To access the Agenda and Backup Materials electronically, go to www.gjcity.org

CITY OF Grand Junction COLORADO

CITY COUNCIL AGENDA
WEDNESDAY, JULY 21, 2021
250 NORTH 5TH STREET
VIRTUAL MEETING - LIVE STREAMED
BROADCAST ON CABLE CHANNEL 191

5:30 PM – REGULAR MEETING

Call to Order, Pledge of Allegiance, Moment of Silence

Proclamations

Proclaiming August 2 - 8, 2021 as Interfaith Awareness Week in the City of Grand Junction

Appointments

To the Parks and Recreation Advisory Board

To the Urban Trails Committee

Citizen Comments

Individuals may comment regarding items scheduled on the Consent Agenda and items not specifically scheduled on the agenda. This time may be used to address City Council about items that were discussed at a previous City Council Workshop.

City Manager Report

Council Reports

CONSENT AGENDA

The Consent Agenda includes items that are considered routine and will be approved by a single motion. Items on the Consent Agenda will not be discussed by City Council, unless an item is removed for individual consideration.

1. Approval of Minutes

a. Minutes of the July 7, 2021 Regular Meeting

2. Contracts

a. 2021 Sewer Replacements and Overlay on Unaweep Ave

3. Resolutions

a. A Resolution to Purchase Property for Fire Station #8

b. A Resolution Adopting the Patterson Road Access Management Plan

c. A Resolution Affirming the Constitutional Rights of the Citizens of Grand Junction, Colorado

REGULAR AGENDA

If any item is removed from the Consent Agenda by City Council, it will be considered here.

4. Public Hearings

a. Quasi-judicial

i. 2021-2025 Five-Year Community Development Block Grant (CDBG) Program Consolidated Plan and 2021 Annual Action Plan

ii. An Ordinance Amending Ordinance No. 4754 that Adopted the Institutional and Civic Facility Master Plan for Colorado Mesa University (CMU) to Include a Larger Area for Campus Expansion within which Administrative Right-of-Way Vacations Apply, Located at 1100 North Avenue

iii. A Resolution Creating and Establishing Alley Improvement District No. ST-21

5. Discussion and Possible Direction Regarding Marijuana Stores Regulations

a. Specific Cap on the Number of Marijuana Business Licenses

b. Hybrid Process for the Selection of Marijuana Business Applicants

c. Direct Staff to Prepare an Ordinance with a Six Percent (6%) Marijuana Sales Tax Rate

6. Non-Scheduled Citizens & Visitors

This is the opportunity for individuals to speak to City Council about items on tonight's agenda and time may be used to address City Council about items that were discussed at a previous City Council Workshop.

7. Other Business

8. Adjournment

City of Grand Junction, State of Colorado

Proclamation

Whereas, the City Council honors and respects all religious beliefs, cultures, creeds and races and every person's right to believe, or not believe, so long as actions taken in support of those beliefs or creeds do not infringe upon the rights of others; and

Whereas, Grand Valley Interfaith Network, is an organization in Grand Junction and Mesa County that offers varied programs, projects and initiatives designed to bring faith groups together to discuss and better practice peace, harmony, cooperation and understanding among all people; and

Whereas, the members of Grand Valley Interfaith Network have been working together to support the interfaith programs and initiatives in Mesa County since 1977; and

Whereas, many Grand Junction faith groups have partnered with Grand Valley Interfaith Network to offer a series of activities and events, which are open to all people of any faith and those who are not so affiliated, in the days and weeks leading up to the annual Interfaith Awareness Week, to be followed by days of individual reflection on connection and peace.

NOW, THEREFORE, I, C.B. McDaniel, by the power vested in me as Mayor of the City of Grand Junction, do hereby proclaim August 2 - 8, 2021 as

"Interfaith Awareness Week"

in the City of Grand Junction and urge all the citizens of the City to be open minded and respect all religions, beliefs, cultures, creeds and races.

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the official Seal of the City of Grand Junction this 21st day of July 2021.

C.B. McD

Mayor

Grand Junction City Council

Regular Session

Item #

Meeting Date: July 21, 2021

Presented By: Wanda Winkelmann, City Clerk

Department: City Clerk

Submitted By: Kerry Graves

Information

SUBJECT:

To the Parks and Recreation Advisory Board

RECOMMENDATION:

To appoint the interview committee's recommendation to the Parks and Recreation Board.

EXECUTIVE SUMMARY:

There is one partial-term vacancy on the Parks and Recreation Advisory Board.

BACKGROUND OR DETAILED INFORMATION:

Beau Flores resigned effective July 8, 2021. Kyle Gardner was selected as an alternate at the April 2021 interviews.

FISCAL IMPACT:

N/A

SUGGESTED MOTION:

I move to (appoint/not appoint) the interview committee's recommendation to the Parks and Recreation Advisory Board.

Attachments

None

Grand Junction City Council

Regular Session

Item #

Meeting Date: July 21, 2021

Presented By: Wanda Winkelmann, City Clerk

Department: City Clerk

Submitted By: Kerry Graves

Information

SUBJECT:

To the Urban Trails Committee

RECOMMENDATION:

To appoint/not appoint the interview committee's recommendation to the Urban Trails Committee.

EXECUTIVE SUMMARY:

Alisha Wenger resigned effective June 9, 2021.

BACKGROUND OR DETAILED INFORMATION:

Athena Fouts was selected as an alternate at the April 14th interviews.

FISCAL IMPACT:

N/A

SUGGESTED MOTION:

I move to appoint/not appoint the interview committee's recommendation to the Urban Trails Committee.

Attachments

None

GRAND JUNCTION CITY COUNCIL
MINUTES OF THE REGULAR MEETING

July 7, 2021

Call to Order, Pledge of Allegiance, Moment of Silence

The City Council of the City of Grand Junction convened into regular session on the 7th day of July 2021 at 5:30 p.m. Those present were Councilmembers Abe Herman, Phillip Pe'a, Randall Reitz, Dennis Simpson, Anna Stout, Rick Taggart, and Council President Chuck McDaniel.

Also present were City Manager Greg Caton, City Attorney John Shaver, Records Manager Debbie Kemp, and Deputy City Clerk Selestina Sandoval.

Council President McDaniel called the meeting to order and Councilmember Pe'a led the Pledge of Allegiance which was followed by a moment of silence.

Proclamations

Proclaiming the Month of July as Parks and Recreation Month in the City of Grand Junction

Councilmember Pe'a read the proclamation. Parks and Recreation Advisory Board member Gary Schroen and Parks and Recreation Director Ken Sherbenou accepted it.

Appointments

Ratification of Appointment to the Mesa County Building Code Board of Appeals

Councilmember Herman moved to ratify the reappointment of Steve Peterson to the Mesa County Building Code Board of Appeals for a term expiring July 2024. Councilmember Pe'a seconded the motion. Motion carried unanimously by voice vote.

Citizen Comments

John Pond spoke regarding the need for civilian oversight.

Ed Kowalski stated the need for more communication between citizens and the City.

Communication Director for Area Church of Jesus Christ of Latter-Day Saints Paige Storheim expressed her excitement with the temple being built in Grand Junction.

Eric Niederkruger spoke about poverty and the housing insecure in the community.

Bruce Lohmiller spoke about homelessness and the Veterans Art Show.

The following individuals spoke regarding constitutional rights, the COVID-19 pandemic and asked that the Council adopt a resolution declaring Grand Junction a Constitutional Sanctuary City: Roland Minnen, Jen Schumann, Naomi Carson, Diane Baker, Melody Gingerich, Merrianne Merriman, Sandra Perea, Kim Bohrer, Kandace Peterhans, Carol Rathbun, Sandra Richmond, Stacey Neel, Mark Rybeck, Deb Schoonmaker, Owen Mangan, and Grant (no last name given).

City Manger's Report

City Manager Caton said the City's Wildland Firefighting Team has been deployed to fight fires in California and asked the public to keep them in their thoughts.

Council Reports

Council President McDaniel wished his wife a happy birthday and thanked her for her support.

Councilmember Stout mentioned that Jon Maraschin with the Business Incubator announced his resignation, and the board is moving forward with a plan on how to replace him.

CONSENT AGENDA

Councilmember Pe'a moved to adopt Consent Agenda items #1 - #4. Councilmember Taggart seconded the motion. Councilmember Simpson read a statement regarding his concerns on how contracts are approved by Council and asked that they be made part of the record (attached). Motion carried by voice vote with Councilmember Simpson voting no.

1. Approval of Minutes

a. Minutes of the June 14, 2021 Special Meeting - Executive Session

b. Summary of the June 14, 2021 Workshop

c. Minutes of the June 16, 2021 Regular Meeting

d. Minutes of the June 28, 2021 Special Meeting

e. Summary of the June 28, 2021 Workshop

2. Set Public Hearings

a. Quasi-judicial

i. Introduction of an Ordinance Amending Ordinance No. 4754 that

Adopted the Institutional and Civic Facility Master Plan for Colorado Mesa University (CMU) to Include a Larger Area for Campus Expansion to which Administrative Right-of-Way Vacations Apply, Located at 1100 North Avenue and Set a Public Hearing for July 21, 2021

ii. A Resolution Referring a Petition to the City Council for the Annexation of Lands to the City of Grand Junction, Colorado, Setting a Hearing on Such Annexation, Exercising Land Use Control, and Introducing Proposed Annexation Ordinance for the Stinker C-Store Annexation of 1.68 Acres, Located at 2905 and 2907 North Avenue and 494 29 Road, and Set a Public Hearing for August 18, 2021

3. Contracts

a. 2021 Authorization for a Contract for Professional Right-of-Way Acquisition Services for Transportation Capacity and Utility Projects

b. Authorize a Contract for the Persigo Wastewater Treatment Plant Structural Repairs

c. Authorize a Sole Source Contract with Action Target for Grand Junction Police Department Firing Range Equipment

d. Authorize a Sole Source Purchase for BriefCam (Video Management System)

4. Resolutions

a. A Resolution of Support for Colorado Department of Transportation's Application to Rebuilding American Infrastructure with Sustainability and Equity (RAISE) for the Multimodal Options for a Vibrant, Equitable (MOVE) Western Slope Project which will include the Grand Junction Mobility Corridor, 2nd Street Promenade, and Dos Rios to Downtown Bicycle/Pedestrian Bridge

REGULAR AGENDA

An Ordinance Adopting the Patterson Road Access Control Plan (ACP) as Title 38 of the Municipal Code

In 2020, the City engaged Stolfus and Associates to study and prepare an Access Control Plan (ACP or Plan) for the 7 mile Patterson Road corridor within the City limits.

The goal of access management is to optimize the performance of the corridor, improve the level of safety, reduce traffic congestion, and improve the overall functionality of a roadway. The ACP works to plan, coordinate, regulate, and design access to and from property adjacent to Patterson.

Throughout 2020, Stolfus' work included inventories of access points, traffic counts, determining existing and future traffic demands, performing a safety analysis for Patterson Road and preparation of a draft Plan. In-person and virtual public open houses were held in October 2020 and January 2021. The draft Plan document was publicly reviewed through GJSpeaks. One-on-one meetings, follow-up phone calls and emails, and neighborhood meetings were used to engage with the public and seek their input on the Plan.

The January 2021 draft Plan was updated to become the April 2021 draft Plan and reflected the public input received. Additional outreach continues through GJSpeaks.com.

Upon adoption, the Patterson Road Access Control Plan (ACP) will amend the Circulation Pan and be an element of the 2020 One Grand Junction Comprehensive Plan. The proposed final ACP will be presented for adoption using the Circulation Plan amendment criteria.

On February 23, 2021 the Planning Commission heard the Patterson Access Control Plan in a virtual hearing. The hearing was continued after public input was received. Direction was given to staff to conduct additional public outreach. Staff conducted this additional public outreach and based on public input, access has changed at various locations.

Public Works Director Trenton Prall introduced the item and Michelle Hansen, Senior Transportation Engineer with Stolfus and Associates presented it in detail.

Mr. Prall addressed Planning Commission’s comments and proposed an alternative approach to this plan to change this from an Access Control Plan to an Access Management Plan passed by resolution (policy guide) instead of an ordinance to alleviate the concerns of codification (law).

Discussion included recurring request from residents to move traffic to North Avenue (the City doesn't own it as it is a state highway), this Plan is not intended to speed up traffic, but rather to mitigate congestion, public engagement methods, goal to increase safety (ACP’s increase safety by lowering crashes 30%-60%), implementation timeline, difference in adoption by ordinance verses resolution, lack of safety of left turns onto Patterson, compliments to Staff for their work, reasoning for the change to a resolution (response to feedback from community, still effective and able to be more flexible), volume of traffic (35,000 cars per day), triggers for the closures of 68 access points mentioned in the Plan (new development or safety issues), safety of U-turns or potential changes to existing intersections to accommodate them, and financing of changes proposed in the Plan (based on traffic study, but possible 50% cost to developer).

The public hearing opened at 7:55 p.m.

The following people spoke against the Plan: Dona Ramsey, Dana Suticum, Donna Wallis, Donny Bennett, Ruth Kannah, Mark Rybeck, Gary Lucero, Verna Bunn, George Parkhurst, Sara Chamberlain, Sandy Keith, Karen Haren, Terry Porter, Diane Lucero, and Anita Ballinger.

The public hearing closed at 8:30 p.m.

Conversation ensued regarding the change of ordinance to resolution.

Councilmember Stout moved to change the Patterson Road Access Control Plan to Patterson Road Access Management Plan and bring this item to the next meeting in resolution form. Councilmember Pe'a seconded the motion. Motion carried by roll call vote with Councilmember Simpson voting no.

An Ordinance Making Supplemental Appropriations and Amending the Budget for 2021 for the Riverbank Rehabilitation Project

A supplemental appropriation is necessary for the Riverbank Rehabilitation Project (Project) in the amount of $710,000 to rehabilitate a portion of the bank on the Colorado River near Las Colonias. With approval of the supplemental appropriation ordinance, Council will also be authorizing the project.

The budget is adopted by City Council through an appropriation ordinance to authorize spending at a fund level based on the line-item budget. Supplemental appropriations are also adopted by ordinance and are required when the adopted budget is increased to approve a new project and associated expenditures. When a project includes a transfer from one fund to another, both the transfer and the expenditure have to be appropriated.

Public Works Director Trent Prall presented the specifications of the project. Finance Director Jodi Welch presented the supplemental appropriation portion of this item.

The public hearing opened at 8:51 p.m.

There were no public comments.

The public hearing closed at 8:52 p.m.

Councilmember Herman moved to adopt Ordinance No. 5008, an ordinance making Supplemental Appropriations to the 2021 Budget of the City of Grand Junction Colorado for the year beginning January 1, 2021 and ending December 31, 2021 for the Riverbank Rehabilitation project on final passage and ordered final publication in pamphlet form. Councilmember Taggart seconded the motion. Motion carried by roll call vote with Councilmember Stout voting no.

Introduction of an Ordinance Placing a Charter Amendment to Change the Authorized Length of a Lease of Certain Public Property from Twenty-Five Up to Ninety-Nine Years on the Election Ballot for the Special Municipal Election to be Held the 2nd day of November 2021 and Set a Public Hearing for July 21, 2021

The purpose of this item is to set a ballot question for a Charter Amendment to permit a 99-year lease to Colorado Discover Ability (CDA).

City Attorney John Shaver presented this item.

Council President McDaniel resported that the President of Colorado Discover Ability Chris Muhr stated they could wait to put this on the 2023 regular election ballot for the sake of saving costs for a November Special Election.

Councilmember Stout moved to introduce an ordinance placing a Charter amendment to change the authorized length of a lease of certain public property from twenty-five up to ninety-nine years on the election ballot for the special municipal election to be held the 2nd day of November 2021 and set a public hearing for July 21, 2021. Councilmember Herman seconded the motion. Motion failed by unanimous roll call vote.

An Ordinance Vacating a Portion of a Road Petitioned Right-of-Way Which Crosses Several Parcels in Orchard Mesa

The City of Grand Junction Community Development Division requested the vacation of two sections of roadway included within the petition recorded in the Mesa County Road Book 1 on Page 34 (Petition) which lie within the Carson Subdivision, Lookout Point Subdivision, Red Tail Ridge Subdivision, and Red Tail Ridge II Subdivision Filing 1 all within Orchard Mesa, in the City of Grand Junction, County of Mesa. The request is limited only to any claim that the City may have from the Petition. The request does not include vacating any right-of-way/roadway that the City may have an interest in due to other claims, such as dedications made upon the plats in the subdivisions referenced.

Associate Planner Senta Costello presented this item.

The public hearing opened at 9:07 p.m.

There were no public comments.

The public hearing closed at 9:07 p.m.

Councilmember Taggart moved to adopt Ordinance No. 5009, an ordinance approving the right-of-way vacation request on final passage and ordered final publication in pamphlet form. Councilmember Herman seconded the motion. Motion carried by unanimous roll call vote.

An Ordinance for Optional Premises License for the Hotel Maverick

Colorado law permits a municipality to pass an ordinance to provide optional premises licenses for an applicant to sell, dispense or serve alcohol beverages at locations designated by the applicant and approved by the State and local licensing authorities. The Hotel Maverick on the Colorado Mesa University (CMU) campus applied for an optional premises license to serve alcohol beverages at and within designated areas at or near the Hotel Maverick on the CMU campus.

City Attorney John Shaver presented this item.

The public hearing opened at 9:10 p.m.

There were no public comments.

The public hearing closed at 9:11 p.m.

Councilmember Simpson moved to adopt Ordinance No. 5010, an ordinance approving an optional premises liquor license for the Hotel Maverick at the locations and on the terms stated in the Ordinance, on final passage and ordered final publication in pamphlet form. Councilmember Pe'a seconded the motion. Motion carried by unanimous roll call vote.

Non-Scheduled Citizens & Visitors

Richard Swingle gave a PowerPoint Presentation regarding the sources of Grand Junction Sales Tax Revenue and asked Council to re-examine whether the reported 22% figure is accurate.

Kim Bohrer played a clip from the President's Press Secretary regarding vaccination administration in Mesa County and expressed her concern with forced vaccination.

Other Business

Councilmember Herman spoke regarding grey water systems and requested this topic be discussed at a workshop.

Councilmember Reitz recommended a unified letter to the *Daily Sentinel* outlining successes during the pandemic.

Councilmember Pe'a stated he spoke with Mesa County Clerk and Recorder Tina Peters who wants to present to Council about the election process during a workshop.

Adjournment

The meeting adjourned at 9:41 p.m.

_____
Selestina Sandoval
Deputy City Clerk

Item 3a

I believe the Council should discuss the following issues:

- The original contract was not discussed with the previous Council because the amount was small. The action tonight will result in a commitment that would require Council approval of the entire contract if it had not been split into pieces. I believe Council should discuss the entire contract as intended by our purchasing policy.
- I believe Council should receive a more thorough explanation of how we use the services of the contractor.
- I believe Council should ask for an expanded explanation of how the $200,000 in the original contract has been or will be spent.

Item 3b

- Staff should have been asked to discuss the fact that the winning bid was $3. million when the other two bids were in excess of $4.5 million. A discussion should occur regarding the ability of the winning bidder to complete quality work if the potential exists mor a significant loss on the project.
- The contract includes $235K for change orders that the City can ask for without seeking Council. It is my understanding that staff believes this mechanism allows for $435K of change orders without Council approval. Council needs to decide if the intent of the Purchasing Policy means that all change orders be considered in determining the level where staff must seek approval.

Item 3c

- Staff should be asked to disclose if there are other vendors that compete with Action Target. If there are competitors, staff should be more specific about the reasons for seeking sole source authorization.

Grand Junction City Council

Regular Session

Item #2.a.

Meeting Date: July 21, 2021

Presented By: Randi Kim, Utilities Director

Department: Public Works - Engineering

Submitted By: Anna Purtscher

Information

SUBJECT:

2021 Sewer Replacements and Overlay on Unaweep Ave

RECOMMENDATION:

Staff Recommends the City Purchasing Division execute a construction contract with M.A Concrete Construction, Inc. for the 2021 Sewer Replacements and Overlay on Unaweep Ave project in the amount of $2,138,451.53.

EXECUTIVE SUMMARY:

The project will replace 5,472 linear feet of sewer pipe and 29 manholes. Following the sewer replacements, approximately 1.5 miles of roadway will be overlaid in the project area. 30 linear feet of concrete improvements and 34 surface tiles will be added to sidewalks in the project area to comply with the Americans with Disabilities Act.

Cost to the City for construction is $2,138,451.53, which is funded by a combination of 2021 Persigo Sewer Replacement project funds and 2021 Contract Street Maintenance project funds. Total project expenditures are estimated at $2,138,451.53 , which includes $1,549,044.93 from the 2021 Persigo Sewer Replacement account for the sewer replacements and $589,406.60 from the 2021 Contract Street Maintenance account for the road overlay and sidewalk improvements. Final completion is scheduled for December 2021.

BACKGROUND OR DETAILED INFORMATION:

This project proposes to replace various sections of sewer lines along Unaweep Avenue between Highway 50 and 27 Road. This will primarily include replacing the sewer lines in the side streets and alleys that connect to the sewer main in Unaweep Avenue in combination with a planned road overlay.

The sections of sewer lines being replaced were identified as a top priority through an internal 2020 asset management effort that considered pipe age, material, condition, and cleaning cost/accessibility to prioritize sewer replacement projects. In addition, 785 feet of the 5,472 feet of the sewer pipe being replaced will also be upsized to accommodate current and future development in Orchard Mesa in accordance with the proposed improvements identified in the 2020 Comprehensive Wastewater Basin Study Update. Replacement of these sewer lines will renew aging infrastructure and help ensure reliable service for the City's wastewater customers now and in the future.

The majority of the asphalt along the proposed section of Unaweep Avenue ranges from a Pavement Condition Index (PCI) rating of 45 to 70, which necessitates an asphalt overlay treatment as part of the City's street maintenance program. The proposed asphalt overlays will include overlaying all of Unaweep Avenue from Highway 50 to 27 Road, as well as some paving on the Escalante Street, Aspen Street, Palmer Street, Palisade Street, and Roubideau Street. In advance of the street overlays, 30 feet of concrete sidewalk will be replaced and 34 ramps will be improved along the corridor to reduce tripping hazards and comply with the Americans with Disabilities Act (ADA).

A formal Invitation for Bids was issued via BidNet (an on-line site for government agencies to post solicitations), posted on the City's Purchasing website, sent to the Grand Junction Chamber of Commerce, the Western Colorado Contractors Association, and advertised in The Daily Sentinel. During the bid process, the City became aware that pipe manufacturer's were unable to hold pricing or guarantee availability of pipe materials for more than 7 days. In response, the City adjusted the procurement schedule such that Council review of the low bid contract was 5 days after the contractor's proposals were submitted rather than the standard 2-week minimum in order to reduce the risk of material cost escalations after the bid. One company submitted a bid, which was found to be responsive and responsible in the following amount:

Vendor	Location	Bid Amount
M.A. Concrete Construction, Inc.	Grand Junction, CO	$2,138,451.53

FISCAL IMPACT:

The expense for the sanitary sewer replacements for this project will be funded by the Joint Sewer Fund and is included in the 2021 Adopted Budget. The street and sidewalk improvements for this project will be funded by the 0.75% Sales Tax Capital Projects Fund and is budgeted within the Contract Street Maintenance project in the 2021 Adopted Budget.
The project expenses associated with this contract are within the amounts included the 2021 Adopted Capital Projects budget as reflected below:

Description of Work	Project Expenses	2021 Budgeted Amount
Sanitary Sewer Replacements	$1,549,044.93	$ 2,000,000.00
Contract Street Maintenance	$589,406.60	$ 4,300,000.00
Total Project Expenses	$2,138,451.53	

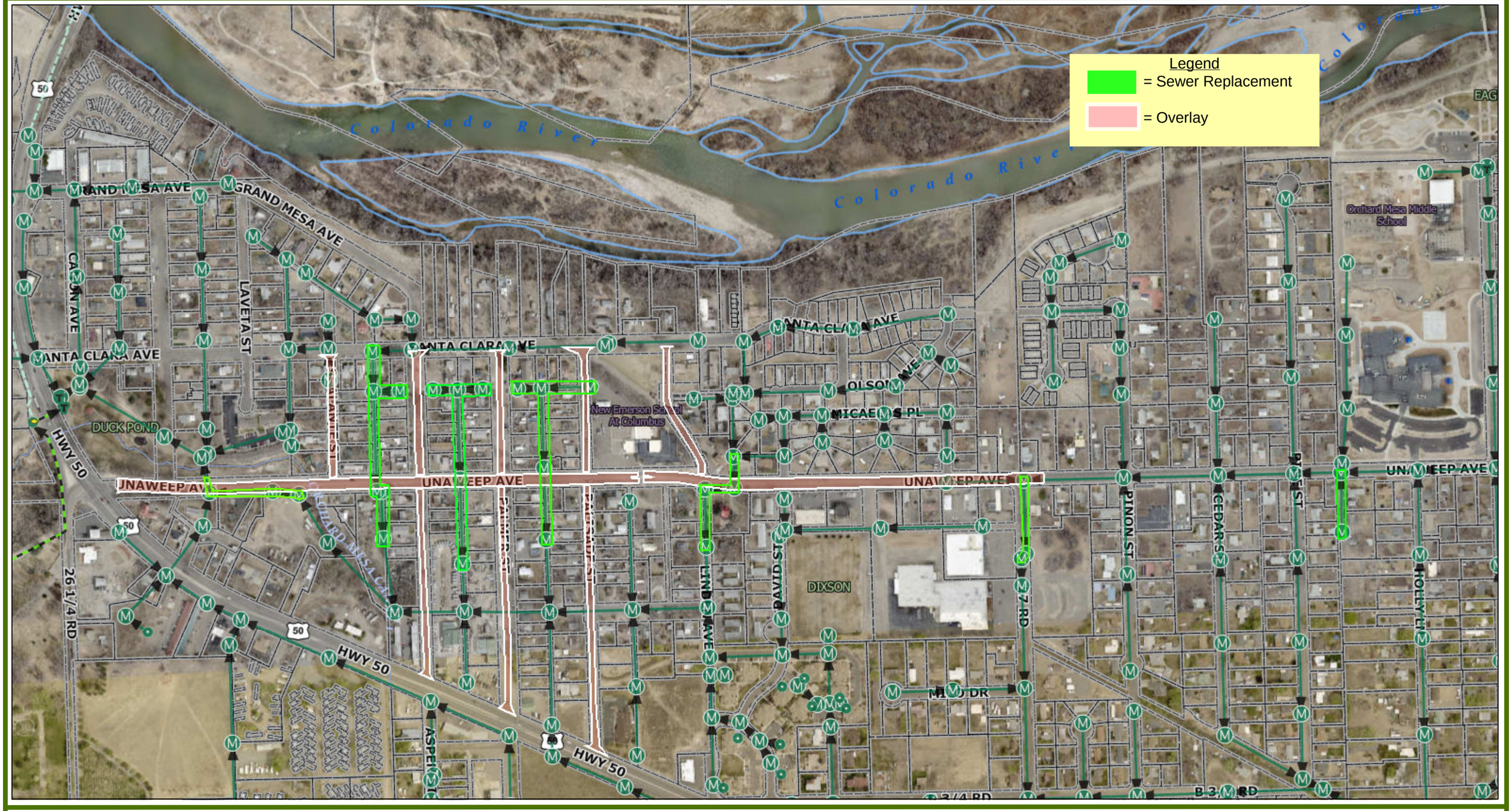
SUGGESTED MOTION:

I move to authorize City Purchasing Division to enter into contract with M.A Concrete Construction, Inc. of Grand Junction, CO for the 2021 Sewer Replacements and Overlay - Unaweep project in the amount of $2,138,451.53.

Attachments

1. Project Vicinity Map

2021 Sewer Replacements & Overlay - Vicinity Map



N

0 0.15 0.3 mi

Date: 7/14/2021

1 inch = 376 feet

CITY OF Grand Junction COLORADO
GEOGRAPHIC INFORMATION SYSTEM

Grand Junction City Council

Regular Session

Item #3.a.

Meeting Date: July 21, 2021

Presented By: Ken Watkins, Fire Chief

Department: Fire

Submitted By: Ken Watkins

Information

SUBJECT:

A Resolution to Purchase Property for Fire Station #8

RECOMMENDATION:

Adopt a Resolution Authorizing the City Manager to Purchase Lot 2 of the Fire Station Subdivision at 3095 D 1/2 Road in an Amount not to Exceed $112,400.00.

EXECUTIVE SUMMARY:

This request it to authorize the City Manager to purchase two acres of real property for Lot 2 of Fire Station Subdivision (addressed as 441 31 Road) for the construction of Fire Station #8. Upon passage of the Fire Responder Tax in 2019, Staff completed due diligence on two primary sites and selected the site known as the "Two Ponies" site for the construction of a fire station that would provide coverage to the southeast area of the City. Staff negotiated a price of $50,000 per acre and for the City to pay the land owner's cost to subdivide the property for the fire station, for a total purchase price of $112,400. This site was selected as best suited for the fire station to provide coverage and meet National Fire Protection Association response time standards.

BACKGROUND OR DETAILED INFORMATION:

In 2008, the Fire Department conducted an extensive study to determine future fire station locations and coverage areas. Research identified the need for a fire station to serve the southeast area of the City and areas in the Grand Junction Rural Fire Protection District that the City serves by contract. Staff identified a number of sites that would be appropriate for a fire station and upon passage of the Fire Responder Tax in 2019, completed due diligence in researching the sites and selecting two primary sites. Upon annexation of a property at 3095 D 1/2 Road known as the "Two Ponies" property, staff entered into discussions with the owner to subdivide and purchase two

acres for a fire station on the site. This site was selected as best suited for the fire station to provide coverage and meet National Fire Protection Association response time standards. Staff planned to purchase the property in 2020 but revenue concerns related to the pandemic put the purchase on hold. The property owners and City staff negotiated a Letter of Intent to purchase the property in 2021. This request will complete this purchase.

FISCAL IMPACT:

The negotiated price for this purchase is $112,400 which is within the $125,000 included for this purchase in the .75% Sales Tax Capital Improvements Fund in the 2021 Adopted Budget.

SUGGESTED MOTION:

I move to (adopt/deny) Resolution No. 54-21, a resolution authorizing the City Manager to purchase real property of Lot 2 Fire Station Subdivision in Grand Junction, Colorado.

Attachments

1. RES-FS 8 Purchase

RESOLUTION NO. __-21

A RESOLUTION AUTHORIZING THE PURCHASE OF THE REAL PROPERTY LEGALLY DESCRIBED AS LOT 2 OF THE FIRE STATION SUBDIVISION, AND LOCATED AT 441 31 ROAD, GRAND JUNCTION, COLORADO, FROM STEVEN W. MILLER AND SUSAN L MILLER AND RATIFYING ACTIONS HERETOFORE TAKEN IN CONNECTION THEREWITH

RECITALS:

The City Manager has entered into a contract with Steven W. and Susan L. Miller (Seller or Millers) for the sale by the Millers and the purchase by the City of that certain real property legally described as Lot 2 of the Fire Station Subdivision and addressed as 441 31 Road, Grand Junction, Colorado (Property.)

The Property will be used for the construction of Grand Junction Fire Department Station 8.

The City Council has considered the contract and in the totality of the circumstances deems the purchase of the Property, reasonable, necessary and proper.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION, COLORADO:

1. That the City Council hereby authorizes the purchase of the Property by the City for a price of $112,400.00. All actions heretofore taken by the officers, employees and agents of the City relating to the purchase of the Property which are consistent with the provisions of the attached Contract to Buy and Sell Real Estate and this Resolution are hereby ratified, approved and confirmed.

2. That the City Council hereby authorizes the expenditure of $112,400.00 and the necessary and reasonable expenses for the purchase of the Property to be paid at closing.

3. That the officers, employees and agents of the City are hereby authorized and directed to take all actions necessary or appropriate to effectuate the provisions of this Resolution and the attached Contract to Buy and Sell Real Estate, including, without limitation, as may be necessary or desirable to effect the purchase of the Property.

PASSED and ADOPTED this 21st day of July 2021.

_____

C.B. McDaniel
President of the City Council

ATTEST:

_____

Wanda Winkelmann
City Clerk

The printed portions of this form, except differentiated additions, have been approved by the Colorado Real Estate Commission. (CBS4-5-19) (Mandatory 7-19)

THIS FORM HAS IMPORTANT LEGAL CONSEQUENCES AND THE PARTIES SHOULD CONSULT LEGAL AND TAX OR OTHER COUNSEL BEFORE SIGNING.

CONTRACT TO BUY AND SELL REAL ESTATE
(LAND)
(■ Property with No Residences)
(☐ Property with Residences-Residential Addendum Attached)

Date: 23 June 2021

AGREEMENT

1. **AGREEMENT.** Buyer agrees to buy and Seller agrees to sell the Property described below on the terms and conditions set forth in this contract (Contract).

2. **PARTIES AND PROPERTY.**

2.1. Buyer. City of Grand Junction, a Colorado Home Rule Municipality (Buyer) will take title to the Property described below as ☐ **Joint Tenants** ☐ **Tenants In Common** ■ **Other** Tenants in severally.

2.2. No Assignability. This Contract **IS NOT** assignable by Buyer unless otherwise specified in **Additional Provisions.**

2.3. Seller. Steven W. Miller and Susan L. Miller (Seller) is the current owner of the Property described below.

2.4. Property. The Property is the following legally described real estate in the County of Mesa, Colorado:

LOT 2 of Fire Station Subdivision, Grand Junction, Mesa County, Colorado.

known as No. TBD (Street Address) Grand Junction (City) CO (State) (Zip),

together with the interests, easements, rights, benefits, improvements and attached fixtures appurtenant thereto and all interest of Seller in vacated streets and alleys adjacent thereto, except as herein excluded (Property).

2.5. Inclusions. The Purchase Price includes the following items (Inclusions):

2.5.1. Inclusions. The following items, whether fixtures or personal property, are included in the Purchase Price unless excluded under **Exclusions**:

None

If any additional items are attached to the Property after the date of this Contract, such additional items are also included in the Purchase Price.

2.5.2. Personal Property - Conveyance. Any personal property must be conveyed at Closing by Seller free and clear of all taxes (except personal property taxes for the year of Closing), liens and encumbrances, except None. Conveyance of all personal property will be by bill of sale or other applicable legal instrument.

2.6. Exclusions. The following items are excluded (Exclusions):

None

2.7. Water Rights, Well Rights, Water and Sewer Taps.

☐ **2.7.1. Deeded Water Rights.** The following legally described water rights:

None

Any deeded water rights will be conveyed by a good and sufficient Special Warranty deed at Closing.

☐ **2.7.2. Other Rights Relating to Water.** The following rights relating to water not included in §§ 2.7.1, 2.7.3, 2.7.4 and 2.7.5, will be transferred to Buyer at Closing:
None

☐ **2.7.3. Well Rights.** Seller agrees to supply required information to Buyer about the well. Buyer understands that if the well to be transferred is a "Small Capacity Well" or a "Domestic Exempt Water Well" used for ordinary household purposes, Buyer must, prior to or at Closing, complete a Change in Ownership form for the well. If an existing well has not been registered with the Colorado Division of Water Resources in the Department of Natural Resources (Division), Buyer must complete a registration of existing well form for the well and pay the cost of registration. If no person will be providing a closing service in connection with the transaction, Buyer must file the form with the Division within sixty days after Closing. The Well Permit # is _____.

☐ **2.7.4. Water Stock Certificates.** The water stock certificates to be transferred at Closing are as follows:
None

2.7.5. Water and Sewer Taps. The parties agree that water and sewer taps listed below for the Property are being conveyed as part of the Purchase Price as follows:
None

If any water or sewer taps are included in the sale, Buyer is advised to obtain, from the provider, written confirmation of the amount remaining to be paid, if any, time and other restrictions for transfer and use of the taps.

2.7.6. Conveyance. If Buyer is to receive any rights to water pursuant to § 2.7.2 (Other Rights Relating to Water), § 2.7.3 (Well Rights), § 2.7.4 (Water Stock Certificates), or § 2.7.5 (Water and Sewer Taps), Seller agrees to convey such rights to Buyer by executing the applicable legal instrument at Closing.

2.8. Growing Crops. With respect to growing crops, Seller and Buyer agree as follows:
None

3. DATES, DEADLINES AND APPLICABILITY.

3.1. Dates and Deadlines.

Item No.	Reference	Event	Date or Deadline
1	§ 4.3	Alternative Earnest Money Deadline	N/A
		Title	
2	§ 8.1, 8.4	Record Title Deadline	June 30, 2021
3	§ 8.2, 8.4	Record Title Objection Deadline	July 8, 2021
4	§ 8.3	Off-Record Title Deadline	June 30, 2021
5	§ 8.3	Off-Record Title Objection Deadline	July 8, 2021
6	§ 8.5	Title Resolution Deadline	July 12, 2021
7	§ 8.6	Right of First Refusal Deadline	N/A
		Owners' Association	
8	§ 7.2	Association Documents Deadline	N/A
9	§ 7.4	Association Documents Termination Deadline	N/A
		Seller's Disclosures	
10	§ 10.1	Seller's Property Disclosure Deadline	June 30, 2021
11	§ 10.10	Lead-Based Paint Disclosure Deadline (if Residential Addendum attached)	NA
		Loan and Credit	
12	§ 5.1	New Loan Application Deadline	N/A
13	§ 5.2	New Loan Termination Deadline	N/A
14	§ 5.3	Buyer's Credit Information Deadline	N/A
15	§ 5.3	Disapproval of Buyer's Credit Information Deadline	N/A
16	§ 5.4	Existing Loan Deadline	N/A
17	§ 5.4	Existing Loan Termination Deadline	N/A

18	§ 5.4	Loan Transfer Approval Deadline	N/A
19	§ 4.7	Seller or Private Financing Deadline	N/A
		Appraisal	
20	§ 6.2	Appraisal Deadline	N/A
21	§ 6.2	Appraisal Objection Deadline	N/A
22	§ 6.2	Appraisal Resolution Deadline	N/A
		Survey	
23	§ 9.1	New ILC or New Survey Deadline	N/A
24	§ 9.3	New ILC or New Survey Objection Deadline	N/A
25	§ 9.3	New ILC or New Survey Resolution Deadline	N/A
		Inspection and Due Diligence	
26	§ 10.3	Inspection Objection Deadline	June 30, 2021
27	§ 10.3	Inspection Termination Deadline	July 2, 2021
28	§ 10.3	Inspection Resolution Deadline	July 12, 2021
29	§ 10.5	Property Insurance Termination Deadline	N/A
30	§ 10.6	Due Diligence Documents Delivery Deadline	June 30, 2021
31	§ 10.6	Due Diligence Documents Objection Deadline	July 8, 2021
32	§ 10.6	Due Diligence Documents Resolution Deadline	July 12, 2021
33	§ 10.6	Environmental Inspection Termination Deadline	July 2, 2021
34	§ 10.6	ADA Evaluation Termination Deadline	N/A
35	§ 10.7	Conditional Sale Deadline	N/A
36	§ 10.10	Lead-Based Paint Termination Deadline (if Residential Addendum attached)	N/A
37	§ 11.1,11.2	Estoppel Statements Deadline	N/A
38	§ 11.3	Estoppel Statements Termination Deadline	N/A
		Closing and Possession	
39	§ 12.3	Closing Date	July 30, 2021
40	§ 17	Possession Date	July 30, 2021
41	§ 17	Possession Time	NOON MDT
42	§ 28	**Acceptance Deadline Date**	June 25, 2021
43	§ 28	**Acceptance Deadline Time**	NOON MDT

3.2. Applicability of Terms. Any box checked in this Contract means the corresponding provision applies. If any deadline blank in § 3.1 (Dates and Deadlines) is left blank or completed with the abbreviation "N/A", or the word "Deleted," such deadline is not applicable and the corresponding provision containing the deadline is deleted. If no box is checked in a provision that contains a selection of "None", such provision means that "None" applies.

The abbreviation "MEC" (mutual execution of this Contract) means the date upon which both parties have signed this Contract.

4. PURCHASE PRICE AND TERMS.

4.1. Price and Terms. The Purchase Price set forth below is payable in U.S. Dollars by Buyer as follows:

Item No.	Reference	Item	Amount	Amount
1	§ 4.1	Purchase Price	$ 112,400.000	
2	§ 4.3	Earnest Money		$ 20,000.00
3	§ 4.5	New Loan		$
4	§ 4.6	Assumption Balance		$
5	§ 4.7	Private Financing		$
6	§ 4.7	Seller Financing		$
7				
8				
9	§ 4.4	Cash at Closing		$92,400.00
10		**TOTAL**	$112,400.00	$112,400.00

4.2. Seller Concession. At Closing, Seller will credit to Buyer $ N/A (Seller Concession). The Seller Concession may be used for any Buyer fee, cost, charge or expenditure to the extent the amount is allowed by the Buyer's lender and is included in the Closing Statement or Closing Disclosure at Closing. Examples of allowable items to be paid for by the Seller

Concession include, but are not limited to: Buyer's closing costs, loan discount points, loan origination fees, prepaid items and any other fee, cost, charge, expense or expenditure. Seller Concession is in addition to any sum Seller has agreed to pay or credit Buyer elsewhere in this Contract.

4.3. Earnest Money. The Earnest Money set forth in this Section, in the form of a WIRE TRANSFER, will be payable to and held by Colorado Title & Closing Services (Earnest Money Holder), in its trust account, on behalf of both Seller and Buyer. The Earnest Money deposit must be tendered, by Buyer, with this Contract unless the parties mutually agree to an **Alternative Earnest Money Deadline** for its payment. The parties authorize delivery of the Earnest Money deposit to the company conducting the Closing (Closing Company), if any, at or before Closing. In the event Earnest Money Holder has agreed to have interest on Earnest Money deposits transferred to a fund established for the purpose of providing affordable housing to Colorado residents, Seller and Buyer acknowledge and agree that any interest accruing on the Earnest Money deposited with the Earnest Money Holder in this transaction will be transferred to such fund.

4.3.1. Alternative Earnest Money Deadline. The deadline for delivering the Earnest Money, if other than at the time of tender of this Contract, is as set forth as the **Alternative Earnest Money Deadline**.

4.3.2. Return of Earnest Money. If Buyer has a Right to Terminate and timely terminates, Buyer is entitled to the return of Earnest Money as provided in this Contract. If this Contract is terminated as set forth in § 25 and, except as provided in § 24 (Earnest Money Dispute), if the Earnest Money has not already been returned following receipt of a Notice to Terminate, Seller agrees to execute and return to Buyer or Broker working with Buyer, written mutual instructions (e.g., Earnest Money Release form), within three days of Seller's receipt of such form.

4.4. Form of Funds; Time of Payment; Available Funds.

4.4.1. Good Funds. All amounts payable by the parties at Closing, including any loan proceeds, Cash at Closing and closing costs, must be in funds that comply with all applicable Colorado laws, including electronic transfer funds, certified check, savings and loan teller's check and cashier's check (Good Funds).

4.4.2. Time of Payment; Available Funds. All funds, including the Purchase Price to be paid by Buyer, must be paid before or at Closing or as otherwise agreed in writing between the parties to allow disbursement by Closing Company at Closing **OR SUCH NONPAYING PARTY WILL BE IN DEFAULT.** Buyer represents that Buyer, as of the date of this Contract, ■ **Does** ☐ **Does Not** have funds that are immediately verifiable and available in an amount not less than the amount stated as Cash at Closing in § 4.1.

4.5. New Loan.

4.5.1. Buyer to Pay Loan Costs. Buyer, except as otherwise permitted in § 4.2 (Seller Concession), if applicable, must timely pay Buyer's loan costs, loan discount points, prepaid items and loan origination fees as required by lender.

4.5.2. Buyer May Select Financing. Buyer may pay in cash or select financing appropriate and acceptable to Buyer, including a different loan than initially sought, except as restricted in § 4.5.3 (Loan Limitations) or § 30 (Additional Provisions).

4.5.3. Loan Limitations. Buyer may purchase the Property using any of the following types of loans: ☐ **Conventional** ☐ **Other** N/A.

4.6. Assumption. Buyer agrees to assume and pay an existing loan in the approximate amount of the Assumption Balance set forth in § 4.1 (Price and Terms), presently payable at $ N/A per N/A including principal and interest presently at the rate of N/A % per annum and also including escrow for the following as indicated: ☐ **Real Estate Taxes** ☐ **Property Insurance Premium** and ☐ N/A.

Buyer agrees to pay a loan transfer fee not to exceed $ N/A. At the time of assumption, the new interest rate will not exceed NA % per annum and the new payment will not exceed $ N/A per N/A principal and interest, plus escrow, if any. If the actual principal balance of the existing loan at Closing is less than the Assumption Balance, which causes the amount of cash required from Buyer at Closing to be increased by more than $ N/A, or if any other terms or provisions of the loan change, Buyer has the Right to Terminate under § 25.1 on or before **Closing Date**.

Seller ☐ **Will** ☐ **Will Not** be released from liability on said loan. If applicable, compliance with the requirements for release from liability will be evidenced by delivery ☐ on or before **Loan Transfer Approval Deadline** ☐ at **Closing** of an appropriate letter of commitment from lender. Any cost payable for release of liability will be paid by N/A in an amount not to exceed $ N/A.

4.7. Seller or Private Financing.

WARNING: Unless the transaction is exempt, federal and state laws impose licensing, other requirements and restrictions on sellers and private financiers. Contract provisions on financing and financing documents, unless exempt, should be prepared by a licensed Colorado attorney or licensed mortgage loan originator. Brokers should not prepare or advise the parties on the specifics of financing, including whether or not a party is exempt from the law.

4.7.1. Seller Financing. If Buyer is to pay all or any portion of the Purchase Price with Seller financing, ☐ **Buyer** ☐ **Seller** will deliver the proposed Seller financing documents to the other party on or before N/A days before **Seller or Private Financing Deadline**.

4.7.1.1. Seller May Terminate. If Seller is to provide Seller financing, this Contract is conditional upon Seller determining whether such financing is satisfactory to Seller, including its payments, interest rate, terms, conditions, cost and

compliance with the law. Seller has the Right to Terminate under § 25.1, on or before **Seller or Private Financing Deadline**, if such Seller financing is not satisfactory to Seller, in Seller's sole subjective discretion.

4.7.2. Buyer May Terminate. If Buyer is to pay all or any portion of the Purchase Price with Seller or private financing, this Contract is conditional upon Buyer determining whether such financing is satisfactory to Buyer, including its availability, payments, interest rate, terms, conditions and cost. Buyer has the Right to Terminate under § 25.1, on or before **Seller or Private Financing Deadline**, if such Seller or private financing is not satisfactory to Buyer, in Buyer's sole subjective discretion.

TRANSACTION PROVISIONS

5. FINANCING CONDITIONS AND OBLIGATIONS.

5.1. New Loan Application. If Buyer is to pay all or part of the Purchase Price by obtaining one or more new loans (New Loan), or if an existing loan is not to be released at Closing, Buyer, if required by such lender, must make an application verifiable by such lender, on or before **New Loan Application Deadline** and exercise reasonable efforts to obtain such loan or approval.

5.2. New Loan Review. If Buyer is to pay all or part of the Purchase Price with a New Loan, this Contract is conditional upon Buyer determining, in Buyer's sole subjective discretion, whether the New Loan is satisfactory to Buyer, including its availability, payments, interest rate, terms, conditions and cost. This condition is for the sole benefit of Buyer. Buyer has the Right to Terminate under § 25.1, on or before **New Loan Termination Deadline**, if the New Loan is not satisfactory to Buyer, in Buyer's sole subjective discretion. Buyer does not have a Right to Terminate based on the New Loan if the objection is based on the Appraised Value (defined below) or the Lender Requirements (defined below). **IF SELLER IS NOT IN DEFAULT AND DOES NOT TIMELY RECEIVE BUYER'S WRITTEN NOTICE TO TERMINATE, BUYER'S EARNEST MONEY WILL BE NONREFUNDABLE,** except as otherwise provided in this Contract (e.g., Appraisal, Title, Survey).

5.3. Credit Information. If an existing loan is not to be released at Closing, this Contract is conditional (for the sole benefit of Seller) upon Seller's approval of Buyer's financial ability and creditworthiness, which approval will be in Seller's sole subjective discretion. Accordingly: (1) Buyer must supply to Seller by **Buyer's Credit Information Deadline**, at Buyer's expense, information and documents (including a current credit report) concerning Buyer's financial, employment and credit condition; (2) Buyer consents that Seller may verify Buyer's financial ability and creditworthiness; and (3) any such information and documents received by Seller must be held by Seller in confidence and not released to others except to protect Seller's interest in this transaction. If the Cash at Closing is less than as set forth in § 4.1 of this Contract, Seller has the Right to Terminate under § 25.1, on or before Closing. If Seller disapproves of Buyer's financial ability or creditworthiness, in Seller's sole subjective discretion, Seller has the Right to Terminate under § 25.1, on or before **Disapproval of Buyer's Credit Information Deadline.**

5.4. Existing Loan Review. If an existing loan is not to be released at Closing, Seller must deliver copies of the loan documents (including note, deed of trust and any modifications) to Buyer by **Existing Loan Deadline.** For the sole benefit of Buyer, this Contract is conditional upon Buyer's review and approval of the provisions of such loan documents. Buyer has the Right to Terminate under § 25.1, on or before **Existing Loan Termination Deadline,** based on any unsatisfactory provision of such loan documents, in Buyer's sole subjective discretion. If the lender's approval of a transfer of the Property is required, this Contract is conditional upon Buyer obtaining such approval without change in the terms of such loan, except as set forth in § 4.6. If lender's approval is not obtained by **Loan Transfer Approval Deadline,** this Contract will terminate on such deadline. Seller has the Right to Terminate under § 25.1, on or before Closing, in Seller's sole subjective discretion, if Seller is to be released from liability under such existing loan and Buyer does not obtain such compliance as set forth in § 4.6.

6. APPRAISAL PROVISIONS.

6.1. Appraisal Definition. An "Appraisal" is an opinion of value prepared by a licensed or certified appraiser, engaged on behalf of Buyer or Buyer's lender, to determine the Property's market value (Appraised Value). The Appraisal may also set forth certain lender requirements, replacements, removals or repairs necessary on or to the Property as a condition for the Property to be valued at the Appraised Value.

6.2. Appraisal Condition. The applicable appraisal provision set forth below applies to the respective loan type set forth in § 4.5.3, or if a cash transaction (i.e. no financing), § 6.2.1 applies.

6.2.1. Conventional/Other. Buyer has the right to obtain an Appraisal. If the Appraised Value is less than the Purchase Price, or if the Appraisal is not received by Buyer on or before **Appraisal Deadline** Buyer may, on or before **Appraisal Objection Deadline**, notwithstanding § 8.3 or § 13:

6.2.1.1. Notice to Terminate. Notify Seller in writing, pursuant to § 25.1, that this Contract is terminated; or

6.2.1.2. Appraisal Objection. Deliver to Seller a written objection accompanied by either a copy of the Appraisal or written notice from lender that confirms the Appraised Value is less than the Purchase Price (Lender Verification).

6.2.1.3. Appraisal Resolution. If an Appraisal Objection is received by Seller, on or before **Appraisal Objection Deadline** and if Buyer and Seller have not agreed in writing to a settlement thereof on or before **Appraisal Resolution Deadline**, this Contract will terminate on the **Appraisal Resolution Deadline**, unless Seller receives Buyer's written withdrawal of the Appraisal Objection before such termination, i.e., on or before expiration of **Appraisal Resolution Deadline.**

6.3. Lender Property Requirements. If the lender imposes any written requirements, replacements, removals or repairs, including any specified in the Appraisal (Lender Requirements) to be made to the Property (e.g., roof repair, repainting), beyond those matters already agreed to by Seller in this Contract, this Contract terminates on the earlier of three days following Seller's receipt of the Lender Requirements, or Closing, unless prior to termination: (1) the parties enter into a written agreement to satisfy the Lender Requirements; (2) the Lender Requirements have been completed; or (3) the satisfaction of the Lender Requirements is waived in writing by Buyer.

6.4. Cost of Appraisal. Cost of the Appraisal to be obtained after the date of this Contract must be timely paid by ☐ **Buyer** ☐ **Seller**. The cost of the Appraisal may include any and all fees paid to the appraiser, appraisal management company, lender's agent or all three.

7. OWNERS' ASSOCIATION. This Section is applicable if the Property is located within a Common Interest Community and subject to the declaration (Association).

7.1. Common Interest Community Disclosure. THE PROPERTY IS LOCATED WITHIN A COMMON INTEREST COMMUNITY AND IS SUBJECT TO THE DECLARATION FOR THE COMMUNITY. THE OWNER OF THE PROPERTY WILL BE REQUIRED TO BE A MEMBER OF THE OWNERS' ASSOCIATION FOR THE COMMUNITY AND WILL BE SUBJECT TO THE BYLAWS AND RULES AND REGULATIONS OF THE ASSOCIATION. THE DECLARATION, BYLAWS AND RULES AND REGULATIONS WILL IMPOSE FINANCIAL OBLIGATIONS UPON THE OWNER OF THE PROPERTY, INCLUDING AN OBLIGATION TO PAY ASSESSMENTS OF THE ASSOCIATION. IF THE OWNER DOES NOT PAY THESE ASSESSMENTS, THE ASSOCIATION COULD PLACE A LIEN ON THE PROPERTY AND POSSIBLY SELL IT TO PAY THE DEBT. THE DECLARATION, BYLAWS AND RULES AND REGULATIONS OF THE COMMUNITY MAY PROHIBIT THE OWNER FROM MAKING CHANGES TO THE PROPERTY WITHOUT AN ARCHITECTURAL REVIEW BY THE ASSOCIATION (OR A COMMITTEE OF THE ASSOCIATION) AND THE APPROVAL OF THE ASSOCIATION. PURCHASERS OF PROPERTY WITHIN THE COMMON INTEREST COMMUNITY SHOULD INVESTIGATE THE FINANCIAL OBLIGATIONS OF MEMBERS OF THE ASSOCIATION. PURCHASERS SHOULD CAREFULLY READ THE DECLARATION FOR THE COMMUNITY AND THE BYLAWS AND RULES AND REGULATIONS OF THE ASSOCIATION.

7.2. Association Documents to Buyer. Seller is obligated to provide to Buyer the Association Documents (defined below), at Seller's expense, on or before **Association Documents Deadline**. Seller authorizes the Association to provide the Association Documents to Buyer, at Seller's expense. Seller's obligation to provide the Association Documents is fulfilled upon Buyer's receipt of the Association Documents, regardless of who provides such documents.

7.3. Association Documents. Association documents (Association Documents) consist of the following:

7.3.1. All Association declarations, articles of incorporation, bylaws, articles of organization, operating agreements, rules and regulations, party wall agreements and the Association's responsible governance policies adopted under § 38-33.3-209.5, C.R.S.;

7.3.2. Minutes of: (1) the annual owners' or members' meeting and (2) any executive boards' or managers' meetings; such minutes include those provided under the most current annual disclosure required under § 38-33.3-209.4, C.R.S. (Annual Disclosure) and minutes of meetings, if any, subsequent to the minutes disclosed in the Annual Disclosure. If none of the preceding minutes exist, then the most recent minutes, if any (§§ 7.3.1 and 7.3.2, collectively, Governing Documents); and

7.3.3. List of all Association insurance policies as provided in the Association's last Annual Disclosure, including, but not limited to, property, general liability, association director and officer professional liability and fidelity policies. The list must include the company names, policy limits, policy deductibles, additional named insureds and expiration dates of the policies listed (Association Insurance Documents);

7.3.4. A list by unit type of the Association's assessments, including both regular and special assessments as disclosed in the Association's last Annual Disclosure;

7.3.5. The Association's most recent financial documents which consist of: (1) the Association's operating budget for the current fiscal year, (2) the Association's most recent annual financial statements, including any amounts held in reserve for the fiscal year immediately preceding the Association's last Annual Disclosure, (3) the results of the Association's most recent available financial audit or review, (4) list of the fees and charges (regardless of name of title of such fees or charges) that the Association's community association manager or Association will charge in connection with the Closing including, but not limited to, any fee incident to the issuance of the Association's statement of assessments (Status Letter), any rush or update fee charged for the Status Letter, any record change fee or ownership record transfer fees (Record Change Fee), fees to access documents, (5) list of all assessments required to be paid in advance, reserves or working capital due at Closing and (6) reserve study, if any (§§ 7.3.4 and 7.3.5, collectively, Financial Documents);

7.3.6. Any written notice from the Association to Seller of a "construction defect action" under § 38-33.3-303.5, C.R.S. within the past six months and the result of whether the Association approved or disapproved such action (Construction Defect Documents). Nothing in this Section limits the Seller's obligation to disclose adverse material facts as required under § 10.2

(Disclosure of Adverse Material Facts; Subsequent Disclosure; Present Condition) including any problems or defects in the common elements or limited common elements of the Association property.

7.4. Conditional on Buyer's Review. Buyer has the right to review the Association Documents. Buyer has the Right to Terminate under § 25.1, on or before **Association Documents Termination Deadline**, based on any unsatisfactory provision in any of the Association Documents, in Buyer's sole subjective discretion. Should Buyer receive the Association Documents after **Association Documents Deadline**, Buyer, at Buyer's option, has the Right to Terminate under § 25.1 by Buyer's Notice to Terminate received by Seller on or before ten days after Buyer's receipt of the Association Documents. If Buyer does not receive the Association Documents, or if Buyer's Notice to Terminate would otherwise be required to be received by Seller after **Closing Date**, Buyer's Notice to Terminate must be received by Seller on or before Closing. If Seller does not receive Buyer's Notice to Terminate within such time, Buyer accepts the provisions of the Association Documents as satisfactory and Buyer waives any Right to Terminate under this provision, notwithstanding the provisions of § 8.6 (Right of First Refusal or Contract Approval).

8. TITLE INSURANCE, RECORD TITLE AND OFF-RECORD TITLE.

8.1. Evidence of Record Title.

☐ **8.1.1. Seller Selects Title Insurance Company.** If this box is checked, Seller will select the title insurance company to furnish the owner's title insurance policy at Seller's expense. On or before **Record Title Deadline**, Seller must furnish to Buyer, a current commitment for an owner's title insurance policy (Title Commitment), in an amount equal to the Purchase Price, or if this box is checked, ☐ an **Abstract of Title** certified to a current date. Seller will cause the title insurance policy to be issued and delivered to Buyer as soon as practicable at or after Closing.

☒ **8.1.2. Buyer Selects Title Insurance Company.** If this box is checked, Buyer will select the title insurance company to furnish the owner's title insurance policy at Buyer's expense. On or before **Record Title Deadline**, Buyer must furnish to Seller, a current commitment for owner's title insurance policy (Title Commitment), in an amount equal to the Purchase Price.

If neither box in § 8.1.1 or § 8.1.2 is checked, § 8.1.1 applies.

8.1.3. Owner's Extended Coverage (OEC). The Title Commitment ■ **Will** ☐ **Will Not** contain Owner's Extended Coverage (OEC). If the Title Commitment is to contain OEC, it will commit to delete or insure over the standard exceptions which relate to: (1) parties in possession, (2) unrecorded easements, (3) survey matters, (4) unrecorded mechanics' liens, (5) gap period (period between the effective date and time of commitment to the date and time the deed is recorded) and (6) unpaid taxes, assessments and unredeemed tax sales prior to the year of Closing. Any additional premium expense to obtain OEC will be paid by ☐ **Buyer** ☐ **Seller** ■ **One-Half by Buyer and One-Half by Seller** ☐ **Other** N/A. Regardless of whether the Contract requires OEC, the Title Insurance Commitment may not provide OEC or delete or insure over any or all of the standard exceptions for OEC. The Title Insurance Company may require a New Survey or New ILC, defined below, among other requirements for OEC. If the Title Insurance Commitment is not satisfactory to Buyer, Buyer has a right to object under § 8.5 (Right to Object to Title, Resolution).

8.1.4. Title Documents. Title Documents consist of the following: (1) copies of any plats, declarations, covenants, conditions and restrictions burdening the Property and (2) copies of any other documents (or, if illegible, summaries of such documents) listed in the schedule of exceptions (Exceptions) in the Title Commitment furnished to Buyer (collectively, Title Documents).

8.1.5. Copies of Title Documents. Buyer must receive, on or before **Record Title Deadline**, copies of all Title Documents. This requirement pertains only to documents as shown of record in the office of the clerk and recorder in the county where the Property is located. The cost of furnishing copies of the documents required in this Section will be at the expense of the party or parties obligated to pay for the owner's title insurance policy.

8.1.6. Existing Abstracts of Title. Seller must deliver to Buyer copies of any abstracts of title covering all or any portion of the Property (Abstract of Title) in Seller's possession on or before **Record Title Deadline**.

8.2. Record Title. Buyer has the right to review and object to the Abstract of Title or Title Commitment and any of the Title Documents as set forth in § 8.5 (Right to Object to Title, Resolution) on or before **Record Title Objection Deadline**. Buyer's objection may be based on any unsatisfactory form or content of Title Commitment or Abstract of Title, notwithstanding § 13, or any other unsatisfactory title condition, in Buyer's sole subjective discretion. If the Abstract of Title, Title Commitment or Title Documents are not received by Buyer on or before the **Record Title Deadline**, or if there is an endorsement to the Title Commitment that adds a new Exception to title, a copy of the new Exception to title and the modified Title Commitment will be delivered to Buyer. Buyer has until the earlier of Closing or ten days after receipt of such documents by Buyer to review and object to: (1) any required Title Document not timely received by Buyer, (2) any change to the Abstract of Title, Title Commitment or Title Documents, or (3) any endorsement to the Title Commitment. If Seller receives Buyer's Notice to Terminate or Notice of Title Objection, pursuant to this § 8.2 (Record Title), any title objection by Buyer is governed by the provisions set forth in § 8.5 (Right to Object to Title, Resolution). If Seller has fulfilled all Seller's obligations, if any, to deliver to Buyer all documents required by § 8.1 (Evidence of Record Title) and Seller does not receive Buyer's Notice to Terminate or Notice of Title Objection by the applicable deadline specified above, Buyer accepts the condition of title as disclosed by the Abstract of Title, Title Commitment and Title Documents as satisfactory.

8.3. Off-Record Title. Seller must deliver to Buyer, on or before **Off-Record Title Deadline**, true copies of all existing surveys in Seller's possession pertaining to the Property and must disclose to Buyer all easements, liens (including, without

limitation, governmental improvements approved, but not yet installed) or other title matters (including, without limitation, rights of first refusal and options) not shown by public records, of which Seller has actual knowledge (Off-Record Matters). This Section excludes any **New ILC** or **New Survey** governed under § 9 (New ILC, New Survey). Buyer has the right to inspect the Property to investigate if any third party has any right in the Property not shown by public records (e.g., unrecorded easement, boundary line discrepancy or water rights). Buyer's Notice to Terminate or Notice of Title Objection of any unsatisfactory condition (whether disclosed by Seller or revealed by such inspection, notwithstanding § 8.2 (Record Title) and § 13 (Transfer of Title)), in Buyer's sole subjective discretion, must be received by Seller on or before **Off-Record Title Objection Deadline**. If an Off-Record Matter is received by Buyer after the **Off-Record Title Deadline**, Buyer has until the earlier of Closing or ten days after receipt by Buyer to review and object to such Off-Record Matter. If Seller receives Buyer's Notice to Terminate or Notice of Title Objection pursuant to this § 8.3 (Off-Record Title), any title objection by Buyer is governed by the provisions set forth in § 8.5 (Right to Object to Title, Resolution). If Seller does not receive Buyer's Notice to Terminate or Notice of Title Objection by the applicable deadline specified above, Buyer accepts title subject to such Off-Record Matters and rights, if any, of third parties not shown by public records of which Buyer has actual knowledge.

8.4. Special Taxing Districts. SPECIAL TAXING DISTRICTS MAY BE SUBJECT TO GENERAL OBLIGATION INDEBTEDNESS THAT IS PAID BY REVENUES PRODUCED FROM ANNUAL TAX LEVIES ON THE TAXABLE PROPERTY WITHIN SUCH DISTRICTS. PROPERTY OWNERS IN SUCH DISTRICTS MAY BE PLACED AT RISK FOR INCREASED MILL LEVIES AND TAX TO SUPPORT THE SERVICING OF SUCH DEBT WHERE CIRCUMSTANCES ARISE RESULTING IN THE INABILITY OF SUCH A DISTRICT TO DISCHARGE SUCH INDEBTEDNESS WITHOUT SUCH AN INCREASE IN MILL LEVIES. BUYERS SHOULD INVESTIGATE THE SPECIAL TAXING DISTRICTS IN WHICH THE PROPERTY IS LOCATED BY CONTACTING THE COUNTY TREASURER, BY REVIEWING THE CERTIFICATE OF TAXES DUE FOR THE PROPERTY AND BY OBTAINING FURTHER INFORMATION FROM THE BOARD OF COUNTY COMMISSIONERS, THE COUNTY CLERK AND RECORDER, OR THE COUNTY ASSESSOR.

A tax certificate from the respective county treasurer listing any special taxing districts that effect the Property (Tax Certificate) must be delivered to Buyer on or before **Record Title Deadline**. If the Property is located within a special taxing district and such inclusion is unsatisfactory to Buyer, in Buyer's sole subjective discretion, Buyer may object, on or before **Record Title Objection Deadline**. If the Tax Certificate shows that the Property is included in a special taxing district and is received by Buyer after the **Record Title Deadline**, Buyer has until the earlier of Closing or ten days after receipt by Buyer to review and object to the Property's inclusion in a special taxing district as unsatisfactory to Buyer.

8.5. Right to Object to Title, Resolution. Buyer's right to object, in Buyer's sole subjective discretion, to any title matters includes those matters set forth in § 8.2 (Record Title), § 8.3 (Off-Record Title), § 8.4 (Special Taxing District) and § 13 (Transfer of Title). If Buyer objects to any title matter, on or before the applicable deadline, Buyer has the following options:

8.5.1. Title Objection, Resolution. If Seller receives Buyer's written notice objecting to any title matter (Notice of Title Objection) on or before the applicable deadline and if Buyer and Seller have not agreed to a written settlement thereof on or before **Title Resolution Deadline**, this Contract will terminate on the expiration of **Title Resolution Deadline**, unless Seller receives Buyer's written withdrawal of Buyer's Notice of Title Objection (i.e., Buyer's written notice to waive objection to such items and waives the Right to Terminate for that reason), on or before expiration of **Title Resolution Deadline**. If either the Record Title Deadline or the Off-Record Title Deadline, or both, are extended pursuant to § 8.2 (Record Title), § 8.3 (Off-Record Title) or § 8.4 (Special Taxing Districts), the Title Resolution Deadline also will be automatically extended to the earlier of Closing or fifteen days after Buyer's receipt of the applicable documents; or

8.5.2. Title Objection, Right to Terminate. Buyer may exercise the Right to Terminate under § 25.1, on or before the applicable deadline, based on any title matter unsatisfactory to Buyer, in Buyer's sole subjective discretion.

8.6. Right of First Refusal or Contract Approval. If there is a right of first refusal on the Property or a right to approve this Contract, Seller must promptly submit this Contract according to the terms and conditions of such right. If the holder of the right of first refusal exercises such right or the holder of a right to approve disapproves this Contract, this Contract will terminate. If the right of first refusal is waived explicitly or expires, or the Contract is approved, this Contract will remain in full force and effect. Seller must promptly notify Buyer in writing of the foregoing. If expiration or waiver of the right of first refusal or approval of this Contract has not occurred on or before **Right of First Refusal Deadline**, this Contract will then terminate.

8.7. Title Advisory. The Title Documents affect the title, ownership and use of the Property and should be reviewed carefully. Additionally, other matters not reflected in the Title Documents may affect the title, ownership and use of the Property, including, without limitation, boundary lines and encroachments, set-back requirements, area, zoning, building code violations, unrecorded easements and claims of easements, leases and other unrecorded agreements, water on or under the Property and various laws and governmental regulations concerning land use, development and environmental matters.

8.7.1. OIL, GAS, WATER AND MINERAL DISCLOSURE. THE SURFACE ESTATE OF THE PROPERTY MAY BE OWNED SEPARATELY FROM THE UNDERLYING MINERAL ESTATE AND TRANSFER OF THE SURFACE ESTATE MAY NOT NECESSARILY INCLUDE TRANSFER OF THE MINERAL ESTATE OR WATER RIGHTS. THIRD PARTIES MAY OWN OR LEASE INTERESTS IN OIL, GAS, OTHER MINERALS, GEOTHERMAL ENERGY OR WATER ON OR UNDER THE SURFACE OF THE PROPERTY, WHICH INTERESTS MAY GIVE THEM

RIGHTS TO ENTER AND USE THE SURFACE OF THE PROPERTY TO ACCESS THE MINERAL ESTATE, OIL, GAS OR WATER.

8.7.2. SURFACE USE AGREEMENT. THE USE OF THE SURFACE ESTATE OF THE PROPERTY TO ACCESS THE OIL, GAS OR MINERALS MAY BE GOVERNED BY A SURFACE USE AGREEMENT, A MEMORANDUM OR OTHER NOTICE OF WHICH MAY BE RECORDED WITH THE COUNTY CLERK AND RECORDER.

8.7.3. OIL AND GAS ACTIVITY. OIL AND GAS ACTIVITY THAT MAY OCCUR ON OR ADJACENT TO THE PROPERTY MAY INCLUDE, BUT IS NOT LIMITED TO, SURVEYING, DRILLING, WELL COMPLETION OPERATIONS, STORAGE, OIL AND GAS, OR PRODUCTION FACILITIES, PRODUCING WELLS, REWORKING OF CURRENT WELLS AND GAS GATHERING AND PROCESSING FACILITIES.

8.7.4. ADDITIONAL INFORMATION. BUYER IS ENCOURAGED TO SEEK ADDITIONAL INFORMATION REGARDING OIL AND GAS ACTIVITY ON OR ADJACENT TO THE PROPERTY, INCLUDING DRILLING PERMIT APPLICATIONS. THIS INFORMATION MAY BE AVAILABLE FROM THE COLORADO OIL AND GAS CONSERVATION COMMISSION.

8.7.5. **Title Insurance Exclusions.** Matters set forth in this Section and others, may be excepted, excluded from, or not covered by the owner's title insurance policy.

8.8. **Consult an Attorney.** Buyer is advised to timely consult legal counsel with respect to all such matters as there are strict time limits provided in this Contract (e.g., **Record Title Objection Deadline** and **Off-Record Title Objection Deadline**).

9. NEW ILC, NEW SURVEY.

9.1. **New ILC or New Survey.** If the box is checked, a: 1) ☐ **New Improvement Location Certificate (New ILC)**; or, 2) ■ **New Survey** in the form of subdivision plat; is required and the following will apply:

9.1.1. **Ordering of New ILC or New Survey.** ☐ **Seller** ☐ **Buyer** will order the New ILC or New Survey. The New ILC or New Survey may also be a previous ILC or survey that is in the above-required form, certified and updated as of a date after the date of this Contract.

9.1.2. **Payment for New ILC or New Survey.** The cost of the New ILC or New Survey will be paid, on or before Closing, by: ☐ **Seller** ■ **Buyer** or: $12,400.00, included in the purchase price, as payment in for the cost of the subdivision plat for the Property.

9.1.3. **Delivery of New ILC or New Survey.** Buyer, Seller, the issuer of the Title Commitment (or the provider of the opinion of title if an Abstract of Title) and N/A will receive a New ILC or New Survey on or before **New ILC or New Survey Deadline**.

9.1.4. **Certification of New ILC or New Survey.** The New ILC or New Survey will be certified by the surveyor to all those who are to receive the New ILC or New Survey.

9.2. **Buyer's Right to Waive or Change New ILC or New Survey Selection.** Buyer may select a New ILC or New Survey different than initially specified in this Contract if there is no additional cost to Seller or change to the **New ILC or New Survey Objection Deadline**. Buyer may, in Buyer's sole subjective discretion, waive a New ILC or New Survey if done prior to Seller incurring any cost for the same.

9.3. **New ILC or New Survey Objection.** Buyer has the right to review and object to the New ILC or New Survey. If the New ILC or New Survey is not timely received by Buyer or is unsatisfactory to Buyer, in Buyer's sole subjective discretion, Buyer may, on or before **New ILC or New Survey Objection Deadline**, notwithstanding § 8.3 or § 13:

9.3.1. **Notice to Terminate.** Notify Seller in writing, pursuant to § 25.1, that this Contract is terminated; or

9.3.2. **New ILC or New Survey Objection.** Deliver to Seller a written description of any matter that was to be shown or is shown in the New ILC or New Survey that is unsatisfactory and that Buyer requires Seller to correct.

9.3.3. **New ILC or New Survey Resolution.** If a **New ILC or New Survey Objection** is received by Seller, on or before **New ILC or New Survey Objection Deadline** and if Buyer and Seller have not agreed in writing to a settlement thereof on or before **New ILC or New Survey Resolution Deadline**, this Contract will terminate on expiration of the **New ILC or New Survey Resolution Deadline**, unless Seller receives Buyer's written withdrawal of the New ILC or New Survey Objection before such termination, i.e., on or before expiration of **New ILC or New Survey Resolution Deadline**.

DISCLOSURE, INSPECTION AND DUE DILIGENCE

10. PROPERTY DISCLOSURE, INSPECTION, INDEMNITY, INSURABILITY, DUE DILIGENCE AND SOURCE OF WATER.

10.1. **Seller's Property Disclosure.** On or before **Seller's Property Disclosure Deadline**, Seller agrees to deliver to Buyer the most current version of the applicable Colorado Real Estate Commission's Seller's Property Disclosure form completed by Seller to Seller's actual knowledge and current as of the date of this Contract.

10.2. Disclosure of Adverse Material Facts; Subsequent Disclosure; Present Condition. Seller must disclose to Buyer any adverse material facts actually known by Seller as of the date of this Contract. Seller agrees that disclosure of adverse material facts will be in writing. In the event Seller discovers an adverse material fact after the date of this Contract, Seller must timely disclose such adverse fact to Buyer. Buyer has the Right to Terminate based on the Seller's new disclosure on the earlier of Closing or five days after Buyer's receipt of the new disclosure. Except as otherwise provided in this Contract, Buyer acknowledges that Seller is conveying the Property to Buyer in an "**As Is**" condition, "**Where Is**" and "**With All Faults.**"

10.3. Inspection. Unless otherwise provided in this Contract, Buyer, acting in good faith, has the right to have inspections (by one or more third parties, personally or both) of the Property and Inclusions (Inspection), at Buyer's expense. If (1) the physical condition of the Property, including, but not limited to, the roof, walls, structural integrity of the Property, the electrical, plumbing, HVAC and other mechanical systems of the Property, (2) the physical condition of the Inclusions, (3) service to the Property (including utilities and communication services), systems and components of the Property (e.g., heating and plumbing), (4) any proposed or existing transportation project, road, street or highway, or (5) any other activity, odor or noise (whether on or off the Property) and its effect or expected effect on the Property or its occupants is unsatisfactory, in Buyer's sole subjective discretion, Buyer may:

10.3.1. Inspection Objection. On or before the **Inspection Objection Deadline**, deliver to Seller a written description of any unsatisfactory condition that Buyer requires Seller to correct; or

10.3.2. Terminate. On or before the **Inspection Termination Deadline**, notify Seller in writing, pursuant to § 25.1, that this Contract is terminated due to any unsatisfactory condition. **Inspection Termination Deadline will be on the earlier of Inspection Resolution Deadline or the date specified in § 3.1 for Inspection Termination Deadline.**

10.3.3. Inspection Resolution. If an Inspection Objection is received by Seller, on or before **Inspection Objection Deadline** and if Buyer and Seller have not agreed in writing to a settlement thereof on or before **Inspection Resolution Deadline**, this Contract will terminate on **Inspection Resolution Deadline** unless Seller receives Buyer's written withdrawal of the Inspection Objection before such termination, i.e., on or before expiration of **Inspection Resolution Deadline.**

10.4. Damage, Liens and Indemnity. Buyer, except as otherwise provided in this Contract or other written agreement between the parties, is responsible for payment for all inspections, tests, surveys, engineering reports, or other reports performed at Buyer's request (Work) and must pay for any damage that occurs to the Property and Inclusions as a result of such Work. Buyer must not permit claims or liens of any kind against the Property for Work performed on the Property. Buyer agrees to indemnify, protect and hold Seller harmless from and against any liability, damage, cost or expense incurred by Seller and caused by any such Work, claim, or lien. This indemnity includes Seller's right to recover all costs and expenses incurred by Seller to defend against any such liability, damage, cost or expense, or to enforce this Section, including Seller's reasonable attorney fees, legal fees and expenses. The provisions of this Section survive the termination of this Contract. This § 10.4 does not apply to items performed pursuant to an Inspection Resolution.

10.5. Insurability. Buyer has the right to review and object to the availability, terms and conditions of and premium for property insurance (Property Insurance). Buyer has the Right to Terminate under § 25.1, on or before **Property Insurance Termination Deadline**, based on any unsatisfactory provision of the Property Insurance, in Buyer's sole subjective discretion.

10.6. Due Diligence.

10.6.1. Due Diligence Documents. If the respective box is checked, Seller agrees to deliver copies of the following documents and information pertaining to the Property (Due Diligence Documents) to Buyer on or before **Due Diligence Documents Delivery Deadline:**

[x] **10.6.1.1.** All contracts relating to the operation, maintenance and management of the Property;

[ ] **10.6.1.2.** Property tax bills for the last N/A years;

[ ] **10.6.1.3.** As-built construction plans to the Property and the tenant improvements, including architectural, electrical, mechanical and structural systems; engineering reports; and permanent Certificates of Occupancy, to the extent now available;

[ ] **10.6.1.4.** A list of all Inclusions to be conveyed to Buyer;

[ ] **10.6.1.5.** Operating statements for the past N/A years;

[ ] **10.6.1.6.** A rent roll accurate and correct to the date of this Contract;

[x] **10.6.1.7.** All current leases, including any amendments or other occupancy agreements, pertaining to the Property. Those leases or other occupancy agreements pertaining to the Property that survive Closing are as follows (Leases):

[ ] **10.6.1.8.** A schedule of any tenant improvement work Seller is obligated to complete but has not yet completed and capital improvement work either scheduled or in process on the date of this Contract;

[ ] **10.6.1.9.** All insurance policies pertaining to the Property and copies of any claims which have been made for the past N/A years;

[x] **10.6.1.10.** Soils reports, surveys and engineering reports or data pertaining to the Property (if not delivered earlier under § 8.3);

[x] **10.6.1.11.** Any and all existing documentation and reports regarding Phase I and II environmental reports, letters, test results, advisories and similar documents respective to the existence or nonexistence of asbestos, PCB transformers, or

other toxic, hazardous or contaminated substances and/or underground storage tanks and/or radon gas. If no reports are in Seller's possession or known to Seller, Seller warrants that no such reports are in Seller's possession or known to Seller;

☐ **10.6.1.12.** Any *Americans with Disabilities Act* reports, studies or surveys concerning the compliance of the Property with said Act;

☒ **10.6.1.13.** All permits, licenses and other building or use authorizations issued by any governmental authority with jurisdiction over the Property and written notice of any violation of any such permits, licenses or use authorizations, if any; and

☒ **10.6.1.14.** Other documents and information:

Any and all documents prepard by Vortex engineering as described in the attached statement.

10.6.2. Due Diligence Documents Review and Objection. Buyer has the right to review and object to Due Diligence Documents. If the Due Diligence Documents are not supplied to Buyer or are unsatisfactory, in Buyer's sole subjective discretion, Buyer may, on or before **Due Diligence Documents Objection Deadline**:

10.6.2.1. Notice to Terminate. Notify Seller in writing, pursuant to § 25.1, that this Contract is terminated; or

10.6.2.2. Due Diligence Documents Objection. Deliver to Seller a written description of any unsatisfactory Due Diligence Documents that Buyer requires Seller to correct.

10.6.2.3. Due Diligence Documents Resolution. If a Due Diligence Documents Objection is received by Seller, on or before **Due Diligence Documents Objection Deadline** and if Buyer and Seller have not agreed in writing to a settlement thereof on or before **Due Diligence Documents Resolution Deadline**, this Contract will terminate on **Due Diligence Documents Resolution Deadline** unless Seller receives Buyer's written withdrawal of the Due Diligence Documents Objection before such termination, i.e., on or before expiration of **Due Diligence Documents Resolution Deadline**.

10.6.3. Zoning. Buyer has the Right to Terminate under § 25.1, on or before **Due Diligence Documents Objection Deadline**, based on any unsatisfactory zoning and any use restrictions imposed by any governmental agency with jurisdiction over the Property, in Buyer's sole subjective discretion.

10.6.4. Due Diligence – Environmental, ADA. Buyer has the right to obtain environmental inspections of the Property including Phase I and Phase II Environmental Site Assessments, as applicable. ☐ **Seller** ■ **Buyer** will order or provide ■ **Phase I Environmental Site Assessment**, ☐ **Phase II Environmental Site Assessment** (compliant with most current version of the applicable ASTM E1527 standard practices for Environmental Site Assessments) and/or ☐ N/A, at the expense of ☐ **Seller** ■ **Buyer** (Environmental Inspection). In addition, Buyer, at Buyer's expense, may also conduct an evaluation whether the Property complies with the *Americans with Disabilities Act* (ADA Evaluation). All such inspections and evaluations must be conducted at such times as are mutually agreeable to minimize the interruption of Seller's and any Seller's tenants' business uses of the Property, if any.

If Buyer's Phase I Environmental Site Assessment recommends a Phase II Environmental Site Assessment, the **Environmental Inspection Termination Deadline** will be extended by MUTUAL AGREEMENT days (Extended Environmental Inspection Termination Deadline) and if such Extended Environmental Inspection Termination Deadline extends beyond the **Closing Date**, the **Closing Date** will be extended a like period of time. In such event, ☐ **Seller** ■ **Buyer** must pay the cost for such Phase II Environmental Site Assessment.

Notwithstanding Buyer's right to obtain additional environmental inspections of the Property in this § 10.6.4, Buyer has the Right to Terminate under § 25.1, on or before **Environmental Inspection Termination Deadline**, or if applicable, the Extended Environmental Inspection Termination Deadline, based on any unsatisfactory results of Environmental Inspection, in Buyer's sole subjective discretion.

Buyer has the Right to Terminate under § 25.1, on or before **ADA Evaluation Termination Deadline**, based on any unsatisfactory ADA Evaluation, in Buyer's sole subjective discretion.

10.7. Conditional Upon Sale of Property. This Contract is conditional upon the sale and closing of that certain property owned by Buyer and commonly known as NONE. Buyer has the Right to Terminate under § 25.1 effective upon Seller's receipt of Buyer's Notice to Terminate on or before **Conditional Sale Deadline** if such property is not sold and closed by such deadline. This Section is for the sole benefit of Buyer. If Seller does not receive Buyer's Notice to Terminate on or before **Conditional Sale Deadline**, Buyer waives any Right to Terminate under this provision.

10.8. Source of Potable Water (Residential Land and Residential Improvements Only). Buyer ■ **Does** ☐ **Does Not** acknowledge receipt of a copy of Seller's Property Disclosure or Source of Water Addendum disclosing the source of potable water for the Property. ☐ There is **No Well.** Buyer ☐ **Does** ☐ **Does Not** acknowledge receipt of a copy of the current well permit.

Note to Buyer: SOME WATER PROVIDERS RELY, TO VARYING DEGREES, ON NONRENEWABLE GROUND WATER. YOU MAY WISH TO CONTACT YOUR PROVIDER (OR INVESTIGATE THE DESCRIBED SOURCE) TO DETERMINE THE LONG-TERM SUFFICIENCY OF THE PROVIDER'S WATER SUPPLIES.

10.9. Existing Leases; Modification of Existing Leases; New Leases. Seller states that none of the Leases to be assigned to the Buyer at the time of Closing contain any rent concessions, rent reductions or rent abatements except as disclosed in the Lease or other writing received by Buyer. Seller will not amend, alter, modify, extend or cancel any of the Leases nor will Seller enter into any new leases affecting the Property without the prior written consent of Buyer, which consent will not be unreasonably withheld or delayed.

11. ESTOPPEL STATEMENTS.

11.1. Estoppel Statements Conditions. Buyer has the right to review and object to any Estoppel Statements. Seller must request from all tenants of the Property and if received by Seller, deliver to Buyer on or before **Estoppel Statements Deadline**, statements in a form and substance reasonably acceptable to Buyer, from each occupant or tenant at the Property (Estoppel Statement) attached to a copy of the Lease stating:

11.1.1. The commencement date of the Lease and scheduled termination date of the Lease;

11.1.2. That said Lease is in full force and effect and that there have been no subsequent modifications or amendments;

11.1.3. The amount of any advance rentals paid, rent concessions given and deposits paid to Seller;

11.1.4. The amount of monthly (or other applicable period) rental paid to Seller;

11.1.5. That there is no default under the terms of said Lease by landlord or occupant; and

11.1.6. That the Lease to which the Estoppel Statement is attached is a true, correct and complete copy of the Lease demising the premises it describes.

11.2. Seller Estoppel Statement. In the event Seller does not receive from all tenants of the Property a completed signed Estoppel Statement, Seller agrees to complete and execute an Estoppel Statement setting forth the information and documents required §11.1 above and deliver the same to Buyer on or before **Estoppel Statements Deadline.**

11.3. Estoppel Statements Termination. Buyer has the Right to Terminate under § 25.1, on or before **Estoppel Statements Termination Deadline**, based on any unsatisfactory Estoppel Statement, in Buyer's sole subjective discretion, or if Seller fails to deliver the Estoppel Statements on or before **Estoppel Statements Deadline.** Buyer also has the unilateral right to waive any unsatisfactory Estoppel Statement.

CLOSING PROVISIONS

12. CLOSING DOCUMENTS, INSTRUCTIONS AND CLOSING.

12.1. Closing Documents and Closing Information. Seller and Buyer will cooperate with the Closing Company to enable the Closing Company to prepare and deliver documents required for Closing to Buyer and Seller and their designees. If Buyer is obtaining a loan to purchase the Property, Buyer acknowledges Buyer's lender is required to provide the Closing Company, in a timely manner, all required loan documents and financial information concerning Buyer's loan. Buyer and Seller will furnish any additional information and documents required by Closing Company that will be necessary to complete this transaction. Buyer and Seller will sign and complete all customary or reasonably-required documents at or before Closing.

12.2. Closing Instructions. Colorado Real Estate Commission's Closing Instructions ☐ **Are** ■ **Are Not** executed with this Contract.

12.3. Closing. Delivery of deed from Seller to Buyer will be at closing (Closing). Closing will be on the date specified as the **Closing Date** or by mutual agreement at an earlier date. The hour and place of Closing will be as designated by BUYER.

12.4. Disclosure of Settlement Costs. Buyer and Seller acknowledge that costs, quality and extent of service vary between different settlement service providers (e.g., attorneys, lenders, inspectors and title companies).

13. TRANSFER OF TITLE.

Subject to Buyer's compliance with the terms and provisions of this Contract, including the tender of any payment due at Closing, Seller must execute and deliver the following good and sufficient deed to Buyer, at Closing:

■ special warranty deed ☐ general warranty deed ☐ bargain and sale deed ☐ quit claim deed ☐ personal representative's deed ☐ N/A deed. Seller, provided another deed is not selected, must execute and deliver a good and sufficient special warranty deed to Buyer, at Closing.

Unless otherwise specified in §30 (Additional Provisions), if title will be conveyed using a special warranty deed or a general warranty deed, title will be conveyed "subject to statutory exceptions" as defined in §38-30-113(5)(a), C.R.S.

14. PAYMENT OF LIENS AND ENCUMBRANCES.

Unless agreed to by Buyer in writing, any amounts owed on any liens or encumbrances securing a monetary sum, including, but not limited to, any governmental liens for special improvements installed as of the date of Buyer's signature hereon, whether assessed or not and previous years' taxes, will be paid at or before Closing by Seller from the proceeds of this transaction or from any other source.

15. CLOSING COSTS, CLOSING FEE, ASSOCIATION FEES AND TAXES.

15.1. Closing Costs. Buyer and Seller must pay, in Good Funds, their respective closing costs and all other items required to be paid at Closing, except as otherwise provided herein.

15.2. Closing Services Fee. The fee for real estate closing services must be paid at Closing by ☐ **Buyer** ☐ **Seller** ■ **One-Half by Buyer and One-Half by Seller** ☐ **Other** N/A.

15.3. Status Letter and Record Change Fees. At least fourteen days prior to **Closing Date**, Seller agrees to promptly request the Association to deliver to Buyer a current Status Letter. Any fees incident to the issuance of Association's Status Letter must be paid by ■ **None** ☐ **Buyer** ☐ **Seller** ☐ **One-Half by Buyer and One-Half by Seller**. Any Record Change Fee must be paid by ■ **None** ☐ **Buyer** ☐ **Seller** ☐ **One-Half by Buyer and One-Half by Seller**.

15.4. Local Transfer Tax. ☐ **The Local Transfer Tax** of N/A % of the Purchase Price must be paid at Closing by ■ **None** ☐ **Buyer** ☐ **Seller** ☐ **One-Half by Buyer and One-Half by Seller**.

15.5. Private Transfer Fee. Private transfer fees and other fees due to a transfer of the Property, payable at Closing, such as community association fees, developer fees and foundation fees, must be paid at Closing by ■ **None** ☐ **Buyer** ☐ **Seller** ☐ **One-Half by Buyer and One-Half by Seller**. The Private Transfer fee, whether one or more, is for the following association(s): _____ in the total amount of _____% of the Purchase Price or $ N/A .

15.6. Water Transfer Fees. The Water Transfer Fees can change. The fees, as of the date of this Contract, do not exceed $ 100.00 for:

☐ Water Stock/Certificates ☐ Water District
☐ Augmentation Membership ☐ Small Domestic Water Company ☒ Irrigation

and must be paid at Closing by ☐ **None** ☐ **Buyer** ☐ **Seller** ■ **One-Half by Buyer and One-Half by Seller.**

15.7. Sales and Use Tax. Any sales and use tax that may accrue because of this transaction must be paid when due by ■ **None** ☐ **Buyer** ☐ **Seller** ☐ **One-Half by Buyer and One-Half by Seller.**

15.8. FIRPTA and Colorado Withholding.

15.8.1. FIRPTA. The Internal Revenue Service (IRS) may require a substantial portion of the Seller's proceeds be withheld after Closing when Seller is a foreign person. If required withholding does not occur, the Buyer could be held liable for the amount of the Seller's tax, interest and penalties. If the box in this Section is checked, Seller represents that Seller ☐ **IS** a foreign person for purposes of U.S. income taxation. If the box in this Section is not checked, Seller represents that Seller is not a foreign person for purposes of U.S. income taxation. Seller agrees to cooperate with Buyer and Closing Company to provide any reasonably requested documents to verify Seller's foreign person status. If withholding is required, Seller authorizes Closing Company to withhold such amount from Seller's proceeds. Seller should inquire with Seller's tax advisor to determine if withholding applies or if an exemption exists.

15.8.2. Colorado Withholding. The Colorado Department of Revenue may require a portion of the Seller's proceeds be withheld after Closing when Seller will not be a Colorado resident after Closing, if not otherwise exempt. Seller agrees to cooperate with Buyer and Closing Company to provide any reasonably requested documents to verify Seller's status. If withholding is required, Seller authorizes Closing Company to withhold such amount from Seller's proceeds. Seller should inquire with Seller's tax advisor to determine if withholding applies or if an exemption exists.

16. PRORATIONS AND ASSOCIATION ASSESSMENTS. The following will be prorated to the **Closing Date**, except as otherwise provided:

16.1. Taxes. Personal property taxes, if any, special taxing district assessments, if any and general real estate taxes for the year of Closing, based on ■ **Taxes for the Calendar Year Immediately Preceding Closing** ☐ **Most Recent Mill Levy and Most Recent Assessed Valuation,** ☐ **Other** _____.

16.2. Rents. Rents based on ☐ **Rents Actually Received** ☐ **Accrued**. At Closing, Seller will transfer or credit to Buyer the security deposits for all Leases assigned, or any remainder after lawful deductions and notify all tenants in writing of such transfer and of the transferee's name and address. Seller must assign to Buyer all Leases in effect at Closing and Buyer must assume Seller's obligations under such Leases.

16.3. Association Assessments. Current regular Association assessments and dues (Association Assessments) paid in advance will be credited to Seller at Closing. Cash reserves held out of the regular Association Assessments for deferred maintenance by the Association will not be credited to Seller except as may be otherwise provided by the Governing Documents. Buyer acknowledges that Buyer may be obligated to pay the Association, at Closing, an amount for reserves or working capital. Any special assessment assessed prior to **Closing Date** by the Association will be the obligation of ☐ **Buyer** ☐ **Seller**. Except however, any special assessment by the Association for improvements that have been installed as of the date of Buyer's signature hereon, whether assessed prior to or after Closing, will be the obligation of Seller. Seller represents there are no unpaid regular or special assessments against the Property except the current regular assessments and N/A . Association Assessments are subject to change as provided in the Governing Documents.

16.4. Other Prorations. Water and sewer charges, propane, interest on continuing loan and N/A .

16.5. Final Settlement. Unless otherwise agreed in writing, these prorations are final.

17. POSSESSION. Possession of the Property will be delivered to Buyer on **Possession Date** at **Possession Time**, subject to the Leases as set forth in § 10.6.1.7.

If Seller, after Closing, fails to deliver possession as specified, Seller will be subject to eviction and will be additionally liable to Buyer for payment of $ 500.00 per day (or any part of a day notwithstanding § 18.1) from **Possession Date** and **Possession Time** until possession is delivered.

GENERAL PROVISIONS

18. DAY; COMPUTATION OF PERIOD OF DAYS, DEADLINE.

18.1. Day. As used in this Contract, the term "day" means the entire day ending at 11:59 p.m., United States Mountain Time (Standard or Daylight Savings, as applicable).

18.2. Computation of Period of Days, Deadline. In computing a period of days (e.g., three days after MEC), when the ending date is not specified, the first day is excluded and the last day is included. If any deadline falls on a Saturday, Sunday or federal or Colorado state holiday (Holiday), such deadline ■ **Will** ☐ **Will Not** be extended to the next day that is not a Saturday, Sunday or Holiday. Should neither box be checked, the deadline will not be extended.

19. CAUSES OF LOSS, INSURANCE; DAMAGE TO INCLUSIONS AND SERVICES; CONDEMNATION; AND WALK-THROUGH. Except as otherwise provided in this Contract, the Property, Inclusions or both will be delivered in the condition existing as of the date of this Contract, ordinary wear and tear excepted.

19.1. Causes of Loss, Insurance. In the event the Property or Inclusions are damaged by fire, other perils or causes of loss prior to Closing (Property Damage) in an amount of not more than ten percent of the total Purchase Price and if the repair of the damage will be paid by insurance (other than the deductible to be paid by Seller), then Seller, upon receipt of the insurance proceeds, will use Seller's reasonable efforts to repair the Property before **Closing Date**. Buyer has the Right to Terminate under § 25.1, on or before **Closing Date**, if the Property is not repaired before **Closing Date**, or if the damage exceeds such sum. Should Buyer elect to carry out this Contract despite such Property Damage, Buyer is entitled to a credit at Closing for all insurance proceeds that were received by Seller (but not the Association, if any) resulting from damage to the Property and Inclusions, plus the amount of any deductible provided for in the insurance policy. This credit may not exceed the Purchase Price. In the event Seller has not received the insurance proceeds prior to Closing, the parties may agree to extend the **Closing Date** to have the Property repaired prior to Closing or, at the option of Buyer, (1) Seller must assign to Buyer the right to the proceeds at Closing, if acceptable to Seller's insurance company and Buyer's lender; or (2) the parties may enter into a written agreement prepared by the parties or their attorney requiring the Seller to escrow at Closing from Seller's sale proceeds the amount Seller has received and will receive due to such damage, not exceeding the total Purchase Price, plus the amount of any deductible that applies to the insurance claim.

19.2. Damage, Inclusions and Services. Should any Inclusion or service (including utilities and communication services), system, component or fixture of the Property (collectively Service) (e.g., heating or plumbing), fail or be damaged between the date of this Contract and Closing or possession, whichever is earlier, then Seller is liable for the repair or replacement of such Inclusion or Service with a unit of similar size, age and quality, or an equivalent credit, but only to the extent that the maintenance or replacement of such Inclusion or Service is not the responsibility of the Association, if any, less any insurance proceeds received by Buyer covering such repair or replacement. If the failed or damaged Inclusion or Service is not repaired or replaced on or before Closing or possession, whichever is earlier, Buyer has the Right to Terminate under § 25.1, on or before **Closing Date**, or, at the option of Buyer, Buyer is entitled to a credit at Closing for the repair or replacement of such Inclusion or Service. Such credit must not exceed the Purchase Price. If Buyer receives such a credit, Seller's right for any claim against the Association, if any, will survive Closing.

19.3. Condemnation. In the event Seller receives actual notice prior to Closing that a pending condemnation action may result in a taking of all or part of the Property or Inclusions, Seller must promptly notify Buyer, in writing, of such condemnation action. Buyer has the Right to Terminate under § 25.1, on or before **Closing Date**, based on such condemnation action, in Buyer's sole subjective discretion. Should Buyer elect to consummate this Contract despite such diminution of value to the Property and Inclusions, Buyer is entitled to a credit at Closing for all condemnation proceeds awarded to Seller for the diminution in the value of the Property or Inclusions but such credit will not include relocation benefits or expenses, or exceed the Purchase Price.

19.4. Walk-Through and Verification of Condition. Buyer, upon reasonable notice, has the right to walk through the Property prior to Closing to verify that the physical condition of the Property and Inclusions complies with this Contract.

19.5. Home Warranty. [Intentionally Deleted]

19.6. Risk of Loss – Growing Crops. The risk of loss for damage to growing crops by fire or other casualty will be borne by the party entitled to the growing crops as provided in § 2.8 and such party is entitled to such insurance proceeds or benefits for the growing crops.

20. RECOMMENDATION OF LEGAL AND TAX COUNSEL. By signing this Contract, Buyer and Seller acknowledge that the respective broker has advised that this Contract has important legal consequences and has recommended the examination of title and consultation with legal and tax or other counsel before signing this Contract.

21. TIME OF ESSENCE, DEFAULT AND REMEDIES. Time is of the essence for all dates and deadlines in this Contract. This means that all dates and deadlines are strict and absolute. If any payment due, including Earnest Money, is not paid, honored or tendered when due, or if any obligation is not performed timely as provided in this Contract or waived, the non-defaulting party has the following remedies:

21.1. If Buyer is in Default:

[x] **21.1.1. Specific Performance.** Seller may elect to cancel this Contract and all Earnest Money (whether or not paid by Buyer) will be paid to Seller and retained by Seller. It is agreed that the Earnest Money is not a penalty and the Parties agree the amount is fair and reasonable. Seller may recover such additional damages as may be proper. Alternatively, Seller may elect to treat this Contract as being in full force and effect and Seller has the right to specific performance, or damages, or both.

21.1.2. Liquidated Damages, Applicable. This § 21.1.2 applies unless the box in § 21.1.1. is checked. Seller may cancel this Contract. All Earnest Money (whether or not paid by Buyer) will be paid to Seller and retained by Seller. It is agreed that the Earnest Money specified in § 4.1 is LIQUIDATED DAMAGES and not a penalty, which amount the parties agree is fair and reasonable and (except as provided in §§ 10.4, 22, 23 and 24), said payment of Earnest Money is SELLER'S ONLY REMEDY for Buyer's failure to perform the obligations of this Contract. Seller expressly waives the remedies of specific performance and additional damages.

21.2. If Seller is in Default: Buyer may elect to treat this Contract as canceled, in which case all Earnest Money received hereunder will be returned to Buyer and Buyer may recover such damages as may be proper. Alternatively, Buyer may elect to treat this Contract as being in full force and effect and Buyer has the right to specific performance, or damages, or both.

22. LEGAL FEES, COST AND EXPENSES. Anything to the contrary herein notwithstanding, in the event of any arbitration or litigation relating to this Contract, prior to or after **Closing Date**, the arbitrator or court must award to the prevailing party all reasonable costs and expenses, including attorney fees, legal fees and expenses.

23. MEDIATION. If a dispute arises relating to this Contract (whether prior to or after Closing) and is not resolved, the parties must first proceed, in good faith, to mediation. Mediation is a process in which the parties meet with an impartial person who helps to resolve the dispute informally and confidentially. Mediators cannot impose binding decisions. Before any mediated settlement is binding, the parties to the dispute must agree to the settlement, in writing. The parties will jointly appoint an acceptable mediator and will share equally in the cost of such mediation. The obligation to mediate, unless otherwise agreed, will terminate if the entire dispute is not resolved within thirty days of the date written notice requesting mediation is delivered by one party to the other at that party's last known address (physical or electronic as provided in § 27). Nothing in this Section prohibits either party from filing a lawsuit and recording a *lis pendens* affecting the Property, before or after the date of written notice requesting mediation. This Section will not alter any date in this Contract, unless otherwise agreed.

24. EARNEST MONEY DISPUTE. Except as otherwise provided herein, Earnest Money Holder must release the Earnest Money following receipt of written mutual instructions, signed by both Buyer and Seller. In the event of any controversy regarding the Earnest Money, Earnest Money Holder is not required to release the Earnest Money. Earnest Money Holder, in its sole subjective discretion, has several options: (1) wait for any proceeding between Buyer and Seller; (2) interplead all parties and deposit Earnest Money into a court of competent jurisdiction (Earnest Money Holder is entitled to recover court costs and reasonable attorney and legal fees incurred with such action); or (3) provide notice to Buyer and Seller that unless Earnest Money Holder receives a copy of the Summons and Complaint or Claim (between Buyer and Seller) containing the case number of the lawsuit (Lawsuit) within one hundred twenty days of Earnest Money Holder's notice to the parties, Earnest Money Holder is authorized to return the Earnest Money to Buyer. In the event Earnest Money Holder does receive a copy of the Lawsuit and has not interpled the monies at the time of any Order, Earnest Money Holder must disburse the Earnest Money pursuant to the Order of the Court. The parties reaffirm the obligation of § 23 (Mediation). This Section will survive cancellation or termination of this Contract.

25. TERMINATION.

25.1. Right to Terminate. If a party has a right to terminate, as provided in this Contract (Right to Terminate), the termination is effective upon the other party's receipt of a written notice to terminate (Notice to Terminate), provided such written notice was received on or before the applicable deadline specified in this Contract. If the Notice to Terminate is not received on or before the specified deadline, the party with the Right to Terminate accepts the specified matter, document or condition as satisfactory and waives the Right to Terminate under such provision.

25.2. Effect of Termination. In the event this Contract is terminated, all Earnest Money received hereunder will be returned to Buyer and the parties are relieved of all obligations hereunder, subject to §§ 10.4, 22, 23 and 24.

26. ENTIRE AGREEMENT, MODIFICATION, SURVIVAL; SUCCESSORS. This Contract, its exhibits and specified addenda, constitute the entire agreement between the parties relating to the subject hereof and any prior agreements pertaining thereto, whether oral or written, have been merged and integrated into this Contract. No subsequent modification of any of the terms of this Contract is valid, binding upon the parties, or enforceable unless made in writing and signed by the parties. Any right or obligation in this Contract that, by its terms, exists or is intended to be performed after termination or Closing survives the same. Any successor to a party receives the predecessor's benefits and obligations of this Contract.

27. NOTICE, DELIVERY AND CHOICE OF LAW.

27.1. Physical Delivery and Notice. Any document, or notice to Buyer or Seller must be in writing, except as provided in § 27.2 and is effective when physically received by such party, any individual named in this Contract to receive documents or notices

for such party, Broker, or Brokerage Firm of Broker working with such party (except any notice or delivery after Closing must be received by the party, not Broker or Brokerage Firm).

27.2. Electronic Notice. As an alternative to physical delivery, any notice, may be delivered in electronic form to Buyer or Seller, any individual named in this Contract to receive documents or notices for such party, Broker or Brokerage Firm of Broker working with such party (except any notice or delivery after Closing must be received by the party, not Broker or Brokerage Firm) at the electronic address of the recipient by facsimile, email or hand delivery.

27.3. Electronic Delivery. Electronic Delivery of documents and notice may be delivered by: (1) email at the email address of the recipient, (2) a link or access to a website or server provided the recipient receives the information necessary to access the documents, or (3) facsimile at the facsimile number (Fax No.) of the recipient.

27.4. Choice of Law. This Contract and all disputes arising hereunder are governed by and construed in accordance with the laws of the State of Colorado that would be applicable to Colorado residents who sign a contract in Colorado for real property located in Colorado.

28. NOTICE OF ACCEPTANCE, COUNTERPARTS. This proposal will expire unless accepted in writing, by Buyer and Seller, as evidenced by their signatures below and the offering party receives notice of such acceptance pursuant to § 27 on or before **Acceptance Deadline Date** and **Acceptance Deadline Time**. If accepted, this document will become a contract between Seller and Buyer. A copy of this Contract may be executed by each party, separately and when each party has executed a copy thereof, such copies taken together are deemed to be a full and complete contract between the parties.

29. GOOD FAITH. Buyer and Seller acknowledge that each party has an obligation to act in good faith including, but not limited to, exercising the rights and obligations set forth in the provisions of **Financing Conditions and Obligations; Title Insurance, Record Title and Off-Record Title; New ILC, New Survey;** and **Property Disclosure, Inspection, Indemnity, Insurability, Due Diligence, and Source of Water**.

ADDITIONAL PROVISIONS AND ATTACHMENTS

30. ADDITIONAL PROVISIONS. (The following additional provisions have not been approved by the Colorado Real Estate Commission.)

This entire Contract and the obligation of the City to proceed under its terms and conditions is expressly contingent upon the approval by resolution of the City Council of the City of Grand Junction. If not obtained on or before July 22, 2021 this Contract shall be void and of no effect.

31. OTHER DOCUMENTS.

31.1. The following documents **are a part** of this Contract:

N/A

31.2. The following documents have been provided but are **not** a part of this Contract:

N/A

SIGNATURES

Buyer's Name:	City of Grand Junction, a Colorado Home Rule Municipality	Buyer's Name:	
Buyer's Signature	6/29/2021 Date	Buyer's Signature	Date
Address:	250 N. 5th Street Grand Junction, CO	Address:	
Phone No.:	(970) 244-1508	Phone No.:	
Fax No.:		Fax No.:	
Email Address:	johns@gjcity.org	Email Address:	

806 **[NOTE: If this offer is being countered or rejected, do not sign this document.**

Seller's Name: Steven W. Miller

S W. Miller 6/25/21
Seller's Signature Date

Address: 3095 D 1/2 Road
Grand Junction, Colorado 81504
Phone No.: 970-623-3015
Fax No.:
Email Address: millerproperties49@yahoo.com

Seller's Name: Susan L. Miller

Susan L Miller 6-25-21
Seller's Signature Date

Address: 3095 D 1/2 Road
Grand Junction, Colorado 81504
Phone No.:
Fax No.:
Email Address:

807

808 **END OF CONTRACT TO BUY AND SELL REAL ESTATE**

---

32. BROKER'S ACKNOWLEDGMENTS AND COMPENSATION DISCLOSURE.
(To be completed by Broker working with Buyer)

Broker ☐ **Does** ☐ **Does Not** acknowledge receipt of Earnest Money deposit. Broker agrees that if Brokerage Firm is the Earnest Money Holder and, except as provided in § 24, if the Earnest Money has not already been returned following receipt of a Notice to Terminate or other written notice of termination, Earnest Money Holder will release the Earnest Money as directed by the written mutual instructions. Such release of Earnest Money will be made within five days of Earnest Money Holder's receipt of the executed written mutual instructions, provided the Earnest Money check has cleared.

Although Broker is not a party to the Contract, Broker agrees to cooperate, upon request, with any mediation requested under § 23.

Broker is working with Buyer as a ☐ **Buyer's Agent** ☐ **Transaction-Broker** in this transaction. ☐ This is a **Change of Status.**

☐ **Customer.** Broker has no brokerage relationship with Buyer. See § 33 for Broker's brokerage relationship with Seller.

Brokerage Firm's compensation or commission is to be paid by ☐ **Listing Brokerage Firm** ☐ **Buyer** ☐ **Other** _____.

Brokerage Firm's Name: _____
Brokerage Firm's License #: _____
Broker's Name: _____
Broker's License #: _____

_____
Broker's Signature Date

Address: _____
_____
Phone No.: _____
Fax No.: _____
Email Address: _____

---

33. BROKER'S ACKNOWLEDGMENTS AND COMPENSATION DISCLOSURE.
(To be completed by Broker working with Seller)

Broker ☐ **Does** ☐ **Does Not** acknowledge receipt of Earnest Money deposit. Broker agrees that if Brokerage Firm is the Earnest Money Holder and, except as provided in § 24, if the Earnest Money has not already been returned following receipt of a Notice to Terminate or other written notice of termination, Earnest Money Holder will release the Earnest Money as directed by the written

mutual instructions. Such release of Earnest Money will be made within five days of Earnest Money Holder's receipt of the executed written mutual instructions, provided the Earnest Money check has cleared.

Although Broker is not a party to the Contract, Broker agrees to cooperate, upon request, with any mediation requested under § 23.

Broker is working with Seller as a ☐ **Seller's Agent** ☐ **Transaction-Broker** in this transaction. ☐ This is a **Change of Status.**

☐ **Customer.** Broker has no brokerage relationship with Seller. See § 32 for Broker's brokerage relationship with Buyer.

Brokerage Firm's compensation or commission is to be paid by ☐ **Seller** ☐ **Buyer** ☐ **Other** _____.

Brokerage Firm's Name: _____
Brokerage Firm's License #: _____
Broker's Name: _____
Broker's License #: _____

_____
Broker's Signature Date

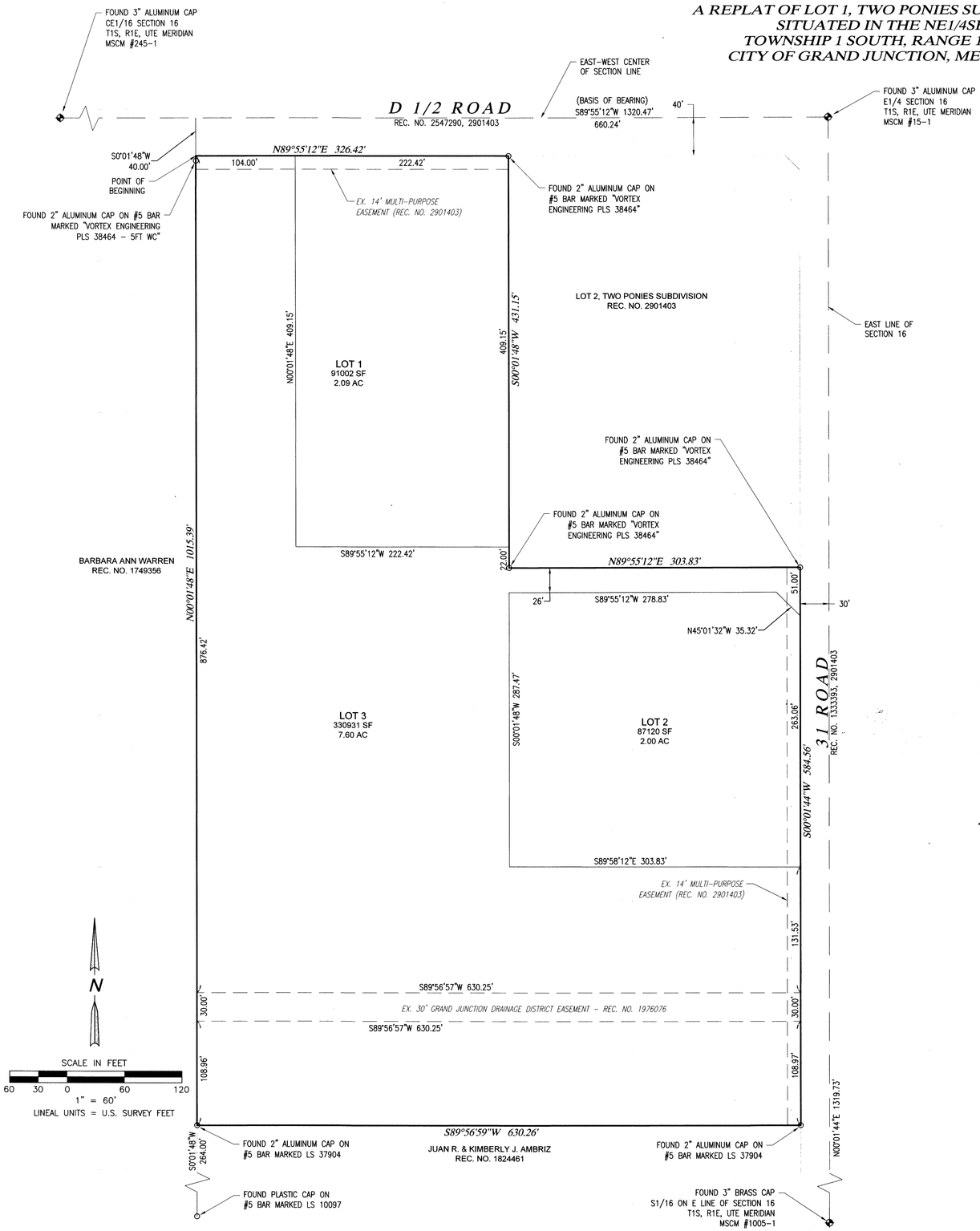
Address: _____
_____
Phone No.: _____
Fax No.: _____
Email Address: _____

809

RECEPTION#: 2979963, at 5/6/2021 12:17:07 PM, 1 of 1
Recording: $13.00, Tina Peters, Mesa County, CO. CLERK AND RECORDER

FIRE STATION SUBDIVISION

A REPLAT OF LOT 1, TWO PONIES SUBDIVISION (REC. NO. 2901403)
SITUATED IN THE NE1/4SE1/4 OF SECTION 16,
TOWNSHIP 1 SOUTH, RANGE 1 EAST, UTE MERIDIAN,
CITY OF GRAND JUNCTION, MESA COUNTY, COLORADO



OWNERSHIP CERTIFICATE

KNOW ALL PERSONS BY THESE PRESENTS:

THAT THE UNDERSIGNED, STEVEN W. MILLER AND SUSAN L. MILLER, THE OWNERS OF RECORD OF THAT REAL PROPERTY SITUATED IN THE NE1/4SE1/4 OF SECTION 16, T1S, R1E, UTE MERIDIAN, CITY OF GRAND JUNCTION, MESA COLORADO, COLORADO, THE OWNERSHIP OF WHICH IS DEMONSTRATED AT REC. NO. 1538550 OF THE RECORDS IN THE OFFICE OF THE MESA COUNTY CLERK AND RECORDER. SAID PROPERTY BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A PARCEL OF LAND LOCATED IN IN THE NE1/4SE1/4 OF SECTION 16, TOWNSHIP 1 SOUTH, RANGE 1 EAST, OF THE UTE MERIDIAN, CITY OF GRAND JUNCTION MESA COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

LOT 1, TWO PONIES SUBDIVISION, AS RECORDED WITH THE MESA COUNTY OFFICE OF THE CLERK AND RECORDER AS RECEPTION NO. 2901403.

PARCEL CONTAINS 11.69 ACRES.

SAID OWNER HAS CAUSED THE DESCRIBED REAL PROPERTY TO BE SURVEYED, LAID OUT, AND TO BE PUBLICLY KNOWN AS "FIRE STATION SUBDIVISION"

SAID OWNERS HEREBY ACKNOWLEDGE THAT ALL LIENHOLDERS ASSOCIATED WITH THE INTERESTS OF THIS PLAT HAVE BEEN REPRESENTED HEREON.

Steven W. Miller 4-9-21
STEVEN W. MILLER DATE

Susan L Miller 4-9-21
SUSAN L. MILLER DATE

NOTARY PUBLIC CERTIFICATION

STATE OF COLORADO)
)§
COUNTY OF MESA)

THIS PLAT WAS ACKNOWLEDGED BEFORE ME BY STEVEN W. MILLER AND SUSAN L. MILLER, ON THIS 9 DAY OF April, 2021

MY COMMISSION EXPIRES 10/21/2024

WITNESS MY HAND AND OFFICIAL SEAL
Stephen Swindell

STEPHEN EDWARD SWINDELL
Notary Public
State of Colorado
Notary ID # 20084036699
My Commission Expires 10-21-2024

LIENHOLDER'S RATIFICATION OF PLAT

THE UNDERSIGNED, HEREBY CERTIFIES: THAT IT IS A HOLDER OF A SECURITY INTEREST UPON THE PROPERTY DESCRIBED HEREON, AND DOES HEREBY JOIN IN AND CONSENT TO THE DEDICATION OF THE LAND DESCRIBED IN SAID DEDICATION BY THE OWNERS THEREOF, AND AGREES THAT IT'S SECURITY INTEREST, AS SHOWN IN DOCUMENT RECORDED AT REC. NO. 2969168, PUBLIC RECORDS OF MESA COUNTY, COLORADO, SHALL BE SUBORDINATED TO THE DEDICATIONS SHOWN HEREON.

IN WITNESS WHEREOF, THE SAID CORPORATION HAS CAUSED THESE PRESENTS TO BE SIGNED BY IT'S Vice President WITH THE AUTHORITY OF ITS BOARD OF DIRECTORS, THIS 23rd DAY OF April, 2021

BY: Patricia V. Luna (TITLE) Vice President

FOR: Colorama Federal Credit Union

NOTARY PUBLIC CERTIFICATION

STATE OF CO)
)§
COUNTY OF Mesa)

THIS PLAT WAS ACKNOWLEDGED BEFORE ME BY Patricia V. Luna, VP for Colorama Federal Credit Union

LIENHOLDER ON THE PROPERTY CURRENTLY LOCATED AT 3095 D 1/2 ROAD, GRAND JUNCTION, CO 81504, ON THIS 23rd DAY OF April, 2021

MY COMMISSION EXPIRES 09-19-2023

WITNESS MY HAND AND OFFICIAL SEAL

CASEY REANN BROWN
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID #20194035994
My Commission Expires September 19, 2023

CASEY REANN BROWN
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID #20194035994
My Commission Expires September 19, 2023

TITLE CERTIFICATION

LAND TITLE GUARANTEE COMPANY, A TITLE INSURANCE COMPANY, AS DULY LICENSED IN THE STATE OF COLORADO, HEREBY CERTIFIES THAT WE HAVE EXAMINED TITLE TO THE HEREON DESCRIBED PROPERTY; THAT WE FIND THE TITLE TO THE PROPERTY IS VESTED TO STEVEN W. MILLER AND SUSAN L. MILLER; THAT THE CURRENT TAXES HAVE BEEN PAID; THAT ALL MORTGAGES NOT SATISFIED OR RELEASED OF RECORD NOR OTHERWISE TERMINATED BY LAW ARE SHOWN HEREON AND THAT THERE ARE NO OTHER ENCUMBRANCES OF RECORD; THAT ALL EASEMENTS, RESERVATIONS, AND RIGHTS-OF-WAY OF RECORD ARE SHOWN HEREON.

*2020 TAXES NOT YET PAID.

Karen Arreguin APRIL 6, 2021
NAME AND TITLE KAREN A. CRESPIN/LIC. TITLE EXAM. DATE
LAND TITLE GUARANTEE COMPANY

CLERK AND RECORDER'S CERTIFICATE

STATE OF COLORADO)
)§
COUNTY OF MESA)

I CERTIFY THAT THIS INSTRUMENT WAS FILED IN MY OFFICE AT 12:17 O'CLOCK P.M., ON THIS 6th DAY OF May, 2021 AND WAS RECORDED AT RECEPTION NO. 2979963.

DRAWER NO. G3-5, FEES $10 #3

BY: Tina Peters Kim Coe
CLERK AND RECORDER DEPUTY

CITY OF GRAND JUNCTION APPROVAL

FIRE STATION SUBDIVISION, A SUBDIVISION OF THE CITY OF GRAND JUNCTION, MESA COUNTY, COLORADO, IS HEREBY APPROVED AND DEDICATIONS ACCEPTED THIS 4 DAY OF May, 2021

CITY MANAGER MAYOR

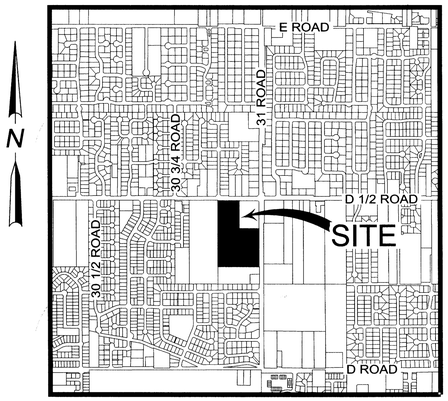
FOR CITY USE ONLY:

ASSOCIATED RECORDED DOCUMENTS

RECEPTION NO.	DOCUMENT TYPE
2979964	RESTRICTIVE COVENANT

AREA SUMMARY:

LOTS:	11.69 AC. 100%
TOTAL:	11.69 AC. 100%



VICINITY MAP
N.T.S.

LEGEND

- PROPERTY BOUNDARY
- LOT BOUNDARY
- SECTION LINE
- ADJOINING PROPERTY LINE
- EASEMENT AS NOTED
- FOUND CONTROL MONUMENT AS NOTED
- FOUND MONUMENT AS NOTED

TABLE OF ABBREVIATIONS

MCSM -	MESA COUNTY SURVEY MONUMENT
N -	NORTH
S -	SOUTH
E -	EAST
W -	WEST
C -	CENTER
T -	TOWNSHIP
R -	RANGE
P.M. -	PRINCIPLE MERIDIAN
SF -	SQUARE FEET
AC -	ACRES
EX. -	EXISTING
MPE -	MULTIPURPOSE EASEMENT
REC. NO. -	RECEPTION NUMBER
U.M. -	UTE MERIDIAN

NOTES:

1. BASIS OF BEARING: USING THE MESA COUNTY REAL TIME VIRTUAL REFERENCE NETWORK, A BEARING AND DISTANCE OF S89°55'12"W AND 1320.47 FEET BETWEEN A FOUND 3" ALUMINUM CAP MONUMENT MARKING THE E1/4 CORNER OF SECTION 16 (MCSM #15-1) AND A FOUND 3" ALUMINUM CAP MONUMENT MARKING THE CE1/16 CORNER OF SECTION 16 (MCSM #245-1).
2. ACCORDING TO COLORADO LAW, YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVERED SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.
3. TITLE INFORMATION PROVIDED BY LAND TITLE GUARANTEE COMPANY, ORDER NO. GJF65038308-8 DATED 03/24/2021.

SURVEYOR'S CERTIFICATE

I, ALEXANDRE B. LHERITIER, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THIS PLAT OF FIRE STATION SUBDIVISION WAS SURVEYED BY ME. IT IS BASED UPON MY PROFESSIONAL KNOWLEDGE, INFORMATION, AND BELIEF ACCORDING TO APPLICABLE STANDARDS OF PRACTICE. THIS IS NOT A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED.

COLORADO LICENSED ALEXANDRE BERGSTEIN LHERITIER PROFESSIONAL LAND SURVEYOR 4/12/21 38484

FIRE STATION SUBDIVISION

LOCATED IN THE
NE1/4SE1/4 of Section 16, T1S, R1E, U.M.
City of Grand Junction, Mesa County, Colorado

VORTEX ENGINEERING, INC.
861 Rood Avenue
Grand Junction, CO 81501
Phone: (970) 245-9051
Fax (970) 245-7639

FIELDWORK: ABL	DRAWING: FIRE STATION PLAT.DWG	DATE: 03/30/2021
DRAWN BY: ABL	JOB NUMBER: F20-051	SHEET 1 OF 1

Grand Junction Planning Commission

Regular Session

Item #3.b.

Meeting Date: July 21, 2021

Presented By: Trenton Prall, Public Works Director, Tamra Allen, Community Development Director, Michelle Hansen

Department: Public Works - Streets

Submitted By: David Thornton, Principal Planner

Information

SUBJECT:

A Resolution Adopting the Patterson Road Access Management Plan

RECOMMENDATION:

The Planning Commission heard this item at its June 8, 2021 meeting and voted (1-4) to not recommend adoption of the access control plan (Plan.) The Commission expressed general support for the plan but had several outstanding items they recommended be addressed before adopting the plan.

The City Council heard the request for Plan adoption at the July 7 meeting. At that time the Council voted (6-1) to adopt the plan by resolution instead of by Ordinance and to rename the plan as an Access Management Plan versus an Access Control Plan.

EXECUTIVE SUMMARY:

In 2020, the City engaged Stolfus and Associates to study and prepare an Access Control Plan (ACP or Plan) for the 7 mile Patterson Road corridor within the City limits.

The goal of access management is to optimize the performance of the corridor, improve the level of safety, reduce traffic congestion, and improve the overall functionality of a roadway. The ACP works to plan, coordinate, regulate, and design access to and from property adjacent to Patterson.

Throughout 2020, Stolfus' work included inventories of access points, traffic counts, determining existing and future traffic demands, performing a safety analysis for Patterson Road and preparation of a draft Plan. In January 2021 the draft Plan was provided for public review. In-person and virtual public open houses were held in

October 2020 and January 2021. The draft Plan document was publicly reviewed through GJSpeaks. One-on-one meetings, follow-up phone calls and emails, and neighborhood meetings were used to engage with the public and seek their input on the Plan.

The January 2021 draft Plan was updated to become the April 2021 draft Plan to reflect the public input received. Additional outreach also continued to utilize GJSpeaks.com.

On February 23, 2021 the Planning Commission heard the Patterson Access Control Plan in a virtual hearing. The hearing was continued after public input was received. Direction was provided to staff to conduct additional public outreach. Staff conducted this additional public outreach. Based on public input resulting in various changes to accesses at various locations to provide more access than previously shown.

The Planning Commission heard this item at its June 8, 2021 meeting and voted (1-4) to not recommend adoption of the access control plan (Plan.) The Commission expressed general support for the plan but had several outstanding items they recommended be addressed before adopting the plan. The City Council heard the request for adoption of the Access Control Plan at the July 7 meeting. At that time the Council voted (6-1) to adopt the plan by resolution instead of by Ordinance and to rename the plan as an Access Management Plan versus an Access Control Plan to reflect the intent to utilize the plan as a guiding document versus a regulatory document.

WIth Council's change from an Access Control Plan to an Access Management Plan the following changes have been made.

Access Study:
- Date updated to July 2021
- Globally changed all references in the study from Access Control Plan (ACP) to Access Management Plan (AMP)
- Updated Section 1.2 in the study to cover meetings held with Planning Commission and City Council since February 23, 2021
- Updated pg 36 to reflect changes related to Access 114-117
- Updated Figure 3H to reflect changes related to Access 114-117
- Updated pg 41 to remove Mantey Heights neighborhood access points from plan
- Updated Figure 3J to remove Mantey Heights neighborhood access points from plan
- Updated pg 53 to identify extension of Camino Del Rey to connect with Rio Grande Dr
- Updated Figure 4C to clearly identify connection to Wellington Ave or Kirby Ln listed on pg 53

Appendices:
- Date updated to July 2021
- Appendix D – globally changed all references in the memos from Access Control Plan (ACP) to Access Management Plan (AMP)

- Appendix E – globally changed all references in the memos from Access Control Plan (ACP) to Access Management Plan (AMP)
- Appendix F – globally changed all references in the table from Access Control Plan (ACP) to Access Management Plan (AMP)
- Appendix F – updated conditions for Access 114, 116, 156, 157, 158, 161
- Appendix F – updated graphics to match graphics in the study

The study and appendicies were updated in the packet on July 21st.

BACKGROUND OR DETAILED INFORMATION:

Study Area

The study area consists of approximately seven miles of Patterson Road (F Road) between I-70B (23.75 Road) and Lodgepole Street (30.75 Road) within the City limits. The segment on the east end that extends beyond City limits is controlled by Mesa County and not included in this plan. In general, land use within the city limits is suburban in nature with residential and commercial uses. There are currently 284 access points on Patterson Road within the study area. A majority of access points are full movement. The access points are classified as follows:

- 15 Signalized public road intersections (29 access points)
- 54 Unsignalized public road intersections (62 access points)
- 2 unsignalized private road intersections (2 access points)
- 81 business access points
- 93 residential access points
- 17 maintenance or field access points

Since its construction in 1984, Patterson Road has served as a critical part of Grand Junction's transportation system. It serves as a major east-west arterial corridor and is an important public resource. Effective access management is essential in order to optimize the performance of the road to improve the level of safety, reduce traffic congestion and improve the quality of the corridor.

Background

In January 2020 the City engaged Stolfus and Associates to prepare an Access Control Plan (ACP) for Patterson Road. The purpose of the ACP is to provide effective access to properties and public street connections to Patterson Road.

The ACP works to coordinate planning, regulation, and design of access to Patterson Road from adjacent property including future development. The Plan involves the systematic control of the location, spacing, design, and operation of driveways, median openings, and street connections. The ACP defines existing and future access locations and configurations (movements allowed), with consideration for circulation and alternative access opportunities. It is a long-range planning document that identifies access conditions that will be implemented as roadway corridor and land-use characteristics change. Similar studies have been developed by CDOT throughout the state and it has been demonstrated that access-managed corridors not only preserve the transportation functions of roadways, but also help preserve property values and

the economic viability of abutting developments.

Public Outreach and Engagement
One key component to a successful ACP is ensuring that the general public, business owners, and property owners have had opportunities to offer their input. Stolfus and Associates worked over the last year to inventory access points, determine existing and future traffic demands, and perform a safety analysis for the Patterson Road corridor. In July 2020, Stolfus prepared a draft plan that included overall project goals.

While the project team ensured that the draft ACP was sound from a transportation engineering perspective, public input is critical to making sure the ACP considers property owner concerns, to the extent feasible. To facilitate this, the first public open house was held on October 1st. Over 800 bilingual (English and Spanish) postcards were mailed to property owners and residents/ business owners abutting and near the corridor. Additionally, bilingual newspaper advertisements were placed, and the City's social media accounts were utilized to distribute information. Even with the COVID-19 Pandemic, 30 people attended the October 1st in-person open house and numerous comment forms were received.

To accommodate those who were unable to attend this open house, all exhibits, and a supplemental video were made available on GJSpeaks.org. Bilingual comment forms and answers to frequently asked questions were also available on the website.

At the open house, attendees with more complicated issues were encouraged to sign up for one-on-one meetings with the project team. City staff simultaneously identified other properties where one-on-one meeting may be beneficial. The project team has contacted those property owners and met with them.

Based on these various stakeholder, one-on-one and open house comments, there were several revisions that were made to the ACP. Revisions to the ACP in January 2021 included those access points that may remain open with a raised median along Patterson Road, but be required to close if a property/site redevelops. This distinction is especially important on sites such as existing fuel stations where large trucks require two access points.

With a new revised draft ACP, a second public open house was held, this time virtually for a week between January 6th and 12th. Bilingual notice was mailed a second time to property owners and residents/business owners abutting and near the corridor. The new draft ACP was prepared and presented to the public for additional review and comment. The virtual open house utilized GJSpeaks.org as its platform where all plan documents were available to view, and comments could be submitted giving the public the entire week to participate.

Participants with more complicated issues were encouraged to sign up for 30-minute one-on-one meetings with the project team on January 13, 2021. There were ten people that signed up for these Zoom virtual meetings. Additionally, phone calls were

made to other concerned property owners and with those the project team had already met with, to resolve questions and obtain feedback. All new comments received were reviewed and considered in the preparation of the January 2021 draft Plan.

At the February 1st City Council Workshop, staff was asked to increase their public outreach. This was done utilizing GJSpeaks, social media channels, providing information to the GJ and Latino Chambers of Commerce and meeting with the Grand Junction Chamber board.

The Planning Commission held a public hearing to consider a recommendation for adoption of the Plan on February 23, 2021. At the February 23rd hearing, Planning Commission asked that Staff do further public outreach. After closing public testimony, Planning Commission tabled the public hearing until March 23rd.

At the Planning Commission meeting on March 23rd Staff requested additional time for public outreach and asked to reschedule the public hearing with Planning Commission when the Access Control Plan is ready for adoption.

Public Outreach since the February 23rd Planning Commission hearing.
During March, April and early May, staff communicated with individual neighborhoods, concerned citizens and business owners. This communication included meeting with the Cris-Mar neighbors, Mantey Heights neighbors (twice) and those neighbors living in the Belair/Mira Vista Drive area (twice); as well as the owner of the Valley Fair shopping center and other business owners.

To increase public engagement the notification area was increased to include 2600 properties in proximity of Patterson Road, up from around 800 addresses initially notified of the planning process. Two mailings occurred, the first mailing in March directed community members to GJSpeaks.com to review the January draft ACP and provide comments. In addition to leaving a comment on GJSpeaks, many people responded through email and posted comments on social media. The GJSpeaks website had nearly 1200 unique pageviews between January and March, 115 views of the video and hundreds of clicks within the website to learn more about the Patterson Road ACP and review the January 2021 draft Plan.

Social media proved to be another successful means to engage the public. From Facebook, through February 23rd there were 58 comments on 3 posts, 6,687 people saw these posts and 878 people engaged by liking, commenting, or sharing with friends. Instagram and NextDoor also saw people's attention to the ACP.

From the comments received through public testimony provided at the February 23rd Planning Commission hearing, as well as on GJSpeaks, social media, email and meetings with various neighborhoods and business owners, many changes were made to the January draft ACP, creating an April draft of the access control plan.

To further engage the public and prepare for the public hearing process, a second

mailing to the 2600 properties occurred the week of April 26th seeking public review of the April draft Plan and provide their comments utilizing GJSpeaks.com. Mailed notice of the public hearings before Planning Commission and City Council in the form of notification cards were sent to all 2600 properties on May 28th. The Notice of the Planning Commission hearing was published June 1, 2021 in the Grand Junction Daily Sentinel.

The final Patterson Road Access Control Plan (ACP) documents are attached to this staff report. Many changes were made from public input between the January draft and the April draft plan. These changes have been assembled in table format and provided with this staff report as an attachment. The table provides detail of the changes incorporated into the final ACP.

Access Management Benefits

The Street Plan Functional Classification Map within the Grand Junction Circulation Plan (GVCP) identifies the corridor as a Minor Arterial from I-70B (23.75 Road) to 25 Road and a Principal Arterial from 25 Road to Lodgepole Street (30.75 Road). Arterial roadways are considered higher order roadways that carry large volumes of traffic and have limited access. Implementing access management along Patterson Road will help the City by preserving and improving traffic operations along the corridor. By preserving the capacity of Patterson Road, more traffic can be carried throughout the corridor and delay the need for additional travel lanes.

Access management provides the means to balance good mobility along a roadway with local access needs of businesses and residents. Many long-term benefits to a corridor include:

• Limiting full movement access within a corridor favors through movements and strategically identifies locations for vehicles to enter and exit the corridor.
• Congestion is reduced, lessening travel times and providing smoother traffic flow.
• Reduces or prolongs the need to add additional thru lanes as traffic increases.
• Reduced congestion results in less air pollution.
• It has tremendous safety benefits. Studies have shown a 30% to 60% reduction in crashes on roadways where access management techniques are implemented.
• Access management is also good for business, providing safe access to customers and retaining more of a community's original market area.

ACP Study Purpose and Goals

The purpose of this study is to coordinate development and growth anticipated in the area with the transportation needs for the local community and traveling public with the intention of improving safety and maximizing the life of the four-lane section along Patterson Rd. The goals for the project are as follows:

• Provide effective and efficient through travel for traffic on Patterson Road utilizing the existing right-of-way and identify where additional right-of-way is needed.
• Provide safe, effective, and efficient access to and from Patterson Road for businesses, residents, and guests to support the economic viability of the City.
• Maintain compatibility with existing and proposed street network connections that

provide local circulation to support the transportation system.
• Support alternative modal choices, including transit, pedestrian, and bicycle routes.
• Provide a plan that can be implemented in phases.
• Maintain compatibility with previous local planning efforts. Such as, the Grand Junction Circulation Plan, Ballot 2A measure, and the 2020 One Grand Junction Comprehensive Plan.

Plan Development and Approach
The existing physical and operational characteristics of Patterson Road were investigated. Then, future physical and operational characteristics were projected for a 20-year planning period based on anticipated growth in the area. The ACP was created using input from City staff, private property owners, and the general public.

To achieve the project goals, various changes to the existing Patterson Road corridor are recommended, including:
• Restriction of numerous full movement access points resulting in right-in/right-out and ¾ movement (left-in, right-in/right-out) accesses.
• Limitation of full movement access to major signalized intersections.
• Reduction of access to one location per ownership and where feasible, shared between adjacent properties.
• For properties located adjacent to Patterson Road, access points may be relocated to lower order streets, where reasonable access can be preserved.
• Out of direction travel will be limited in general to a maximum distance of one mile (½ mile each direction). Out of direction travel is the distance needed to reach an access that has been obstructed by a center median compared to the distance needed on an undivided street.

The recommended changes to Patterson Rd will result in the following benefits:
• a 60% reduction of vehicle conflict points, which correlates to a reduction in crashes.
• a 23% reduction in conflict points for pedestrians and cyclists traveling on Patterson Rd.
• improved travel time in both directions during morning and evening peak periods.
• the addition of auxiliary lanes at major intersections to safely separate turning movements and through movements and allow through movements to travel unimpeded.
• retention of business market area over time by reducing congestion.
• increased fuel efficiency the traveling public and improved air quality by providing smoother traffic flow.

In addition to the recommended changes, several new local streets are proposed. These alternative streets provide additional circulation opportunities that will reduce local dependence on Patterson Rd by providing alternatives for restricted left-turn movements and reducing traffic at high-demand intersections.

Corridor Improvement Priorities
A base level review of corridor traffic safety and operations was conducted to support

the ACP. Using a 2045 horizon year, traffic demand on the corridor is generally expected to increase by 33% in the morning peak hour and 24% in the afternoon peak hour. Since there are no well-established methods of estimating future crashes, data from 2014 to 2018 was used to evaluate existing intersection safety.

Patterson Rd intersections with the highest traffic safety and operations improvement priorities are at 25 Rd and N 12th St. The Patterson Rd segment with the highest priority for implementation of the ACP with a raised median is from 24 ½ Rd to 25 Rd due to the elevated number of driveway crashes.

Other locations on the corridor that show a high potential for crash reduction include the Patterson Rd intersections with 24 Rd, Market St, 24 ½ Rd, 25 ½ Rd, N 1st St, N 15th St, 28 ¼ Rd, 29 Rd, 29 ½ Rd, and 30 Rd. Implementation of the ACP with a raised median between 25 Rd and 12th St has a high benefit due to the number of driveway crashes recorded. Thirteen intersections on the corridor meet requirements for additional right or left turn lanes.

Other findings and recommendations for the corridor include the following:
• Alternative intersection types were considered, but it is recommended that the intersection at 24 Rd remain a conventional signalized intersection, with an additional northbound thru and eastbound left turn lane constructed to help traffic operations.
• Elimination of the traffic signal at Market St was considered because of its close proximity to 24 Rd, but due to the resulting impacts and in consideration of the potential relief that a future extension of F 1/2 Rd as a principal arterial would provide, it is recommended that the Market St intersection remain signalized.
• Restricting the 15th St to ¾ access was considered, but since the signal serves pedestrian movements and as a relief valve to 12th St, it is recommended to remain as is.
• Retain full movement for the intersection at 26 ¾ Road unless future operational or safety issues occur.
• Conduct further analysis to identify mid-block crossing locations that support pedestrian accessibility and transit access.
• Adopt alternative road connections into the City of Grand Junction's Street Plan Functional Classification Map as part of the Grand Junction Circulation Plan.

Implementation Conditions
The improvements recommended in the ACP represent a long-range plan to implement over time as traffic and safety needs arise and as funding becomes available. Construction of the improvements recommended may be completed using public and/or private funding. The following scenarios will trigger construction.

1. A property redevelops or changes use, resulting in an increase in traffic to and from the site of 20% or more.
2. Planned publicly funded project by the City.
3. A safety or operational issue develops that can be mitigated through the implementation of access management techniques consistent with the ACP.

It is important to remember that implementation of improvements recommended in the ACP will only occur with one of the triggers listed above. Without one of these scenarios, the ACP does not compel a property owner to make access changes.

Conclusion

Traffic demand on the Patterson Rd is expected to increase by 24% to 33% over the next twenty years challenging the future functionality of the corridor. Access management has been proven both nationally and statewide to effectively preserve the transportation function of arterial roadways by optimizing the performance of the road to improve the level of safety, reduce traffic congestion and preserve property values without constructing major arterial improvements. The findings of this study indicate that applying access management techniques along Patterson Rd, including the implementation of a raised median, addition of auxiliary lanes, and the consolidation of driveways, will significantly reduce conflict points for vehicles, pedestrians, and cyclists, which correlates to reduced crashes and improved safety. In addition, smoother traffic flow and improved travel times will extend the life of the existing four-lane section on Patterson Rd. Prolonging the need for additional through lanes along Patterson Rd will result in taxpayer savings and reduced impacts to adjacent properties and businesses.

The proposed ACP and associated alternative routes provide the City with a corridor-wide vision for how to coordinate development and growth with the transportation needs on Patterson Rd. The ACP will provide clear expectations for access for both City staff and property owners/developers as land-use changes are proposed and public projects are developed. To provide for commitment to the access modifications and circulation routes recommended by this study, it is recommended that City adopt the ACP for Patterson Rd, as well as the proposed alternative routes. The ACP identifies access locations and levels of access by reference point for Patterson Rd within City limits. The ACP Table, which provides detailed conditions and requirements for each access point, is included in Appendix F. In recognition of the plan's long-range nature and the potential for conditions to change over time, the City should view this plan as a living document that can be amended to best meet future conditions and priorities for the City.

The Patterson Road Access Control Plan will become Title 38, Volume III, of the Municipal Code. It is a standalone plan in Volume III that houses the various land-use related adopted planning documents of the City.

The Plan is attached to this staff report and is proposed to be adopted by Ordinance in its entirety.

NOTIFICATION REQUIREMENTS

Published Notice was completed consistent to the provisions in Section 21.02.080 (g) of the City's Zoning and Development Code. A notice of the public hearing was published June 1, 2021 in the Grand Junction Sentinel. Mailed notice and posting are

not required for Comprehensive Plan Amendments, however, a notice card was sent to the 2600 properties the City directly engaged with in the planning process. Also, GJSpeaks and the City's social media accounts were used to get the word out to the community with a large response through those means.

ANALYSIS

The Patterson Road Access Control Plan is specific to the Patterson Road Corridor and as such is a plan designed to manage traffic flow and safety within the Corridor. It is proposed to be adopted as an element of the Comprehensive Plan; however, it will be separately codified as Title 38 within the Grand Junction Municipal Code. As a component of the Comprehensive Plan, as is the 2018 Grand Junction Circulation Plan, it is the Planning Staff's opinion that the Patterson Road Access Control Plan does not amend the Circulation Plan and is instead a standalone plan. Accordingly, the review and amendment criteria analyzed below, 21.02.130c1, are for amendment of the Comprehensive Plan; the Planning Staff has found that the criteria for amendment of the Junction Circulation Plan, 21.02.130c2, are not applicable.

The Patterson Road Access Control Plan will become Title 38 in Volume III, of the Municipal Code and one of many planning documents that support and implement the City's Comprehensive Plan. Pursuant to Section 21.02.130(c)(1) of the Grand Junction Zoning and Development Code, the City may adopt Plans consistent with the vision, goals and policies of the Comprehensive Plan and the following criteria for Plan Amendments are met:

21.02.130(c)(1) Criteria

(1) The City may amend the Comprehensive Plan, neighborhood plans, corridor plans and area plans if the proposed change is consistent with the vision (intent), goals and policies of the Comprehensive Plan and:

Upon adoption, the Patterson Road ACP becomes a new Plan to Volume III of the Municipal Code and will become Title 38. The One Grand Junction Comprehensive Plan and all other adopted Plans by the City are elements of Volume III titled "Comprehensive Plan" and thus codified in Volume III.

This ACP is the first access control plan for Patterson Road and its need continues to grow as traffic increases with new development occurring along and in proximity of the corridor. Many Grand Junction residents and visitors use the corridor for their transportation needs. The ACP is supported by the recently adopted 2020 One Grand Junction Comprehensive Plan, in particular Strategy f under Goal 2 of Plan Principal 6 Efficient and Connected Transportation, which strategy states, "Access Management. - Plan, implement, and support the development of Access Control Plans (e.g. Patterson Road and North Avenue)". The Patterson Road Access Control Plan Study is ready for adoption as a planning document implementing the City's Comprehensive Plan adopted December 16, 2020.

Additionally, the proposed ACP implements the 2020 One Grand Junction Comprehensive Plan in the following ways.

It furthers the planning that is needed to help support a resilient and diverse economy and plan for future key infrastructure projects. It helps plan for infrastructure including center medians that support urban development. It further plans for creating a safe, balanced, and well-connected transportation system complete with center medians, shared accesses and turn lanes to help capacity and safety. These are supported specifically by the Plan Principals, Goals and Strategies from the 2020 One Grand Junction Comprehensive Plan listed below.

Plan Principle 2: Resilient and Diverse Economy
Goal 6. Invest in key infrastructure that supports business.
Strategy: Continue to strategically invest in transportation and utility infrastructure to serve business and implement the Grand Junction Circulation Plan…."

The adoption of the Patterson Road ACP furthers the planning that is needed to help support a resilient and diverse economy and plan for key infrastructure projects.

Plan Principal 3: Responsible and Managed Growth
Goal 4. Maintain and build infrastructure that supports urban development.

The ACP helps plan future infrastructure including center medians that support urban development.

Plan Principal; 6: Efficient and Connected Transportation
Goal 1. Continue to develop a safe, balanced, and well-connected transportation system that enhances mobility for all modes - Strategy f Complete Streets - subsection vi. Constructing center medians, shared accesses and turn lanes to enhance roadway capacity and safety.
Goal 2 Actively manage transportation systems and infrastructure to improve reliability, efficiency, and safety - Strategy f Access Management. Plan, implement, and support the development of Access Control Plans (e.g. Patterson Road and North Avenue).

Staff finds that the ACP is consistent with the vision, goals, principles and policies of the One Grand Junction Comprehensive Plan and other Plans adopted under Volume III. This criterion has been met.

(i) Subsequent events have invalidated the original premises and findings; and/or

The Patterson Road corridor continue to see increases in traffic and public safety concerns; however, this is not a subsequent event that invalidates an original premise of an existing Plan since this is the first Access Control Plan for Patterson Road.

Therefore, Staff finds that this criterion has not been met.

(ii) The character and/or conditions of the area has changed such that the amendment is consistent with the Plan; and/or

Similar to criterion (i), since this is the first access control plan for Patterson Road there is nothing that would support this criterion regarding changing character or conditions of the area.

Therefore, Staff finds that this criterion has not been met.

(iii) Public and community facilities are adequate to serve the type and scope of land use proposed; and/or

This criterion is not applicable since the adoption is of an Access Control Plan and not about specific land uses.

Therefore, Staff finds that this criterion has not been met.

(iv) An inadequate supply of suitably designated land is available in the community, as defined by the presiding body, to accommodate the proposed land use; and/or

This criterion is not applicable since the adoption is of an Access Control Plan and not a land use map amendment.

Therefore, Staff finds that this criterion has not been met.

(v) The community or area, as defined by the presiding body, will derive benefits from the proposed amendment;

The purpose of the Patterson Road Access Control Plan (ACP) is to coordinate development and growth anticipated in the area with the transportation needs for the local community and traveling public with the intention of improving safety and maximizing the life of the four-lane section along Patterson Rd. The goals for the project are as follows:
 Provide effective and efficient through travel for traffic on Patterson Road utilizing the existing right-of-way and identify where additional right-of-way is needed.
 Provide safe, effective, and efficient access to and from Patterson Road for businesses, residents, and guests to support the economic viability of the City.
 Maintain compatibility with existing and proposed street network connections that provide local circulation to support the transportation system.
 Support alternative modal choices, including transit, pedestrian, and bicycle routes.
 Provide a plan that can be implemented in phases.
 Maintain compatibility with previous local planning efforts. Such as, the Grand Junction Circulation Plan, Ballot 2A measure, and the 2020 One Grand Junction Comprehensive Plan.

Access Control Plans work to coordinate planning, regulation, and design of access to properties along a corridor. The Patterson Road ACP involves the systematic control of the location, spacing, design, and operations of driveways, median openings, and street connections and manages the road corridor to not only preserve the transportation functions of corridor, but also to help preserve property values and the economic viability of abutting developments. It optimizes the performance of the roadway to improve the level of safety, reduction of traffic congestion and is key in minimizing the need to add additional lanes of traffic (expansion from 2 lanes to 3 lanes each way) that would have a much greater impact to the corridor and adjacent properties.

Community benefits also include:
 a 60% reduction of vehicle conflict points, which correlates to a reduction in crashes.
 a 23% reduction in conflict points for pedestrians and cyclists traveling on Patterson Rd.
 improved travel time in both directions during morning and evening peak periods.
 the addition of auxiliary lanes at major intersections to safely separate turning movements and through movements and allow through movements to travel unimpeded.
 retention of business market area over time by reducing congestion.
 increased fuel efficiency the traveling public and improved air quality by providing smoother traffic flow.

Staff found that this criterion had been met.

The five criteria above only require one of them to be met to be satisfied. The proposed Patterson Road ACP is a new Plan to Volume III of the Municipal Code and is not an update or amendment to that Volume.

RECOMMENDATION AND FINDINGS OF FACT

After reviewing the Patterson Road Access Control Plan, CPA-2021-17, a request by the City of Grand Junction to adopt the Patterson Road Access Control Plan (ACP), as Volume III, Title 38 of the Municipal Code, the following findings of fact have been made:

1. The proposed Access Control Plan is consistent with the goals and policies of the Comprehensive Plan.

2. At least one of the review criteria in Section 21.02.130(c)(1) of the Grand Junction Municipal Code have been met.

The Planning Commission heard this item at its June 8, 2021 meeting and voted (1-4) to not recommend adoption of the access control plan (Plan.) The Commission expressed general support for the plan but had several outstanding items they recommended be addressed before adopting the plan.

the following concerns that it recommended be considered before adoption of the Plan, including

1) Revisit Access points 114, 116 and 117.
2) Provide a mechanism of how to pay for improvements such as the use of Transportation Capacity Payment (TCP) funds.
3) The Plan area is largely residential that is unfairly being treated, needs to be addressed.
4) Further evaluate the 1st trigger in the 3 types of implementation, which states "A property redevelops or changes use, resulting in an increase in traffic to and from the site of 20% or more."
5) Revise Darby Lane (#236) to 3/4 and Placer Street (#240) to right-in/right-out access points.

In response to these comments, staff has the following recommendations:
1. Staff has re-reviewed access points 114, 116 and 117 and recommends changing the Plan to allow for a conditional ¾ movement intersection at access point 116.
2. Staff recommends the council consider a policy regarding city participation (utilizing TCP payment/credits) for partial and proportional funding of improvements triggered by new development.
3. Staff has reviewed the residential portions of the plan especially in the area around Mantey Heights and recommends access points 156,157,158, 160, be removed from the Plan for further study. The city will be constructing the extension of Hawthorne Avenue between 28 Road and 28 ¼ Road which will necessitate changing the intersection of 28 Road with Patterson Road from a full movement intersection to a ¾ movement intersection. This change on Patterson Road will potentially affect Access point 158.
4. Staff recommends retaining the 1st trigger as that is the only implementation measure to require redevelopment to participate in improvements.
5. Staff recommends retaining the plan unchanged for Darby Lane and Placer Street (Accesses 236 and 240) due to proposed 3/4 access near access 237 for the Burkey property development. This proposed 3/4 access would conflict with the left turn storage for a 3/4 movement at access 236 (Darby Dr).

The City Council heard the request for adoption of the Access Control Plan at the July 7 meeting. At that time the Council voted (6-1) to adopt the plan by resolution instead of by Ordinance and to rename the plan as an Access Management Plan versus an Access Control Plan to reflect the intent to utilize the plan as a guiding document versus a regulatory document.

SUGGESTED MOTION:

I move to (adopt/deny) Resolution No. 55-21 a resolution adopting the Patterson Road Access Management Plan.

Attachments

1. RES-Patterson AMP 071221jps
2. Final Patterson Rd Access Study
3. Final Patterson Rd Access Study- Appendices
4. Public Comments received since June 1st thru June 8th

5. GJSpeaks - Response to Public Comments
6. Public Comments on the April 2021 Patterson Road ACP draft
7. Public Comments on the January 2021 Patterson Road ACP draft
8. Public Notice - June 8th PC Hearing - Patterson Road ACP
9. Patterson Rd ACP Brochure - March 2021
10. Patterson Rd ACP Brochure - April 2021
11. FAQ
12. Planning Commission Minutes - 23 Feb 2021 - Patterson Road ACP
13. Planning Commission Minutes - 2021 - June 8 - Draft
14. Public Emails Received 06152021
15. Public Emails Received 06/16/2021
16. Public Emails Recieved July 2021

CITY OF GRAND JUNCTION, COLORADO

RESOLUTION NO._____-21

A RESOLUTION ADOPTING THE PATTERSON ROAD ACCESS MANAGEMENT PLAN FOR APPROXIMATELY SEVEN MILES OF PATTERSON ROAD BETWEEN I-70 B (23.75 ROAD) AND LODGE POLE STREET (30.75 ROAD) IN GRAND JUNCTION, COLORADO

Recitals

The City of Grand Junction staff and Stolfus and Associates have diligently studied and prepared recommendations for the long-term management of the Patterson Road corridor within the current limits of Grand Junction. The adoption of this Resolution, which serves to establish as City policy, the principles of access management developed and recommended by the research and best engineering practice of Stolfus and the City staff, follows numerous virtual and in-person public meetings and open houses. Many members of the public attended and participated in those meetings, together with Planning Commission and City Council hearings.

At its July 7, 2021 City Council hearing a number of persons spoke against adopting access controls as a matter of law for the Patterson Road corridor. After considering the testimony and having received a proposal from City staff to adopt the principles of the study as policy ("Management Plan") instead of as regulation, the City Council found that the Management Plan policy for Patterson Road would be best adopted, and at present is most consistent with furthering the City's goals, as guiding principles of the City of Grand Junction.

By and with this Resolution the City staff is authorized to apply the Management Plan policy to supervise the Patterson Road corridor. Once adopted the Management Plan policy will function to preserve Patterson Road as an essential transportation corridor and help to recognize that changes to Patterson Road, especially in predominately residential areas may impact property values and the economic viability of development/redevelopment of property along the corridor.

Implementation of the Management Plan will occur over time as property adjacent to the corridor develops/redevelops and as such the City Council understands and agrees that the benefits of the Management Plan policy will result over time. The adoption of the Management Plan policy will allow for the City to take action as may be necessary or required for the City to address conditions as they change, which may include but are not limited to reconsidering unintended consequences of implementation of the Management Plan and/or responding to locations or conditions along the Patterson Road corridor that are now or may reasonably be found to be hazardous or otherwise would benefit from improvement.

DRAFT

The City Council intends the Management Plan policy to assist the City and the users of Patterson Road to optimize the performance of the roadway while maintaining safe traffic patterns and to the extent possible minimizing the need to add additional lanes of traffic and other physical changes to the roadway. With application of the Management Plan the City will specifically commit to further evaluation, study and consideration of Access Points 156 (Mount View Drive), 157 (Mantey Heights Drive), 158 (Santa Fe Drive), and 161 (E. Park Avenue) in the future.

The City Council, in order to assure the Management Plan remains consistent with the needs of sound development/redevelopment practices and transportation planning, engineering and management, will review this Resolution within 60 days of the seventh year following its approval. The City Council may, prior to that review amend this Resolution and the policies adopted pursuant to it, or in accordance with the Charter and Ordinances of the City, propose an ordinance to adopt the management principles as law. The City Council finds and declares that this Resolution, and the Management Plan policy adopted herewith is in furtherance of the public health, safety and welfare and this Resolution bears a rational relation to the object sought to be obtained

Any appeal of a staff decision from application of the Management Plan to a development/redevelopment application shall first be as provided in GJMC 21.02.120(b).

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION THAT:

The Patterson Road Access Management Plan (AMP) of the City of Grand Junction, Colorado, in the form of the document attached hereto, is hereby adopted as the policy of the City and shall be implemented as provided herein and in accordance with the Charter and Ordinances of the City.

PASSED AND APPROVED this 21st day of July, 2021.

_____
C.B. McDaniel
President of the City Council

ATTEST:

_____
Wanda Winkelmann
City Clerk

DRAFT

City of Grand Junction
Patterson Road
Access Study

US 6 / US 50 / I-70B to Lodgepole Street

July 2021

CITY OF Grand Junction COLORADO

Stolfus

CITY OF GRAND JUNCTION
PATTERSON ROAD ACCESS STUDY

US 6/ US 50/ I-70B to Lodgepole Street

July 2021

Prepared for:

City of Grand Junction
250 North 5th St
Grand Junction, CO 81501

Prepared by:

Stolfus & Associates, Inc.
5690 DTC Blvd, Suite 330W
Greenwood Village, Colorado 80111
Andrew Amend, PE, PTOE - Project Manager
SAI Reference No. 4000.038.01

TABLE OF CONTENTS

Executive Summary ..... **i**

1.0 Introduction **5**

1.1 Project Background 5

1.2 Public Involvement 7

2.0 Access Management – Benefits, Principles and Techniques **9**

2.1 Access Management Benefits 9

2.2 Guiding Principles 10

2.3 Techniques 11

3.0 Existing Conditions **15**

3.1 Land Use Characteristics 15

3.2 Roadway Characteristics 15

3.3 Existing Access Inventory 15

3.4 Crash History 16

4.0 Access Plan Development and Evaluation **20**

4.1 Process 20

4.2 Evaluation Results 21

5.0 Plan Recommendations **23**

5.1 Access Management Plan 24

5.2 Alternative Local Routes 53

6.0 Access Plan Implementation Conditions **58**

7.0 Conclusion **59**

8.0 List of Acronyms **60**

9.0 Glossary **61**

LIST OF FIGURES

Figure 1. Study Area 6

Figure 2. Patterson Rd Driveway Crashes 19

Figure 3. Patterson Rd AMP Exhibits 27

Figure 4. Patterson Rd AMP Alternative Routes 55

LIST OF TABLES

Table 1. Intersection Level of Service of Safety 17

Table 2. Compatibility Evaluation Summary 21

TECHNICAL APPENDICES

Appendix A - Public Outreach

Appendix B - Existing Access Inventory

Appendix C - Crash History

Appendix D - Traffic Methodology, Data, and Analysis

Appendix E - Access Plan Methodology and Evaluation Process

Appendix F - Access Management Plan Tables and Exhibits

EXECUTIVE SUMMARY

Project Background

Since its construction in 1984, Patterson Rd has served as a critical part of Grand Junction's transportation system. It serves as a major east-west arterial corridor and is an important public resource for the community. Sustained and successful economic development along the corridor is increasing travel demand and necessitating the need to improve safety, operations, and reliability. Effective access management is essential in order to optimize the performance of the road to improve the level of safety, reduce traffic congestion and improve the quality of this corridor without constructing major arterial improvements. In recognition of the benefits of access management and the need to proactively plan for the future, the City of Grand Junction identified an Access Management Plan (AMP) as a first step toward planning for both private development access and for public improvement projects along Patterson Rd. Similar studies have been developed both nationally and statewide and it has been demonstrated that access-managed corridors not only preserve the transportation functions of roadways, but also help preserve property values and the economic viability of abutting developments. ***The purpose of this study is to coordinate development and growth anticipated in the area with the transportation needs for the local community and traveling public with the intention of improving safety and maximizing the life of the four-lane section along Patterson Rd.***

The AMP coordinates planning, regulation, and design of access to Patterson Rd from adjacent property, including new land development. The plan incorporates the systematic control of the location, spacing, design, and operation of driveways, median openings, and street connections to the roadway. The AMP defines existing and future access locations and configurations (movements allowed), with consideration for circulation and alternative access opportunities. It is a long-range planning document that identifies access conditions that will be implemented as roadway corridor and land-use characteristics change. The AMP will provide clear expectations for access for both City staff and property owners/developers.

Study Area

The study area consists of approximately seven miles of Patterson Rd (F Rd) between I-70B (23.75 Rd) and Lodgepole St (30.75 Rd). The segment on the east end that extends beyond City limits is controlled by Mesa County and not included in this plan. In general, land use within the city limits is suburban in nature with residential and commercial uses. There are currently 284 access points on Patterson Rd within the study area. A majority of access points are full movement. The access points are classified as follows:

- 14 Signalized public road intersections (27 access points)
- 54 Unsignalized public road intersections (62 access points)
- 2 unsignalized private road intersections (2 access points)
- 82 business access points
- 95 residential access points
- 18 maintenance or field access points

Project Goals

The Street Plan Functional Classification Map within the Grand Valley Circulation Plan identifies the corridor as a Minor Arterial from I-70B (23.75 Rd) to 25 Rd and a Principal Arterial from 25 Rd to Lodgepole St (30.75 Rd). Arterial roadways are considered higher order roadways that carry large volumes of traffic and have limited access. Implementing access management along Patterson Rd will help the City by preserving and improving traffic operations along the corridor. By preserving the capacity of Patterson Rd, more traffic can be carried throughout the corridor without the construction of additional travel lanes.

Access management also has tremendous safety benefits. Of the reported crashes on Patterson Rd, 64.0% (759) were at or related to an intersection. Studies have shown a 30% to 60% reduction in crashes on roadways where access management techniques are implemented. The reduction in vehicle conflicts has the added benefit of improving traffic flow, reducing travel times, increasing public safety, reducing economic loss, increasing fuel efficiency and contributing less to air pollution. Access management is also good for business, providing safe access to customers and retaining more of a community's original market area by limiting congestion that may prevent some customers from making a trip.

With this in mind and recognizing the primary purpose of the AMP is to improve safety and the traveling experience along the corridor and coordinate anticipated growth in the area with the roadway network, the following project goals were established:

- Provide effective and efficient through travel for traffic on Patterson Rd utilizing the existing right-of-way and identify if additional right-of-way is needed.
- Provide safe, effective, and efficient access to and from Patterson Rd for businesses, residents, and guests to support the economic viability of the City of Grand Junction and Mesa County.
- Maintain compatibility with existing and proposed street network connections that provide local circulation to support the transportation system.
- Support alternative modal choices, including transit, pedestrian, and bicycle routes.
- Provide a plan that can be implemented in phases.
- Maintain compatibility with previous local planning efforts. Such as, the Grand Valley Circulation Plan, Ballot 2A measure, and the One Grand Junction Comprehensive Plan.

Plan Development and Approach

The existing physical and operational characteristics of Patterson Rd were investigated. Next, future physical and operational characteristics were projected for a 20-year planning period based on anticipated growth in the area. The AMP was created using input from City staff, private property owners, and the general public.

To achieve the project goals, various changes to the existing Patterson Rd corridor are recommended, including:

- Restriction of numerous full movement access points resulting in right-in/right-out and ¾ movement (left-in, right-in/right-out) accesses.
- Limitation of full movement access to major signalized intersections.
- Consolidation of access to one location per ownership and where feasible, shared between adjacent properties.
- For properties located adjacent to Patterson Rd, access points may be relocated to lower order streets where reasonable access can be provided.

- Out-of-direction travel will be limited in general to a maximum distance of one mile (½ mile each direction). Out-of-direction travel is the distance needed to reach an access that has been obstructed by a center median compared to the distance needed on an undivided street.

The recommended changes to Patterson Rd will result in the following benefits:

- a 60% reduction of vehicle conflict points, which correlates to a reduction in crashes
- a 45% reduction in conflict points for pedestrians and cyclists traveling on Patterson Rd
- improved travel time in both directions during morning and evening peak periods
- the addition of auxiliary lanes at major intersections to safely separate turning movements and through movements and allow through movements to travel unimpeded
- retention of business market area over time by reducing congestion
- increased fuel efficiency the traveling public and improved air quality by providing smoother traffic flow

In addition to the recommended changes, several new local streets are proposed. These alternative streets provide additional circulation opportunities that will reduce local dependence on Patterson Rd by providing alternatives for restricted left-turn movements and reducing traffic at high-demand intersections.

Public Involvement

Input from corridor stakeholders including property owners, occupants, partner agencies, and the general public was critical to the AMP development. In advance of the first open house, agency stakeholder meetings with Mesa County, Grand Junction Fire District, Clifton Fire District, Mesa County Valley School District 51, Grand Valley Transit and Mesa County Regional Transportation Planning Organization were held. In compliance with Mesa County Public Health requirements, a public open house was held at Faith Heights Church on October 1, 2020. Over 800 bilingual invitations were sent out and notice was posted on City social media feeds for the open house. Additionally, all exhibits were posted on the GJSpeaks website for those who did not attend in person.

Following the public open house, the project team met with key property owners and anyone who signed up for one-on-one meetings at the open house. The plan was then updated to reflect the public input received from the open house and subsequent meetings. While Mesa County Public Health restrictions prevented a second in-person open house, the updated AMP was presented as a “virtual open house” on GJSpeaks from January 6-12, 2021. Again, postcards were mailed to owners and occupants along Patterson Rd along with notices to the general public. This provided an additional opportunity to review the revised AMP and provide new comments. Also offered on GJSpeaks was a sign-up to meet with the project team on January 13th over Zoom to resolve any additional questions.

At the February 23rd Planning Commission meeting, it was determined that additional public involvement was required before the plan could proceed. Nearly 2,600 postcards were sent out to corridor stakeholders at two different times inviting them to view exhibits on GJSpeaks and meet with City staff. Staff proceeded to meet with Home Owners Associations, business complex representatives, emergency serves, transit agencies, the Chamber of Commerce, and the school district in addition to individual property owners. Through this additional process, several access points were changed in the plan.

Corridor Improvement Priorities

A base level review of corridor traffic safety and operations was conducted to support the AMP. Using a 2045 horizon year, traffic demand on the corridor is generally expected to increase by 33% in the morning peak hour and 24% in the afternoon peak hour. Since there are no well-established methods of estimating future crashes, data from 2014 to 2018 was used to evaluate existing intersection safety.

Patterson Rd intersections with the highest traffic safety and operations improvement priorities are at 25 Rd and N 12th St. The Patterson Rd segment with the highest priority for implementation of the AMP with a raised median is from 24 ½ Rd to 25 Rd due to the elevated number of driveway crashes.

Other locations on the corridor that show a high potential for crash reduction include the Patterson Rd intersections with 24 Rd, Market St, Home Depot access, 24 ½ Rd, 25 ½ Rd, N 1st St, N 7th St, N 15th St, 28 Rd, 28 ¼ Rd, 29 Rd, 29 ½ Rd, and 30 Rd. Implementation of the AMP with a raised median between 25 Rd and 12th St has a high benefit due to the number of driveway crashes recorded. Fourteen intersections on the corridor meet requirements for additional right or left turn lanes.

Other findings and recommendations for the corridor include the following:

- Alternative intersection types were considered, but it is recommended that the intersection at 24 Rd remain a conventional signalized intersection, with an additional northbound thru and eastbound left turn lane constructed to help traffic operations.
- Elimination of the traffic signal at Market St was considered because of its close proximity to 24 Rd, but due to the resulting impacts and in consideration of the potential relief that a future extension of F 1/2 Rd as a principal arterial would provide, it is recommended that the Market St intersection remain signalized.
- Restricting the 15th St to ¾ access was considered, but since the signal serves pedestrian movements and as a relief valve to 12th St, it is recommended to remain as is.
- Conduct further analysis to identify mid-block crossing locations that support pedestrian accessibility and transit access.
- Adopt alternative road connections into the City of Grand Junction's Street Plan Functional Classification Map as part of the Grand Junction Circulation Plan.

Implementation Conditions

The improvements recommended in the AMP represent a long-range plan to implement over time as traffic and safety needs arise and as funding becomes available. Construction of the improvements recommended may be completed using public and/or private funding. The following scenarios will trigger construction.

1. A property redevelops or changes use, resulting in an increase in traffic to and from the site of 20% or more.
2. Planned publicly funded project by the City.
3. A safety or operational issue develops that can be mitigated through the implementation of access management techniques consistent with the AMP.

Implementation of improvements recommended in the AMP will only occur with one of the triggers listed above. Without one of these scenarios, the AMP does not compel a property owner to make access changes.

1.0 INTRODUCTION

1.1 Project Background

Patterson Rd is a critical east-west arterial corridor for Grand Junction's large and growing community. Sustained and successful economic development along the corridor is increasing travel demand and necessitating the need to improve safety, operations, and reliability. Applying access management along arterial corridors such as Patterson Rd is a proven technique to help communities preserve the transportation function of existing corridors, thereby prolonging the need for major arterial improvements, such as the addition of through lanes. A raised median, consistent with the City's Principal Arterial section, is a key access management technique that reduces conflicts and improves traffic flow, which will extend the life of the four-lane section on Patterson Rd. However, in considering the implementation of medians, it is also important to consider access locations, turn lane requirements, and circulation on a corridor-wide basis. In recognition of the benefits of access management and the need to proactively plan for the future, the City of Grand Junction identified an Access Management Plan (AMP) as a first step toward planning for both private development access and for public improvement projects along Patterson Rd.

The purpose of this study is to coordinate development and growth anticipated in the area with the transportation needs for the local community and traveling public with the intention of improving safety and maximizing the life of the four-lane section along Patterson Rd. The goals for the project are as follows:

- Provide effective and efficient through travel for traffic on Patterson Rd utilizing the existing Right-of-Way and identify if additional Right-of-Way is needed
- Provide safe, effective, and efficient access to and from Patterson Rd for businesses, residents, and guests to support the economic viability of the City of Grand Junction and Mesa County
- Maintain compatibility with existing and proposed street network connections that provide local circulation to support the transportation system
- Provide a plan that can be implemented in phases
- Support alternative modal choices, including transit, pedestrian, and bicycle routes
- Maintain compatibility with previous local planning efforts

The western AMP limit begins at the co-located highways US 6, US 50 and I-70B. The AMP limits then extend 7.35 miles to just east of the City boundary at Lodgepole St. Mesa County was not involved in the development of the AMP so any recommendations for those areas outside City limits may only be implemented as part of an annexation. The limits of the Patterson Rd AMP are illustrated in Figure 1.

This report summarizes the study process, analyses, findings and recommendations for access modifications within the Patterson Rd corridor.

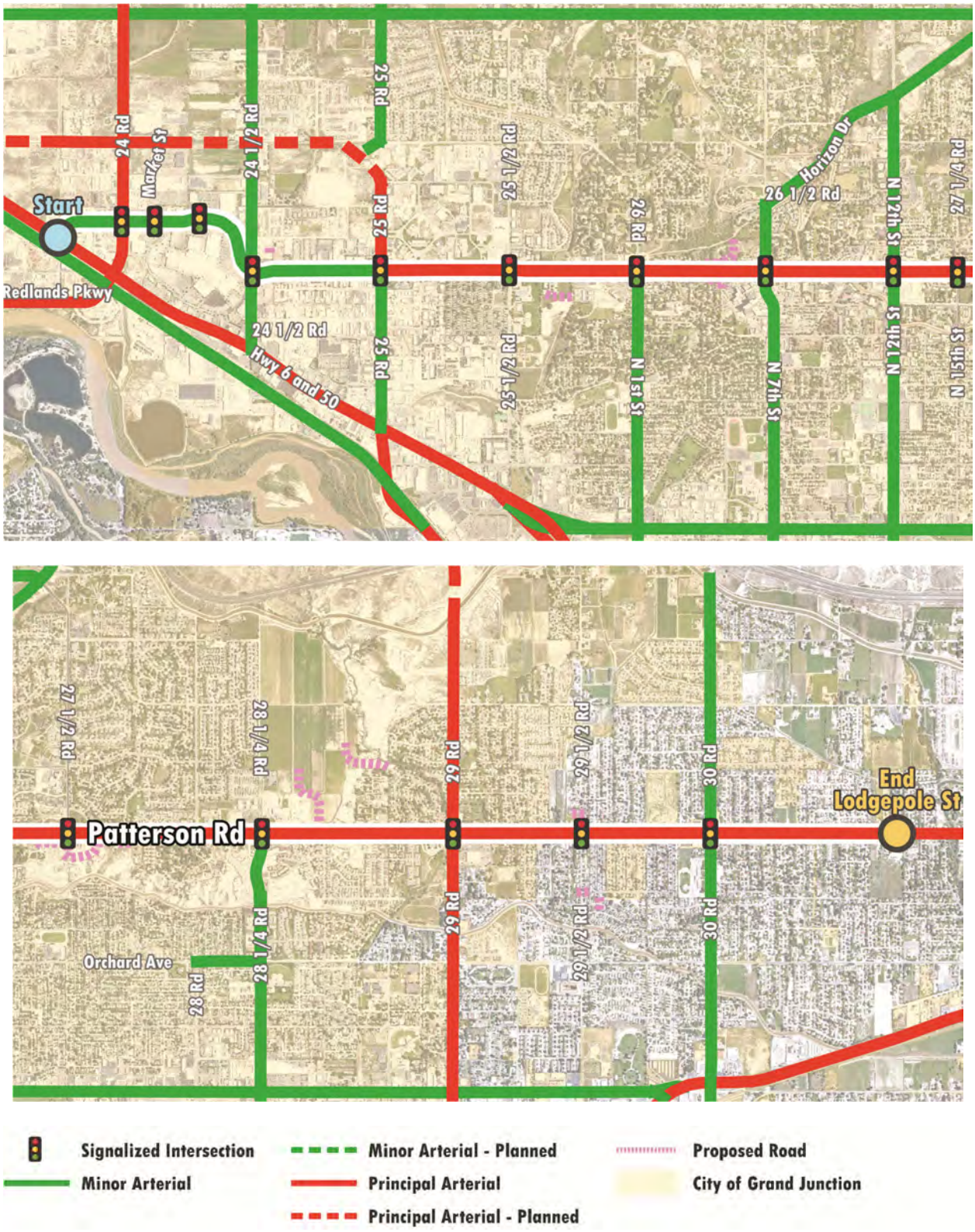


Figure 1. Study Area

1.2 Public Involvement

Input from corridor stakeholders, including property owners, tenants, and the general public, was a critical element of the project. Multiple techniques were used to engage stakeholders, including advertised public open houses, one-on-one meetings/phone calls with interested stakeholders, public presentations to the Grand Junction City Council, and project information posted on the GJSpeaks website.

An advertised project-specific public open house was held at Faith Heights Church on October 1, 2020 to present and discuss a draft AMP, review access management principles, and gather public input on the plan. Given Mesa County Public Health restrictions in place at the time, open house exhibits were also made available along with an introductory video on the GJSpeaks website. Corridor property owners, local government representatives, and other interested individuals who contacted the project team prior to the open houses were invited by first class mail and e-mail, when provided. Bilingual postcards were mailed to 841 property owners, businesses, and residential occupants on or adjacent to the corridor.

Due to additional Mesa County Public Health restrictions, public presentation of the revised AMP was conducted online only. Exhibits were available for public consumption beginning on January 6, 2021 and concluded with virtual one-on-one meetings with the project team on January 13th. Postcards were mailed to an updated list of 740 property owners, businesses, and residential occupants on or adjacent to the corridor. Invitations to both open houses were posted on City social media accounts and a legal public notice was posted in the Daily Sentinel.

Exhibits displayed at both open houses included:

- Project goals
- Access management principles and techniques
- Patterson Rd Access Management Plan Map
- Implementation
- Schedule

The same exhibits were also available for review on the GJSpeaks website. Representatives from the City and the consultant team were available for questions and discussion at the first open house where 30 people attended. At the second open house, which was available online for a one-week review period, ten people reserved one-on-one meetings with the project team and attended via Zoom on January 13th. One additional meeting was held with neighboring property owners over telephone later in the week.

Following the October public open house, the project team held a series of one-on-one meetings with corridor property owners. Five meetings were held over Zoom and six other property owners declined to meet or did not respond to multiple inquiries by the project team. The project was also discussed with several interested parties via telephone at various times during plan development.

Public comments were received at all public outreach events via email, regular mail, and from the online platform Survey Monkey. A list of one-on-one meeting participants, comment sheets, and open house sign-in sheets can be found in Appendix A.

At the February 23rd Planning Commission meeting, it was determined that additional public involvement was required before the plan could proceed. Nearly 2,600 postcards were sent out

to corridor stakeholders at two different times inviting them to view exhibits on GJSpeaks and meet with City staff. Staff proceeded to meet with Home Owners Associations, business complex representatives, emergency serves, transit agencies, the Chamber of Commerce, and the school district in addition to individual property owners. Through this additional process, several access points were changed in the plan.

The project team updated Planning Commission and City Council on project progress and development on several occasions. Virtual presentations were made to Planning Commission and Council and updates were provided via written memorandums from City staff. Council meetings were held on August 3, 2020, February 1, May 19, and July 7, 2021. Planning Commission Meetings were held on February 23 and June 8, 2021. Final adoption of the AMP will be held in a public hearing on July 21, 2021.

2.0 ACCESS MANAGEMENT – BENEFITS, PRINCIPLES AND TECHNIQUES

As defined by the *Access Management Manual, TRB, Second Edition 2014*, "Access management is the coordinated planning, regulation, and design of access between roadways and land development. It involves the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway." Developing an AMP provides local authorities with the opportunity to develop a single transportation plan that considers multiple access points along a segment of roadway as a network rather than as individual access points. Corridor specific issues such as intersection spacing, traffic movements, circulation, land use, topography, alternative access opportunities, and other local planning documents may be considered in developing an AMP. The Plan does not define capacity improvements, off-network improvements, or funding sources for access improvements, although municipalities often consider off-network improvements in conjunction with an AMP. The Plan is a long-range planning document that identifies access conditions that will be implemented as roadway and land-use characteristics change.

2.1 Access Management Benefits

Access management provides the means to balance good mobility along Patterson Rd with local access needs of businesses and residents. Implementation of access management principles and techniques on local transportation networks can provide the following long-term benefits for roadway users, the community, and businesses:

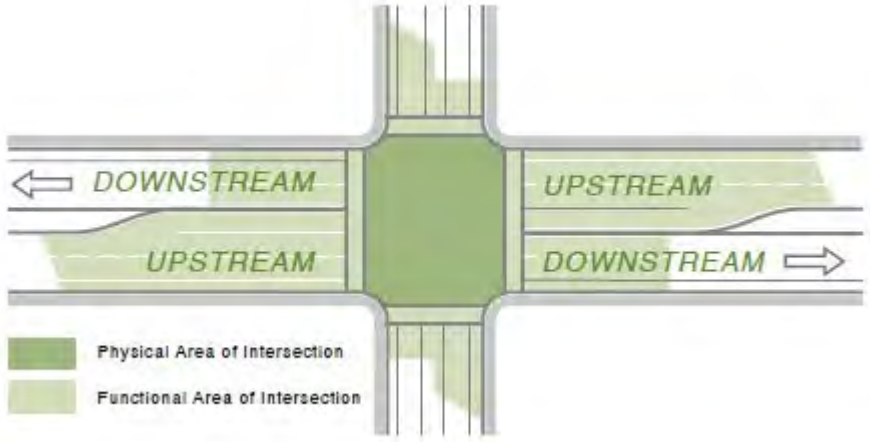
- Improves safety
  - Fewer decision points and less conflict potential for motorists, cyclists, and pedestrians result in a reduced number of crashes.
  - Safe access to businesses and residences is provided.
- Increases ability to accommodate traffic demands
  - Limiting full movement access within a corridor favors through movements and strategically identifies locations for vehicles to enter and exit the corridor.
  - Congestion is reduced, lessening travel times and providing smoother traffic flow.
  - Reduce or prolong the need to add additional thru lanes as traffic increases.
  - Improved operations on the roadway provides opportunities to reduce delay on the local street system.
  - Reduced congestion results in less air pollution.
- Preserves property values and the economic viability of abutting development
  - A more efficient roadway system captures a broader market area.
  - A more predictable and consistent development environment is created.
  - Well-defined driveways with suitable spacing make it easier for customers to enter and exit businesses safely, thereby encouraging customers to patronize corridor businesses.
- Encourages use and development of local streets within the periphery of the corridor
  - Allows traffic to access local amenities without using Patterson Rd, providing convenient local access and circulation and reduced volumes on Patterson Rd.

2.2 Guiding Principles

Access management centers around limiting and consolidating access along major roadways and focusing access for development on a supporting local street network and circulation system. The following guiding principles to access management were applied in the development of the Plan for Patterson Rd:

- Limit the number of direct access points to the corridor
- Locate major intersections (existing or potential future signals) to favor through movements and to accommodate infrastructure for turning movements
- Minimize the number of locations where vehicles merge, split, or cross
- Remove turning vehicles from through traffic lanes
- Provide a supporting local street network and circulation system

In addition, the functional intersection area was considered in evaluating the spacing between major intersections. The *American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets, 2011* and *Access Management Manual, TRB, Second Edition 2014* indicates that separation of access points should not be less than the functional area of the intersection. The functional intersection area extends upstream and downstream from the physical intersection as shown below.



Source: Federal Highway Administration (FHWA) Access Management in the Vicinity of Intersections Technical Summary

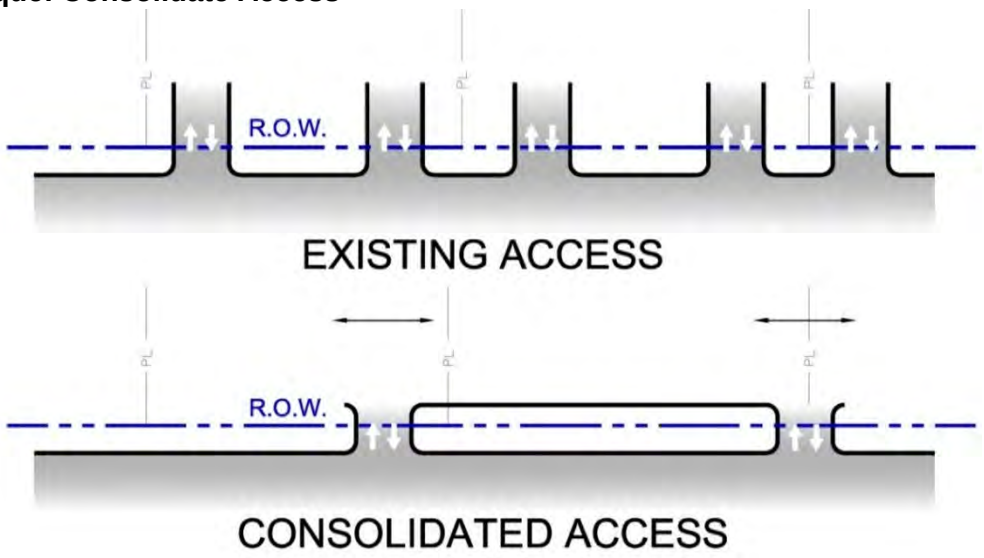
The upstream distance is a combination of the storage length, deceleration and taper length, and the perception-reaction distance required for the speed of the segment. The downstream distance is measured as either acceleration length or decision sight distance. Providing acceleration length allows vehicles to accelerate to normal speed without conflict. Providing decision sight distance allows drivers to pass through an intersection before considering potential conflicts at the next intersection. Acceleration length was identified as the controlling downstream functional intersection distance for this corridor due to the high speed (between 35 and 45 mph) and the existing use of acceleration lanes. The functional intersection area depends on the speed of the segment and the number of projected turning vehicles.

2.3 Techniques

Several access management techniques, illustrated on the following pages, may be used to achieve the principles outlined above and to realize the benefits of access management.

Principle: Limit the number of direct access points to the corridor

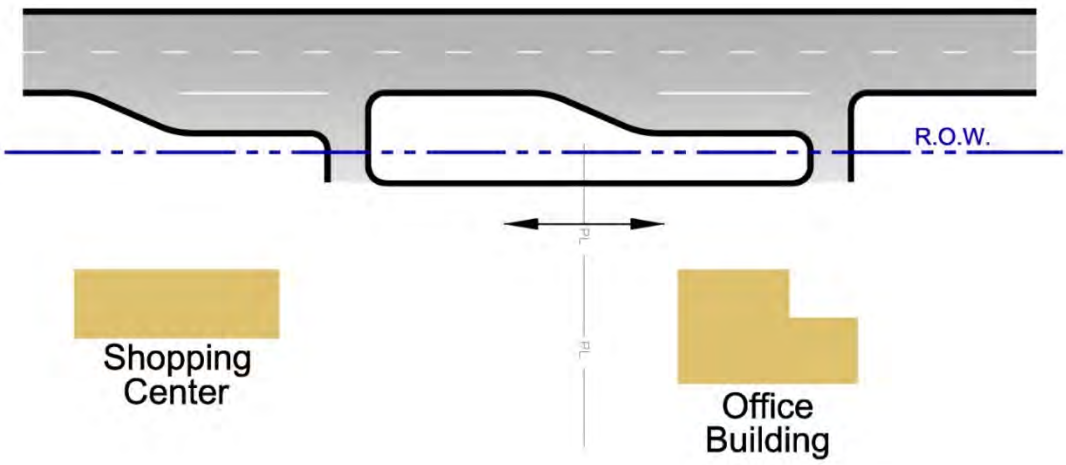
Technique: Consolidate Access



Consolidate access points by:

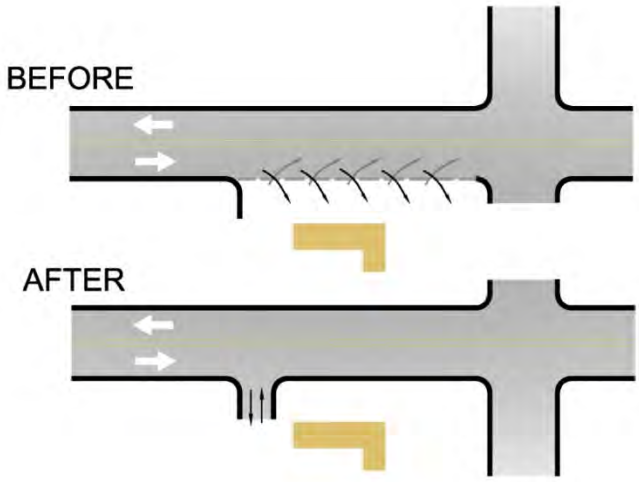
- *Reducing the number of access points that serve a single property/ownership*
- *Reducing the number of frontage road access points to the roadway*
- *Providing joint access for multiple properties at or near a property line*

Technique: Connect Adjacent Properties



Connect adjacent properties to provide circulation between properties and increase access opportunities for multiple properties.

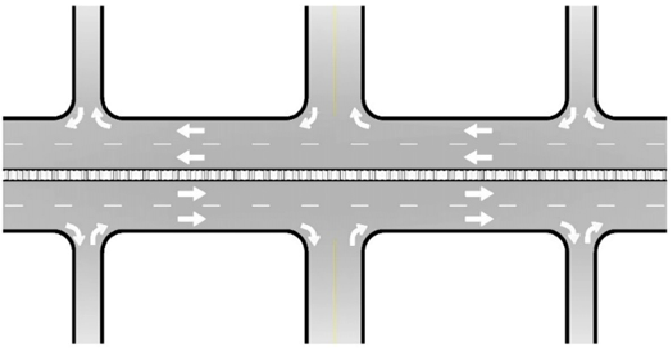
Technique: Define Driveways



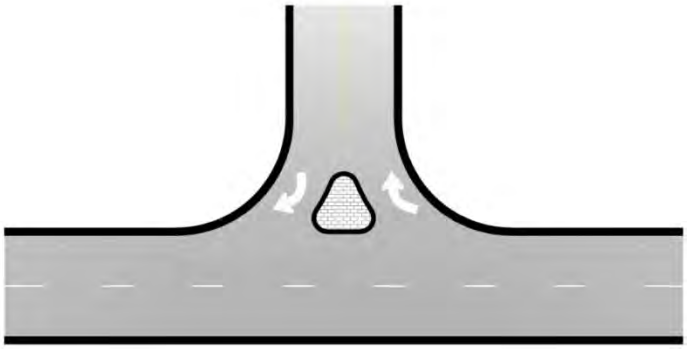
Define driveways to provide clear identification of entrance and exit locations.

Principle: Minimize the number of locations where vehicles merge, split, or cross

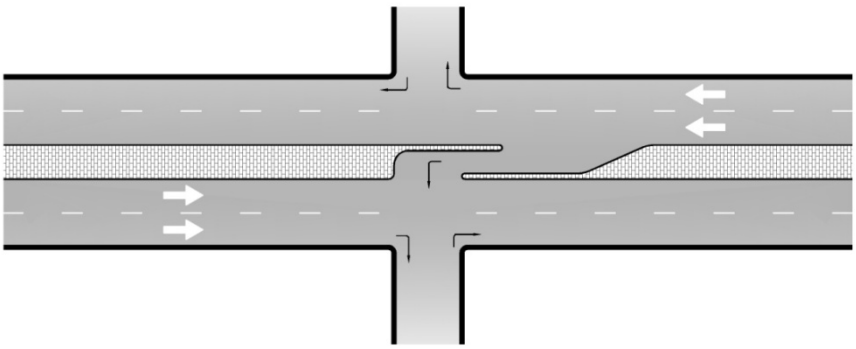
Technique: Install Medians and Islands



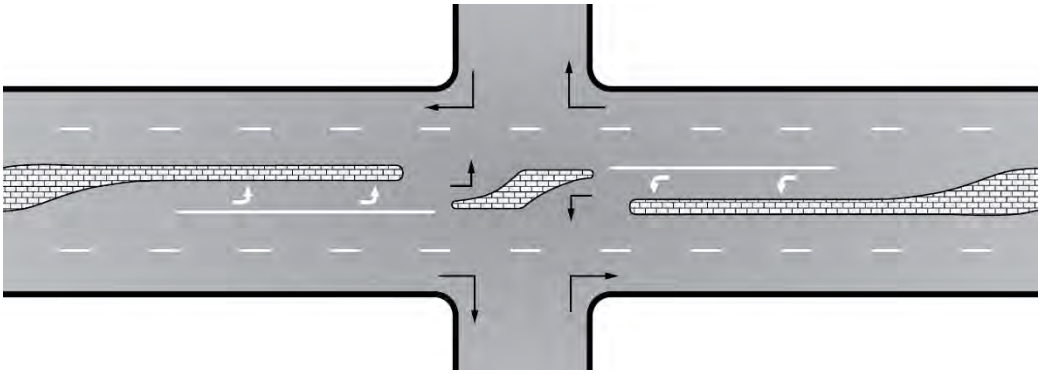
Right-in/right-out with raised median eliminates left turn movements between major intersections throughout a corridor. This is the preferred technique for Patterson Road.



Right-in/right-out with channelizing island eliminates left turn movements at specific locations. This technique is a potential interim solution where a median may be unreasonable to construct for a single property due to space constraints at time of development.



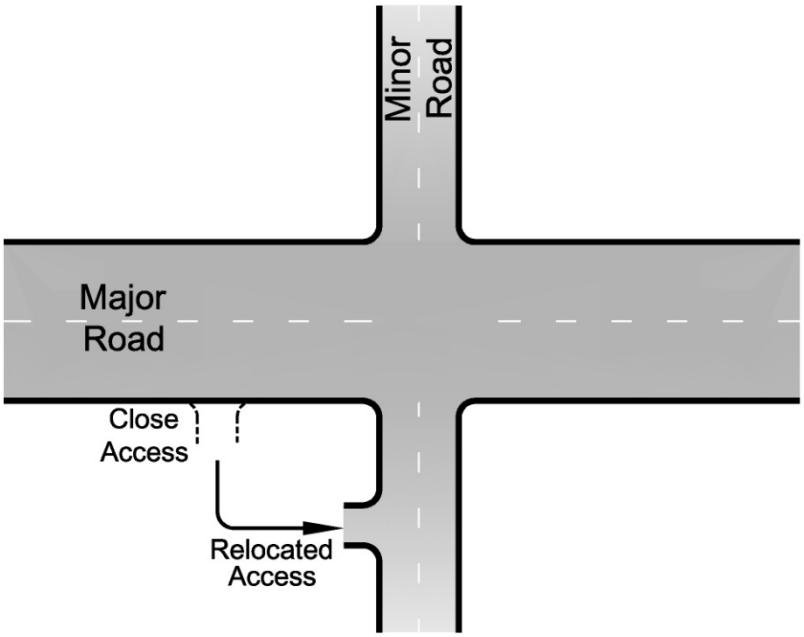
Directional median opening or a ¾ movement limits left turn movements to one direction at strategic locations where increased access is beneficial for safety or operational reasons.



A ¾ movement limits left turn movements where increased access is beneficial on both sides of the street.

Principle: Provide a supporting local street network and circulation system

Technique: Provide Cross St Access



Relocate access to a side street to:

- *Reduce the number of direct access points to the major roadway.*
- *Provide safe and easy access to a minor roadway intersection with the major roadway.*
- *Provide opportunities to use an alternate local route, thereby avoiding use of the major roadway completely.*

3.0 EXISTING CONDITIONS

3.1 Land Use Characteristics

The study area encompasses just over seven miles within the Grand Junction city limits. The corridor features intense commercial land use at its western end extending two miles to 25 ½ Rd where more residential uses intermix with commercial development. East of 15th St (27 ¼ Rd), development along the corridor is largely residential. Major developments that directly access Patterson Rd include the Mesa Mall at 24 ½ Rd and St. Mary's Medical Center at 7th St (26 ½ Rd).

3.2 Roadway Characteristics

Traveling east, the posted speed limit on Patterson Rd is 35 mph at the west end of the corridor until it increases to 40 mph east of 24 ½ Rd. East of 1st St (26 Rd) it dips down to 35 mph, but increases back to 40 mph east of 15th St (27 ¼ Rd). East of 29 Rd, the speed limit increases to 45 mph, where it remains the rest of the study area.

Patterson Rd is generally a four-lane arterial with a Two-Way Left-Turn Ln (TWLTL). East of 1st St (26 Rd) there is no TWLTL for approximately ¼ mile and raised medians are in place adjacent to turn lanes at several signalized intersections. Bike lanes exist on both sides of the roadway between 28 ¼ Rd and the end of the study area at Lodgepole St. There are 15 signalized intersections within the study area, as shown in Figure 1.

3.3 Existing Access Inventory

There are currently 288 access points along Patterson Rd within the study area. Full movement access is provided at 261 locations, 34 of which are signalized. Access restricting left turns onto Patterson Rd (3/4 access) is provided at 15 locations. Right In-Right Out access is provided at 12 locations.

The following provides a description of the accesses by type:

Public Rd Unsignalized (PRU) – Full or partial movement, stop-controlled intersection providing direct access to a publicly owned roadway. There are 62 PRU access points to Patterson Rd in the study area.

Public Rd Signalized (PRS) – Full or partial movement, signal-controlled intersection providing direct access to a publicly owned roadway. There are 27 PRS access points to Patterson Rd in the study area.

Private Rd Unsignalized (PVRU) – Full or partial movement, stop-controlled intersection providing direct access to a private property. These roadways are maintained privately. There is 1 PVRU access point to Patterson Rd in the study area.

Residential Access (R) – Full movement private roadway access points used on a regular basis by limited traffic. These types of access points include single-family private driveways. There are 95 R access points to Patterson Rd in the study area.

Business Access (BA) – Full movement roadway access points serving businesses within the study area. These types of access points are typically used multiple times daily by a variety of traffic types. There are a total of 77 BA access points to Patterson Rd in the study area.

Field Access (FA) – Full or partial movement access points that provide direct access from the roadway to agricultural land. These types of access points are typically not well-defined and are used infrequently. There are 14 FA access points to Patterson Rd in the study area.

Maintenance Access (MA) – Full or partial movement access points that provide direct access from the roadway for vehicles that are maintaining a public or private utility, such as a drainage structure or an electric meter. There are 4 MA access points to Patterson Rd in the study area.

Pull Off (PO) – Informal full or partial movement access points where vehicles may pull off the roadway or park, typically for shorter durations. There are 2 PO access points to Patterson Rd in the study area.

For the purposes of identifying the location of access points for this plan, all access points are defined by the approximate reference point (RP) along Patterson Rd based on the distance from US 6/ US 50/ I-70B. All access points are located at the approximate centerline of the access (+/- 50 feet). A complete inventory of existing access points is included in Appendix B.

3.4 Crash History

Crash data for a five-year period from January 1, 2014 to December 31, 2018 was reviewed for this report. Within the study area, there were 1,186 crashes within this period including 241 crashes that resulted in at least one injury and three crashes that resulted in a fatality.

Of the reported crashes, 759 (64.0%) were at or related to an intersection. Crashes were reviewed at the following intersections with Patterson Rd:

- I-70B Business Route
- 24 Rd
- Mall Entrance 1
- Mall Entrance 2
- 24 1/2 Rd
- Commerce Blvd
- 25 Rd
- Foresight Cir
- Northgate Dr
- Burkey St
- 25 1/2 Rd
- Cider Mill Rd
- Park Dr
- Meander Dr
- 26 Rd/ N 1st St
- Park Dr
- Mira Vista Rd
- 26 1/2 Rd/ N 7th St
- 8th Ct
- Viewpoint Dr
- 26 3/4 Rd
- N 12th St
- 27 1/4 Rd / N 15th St
- 27 1/2 Rd
- Spring Valley Cir
- Beechwood St
- El Corona Dr
- Santa Fe Dr
- 28 Rd
- Park Ave
- Rio Grande Dr
- 28 1/4 Rd
- Grand Cascade Way
- 28 3/4 Rd
- Legends Way
- Belhaven Way
- E Indian Creek Dr
- 29 Rd
- Partee Dr
- Chris-Mar St
- Colanwood St
- 29 1/2 Rd
- Greenfield Cir E
- Pioneer Rd
- Broken Spoke Rd
- Darby Dr
- Hudson Bay Dr
- 30 Rd
- Agana Dr
- Seranade St
- McMullin Dr
- Mesa Valley Dr
- Cottege Meadows Ct

The evaluated crash data provided some general observations about the crash patterns. Rear end (front to rear) crashes were the most prevalent crash type, accounting for approximately 42% of all crashes, followed by broadside (front to side) crashes at approximately 32%.

Level of Service of Safety (LOSS) was calculated for each intersection. The LOSS reflects how the intersection performs in regard to its expected crash frequency at a specific level of ADT (major and minor) when compared to intersections in Colorado with similar characteristics. LOSS can also indicate the potential for which crash reduction might be made if improvements were implemented and is graded as follows:

LOSS I – Below 20th Percentile (*Indicates a low potential for crash reduction)*

LOSS II – 20th Percentile to Mean (*Indicates a low to moderate potential for crash reduction)*

LOSS III – Mean to 80th Percentile (*Indicates a moderate to high potential for crash reduction)*

LOSS IV – Above 80th Percentile (*Indicates a high potential for crash reductions)*

Table 1 shows crash frequency for the five-year year period, LOSS considering all crash severities, and LOSS considering only injury or fatal crashes for each intersection. Several intersections indicate a high potential for crash reduction.

Table 1. Intersection Level of Service of Safety

Patterson Rd Intersection	Number of Crashes				LOSS All	LOSS Severe
	Property Damage Only	Injury	Fatal	Total		
I-70B Business Route	2	0	0	2	II	II
24 Rd	38	7	0	45	IV	IV
Market St	24	10	0	34	IV	IV
Home Depot Access	12	3	0	15	IV	III
24 1/2 Rd	52	8	0	60	IV	IV
Commerce Blvd	1	0	0	1	I	II
25 Rd	47	14	0	61	IV	IV
Foresight Cir	3	0	0	3	II	II
Northgate Dr	2	0	0	2	II	II
Burkey St	3	3	0	6	II	III
25 1/2 Rd	21	11	0	32	IV	IV
Cider Mill Rd	1	0	0	1	I	II
Park Dr	1	1	0	2	II	II
Meander Dr	5	3	0	8	III	III
26 Rd/ N 1st St	47	13	0	60	IV	IV
Park Dr	2	0	0	2	II	II
Mira Vista Rd	3	0	0	3	II	II
26 1/2 Rd/ N 7th St	46	4	0	50	IV	III
8th Ct	1	0	0	1	I	II

Table 1. Intersection Level of Service of Safety

Patterson Rd Intersection	Number of Crashes				LOSS All	LOSS Severe
	Property Damage Only	Injury	Fatal	Total		
Viewpoint Dr	2	0	0	2	II	II
26 3/4 Rd	0	2	0	2	II	III
N 12th St	63	15	1	79	IV	IV
27 1/4 Rd / N 15th St	29	7	0	36	IV	IV
27 1/2 Rd	26	6	0	32	III	III
Spring Valley Cir	4	2	0	6	II	II
Beechwood St	4	1	0	5	II	II
El Corona Dr	4	0	0	4	II	II
Santa Fe Dr	1	0	0	1	I	II
28 Rd	8	10	0	18	III	IV
Park Ave	0	1	0	1	I	II
Rio Grande Dr	4	1	0	5	II	II
28 1/4 Rd	21	7	0	28	IV	IV
Grand Cascade Way	1	1	0	2	I	II
28 3/4 Rd	1	0	0	1	I	II
Legends Way	2	0	0	2	I	II
Belhaven Way	3	0	0	3	II	II
E Indian Creek Dr	3	0	0	3	I	I
29 Rd	50	9	0	59	IV	IV
Partee Dr	0	1	0	1	I	II
Chris-Mar St	1	0	0	1	I	II
Colanwood St	1	0	0	1	I	II
29 1/2 Rd	17	6	1	24	IV	IV
Greenfield Cir E	1	0	0	1	I	II
Pioneer Rd	2	0	0	2	I	II
Broken Spoke Rd	2	1	0	3	II	II
Darby Dr	1	1	0	2	I	II
Hudson Bay Dr	1	0	0	1	I	II
30 Rd	30	10	0	40	IV	IV
Agana Dr	1	0	0	1	I	II
Serenade St	1	1	0	2	I	II
McMullin Dr	0	1	0	1	II	II
Mesa Valley Dr	1	0	0	1	II	II
Cottage Meadows Ct	0	1	0	1	II	II

Of the reported crashes, 74 crashes (6.2%) were at or related to a driveway on Patterson Rd. Figure 2 shows the locations of driveway crashes occurring on Patterson Rd segment by segment. The segments from 24 1/2 Rd to 12th St display the greatest number of driveway related crashes. More specifically, almost one quarter of all driveway related crashes on Patterson Rd occurred between 24 1/2 Rd to 25 Rd.

Figure 2. Patterson Rd Driveway Crashes

Overall, implementing access management techniques will reduce the number of conflict points in the study area. According to the Highway Safety manual, the reduction of access points along a roadway segment is expected to result in a reduction of crashes. A summary of the crash history is included in Appendix D.

4.0 ACCESS PLAN DEVELOPMENT AND EVALUATION

Using the traffic volume forecasts, input from the City, input from other project stakeholders and the public outreach program, previous planning efforts and guidance from the Grand Junction TEDS Manual, an Access Management Plan (AMP) was developed for the project. This Plan considers access points in logical groupings, as well as circulation opportunities via the existing and potential future local street system.

4.1 Process

The AMP was developed using a 4-step process:

Step One - Methodology and Compatibility Index

A traffic methodology and AMP methodology were established at the beginning of the project to define the purpose, approach, and assumptions used to develop the Plan. In addition, a compatibility index was developed to provide a logical means for determining whether the AMP meets the established project goals. The index identified a set of evaluation criteria that correspond with each project objective, as listed in Section 1.1. A simple rating system that identifies the plan as favorable, neutral or unfavorable with respect to each criterion was defined. Each of the three ratings under each criterion was then defined to assist in the evaluation. The traffic methodology memo can be found in Appendix D. The AMP methodology memo and compatibility index can be found in Appendix E.

Step Two – Development of the Access Management Plan

The existing inventory of access points was reviewed with existing parcel and ownership information. This review determined which parcels adjacent to Patterson Rd lacked access to Patterson Rd, which parcels had multiple accesses to consider for consolidation, and which parcels had access or potential access to an existing or proposed lower classification roadway. It also helped identify parcels that currently have shared access or could have shared access in the future. Access solutions were developed by applying access management principles and techniques discussed in Section 2.0. Major full movement intersections have generally already been identified and signalized, but were confirmed based on traffic projections, City planning documents, and anticipated growth patterns. Access for each parcel in between major intersections was either limited (right-in/right-out or ¾ movement) or provided via a lower classification roadway. In cases where multiple access points served a single ownership, access was reduced to one per ownership. Shared access between parcels was developed wherever feasible.

Step Three – Refine the Access Management Plan

A draft AMP was presented to an internal City review team. Based on comments received from the team, the draft plan was refined and presented to the City Council, Planning Commission, and the public using both virtual and in-person methods. Public comment was reviewed, and the Plan was modified at several points throughout the project, as appropriate. Improvements considered cost prohibitive, with unmanageable physical constraints, with significant traffic operational deficiencies, inconsistent with overall community expectations, or not appearing to provide a reasonable level of access, were revised. In some cases, access conditions were defined to allow phased implementation of long-term solutions. In particular, several conditional

right-in/right-out access points were identified to clearly identify access points where redevelopment would trigger closure of the access point rather than a public project.

Step Four – Evaluation

Following the public outreach process, the refined AMP was evaluated using the compatibility index described in Step One to determine whether project objectives were met.

4.2 Evaluation Results

The results of the evaluation by objective are listed in Table 2. Overall, the AMP rates favorably and is compatible with project goals. Plan adoption by the City is recommended. Details of the Plan evaluation can be found in Appendix E. A graphical representation of the AMP is presented in Figure 3 (A-P).

Table 2. Compatibility Evaluation Summary

Project Goal	Evaluation Criteria	Rating
Provide effective and efficient through travel for traffic on Patterson Rd utilizing the existing right-of-way and identify if additional right-of-way is needed.	Corridor Travel Speeds/Time	Favorable
	Functional Intersection Area	Neutral
	Number of Conflict Points	Favorable
	Right-of-way	Neutral
Provide safe, effective, and efficient access to and from Patterson Rd for businesses, residents, and guests to support the economic viability of the City of Grand Junction and Mesa County.	Intersection Sight Distance	Favorable
	Intersection LOS or Critical Movements	Neutral
	Conformance with Grand Junction TEDS Manual	Favorable
	Out-of-direction Travel Distance	Unfavorable
	Intersection Crash Risk	Favorable
	Business Market Area	Favorable

Project Goal	Evaluation Criteria	Rating
Maintain compatibility with existing and proposed street network connections that provide local circulation to support the transportation system.	Local Route Circulation	Favorable
	Serviceability of Local Routes to Developments and Properties within the Study Area	Favorable
Support alternative modal choices, including transit, pedestrian, and bicycle routes.	Pedestrian/Bicycle Parallel Access	Favorable
	Pedestrian/Bicycle Crossing Opportunities	Neutral
	Transit Opportunities	Neutral
Provide a plan that can be implemented in phases.	Public Support	Neutral
	Phasing Opportunities	Favorable
	Physical Constraints	Neutral
	Funding Opportunities	Favorable
Maintain compatibility with previous local planning efforts, such as, the GVCP Plan, Ballot 2A measure, and the One Grand Junction Comprehensive Plan.	Compatibility with Local Planning	Favorable

5.0 PLAN RECOMMENDATIONS

This section presents details of the recommended Access Management Plan (AMP) for Patterson Rd. The Plan has been developed with considerable participation from the City of Grand Junction, project stakeholders such as emergency services, Mesa County, Grand Valley MPO, Grand Valley Transit, and the public. After evaluating both existing and future conditions, the Plan defines how each access will function in the future. In general, the AMP limits full movement access to major signalized intersections. Functional intersection area was considered in evaluating the spacing between major intersections and ¾ movement intersections. Intersection-specific calculations of the functional intersection area are included at the end of Appendix E. While it is ideal to provide the full functional intersection area between full movement intersections, other site-specific considerations were considered in determining intersection spacing. At a minimum, the physical length needed to accommodate auxiliary lane lengths as defined by the TEDS Manual is provided between intersections unless otherwise noted. Most access points are intended to remain open as a right-in/right-out for the long-term. However, there are some public road access points that are located within the functional intersection area of a major intersection and they have alternate traffic circulation options. These access points have the potential to close if safety or operational issues develop. The AMP designates these as a conditional safety right-in/right-out to identify the potential risk.

In addition, access is reduced to one location per ownership and where feasible, shared between adjacent properties. Where reasonable access can be provided to an alternate lower classification cross street, access points are relocated to the cross street. Access for parcels between major intersections is limited. To maximize local circulation options, minor public road intersections and private access that serves multiple properties are identified as ¾ movement. This was done where providing the left-turn movement improves operations and/or circulation and where there is adequate space to develop left turn auxiliary lanes.

Out-of-direction travel was generally limited to a maximum distance of one mile (½ mile each way). Out-of-direction travel was limited by providing full movement and ¾ movement intersections at necessary intervals. Accommodation for U-turns at major intersections is recommended to provide alternatives for restricted left-turn movements. In addition, the Grand Junction Circulation Plan, in conjunction with proposed alternate routes from this study, will provide key alternatives for restricted left-turn movements.

Traffic control measures that may be used to achieve proposed conditions include raised or depressed medians, driveway channelizing islands at limited access points, directional median openings at 3/4 movement access points, and signage and striping. To avoid turn movement violations and potential enforcement issues, eventual installation of a raised median is recommended. Based on the existing cross-section with a two-way-left turn lane on Patterson Rd, installation of a raised median can likely be achieved with little to no widening through most of the corridor. Within the section between Park Dr and Mira Vista Rd, where the cross-section of the roadway only includes two through lanes in each direction, a narrow raised median or barrier is recommended to restrict turning movements if safety or operational issues develop. Widening to the south is recommended where there is currently a tiered wall. The bottom wall will need to be reconstructed and right-of-way acquisition is likely. Prior to the implementation of a median, further evaluation of the off-Patterson street network and additional public outreach will be required.

The narratives in this section are intended to serve as a summary of the key features of the AMP. The figures are intended to provide a graphical representation of the AMP. A detailed explanation of each access in the study area, by reference point, is presented in the AMP Table in Appendix F. Reference the AMP Table for specific access configurations and conditions. Recognizing that this plan is a long-term planning document and not a detailed engineering design, reference point designations are intended to be approximate. As more detailed information is available, these designations may be modified (generally within 0.05 miles of the specified reference point designation).

5.1 Access Management Plan

Key features of the AMP are summarized by major intersections on the following pages and illustrated in Figure 3. The AMP will reduce the number of access points from 284 to 220 as the corridor and land use along the corridor changes. This reduction in access includes the following:

- 68 access closures/consolidations
- 86 conditional access points that will close upon redevelopment
- 13 conditional safety right-in/right-out access points that will close if safety or operational issues develop

In addition, there are 210 access points with restricted movements including right-in/right-out access, right-in or right-out only, ¾ movement access points that will result in a reduction in conflict points through the corridor. Between the consolidation of access points and the application of restricted movement access points, the number of conflict points throughout the corridor is reduced from 2,900 to 1,100, a total reduction in conflict points of 63%.

There are 15 signalized full movement intersections in the plan. Full movement signalized intersections have been confirmed as part of the AMP; however, this does not restrict the City from considering other types of traffic control deemed appropriate in the future, including roundabouts and continuous flow intersections (CFI's).

Auxiliary lanes shall be provided at access points in accordance with the TEDS Manual. Auxiliary lane improvements will improve safety and congestion by removing slower turning vehicles from the through lanes. This eliminates the speed differential between through movements and turning movements that commonly cause crashes, as well as eliminating queuing of turning vehicles that block the clear passage of through movements. The following fourteen intersections on the corridor are anticipated to meet requirements for additional right or left turn lanes on Patterson Rd in the 20-year planning period: 24 Rd, Market St, Home Depot access, 24 ½ Rd, 25 Rd, 25 ½ Rd, 1st St, 7th St, 12th St, 15th St, 28 ¼ Rd, 29 ½ Rd, and 30 Rd. A detailed summary of anticipated auxiliary lanes can be found in Appendix D. Some level of ROW impacts, typical to a public project, are anticipated to occur in order to accommodate the additional auxiliary lanes. In addition, the following intersection improvements are recommended consistent with previous planning efforts:

- 24 Rd intersection - two northbound thru lanes and two eastbound left turn lanes
- 12th St intersection - dual lefts for each approach
- 29 Rd intersection - dual northbound left turn lanes

The City's 2019 Ballot Measure 2A will fund auxiliary lane improvements at 25 Rd, 12th St, 28 ¼ Rd, and 29 Rd, as well as widening of 24 Rd north of Patterson. Other intersection improvements identified will be implemented in the future as funding becomes available.

I-70B to Market St (Figure 3A)

1) While I-70B is not identified as an access point in the AMP, this T-intersection is anticipated to remain full movement with the potential for signalization, if warranted and permitted by CDOT.

2) 24 Rd and Market St will also remain full movement signalized intersections. Refer to Appendix D for more information about the alternative investigations for 24 Rd and Market St.

3) Access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible. Utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system. Refer to the AMP Table for conditions of implementation.

4) Access 2 is identified as a ¾ movement and is intended to serve multiple properties along the south side of Patterson Rd through cross access easements.

5) Access 3 is identified as conditional full movement that will be restricted to Right In/Right Out access with redevelopment of the property.

6) Access 5 is a conditional right-in/right-out movement and will close when a connection to Access 2 is available.

7) Due to the proximity to 24 Rd, Access 6 and 7, Rae Lynn St, are identified as conditional safety right-in/right-outs and may close if safety or operational issues develop and the conditions in the AMP Table are met. Refer to the AMP Table for conditions of implementation.

Market St to Home Depot/Mesa Mall Access (15/16) (Figure 3A-B)

1) Market St. and the Home Depot/Mesa Mall Access (Access 15 and 16) will remain full movement signalized intersections. Refer to Appendix D for more information about the alternative investigations for Market St.

2) Access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system. Refer to the AMP Table for conditions of implementation.

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3A

Home Depot/Mesa Mall Access (15/16) to 24 ½ Rd (Figure 3B)

1) The Home Depot/Mesa Mall Access (Access 15 and 16) and 24 ½ Rd will remain full movement signalized intersections.

2) Access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system.

3) Access 17 is identified as a conditional safety right-in only. Alternate full movement access is available at the signal at Access 15. A right-in only will remain long-term unless safety or operational issues develop, which will trigger closure of the access.

4) Access 20 was limited to a right-in only due to sight distance concerns. Alternate access is also available via 24 ½ Rd to the affected properties. Refer to the AMP Table for conditions of implementation.

24 ½ Rd to 25 Rd (Figure 3B–C)

1) 24 ½ Rd and 25 Rd will remain full movement signalized intersections. ¾ movement intersections are proposed at Access 26, 27, and 29 to serve multiple properties on the north and Commerce Blvd on the south.

2) All other access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system.

3) Access 23 will close once an alternative connection to Flatop Ln is in place. Due to the proximity to 24 ½ Rd, Access 24 is identified as a conditional safety right-in/right-out and may close if safety or operational issues develop and the conditions in the AMP Table are met. Alternate access to 24 ½ Rd and Commerce Blvd is available.

4) A right-in only is located at Access 25. Several access points are identified as conditional right-in/right-out and will close upon redevelopment. Refer to the AMP Table for conditions of implementation.

5) A public connection through the Grand Valley Transit Park-n-ride between the properties adjacent to Patterson Rd and F 1/8 Rd is proposed to replace restricted movements on Patterson Rd.

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3B

25 Rd to 25 ½ Rd (Figure 3C–E)

1) 25 Rd and 25 ½ Rd will remain full movement signalized intersections.

2) Access for this section shall be limited to right-in/right-out between major intersections, except for ¾ movement at the intersections with Foresight Cir, Northgate Dr, and Burkey St (Access 40, 41, and 44).

3) Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system.

4) Access 38 will be relocated outside the functional intersection area of 25 Rd to Access 38a upon redevelopment. Several access points are identified as conditional right-in/right-out and will close upon redevelopment. Refer to the AMP Table for conditions of implementation.

25 ½ Rd to 26 Rd/1st St (Figure 3E–F)

1) 25½ Rd and 26 Rd/1st St will remain full movement signalized intersections.

2) Conditional ¾ movement intersections are proposed at Access 61, 62 and 64. Access 61 may be a ¾ movement provided that the site developer can demonstrate that TEDS left turn lane requirements are met. Accesses 62 and 64 serve public streets, 25 ¾ Rd and Meander Dr, respectively. Left-turn access into both public streets is desired, however the distance between these two intersections does not allow for the full length of auxiliary lanes required based on the current speed limit. A design variance or speed reduction must be justified and approved by the City to allow both ¾ movements when either redevelopment occurs or a public project is funded to build a median. If further study does not support ¾ movements at both locations, one access will be a right-in/right-out, as determined by the City.

3) All other access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system.

4) A right-out only is located at Access 50. Several access points are identified as conditional right-in/right-out and will close upon redevelopment. Refer to the AMP Table for conditions of implementation. In addition, a connection between Cider Mill Rd and the extension of 25 ¾ Rd is proposed to provide circulation within the local street system to replace restricted left turn movements on Patterson Rd.

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3C

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3D

PATTERSON ROAD AMP EXHIBIT

NOTE:
A DESIGN VARIANCE OR SPEED REDUCTION MUST BE JUSTIFIED AND APPROVED BY THE CITY TO ALLOW 3/4 MOVEMENT AT BOTH ACCESS 62 AND 64. OTHERWISE, RI-RO WILL BE APPLIED TO ONE LOCATION AS DETERMINED BY THE CITY.

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- **G** GATED ACCESS POINT
- **C** CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- **S** CONDITIONAL SAFETY ACCESS POINT

FIGURE 3E

26 Rd/1st St to 26 ½ Rd/7th St (Figure 3F–G)

1) 26 Rd/1st St and 26 ½ Rd/7th St will remain full movement signalized intersections.

2) ¾ movement intersections are proposed at Access 74. A public road connection between Access 74 to Horizon Place is proposed to support circulation for future redevelopment in the area.

3) Conditional ¾ movement access is proposed at Access 86 and Access 93. Both access may be restricted to Right In/Right Out if safety or operational issues develop.

4) All other access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system.

5) Due to the proximity to 26 Rd/1st St, Park Dr (Access 69) is identified as a conditional safety right-in/right-out and may close if safety or operational issues develop and the conditions in the AMP Table are met. Alternate access to 1st St is available.

6) Several access points in this section are identified as conditional right-in/right-out and will close upon redevelopment. In particular, the properties on the north side of Patterson Rd should be connected through cross-access easements and access should be consolidated and shared as much as possible with redevelopment. Refer to the AMP Table for conditions of implementation.

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3F

26 ½ Rd/7th St to 12th St (Figure 3G–H)

1) 26 ½ Rd/7th St and 12th St will remain full movement signalized intersections.

2) A conditional full movement intersection is proposed at 26 ¾ Rd (Access 106). Movements at the access may be restricted when safety or operational issues occur.

3) All other access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system. Several access points in this section are identified as conditional right-in/right-out or right-out only and will close upon redevelopment. Refer to the AMP Table for conditions of implementation.

4) Access 116 is conditional ¾ movement, dependent on the property owner providing cross access to Access 114. If cross access is not provided, Access 116 shall be restricted to Right-In/Right-Out with construction of a median or redevelopment. In addition, if safety or operational issues develop, Access 116 will be restricted to Right-In/Right-Out.

12th St to 15th St (Figure 3H)

1) 12th St and 15th St will remain full movement signalized intersections.

2) While Access 123 is located within the functional intersection area of 12th St, traffic operational analysis indicates that adding more left turn movements to 12th St will overload the intersection. Therefore, a ¾ movement is proposed at Access 123.

3) Access 129 is conditional ¾ movement and may be restricted to Right In/Right Out if safety or operational issues develop.

4) Investigation into modifying 15th St to a ¾ movement and providing signalized crossings for bicycles and pedestrians was conducted. Ultimately, the City decided to keep 15th as a full movement intersection based on traffic patterns, circulation, and public support. Refer to Appendix D for more information about the alternative investigations for 15th St.

5) All other access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system.

6) Access 126 and 127 shall be consolidated to one shared access. Access 130 will be a right-out only for circulation to the subdivision. Refer to the AMP Table for conditions of implementation.

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3G

PATTERSON ROAD AMP EXHIBIT

NOTE:
A SINGLE SHARED RI-RO FOR THESE PROPERTIES WILL BE PROVIDED.

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3H

15th St to 27 ½ Rd (Figure 3H-I)

1) 15th St and 27 ½ Rd will remain full movement signalized intersections. Investigation into modifying 15th St to a ¾ movement and providing signalized crossings for bicycles and pedestrians was conducted. Ultimately, the City decided to keep 15th as a full movement intersection based on traffic patterns, circulation, and public support. Refer to Appendix D for more information about the alternative investigations for 15th St.

2) If desired upon redevelopment, the 4th leg of 27 ½ Rd may be installed on the south side of Patterson Rd. Utility relocations will be required and must be coordinated with the utility owner. If Access 145a is implemented, Access 146 must close and Access 148 must be restricted to right-in/right-out.

3) All other access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system.

4) Access 136 and 137 shall be consolidated to one shared access at Access 136a. Similarly, Access 142 and 143 shall consolidate to one shared access at Access 142a and Access 141 shall be relocated to Access 141a. Several access points in this section are identified as conditional right-in/right-out and will close upon redevelopment. Refer to the AMP Table for conditions of implementation.

5) Public road connections on the south side of Patterson Rd that connect Patterson Rd properties to Wellington Ave are recommended upon redevelopment to create more circulation to the full movement intersection at 15th St.

PATTERSON ROAD AMP EXHIBIT

NOTE:
SOUTH LEG OF 27 1/2 ROAD MAY BE IMPLEMENTED WITH REDEVELOPMENT AND UTILITY RELOCATION IF DESIRED.

0 200 400 800 Feet

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 31

27 ½ Rd to 28 ¼ Rd (Figure 3I-K)

1) 27 ½ Rd and 28 ¼ Rd will remain full movement signalized intersections. If desired upon redevelopment, the 4th leg of 27 ½ Rd may be installed on the south side of Patterson Rd. Utility relocations will be required and must be coordinated with the utility owner.

2) If Access 145a is implemented, Access 146 must close and Access 148 must be restricted to right-in/right-out. ¾ movement intersections are proposed at Access 148, 150, 159, and 161.

3) Residents in the area were concerned about restricting 28 Rd (Access 159) to ¾ movement and were interested in the potential for signalization. However, due to the proximity of 28 Rd and 28 ¼ Rd, signalization is not recommended. The future connection of Hawthorne Ave to 28 ¼ Rd will provide the area with alternative options to a signalized intersection for left-out movements.

4) All other access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system.

5) Due to circulation constraints and the condition of the local roads in the Mantey Heights neighborhood, access conditions for Access 156, 157, 158 and 161 are not defined as part of the AMP. Further study is required to determine long-term conditions of these access points. The need for access restrictions for some of these access points may be identified with public projects, especially at 28 Rd, or if safety or operational concerns develop in the area that can be mitigated through access management techniques. Sight distance issues at Access 157 were identified during the study and may require improvement in the future. The City will engage the neighborhood with future improvements identified for the area.

6) Access 162 is identified as conditional right-in/right-out and will close upon redevelopment. Refer to the AMP Table for conditions of implementation.

7) Public road connections on the south side of Patterson Rd that connect Patterson Rd properties to Wellington Ave are recommended upon redevelopment to create more circulation to the full movement intersection at 15th St. In addition, an extension of Camino Del Rey Dr to Rio Grande Dr is recommended upon redevelopment to improve circulation in the Mantey Heights area.

28 ¼ Rd to 29 Rd (Figure 3K-L)

1) 28 ¼ Rd and 29 Rd will remain full movement signalized intersections. Access to Matchet Park (Access 176), Legends Way, and both sides of W Indian Creek Dr are proposed as ¾ movements. West Indian Creek Dr connects to Presley Ave and Presley will connect to 29 Rd in the future.

2) All other access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as

properties redevelop to ensure that all properties are provided access to the public street system.

3) Due to the proximity to 29 Rd, E Indian Creek Dr (Access 196) is identified as a conditional safety right-in/right-out and may close if safety or operational issues develop and the conditions in the AMP Table are met. Alternate access to W Indian Creek Dr is available. Access 180 is identified as conditional right-in/right-out and will close upon redevelopment. Refer to the AMP Table for conditions of implementation.

4) Belhaven Way should be widened to full public street standards to provide access to the current Church of Christ property to the east.

PATTERSON ROAD AMP EXHIBIT

NOTE:
ALTERNATIVE ROUTE TO SIGNAL AT 28 1/4 ROAD VIA HAWTHORNE AVE.

NOTE:
THIS STUDY DOES NOT DEFINE CONDITIONS FOR ACCESS 156, 157, 158, AND 161. FURTHER STUDY IS REQUIRED FOR LONG-TERM CONDITIONS OF THESE ACCESS POINTS.

0 200 400 800 Feet

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3J

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3K

29 Rd to 29 ½ Rd (Figure 3L-M)

1) 29 Rd and 29 ½ Rd will remain full movement signalized intersections. Access 205 to Safeway, Broken Spoke Rd, and the north side of 29 3/8 Rd are proposed as ¾ movements.

2) All other access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system.

3) Due to the proximity to 29 ½ Rd, Colanwood St (Access 227) is identified as a conditional safety right-in/right-out and may close if safety or operational issues develop and the conditions in the AMP Table are met. Alternate access via Wellington Ave or Parkway Dr is available.

4) Several access points in this section are identified as conditional right-in/right-out and will close upon redevelopment. In particular, the properties on the north side of Patterson Rd from Access 202-206 should be connected through cross-access easements and access should be consolidated and shared as much as possible with redevelopment.

5) Cris-Mar St and Redwing Ln (Accesses 211 and 212) are conditional full-movement access without the potential for signalization. Movements may be restricted if safety or operational issues develop.

6) Penny Ln should also be constructed to provide properties currently served by Access 224 and 226 alternate access to 29 ½ Rd. 224 also has alternate access to Bonito Ave and 226 has alternate access to Mount Julian Dr and cross access will be required upon development. Refer to the AMP Table for conditions of implementation.

29 ½ Rd to 30 Rd (Figure 3M-O)

1) 29 ½ Rd and 30 Rd will remain full movement signalized intersections. A ¾ movement is proposed on both sides of the road at Placer St (Access 240 and 241).

2) All other access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system.

3) Due to the proximity to 29 ½ Rd, Greenfield Cir E (Access 233) and Pioneer Rd (Access 234) are identified as a conditional safety right-in/right-out and may close if safety or operational issues develop and the conditions in the AMP Table are met. Alternate access via Bookcliff Ave and Bonito Ln respectively is available.

4) Hudson Bay Dr (Access 244) is also identified as conditional safety right-in/right-out due to proximity to 30 Rd. Alternate access to F ¼ Rd is available.

5) Several access points in this section are identified as conditional right-in/right-out and will close upon redevelopment. Refer to the AMP Table for conditions of implementation.

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3L

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3M

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3N

30 Rd to Lodgepole St (Figure 3O-P)

1) 30 Rd will remain a full movement signalized intersection. As the City boundary is crossed into Mesa County, the access points are identified as unsignalized full movement intersections. This includes Lodgepole St and the two access points to the Museum of Western Colorado (Access 284 and 286. If the museum changes use or expands in a way that significantly increases traffic, Access 284 should close and Access 286 should be realigned with Lodgepole St to create a 4-legged intersection. The north leg of Serenade St, Roundtable Rd, Grand Valley Dr, and Cottage Meadow Ct are proposed as ¾ movements.

2) All other access for this section shall be limited to right-in/right-out between major intersections. Access points shall be reduced to one location per ownership, relocated to cross streets, and/or shared, where feasible, utilizing cross-access easements as properties redevelop to ensure that all properties are provided access to the public street system.

3) Due to the proximity to 30 Rd, Ronlin Dr (Access 250) is identified as a conditional safety right-in/right-out and may close if safety or operational issues develop and the conditions in the AMP Table are met. Alternate access via E Vista Dr and Agana Dr is available.

4) Several access points in this section are identified as conditional right-in/right-out and will close upon redevelopment. Refer to the AMP Table for conditions of implementation.

5) Connections to Wellington Ave and/or Kirby Ln should also be constructed to provide properties currently served by Access 269, 271 and 272. Refer to the AMP Table for conditions of implementation.

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 30

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3P

5.2 Alternative Local Routes

In addition to recommended access modifications, this study has resulted in recommendations for development of several alternative local routes. These alternative routes provide additional local connections and internal circulation opportunities that will benefit operations on Patterson Rd. The alternative routes would reduce local dependence on Patterson, provide alternatives that support restricted turning movements on Patterson, and reduce demand at intersections that are already experiencing high demand. The routes illustrated in the plan are conceptual in nature and will require detailed engineering to establish exact alignments at the time of implementation. Some access improvements require development of alternative routes prior to implementation.

The following is a list of the alternative routes or additional connections identified and illustrated in Figure 4:

- North-south route through GVT Park-n-Ride between the properties adjacent to Patterson Rd and F 1/8 Rd
- East-west connection between Cider Mill Rd and the extension of W Orchard Ln
- North-south route from Access 74 to connect with access to 26 ½ Rd in the future
- Connections between Access 138 and 148 to Wellington Ave
- East-west extension of Camino Del Rey to connect with Rio Grande Dr
- North-south connection through Matchett Park at Access 176 with an east-west connection from Navajo way to provide opportunities for the neighborhood to access the signal at 28 ¼ Rd
- Widening of Belhaven Way to a full public street width
- Development of Penny Ln between 29 ½ Rd and the properties currently served by Access 224 and 226
- Connection to Wellington Ave and/or Kirby Ln for the properties currently served by Access 269, 271 and 272.

The adoption of these additional road connections into the City of Grand Junction's Street Plan Functional Classification Map as part of the Grand Junction Circulation Plan is recommended. It is anticipated that the majority of these routes would be accomplished in phases when development or redevelopment occurs.

In support of alternate modes, the AMP also considered pedestrian, bicycle and transit access throughout the corridor. Overall, reducing access points reduces potential conflict points for pedestrians, cyclists and buses traveling Patterson Rd. Grand Valley Transit (GVT) provides fixed route transit service throughout Mesa County and the City of Grand Junction. Currently, there are four routes that travel from the GVT Park-n-ride on 24 ½ Rd. Three routes travel on Patterson for some distance. Left turn restrictions shown in the AMP will not affect existing GVT routes and no new access points conflict with existing GVT stops.

The AMP also supports the accommodation of pedestrian and bicycle crossings at full movement signalized intersections. As intersections are improved and sidewalk is added throughout the corridor, pedestrian crossings should be implemented and upgraded to current

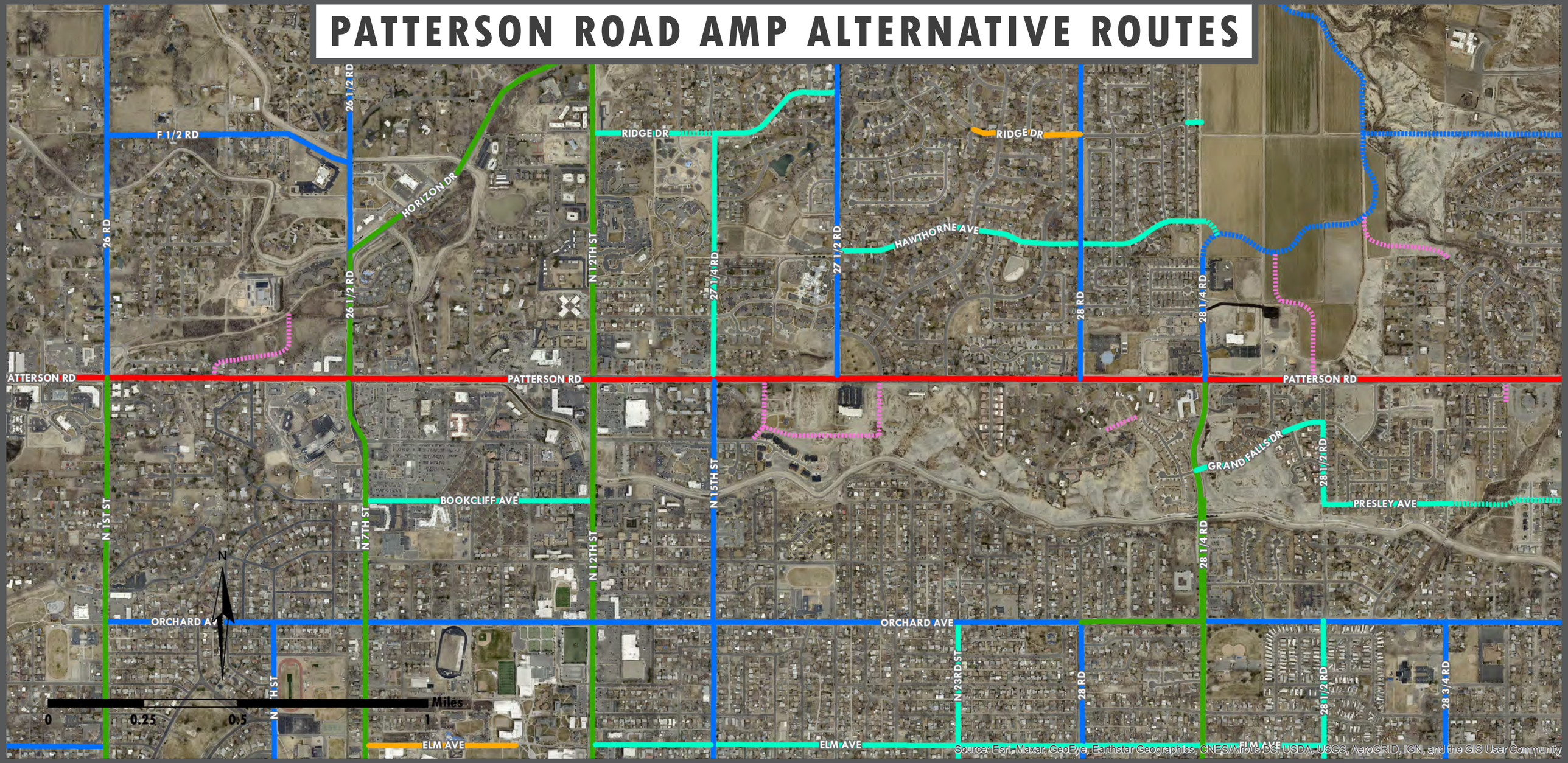
ADA standards. Further traffic and safety analysis of future opportunities for mid-block crossings to support pedestrian accessibility and transit access is recommended.

PATTERSON ROAD AMP ALTERNATIVE ROUTES

LEGEND

- PRINCIPAL ARTERIAL
- PRINCIPAL ARTERIAL - PROPOSED
- MINOR ARTERIAL
- MINOR ARTERIAL - PROPOSED
- MAJOR COLLECTOR
- MAJOR COLLECTOR - PROPOSED
- MINOR COLLECTOR
- MINOR COLLECTOR - PROPOSED
- LOCAL ROAD
- LOCAL ROAD - PROPOSED
- UNCLASSIFIED
- AMP ALTERNATIVE STREETS - PROPOSED

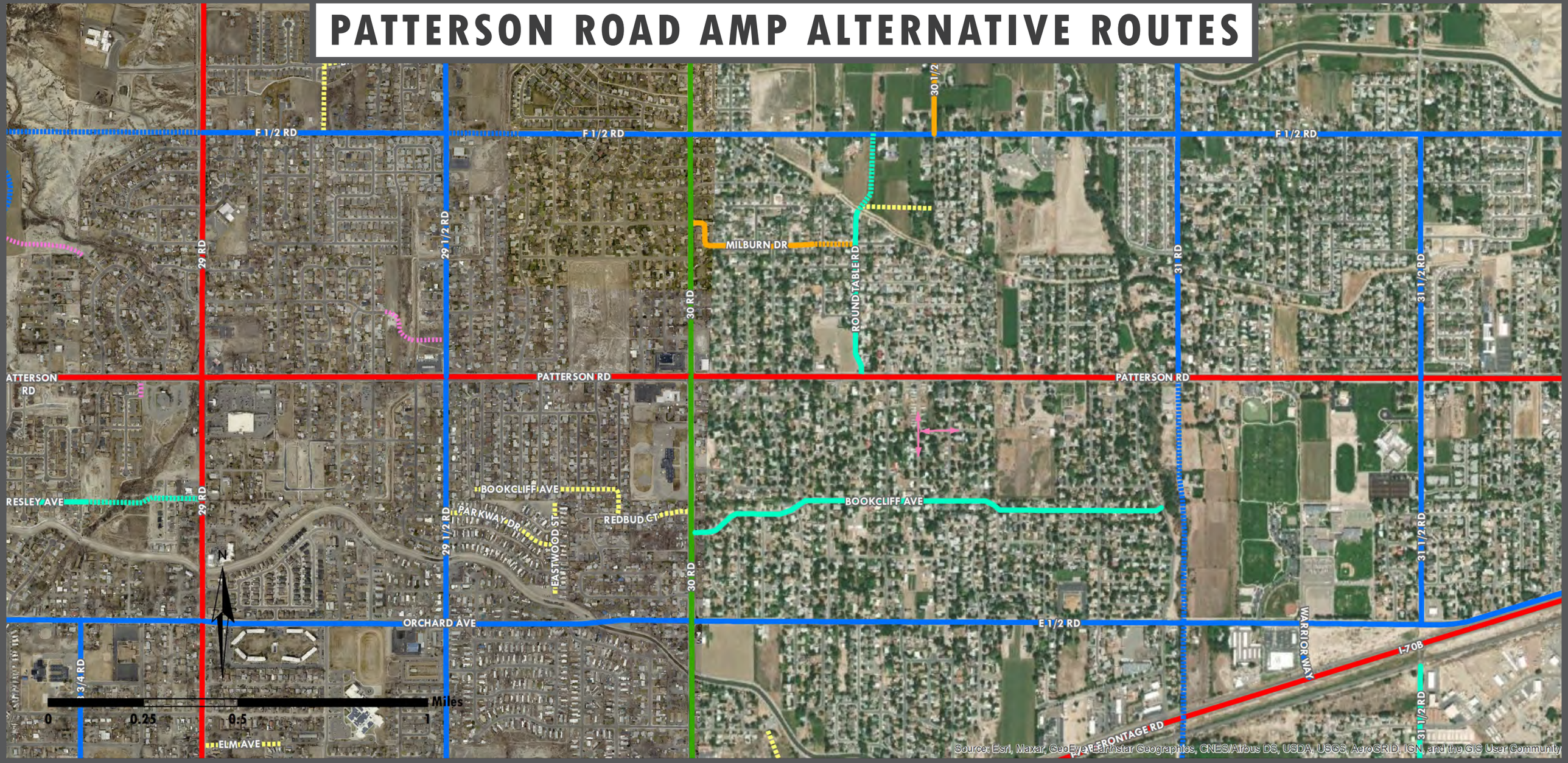
PATTERSON ROAD AMP ALTERNATIVE ROUTES



LEGEND

- PRINCIPAL ARTERIAL
- PRINCIPAL ARTERIAL - PROPOSED
- MINOR ARTERIAL
- MINOR ARTERIAL - PROPOSED
- MAJOR COLLECTOR
- MAJOR COLLECTOR - PROPOSED
- MINOR COLLECTOR
- MINOR COLLECTOR - PROPOSED
- LOCAL ROAD
- LOCAL ROAD - PROPOSED
- UNCLASSIFIED
- AMP ALTERNATIVE STREETS - PROPOSED

PATTERSON ROAD AMP ALTERNATIVE ROUTES



LEGEND

- PRINCIPAL ARTERIAL
- PRINCIPAL ARTERIAL - PROPOSED
- MINOR ARTERIAL
- MINOR ARTERIAL - PROPOSED
- MAJOR COLLECTOR
- MAJOR COLLECTOR - PROPOSED
- MINOR COLLECTOR
- MINOR COLLECTOR - PROPOSED
- LOCAL ROAD
- LOCAL ROAD - PROPOSED
- UNCLASSIFIED
- AMP ALTERNATIVE STREETS - PROPOSED

6.0 ACCESS PLAN IMPLEMENTATION CONDITIONS

The improvements recommended in the Plan represent a long-range plan to implement over time as traffic and safety needs arise and as funding becomes available. Construction of the improvements recommended may be completed using public and/or private funding. The following cases will trigger construction.

1. A property redevelops or changes use, resulting in an increase in traffic to and from the site of 20% or more. In this case, limited improvements at the specific access point may be required. As part of the development review process, additional transportation improvements may also be necessary to address specific traffic-related impacts created by the development. These improvements will be compatible with the AMP. In addition, upon redevelopment, property owners will provide legally defined cross-access easements for shared access points, as defined by the Plan. If a property does not redevelop, the property owner will not be required to construct access modifications. (Private Funding).

2. The City obtains funding to complete improvements to a segment of the corridor or a local route. (Public Funding)

3. A safety or operational issue develops that can be mitigated through the implementation of access management techniques consistent with the Access Plan. Depending on the extent and type of safety or operational issue, improvements may address a segment of the corridor or a local route, or may be limited to an isolated location or access point. (Public or Private Funding)

4. Any combination of 1, 2, or 3.

Detailed engineering drawings of exact roadway alignments and access improvements will be required as project funding is identified. Details related to storm drainage, utilities, landscaping, environmental issues, pedestrian/bicycle facilities, roadway sections, and other topographic features will be considered during this design process. Environmental evaluations appropriate to the size, type, and funding of the project will be completed as part of the design phase.

7.0 CONCLUSION

Traffic demand on the Patterson Rd is expected to increase by 24% to 33% over the next twenty years challenging the future functionality of the corridor. Access management has been proven both nationally and statewide to effectively preserve the transportation function of arterial roadways by optimizing the performance of the road to improve the level of safety, reduce traffic congestion and preserve property values without constructing major arterial improvements. The findings of this study indicate that applying access management techniques along Patterson Rd, including the implementation of a raised median, addition of auxiliary lanes, and the consolidation of driveways, will significantly reduce conflict points for vehicles, pedestrians, and cyclists, which correlates to reduced crashes and improved safety. In addition, smoother traffic flow and improved travel times will extend the life of the existing four-lane section on Patterson Rd. Prolonging the need for additional through lanes along Patterson Rd will result in taxpayer savings and reduced impacts to adjacent properties and businesses.

The proposed AMP and associated alternative routes provide the City with a corridor-wide vision for how to coordinate development and growth with the transportation needs on Patterson Rd. The AMP will provide clear expectations for access for both City staff and property owners/developers as land-use changes are proposed and public projects are developed. To provide for commitment to the access modifications and circulation routes recommended by this study, it is recommended that City adopt the AMP for Patterson Rd, as well as the proposed alternative routes. The AMP identifies access locations and levels of access by reference point for Patterson Rd within City limits. The AMP Table, which provides detailed conditions and requirements for each access point, is included in Appendix F. In recognition of the plan's long-range nature and the potential for conditions to change over time, the City should view this plan as a living document that can be amended to best meet future conditions and priorities for the City.

8.0 LIST OF ACRONYMS

AASHTO = American Association of State Highway and Transportation Officials

AMP = Access Management Plan

ADA = Americans with Disabilities Act

ADT = Average Daily Traffic

ATS = Average Travel Speed

BA = Business Access

CDOT = Colorado Department of Transportation

CFI = Continuous Flow Intersection

FA = Field Access

FHWA = Federal Highway Administration

GVCP = Grand Valley Comprehensive Plan

GVT = Grand Valley Transit

HCM = Highway Capacity Manual, 6th Edition

HCS = Highway Capacity Software

LOSS = Level of Service of Safety

MA = Maintenance Access

MP = Milepost

MPO = Metropolitan Planning Organization

mph = Miles Per Hour

MUTCD = Manual on Uniform Traffic Control Devices

NCHRP = National Cooperative Highway Research Program

PRU = Public Rd Unsignalized

PRS = Public Rd Signalized

PTSF = Percent Time Spent Following

PVRU = Private Rd Unsignalized

R = Residential Access

R-A = Regional Highway

RP = Reference Point

ROW = Right-of-Way

TEDS = Transportation Engineering Design Standards

TMC = Turning Movement Count

TRB = Transportation Research Board

vph = vehicles per hour

9.0 GLOSSARY

Access – Any driveway or other point of entry and/or exit such as a street, road or highway that connects to the general street system

Access Category – means one of eight categories described in Section Three of the State Highway Access Code, and determines the degree to which access to a state highway is controlled

Access Plan, Access Management Plan – A plan which designates access locations and levels of access for the purpose of bringing those portions of roadway included in the planning area into conformance with the highway functional classification to the extent feasible

Access Management – Systematic control of the location, spacing, design, and operation of driveways, median openings, and street connections to a roadway

Access Permit – Means by which access improvements are reviewed, approved and constructed in accordance with the State Highway Access Code

Average Travel Speed (ATS) – The highway segment length divided by the average travel time taken by vehicles to traverse it during a designated time interval

Driveway – An access that is not a public street, road, or highway

Full Movement Access – An access without turn restrictions

Functional Intersection Area – Area upstream and downstream of an intersection where intersection operation and conflicts influence driver behavior, vehicle operations, or traffic conditions.

Level-of-Service (LOS) – An indication of the quality of traffic flow as measured by vehicle delays or travel speeds. Level-of-service grades range from LOS A (ideal traffic flow) to LOS F (heavily congested conditions). LOS D is typically considered an acceptable traffic condition during peak demand periods in urbanized locations.

Percent Time Spent Following (PTSF) – The average percentage of time that vehicles must travel in platoons behind slower vehicles due to the inability to pass.

Right-of-way (ROW) – The entire width between the boundary lines of every way publicly maintained when any part thereof is open to the use of the public for purposes of vehicular travel

Turning Movement Count (TMC) – A tally of the number of vehicles turning left, right, or traveling through an intersection

Volume-to-Capacity Ratio (v/c) – The sufficiency of an intersection to accommodate vehicular demand. A v/c over 1.00 means the traffic demand exceeds the capacity.

City of Grand Junction
Patterson Road
Access Study Appendices

US 6 / US 50 / I-70B to Lodgepole Street

July 2021

CITY OF Grand Junction COLORADO

Stolfus

Appendix A - Public Outreach

PATTERSON ROAD ACCESS CONTROL PLAN
ANSWERS TO FREQUENTLY ASKED QUESTIONS

What is an Access?

An access, as related to roadways, is a location where vehicles, bicycles, or pedestrians may enter and/or exit a roadway. Access may be public, such as a street, or private, such as a driveway to a business or residence. Every property owner has the right of reasonable access to the general street system.

Why is access management beneficial?

Access management benefits communities by preserving and improving traffic operations along the most critical roadways. Efficiently managing existing roadways so that they are operating to their fullest capacity costs less than investing in new roadways. Applying access management techniques can increase roadway capacity by 20% to 40%. Access management also has tremendous safety benefits. Studies have shown a 30% to 60% reduction in crashes on roadways where access management techniques are implemented.

The reduction in vehicle conflicts has the added benefit of improving traffic flow, reducing travel times, increasing fuel efficiency and contributing less to air pollution. Access management is also good for business, providing safe access to customers and retaining more of a community's original market area.

What is an Access Control Plan?

An Access Control Plan (ACP) provides a unified vision of the future access needs for a particular roadway corridor. The goals are to define safe, effective, and efficient access to support the economic viability of the corridor, utilize existing right of way, allow for smooth passage of through traffic on the roadway, maintain compatibility with local planning efforts and the existing and proposed street network connections and circulations, provide a plan that can be implemented in phases, and support alternative modal choices.

An ACP defines existing and future access locations with consideration for spacing, traffic movements, circulation, and alternative access opportunities. The ACP does not define specific roadway improvements or funding sources. It is a long-range planning document that identifies access conditions that will be implemented as roadway and land-use characteristics change.

Why is adopting an ACP beneficial?

An ACP allows Grand Junction to make decisions about access that are more consistent with the local vision, land use, and the local transportation system as a whole. In addition, the ACP addresses access on a corridor-wide basis rather than an individual, first-come, first-serve basis. An ACP considers how adjacent access points impact each other and provides property owners with security in the planned access for their property. Recommendations of the ACP consider adjacent land use, corridor specific conditions and local plans for future improvements. Closer access spacing and increased level of access may also be recommended where technical analyses can demonstrate adequate traffic safety and operations.

How is the ACP implemented?

The ACP will be implemented in phases as changes and growth occur around the City. Portions of the plan will be implemented based on the following triggers:

1. Redevelopment that increases traffic
2. Planned publicly funded project
3. Safety or operational issue

What area does the ACP include?

The ACP study area covers approximately 7.1 miles of Patterson Road from US 6/US 50 to Lodgepole Street.

How long will it take to complete the Access Plan?

The ACP project began in January 2020 and is expected to be completed in April 2021.

How can I get more information about the project?

Please contact one of the project team representatives:

Rick Dorris
Development Engineer
City of Grand Junction
Ph. (970) 256-4034
rickdo@gjcity.org

Andrew Amend
Consultant Project Manager
Stolfus & Associates, Inc.
Ph. (303) 221-2330
andrew@stolfusandassociates.com

PLAN DE CONTROL DE ACCESO DE LA CALLE PATTERSON
RESPUESTAS A PREGUNTAS FRECUENTES

¿Qué significa el acceso?
El acceso, relacionado con carreteras, es una ubicación donde los vehículos, bicicletas o peatones pueden entrar y/o salir de una carretera. El acceso puede ser publico como una calle o privada, como una entrada de carros o un negocio o residencia. Cada dueño de propiedad tiene el derecho de tener acceso razonable al sistema de calles general.

¿Porque el manejo del acceso es bueno?
El manejo del acceso beneficia a las comunidades al preservar y mejorar las operaciones de trafico a lo largo de las carreteras más críticas. El manejo del acceso de manera eficiente en las carreteras actuales sirve para que las carreteras funcionen a su máxima capacidad y cuesta menos que invertir en nuevas carreteras. La aplicación de técnicas de manejo de acceso puede incrementar la capacidad de las carreteras entre un 20-40%. El manejo del acceso también tiene un tremendo beneficio en la seguridad. Los estudios han demostrado una reducción de un 30-60% de los choques en las carreteras donde las técnicas de manejo del acceso son implementadas.

La reducción de conflictos en vehículos tiene el beneficio adicional de mejorar el flujo de tráfico, reducción del tiempo de manejo, incremento en la eficiencia del uso de combustible y contribuye a menos contaminación. El manejo del acceso es también Bueno para negocios, les da un acceso seguro a los clientes y retiene a las áreas en la comunidad que originalmente son áreas comerciales.

¿Qué es un Plan de Control de Acceso?
Un Plan de Control de Acceso (Siglas en Ingles ACP) provee una visión unificada de las necesidades del futuro acceso de una carretera en particular. La meta es definir un acceso seguro, efectivo y eficiente para apoyar la viabilidad económica de una carretera, utilizar las salidas con derecho de paso, permitir el pase tranquilo hacia el trafico que viene de una carretera, mantener la compatibilidad con los esfuerzos de planificación y las conexiones y circulaciones de las propuestas de redes de calles y de las calles actuales, compartir un plan que sea implementado en fases y apoye los modelos opcionales alternativos.

Un ACP (siglas en ingles para Plan de Control de Acceso), define las ubicaciones de accesos futuros considerando el espacio, el movimiento del tráfico, la circulación y las oportunidades de acceso alternativo. El ACP no define las mejoras en carreteras especificas o las fuentes de financiamiento. Es un documento de un plan a largo plazo que identifica las condiciones de acceso que se implementarán a medida que cambien las características de las carreteras y el uso del suelo.

¿En qué beneficia el adoptar un ACP?
Un ACP permite que la Ciudad de Grand Junction tome decisiones acerca del acceso que es mas consistente con la visión local, el uso del suelo y el sistema de transporte en general. Adicionalmente, el ACP dirige el acceso en toda la carretera en lugar de un individuo, por orden de llegada. Un ACP considera como los puntos de acceso adjuntos impactan a cada individuo y proveen a los dueños de propiedad seguridad en el plan de acceso para su propiedad. Las recomendaciones sobre el ACP consideran el uso del suelo adjunto, las condiciones de las carreteras, y los planes locales para futuras mejoras. El espacio del acceso cercano y el incrementar el nivel de acceso puede también ser recomendado donde el análisis técnico puede demostrar la seguridad adecuada en el tráfico y las operaciones.

¿Cómo se implementa un ACP?
El ACP se implementa en fases, así como los cambios y el crecimiento ocurre en la ciudad. Las porciones del plan se implementarán basadas en los siguientes factores:

1. La reurbanización que incrementa el trafico
2. El proyecto planificado financiado por fondos públicos
3. La seguridad o problemas de operación.

¿Cuál es el área que está incluida en el ACP?
El estudio del área del ACP cubre aproximadamente 7.1 millas de la calle Patterson desde US 6/US 50 hasta la calle Lodgepole.

¿Cuánto se tardarán en terminar el Plan de Acceso?
El Proyecto del ACP comenzó en enero del 2020 y se espera que termine en abril 2021.

¿Cómo puedo obtener más información acerca del Proyecto?
Por favor contacte al representante del equipo del Proyecto.

Rick Dorris
Development Engineer
City of Grand Junction
Ph. (970) 256-4034
rickdo@gjcity.org

Andrew Amend
Consultant Project Manager
Stolfus & Associates, Inc.
Ph. (303) 221-2330
andrew@stolfusandassociates.com

Open House 1

October 1, 2020

PATTERSON ROAD ACCESS CONTROL PLAN

CITY OF GRAND JUNCTION
INVITES YOU TO THE

OPEN HOUSE

FOR THE

PATTERSON ROAD ACCESS CONTROL PLAN

FROM HIGHWAY 6 TO LODGEPOLE STREET

THURSDAY
OCTOBER 1, 2020
JUEVES
1 DE OCTUBRE DEL 2020

4:00 - 7:00 PM
(NO FORMAL PRESENTATION - COME ANYTIME)
(NO HABRA UNA PRESENTACIÓN FORMAL, PUEDE LLEGAR A CUALQUIER HORA)

FAITH HEIGHTS CHURCH
600 28 1/4 RD
GRAND JUNCTION, CO 81506

CITY OF Grand Junction COLORADO

Stolfus

PLAN DE CONTROL DE ACCESO DE LA CALLE PATTERSON

LA CIUDAD DE GRAND JUNCTION
LO INVITA

UNA EXCHIBIÓN ABIERTA AL PUBLICO

SOBRE

EL PLAN DE CONTROL DE ACCESO DE LA CALLE PATTERSON

DESDE HIGHWAY (CARRETERA) 6
HASTA LA CALLE LODGEPOLE

THIS OPEN HOUSE WILL PROVIDE THE COMMUNITY WITH AN OPPORTUNITY TO:

- DISCUSS FUTURE ACCESS TO PATTERSON RD WITH PROJECT REPRESENTATIVES
- PROVIDE COMMENTS ON THE DRAFT ACCESS CONTROL PLAN

THANK YOU FOR YOUR PARTICIPATION!
FOR ONLINE PRESENTATION, MAPS, AND COMMENTS, PLEASE SEE GJSPEAKS.ORG.

LA EXHIBICIÓN ABIERTA AL PUBLICO PROVEE LA OPORTUNIDAD PARA QUE LA COMUNIDAD:

- HABLE CON LOS REPRESENTANTES DEL PROYECTO SOBRE EL FUTURO ACCESO A LA CALLE PATTERSON
- PROPORCIONE SUS COMENTARIOS SOBRE LOS PLANES INICIALES DEL CONTROL DE ACCESO

¡GRACIAS POR SU PARTICIPACIÓN!
PARA VER LA PRESENTACIÓN POR INTERNET, MAPAS, Y COMENTARIOS, POR FAVOR VISITE LA PÁGINA GJSPEAKS.ORG.

FOR MORE INFORMATION, PLEASE CONTACT:
PARA PEDIR MÁS INFORMACIÓN, POR FAVOR CONTACTE A:

ANDREW AMEND
STOLFUS & ASSOCIATES, INC.
(303)221-2330
ANDREW@STOLFUSANDASSOCIATES.COM

STOLFUS & ASSOCIATES, INC.
5690 DTC BLVD. STE. 330W
GREENWOOD VILLAGE, CO 80111

CITY OF Grand Junction COLORADO

Stolfus

PATTERSON ROAD ACCESS CONTROL PLAN

CITY OF GRAND JUNCTION
INVITES YOU TO THE

OPEN HOUSE

FOR THE

PATTERSON ROAD ACCESS CONTROL PLAN

FROM HIGHWAY 6 & 50 TO
LODGEPOLE STREET

THURSDAY
OCTOBER 1, 2020

4:00 - 7:00 PM
(NO FORMAL PRESENTATION -
COME ANYTIME)

FAITH HEIGHTS CHURCH
600 28 1/4 RD
GRAND JUNCTION, CO

FOR MORE INFORMATION, CONTACT:
ANDREW AMEND
STOLFUS & ASSOCIATES, INC.
(303)221-2330
ANDREW@STOLFUSANDASSOCIATES.COM

FOR ONLINE PRESENTATION, MAPS, AND
COMMENTS, PLEASE SEE GJSPEAKS.ORG

SI HABLA ESPAÑOL, FOR FAVOR VISITE
GJSPEAKS.ORG O ASISTA A NUESTRA
EXHIBICION ABIERTA AL PUBLICO

PATTERSON ROAD ACCESS CONTROL PLAN
COMMENT SHEET - PUBLIC OPEN HOUSE
October 1, 2020

Name: Roger Titmus Representing: Stinker Stores

Address: 2498 Patterson Road City: Grand Junction State: CO Zip: 81505

Phone: 208 337 2830 Email: rtitmus@stinker.com

* This survey (English only) can also be completed online at: https://www.surveymonkey.com/r/8WQF26Y
* For Spanish clients, please print this form, complete, and email or mail to the contact at the bottom of the page.

1. Are you a (check all that apply):
   - ☒ Property Owner on Patterson Road
   - ☐ Renter/Lessee on Patterson Road
   - ☒ Business Owner on Patterson Road
   - ☐ Commuter through corridor
   - ☐ Other _____

2. Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.
   - ☒ Safety
   - ☒ Mobility through the corridor
   - ☒ Driveway Access
   - ☐ Pedestrian Access
   - ☐ Bicycle Access
   - ☐ Property Impacts
   - ☐ Local Street Intersections
   - ☐ Bus Service

3. What are some of your concerns regarding the proposed Access Control Plan? (check all that apply)
   - ☐ Sharing access with my neighbor
   - ☐ Accessing my property/business from a roadway other than Patterson Road
   - ☐ Modification of circulation on my property
   - ☒ Reducing the number of access points to my property
   - ☒ Restricting the turning movements to/from my property
   - ☐ Relocation of access point on my property
   - ☐ Other _____

4. What statement best reflects how you feel about the Access Control Plan?
   - ☐ I support the Access Control Plan
   - ☐ I support the Access Control Plan, but have concerns about access at particular locations. Please note those areas:
     _____
     _____
   - ☒ I do **not** support the Access Control Plan

5. Do you have any other comments, questions, or concerns?

If the goal is to improve traffic flow on Patterson, restricting access to retail will not help achieve the goal. Restricting access causes drivers to stack up at bottleneck points, wait for opposing traffic, make u-turns, and backtrack to their destination. There are several east/west roads in Grand Junction that give drivers a lot of options. The best option to avoid hitting the brakes is to take I70, but there are few direct routes to the interstate. Providing better access to the interstate will improve traffic flow. Better north/south connectivity solves the problem. Restricting driveway access does not.

Please leave this with us, mail, or email by **October 15th** to:
Andrew Amend Stolfus & Associates, Inc.
5690 DTC Boulevard, Suite 330W, Greenwood Village, CO 80111
303.221.2330 (Phone) andrew@stolfusandassociates.com

Grand Junction Speaks
Published Comments for October 1, 2020 Patterson Access Control Meeting
Patterson Access Control Open House

As the Resident of 3030 Patterson Road, I do not find it beneficial to remove the only access point(Drive way) to my property. This is a privately owned property that is still zoned as Agricultural and thus should have its own entrance for equipment. By implementing the above changes to Patterson from 30 to Grand Valley drive you are not only creating a hazard for the business but also causing more traffic issues by introducing large Agriculture equipment into a small immobile space (between the building and fence line). These changes would cause more issues than they would prevent and should be stricken from the building plan.

09/23/2020 10:42 am

Brian Arms
3030 Patterson Road
Grand Junction, 81504

How will anyone that lives in Mantey Heights head west? Are you encouraging u-turns?

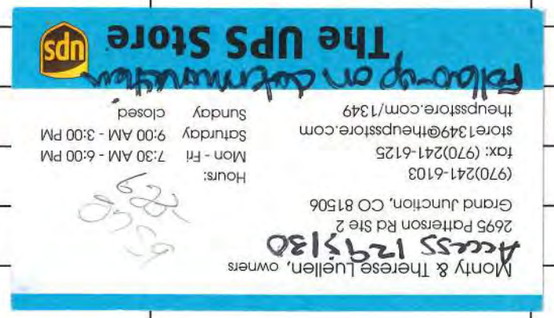
09/28/2020 9:21 am

Cheryl Fiegel
562 Grand Valley Dr
Grand Junction, 81504

One-on-One Meetings

Patterson Road Access Control Plan
One-on-One Meeting Sign Up

Name	Representing	Access Point Numbers	Phone Number	Email
PENNY WAGNER	GRAND VIEW HOA	28 ROAD	628-1858	pennywagnergvhoa@gmail.com
GARY AZOUR	COMET CLEANERS	25 & PATTERSON / COMET	970 201-2225	gcervone@gmail.com
Michael Shafer	Resident	2745 Patterson	970-250-5739	mikegjco@gmail.com
Paul Tambright	Bookcliff Liquors	3026 Patterson	970-250-8378	gjnana@hotmail.com
Matt Darling	Cross Orchards Museum	278 - 286	970 242 0971 X2-221	mdarling@westcomuseum.org
	Go try to get County & neighbor to attend	Mark Skwerkurt		
Monty Luellen		129 & 130 - concerned about single access - doesn't need one on one, just		
		follow up on	access determination	623-0759 or UPS Store



Patterson Road Access Control Plan
One-on-One Meeting Sign Up

Name	Representing	Address	Notes
Penny Wagner	Grand View HOA	28 Road	Called and left voice messages multiple time and reached out via email, but never received a response.
Gary Crone	Comet	25 Rd & Patterson	Met with owner to discuss his dry cleaning business access to Patterson. Agreed to allow RIRO access instead of closing it, as proposed in the original plan.
Michael Shafer	Resident	2745 Patterson	Contacted resident and he stated there was no need for a meeting. He had spoken with other community members and they are not concerned about the ACP at this time.
Pam Hambright	Bookchief Liquors	3026 Patterson	Met with owner and agreed to revise the ACP so that trucks could continue to circulate through her business.
Matt Darling	Cross Orchards Museum	3073 F Rd	Met with representatives and agreed that no modifications to the ACP were needed at the property.
Monty Luellen			Contacted owner and he stated there was no need for a meeting, but that he would like to be informed of the final access determination for his properties two Patterson access points.
Dr. Bill Merkel	W & D MERKEL FAMILY	2626 Patterson	The property was recently sold, but Dr. Merkel did provide the contact information for the real estate agent who arranged the transaction. The real estate agent has not replied to requests for information about the new owner.
Gara Ross, Executive Assistant to Michelle Shiao and Dan Prinster	SCL Health St Mary's Medicine Center	2686 Patterson	Met with representatives and agreed to modify the modify the ACP to better serve the hospital's needs. We also made small access modifications to their property at 12th Street
Pastor Seth Thomas	Northeast Christian Church	2751 Patterson	Met with representatives to discuss future development plans and the Xcel gas facilities preventing extension of 27 1/2 Road to the south. Agreed that we should rethink access in this area, which will be shown in the Revised ACP.
Bill Wade	CHURCH OF CHRIST OF GRAND JUNCTION	2893 Patterson	Contacted the church office and was referred to the head of their planning committee. Called a left voice messages, but have not received a response.
Trent Spendrup	Hope Plaza	2482 Patterson	The representative initiated contact with us to be kept informed of the ACP status, but has not responded to our follow-up meeting requests.

Open House 2

January 6-12, 2021

PATTERSON ROAD ACCESS CONTROL PLAN

FROM HIGHWAY 6 TO LODGEPOLE STREET

THE CITY OF GRAND JUNCTION INVITES YOU TO THE

VIRTUAL OPEN HOUSE

PLAN DE CONTROL DE ACCESSO DE LA CALLE PATTERSON

DESDE HIGHWAY (CARRETERA) 6 HASTA LA CALLE LODGEPOLE

LA CIUDAD DE GRAND JUNCTION LE INVITA A

UNA CASA VIRTUAL ABIERTA AL PUBLICO

JANUARY 6-12,2021
DEL 6 AL 12 DE ENERO DEL 2021

GJSPEAKS.ORG

CITY OF Grand Junction COLORADO

Stolfus

THIS VIRTUAL OPEN HOUSE WILL PROVIDE THE COMMUNITY WITH AN OPPORTUNITY TO:

- **WATCH AN INTRODUCTORY VIDEO**
- **VIEW THE REVISED ACCESS PLAN**
- **LEAVE COMMENTS**

PLEASE VISIT GJSPEAKS.ORG

ESTA CASA VIRUTAL ABIERTA DARÁ A LA COMUNIDAD UNA OPORTUNIDAD DE:

- **MIRAR UN VIDEO DE INTRODUCCIÓN**
- **VER EL PLAN DE ACCESO REVISADO**
- **DEJAR COMENTARIOS**

VISITE GJSPEAKS.ORG

FOR MORE INFORMATION, PLEASE CONTACT:
PARA MÁS INFORMACIÓN, CONTACTAR A:

DAVID THORNTON, AICP
PRINCIPAL PLANNER
CITY OF GRAND JUNCTION
970-244-1450
DAVIDTH@GJCITY.ORG

STOLFUS & ASSOCIATES, INC.
5690 DTC BLVD. STE. 330W
GREENWOOD VILLAGE, CO 80111

PATTERSON ROAD ACCESS CONTROL PLAN

FROM HIGHWAY 6 & 50 TO LODGEPOLE STREET

THE CITY OF GRAND JUNCTION INVITES YOU TO THE

VIRTUAL OPEN HOUSE

JANUARY 6-12, 2021

VISIT GJSPEAKS.ORG

SI HABLA ESPAÑOL POR FAVOR VISITE GJSPEAKS.ORG O ASISTA A NUESTRA EXHIBICIÓN ABIERTA AL PÚBLICO

FOR MORE INFORMATION, PLEASE CONTACT:
DAVID THORNTON, AICP
PRINCIPAL PLANNER
CITY OF GRAND JUNCTION
970-244-1450
DAVIDTH@GJCITY.ORG

Virtual Meetings

January 13, 2021

Patterson Rd Meeting Sign-Ups				
First Name	Last Name	Email	Sign Up Items	Reference ACP Sheet
Matt	Clark	mattclarkcreations@gmail.com	01/13/2021 4:00PM-4:30PM - MST Meeting Time - Pyramid Building	Access 42
Myron	Klesner	myron@northeastchristian.org	01/13/2021 4:00PM-4:30PM - MST Meeting Time (2) - Northeast Christian Church	15th Street to Beechwood Street - Access 146
Brandon	Akins	brandshellyakins@gmail.com	01/13/2021 4:30PM-5:00PM - MST Meeting Time - Heritage Church	29 Road
Mark	Shoberg	hoa@brayandco.com	01/13/2021 4:30PM-5:00PM - MST Meeting Time - Bray HOA	Access 40
Michelle	Fisher	burkemichelle648@yahoo.com	01/13/2021 5:00PM-5:30PM - MST Meeting Time	24 1/2 Road to 25 Road - Access 29
Vicki	Konn	vickik@netpolarity.com	01/13/2021 5:00PM-5:30PM - MST Meeting Time - netPolarity	24 1/2 Road to 25 Road - Access 29
Lorena	Thompson	lorena@gjangelos.com	01/13/2021 5:30PM-6:00PM - MST Meeting Time (2) - Angelo's Pottery	24 1/2 Road to 25 Road - Access 29
Wendi	Wells	digwells@aol.com	01/13/2021 5:30PM-6:00PM - MST Meeting Time - Farmers Insurance	24 1/2 Road to 25 Road - Access 29
Bryan	Muhr	Bmurr1960@gmail.com	01/13/2021 6:00PM-6:30PM - MST Meeting Time	Access 76 and 78
monty	luellen	luellen0399@msn.com	01/13/2021 6:30PM-7:00PM - MST Meeting Time - patterson gardens hoa	Access 130, 116, 117

From:	Michelle Hansen
To:	jeff.p.tipton@gmail.com; bmurr1960@gmail.com
Cc:	Andrew Amend; David Thornton; Rick Dorris; Trenton Prall
Subject:	Patterson Access Control Plan
Date:	Wednesday, January 20, 2021 13:47:04
Attachments:	74c8b419-1438-4a22-8684-34033ad9fcc5.png Patterson ACP_Figure 2F.pdf Patterson - What is Access Management.pdf Patterson Driveway Crashes.pdf

---

Jeff, Brenda, and Bryan,

Thank you for meeting with me this past Monday regarding the Patterson Access Control Plan. As discussed, I've attached the updated plan in your area reflecting the changes at Access 75 and 76 to provide conditional right-in/right-out access points at these locations. The conditional element specifies that these access points will remain open until your property redevelops. Upon redevelopment, these access points will be closed.

Also attached is some information regarding safety and crashes through the corridor. The What is Access Management document provides the information we discussed about the percentage of crashes related to left turns as opposed to right turns at access points. The Patterson Driveway Crashes document provides the information about the number of access related crashes that have occurred through different segments of the corridor between 2014 and 2018.

I have debriefed the City staff on our conversation. Jeff, someone will be contacting you before the end of this week to further discuss your concerns and answer any additional questions. Please contact me if you have any additional questions. Thank you for participating in the project.

Michelle

We moved! Please note our new Suite Number, Suite 330W
Michelle R. Hansen, PE| Senior Transportation Engineer
Stolfus
www.stolfusandassociates.com
Stolfus & Associates, Inc. | 5690 DTC Boulevard, Suite 330W | Greenwood Village, CO 80111
P: 303 221 2330 | C: 720 771 3056 | michelle@stolfusandassociates.com

From:	Andrew Amend
To:	hoa@brayandco.com
Cc:	Rick Dorris; David Thornton; Michelle Hansen; mattclarkcreations@gmail.com
Subject:	Patterson Road ACP Follow Up
Date:	Tuesday, January 19, 2021 20:19:41
Attachments:	49ae0dd3-dc72-4fe1-a533-684f76858e4f.png Patterson ACP Figure 2D.pdf

Dear Mr. Shoberg,

As discussed at our Zoom meeting last Wednesday, our project team has performed an engineering investigation into your request to provide ¾ (Left-In and Right-In) access to Foresight Circle. In development of this plan, our team applied the concept of Functional Intersection Area (FIA), as defined in the TRB's Access Management Manual. While accounting for the 216-foot peak queue length projected in 2045 at 25 Road, we have concluded that Foresight Circle is outside the FIA. Because Foresight Circle is a public street and outside the FIA for 25 Road, the plan has been revised to provide ¾ access at #40, as shown in the attached exhibit. We have also redesignated access to Northgate Drive to ¾ in order to provide greater access to the south side of Patterson Road and to provide a u-turn opportunity for traffic coming from the east.

Thank you for your interest in the project,

Andrew Amend, PE, PTOE | Transportation Engineer

Stolfus

www.stolfusandassociates.com

Stolfus & Associates, Inc. | 5690 DTC Boulevard, Suite 330W | Greenwood Village, CO 80111

Main: 303 221 2330 | **andrew@stolfusandassociates.com**

From:	Andrew Amend
To:	vickik@netpolarity.com; digwells@aol.com
Cc:	Rick Dorris; David Thornton; Michelle Hansen
Subject:	Patterson Road ACP
Date:	Tuesday, January 19, 2021 19:47:15
Attachments:	bda004cd-bc34-4119-90b8-d09844f1fc12.png Patterson ACP Figure 2C.pdf

---

Dear Ms. Wells and Ms. Konn,

As discussed at our Zoom meeting last Wednesday, our project team has performed an engineering investigation into your request to provide ¾ (Left-In, Right-In, Right-Out only) access to 2478 Patterson Road. We have concluded that this change is consistent with the access control plan methodology and have moved the ¾ access from #30 to #29, as shown in the attached plan. Please note that when a raised median is implemented on the segment of Patterson Road between 24 ½ Road and 25 Road, ¾ access at #29 is conditioned upon the owner of 2478 Patterson Road establishing legal cross access to the adjacent properties at 2474 Patterson Road and 2482 Patterson Road. Establishment of legal cross access does not imply an obligation for any of the property owners to physically construct the improvements.

Thank you for your interest in the project,

Andrew Amend, PE, PTOE | Transportation Engineer

Stolfus

www.stolfusandassociates.com

Stolfus & Associates, Inc. | 5690 DTC Boulevard, Suite 330W | Greenwood Village, CO 80111

Main: 303 221 2330 | **andrew@stolfusandassociates.com**

From:	Andrew Amend
To:	lorena@gjangelos.com
Cc:	Rick Dorris; David Thornton; Michelle Hansen
Subject:	Patterson Road ACP Follow Up
Date:	Tuesday, January 19, 2021 19:42:36
Attachments:	29703b32-05e1-4447-beae-d4948f24ac8d.png Patterson ACP Figure 2C.pdf

Dear Ms. Thompson,
As discussed at our Zoom meeting last Wednesday, our project team has performed an engineering investigation into your request to provide ¾ (Left-In, Right-In, Right-Out only) access to 2478 Patterson Road. We have concluded that this change is consistent with the access control plan methodology and have moved the ¾ access from #30 to #29, as shown in the attached plan. Please note that when a raised median is implemented on the segment of Patterson Road between 24 ½ Road and 25 Road, ¾ access at #29 is conditioned upon the owner of 2478 Patterson Road establishing legal cross access to the adjacent properties at 2474 Patterson Road and 2482 Patterson Road. Establishment of legal cross access does not imply an obligation for any of the property owners to physically construct the improvements.

Also on our Zoom meeting, you mentioned that you had mailed us a letter last fall. We were unable to find any record of receiving your letter and so I deeply apologize for our lack of responsiveness. We would still appreciate your thoughts on the project, so if you want to reply to this message with a copy, we would be happy to take it into consideration.

Thank you for your interest in the project,

Andrew Amend, PE, PTOE | Transportation Engineer
Stolfus
www.stolfusandassociates.com
Stolfus & Associates, Inc. | 5690 DTC Boulevard, Suite 330W | Greenwood Village, CO 80111
Main: 303 221 2330 | **andrew@stolfusandassociates.com**

Survey Monkey Results

Open House 1 and Open House 2

#1

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Friday, October 02, 2020 1:49:56 PM
Last Modified: Friday, October 02, 2020 1:52:28 PM
Time Spent: 00:02:31
IP Address: 69.146.117.38

Page 1

Q1

Please provide your contact information.

Name	**Matt Darling**
Address	**3073 Patterson Rd**
City	**GRAND JUNCTION**
State	**CO**
Zip	**81504**
Phone Number	**9702617839**
Email	**mdarling@westcomuseum.org**

Q2

Are you a (check all that apply):

Business Owner on Patterson Road,

Commuter through corridor

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Property Impacts

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Modification of circulation on my property

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan, but have concerns about access at particular locations.

Q6

Do you have any other comments, questions, or concerns?

No.

#2

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Monday, October 05, 2020 7:10:19 AM
Last Modified: Monday, October 05, 2020 8:26:21 AM
Time Spent: 01:16:02
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Roger Titmus representing Stinker Stores**
Address	**2498 Patterson Road**
City	**Grand Junction**
State	**CO**
Zip	**81505**
Phone Number	**209-337-2830**
Email	**rtitmus@stinker.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road,

Business Owner on Patterson Road

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Mobility through the corridor,

Driveway Access

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Restricting the turning movements to/from my property,
Other:
reducing the number of access points to my property

Q5

What statement best reflects how you feel about the Access Control Plan?

I do not support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

If the goal is to improve traffic flow on Patterson, restricting access to retail will not help achieve the goal. Restricting access causes drivers to stack up at bottleneck points, wait for opposing traffic, make u-turns, and backtrack to their destination. There are several east/west roads in Grand Junction that give drivers a lot of options. The best option to avoid hitting the brakes is to take I70, but there are few direct routes to the interstate. Providing better access to the interstate will improve the brakes is to take I70, but there are few direct routes to the interstate. Providing better access to the interstate will improve traffic flow. Better north/south connectivity solves the problem. Restricting driveway access does not.

#3

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Monday, October 05, 2020 1:07:20 PM
Last Modified: Monday, October 05, 2020 1:10:38 PM
Time Spent: 00:03:18
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Michael Shater**
Address	**2745 Patterson**
City	**Grand Junction**
State	**CO**
Zip	**81506**
Phone Number	**9702505739**
Email	**mikegjco@gmail.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Driveway Access

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Relocation of access point on my property,
Other:
also reducing and restricting (4&5)

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan, but have concerns about access at particular locations.

,
If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::
undecided

Q6

Do you have any other comments, questions, or concerns?

not at this time

#4

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Monday, October 05, 2020 1:10:43 PM
Last Modified: Monday, October 05, 2020 1:12:02 PM
Time Spent: 00:01:19
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Ryan Frieling representing Feather Petro - Stop n Save**
Address	**621 2Y Road**
City	**Grand Junction**
State	**CO**
Zip	**81505**
Email	**rfrieling@featherpetro.com**

Q2

Are you a (check all that apply):

Business Owner on Patterson Road

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Mobility through the corridor,

Driveway Access

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Accessing my property/business from a roadway other than Patterson Road

,
Other:
also modification and restriction (3&5)

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan, but have concerns about access at particular locations.

,
If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::
Patterson W of 2Y road

Q6

Do you have any other comments, questions, or concerns?

none

#5

COMPLETE

Collector:	Patterson Road...al Open House (Web Link)
Started:	Monday, October 05, 2020 1:12:06 PM
Last Modified:	Monday, October 05, 2020 1:21:45 PM
Time Spent:	00:09:39
IP Address:	50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Mike Fisher**
Address	**2918 Patterson Road**
City	**GRand Junction**
State	**CO**
Zip	**81504**
Phone Number	**970-640-9010**
Email	**mikefisher542@gmail.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Driveway Access,

Property Impacts

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Relocation of access point on my property,
Other:
also reducing and restricting (4&5) AND closing access to our garage - de-valuing our property

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan, but have concerns about access at particular locations.

,
If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::
Our driveway access and the amount of traffic already using our street as a U-turn because of Safeway

Q6

Do you have any other comments, questions, or concerns?

Please contact us directly if the plan continues to close our driveway as we will lose considerable amount of money when we sell our house because the garage would no longer be functional as a two- car garage

#6

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Monday, October 05, 2020 1:22:09 PM
Last Modified: Monday, October 05, 2020 1:27:45 PM
Time Spent: 00:05:35
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Kaia Michaelis representing Museums of Western Co.**
Address	**3073 F. Road**
City	**Grand Junction**
State	**CO**
Zip	**81505**
Phone Number	**970-242-0971 x204**
Email	**kmichaelis@westerncomuseum.org**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road,

Business Owner on Patterson Road

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Mobility through the corridor,

Local Street Intersections

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Reducing the number of access points to my property

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan, but have concerns about access at particular locations.

,

If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::

We need to maintain a secondary access point at Cross Orchards for traffic flow at large events.

Q6

Do you have any other comments, questions, or concerns?

none

#7

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Monday, October 05, 2020 1:35:45 PM
Last Modified: Monday, October 05, 2020 1:42:36 PM
Time Spent: 00:06:51
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Robert Garrison Jr.**
Address	**2778 Patterson**
City	**Grand Junction**
State	**co**
Zip	**81506**
Phone Number	**241-6565**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road,

Renter/Lessee on Patterson Road,

Commuter through corridor

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Driveway Access,

Property Impacts

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Restricting the turning movements to/from my property,
Other:
and relocation - future access

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan, but have concerns about access at particular locations.

,
If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::
reduce speed to encourage alternate routes

Q6

Do you have any other comments, questions, or concerns?

none

#8

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Monday, October 05, 2020 1:28:09 PM
Last Modified: Monday, October 05, 2020 1:43:01 PM
Time Spent: 00:14:51
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Steve Scodggins representing Museum of West Slope**
Address	**3513 G. Road**
City	**Palisade**
State	**CO**
Zip	**81526**
Email	**sscodggins@coloradoe2.org**

Q2

Are you a (check all that apply):

Business Owner on Patterson Road

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Mobility through the corridor,

Local Street Intersections

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Modification of circulation on my property,
Other:
also restriction and relocation

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan.,
If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::
Thanks for developing a plan - having time for feedback and a thoughtful process are important.

Q6

Do you have any other comments, questions, or concerns?

none

#9

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Monday, October 05, 2020 1:43:02 PM
Last Modified: Monday, October 05, 2020 1:46:34 PM
Time Spent: 00:03:31
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Jim Forsythe**
Address	**2887 Streamside**
City	**Grand Junction**
State	**CO**
Zip	**81505**
Phone Number	**970-765-5532**
Email	**JLFK15@outlook.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Mobility through the corridor,

Local Street Intersections

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Accessing my property/business from a roadway other than Patterson Road

,
Other:
and reducing (#4)

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

Excellent and knowledgeable staff on hand

#10

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Monday, October 05, 2020 1:46:42 PM
Last Modified: Monday, October 05, 2020 1:52:02 PM
Time Spent: 00:05:20
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Carl Zimmerman**
Address	**666 Turtledove Drive**
City	**Grand Junction**
State	**CO**
Zip	**81506**
Phone Number	**970-4244526**

Q2

Are you a (check all that apply):

Commuter through corridor,

Other (please specify):

Grandview subdivision

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Accessing my property/business from a roadway other than Patterson Road

,

Other:

Hawthorne Ave to 28 1/4 road - I support that

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

Hawthorne needs to go through to 28 1/4 road

#11

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Monday, October 05, 2020 1:53:29 PM
Last Modified: Monday, October 05, 2020 1:56:02 PM
Time Spent: 00:02:33
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Burlena Price**
Address	**2887 1/2 Cascade Ave.**
City	**Grandf Junction**
State	**CO**
Zip	**81501**
Phone Number	**970-314-9817**
Email	**bprice7372@yahoo.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road,

Other (please specify):

property owner off of patterson rd

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Sharing access with my neighbor,

Other:

keeping it from property

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

Can't be done soon enough Thank you for your plan!

#12

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Monday, October 05, 2020 1:56:06 PM
Last Modified: Monday, October 05, 2020 2:00:11 PM
Time Spent: 00:04:05
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Janice Breagan**
Address	**2885 1/2 Cascade**
City	**Grand Junction**
State	**CO**
Zip	**81501**
Phone Number	**970-245-4193**

Q2

Are you a (check all that apply):

Commuter through corridor

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Pedestrian Access,

Bicycle Access

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Sharing access with my neighbor,
Other:
none - but it makes you check something

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

Can't be done soon enough! Thank you!

#13

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Wednesday, October 07, 2020 6:52:17 AM
Last Modified: Wednesday, October 07, 2020 6:56:07 AM
Time Spent: 00:03:49
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Brian Arms**
Address	**3030 PAtterson Road**
City	**Grand Junction**
State	**co**
Zip	**81504**

Q2

Are you a (check all that apply):

Renter/Lessee on Patterson Road,

Other (please specify):

Resident From 30 to Grand Valley Drive

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Restricting the turning movements to/from my property

Q5

What statement best reflects how you feel about the Access Control Plan?

I do not support the Access Control Plan.,
If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::
As the Resident of 3030 Patterson Road, I do not find it beneficial to remove the only access point(Drive way) to my property. This is a privately owned property that is still zoned as Agricultural and thus should have its own entrance for equipment. By implementing the above changes to Patterson from 30 to Grand Valley drive you are not only creating a hazard for the business but also causing more traffic issues by introducing large Agriculture equipment into a small immobile space (between the building and fence line). These changes would cause more issues than they would prevent and should be stricken from the building plan.

Q6

Do you have any other comments, questions, or concerns?

none

#14

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Wednesday, October 07, 2020 6:56:11 AM
Last Modified: Wednesday, October 07, 2020 7:00:09 AM
Time Spent: 00:03:57
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Cheryl Fiegel**
Address	**562 Grand VAlley Dr.**
City	**Grand Junction**
State	**CO**
Zip	**81504**

Q2

Are you a (check all that apply):

Commuter through corridor

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Restricting the turning movements to/from my property

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan, but have concerns about access at particular locations.

,
If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::
How will anyone that lives in Mantey Heights head west? Are you encouraging u-turns?09/28/2020 9:21 am

Q6

Do you have any other comments, questions, or concerns?

none

#15

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Tuesday, October 13, 2020 8:39:38 PM
Last Modified: Tuesday, October 13, 2020 8:44:21 PM
Time Spent: 00:04:43
IP Address: 184.166.12.231

Page 1

Q1

Please provide your contact information.

Name	**Lorena Thompson -- LCAT Investments**
Address	**2478 F Road #11, 2478**
City	**Grand Junction**
State	**CO**
Zip	**81505**
Phone Number	**9702502106**
Email	**lorena@gjangelos.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road,
Renter/Lessee on Patterson Road,
Business Owner on Patterson Road,
Commuter through corridor

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Mobility through the corridor,
Driveway Access,
Property Impacts

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Restricting the turning movements to/from my property,
Other:
See the attached statement.

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan, but have concerns about access at particular locations.

Q6

Do you have any other comments, questions, or concerns?

We own LCAT in the entry marked 29 on your project map. This plaza holds 29 active business, many of which are medical with some retail. You have chosen to take the ¾ access in at Hope Plaza (#30) next door where there is no real way to connect a drive to our plaza without knocking down a business or turning their parking lot into a thorofare. I cannot imagine that, that will be okay with them. That plaza – the only one with a ¾ access hosts only 4 businesses. This makes no sense at all. You are cutting off access to 29 businesses to give access to 4. The city's attitude seems to be that you are going to put in the median and the business along that route can just figure it out. This will – without any doubt—hurt our business.` With COVID challenging our very existence, this just adds mayhem to misery.
Could you reconsider where the ¾ access occurs and attempt to damage the least number of businesses with this decision?

#16

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Wednesday, October 14, 2020 12:02:05 PM
Last Modified: Wednesday, October 14, 2020 12:06:38 PM
Time Spent: 00:04:32
IP Address: 50.211.228.253

Page 1

Q1

Please provide your contact information.

Name	**Monty Luellen Representing Patterson Gardens HOA**
Address	**2721 Patterson**
City	**Grand Junction**
State	**CO**
Zip	**81506**
Phone Number	**970-623-2759**
Email	**Luellen0399@msn.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road,

Business Owner on Patterson Road

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Driveway Access,

Property Impacts

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Modification of circulation on my property,
Other:
also reducing and restricting (4&5)

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan, but have concerns about access at particular locations.

,
If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::
#129, #130, #159

Q6

Do you have any other comments, questions, or concerns?

not at this time

#17

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Thursday, October 15, 2020 8:16:29 AM
Last Modified: Thursday, October 15, 2020 8:29:21 AM
Time Spent: 00:12:52
IP Address: 47.47.138.82

Page 1

Q1

Please provide your contact information.

Name	**Lori Carlston-Thompson**
Address	**2478 Patterson Rd., #15**
City	**Grand Junction**
State	**co**
Zip	**81505**
Phone Number	**9702454567**
Email	**loricarlston@allstate.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road,
Renter/Lessee on Patterson Road,
Business Owner on Patterson Road,
Commuter through corridor

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,
Mobility through the corridor,
Driveway Access

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Restricting the turning movements to/from my property,
Other:
No access other than Patterson, neighbor not willing to do pass through, and if he was it would cause speeding problems in parking lot. So don't really blame him.

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan, but have concerns about access at particular locations.

,

If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::

Would like to see a left turn into the 2478 Patterson complex as there are so many businesses in this complex and we already have left in, left out access - it is not an accident hazard.

Q6

Do you have any other comments, questions, or concerns?

If the plan comes to fruition which extends the Riverside Parkway up 25 Rd to F 1/2 Rd, it will cause a lot of traffic to bypass the section of Patterson we're on, between 24 1/2 Rd and 25 Rd. There is already less traffic on this part of Patterson than there is near 7th to 12th St - so perhaps the building of medians and restricting of traffic on this section of Patterson will never need to be completed, and we can save the city and taxpayers money. The bottleneck of Patterson between 1st and 7th streets may require the city to find alternate traffic routes as the city grows.

#18

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Thursday, October 15, 2020 11:47:06 AM
Last Modified: Thursday, October 15, 2020 11:51:45 AM
Time Spent: 00:04:38
IP Address: 69.146.252.115

Page 1

Q1

Please provide your contact information.

Name	**Lynn Thompson**
Address	**2478 Patterson**
City	**Grand Junction**
State	**Colorado**
Zip	**81505**
Phone Number	**970250-0815**
Email	**lynn@gjangelos.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road,
Business Owner on Patterson Road,
Commuter through corridor

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Mobility through the corridor,
Driveway Access,
Property Impacts

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Restricting the turning movements to/from my property

Q5

What statement best reflects how you feel about the Access Control Plan?

I do not support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

Having a "right only in and right only out" access to my property will make it more difficult for our customers to access my business, resulting in loss of income. Also, if it were even possible to connect access with adjoining properties, it will make my parking lot a street, resulting in safety issues for my employees and customers.

#19

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Tuesday, January 05, 2021 4:45:16 PM
Last Modified: Tuesday, January 05, 2021 4:49:23 PM
Time Spent: 00:04:07
IP Address: 98.234.51.223

Page 1

Q1

Please provide your contact information.

Name	**Haixia Zhang**
Address	**2478 Patterson Rd**
City	**GJ**
State	**CO**
Zip	**81505**
Phone Number	**4156376343**
Email	**hzhang@netpolarity.com**

Q2

Are you a (check all that apply):

Renter/Lessee on Patterson Road,

Business Owner on Patterson Road,

Other (please specify):

Blockage to Patterson Road centerline will prevent all of our employees to be able to leave our office from our parking lot. We would have to turn left out of the complex to go home. We have close to 10 employees in the office and everyone is very dissatisfied with the suggested change.

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Mobility through the corridor,

Driveway Access,

Property Impacts

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Relocation of access point on my property

Q5

What statement best reflects how you feel about the Access Control Plan?

I do not support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

do not block the road, we will leave Patterson Road if you do

#20

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Wednesday, January 06, 2021 8:48:55 AM
Last Modified: Wednesday, January 06, 2021 8:54:39 AM
Time Spent: 00:05:43
IP Address: 35.133.61.90

Page 1

Q1

Please provide your contact information.

Name	**robert garrison**
Address	**2778 patterson road**
City	**grand junction**
State	**CO**
Zip	**81506**
Phone Number	**18017255620**
Email	**robrlgjr@outlook.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road,

Commuter through corridor

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Driveway Access,

Property Impacts,

Bus Service

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Restricting the turning movements to/from my property,
Other:
median design, sound reduction

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan.,
If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::
median design, will it be like north avenue? can zeroscape be incorporated for sound reduction? traffic noise

Q6

Do you have any other comments, questions, or concerns?

getting to my home while traveling east for 12th street

#21

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Wednesday, January 06, 2021 12:38:25 PM
Last Modified: Wednesday, January 06, 2021 1:12:49 PM
Time Spent: 00:34:23
IP Address: 69.145.234.89

Page 1

Q1

Please provide your contact information.

Name	**Renee Williams**
Address	**2515 Foresight Circle**
City	**Grand Junction**
State	**CO**
Zip	**81505**
Phone Number	**970 3734**
Email	**synergisticwellnessatforesight@gmail.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road,

Business Owner on Patterson Road

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Mobility through the corridor,

Local Street Intersections

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Restricting the turning movements to/from my property

Q5

What statement best reflects how you feel about the Access Control Plan?

I do not support the Access Control Plan.,

If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::

Access to existing Foresight Circle Industrial Park right of ways and other public right of ways should not be restricted as these have been established for decades. Restricting access to existing public streets along Patterson appears to be a result of supporting private development interests at the expense of access to existing public streets.

Q6

Do you have any other comments, questions, or concerns?

no

#22

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Wednesday, January 06, 2021 9:58:26 AM
Last Modified: Wednesday, January 06, 2021 2:35:03 PM
Time Spent: 04:36:36
IP Address: 184.166.14.14

Page 1

Q1

Please provide your contact information.

Name	**Craig Robillard**
Address	**848 Summer Sage Court**
City	**Grand Junction**
State	**CO**
Zip	**81506**
Phone Number	**9704337141**
Email	**c42skipper@gmail.com**

Q2

Are you a (check all that apply):

Commuter through corridor,

Other (please specify):

Frequentl bicycle rider in the neighborhood

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Bicycle Access

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Relocation of access point on my property,

Other:

Not a property owner but I had to check a box for the survey to be accepted.

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

Any thoughts about improving bicycle path system along Patterson?

#23

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Wednesday, January 06, 2021 3:41:08 PM
Last Modified: Wednesday, January 06, 2021 3:45:54 PM
Time Spent: 00:04:45
IP Address: 97.118.29.44

Page 1

Q1

Please provide your contact information.

Name	**Bennett Boeschenstein**
Address	**1255 Ouray Ave**
City	**Grand Junction**
State	**CO**
Zip	**81501**
Phone Number	**19706408153**
Email	**boeschenstein.bennett0@gmail.com**

Q2

Are you a (check all that apply):

Commuter through corridor,

Other (please specify):

Board member museums of Western Colorado (Cross Orchards)

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Mobility through the corridor,

Pedestrian Access,

Bicycle Access,

Property Impacts,

Local Street Intersections,

Bus Service

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Relocation of access point on my property

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

Cross Orchards should have at least two good access points with accel-decel lanes

#24

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Wednesday, January 06, 2021 6:01:48 PM
Last Modified: Wednesday, January 06, 2021 6:05:52 PM
Time Spent: 00:04:03
IP Address: 71.218.32.179

Page 1

Q1

Please provide your contact information.

Name	**Andrew Amend**
Address	**5690 DTC Blvd**
City	**Greenwood Village**
State	**CO**
Zip	**80111**
Phone Number	**3032212330**
Email	**andrew@stolfusandassociates.com**

Q2

Are you a (check all that apply):

Commuter through corridor,

Other (please specify):

Project Engineer

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Mobility through the corridor,

Local Street Intersections

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Accessing my property/business from a roadway other than Patterson Road

,

Other:

making sure SurveyMonkey works

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

Just checking to make sure SurveyMonkey is working properly

#25

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Thursday, January 07, 2021 3:19:25 PM
Last Modified: Thursday, January 07, 2021 3:25:15 PM
Time Spent: 00:05:49
IP Address: 63.233.204.194

Page 1

Q1

Please provide your contact information.

Name	**Roger Titmus**
Address	**3184 Elder St**
City	**Boise**
State	**Idaho**
Zip	**83705**
Phone Number	**2083750942**
Email	**rtitmus@stinker.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road,

Business Owner on Patterson Road

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Driveway Access,

Property Impacts

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Other:
All of the above

Q5

What statement best reflects how you feel about the Access Control Plan?

I do not support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

Reducing access to retail will discourage redevelopment and cause neighborhood blight.

#26

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Friday, January 08, 2021 2:26:20 PM
Last Modified: Friday, January 08, 2021 2:29:13 PM
Time Spent: 00:02:52
IP Address: 184.166.174.17

Page 1

Q1

Please provide your contact information.

Name	**Marilyn Swanson**
Address	**2610 Springside Ct**
City	**Grand Junction**
State	**Colorado**
Zip	**81506**
Phone Number	**3036380742**
Email	**southsidere@gmail.com**

Q2

Are you a (check all that apply):

Other (please specify):

Springside Ct is very close to Patterson Rd. A stop light is needed badly at 28 Rd and Patterson.

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Safety,

Mobility through the corridor,

Local Street Intersections

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Respondent skipped this question

Q5

What statement best reflects how you feel about the Access Control Plan?

I support the Access Control Plan, but have concerns about access at particular locations.

,

If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::

Signal at 28 Rd is badly needed.

Q6

Do you have any other comments, questions, or concerns?

Respondent skipped this question

#27

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Monday, January 11, 2021 8:53:19 PM
Last Modified: Monday, January 11, 2021 8:59:10 PM
Time Spent: 00:05:51
IP Address: 98.127.108.244

Page 1

Q1

Please provide your contact information.

Name	**Nicholas A Sechrist**
Address	**2530 Falls View Cir**
City	**Grand Junction**
State	**CO**
Zip	**81505**
Phone Number	**9702706485**
Email	**ns2chiro@msn.com**

Q2

Are you a (check all that apply):

Business Owner on Patterson Road

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Mobility through the corridor,

Driveway Access,

Property Impacts

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Restricting the turning movements to/from my property

Q5

What statement best reflects how you feel about the Access Control Plan?

I do not support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

The main issue is two gas stations, both with two entrances that are caddy-corner at 25 Rd and Patterson. The greater advantage for flow and safety would be widening 25 Rd. There are multiple business inside of Foresight Circle and limiting access is only going to jam up larger intersections, namely 25 Rd and Patterson.

#28

COMPLETE

Collector: Patterson Road...al Open House (Web Link)
Started: Tuesday, January 12, 2021 9:55:49 PM
Last Modified: Tuesday, January 12, 2021 9:59:01 PM
Time Spent: 00:03:12
IP Address: 184.166.12.214

Page 1

Q1

Please provide your contact information.

Name	**Nathan Williams**
Address	**1915 Monument Canyon Drive**
City	**Grand Junction**
State	**CO**
Zip	**81507**
Phone Number	**9702703733**
Email	**nathan.w.williams1@gmail.com**

Q2

Are you a (check all that apply):

Property Owner on Patterson Road,
Renter/Lessee on Patterson Road,
Business Owner on Patterson Road,
Commuter through corridor

Q3

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Mobility through the corridor,
Property Impacts,
Local Street Intersections

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Reducing the number of access points to my property

Q5

What statement best reflects how you feel about the Access Control Plan?

I do not support the Access Control Plan.

Q6

Do you have any other comments, questions, or concerns?

The access plan as written will have severe deleterious impacts to my business and the several businesses in the Foresight Park. We need to have same access we have now.

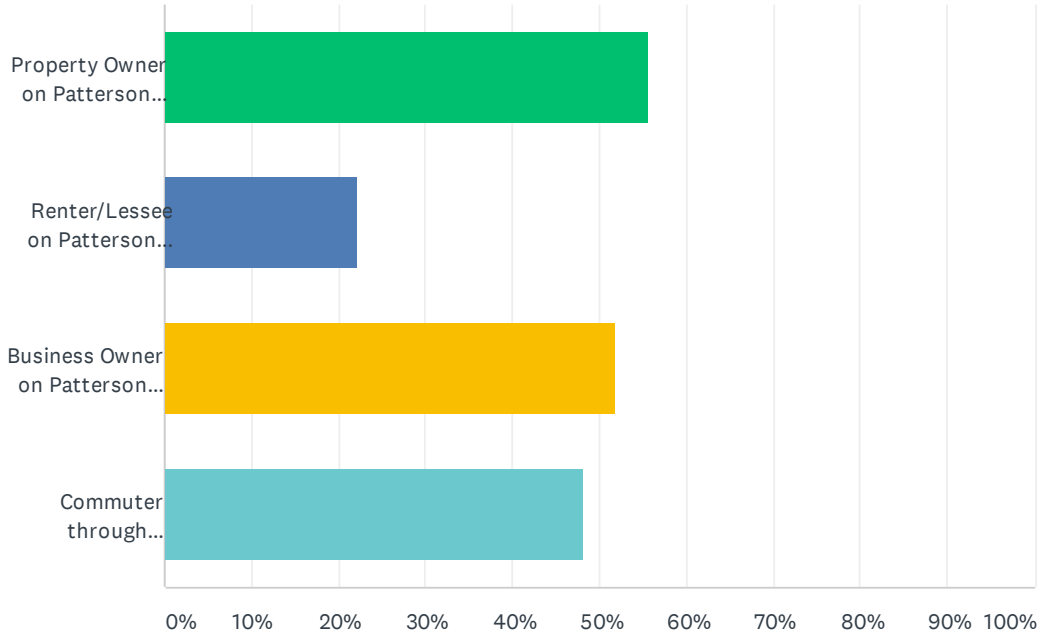
Q1 Please provide your contact information.

Answered: 28 Skipped: 0

ANSWER CHOICES	RESPONSES	
Name	100.00%	28
Address	100.00%	28
City	100.00%	28
State	100.00%	28
Zip	100.00%	28
Phone Number	85.71%	24
Email	82.14%	23

Q2 Are you a (check all that apply):

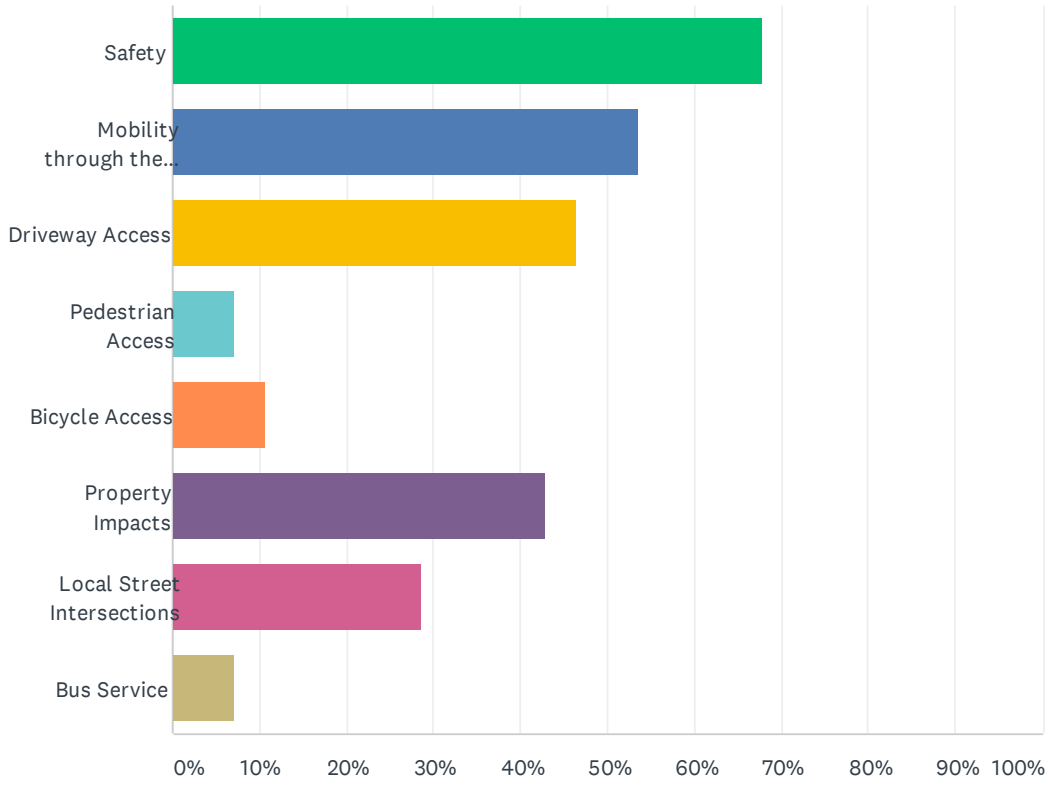
Answered: 27 Skipped: 1



ANSWER CHOICES	RESPONSES	
Property Owner on Patterson Road	55.56%	15
Renter/Lessee on Patterson Road	22.22%	6
Business Owner on Patterson Road	51.85%	14
Commuter through corridor	48.15%	13
Total Respondents: 27		

Q3 Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

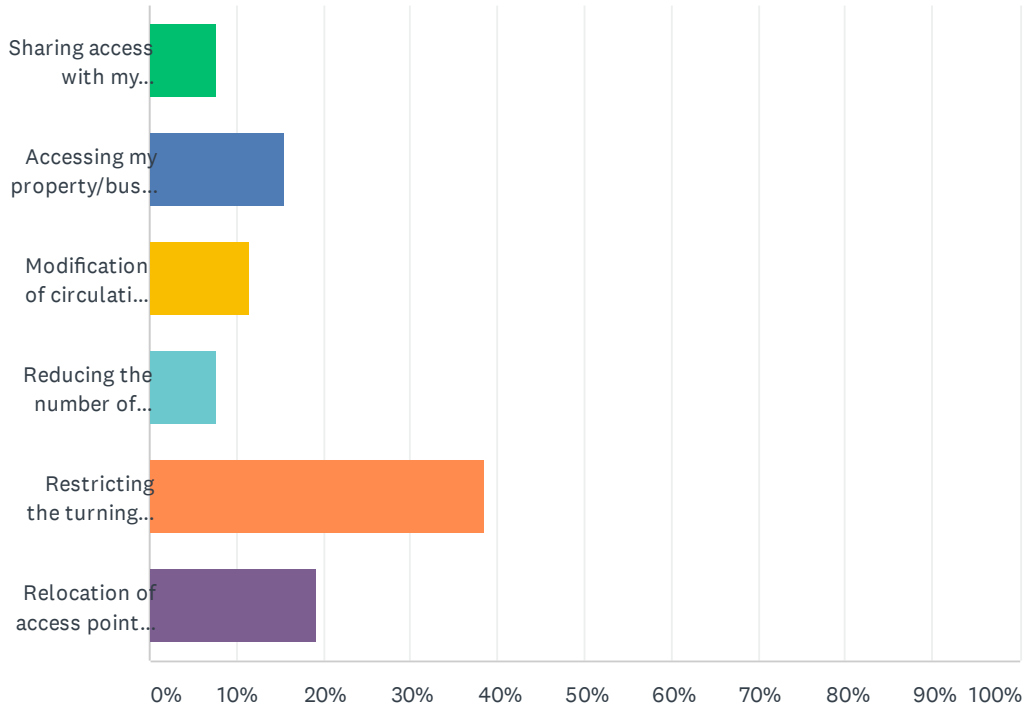
Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES	
Safety	67.86%	19
Mobility through the corridor	53.57%	15
Driveway Access	46.43%	13
Pedestrian Access	7.14%	2
Bicycle Access	10.71%	3
Property Impacts	42.86%	12
Local Street Intersections	28.57%	8
Bus Service	7.14%	2
Total Respondents: 28		

Q4 If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

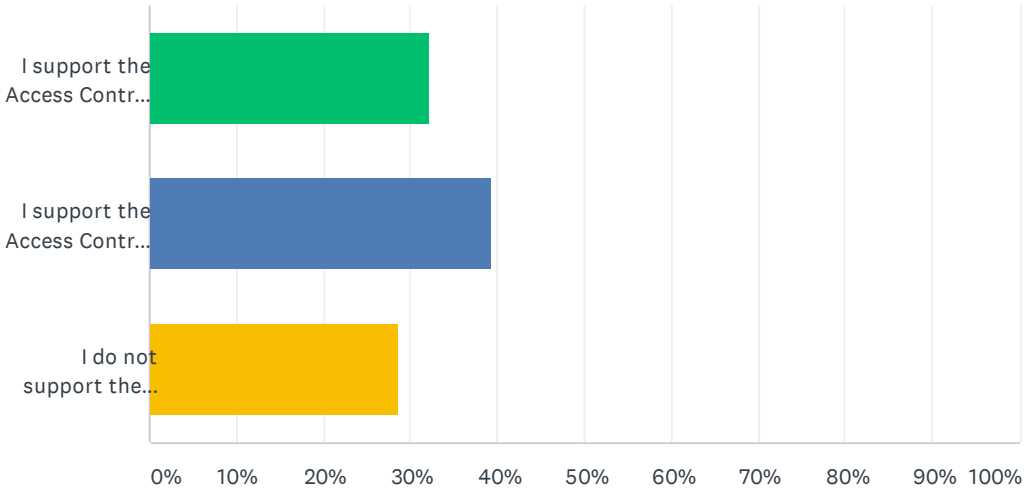
Answered: 26 Skipped: 2



ANSWER CHOICES	RESPONSES	
Sharing access with my neighbor	7.69%	2
Accessing my property/business from a roadway other than Patterson Road	15.38%	4
Modification of circulation on my property	11.54%	3
Reducing the number of access points to my property	7.69%	2
Restricting the turning movements to/from my property	38.46%	10
Relocation of access point on my property	19.23%	5
TOTAL		26

Q5 What statement best reflects how you feel about the Access Control Plan?

Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES	
I support the Access Control Plan.	32.14%	9
I support the Access Control Plan, but have concerns about access at particular locations.	39.29%	11
I do not support the Access Control Plan.	28.57%	8
TOTAL		28

Area/Location of Concern	Contact or Meeting with Staff	Access Point(s)	Draft Condition (January 2021)	Changes Made to ACP	Follow Up
Cris-Mar - previously summarized. Requesting a note be added that the access control measures would not be added until the Bonito/Penny Lane connection to 29 1/2 Road is added. Improvements needed to Bonito for two blocks east of 29 Road to accommodate additional traffic.	Contacted by Trent Prall	211/212	211-RIRO, 212-3/4 movement	Add connection between Penny Lane and Bonito on the alt routes map. Make Cris Mar and Redwing conditional unsignalized full movement. Cris Mar goes to RIRO and Redwing goes to 3/4 upon connection to 29 1/2 Road.	None
Mantey Heights - Approximately 25 people attended the meeting at 4:00 on Thursday 3/18. Speeding is big concern. They are concerned about emergency access, tight streets due to vegetation, sight distance. I would like to look into the possibility of a left out accel lane at access 157. We have received 3 letters (attached): Gloria Deschamp (124 Mount View Drive); Beth McKee (135 Carlitos Ave), and Marc Burdick and Colin Carman (114 Camino Del Rey Dr). Gary Lucero is the primary contact at 245-6333.	Contacted by Trent Prall	156/157/158	156-RIRO, 157 - RIRO, 158-Closed	Add connection between Camino Del Rey and Rio Grande. Make 156 conditional full movement to be restricted to 3/4 if safety/operational issues occur. Make 158 a safety RIRO - conditions note closure only if safety or operational issues develop. Keep 157 as RIRO.	For 40 mph, full decel is 275' and P-R is 90'. Assuming the minimum 25' storage at 28 Rd, the minimum allowable distance to a 3/4 Mantey Heights Dr is 390'. Measured distance is 370', so the 3/4 is recommended at Mt View Dr #156. #158 changed to safety conditional RIRO.
Mira Vista/Belair/Mayfair - 23 people attended the meeting at 5:00 on Thursday 3/18. They are adamant about not sharing anything access/road/etc. with St. Mary's. Their CC&R's restrict their neighborhood to only residential uses therefore they argue that St. Mary's Hospital will not be able to expand to the west even if they do own all of it. They want the lefts out of Patterson at access 93 (St. Mary's) to be eliminated and then they will be fine. At peak hours the neighborhood already uses access 86 as a 3/4. Would like for it to be at least 3/4. One individual asked we consider just restricting full motion access for certain hours of the day. We received one letter from Bill Crawford (2551 Mayfair Dr). Danielle Schuster is the primary contact at 970-749-8468 or dnbschuster@gmailcom.	Contacted by Trent Prall	86/86a/93	86 - Conditional RIRO, 86a - Conditional 3/4, 93 - Conditional RIRO	Eliminate 86a. Make 86 and 93 conditional 3/4 with conditions to restrict to RIRO if safety or operational issues develop.	None
Patterson Gardens - Barbara Sundermeier (sp?) 256-0093 is concerned about no 3/4 access at 129. She states that it is unrealistic to think that someone can make a U-turn at the access #123 City Market 3/4 access. Rick and Andrew have already weighed in via email stating 3/4 access is possible and not get into the functional intersection area of Patterson and 15th.	Contacted by Trent Prall	129	129-RIRO	Change Access 129 to conditional 3/4 with conditions to restrict to RIRO if safety or operational issues develop.	None
ACCESS #3 - self-storage company - Concern that large truck traffic entering and exiting the storage unit facility with only a right in right out option will find it difficult to make U-turns further west on Patterson Road near the I-70 B intersection to go east.	Contacted by Trent Prall	1/3	1-closed, 3-RIRO	I-70 B to 24 Rd provides alternate access to get back to Patterson going east or to enter from the west. Change Access 3 to unsignalized full movement (conditional) with condition to restrict movements only when left turn improvements are implemented at I-70B. Change Access 1 to conditional RIRO with condition to close upon redevelopment only.	None

ACCESS #29 and other north access around Patterson Village Square between 24 1/2 and 25 Road - Impact these changes will have on intersections at 24 1/2 and 25 Road is a concern. Often it takes more than one light cycle now to make a left. By making everyone on my block go to these intersections to make left turns makes the situation worse. Are there plans to increase turn lanes or make changes to improve traffic flow at these intersections.		29	29-Conditional 3/4 - no change proposed	Not all left turns will need to be accommodated at 24 1/2 Rd/25 Rd. Multiple options for eastbound movements are provided including left turns at Commerce, U-turns along Patterson, access to Flat Top. The traffic study for the ACP identified some auxiliary lane improvements at 24 1/2 Rd and 25 Rd along Patterson, but did not identify the need for improvements on these roads. The City will continue to monitor how traffic reroutes and traffic volumes increase at public road intersections to identify the need for additional improvements at signalized intersections in the future.	None
ACCESS #44 - Need to retain full movement at Burkey Street (Post Office Annex access). ACCESS #106 and #108 - Concerned with limiting turning movements into the Northern Way neighborhood.		44/106/108	44-3/4 movement (no change) 106- 3/4 movement, 108- RIRO(no change)	Burkey Street has a 3/4 movement allowing left-turns in. Blichman Avenue to the north provides access back to 25 Rd for left turns out. Access 106 is changed to conditional full movement to be restricted to 3/4 only with safety or operational issues. Either U-turns at 7th Street or re-routing via 7th to Bookcliff or 7th to Horizon will achieve movements to the east for vehicles not comfortable making left turns at 106. Left turn movements can be made at Access 106 - no change proposed for Access 108.	None
ACCESS #69 - E Park Avenue - Extra traffic would not be good using Park Avenue		69	69- Safety RIRO (no change)	Park Avenue will be restricted to RIRO when a median is constructed on Patterson. It has the potential to close if safety or operational issues ever occurred at that location due to its proximity to 1st St. Alternate access to 1st Street already exists. The access restrictions are not expected to increase traffic to the neighborhood.	None
ACCESS #86 - Mira Vista Rd - Don't limit this intersection to RI / RO only.		86/86a/93	86 - Conditional RIRO, 86a - Conditional 3/4, 93 - Conditional RIRO	Eliminate 86a. Make 86 and 93 conditional 3/4 with conditions to restrict to RIRO if safety or operational issues develop.	None
ACCESS # 116 and #117 - Wants 3/4 Movement for west bound Patterson Traffic in to Village Fair Shopping Center @ 12th and Patterson	Rick and Dave met Mr. Gibbs onsite - 3/25	114/116/117	114-conditional RIRO, 116-RIRO, 117- closed	Change Access 117 to RIRO. Change Access 116 to conditional RIRO - cannot close until truck circulation can be accommodated on site. 3/4 movement at 116 was evaluated and determined to be too close to 12th St. Change access 114 to conditional 3/4 - conditioned upon providing access to parcels both east/west.	For 35 mph, full decel is 215' and P-R is 75'. Distance from #114 to 12th St is 560' so conditional 3/4 has been added to 114.
ACCESS #129 and #130 - Concerned with safety issues and access to Patterson Gardens Townhomes between 12th and 15th Streets		129/130	129-RIRO, 130- right-out only (no change)	Change Access 129 to conditional 3/4 with conditions to restrict to RIRO if safety or operational issues develop.	None

ACCESS #156 - Mt View Drive - Mantey Heights - I have had no problems navigating the entering and existing onto Patterson Road, no to any closures.		156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. Make 156 conditional full movement to be restricted to 3/4 if safety/operational issues occur. Access 157 to remain RIRO. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.	None
ACCESS # 156-158 and #160-163 - Mantey Heights - Access from the east		156/157/158/161/163	156-RIRO, 157 - RIRO, 158-Closed, 161-3/4 movement (no change), 163- RIRO)(no change)	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. Make 156 conditional full movement to be restricted to 3/4 if safety/operational issues occur. Access 157 to remain RIRO. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.	For 40 mph, full decel is 275' and P-R is 90'. Assuming the minimum 25' storage at 28 Rd, the minimum allowable distance to a 3/4 Mantey Heights Dr is 390'. Measured distance is 370', so the 3/4 is recommended at Mt View Dr #156. #158 changed to safety conditional RIRO.
Access #157 and #158 - Don't close #158, easier to see from #158 than #157 (Santa Fe Drive, Mantey Heights)		156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. Make 156 conditional full movement to be restricted to 3/4 if safety/operational issues occur. Access 157 to remain RIRO. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.	For 40 mph, full decel is 275' and P-R is 90'. Assuming the minimum 25' storage at 28 Rd, the minimum allowable distance to a 3/4 Mantey Heights Dr is 390'. Measured distance is 370', so the 3/4 is recommended at Mt View Dr #156. #158 changed to safety conditional RIRO.

Access #157 and #158 - Don't close #158, easier to see from #158 than #157 (Santa Fe Drive, Mantey Heights) Santa Fe Drive, Mantey Heights		156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. Make 156 conditional full movement to be restricted to 3/4 if safety/operational issues occur. Access 157 to remain RIRO. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.	For 40 mph, full decel is 275' and P-R is 90'. Assuming the minimum 25' storage at 28 Rd, the minimum allowable distance to a 3/4 Mantey Heights Dr is 390'. Measured distance is 370', so the 3/4 is recommended at Mt View Dr #156. #158 changed to safety conditional RIRO.
Access #157 and #158 - Don't close #158, easier to see from #158 than #157 (Santa Fe Drive, Mantey Heights)		156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. Make 156 conditional full movement to be restricted to 3/4 if safety/operational issues occur. Access 157 to remain RIRO. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.	For 40 mph, full decel is 275' and P-R is 90'. Assuming the minimum 25' storage at 28 Rd, the minimum allowable distance to a 3/4 Mantey Heights Dr is 390'. Measured distance is 370', so the 3/4 is recommended at Mt View Dr #156. #158 changed to conditional RIRO.
Access #157 and #158 - Don't close #158, easier to see from #158 than #157 (Santa Fe Drive, Mantey Heights)		156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. Make 156 conditional full movement to be restricted to 3/4 if safety/operational issues occur. Access 157 to remain RIRO. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.	For 40 mph, full decel is 275' and P-R is 90'. Assuming the minimum 25' storage at 28 Rd, the minimum allowable distance to a 3/4 Mantey Heights Dr is 390'. Measured distance is 370', so the 3/4 is recommended at Mt View Dr #156. #158 changed to safety conditional RIRO.

Access #158 - Don't close #158 (Santa Fe Drive, Mantey Heights)		156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. Make 156 conditional full movement to be restricted to 3/4 if safety/operational issues occur. Access 157 to remain RIRO. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.	For 40 mph, full decel is 275' and P-R is 90'. Assuming the minimum 25' storage at 28 Rd, the minimum allowable distance to a 3/4 Mantey Heights Dr is 390'. Measured distance is 370', so the 3/4 is recommended at Mt View Dr #156. #158 changed to safety conditional RIRO.
ACCESS 159 - difficult to turn left. Need a connector road between 28 Road and 28 1/4 Road to allow neighborhood to access the 28 1/4 Road traffic light.		159	159-3/4 movement (no change)	City is currently connecting Hawthorne to 28 1/4 Rd to address left-turn out need. This connection was previously identified in the City's Street plan before the ACP.	None
ACCESS #168 - Don't connect 28 1/4 Road with Hawthorne Drive. Going to 29 Road as an alternate route to go west on Patterson Road adds additional time to commute.		168	168 signalized full movement (no change)	The Hawthorne connection was already planned prior to the ACP and is currently moving forward. You will still be able to use 28 Rd to go west on Patterson. You will just need to reroute to go east on Patterson.	None
ACCESS # 184 - 28 3/4 Road - Don't connect Matchett Park with Navajo Way. Against making 28 3/4 Road a RI / RO.		184	184-RIRO (no change)	The plan attempts to balance 3/4 movements to the north and south of Patterson and to provide 3/4 movements where the most vehicles/properties can be served. 28 3/4 is too close to Legends Way to provide a 3/4 movement. The connection between Navajo and Matchett Park is meant to provide alternate routes for the neighborhoods on the north to reach a traffic signal for left turn movements.	None
ACCESS #168 - Don't connect 28 1/4 Road with Hawthorne Drive and Matchett Park and with Indian Creek Subdivision, instead provide a connection from Indian Creek to 29 Road. **ACCESS #184** - 28 3/4 Road - Don't like limiting 28 3/4 Road to right in and right out only.		168/184	168 signalized full movement (no change), 184-RIRO(no change)	City is currently connecting Hawthorne to 28 1/4 Rd to address need. This connection was previously identified in the City's Street plan before the ACP. While a connection from Indian Creek to 29 Road would be beneficial, the availability of land to make that connection without impacting homes in Indian Creek is not available. Crossing of a major drainageway would also be required to connect to 29 Rd.	None

ACCESS #216 - 29 1/4 Road - Concerned with limiting 29 1/4 Road to right only. To go westbound on Patterson Road will add 3 to 5 minutes to my commute as I will have to go south and make my way over to 29 Road, then sit at a stoplight that backs up in the left turn lane now at Patterson.		216	216-RIRO (no change)	Implementation of this plan will occur over time as needed. A median will be added in this section when safety and operations on Patterson calls for it. In the future, it is anticipated that making left turns from 29 1/4 will become more difficult and finding an alternate route will actually be faster and safer than waiting for a gap in traffic on Patterson Rd. Currently there are no plans to implement a median in this segment.	None
ACCESS #233 - E Greenfield Cir - no access to 29 1/2 Road, 30 Road too far away for circulation		233	233-Safety RIRO(no change)	Access 233 is too close to 29 1/2 Rd to provide left-turns in. When a median is implemented at 29 1/2 Rd, Greenfield will be restricted to RIRO. It will only be closed if safety or operational issues develop. Alternate left-turn in access is available at Placer St. In addition, u-turns are available at either Placer or 30 Rd for left-turn movements out. Out of direction travel to u-turn at Placer St is less than 1/2 mile total.	None
ACCESS #235 and #244 - Oxbow and Trading Post subdivisions - One full access to these subdivision would be helpful instead of access required to go to 30 Road.		235/244	235-RIRO, 244-Safety RIRO(no change)	Change 235 to 3/4. 241 is also 3/4 and will provide access to neighborhoods. The plan looks to identify key locations with appropriate spacing for traffic signals for ideal operations on Patterson Rd for full movement intersections, which is basically already in place at 1/2 mile spacing. The plan has identified additional 3/4 movement access between signals where operations are improved and multiple properties/businesses can be served. Access 244 is too close to 30 Rd to provide anything more than RIRO. Alternate access via F 1/4 Rd is available and if safety or operational issues develop at 244, the access will close.	None
ACCESS #266 - Grand Valley Drive - Concern this will make Grand Valley Drive a throughfare. Don't eliminate the center lane, need for turn movements and emergency vehicles.		262/266	262-3/4 movement, 266-RIRO	Change 3/4 movement to Access 266 and change Access 262 to RIRO. Access 266 provides more connectivity and better circulation for the City overall and the location doesn't create overlapping left issues on Patterson. May increase traffic and speeds on Grand Valley, but probably a similar amount of traffic at Gerken with the 3/4 at 262. The plan has considered emergency services and alternate circulation routes for emergency services and the general public.	None

ACCESS #266 - Grand Valley Drive - The better choice for a south bound road would be Grand Valley Drive, it is a straight road all the way to E 1/2 Road. The plan for Patterson Road between 30 and 31 Roads needs work.		262/266	262-3/4 movement, 266-RIRO	Change 3/4 movement to Access 266 and change Access 262 to RIRO. We agree that 266 provides more connectivity and better circulation for the City overall and the location doesn't create overlapping left issues on Patterson. May increase traffic and speeds on Grand Valley, but probably a similar amount of traffic at Gerken with the 3/4 at 262.	None
GENERAL COMMENT - Between 1st and 7th St - Concerned with traffic, increasing side street traffic, and traffic speeds		N/A	N/A	A traffic analysis was conducted with this study and the plan provides solutions to respond to corridor operations and safety if traffic volumes increase. If traffic volumes do not increase, the need for the median and access modifications will not be required. This plan is just one part of the City's transportation system. The City will continue to monitor how traffic reroutes and traffic volumes increase at public road intersections to identify the need for additional improvements.	None
GENERAL COMMENTS - Enforce traffic laws		N/A	N/A	This plan supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.	None
GENERAL COMMENTS - Enforce Traffic Laws. Suggest flashing yellow arrows in intersection turn lanes.		N/A	N/A	This plan supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce. The City is considering implementing flashing yellow arrows as funding is available and signals are upgraded.	None
GENERAL COMMENTS - All this project will do is direct more traffic onto Patterson Road and 29 Road.		N/A	N/A	This project is meant to allow Patterson to operate to accommodate traffic for it's classification, which is a major arterial. Patterson is a key east-west arterial for the City. If improvements to Patterson are not made, congestion will occur and traffic will look for alternate routes either north or south of Patterson to meet the demand.	None
GENERAL COMMENTS - Supports controlling turn movements		N/A	N/A	Thank you for your input.	None

GENERAL COMMENTS - Don't push traffic into neighborhoods, reduce speed limits and enforce traffic laws		N/A	N/A	This project is meant to allow Patterson to operate to accommodate traffic for it's classification, which is a major arterial. Major arterials prioritize through movements and higher speeds. Patterson is a key east-west arterial for the City. If improvements to Patterson are not made, congestion will occur and traffic will look for alternate routes either north or south of Patterson to meet the demand. This plan also supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.	None
GENERAL COMMENTS - Reduce speed limits and enforce traffic laws		N/A	N/A	This project is meant to allow Patterson to operate to accommodate traffic for it's classification, which is a major arterial. Major arterials prioritize through movements and higher speeds. Patterson is a key east-west arterial for the City. If improvements to Patterson are not made, congestion will occur and traffic will look for alternate routes either north or south of Patterson to meet the demand. This plan also supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.	None
GENERAL COMMENTS - Enforce traffic laws		N/A	N/A	This plan supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.	None
GENERAL COMMENTS - Concerned about the additional traffic in neighborhoods due to the need to access their homes through neighborhood streets that tie into north/south streets such as 30 Road and 31 Road.		N/A	N/A	The plan does result in additional circulation by neighborhood traffic. The volumes anticipated are very low and neighborhood traffic may already be choosing to take these routes during peak hours. We do not believe we have created any cut-through routes that would increase traffic from outside the neighborhood.	None

GENERAL COMMENTS - Don't approve any new subdivisions that have to access Patterson Rd. Not fair homeowner has to build a new driveway to existing garage when existing driveway is closed to garage.		N/A	N/A	All new subdivisions will be subject to this ACP in the future. Any homes that have access to a garage today have conditions on their access closure to only occur if redevelopment occurs. Otherwise access to the garage remains.	None
GENERAL COMMENTS - Enforce traffic laws.		N/A	N/A	This plan supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.	None
My comments don't exactly pertain to the changes proposed on Patterson rd but rather an observation as a newcomer to GJ. I moved my from my Denver home of forty years and a growing recreational manufacturing business here almost three years ago hoping to grow my business and find a slower paced life on the western slope. I live barely 100 yards from Patterson Rd where I get to witness an amazingly huge amount of idiot drivers either " rolling coal" in their oversized noisy air polluting trucks or any number of crotch rockets and noisy little souped up cars intending to see how fast and loud they can get from 28 Rd to 29 Rd! If there ever were a reason to pack up both my home and business this would be it! If it weren't for the fact that we love our house and aren't ones to move as a knee jerk reaction because we live near what friend that's lived here a long time has started the road " Neanderthal Blvd". It makes me incredibly tense every time I venture out onto Patterson (aka Neanderthal). We Don't need to make the road faster! We need to make it a more evenly paced road with ways to slow the stretches down so as to not make it appealing the the " rolling coal trucks and drag racers". I don't have any great suggestions but I think some smarter engineers ought to be able to come up with some solutions. Maybe there needs to be ways to break up the speedways while creating a more even flow.		N/A	N/A		
I live barely 100 yards from Patterson Rd where I get to witness an amazingly huge amount of idiot drivers either " rolling coal" in their oversized noisy air polluting trucks or any number of crotch rockets and noisy little souped up cars intending to see how fast and loud they can get from 28 Rd to 29 Rd!		N/A	N/A	This project is meant to allow Patterson to operate to accommodate traffic for it's classification, which is a major arterial. Major arterials prioritize through movements and higher speeds. Patterson is a key east-west arterial for the City. If improvements to Patterson are not made, congestion will occur and traffic will look for alternate routes either north or south of Patterson to meet the demand. This plan also supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.	None
If there ever were a reason to pack up both my home and business this would be it! If it weren't for the fact that we love our house and aren't ones to move as a knee jerk reaction because we live near what friend that's lived here a long time has started the road " Neanderthal Blvd".		35/36/27	35/36-signalized full movement(no change), 27-3/4 movement (no change)	Commerce Blvd will likely be restricted to 3/4 movement with a public project.	None

It makes me incredibly tense every time I venture out onto Patterson (aka Neanderthal). We Don't need to make the road faster! We need to make it a more evenly paced road with ways to slow the stretches down so as to not make it appealing the the " rolling coal trucks and drag racers".		233	233-Safety RIRO(no change)	Conditional safety access point means if a safety or operational issue develops at this intersection, it will be closed. These are the only conditions that a closure could occur. Alternate access to other streets has been confirmed at all locations with a Conditional Safety designation. Specifically at Greenfield, a circulation via BookCliff Ave is available to multiple other access points.	None
I don't have any great suggestions but I think some smarter engineers ought to be able to come up with some solutions. Maybe there needs to be ways to break up the speedways while creating a more even flow.		86/86a/93	86 - Conditional RIRO, 86a - Conditional 3/4, 93 - Conditional RIRO	Based on additional public feedback, the plan has been changed as follows: Eliminate 86a. Make 86 and 93 conditional 3/4 with conditions to restrict to RIRO if safety or operational issues develop.	None
Property owner at Access 70 and 71.	Contacted by Dave Thornton	70/71	70-closed (no change), 71-conditional RIRO(no change)	Add cross access between 71 and 72. Access 71 will close upon redevelopment.	None
Potential buyer for Access 70 and 71. Interested in maintaining one access to Patterson in addition to the Lost Lane access currently proposed by the plan.	Contacted by Rick Dorris	70/71	70-closed (no change), 71-conditional RIRO(no change)	Add cross access between 71 and 72. Access 71 will close upon redevelopment.	None
Developer interested in RIRO at Access 246	Contacted by Rick Dorris	246	246- Conditional RIRO (conditions changed)	Change conditions for 246 conditional RIRO to property owner constructing right turn lane when redevelopment occurs.	None
GENERAL COMMENTS: My name is James Schultz and I worked for 30 years as a real estate consultant with Monument Realty, RE\MAX 4000, and RE\MAX Two Rivers from 1981 through 2011. I also have my Accredited Land Consultant designation through the Realty Land Institute, Rocky Mountain Region. I worked on developing land in the county and in the city and created several parcels that were built on, from home sites, recreation sites, and commercial/residential (Multi-Use) along 24 Rd. through Kathy Portner.I have traveled a lot of Europe and of course, a lot of the USA, and I cannot believe you would build (and have built) such atrocities in this county as double round-a-bouts, reverse lane changes (22 Rd Overpass), 1st street from Orchard to Patterson with speed bumps(thanks to Pat Gormley), and others. Now, you are contemplating destroying Patterson Road for 7 miles? Kathy Portner called it "calming traffic". Why don't you force all of the traffic control people to move out along Patterson and see how they like trying to negotiate their travel under those conditions? Watch what happens to emergency vehicles such as fire engines and rescue squads trying to hurry to their destinations. How many people will suffer from that? I'll bet they avoid 1st Street past Pat Gormley's house. Most businesses will be hurt by this plan along Patterson as well. Why not study the means that other growing cities use to make traffic flow smoother and easier. That would be the best thing for all parties, rather than "calming traffic" and making everybody suffer for it. Perhaps a few patrolmen, especially at night, with radar guns would solve the problem spoken of, and raise some money for the City of Grand Junction. Think about the suffering....		N/A	N/A	Access Management is a proven technique both in the US and Europe used to make traffic flow smoother and easier and extend the life of arterial corridors. It is not a traffic calming technique, but is meant to improve safety and congestion on the most critical connections and highest volume streets in cities. The plan has been reviewed with emergency services, alternate routes for circulation have been identified, and improved operations will improve the time to get to the hospital on Patterson. This plan supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.	None
Developer interested in potential for 3/4 movement at both Access 53 and 61.	Contacted by Rick Dorris	53/61	53-conditional 3/4 movement, 61-conditional 3/4 movement (conditions changed)	Conditions were removed from Access 53 and it will be a 3/4 movement. Access 61 is a conditional 3/4 movement and is conditional upon the developer demonstrating the left turn movements meet TEDS requirements based on projected traffic volumes. Access 61 will be restricted to RIRO if safety or operational issues develop.	None

Q6 Do you have any other comments, questions, or concerns?

Answered: 27 Skipped: 1

Appendix B - Existing Access Inventory

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
1	0.060	LT	2384 Patterson Rd	BA	Concrete	Y	Unsig. Full Movement
2	0.133	RT	2381, 2385, 2387 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
3	0.149	LT	2384 Patterson Rd	BA	Concrete	N	Unsig. Full Movement
4	0.157	LT	2388 Patterson Rd	FA	Dirt	N	Unsig. Full Movement
5	0.167	RT	2386 Hwy 6 & 50	BA	Asphalt	N	Unsig. Full Movement
6	0.222	RT	Rae Lynn St	PRU	Asphalt		Unsig. Full Movement
7	0.226	LT	Rae Lynn St	PRU	Asphalt		Unsig. Full Movement
8	0.292	RT	24 Rd	PRS	Asphalt		Sig. Full Movement
9	0.292	LT	24 Rd	PRS	Asphalt		Sig. Full Movement
10	0.421	RT	Market St (South side is commercial access for Mesa Mall)	PRS	Asphalt		Sig. Full Movement
11	0.421	LT	Market St (South side is commercial access for Mesa Mall)	PRS	Asphalt		Sig. Full Movement
12	0.498	LT	2412 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
13	0.505	LT	2422 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
14	0.534	LT	2424 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
15	0.600	LT	2424, 2428, 2430, 2436 Patterson Rd North, and Mesa Mall South	BA	Asphalt	N	Sig. Full Movement
16	0.600	RT	2424, 2428, 2430, 2436 Patterson Rd North, and Mesa Mall South	BA	Asphalt	N	Sig. Full Movement
17	0.675	LT	2430, 2436 Patterson Rd	BA	Asphalt	N	Unsig. 3/4 Movement
18	0.734	LT	2436, 3438, 2440 Patterson Rd and 625 24 1/2 Rd	BA	Asphalt	N	Unsig. Full Movement
19	0.814	LT	2442, 2444 Patterson Rd	BA		N	Unsig. Full Movement
20	0.855	LT	2446, 2448 Patterson Rd	BA	Asphalt	N	Unsig. 3/4 Movement
21	0.944	LT	24 1/2 Rd	PRS	Asphalt		Sig. Full Movement
22	0.944	RT	24 1/2 Rd	PRS	Asphalt		Sig. Full Movement
23	1.009	LT	2452, 2454 Patterson Rd	BA	Asphalt	N	Unsig. 3/4 Movement
24	1.031	RT	2451, 2463, 2465 Patterson Rd and 590 24 1/2 Rd	BA	Asphalt	N	Unsig. Full Movement

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
25	1.071	LT	2460, 2464 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
26	1.113	LT	2470, 2472, 2474 Patterson Rd North	BA	Asphalt	N	Unsig. Full Movement
27	1.113	RT	Commerce Blvd South	PRU	Asphalt		Unsig. Full Movement
28	1.176	LT	2470, 2472, 2474 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
29	1.235	LT	2478 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
30	1.308	LT	2482 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
31	1.325	RT	2488 Commerce Blvd	BA	Asphalt	N	Unsig. Full Movement
32	1.358	LT	2486, 2490 2494 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
33	1.404	RT	599 25 Rd	BA	Asphalt	N	Right In-Right Out
34	1.424	LT	2498 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
35	1.459	LT	25 Rd	PRS	Asphalt		Sig. Full Movement
36	1.459	RT	25 Rd	PRS	Asphalt		Sig. Full Movement
37	1.492	RT	596 25 Rd	BA	Asphalt	N	Unsig. Full Movement
38	1.538	RT	2515 Patterson Rd	BA	Asphalt	N	Unsig. 3/4 Movement
39	1.600	LT	Foresight Cir	PRU	Asphalt		Unsig. Full Movement
40	1.619	LT	Foresight Cir	PRU	Asphalt		Unsig. Full Movement
41	1.648	RT	Northgate Dr	PRU	Asphalt		Unsig. Full Movement
42	1.715	LT	2526, 2527 Patterson Rd	BA	Asphalt	N	Right In-Right Out
43	1.768	LT	2532 Patterson Rd	BA	Asphalt	N	Unsig. 3/4 Movement
44	1.861	LT	Burkey St	PRU	Asphalt		Unsig. Full Movement
45	1.932	RT	Drain	MA	Concrete	N	Unsig. Full Movement
46	1.954	RT	Drain	MA	Concrete	N	Unsig. Full Movement
47	1.975	LT	25 1/2 Rd	PRS	Asphalt		Sig. Full Movement

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
48	1.975	RT	25 1/2 Rd	PRS	Asphalt		Sig. Full Movement
49	2.040	LT	2554, 2555, 2556, 2558, 2560 Patterson Rd	BA/R	Asphalt	N	Unsig. Full Movement
50	2.092	LT	2562 Patterson Rd	R	Gravel	N	Unsig. Full Movement
51	2.104	LT	2566 Patterson Rd	R	Asphalt/Gravel	N	Unsig. Full Movement
52	2.124	LT	2570 Patterson Rd	R	Gravel	N	Unsig. Full Movement
53	2.146	LT	2570 Patterson Rd	R	Gravel	N	Unsig. Full Movement
54	2.138	RT	Cider Mill Rd	PRU	Asphalt		Unsig. Full Movement
55	2.165	LT	2566 Patterson Rd	R	Gravel	N	Unsig. Full Movement
56	2.181	LT	2572 Patterson Rd	R	Gravel	N	Unsig. Full Movement
57	2.204	LT	2574 Patterson Rd	R	Asphalt	N	Unsig. Full Movement
58	2.209	LT	2576 Patterson Rd	BA/R	Asphalt/Gravel	N	Unsig. Full Movement
59	2.229	LT	2580 Patterson Rd	BA/R	Asphalt/Gravel	N	Unsig. Full Movement
60	2.231	RT	2945-101-00-167	R	Asphalt		Unsig. Full Movement
61	2.233	LT	2580 Patterson Rd	BA/R	Asphalt/Gravel	N	Unsig. Full Movement
62	2.237	RT	25 3/4 Rd	PRU	Asphalt		Unsig. Full Movement
63	2.268	LT	2582, 2584 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
64	2.353	LT	Meander Dr	PRU	Asphalt		Unsig. Full Movement
65	2.353	RT	Meander Dr	PRU	Asphalt		Unsig. 3/4 Movement
66	2.430	LT	2594, 2596 Patterson Rd	BA	Asphalt	N	Right In-Right Out
67	2.487	LT	26 Rd	PRS	Asphalt		Sig. Full Movement
68	2.487	RT	N 1st St	PRS	Asphalt		Sig. Full Movement
69	2.561	RT	Park Dr	PRU	Asphalt		Right In-Right Out
70	2.651	RT	2615 Patterson Rd	R	Gravel	N	Unsig. Full Movement

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
71	2.674	RT	2615 Patterson Rd	R	Asphalt/Gravel	N	Unsig. Full Movement
72	2.706	RT	2621 Patterson Rd	R	Asphalt	N	Unsig. Full Movement
73	2.714	RT	2623 Patterson Rd	R	Gravel	N	Unsig. Full Movement
74	2.718	LT	2626 Patterson Rd	R	Asphalt/Gravel	N	Unsig. Full Movement
75	2.722	RT	2623 Patterson Rd	R	Gravel	N	Unsig. Full Movement
76	2.732	RT	2625 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
77	2.740	LT	2626 Patterson Rd	R	Gravel	N	Unsig. Full Movement
78	2.746	RT	2625 Patterson Rd	R	Gravel	N	Unsig. Full Movement
79	2.749	LT	2628 Patterson Rd	R	Concrete	N	Unsig. Full Movement
80	2.756	RT	326 Belaire Dr	R	Gravel	Y	Unsig. Full Movement
81	2.761	LT	2628 Patterson Rd	R	Concrete	N	Unsig. Full Movement
82	2.765	RT	336 Belaire Dr	R	Concrete	N	Unsig. Full Movement
83	2.768	LT	2630 Patterson Rd	R	Concrete	N	Unsig. Full Movement
84	2.779	LT	2630 Patterson Rd	R	Concrete	N	Unsig. Full Movement
85	2.785	LT	2632 Patterson Rd	R	Concrete	N	Unsig. Full Movement
86	2.794	RT	Mira Vista Rd	PRU	Asphalt		Unsig. Full Movement
87	2.807	LT	2634 Patterson Rd	R	Concrete/Asphalt	N	Unsig. Full Movement
88	2.818	LT	2634 Patterson Rd	R	Concrete/Asphalt	N	Unsig. Full Movement
89	2.829	LT	2636, 2638 Patterson Rd	BA/R	Concrete	N	Unsig. Full Movement
90	2.848	LT	2640 Patterson Rd	BA	Asphalt	N	Right Out-Left Out
91	2.859	LT	2640 Patterson Rd	BA	Asphalt	N	Right In-Left In
92	2.867	LT	2642 Patterson Rd	BA	Asphalt	N	Right Out-Left Out
93	2.867	RT	2635 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
94	2.878	LT	2642 Patterson Rd	BA	Asphalt	N	Right In-Left In
95	2.894	LT	2644 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
96	2.910	LT	2646 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
97	2.943	LT	2646, 2648 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
98	2.960	LT	2648 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
99	3.000	LT	26 1/2 Rd/N 7th St	PRS	Asphalt		Sig. Full Movement
100	3.000	RT	26 1/2 Rd/N 7th St	PRS	Asphalt		Sig. Full Movement
101	3.072	LT	N 8th Ct	PRU	Asphalt		Unsig. Full Movement
102	3.136	RT	2661 Patterson Rd, 750 Wellington Ave	BA	Asphalt	N	Unsig. 3/4 Movement
103	3.164	LT	2666 Patterson Rd	R	Gravel	N	Unsig. Full Movement
104	3.190	LT	View Point Dr	PRU	Asphalt		Unsig. Full Movement
105	3.216	LT	2674 Patterson Rd	R	Asphalt	N	Unsig. Full Movement
106	3.262	LT	26 3/4 Rd	PRU	Asphalt	N	Unsig. Full Movement
107	3.308	LT	2416 Patterson Rd, 935, 959 Northern Way	R	Asphalt	N	Unsig. Full Movement
108	3.333	LT	Northern Way	PRU	Asphalt	N	Unsig. Full Movement
109	3.333	RT	Private road, 2683 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
110	3.353	RT	2683 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
111	3.358	LT	960 Northern Way	R	Asphalt	N	Unsig. Full Movement
112	3.368	LT	2686 Patterson Rd	BA	Asphalt/Concrete	N	Unsig. Full Movement
113	3.376	RT	2683 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
114	3.391	RT	2687 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
115	3.395	LT	2686 Patterson Rd	BA	Asphalt/Concrete	N	Unsig. Full Movement
116	3.426	RT	2691, 2695, 2699 Patterson Rd, 2531, 2511 N 12th St	BA	Asphalt/Concrete	N	Unsig. Full Movement

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
117	3.447	RT	2691, 2695, 2699 Patterson Rd, 2531, 2511 N 12th St	BA	Asphalt/Concrete	N	Unsig. Full Movement
118	3.456	LT	2686 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
119	3.515	LT	N 12th St	PRS	Asphalt		Sig. Full Movement
120	3.515	RT	N 12th St	PRS	Asphalt		Sig. Full Movement
121	3.560	LT	2702 Patterson Rd	BA	Asphalt	N	Right In-Right Out
122	3.574	LT	2708 Patterson Rd	BA	Asphalt	N	Right In-Right Out
123	3.585	RT	2600 N 12th St	BA	Concrete	N	Unsig. 3/4 Movement
124	3.592	LT	2708 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
125	3.611	RT	2712 Patters	PO	Concrete	N	Right In-Right Out
125	3.619	LT	2710 Patterson Rd	BA	Concrete	N	Right In-Right Out
126	3.639	LT	2714 Patterson Rd	R	Concrete/Gravel	N	Right In-Right Out
127	3.643	LT	2718 Patterson Rd	R	Concrete	N	Right In-Right Out
128	3.659	LT	2718 Patterson Rd	R	Asphalt	N	Unsig. Full Movement
129	3.664	RT	2721 Patterson Rd	R	Asphalt	N	Unsig. Full Movement
130	3.744	RT	2721 Patterson Rd	R	Asphalt	N	Unsig. Full Movement
131	3.773	RT	N 15th St	PRS	Asphalt		Sig. Full Movement
132	3.773	LT	N 15th St	PRS	Asphalt		Sig. Full Movement
133	3.805	LT	2726 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
134	3.811	LT	2728 Patterson Rd	R	Gravel	N	Unsig. Full Movement
135	3.837	RT	2680 N 15th St	BA	Asphalt	N	Unsig. Full Movement
136	3.853	LT	2734 Patterson Rd	R	Gravel	Y	Unsig. Full Movement
137	3.872	LT	2736 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
138	3.875	RT	2737, 2741, 2745 Patterson Rd	R	Gravel	N	Unsig. Full Movement

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
139	3.887	RT	2737 Patterson Rd	FA	Gravel	N	Unsig. Full Movement
140	3.902	LT	2738 Patterson Rd	R	Gravel	N	Unsig. Full Movement
141	3.934	RT	2737, 2741, 2745 Patterson Rd	R	Gravel	N	Unsig. Full Movement
142	3.942	LT	2742 Patterson Rd	R	Gravel	N	Unsig. Full Movement
143	3.967	LT	Empty lot	FA	Asphalt	N	Sig. Full Movement
144	4.015	LT	Empty lot	FA	Asphalt	N	Sig. Full Movement
145	4.030	LT	27 1/2 Rd	PRS	Asphalt	N	Sig. Full Movement
146	4.061	RT	2751, 2765 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
147	4.121	LT	Spring Valley Cir	PRU	Asphalt		Unsig. 3/4 Movement
148	4.121	RT	2751, 2765 Patterson Rd	R	Asphalt	N	Unsig. Full Movement
149	4.250	RT	2771, 2773, 2775 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
150	4.258	LT	Beechwood St	PRU	Asphalt		Unsig. Full Movement
152	4.292	RT	2777 Patterson Rd	R	Asphalt	N	Unsig. Full Movement
153	4.323	LT	2778 Patterson Rd	R	Asphalt	N	Unsig. Full Movement
154	4.356	LT	Pheasant Trail Ct	PRU	Asphalt	N	Unsig. Full Movement
155	4.356	RT	El Corona Dr	PRU	Asphalt	N	Unsig. Full Movement
156	4.384	RT	Mount View Dr	PRU	Asphalt		Unsig. Full Movement
157	4.457	RT	Mantey Heights Dr	PRU	Asphalt		Unsig. Full Movement
158	4.504	RT	Santa Fe Dr	PRU	Asphalt		Unsig. Full Movement
159	4.546	LT	28 Rd	PRU	Asphalt		Unsig. Full Movement
160	4.558	RT	2801 Patterson Rd	R	Asphalt	N	Unsig. Full Movement
161	4.584	RT	E Park Ave	PRU	Asphalt		Unsig. Full Movement
162	4.620	RT	2811 Patterson Rd	R	Gravel	N	Unsig. Full Movement

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
163	4.677	RT	Rio Grande Dr	PRU	Asphalt		Unsig. Full Movement
164	4.677	LT	2814 Patterson Rd, 615 28 1/4 Rd	R/PVRU	Asphalt		Unsig. 3/4 Movement
165	4.739	RT	2813, 2815, 2825 Patterson Rd	BA	Gravel	N	Unsig. Full Movement
166	4.776	RT	2813, 2815, 2825 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
167	4.828	RT	28 1/4 Rd	PRS	Asphalt		Sig. Full Movement
168	4.828	LT	28 1/4 Rd	PRS	Asphalt		Sig. Full Movement
169	4.866	RT	2827 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
170	4.916	RT	2835 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
171	4.930	LT	2844 Patterson Rd	PVRU	Concrete/Gravel	N	Unsig. Full Movement
172	4.946	RT	Grand Cascade Way	PRU	Asphalt		Unsig. Full Movement
173	4.972	LT	2844 Patterson Rd	R	Concrete/Gravel	Y	Unsig. Full Movement
174	4.980	LT	2844 Patterson Rd	R	Concrete/Gravel	Y	Unsig. Full Movement
175	5.000	LT	2844 Patterson Rd	R	Concrete/Gravel	Y	Unsig. Full Movement
176	5.037	LT	2844 Patterson Rd	FA	Concrete/Gravel	N	Unsig. Full Movement
177	5.048	LT	2844 Patterson Rd	FA	Concrete/Gravel	N	Unsig. Full Movement
178	5.082	LT	2854 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
179	5.111	LT	2856 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
180	5.153	LT	2844 Patterson Rd	FA	Concrete/Gravel	N	Unsig. Full Movement
181	5.165	RT	Legends Way	PRU	Asphalt		Unsig. Full Movement
182	5.189	LT	2872 Patterson Rd	FA	Concrete/Gravel	N	Unsig. Full Movement
183	5.229	LT	2872 Patterson Rd	FA	Concrete/Gravel	N	Unsig. Full Movement
184	5.248	LT	28 3/4 Rd	PRU	Asphalt		Unsig. Full Movement
185	5.264	RT	598 Sinatra Way	R	Concrete/Gravel	N	Unsig. Full Movement

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
186	5.277	LT	604 28 3/4 Rd	BA	Concrete/Gravel	N	Unsig. Full Movement
187	5.280	RT	598 Sinatra Way	R	Concrete/Gravel	N	Unsig. Full Movement
188	5.288	LT	2876 Patterson Rd	R	Concrete	N	Unsig. Full Movement
189	5.302	LT	2876 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
190	5.303	RT	598 Sinatra Way	R	Concrete/Gravel	N	Unsig. Full Movement
191	5.326	RT	2879 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
192	5.360	RT	W Indian Creek Dr	PRU	Asphalt		Unsig. Full Movement
193	5.360	LT	W Indian Creek Dr	PRU	Asphalt		Unsig. Full Movement
194	5.438	RT	Belhavan Way	PRU	Asphalt		Unsig. Full Movement
195	5.447	RT	2893 Patterson Rd	BA	Concrete/Gravel	N	Unsig. Full Movement
196	5.488	LT	E Indian Creek Dr	PRU	Asphalt		Unsig. Full Movement
197	5.488	RT	2893 Patterson Rd	BA	Concrete/Gravel	N	Unsig. Full Movement
198	5.527	RT	2893 Patterson Rd	BA	Concrete/Gravel	N	Right In-Right Out
199	5.572	RT	29 Rd	PRS	Asphalt		Sig. Full Movement
200	5.572	LT	29 Rd	PRS	Asphalt		Sig. Full Movement
199	5.603	RT	Pull off	PO	Concrete	N	Unsig. Full Movement
201	5.610	LT	2902, 2904, 2906 Patterson Rd, 606, 608 29 Rd	BA	Concrete	N	Right In-Right Out
202	5.645	LT	2908 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
203	5.662	LT	2910 Patterson Rd	R	Concrete	N	Unsig. Full Movement
204	5.679	LT	2912 Patterson Rd	R	Concrete/Dirt	N	Unsig. Full Movement
205	5.679	RT	2901, 2903, 2905, 2913, 2915 Patterson Rd	BA	Asphalt	N	Unsig. 3/4 Movement
206	5.696	LT	2914 Patterson Rd	R	Concrete	Y	Unsig. Full Movement
207	5.719	RT	2901, 2903, 2905, 2913, 2915 Patterson Rd	BA	Asphalt	N	Right In-Right Out

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
208	5.732	LT	Partee Dr	PRU	Asphalt		Unsig. Full Movement
209	5.750	RT	2917 Patterson Rd	R	Asphalt/Concrete	N	Unsig. Full Movement
210	5.758	LT	2918 Patterson Rd	R	Asphalt/Concrete	Y	Unsig. Full Movement
211	5.792	LT	Cris-Mar St	PRU	Asphalt		Unsig. Full Movement
212	5.795	RT	Redwing Ln	PRU	Asphalt		Unsig. Full Movement
213	5.823	LT	2943-053-40-000	R	Concrete	Y	Unsig. Full Movement
214	5.836	LT	2926 Patterson Rd	R	Concrete/Asphalt	N	Unsig. Full Movement
215	5.858	LT	2926 Patterson Rd	R	Concrete/Asphalt	N	Unsig. Full Movement
216	5.858	RT	29 1/4 Rd	PRU	Asphalt		Unsig. Full Movement
217	5.880	LT	2934 Patterson Rd	R	Concrete/Dirt	N	Unsig. Full Movement
218	5.891	LT	2934 Patterson Rd	R	Concrete/Dirt	N	Unsig. Full Movement
219	5.897	LT	2938 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
220	5.905	LT	2938 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
221	5.931	LT	29 3/8 Rd	PRU	Asphalt		Unsig. Full Movement
222	5.931	RT	29 3/8 Rd	PRU	Asphalt		Unsig. Full Movement
223	5.951	LT	2940 Patterson Rd	R	Concrete	N	Unsig. Full Movement
224	5.969	LT	2942 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
225	5.974	RT	2939 Patterson Rd	R	Concrete	Y	Unsig. Full Movement
226	6.000	LT	2944 Patterson Rd	R	Concrete/Dirt	N	Unsig. Full Movement
227	6.020	RT	Colanwood St	PRU	Asphalt		Unsig. Full Movement
228	6.025	LT	2948 Patterson Rd	BA	Asphalt	N	Unsig. 3/4 Movement
229	6.041	RT	2945 Patterson Rd	R	Concrete/Asphalt	N	Unsig. Full Movement
230	6.057	RT	599 29 1/2 Rd	BA	Concrete/Asphalt	N	Unsig. Full Movement

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
231	6.087	RT	29 1/2 Rd	PRS	Asphalt		Sig. Full Movement
232	6.087	LT	29 1/2 Rd	PRS	Asphalt		Sig. Full Movement
233	6.160	RT	E Greenfield Cir	PRU	Asphalt		Unsig. Full Movement
234	6.188	LT	Pioneer Rd	PRU	Asphalt		Unsig. Full Movement
235	6.243	LT	Broken Spoke Rd	PRU	Asphalt		Unsig. Full Movement
236	6.282	RT	Darby Dr	PRU	Asphalt		Unsig. Full Movement
237	6.345	LT	Maintenance access	MA	Gravel		Unsig. Full Movement
238	6.352	RT	2977 Patterson Rd	R	Concrete/Dirt	N	Unsig. Full Movement
239	6.390	LT	2980 Patterson Rd	FA	Concrete	N	Sig. Full Movement
240	6.400	RT	Placer St	PRU	Asphalt		Unsig. Full Movement
241	6.400	LT	2982 Patterson Rd	FA	Concrete	N	Sig. Full Movement
242	6.400	LT	2982 Patterson Rd	FA	Concrete	N	Sig. Full Movement
243	6.474	RT	Maintenance access	MA	Concrete	Y	Unsig. Full Movement
244	6.497	LT	Hudson Bay Dr	PRU	Asphalt		Unsig. Full Movement
245	6.497	RT	599 30 Rd	BA	Asphalt	N	Unsig. Full Movement
246	6.528	LT	2992 Patterson Rd	BA	Asphalt	N	Unsig. 3/4 Movement
247	6.532	RT	599 30 Rd	BA	Asphalt	N	Unsig. Full Movement
248	6.600	RT	30 Rd	PRS	Asphalt		Sig. Full Movement
249	6.600	LT	30 Rd	PRS	Asphalt		Sig. Full Movement
250	6.667	LT	Ronlin Dr	PRU	Asphalt		Unsig. Full Movement
251	6.721	LT	Agana Dr	PRU	Asphalt		Unsig. Full Movement
252	6.721	RT	Agana Dr	PRU	Asphalt		Unsig. Full Movement
253	6.776	LT	Starlight Dr	PRU	Asphalt		Unsig. Full Movement

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
254	6.831	LT	Serenade St	PRU	Asphalt		Unsig. Full Movement
255	6.831	RT	Serenade St	PRU	Asphalt		Unsig. Full Movement
256	6.863	RT	3027 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
257	6.863	LT	3026 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
258	6.882	LT	3026 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
259	6.897	LT	3028 Patterson Rd	R	Concrete/Dirt	N	Unsig. Full Movement
260	6.911	LT	3030 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
261	6.913	RT	McMullin Dr	PRU	Asphalt		Unsig. Full Movement
262	6.962	RT	Gerken Rd	PRU	Asphalt		Unsig. Full Movement
263	6.962	LT	Round Table Rd	PRU	Asphalt		Unsig. Full Movement
264	6.991	RT	599 Grand Valley Dr	R	Concrete/Gravel	N	Unsig. Full Movement
265	7.002	RT	599 Grand Valley Dr	R	Concrete/Gravel	N	Unsig. Full Movement
266	7.016	RT	Grand Valley Dr	PRU	Asphalt		Unsig. Full Movement
267	7.016	LT	Grand Valley Dr	PRU	Asphalt		Unsig. Full Movement
268	7.039	RT	598 Grand Valley Dr	FA	Dirt	N	Unsig. Full Movement
269	7.053	RT	3047 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
270	7.060	LT	3044 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
271	7.082	RT	3047 Patterson Rd	R	Asphalt	N	Unsig. Full Movement
272	7.111	RT	3049 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
273	7.120	LT	Mesa Valley Dr	PRU	Asphalt		Unsig. Full Movement
274	7.147	LT	3054 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
275	7.147	RT	Shoshone St	PRU	Asphalt		Unsig. Full Movement
276	7.168	LT	3054 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate CDOT reference point (milepost) (in hundredths of a mile) based on CDOT Highway Data Explorer.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections shall accommodate U-turns for design vehicle
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6 .Implement with development, redevelopment or use change
7. If City, Town, County or CDOT improves SH 402 or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the highway or local street system is provided.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.

Access ID No.	Mile Post **	Side	Description	Type	Surface Material	Gate* (Y/N)	Existing Configuration
277	7.221	LT	Cottage Meadows Ct	PRU	Asphalt		Unsig. Full Movement
278	7.243	RT	3065 Patterson Rd	BA	Concrete/Gravel	Y	Unsig. Full Movement
279	7.256	LT	3064 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
280	7.264	LT	3066 Patterson Rd	R	Concrete/Dirt	Y	Unsig. Full Movement
281	7.276	LT	3068 Patterson Rd	R	Concrete	N	Unsig. Full Movement
282	7.279	RT	3067 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
283	7.290	LT	3068 Patterson Rd	R	Concrete	N	Unsig. Full Movement
284	7.295	RT	3073 Patterson Rd	BA	Concrete/Gravel	Y	Unsig. Full Movement
285	7.319	RT	3073 Patterson Rd	FA	Concrete/Dirt	Y	Unsig. Full Movement
286	7.341	RT	3073 Patterson Rd	BA	Concrete/Asphalt	Y	Unsig. Full Movement
287	7.349	LT	Lodgepole St	PRU	Asphalt		Unsig. Full Movement

Legend	
Access Type	Abbreviation
Business/Commercial Access	BA
Field Access	FA
Maintenance Access	MA
Residential Access	R
Pull Off	PO
Public Road Signalized	PRS
Public Road Unsignalized	PRU
Private Road Unsignalized	PVRU

Appendix C - Crash History

#	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
1	PATTERSON RD & NORTH GATE DR	1/6/2014	11:35:00 AM	PDO	0		At Intersection	Front to Rear	S	Backing	Stop in Traff
2	PATTERSON RD & 1ST ST	1/7/2014	10:01:00 AM	PDO	0		At Intersection	Front to Rear	E	Going Straight	Stop in Traff
3	PATTERSON RD & 7TH ST	1/7/2014	10:23:00 AM	PDO	0		At Intersection	Front to Side	N	Left Turn	Going Straight
4	PATTERSON RD & 12TH ST	1/8/2014	10:19:00 AM	PDO	0		At Intersection	Front to Side	N	Right Turn	Going Straight
5	25 RD & PATTERSON RD	1/9/2014	12:30:00 PM	PDO	50	South	Non-Int	Front to Rear	N	Going Straight	Stop in Traff
6	24 1/2 RD & PATTERSON RD	1/10/2014	2:46:00 PM	PDO	30	South	Intersection Related	Front to Rear	N	Going Straight	Stop in Traff
7	1ST ST & PATTERSON RD	1/17/2014	8:31:00 AM	PDO	25	North	Non-Int	Front to Rear	S	Going Straight	Stop in Traff
8	PATTERSON RD & 29 RD	1/19/2014	12:42:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Going Straight
9	PATTERSON RD & 24 RD	1/22/2014	2:42:00 PM	PDO	0		Intersection Related	Front to Rear	E	Going Straight	Stop in Traff
10	24 1/2 RD & PATTERSON RD	1/24/2014	9:43:00 PM	PDO	62	South	Non-Int	Same Dir Side Side	S	Going Straight	Going Straight
11	W. INDIAN CREEK DR & PATTERSON RD	1/24/2014	3:17:00 PM	PDO	50	West	Non-Int	Front to Rear	E	Going Straight	Stop in Traff
12	PATTERSON RD & 12TH ST	1/27/2014	11:09:00 AM	INJ	0		At Intersection	Front to Front	W	Left Turn	Going Straight
13	PATTERSON RD & 25 RD	1/28/2014	12:14:00 PM	PDO	0		At Intersection	Front to Front	W	Left Turn	Going Straight
14	PATTERSON RD & MIRA VISTA RD	1/30/2014	6:21:00 PM	PDO	200	West	Non-Int	Front to Rear	E	Going Straight	Slowing
15	12TH ST & PATTERSON RD	1/31/2014	1:04:00 PM	PDO	100	South	Non-Int	Front to Rear	N	Going Straight	Stop in Traff
16	PATTERSON RD & 1ST ST	2/1/2014	9:44:00 AM	PDO	20	East	At Intersection	Same Dir Side Side	W	Changing Lanes	Going Straight
17	PATTERSON RD & 30 RD	2/3/2014	5:39:00 PM	PDO	0		At Intersection	Front to Side	N	Right Turn	Going Straight
18	PATTERSON RD & 27 1/2 RD	2/4/2014	6:30:00 AM	PDO	0		At Intersection	Front to Side	W	Going Straight	Left Turn
19	PATTERSON RD & 29 RD	2/4/2014	7:30:00 AM	PDO	0		Intersection Related	Front to Rear	S	Slowing	Stop in Traff
20	PATTERSON RD & PARTEE DR	2/6/2014	10:25:00 AM	PDO	30	West	Non-Int	Same Dir Side Side	W	Changing Lanes	Going Straight
21	PATTERSON RD & 24 1/2 RD	2/7/2014	11:49:00 AM	PDO	0		At Intersection	Front to Side	E	Left Turn	Going Straight
22	PATTERSON RD & 30 RD	2/8/2014	6:47:00 PM	PDO	350	West	Drive Acc Relat	Front to Side	E	Left Turn	Going Straight
23	PATTERSON RD & 8TH CT	2/10/2014	3:34:00 PM	PDO	0		Non-Int	Front to Rear	E	Going Straight	Stop in Traff
24	PATTERSON RD & SERANADE ST	2/13/2014	6:54:00 PM	PDO	50	West	Drive Acc Relat	Opp Dir Side Side	S	Left Turn	Going Straight
25	PATTERSON RD & GREENFIELD CIR EAST	2/14/2014	7:05:00 PM	PDO	0		At Intersection	Light/Util Pole	E	Right Turn	UNK
26	PATTERSON RD & 28 3/4 RD	2/19/2014	3:12:00 PM	PDO	80	East	Intersection Related	Front to Rear	W	Slowing	Slowing
27	25 RD & PATTERSON RD	2/19/2014	3:31:00 PM	PDO	150	North	Drive Acc Relat	Front to Side	N	Left Turn	Going Straight
28	PATTERSON RD & 12TH ST	2/22/2014	3:20:00 PM	PDO	200	West	Drive Acc Relat	Front to Side	N	Right Turn	Going Straight
29	24 1/2 RD & PATTERSON RD	2/24/2014	12:29:00 PM	PDO	500	South	Drive Acc Relat	Front to Side	E	Left Turn	Going Straight
30	PATTERSON RD & 24 1/2 RD	2/27/2014	4:35:00 PM	PDO	25	West	Intersection Related	Front to Rear	E	Changing Lanes	Stop in Traff
31	PATTERSON RD & 7TH ST	2/28/2014	1:56:00 PM	PDO	100	West	Non-Int	Front to Rear	W	Going Straight	Going Straight
32	25 RD & PATTERSON RD	3/3/2014	2:06:00 PM	PDO	175	North	Drive Acc Relat	Front to Side	N	Left Turn	Going Straight
33	PATTERSON RD & 24 1/2 RD	3/4/2014	11:23:00 AM	PDO	0		At Intersection	Same Dir Side Side	E	Right Turn	Stop in Traff
34	7TH ST & PATTERSON RD	3/5/2014	1:57:00 PM	INJ	417	North	Drive Acc Relat	Overturning	S	Going Straight	Left Turn
35	PATTERSON RD & 27 1/2 RD	3/7/2014	7:50:00 PM	PDO	1320	East	Non-Int	Same Dir Side Side	E	Changing Lanes	Going Straight
36	PATTERSON RD & 1ST ST	3/8/2014	3:24:00 PM	PDO	100	East	Non-Int	Front to Rear	W	Going Straight	Stop in Traff
37	I-70B & PATTERSON RD	3/9/2014	3:15:00 PM	INJ	1266	West	Non-Int	Front to Rear	W	Going Straight	Going Straight
38	PATTERSON RD & 7TH ST	3/11/2014	10:00:00 AM	PDO	20	East	Intersection Related	Front to Rear	W	Going Straight	Slowing
39	PATTERSON RD & 1ST ST	3/11/2014	12:48:00 PM	PDO	300	East	Non-Int	Front to Rear	W	Going Straight	Stop in Traff
40	PATTERSON RD & MARKET STREET	3/15/2014	9:37:00 PM	PDO	0		At Intersection	Front to Side	W	Going Straight	Going Straight
41	PATTERSON RD & 7TH ST	3/18/2014	11:31:00 AM	PDO	0		Intersection Related	Front to Rear	E	Going Straight	Stop in Traff
42	PATTERSON RD & 7TH ST	3/18/2014	2:01:00 PM	PDO	0		At Intersection	Front to Side	W	Going Straight	Left Turn
43	24 RD & PATTERSON RD	3/19/2014	4:29:00 PM	PDO	80	South	Non-Int	Front to Rear	S	Changing Lanes	Going Straight
44	PATTERSON RD & 24 RD	3/19/2014	2:37:00 PM	PDO	0		Non-Int	Front to Rear	W	Going Straight	Stop in Traff
45	PATTERSON RD & 12TH ST	3/20/2014	4:42:00 PM	PDO	778	West	Non-Int	Front to Rear	E	Going Straight	Stop in Traff
46	PATTERSON RD & 7TH ST	3/23/2014	7:36:00 AM	PDO	0		At Intersection	Front to Side	E	Going Straight	Going Straight
47	PATTERSON RD & BEECHWOOD ST	3/24/2014	4:01:00 PM	PDO	0		At Intersection	Front to Side	S	Right Turn	Going Straight
48	PATTERSON RD & 26 1/4 RD	3/24/2014	4:35:00 PM	PDO	0		Non-Int	Front to Rear	W	Going Straight	Slowing
49	PATTERSON RD & 12TH ST	3/26/2014	11:54:00 AM	INJ	0		At Intersection	Front to Rear	W	Going Straight	Stop in Traff
50	PATTERSON RD & 7TH ST	3/26/2014	4:15:00 PM	PDO	0		At Intersection	Front to Rear	N	Left Turn	Left Turn
51	PATTERSON RD & 12TH ST	3/28/2014	8:20:00 PM	PDO	0		At Intersection	Front to Side	E	Right Turn	Stop in Traff
52	24 1/2 RD & PATTERSON RD	3/30/2014	11:00:00 AM	PDO	500	South	Drive Acc Relat	Front to Side	E	Left Turn	Going Straight
53	PATTERSON RD & 27 1/2 RD	3/31/2014	8:00:00 AM	PDO	0		At Intersection	Front to Front	W	Going Straight	Stop in Traff
54	25 RD & PATTERSON RD	4/1/2014	11:00:00 AM	PDO	150	North	Drive Acc Relat	Front to Side	E	Left Turn	Going Straight
55	PATTERSON RD & HOME DEPOT	4/3/2014	4:34:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Going Straight
56	24 1/2 RD & PATTERSON RD	4/3/2014	3:39:00 PM	PDO	500	South	Drive Acc Relat	Front to Side	E	Left Turn	Going Straight
57	PATTERSON RD & 12TH ST	4/3/2014	1:47:00 PM	PDO	100	East	Non-Int	Front to Rear	W	Going Straight	Stop in Traff
58	PATTERSON RD & GRAND CASCADE WAY	4/4/2014	9:17:00 AM	PDO	0		Intersection Related	Front to Rear	N	Going Straight	Stop in Traff
59	24 1/2 RD & PATTERSON RD	4/4/2014	12:09:00 PM	PDO	500	South	Drive Acc Relat	Front to Side	E	Left Turn	Going Straight
60	PATTERSON RD & HOME DEPOT	4/5/2014	11:58:00 AM	PDO	0		Intersection Related	Front to Rear	W	Going Straight	Stop in Traff
61	PATTERSON RD & 29 1/2 RD	4/6/2014	2:09:00 PM	PDO	100	East	Intersection Related	Front to Rear	W	Slowing	Stop in Traff
62	PATTERSON RD & 24 RD	4/8/2014	2:57:00 PM	INJ	0		At Intersection	Front to Side	N	Left Turn	Going Straight
63	PATTERSON RD & 29 RD	4/10/2014	9:31:00 PM	PDO	0		Intersection Related	Front to Front	E	Right Turn	Left Turn
64	PATTERSON RD & 27 1/2 RD	4/11/2014	7:40:00 AM	PDO	0		At Intersection	Front to Side	W	Going Straight	Left Turn
65	PATTERSON RD & 24 RD	4/12/2014	9:04:00 AM	PDO	0		At Intersection	Front to Rear	W	Going Straight	Going Straight
66	25 RD & PATTERSON RD	4/16/2014	4:39:00 PM	PDO	241	South	Intersection Related	Front to Rear	N	Going Straight	Stop in Traff
67	PATTERSON RD & 7TH ST	4/17/2014	2:11:00 PM	PDO	0		At Intersection	Front to Front	E	Right Turn	Left Turn
68	PATTERSON RD & MEANDER DR	4/18/2014	3:44:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Going Straight
69	7TH ST & PATTERSON RD	4/18/2014	2:09:00 PM	PDO	30	South	Non-Int	Front to Rear	N	Going Straight	Stop in Traff
70	PATTERSON RD & 30 RD	4/21/2014	2:37:00 PM	PDO	0		At Intersection	Front to Side	E	Left Turn	Left Turn
71	RIO GRANDE DR & PATTERSON RD	4/21/2014	4:42:00 PM	PDO	40	East	Non-Int	Front to Rear	E	Going Straight	Stop in Traff
72	1ST ST & PATTERSON RD	4/22/2014	5:00:00 PM	PDO	20	South	Intersection Related	Front to Rear	N	Going Straight	Stop in Traff
73	SERANADE ST & PATTERSON RD	4/23/2014	7:16:00 AM	INJ	0		At Intersection	Park Motor Veh	W	Other	Parked
74	24 RD & PATTERSON RD	4/23/2014	10:53:00 AM	PDO	50	North	Intersection Related	Front to Rear	S	Backing	Stop in Traff
75	PATTERSON RD & MARKET STREET	4/25/2014	12:26:00 PM	PDO	0		At Intersection	Front to Side	E	Left Turn	Going Straight
76	PATTERSON RD & 7TH ST	4/27/2014	3:11:00 PM	PDO	0		At Intersection	Front to Rear	N	Right Turn	Going Straight
77	PATTERSON RD & 27 1/2 RD	4/28/2014	5:22:00 PM	PDO	500	West	Non-Int	Front to Rear	E	Going Straight	Slowing
78	PATTERSON RD & 28 1/4 RD	4/30/2014	8:09:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Going Straight
79	PATTERSON RD & 15TH ST	5/1/2014	8:18:00 AM	PDO	300	West	Drive Acc Relat	Front to Rear	W	Going Straight	Stop in Traff
80	PATTERSON RD & 28 RD	5/2/2014	5:45:00 PM	INJ	0		At Intersection	Front to Front	S	Left Turn	Going Straight
81	PATTERSON RD & 12TH ST	5/4/2014	7:24:00 AM	PDO	0		At Intersection	Front to Side	N	Going Straight	Going Straight
82	PATTERSON RD & 24 RD	5/5/2014	4:11:00 PM	PDO	0		At Intersection	Front to Side	N	Going Straight	Going Straight
83	PATTERSON RD & 7TH ST	5/5/2014	1:11:00 PM	PDO	530	West	Non-Int	Front to Rear	W	Going Straight	Stop in Traff
84	PATTERSON RD & 24 RD	5/8/2014	3:44:00 PM	PDO	0		At Intersection	Front to Rear	W	Going Straight	Going Straight
85	PATTERSON RD & 28 1/4 RD	5/8/2014	7:08:00 AM	PDO	0		At Intersection	Front to Side	E	Going Straight	Left Turn
86	PATTERSON RD & GRAND CASCADE WAY	5/8/2014	8:00:00 AM	PDO	400	East	Non-Int	Same Dir Side Side	W	U-Turn	Going Straight
87	PATTERSON RD & 1ST ST	5/9/2014	10:13:00 AM	PDO	100	West	Non-Int	Same Dir Side Side	E	Changing Lanes	Going Straight
88	PATTERSON RD & RIO GRANDE DR	5/13/2014	5:09:00 PM	PDO	10	East	Non-Int	Front to Rear	E	Going Straight	Stop in Traff
89	PATTERSON RD & PARTEE DR	5/14/2014	7:52:00 AM	PDO	200	East	Non-Int	Front to Rear	W	Going Straight	Slowing
90	PATTERSON RD & 15TH ST	5/21/2014	8:30:00 AM	PDO	0		At Intersection	Front to Side	W	Going Straight	Left Turn
91	PATTERSON RD & 7TH ST	5/28/2014	9:32:00 PM	PDO	0		At Intersection	Front to Side	E	Going Straight	Left Turn
92	PATTERSON RD & MCMULLIN DR	5/30/2014	2:02:00 PM	PDO	90	West	Drive Acc Relat	Front to Rear	W	Going Straight	Slowing
93	PATTERSON RD & 1ST ST	6/2/2014	3:14:00 PM	PDO	0		At Intersection	Front to Side	N	Right Turn	Going Straight
94	PATTERSON RD & 12TH ST	6/4/2014	10:52:00 AM	PDO	275	East	Intersection Related	Same Dir Side Side	W	Changing Lanes	Changing Lanes
95	PATTERSON RD & 29 RD	6/4/2014	6:29:00 PM	PDO	25	East	Intersection Related	Same Dir Side Side	W	Right Turn	Going Straight
96	PATTERSON RD & MARKET STREET	6/4/2014	3:16:00 PM	PDO	30	East	Intersection Related	Front to Rear	W	Slowing	Stop in Traff
97	PATTERSON RD & 29 1/2 RD	6/6/2014	9:58:00 AM	PDO	0		At Intersection	Front to Side	S	Left Turn	Going Straight
98	PATTERSON RD & 29 RD	6/7/2014	10:51:00 PM	PDO	0		At Intersection	Front to Front	E	Left Turn	Going Straight
99	PATTERSON RD & 27 1/2 RD	6/9/2014	5:24:00 PM	PDO	1320	West	Intersection Related	Front to Rear	E	Going Straight	Slowing
100	LEGENDS WAY & PATTERSON RD	6/13/2014	3:14:00 PM	PDO	20	South	Intersection Related	Front to Rear	N	Going Straight	Stop in Traff
101	PATTERSON RD & 28 RD	6/14/2014	9:44:00 AM	INJ	0		At Intersection	Front to Side	S	Left Turn	Going Straight
102	PATTERSON RD & 30 RD	6/15/2014	3:06:00 PM	PDO	50	East	Intersection Related	Front to Rear	W	Going Straight	Stop in Traff
103	29 RD & PATTERSON RD	6/18/2014	7:47:00 PM	PDO			Intersection Related	Opp Dir Side Side	W	Left Turn	Stop in Traff
104	PATTERSON RD & 29 1/2 RD	6/18/2014	1:57:00 PM	PDO	100	East	Non-Int	Front to Rear	W	Going Straight	Slowing
105	PATTERSON RD & 12TH ST	6/20/2014	8:27:00 AM	PDO	0		At Intersection	Front to Side	W	Left Turn	Going Straight
106	PATTERSON RD & 28 1/4 RD	6/21/2014	3:38:00 PM	PDO	0		At Intersection	Tree	E	Going Straight	Going Straight
107	PATTERSON RD & 25 1/2 RD	6/21/2014	1:24:00 PM	PDO	250	East	Non-Int	Front to Rear	W	Going Straight	Stop in Traff
108	PATTERSON RD & 25 3/4 RD	6/26/2014	8:42:00 PM	PDO	139	East	Non-Int	Wild Animal	W	Going Straight	UNK
109	PATTERSON RD & 12TH ST	6/27/2014	9:57:00 AM	PDO	0		At Intersection	Same Dir Side Side	N	Right Turn	Going Straight
110	PATTERSON RD & SPRING VALLEY CIR	6/27/2014	9:37:00 AM	PDO	0		Non-Int	Front to Rear	W	Going Straight	Slowing
111	PATTERSON RD & 27 1/2 RD	6/28/2014	8:44:00 AM	PDO	0		At Intersection	Front to Side	S	Right Turn	Going Straight
112	PATTERSON RD & SANTA FE DR	7/1/2014	5:21:00 PM	INJ	0		Non-Int	Front to Rear	E	Going Straight	Stop in Traff
113	PATTERSON RD & COMMERCE BLVD	7/1/2014	12:31:00 PM	PDO	200	East	Drive Acc Relat	Front to Side	N	Left Turn	Going Straight
114	25 3/4 RD & PATTERSON RD	7/2/2014	5:48:00 PM	INJ	0		At Intersection	Front to Side	N	Left Turn	Going Straight
115	25 RD & PATTERSON RD	7/6/2014	3:23:00 PM	PDO	10	South	Intersection Related	Front to Rear	N	Going Straight	Stop in Traff
116	PATTERSON RD & 28 RD	7/10/2014	3:43:00 PM	PDO	0		At Intersection	Front to Side	S	Left Turn	Going Straight
117	PATTERSON RD & 1ST ST	7/14/2014	1:44:00 PM	PDO	100	East	Intersection Related	Front to Rear	W	Going Straight	Stop in Traff
118	PATTERSON RD & BELLHAVEN WAY	7/16/2014	1:21:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Going Straight

#	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
119	PATTERSON RD & 28 RD	7/21/2014	1:03:00 PM	INJ	0		At Intersection	Front to Side	S	Left Turn	Going Straight
120	PATTERSON RD & 29 RD	7/22/2014	11:15:00 AM	PDO	0		At Intersection	Front to Front	N	Left Turn	Going Straight
121	28 1/4 RD & PATTERSON RD	7/25/2014	1:37:00 PM	PDO	50	South	At Intersection	Front to Rear	N	Going Straight	Stop in Traff
122	PATTERSON RD & MEANDER DR	7/30/2014	12:24:00 PM	PDO	0		At Intersection	Front to Side	N	Going Straight	Going Straight
123	PATTERSON RD & 29 RD	8/1/2014	6:05:00 PM	INJ	0		At Intersection	Rear to Rear	W	Left Turn	Going Straight
124	PATTERSON RD & 29 RD	8/1/2014	6:55:00 PM	INJ	1238	West	Non-Int	Front to Rear	E	Going Straight	Stop in Traff
125	PATTERSON RD & MARKET STREET	8/2/2014	4:29:00 PM	PDO	20	West	Non-Int	Front to Rear	E	Going Straight	Stop in Traff
126	PATTERSON RD & FORESIGHT CIR SOUTH	8/4/2014	3:06:00 PM	PDO	30	East	Non-Int	Front to Rear	W	Going Straight	Slowing
127	PATTERSON RD & MEANDER DR	8/4/2014	9:49:00 AM	PDO	0		At Intersection	Front to Side	S	Right Turn	Going Straight
128	PATTERSON RD & 24 1/2 RD	8/6/2014	4:09:00 PM	PDO	40	West	Intersection Related	Same Dir Side Side	E	Right Turn	Going Straight
129	PATTERSON RD & MARKET STREET	8/9/2014	12:19:00 PM	PDO	350	East	Drive Acc Relat	Front to Side	S	Left Turn	Going Straight
130	PATTERSON RD & 29 1/2 RD	8/11/2014	7:25:00 AM	PDO	200	East	Non-Int	Front to Rear	W	Going Straight	Stop in Traff
131	PATTERSON RD & 12TH ST	8/11/2014	9:24:00 AM	PDO	200	East	Non-Int	Front to Rear	W	Going Straight	Stop in Traff
132	PATTERSON RD & EAST INDIAN CREEK D	8/11/2014	5:42:00 PM	PDO	0		At Intersection	Front to Rear	E	Going Straight	Stop in Traff
133	PATTERSON RD & 27 1/2 RD	8/14/2014	10:44:00 AM	INJ	0		At Intersection	Front to Side	S	Right Turn	Going Straight
134	24 1/2 RD & PATTERSON RD	8/14/2014	1:23:00 PM	PDO	500	South	At Intersection	Front to Side	E	Left Turn	Going Straight
135	PATTERSON RD & 25 RD	8/15/2014	11:13:00 AM	PDO	0		Drive Acc Relat	Front to Rear	N	Going Straight	Going Straight
136	PATTERSON RD & 24 1/2 RD	8/15/2014	5:08:00 PM	PDO	0		At Intersection	Front to Rear	N	Going Straight	Stop in Traff
137	24 1/2 RD & PATTERSON RD	8/19/2014	10:19:00 AM	PDO	500	South	At Intersection	Front to Rear	W	Backing	Stop in Traff
138	24 RD & PATTERSON RD	8/19/2014	12:20:00 PM	PDO	0		At Intersection	Same Dir Side Side	SE	Left Turn	Left Turn
139	PATTERSON RD & MEANDER DR	8/20/2014	4:05:00 PM	INJ	15	East	At Intersection	Front to Rear	W	Going Straight	Stop in Traff
140	PATTERSON RD & 27 1/2 RD	8/20/2014	9:00:00 AM	PDO	250	West	Non-Int	Front to Rear	E	Going Straight	Stop in Traff
141	I-70B & PATTERSON RD	8/20/2014	1:57:00 PM	PDO	0		At Intersection	Sign	E	Left Turn	UNK
142	30 RD & PATTERSON RD	8/21/2014	4:40:00 PM	PDO	100	South	Non-Int	Same Dir Side Side	N	Changing Lanes	Going Straight
143	PATTERSON RD & 12TH ST	8/21/2014	7:23:00 AM	PDO	20	East	Intersection Related	Front to Rear	W	Going Straight	Right Turn
144	PATTERSON RD & RIO GRANDE DR	8/22/2014	5:23:00 PM	PDO	0		Intersection Related	Front to Rear	E	Slowing	Stop in Traff
145	PATTERSON RD & 28 1/4 RD	8/23/2014	9:00:00 AM	PDO	632	East	Drive Acc Relat	Front to Rear	W	Going Straight	Slowing
146	12TH ST & PATTERSON RD	8/23/2014	5:11:00 PM	PDO	150	South	Non-Int	Same Dir Side Side	N	Changing Lanes	Going Straight
147	PATTERSON RD & 7TH ST	8/25/2014	10:38:00 AM	PDO	100	West	Non-Int	Front to Rear	W	Going Straight	Slowing
148	PATTERSON RD & 27 1/2 RD	8/25/2014	4:48:00 PM	PDO	700	West	Non-Int	Front to Rear	E	Going Straight	Slowing
149	29 RD & PATTERSON RD	8/26/2014	12:19:00 PM	PDO	350	South	Drive Acc Relat	Same Dir Side Side	N	Right Turn	Right Turn
150	PATTERSON RD & 12TH ST	8/27/2014	8:53:00 AM	INJ	775	West	Intersection Related	Front to Rear	W	Going Straight	Stop in Traff
151	7TH ST & PATTERSON RD	8/27/2014	3:40:00 PM	INJ	30	South	Intersection Related	Front to Rear	N	Going Straight	Going Straight
152	PATTERSON RD & 1ST ST	8/27/2014	2:02:00 PM	PDO	30	West	Non-Int	Front to Rear	W	Going Straight	Slowing
153	PATTERSON RD & 7TH ST	8/27/2014	3:32:00 PM	PDO	200	West	Non-Int	Front to Rear	E	Going Straight	Going Straight
154	PATTERSON RD & MARKET STREET	8/28/2014	10:58:00 AM	PDO	0		At Intersection	Front to Side	E	Going Straight	Left Turn
155	PATTERSON RD & 29 RD	8/31/2014	3:17:00 PM	PDO	0		At Intersection	Overturning	N	Right Turn	Going Straight
156	PATTERSON RD & 7TH ST	9/1/2014	6:48:00 PM	PDO	0		Intersection Related	Front to Rear	W	Going Straight	Stop in Traff
157	PATTERSON RD & 29 RD	9/2/2014	4:22:00 PM	INJ	512	West	Non-Int	Front to Rear	E	Going Straight	Stop in Traff
158	PATTERSON RD & MIRA VISTA DR	9/2/2014	6:01:00 PM	PDO	377	West	Drive Acc Relat	Front to Side	N	Left Turn	Going Straight
159	PATTERSON RD & 24 1/2 RD	9/3/2014	10:33:00 AM	INJ	250	East	Drive Acc Relat	Front to Side	N	Right Turn	Going Straight
160	25 RD & PATTERSON RD	9/4/2014	3:18:00 PM	INJ	150	North	Drive Acc Relat	Front to Side	N	Left Turn	Going Straight
161	PATTERSON RD & 28 1/4 RD	9/5/2014	4:26:00 PM	PDO	250	East	Non-Int	Front to Rear	W	Changing Lanes	Going Straight
162	PATTERSON RD & 1ST ST	9/6/2014	7:42:00 PM	INJ	750	East	Non-Int	Front to Rear	W	Going Straight	Slowing
163	PATTERSON RD & 25 RD	9/8/2014	4:53:00 PM	PDO	0		At Intersection	Other Harm Obj	S	Backing	Stop in Traff
164	PATTERSON RD & 15TH ST	9/11/2014	7:39:00 AM	PDO	0		At Intersection	Front to Side	W	Going Straight	Left Turn
165	PATTERSON RD & 7TH ST	9/13/2014	9:25:00 PM	PDO	100	East	Non-Int	Same Dir Side Side	E	Changing Lanes	Going Straight
166	PATTERSON RD & 12TH ST	9/14/2014	9:39:00 PM	PDO	0		At Intersection	Overturning	E	Left Turn	Going Straight
167	PATTERSON RD & BURKEY ST	9/15/2014	9:38:00 AM	PDO	0		At Intersection	Front to Rear	W	Going Straight	Right Turn
168	28 RD & PATTERSON RD	9/15/2014	1:14:00 PM	PDO	30	North	Intersection Related	Front to Rear	N	Backing	Stop in Traff
169	PATTERSON RD & MESA VALLEY DR	9/17/2014	6:19:00 PM	PDO	0		Intersection Related	Front to Rear	W	Changing Lanes	Other
170	PATTERSON RD & 12TH ST	9/22/2014	11:18:00 AM	INJ	0		At Intersection	Front to Side	E	Left Turn	Going Straight
171	PATTERSON RD & CRIS-MAR ST	9/22/2014	2:54:00 PM	PDO	0		Non-Int	Same Dir Side Side	W	Changing Lanes	Going Straight
172	PATTERSON RD & BEECHWOOD ST	9/24/2014	8:03:00 AM	PDO	0		Intersection Related	Front to Rear	W	Going Straight	Slowing
173	PATTERSON RD & 24 RD	9/25/2014	1:49:00 PM	PDO	0		At Intersection	Same Dir Side Side	W	Left Turn	Left Turn
174	PATTERSON RD & 24 1/2 RD	9/25/2014	2:12:00 PM	PDO	0		At Intersection	Same Dir Side Side	E	Right Turn	Going Straight
175	25 RD & PATTERSON RD	9/29/2014	4:09:00 PM	INJ	150	North	Drive Acc Relat	Front to Side	E	Left Turn	Going Straight
176	PATTERSON RD & 12TH ST	9/29/2014	11:26:00 AM	PDO	100	East	Non-Int	Same Dir Side Side	E	Changing Lanes	Going Straight
177	PATTERSON RD & 24 1/2 RD	9/29/2014	7:22:00 PM	PDO	0		At Intersection	Front to Rear	N	Left Turn	Going Straight
178	PATTERSON RD & 25 1/2 RD	9/30/2014	1:39:00 PM	PDO	0		At Intersection	Front to Side	W	Going Straight	Going Straight
179	24 RD & PATTERSON RD	10/1/2014	5:48:00 PM	PDO	165	South	Intersection Related	Front to Rear	N	Going Straight	Slowing
180	PATTERSON RD & MARKET STREET	10/2/2014	1:53:00 PM	PDO	0		At Intersection	Front to Side	W	Going Straight	Left Turn
181	PATTERSON RD & 1ST ST	10/3/2014	12:31:00 PM	PDO	1150	East	Drive Acc Relat	Front to Rear	W	Going Straight	Stop in Traff
182	PATTERSON RD & 27 1/2 RD	10/9/2014	1:15:00 PM	PDO	0		Intersection Related	Front to Side	S	Left Turn	Left Turn
183	PATTERSON RD & HOME DEPOT	10/13/2014	2:36:00 PM	PDO	0		At Intersection	Front to Side	S	Right Turn	Going Straight
184	PATTERSON RD & 25 1/2 RD	10/14/2014	6:21:00 PM	PDO	600	West	Non-Int	Front to Side	E	U-Turn	Going Straight
185	24 1/2 RD & PATTERSON RD	10/15/2014	11:59:00 AM	PDO	500	South	Drive Acc Relat	Front to Side	E	Going Straight	Going Straight
186	PATTERSON RD & EL CORONA DR	10/15/2014	5:22:00 PM	PDO	150	West	Intersection Related	Front to Rear	E	Going Straight	Stop in Traff
187	PATTERSON RD & 26 3/4 RD	10/17/2014	4:33:00 PM	INJ	0		At Intersection	Curb	S	Left Turn	Going Straight
188	PATTERSON RD & 24 RD	10/17/2014	4:01:00 PM	PDO	0		At Intersection	Front to Side	S	Right Turn	Going Straight
189	PATTERSON RD & 29 RD	10/18/2014	1:41:00 PM	PDO	0		At Intersection	Front to Rear	W	Going Straight	Stop in Traff
190	PATTERSON RD & PHEASANT TRAIL CT	10/19/2014	2:33:00 PM	PDO	150	East	Non-Int	Same Dir Side Side	W	Other	Going Straight
191	PATTERSON RD & 28 RD	10/19/2014	12:32:00 PM	PDO	0		At Intersection	Front to Side	S	Left Turn	Going Straight
192	PATTERSON RD & PARK DR	10/19/2014	6:58:00 PM	PDO	0		At Intersection	Same Dir Side Side	E	Changing Lanes	Going Straight
193	PATTERSON RD & 7TH ST	10/21/2014	7:57:00 AM	INJ	0		At Intersection	Front to Rear	E	Going Straight	Stop in Traff
194	I-70B & PATTERSON RD	10/22/2014	3:46:00 PM	PDO	200	West	Intersection Related	Front to Rear	W	Going Straight	Slowing
195	PATTERSON RD & 28 RD	10/24/2014	9:24:00 PM	PDO	0		At Intersection	Front to Rear	W	Going Straight	Right Turn
196	PATTERSON RD & SPRING VALLEY CIR	11/4/2014	7:49:00 AM	PDO	0		Non-Int	Front to Rear	W	Going Straight	Going Straight
197	PATTERSON RD & 12TH ST	11/4/2014	1:29:00 PM	PDO	500	West	Non-Int	Front to Rear	W	Going Straight	Stop in Traff
198	PATTERSON RD & PIONEER RD	11/5/2014	11:54:00 AM	PDO	0		At Intersection	Bicycle Collision	S	Going Straight	Going Straight
199	PATTERSON RD & 25 RD	11/5/2014	9:04:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Going Straight
200	PATTERSON RD & VIEWPOINT DR	11/8/2014	11:48:00 AM	INJ	50	East	Non-Int	Front to Rear	W	Changing Lanes	Slowing
201	PATTERSON RD & HOME DEPOT	11/8/2014	6:08:00 PM	INJ	500	East	Non-Int	Front to Rear	W	Going Straight	Slowing
202	PATTERSON RD & 24 RD	11/11/2014	4:36:00 PM	PDO	300	East	Non-Int	Same Dir Side Side	W	Changing Lanes	Going Straight
203	PATTERSON RD & 7TH ST	11/11/2014	5:43:00 PM	PDO	0		At Intersection	Front to Side	W	Right Turn	Going Straight
204	PATTERSON RD & 26 3/4 RD	11/12/2014	5:39:00 PM	INJ	0		At Intersection	Front to Rear	E	Going Straight	Stop in Traff
205	PATTERSON RD & 15TH ST	11/14/2014	2:03:00 PM	PDO	0		At Intersection	Front to Side	N	Right Turn	Going Straight
206	PATTERSON RD & 27 1/2 RD	11/18/2014	4:05:00 PM	PDO	0		Non-Int	Front to Rear	E	Going Straight	Going Straight
207	PATTERSON RD & 29 1/2 RD	11/18/2014	5:40:00 PM	PDO	0		At Intersection	Front to Front	E	Going Straight	Left Turn
208	PATTERSON RD & 12TH ST	11/19/2014	8:50:00 AM	INJ	266	East	Non-Int	Front to Rear	W	Going Straight	Slowing
209	PATTERSON RD & 12TH ST	11/21/2014	12:45:00 PM	PDO	693	East	Non-Int	Front to Rear	W	Going Straight	Slowing
210	PATTERSON RD & 7TH ST	11/21/2014	11:23:00 AM	PDO	0		At Intersection	Front to Side	N	Left Turn	Going Straight
211	PATTERSON RD & 12TH ST	11/21/2014	5:23:00 PM	PDO	150	East	Intersection Related	Front to Rear	W	Going Straight	Slowing
212	PATTERSON RD & HOME DEPOT	11/24/2014	1:24:00 PM	INJ	0		At Intersection	Front to Side	W	Left Turn	Going Straight
213	PATTERSON RD & 28 RD	11/25/2014	11:06:00 AM	INJ	0		At Intersection	Front to Side	S	Left Turn	Going Straight
214	29 RD & PATTERSON RD	11/26/2014	7:22:00 PM	PDO	190	North	Drive Acc Relat	Front to Side	W	Left Turn	Going Straight
215	PATTERSON RD & BROKEN SPOKE RD	11/26/2014	6:57:00 AM	PDO	0		At Intersection	Front to Rear	S	Going Straight	Stop in Traff
216	MARKET STREET & PATTERSON RD	11/28/2014	2:01:00 PM	PDO	40	North	Non-Int	Same Dir Side Side	S	Changing Lanes	Going Straight
217	PATTERSON RD & HOME DEPOT	11/29/2014	12:57:00 PM	PDO	0		At Intersection	Front to Side	N	Right Turn	Going Straight
218	PATTERSON RD & VIEWPOINT DR	12/1/2014	7:40:00 AM	PDO	0		Non-Int	Wild Animal	W	Going Straight	UNK
219	PATTERSON RD & 12TH ST	12/3/2014	5:49:00 PM	PDO	0		Non-Int	Same Dir Side Side	N	Changing Lanes	Going Straight
220	PATTERSON RD & 27 1/2 RD	12/5/2014	1:24:00 PM	PDO	100	West	Intersection Related	Front to Rear	E	Going Straight	Slowing
221	PATTERSON RD & 1ST ST	12/5/2014	9:55:00 PM	PDO	0		At Intersection	Front to Front	W	Left Turn	Going Straight
222	PATTERSON RD & 12TH ST	12/6/2014	7:47:00 AM	INJ	100	East	Non-Int	Same Dir Side Side	W	Changing Lanes	Going Straight
223	25 1/2 RD & PATTERSON RD	12/8/2014	6:30:00 PM	PDO	158	North	Drive Acc Relat	Front to Side	E	Right Turn	Going Straight
224	MEANDER DR & PATTERSON RD	12/9/2014	5:18:00 PM	PDO	200	West	Non-Int	Front to Rear	E	Slowing	Stop in Traff
225	PATTERSON RD & 24 1/2 RD	12/9/2014	6:17:00 PM	PDO	0		At Intersection	Same Dir Side Side	E	Going Straight	Going Straight
226	PATTERSON RD & 15TH ST	12/12/2014	3:39:00 PM	PDO	300	East	Intersection Related	Front to Rear	W	Going Straight	Slowing
227	PATTERSON RD & 25 1/2 RD	12/12/2014	8:16:00 PM	PDO	0		At Intersection	Front to Rear	W	Going Straight	Stop in Traff
228	PATTERSON RD & 12TH ST	12/14/2014	10:44:00 PM	INJ	0		At Intersection	Front to Side	W	Left Turn	Going Straight
229	I-70B & PATTERSON RD	12/15/2014	5:24:00 PM	INJ	0		At Intersection	Front to Side	E	Left Turn	Going Straight
230	PATTERSON RD & 7TH ST	12/15/2014	5:23:00 PM	PDO	0		At Intersection	Front to Rear	N	Going Straight	Stop in Traff
231	PATTERSON RD & 25 1/2 RD	12/16/2014	5:50:00 PM	INJ	0		At Intersection	Opp Dir Side Side	W	Left Turn	Going Straight
232	PATTERSON RD & MIRA VISTA DR	12/22/2014	10:13:00 AM	PDO	0		Non-Int	Front to Front	W	Spun Out of Cntrl	Going Straight
233	PATTERSON RD & 28 1/4 RD	12/23/2014	2:26:00 PM	INJ	0		At Intersection	Front to Side	W	Left Turn	Going Straight
234	PATTERSON RD & 24 1/2 RD	12/23/2014	6:57:00 PM	PDO	0		At Intersection	Front to Side	N	Right Turn	Going Straight
235	24 1/2 RD & PATTERSON RD	12/27/2014	3:17:00 PM	PDO	500	South	Drive Acc Relat	Front to Side	E	Left Turn	Going Straight
236	PATTERSON RD & 1ST ST	12/27/2014	5:39:00 PM	PDO	0		Intersection Related	Front to Rear	E	Going Straight	Going Straight

#	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
237	PATTERSON RD & LEGENDS WAY	12/29/2014	11:10:00 AM	PDO	0		Non-Int	Sign	E	Right Turn	UNK
238	PATTERSON RD & 25 RD	1/1/2015	8:01:00 PM	INJ	120	E	Driveway Access Related	Front to Front	W	Left Turn	Straight
239	PATTERSON RD & 29 RD	1/5/2015	1:10:00 PM	PDO			Non-Intersection	Side to Side Same Dir	W	Changing Lanes	Straight
240	PATTERSON RD & 25 RD	1/6/2015	4:31:00 PM	PDO	1150	W	Intersection Related	Front to Front	E	Left Turn	Straight
241	25 RD & PATTERSON RD	1/7/2015	3:20:00 PM	PDO			At Intersection	Front to Rear	N	Slowing	Stopped
242	PATTERSON RD & W INDIAN CREEK DR	1/8/2015	5:38:00 PM	PDO			Non-Intersection	Front to Rear	E	Straight	Stopped
243	PATTERSON RD & E INDIAN CREEK DR	1/9/2015	10:27:00 AM	PDO			At Intersection	Front to Side	N	Left Turn	Straight/following road
244	PATTERSON RD & 27 1/2 RD	1/12/2015	5:05:00 PM	PDO			Non-Intersection	Front to Rear	E	Straight	Slowing
245	PATTERSON RD & 24 1/2 RD	1/17/2015	2:06:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight
246	PATTERSON RD & N 12TH ST	1/18/2015	9:58:00 AM	PDO			At Intersection	Front to Rear	E	Left Turn	Straight
247	PATTERSON RD & 25 RD	1/23/2015	12:47:00 PM	INJ	607	W	Non-Intersection	Front to Rear	W	U-Turn	Straight
248	PATTERSON RD & MARKET ST	1/27/2015	10:00:00 AM	INJ			At Intersection	Front to Side	W	Straight	Straight
249	PATTERSON RD & 25 RD	1/30/2015	3:56:00 PM	INJ			At Intersection	Front to Rear	N	Straight	Stopped
250	PATTERSON RD & 25 RD	1/30/2015	2:36:00 PM	PDO			At Intersection	Sign	S	Straight	UNK
251	PATTERSON RD & 25 1/2 RD	2/2/2015	3:46:00 PM	PDO			At Intersection	Front to Rear	E	Straight	Straight
252	PATTERSON RD & MARKET ST	2/4/2015	7:39:00 PM	PDO	600	E	At Intersection	Front to Side	W	Left Turn	Straight
253	PATTERSON RD & N 7TH ST	2/10/2015	5:34:00 PM	INJ	300	W	Non-Intersection	Front to Rear	E	Straight	Stopped
254	PATTERSON RD & N 1ST ST	2/10/2015	11:32:00 AM	PDO	30	E	At Intersection	Front to Rear	W	Straight	Stopped
255	25 RD & PATTERSON RD	2/10/2015	3:18:00 PM	PDO	300	N	Non-Intersection	Front to Front	E	Left Turn	Straight
256	24 1/2 RD & PATTERSON RD	2/11/2015	6:48:00 PM	PDO	500	S	Intersection Related	Side to Side Same Dir	N	U-Turn	Straight
257	PATTERSON RD & N 1ST ST	2/16/2015	12:34:00 PM	PDO	50	E	Non-Intersection	Front to Rear	W	Straight	Stopped
258	PATTERSON RD & N 7TH ST	2/18/2015	4:28:00 PM	PDO	350	W	Non-Intersection	Front to Rear	E	Straight	Stopped
259	N 7TH ST & PATTERSON RD	2/19/2015	12:12:00 PM	PDO	50	S	Intersection Related	Front to Rear	N	Changing Lanes	Stopped
260	PATTERSON RD & 25 1/2 RD	2/21/2015	8:47:00 PM	PDO	300	E	Driveway Access Related	Front to Rear	W	Straight	Right Turn
261	N 12TH ST & PATTERSON RD	2/23/2015	12:44:00 PM	INJ	40	S	Intersection Related	Front to Rear	N	Straight	Stopped
262	25 RD & PATTERSON RD	2/24/2015	3:16:00 PM	PDO	100	N	Driveway Access Related	Front to Side	N	Slowing	Straight
263	30 RD & PATTERSON RD	2/24/2015	7:30:00 PM	PDO	20	S	Intersection Related	Front to Rear	N	Straight	Stopped
264	PATTERSON RD & 25 RD	2/27/2015	5:23:00 PM	PDO	100	E	Non-Intersection	Front to Rear	E	Straight	Stopped
265	PATTERSON RD & BEECHWOOD ST	2/27/2015	11:07:00 AM	PDO			At Intersection	Curb	E	Left Turn	Straight
266	24 1/2 RD & PATTERSON RD	2/28/2015	12:43:00 PM	PDO			At Intersection	Side to Side Same Dir	E	Right Turn	Straight
267	PATTERSON RD & 29 RD	2/28/2015	10:13:00 PM	PDO	100	W	Intersection Related	Front to Rear	E	Straight	Stopped
268	PATTERSON RD & MIRA VISTA RD	3/2/2015	5:37:00 PM	PDO	75	E	Non-Intersection	Side to Side Same Dir	E	Changing Lanes	Straight
269	PATTERSON RD & 25 1/2 RD	3/3/2015	12:41:00 PM	INJ	80	E	Intersection Related	Front to Rear	W	Slowing	Stopped
270	PATTERSON RD & N 15TH ST	3/5/2015	11:17:00 PM	PDO			Non-Intersection	Front to Rear	W	Straight	Stopped
271	24 RD & PATTERSON RD	3/6/2015	3:46:00 AM	PDO	726	N	Non-Intersection	Sign	S	Straight	UNK
272	PATTERSON RD & 29 RD	3/6/2015	8:46:00 AM	PDO			Intersection Related	Front to Rear	W	Straight	Slowing
273	N 12TH ST & PATTERSON RD	3/7/2015	8:45:00 PM	INJ	300	S	Non-Intersection	All Other Peds	S	Straight	UNK
274	25 RD & PATTERSON RD	3/9/2015	2:20:00 PM	PDO	150	N	Driveway Access Related	Front to Front	N	Left Turn	Straight
275	PATTERSON RD & N 15TH ST	3/10/2015	3:47:00 PM	PDO	900	E	Non-Intersection	Front to Rear	W	Straight	UNK
276	PATTERSON RD & 27 1/2 RD	3/11/2015	5:52:00 AM	PDO	300	W	Non-Intersection	Front to Rear	W	Straight	Stopped
277	PATTERSON RD & 30 3/4 RD	3/12/2015	11:10:00 AM	PDO			At Intersection	Front to Side	W	Straight	Straight
278	PATTERSON RD & 27 1/2 RD	3/13/2015	5:22:00 PM	PDO	200	W	Non-Intersection	Front to Rear	E	Straight	Straight
279	29 1/2 RD & PATTERSON RD	3/13/2015	12:33:00 PM	PDO	20	N	Intersection Related	Front to Rear	S	Straight	Straight
280	PATTERSON RD & N 12TH ST	3/16/2015	8:37:00 AM	INJ			At Intersection	Front to Side	W	Straight	Straight
281	PATTERSON RD & PATTERSON RD	3/18/2015	1:26:00 PM	PDO			At Intersection	Light Pole / Utility Pole	E	Left Turn	Straight
282	PATTERSON RD & 29 1/2 RD	3/19/2015	6:44:00 AM	PDO	300	W	Non-Intersection	Front to Rear	W	Straight	Stopped
283	PATTERSON RD & EL CORONA DR	3/19/2015	8:10:00 PM	PDO			At Intersection	Front to Rear	E	Straight	Straight
284	PATTERSON RD & 25 1/2 RD	3/20/2015	6:43:00 AM	INJ			At Intersection	Front to Front	S	Left Turn	Straight
285	PATTERSON RD & MEANDER DR	3/20/2015	1:53:00 PM	PDO			Driveway Access Related	Front to Front	W	Left Turn	Straight
286	PATTERSON RD & MARKET ST	3/20/2015	8:08:00 AM	PDO			At Intersection	Front to Side	E	Straight	Straight
287	24 1/2 RD & PATTERSON RD	3/21/2015	1:09:00 PM	PDO	500	S	Driveway Access Related	Front to Front	E	Left Turn	Straight
288	PATTERSON RD & 29 RD	3/23/2015	5:31:00 PM	PDO			At Intersection	Front to Rear	W	Straight	Stopped
289	PATTERSON RD & PARK DR	3/25/2015	1:45:00 PM	PDO	50	W	Non-Intersection	Guard Rail	W	Straight	UNK
290	PATTERSON RD & 29 RD	3/27/2015	4:38:00 PM	PDO	100	E	Driveway Access Related	Side to Side Same Dir	S	Right Turn	Straight
291	PATTERSON RD & BURKEY ST	3/30/2015	7:32:00 AM	PDO	50	E	Intersection Related	Front to Rear	W	Straight	Stopped
292	N 12TH ST & PATTERSON RD	3/30/2015	5:33:00 PM	PDO			At Intersection	Side to Side Same Dir	N	Right Turn	Straight
293	PATTERSON RD & N 1ST ST	4/1/2015	12:23:00 PM	PDO			At Intersection	Front to Rear	E	Straight	Stopped
294	PATTERSON RD & N 7TH ST	4/1/2015	6:01:00 PM	PDO			At Intersection	Front to Side	S	Straight	Straight
295	PATTERSON RD & 27 1/2 RD	4/2/2015	7:09:00 PM	INJ	50	W	Intersection Related	Front to Rear	E	Straight	Stopped
296	PATTERSON RD & 25 RD	4/2/2015	4:54:00 PM	INJ	100	E	Driveway Access Related	Other - Non Collision	N	Right Turn	Straight
297	PATTERSON RD & N 15TH ST	4/6/2015	5:29:00 PM	PDO	40	W	At Intersection	Front to Rear	E	Straight	Stopped
298	25 RD & PATTERSON RD	4/8/2015	3:47:00 PM	PDO	140	N	Driveway Access Related	Front to Side	E	Left Turn	Straight
299	PATTERSON RD & 25 1/2 RD	4/9/2015	11:27:00 AM	PDO	50	E	Intersection Related	Front to Rear	W	Straight	Stopped
300	PATTERSON RD & 24 RD	4/11/2015	2:38:00 PM	INJ			At Intersection	Front to Side	E	Left Turn	Straight
301	PATTERSON RD & 27 1/2 RD	4/11/2015	11:52:00 AM	INJ	20	W	Non-Intersection	Front to Rear	W	Straight	Stopped
302	24 1/2 RD & PATTERSON RD	4/11/2015	7:44:00 PM	PDO	492	S	Driveway Access Related	Front to Side	E	Left Turn	Straight
303	PATTERSON RD & PATTERSON RD	4/11/2015	12:36:00 PM	PDO			At Intersection	Front to Rear	W	Straight	Stopped
304	PATTERSON RD & 29 1/2 RD	4/12/2015	11:36:00 AM	INJ			At Intersection	Front to Front	S	Left Turn	Straight
305	PATTERSON RD & FORESIGHT CIR	4/13/2015	6:03:00 PM	PDO	380	E	Driveway Access Related	Front to Side	W	Changing Lanes	Straight
306	PATTERSON RD & PATTERSON RD	4/13/2015	8:17:00 AM	PDO			At Intersection	Traffic Signal Pole	W	Right Turn	UNK
307	PATTERSON RD & SPRING VALLEY CIR	4/13/2015	8:18:00 AM	PDO			At Intersection	Front to Side	S	Right Turn	Straight
308	PATTERSON RD & 28 RD	4/14/2015	5:15:00 PM	PDO	100	E	Non-Intersection	Front to Rear	E	Straight	Stopped
309	PATTERSON RD & 24 1/2 RD	4/15/2015	10:40:00 AM	PDO			At Intersection	Side to Side Same Dir	N	Right Turn	Left Turn
310	PATTERSON RD & N 12TH ST	4/16/2015	10:13:00 AM	PDO	600	W	Driveway Access Related	Front to Side	S	Left Turn	Straight
311	PATTERSON RD & N 15TH ST	4/18/2015	6:29:00 PM	INJ			At Intersection	Front to Side	E	Straight	Straight
312	PATTERSON RD & NORTHERN WAY	4/19/2015	3:17:00 AM	PDO			Non-Intersection	Guard Rail	W	Straight	UNK
313	PATTERSON RD & MARKET ST	4/20/2015	8:03:00 AM	INJ			At Intersection	Overturning	W	Left Turn	Straight
314	PATTERSON RD & N 15TH ST	4/20/2015	4:51:00 PM	INJ			At Intersection	Front to Rear	N	Slowing	Stopped
315	PATTERSON RD & SPRING VALLEY CIR	4/20/2015	8:25:00 AM	PDO	60	W	Non-Intersection	Front to Rear	W	Straight	Straight
316	PATTERSON RD & N 12TH ST	4/20/2015	7:46:00 AM	PDO	750	E	Intersection Related	Front to Rear	W	Straight	Stopped
317	24 RD & PATTERSON RD	4/22/2015	4:58:00 PM	PDO	100	S	Intersection Related	Front to Rear	N	Straight	Straight
318	PATTERSON RD & N 7TH ST	4/23/2015	7:54:00 PM	PDO			At Intersection	Front to Side	S	Straight	Straight
319	N 12TH ST & PATTERSON RD	4/24/2015	7:20:00 PM	PDO	260	S	Driveway Access Related	Front to Side	E	Right Turn	Straight
320	PATTERSON RD & 25 RD	4/25/2015	11:53:00 PM	INJ			Parking Lot	Front to Side	W	Right Turn	Parked
321	PATTERSON RD & N 1ST ST	4/25/2015	8:31:00 PM	PDO			At Intersection	Front to Side	W	Straight	Left Turn
322	PATTERSON RD & N 12TH ST	5/7/2015	9:44:00 AM	FAT			At Intersection	Front to Front	E	Left Turn	Straight
323	PATTERSON RD & MARKET ST	5/7/2015	5:28:00 PM	PDO			Intersection Related	Front to Rear	W	Straight	Stopped
324	PATTERSON RD & 25 RD	5/8/2015	11:57:00 AM	PDO			At Intersection	Front to Front	S	Left Turn	Straight
325	24 RD & PATTERSON RD	5/9/2015	12:36:00 PM	PDO	100	S	Non-Intersection	Side to Side Same Dir	N	Changing Lanes	Stopped
326	25 RD & PATTERSON RD	5/10/2015	1:29:00 PM	PDO			At Intersection	Front to Front	N	Left Turn	Left Turn
327	PATTERSON RD & 24 1/2 RD	5/11/2015	3:35:00 PM	INJ			At Intersection	Front to Front	E	Left Turn	Straight
328	PATTERSON RD & 27 1/2 RD	5/13/2015	8:00:00 AM	PDO			At Intersection	Front to Side	E	Left Turn	Straight
329	PATTERSON RD & 25 1/2 RD	5/14/2015	3:28:00 PM	INJ			At Intersection	Front to Front	W	Straight	Left Turn
330	PATTERSON RD & N 7TH ST	5/15/2015	9:45:00 PM	PDO			At Intersection	Front to Front	S	Straight	Straight
331	PATTERSON RD & 25 RD	5/16/2015	7:02:00 PM	PDO	50	W	At Intersection	Front to Rear	E	Slowing	Stopped
332	N 12TH ST & PATTERSON RD	5/17/2015	7:43:00 PM	PDO			At Intersection	Front to Side	E	Straight	Left Turn
333	PATTERSON RD & N 1ST ST	5/18/2015	3:59:00 PM	INJ	500	E	Driveway Access Related	Front to Rear	W	Straight	Stopped
334	PATTERSON RD & 25 RD	5/19/2015	1:02:00 PM	PDO			At Intersection	Front to Side	S	Left Turn	Stopped
335	29 1/2 RD & PATTERSON RD	5/22/2015	1:09:00 PM	PDO	84	S	Intersection Related	Front to Side	S	Left Turn	Straight
336	24 1/2 RD & PATTERSON RD	5/23/2015	5:37:00 PM	PDO	500	S	Driveway Access Related	Front to Front	E	Left Turn	Straight
337	24 1/2 RD & PATTERSON RD	5/23/2015	5:37:00 PM	PDO	500	S	Driveway Access Related	Front to Front	E	Left Turn	Straight
338	25 RD & PATTERSON RD	5/26/2015	7:57:00 AM	PDO	129	N	Driveway Access Related	Front to Side	E	Left Turn	Straight
339	PATTERSON RD & 28 1/4 RD	5/27/2015	11:32:00 AM	PDO	460	W	Non-Intersection	Front to Rear	E	Straight	Slowing
340	PATTERSON RD & N 12TH ST	5/27/2015	4:54:00 PM	PDO	200	E	Non-Intersection	Front to Rear	E	Straight	Slowing
341	PATTERSON RD & 29 1/2 RD	6/2/2015	2:08:00 PM	INJ	400	E	Intersection Related	Front to Rear	W	Straight	Stopped
342	24 1/2 RD & PATTERSON RD	6/5/2015	3:53:00 PM	PDO	500	S	Driveway Access Related	Front to Side	E	Left Turn	Straight
343	PATTERSON RD & 30 RD	6/10/2015	4:28:00 PM	PDO	100	W	Intersection Related	Front to Rear	E	Straight	Stopped
344	25 RD & PATTERSON RD	6/11/2015	12:08:00 PM	PDO	150	N	Driveway Access Related	Front to Side	E	Right Turn	Straight
345	PATTERSON RD & N 7TH ST	6/12/2015	1:02:00 PM	PDO			At Intersection	Front to Side	N	Right Turn	Straight
346	PATTERSON RD & PATTERSON RD	6/13/2015	1:26:00 PM	PDO			At Intersection	Front to Rear	W	Straight	Stopped
347	PATTERSON RD & DARBY DR	6/14/2015	1:00:00 PM	INJ			At Intersection	Mailbox	E	Straight	Right Turn
348	PATTERSON RD & N 12TH ST	6/15/2015	2:36:00 AM	INJ			At Intersection	Front to Side	N	Straight	Straight
349	PATTERSON RD & N 12TH ST	6/15/2015	7:20:00 PM	PDO			At Intersection	Side to Side Opp Dir	W	Left Turn	Straight
350	25 RD & PATTERSON RD	6/17/2015	3:01:00 PM	PDO	50	S	Driveway Access Related	Front to Side	W	Right Turn	Straight
351	PATTERSON RD & 27 1/2 RD	6/18/2015	10:56:00 PM	PDO			At Intersection	Front to Rear	W	Straight	Stopped
352	PATTERSON RD & FORESIGHT CIR	6/19/2015	11:20:00 AM	PDO			At Intersection	Front to Side	S	Left Turn	Straight
353	PATTERSON RD & N 12TH ST	6/19/2015	8:33:00 PM	PDO			At Intersection	Front to Side	S	Straight	Straight
354	PATTERSON RD & N 12TH ST	6/20/2015	4:49:00 PM	PDO			Intersection Related	Side to Side Same Dir	S	Left Turn	Right Turn

#	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
355	PATTERSON RD & 29 1/2 RD	6/22/2015	12:43:00 PM	PDO	268	E	Non-Intersection	Side to Side Same Dir	E	Changing Lanes	Straight
356	PATTERSON RD & 30 RD	6/26/2015	1:00:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight
357	PATTERSON RD & 25 1/2 RD	6/30/2015	10:11:00 AM	PDO			At Intersection	Front to Rear	W	Changing Lanes	Slowing
358	PATTERSON RD & 30 RD	7/3/2015	11:26:00 AM	INJ			At Intersection	Front to Side	W	Straight	Straight
359	PATTERSON RD & COMMERCE BLVD	7/8/2015	12:34:00 PM	PDO	300	W	Alley Related	Side to Side Same Dir	E	Weaving	Straight
360	PATTERSON RD & 29 RD	7/8/2015	5:43:00 PM	PDO			Intersection Related	Front to Rear	E	Backing	Stopped
361	PATTERSON RD & E INDIAN CREEK DR	7/14/2015	5:11:00 PM	PDO			Non-Intersection	Front to Rear	E	Slowing	Slowing
362	PATTERSON RD & N 1ST ST	7/21/2015	10:05:00 AM	INJ			At Intersection	All Other Peds	W	Right Turn	UNK
363	PATTERSON RD & N 12TH ST	7/21/2015	3:59:00 PM	PDO	25	E	Non-Intersection	Front to Rear	E	Straight	Stopped
364	PATTERSON RD & RIO GRANDE DR DR	7/21/2015	11:18:00 AM	PDO			Intersection Related	Front to Rear	E	Straight	Straight
365	PATTERSON RD & 28 1/4 RD	7/23/2015	5:26:00 PM	INJ			At Intersection	Front to Rear	E	Straight	Stopped
366	PATTERSON RD & 27 1/2 RD	7/23/2015	11:56:00 PM	PDO	500	W	Non-Intersection	Front to Rear	W	Straight	Stopped
367	N 12TH ST & PATTERSON RD	7/24/2015	2:03:00 PM	PDO			At Intersection	Front to Rear	S	Straight	Right Turn
368	25 RD & PATTERSON RD	7/25/2015	5:58:00 PM	PDO			At Intersection	Front to Rear	N	Straight	Stopped
369	PATTERSON RD & 24 1/2 RD	7/25/2015	10:43:00 AM	PDO			At Intersection	Rear to Side	E	Left Turn	Straight
370	PATTERSON RD & N 12TH ST	7/28/2015	2:00:00 PM	PDO	300	W	Driveway Access Related	Side to Side Same Dir	E	Changing Lanes	Changing Lanes
371	24 1/2 RD & PATTERSON RD	7/28/2015	3:16:00 PM	PDO	500	S	Non-Intersection	Side to Side Same Dir	N	Changing Lanes	Straight
372	PATTERSON RD & 25 1/2 RD	7/29/2015	12:15:00 PM	INJ			At Intersection	Front to Front	W	Left Turn	Straight
373	N 12TH ST & PATTERSON RD	7/29/2015	2:32:00 PM	PDO	25	N	Intersection Related	Front to Rear	S	Straight	Stopped
374	PATTERSON RD & 25 RD	7/30/2015	2:26:00 PM	INJ			At Intersection	Front to Side	W	Left Turn	Straight
375	PATTERSON RD & 29 1/2 RD	7/30/2015	5:30:00 PM	PDO	150	W	Non-Intersection	Front to Rear	E	Straight	Stopped
376	PATTERSON RD & N 12TH ST	8/4/2015	9:06:00 PM	INJ			At Intersection	Front to Side	W	Left Turn	Straight
377	PATTERSON RD & 24 RD	8/5/2015	3:32:00 PM	PDO			Intersection Related	Front to Rear	E	Straight	Stopped
378	PATTERSON RD & 28 1/4 RD	8/6/2015	8:58:00 AM	INJ			At Intersection	All Other Peds	S	Right Turn	UNK
379	PATTERSON RD & 29 1/2 RD	8/8/2015	5:15:00 PM	PDO			At Intersection	Front to Rear	W	Straight	Stopped
380	PATTERSON RD & N 1ST ST	8/12/2015	5:29:00 PM	PDO	500	W	Non-Intersection	Front to Side	E	Changing Lanes	Straight
381	PATTERSON RD & N 12TH ST	8/13/2015	9:59:00 AM	PDO			At Intersection	Side to Side Same Dir	W	Straight	Right Turn
382	PATTERSON RD & 27 1/2 RD	8/14/2015	3:54:00 PM	PDO			Intersection Related	Front to Rear	S	Straight	Straight
383	PATTERSON RD & 29 1/2 RD	8/15/2015	7:17:00 PM	PDO			At Intersection	Front to Side	E	Left Turn	Straight
384	PATTERSON RD & MEANDER DR	8/20/2015	11:53:00 AM	PDO	203	E	Driveway Access Related	Side to Side Same Dir	E	Changing Lanes	Straight
385	PATTERSON RD & 30 RD	8/21/2015	2:45:00 PM	INJ			At Intersection	Front to Side	E	Straight	Straight
386	PATTERSON RD & 29 1/2 RD	8/21/2015	3:40:00 PM	INJ	133	E	Non-Intersection	Tree	W	Straight	Stopped
387	PATTERSON RD & 27 1/2 RD	8/22/2015	3:37:00 PM	PDO	50	W	At Intersection	Front to Rear	E	Straight	Stopped
388	PATTERSON RD & PARTEE DR	8/23/2015	9:58:00 PM	INJ			Intersection Related	Front to Side	E	Left Turn	Straight
389	PATTERSON RD & BURKEY ST	8/24/2015	3:45:00 PM	INJ			At Intersection	Front to Side	S	Left Turn	Straight
390	PATTERSON RD & BURKEY ST	8/25/2015	10:59:00 AM	INJ			At Intersection	All Other Peds	S	Right Turn	UNK
391	PATTERSON RD & BEECHWOOD ST	8/26/2015	7:51:00 AM	PDO			Non-Intersection	Front to Rear	W	Straight	Stopped
392	PATTERSON RD & N 15TH ST	8/27/2015	2:53:00 PM	PDO			Intersection Related	Front to Side	S	Right Turn	Straight
393	PATTERSON RD & N 15TH ST	8/27/2015	2:53:00 PM	PDO			Intersection Related	Front to Rear	S	Right Turn	Straight
394	PATTERSON RD & MARKET ST	8/28/2015	5:03:00 PM	INJ			At Intersection	Front to Side	W	Left Turn	Straight
395	PATTERSON RD & PATTERSON RD	8/28/2015	8:46:00 AM	PDO			Non-Intersection	Front to Rear	W	Slowing	Stopped
396	PATTERSON RD & 30 RD	8/29/2015	8:36:00 PM	PDO			At Intersection	Front to Rear	W	Slowing	Stopped
397	PATTERSON RD & GRAND CASCADE WAY	9/1/2015	7:40:00 AM	PDO	250	E	Non-Intersection	Front to Rear	W	Straight	Slowing
398	PATTERSON RD & 25 RD	9/2/2015	1:47:00 PM	PDO	500	E	Intersection Related	Front to Rear	W	Slowing	Stopped
399	PATTERSON RD & 24 RD	9/2/2015	11:35:00 AM	PDO	30	E	Intersection Related	Front to Rear	W	Straight	Stopped
400	25 RD & PATTERSON RD	9/3/2015	3:27:00 PM	PDO	150	N	Driveway Access Related	Front to Side	E	Left Turn	Straight
401	24 1/2 RD & PATTERSON RD	9/4/2015	4:57:00 PM	PDO	500	S	Driveway Access Related	Front to Side	E	Left Turn	Straight
402	PATTERSON RD & 24 1/2 RD	9/4/2015	3:00:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight
403	PATTERSON RD & W INDIAN CREEK DR	9/7/2015	7:34:00 PM	PDO	150	E	Non-Intersection	Sign	E	Straight	UNK
404	PATTERSON RD & 30 RD	9/8/2015	1:01:00 PM	PDO	148	E	Non-Intersection	Fence	E	Straight	UNK
405	25 RD & PATTERSON RD	9/9/2015	12:33:00 PM	PDO	150	N	Driveway Access Related	Front to Side	N	Left Turn	Straight
406	PATTERSON RD & 24 1/2 RD	9/10/2015	6:14:00 PM	PDO	205	E	Driveway Access Related	Front to Side	N	Left Turn	Straight
407	PATTERSON RD & 28 1/4 RD	9/10/2015	5:03:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight
408	24 RD & PATTERSON RD	9/11/2015	7:08:00 PM	INJ			Intersection Related	Front to Rear	W	Straight	Stopped
409	PATTERSON RD & N 12TH ST	9/11/2015	8:04:00 PM	INJ			At Intersection	Front to Side	E	Left Turn	Straight
410	N 1ST ST & PATTERSON RD	9/12/2015	11:30:00 AM	PDO	25	S	Intersection Related	Front to Rear	N	Straight	Stopped
411	PATTERSON RD & 28 RD	9/14/2015	10:13:00 AM	INJ			At Intersection	Front to Side	S	Left Turn	Straight
412	24 RD & PATTERSON RD	9/15/2015	7:35:00 PM	PDO			At Intersection	Front to Front	E	Left Turn	Straight
413	30 RD & PATTERSON RD	9/16/2015	6:30:00 PM	PDO	258	S	Non-Intersection	Other Fixed Object	N	Straight	UNK
414	PATTERSON RD & 29 1/2 RD	9/20/2015	3:57:00 PM	INJ			At Intersection	Front to Side	W	Left Turn	Straight
415	PATTERSON RD & 24 1/2 RD	9/24/2015	5:38:00 PM	INJ			At Intersection	Front to Front	E	Straight	Left Turn
416	PATTERSON RD & 29 RD	9/25/2015	1:31:00 PM	PDO	75	E	Intersection Related	Side to Side Same Dir	W	Changing Lanes	Straight
417	25 RD & PATTERSON RD	9/28/2015	9:28:00 AM	PDO	100	N	Driveway Access Related	Front to Side	E	Left Turn	Straight
418	PATTERSON RD & MEANDER DR	9/28/2015	5:16:00 PM	PDO			Non-Intersection	Front to Rear	E	Straight	Stopped
419	PATTERSON RD & N 1ST ST	9/29/2015	3:49:00 PM	INJ	220	E	At Intersection	Front to Rear	W	Slowing	Stopped
420	PATTERSON RD & N 12TH ST	9/29/2015	8:38:00 AM	PDO	100	E	Non-Intersection	Front to Rear	W	Slowing	Slowing
421	N 12TH ST & PATTERSON RD	9/29/2015	7:55:00 AM	PDO	100	N	Intersection Related	Front to Rear	S	Straight	Stopped
422	PATTERSON RD & 29 RD	9/29/2015	3:49:00 PM	PDO			At Intersection	Front to Rear	S	Straight	Stopped
423	PATTERSON RD & N 1ST ST	10/1/2015	11:32:00 AM	PDO	100	E	Intersection Related	Front to Rear	W	Slowing	Stopped
424	PATTERSON RD & N 12TH ST	10/3/2015	9:13:00 AM	PDO	100	W	Driveway Access Related	Front to Rear	W	Slowing	Stopped
425	PATTERSON RD & 25 RD	10/8/2015	1:20:00 PM	PDO	60	E	Intersection Related	Front to Rear	W	Changing Lanes	Stopped
426	29 RD & PATTERSON RD	10/9/2015	5:38:00 PM	PDO	50	S	At Intersection	Front to Rear	S	Straight	Slowing
427	29 RD & PATTERSON RD	10/9/2015	5:38:00 PM	PDO			At Intersection	Front to Rear	W	Left Turn	Left Turn
428	PATTERSON RD & 25 RD	10/11/2015	3:07:00 PM	PDO			At Intersection	Front to Rear	W	Straight	Stopped
429	PATTERSON RD & 29 1/2 RD	10/11/2015	5:31:00 PM	PDO			At Intersection	Front to Side	E	Left Turn	Straight
430	PATTERSON RD & 29 1/2 RD	10/12/2015	8:51:00 AM	PDO			At Intersection	Front to Side	S	Right Turn	Straight
431	29 RD & PATTERSON RD	10/13/2015	7:55:00 AM	PDO	393	S	Non-Intersection	Front to Side	S	Left Turn	Straight
432	PATTERSON RD & 24 1/2 RD	10/14/2015	4:07:00 PM	PDO			At Intersection	Side to Side Same Dir	E	Right Turn	Straight
433	PATTERSON RD & NORTHERN WAY	10/15/2015	11:50:00 AM	INJ			Driveway Access Related	Front to Side	N	Straight	Straight
434	24 1/2 RD & PATTERSON RD	10/16/2015	8:47:00 PM	INJ	500	S	At Intersection	Front to Side	E	Left Turn	Straight
435	PATTERSON RD & N 1ST ST	10/16/2015	1:56:00 PM	INJ	150	E	Non-Intersection	Front to Rear	W	Straight	Stopped
436	PATTERSON RD & N 7TH ST	10/16/2015	1:06:00 PM	PDO			At Intersection	Side to Side Same Dir	S	Right Turn	Left Turn
437	PATTERSON RD & 29 RD	10/16/2015	7:19:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight
438	30 RD & PATTERSON RD	10/18/2015	5:06:00 PM	PDO			At Intersection	Front to Rear	W	Slowing	Stopped
439	PATTERSON RD & 29 1/2 RD	10/19/2015	7:29:00 AM	PDO	30	E	Intersection Related	Front to Rear	N	Right Turn	Straight
440	PATTERSON RD & N 1ST ST	10/19/2015	4:18:00 PM	PDO	268	W	Intersection Related	Front to Rear	E	Straight	Stopped
441	PATTERSON RD & N 12TH ST	10/21/2015	2:05:00 PM	PDO			Intersection Related	Side to Side Same Dir	S	Right Turn	Left Turn
442	PATTERSON RD & MIRA VISTA RD	10/24/2015	2:54:00 PM	INJ	250	W	Non-Intersection	Front to Side	E	Changing Lanes	Straight
443	PATTERSON RD & N 8TH CT	10/24/2015	12:51:00 PM	PDO	200	E	Intersection Related	Front to Rear	W	Slowing	Stopped
444	N 12TH ST & PATTERSON RD	10/26/2015	8:26:00 PM	PDO			Intersection Related	Front to Side	E	Right Turn	Stopped
445	PATTERSON RD & NORTHERN WAY	10/27/2015	9:15:00 AM	INJ	308	E	Non-Intersection	Front to Front	E	Left Turn	Straight
446	N 12TH ST & PATTERSON RD	10/30/2015	9:44:00 AM	INJ	75	N	Intersection Related	Front to Rear	S	Straight	Stopped
447	PATTERSON RD & 25 RD	10/30/2015	2:28:00 PM	PDO	360	E	Non-Intersection	Side to Side Same Dir	W	Changing Lanes	Straight
448	PATTERSON RD & 27 1/2 RD	10/31/2015	12:09:00 PM	INJ	820	W	Non-Intersection	Front to Rear	W	Straight	Slowing
449	PATTERSON RD & N 1ST ST	10/31/2015	11:02:00 AM	PDO	25	E	Intersection Related	Front to Rear	W	Straight	Stopped
450	PATTERSON RD & MARKET ST	11/1/2015	1:42:00 PM	INJ	1114	E	Intersection Related	Side to Side Same Dir	W	Changing Lanes	Straight
451	24 1/2 RD & PATTERSON RD	11/3/2015	5:40:00 PM	INJ	500	S	At Intersection	Front to Side	E	Left Turn	Straight
452	PATTERSON RD & RIO GRANDE DR DR	11/6/2015	4:15:00 PM	INJ	50	E	Non-Intersection	Front to Rear	E	Straight	Stopped
453	29 RD & PATTERSON RD	11/9/2015	8:35:00 AM	INJ	417	S	Driveway Access Related	Front to Side	S	Left Turn	Straight
454	N 12TH ST & PATTERSON RD	11/10/2015	3:52:00 PM	INJ	625	S	Non-Intersection	Front to Rear	N	Straight	Stopped
455	N 12TH ST & PATTERSON RD	11/10/2015	4:39:00 PM	PDO			At Intersection	Front to Side	N	Left Turn	Straight
456	MEANDER DR & PATTERSON RD	11/11/2015	1:09:00 PM	INJ			At Intersection	Side to Side Same Dir	S	Right Turn	Right Turn
457	PATTERSON RD & N 7TH ST	11/11/2015	3:26:00 PM	PDO	400	E	Non-Intersection	Front to Rear	E	Slowing	Slowing
458	PATTERSON RD & 27 1/2 RD	11/12/2015	8:56:00 AM	PDO			At Intersection	Side to Side Same Dir	S	Left Turn	Left Turn
459	PATTERSON RD & 25 RD	11/12/2015	12:34:00 PM	PDO	150	E	Intersection Related	Side to Side Same Dir	W	Straight	Stopped
460	PATTERSON RD & SPRING VALLEY CIR	11/13/2015	8:54:00 AM	INJ			At Intersection	Front to Rear	W	Slowing	Stopped
461	PATTERSON RD & 24 RD	11/14/2015	10:59:00 AM	PDO	70	E	Intersection Related	Front to Rear	W	Straight	Stopped
462	PATTERSON RD & N 15TH ST	11/14/2015	10:56:00 AM	PDO	10	W	Intersection Related	Vehicle Debris or Cargo	E	Slowing	Stopped
463	PATTERSON RD & N 12TH ST	11/15/2015	1:42:00 PM	PDO			At Intersection	Front to Side	N	Left Turn	Straight
464	25 RD & PATTERSON RD	11/16/2015	8:30:00 PM	PDO	20	N	Intersection Related	Front to Rear	N	Backing	Stopped
465	25 RD & PATTERSON RD	11/19/2015	9:16:00 AM	PDO	150	N	Driveway Access Related	Side to Side Opp Dir	E	Backing	Stopped
466	MARKET ST & PATTERSON RD	11/19/2015	12:59:00 PM	PDO			Driveway Access Related	Front to Side	E	Right Turn	Straight
467	PATTERSON RD & N 1ST ST	11/20/2015	3:50:00 PM	PDO	80	W	Intersection Related	Front to Rear	E	Slowing	Stopped
468	24 RD & PATTERSON RD	11/23/2015	1:42:00 PM	INJ			At Intersection	Front to Rear	S	Straight	Stopped
469	N 12TH ST & PATTERSON RD	11/23/2015	9:54:00 PM	PDO	50	N	Intersection Related	Front to Rear	S	Straight	Stopped
470	PATTERSON RD & N 1ST ST	11/25/2015	4:36:00 PM	PDO			At Intersection	Front to Front	W	Left Turn	Straight
471	PATTERSON RD & PARK DR	11/29/2015	11:42:00 PM	PDO	200	E	Non-Intersection	Wall or Building	E	Straight	UNK
472	PATTERSON RD & 29 RD	11/29/2015	10:00:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight

#	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
473	N 15TH ST & PATTERSON RD	11/30/2015	8:59:00 AM	PDO	150	N	Intersection Related	Front to Rear	S	Straight	Stopped
474	PATTERSON RD & N 1ST ST	12/1/2015	8:55:00 AM	INJ	25	E	At Intersection	Front to Rear	W	Straight	Stopped
475	PATTERSON RD & N 12TH ST	12/2/2015	5:14:00 PM	INJ	200	W	Non-Intersection	Front to Rear	E	Straight	Stopped
476	PATTERSON RD & N 15TH ST	12/4/2015	1:54:00 PM	INJ			Intersection Related	Front to Side	W	Left Turn	Straight
477	PATTERSON RD & 25 RD	12/6/2015	10:21:00 AM	INJ	150	W	Non-Intersection	Front to Rear	W	Straight	Stopped
478	PATTERSON RD & PARK DR	12/7/2015	12:46:00 PM	INJ			Non-Intersection	Front to Rear	W	Straight	Stopped
479	PATTERSON RD & 25 RD	12/7/2015	11:39:00 AM	PDO	150	E	Driveway Access Related	Front to Side	N	Left Turn	Straight
480	PATTERSON RD & N 1ST ST	12/9/2015	5:50:00 PM	PDO	600	W	Non-Intersection	Front to Rear	E	Straight	Stopped
481	PATTERSON RD & 29 RD	12/9/2015	3:49:00 PM	PDO			At Intersection	Front to Side	E	Left Turn	Straight
482	PATTERSON RD & 25 1/2 RD	12/11/2015	4:44:00 PM	PDO	10	W	At Intersection	Front to Rear	E	Straight	Stopped
483	24 1/2 RD & PATTERSON RD	12/15/2015	5:14:00 PM	PDO	500	S	Driveway Access Related	Front to Side	E	Left Turn	Straight
484	24 1/2 RD & PATTERSON RD	12/15/2015	3:48:00 PM	PDO	50	S	Non-Intersection	Front to Rear	N	Straight	Stopped
485	PATTERSON RD & 28 1/4 RD	12/16/2015	12:55:00 PM	INJ	30	W	Intersection Related	Front to Rear	E	Slowing	Stopped
486	PATTERSON RD & SERANADE ST	12/17/2015	9:50:00 PM	PDO	240	E	Non-Intersection	Light Pole / Utility Pole	W	Straight	Straight
487	PATTERSON RD & N 7TH ST	12/18/2015	3:23:00 PM	INJ	300	E	Non-Intersection	Rear to Side	E	Straight	Stopped
488	PATTERSON RD & N 12TH ST	12/18/2015	3:06:00 PM	PDO	659	W	Driveway Access Related	Front to Side	W	Left Turn	Straight
489	PATTERSON RD & 25 1/2 RD	12/18/2015	6:45:00 PM	PDO	276	W	Non-Intersection	Front to Front	E	Straight	Straight
490	PATTERSON RD & SERANADE ST	12/22/2015	7:50:00 PM	INJ	290	E	Driveway Access Related	Front to Side	S	Left Turn	Straight
491	PATTERSON RD & N 12TH ST	12/23/2015	11:46:00 AM	INJ			At Intersection	Front to Front	N	Left Turn	Straight
492	PATTERSON RD & NORTHERN WAY	12/23/2015	12:45:00 PM	PDO	20	W	Non-Intersection	Front to Front	E	Changing Lanes	Straight
493	PATTERSON RD & 25 RD	12/23/2015	2:41:00 PM	PDO	475	W	Driveway Access Related	Front to Side	S	Right Turn	Straight
494	PATTERSON RD & SERANADE ST	12/23/2015	5:34:00 PM	PDO			Driveway Access Related	Front to Front	E	Left Turn	Straight
495	PATTERSON RD & N 12TH ST	12/23/2015	1:20:00 PM	PDO	100	W	Intersection Related	Front to Rear	E	Straight	Stopped
496	PATTERSON RD & EL CORONA DR	12/23/2015	3:00:00 PM	PDO			At Intersection	Front to Rear	N	Left Turn	Straight
497	PATTERSON RD & MARKET ST	12/23/2015	2:54:00 PM	PDO	348	E	At Intersection	Front to Side	S	Left Turn	Straight
498	24 RD & PATTERSON RD	12/24/2015	9:18:00 PM	PDO			At Intersection	Front to Side	W	Changing Lanes	Straight
499	PATTERSON RD & N 12TH ST	12/27/2015	5:31:00 PM	PDO			At Intersection	Rear to Side	E	Left Turn	Straight
500	N 12TH ST & PATTERSON RD	12/28/2015	8:06:00 AM	INJ	200	S	Driveway Access Related	Front to Side	N	Left Turn	Straight
501	MARKET ST & PATTERSON RD	12/29/2015	2:30:00 PM	PDO	150	N	Non-Intersection	Side to Side Same Dir	S	Passing	Stopped
502	PATTERSON RD & 24 1/2 RD	12/30/2015	2:17:00 PM	PDO			At Intersection	Side to Side Same Dir	E	Changing Lanes	Straight
503	PATTERSON RD & RIO GRANDE DR DR	12/31/2015	2:31:00 PM	PDO	145	E	Intersection Related	Front to Rear	E	Changing Lanes	Stopped
504	PATTERSON RD & SERANADE ST	12/31/2015	12:14:00 PM	PDO	40	N	Intersection Related	Front to Rear	S	Straight	Stopped
505	24 1/2 RD & PATTERSON RD	1/1/2016	2:20:00 PM	PDO	25	S	At Intersection	Front to Rear	N	Slowing	Slowing
506	PATTERSON RD & N 1ST	1/2/2016	6:14:00 PM	PDO	0		At Intersection	Front to Rear	N	Right Turn	Right Turn
507	24 1/2 RD & PATTERSON RD	1/5/2016	1:32:00 PM	PDO	500	S	Driveway Access Related	Front to Side	E	Right Turn	Straight/following RD
508	PATTERSON RD & N 7TH ST	1/7/2016	6:11:00 PM	PDO	300	W	Non-Intersection	Front to Rear	E	Straight/following RD	Stopped
509	PATTERSON RD & VIEW POINT DR	1/7/2016	2:35:00 AM	PDO	161	W	Non-Intersection	Concrete Highway Barrier	W	Straight/following RD	UNK
510	PATTERSON RD & LEGENDS WAY	1/7/2016	7:19:00 AM	PDO	0		At Intersection	Sign	E	Straight/following RD	UNK
511	PATTERSON RD & N ST	1/9/2016	5:30:00 PM	PDO	300	W	Non-Intersection	Side to Side Same Dir	E	Weaving	Straight/following RD
512	PATTERSON RD & 30	1/13/2016	4:11:00 PM	INJ	239	W	Non-Intersection	Front to Rear	W	Straight/following RD	Stopped
513	PATTERSON RD & 24 1/2 RD	1/14/2016	6:15:00 PM	PDO	500	W	Non-Intersection	Side to Side Same Dir	E	Straight/following RD	Straight/following RD
514	28 1/4 RD & PATTERSON RD	1/15/2016	6:19:00 AM	INJ	0		At Intersection	Bicycle	S	Straight/following RD	Straight/following RD
515	PATTERSON RD & 29 RD	1/20/2016	5:35:00 PM	PDO	0		Intersection Related	Front to Front	W	Left Turn	Straight/following RD
516	PATTERSON RD & N ST	1/20/2016	12:34:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Straight/following RD
517	PATTERSON RD & N 15TH ST	1/24/2016	1:54:00 PM	PDO	0		At Intersection	Front to Side	W	Straight/following RD	Straight/following RD
518	24 RD & PATTERSON RD	1/25/2016	3:13:00 PM	PDO	350	S	Highway Interchange	Front to Side	W	Right Turn	Straight/following RD
519	PATTERSON RD & 28 3/4 RD RD	1/28/2016	10:53:00 AM	PDO	100	E	Non-Intersection	Side to Side Same Dir	W	Changing Lanes	Straight/following RD
520	PATTERSON RD & 30 RD	1/29/2016	8:16:00 PM	INJ	0		At Intersection	Front to Rear	W	Straight/following RD	Right Turn
521	PATTERSON RD & N ST	1/30/2016	7:26:00 PM	PDO	0		At Intersection	Front to Rear	N	Right Turn	Straight/following RD
522	PATTERSON RD & 25 RD RD	2/1/2016	6:35:00 PM	INJ	0		At Intersection	Front to Front	S	Left Turn	Straight/following RD
523	NORTHERN WAY & PATTERSON RD	2/1/2016	4:02:00 PM	PDO	300	N	Non-Intersection	Rear to Side	E	Backing	Straight/following RD
524	25 RD & PATTERSON RD	2/5/2016	11:10:00 AM	PDO	130	N	Driveway Access Related	Front to Side	E	Right Turn	Straight/following RD
525	30 RD & PATTERSON RD	2/8/2016	8:56:00 AM	PDO	200	N	Driveway Access Related	Side to Side Same Dir	S	Passing	Right Turn
526	PATTERSON RD & RIO GRANDE DR	2/11/2016	5:28:00 PM	PDO	100	E	Non-Intersection	Front to Rear	E	Straight/following RD	Stopped
527	PATTERSON RD & 24 RD	2/15/2016	2:36:00 PM	PDO	0		At Intersection	Side to Side Opposite Dir	W	Straight/following RD	Stopped
528	PATTERSON RD & 29 RD	2/16/2016	6:31:00 PM	INJ	0		At Intersection	Front to Side	W	Left Turn	Straight/following RD
529	PATTERSON RD & N 12TH ST	2/19/2016	6:42:00 PM	INJ	0		At Intersection	Front to Rear	N	Straight/following RD	Stopped
530	24 RD & PATTERSON RD	2/22/2016	8:26:00 PM	PDO	250	S	Intersection Related	Front to Side	W	Right Turn	Straight/following RD
531	PATTERSON RD & MARKET ST	2/27/2016	10:45:00 AM	INJ	0		At Intersection	Front to Side	W	Straight/following RD	Straight/following RD
532	PATTERSON RD & 25 RD	2/29/2016	3:05:00 AM	INJ	50	W	Intersection Related	Tree	W	Straight/following RD	UNK
533	PATTERSON RD & 24 RD RD	3/2/2016	1:42:00 PM	PDO	200	E	Non-Intersection	Side to Side Same Dir	W	Changing Lanes	Straight/following RD
534	PATTERSON RD & 25 RD	3/4/2016	1:01:00 PM	PDO	200	W	Intersection Related	Front to Rear	E	Straight/following RD	Slowing
535	PATTERSON RD & 24 1/2 RD RD	3/4/2016	5:16:00 PM	PDO	0		Intersection Related	Front to Rear	S	Right Turn	Right Turn
536	PATTERSON RD & 29 3/8 RD RD	3/5/2016	2:35:00 PM	PDO	93	E	Driveway Access Related	Front to Rear	W	Changing Lanes	Right Turn
537	PATTERSON RD & BEECHWOOD ST	3/7/2016	3:48:00 PM	INJ	0		At Intersection	Front to Rear	W	Slowing	Stopped
538	PATTERSON RD & N 1ST	3/8/2016	8:59:00 AM	PDO	400	E	Non-Intersection	Front to Rear	W	Straight/following RD	Slowing
539	28 1/4 RD & PATTERSON RD	3/9/2016	8:41:00 AM	PDO	50	N	Intersection Related	Front to Rear	N	Slowing	Stopped
540	PATTERSON RD & NORTHERN WAY	3/10/2016	12:17:00 PM	INJ	100	E	Driveway Access Related	Side to Side Opposite Dir	S	Left Turn	Straight/following RD
541	PATTERSON RD & N 12TH ST	3/10/2016	4:12:00 PM	PDO	80	N	Intersection Related	Front to Rear	S	Slowing	Stopped
542	24 1/2 RD & PATTERSON RD	3/11/2016	12:43:00 PM	PDO	500	S	Driveway Access Related	Front to Side	W	Straight/following RD	Straight/following RD
543	24 1/2 RD & PATTERSON RD	3/18/2016	1:01:00 PM	PDO	500	S	Driveway Access Related	Front to Front	S	Left Turn	Straight/following RD
544	PATTERSON RD & PIONEER RD	3/19/2016	11:49:00 PM	PDO	0		At Intersection	Front to Side	S	Left Turn	Left Turn
545	PATTERSON RD & 25 RD	3/25/2016	2:05:00 PM	PDO	130	E	Driveway Access Related	Front to Rear	E	Straight/following RD	Slowing
546	PATTERSON RD & MEANDER DR	3/26/2016	5:01:00 PM	PDO	50	E	Non-Intersection	Front to Rear	E	Straight/following RD	Slowing
547	PATTERSON RD & 28 1/4 RD RD	3/27/2016	1:45:00 PM	PDO	1600	E	Non-Intersection	Front to Side	E	U-Turn	Straight/following RD
548	PATTERSON RD & 27 1/2 RD RD	3/29/2016	6:19:00 PM	PDO	0		At Intersection	Side to Side Same Dir	S	Right Turn	Straight/following RD
549	PATTERSON RD & N ST	4/2/2016	2:36:00 PM	INJ	318	W	Driveway Access Related	Front to Side	W	Left Turn	Straight/following RD
550	PATTERSON RD & 28 1/4 RD	4/3/2016	7:09:00 AM	PDO	0		At Intersection	Front to Side	E	Straight/following RD	Left Turn
551	PATTERSON RD & N 15TH ST	4/5/2016	11:22:00 AM	PDO	0		Intersection Related	Front to Rear	W	Straight/following RD	Slowing
552	PATTERSON RD & 25 RD	4/6/2016	4:32:00 PM	INJ	90	E	Driveway Access Related	Front to Rear	E	Straight/following RD	Slowing
553	25 RD & PATTERSON RD	4/8/2016	2:14:00 PM	INJ	100	N	Intersection Related	Front to Rear	S	Slowing	Stopped
554	PATTERSON RD & 29 3/8 RD	4/11/2016	7:54:00 AM	PDO	150	E	Non-Intersection	Front to Rear	W	Straight/following RD	Slowing
555	PATTERSON RD & N ST	4/12/2016	10:53:00 AM	PDO	0		Intersection Related	Front to Rear	E	Backing	Stopped
556	PATTERSON RD & MEANDER DR	4/12/2016	3:42:00 PM	PDO	0		Intersection Related	Side to Side Same Dir	W	Weaving	Straight/following RD
557	PATTERSON RD & N ST	4/13/2016	1:47:00 PM	PDO	880	W	Driveway Access Related	Other Object	N	Right Turn	UNK
558	PATTERSON RD & 29 1/2 RD RD	4/15/2016	7:01:00 AM	PDO	297	W	Driveway Access Related	Bicycle	S	Right Turn	Straight/following RD
559	PATTERSON RD & N 7TH ST	4/15/2016	7:12:00 AM	PDO			At Intersection	Front to Front	E	Straight/following RD	Left Turn
560	PATTERSON RD & N ST	4/15/2016	3:37:00 PM	PDO	300	E	Intersection Related	Front to Rear	W	Other	Passing
561	PATTERSON RD & N ST	4/18/2016	12:20:00 PM	PDO			Intersection Related	Front to Side	W	Passing	Straight/following RD
562	PATTERSON RD & 30 RD RD	4/19/2016	9:15:00 AM	PDO			At Intersection	Front to Front	N	Left Turn	Straight/following RD
563	PATTERSON RD & 28 RD RD	4/20/2016	2:00:00 PM	INJ			At Intersection	Front to Side	S	Left Turn	Left Turn
564	PATTERSON RD & PARK AVE	4/20/2016	2:00:00 PM	PDO			Non-Intersection	Side to Side Same Dir	E	Changing Lanes	Straight/following RD
565	PATTERSON RD & MIRA VISTA RD	4/20/2016	5:17:00 PM	PDO	20	E	At Intersection	Front to Rear	E	Straight/following RD	Stopped
566	PATTERSON RD & 28 RD RD	4/21/2016	12:01:00 PM	INJ			At Intersection	Front to Side	S	Left Turn	Straight/following RD
567	30 RD & PATTERSON RD	4/21/2016	12:17:00 PM	PDO	50	S	Intersection Related	Front to Rear	N	Slowing	Stopped
568	PATTERSON RD & BEECHWOOD ST	4/22/2016	8:00:00 AM	PDO			Driveway Access Related	Front to Side	W	Left Turn	Straight/following RD
569	PATTERSON RD & 28 1/4 RD RD	4/22/2016	11:27:00 AM	PDO	100	W	Intersection Related	Side to Side Same Dir	E	Changing Lanes	Straight/following RD
570	PATTERSON RD & 30 RD RD	4/23/2016	5:35:00 PM	INJ	225	W	At Intersection	Front to Rear	E	Slowing	Stopped
571	PATTERSON RD & N ST	4/27/2016	7:36:00 AM	INJ			At Intersection	Front to Side	W	Left Turn	Straight/following RD
572	24 RD & PATTERSON RD	4/29/2016	11:16:00 AM	INJ	70	S	Intersection Related	Front to Rear	N	Slowing	Stopped
573	PATTERSON RD & 29 1/2 RD	4/29/2016	4:29:00 PM	INJ	70	W	Non-Intersection	Front to Rear	E	Straight/following RD	Straight/following RD
574	PATTERSON RD & 25 RD	5/2/2016	2:41:00 PM	INJ	100	E	Intersection Related	Front to Rear	W	Straight/following RD	Slowing
575	PATTERSON RD & 24 1/2 RD RD	5/2/2016	5:16:00 PM	PDO			At Intersection	Front to Side	S	Left Turn	Straight/following RD
576	PATTERSON RD & N ST	5/2/2016	4:45:00 PM	PDO	600	W	Non-Intersection	Front to Rear	E	Changing Lanes	Stopped
577	PATTERSON RD & N 12TH ST	5/3/2016	7:19:00 PM	INJ	295	N	Non-Intersection	Side to Side Opposite Dir	E	Left Turn	Straight/following RD
578	PATTERSON RD & N 7TH ST	5/5/2016	4:14:00 PM	PDO	900	W	Non-Intersection	Front to Rear	E	Straight/following RD	Stopped
579	PATTERSON RD & 25 RD RD	5/6/2016	11:58:00 AM	PDO	1433	W	Driveway Access Related	Front to Side	S	Right Turn	Straight/following RD
580	PATTERSON RD & N ST	5/8/2016	11:28:00 AM	INJ	100	W	Intersection Related	Front to Rear	E	Slowing	Stopped
581	PATTERSON RD & SPRING VALLEY CIR	5/11/2016	2:26:00 PM	INJ	150	E	Non-Intersection	Front to Rear	W	Straight/following RD	Slowing
582	PATTERSON RD & BROKEN RD	5/15/2016	6:48:00 PM	INJ			At Intersection	Front to Side	E	Left Turn	Straight/following RD
583	PATTERSON RD & 24 1/2 RD	5/15/2016	2:10:00 AM	PDO			At Intersection	Traffic Signal Pole	W	Straight/following RD	UNK
584	PATTERSON RD & 25 RD	5/16/2016	2:13:00 PM	PDO	75	W	Intersection Related	Front to Rear	E	Straight/following RD	Slowing
585	PATTERSON RD & 29 RD	5/17/2016	7:41:00 AM	PDO			At Intersection	Front to Side	W	Straight/following RD	Left Turn
586	PATTERSON RD & 24 RD RD	5/18/2016	5:10:00 PM	PDO			At Intersection	Side to Side Same Dir	E	Right Turn	Left Turn
587	PATTERSON RD & 30 RD	5/19/2016	12:14:00 PM	PDO			At Intersection	Front to Side	E	Straight/following RD	Left Turn

#	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
588	PATTERSON RD & 29 1/2 RD RD	5/20/2016	4:39:00 PM	INJ	300	E	Intersection Related	Front to Rear	W	Slowing	Stopped
589	PATTERSON RD & NORTHGATE DR	5/24/2016	3:20:00 PM	PDO			At Intersection	Side to Side Same Dir	N	Left Turn	Straight/following RD
590	PATTERSON RD & 30 RD	5/26/2016	1:52:00 PM	INJ	100	W	Intersection Related	Front to Rear	E	Straight/following RD	Stopped
591	PATTERSON RD & 29 RD	5/27/2016	5:17:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight/following RD
592	24 RD & PATTERSON RD	6/1/2016	6:14:00 PM	INJ	350	S	Highway Interchange	Front to Rear	NW	Straight/following RD	Stopped
593	PATTERSON RD & 27 1/2 RD RD	6/1/2016	8:00:00 AM	PDO	250	W	Driveway Access Related	Front to Side	N	Left Turn	Straight/following RD
594	PATTERSON RD & N 1ST	6/1/2016	8:33:00 AM	PDO			At Intersection	Front to Rear	W	Straight/following RD	Straight/following RD
595	PATTERSON RD & 28 RD	6/1/2016	5:19:00 PM	PDO	70	E	Intersection Related	Front to Rear	E	Straight/following RD	Stopped
596	PATTERSON RD & N 12TH ST	6/3/2016	5:10:00 PM	INJ	300	W	Intersection Related	Front to Rear	E	Straight/following RD	Stopped
597	PATTERSON RD & 28 3/4 RD	6/3/2016	8:49:00 AM	PDO	60	E	Non-Intersection	Front to Rear	W	Straight/following RD	Stopped
598	PATTERSON RD & 25 RD RD	6/4/2016	4:27:00 PM	PDO	120	W	Driveway Access Related	Front to Side	S	Left Turn	Straight/following RD
599	PATTERSON RD & N ST	6/7/2016	9:57:00 AM	PDO	400	W	Non-Intersection	Front to Rear	W	Changing Lanes	Straight/following RD
600	PATTERSON RD & N 12TH ST	6/7/2016	2:24:00 PM	PDO			At Intersection	Front to Side	E	Straight/following RD	Left Turn
601	PATTERSON RD & 29 RD	6/8/2016	8:58:00 AM	PDO	300	E	Non-Intersection	Front to Rear	W	Straight/following RD	Slowing
602	PATTERSON RD & N 15TH ST	6/8/2016	7:32:00 PM	PDO			At Intersection	Front to Rear	E	Straight/following RD	Stopped
603	PATTERSON RD & SPRING VALLEY CIR	6/9/2016	8:57:00 AM	PDO			At Intersection	Front to Rear	E	Straight/following RD	Slowing
604	24 RD & PATTERSON RD	6/10/2016	4:57:00 PM	PDO			Intersection Related	Side to Side Same Dir	N	Right Turn	Straight/following RD
605	PATTERSON RD & 28 1/4 RD RD	6/11/2016	2:25:00 PM	PDO	500	W	Non-Intersection	Front to Rear	E	Slowing	Stopped
606	PATTERSON RD & MARKET ST	6/14/2016	9:19:00 AM	INJ			At Intersection	Front to Side	E	Straight/following RD	Left Turn
607	PATTERSON RD & VIEW POINT DR	6/15/2016	11:42:00 AM	PDO	240	W	Intersection Related	Front to Rear	W	Straight/following RD	Stopped
608	PATTERSON RD & N ST	6/16/2016	8:22:00 AM	PDO	10	E	Intersection Related	Front to Rear	W	Slowing	Stopped
609	PATTERSON RD & RIO DR	6/20/2016	10:22:00 PM	INJ			At Intersection	Front to Rear	S	Right Turn	Straight/following RD
610	PATTERSON RD & N 15TH ST	6/20/2016	4:21:00 PM	PDO	30	E	Intersection Related	Front to Rear	W	Straight/following RD	Stopped
611	PATTERSON RD & N ST	6/21/2016	8:21:00 AM	PDO			At Intersection	Front to Side	N	Left Turn	Straight/following RD
612	PATTERSON RD & N ST	6/21/2016	3:42:00 PM	PDO			At Intersection	Front to Side	N	Left Turn	Straight/following RD
613	24 1/2 RD & PATTERSON RD	6/22/2016	4:28:00 PM	INJ	500	S	At Intersection	Front to Side	E	Left Turn	Straight/following RD
614	PATTERSON RD & 29 RD	6/22/2016	9:06:00 AM	PDO			At Intersection	Front to Side	E	Straight/following RD	Straight/following RD
615	PATTERSON RD & 25 RD RD	6/24/2016	3:32:00 PM	PDO	150	E	Driveway Access Related	Front to Side	N	Left Turn	Straight/following RD
616	PATTERSON RD & 28 RD	6/25/2016	10:30:00 AM	PDO	300	W	Non-Intersection	Front to Rear	W	Straight/following RD	Straight/following RD
617	PATTERSON RD & 28 1/4 RD RD	6/27/2016	12:40:00 PM	PDO			At Intersection	Front to Front	N	Left Turn	Straight/following RD
618	PATTERSON RD & 28 RD RD	6/29/2016	2:39:00 PM	INJ			At Intersection	Side to Side Same Dir	W	Right Turn	Straight/following RD
619	PATTERSON RD & 29 RD	6/29/2016	3:04:00 PM	INJ			At Intersection	Front to Side	W	Left Turn	Straight/following RD
620	PATTERSON RD & 29 RD	7/1/2016	2:56:00 PM	INJ			At Intersection	Front to Side	W	Left Turn	Straight/following RD
621	PATTERSON RD & N 7TH ST	7/1/2016	1:04:00 PM	PDO			At Intersection	Front to Side	W	Straight/following RD	Straight/following RD
622	PATTERSON RD & 29 RD	7/3/2016	11:50:00 PM	PDO			Non-Intersection	Sign	E	Straight/following RD	UNK
623	PATTERSON RD & N ST	7/8/2016	5:05:00 PM	PDO	300	W	Driveway Access Related	Front to Side	N	Left Turn	Straight/following RD
624	PATTERSON RD & 29 1/2 RD	7/11/2016	6:45:00 AM	INJ			Non-Intersection	Front to Rear	W	Straight/following RD	Stopped
625	PATTERSON RD & LEGENDS WAY	7/12/2016	5:35:00 PM	PDO	50	W	Non-Intersection	Front to Rear	E	Slowing	Stopped
626	PATTERSON RD & 29 RD	7/14/2016	5:47:00 PM	PDO	520	E	Intersection Related	Front to Rear	W	Straight/following RD	Stopped
627	PATTERSON RD & 28 1/4 RD RD	7/16/2016	5:12:00 PM	PDO			Non-Intersection	Front to Side	W	U-Turn	Left Turn
628	PATTERSON RD & 29 1/2 RD	7/17/2016	1:51:00 PM	PDO	60	E	Intersection Related	Front to Rear	W	Straight/following RD	Stopped
629	PATTERSON RD & MIRA VISTA RD	7/19/2016	3:38:00 PM	PDO	110	E	Non-Intersection	Front to Rear	E	Straight/following RD	Stopped
630	24 RD & PATTERSON RD	7/21/2016	4:09:00 PM	PDO	500	S	Intersection Related	Side to Side Same Dir	W	Right Turn	Straight/following RD
631	PATTERSON RD & N ST	7/24/2016	5:22:00 PM	INJ	0		At Intersection	Front to Side	W	Left Turn	Straight/following RD
632	PATTERSON RD & N 12TH ST	7/29/2016	6:29:00 PM	INJ	320	S	Non-Intersection	All Other Peds	W	Straight/following RD	Straight/following RD
633	PATTERSON RD & 25 1/2 RD RD	8/1/2016	5:32:00 PM	INJ			At Intersection	Front to Side	S	Left Turn	Straight/following RD
634	PATTERSON RD & 27 1/2 RD	8/1/2016	7:08:00 PM	PDO			Driveway Access Related	Front to Rear	E	Straight/following RD	Right Turn
635	PATTERSON RD & N 1ST	8/3/2016	7:52:00 AM	INJ	30	E	At Intersection	Front to Rear	W	Straight/following RD	Stopped
636	PATTERSON RD & 27 1/2 RD	8/5/2016	4:05:00 PM	INJ	250	E	Intersection Related	Front to Rear	W	Straight/following RD	Stopped
637	PATTERSON RD & MESA MALL ACCESS	8/8/2016	5:53:00 PM	INJ	150	W	Intersection Related	Front to Rear	E	Straight/following RD	Stopped
638	PATTERSON RD & 25 RD	8/8/2016	1:51:00 PM	PDO	100	E	Intersection Related	Front to Rear	W	Straight/following RD	Stopped
639	PATTERSON RD & 28 RD RD	8/8/2016	4:52:00 PM	PDO			At Intersection	Front to Side	S	Left Turn	Straight/following RD
640	PATTERSON RD & BURKEY ST	8/10/2016	10:33:00 AM	PDO			Non-Intersection	Front to Rear	E	Slowing	Stopped
641	PATTERSON RD & BEECHWOOD ST	8/11/2016	4:00:00 PM	PDO			Driveway Access Related	Front to Rear	E	Straight/following RD	Right Turn
642	PATTERSON RD & EL DR	8/13/2016	3:28:00 PM	PDO			At Intersection	Front to Side	N	Left Turn	Left Turn
643	28 1/4 RD & PATTERSON RD	8/14/2016	5:05:00 PM	INJ			Non-Intersection	Side to Side Same Dir	S	U-Turn	Straight/following RD
644	PATTERSON RD & N ST	8/15/2016	9:15:00 AM	PDO			At Intersection	Front to Rear	N	Left Turn	Straight/following RD
645	PATTERSON RD & N 1ST	8/15/2016	3:44:00 PM	PDO	300	E	Intersection Related	Front to Rear	W	Straight/following RD	Stopped
646	PATTERSON RD & N ST	8/17/2016	7:42:00 PM	PDO			Intersection Related	Front to Rear	S	Slowing	Stopped
647	PATTERSON RD & N 15TH ST	8/23/2016	9:14:00 AM	PDO	40	E	Intersection Related	Front to Rear	W	Straight/following RD	Straight/following RD
648	PATTERSON RD & 25 1/2 RD RD	8/26/2016	2:46:00 AM	INJ			At Intersection	Front to Side	W	Right Turn	Stopped
649	PATTERSON RD & N 12TH ST	8/26/2016	12:24:00 PM	PDO	104	N	Intersection Related	Side to Side Same Dir	S	Changing Lanes	Straight/following RD
650	PATTERSON RD & 30 RD	8/30/2016	8:20:00 PM	INJ			At Intersection	Front to Side	W	Straight/following RD	Left Turn
651	PATTERSON RD & 29 RD	8/31/2016	3:53:00 PM	INJ			At Intersection	Front to Front	W	Left Turn	Straight/following RD
652	PATTERSON RD & N 12TH ST	9/5/2016	6:45:00 PM	PDO	200	S	Driveway Access Related	Side to Side Same Dir	S	Changing Lanes	Straight/following RD
653	PATTERSON RD & GRAND CASCADE WAY	9/6/2016	7:50:00 AM	INJ	400	E	Non-Intersection	Front to Rear	W	Straight/following RD	Straight/following RD
654	PATTERSON RD & MESA ACCESS	9/7/2016	9:11:00 AM	INJ			At Intersection	Front to Front	W	Left Turn	Straight/following RD
655	PATTERSON RD & PARK AVE	9/9/2016	5:18:00 PM	INJ			At Intersection	Front to Rear	E	Slowing	Stopped
656	25 RD & PATTERSON RD	9/9/2016	8:30:00 AM	PDO	120	N	Driveway Access Related	Front to Side	E	Right Turn	Straight/following RD
657	PATTERSON RD & 25 RD	9/12/2016	7:09:00 AM	INJ			At Intersection	Front to Side	E	Straight/following RD	Straight/following RD
658	PATTERSON RD & N 7TH ST	9/13/2016	2:56:00 PM	INJ	20	E	Intersection Related	Front to Rear	W	Straight/following RD	Right Turn
659	PATTERSON RD & PHEASANT TRAIL CT	9/13/2016	7:56:00 AM	INJ	150	E	Non-Intersection	Front to Rear	W	Straight/following RD	Stopped
660	PATTERSON RD & 25 1/2 RD RD	9/13/2016	7:58:00 AM	PDO			At Intersection	Front to Rear	W	Backing	Stopped
661	PATTERSON RD & 25 1/2 RD	9/13/2016	7:57:00 AM	PDO			At Intersection	Front to Side	W	Straight/following RD	Straight/following RD
662	PATTERSON RD & MARKET ST	9/16/2016	2:51:00 PM	PDO			Intersection Related	Front to Side	E	Changing Lanes	Straight/following RD
663	PATTERSON RD & N 15TH ST	9/17/2016	8:39:00 PM	INJ			Intersection Related	Front to Rear	E	Straight/following RD	Stopped
664	PATTERSON RD & GRAND CASCADE WAY	9/20/2016	12:40:00 PM	INJ	125	E	Non-Intersection	Front to Rear	W	Straight/following RD	Stopped
665	PATTERSON RD & 24 1/2 RD RD	9/21/2016	4:38:00 PM	PDO	350	E	Non-Intersection	Front to Side	N	Left Turn	Straight/following RD
666	PATTERSON RD & PIONEER RD	9/26/2016	7:47:00 AM	PDO			Non-Intersection	Front to Rear	W	Slowing	Stopped
667	PATTERSON RD & 29 RD	9/27/2016	6:41:00 AM	PDO			At Intersection	Front to Side	N	Left Turn	Straight/following RD
668	PATTERSON RD & N ST	9/28/2016	12:00:00 PM	PDO			At Intersection	Front to Front	W	Left Turn	Straight/following RD
669	25 1/2 RD & PATTERSON RD	9/29/2016	8:12:00 AM	INJ			Intersection Related	Front to Rear	S	Straight/following RD	Stopped
670	PATTERSON RD & 25 RD RD	9/29/2016	1:45:00 PM	PDO	1150	W	Driveway Access Related	Front to Side	S	Left Turn	Straight/following RD
671	PATTERSON RD & N 1ST	9/29/2016	11:36:00 AM	PDO			At Intersection	Side to Side Same Dir	N	Left Turn	Left Turn
672	PATTERSON RD & 29 RD	9/30/2016	9:18:00 PM	PDO			At Intersection	Side to Side Opposite Dir	W	Left Turn	Straight/following RD
673	PATTERSON RD & BURKEY ST	10/5/2016	3:24:00 PM	INJ			Intersection Related	Other - Non Collision	E	Slowing	Slowing
674	25 RD & PATTERSON RD	10/6/2016	9:47:00 AM	PDO	158	N	Driveway Access Related	Front to Front	E	Left Turn	Slowing
675	25 RD & PATTERSON RD	10/6/2016	3:02:00 PM	PDO	125	N	Driveway Access Related	Front to Front	E	Left Turn	Straight/following RD
676	PATTERSON RD & N ST	10/6/2016	11:59:00 AM	PDO			At Intersection	Front to Rear	E	Slowing	Stopped
677	24 1/2 RD & PATTERSON RD	10/8/2016	11:08:00 AM	PDO	315	S	Non-Intersection	Side to Side Same Dir	S	Changing Lanes	Straight/following RD
678	PATTERSON RD & N ST	10/10/2016	1:33:00 PM	INJ			At Intersection	Front to Front	W	Left Turn	Straight/following RD
679	PATTERSON RD & 25 RD RD	10/12/2016	8:20:00 PM	INJ	150	W	Intersection Related	Front to Side	S	Left Turn	Straight/following RD
680	PATTERSON RD & 24 RD	10/13/2016	7:48:00 PM	PDO	30	E	Intersection Related	Front to Rear	W	Straight/following RD	Stopped
681	PATTERSON RD & 25 1/2 RD	10/15/2016	10:08:00 AM	PDO			At Intersection	Front to Side	W	Straight/following RD	Straight/following RD
682	PATTERSON RD & 30 RD	10/17/2016	4:53:00 PM	PDO			At Intersection	Front to Side	S	Straight/following RD	Straight/following RD
683	PATTERSON RD & MARKET ST	10/18/2016	12:10:00 PM	INJ	731	E	Non-Intersection	Side to Side Same Dir	W	Changing Lanes	Straight/following RD
684	PATTERSON RD & 25 1/2 RD RD	10/18/2016	4:32:00 PM	PDO			Intersection Related	Front to Rear	N	Stopped	Stopped
685	PATTERSON RD & 29 RD	10/20/2016	3:38:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight/following RD
686	PATTERSON RD & 29 1/2 RD RD	10/21/2016	11:44:00 AM	PDO	50	E	Intersection Related	Front to Rear	W	Other	Stopped
687	24 1/2 RD & PATTERSON RD	10/21/2016	6:26:00 PM	PDO	500	S	Intersection Related	Front to Side	E	Left Turn	Straight/following RD
688	PATTERSON RD & N 1ST	10/23/2016	1:40:00 AM	PDO			Intersection Related	Front to Front	W	Left Turn	Stopped
689	PATTERSON RD & N 7TH ST	10/25/2016	1:22:00 PM	INJ	400	W	Non-Intersection	Front to Rear	E	Straight/following RD	Stopped
690	PATTERSON RD & MARKET ST	10/26/2016	2:42:00 PM	INJ			At Intersection	Front to Side	E	Straight/following RD	Left Turn
691	PATTERSON RD & 29 RD	10/28/2016	4:00:00 PM	PDO			At Intersection	Front to Side	W	Straight/following RD	Slowing
692	PATTERSON RD & N 15TH ST	11/2/2016	2:28:00 PM	INJ			At Intersection	Front to Side	W	Straight/following RD	Straight/following RD
693	PATTERSON RD & GRAND CASCADE WAY	11/4/2016	2:37:00 PM	INJ	450	E	Non-Intersection	Bicycle	E	Straight/following RD	Straight/following RD
694	PATTERSON RD & 24 1/2 RD	11/5/2016	6:36:00 AM	PDO	150	E	Non-Intersection	Curb	W	Straight/following RD	UNK
695	PATTERSON RD & 28 RD RD	11/9/2016	12:09:00 PM	INJ			At Intersection	Front to Side	S	Left Turn	Straight/following RD
696	PATTERSON RD & MIRA RD	11/10/2016	4:07:00 PM	PDO	300	E	Driveway Access Related	Front to Front	W	Left Turn	Straight/following RD
697	PATTERSON RD & N 15TH ST	11/10/2016	9:04:00 AM	PDO	225	W	Non-Intersection	Front to Rear	W	Straight/following RD	Stopped
698	PATTERSON RD & SPRING CIR	11/10/2016	3:26:00 PM	PDO			At Intersection	Front to Side	E	Left Turn	Straight/following RD
699	24 1/2 RD & PATTERSON RD	11/11/2016	10:30:00 AM	INJ	150	S	Driveway Access Related	Front to Rear	N	Straight/following RD	Stopped
700	PATTERSON RD & 24 1/2 RD RD	11/13/2016	6:19:00 PM	INJ	1350	W	At Intersection	Front to Side	N	Left Turn	Straight/following RD
701	PATTERSON RD & 24 1/2 RD RD	11/13/2016	11:47:00 AM	PDO			Non-Intersection	Front to Front	E	Right Turn	Straight/following RD
702	PATTERSON RD & MEANDER DR	11/14/2016	4:13:00 PM	PDO			At Intersection	Wild Animal	E	Straight/following RD	UNK
703	PATTERSON RD & N 12TH ST	11/17/2016	8:00:00 AM	PDO	80	N	Non-Intersection	Side to Side Opposite Dir	N	Straight/following RD	Straight/following RD

#	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
704	PATTERSON RD & 24 1/2 RD RD	11/18/2016	6:02:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight/following RD
705	PATTERSON RD & 30 RD	11/23/2016	4:30:00 PM	PDO	300	W	Non-Intersection	Front to Rear	E	Straight/following RD	Slowing
706	PATTERSON RD & MARKET ST	11/23/2016	5:45:00 PM	PDO			Intersection Related	Front to Rear	W	Straight/following RD	Stopped
707	PATTERSON RD & 25 3/4 RD	11/25/2016	9:14:00 PM	INJ			Non-Intersection	Front to Rear	E	Straight/following RD	Slowing
708	24 RD & PATTERSON RD	11/29/2016	11:00:00 AM	PDO	500	S	At Intersection	Side to Side Same Dir	W	Right Turn	Straight/following RD
709	25 RD & PATTERSON RD	11/30/2016	12:48:00 PM	PDO	200	N	Driveway Access Related	Front to Side	N	Left Turn	Straight/following RD
710	PATTERSON RD & 25 RD RD	12/1/2016	4:15:00 PM	PDO	300	E	Non-Intersection	Side to Side Same Dir	W	Changing Lanes	Straight/following RD
711	PATTERSON RD & 27 1/2 RD	12/1/2016	9:11:00 PM	PDO	600	W	Non-Intersection	Wild Animal	W	Straight/following RD	UNK
712	PATTERSON RD & 28 1/4 RD RD	12/1/2016	9:38:00 AM	PDO	200	E	Intersection Related	Front to Rear	W	Slowing	Slowing
713	PATTERSON RD & N ST	12/5/2016	7:42:00 PM	INJ			At Intersection	Front to Side	E	Left Turn	Straight/following RD
714	PATTERSON RD & N ST	12/5/2016	6:26:00 PM	PDO	400	W	Non-Intersection	Front to Rear	W	Slowing	Stopped
715	PATTERSON RD & N ST	12/5/2016	6:48:00 PM	PDO	100	W	Non-Intersection	Side to Side Same Dir	W	Changing Lanes	Straight/following RD
716	PATTERSON RD & MARKET ST	12/9/2016	12:58:00 PM	INJ			At Intersection	Front to Side	W	Straight/following RD	Straight/following RD
717	PATTERSON RD & MARKET ST	12/10/2016	2:24:00 PM	INJ	395	E	Driveway Access Related	Front to Side	S	Left Turn	Straight/following RD
718	PATTERSON RD & N 12TH ST	12/12/2016	10:14:00 AM	PDO			At Intersection	Front to Side	W	Straight/following RD	Straight/following RD
719	PATTERSON RD & 28 1/4 RD RD	12/14/2016	12:24:00 PM	INJ			At Intersection	Front to Side	W	Left Turn	Straight/following RD
720	PATTERSON RD & 25 RD RD	12/15/2016	1:31:00 PM	INJ	155	W	Intersection Related	Front to Rear	E	Slowing	Stopped
721	PATTERSON RD & 24 1/2 RD RD	12/19/2016	10:22:00 AM	PDO	250	E	Driveway Access Related	Front to Side	N	Right Turn	Straight/following RD
722	PATTERSON RD & N 12TH ST	12/19/2016	4:04:00 PM	PDO	560	W	Intersection Related	Front to Rear	E	Straight/following RD	Stopped
723	PATTERSON RD & N 7TH ST	12/19/2016	4:22:00 PM	PDO	60	E	Intersection Related	Front to Rear	W	Straight/following RD	Slowing
724	PATTERSON RD & 27 1/2 RD	12/19/2016	4:07:00 PM	PDO			At Intersection	Front to Rear	W	Straight/following RD	Stopped
725	PATTERSON RD & 25 RD RD	12/22/2016	12:15:00 PM	PDO	460	E	Non-Intersection	Front to Rear	W	Changing Lanes	Straight/following RD
726	25 1/2 RD & PATTERSON RD	1/2/2017	11:52:00 AM	PDO	250	N	Driveway Related	Front to Rear	N	Straight	Slowing
727	N 7TH ST & PATTERSON RD	1/9/2017	7:30:00 AM	PDO	350	N	Non-Int	Side-Side Same Dir	S	Spun Out Of Control	Spun Out Of Control
728	24 1/2 RD & PATTERSON RD	1/13/2017	8:20:00 PM	INJ	500	S	Driveway Related	Front to Side	E	Left Turn	Straight
729	24 1/2 RD & PATTERSON RD	1/18/2017	11:51:00 AM	PDO	500	S	Driveway Related	Front to Side	E	Left Turn	Straight
730	HWY 6 & 50 & PATTERSON RD	1/18/2017	1:10:00 PM	PDO			At Intersection	Front to Side	E	Left Turn	Straight
731	PATTERSON RD & COLANWOOD ST	1/19/2017	4:49:00 AM	PDO			At Intersection	Front to Side	N	Straight	Straight
732	PATTERSON RD & N 1ST ST	1/19/2017	5:24:00 PM	PDO			At Intersection	Front to Rear	W	Slowing	Stopped
733	24 1/2 RD & PATTERSON RD	1/21/2017	12:23:00 PM	INJ	500	S	At Intersection	Front to Side	W	Straight	Straight
734	N 7TH ST & PATTERSON RD	1/22/2017	9:35:00 AM	PDO			At Intersection	Front to Rear	S	Straight	Stopped
735	29 RD & PATTERSON RD	1/23/2017	4:50:00 PM	PDO	30	S	Intersection Related	Front to Rear	N	Straight	Stopped
736	25 RD & PATTERSON RD	1/25/2017	3:16:00 PM	INJ			Intersection Related	Front to Rear	N	Straight	Stopped
737	PATTERSON RD & 29 RD	1/26/2017	7:52:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight
738	PATTERSON RD & 29 RD	1/27/2017	3:30:00 PM	PDO			At Intersection	Front to Rear	W	Left Turn	Left Turn
739	PATTERSON RD & MESA MALL ACCESS RD	1/27/2017	7:55:00 PM	PDO			At Intersection	Front to Side	E	Left Turn	Straight
740	PATTERSON RD & N 1ST ST	1/29/2017	11:08:00 PM	PDO	415	W	Non-Int	Curb	W	Straight	UNK
741	PATTERSON RD & MARKET ST	1/30/2017	5:08:00 PM	INJ			Intersection Related	Front to Rear	S	Straight	Stopped
742	MARKET ST & PATTERSON RD	1/30/2017	5:14:00 PM	INJ	420	N	Non-Int	Curb	S	Spun Out Of Control	UNK
743	PATTERSON RD & MEANDER DR	2/2/2017	6:10:00 PM	INJ			At Intersection	Front to Rear	W	Slowing	Straight
744	PATTERSON RD & 25 RD	2/7/2017	5:52:00 PM	INJ			At Intersection	Front to Side	N	Left Turn	Straight
745	PATTERSON RD & SPRING VALLEY CIR	2/8/2017	10:19:00 AM	INJ			Intersection Related	Bicycle	W	Straight	Stopped
746	24 1/2 RD & PATTERSON RD	2/9/2017	4:51:00 PM	PDO	1000	S	Non-Int	Side-Side Same Dir	S	Changing Lanes	Straight
747	PATTERSON RD & CIDER MILL RD	2/9/2017	5:22:00 PM	PDO	245	W	Intersection Related	Front to Rear	W	Straight	Stopped
748	PATTERSON RD & 30 RD	2/12/2017	12:21:00 PM	INJ	30	W	Intersection Related	Front to Rear	E	Straight	Slowing
749	PATTERSON RD & 25 RD	2/14/2017	10:41:00 AM	INJ			At Intersection	Front to Front	N	Left Turn	Straight
750	PATTERSON RD & N 12TH ST	2/14/2017	5:58:00 PM	PDO			At Intersection	Front to Side	S	Left Turn	Straight
751	24 RD & PATTERSON RD	2/16/2017	5:39:00 PM	PDO	100	S	Intersection Related	Front to Rear	N	Straight	Stopped
752	PATTERSON RD & 29 RD	2/22/2017	6:17:00 PM	INJ			At Intersection	Front to Side	W	Left Turn	Straight
753	PATTERSON RD & 28 1/4 RD	2/25/2017	10:04:00 PM	PDO			At Intersection	Front to Front	W	Left Turn	Straight
754	PATTERSON RD & MIRA VISTA RD	2/27/2017	12:18:00 PM	PDO	309	E	Non-Int	Side-Side Same Dir	N	Left Turn	Changing Lanes
755	25 1/2 RD & PATTERSON RD	2/28/2017	10:41:00 AM	PDO	160	S	Non-Int	Curb	S	Straight	UNK
756	PATTERSON RD & N 7TH ST	2/28/2017	10:39:00 AM	PDO			At Intersection	Front to Side	E	Straight	Left Turn
757	PATTERSON RD & 27 1/2 RD	3/1/2017	10:32:00 AM	INJ			At Intersection	Front to Side	E	Straight	Left Turn
758	PATTERSON RD & 29 RD	3/6/2017	5:21:00 PM	INJ	200	E	Intersection Related	Front to Rear	W	Slowing	Stopped
759	PATTERSON RD & 29 1/2 RD	3/7/2017	2:22:00 PM	INJ	80	W	Intersection Related	Front to Rear	E	Slowing	Slowing
760	PATTERSON RD & MARKET ST	3/11/2017	3:02:00 PM	PDO	20	W	Intersection Related	Front to Rear	W	Straight	Stopped
761	PATTERSON RD & 24 1/2 RD	3/13/2017	12:02:00 PM	INJ	250	E	Intersection Related	Front to Rear	W	Straight	Slowing
762	PATTERSON RD & 25 RD	3/16/2017	9:41:00 PM	PDO			At Intersection	Front to Side	E	Left Turn	Straight
763	PATTERSON RD & 24 RD	3/18/2017	11:28:00 AM	PDO			At Intersection	Front to Side	N	Right Turn	Left Turn
764	25 RD & PATTERSON RD	3/19/2017	3:03:00 PM	INJ	50	N	Intersection Related	Front to Rear	S	Straight	Stopped
765	N 12TH ST & PATTERSON RD	3/20/2017	4:17:00 PM	PDO	30	N	Intersection Related	Front to Rear	S	Straight	Stopped
766	PATTERSON RD & 29 1/2 RD	3/23/2017	11:40:00 AM	INJ	250	E	At Intersection	Front to Rear	W	Straight	Stopped
767	29 RD & PATTERSON RD	3/24/2017	4:52:00 PM	PDO	75	S	Intersection Related	Front to Rear	N	Left Turn	Left Turn
768	PATTERSON RD & 25 RD	3/27/2017	11:12:00 AM	INJ	481	W	Driveway Related	Front to Side	S	Left Turn	Straight
769	PATTERSON RD & 30 RD	4/2/2017	4:20:00 PM	PDO			Intersection Related	Front to Rear	E	Straight	Stopped
770	PATTERSON RD & PARK DR	4/5/2017	7:13:00 PM	PDO	100	E	Non-Int	Guard Rail	W	Straight	UNK
771	PATTERSON RD & 30 RD	4/9/2017	8:07:00 PM	INJ			Intersection Related	All Other Peds	N	Right Turn	Straight
772	PATTERSON RD & 24 RD	4/9/2017	1:53:00 PM	PDO			At Intersection	Front to Side	N	Left Turn	Straight
773	PATTERSON RD & 29 RD	4/10/2017	4:52:00 PM	INJ	200	W	Non-Int	Front to Rear	E	Straight	Stopped
774	25 RD & PATTERSON RD	4/10/2017	9:49:00 AM	PDO	200	N	Driveway Related	Front to Front	E	Right Turn	Straight
775	25 1/2 RD & PATTERSON RD	4/12/2017	4:37:00 PM	PDO	20	N	Intersection Related	Front to Rear	S	Straight	Stopped
776	PATTERSON RD & MESA MALL ACCESS RD	4/13/2017	6:46:00 PM	PDO			At Intersection	Front to Side	E	Straight	Straight
777	25 RD & PATTERSON RD	4/14/2017	1:16:00 PM	PDO	100	S	Intersection Related	Front to Rear	N	Straight	Stopped
778	PATTERSON RD & N 12TH ST	4/14/2017	2:47:00 PM	PDO			At Intersection	Front to Rear	S	Left Turn	Left Turn
779	HWY 6 & 50 & PATTERSON RD	4/15/2017	4:29:00 PM	INJ			Hwy Interchange	Other - Non Collision	SW	Right Turn	UNK
780	PATTERSON RD & BROKEN SPOKE RD	4/15/2017	1:21:00 PM	PDO			At Intersection	Front to Side	S	Straight	Straight
781	PATTERSON RD & COMMERCE BLVD	4/18/2017	10:32:00 AM	INJ	305	E	Driveway Related	Front to Side	S	Left Turn	Straight
782	PATTERSON RD & MESA MALL ACCESS RD	4/20/2017	1:04:00 PM	PDO	30	E	Intersection Related	Front to Rear	W	Straight	Straight
783	PATTERSON RD & 29 RD	4/26/2017	5:12:00 PM	PDO			Intersection Related	Side-Side Same Dir	E	Other	Stopped
784	PATTERSON RD & N 1ST ST	4/27/2017	11:35:00 AM	INJ			At Intersection	Front to Side	W	Left Turn	Straight
785	PATTERSON RD & 25 RD	5/4/2017	2:20:00 PM	INJ	350	E	Non-Int	Front to Rear	W	Straight	Stopped
786	PATTERSON RD & MARKET ST	5/4/2017	7:28:00 PM	PDO			At Intersection	Front to Side	N	Straight	Straight
787	PATTERSON RD & 25 RD	5/5/2017	5:26:00 PM	INJ	135	W	Driveway Related	Front to Side	S	Left Turn	Straight
788	PATTERSON RD & N 7TH ST	5/5/2017	12:56:00 PM	PDO			At Intersection	Front to Rear	W	Left Turn	Left Turn
789	PATTERSON RD & STARLIGHT DR	5/9/2017	12:30:00 AM	INJ	130	E	Non-Int	Tree	W	Straight	UNK
790	PATTERSON RD & E INDIAN CREEK DR	5/9/2017	7:00:00 AM	PDO			At Intersection	School Age To/From School	E	Straight	Right Turn
791	24 1/2 RD & PATTERSON RD	5/10/2017	3:37:00 PM	PDO	400	N	Driveway Related	Side-Side Same Dir	S	Passing	Right Turn
792	PATTERSON RD & 28 1/4 RD	5/12/2017	10:20:00 AM	PDO	450	W	Non-Int	Front to Rear	E	Straight	Stopped
793	29 RD & PATTERSON RD	5/17/2017	11:02:00 AM	PDO	420	S	Driveway Related	Front to Side	W	Left Turn	Straight
794	24 RD & PATTERSON RD	5/19/2017	10:07:00 AM	PDO			At Intersection	Side-Side Same Dir	S	Left Turn	Left Turn
795	PATTERSON RD & 25 1/2 RD	5/20/2017	8:22:00 PM	INJ	222	W	Intersection Related	Curb	W	Straight	UNK
796	PATTERSON RD & RIO GRANDE DR	5/22/2017	3:46:00 PM	PDO	40	E	Intersection Related	Front to Rear	E	Slowing	Stopped
797	PATTERSON RD & 29 RD	5/22/2017	5:34:00 PM	PDO	500	W	Intersection Related	Front to Rear	E	Slowing	Stopped
798	PATTERSON RD & N 7TH ST	5/28/2017	11:20:00 PM	INJ			At Intersection	Front to Side	W	Straight	Straight
799	PATTERSON RD & 25 1/2 RD	5/30/2017	4:06:00 PM	INJ	200	E	Non-Int	Front to Rear	W	Straight	Stopped
800	PATTERSON RD & MIRA VISTA RD	5/30/2017	2:58:00 PM	PDO	330	E	Driveway Related	Front to Rear	E	Straight	Left Turn
801	PATTERSON RD & 29 3/8 RD	5/30/2017	7:29:00 PM	PDO			Non-Int	Side-Side Same Dir	W	Weaving	Straight
802	PATTERSON RD & N 15TH ST	5/31/2017	4:32:00 PM	PDO	100	E	Intersection Related	Front to Rear	W	Changing Lanes	Stopped
803	PATTERSON RD & N 12TH ST	6/4/2017	3:05:00 PM	PDO			At Intersection	Front to Side	N	Straight	Straight
804	27 1/2 RD & PATTERSON RD	6/7/2017	8:04:00 AM	PDO			Intersection Related	Front to Rear	S	Straight	Stopped
805	PATTERSON RD & BEECHWOOD ST	6/8/2017	2:18:00 PM	PDO			Non-Int	Front to Rear	E	Straight	Stopped
806	PATTERSON RD & 29 RD	6/8/2017	7:24:00 AM	PDO	265	E	Intersection Related	Front to Rear	W	Straight	Slowing
807	PATTERSON RD & BEECHWOOD ST	6/8/2017	2:14:00 PM	PDO			At Intersection	Front to Rear	E	Straight	Stopped
808	PATTERSON RD & N 15TH ST	6/12/2017	7:59:00 AM	INJ			At Intersection	Bicycle	N	Left Turn	Straight
809	PATTERSON RD & N 1ST ST	6/13/2017	4:54:00 PM	PDO			At Intersection	Front to Side	N	Left Turn	Straight
810	PATTERSON RD & CIDER MILL RD	6/15/2017	5:12:00 PM	INJ			Non-Int	Front to Rear	W	Straight	Straight
811	PATTERSON RD & N 15TH ST	6/17/2017	8:39:00 AM	PDO			At Intersection	Front to Side	W	Left Turn	Straight
812	PATTERSON RD & 25 1/2 RD	6/19/2017	1:18:00 PM	INJ	279	E	Driveway Related	Front to Side	S	Left Turn	Straight
813	N 12TH ST & PATTERSON RD	6/20/2017	4:13:00 PM	PDO			At Intersection	Front to Rear	S	Straight	Stopped
814	PATTERSON RD & N 1ST ST	6/21/2017	8:07:00 PM	INJ	380	W	Intersection Related	Front to Rear	E	Straight	Stopped
815	PATTERSON RD & 24 RD	6/21/2017	2:10:00 PM	PDO	449	W	Driveway Related	Front to Front	N	Right Turn	Straight
816	PATTERSON RD & N 7TH ST	6/23/2017	5:26:00 PM	PDO	300	W	Intersection Related	Front to Rear	E	Straight	Stopped
817	PATTERSON RD & 25 1/2 RD	6/26/2017	11:53:00 AM	INJ	50	W	Intersection Related	Front to Rear	E	Straight	Stopped
818	PATTERSON RD & MARKET ST	6/26/2017	12:42:00 PM	INJ			At Intersection	Front to Side	W	Straight	Straight
819	PATTERSON RD & 27 1/2 RD	6/29/2017	9:28:00 AM	INJ			At Intersection	Front to Side	E	Left Turn	Straight
820	N 7TH ST & PATTERSON RD	6/29/2017	12:53:00 PM	PDO	130	N	Driveway Related	Front to Side	E	Right Turn	Straight

#	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
821	PATTERSON RD & GRAND CASCADE WAY	7/6/2017	7:53:00 AM	INJ			At Intersection	Front to Side	W	Straight	Slowing
822	PATTERSON RD & 27 1/2 RD	7/7/2017	6:40:00 PM	PDO			At Intersection	Front to Side	E	Straight	Left Turn
823	PATTERSON RD & 25 RD	7/9/2017	10:51:00 AM	PDO	100	W	Driveway Related	Side-Side Same Dir	S	Left Turn	Straight
824	PATTERSON RD & 27 1/2 RD	7/9/2017	11:01:00 AM	PDO	200	E	Intersection Related	Front to Rear	W	Straight	Stopped
825	PATTERSON RD & 25 RD	7/10/2017	11:02:00 AM	PDO			At Intersection	Front to Rear	W	Left Turn	Straight
826	PATTERSON RD & N 1ST ST	7/10/2017	4:26:00 PM	PDO	200	W	Intersection Related	Front to Rear	E	Straight	Stopped
827	24 RD & PATTERSON RD	7/14/2017	8:47:00 AM	PDO			Driveway Related	Guard Rail	S	U-Turn	UNK
828	PATTERSON RD & N 1ST ST	7/17/2017	2:15:00 PM	INJ	792	E	Driveway Related	Front to Front	E	Straight	Stopped
829	PATTERSON RD & 26 3/4 RD	7/20/2017	8:34:00 AM	PDO	25	W	Non-Int	Side-Side Same Dir	W	Changing Lanes	Stopped
830	PATTERSON RD & 29 RD	7/21/2017	6:35:00 PM	INJ			At Intersection	Front to Side	W	Left Turn	Straight
831	30 RD & PATTERSON RD	7/21/2017	4:07:00 PM	PDO	260	N	Non-Int	Front to Side	W	Left Turn	Straight
832	PATTERSON RD & 24 1/2 RD	7/29/2017	8:45:00 PM	PDO			At Intersection	Front to Front	N	Left Turn	Straight
833	25 1/2 RD & PATTERSON RD	7/31/2017	11:52:00 AM	INJ			At Intersection	Front to Side	E	Left Turn	Straight
834	PATTERSON RD & 28 1/4 RD	8/1/2017	2:59:00 PM	PDO	400	W	Intersection Related	Front to Rear	E	Straight	Slowing
835	PATTERSON RD & N 15TH ST	8/2/2017	8:00:00 AM	PDO	100	W	Intersection Related	Front to Rear	W	Slowing	Stopped
836	PATTERSON RD & 30 RD	8/5/2017	4:25:00 PM	PDO			At Intersection	Front to Side	W	Straight	Straight
837	PATTERSON RD & W GREENFIELD CIR	8/5/2017	7:44:00 AM	PDO	100	E	Non-Int	Side-Side Same Dir	W	Changing Lanes	Straight
838	PATTERSON RD & N 1ST ST	8/9/2017	7:42:00 PM	INJ			At Intersection	Bicycle	W	Straight	Straight
839	PATTERSON RD & BEECHWOOD ST	8/9/2017	7:50:00 AM	PDO	226	E	Non-Int	Front to Rear	W	Slowing	Slowing
840	PATTERSON RD & N 7TH ST	8/10/2017	9:37:00 PM	PDO			At Intersection	All Other Peds	N	Left Turn	Straight
841	PATTERSON RD & 28 1/4 RD	8/11/2017	4:49:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight
842	24 1/2 RD & PATTERSON RD	8/12/2017	2:45:00 PM	PDO	210	S	Driveway Related	Bicycle	W	Straight	Straight
843	PATTERSON RD & 25 1/2 RD	8/12/2017	11:21:00 AM	PDO	50	E	Intersection Related	Side-Side Same Dir	W	Changing Lanes	Slowing
844	PATTERSON RD & 28 RD	8/14/2017	7:12:00 PM	INJ			At Intersection	Front to Side	S	Left Turn	Straight
845	PATTERSON RD & N 12TH ST	8/14/2017	2:09:00 PM	PDO	400	E	Non-Int	Front to Rear	E	Straight	Slowing
846	PATTERSON RD & 25 3/4 RD	8/15/2017	10:30:00 AM	PDO	225	E	Non-Int	Curb	E	Changing Lanes	Avoiding Object
847	PATTERSON RD & N 12TH ST	8/15/2017	12:15:00 PM	PDO	418	W	Driveway Related	Front to Side	N	Straight	Straight
848	PATTERSON RD & 25 1/2 RD	8/18/2017	5:08:00 PM	PDO			At Intersection	Front to Front	W	Left Turn	Straight
849	PATTERSON RD & 25 RD	8/22/2017	1:01:00 PM	PDO	190	W	Intersection Related	Front to Rear	E	Straight	Stopped
850	PATTERSON RD & COMMERCE BLVD	8/26/2017	5:09:00 PM	PDO			Intersection Related	Front to Side	E	Left Turn	Straight
851	24 1/2 RD & PATTERSON RD	8/27/2017	12:49:00 PM	PDO	500	S	Driveway Related	Front to Side	E	Straight	Straight
852	PATTERSON RD & MESA MALL ACCESS RD	8/28/2017	4:23:00 PM	PDO	60	E	Intersection Related	Other Object	N	Right Turn	UNK
853	24 RD & PATTERSON RD	8/29/2017	3:29:00 PM	PDO			Intersection Related	Side-Side Same Dir	W	Left Turn	Left Turn
854	PATTERSON RD & N 12TH ST	9/6/2017	12:08:00 PM	PDO	250	W	Driveway Related	Front to Side	N	Right Turn	Left Turn
855	PATTERSON RD & N 7TH ST	9/6/2017	6:19:00 AM	PDO			At Intersection	Front to Side	N	UNK	Straight
856	PATTERSON RD & N 15TH ST	9/6/2017	11:57:00 AM	PDO	500	E	Intersection Related	Front to Rear	W	Slowing	Stopped
857	PATTERSON RD & 25 RD	9/6/2017	8:34:00 PM	PDO			At Intersection	Front to Side	NE	Straight	Straight
858	PATTERSON RD & FORESIGHT CIR	9/7/2017	4:53:00 PM	PDO			At Intersection	Front to Side	S	Left Turn	Left Turn
859	MARKET ST & PATTERSON RD	9/9/2017	3:14:00 PM	PDO			Driveway Related	Front to Side	E	Right Turn	Left Turn
860	PATTERSON RD & N 12TH ST	9/11/2017	7:28:00 AM	PDO			At Intersection	Front to Side	W	Right Turn	Straight
861	PATTERSON RD & N 15TH ST	9/11/2017	6:23:00 PM	PDO			At Intersection	Front to Side	E	Straight	Left Turn
862	N 1ST & PATTERSON RD	9/12/2017	5:43:00 PM	PDO	750	N	Driveway Related	Front to Rear	N	Straight	Stopped
863	PATTERSON RD & 25 RD	9/14/2017	12:43:00 PM	PDO	100	W	Non-Int	Front to Rear	W	Slowing	Stopped
864	PATTERSON RD & 25 RD	9/14/2017	4:12:00 PM	PDO	500	W	Non-Int	Front to Rear	W	Straight	Stopped
865	24 RD & PATTERSON RD	9/16/2017	8:51:00 AM	PDO	40	S	Intersection Related	Front to Rear	N	Straight	Stopped
866	PATTERSON RD & N 7TH ST	9/21/2017	4:24:00 PM	PDO			Intersection Related	Front to Rear	S	Right Turn	Right Turn
867	PATTERSON RD & N 7TH ST	9/21/2017	4:46:00 PM	PDO	100	W	Intersection Related	Front to Rear	E	Straight	Stopped
868	24 1/2 RD & PATTERSON RD	9/22/2017	11:08:00 AM	PDO			At Intersection	Front to Rear	S	Right Turn	Right Turn
869	PATTERSON RD & 25 RD	9/22/2017	12:12:00 PM	PDO	190	W	Intersection Related	Front to Rear	E	Changing Lanes	Stopped
870	24 RD & PATTERSON RD	9/23/2017	10:10:00 PM	PDO	605	N	Non-Int	Curb	N	Straight	UNK
871	PATTERSON RD & N 1ST ST	9/26/2017	9:16:00 PM	PDO	856	E	Non-Int	Guard Rail	W	Straight	UNK
872	PATTERSON RD & 29 1/2 RD	9/26/2017	6:37:00 PM	PDO			At Intersection	Bicycle	W	Left Turn	Straight
873	PATTERSON RD & 30 RD	9/28/2017	7:21:00 AM	PDO			At Intersection	Front to Side	E	Straight	Left Turn
874	PATTERSON RD & CRIS-MAR ST	9/28/2017	7:43:00 AM	PDO			At Intersection	Front to Rear	W	Straight	Stopped
875	PATTERSON RD & NORTHGATE DR	9/29/2017	7:36:00 PM	PDO			Non-Int	Front to Rear	N	Straight	Straight
876	PATTERSON RD & VIEW POINT DR	10/2/2017	5:18:00 PM	PDO			Non-Int	Front to Rear	E	Straight	Stopped
877	PATTERSON RD & 30 RD	10/2/2017	3:16:00 PM	PDO	100	W	Intersection Related	Front to Rear	E	Straight	Stopped
878	25 RD & PATTERSON RD	10/4/2017	5:22:00 PM	PDO	100	N	Intersection Related	Front to Rear	N	Straight	Stopped
879	PATTERSON RD & 25 1/2 RD	10/4/2017	12:53:00 PM	PDO	75	E	Non-Int	Front to Rear	W	Straight	Stopped
880	24 RD & PATTERSON RD	10/6/2017	6:09:00 PM	INJ			Intersection Related	Front to Front	N	Left Turn	Straight
881	PATTERSON RD & N 7TH ST	10/9/2017	6:40:00 AM	PDO			At Intersection	All Other Peds	S	Right Turn	Straight
882	PATTERSON RD & 30 RD	10/11/2017	4:34:00 PM	PDO			At Intersection	Front to Rear	S	Other	Stopped
883	PATTERSON RD & N 8TH CT	10/12/2017	3:48:00 PM	PDO	500	E	Non-Int	Front to Rear	W	Straight	Stopped
884	PATTERSON RD & N 12TH ST	10/12/2017	12:08:00 PM	PDO	375	E	Intersection Related	Front to Rear	W	Straight	Stopped
885	PATTERSON RD & N 15TH ST	10/12/2017	4:11:00 PM	PDO	600	E	Intersection Related	Front to Rear	W	Straight	Stopped
886	PATTERSON RD & MESA MALL ACCESS RD	10/16/2017	6:00:00 PM	PDO			At Intersection	Front to Rear	W	Slowing	Stopped
887	PATTERSON RD & 27 1/2 RD	10/17/2017	3:15:00 PM	PDO	170	E	Intersection Related	Front to Rear	W	Straight	Stopped
888	PATTERSON RD & 27 1/2 RD	10/18/2017	5:16:00 PM	PDO			At Intersection	Front to Rear	W	Straight	Stopped
889	PATTERSON RD & 28 1/4 RD	10/19/2017	2:43:00 PM	PDO			Intersection Related	Side-Side Same Dir	E	Changing Lanes	Straight
890	PATTERSON RD & N 12TH ST	10/21/2017	1:29:00 PM	INJ			At Intersection	Front to Side	E	Left Turn	Straight
891	PATTERSON RD & MESA MALL ACCESS RD	10/21/2017	12:06:00 PM	PDO			Intersection Related	Side-Side Same Dir	W	U-Turn	Right Turn
892	PATTERSON RD & N 12TH ST	10/22/2017	1:24:00 PM	PDO			Intersection Related	Front to Side	S	Left Turn	Right Turn
893	PATTERSON RD & N 12TH ST	10/23/2017	11:14:00 AM	PDO	20	E	Intersection Related	Front to Rear	W	Slowing	Stopped
894	PATTERSON RD & N 1ST ST	10/24/2017	5:08:00 PM	PDO	300	E	Non-Int	Guard Rail	W	Straight	UNK
895	PATTERSON RD & 25 RD	10/24/2017	11:19:00 AM	PDO	40	E	Intersection Related	Front to Rear	W	Left Turn	Left Turn
896	PATTERSON RD & 24 1/2 RD	10/26/2017	5:44:00 PM	PDO	363	E	Non-Int	Sign	W	Straight	UNK
897	PATTERSON RD & RIO GRANDE DR	10/27/2017	4:06:00 PM	INJ	100	W	Non-Int	Front to Rear	E	Straight	Stopped
898	PATTERSON RD & DARBY DR	10/27/2017	6:24:00 PM	PDO			At Intersection	Front to Side	N	Left Turn	Straight
899	PATTERSON RD & 25 RD	10/28/2017	11:07:00 PM	INJ			At Intersection	Front to Front	S	Straight	Straight
900	PATTERSON RD & MARKET ST	11/2/2017	9:30:00 AM	PDO			At Intersection	Front to Side	W	Straight	Straight
901	PATTERSON RD & PARK DR	11/3/2017	11:26:00 AM	PDO	60	E	Intersection Related	Front to Rear	W	Slowing	Stopped
902	25 RD & PATTERSON RD	11/6/2017	11:48:00 AM	PDO	127	N	Driveway Related	Front to Front	N	Left Turn	Straight
903	PATTERSON RD & 25 RD	11/7/2017	4:47:00 PM	PDO	150	E	Intersection Related	Front to Rear	W	Slowing	Stopped
904	PATTERSON RD & 25 RD	11/8/2017	2:38:00 PM	PDO	199	E	Intersection Related	Front to Rear	W	Slowing	Stopped
905	PATTERSON RD & N 12TH ST	11/10/2017	9:46:00 AM	PDO	642	E	Non-Int	Side-Side Same Dir	NE	Changing Lanes	Straight
906	PATTERSON RD & 24 1/2	11/10/2017	5:53:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight
907	PATTERSON RD & 28 1/4	11/10/2017	6:34:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight
908	PATTERSON RD & 24 1/2	11/10/2017	3:19:00 PM	PDO			At Intersection	Side-Side Same Dir	SE	Changing Lanes	Straight
909	PATTERSON RD & 24 1/2	11/11/2017	10:24:00 PM	PDO			At Intersection	Front to Side	W	Straight	Straight
910	29 RD & PATTERSON RD	11/13/2017	4:04:00 PM	PDO	268	N	Intersection Related	Front to Rear	S	Passing	Stopped
911	PATTERSON RD & 28 1/4	11/17/2017	6:49:00 PM	PDO			Non-Int	Side-Side Same Dir	W	Weaving	Straight
912	PATTERSON RD & 29 RD	11/17/2017	9:08:00 AM	PDO			At Intersection	Front to Front	E	Straight	Left Turn
913	PATTERSON RD & 25 1/2	11/18/2017	12:46:00 PM	PDO			At Intersection	Front to Rear	E	Straight	Stopped
914	PATTERSON RD & N 12TH ST	11/19/2017	10:03:00 AM	PDO			Intersection Related	Front to Rear	N	Left Turn	Left Turn
915	PATTERSON RD & 30 RD	11/19/2017	4:32:00 PM	PDO			Intersection Related	Front to Rear	S	Straight	Slowing
916	PATTERSON RD & N 7TH ST	11/22/2017	2:38:00 PM	PDO	10	W	Intersection Related	Front to Rear	E	Other	Stopped
917	PATTERSON RD & N 12TH ST	11/24/2017	1:46:00 PM	PDO	350	W	Driveway Related	Front to Rear	W	Straight	Slowing
918	PATTERSON RD & N 15TH ST	11/28/2017	1:34:00 PM	PDO			At Intersection	Front to Side	E	Straight	Straight
919	PATTERSON RD & 25 1/2	11/28/2017	5:31:00 PM	PDO			At Intersection	Front to Side	N	Straight	Left Turn
920	29 RD & PATTERSON RD	12/2/2017	2:39:00 PM	PDO	350	S	Driveway Related	Front to Side	W	Left Turn	Straight
921	PATTERSON RD & N 7TH ST	12/4/2017	8:37:00 PM	PDO			At Intersection	Front to Front	N	Straight	Straight
922	PATTERSON RD & FORESIGHT CIR	12/5/2017	3:38:00 PM	PDO	480	E	Intersection Related	Front to Rear	W	Straight	Stopped
923	PATTERSON RD & N 1ST ST	12/5/2017	5:27:00 PM	PDO			Intersection Related	Front to Rear	W	Straight	Stopped
924	PATTERSON RD & 25 RD	12/7/2017	2:37:00 PM	PDO	40	E	Intersection Related	Front to Rear	W	Straight	Slowing
925	PATTERSON RD & 24 1/2	12/8/2017	12:45:00 PM	PDO			At Intersection	Front to Front	E	Left Turn	Straight
926	PATTERSON RD & 24 RD	12/8/2017	1:50:00 PM	PDO			At Intersection	Front to Side	N	Straight	Left Turn
927	PATTERSON RD & N 7TH ST	12/14/2017	1:11:00 PM	PDO			Intersection Related	Front to Side	W	Straight	Left Turn
928	PATTERSON RD & HOME DEPOT SIGNAL	12/14/2017	1:55:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight
929	PATTERSON RD & N 1ST ST	12/15/2017	9:50:00 PM	PDO	100	W	Non-Int	Side-Side Same Dir	E	Changing Lanes	Straight
930	PATTERSON RD & 30 RD	12/16/2017	2:49:00 PM	PDO			At Intersection	Front to Side	N	Straight	Straight
931	PATTERSON RD & 29 RD	12/17/2017	5:31:00 PM	PDO	350	E	Driveway Related	Front to Rear	N	Right Turn	Straight
932	PATTERSON RD & AGANA	12/17/2017	1:44:00 PM	PDO	130	W	Intersection Related	Fence	N	Left Turn	UNK
933	PATTERSON RD & 24 RD	12/18/2017	2:35:00 PM	PDO	160	W	Intersection Related	Front to Front	NE	Changing Lanes	Straight
934	PATTERSON RD & 25 1/2	12/21/2017	6:15:00 PM	PDO			At Intersection	Front to Side	E	Left Turn	Straight
935	PATTERSON RD & MARKET ST	12/22/2017	2:40:00 PM	PDO	25	W	Non-Int	Front to Rear	W	Straight	Stopped
936	PATTERSON RD & 29 RD	12/23/2017	4:24:00 AM	PDO			At Intersection	Traffic Signal Pole	N	Left Turn	UNK
937	PATTERSON RD & 28 RD	12/25/2017	4:17:00 PM	PDO			At Intersection	Front to Side	S	Left Turn	Straight
938	PATTERSON RD & N 1ST ST	12/29/2017	2:44:00 PM	PDO			At Intersection	Front to Rear	W	Straight	Stopped

#	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
939	PATTERSON RD & N 12TH ST	12/31/2017	10:07:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Straight
940	PATTERSON RD & 25 RD	1/2/2018	10:58:00 AM	PDO	1215	N	Driveway Access Related	Front to Front	E	Left Turn	Left Turn
941	PATTERSON RD & 25 RD	1/3/2018	3:01:00 PM	PDO	120	S	Intersection Related	Front to Rear	N	Straight/following road	Stopped
942	PATTERSON RD & N 15TH ST	1/3/2018	5:24:00 PM	PDO	602	E	Intersection Related	Side to Side Same Dir	E	Changing Lanes	Straight/following road
943	PATTERSON RD & 25 RD	1/4/2018	1:55:00 PM	PDO	108	E	Driveway Access Related	Front to Side	N	Left Turn	Straight/following road
944	PATTERSON RD & 29 RD	1/8/2018	5:50:00 PM	PDO	0		Intersection Related	Front to Rear	N	Straight/following road	Stopped
945	PATTERSON RD & HOME DEPOT SIGNAL	1/9/2018	11:50:00 AM	PDO	500	E	Non-Intersection	Light Pole / Utility Pole	W	Straight/following road	UNK
946	PATTERSON RD & 24 1/2 RD	1/10/2018	2:14:00 PM	PDO	500	S	At Intersection	Front to Rear	S	Changing Lanes	Stopped
947	PATTERSON RD & 24 1/2 RD	1/10/2018	2:01:00 PM	PDO	0		Intersection Related	Front to Side	E	Left Turn	Stopped
948	PATTERSON RD & 30 RD	1/12/2018	10:15:00 AM	PDO	30	S	Intersection Related	Front to Rear	N	Straight/following road	Stopped
949	636 MARKET ST & PATTERSON RD	1/12/2018	5:15:00 PM	PDO	224	N	At Intersection	Front to Side	E	Right Turn	Left Turn
950	PATTERSON RD & N 1ST ST	1/18/2018	8:57:00 AM	PDO	20	E	Intersection Related	Enbankment	N	Right Turn	Straight/following road
951	PATTERSON RD & 29 1/2 RD	1/19/2018	3:52:00 PM	FAT	0		At Intersection	Front to Side	W	Left Turn	Straight/following road
952	PATTERSON RD & 27 1/2 RD	1/19/2018	8:20:00 PM	PDO	0		At Intersection	Traffic Signal Pole	S	Left Turn	UNK
953	PATTERSON RD & HWY 6 & 50	1/19/2018	11:11:00 PM	PDO	150	N	Non-Intersection	Enbankment	W	Straight/following road	UNK
954	PATTERSON RD & N 12TH ST	1/20/2018	7:54:00 PM	INJ	200	S	Driveway Access Related	Front to Side	E	Straight/following road	Straight/following road
955	PATTERSON RD & 28 1/4 RD	1/21/2018	5:16:00 AM	PDO	0		At Intersection	Curb	N	Left Turn	UNK
956	PATTERSON RD & 25 RD	1/21/2018	12:47:00 PM	PDO	100	N	Intersection Related	Front to Rear	S	Straight/following road	Stopped
957	PATTERSON RD & N 12TH ST	1/21/2018	4:07:00 PM	PDO	0		At Intersection	Front to Side	W	Straight/following road	Straight/following road
958	PATTERSON RD & 27 1/2 RD	1/22/2018	8:54:00 AM	PDO	0		At Intersection	Side to Side Same Dir	E	Straight/following road	Stopped
959	PATTERSON RD & 29 RD	1/23/2018	5:43:00 PM	PDO	73	S	Intersection Related	Front to Rear	N	Straight/following road	Stopped
960	PATTERSON RD & N 12TH ST	1/24/2018	5:49:00 PM	PDO	0		Intersection Related	Front to Side	N	Right Turn	Left Turn
961	PATTERSON RD & N 15TH ST	1/27/2018	11:40:00 AM	PDO	600	E	Intersection Related	Front to Rear	W	Straight/following road	Stopped
962	PATTERSON RD & 25 RD	1/29/2018	10:13:00 AM	INJ	1500	E	Driveway Access Related	Front to Rear	W	Straight/following road	Slowing
963	PATTERSON RD & 24 1/2 RD	1/30/2018	7:55:00 AM	PDO	1200	E	Non-Intersection	Side to Side Same Dir	W	Changing Lanes	Straight/following road
964	PATTERSON RD & 27 1/2 RD	1/31/2018	3:25:00 PM	PDO	0		At Intersection	Front to Side	E	Left Turn	Straight/following road
965	PATTERSON RD & N 15TH ST	2/2/2018	5:32:00 PM	PDO	300	E	Non-Intersection	Side to Side Same Dir	W	Straight/following road	Straight/following road
966	PATTERSON RD & 29 RD	2/3/2018	1:00:00 PM	PDO	200	S	Intersection Related	Front to Rear	N	Straight/following road	Stopped
967	PATTERSON RD & 25 RD	2/3/2018	10:40:00 PM	PDO	50	N	At Intersection	Side to Side Same Dir	S	Changing Lanes	Straight/following road
968	PATTERSON RD & 28 1/4 RD	2/8/2018	7:40:00 AM	INJ	0		Intersection Related	Front to Rear	W	Straight/following road	Stopped
969	PATTERSON RD & 24 1/2 RD	2/8/2018	11:14:00 AM	PDO	0		Intersection Related	Front to Rear	N	Straight/following road	Straight/following road
970	PATTERSON RD & GRAND CASCADE WY	2/9/2018	7:53:00 AM	PDO	50	E	Non-Intersection	Front to Rear	W	Straight/following road	Stopped
971	PATTERSON RD & GRAND CASCADE WY	2/9/2018	7:53:00 AM	PDO	70	E	Non-Intersection	Front to Rear	W	Straight/following road	Stopped
972	PATTERSON RD & 25 1/2 RD	2/12/2018	2:02:00 PM	PDO	50	E	Intersection Related	Side to Side Same Dir	E	Changing Lanes	Straight/following road
973	PATTERSON RD & 25 1/2 RD	2/13/2018	11:51:00 AM	PDO	300	E	Intersection Related	Front to Rear	W	Straight/following road	Slowing
974	PATTERSON RD & N 12TH ST	2/14/2018	5:14:00 PM	PDO	230	E	Intersection Related	Front to Rear	W	Straight/following road	Slowing
975	PATTERSON RD & N 7TH ST	2/14/2018	10:07:00 AM	PDO	0		At Intersection	Front to Front	N	Left Turn	Straight/following road
976	PATTERSON RD & N 7TH ST	2/15/2018	6:42:00 PM	PDO	0		At Intersection	Front to Front	N	Left Turn	Straight/following road
977	PATTERSON RD & MARKET ST	2/15/2018	6:53:00 PM	PDO	0		At Intersection	Front to Rear	W	Backing	Stopped
978	PATTERSON RD & N 12TH ST	2/16/2018	8:43:00 AM	PDO	0		Intersection Related	Front to Side	W	Changing Lanes	Straight/following road
979	PATTERSON RD & N 7TH ST	2/20/2018	3:08:00 PM	PDO	0		At Intersection	Front to Side	N	Left Turn	Straight/following road
980	PATTERSON RD & SPRING VALLEY CIR	2/22/2018	7:11:00 AM	INJ	150	E	Non-Intersection	Front to Side	E	Straight/following road	Straight/following road
981	PATTERSON RD & GRAND CASCADE WY	2/22/2018	6:51:00 AM	PDO	250	E	Non-Intersection	Front to Side	W	Straight/following road	Straight/following road
982	PATTERSON RD & 24 RD	2/22/2018	7:11:00 PM	PDO	0		At Intersection	Front to Side	N	Left Turn	Straight/following road
983	PATTERSON RD & 24 1/2 RD	2/25/2018	11:44:00 AM	PDO	50	W	Intersection Related	Front to Rear	E	Straight/following road	Stopped
984	PATTERSON RD & N 12TH ST	2/26/2018	2:40:00 PM	PDO	100	W	Intersection Related	Side to Side Same Dir	E	Changing Lanes	Stopped
985	PATTERSON RD & 28 RD	2/28/2018	5:21:00 PM	PDO	70	E	Non-Intersection	Front to Rear	E	Straight/following road	Straight/following road
986	PATTERSON RD & 29 RD	2/28/2018	7:41:00 AM	PDO	0		At Intersection	Front to Side	E	Left Turn	Straight/following road
987	PATTERSON RD & N 7TH ST	2/28/2018	10:45:00 AM	PDO	0		At Intersection	Front to Side	N	Right Turn	Left Turn
988	PATTERSON RD & N 7TH ST	2/28/2018	1:24:00 PM	PDO	0		At Intersection	Front to Side	N	Left Turn	Straight/following road
989	PATTERSON RD & PARTEE DR	3/1/2018	7:45:00 AM	PDO	0		Non-Intersection	Front to Rear	W	Straight/following road	Stopped
990	PATTERSON RD & 27 1/2 RD	3/1/2018	3:22:00 PM	PDO	300	W	At Intersection	Front to Rear	E	Straight/following road	Slowing
991	PATTERSON RD & N 1ST ST	3/3/2018	10:01:00 AM	PDO	30	N	Intersection Related	Front to Rear	S	Straight/following road	Stopped
992	PATTERSON RD & N 7TH ST	3/3/2018	10:36:00 AM	PDO	20	N	Intersection Related	Front to Rear	S	Straight/following road	Stopped
993	PATTERSON RD & 24 1/2 RD	3/3/2018	2:13:00 PM	PDO	400	S	At Intersection	Front to Side	E	Left Turn	Straight/following road
994	PATTERSON RD & 30 RD	3/5/2018	3:56:00 PM	PDO	0		At Intersection	Front to Rear	W	Straight/following road	Stopped
995	PATTERSON RD & N 1ST ST	3/6/2018	5:20:00 PM	PDO	160	W	Non-Intersection	Front to Rear	E	Slowing	Stopped
996	PATTERSON RD & 25 RD	3/6/2018	4:57:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Straight/following road
997	PATTERSON RD & 25 RD	3/8/2018	10:47:00 AM	PDO	15	E	Intersection Related	Front to Rear	W	Straight/following road	Stopped
998	PATTERSON RD & 24 1/2 RD	3/8/2018	1:23:00 PM	PDO	0		At Intersection	Front to Side	N	Left Turn	Straight/following road
999	PATTERSON RD & BURKEY ST	3/8/2018	2:11:00 PM	PDO	0		At Intersection	Bicycle	S	Right Turn	Straight/following road
1000	PATTERSON RD & N 15TH ST	3/8/2018	9:46:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Straight/following road
1001	PATTERSON RD & N 1ST ST	3/9/2018	4:06:00 PM	PDO	0		Intersection Related	Front to Rear	E	Straight/following road	Stopped
1002	PATTERSON RD & 25 1/2 RD	3/14/2018	4:10:00 PM	PDO	0		At Intersection	Front to Side	UNK	UNK	Straight/following road
1003	PATTERSON RD & 30 RD	3/15/2018	12:17:00 PM	PDO	181	N	Driveway Access Related	Front to Front	W	Left Turn	Slowing
1004	PATTERSON RD & 24 1/2 RD	3/19/2018	5:15:00 PM	PDO	0		At Intersection	Front to Side	E	Left Turn	Straight/following road
1005	PATTERSON RD & N 12TH ST	3/21/2018	2:55:00 PM	PDO	220	W	Intersection Related	Front to Rear	E	Slowing	Stopped
1006	PATTERSON RD & N 12TH ST	3/21/2018	5:08:00 PM	PDO	370	W	Intersection Related	Front to Rear	E	Straight/following road	Stopped
1007	PATTERSON RD & N 1ST ST	3/24/2018	5:22:00 PM	PDO	0		At Intersection	Front to Side	E	Left Turn	Left Turn
1008	PATTERSON RD & MARKET ST	3/28/2018	10:08:00 AM	PDO	0		At Intersection	Front to Side	E	Straight/following road	Straight/following road
1009	PATTERSON RD & N 12TH ST	3/28/2018	12:30:00 PM	PDO	0		Intersection Related	Front to Rear	N	Straight/following road	Stopped
1010	PATTERSON RD & 30 RD	3/29/2018	7:10:00 AM	PDO	0		At Intersection	Front to Side	E	Straight/following road	Straight/following road
1011	PATTERSON RD & N 7TH ST	4/1/2018	8:34:00 PM	PDO	0		At Intersection	Front to Rear	S	Straight/following road	Stopped
1012	PATTERSON RD & 29 RD	4/2/2018	1:11:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Straight/following road
1013	PATTERSON RD & N 15TH ST	4/4/2018	7:25:00 AM	PDO	403	E	Intersection Related	Front to Rear	W	Slowing	Stopped
1014	PATTERSON RD & N 15TH ST	4/4/2018	4:17:00 PM	PDO	363	E	Intersection Related	Front to Rear	E	Straight/following road	Stopped
1015	PATTERSON RD & 24 RD	4/6/2018	12:27:00 PM	PDO	0		At Intersection	Front to Side	N	Left Turn	Straight/following road
1016	PATTERSON RD & 25 1/2 RD	4/9/2018	4:34:00 PM	PDO	0		Non-Intersection	Front to Rear	W	Straight/following road	Avoiding Object
1017	PATTERSON RD & 25 RD	4/12/2018	3:42:00 PM	PDO	0		At Intersection	Bicycle	W	Straight/following road	Right Turn
1018	PATTERSON RD & 24 1/2 RD	4/18/2018	1:27:00 PM	PDO	170	N	Driveway Access Related	Front to Side	W	Left Turn	Straight/following road
1019	PATTERSON RD & N 12TH ST	4/18/2018	12:27:00 PM	PDO	40	S	Intersection Related	Front to Rear	N	Changing Lanes	Stopped
1020	PATTERSON RD & N 1ST ST	4/20/2018	11:08:00 AM	PDO	0		At Intersection	Front to Side	N	Right Turn	Straight/following road
1021	PATTERSON RD & MIRA VISTA RD	4/21/2018	6:12:00 PM	PDO	300	W	Non-Intersection	Front to Rear	W	Straight/following road	Slowing
1022	PATTERSON RD & VIEW POINT DR	4/21/2018	3:54:00 PM	PDO	0		At Intersection	All Other Peds	S	Right Turn	Straight/following road
1023	PATTERSON RD & 29 RD	4/27/2018	3:16:00 PM	PDO	200	E	Intersection Related	Front to Rear	W	Slowing	Stopped
1024	PATTERSON RD & N 12TH ST	5/2/2018	11:30:00 AM	PDO	100	S	Driveway Access Related	Side to Side Same Dir	N	Changing Lanes	Straight/following road
1025	PATTERSON RD & 24 1/2 RD	5/2/2018	8:37:00 PM	PDO	500	S	Driveway Access Related	Front to Side	E	Left Turn	Straight/following road
1026	PATTERSON RD & 30 RD	5/2/2018	3:12:00 PM	PDO	20	E	Intersection Related	Front to Rear	W	Straight/following road	Stopped
1027	PATTERSON RD & N 12TH ST	5/2/2018	4:41:00 PM	PDO	300	E	Intersection Related	Front to Rear	W	Straight/following road	Stopped
1028	PATTERSON RD & N 15TH ST	5/3/2018	5:29:00 PM	INJ	500	E	Non-Intersection	Front to Rear	W	Straight/following road	Stopped
1029	PATTERSON RD & 27 1/2 RD	5/3/2018	10:47:00 AM	PDO	0		At Intersection	Front to Side	E	Left Turn	Straight/following road
1030	PATTERSON RD & 25 RD	5/4/2018	12:31:00 PM	PDO	0		At Intersection	Front to Front	N	Left Turn	Straight/following road
1031	PATTERSON RD & 24 RD	5/5/2018	9:05:00 PM	INJ	0		At Intersection	Front to Side	E	Left Turn	Straight/following road
1032	PATTERSON RD & N 7TH ST	5/5/2018	12:15:00 PM	PDO	570	W	Intersection Related	Front to Rear	E	Straight/following road	Stopped
1033	PATTERSON RD & 29 RD	5/6/2018	4:32:00 PM	PDO	0		At Intersection	Front to Rear	W	Straight/following road	Stopped
1034	PATTERSON RD & 24 1/2 RD	5/8/2018	12:58:00 PM	PDO	466	S	Driveway Access Related	Front to Side	E	Left Turn	Straight/following road
1035	PATTERSON RD & 25 RD	5/9/2018	1:32:00 PM	PDO	130	S	Driveway Access Related	Front to Side	E	Left Turn	Straight/following road
1036	PATTERSON RD & RIO GRANDE DR	5/9/2018	4:10:00 PM	PDO	0		Non-Intersection	Curb	W	Straight/following road	UNK
1037	PATTERSON RD & N 12TH ST	5/9/2018	6:38:00 AM	PDO	0		At Intersection	Front to Side	N	Straight/following road	Straight/following road
1038	PATTERSON RD & 25 RD	5/11/2018	12:49:00 PM	PDO	230	S	Intersection Related	Front to Rear	N	Other	Stopped
1039	PATTERSON RD & N 12TH ST	5/12/2018	6:30:00 PM	PDO	400	W	Driveway Access Related	Front to Rear	E	Straight/following road	Slowing
1040	PATTERSON RD & 25 RD	5/13/2018	9:24:00 AM	PDO	1000	W	Driveway Access Related	Side to Side Same Dir	W	Changing Lanes	Straight/following road
1041	PATTERSON RD & HWY 6 & 50	5/15/2018	2:24:00 PM	PDO	250	N	Intersection Related	Side to Side Same Dir	NE	Changing Lanes	Straight/following road
1042	PATTERSON RD & MIRA VISTA RD	5/15/2018	5:00:00 PM	PDO	355	E	Intersection Related	Front to Rear	UNK	UNK	UNK
1043	I-70B & PATTERSON RD	5/16/2018	9:51:00 AM	PDO	0		Driveway Access Related	Front to Side	W	Changing Lanes	Left Turn
1044	PATTERSON RD & 27 1/2 RD	5/18/2018	3:55:00 PM	INJ	250	W	Intersection Related	Overturning	E	Other	UNK
1045	PATTERSON RD & GRAND VALLEY DR	5/22/2018	8:55:00 AM	INJ	155	W	Non-Intersection	Front to Rear	E	Straight/following road	Straight/following road
1046	PATTERSON RD & GRAND VALLEY DR	5/22/2018	8:55:00 AM	INJ	155	W	Non-Intersection	Front to Rear	E	Straight/following road	Straight/following road
1047	PATTERSON RD & SANTA FE DR	5/23/2018	7:16:00 AM	PDO	50	E	Intersection Related	Front to Rear	W	Straight/following road	Slowing
1048	PATTERSON RD & N 15TH ST	5/23/2018	4:12:00 PM	PDO	200	E	Intersection Related	Front to Rear	UNK	UNK	Slowing
1049	PATTERSON RD & 24 1/2 RD	5/25/2018	5:46:00 PM	PDO	0		At Intersection	Front to Side	N	U-Turn	Left Turn
1050	PATTERSON RD & MARKET ST	5/27/2018	7:18:00 AM	PDO	150	E	At Intersection	Light Pole / Utility Pole	E	Straight/following road	UNK
1051	636 MARKET ST & PATTERSON RD	5/28/2018	11:43:00 AM	PDO	250	N	Intersection Related	Front to Side	E	Right Turn	Straight/following road
1052	PATTERSON RD & MEANDER DR	5/30/2018	2:38:00 PM	PDO	451	W	Driveway Access Related	Bicycle	S	Stopped	Straight/following road
1053	PATTERSON RD & 29 RD	5/30/2018	7:51:00 PM	PDO	780	W	Non-Intersection	Front to Rear	W	Straight/following road	Straight/following road
1054	PATTERSON RD & 25 1/2 RD	6/4/2018	4:24:00 PM	PDO	0		Intersection Related	Front to Rear	W	Straight/following road	Straight/following road
1055	PATTERSON RD & 24 1/2 RD	6/5/2018	10:53:00 AM	PDO	500	W	Driveway Access Related	Front to Side	W	Right Turn	Straight/following road
1056	PATTERSON RD & N 7TH ST	6/5/2018	3:13:00 PM	PDO	0		At Intersection	Front to Side	E	Straight/following road	Left Turn

#	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
1057	PATTERSON RD & 24 1/2 RD	6/6/2018	11:56:00 AM	PDO	0		Intersection Related	Front to Rear	W	Slowing	Stopped
1058	PATTERSON RD & 27 1/2 RD	6/6/2018	5:02:00 PM	PDO	0		At Intersection	Front to Rear	E	Straight/following road	Stopped
1059	PATTERSON RD & 25 RD	6/7/2018	12:50:00 PM	PDO	350	W	Non-Intersection	Front to Rear	E	Slowing	Slowing
1060	PATTERSON RD & 24 1/2 RD	6/7/2018	2:28:00 PM	PDO	0		At Intersection	Front to Side	E	Left Turn	Straight/following road
1061	PATTERSON RD & 28 3/4 RD	6/8/2018	4:42:00 PM	PDO	0		Non-Intersection	Front to Rear	E	Straight/following road	Stopped
1062	PATTERSON RD & N 12TH ST	6/9/2018	12:38:00 PM	PDO	0		At Intersection	Front to Side	S	Straight/following road	Straight/following road
1063	PATTERSON RD & 24 1/2 RD	6/9/2018	6:19:00 PM	PDO	0		At Intersection	Front to Rear	S	Right Turn	Right Turn
1064	PATTERSON RD & 29 1/2 RD	6/12/2018	7:05:00 AM	PDO	40	E	Non-Intersection	Side to Side Opposite Dir	E	Drove Wrong Way	Straight/following road
1065	PATTERSON RD & 24 1/2 RD	6/12/2018	3:40:00 PM	PDO	0		At Intersection	Front to Side	E	Left Turn	Straight/following road
1066	PATTERSON RD & 24 1/2 RD	6/14/2018	4:22:00 PM	PDO	500	S	Driveway Access Related	Front to Side	E	Left Turn	Straight/following road
1067	PATTERSON RD & 24 1/2 RD	6/16/2018	2:54:00 PM	PDO	0		At Intersection	Front to Rear	W	Straight/following road	Slowing
1068	PATTERSON RD & MCMULLIN DR	6/19/2018	5:13:00 PM	INJ	0		At Intersection	Front to Side	W	Left Turn	Straight/following road
1069	PATTERSON RD & N 7TH ST	6/20/2018	11:25:00 AM	PDO	150	W	Driveway Access Related	Front to Side	W	Straight/following road	Left Turn
1070	PATTERSON RD & 29 RD	6/23/2018	11:53:00 PM	PDO	750	S	Non-Intersection	Front to Rear	S	Straight/following road	Slowing
1071	PATTERSON RD & 25 RD	6/25/2018	10:38:00 AM	PDO	150	N	Intersection Related	Front to Rear	S	Straight/following road	Stopped
1072	PATTERSON RD & MIRA VISTA RD	6/27/2018	2:26:00 PM	FAT	260	W	Non-Intersection	Front to Rear	UNK	UNK	Left Turn
1073	PATTERSON RD & COMMERCE BLVD	6/27/2018	8:55:00 AM	INJ	306	E	Driveway Access Related	Front to Side	S	Left Turn	Straight/following road
1074	PATTERSON RD & N 7TH ST	6/27/2018	9:45:00 AM	PDO	580	W	Driveway Access Related	Front to Side	E	Left Turn	Straight/following road
1075	PATTERSON RD & 30 RD	6/28/2018	3:57:00 PM	PDO	0		At Intersection	Front to Side	E	Straight/following road	Straight/following road
1076	PATTERSON RD & N 1ST ST	6/29/2018	10:56:00 AM	PDO	400	W	Intersection Related	Front to Rear	E	Slowing	Stopped
1077	PATTERSON RD & 25 RD	7/2/2018	2:23:00 PM	PDO	173	N	Driveway Access Related	Front to Side	E	Left Turn	Straight/following road
1078	PATTERSON RD & N 12TH ST	7/2/2018	3:48:00 PM	PDO	50	S	Non-Intersection	Front to Rear	N	Straight/following road	Slowing
1079	PATTERSON RD & 30 RD	7/2/2018	11:19:00 PM	PDO	0		Non-Intersection	Front to Rear	E	Straight/following road	Slowing
1080	PATTERSON RD & 24 1/2 RD	7/2/2018	2:38:00 PM	PDO	0		At Intersection	Front to Front	E	Left Turn	Straight/following road
1081	PATTERSON RD & 24 RD	7/5/2018	10:04:00 AM	PDO	80	N	Intersection Related	Side to Side Same Dir	S	Right Turn	Straight/following road
1082	PATTERSON RD & SPRING VALLEY CIR	7/5/2018	12:48:00 PM	PDO	0		Intersection Related	Front to Rear	W	Straight/following road	Stopped
1083	PATTERSON RD & 28 RD	7/7/2018	10:39:00 AM	PDO	0		At Intersection	Front to Side	S	Left Turn	Straight/following road
1084	PATTERSON RD & 30 RD	7/8/2018	7:46:00 PM	INJ	0		At Intersection	Front to Rear	N	Straight/following road	Straight/following road
1085	PATTERSON RD & N 1ST ST	7/9/2018	3:17:00 PM	PDO	0		At Intersection	Front to Side	S	Left Turn	Straight/following road
1086	PATTERSON RD & N 12TH ST	7/9/2018	1:43:00 PM	PDO	0		At Intersection	Front to Rear	E	Straight/following road	Stopped
1087	PATTERSON RD & 24 1/2 RD	7/12/2018	12:57:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Straight/following road
1088	PATTERSON RD & N 12TH ST	7/20/2018	1:32:00 PM	PDO	150	E	Driveway Access Related	Front to Side	N	Straight/following road	Straight/following road
1089	PATTERSON RD & 25 RD	7/22/2018	12:41:00 PM	PDO	0		At Intersection	Front to Rear	E	Straight/following road	Slowing
1090	PATTERSON RD & 25 RD	7/23/2018	5:32:00 PM	PDO	132	N	Driveway Access Related	Front to Front	E	Left Turn	Slowing
1091	636 MARKET ST & PATTERSON RD	7/24/2018	9:08:00 AM	PDO	224	N	Driveway Access Related	Front to Side	E	Right Turn	Left Turn
1092	PATTERSON RD & 27 1/2 RD	7/26/2018	4:28:00 PM	PDO	50	E	Non-Intersection	Front to Rear	E	Straight/following road	Stopped
1093	PATTERSON RD & N 12TH ST	7/26/2018	5:20:00 PM	PDO	350	E	Non-Intersection	Front to Rear	E	Straight/following road	Slowing
1094	PATTERSON RD & 29 RD	7/26/2018	2:24:00 PM	PDO	0		At Intersection	Front to Front	E	Straight/following road	Left Turn
1095	PATTERSON RD & PLACER ST	7/28/2018	10:52:00 AM	PDO	286	W	Non-Intersection	Front to Front	E	Other	Straight/following road
1096	PATTERSON RD & 28 1/4 RD	7/29/2018	4:29:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Straight/following road
1097	PATTERSON RD & MARKET ST	7/31/2018	4:23:00 PM	PDO	0		At Intersection	Overturning	E	Straight/following road	Straight/following road
1098	PATTERSON RD & N 7TH ST	8/6/2018	11:54:00 AM	PDO	250	W	Driveway Access Related	Front to Side	S	Left Turn	Straight/following road
1099	636 MARKET ST & PATTERSON RD	8/7/2018	12:05:00 PM	PDO	294	N	At Intersection	Front to Side	E	Right Turn	Left Turn
1100	PATTERSON RD & 30 RD	8/8/2018	4:08:00 PM	PDO	0		At Intersection	Front to Side	W	Straight/following road	Straight/following road
1101	636 MARKET ST & PATTERSON RD	8/12/2018	2:24:00 PM	PDO	220	N	Driveway Access Related	Front to Side	E	Right Turn	Left Turn
1102	PATTERSON RD & 29 1/2 RD	8/12/2018	9:52:00 AM	PDO	0		At Intersection	Front to Side	N	Left Turn	Stopped
1103	PATTERSON RD & 25 RD	8/14/2018	2:16:00 PM	PDO	695	W	Non-Intersection	Side to Side Same Dir	S	Left Turn	Straight/following road
1104	PATTERSON RD & 28 1/4 RD	8/14/2018	3:19:00 PM	PDO	0		At Intersection	Front to Side	E	Straight/following road	Left Turn
1105	PATTERSON RD & 29 1/2 RD	8/14/2018	4:52:00 PM	PDO	245	W	Intersection Related	Other - Non Collision	E	Other	UNK
1106	PATTERSON RD & 29 RD	8/18/2018	6:10:00 AM	INJ	0		At Intersection	All Other Peds	N	UNK	Straight/following road
1107	PATTERSON RD & N 12TH ST	8/22/2018	11:41:00 AM	PDO	50	N	Intersection Related	Front to Rear	S	Changing Lanes	Stopped
1108	PATTERSON RD & 28 1/4 RD	8/22/2018	3:35:00 PM	PDO	0		At Intersection	Side to Side Same Dir	N	Left Turn	Left Turn
1109	PATTERSON RD & N 12TH ST	8/23/2018	6:46:00 PM	PDO	20	E	Intersection Related	Side to Side Same Dir	N	Right Turn	Straight/following road
1110	PATTERSON RD & N 15TH ST	8/26/2018	2:14:00 PM	PDO	0		At Intersection	Front to Side	E	Left Turn	Straight/following road
1111	PATTERSON RD & 30 RD	8/26/2018	8:01:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Straight/following road
1112	PATTERSON RD & 25 RD	8/26/2018	8:17:00 PM	PDO	0		At Intersection	Front to Front	W	Left Turn	Straight/following road
1113	PATTERSON RD & N 15TH ST	8/27/2018	5:43:00 PM	INJ	685	E	Non-Intersection	Front to Rear	E	Straight/following road	Slowing
1114	PATTERSON RD & N 7TH ST	8/29/2018	5:41:00 PM	PDO	150	E	Non-Intersection	Front to Rear	W	Straight/following road	Stopped
1115	PATTERSON RD & 25 RD	8/29/2018	12:27:00 PM	PDO	0		At Intersection	Front to Side	W	Left Turn	Straight/following road
1116	PATTERSON RD & N 1ST ST	8/29/2018	12:40:00 PM	PDO	100	E	Intersection Related	Front to Rear	W	Straight/following road	Stopped
1117	PATTERSON RD & N 7TH ST	8/29/2018	5:26:00 PM	PDO	0		At Intersection	Front to Front	S	Right Turn	Straight/following road
1118	PATTERSON RD & N 15TH ST	9/4/2018	8:03:00 AM	PDO	175	W	Non-Intersection	Front to Rear	W	Straight/following road	Slowing
1119	PATTERSON RD & 29 RD	9/4/2018	3:17:00 PM	PDO	0		At Intersection	Front to Rear	E	Straight/following road	Right Turn
1120	PATTERSON RD & 25 1/2 RD	9/5/2018	5:27:00 PM	PDO	0		At Intersection	Front to Side	E	Left Turn	Straight/following road
1121	PATTERSON RD & N 7TH ST	9/6/2018	4:05:00 PM	PDO	200	N	Driveway Access Related	Front to Side	E	Right Turn	Straight/following road
1122	PATTERSON RD & N 12TH ST	9/7/2018	11:54:00 AM	PDO	350	E	Intersection Related	Side to Side Same Dir	W	Changing Lanes	Straight/following road
1123	PATTERSON RD & N 15TH ST	9/14/2018	6:24:00 PM	INJ	15	W	At Intersection	All Other Peds	N	Left Turn	Straight/following road
1124	PATTERSON RD & N 1ST ST	9/14/2018	3:07:00 PM	INJ	0		At Intersection	Front to Side	W	Left Turn	Straight/following road
1125	PATTERSON RD & 24 1/2 RD	9/18/2018	11:30:00 AM	PDO	0		At Intersection	Front to Side	W	Straight/following road	Straight/following road
1126	PATTERSON RD & 25 RD	9/21/2018	12:36:00 PM	PDO	150	W	Non-Intersection	Front to Side	E	Left Turn	Straight/following road
1127	PATTERSON RD & 30 RD	9/25/2018	10:33:00 AM	INJ	0		At Intersection	Front to Side	S	Right Turn	Straight/following road
1128	PATTERSON RD & 24 1/2 RD	9/25/2018	1:53:00 PM	PDO	0		At Intersection	Front to Side	N	Straight/following road	Straight/following road
1129	PATTERSON RD & N 7TH ST	9/27/2018	5:25:00 PM	PDO	0		Intersection Related	Front to Rear	E	Straight/following road	Stopped
1130	PATTERSON RD & 24 1/2 RD	9/29/2018	2:15:00 PM	PDO	0		Intersection Related	Front to Rear	W	Slowing	Stopped
1131	PATTERSON RD & 25 RD	10/1/2018	5:22:00 PM	PDO	500	S	Non-Intersection	Front to Rear	N	Slowing	Stopped
1132	PATTERSON RD & 24 1/2 RD	10/6/2018	7:48:00 PM	PDO	500	S	At Intersection	Front to Side	E	Straight/following road	Straight/following road
1133	PATTERSON RD & N 12TH ST	10/7/2018	10:34:00 PM	PDO	0		At Intersection	Front to Side	S	Straight/following road	Straight/following road
1134	PATTERSON RD & BEECHWOOD ST	10/9/2018	7:59:00 AM	PDO	250	W	Non-Intersection	Front to Rear	W	Straight/following road	Slowing
1135	PATTERSON RD & N 12TH ST	10/11/2018	7:54:00 AM	PDO	600	E	Non-Intersection	Front to Rear	W	Slowing	Stopped
1136	PATTERSON RD & 25 RD	10/13/2018	2:25:00 PM	PDO	60	E	Non-Intersection	Front to Rear	E	Straight/following road	Slowing
1137	PATTERSON RD & SERANADE ST	10/13/2018	10:32:00 PM	PDO	158	E	Driveway Access Related	Front to Side	S	Left Turn	Straight/following road
1138	PATTERSON RD & N 12TH ST	10/14/2018	10:06:00 AM	PDO	0		At Intersection	Front to Side	W	Straight/following road	Straight/following road
1139	PATTERSON RD & N 15TH ST	10/17/2018	4:55:00 PM	PDO	20	E	Intersection Related	Front to Rear	E	Straight/following road	Stopped
1140	PATTERSON RD & BELHAVEN WY	10/18/2018	3:54:00 PM	PDO	0		At Intersection	Front to Rear	E	Straight/following road	Straight/following road
1141	PATTERSON RD & 25 RD	10/19/2018	12:30:00 PM	PDO	100	E	Intersection Related	Front to Rear	W	Straight/following road	Stopped
1142	PATTERSON RD & N 12TH ST	10/24/2018	11:00:00 AM	PDO	150	W	Driveway Access Related	Front to Rear	W	Slowing	Slowing
1143	PATTERSON RD & 27 1/2 RD	10/25/2018	11:09:00 AM	PDO	200	W	Non-Intersection	Front to Rear	E	Slowing	Slowing
1144	PATTERSON RD & COTTAGE MEADOWS	10/26/2018	6:04:00 PM	INJ	0		At Intersection	Other - Non Collision	W	Changing Lanes	UNK
1145	PATTERSON RD & HWY 6 & 50	10/26/2018	8:37:00 PM	INJ	0		Non-Intersection	Enbankment	SW	Straight/following road	UNK
1146	PATTERSON RD & BEECHWOOD ST	10/27/2018	3:28:00 PM	PDO	50	W	Non-Intersection	Sign	W	Straight/following road	UNK
1147	PATTERSON RD & 30 RD	10/30/2018	10:29:00 AM	PDO	0		At Intersection	Front to Rear	W	Straight/following road	Stopped
1148	PATTERSON RD & 28 1/4 RD	10/31/2018	3:06:00 PM	PDO	200	W	Intersection Related	Front to Rear	E	Straight/following road	Slowing
1149	PATTERSON RD & 25 RD	11/3/2018	4:05:00 PM	PDO	492	E	Non-Intersection	Front to Rear	W	Straight/following road	Stopped
1150	PATTERSON RD & 24 1/2 RD	11/3/2018	11:20:00 AM	PDO	0		At Intersection	Front to Side	E	Left Turn	Straight/following road
1151	PATTERSON RD & GRAND CASCADE WY	11/4/2018	7:34:00 PM	PDO	0	W	Non-Intersection	Side to Side Same Dir	W	Straight/following road	Straight/following road
1152	PATTERSON RD & 27 1/2 RD	11/6/2018	7:53:00 PM	PDO	0		Intersection Related	Front to Rear	W	Straight/following road	Stopped
1153	PATTERSON RD & 27 1/2 RD	11/7/2018	6:46:00 PM	PDO	200	E	Driveway Access Related	Front to Side	N	Left Turn	Straight/following road
1154	636 MARKET ST & PATTERSON RD	11/9/2018	11:52:00 AM	PDO	250	N	Driveway Access Related	Front to Side	E	Right Turn	Left Turn
1155	PATTERSON RD & 28 1/4 RD	11/9/2018	6:22:00 PM	PDO	400	W	Intersection Related	Front to Rear	E	UNK	Stopped
1156	PATTERSON RD & 25 RD	11/12/2018	5:28:00 PM	PDO	250	W	Driveway Access Related	Front to Side	E	Left Turn	Straight/following road
1157	PATTERSON RD & N 7TH ST	11/12/2018	6:09:00 PM	PDO	0	S	At Intersection	Front to Side	S	Left Turn	Straight/following road
1158	PATTERSON RD & MIRA VISTA RD	11/13/2018	12:13:00 PM	PDO	500	W	Non-Intersection	Front to Rear	E	Straight/following road	Slowing
1159	PATTERSON RD & 29 RD	11/14/2018	4:03:00 PM	PDO	400	S	Driveway Access Related	Front to Side	W	Left Turn	Straight/following road
1160	PATTERSON RD & 29 RD	11/16/2018	6:07:00 PM	PDO	0		At Intersection	Front to Rear	E	Slowing	Stopped
1161	PATTERSON RD & 24 1/2 RD	11/17/2018	2:38:00 PM	PDO	0		At Intersection	Front to Front	S	Left Turn	Straight/following road
1162	PATTERSON RD & MARKET ST	11/17/2018	5:18:00 PM	PDO	0		At Intersection	Front to Side	N	Right Turn	Left Turn
1163	PATTERSON RD & 30 RD	11/22/2018	5:08:00 PM	PDO	0	W	At Intersection	Front to Side	W	Left Turn	Straight/following road
1164	PATTERSON RD & 30 RD	11/28/2018	9:58:00 PM	PDO	0		At Intersection	Front to Side	S	Straight/following road	Straight/following road
1165	PATTERSON RD & GRAND CASCADE WY	11/29/2018	5:00:00 PM	PDO	0		Non-Intersection	Front to Rear	E	Slowing	Slowing
1166	PATTERSON RD & 29 RD	11/29/2018	4:20:00 PM	PDO	0		At Intersection	Front to Front	W	Left Turn	Straight/following road
1167	PATTERSON RD & BELHAVEN WY	11/29/2018	4:39:00 PM	PDO	0	N	At Intersection	Front to Side	N	Left Turn	Straight/following road
1168	PATTERSON RD & N 12TH ST	11/30/2018	6:07:00 PM	PDO	0		At Intersection	Side to Side Same Dir	E	Right Turn	Left Turn
1169	REDLANDS PKWY RAMP & PATTERSON RD	12/2/2018	8:53:00 AM	PDO	400	S	Highway Interchange	Front to Rear	NW	Changing Lanes	Changing Lanes
1170	PATTERSON RD & N 1ST ST	12/5/2018	5:15:00 PM	PDO	50	E	Intersection Related	Front to Rear	W	Slowing	Stopped
1171	PATTERSON RD & N 12TH ST	12/5/2018	9:26:00 AM	PDO	0		At Intersection	Front to Side	E	Right Turn	Straight/following road
1172	PATTERSON RD & N 1ST ST	12/7/2018	4:11:00 PM	PDO	150	W	Non-Intersection	Front to Rear	E	Straight/following road	Stopped
1173	PATTERSON RD & 25 RD	12/7/2018	12:09:00 PM	PDO	233	N	Driveway Access Related	Front to Side	E	Left Turn	Straight/following road

#	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
1174	PATTERSON RD & 24 1/2 RD	12/7/2018	2:52:00 PM	PDO	189	N	Driveway Access Related	Front to Side	W	Left Turn	Straight/following road
1175	PATTERSON RD & 24 1/2 RD	12/8/2018	2:21:00 PM	PDO	0		At Intersection	Front to Rear	N	Straight/following road	Stopped
1176	PATTERSON RD & 25 RD	12/10/2018	6:45:00 AM	PDO	0		At Intersection	Front to Side	N	Right Turn	Straight/following road
1177	PATTERSON RD & 24 RD	12/11/2018	8:57:00 PM	PDO	0		At Intersection	Front to Side	N	Left Turn	Straight/following road
1178	PATTERSON RD & MESA MALL ENTRANCE	12/13/2018	10:48:00 AM	PDO	0		At Intersection	Front to Side	W	Straight/following road	Left Turn
1179	PATTERSON RD & 25 RD	12/13/2018	3:19:00 PM	PDO	0		At Intersection	Front to Side	E	Straight/following road	Left Turn
1180	PATTERSON RD & 25 RD	12/14/2018	3:15:00 PM	PDO	570	W	Non-Intersection	Front to Rear	E	Straight/following road	Stopped
1181	PATTERSON RD & 24 1/2 RD	12/15/2018	4:56:00 PM	PDO	500	S	At Intersection	Front to Front	E	Left Turn	Left Turn
1182	PATTERSON RD & 30 RD	12/16/2018	3:14:00 PM	PDO	400	W	Intersection Related	Front to Rear	E	Straight/following road	Slowing
1183	PATTERSON RD & 28 1/4 RD	12/18/2018	12:23:00 PM	PDO	150	W	Non-Intersection	Front to Rear	E	Straight/following road	Stopped
1184	PATTERSON RD & MIRA VISTA RD	12/19/2018	3:51:00 PM	PDO	0		At Intersection	Front to Rear	W	Straight/following road	Stopped
1185	PATTERSON RD & 29 1/2 RD	12/23/2018	5:37:00 PM	PDO	0		At Intersection	Bicycle	W	Straight/following road	Left Turn
1186	PATTERSON RD & 29 1/2 RD	12/24/2018	2:59:00 PM	PDO	0		At Intersection	Front to Side	E	Straight/following road	Left Turn

Appendix D - Traffic Methodology, Data, and Analysis

CITY OF GRAND JUNCTION

PATTERSON ROAD ACCESS STUDY – TRAFFIC OPERATIONS

US 6/ US 50/ I-70B to Lodgepole Street

January 2021

Prepared for:

City of Grand Junction
250 North 5th Street
Grand Junction, CO 81501

Prepared by:

Stolfus & Associates, Inc.
5690 DTC Boulevard, Suite 330W
Greenwood Village, Colorado 80111
Andrew Amend, PE, PTOE - Project Manager
SAI Reference No. 4000.038.01

TABLE OF CONTENTS

1.0 Existing Traffic Operations 3

1.1 Traffic Volumes 3

1.2 Level of Service Criteria 3

1.3 LOS Analysis 4

1.3.1 Intersections 4

1.3.2 Facility Operations 5

2.0 Year 2045 No Build Traffic Operations 6

2.1 Year 2045 Traffic Volumes and Roadway Network 6

2.2 Signal Warrants 7

2.3 Auxiliary Lanes 8

2.4 Additional Geometric Changes to No Build Model 8

2.5 2045 No Build Traffic Operations 9

2.5.1 Intersections 9

2.5.2 Facility Operations 10

3.0 Year 2045 AMP Traffic Operations 10

3.1 Year 2045 AMP Scenario 10

3.2 Auxiliary Lanes 11

3.3 Geometric Changes to 2045 AMP Model 12

3.4 2045 AMP Traffic Operations 12

3.4.1 Intersections 12

3.4.2 Facility Operations 13

3.5 Evaluated Alternatives 13

1.0 EXISTING TRAFFIC OPERATIONS

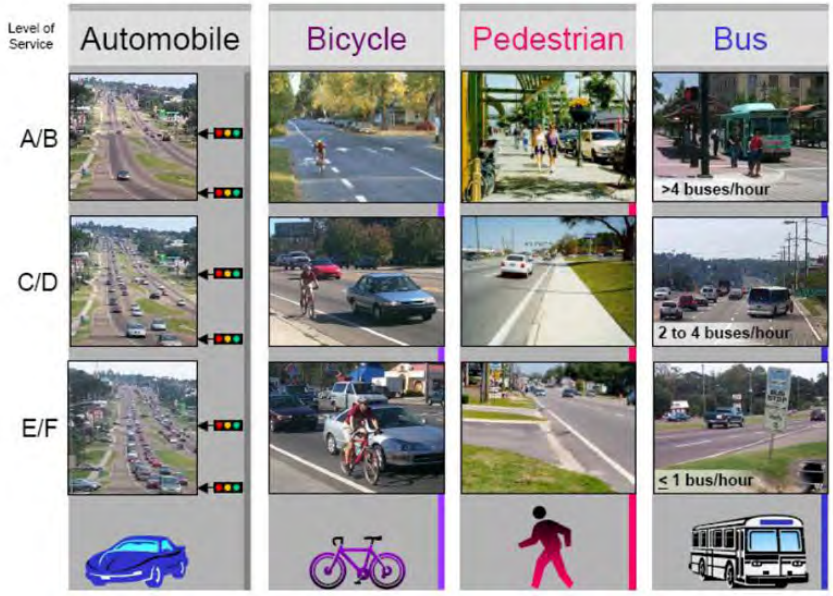
1.1 Traffic Volumes

Existing traffic volumes were collected throughout the study area. Turning movement counts were collected on Tuesday, March 3, 2020 during the AM peak period (7:00-9:00 AM) and the PM peak period (4:00-6:00 PM) at 15 intersections. Vehicle classification counts were collected at 13 locations along Patterson Rd from March 3-4, 2020. Since turning movements were not collected at 15th St, the volumes at that intersection were taken from a Traffic Impact Study conducted by Kimley Horn for the intersection of 12th St and Patterson Rd. The existing traffic counts are included in Appendix D.

1.2 Level of Service Criteria

Traffic analyses were conducted in accordance with procedures outlined in the Highway Capacity Manual, 6th Edition (HCM), and include intersection and highway segment Level-of-Service (LOS). LOS is a measure of the quality of traffic flow and ranges from LOS A (nearly ideal traffic conditions with very little delay for motorists) to LOS F (poor traffic conditions with long motorist delays). LOS C is typically considered a “good” traffic condition. LOS D or better conditions are typically desirable during peak traffic periods; however, LOS E conditions are not uncommon. LOS F, although undesirable, is also not uncommon for side street traffic movements at full movement, unsignalized intersections with high volume arterial roadways.

Where an unsignalized intersection operates at LOS E or F, a volume to capacity (V/C) ratio has been reported for the critical movement. The V/C ratio is a measure of how close a movement is to capacity, with 1.00 indicating that the movement has reached capacity. Where V/C exceeds 1.00, traffic demand during peak periods exceeds the capacity for the movement. This condition will cause queues (amount of traffic backed up at an intersection) to grow, potentially overflowing auxiliary lanes and blocking adjacent traffic lanes until demand decreases. Examples of LOS for various modes of travel are shown below.



Source: FDOT Quality/Level of Service Handbook

Table 1 provides a summary of the HCM's LOS Criteria for intersections and Table 2 provides a summary of the LOS Criteria for urban street segments.

Table 1 – Intersection LOS Criteria

Level of Service (LOS)	Signalized Intersection	Unsignalized Intersection	Traffic Characteristics
	Average Intersection Delay (sec/veh)	Worst Movement (sec/veh)	
A	<= 10	<= 10	Free Flow / Insignificant Delays
B	> 10-20	> 10-15	Stable Flow / Minimal Delays
C	> 20-35	>15-25	Stable Flow / Acceptable Delays
D	> 35-55	>25-35	Nearing Unstable / Tolerable Delays
E	> 55-80	>35-50	Unstable Flow / Significant Delays
F	> 80	> 50	Forced Flow / Excessive Delays

Table 2 – Urban Street LOS Criteria

LOS	Travel Speed Threshold by Base Free-Flow Speed (mi/h)							Volume to Capacity Ratio
	55	50	45	40	35	30	25	
A	>44	>40	>36	>32	>28	>24	>20	<=1.0
B	>37	>34	>30	>27	>23	>20	>17	
C	>28	>25	>23	>20	>18	>15	>13	
D	>22	>20	>18	>16	>14	>12	>10	
E	>17	>15	>14	>12	>11	>9	>8	
F	<=17	<=15	<=14	<=12	<=11	<=9	<=8	
F	Any							>1.0

1.3 LOS Analysis

1.3.1 Intersections

Traffic operations were evaluated using the *Highway Capacity Manual, 6th Edition* methods as

applied in the HCS 7 software. The Streets module in HCS was the primary tool used for analyzing traffic operations for both the intersections and the roadway segments between intersections along Patterson Rd. TEAPAC files containing the existing signal timings were provided by the City of Grand Junction. Since HCS is better suited to conduct the traffic analysis required by this AMP, the timings from TEAPAC were imported into the HCS models. Table 3 and

Table 4 show the existing traffic operations at the stop-controlled and signalized intersections.

Table 3 – Existing Stop-Controlled Intersection Delay & LOS

Intersection		AM			PM	
	Movement	Delay (sec)	LOS (V/C)	Movement	Delay (sec)	LOS (V/C)
28 Rd & Patterson Rd	SBL	613.0	F (1.57)	SBL	527.9	F (1.34)

Table 4 – Existing Signalized Intersection Delay & LOS

Intersection	AM		PM	
	Delay (sec)	LOS	Delay (sec)	LOS
24 Rd & Patterson Rd	31.4	C	48.6	D
Market St & Patterson Rd	11.8	B	27.8	C
Mesa Mall Access & Patterson Rd	8.4	A	19.2	B
24 1/2 Rd & Patterson Rd	15.7	B	27.4	C
25 Rd & Patterson Rd	33.2	C	108.8	F
25 1/2 Rd & Patterson Rd	21.7	C	34.0	C
N 1st St & Patterson Rd	24.3	C	19.0	B
N 7th St & Patterson Rd	26.1	C	28.2	C
N 12th St & Patterson Rd	32.9	C	39.4	D
N 15th St & Patterson Rd	5.1	A	7.1	A
27 1/2 Rd & Patterson Rd	18.9	B	18.5	B
28 1/4 Rd & Patterson Rd	18.4	B	19.0	B
29 Rd & Patterson Rd	56.1	E	54.8	D
29 1/2 Rd & Patterson Rd	19.0	B	14.1	B
30 Rd & Patterson Rd	31.7	C	30.2	C

All the signalized intersections operate at acceptable levels of service, with the exception of Patterson Rd & 25 Rd, which operates at LOS F in the PM peak hour. This is primarily due to the eastbound thru movement being over capacity. The stop-controlled intersection of Patterson Rd & 28 Rd fails in both the AM and PM time periods as a result of the southbound left turn movement having difficulty finding gaps in traffic while turning onto Patterson Rd. The V/C ratio is well over 1.00 in both time periods, indicating that queuing is likely a problem for the southbound left turning movement. Since the traffic volumes at this intersection are too low to warrant a signal, restricting the southbound left turn movement should be considered. The HCS results have been included in Appendix D.

1.3.2 Facility Operations

In accordance with HCM methods, traffic operations for both the individual urban street segments and the overall facility were analyzed. Table 5 shows the travel speed, percent of free flow speed (PFFS), and the LOS.

Table 5 – Existing Facility Operations

Segment	AM						PM					
	Eastbound			Westbound			Eastbound			Westbound		
	Travel Speed MPH	PFFS	LOS	Travel Speed MPH	PFFS	LOS	Travel Speed MPH	PFFS	LOS	Travel Speed MPH	PFFS	LOS
24 Rd to Market St	12.3	29.2	F	24.8	59.7	C	12.7	30.1	E	13.1	31.6	E
Market St to Mesa Mall Access	21.6	51.3	C	25.8	61.8	C	14.4	34.1	E	18.0	43.1	D
Mesa Mall Access to 24 1/2 Rd	30.2	75.2	B	30.3	74.5	B	26.3	65.5	C	28.9	70.9	B
24 1/2 Rd to 25 Rd	34.8	85.5	A	25.2	58.6	C	26.1	64.2	C	26.2	61.0	C
25 Rd to 25 1/2 Rd	22.2	51.4	C	35.5	82.3	A	7.4	17.2	F	30.4	70.4	B
25 1/2 Rd to 1st St	31.5	73.1	B	29.6	72.6	B	21.6	50.1	C	33.2	81.6	A
1st St to 7th St	30.6	72.5	B	27.4	68.7	B	29.8	70.7	B	24.4	61.1	C
7th St to 12th St	33.6	84.0	A	23.6	55.7	C	25.9	64.7	C	22.6	53.4	C
12th St to 15th St	14.7	36.8	E	34.1	80.7	A	14.5	36.3	E	31.7	75.1	B
15th St to 27 1/2 Rd	36.2	82.2	A	27.0	61.3	C	32.8	74.5	B	26.4	59.8	C
27 1/2 Rd to 28 1/4 Rd	36.5	84.0	A	34.7	75.6	B	37.4	85.9	A	36.4	79.4	B
28 1/4 Rd to 29 Rd	35.8	84.1	A	32.6	72.6	B	34.7	81.6	A	32.4	72.2	B
29 Rd to 29 1/2 Rd	27.6	62.8	C	31.1	70.8	B	24.5	55.9	C	36.8	83.7	A
29 1/2 Rd to 30 Rd	36.7	80.6	A	20.5	50.2	C	37.4	82.1	A	19.6	48.1	D
Facility (24 Rd to 30 Rd)	**29.2**	**68.7**	**B**	**28.5**	**66.8**	**C**	**21.9**	**51.5**	**F**	**27.3**	**64.0**	**C**

As can be seen in the table, most of the segments operate acceptably. Notably, the segment from 24 Rd to Market St operates at a LOS F for the eastbound direction in the AM, and LOS E in both directions during the PM. The segment from 25 Rd to 25 ½ Rd operates at LOS F for the eastbound direction in the PM. Overall, the facility operates at LOS B and C for the eastbound and westbound directions in the AM. The westbound direction operates at LOS C in the PM, while the eastbound direction operates at LOS F. HCS gives a facility LOS of F if any of the segments are over capacity, so while the eastbound direction in the PM is technically LOS F, it is only due to one segment operating over capacity. Overall, the travel speeds along the corridor are good.

2.0 YEAR 2045 NO BUILD TRAFFIC OPERATIONS

2.1 Year 2045 Traffic Volumes and Roadway Network

The 2045 No Build scenario models the projected traffic conditions in the year 2045, assuming the access recommendations proposed by the AMP have not been implemented. The No Build scenario is used to identify which locations will potentially develop operational issues due to growth in traffic volumes, and is used to compare operational characteristics with the Year 2045 AMP scenario. Traffic operations or conditions in the 2045 No Build scenario may be unacceptable, with potential solutions to these issues proposed in the AMP scenario.

While the roadway geometry remained consistent with the Existing scenario, the traffic volumes were increased to reflect the expected growth in the surrounding area. The 2045 intersection volumes were forecasted using the Grand Valley MPO Travel Demand Model. The primary purpose of the year 2045 Travel Demand Model is to forecast traffic and travel in communities throughout the region. Additionally, the model can support evaluation of proposed roadway projects, help evaluate potential impacts of proposed development projects, and support various other studies of the region, subareas, corridors, and other planning activities. The model has been calibrated to reflect a base year of 2018, and contains future year data reflecting the forecasted year 2045 conditions. Generally speaking, collector roadways and

above are reflected in the model. Local roadways and private accesses are not represented. Land and roadway developments that are expected to be completed by the year 2045 have been incorporated into the model, while projects that are not yet a certainty, have not been included. The City of Grand Junction has provided information on several proposed developments that are expected to be completed by the year 2045. The location of each development is listed below:

- NW corner of 27 Rd and Patterson Rd
- 2566 & 2580 Patterson
- Burkey Park
- Matchett Park
- Orange Grove and Thunder Valley
- NW of 7th and Patterson

The year 2045 model from the Grand Valley MPO has the option to include an interchange between I-70 and 29 Rd. This interchange would increase traffic volumes along a portion of Patterson Rd, and decrease the volumes along a different portion. This project is currently unfunded, and there is no certainty of it being completed by 2045. Because of the uncertainty, the year 2045 Travel Demand Model that is used for this project will not include an interchange at 29 Rd.

The Iterative Procedure – Directional Method as described in NCHRP Report 765 Analytical Travel Forecasting Approaches for Project-Level Planning and Design was used to generate intersection turning movement forecasts for the horizon year. The directional method uses an iterative approach to alternatively balance entering traffic and departing traffic volumes until an acceptable level of convergence is reached. The program Turns32 was used to balance the volumes. There were three sets of volumes for this project: year 2020 turning movement counts, year 2018 travel demand model, and year 2045 travel demand model. The increase in link volumes from the 2018 to 2045 travel demand model was calculated, and then added to the link volumes of the 2020 turning movement counts. These link volumes, along with the raw 2020 turning movement counts were input into Turns32. The turning movement counts were then increased in Turns32 to balance with the link volumes. These increased turning movements are the 2045 projected turning movements used in the traffic analysis. The 2045 projected turning movement volumes are 33% higher than the 2020 turning movement counts in the AM peak hour, and 24% higher in the PM peak hour.

2.2 Signal Warrants

In order to identify potential future traffic control at full movement intersections, traffic signal warrants were evaluated at a high level. The Manual on Uniform Traffic Control Devices (MUTCD) contains nine traffic signal warrants that help determine if installing a traffic signal at a particular location is justified. The signal warrants are listed below.

#1 – Eight-Hour Vehicular Volume
#2 – Four-Hour Vehicular Volume
#3 – Peak Hour Vehicular Volume
#4 – Pedestrian Volume
#5 – School Crossing
#6 – Coordinated Signal System
#7 – Crash Experience

#8 – Roadway Network
#9 – Intersection Near a (Railroad) Grade Crossing

The only unsignalized intersection being studied along Patterson Rd is the intersection of Patterson Rd & 28 Rd, which is currently stop-controlled. Since 2045 traffic volumes are speculative, only the Peak Hour (#3) signal warrant was evaluated at corridor intersections. In order for a signal to be warranted, the left turning movement from 28 Rd onto Patterson Rd would have to be at least 100 vph. It is projected to be 49 vph in the AM, and 77 vph in the PM, meaning that a signal is not warranted. In 2021 the City will be connecting 28 Rd to the signal at 28 ¼ Rd via Hawthorne Ave. This will alleviate the left turn delay problem.

2.3 Auxiliary Lanes

With the increased volumes expected for 2045, each turning movement was assessed to see if an auxiliary lane is warranted, based on the requirements outlined by the Grand Junction Transportation Engineering Design Standards (TEDS) Manual. The number of vehicles required to warrant an auxiliary lane is based on the number of thru lanes on the arterial, the speed limit, and whether it is a right or left turning movement. These requirements can be found in section 29.28.170 of the TEDS Manual. According to the manual, dual lefts were included in locations where the left turning movement exceeded 300 vph. The warranted auxiliary lanes were included in both the 2045 No Build and Build HCS models. Some level of ROW impacts, typical to a public project, are anticipated to occur in order to accommodate the additional auxiliary lanes. Table 6 shows the warranted auxiliary lanes that are not currently in place. The AMP found that thirteen intersections warranted auxiliary lanes as listed in the table below.

Table 6–Required Auxiliary Lanes

Intersection	Movement Warranting Auxiliary Lane	
	Left Decel	Right Decel
24 Rd & Patterson Rd		EBR, WBR, SBR
Market St & Patterson Rd		EBR
Mesa Mall Access & Patterson Rd		EBR
24 1/2 Rd & Patterson Rd		EBR, WBR
25 Rd & Patterson Rd		EBR, WBR
25 1/2 Rd & Patterson Rd		EBR, WBR
N 1st St & Patterson Rd		WBR
N 7th St & Patterson Rd		WBR
N 12th St & Patterson Rd	WBL (Dual Lefts)	WBR
28 1/4 Rd & Patterson Rd		EBR
29 Rd & Patterson Rd		EBR, WBR
29 1/2 Rd & Patterson Rd	NBL, SBL	EBR, WBR
30 Rd & Patterson Rd		EBR, WBR

2.4 Additional Geometric Changes to No Build Model

Along with the required auxiliary lanes that were added to the HCS models for the 2045 No Build scenario, several other intersection improvements that are expected to be completed by the year 2045 were added to the models. The intersection of Patterson Rd & 24 Rd was

modeled with two northbound thru lanes and two eastbound left turn lanes. The intersection of Patterson Rd & 12th St was assumed to have dual lefts for each approach, and the intersection of Patterson Rd & 29 Rd was assumed to have dual northbound left turn lanes. These three intersection improvements were modeled in both the 2045 No Build and the 2045 AMP models. It is anticipated that the 12th Street project will require additional ROW. The other two projects may be able to fit the proposed infrastructure within existing ROW, but may need temporary easements for tie-ins.

2.5 2045 No Build Traffic Operations

2.5.1 Intersections

Traffic operations were evaluated using *Highway Capacity Manual, 6th Edition* methods as applied in the HCS 7 software. The Streets module in HCS is the primary tool for analyzing traffic operations for both the intersections and the roadway segments between intersections along Patterson Rd. The cycle lengths, splits, and offsets were optimized to accommodate the 2045 traffic patterns. The roadway network was updated to include all of the warranted auxiliary lanes, but the specific changes proposed by this AMP are not in the No Build scenario. Table 7 and

Table 8 show the traffic operations for the intersections along Patterson Rd in the 2045 No Build scenario. The HCS printouts of the results can be found in Appendix D.

Table 7 – 2045 No Build Stop-Control Intersection Delay & LOS

Intersection	AM			PM		
	Movement	Delay (sec)	LOS (V/C)	Movement	Delay (sec)	LOS (V/C)
28 Rd & Patterson Rd	SBL	1520.1	F (3.30)	SBL	1682.2	F (3.92)

Table 8 – 2045 No Build Signalized Intersection Delay & LOS

Intersection	AM		PM	
	Delay (sec)	LOS	Delay (sec)	LOS
24 Rd & Patterson Rd	38.2	D	40.4	D
Market St & Patterson Rd	9.0	A	24.4	C
Mesa Mall Access & Patterson Rd	13.5	B	34.4	C
24 1/2 Rd & Patterson Rd	22.6	C	39.5	D
25 Rd & Patterson Rd	31.2	C	74.0	E
25 1/2 Rd & Patterson Rd	20.9	C	24.4	C
N 1st St & Patterson Rd	30.7	C	50.5	D
N 7th St & Patterson Rd	20.4	C	52.5	D
N 12th St & Patterson Rd	33.3	C	76.4	E
N 15th St & Patterson Rd	5.9	A	6.0	A
27 1/2 Rd & Patterson Rd	19.9	B	19.2	B
28 1/4 Rd & Patterson Rd	26.1	C	36.0	D
29 Rd & Patterson Rd	30.1	C	39.2	D
29 1/2 Rd & Patterson Rd	14.3	B	50.6	D
30 Rd & Patterson Rd	27.2	C	20.1	C

The stop-controlled intersection at 28 Rd & Patterson Rd is expected to continue to operate at LOS F in 2045, due to left turns out of the side streets having difficulty finding gaps in the traffic along Patterson Rd. The V/C ratio is far over 1.00, indicating that queueing will be problematic.

Delays have increased at most of the signalized intersections along the corridor due to the increase in traffic volume. The intersections of Patterson Rd & 25 Rd and of Patterson Rd & 12th St are expected to operate at LOS E in the PM. The poor level of service is caused by the eastbound thru movement operating over capacity at both intersections. Without a third eastbound thru lane, it will be difficult to allocate enough green time to the eastbound thru movement without causing operational issues for the side streets.

2.5.2 Facility Operations

Traffic operations for both the individual urban street segments and the overall facility were analyzed using the HCS Streets methods. Table 9 shows the travel speed, percent of free flow speed (PFFS), and the LOS.

Table 9 – 2045 No Build Facility Operations

Segment	AM						PM					
	Eastbound			Westbound			Eastbound			Westbound		
	Travel Speed MPH	PFFS	LOS	Travel Speed MPH	PFFS	LOS	Travel Speed MPH	PFFS	LOS	Travel Speed MPH	PFFS	LOS
24 Rd to Market St	7.5	17.9	F	18.6	44.8	D	3.2	7.7	F	10.8	26.1	F
Market St to Mesa Mall Access	29.8	70.9	B	26.5	63.6	C	18.2	43.3	D	12.3	29.6	F
Mesa Mall Access to 24 1/2 Rd	26.6	66.3	C	28.2	69.2	B	16.9	42.0	D	18.4	56.7	C
24 1/2 Rd to 25 Rd	28.1	69.2	B	23.1	53.7	C	21.0	51.6	C	12.3	28.6	F
25 Rd to 25 1/2 Rd	25.9	60.0	C	34.3	79.5	B	11.5	26.7	F	36.7	85.0	A
25 1/2 Rd to 1st St	30.6	71.0	B	23.6	57.8	C	30.1	69.9	B	26.0	63.8	C
1st St to 7th St	22.6	53.6	C	31.0	77.7	B	13.5	32.0	F	23.0	57.8	C
7th St to 12th St	29.9	74.6	B	20.2	47.8	D	11.1	27.7	F	19.2	45.3	D
12th St to 15th St	13.8	34.6	E	33.9	80.1	A	5.2	13.1	F	35.6	84.1	A
15th St to 27 1/2 Rd	32.8	74.5	B	19.0	43.2	D	28.8	65.4	C	22.4	50.8	C
27 1/2 Rd to 28 1/4 Rd	35.7	82.1	A	29.4	64.1	C	37.4	85.9	A	27.4	59.8	C
28 1/4 Rd to 29 Rd	32.8	77.0	B	28.1	62.6	C	26.2	61.6	C	24.7	54.9	C
29 Rd to 29 1/2 Rd	24.2	55.1	C	34.9	79.5	B	20.7	47.3	D	23.2	53.0	C
29 1/2 Rd to 30 Rd	41.5	91.1	A	28.1	68.9	B	14.9	32.8	F	31.9	78.1	B
Facility (24 Rd to 30 Rd)	**26.7**	**62.9**	**C**	**26.8**	**62.8**	**C**	**15.5**	**42.5**	**F**	**22.4**	**52.3**	**F**

The travel speeds along the highway segments of Patterson Rd have decreased from the Existing Conditions scenario. The roadway segment between 24 Rd and Market St is the most problematic, operating at LOS F for the eastbound direction in the AM and LOS F for both directions in the PM. Several other segments operate at LOS F for the PM time period, most notably the eastbound segment of Patterson Rd from 1st St to 15th St.

3.0 YEAR 2045 AMP TRAFFIC OPERATIONS

3.1 Year 2045 AMP Scenario

The AMP scenario analyzes the traffic conditions assuming that all of the recommendations proposed by the AMP have been implemented. The base traffic volumes remain the same as in

the 2045 No Build scenario, however, in locations where a movement has been restricted in the AMP scenario, the vehicles are rerouted, resulting in different turning movement volumes.

3.2 Auxiliary Lanes

Since the volumes of several of the turning movements in the AMP scenario differ from those in the No Build scenario, each turning movement was reassessed to see if an auxiliary lane is warranted based on the requirements outlined by the Grand Junction Transportation Engineering Design Standards (TEDS) Manual. The number of vehicles required to warrant an auxiliary lane is based on the number of thru lanes on the arterial, the speed limit, and whether it is a right or left turning movement. These requirements can be found in section 29.28.170 of the TEDS Manual. Per the TEDS Manual, dual lefts were included in locations where the left turning movement exceeded 300 vph. Along with identifying the warranted auxiliary lanes, their required lengths were calculated as well, and are shown in Table 10. The total length for both right and left turn lanes in the TEDS Manual standards is calculated by adding the taper length to the 90% queue length. The required auxiliary lanes have been included in the HCS models. It is anticipated that some level of ROW impacts, typical to a public project, will occur to accommodate the additional auxiliary lanes.

Table 10 – 2045 AMP Required Auxiliary Lanes

Intersection	Movement	Volume	Speed Limit	Taper Length	90% Queue Length	Total Length
Patterson Rd & 24 Rd	SBR	71	40	90	43	133
	EBR	207	35	60	0	60
	WBR	359	35	60	0	60
Patterson Rd & Market St	EBR	141	35	60	41	101
Patterson Rd & Home Depot	EBR	227	35	60	103	163
	NBL	279	20	60	139	199
	NBR	249	20	60	205	265
Patterson Rd & 24 1/2 Rd	EBR	251	35	60	165	225
	WBR	282	35	60	92	152
Patterson Rd & 25 Rd	EBR	181	40	90	124	214
	WBR	147	40	90	89	179
Patterson Rd & 25 1/2 Rd	EBR	144	40	90	84	174
	WBR	147	40	90	17	107
Patterson Rd & 1st St	WBR	124	35	60	93	153
Patterson Rd & 7th St	WBR	172	35	60	30	90
Patterson Rd & 12 St	SBL	288	40	90	139	229
	WBL (Dual)	382	40	90	79	169
	WBR	151	40	90	59	149
Patterson Rd & 15 St	EBR	30	40	90	175	265
	WBR	194	40	90	30	120
Patterson Rd & 28 1/4 Rd	EBR	329	40	90	73	163
Patterson Rd & 29 Rd	EBR	310	45	90	154	244
	WBR	98	45	90	21	111
Patterson Rd & 29 1/2 Rd	EBR	96	45	90	73	163
	WBR	265	45	90	114	204
	NBL	86	35	60	73	133
	SBL	155	35	60	191	251
Patterson Rd & 30 Rd	EBR	319	35	60	34	94
	WBR	69	45	90	33	123

3.3 Geometric Changes to 2045 AMP Model

The required auxiliary lanes were included in the 2045 AMP HCS models. The following three changes were added to the 2045 AMP models, just as they were to the 2045 No Build models as well. The intersection of Patterson Rd & 24 Rd was modeled with two northbound thru lanes and two eastbound left turn lanes. The intersection of Patterson Rd & 12th St was assumed to have dual lefts for each approach, and the intersection of Patterson Rd & 29 Rd was assumed to have dual northbound left turn lanes.

3.4 2045 AMP Traffic Operations

3.4.1 Intersections

Traffic operations were evaluated using *Highway Capacity Manual, 6th Edition* methods as applied in the HCS 7 software. The Streets module in HCS is the primary tool for analyzing traffic operations for both the intersections and the roadway segments between intersections along Patterson Rd. The signal cycle lengths, splits, and offsets were optimized to accommodate the changed traffic patterns. Table 11 and Table 13 show the traffic operations for the intersections along Patterson Rd in the 2045 AMP scenario. The HCS printouts of the results can be found in Appendix D.

Table 11 – 2045 AMP Stop-Control Intersection Delay & LOS

Intersection	AM			PM		
	Movement	Delay (sec)	LOS (V/C)	Movement	Delay (sec)	LOS (V/C)
28 Rd & Patterson Rd	SBR	26.4	D	SBR	16.6	C

Table 12 – 2045 AMP Signalized Intersection Delay & LOS

Intersection	AM		PM	
	Delay (sec)	LOS	Delay (sec)	LOS
24 Rd & Patterson Rd	30.1	C	37.6	D
Market St & Patterson Rd	9.7	A	22.6	C
Mesa Mall Access & Patterson Rd	8.7	A	35.5	D
24 1/2 Rd & Patterson Rd	20.5	C	35.4	D
25 Rd & Patterson Rd	28.9	C	55.7	E
25 1/2 Rd & Patterson Rd	25.7	C	31.1	C
N 1st St & Patterson Rd	27.8	C	49.0	D
N 7th St & Patterson Rd	25.6	C	34.8	C
N 12th St & Patterson Rd	27.4	C	62.4	E
N 15th St & Patterson Rd	4.5	A	10.5	B
27 1/2 Rd & Patterson Rd	20.0	C	30.4	C
28 1/4 Rd & Patterson Rd	24.5	C	33.4	C
29 Rd & Patterson Rd	26.7	C	38.4	D
29 1/2 Rd & Patterson Rd	17.8	B	32.9	C
30 Rd & Patterson Rd	21.5	C	23.0	C

The intersection results are similar to those of the 2045 No Build scenario, with the intersections of Patterson Rd & 25 Rd and Patterson Rd & 12th St still expected to operate at LOS E in the

PM. Unless geometric changes are made to increase the capacity of the eastbound thru movement, it is likely that operations at these two intersections will be problematic by year 2045.

3.4.2 Facility Operations

Traffic operations for both the individual urban street segments and the overall facility were analyzed using the HCS Streets methods. Table 13 shows the travel speed, percent of free flow speed (PFFS), and the LOS.

Table 13 – 2045 AMP Facility Operations

Segment	AM						PM					
	Eastbound			Westbound			Eastbound			Westbound		
	Travel Speed MPH	PFFS	LOS	Travel Speed MPH	PFFS	LOS	Travel Speed MPH	PFFS	LOS	Travel Speed MPH	PFFS	LOS
24 Rd to Market St	7.3	17.3	F	18.6	44.8	D	6.2	14.7	F	16.2	39.1	E
Market St to Mesa Mall Access	27.7	66.7	C	27.1	65.2	C	16.7	40.3	D	13.5	32.5	E
Mesa Mall Access to 24 1/2 Rd	31.9	79.2	B	26.6	65.0	C	16.8	41.7	D	21.3	52.2	C
24 1/2 Rd to 25 Rd	29.8	72.8	B	23.8	54.9	C	21.2	51.6	C	21.8	50.4	C
25 Rd to 25 1/2 Rd	25.7	59.9	C	29.8	69.4	B	16.1	37.6	F	31.6	73.6	B
25 1/2 Rd to 1st St	29.1	67.2	B	24.2	59.1	C	24.3	56.1	C	22.8	55.6	C
1st St to 7th St	24.3	56.8	C	27.0	66.8	C	14.7	34.5	F	29.3	72.6	B
7th St to 12th St	23.9	58.7	C	23.4	54.4	C	31.6	77.5	B	23.7	55.0	C
12th St to 15th St	14.0	34.7	E	34.4	80.7	A	6.1	15.0	F	24.2	56.8	C
15th St to 27 1/2 Rd	35.2	79.8	B	20.7	46.9	D	28.6	65.0	C	12.4	28.2	F
27 1/2 Rd to 28 1/4 Rd	37.7	87.2	A	31.6	69.4	B	36.6	84.6	A	16.4	36.0	F
28 1/4 Rd to 29 Rd	32.8	75.5	B	31.4	68.6	B	31.4	72.3	B	23.9	52.3	C
29 Rd to 29 1/2 Rd	28.1	62.6	C	32.1	71.3	B	23.3	51.8	C	31.5	70.1	B
29 1/2 Rd to 30 Rd	33.6	73.8	B	28.7	70.3	B	28.2	61.9	C	30.5	74.8	B
Facility (24 Rd to 30 Rd)	**26.8**	**62.7**	**C**	**27.4**	**63.6**	**C**	**19.9**	**46.5**	**F**	**22.3**	**51.8**	**F**

The roadway segment between 24 Rd and Market St is the most problematic, operating at LOS F for the eastbound direction during both time periods, similar to the 2045 No Build scenario. Much of Patterson Rd, between 25 Rd and 27 ½ Rd, is expected to be over capacity for the eastbound direction during the PM peak hour. Overall, however, travel times for both directions and time periods are expected to experience a slight improvement with the implementation of the AMP. This can mostly be attributed to the reduction of access points along the corridor.

3.5 Evaluated Alternatives

Prior to finalizing the AMP, several alternative designs were evaluated along Patterson Rd.

Market St as a Stop-Controlled Intersection: Due to the proximity of Market St to 24 Rd, and the resulting overlap of functional intersection areas, this alternative called for the signal to be removed from the intersection of Patterson Rd & Market St. The north side of the intersection would be right-in right-out, and the south side would be a ¾ movement. The northbound thru and left turn movements were rerouted to the Home Depot access point, while the southbound thru and left turn movements, and eastbound left turn movement were rerouted to 24 Rd. Although the intersection of Patterson Rd & Market St was expected to operate well in this scenario, it increased the volumes at the intersections of Patterson Rd & 24 Rd and Patterson Rd & Home Depot access. The southern leg of the Home Depot access would require dual northbound left turn lanes, a thru lane, and a right turn lane in order to operate acceptably. This

would result in impacts to the Mesa Mall circulation road and parking. The southbound left turn movement at 24 Rd was expected to increase from 465 vph to 808 vph in the PM. In order for the movement to operate under capacity, there would need to be three left turn lanes, or an alternative intersection design, such as a continuous flow intersection (CFI). Due to the impacts along 24 Rd and at the Mesa Mall and in consideration of the potential relief that a future extension of F 1/2 Rd as a principal arterial would provide, it was decided to keep Market St signalized.

Patterson Rd & 24 Rd as CFI: With Market St as a stop-controlled intersection, the intersection of Patterson Rd & 24 Rd was evaluated as a CFI to handle the increased southbound left turn movement. Only the northern leg of the intersection was analyzed as a CFI, since making the other legs CFI's did not provide significant improvements to traffic operations. The CFI option was expected to operate well during all time periods. Since it was decided to keep Market St as a signalized intersection, the forecasted southbound left turn volume was reduced back to 465 vph, making a CFI unnecessary. The intersection of Patterson Rd & 24 Rd will remain a conventional signalized intersection, with an additional northbound thru and eastbound left turn lane constructed to help traffic operations.

Patterson Rd & 15th St as a ¾ movement: A scenario was analyzed where 15th St was made a ¾ movement stop-controlled intersection, with the left turns out restricted. Although traffic operations were good under this alternative, the pedestrian crossings would be eliminated if the intersection were to be made stop controlled. As this intersection sees frequent pedestrian crossings, it was considered necessary for the pedestrian crossings to remain, so the intersection will remain signalized.

Memorandum

To: Patterson Road Access Management Plan (AMP) Project Team

From: Maxwell Rusch, PE

Date: March 18, 2020

Re: Patterson Road Traffic Methodology

This memorandum describes the general traffic engineering and transportation planning approach proposed by Stolfus & Associates, Inc. for the Patterson Road Access Management Plan (AMP). The purpose of this memorandum is to outline the primary assumptions and procedures that will be used in the traffic analyses for the project. All traffic analyses conducted for the AMP will be in accordance with this methodology, and used to support access-related decisions made during the course of the project. While access point consolidation is the primary goal of the project, recommendations resulting from the AMP traffic analyses, such as the addition of auxiliary lanes, may be incorporated as well.

STUDY AREA

The study area consists of a 7-mile segment of Patterson Road in Mesa County. The roadway is an undivided, 4-lane roadway. The segment begins at the intersection of I-70 Business & Patterson Road and ends at the intersection of Lodgepole St & Patterson Rd. The entirety of the study area lies within the Grand Junction City boundaries.

EXISTING TRAFFIC

Daily Classification Counts that will be conducted over a two-day period, have been proposed for the following 13 locations:

- East of 24 Road
- West of 24 Road
- East of 24½ Road
- West of 24½ Road
- West of 25 Road
- East of 25 Road
- West of 1st Street
- West of 7th Street
- West of 12th Street
- West of 28 ¼ Road
- West of 29 Road
- East of 29 Road
- East of 30 Road

Peak Hour Turning Movement Counts (7:00-9:00 AM & 4:00-6:00 PM) have been proposed for the following 15 locations:

- 24 Road & Patterson
- Market Street/Mall Access & Patterson
- Home Depot Access/Mesa Mall Access & Patterson
- 24 ½ Road & Patterson
- 25 Road & Patterson
- 25 ½ Road & Patterson
- 1st Street & Patterson
- 7th Street & Patterson
- 12th Street & Patterson
- 27 ½ Road & Patterson
- 28 Road & Patterson.
- 28 ¼ Road & Patterson
- 29 Road & Patterson
- 29 ½ Road & Patterson
- 30 Road & Patterson

FUTURE TRAFFIC

Future intersection volumes will be forecasted using the Grand Valley MPO Travel Demand Model. Models for existing conditions (year 2018-2019) and future conditions (year 2045) will be provided by the MPO. Roadway volumes from the model's base year traffic assignment will be compared to available traffic count data in order to ensure that the model is reasonably representing observed traffic patterns. Some amount of deviation between existing and modeled volumes is acceptable and expected. As is typical with regional models, traffic volumes on higher volume facilities are more reliable than traffic volumes on low volume facilities, such as collector streets and arterial streets. The table below reports the maximum desirable amount of deviation between modeled traffic volume and ground counts for the base year. If the deviation exceeds what is listed below, alterations may be made to the future models link volumes.

Model Volume Validation Criteria

Link Type	Max. Deviation
Freeway	+/- 10%
Expressway	+/- 10%
Principal Arterial	+/- 10%
Minor Arterial	+/- 15%
Collector	+/- 25%

The primary purpose of the year 2045 Travel Demand Model is to forecast traffic and travel in communities throughout the region. Additionally, the model can support evaluation of proposed roadway projects, help evaluate potential impacts of proposed development projects, and support various other studies of the region, subareas, corridors, and other planning activities. The model has been calibrated to reflect a base year of 2018 and contains future year data reflecting the forecasted year 2045 conditions. Generally speaking, Collector roadways and above are reflected in the model. Local roadways and private accesses are not represented. Land and roadway developments that are expected to be completed by the year 2045 have been incorporated into the model, while projects that are not yet a certainty, have not been included. The City of Grand Junction has provided information on several proposed developments that are expected to be completed by the year 2045. The location of each development is listed below:

- NW corner of 27 Rd and Patterson Rd
- 2566 & 2580 Patterson
- Burkey Park
- Matchett Park
- Orange Grove and Thunder Valley
- NW of 7th and Patterson

Intersection improvements have been proposed at the following intersections:

- Patterson Road & 25 Road
- Patterson Road & 28 ½ Road
- Patterson Road & 29 Road
- Patterson Road & 12th Street

Once the 2045 Travel Demand Models have been provided, they will be checked to confirm that these projects and intersection improvements are reflected in the models.

The year 2045 model will have the option to include an interchange between I-70 and 29 Rd. This interchange would increase traffic volumes along a portion of Patterson Rd, and decrease the volumes along a different portion. This project is currently unfunded, and there is no certainty of it being completed by 2045. Because of the uncertainty, the year 2045 Travel Demand Model that is used for this project will not include an interchange at 29 Rd.

The Iterative Procedure – Directional Method as described in NCHRP Report 765 Analytical Travel Forecasting Approaches for Project-Level Planning and Design will be used to generate intersection turning movement forecasts for the horizon year. The directional method uses an iterative approach to alternatively balance entering traffic and departing traffic volumes until an acceptable level of convergence is reached. This method applies existing turning movement volumes, and base and future year link volumes. The iterative procedure—directional method was previously documented in *NCHRP Report 255.* The method has been in use for many years and is widely accepted by transportation practitioners. Directional link volume forecasts and an estimate of intersection turning movement percentages are required. Estimated turning percentages can be based on existing turning movement counts, turning movement patterns at similar intersections, or professional judgment. The method alternatively balances intersection approach and departure volumes in an iterative process until an acceptable level of convergence is reached.

TRAFFIC ANALYSIS SCENARIOS

Traffic operations will be evaluated for the following three scenarios:

- Existing
- '2045 No AMP'
- '2045 AMP'

The existing scenario will be evaluated using existing count data and the existing roadway geometry. The 2045 No AMP scenario will evaluate traffic conditions using volumes from the Year 2045 Travel Demand Model. Roadway developments that are expected to occur irrespective of this AMP will be incorporated into the models. The 2045 AMP scenario will analyze the study area assuming full implementation of the proposed AMP plan. Movements will be rerouted when necessary. Traffic signal timings will be optimized in both 2045 scenarios, and where warranted by the Transportation Engineering Design Standards (TEDS) criteria, auxiliary lanes will also be assumed.

TRAFFIC ANALYSIS APPROACH

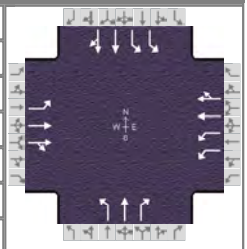
Traffic operations will be evaluated using *Highway Capacity Manual, 6th Edition* methods as applied in the HCS 7 software. The Streets module in HCS will be the primary tool for analyzing traffic operations for both the intersections and the roadway segments between intersections along Patterson Rd.

The impacts of the AMP, from a traffic operations standpoint, are applicable to two of the project goals. The first goal is to provide effective and efficient thru travel for traffic on Patterson Road. This will be evaluated by the corridor travel time in the HCS reports. A decrease in corridor travel time will be deemed favorable, while an increase will be unfavorable. The second goal is to provide safe, effective, and efficient access to and from Patterson Road for businesses, residents, and guests. This will be evaluated by looking at three metrics. The first will be to analyze the left turning movements onto and off of Patterson Road. A decrease in the number of left turning movements with unacceptable traffic operations (LOS E or F) will be deemed favorable, while an increase will be unfavorable. Another criterion that will be evaluated is the extent to which the auxiliary lanes along Patterson Road conform to the Grand Junction TEDS Manual, with the objective being to increase the compliance between the No AMP and AMP scenarios. Finally, while not a directly quantifiable measure, the amount of out of direction travel required to access stores, business, and homes from Patterson Rd, and vice versa, will be evaluated.

TEAPAC files containing the existing signal timings have been provided by the City of Grand Junction. Since HCS is better suited to conduct the traffic analysis required by this AMP, the timings from TEAPAC will be imported into the HCS models. In the year 2045 HCS models, the signal timings will be optimized to accommodate changing traffic patterns. HCS printouts summarizing the optimized timings and LOS results will be included in the technical appendices. The metrics used by HCS to determine the LOS for multimodal forms of travel along a corridor are unlikely to be changed by this AMP. As a result, while the future signal timings will ensure sufficient pedestrian crossing times, multimodal results will not be reported in this AMP.

HCS7 Signalized Intersection Results Summary

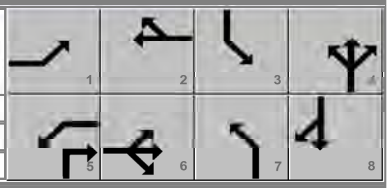
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.91
Urban Street	Patterson Rd	Analysis Year		Analysis Period	1> 7:00
Intersection	24 Road & Patterson	File Name	Existing AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	67	140	51	118	151	115	67	426	360	112	204	17

Signal Information			
Cycle, s	100.0	Reference Phase	6
Offset, s	85	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.8	0.5	33.2	7.8	0.9	27.8	
Yellow	3.5	3.5	4.0	3.5	0.0	4.0	
Red	0.5	0.5	1.0	0.5	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	2.0	4.0	1.1	3.0	2.0	4.0
Phase Duration, s	16.3	42.7	11.8	38.2	11.8	32.8	12.7	33.7
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	12.2		5.6		4.7	26.9	5.4	7.2
Green Extension Time (g_e), s	0.0	0.0	0.7	0.0	0.1	0.9	0.3	7.3
Phase Call Probability	1.00		0.97		0.87	1.00	0.97	1.00
Max Out Probability	1.00		0.00		0.08	1.00	0.17	0.19

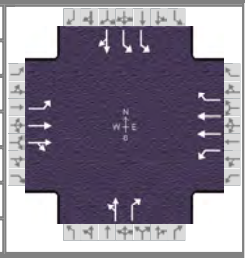
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	292	436	396	130	152	140	74	468	396	123	122	121
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1725	1841	1669	1716	1826	1571	1810	1826	1585	1730	1841	1789
Queue Service Time (g_s), s	10.2	15.6	15.2	3.6	6.1	6.5	2.7	24.9	21.4	3.4	5.1	5.2
Cycle Queue Clearance Time (g_c), s	10.2	15.6	15.2	3.6	6.1	6.5	2.7	24.9	21.4	3.4	5.1	5.2
Green Ratio (*g/C*)	0.47	0.38	0.38	0.08	0.33	0.33	0.36	0.28	0.36	0.09	0.29	0.29
Capacity (*c*), veh/h	564	694	629	267	607	522	462	508	564	301	528	513
Volume-to-Capacity Ratio (*X*)	0.518	0.629	0.630	0.485	0.250	0.269	0.159	0.922	0.701	0.409	0.231	0.235
Back of Queue (*Q*), ft/ln (90 th percentile)	175	200.8	175.1	64.1	107.5	99.9	45.9	425.2	271.7	58.6	90	91.2
Back of Queue (*Q*), veh/ln (90 th percentile)	7.6	8.8	7.9	2.8	4.7	4.5	2.1	18.6	12.2	2.6	4.0	3.9
Queue Storage Ratio (*RQ*) (90 th percentile)	0.98	0.00	0.00	0.29	0.00	0.00	0.35	0.00	1.54	0.44	0.00	0.00
Uniform Delay (d_1), s/veh	19.0	16.3	15.3	44.2	24.3	24.5	21.8	35.0	27.6	43.2	27.2	27.3
Incremental Delay (d_2), s/veh	1.1	4.3	4.7	1.7	0.9	1.1	0.2	22.3	4.2	1.3	0.3	0.3
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	20.1	20.6	20.0	45.9	25.2	25.6	22.0	57.4	31.8	44.5	27.6	27.6
Level of Service (LOS)	C	C	C	D	C	C	C	E	C	D	C	C
Approach Delay, s/veh / LOS	20.3	C		31.7	C		43.8	D		33.3	C	
Intersection Delay, s/veh / LOS	31.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.28	B	2.28	B	2.44	B	2.29	B
Bicycle LOS Score / LOS	0.72	A	0.84	A	2.03	B	0.79	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

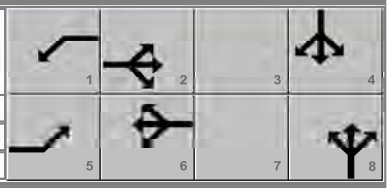
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year		Analysis Period	1> 7:00
Intersection	Market Street/Mall Acce…	File Name	Existing AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	44	541	31	12	348	72	12	6	10	60	7	23

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	0.9	3.6	68.7	3.0	4.8	0.0	
Yellow	3.5	0.0	4.0	4.0	4.0	0.0	
Red	0.5	0.0	1.0	1.0	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	3.0		11.0		10.0
Phase Duration, s	8.5	77.3	4.9	73.7		8.0		9.8
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0		5.0		5.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	3.3		2.1			3.2		4.1
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0		0.0		0.2
Phase Call Probability	0.90		0.18			0.61		0.95
Max Out Probability	0.00		0.00			0.00		0.00

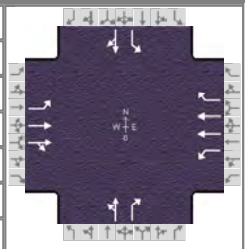
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	85	555	545	7	208	43		22	12	72	36	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1711	1856	1820	1810	1766	1522		1839	1610	1702	1670	
Queue Service Time (g_s), s	1.3	16.3	16.4	0.1	1.0	0.2		1.2	0.7	2.1	2.1	
Cycle Queue Clearance Time (g_c), s	1.3	16.3	16.4	0.1	1.0	0.2		1.2	0.7	2.1	2.1	
Green Ratio (*g/C*)	0.75	0.72	0.72	0.70	0.69	0.69		0.03	0.03	0.05	0.05	
Capacity (*c*), veh/h	912	1342	1316	369	2426	1045		56	49	162	79	
Volume-to-Capacity Ratio (*X*)	0.093	0.414	0.414	0.019	0.086	0.041		0.388	0.246	0.447	0.455	
Back of Queue (*Q*), ft/ln (90 th percentile)	14.6	227.7	219.8	1.5	13.7	3		22.1	12.2	36.6	36.1	
Back of Queue (*Q*), veh/ln (90 th percentile)	0.6	10.1	10.0	0.1	0.6	0.1		1.0	0.6	1.6	1.6	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.10	0.00	0.00	0.01	0.00	0.03		0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	3.4	9.1	9.1	5.8	2.6	1.0		47.6	47.4	46.3	46.4	
Incremental Delay (d_2), s/veh	0.0	0.9	0.9	0.0	0.1	0.1		1.6	1.0	0.7	1.5	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	3.4	9.9	10.0	5.8	2.7	1.1		49.2	48.3	47.1	47.9	
Level of Service (LOS)	A	A	B	A	A	A		D	D	D	D	
Approach Delay, s/veh / LOS	9.5	A		2.5	A		48.9	D		47.3	D	
Intersection Delay, s/veh / LOS	11.8						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.85	B	2.05	B	2.47	B	2.31	B
Bicycle LOS Score / LOS	1.10	A	0.92	A	0.54	A	0.67	A

Copyright © 2020 University of Florida, All Rights Reserved.

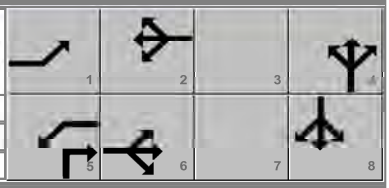
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.84
Urban Street	Patterson Rd	Analysis Year		Analysis Period	1> 7:00
Intersection	Home Depot Access/Me…	File Name	Existing AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	33	559	13	12	405	13	7	5	10	26	4	19

Signal Information												
Cycle, s	100.0	Reference Phase	2									
Offset, s	51	Reference Point	Begin									
Uncoordinated	No	Simult. Gap E/W	Off	Green	0.9	3.3	70.2	4.0	2.6	0.0		
Force Mode	Fixed	Simult. Gap N/S	Off	Yellow	3.5	0.0	4.0	4.0	4.0	0.0		
				Red	0.5	0.0	1.0	1.0	1.0	0.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2		4		8
Case Number	1.1	4.0	1.1	3.0		11.0		10.0
Phase Duration, s	8.2	78.5	4.9	75.2		7.6		9.0
Change Period, (*Y+R c*), s	4.0	5.0	4.0	5.0		5.0		5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0		5.4		5.4
Queue Clearance Time (*g s*), s	3.0		2.1			2.8		3.7
Green Extension Time (*g e*), s	0.3	0.0	0.0	0.0		0.1		0.2
Phase Call Probability	0.85		0.18			0.52		0.80
Max Out Probability	0.00		0.00			0.00		0.00

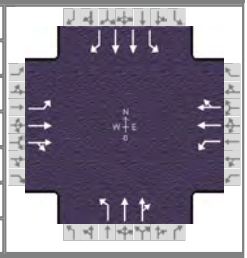
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	67	587	582	7	236	8		14	12	31	27	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1711	1856	1840	1810	1752	1610		1846	1610	1767	1654	
Queue Service Time (*g s*), s	1.0	12.4	12.4	0.1	2.5	0.2		0.8	0.7	1.7	1.6	
Cycle Queue Clearance Time (*g c*), s	1.0	12.4	12.4	0.1	2.5	0.2		0.8	0.7	1.7	1.6	
Green Ratio (*g/C*)	0.76	0.74	0.74	0.71	0.70	0.70		0.03	0.03	0.04	0.04	
Capacity (*c*), veh/h	883	1364	1353	376	2459	1130		48	56	71	66	
Volume-to-Capacity Ratio (*X*)	0.076	0.430	0.430	0.019	0.096	0.007		0.299	0.213	0.437	0.413	
Back of Queue (*Q*), ft/ln (90 th percentile)	11.3	147.2	144	1.5	32.5	2.2		16.5	13.1	35.4	30.6	
Back of Queue (*Q*), veh/ln (90 th percentile)	0.5	6.5	6.5	0.1	1.4	0.1		0.7	0.6	1.6	1.4	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.08	0.00	0.00	0.01	0.00	0.00		0.00	0.15	0.27	0.00	
Uniform Delay (*d 1*), s/veh	3.2	5.2	5.2	4.9	5.6	5.9		47.8	46.9	46.9	46.8	
Incremental Delay (*d 2*), s/veh	0.0	0.9	0.9	0.0	0.1	0.0		4.9	2.7	5.9	5.7	
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	3.3	6.1	6.1	4.9	5.7	6.0		52.7	49.6	52.8	52.6	
Level of Service (LOS)	A	A	A	A	A	A		D	D	D	D	
Approach Delay, s/veh / LOS	6.0	A		5.7	A		51.3	D		52.7	D	
Intersection Delay, s/veh / LOS	8.4						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.85	B	1.86	B	2.46	B	2.32	B
Bicycle LOS Score / LOS	1.08	A	0.91	A	0.53	A	0.58	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

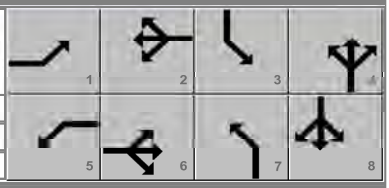
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.92
Urban Street	Patterson Rd	Analysis Year		Analysis Period	1> 7:00
Intersection	24 1/2 Rd & Patterson	File Name	Existing AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	26	502	45	71	358	102	71	121	59	117	156	24

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	28	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.1	0.7	59.9	5.3	2.9	9.5						
Yellow	3.5	0.0	4.0	3.5	0.0	4.0						
Red	0.5	0.0	1.5	0.5	0.0	1.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phase Duration, s	7.9	66.1	7.1	65.4	9.3	14.5	12.2	17.4
Change Period, ($Y+R_c$), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	3.2		2.7		5.9	7.6	8.3	6.5
Green Extension Time (g_e), s	0.2	0.0	0.1	0.0	0.1	2.0	0.1	2.2
Phase Call Probability	0.78		0.63		0.88	1.00	0.97	1.00
Max Out Probability	0.00		0.00		1.00	0.03	1.00	0.01

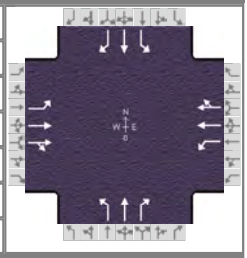
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	54	577	561	36	117	114	77	100	96	127	170	26
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1697	1870	1816	1810	1856	1716	1767	1856	1656	1767	1738	1397
Queue Service Time (g_s), s	1.2	6.9	6.4	0.7	2.2	2.5	3.9	5.1	5.6	6.3	4.5	1.7
Cycle Queue Clearance Time (g_c), s	1.2	6.9	6.4	0.7	2.2	2.5	3.9	5.1	5.6	6.3	4.5	1.7
Green Ratio (*g/C*)	0.64	0.61	0.61	0.63	0.60	0.60	0.15	0.10	0.10	0.19	0.12	0.12
Capacity (*c*), veh/h	767	1134	1101	389	1111	1028	236	177	158	264	432	174
Volume-to-Capacity Ratio (*X*)	0.071	0.509	0.510	0.092	0.106	0.110	0.328	0.564	0.606	0.482	0.392	0.150
Back of Queue (*Q*), ft/ln (90 th percentile)	17.4	81.6	73.1	10.9	34.6	35.7	70.2	102.3	98.5	111.7	80	26.6
Back of Queue (*Q*), veh/ln (90 th percentile)	0.7	3.6	3.3	0.5	1.5	1.6	3.1	4.5	4.4	5.0	3.5	1.1
Queue Storage Ratio (*RQ*) (90 th percentile)	0.13	0.00	0.00	0.08	0.00	0.00	0.53	0.00	0.00	0.84	0.00	0.00
Uniform Delay (d_1), s/veh	7.1	2.9	2.6	7.4	6.8	7.4	38.0	43.2	43.4	35.9	40.3	39.1
Incremental Delay (d_2), s/veh	0.0	1.5	1.5	0.1	0.2	0.2	1.1	4.0	5.2	1.9	0.8	0.6
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	7.1	4.3	4.1	7.5	7.0	7.6	39.1	47.2	48.7	37.8	41.1	39.6
Level of Service (LOS)	A	A	A	A	A	A	D	D	D	D	D	D
Approach Delay, s/veh / LOS	4.3	A		7.3	A		45.4	D		39.7	D	
Intersection Delay, s/veh / LOS	15.7						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.24	B	2.39	B	2.31	B	2.30	B
Bicycle LOS Score / LOS	1.00	A	0.96	A	0.71	A	0.75	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

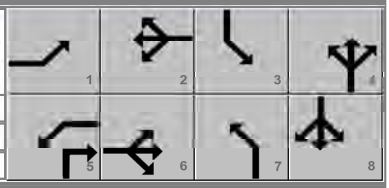
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.87
Urban Street	Patterson Rd	Analysis Year		Analysis Period	1> 7:00
Intersection	25 Road & Patterson	File Name	Existing AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	70	532	37	157	524	105	92	241	91	174	270	37

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	65	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	10.0	36.0	10.0	25.0	0.0	0.0	
Yellow	3.5	4.5	3.5	4.0	0.0	0.0	
Red	0.5	1.5	0.5	1.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	3.0
Phase Duration, s	14.0	42.0	14.0	42.0	14.0	30.0	14.0	30.0
Change Period, ($Y+R_c$), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	5.5		3.7		6.2	15.5	10.1	17.5
Green Extension Time (g_e), s	0.2	0.0	0.1	0.0	0.1	2.9	0.0	2.5
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		0.35		1.00	0.46	1.00	0.65

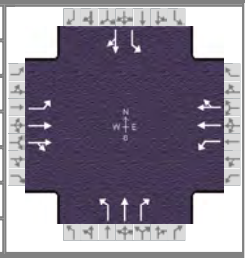
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	117	480	469	57	115	112	106	277	87	200	310	43
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1870	1827	1795	1885	1777	1753	1811	1610	1795	1811	1585
Queue Service Time (g_s), s	3.5	22.7	22.6	1.7	4.9	4.9	4.2	13.5	3.7	8.1	15.5	2.1
Cycle Queue Clearance Time (g_c), s	3.5	22.7	22.6	1.7	4.9	4.9	4.2	13.5	3.7	8.1	15.5	2.1
Green Ratio (*g/C*)	0.46	0.36	0.36	0.46	0.36	0.36	0.35	0.25	0.35	0.35	0.25	0.25
Capacity (*c*), veh/h	578	673	658	319	679	640	323	453	564	349	453	396
Volume-to-Capacity Ratio (*X*)	0.202	0.713	0.713	0.177	0.169	0.175	0.327	0.612	0.155	0.574	0.685	0.107
Back of Queue (*Q*), ft/ln (90 th percentile)	51.3	341.2	331.1	29	88.6	84.2	78.5	226.9	58.2	145.7	258.5	33.6
Back of Queue (*Q*), veh/ln (90 th percentile)	2.3	15.3	14.8	1.3	4.0	3.8	3.5	9.8	2.6	6.6	11.2	1.5
Queue Storage Ratio (*RQ*) (90 th percentile)	0.29	0.00	0.00	0.16	0.00	0.00	0.35	0.00	0.33	1.10	0.00	0.25
Uniform Delay (d_1), s/veh	12.5	29.9	29.4	17.3	26.6	25.4	24.2	33.2	22.3	25.3	33.9	28.9
Incremental Delay (d_2), s/veh	0.7	5.9	6.0	1.0	0.5	0.5	2.7	6.1	0.6	6.7	8.2	0.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	13.3	35.8	35.5	18.3	27.0	25.9	26.9	39.3	22.9	32.0	42.1	29.4
Level of Service (LOS)	B	D	D	B	C	C	C	D	C	C	D	C
Approach Delay, s/veh / LOS	33.2	C		24.9	C		33.4	C		37.5	D	
Intersection Delay, s/veh / LOS	33.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.11	B	2.29	B	2.29	B
Bicycle LOS Score / LOS	1.09	A	1.23	A	1.26	A	1.40	A

Copyright © 2020 University of Florida, All Rights Reserved.

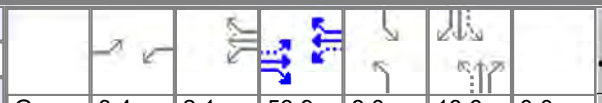
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.82
Urban Street	Patterson Rd	Analysis Year		Analysis Period	1> 7:00
Intersection	25 1/2 Road & Patterson	File Name	Existing AM.xus		
Project Description					

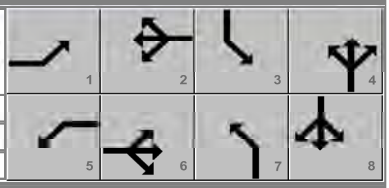


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	17	678	43	138	863	90	40	55	83	133	108	48

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	17	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.4	2.1	53.9	8.0	13.6	0.0
Yellow	3.5	0.0	4.5	3.5	4.0	0.0
Red	0.5	0.0	1.5	0.5	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	7.4	59.9	9.6	62.0	12.0	18.6	12.0	18.6
Change Period, (*Y+R c*), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.3	5.2	5.3
Queue Clearance Time (*g s*), s	2.5		3.0		4.2	7.9	10.0	12.5
Green Extension Time (*g e*), s	0.0	0.0	0.1	0.0	0.0	1.5	0.0	1.1
Phase Call Probability	0.43		0.69		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	0.14	1.00	0.66

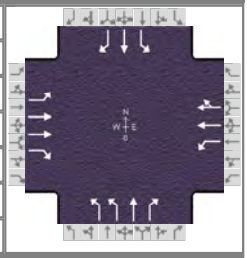
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	20	431	422	43	148	146	49	67	101	162	190	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1870	1831	1781	1870	1808	1767	1885	1585	1682	1758	
Queue Service Time (*g s*), s	0.5	12.5	11.9	1.0	2.5	2.4	2.2	3.2	5.9	8.0	10.5	
Cycle Queue Clearance Time (*g c*), s	0.5	12.5	11.9	1.0	2.5	2.4	2.2	3.2	5.9	8.0	10.5	
Green Ratio (*g/C*)	0.57	0.54	0.54	0.60	0.56	0.56	0.22	0.14	0.14	0.22	0.14	
Capacity (*c*), veh/h	701	1008	986	439	1048	1013	226	256	215	303	239	
Volume-to-Capacity Ratio (*X*)	0.029	0.428	0.428	0.097	0.142	0.144	0.216	0.262	0.471	0.535	0.798	
Back of Queue (*Q*), ft/ln (90 th percentile)	7.2	166.7	154.6	14.9	39.2	36.6	43.5	60.2	96.3	151.9	182.2	
Back of Queue (*Q*), veh/ln (90 th percentile)	0.3	7.5	7.0	0.7	1.8	1.6	1.9	2.7	4.3	6.4	8.1	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.05	0.00	0.00	0.11	0.00	0.00	0.39	0.00	1.09	1.13	0.00	
Uniform Delay (*d 1*), s/veh	9.5	11.8	11.0	9.6	6.7	6.3	32.4	38.7	39.9	34.4	41.9	
Incremental Delay (*d 2*), s/veh	0.0	1.2	1.2	0.1	0.2	0.2	2.2	0.8	2.3	6.6	10.7	
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	9.6	13.0	12.3	9.7	6.9	6.5	34.6	39.5	42.2	41.0	52.6	
Level of Service (LOS)	A	B	B	A	A	A	C	D	D	D	D	
Approach Delay, s/veh / LOS	12.5	B		7.1	A		39.6	D		47.3	D	
Intersection Delay, s/veh / LOS	21.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.08	B	1.89	B	2.30	B	2.30	B
Bicycle LOS Score / LOS	1.23	A	1.59	B	0.85	A	1.07	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

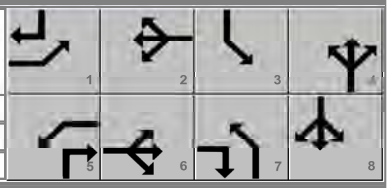
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.77
Urban Street	Patterson Rd	Analysis Year		Analysis Period	1> 7:00
Intersection	1st Street & Patterson	File Name	Existing AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	20	704	131	174	966	22	113	125	143	94	250	30

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	73	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	2.9	3.4	48.3	5.5	1.7	19.7	
Yellow	3.5	0.0	3.0	3.5	0.0	4.0	
Red	0.5	0.0	2.5	0.5	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	4.0	1.1	3.0	1.1	3.0
Phase Duration, s	6.9	53.8	10.3	57.2	9.5	24.7	11.2	26.4
Change Period, ($Y+R_c$), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	2.4		3.4		5.3	11.7	7.3	18.4
Green Extension Time (g_e), s	0.0	0.0	0.2	0.0	0.3	3.8	0.2	3.1
Phase Call Probability	0.36		0.79		0.98	1.00	0.97	1.00
Max Out Probability	0.00		0.00		0.73	0.17	1.00	0.41

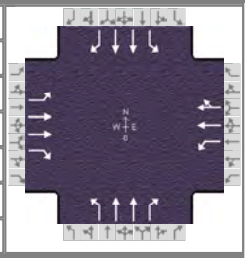
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	16	566	105	56	159	159	147	162	186	122	325	39
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1766	1598	1781	1870	1855	1743	1856	1598	1810	1885	1610
Queue Service Time (g_s), s	0.4	8.5	2.2	1.4	5.0	5.0	3.3	7.7	9.7	5.3	16.4	1.9
Cycle Queue Clearance Time (g_c), s	0.4	8.5	2.2	1.4	5.0	5.0	3.3	7.7	9.7	5.3	16.4	1.9
Green Ratio (*g/C*)	0.51	0.48	0.54	0.56	0.52	0.52	0.25	0.20	0.26	0.27	0.21	0.24
Capacity (*c*), veh/h	606	1705	859	489	967	959	399	366	416	329	404	391
Volume-to-Capacity Ratio (*X*)	0.027	0.332	0.123	0.114	0.165	0.165	0.367	0.443	0.446	0.372	0.804	0.100
Back of Queue (*Q*), ft/ln (90 th percentile)	6.4	116.3	30	20.2	79.2	79.2	55.6	133.9	139.1	92.5	263.1	29
Back of Queue (*Q*), veh/ln (90 th percentile)	0.3	5.2	1.4	0.9	3.5	3.5	2.5	5.9	6.3	4.2	11.9	1.3
Queue Storage Ratio (*RQ*) (90 th percentile)	0.05	0.00	0.23	0.18	0.00	0.00	0.42	0.00	1.05	0.84	0.00	0.00
Uniform Delay (d_1), s/veh	11.6	12.9	7.5	9.9	14.4	14.3	30.7	35.3	30.9	29.0	37.3	29.4
Incremental Delay (d_2), s/veh	0.0	0.4	0.2	0.1	0.2	0.2	0.8	1.2	1.1	1.0	7.6	0.2
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	11.7	13.4	7.7	10.0	14.6	14.5	31.5	36.5	32.0	30.0	44.9	29.5
Level of Service (LOS)	B	B	A	A	B	B	C	D	C	C	D	C
Approach Delay, s/veh / LOS	12.5	B		13.9	B		33.3	C		39.9	D	
Intersection Delay, s/veh / LOS	24.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.26	B	2.09	B	2.30	B	2.45	B
Bicycle LOS Score / LOS	1.40	A	1.73	B	1.30	A	1.29	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

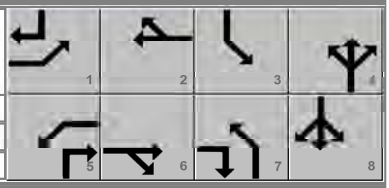
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.80
Urban Street	Patterson Rd	Analysis Year		Analysis Period	1> 7:00
Intersection	7th Street & Patterson	File Name	Existing AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	101	573	204	147	955	89	88	292	78	75	391	188

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	22	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.4	2.0	49.4	5.7	1.0	19.5	
Yellow	3.5	0.0	4.0	3.5	0.0	4.0	
Red	0.5	0.0	1.0	0.5	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	2.0	4.0	1.1	3.0	1.1	3.0
Phase Duration, s	10.4	56.5	8.4	54.4	10.7	25.5	9.7	24.5
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	6.8		5.2		6.9	10.5	6.1	15.0
Green Extension Time (g_e), s	0.2	0.0	0.2	0.0	0.1	6.3	0.0	4.5
Phase Call Probability	0.91		0.82		0.95	1.00	0.93	1.00
Max Out Probability	0.26		0.00		1.00	0.43	1.00	0.73

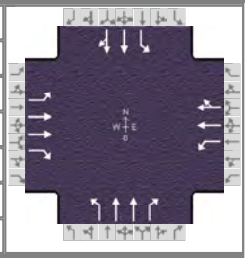
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	87	496	154	61	217	213	110	365	81	94	489	235
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1766	1431	1810	1870	1816	1767	1795	1588	1795	1809	1578
Queue Service Time (g_s), s	4.8	3.9	1.0	3.2	7.9	7.9	4.9	8.5	3.8	4.1	12.6	13.0
Cycle Queue Clearance Time (g_c), s	4.8	3.9	1.0	3.2	7.9	7.9	4.9	8.5	3.8	4.1	12.6	13.0
Green Ratio (*g/C*)	0.06	0.51	0.58	0.04	0.49	0.49	0.26	0.20	0.25	0.25	0.20	0.26
Capacity (*c*), veh/h	115	1818	842	79	924	898	240	736	395	269	706	410
Volume-to-Capacity Ratio (*X*)	0.758	0.273	0.183	0.772	0.235	0.237	0.458	0.496	0.206	0.349	0.693	0.574
Back of Queue (*Q*), ft/ln (90 th percentile)	98	52.9	13.1	61.6	124.4	124.2	87.8	132.8	56.8	72.8	191.8	175.2
Back of Queue (*Q*), veh/ln (90 th percentile)	4.5	2.3	0.6	2.8	5.6	5.4	3.9	6.0	2.6	3.3	8.7	7.9
Queue Storage Ratio (*RQ*) (90 th percentile)	0.56	0.00	0.08	0.47	0.00	0.00	0.40	0.00	0.32	0.66	0.00	0.00
Uniform Delay (d_1), s/veh	48.9	5.7	1.6	39.4	18.1	17.9	30.0	32.0	27.1	30.0	37.5	32.3
Incremental Delay (d_2), s/veh	11.1	0.3	0.4	15.3	0.4	0.5	1.9	0.7	0.4	1.1	2.4	1.8
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	60.0	6.0	2.0	54.7	18.6	18.4	31.9	32.7	27.5	31.1	39.8	34.1
Level of Service (LOS)	E	A	A	D	B	B	C	C	C	C	D	C
Approach Delay, s/veh / LOS	11.5	B		22.9	C		31.8	C		37.2	D	
Intersection Delay, s/veh / LOS	26.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.43	B	2.41	B	2.30	B	2.49	B
Bicycle LOS Score / LOS	1.37	A	1.71	B	0.95	A	1.16	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

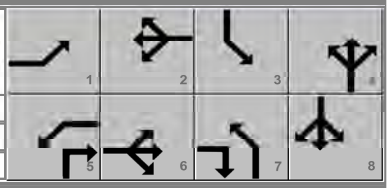
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.80
Urban Street	Patterson Rd	Analysis Year	Existing	Analysis Period	1> 7:00
Intersection	12th Street & Patterson	File Name	Existing AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	109	470	116	259	993	96	137	295	74	73	338	82

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	69	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.0	12.0	24.5	11.0	21.0	0.0
Yellow	3.5	3.5	4.0	3.5	4.0	0.0
Red	0.5	0.5	1.5	0.5	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	13.0	30.0	29.0	46.0	15.0	26.0	15.0	26.0
Change Period, ($Y+R_c$), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	7.3		5.1		9.2	11.1	5.6	15.6
Green Extension Time (g_e), s	0.1	0.0	0.6	0.0	0.1	4.2	0.1	2.8
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		0.00		1.00	0.55	0.90	0.97

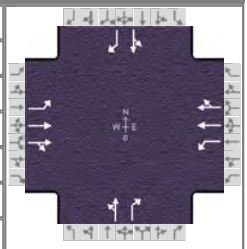
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	131	565	139	142	303	295	171	369	93	91	270	255
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1766	1602	1795	1885	1826	1781	1781	1572	1795	1870	1740
Queue Service Time (g_s), s	5.3	14.0	5.9	3.1	14.0	13.8	7.2	9.1	3.4	3.6	13.3	13.6
Cycle Queue Clearance Time (g_c), s	5.3	14.0	5.9	3.1	14.0	13.8	7.2	9.1	3.4	3.6	13.3	13.6
Green Ratio (*g/C*)	0.34	0.24	0.36	0.52	0.40	0.40	0.32	0.21	0.46	0.32	0.21	0.21
Capacity (*c*), veh/h	433	866	570	599	763	740	316	748	723	362	393	365
Volume-to-Capacity Ratio (*X*)	0.302	0.653	0.245	0.237	0.397	0.399	0.543	0.493	0.128	0.252	0.688	0.698
Back of Queue (*Q*), ft/ln (90 th percentile)	83.6	187.7	81.4	46.3	225.2	215.9	133.5	150	50.3	67.1	231.5	223.7
Back of Queue (*Q*), veh/ln (90 th percentile)	3.7	8.3	3.7	2.1	10.2	9.7	6.0	6.7	2.2	3.0	10.4	10.0
Queue Storage Ratio (*RQ*) (90 th percentile)	0.47	0.00	0.56	0.18	0.00	0.00	0.60	0.00	0.23	0.51	0.00	0.00
Uniform Delay (d_1), s/veh	23.3	31.9	21.2	9.5	29.5	28.8	27.1	34.8	15.5	25.0	36.5	36.6
Incremental Delay (d_2), s/veh	1.1	2.3	0.6	0.8	1.3	1.3	6.6	2.3	0.4	1.7	9.4	10.6
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	24.4	34.3	21.9	10.3	30.8	30.1	33.6	37.1	15.9	26.7	45.9	47.1
Level of Service (LOS)	C	C	C	B	C	C	C	D	B	C	D	D
Approach Delay, s/veh / LOS	30.7	C		26.6	C		33.1	C		43.6	D	
Intersection Delay, s/veh / LOS	32.9						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.44	B	2.27	B	2.30	B	2.45	B
Bicycle LOS Score / LOS	1.20	A	1.88	B	1.01	A	1.00	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

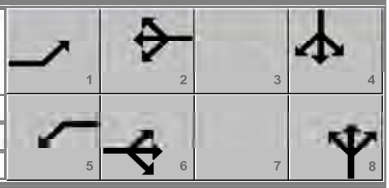
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	Existing	Analysis Period	1> 7:00
Intersection	Patterson Rd & 15th St	File Name	Existing AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	37	541	12	23	1518	29	13	3	20	13	3	62

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	47	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	1.4	2.5	75.9	6.7	0.0	0.0	
Yellow	3.5	0.0	3.5	3.5	0.0	0.0	
Red	1.0	0.0	1.0	1.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2		8		4
Case Number	1.1	4.0	1.1	4.0		7.0		7.0
Phase Duration, s	8.4	82.9	5.9	80.4		11.2		11.2
Change Period, ($Y+R_c$), s	4.5	4.5	4.5	4.5		4.5		4.5
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	2.6		2.2			3.4		6.6
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0		0.2		0.2
Phase Call Probability	0.78		0.28			0.98		0.98
Max Out Probability	0.00		0.00			0.00		0.00

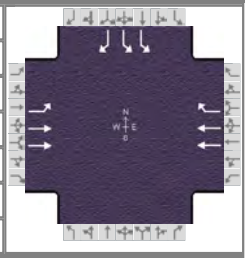
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	54	408	405	12	405	402		19	24		19	75
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1870	1856	1781	1870	1858		1508	1585		1508	1585
Queue Service Time (g_s), s	0.6	2.0	2.0	0.2	3.3	3.3		0.0	1.4		0.0	4.6
Cycle Queue Clearance Time (g_c), s	0.6	2.0	2.0	0.2	3.3	3.3		1.1	1.4		1.1	4.6
Green Ratio (*g/C*)	0.80	0.78	0.78	0.77	0.76	0.76		0.07	0.07		0.07	0.07
Capacity (*c*), veh/h	632	1467	1455	597	1420	1411		166	106		166	106
Volume-to-Capacity Ratio (*X*)	0.086	0.278	0.278	0.020	0.285	0.285		0.116	0.228		0.116	0.707
Back of Queue (*Q*), ft/ln (90 th percentile)	5.3	21.8	22	1.4	35.3	35.4		18.3	23.1		18.3	76.5
Back of Queue (*Q*), veh/ln (90 th percentile)	0.2	1.0	1.0	0.1	1.6	1.6		0.8	1.0		0.8	3.4
Queue Storage Ratio (*RQ*) (90 th percentile)	0.07	0.00	0.00	0.02	0.00	0.00		0.00	0.52		0.00	1.73
Uniform Delay (d_1), s/veh	2.2	0.8	0.8	2.6	1.5	1.6		44.0	44.2		44.0	45.7
Incremental Delay (d_2), s/veh	0.0	0.4	0.4	0.0	0.4	0.4		0.1	0.4		0.1	3.2
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	2.2	1.2	1.3	2.6	2.0	2.0		44.2	44.6		44.2	48.9
Level of Service (LOS)	A	A	A	A	A	A		D	D		D	D
Approach Delay, s/veh / LOS	1.3	A		2.0	A		44.4	D		47.9	D	
Intersection Delay, s/veh / LOS	5.1						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.83	B	1.84	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.07	A	2.05	B	0.56	A	0.64	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

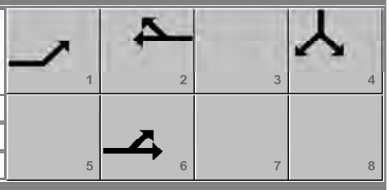
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	Existing	Analysis Period	1> 7:00
Intersection	27 1/2 Road & Patterson	File Name	Existing AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	71	503			1418	444				344		152

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	47	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.0	59.0	20.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.0	0.0	0.0	0.0
Red	0.5	1.5	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6		2				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	10.0	75.0		65.0				25.0
Change Period, (*Y+R c*), s	4.0	6.0		6.0				5.0
Max Allow Headway (*MAH*), s	5.2	0.0		0.0				5.3
Queue Clearance Time (*g s*), s	3.2							12.9
Green Extension Time (*g e*), s	0.0	0.0		0.0				2.2
Phase Call Probability	1.00							1.00
Max Out Probability	1.00							0.67

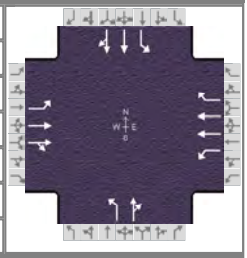
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				7		14
Adjusted Flow Rate (*v*), veh/h	64	453			672	210				414		183
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1795			1795	1610				1757		1522
Queue Service Time (*g s*), s	1.2	7.1			8.8	4.9				10.7		10.9
Cycle Queue Clearance Time (*g c*), s	1.2	7.1			8.8	4.9				10.7		10.9
Green Ratio (*g/C*)	0.67	0.69			0.59	0.59				0.20		0.20
Capacity (*c*), veh/h	488	2477			2118	950				703		304
Volume-to-Capacity Ratio (*X*)	0.131	0.183			0.317	0.221				0.590		0.602
Back of Queue (*Q*), ft/ln (90 th percentile)	17.6	95			114.4	62				168.3		173.8
Back of Queue (*Q*), veh/ln (90 th percentile)	0.8	4.3			5.2	2.8				7.7		7.5
Queue Storage Ratio (*RQ*) (90 th percentile)	0.12	0.00			0.00	1.17				1.01		0.00
Uniform Delay (*d 1*), s/veh	6.2	9.8			9.4	7.2				36.3		36.4
Incremental Delay (*d 2*), s/veh	0.4	0.1			0.3	0.4				3.6		8.5
Initial Queue Delay (*d 3*), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (*d*), s/veh	6.6	9.9			9.7	7.7				39.9		44.9
Level of Service (LOS)	A	A			A	A				D		D
Approach Delay, s/veh / LOS	9.5	A		9.2	A		0.0			41.4	D	
Intersection Delay, s/veh / LOS	18.9						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.66	A	2.07	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	1.06	A	2.34	B				F

Copyright © 2020 University of Florida, All Rights Reserved.

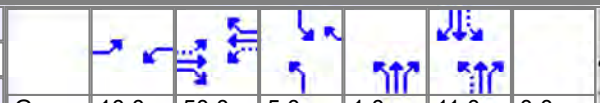
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.85
Urban Street	Patterson Rd	Analysis Year		Analysis Period	1> 7:00
Intersection	28 1/4 Road & Patterson	File Name	Existing AM.xus		
Project Description					

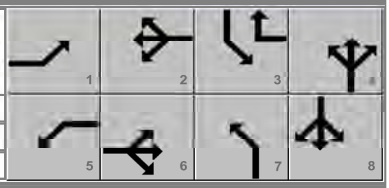


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	697	155	138	1550	61	207	20	47	23	11	22

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	50	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	Off
Force Mode	Fixed	Simult. Gap N/S	On



Green	10.0	50.0	5.0	1.0	11.0	0.0
Yellow	3.5	4.5	3.5	3.5	4.0	0.0
Red	0.5	1.5	0.5	0.5	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	3.0	1.1	4.0	1.1	4.0
Phase Duration, s	14.0	56.0	14.0	56.0	14.0	21.0	9.0	16.0
Change Period, (*Y+R c*), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.1	0.0	5.2	5.4	5.2	5.4
Queue Clearance Time (*g s*), s	2.7		3.5		12.0	6.1	3.3	3.5
Green Extension Time (*g e*), s	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.3
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.10		0.30		1.00	0.05	1.00	0.24

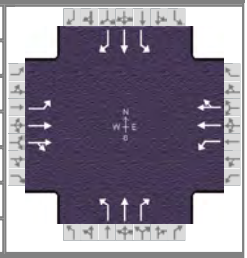
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	31	253	240	66	744	29	244	79		27	13	26
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1885	1767	1795	1795	1610	1795	1687		1810	1900	1610
Queue Service Time (*g s*), s	0.7	5.6	5.2	1.5	11.5	1.0	10.0	4.1		1.3	0.6	1.5
Cycle Queue Clearance Time (*g c*), s	0.7	5.6	5.2	1.5	11.5	1.0	10.0	4.1		1.3	0.6	1.5
Green Ratio (*g/C*)	0.60	0.50	0.50	0.60	0.50	0.55	0.23	0.16		0.16	0.11	0.11
Capacity (*c*), veh/h	511	943	883	637	1795	886	383	270		295	209	177
Volume-to-Capacity Ratio (*X*)	0.060	0.268	0.272	0.104	0.414	0.033	0.635	0.292		0.092	0.062	0.146
Back of Queue (*Q*), ft/ln (90 th percentile)	11.3	84.3	75.5	21.5	136.4	28.4	210	74.3		24	12.5	25.9
Back of Queue (*Q*), veh/ln (90 th percentile)	0.5	3.8	3.4	1.0	6.2	1.3	9.5	3.4		1.1	0.6	1.2
Queue Storage Ratio (*RQ*) (90 th percentile)	0.04	0.00	0.00	0.08	0.00	0.29	0.79	0.00		0.22	0.00	0.00
Uniform Delay (*d 1*), s/veh	9.9	9.7	8.6	8.4	13.0	13.1	35.0	37.0		35.8	39.9	40.3
Incremental Delay (*d 2*), s/veh	0.2	0.5	0.6	0.2	0.5	0.0	7.8	2.7		0.6	0.6	1.7
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	10.1	10.2	9.2	8.6	13.5	13.2	42.8	39.7		36.4	40.4	42.0
Level of Service (LOS)	B	B	A	A	B	B	D	D		D	D	D
Approach Delay, s/veh / LOS	9.7	A		13.1	B		42.0	D		39.4	D	
Intersection Delay, s/veh / LOS	18.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.09	B	2.09	B	2.45	B	2.30	B
Bicycle LOS Score / LOS	1.37	A	2.19	B	1.02	A	0.54	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

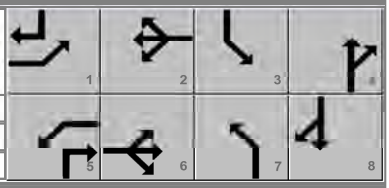
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year		Analysis Period	1> 7:00
Intersection	29 Road & Patterson	File Name	Existing AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	97	506	169	115	1269	62	243	157	57	50	142	267

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	14	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.5	45.5	7.5	4.0	13.0	0.0
Yellow	3.5	4.5	3.5	0.0	4.0	0.0
Red	1.0	2.0	1.0	0.0	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	2.0	3.0	2.0	3.0
Phase Duration, s	14.0	52.0	14.0	52.0	16.0	22.0	12.0	18.0
Change Period, ($Y+R_c$), s	4.5	6.5	4.5	6.5	4.5	5.0	4.5	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (g_s), s	3.9		4.1		13.5	11.3	5.3	15.0
Green Extension Time (g_e), s	0.1	0.0	0.1	0.0	0.0	1.4	0.0	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.21		0.24		1.00	0.67	1.00	1.00

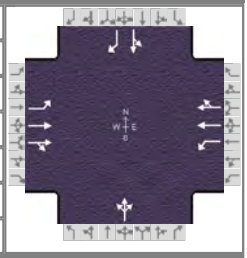
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	76	273	254	81	470	462	293	189	27	60	171	261
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1885	1724	1767	1870	1839	1767	1870	1610	1753	1870	1610
Queue Service Time (g_s), s	1.9	11.1	11.4	2.1	17.7	17.5	11.5	9.3	1.2	3.3	8.8	13.0
Cycle Queue Clearance Time (g_c), s	1.9	11.1	11.4	2.1	17.7	17.5	11.5	9.3	1.2	3.3	8.8	13.0
Green Ratio (*g/C*)	0.55	0.46	0.46	0.55	0.46	0.46	0.12	0.17	0.27	0.08	0.13	0.23
Capacity (*c*), veh/h	396	858	784	519	851	837	203	318	427	131	243	362
Volume-to-Capacity Ratio (*X*)	0.191	0.318	0.324	0.155	0.553	0.553	1.441	0.595	0.062	0.458	0.704	0.722
Back of Queue (*Q*), ft/ln (90 th percentile)	30.1	168.6	162	30.6	223.4	216.5	589.3	172.8	19.8	74.1	176.5	226.6
Back of Queue (*Q*), veh/ln (90 th percentile)	1.3	7.6	7.2	1.4	10.0	9.7	26.1	7.7	0.9	3.3	7.9	10.3
Queue Storage Ratio (*RQ*) (90 th percentile)	0.10	0.00	0.00	0.08	0.00	0.00	2.66	0.00	0.09	0.56	0.00	1.72
Uniform Delay (d_1), s/veh	12.0	22.8	22.9	10.7	18.6	18.3	44.3	38.3	27.5	44.3	41.7	35.9
Incremental Delay (d_2), s/veh	0.8	0.7	0.8	0.4	1.8	1.8	223.9	8.0	0.3	11.1	15.7	11.8
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	12.8	23.5	23.7	11.2	20.4	20.1	268.2	46.3	27.7	55.4	57.4	47.6
Level of Service (LOS)	B	C	C	B	C	C	F	D	C	E	E	D
Approach Delay, s/veh / LOS	22.2	C		19.5	B		173.1	F		52.0	D	
Intersection Delay, s/veh / LOS	56.1						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.15	B	2.17	B	2.30	B	2.30	B
Bicycle LOS Score / LOS	1.25	A	1.92	B	1.33	A	1.30	A

Copyright © 2020 University of Florida, All Rights Reserved.

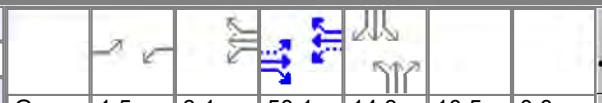
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.85
Urban Street	Patterson Rd	Analysis Year		Analysis Period	1> 7:00
Intersection	29 1/2 Road & Patterson	File Name	Existing AM.xus		
Project Description					

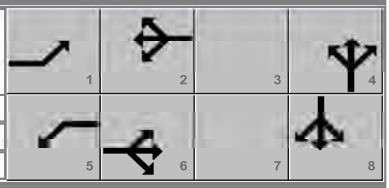


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	14	496	88	94	1231	129	78	34	59	71	49	56

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	71	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	1.5	3.1	50.1	14.3	10.5	0.0
Yellow	3.5	0.0	5.0	4.0	4.0	0.0
Red	0.5	0.0	1.5	1.0	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2		4		8
Case Number	1.1	4.0	1.1	4.0		12.0		11.0
Phase Duration, s	5.5	56.6	8.6	59.8		19.3		15.5
Change Period, ($Y+R_c$), s	4.0	6.5	4.0	6.5		5.0		5.0
Max Allow Headway (*MAH*), s	4.5	0.0	4.5	0.0		4.7		4.7
Queue Clearance Time (g_s), s	2.3		4.4			13.7		9.7
Green Extension Time (g_e), s	0.0	0.0	0.3	0.0		0.6		0.9
Phase Call Probability	0.30		0.92			1.00		1.00
Max Out Probability	0.00		0.00			0.07		0.00

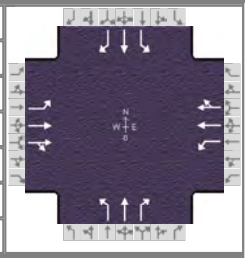
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	13	270	259	91	671	652		201			141	66
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1885	1786	1795	1885	1822		1669			1788	1585
Queue Service Time (g_s), s	0.3	5.1	4.5	2.4	22.7	21.7		11.7			7.7	3.9
Cycle Queue Clearance Time (g_c), s	0.3	5.1	4.5	2.4	22.7	21.7		11.7			7.7	3.9
Green Ratio (*g/C*)	0.52	0.50	0.50	0.56	0.53	0.53		0.14			0.11	0.11
Capacity (*c*), veh/h	219	945	895	551	1004	970		238			188	167
Volume-to-Capacity Ratio (*X*)	0.058	0.286	0.289	0.166	0.669	0.671		0.845			0.752	0.396
Back of Queue (*Q*), ft/ln (90 th percentile)	5.2	71.9	61.3	35.2	238.2	214.6		191.8			138.3	62.9
Back of Queue (*Q*), veh/ln (90 th percentile)	0.2	3.2	2.8	1.6	10.7	9.4		8.3			6.1	2.8
Queue Storage Ratio (*RQ*) (90 th percentile)	0.04	0.00	0.00	0.27	0.00	0.00		0.00			0.00	0.00
Uniform Delay (d_1), s/veh	14.4	7.7	6.6	10.9	12.8	11.5		41.8			43.5	41.8
Incremental Delay (d_2), s/veh	0.1	0.5	0.5	0.1	2.6	2.7		9.3			5.9	1.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	0.0
Control Delay (*d*), s/veh	14.5	8.2	7.2	11.0	15.4	14.2		51.1			49.4	43.3
Level of Service (LOS)	B	A	A	B	B	B		D			D	D
Approach Delay, s/veh / LOS	7.9	A		14.5	B		51.1	D		47.5	D	
Intersection Delay, s/veh / LOS	19.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.67	B	1.89	B	2.31	B	2.32	B
Bicycle LOS Score / LOS	1.07	A	1.90	B	0.82	A	0.83	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

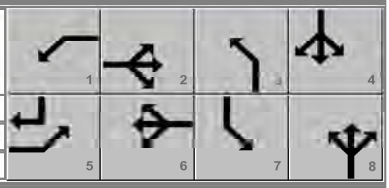
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year		Analysis Period	1> 7:00
Intersection	30 Road & Patterson	File Name	Existing AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	72	368	142	101	827	14	303	45	45	37	95	182

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	19	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	10.2	40.8	8.5	6.0	11.0	0.0	
Yellow	3.5	5.0	3.5	3.5	4.0	0.0	
Red	0.5	1.5	0.5	0.5	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	3.0
Phase Duration, s	14.2	47.3	14.2	47.3	22.5	26.0	12.5	16.0
Change Period, (*Y+R c*), s	4.0	6.5	4.0	6.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.2	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (*g s*), s	4.5		6.2		19.7	4.8	4.0	7.8
Green Extension Time (*g e*), s	0.1	0.0	0.1	0.0	0.0	1.1	0.0	0.4
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.19		1.00		1.00	0.00	0.73	1.00

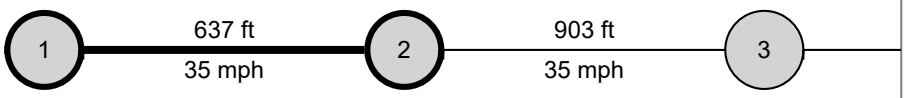
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	87	321	294	145	607	603	365	54	53	45	114	108
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1885	1706	1795	1885	1874	1781	1870	1560	1810	1885	1585
Queue Service Time (*g s*), s	2.5	7.6	7.7	4.2	29.4	29.4	17.7	2.4	2.8	2.0	5.8	5.8
Cycle Queue Clearance Time (*g c*), s	2.5	7.6	7.7	4.2	29.4	29.4	17.7	2.4	2.8	2.0	5.8	5.8
Green Ratio (*g/C*)	0.51	0.41	0.41	0.51	0.41	0.41	0.31	0.21	0.21	0.19	0.11	0.21
Capacity (*c*), veh/h	301	769	696	508	769	765	462	393	328	370	207	336
Volume-to-Capacity Ratio (*X*)	0.289	0.417	0.422	0.286	0.789	0.789	0.790	0.138	0.162	0.121	0.552	0.323
Back of Queue (*Q*), ft/ln (90 th percentile)	41.6	98.3	92.5	67.9	449.1	447.2	285.8	45.5	46.2	37.5	122.3	97.4
Back of Queue (*Q*), veh/ln (90 th percentile)	1.9	4.4	4.2	3.1	20.2	20.2	12.8	2.0	2.0	1.7	5.5	4.4
Queue Storage Ratio (*RQ*) (90 th percentile)	0.32	0.00	0.00	0.51	0.00	0.00	1.29	0.00	0.26	0.28	0.00	0.73
Uniform Delay (*d 1*), s/veh	18.7	10.7	10.7	12.4	30.7	30.7	29.9	32.1	32.3	33.2	42.2	33.3
Incremental Delay (*d 2*), s/veh	1.6	1.1	1.3	1.4	8.0	8.1	12.9	0.7	1.1	0.7	10.2	2.5
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	20.3	11.8	12.0	13.8	38.8	38.8	42.8	32.9	33.4	33.9	52.3	35.9
Level of Service (LOS)	C	B	B	B	D	D	D	C	C	C	D	D
Approach Delay, s/veh / LOS	12.9	B		36.1	D		40.6	D		42.6	D	
Intersection Delay, s/veh / LOS	31.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.10	B	2.23	B	2.30	B	2.30	B
Bicycle LOS Score / LOS	1.07	A	1.42	A	1.27	A	0.93	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	24 Road & Patterson	Market Street/Mall Access & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (24 Rd - Market St)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
1	35	35	2	2	637	637	50	50	0	0	100	0	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h					never	
1	Shared Lane Spillback Time, h				never		never
1	Base Free-Flow Speed, mph	41.58			42.05		
1	Running Time, s	14.79			15.06		
1	Running Speed, mph	29.37			28.85		
1	Through Delay, s/veh	2.71			20.29		
1	Travel Time, s	17.50			35.34		
1	Travel Speed, mph	24.82			12.29		
1	Stop Rate, stops/veh	0.12			0.47		
1	Spatial Stop Rate, stops/mi	0.97			3.88		
1	Through vol/cap Ratio	0.09			0.63		
1	Percent of Base FFS	59.69			29.23		
1	Level of Service	C			F		
1	Auto Traveler Perception Score	2.28			2.76		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	2.30		B	3.47		C
1	Bicycle Segment LOS Score / LOS	2.00		A	2.64		B
1	Transit Segment LOS Score / LOS	1.18		A	2.57		B

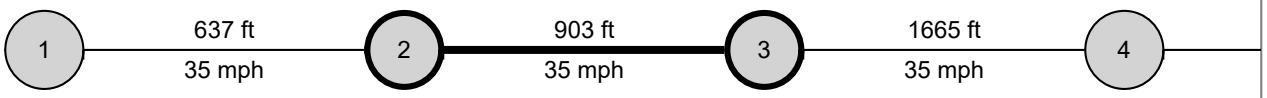
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	Market Street/Mall Access & Pat	Home Depot Access/Mesa Mall Access &		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (Market St - Home Depot)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
2	35	35	2	2	903	903	50	50	2	1	70	0	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h		never				
2	Shared Lane Spillback Time, h	never					
2	Base Free-Flow Speed, mph	41.72			42.05		
2	Running Time, s	18.20			18.58		
2	Running Speed, mph	33.83			33.13		
2	Through Delay, s/veh	5.69			9.94		
2	Travel Time, s	23.89			28.53		
2	Travel Speed, mph	25.77			21.58		
2	Stop Rate, stops/veh	0.24			0.45		
2	Spatial Stop Rate, stops/mi	1.42			2.62		
2	Through vol/cap Ratio	0.10			0.41		
2	Percent of Base FFS	61.77			51.32		
2	Level of Service	C			C		
2	Auto Traveler Perception Score	2.35			2.55		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	2.71		B	3.63		D
2	Bicycle Segment LOS Score / LOS	2.22		B	2.77		C
2	Transit Segment LOS Score / LOS	1.12		A	1.62		A

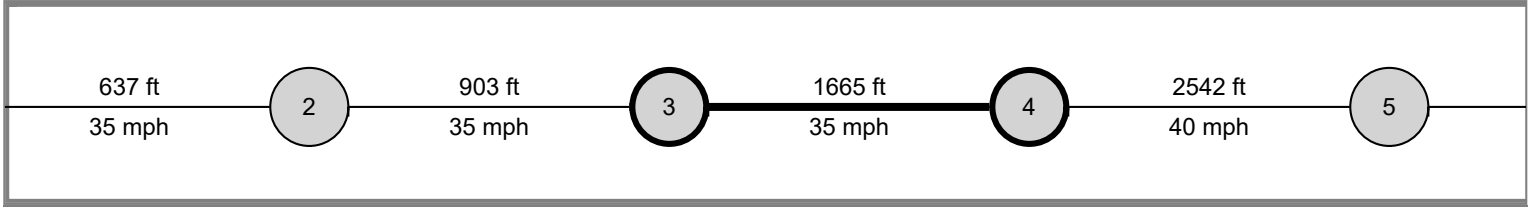
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	Home Depot Access/Mesa Mall /	24 1/2 Rd & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (Home Depot - 24 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
3	35	35	2	2	1665	1665	50	50	550	550	70	100	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never			never		
3	Base Free-Flow Speed, mph	40.71			40.19		
3	Running Time, s	30.21			31.44		
3	Running Speed, mph	37.58			36.11		
3	Through Delay, s/veh	7.20			6.10		
3	Travel Time, s	37.41			37.54		
3	Travel Speed, mph	30.34			30.24		
3	Stop Rate, stops/veh	0.27			0.25		
3	Spatial Stop Rate, stops/mi	0.85			0.79		
3	Through vol/cap Ratio	0.11			0.43		
3	Percent of Base FFS	74.53			75.24		
3	Level of Service	B			B		
3	Auto Traveler Perception Score	2.27			2.26		
Multimodal Results (Segment)							
3	Pedestrian Segment LOS Score / LOS	2.83		C	3.58		D
3	Bicycle Segment LOS Score / LOS	2.29		B	2.82		C
3	Transit Segment LOS Score / LOS	0.81		A	0.98		A

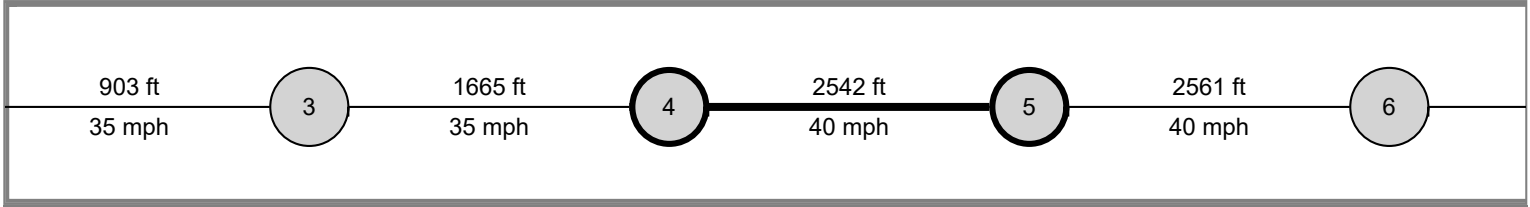
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	24 1/2 Rd & Patterson	25 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (24 1/2 Rd - 25 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
4	40	35	2	2	2542	2542	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never		never	never		
4	Base Free-Flow Speed, mph	42.99			40.64		
4	Running Time, s	42.20			45.62		
4	Running Speed, mph	41.07			37.99		
4	Through Delay, s/veh	26.61			4.26		
4	Travel Time, s	68.81			49.87		
4	Travel Speed, mph	25.19			34.75		
4	Stop Rate, stops/veh	0.69			0.12		
4	Spatial Stop Rate, stops/mi	1.44			0.26		
4	Through vol/cap Ratio	0.17			0.51		
4	Percent of Base FFS	58.59			85.52		
4	Level of Service	C			A		
4	Auto Traveler Perception Score	2.36			2.18		
Multimodal Results (Segment)							
4	Pedestrian Segment LOS Score / LOS	2.81		C	3.18		C
4	Bicycle Segment LOS Score / LOS	2.35		B	2.77		C
4	Transit Segment LOS Score / LOS	1.22		A	0.71		A

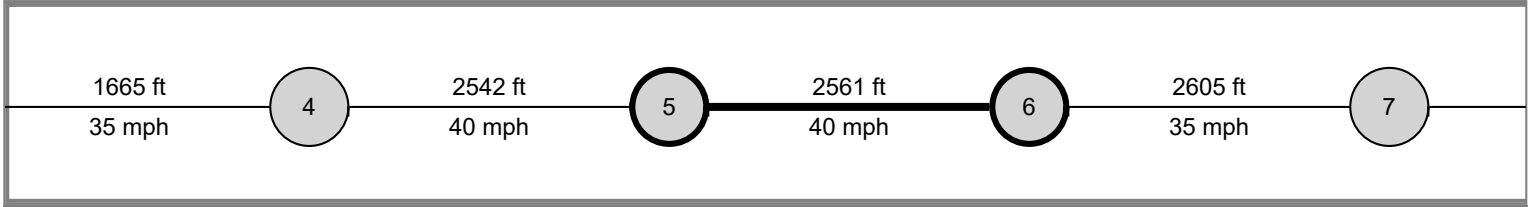
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	25 Road & Patterson	25 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (25 Rd - 25 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
5	40	40	2	2	2561	2561	50	50	260	260	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h		never			never	
5	Shared Lane Spillback Time, h	never			never		never
5	Base Free-Flow Speed, mph	43.13			43.13		
5	Running Time, s	42.42			43.26		
5	Running Speed, mph	41.16			40.37		
5	Through Delay, s/veh	6.75			35.44		
5	Travel Time, s	49.17			78.70		
5	Travel Speed, mph	35.51			22.19		
5	Stop Rate, stops/veh	0.23			0.83		
5	Spatial Stop Rate, stops/mi	0.48			1.71		
5	Through vol/cap Ratio	0.14			0.71		
5	Percent of Base FFS	82.34			51.44		
5	Level of Service	A			C		
5	Auto Traveler Perception Score	2.21			2.40		
Multimodal Results (Segment)							
5	Pedestrian Segment LOS Score / LOS	2.64		B	3.44		C
5	Bicycle Segment LOS Score / LOS	2.39		B	2.81		C
5	Transit Segment LOS Score / LOS	0.54		A	1.58		A

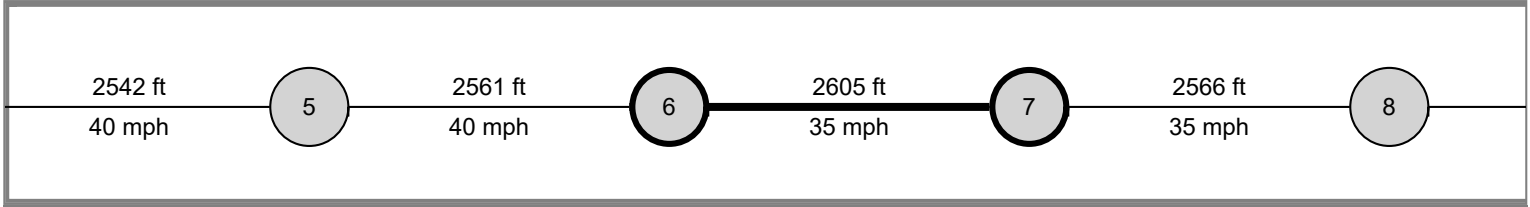
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	25 1/2 Road & Patterson	1st Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (25 1/2 Rd - 26 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
6	35	40	2	2	2605	2605	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
6	Bay/Lane Spillback Time, h		never			never	
6	Shared Lane Spillback Time, h	never			never		
6	Base Free-Flow Speed, mph	40.74			43.09		
6	Running Time, s	45.46			43.74		
6	Running Speed, mph	39.07			40.61		
6	Through Delay, s/veh	14.58			12.69		
6	Travel Time, s	60.04			56.42		
6	Travel Speed, mph	29.58			31.48		
6	Stop Rate, stops/veh	0.47			0.39		
6	Spatial Stop Rate, stops/mi	0.96			0.79		
6	Through vol/cap Ratio	0.16			0.42		
6	Percent of Base FFS	72.62			73.05		
6	Level of Service	B			B		
6	Auto Traveler Perception Score	2.28			2.26		
Multimodal Results (Segment)							
6	Pedestrian Segment LOS Score / LOS	2.85		C	3.12		C
6	Bicycle Segment LOS Score / LOS	2.45		B	2.73		B
6	Transit Segment LOS Score / LOS	0.90		A	0.88		A

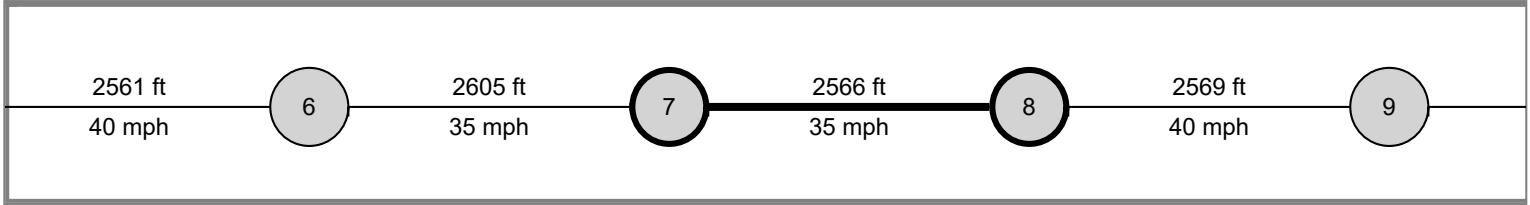
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	1st Street & Patterson	7th Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (26 Rd - 26 1/2)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
7	35	40	2	2	2566	2566	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
7	Bay/Lane Spillback Time, h		never			never	
7	Shared Lane Spillback Time, h	never			never		never
7	Base Free-Flow Speed, mph	39.83			42.18		
7	Running Time, s	45.92			43.76		
7	Running Speed, mph	38.10			39.98		
7	Through Delay, s/veh	18.00			13.49		
7	Travel Time, s	63.93			57.26		
7	Travel Speed, mph	27.37			30.56		
7	Stop Rate, stops/veh	0.57			0.40		
7	Spatial Stop Rate, stops/mi	1.16			0.82		
7	Through vol/cap Ratio	0.23			0.32		
7	Percent of Base FFS	68.72			72.45		
7	Level of Service	B			B		
7	Auto Traveler Perception Score	2.31			2.26		
Multimodal Results (Segment)							
7	Pedestrian Segment LOS Score / LOS	2.77		C	2.94		C
7	Bicycle Segment LOS Score / LOS	2.53		B	2.64		B
7	Transit Segment LOS Score / LOS	1.07		A	0.89		A

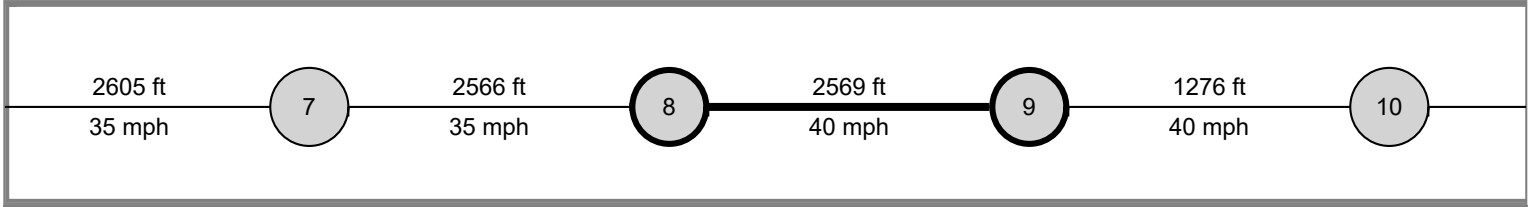
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	7th Street & Patterson	12th Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (26 1/2 Rd to 12th St)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
8	40	35	2	2	2569	2569	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
8	Bay/Lane Spillback Time, h		never			never	
8	Shared Lane Spillback Time, h	never			never		never
8	Base Free-Flow Speed, mph	42.34			39.99		
8	Running Time, s	43.73			46.13		
8	Running Speed, mph	40.05			37.97		
8	Through Delay, s/veh	30.49			6.04		
8	Travel Time, s	74.22			52.17		
8	Travel Speed, mph	23.60			33.57		
8	Stop Rate, stops/veh	0.83			0.19		
8	Spatial Stop Rate, stops/mi	1.71			0.39		
8	Through vol/cap Ratio	0.40			0.27		
8	Percent of Base FFS	55.74			83.95		
8	Level of Service	C			A		
8	Auto Traveler Perception Score	2.40			2.20		
Multimodal Results (Segment)							
8	Pedestrian Segment LOS Score / LOS	3.01		C	2.94		C
8	Bicycle Segment LOS Score / LOS	2.70		B	2.60		B
8	Transit Segment LOS Score / LOS	1.41		A	0.70		A

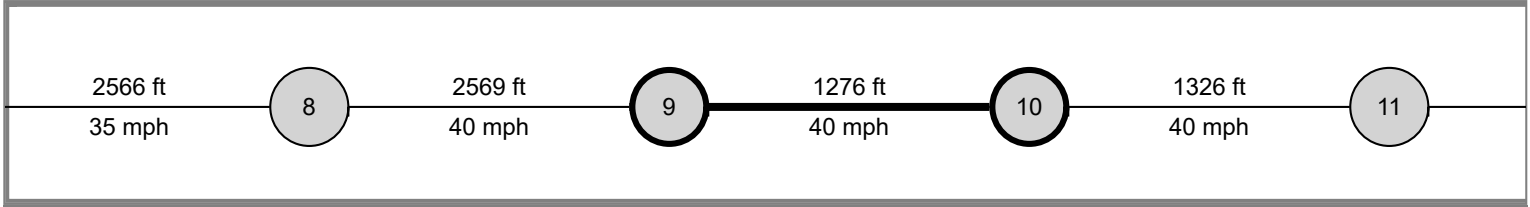
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	12th Street & Patterson	Patterson Rd & 15th St		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (12th St - 27 1/4 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
9	40	35	2	2	1276	1276	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
9	Bay/Lane Spillback Time, h		never			never	
9	Shared Lane Spillback Time, h	never			never		never
9	Base Free-Flow Speed, mph	42.30			39.95		
9	Running Time, s	23.50			24.88		
9	Running Speed, mph	37.03			34.97		
9	Through Delay, s/veh	2.00			34.28		
9	Travel Time, s	25.49			59.16		
9	Travel Speed, mph	34.13			14.71		
9	Stop Rate, stops/veh	0.08			0.75		
9	Spatial Stop Rate, stops/mi	0.32			3.11		
9	Through vol/cap Ratio	0.28			0.65		
9	Percent of Base FFS	80.68			36.81		
9	Level of Service	A			E		
9	Auto Traveler Perception Score	2.19			2.63		
Multimodal Results (Segment)							
9	Pedestrian Segment LOS Score / LOS	2.99		C	3.33		C
9	Bicycle Segment LOS Score / LOS	2.67		B	2.70		B
9	Transit Segment LOS Score / LOS	0.68		A	2.25		B

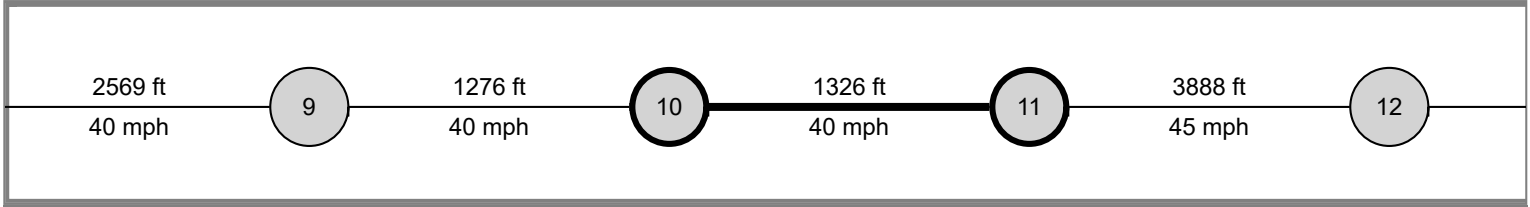
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	Patterson Rd & 15th St	27 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
10	40	40	2	2	1326	1326	50	50	0	0	70	70	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
10	Bay/Lane Spillback Time, h		never			never	
10	Shared Lane Spillback Time, h	never		never	never		
10	Base Free-Flow Speed, mph	44.07			44.07		
10	Running Time, s	23.72			23.71		
10	Running Speed, mph	38.11			38.13		
10	Through Delay, s/veh	9.73			1.25		
10	Travel Time, s	33.45			24.96		
10	Travel Speed, mph	27.03			36.22		
10	Stop Rate, stops/veh	0.33			0.05		
10	Spatial Stop Rate, stops/mi	1.32			0.19		
10	Through vol/cap Ratio	0.32			0.28		
10	Percent of Base FFS	61.33			82.20		
10	Level of Service	C			A		
10	Auto Traveler Perception Score	2.56			2.17		
Multimodal Results (Segment)							
10	Pedestrian Segment LOS Score / LOS	3.43		C	3.45		C
10	Bicycle Segment LOS Score / LOS	2.78		C	2.72		B
10	Transit Segment LOS Score / LOS	1.16		A	0.57		A

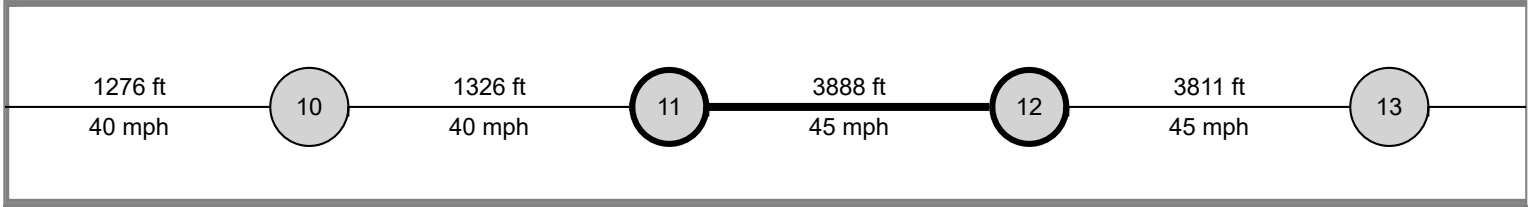
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	27 1/2 Road & Patterson	28 1/4 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (27 1/4 Rd - 27 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
11	45	40	2	2	3888	3888	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement		2	12	1	6	
11	Bay/Lane Spillback Time, h		never			never	
11	Shared Lane Spillback Time, h	never		never	never		
11	Base Free-Flow Speed, mph	45.84			43.49		
11	Running Time, s	60.16			62.64		
11	Running Speed, mph	44.06			42.32		
11	Through Delay, s/veh	16.34			9.91		
11	Travel Time, s	76.50			72.55		
11	Travel Speed, mph	34.65			36.54		
11	Stop Rate, stops/veh	0.48			0.40		
11	Spatial Stop Rate, stops/mi	0.65			0.55		
11	Through vol/cap Ratio	0.44			0.18		
11	Percent of Base FFS	75.59			84.01		
11	Level of Service	B			A		
11	Auto Traveler Perception Score	2.34			2.22		
Multimodal Results (Segment)							
11	Pedestrian Segment LOS Score / LOS	3.61		D	2.96		C
11	Bicycle Segment LOS Score / LOS	2.81		C	2.55		B
11	Transit Segment LOS Score / LOS	0.69		A	0.51		A

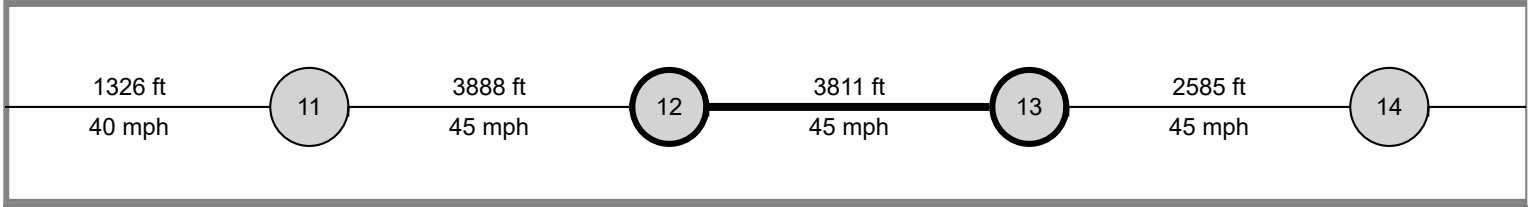
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	28 1/4 Road & Patterson	29 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (28 1/4 Rd - 29 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12	45	40	2	2	3811	3811	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
12	Bay/Lane Spillback Time, h		never			never	
12	Shared Lane Spillback Time, h	never		never	never		never
12	Base Free-Flow Speed, mph	44.90			42.55		
12	Running Time, s	59.68			62.81		
12	Running Speed, mph	43.54			41.37		
12	Through Delay, s/veh	20.06			9.82		
12	Travel Time, s	79.74			72.63		
12	Travel Speed, mph	32.58			35.78		
12	Stop Rate, stops/veh	0.53			0.30		
12	Spatial Stop Rate, stops/mi	0.74			0.41		
12	Through vol/cap Ratio	0.58			0.27		
12	Percent of Base FFS	72.57			84.07		
12	Level of Service	B			A		
12	Auto Traveler Perception Score	2.25			2.20		
Multimodal Results (Segment)							
12	Pedestrian Segment LOS Score / LOS	3.58		D	2.95		C
12	Bicycle Segment LOS Score / LOS	2.86		C	2.57		B
12	Transit Segment LOS Score / LOS	0.85		A	0.56		A

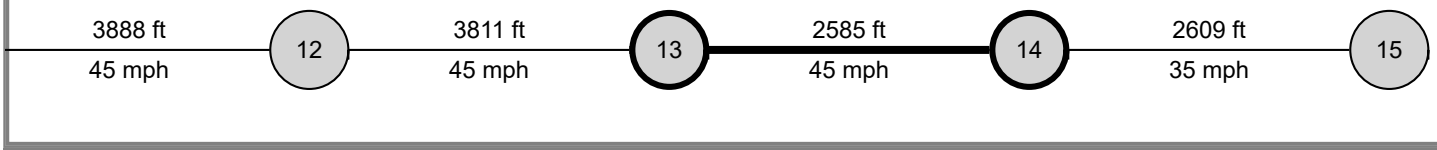
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	29 Road & Patterson	29 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (29 Rd - 29 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
13	45	45	2	2	2585	2585	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
13	Bay/Lane Spillback Time, h		never			never	
13	Shared Lane Spillback Time, h	never			never		never
13	Base Free-Flow Speed, mph	43.89			43.89		
13	Running Time, s	41.28			40.34		
13	Running Speed, mph	42.69			43.69		
13	Through Delay, s/veh	15.41			23.58		
13	Travel Time, s	56.69			63.92		
13	Travel Speed, mph	31.09			27.57		
13	Stop Rate, stops/veh	0.41			0.68		
13	Spatial Stop Rate, stops/mi	0.83			1.38		
13	Through vol/cap Ratio	0.69			0.32		
13	Percent of Base FFS	70.84			62.82		
13	Level of Service	B			C		
13	Auto Traveler Perception Score	2.26			2.35		
Multimodal Results (Segment)							
13	Pedestrian Segment LOS Score / LOS	3.81		D	3.24		C
13	Bicycle Segment LOS Score / LOS	2.95		C	2.62		B
13	Transit Segment LOS Score / LOS	1.02		A	1.10		A

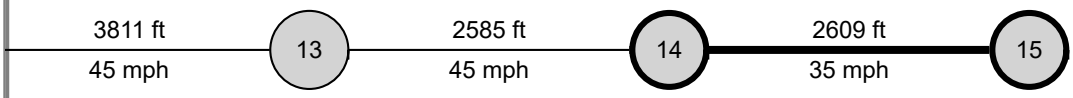
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	Existing AM.xus	Analysis Year	Existing	System Cycle Length, s	100
Intersections	29 1/2 Road & Patterson	30 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (29 1/2 Rd - 30 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
14	35	45	2	2	2609	2609	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
14	Bay/Lane Spillback Time, h					never	
14	Shared Lane Spillback Time, h				never		
14	Base Free-Flow Speed, mph	40.82			45.52		
14	Running Time, s	46.85			40.65		
14	Running Speed, mph	37.97			43.76		
14	Through Delay, s/veh	40.02			7.82		
14	Travel Time, s	86.88			48.46		
14	Travel Speed, mph	20.48			36.71		
14	Stop Rate, stops/veh	0.92			0.23		
14	Spatial Stop Rate, stops/mi	1.86			0.47		
14	Through vol/cap Ratio	0.81			0.29		
14	Percent of Base FFS	50.16			80.63		
14	Level of Service	C			A		
14	Auto Traveler Perception Score	2.42			2.21		
Multimodal Results (Segment)							
14	Pedestrian Segment LOS Score / LOS	3.95		D	2.92		C
14	Bicycle Segment LOS Score / LOS	2.89		C	2.56		B
14	Transit Segment LOS Score / LOS	1.77		A	0.54		A

Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	753.72	737.51
Facility Travel Speed, mph	28.53	29.16
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	66.77	68.66
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.27

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.14	C
Bicycle Facility LOS Score / LOS	2.63	C	2.66	C
Transit Facility LOS Score / LOS	1.01	A	0.92	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Two-Way Stop-Control Report

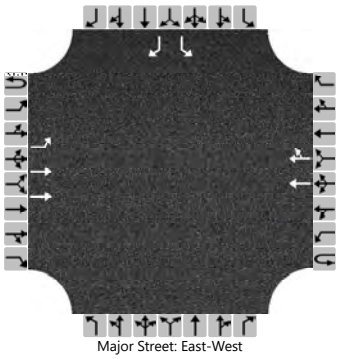
General Information

Analyst	
Agency/Co.	Stolfus and Associates
Date Performed	4/30/2020
Analysis Year	2018
Time Analyzed	AM
Intersection Orientation	East-West
Project Description	Patterson ACP

Site Information

Intersection	28 RD
Jurisdiction	
East/West Street	
North/South Street	
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	0		0	0	0		1	0	1
Configuration		L	T				T	TR						L		R
Volume (veh/h)	0	10	833				1759	57						37		58
Percent Heavy Vehicles (%)	3	1												3		0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.5		6.9
Critical Headway (sec)		4.12												6.86		6.90
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.21												3.53		3.30

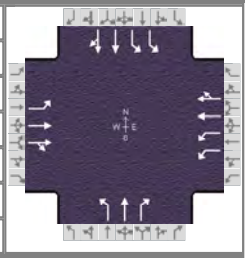
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		11												40		63
Capacity, c (veh/h)		294												26		250
v/c Ratio		0.04												1.57		0.25
95% Queue Length, Q_{95} (veh)		0.1												4.9		1.0
Control Delay (s/veh)		17.7												613.0		24.2
Level of Service (LOS)		C												F		C
Approach Delay (s/veh)	0.2												253.5			
Approach LOS													F			

Copyright © 2020 University of Florida. All Rights Reserved.

HCS7 Signalized Intersection Results Summary

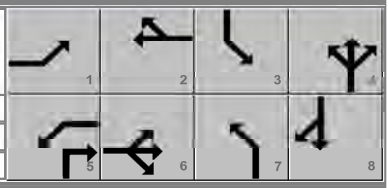
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.92
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	24 Road & Patterson	File Name	Existing PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	63	155	176	493	322	177	42	291	215	207	444	25

Signal Information			
Cycle, s	110.0	Reference Phase	6
Offset, s	81	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	10.7	6.6	36.8	6.0	3.7	24.3	
Yellow	3.5	3.5	4.0	3.5	0.0	4.0	
Red	0.5	0.5	1.0	0.5	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	2.0	4.0	1.1	3.0	2.0	4.0
Phase Duration, s	14.7	41.8	25.3	52.4	10.0	29.3	13.7	32.9
Change Period, (*Y+R c*), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	10.1		18.1		4.1	19.3	8.9	15.3
Green Extension Time (*g e*), s	0.6	0.0	3.2	0.0	0.1	5.0	0.8	6.3
Phase Call Probability	1.00		1.00		0.75	1.00	1.00	1.00
Max Out Probability	0.42		0.07		0.00	0.47	0.22	0.20

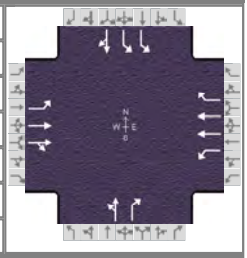
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	209	513	583	536	285	257	46	316	234	225	257	253
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1870	1579	1743	1885	1662	1810	1885	1598	1743	1856	1819
Queue Service Time (*g s*), s	8.1	27.4	36.8	16.1	11.2	11.5	2.1	17.3	11.0	6.9	13.2	13.3
Cycle Queue Clearance Time (*g c*), s	8.1	27.4	36.8	16.1	11.2	11.5	2.1	17.3	11.0	6.9	13.2	13.3
Green Ratio (*g/C*)	0.43	0.33	0.33	0.19	0.43	0.43	0.28	0.22	0.41	0.09	0.25	0.25
Capacity (*c*), veh/h	512	626	528	674	813	716	268	416	661	307	471	462
Volume-to-Capacity Ratio (*X*)	0.408	0.820	1.103	0.795	0.351	0.359	0.170	0.761	0.353	0.734	0.546	0.548
Back of Queue (*Q*), ft/ln (90 th percentile)	132.4	415	740.9	228.3	171.7	160.6	36.5	272	149.4	120.3	205.3	209.7
Back of Queue (*Q*), veh/ln (90 th percentile)	6.0	18.6	33.4	10.3	7.7	7.2	1.7	12.3	6.7	5.4	9.1	9.0
Queue Storage Ratio (*RQ*) (90 th percentile)	0.75	0.00	0.00	1.04	0.00	0.00	0.28	0.00	0.85	0.91	0.00	0.00
Uniform Delay (*d 1*), s/veh	20.8	32.1	41.9	42.3	21.0	21.1	30.3	40.2	22.1	48.9	35.6	35.6
Incremental Delay (*d 2*), s/veh	0.7	11.5	70.4	2.8	1.1	1.2	0.4	5.6	0.5	4.8	1.4	1.4
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	21.6	43.6	112.3	45.1	22.0	22.3	30.7	45.8	22.6	53.7	37.0	37.0
Level of Service (LOS)	C	D	F	D	C	C	C	D	C	D	D	D
Approach Delay, s/veh / LOS	70.8	E		33.5	C		35.5	D		42.1	D	
Intersection Delay, s/veh / LOS	48.6						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	2.27	B	2.45	B	2.29	B
Bicycle LOS Score / LOS	0.84	A	1.38	A	1.47	A	1.09	A

Copyright © 2020 University of Florida, All Rights Reserved.

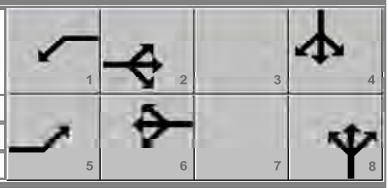
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.94
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	Market Street/Mall Acce…	File Name	Existing PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	83	435	86	28	756	256	76	46	22	228	21	179

Signal Information												
Cycle, s	110.0	Reference Phase	2									
Offset, s	0	Reference Point	Begin	Green	1.5	2.2	56.7	9.7	17.0	0.0		
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.5	3.5	4.0	4.0	4.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.5	1.0	1.0	1.0	0.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	3.0		11.0		10.0
Phase Duration, s	11.7	67.9	5.5	61.7		14.7		22.0
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0		5.0		5.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.4
Queue Clearance Time (g_s), s	7.4		2.3			9.6		15.9
Green Extension Time (g_e), s	0.3	0.0	0.0	0.0		0.2		1.0
Phase Call Probability	1.00		0.29			0.99		1.00
Max Out Probability	0.00		0.00			0.00		0.00

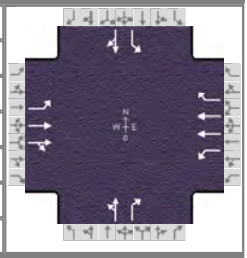
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	198	639	605	11	307	104		130	23	243	213	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1885	1777	1810	1795	1610		1843	1610	1757	1636	
Queue Service Time (g_s), s	5.4	28.6	29.5	0.3	6.3	5.1		7.6	1.5	6.9	13.9	
Cycle Queue Clearance Time (g_c), s	5.4	28.6	29.5	0.3	6.3	5.1		7.6	1.5	6.9	13.9	
Green Ratio (*g/C*)	0.60	0.57	0.57	0.53	0.52	0.52		0.09	0.09	0.15	0.15	
Capacity (*c*), veh/h	691	1077	1015	219	1849	830		163	142	542	252	
Volume-to-Capacity Ratio (*X*)	0.287	0.593	0.596	0.052	0.166	0.125		0.798	0.165	0.448	0.844	
Back of Queue (*Q*), ft/ln (90 th percentile)	79.8	395.5	387.5	5	103.7	79		134.6	24	115.8	197.5	
Back of Queue (*Q*), veh/ln (90 th percentile)	3.6	17.8	17.6	0.2	4.7	3.6		6.1	1.1	5.3	9.0	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.55	0.00	0.00	0.05	0.00	0.75		0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	10.1	21.7	22.9	14.8	18.6	20.3		49.2	46.4	42.3	45.2	
Incremental Delay (d_2), s/veh	0.1	2.0	2.1	0.0	0.2	0.3		3.4	0.2	0.2	3.0	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	10.2	23.6	25.0	14.9	18.7	20.6		52.6	46.6	42.5	48.2	
Level of Service (LOS)	B	C	C	B	B	C		D	D	D	D	
Approach Delay, s/veh / LOS	22.4	C		19.1	B		51.6	D		45.2	D	
Intersection Delay, s/veh / LOS	27.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.89	B	2.09	B	2.48	B	2.30	B
Bicycle LOS Score / LOS	1.02	A	1.40	A	0.74	A	1.24	A

Copyright © 2020 University of Florida, All Rights Reserved.

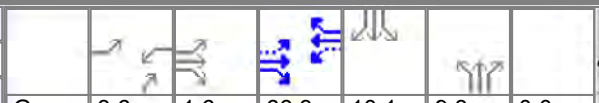
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.91
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	Home Depot Access/Me…	File Name	Existing PM.xus		
Project Description					

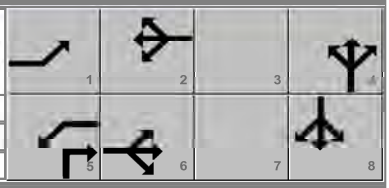


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	58	598	44	74	879	65	59	22	88	89	13	89

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	43	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	Off
Force Mode	Fixed	Simult. Gap N/S	Off



Green	3.6	1.6	66.3	10.1	9.3	0.0	
Yellow	3.5	0.0	4.0	4.0	4.0	0.0	
Red	0.5	0.0	1.0	1.0	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2		4		8
Case Number	1.1	4.0	1.1	3.0		11.0		10.0
Phase Duration, s	9.2	73.0	7.6	71.3		14.3		15.1
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0		5.0		5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0		5.5		5.5
Queue Clearance Time (g_s), s	4.8		2.9			8.3		9.3
Green Extension Time (g_e), s	0.6	0.0	0.2	0.0		1.0		0.8
Phase Call Probability	0.98		0.72			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.09

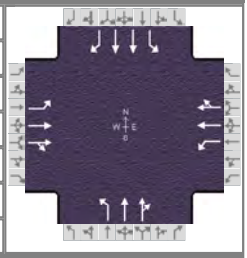
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	121	677	663	42	500	37		89	97	98	112	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1885	1839	1810	1809	1610		1833	1585	1810	1642	
Queue Service Time (g_s), s	2.8	20.4	20.2	0.9	10.1	1.7		5.1	6.3	5.7	7.3	
Cycle Queue Clearance Time (g_c), s	2.8	20.4	20.2	0.9	10.1	1.7		5.1	6.3	5.7	7.3	
Green Ratio (*g/C*)	0.65	0.62	0.62	0.64	0.60	0.60		0.08	0.12	0.09	0.09	
Capacity (*c*), veh/h	594	1165	1136	297	2181	971		155	186	167	151	
Volume-to-Capacity Ratio (*X*)	0.204	0.581	0.583	0.142	0.229	0.038		0.574	0.520	0.587	0.741	
Back of Queue (*Q*), ft/ln (90 th percentile)	41.9	237.8	227.6	13.4	154.9	23.3		101.7	106.3	108.9	127.4	
Back of Queue (*Q*), veh/ln (90 th percentile)	1.9	10.7	10.3	0.6	7.0	1.1		4.6	4.8	4.9	5.8	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.32	0.00	0.00	0.12	0.00	0.00		0.00	1.20	0.82	0.00	
Uniform Delay (d_1), s/veh	8.0	9.7	9.4	8.9	16.3	14.8		48.4	45.6	47.9	48.7	
Incremental Delay (d_2), s/veh	0.2	1.9	2.0	0.3	0.2	0.1		4.7	3.2	4.6	9.7	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	8.2	11.6	11.4	9.2	16.6	14.9		53.2	48.8	52.5	58.4	
Level of Service (LOS)	A	B	B	A	B	B		D	D	D	E	
Approach Delay, s/veh / LOS	11.2	B		15.9	B		50.9	D		55.7	E	
Intersection Delay, s/veh / LOS	19.2						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.88	B	1.88	B	2.46	B	2.32	B
Bicycle LOS Score / LOS	1.12	A	1.41	A	0.79	A	0.83	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

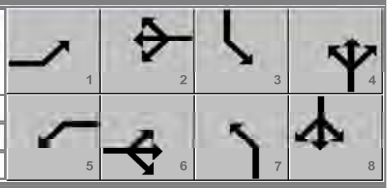
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.91
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	24 1/2 Rd & Patterson	File Name	Existing PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	515	161	204	720	174	219	222	166	170	208	80

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	23	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.3	0.5	58.3	9.0	1.4	13.0	
Yellow	3.5	0.0	4.0	3.5	3.5	4.0	
Red	0.5	0.0	1.5	0.5	0.5	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	3.0
Phase Duration, s	9.3	63.8	9.7	64.3	18.4	23.4	13.0	18.0
Change Period, (*Y+R c*), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	5.1		5.4		14.4	15.0	11.0	8.7
Green Extension Time (*g e*), s	0.4	0.0	0.5	0.0	0.1	3.4	0.0	3.6
Phase Call Probability	0.97		0.98		1.00	1.00	1.00	1.00
Max Out Probability	0.01		0.00		1.00	0.36	1.00	0.30

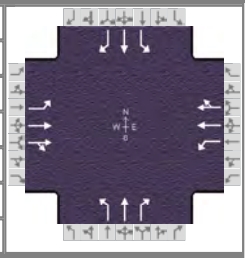
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	112	740	692	123	277	262	241	224	202	187	229	88
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1885	1732	1795	1885	1758	1810	1885	1622	1795	1781	1585
Queue Service Time (*g s*), s	3.1	31.2	29.8	3.4	5.8	5.6	12.4	12.4	13.0	9.0	6.7	5.7
Cycle Queue Clearance Time (*g c*), s	3.1	31.2	29.8	3.4	5.8	5.6	12.4	12.4	13.0	9.0	6.7	5.7
Green Ratio (*g/C*)	0.58	0.53	0.53	0.58	0.53	0.53	0.27	0.17	0.17	0.20	0.12	0.12
Capacity (*c*), veh/h	552	1000	918	252	1008	940	365	316	272	243	421	188
Volume-to-Capacity Ratio (*X*)	0.203	0.740	0.754	0.489	0.275	0.279	0.659	0.710	0.743	0.770	0.542	0.469
Back of Queue (*Q*), ft/ln (90 th percentile)	50.3	382.9	313.2	57.3	90.1	82	195.6	204.2	192	186.6	116.6	94.6
Back of Queue (*Q*), veh/ln (90 th percentile)	2.3	17.3	14.2	2.6	4.1	3.7	8.9	9.2	8.7	8.4	5.2	4.2
Queue Storage Ratio (*RQ*) (90 th percentile)	0.38	0.00	0.00	0.43	0.00	0.00	1.48	0.00	0.00	1.41	0.00	0.00
Uniform Delay (*d 1*), s/veh	11.1	16.7	13.9	17.4	8.2	7.8	34.5	43.2	43.5	41.0	45.7	45.3
Incremental Delay (*d 2*), s/veh	0.2	4.4	5.1	1.9	0.6	0.7	4.7	4.2	6.3	14.8	1.5	2.6
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	11.4	21.1	19.0	19.3	8.8	8.4	39.1	47.5	49.8	55.8	47.2	47.8
Level of Service (LOS)	B	C	B	B	A	A	D	D	D	E	D	D
Approach Delay, s/veh / LOS	19.5	B		10.6	B		45.2	D		50.5	D	
Intersection Delay, s/veh / LOS	27.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.26	B	2.41	B	2.30	B	2.31	B
Bicycle LOS Score / LOS	1.15	A	1.48	A	1.04	A	0.90	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

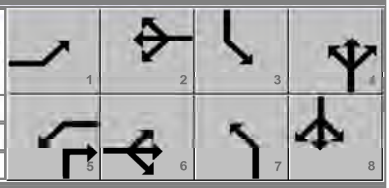
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.90
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	25 Road & Patterson	File Name	Existing PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	66	741	147	222	834	147	180	308	176	205	301	111

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	102	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	16.9	40.2	12.5	21.4	0.0	0.0
Yellow	3.5	4.5	3.5	4.0	0.0	0.0
Red	0.5	1.5	0.5	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	3.0
Phase Duration, s	20.9	46.2	20.9	46.2	16.5	26.4	16.5	26.4
Change Period, (*Y+R c*), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	5.6		6.5		11.6	21.7	13.1	21.3
Green Extension Time (*g e*), s	0.4	0.0	0.4	0.0	0.1	0.0	0.0	0.1
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.02		0.04		1.00	1.00	1.00	1.00

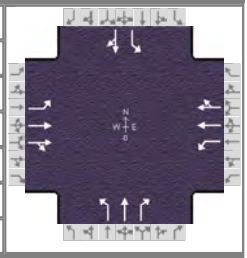
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	131	890	872	141	318	304	200	342	179	228	334	123
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1885	1778	1795	1885	1786	1781	1885	1598	1795	1870	1610
Queue Service Time (*g s*), s	3.6	40.2	40.2	4.5	12.0	12.9	9.6	19.7	9.0	11.1	19.3	7.3
Cycle Queue Clearance Time (*g c*), s	3.6	40.2	40.2	4.5	12.0	12.9	9.6	19.7	9.0	11.1	19.3	7.3
Green Ratio (*g/C*)	0.52	0.37	0.37	0.52	0.37	0.37	0.31	0.19	0.35	0.31	0.19	0.19
Capacity (*c*), veh/h	530	689	650	341	689	653	269	367	556	269	364	313
Volume-to-Capacity Ratio (*X*)	0.247	1.291	1.342	0.412	0.462	0.465	0.744	0.933	0.322	0.845	0.919	0.394
Back of Queue (*Q*), ft/ln (90 th percentile)	56.2	1399.3	1481.6	79.1	168.5	177.5	184.7	373.2	134.3	221.2	363.5	120.5
Back of Queue (*Q*), veh/ln (90 th percentile)	2.6	63.1	66.3	3.6	7.6	7.9	8.3	16.8	6.1	10.0	16.3	5.5
Queue Storage Ratio (*RQ*) (90 th percentile)	0.32	0.00	0.00	0.45	0.00	0.00	0.84	0.00	0.76	1.67	0.00	0.91
Uniform Delay (*d 1*), s/veh	11.9	39.5	40.3	20.7	20.4	22.5	31.7	43.6	26.3	32.2	43.5	38.6
Incremental Delay (*d 2*), s/veh	1.0	141.2	163.2	3.1	1.9	2.0	17.0	32.8	1.5	26.4	30.6	3.7
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	12.9	180.7	203.5	23.8	22.2	24.5	48.7	76.4	27.8	58.7	74.0	42.3
Level of Service (LOS)	B	F	F	C	C	C	D	E	C	E	E	D
Approach Delay, s/veh / LOS	179.6	F		23.4	C		56.7	E		63.2	E	
Intersection Delay, s/veh / LOS	108.8						F					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.11	B	2.30	B	2.30	B
Bicycle LOS Score / LOS	1.36	A	1.59	B	1.68	B	1.62	B

Copyright © 2020 University of Florida, All Rights Reserved.

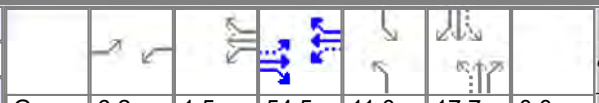
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.89
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	25 1/2 Road & Patterson	File Name	Existing PM.xus		
Project Description					

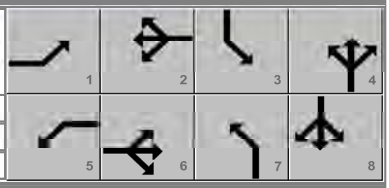


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	36	1077	89	182	1079	104	92	145	189	185	118	46

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	28	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	6.2	1.5	54.5	11.0	17.7	0.0
Yellow	3.5	0.0	4.5	3.5	4.0	0.0
Red	0.5	0.0	1.5	0.5	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	10.2	60.5	11.8	62.1	15.0	22.7	15.0	22.7
Change Period, (*Y+R c*), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.3	5.2	5.3
Queue Clearance Time (*g s*), s	3.4		5.2		7.0	16.0	12.6	12.7
Green Extension Time (*g e*), s	0.1	0.0	0.3	0.0	0.1	1.7	0.0	2.3
Phase Call Probability	0.78		0.97		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.02		1.00	0.85	1.00	0.39

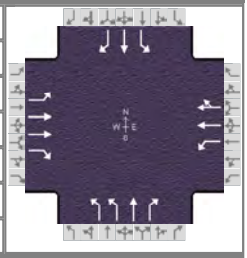
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	49	803	790	114	375	364	103	163	212	208	184	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1767	1885	1834	1795	1885	1826	1781	1870	1610	1795	1780	
Queue Service Time (*g s*), s	1.4	42.1	42.9	3.2	12.0	11.2	5.0	8.8	14.0	10.6	10.7	
Cycle Queue Clearance Time (*g c*), s	1.4	42.1	42.9	3.2	12.0	11.2	5.0	8.8	14.0	10.6	10.7	
Green Ratio (*g/C*)	0.55	0.50	0.50	0.57	0.51	0.51	0.26	0.16	0.16	0.26	0.16	
Capacity (*c*), veh/h	438	935	909	226	961	931	299	301	259	309	287	
Volume-to-Capacity Ratio (*X*)	0.112	0.860	0.869	0.503	0.390	0.391	0.346	0.541	0.819	0.673	0.643	
Back of Queue (*Q*), ft/ln (90 th percentile)	20.2	578.7	578.3	62.5	163.6	149	96.3	152.5	215.6	189.1	173.5	
Back of Queue (*Q*), veh/ln (90 th percentile)	0.9	26.1	26.1	2.8	7.4	6.6	4.3	6.8	9.8	8.5	7.8	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.15	0.00	0.00	0.47	0.00	0.00	0.87	0.00	2.45	1.43	0.00	
Uniform Delay (*d 1*), s/veh	11.2	27.0	27.2	24.6	14.1	12.6	32.7	42.4	44.6	34.6	43.2	
Incremental Delay (*d 2*), s/veh	0.1	9.3	10.2	2.0	1.0	1.0	3.2	2.1	14.1	11.2	3.7	
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	11.3	36.3	37.4	26.6	15.0	13.7	35.8	44.6	58.7	45.8	46.8	
Level of Service (LOS)	B	D	D	C	B	B	D	D	E	D	D	
Approach Delay, s/veh / LOS	36.1	D		16.0	B		49.0	D		46.3	D	
Intersection Delay, s/veh / LOS	34.0						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.09	B	1.90	B	2.30	B	2.30	B
Bicycle LOS Score / LOS	1.60	B	1.75	B	1.28	A	1.13	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

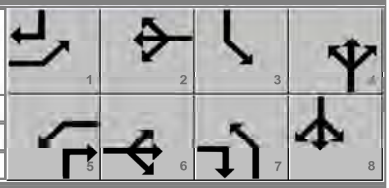
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.93
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	1st Street & Patterson	File Name	Existing PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	55	1203	167	187	1110	60	184	179	183	82	132	37

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	74	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.8	1.0	59.6	7.5	0.5	16.2	
Yellow	3.5	0.0	3.0	3.5	0.0	4.0	
Red	0.5	0.0	2.5	0.5	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	4.0	1.1	3.0	1.1	3.0
Phase Duration, s	10.8	65.1	11.8	66.0	12.0	21.7	11.5	21.2
Change Period, (*Y+R c*), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.3	5.2	5.3
Queue Clearance Time (*g s*), s	3.5		4.9		7.1	14.0	6.5	9.6
Green Extension Time (*g e*), s	0.2	0.0	0.5	0.0	0.5	2.7	0.2	3.1
Phase Call Probability	0.85		0.97		1.00	1.00	0.93	1.00
Max Out Probability	0.00		0.00		0.70	0.19	0.37	0.08

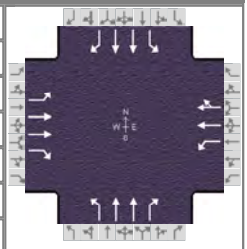
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	62	1358	189	114	360	354	198	192	197	88	142	40
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1795	1610	1781	1885	1851	1757	1885	1598	1795	1885	1610
Queue Service Time (*g s*), s	1.5	25.1	3.6	2.9	6.9	6.6	5.1	10.6	12.0	4.5	7.6	2.2
Cycle Queue Clearance Time (*g c*), s	1.5	25.1	3.6	2.9	6.9	6.6	5.1	10.6	12.0	4.5	7.6	2.2
Green Ratio (*g/C*)	0.60	0.54	0.61	0.61	0.55	0.55	0.22	0.15	0.22	0.22	0.15	0.21
Capacity (*c*), veh/h	521	1943	989	296	1037	1018	576	287	356	225	278	337
Volume-to-Capacity Ratio (*X*)	0.119	0.699	0.191	0.386	0.347	0.348	0.343	0.671	0.553	0.392	0.511	0.118
Back of Queue (*Q*), ft/ln (90 th percentile)	22.1	236.5	45.3	48.5	89.6	86	87.4	179.9	169.2	81	136.1	34.8
Back of Queue (*Q*), veh/ln (90 th percentile)	1.0	10.7	2.1	2.2	4.0	3.8	4.0	8.1	7.6	3.7	6.1	1.6
Queue Storage Ratio (*RQ*) (90 th percentile)	0.17	0.00	0.34	0.44	0.00	0.00	0.66	0.00	1.28	0.73	0.00	0.00
Uniform Delay (*d 1*), s/veh	8.8	11.8	5.4	14.3	6.9	6.5	35.8	44.0	37.9	36.4	43.2	35.3
Incremental Delay (*d 2*), s/veh	0.1	1.8	0.4	0.7	0.6	0.6	0.5	3.8	1.9	1.6	2.1	0.2
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	8.9	13.6	5.8	15.1	7.4	7.0	36.3	47.9	39.8	37.9	45.3	35.5
Level of Service (LOS)	A	B	A	B	A	A	D	D	D	D	D	D
Approach Delay, s/veh / LOS	12.5	B		8.3	A		41.3	D		41.5	D	
Intersection Delay, s/veh / LOS	19.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.26	B	2.09	B	2.30	B	2.46	B
Bicycle LOS Score / LOS	1.75	B	1.69	B	1.46	A	0.93	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

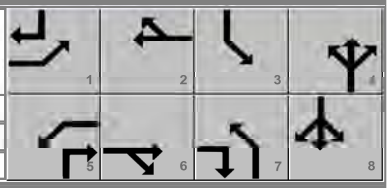
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.93
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	7th Street & Patterson	File Name	Existing PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	142	1204	163	104	920	46	247	407	197	66	255	174

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	15	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.5	0.4	46.5	7.1	4.3	18.3	
Yellow	3.5	3.5	4.0	3.5	3.5	4.0	
Red	0.5	0.5	1.0	0.5	0.5	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	2.0	4.0	1.1	3.0	1.1	3.0
Phase Duration, s	15.8	55.9	11.5	51.5	19.4	31.6	11.1	23.3
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	11.6		7.2		14.8	12.9	5.5	12.9
Green Extension Time (g_e), s	0.4	0.0	0.2	0.0	0.6	7.2	0.1	5.4
Phase Call Probability	0.99		0.93		1.00	1.00	0.89	1.00
Max Out Probability	0.41		0.01		1.00	0.20	1.00	0.50

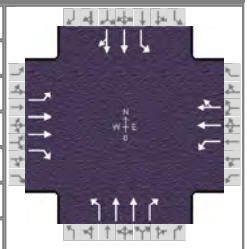
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	156	1326	151	89	414	407	266	438	198	71	274	187
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1795	1438	1795	1885	1856	1810	1795	1590	1810	1781	1562
Queue Service Time (g_s), s	9.6	30.6	2.7	5.2	17.9	17.8	12.8	10.9	10.1	3.5	7.7	10.9
Cycle Queue Clearance Time (g_c), s	9.6	30.6	2.7	5.2	17.9	17.8	12.8	10.9	10.1	3.5	7.7	10.9
Green Ratio (*g/C*)	0.11	0.46	0.60	0.07	0.42	0.42	0.32	0.24	0.31	0.23	0.17	0.27
Capacity (*c*), veh/h	193	1659	889	122	797	784	410	868	493	283	591	430
Volume-to-Capacity Ratio (*X*)	0.809	0.799	0.170	0.729	0.519	0.520	0.647	0.504	0.401	0.251	0.464	0.435
Back of Queue (*Q*), ft/ln (90 th percentile)	172.2	317.5	30	91.1	251	253.1	194.9	159.6	136.1	61.6	128.5	151.8
Back of Queue (*Q*), veh/ln (90 th percentile)	7.8	14.3	1.4	4.1	11.3	11.1	8.9	7.2	6.1	2.8	5.7	6.8
Queue Storage Ratio (*RQ*) (90 th percentile)	0.98	0.00	0.19	0.69	0.00	0.00	0.89	0.00	0.77	0.56	0.00	0.00
Uniform Delay (d_1), s/veh	53.2	17.1	4.5	45.0	23.7	23.4	30.0	31.9	26.5	34.0	41.4	33.0
Incremental Delay (d_2), s/veh	9.8	3.4	0.3	8.5	1.8	1.8	2.9	0.6	0.8	0.7	0.8	1.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	63.0	20.5	4.8	53.4	25.5	25.2	33.0	32.6	27.3	34.7	42.3	34.0
Level of Service (LOS)	E	C	A	D	C	C	C	C	C	C	D	C
Approach Delay, s/veh / LOS	23.1	C		28.1	C		31.5	C		38.3	D	
Intersection Delay, s/veh / LOS	28.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.44	B	2.43	B	2.30	B	2.49	B
Bicycle LOS Score / LOS	1.80	B	1.43	A	1.23	A	0.93	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

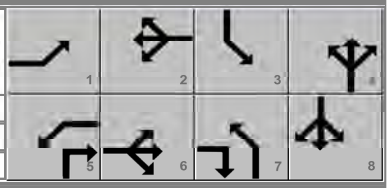
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.95
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	12th Street & Patterson	File Name	Existing PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	1185	175	152	692	52	212	364	216	136	416	112

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	85	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	12.5	44.0	10.3	2.6	18.1	0.0	
Yellow	3.5	4.0	3.5	3.5	4.0	0.0	
Red	0.5	1.5	0.5	0.5	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	16.5	49.5	16.5	49.5	20.9	29.7	14.3	23.1
Change Period, ($Y+R_c$), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	5.2		9.1		12.3	14.1	9.0	18.8
Green Extension Time (g_e), s	0.2	0.0	0.3	0.0	0.5	5.2	0.1	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.23		1.00		1.00	0.59	1.00	1.00

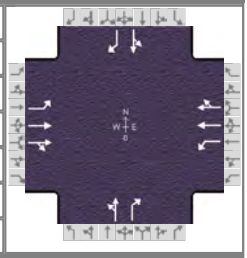
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	97	1295	191	210	521	508	223	383	227	143	287	269
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1809	1593	1795	1885	1838	1810	1809	1598	1810	1885	1741
Queue Service Time (g_s), s	3.2	36.3	6.1	7.1	25.5	25.8	10.3	10.1	12.1	7.0	16.5	16.8
Cycle Queue Clearance Time (g_c), s	3.2	36.3	6.1	7.1	25.5	25.8	10.3	10.1	12.1	7.0	16.5	16.8
Green Ratio (*g/C*)	0.51	0.40	0.55	0.51	0.40	0.40	0.34	0.22	0.34	0.26	0.16	0.16
Capacity (*c*), veh/h	349	1447	883	288	754	735	354	812	540	329	310	287
Volume-to-Capacity Ratio (*X*)	0.279	0.895	0.217	0.730	0.691	0.691	0.631	0.472	0.421	0.435	0.925	0.938
Back of Queue (*Q*), ft/ln (90 th percentile)	57.3	434.5	80	128.8	356.7	356.7	178	162.4	171.4	127.2	327.7	321.2
Back of Queue (*Q*), veh/ln (90 th percentile)	2.6	19.8	3.6	5.8	16.1	16.1	8.1	7.4	7.7	5.8	14.8	14.4
Queue Storage Ratio (*RQ*) (90 th percentile)	0.32	0.00	0.55	0.49	0.00	0.00	0.81	0.00	0.78	0.96	0.00	0.00
Uniform Delay (d_1), s/veh	19.6	28.6	11.0	22.2	28.3	29.2	29.4	37.0	28.1	33.0	45.3	45.4
Incremental Delay (d_2), s/veh	1.2	5.7	0.3	12.7	4.3	4.4	8.3	2.0	2.4	4.1	35.1	39.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	20.9	34.4	11.4	34.9	32.6	33.6	37.7	39.0	30.5	37.2	80.4	84.9
Level of Service (LOS)	C	C	B	C	C	C	D	D	C	D	F	F
Approach Delay, s/veh / LOS	30.8	C		33.4	C		36.3	D		73.3	E	
Intersection Delay, s/veh / LOS	39.4						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.43	B	2.28	B	2.30	B	2.46	B
Bicycle LOS Score / LOS	1.75	B	1.27	A	1.18	A	1.06	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

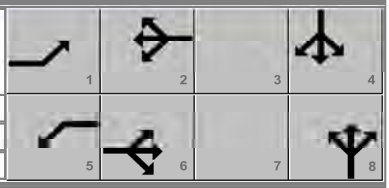
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.95
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	Patterson Rd & 15th St	File Name	Existing PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	90	1577	39	35	1002	39	20	6	53	65	5	85

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	88	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.6	1.0	83.4	8.5	0.0	0.0	
Yellow	3.5	0.0	3.5	3.5	0.0	0.0	
Red	1.0	0.0	1.0	1.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2		8		4
Case Number	1.1	4.0	1.1	4.0		7.0		7.0
Phase Duration, s	9.1	88.9	8.1	87.9		13.0		13.0
Change Period, (*Y+R c*), s	4.5	4.5	4.5	4.5		4.5		4.5
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (*g s*), s	3.1		2.6			5.7		8.1
Green Extension Time (*g e*), s	0.1	0.0	0.0	0.0		0.4		0.4
Phase Call Probability	0.92		0.72			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

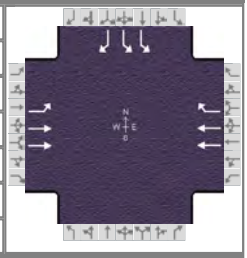
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	83	750	745	42	632	624		27	56		74	89
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1856	1840	1781	1885	1860		1522	1585		1435	1585
Queue Service Time (*g s*), s	1.1	9.9	10.1	0.6	9.6	9.3		0.0	3.7		3.8	6.1
Cycle Queue Clearance Time (*g c*), s	1.1	9.9	10.1	0.6	9.6	9.3		1.7	3.7		5.5	6.1
Green Ratio (*g/C*)	0.80	0.77	0.77	0.79	0.76	0.76		0.08	0.08		0.08	0.08
Capacity (*c*), veh/h	437	1424	1412	355	1430	1411		175	122		174	122
Volume-to-Capacity Ratio (*X*)	0.191	0.527	0.528	0.119	0.442	0.442		0.156	0.457		0.425	0.733
Back of Queue (*Q*), ft/ln (90 th percentile)	9.9	90.1	88.7	5.5	90.9	86.4		28.7	60.2		80.3	100.9
Back of Queue (*Q*), veh/ln (90 th percentile)	0.4	4.0	4.0	0.2	4.1	3.9		1.3	2.7		3.6	4.5
Queue Storage Ratio (*RQ*) (90 th percentile)	0.12	0.00	0.00	0.06	0.00	0.00		0.00	1.36		0.00	2.28
Uniform Delay (*d 1*), s/veh	2.8	2.1	2.2	3.2	3.0	2.8		47.6	48.6		49.4	49.7
Incremental Delay (*d 2*), s/veh	0.1	1.1	1.1	0.0	0.6	0.7		0.2	1.0		0.6	3.2
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	2.9	3.3	3.3	3.2	3.6	3.5		47.8	49.6		50.0	52.8
Level of Service (LOS)	A	A	A	A	A	A		D	D		D	D
Approach Delay, s/veh / LOS	3.3	A		3.5	A		49.0	D		51.6	D	
Intersection Delay, s/veh / LOS	7.1						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.84	B	1.84	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.97	B	1.42	A	0.62	A	0.76	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

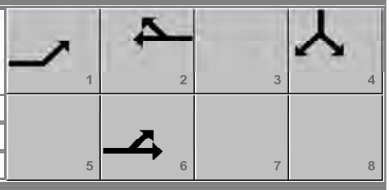
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.99
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	27 1/2 Road & Patterson	File Name	Existing PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	138	1436			822	342				545		124

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	88	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	10.3	64.4	20.3	0.0	0.0	0.0	
Yellow	3.5	4.5	4.0	0.0	0.0	0.0	
Red	0.5	1.5	1.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6		2				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	14.3	84.7		70.4				25.3
Change Period, ($Y+R_c$), s	4.0	6.0		6.0				5.0
Max Allow Headway (*MAH*), s	5.2	0.0		0.0				5.3
Queue Clearance Time (g_s), s	4.0							18.7
Green Extension Time (g_e), s	0.2	0.0		0.0				0.7
Phase Call Probability	1.00							1.00
Max Out Probability	0.43							1.00

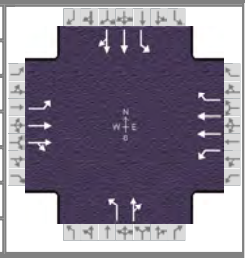
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				7		14
Adjusted Flow Rate (*v*), veh/h	99	1028			932	388				551		125
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1795			1795	1610				1757		1610
Queue Service Time (g_s), s	2.0	13.4			13.3	10.4				16.7		7.6
Cycle Queue Clearance Time (g_c), s	2.0	13.4			13.3	10.4				16.7		7.6
Green Ratio (*g/C*)	0.70	0.72			0.59	0.59				0.18		0.18
Capacity (*c*), veh/h	431	2568			2101	943				649		297
Volume-to-Capacity Ratio (*X*)	0.229	0.400			0.443	0.411				0.849		0.422
Back of Queue (*Q*), ft/ln (90 th percentile)	30.5	150.9			154.1	115				263.8		124.3
Back of Queue (*Q*), veh/ln (90 th percentile)	1.4	6.8			6.9	5.2				12.0		5.7
Queue Storage Ratio (*RQ*) (90 th percentile)	0.20	0.00			0.00	2.18				1.58		0.00
Uniform Delay (d_1), s/veh	7.2	6.9			9.7	7.7				43.4		39.7
Incremental Delay (d_2), s/veh	0.9	0.3			0.6	1.1				13.1		4.3
Initial Queue Delay (d_3), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (*d*), s/veh	8.1	7.3			10.2	8.8				56.4		44.0
Level of Service (LOS)	A	A			B	A				E		D
Approach Delay, s/veh / LOS	7.3	A		9.8	A		0.0			54.1	D	
Intersection Delay, s/veh / LOS	18.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.66	A	2.08	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	1.80	B	1.46	A				F

Copyright © 2020 University of Florida, All Rights Reserved.

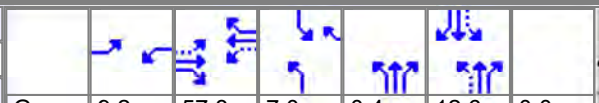
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.97
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	28 1/4 Road & Patterson	File Name	Existing PM.xus		
Project Description					

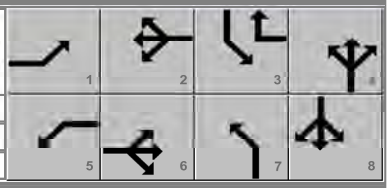


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	29	1509	266	95	913	26	226	14	156	39	22	45

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	63	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	Off
Force Mode	Fixed	Simult. Gap N/S	On



Green	9.2	57.8	7.0	0.4	12.6	0.0
Yellow	3.5	4.5	3.5	3.5	4.0	0.0
Red	0.5	1.5	0.5	0.5	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	3.0	1.1	4.0	1.1	4.0
Phase Duration, s	13.2	63.8	13.2	63.8	15.4	22.0	11.0	17.6
Change Period, (*Y+R c*), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.1	0.0	5.2	5.4	5.2	5.4
Queue Clearance Time (*g s*), s	2.5		4.2		13.4	13.2	4.1	4.9
Green Extension Time (*g e*), s	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.8
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.13		1.00		1.00	1.00	1.00	0.38

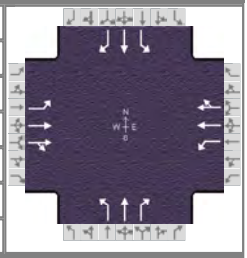
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	18	561	532	90	868	25	233	175		40	23	46
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1885	1786	1810	1795	1560	1810	1631		1810	1900	1610
Queue Service Time (*g s*), s	0.5	15.8	14.2	2.2	13.5	0.6	11.4	11.2		2.1	1.2	2.9
Cycle Queue Clearance Time (*g c*), s	0.5	15.8	14.2	2.2	13.5	0.6	11.4	11.2		2.1	1.2	2.9
Green Ratio (*g/C*)	0.61	0.53	0.53	0.61	0.53	0.59	0.24	0.15		0.18	0.11	0.11
Capacity (*c*), veh/h	460	991	939	407	1886	919	372	252		223	218	184
Volume-to-Capacity Ratio (*X*)	0.039	0.566	0.567	0.222	0.460	0.027	0.626	0.695		0.180	0.104	0.252
Back of Queue (*Q*), ft/ln (90 th percentile)	7.2	169.1	144.2	33.9	148.5	7.8	206.4	186.8		40.1	24.1	51.9
Back of Queue (*Q*), veh/ln (90 th percentile)	0.3	7.6	6.4	1.5	6.7	0.3	9.4	8.5		1.8	1.1	2.4
Queue Storage Ratio (*RQ*) (90 th percentile)	0.03	0.00	0.00	0.13	0.00	0.08	0.78	0.00		0.36	0.00	0.00
Uniform Delay (*d 1*), s/veh	10.3	9.8	8.3	10.2	11.7	7.6	37.3	44.0		38.4	43.6	44.4
Incremental Delay (*d 2*), s/veh	0.1	1.8	1.9	0.8	0.5	0.0	7.7	14.7		1.8	1.0	3.2
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	10.4	11.6	10.2	11.0	12.3	7.6	45.0	58.8		40.1	44.6	47.6
Level of Service (LOS)	B	B	B	B	B	A	D	E		D	D	D
Approach Delay, s/veh / LOS	10.9	B		12.0	B		50.9	D		44.2	D	
Intersection Delay, s/veh / LOS	19.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.09	B	2.09	B	2.46	B	2.31	B
Bicycle LOS Score / LOS	2.02	B	1.37	A	1.16	A	0.58	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

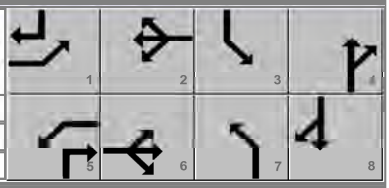
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.95
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	29 Road & Patterson	File Name	Existing PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	155	1207	310	127	766	28	238	136	183	52	83	76

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	18	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.5	51.5	9.5	17.0	0.0	0.0	
Yellow	3.5	4.5	3.5	4.0	0.0	0.0	
Red	1.0	2.0	1.0	1.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	2.0	3.0	2.0	3.0
Phase Duration, s	16.0	58.0	16.0	58.0	14.0	22.0	14.0	22.0
Change Period, (*Y+R c*), s	4.5	6.5	4.5	6.5	4.5	5.0	4.5	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (*g s*), s	5.0		6.5		11.5	10.8	5.3	6.7
Green Extension Time (*g e*), s	0.1	0.0	0.2	0.0	0.0	0.9	0.0	1.2
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.11		0.50		1.00	0.44	1.00	0.07

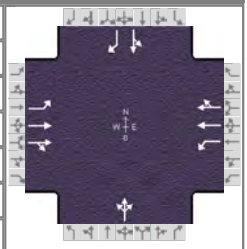
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	111	562	523	158	498	491	251	143	156	55	87	27
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1885	1751	1795	1885	1861	1795	1826	1598	1711	1826	1560
Queue Service Time (*g s*), s	3.0	27.5	27.7	4.5	19.8	19.7	9.5	7.9	8.8	3.3	4.7	1.5
Cycle Queue Clearance Time (*g c*), s	3.0	27.5	27.7	4.5	19.8	19.7	9.5	7.9	8.8	3.3	4.7	1.5
Green Ratio (*g/C*)	0.57	0.47	0.47	0.57	0.47	0.47	0.09	0.15	0.26	0.09	0.15	0.26
Capacity (*c*), veh/h	408	883	820	357	883	871	155	282	414	148	282	404
Volume-to-Capacity Ratio (*X*)	0.272	0.637	0.637	0.443	0.564	0.564	1.616	0.507	0.376	0.370	0.310	0.068
Back of Queue (*Q*), ft/ln (90 th percentile)	47.1	378.7	366.9	73	245.6	241.3	579.9	151.1	135.7	70.7	95.1	23.7
Back of Queue (*Q*), veh/ln (90 th percentile)	2.1	17.1	16.3	3.3	11.1	10.8	26.1	6.6	6.1	3.0	4.2	1.0
Queue Storage Ratio (*RQ*) (90 th percentile)	0.15	0.00	0.00	0.18	0.00	0.00	2.63	0.00	0.62	0.53	0.00	0.18
Uniform Delay (*d 1*), s/veh	12.5	28.0	28.6	16.2	19.0	18.7	50.3	42.7	33.5	47.4	41.3	30.7
Incremental Delay (*d 2*), s/veh	1.2	2.6	2.8	2.7	1.8	1.8	304.8	6.4	2.6	7.0	2.8	0.3
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	13.8	30.6	31.4	18.9	20.8	20.5	355.0	49.0	36.1	54.4	44.1	31.1
Level of Service (LOS)	B	C	C	B	C	C	F	D	D	D	D	C
Approach Delay, s/veh / LOS	29.4	C		20.4	C		184.9	F		45.3	D	
Intersection Delay, s/veh / LOS	54.8						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.15	B	2.17	B	2.30	B	2.30	B
Bicycle LOS Score / LOS	1.94	B	1.29	A	1.39	A	0.77	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

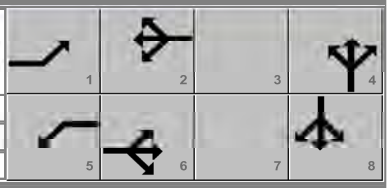
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.97
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	29 1/2 Road & Patterson	File Name	Existing PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	69	1265	73	61	793	59	82	46	124	84	19	32

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	56	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.0	0.5	61.9	28.0	0.0	0.0
Yellow	3.5	0.0	5.0	4.0	0.0	0.0
Red	0.5	0.0	1.5	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2		4		8
Case Number	1.1	4.0	1.1	4.0		8.0		7.0
Phase Duration, s	8.0	68.4	8.6	69.0		33.0		33.0
Change Period, ($Y+R_c$), s	4.0	6.5	4.0	6.5		5.0		5.0
Max Allow Headway (*MAH*), s	4.5	0.0	4.5	0.0		4.8		4.8
Queue Clearance Time (g_s), s	3.4		4.0			30.0		16.0
Green Extension Time (g_e), s	0.1	0.0	0.1	0.0		0.0		1.5
Phase Call Probability	0.81		0.91			1.00		1.00
Max Out Probability	0.01		0.04			1.00		0.08

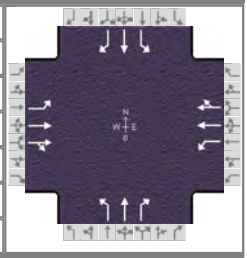
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	54	525	514	79	562	548		260			106	33
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1885	1849	1810	1885	1839		1009			712	1572
Queue Service Time (g_s), s	1.4	9.7	9.3	2.0	11.2	10.6		14.0			0.0	1.8
Cycle Queue Clearance Time (g_c), s	1.4	9.7	9.3	2.0	11.2	10.6		28.0			14.0	1.8
Green Ratio (*g/C*)	0.60	0.56	0.56	0.60	0.57	0.57		0.25			0.25	0.25
Capacity (*c*), veh/h	363	1062	1041	403	1071	1044		300			241	400
Volume-to-Capacity Ratio (*X*)	0.148	0.494	0.494	0.197	0.525	0.525		0.865			0.441	0.082
Back of Queue (*Q*), ft/ln (90 th percentile)	20	102.1	96.6	29.9	116.4	110.5		282.7			106.8	27.3
Back of Queue (*Q*), veh/ln (90 th percentile)	0.9	4.6	4.4	1.4	5.2	4.9		12.6			4.6	1.2
Queue Storage Ratio (*RQ*) (90 th percentile)	0.15	0.00	0.00	0.23	0.00	0.00		0.00			0.00	0.00
Uniform Delay (d_1), s/veh	10.3	5.5	5.2	9.9	5.8	5.4		43.6			35.5	31.2
Incremental Delay (d_2), s/veh	0.1	1.1	1.1	0.2	1.3	1.4		22.2			1.3	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	0.0
Control Delay (*d*), s/veh	10.4	6.6	6.3	10.1	7.2	6.7		65.9			36.8	31.3
Level of Service (LOS)	B	A	A	B	A	A		E			D	C
Approach Delay, s/veh / LOS	6.6	A		7.2	A		65.9	E		35.5	D	
Intersection Delay, s/veh / LOS	14.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.67	B	1.89	B	2.29	B	2.29	B
Bicycle LOS Score / LOS	1.68	B	1.26	A	0.92	A	0.72	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

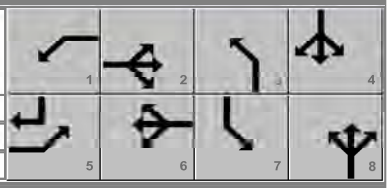
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.96
Urban Street	Patterson Rd	Analysis Year	2020	Analysis Period	1> 7:00
Intersection	30 Road & Patterson	File Name	Existing PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	155	933	219	55	580	52	197	87	80	36	55	97

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	26	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	10.0	1.0	41.5	10.0	24.0	0.0
Yellow	3.5	3.5	5.0	3.5	4.0	0.0
Red	0.5	0.5	1.5	0.5	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	3.0
Phase Duration, s	19.0	53.0	14.0	48.0	14.0	29.0	14.0	29.0
Change Period, ($Y+R_c$), s	4.0	6.5	4.0	6.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.2	0.0	4.2	4.2	4.2	4.2
Queue Clearance Time (g_s), s	7.1		5.1		12.0	6.6	3.6	4.7
Green Extension Time (g_e), s	0.3	0.0	0.1	0.0	0.0	0.7	0.0	0.8
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.05		0.50		1.00	0.00	0.06	0.00

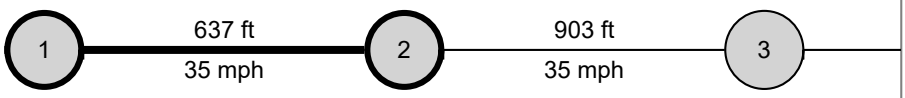
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	161	619	581	92	537	521	205	91	82	38	57	5
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1885	1761	1810	1885	1830	1767	1900	1610	1810	1900	1572
Queue Service Time (g_s), s	5.1	23.6	23.8	3.1	29.0	29.0	10.0	4.3	4.6	1.6	2.7	0.2
Cycle Queue Clearance Time (g_c), s	5.1	23.6	23.8	3.1	29.0	29.0	10.0	4.3	4.6	1.6	2.7	0.2
Green Ratio (*g/C*)	0.53	0.42	0.42	0.47	0.38	0.38	0.31	0.22	0.22	0.31	0.22	0.35
Capacity (*c*), veh/h	371	797	744	319	711	690	460	415	351	428	415	558
Volume-to-Capacity Ratio (*X*)	0.435	0.777	0.780	0.289	0.755	0.755	0.446	0.219	0.234	0.088	0.138	0.009
Back of Queue (*Q*), ft/ln (90 th percentile)	82.2	203.4	195	56.1	449	440.1	164.7	83.8	77.4	29.1	51.8	3.7
Back of Queue (*Q*), veh/ln (90 th percentile)	3.7	9.2	8.8	2.6	20.2	19.8	7.3	3.8	3.5	1.3	2.4	0.2
Queue Storage Ratio (*RQ*) (90 th percentile)	0.62	0.00	0.00	0.43	0.00	0.00	0.74	0.00	0.44	0.22	0.00	0.03
Uniform Delay (d_1), s/veh	19.5	12.9	12.9	18.0	36.6	36.8	29.8	35.3	35.4	27.0	34.7	23.0
Incremental Delay (d_2), s/veh	2.5	5.1	5.5	2.3	7.3	7.5	3.1	1.2	1.6	0.4	0.7	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	22.0	18.0	18.4	20.3	43.9	44.3	32.9	36.5	37.0	27.4	35.4	23.0
Level of Service (LOS)	C	B	B	C	D	D	C	D	D	C	D	C
Approach Delay, s/veh / LOS	18.6	B		42.2	D		34.7	C		31.7	C	
Intersection Delay, s/veh / LOS	30.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.11	B	2.24	B	2.30	B	2.30	B
Bicycle LOS Score / LOS	1.61	B	1.08	A	1.11	A	0.65	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	24 Road & Patterson	Market Street/Mall Access & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (24 Rd - Market St)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
1	35	35	2	2	637	637	50	50	0	0	100	0	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement		2	12	1	6	
1	Bay/Lane Spillback Time, h				0.02	never	
1	Shared Lane Spillback Time, h				0.15		never
1	Base Free-Flow Speed, mph	41.58			42.05		
1	Running Time, s	14.85			15.15		
1	Running Speed, mph	29.24			28.67		
1	Through Delay, s/veh	18.20			19.12		
1	Travel Time, s	33.05			34.27		
1	Travel Speed, mph	13.14			12.67		
1	Stop Rate, stops/veh	0.55			0.46		
1	Spatial Stop Rate, stops/mi	4.53			3.77		
1	Through vol/cap Ratio	0.17			0.22		
1	Percent of Base FFS	31.60			30.14		
1	Level of Service	E			E		
1	Auto Traveler Perception Score	2.88			2.75		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	2.52		B	3.63		D
1	Bicycle Segment LOS Score / LOS	2.20		B	2.65		B
1	Transit Segment LOS Score / LOS	2.34		B	2.55		B

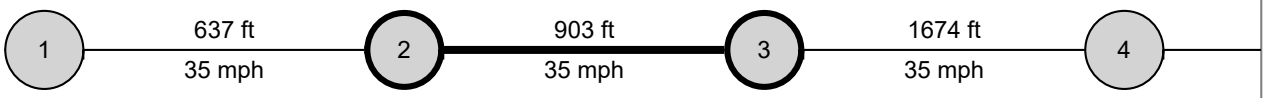
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	Market Street/Mall Access & Pat	Home Depot Access/Mesa Mall Access &		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (Market St - Home Depot)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
2	35	35	2	2	903	903	50	50	2	1	70	0	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h		never				
2	Shared Lane Spillback Time, h	never					
2	Base Free-Flow Speed, mph	41.72			42.05		
2	Running Time, s	18.36			18.75		
2	Running Speed, mph	33.53			32.83		
2	Through Delay, s/veh	15.91			24.16		
2	Travel Time, s	34.27			42.91		
2	Travel Speed, mph	17.97			14.35		
2	Stop Rate, stops/veh	0.56			0.71		
2	Spatial Stop Rate, stops/mi	3.26			4.13		
2	Through vol/cap Ratio	0.23			0.59		
2	Percent of Base FFS	43.06			34.12		
2	Level of Service	D			E		
2	Auto Traveler Perception Score	2.66			2.81		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	2.93		C	3.87		D
2	Bicycle Segment LOS Score / LOS	2.47		B	2.77		C
2	Transit Segment LOS Score / LOS	1.86		A	2.37		B

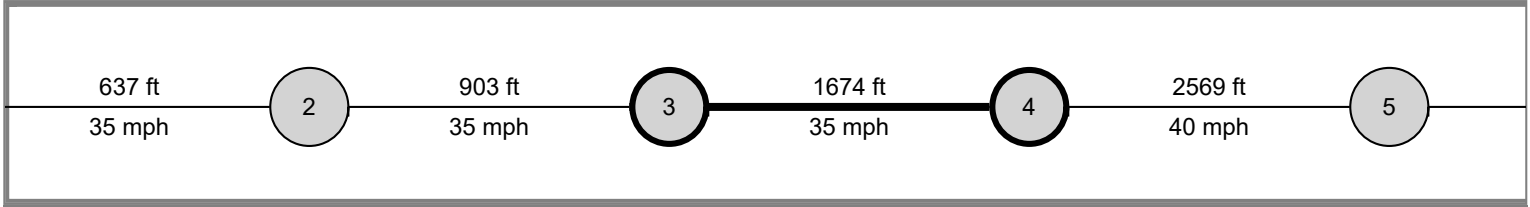
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	Home Depot Access/Mesa Mall /	24 1/2 Rd & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (Home Depot - 24 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
3	35	35	2	2	1674	1674	50	50	550	550	70	100	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never			never		
3	Base Free-Flow Speed, mph	40.72			40.20		
3	Running Time, s	30.68			31.84		
3	Running Speed, mph	37.21			35.84		
3	Through Delay, s/veh	8.84			11.51		
3	Travel Time, s	39.52			43.35		
3	Travel Speed, mph	28.88			26.33		
3	Stop Rate, stops/veh	0.27			0.35		
3	Spatial Stop Rate, stops/mi	0.85			1.11		
3	Through vol/cap Ratio	0.28			0.58		
3	Percent of Base FFS	70.93			65.49		
3	Level of Service	B			C		
3	Auto Traveler Perception Score	2.27			2.31		
Multimodal Results (Segment)							
3	Pedestrian Segment LOS Score / LOS	3.21		C	3.66		D
3	Bicycle Segment LOS Score / LOS	2.61		B	2.84		C
3	Transit Segment LOS Score / LOS	0.99		A	1.30		A

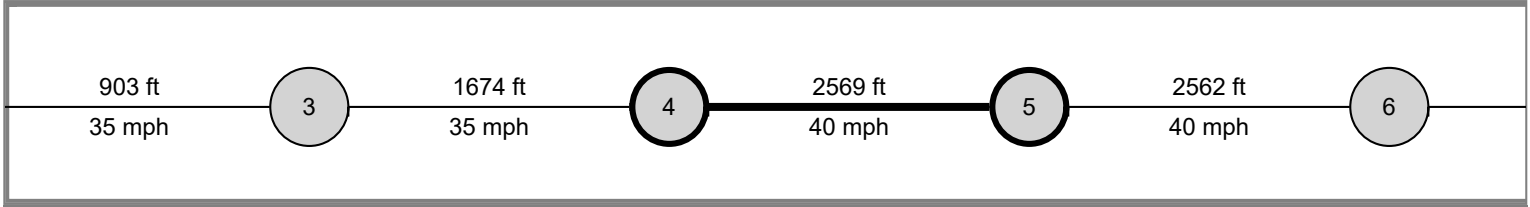
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	24 1/2 Rd & Patterson	25 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (24 1/2 Rd - 25 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
4	40	35	2	2	2569	2569	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never		never	never		
4	Base Free-Flow Speed, mph	43.00			40.65		
4	Running Time, s	43.15			46.64		
4	Running Speed, mph	40.60			37.55		
4	Through Delay, s/veh	23.66			20.46		
4	Travel Time, s	66.81			67.10		
4	Travel Speed, mph	26.22			26.10		
4	Stop Rate, stops/veh	0.55			0.54		
4	Spatial Stop Rate, stops/mi	1.12			1.12		
4	Through vol/cap Ratio	0.46			0.74		
4	Percent of Base FFS	60.98			64.22		
4	Level of Service	C			C		
4	Auto Traveler Perception Score	2.31			2.31		
Multimodal Results (Segment)							
4	Pedestrian Segment LOS Score / LOS	3.32		C	3.68		D
4	Bicycle Segment LOS Score / LOS	2.70		B	2.86		C
4	Transit Segment LOS Score / LOS	1.18		A	1.36		A

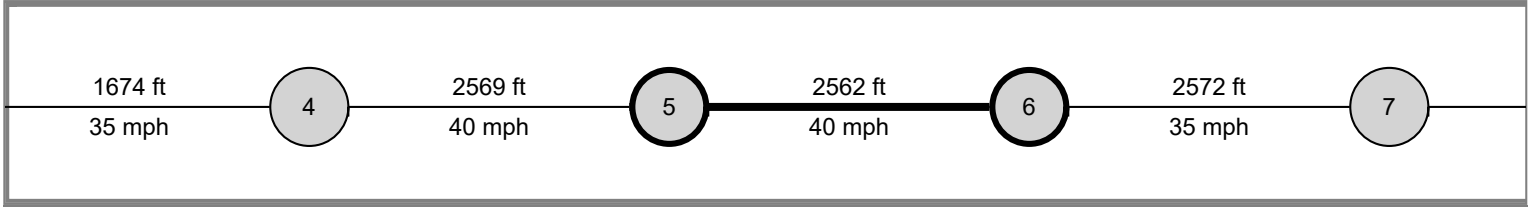
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	25 Road & Patterson	25 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (25 Rd - 25 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
5	40	40	2	2	2562	2562	50	50	260	260	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h		never		never	0.65	
5	Shared Lane Spillback Time, h	never			never		0.25
5	Base Free-Flow Speed, mph	43.13			43.13		
5	Running Time, s	43.02			44.51		
5	Running Speed, mph	40.61			39.25		
5	Through Delay, s/veh	14.48			190.39		
5	Travel Time, s	57.50			234.90		
5	Travel Speed, mph	30.38			7.44		
5	Stop Rate, stops/veh	0.41			1.93		
5	Spatial Stop Rate, stops/mi	0.84			3.97		
5	Through vol/cap Ratio	0.39			1.31		
5	Percent of Base FFS	70.44			17.24		
5	Level of Service	B			F		
5	Auto Traveler Perception Score	2.26			2.78		
Multimodal Results (Segment)							
5	Pedestrian Segment LOS Score / LOS	3.22		C	4.11		D
5	Bicycle Segment LOS Score / LOS	2.71		B	3.00		C
5	Transit Segment LOS Score / LOS	0.95		A	3.37		C

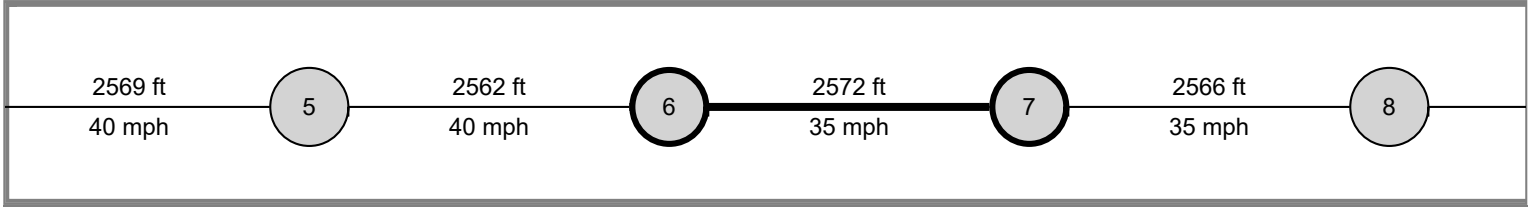
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	25 1/2 Road & Patterson	1st Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (25 1/2 Rd - 26 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
6	35	40	2	2	2572	2572	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
6	Bay/Lane Spillback Time, h		never			never	
6	Shared Lane Spillback Time, h	never			never		
6	Base Free-Flow Speed, mph	40.73			43.08		
6	Running Time, s	45.51			44.31		
6	Running Speed, mph	38.53			39.57		
6	Through Delay, s/veh	7.25			36.91		
6	Travel Time, s	52.76			81.23		
6	Travel Speed, mph	33.24			21.59		
6	Stop Rate, stops/veh	0.22			0.84		
6	Spatial Stop Rate, stops/mi	0.45			1.73		
6	Through vol/cap Ratio	0.35			0.87		
6	Percent of Base FFS	81.61			50.12		
6	Level of Service	A			C		
6	Auto Traveler Perception Score	2.21			2.40		
Multimodal Results (Segment)							
6	Pedestrian Segment LOS Score / LOS	3.26		C	3.95		D
6	Bicycle Segment LOS Score / LOS	2.71		B	2.97		C
6	Transit Segment LOS Score / LOS	0.75		A	1.72		A

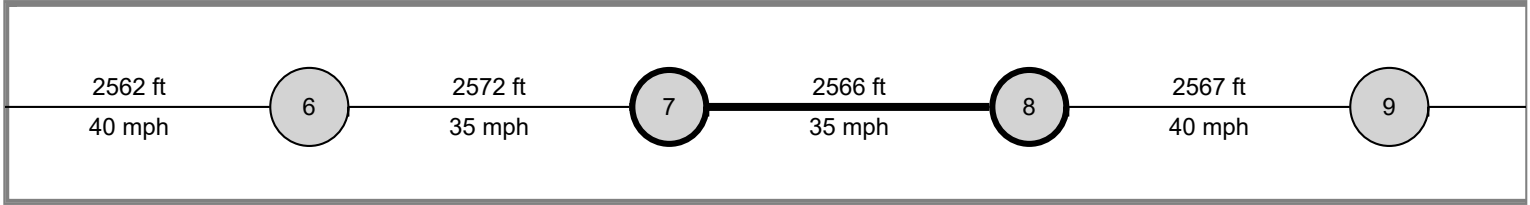
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	1st Street & Patterson	7th Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (26 Rd - 26 1/2)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
7	35	40	2	2	2566	2566	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
7	Bay/Lane Spillback Time, h		never			never	
7	Shared Lane Spillback Time, h	never			never		never
7	Base Free-Flow Speed, mph	39.83			42.18		
7	Running Time, s	46.50			45.07		
7	Running Speed, mph	37.63			38.82		
7	Through Delay, s/veh	25.35			13.61		
7	Travel Time, s	71.85			58.68		
7	Travel Speed, mph	24.35			29.82		
7	Stop Rate, stops/veh	0.64			0.36		
7	Spatial Stop Rate, stops/mi	1.32			0.74		
7	Through vol/cap Ratio	0.52			0.70		
7	Percent of Base FFS	61.14			70.69		
7	Level of Service	C			B		
7	Auto Traveler Perception Score	2.34			2.25		
Multimodal Results (Segment)							
7	Pedestrian Segment LOS Score / LOS	3.33		C	3.59		D
7	Bicycle Segment LOS Score / LOS	2.74		B	2.94		C
7	Transit Segment LOS Score / LOS	1.37		A	1.09		A

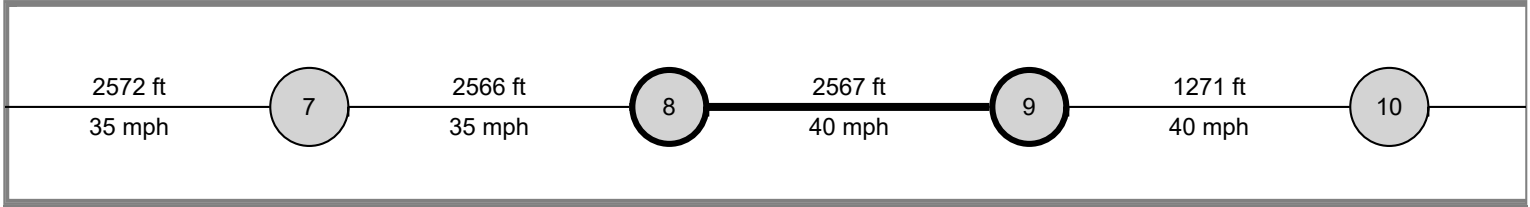
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	7th Street & Patterson	12th Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (26 1/2 Rd to 12th St)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
8	40	35	2	2	2567	2567	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
8	Bay/Lane Spillback Time, h	never	never		never	never	
8	Shared Lane Spillback Time, h	never			never		never
8	Base Free-Flow Speed, mph	42.34			39.99		
8	Running Time, s	44.36			47.57		
8	Running Speed, mph	39.46			36.80		
8	Through Delay, s/veh	33.07			20.13		
8	Travel Time, s	77.42			67.69		
8	Travel Speed, mph	22.61			25.86		
8	Stop Rate, stops/veh	0.77			0.51		
8	Spatial Stop Rate, stops/mi	1.57			1.05		
8	Through vol/cap Ratio	0.69			0.80		
8	Percent of Base FFS	53.39			64.65		
8	Level of Service	C			C		
8	Auto Traveler Perception Score	2.38			2.30		
Multimodal Results (Segment)							
8	Pedestrian Segment LOS Score / LOS	3.56		D	3.64		D
8	Bicycle Segment LOS Score / LOS	2.82		C	2.92		C
8	Transit Segment LOS Score / LOS	1.56		A	1.37		A

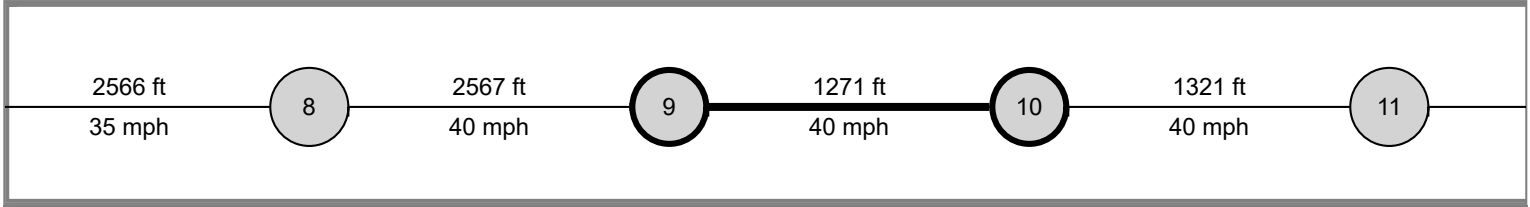
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	12th Street & Patterson	Patterson Rd & 15th St		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (12th St - 27 1/4 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
9	40	35	2	2	1271	1271	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
9	Bay/Lane Spillback Time, h		never		never	never	never
9	Shared Lane Spillback Time, h	never			never		never
9	Base Free-Flow Speed, mph	42.29			39.94		
9	Running Time, s	23.76			25.45		
9	Running Speed, mph	36.48			34.05		
9	Through Delay, s/veh	3.54			34.36		
9	Travel Time, s	27.30			59.82		
9	Travel Speed, mph	31.74			14.49		
9	Stop Rate, stops/veh	0.13			0.80		
9	Spatial Stop Rate, stops/mi	0.52			3.31		
9	Through vol/cap Ratio	0.44			0.89		
9	Percent of Base FFS	75.05			36.27		
9	Level of Service	B			E		
9	Auto Traveler Perception Score	2.22			2.67		
Multimodal Results (Segment)							
9	Pedestrian Segment LOS Score / LOS	3.57		D	4.07		D
9	Bicycle Segment LOS Score / LOS	2.73		B	2.93		C
9	Transit Segment LOS Score / LOS	0.91		A	2.40		B

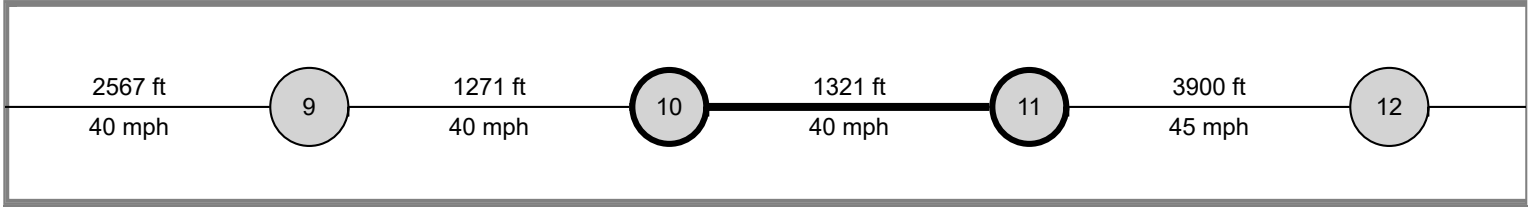
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	Patterson Rd & 15th St	27 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
10	40	40	2	2	1321	1321	50	50	0	0	70	70	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
10	Bay/Lane Spillback Time, h		never			never	
10	Shared Lane Spillback Time, h	never		never	never		
10	Base Free-Flow Speed, mph	44.07			44.07		
10	Running Time, s	23.96			24.17		
10	Running Speed, mph	37.59			37.27		
10	Through Delay, s/veh	10.22			3.28		
10	Travel Time, s	34.18			27.44		
10	Travel Speed, mph	26.35			32.82		
10	Stop Rate, stops/veh	0.31			0.10		
10	Spatial Stop Rate, stops/mi	1.26			0.40		
10	Through vol/cap Ratio	0.44			0.53		
10	Percent of Base FFS	59.80			74.48		
10	Level of Service	C			B		
10	Auto Traveler Perception Score	2.55			2.20		
Multimodal Results (Segment)							
10	Pedestrian Segment LOS Score / LOS	3.87		D	4.14		D
10	Bicycle Segment LOS Score / LOS	2.90		C	2.96		C
10	Transit Segment LOS Score / LOS	1.28		A	0.89		A

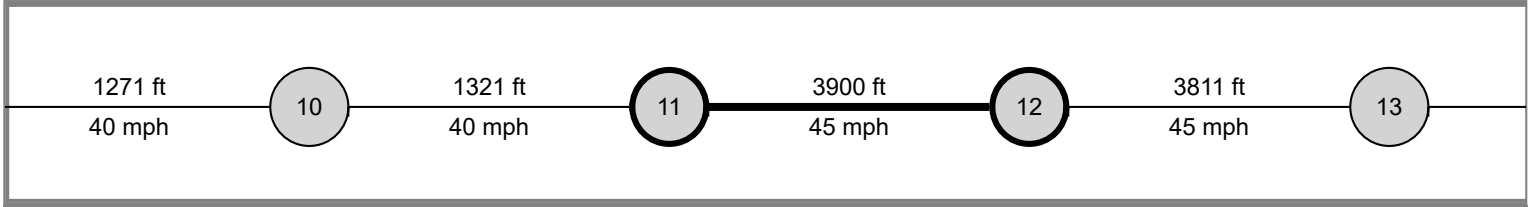
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	27 1/2 Road & Patterson	28 1/4 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (27 1/4 Rd - 27 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
11	45	40	2	2	3900	3900	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement		2	12	1	6	
11	Bay/Lane Spillback Time, h		never			never	
11	Shared Lane Spillback Time, h	never		never	never		
11	Base Free-Flow Speed, mph	45.85			43.50		
11	Running Time, s	60.72			63.94		
11	Running Speed, mph	43.79			41.59		
11	Through Delay, s/veh	12.38			7.25		
11	Travel Time, s	73.10			71.20		
11	Travel Speed, mph	36.38			37.35		
11	Stop Rate, stops/veh	0.34			0.28		
11	Spatial Stop Rate, stops/mi	0.46			0.39		
11	Through vol/cap Ratio	0.47			0.40		
11	Percent of Base FFS	79.35			85.87		
11	Level of Service	B			A		
11	Auto Traveler Perception Score	2.31			2.20		
Multimodal Results (Segment)							
11	Pedestrian Segment LOS Score / LOS	3.81		D	3.59		D
11	Bicycle Segment LOS Score / LOS	2.86		C	2.87		C
11	Transit Segment LOS Score / LOS	0.62		A	0.57		A

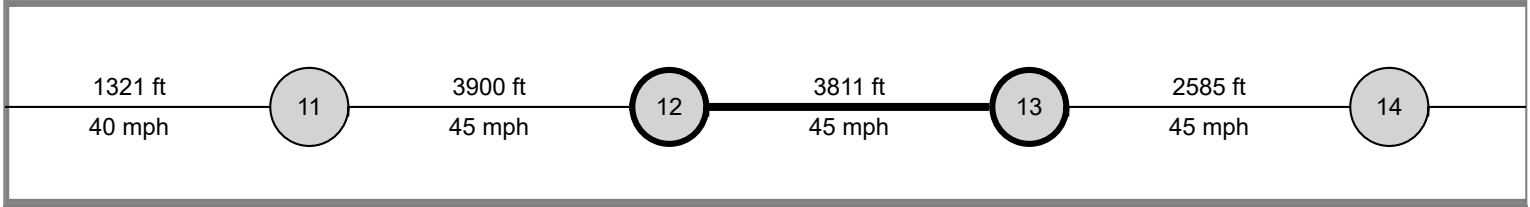
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	28 1/4 Road & Patterson	29 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (28 1/4 Rd - 29 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12	45	40	2	2	3811	3811	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
12	Bay/Lane Spillback Time, h		never			never	
12	Shared Lane Spillback Time, h	never		never	never		never
12	Base Free-Flow Speed, mph	44.90			42.55		
12	Running Time, s	59.86			63.85		
12	Running Speed, mph	43.41			40.69		
12	Through Delay, s/veh	20.26			11.02		
12	Travel Time, s	80.12			74.87		
12	Travel Speed, mph	32.43			34.70		
12	Stop Rate, stops/veh	0.51			0.28		
12	Spatial Stop Rate, stops/mi	0.71			0.39		
12	Through vol/cap Ratio	0.57			0.57		
12	Percent of Base FFS	72.23			81.55		
12	Level of Service	B			A		
12	Auto Traveler Perception Score	2.25			2.20		
Multimodal Results (Segment)							
12	Pedestrian Segment LOS Score / LOS	3.78		D	3.55		D
12	Bicycle Segment LOS Score / LOS	2.88		C	2.86		C
12	Transit Segment LOS Score / LOS	0.87		A	0.73		A

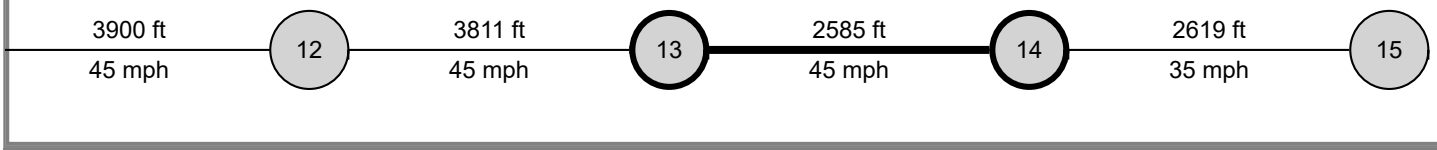
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	29 Road & Patterson	29 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (29 Rd - 29 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
13	45	45	2	2	2585	2585	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
13	Bay/Lane Spillback Time, h		never			never	
13	Shared Lane Spillback Time, h	never			never		never
13	Base Free-Flow Speed, mph	43.89			43.89		
13	Running Time, s	40.98			40.98		
13	Running Speed, mph	43.01			43.01		
13	Through Delay, s/veh	6.98			30.88		
13	Travel Time, s	47.96			71.86		
13	Travel Speed, mph	36.75			24.53		
13	Stop Rate, stops/veh	0.18			0.77		
13	Spatial Stop Rate, stops/mi	0.38			1.57		
13	Through vol/cap Ratio	0.53			0.64		
13	Percent of Base FFS	83.72			55.88		
13	Level of Service	A			C		
13	Auto Traveler Perception Score	2.20			2.38		
Multimodal Results (Segment)							
13	Pedestrian Segment LOS Score / LOS	3.67		D	3.41		C
13	Bicycle Segment LOS Score / LOS	2.85		C	2.90		C
13	Transit Segment LOS Score / LOS	0.63		A	1.42		A

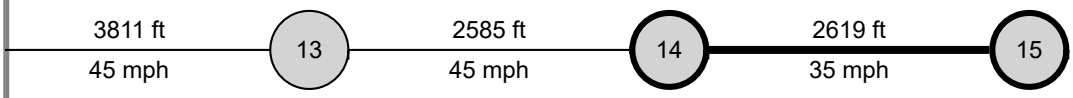
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	Existing PM.xus	Analysis Year	2020	System Cycle Length, s	110
Intersections	29 1/2 Road & Patterson	30 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (29 1/2 Rd - 30 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
14	35	45	2	2	2619	2619	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
14	Bay/Lane Spillback Time, h					never	
14	Shared Lane Spillback Time, h				never		
14	Base Free-Flow Speed, mph	40.83			45.53		
14	Running Time, s	46.66			41.38		
14	Running Speed, mph	38.27			43.15		
14	Through Delay, s/veh	44.37			6.43		
14	Travel Time, s	91.03			47.81		
14	Travel Speed, mph	19.62			37.35		
14	Stop Rate, stops/veh	0.94			0.17		
14	Spatial Stop Rate, stops/mi	1.89			0.35		
14	Through vol/cap Ratio	0.76			0.49		
14	Percent of Base FFS	48.05			82.05		
14	Level of Service	D			A		
14	Auto Traveler Perception Score	2.43			2.19		
Multimodal Results (Segment)							
14	Pedestrian Segment LOS Score / LOS	3.27		C	3.40		C
14	Bicycle Segment LOS Score / LOS	2.82		C	2.81		C
14	Transit Segment LOS Score / LOS	1.81		A	0.58		A

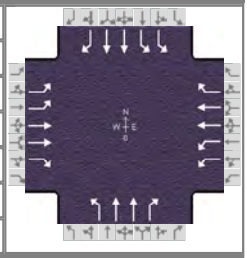
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	786.87	983.12
Facility Travel Speed, mph	27.34	21.89
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	63.99	51.53
Facility Level of Service	C	F
Facility Auto Traveler Perception Score	2.32	2.34

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.47	C	3.69	D
Bicycle Facility LOS Score / LOS	2.77	C	2.89	C
Transit Facility LOS Score / LOS	1.10	A	1.37	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

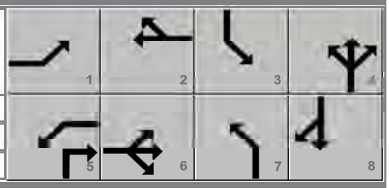
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.91
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	24 Road & Patterson	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	216	235	72	125	217	278	87	934	412	413	633	71

Signal Information			
Cycle, s	100.0	Reference Phase	6
Offset, s	85	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.8	3.0	18.4	8.4	2.6	37.8	
Yellow	3.5	3.5	4.0	3.5	0.0	4.0	
Red	0.5	0.5	1.0	0.5	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	2.0	3.0	1.1	3.0	2.0	3.0
Phase Duration, s	18.8	30.4	11.8	23.4	12.4	42.8	15.0	45.4
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	14.5		5.8		5.0	28.1	13.0	16.8
Green Extension Time (g_e), s	0.3	0.0	0.5	0.0	0.2	9.7	0.0	18.0
Phase Call Probability	1.00		0.98		0.93	1.00	1.00	1.00
Max Out Probability	1.00		0.02		0.27	0.85	1.00	0.62

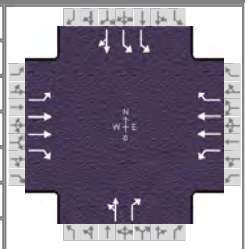
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	540	587	180	137	238	305	96	1026	453	454	696	78
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1675	1752		1716	1738		1810	1738	1585	1730	1752	1518
Queue Service Time (g_s), s	12.5	15.4		3.8	6.0		3.0	26.1	21.7	11.0	14.8	3.2
Cycle Queue Clearance Time (g_c), s	12.5	15.4		3.8	6.0		3.0	26.1	21.7	11.0	14.8	3.2
Green Ratio (*g/C*)	0.35	0.25		0.08	0.18		0.46	0.38	0.46	0.11	0.40	0.40
Capacity (*c*), veh/h	847	890		269	641		391	1314	723	381	1417	614
Volume-to-Capacity Ratio (*X*)	0.637	0.660		0.512	0.372		0.245	0.781	0.626	1.193	0.491	0.127
Back of Queue (*Q*), ft/ln (90 th percentile)	172.3	240.8		68.1	105.1		49.2	346	258.8	346.8	201.6	46.3
Back of Queue (*Q*), veh/ln (90 th percentile)	7.5	10.6		3.0	4.6		2.2	15.1	11.6	15.5	8.9	2.0
Queue Storage Ratio (*RQ*) (90 th percentile)	0.97	0.00		0.31	0.00		0.37	0.00	1.46	2.62	0.00	0.71
Uniform Delay (d_1), s/veh	24.2	36.1		44.3	35.7		16.5	27.5	20.7	44.5	22.1	18.7
Incremental Delay (d_2), s/veh	1.8	3.8		1.9	1.5		0.5	3.0	1.8	109.8	0.4	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	26.0	39.9	0.0	46.2	37.2	0.0	16.9	30.5	22.5	154.3	22.5	18.8
Level of Service (LOS)	C	D	A	D	D	A	B	C	C	F	C	B
Approach Delay, s/veh / LOS	28.6	C		22.3	C		27.4	C		71.0	E	
Intersection Delay, s/veh / LOS	38.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.44	B	2.59	C	2.57	C	2.57	C
Bicycle LOS Score / LOS	0.96	A	1.05	A	1.79	B	1.50	B

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

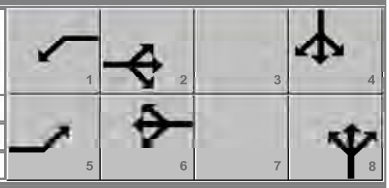
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	Market Street/Mall Acce…	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	71	848	83	25	580	94	30	12	19	87	17	44

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	52	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	1.7	3.0	65.6	4.4	6.4	0.0	
Yellow	3.5	0.0	4.0	4.0	4.0	0.0	
Red	0.5	0.0	1.0	1.0	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	3.0	1.1	3.0		11.0		10.0
Phase Duration, s	8.7	73.6	5.7	70.6		9.4		11.4
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0		5.0		5.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	3.7		2.3			4.7		6.3
Green Extension Time (g_e), s	0.2	0.0	0.0	0.0		0.0		0.2
Phase Call Probability	0.94		0.34			0.87		0.99
Max Out Probability	0.00		0.00			1.00		0.32

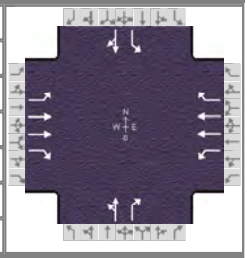
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	99	1179	115	15	342	55		51	23	105	73	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1711	1766	1610	1810	1766	1522		1834	1610	1702	1682	
Queue Service Time (g_s), s	1.7	4.6	0.3	0.3	4.7	2.3		2.7	1.4	3.0	4.3	
Cycle Queue Clearance Time (g_c), s	1.7	4.6	0.3	0.3	4.7	2.3		2.7	1.4	3.0	4.3	
Green Ratio (*g/C*)	0.71	0.69	0.69	0.67	0.66	0.66		0.04	0.04	0.06	0.06	
Capacity (*c*), veh/h	759	2423	1104	402	2317	998		80	70	217	107	
Volume-to-Capacity Ratio (*X*)	0.130	0.487	0.105	0.037	0.148	0.056		0.634	0.327	0.482	0.685	
Back of Queue (*Q*), ft/ln (90 th percentile)	22.5	43.1	4.7	3.4	67.8	30.5		52	22.7	52.4	74.4	
Back of Queue (*Q*), veh/ln (90 th percentile)	1.0	1.9	0.2	0.2	3.0	1.3		2.4	1.0	2.3	3.4	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.15	0.00	0.04	0.03	0.00	0.28		0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	4.8	1.4	0.6	5.2	8.7	11.6		47.0	46.4	45.2	45.8	
Incremental Delay (d_2), s/veh	0.0	0.6	0.2	0.0	0.1	0.1		3.1	1.0	0.6	2.9	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	4.8	1.9	0.7	5.2	8.8	11.7		50.1	47.4	45.8	48.7	
Level of Service (LOS)	A	A	A	A	A	B		D	D	D	D	
Approach Delay, s/veh / LOS	2.0	A		9.1	A		49.3	D		47.0	D	
Intersection Delay, s/veh / LOS	9.0						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.86	B	2.06	B	2.47	B	2.46	B
Bicycle LOS Score / LOS	1.48	A	1.18	A	0.61	A	0.78	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

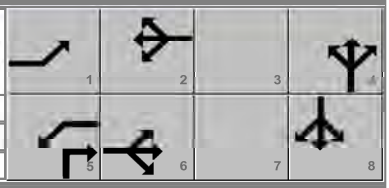
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.84
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	Home Depot Access/Me…	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	756	189	87	571	13	70	21	47	25	30	28

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	27	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	Off
Force Mode	Fixed	Simult. Gap N/S	Off

Green	3.9	0.3	62.2	5.8	8.7	0.0	
Yellow	3.5	0.0	4.0	4.0	4.0	0.0	
Red	0.5	0.0	1.0	1.0	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2		4		8
Case Number	1.1	3.0	1.1	3.0		11.0		10.0
Phase Duration, s	8.2	67.5	7.9	67.2		13.7		10.8
Change Period, (*Y+R c*), s	4.0	5.0	4.0	5.0		5.0		5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0		5.4		5.4
Queue Clearance Time (*g s*), s	3.4		3.1			7.7		5.9
Green Extension Time (*g e*), s	0.4	0.0	0.3	0.0		1.0		0.4
Phase Call Probability	0.85		0.79			0.99		0.94
Max Out Probability	0.00		0.00			0.00		0.00

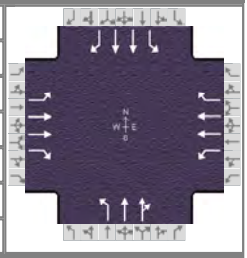
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	67	1308	327	56	367	8		108	56	30	69	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1711	1766	1598	1810	1752	1610		1830	1610	1767	1748	
Queue Service Time (*g s*), s	1.4	20.2	8.1	1.1	2.8	0.1		5.7	3.1	1.6	3.9	
Cycle Queue Clearance Time (*g c*), s	1.4	20.2	8.1	1.1	2.8	0.1		5.7	3.1	1.6	3.9	
Green Ratio (*g/C*)	0.66	0.63	0.63	0.66	0.62	0.62		0.09	0.13	0.06	0.06	
Capacity (*c*), veh/h	719	2209	999	269	2182	1002		159	203	103	102	
Volume-to-Capacity Ratio (*X*)	0.094	0.592	0.327	0.208	0.168	0.008		0.683	0.275	0.288	0.676	
Back of Queue (*Q*), ft/ln (90 th percentile)	19.3	220	100.2	16	38.8	2		112.7	51.9	31.4	78.7	
Back of Queue (*Q*), veh/ln (90 th percentile)	0.8	9.8	4.5	0.7	1.7	0.1		5.1	2.4	1.4	3.6	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.14	0.00	0.50	0.15	0.00	0.00		0.00	0.59	0.24	0.00	
Uniform Delay (*d 1*), s/veh	6.1	9.5	7.0	9.0	4.8	5.4		44.3	39.6	45.1	46.1	
Incremental Delay (*d 2*), s/veh	0.1	1.1	0.8	0.5	0.2	0.0		7.2	1.0	2.2	10.5	
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	6.2	10.6	7.8	9.5	4.9	5.4		51.5	40.6	47.2	56.7	
Level of Service (LOS)	A	B	A	A	A	A		D	D	D	E	
Approach Delay, s/veh / LOS	9.8	A		5.5	A		47.8	D		53.8	D	
Intersection Delay, s/veh / LOS	13.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.88	B	1.88	B	2.46	B	2.47	B
Bicycle LOS Score / LOS	1.45	A	1.15	A	0.76	A	0.65	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.92
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	24 1/2 Rd & Patterson	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	40	724	70	147	442	121	144	138	62	211	307	83

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	15	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.4	0.3	52.6	10.0	1.0	13.2	1	2	3	4		
Yellow	3.5	0.0	4.0	3.5	0.0	4.0	5	6	7	8		
Red	0.5	0.0	1.5	0.5	0.0	1.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	8.4	58.1	8.7	58.4	14.0	18.2	15.0	19.2
Change Period, (*Y+R c*), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	4.1		4.5		9.5	7.9	13.0	11.1
Green Extension Time (*g e*), s	0.4	0.0	0.3	0.0	0.7	3.4	0.0	3.1
Phase Call Probability	0.88		0.94		0.99	1.00	1.00	1.00
Max Out Probability	0.00		0.01		0.00	0.15	1.00	0.24

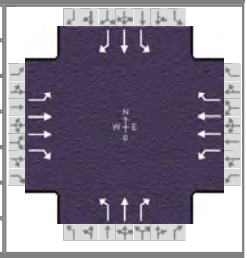
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	78	1405	136	100	301	82	157	111	106	229	334	90
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1697	1781	1610	1810	1766	1598	1767	1856	1665	1767	1738	1397
Queue Service Time (*g s*), s	2.1	26.8	3.0	2.5	3.6	2.3	7.5	5.5	5.9	11.0	9.1	5.9
Cycle Queue Clearance Time (*g c*), s	2.1	26.8	3.0	2.5	3.6	2.3	7.5	5.5	5.9	11.0	9.1	5.9
Green Ratio (*g/C*)	0.57	0.53	0.53	0.57	0.53	0.53	0.23	0.13	0.13	0.24	0.14	0.14
Capacity (*c*), veh/h	597	1873	847	245	1867	844	279	245	220	351	493	198
Volume-to-Capacity Ratio (*X*)	0.130	0.750	0.160	0.409	0.161	0.098	0.562	0.453	0.483	0.654	0.676	0.455
Back of Queue (*Q*), ft/ln (90 th percentile)	29.2	271	40.8	41.2	54.9	33	127.2	105.4	100.8	182.8	149.8	95.8
Back of Queue (*Q*), veh/ln (90 th percentile)	1.2	12.1	1.9	1.9	2.4	1.5	5.6	4.7	4.5	8.1	6.5	3.8
Queue Storage Ratio (*RQ*) (90 th percentile)	0.22	0.00	0.18	0.31	0.00	0.13	0.96	0.00	0.00	1.38	0.00	0.00
Uniform Delay (*d 1*), s/veh	9.3	12.8	8.1	15.1	9.7	10.6	32.9	40.1	40.2	33.4	40.7	39.4
Incremental Delay (*d 2*), s/veh	0.1	2.5	0.4	1.4	0.2	0.2	2.5	1.9	2.3	4.9	2.3	2.3
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	9.4	15.3	8.5	16.5	9.9	10.8	35.4	41.9	42.5	38.3	43.0	41.7
Level of Service (LOS)	A	B	A	B	A	B	D	D	D	D	D	D
Approach Delay, s/veh / LOS	14.5	B		11.4	B		39.4	D		41.2	D	
Intersection Delay, s/veh / LOS	22.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.25	B	2.41	B	2.46	B	2.45	B
Bicycle LOS Score / LOS	1.24	A	1.12	A	0.80	A	1.03	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

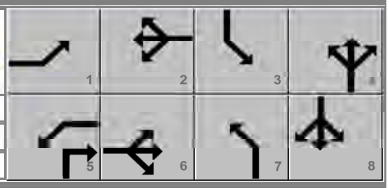
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.87
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	25 Road & Patterson	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	83	774	55	206	687	109	125	261	120	190	305	41

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	40	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.0	9.0	31.0	6.0	2.0	23.0	
Yellow	3.5	3.5	4.5	3.5	0.0	4.0	
Red	0.5	0.5	1.5	0.5	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	23.0	50.0	10.0	37.0	10.0	28.0	12.0	30.0
Change Period, (*Y+R c*), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	5.1		6.2		8.0	17.3	10.0	20.0
Green Extension Time (*g e*), s	0.5	0.0	0.0	0.0	0.0	2.4	0.0	2.1
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		1.00		1.00	0.92	1.00	1.00

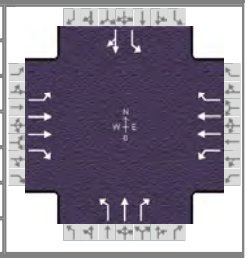
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	135	1262	90	113	376	60	144	300	121	218	351	47
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1781	1585	1795	1795	1585	1753	1811	1610	1795	1811	1585
Queue Service Time (*g s*), s	3.1	28.7	2.2	4.2	9.1	2.8	6.0	15.3	5.8	8.0	18.0	2.3
Cycle Queue Clearance Time (*g c*), s	3.1	28.7	2.2	4.2	9.1	2.8	6.0	15.3	5.8	8.0	18.0	2.3
Green Ratio (*g/C*)	0.52	0.44	0.44	0.37	0.31	0.31	0.29	0.23	0.29	0.31	0.25	0.25
Capacity (*c*), veh/h	610	1567	697	234	1113	491	226	417	467	291	453	396
Volume-to-Capacity Ratio (*X*)	0.222	0.806	0.129	0.481	0.338	0.121	0.637	0.720	0.258	0.751	0.774	0.119
Back of Queue (*Q*), ft/ln (90 th percentile)	45.7	320.8	30.8	84.2	144.5	43.5	131	261.3	92.6	182.8	302.9	37.3
Back of Queue (*Q*), veh/ln (90 th percentile)	2.0	14.3	1.4	3.8	6.5	1.9	5.8	11.3	4.2	8.2	13.1	1.7
Queue Storage Ratio (*RQ*) (90 th percentile)	0.26	0.00	0.19	0.48	0.00	0.34	0.59	0.00	0.53	1.38	0.00	0.28
Uniform Delay (*d 1*), s/veh	9.0	19.1	10.3	23.8	32.0	25.6	30.2	35.5	27.2	30.9	34.9	29.0
Incremental Delay (*d 2*), s/veh	0.8	4.2	0.4	5.9	0.7	0.4	12.9	10.3	1.3	16.3	12.2	0.6
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	9.8	23.3	10.6	29.6	32.7	26.0	43.1	45.8	28.6	47.2	47.1	29.6
Level of Service (LOS)	A	C	B	C	C	C	D	D	C	D	D	C
Approach Delay, s/veh / LOS	21.3	C		31.3	C		41.4	D		45.8	D	
Intersection Delay, s/veh / LOS	31.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.12	B	2.12	B	2.45	B	2.44	B
Bicycle LOS Score / LOS	1.35	A	1.44	A	1.42	A	1.50	B

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.82
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	25 1/2 Road & Patterson	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	32	934	51	137	986	90	73	89	98	212	149	118

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	98	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.2	1.4	45.1	6.0	1.0	18.3	1	2	3	4		
Yellow	3.5	0.0	4.5	3.5	3.5	4.0						
Red	0.5	0.0	1.5	0.5	0.5	1.0	5	6	7	8		

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	9.2	51.1	10.6	52.5	10.0	23.3	15.0	28.3
Change Period, ($Y+R_c$), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.3	5.2	5.3
Queue Clearance Time (g_s), s	3.1		3.9		6.0	8.7	13.0	19.9
Green Extension Time (g_e), s	0.1	0.0	0.3	0.0	0.0	3.5	0.0	3.3
Phase Call Probability	0.65		0.83		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	0.01	1.00	0.03

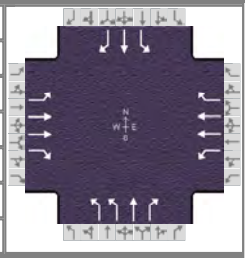
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	38	1109	61	64	460	42	89	109	120	259	326	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1781	1598	1781	1781	1572	1767	1885	1585	1682	1719	
Queue Service Time (g_s), s	1.1	18.7	0.6	1.9	4.4	0.4	4.0	5.0	6.7	11.0	17.9	
Cycle Queue Clearance Time (g_c), s	1.1	18.7	0.6	1.9	4.4	0.4	4.0	5.0	6.7	11.0	17.9	
Green Ratio (*g/C*)	0.50	0.45	0.45	0.52	0.47	0.47	0.24	0.18	0.18	0.31	0.23	
Capacity (*c*), veh/h	532	1606	720	317	1657	732	213	344	289	402	400	
Volume-to-Capacity Ratio (*X*)	0.071	0.691	0.084	0.202	0.278	0.057	0.418	0.315	0.413	0.644	0.814	
Back of Queue (*Q*), ft/ln (90 th percentile)	17.3	177.1	8.8	30.1	60.5	5.6	82.3	93	105.5	207.8	260.5	
Back of Queue (*Q*), veh/ln (90 th percentile)	0.8	7.9	0.4	1.3	2.7	0.3	3.7	4.2	4.7	8.8	11.6	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.13	0.00	0.07	0.23	0.00	0.04	0.74	0.00	1.19	1.55	0.00	
Uniform Delay (d_1), s/veh	13.4	11.7	3.8	15.1	7.8	3.4	31.4	35.4	36.1	29.0	36.3	
Incremental Delay (d_2), s/veh	0.1	2.2	0.2	0.4	0.3	0.1	5.9	0.7	1.3	7.7	5.7	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	13.5	13.9	4.0	15.5	8.1	3.5	37.4	36.2	37.5	36.8	42.0	
Level of Service (LOS)	B	B	A	B	A	A	D	D	D	D	D	
Approach Delay, s/veh / LOS	13.4	B		8.6	A		37.0	D		39.7	D	
Intersection Delay, s/veh / LOS	20.9						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.10	B	1.90	B	2.45	B	2.45	B
Bicycle LOS Score / LOS	1.51	B	1.71	B	1.01	A	1.45	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

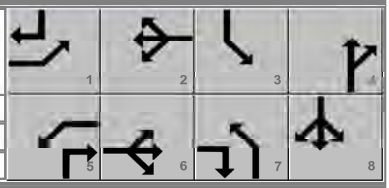
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.77
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	1st Street & Patterson	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	54	966	180	173	1046	40	114	213	143	178	475	67

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	47	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.7	1.8	30.0	6.9	4.0	33.1	
Yellow	3.5	0.0	3.0	3.5	0.0	4.0	
Red	0.5	0.0	2.5	0.5	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	2.0	3.0	1.1	3.0
Phase Duration, s	9.7	35.5	11.4	37.3	10.9	38.1	14.9	42.1
Change Period, (*Y+R c*), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	3.5		5.5		6.1	13.7	9.9	32.6
Green Extension Time (*g e*), s	0.1	0.0	0.3	0.0	0.9	8.0	1.0	4.5
Phase Call Probability	0.71		0.93		0.98	1.00	1.00	1.00
Max Out Probability	0.01		0.00		0.00	0.20	0.02	0.74

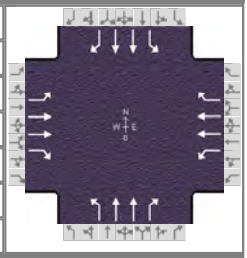
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	44	791	147	95	576	22	148	277	186	231	617	87
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1766	1598	1781	1781	1572	1743	1856	1598	1810	1885	1610
Queue Service Time (*g s*), s	1.5	19.7	5.4	3.5	13.4	0.9	4.1	11.7	7.8	7.9	30.6	3.3
Cycle Queue Clearance Time (*g c*), s	1.5	19.7	5.4	3.5	13.4	0.9	4.1	11.7	7.8	7.9	30.6	3.3
Green Ratio (*g/C*)	0.36	0.30	0.37	0.37	0.32	0.32	0.07	0.33	0.41	0.46	0.37	0.43
Capacity (*c*), veh/h	312	1061	590	266	1132	500	242	614	648	471	700	689
Volume-to-Capacity Ratio (*X*)	0.142	0.746	0.250	0.358	0.509	0.044	0.612	0.450	0.287	0.491	0.882	0.126
Back of Queue (*Q*), ft/ln (90 th percentile)	23.6	260.3	76.8	57.6	182.7	13.7	74.9	181.6	111.9	123.2	452.2	47.4
Back of Queue (*Q*), veh/ln (90 th percentile)	1.1	11.5	3.5	2.6	8.2	0.6	3.4	8.1	5.0	5.6	20.4	2.2
Queue Storage Ratio (*RQ*) (90 th percentile)	0.18	0.00	0.58	0.52	0.00	0.13	0.57	0.00	0.85	1.12	0.00	0.00
Uniform Delay (*d 1*), s/veh	19.4	29.2	17.2	22.2	28.5	21.6	45.2	26.3	20.0	17.9	29.4	17.3
Incremental Delay (*d 2*), s/veh	0.2	4.0	0.8	0.7	1.0	0.1	3.5	0.7	0.3	1.1	11.4	0.1
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	19.6	33.3	18.1	22.9	29.5	21.7	48.8	27.0	20.3	19.1	40.8	17.4
Level of Service (LOS)	B	C	B	C	C	C	D	C	C	B	D	B
Approach Delay, s/veh / LOS	30.4	C		28.4	C		30.3	C		33.2	C	
Intersection Delay, s/veh / LOS	30.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	2.11	B	2.43	B	2.43	B
Bicycle LOS Score / LOS	1.77	B	1.84	B	1.49	A	2.03	B

Copyright © 2020 University of Florida, All Rights Reserved.

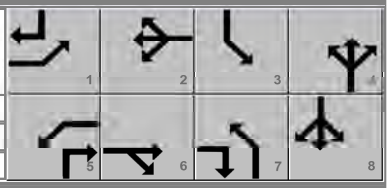
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.80
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	7th Street & Patterson	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	69	716	189	238	1007	106	80	301	147	168	654	204

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	0	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.2	3.0	36.5	5.7	3.3	29.2
Yellow	3.5	0.0	4.0	3.5	0.0	4.0
Red	0.5	0.0	1.0	0.5	0.0	1.0

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	8.2	41.5	11.2	44.6	9.7	34.2	13.0	37.5
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	5.1		6.7		5.9	9.4	10.0	21.7
Green Extension Time (g_e), s	0.2	0.0	0.7	0.0	0.2	13.2	0.0	10.8
Phase Call Probability	0.79		0.98		0.94	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.53	0.28	1.00	0.46

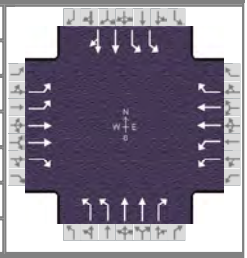
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	57	589	134	142	602	60	100	376	168	210	818	255
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1766	1374	1810	1781	1543	1767	1795	1591	1795	1809	1586
Queue Service Time (g_s), s	3.1	7.8	1.6	4.7	6.9	0.7	3.9	7.4	6.7	8.0	19.7	12.1
Cycle Queue Clearance Time (g_c), s	3.1	7.8	1.6	4.7	6.9	0.7	3.9	7.4	6.7	8.0	19.7	12.1
Green Ratio (*g/C*)	0.04	0.37	0.42	0.45	0.40	0.40	0.35	0.29	0.36	0.40	0.33	0.37
Capacity (*c*), veh/h	76	1291	592	416	1410	611	229	1049	581	423	1176	583
Volume-to-Capacity Ratio (*X*)	0.746	0.456	0.227	0.342	0.427	0.099	0.436	0.359	0.288	0.497	0.695	0.438
Back of Queue (*Q*), ft/ln (90 th percentile)	69.5	98.6	19.9	78.5	86.5	10.6	68.9	115.6	94.6	127.6	268.2	160.3
Back of Queue (*Q*), veh/ln (90 th percentile)	3.2	4.4	0.9	3.6	3.9	0.5	3.1	5.2	4.3	5.8	12.2	7.2
Queue Storage Ratio (*RQ*) (90 th percentile)	0.39	0.00	0.13	0.59	0.00	0.07	0.31	0.00	0.54	1.16	0.00	0.00
Uniform Delay (d_1), s/veh	49.2	11.5	3.7	17.6	9.5	4.9	24.5	23.9	19.2	21.2	29.4	23.9
Incremental Delay (d_2), s/veh	15.3	0.9	0.7	0.5	0.7	0.2	1.9	0.3	0.4	1.3	1.3	0.7
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	64.6	12.4	4.4	18.1	10.2	5.1	26.4	24.2	19.6	22.5	30.7	24.6
Level of Service (LOS)	E	B	A	B	B	A	C	C	B	C	C	C
Approach Delay, s/veh / LOS	14.8	B		11.2	B		23.3	C		28.2	C	
Intersection Delay, s/veh / LOS	20.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.43	B	2.45	B	2.47	B
Bicycle LOS Score / LOS	1.47	A	1.88	B	1.02	A	1.55	B

Copyright © 2020 University of Florida, All Rights Reserved.

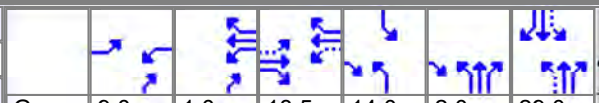
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.80
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	12th Street & Patterson	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					

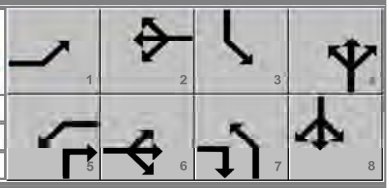


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	135	571	179	382	1138	114	224	501	122	96	570	107

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	45	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	9.0	1.0	18.5	14.0	2.0	29.0
Yellow	3.5	3.5	4.0	3.5	3.5	4.0
Red	0.5	0.5	1.5	0.5	0.5	1.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	13.0	24.0	18.0	29.0	24.0	40.0	18.0	34.0
Change Period, (*Y+R c*), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	4.9		6.2		6.3	15.9	4.0	23.6
Green Extension Time (*g e*), s	0.2	0.0	0.7	0.0	1.4	10.4	0.4	4.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		0.25		0.02	0.48	0.04	0.99

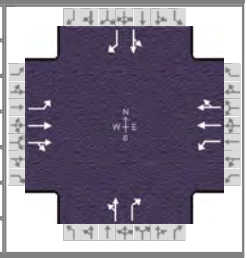
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	128	540	169	224	667	67	280	626	153	120	435	411
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1730	1766	1600	1743	1795	1598	1730	1781	1572	1743	1870	1764
Queue Service Time (*g s*), s	2.9	13.9	6.4	4.2	17.5	3.0	4.3	13.9	5.5	2.0	21.5	21.6
Cycle Queue Clearance Time (*g c*), s	2.9	13.9	6.4	4.2	17.5	3.0	4.3	13.9	5.5	2.0	21.5	21.6
Green Ratio (*g/C*)	0.28	0.18	0.39	0.34	0.24	0.24	0.51	0.35	0.49	0.43	0.29	0.29
Capacity (*c*), veh/h	513	654	618	700	844	375	933	1246	771	900	542	512
Volume-to-Capacity Ratio (*X*)	0.249	0.826	0.274	0.320	0.790	0.178	0.300	0.502	0.198	0.133	0.803	0.803
Back of Queue (*Q*), ft/ln (90 th percentile)	50.5	174	77.3	65.4	254.4	47.3	68.5	202.1	80.6	33	346.5	332.3
Back of Queue (*Q*), veh/ln (90 th percentile)	2.3	7.7	3.5	2.9	11.5	2.1	3.1	9.0	3.6	1.5	15.5	14.9
Queue Storage Ratio (*RQ*) (90 th percentile)	0.29	0.00	0.53	0.25	0.00	0.36	0.31	0.00	0.36	0.25	0.00	0.00
Uniform Delay (*d 1*), s/veh	30.4	30.8	16.3	21.3	36.3	26.9	16.6	25.6	14.4	17.4	32.9	32.9
Incremental Delay (*d 2*), s/veh	0.7	7.3	0.7	1.0	6.3	0.9	0.8	1.4	0.6	0.3	11.9	12.6
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	31.1	38.0	17.0	22.3	42.6	27.7	17.4	27.1	15.0	17.7	44.7	45.4
Level of Service (LOS)	C	D	B	C	D	C	B	C	B	B	D	D
Approach Delay, s/veh / LOS	32.7	C		36.8	D		22.8	C		41.7	D	
Intersection Delay, s/veh / LOS	33.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.59	C	2.45	B	2.57	C	2.58	C
Bicycle LOS Score / LOS	1.40	A	2.17	B	1.36	A	1.28	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

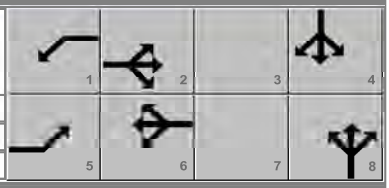
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	Patterson Rd & 15th St	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	140	623	15	51	1800	194	12	3	20	12	3	61

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	9	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.2	2.8	75.4	6.6	0.0	0.0	
Yellow	4.0	0.0	4.0	4.0	0.0	0.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		7.0		7.0
Phase Duration, s	10.0	82.2	7.2	79.4		10.6		10.6
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0		4.0		4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	4.0		2.3			3.4		6.5
Green Extension Time (g_e), s	0.3	0.0	0.0	0.0		0.2		0.2
Phase Call Probability	0.99		0.53			0.98		0.98
Max Out Probability	0.00		0.00			0.00		0.00

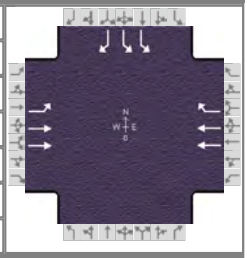
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	179	410	407	27	536	518		18	24		18	73
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1856	1840	1781	1885	1820		1515	1585		1515	1585
Queue Service Time (g_s), s	2.0	8.7	8.6	0.3	4.8	4.2		0.0	1.4		0.0	4.5
Cycle Queue Clearance Time (g_c), s	2.0	8.7	8.6	0.3	4.8	4.2		1.0	1.4		1.0	4.5
Green Ratio (*g/C*)	0.82	0.78	0.78	0.79	0.75	0.75		0.07	0.07		0.07	0.07
Capacity (*c*), veh/h	556	1451	1439	580	1422	1373		165	105		165	105
Volume-to-Capacity Ratio (*X*)	0.322	0.283	0.283	0.046	0.377	0.377		0.110	0.230		0.110	0.701
Back of Queue (*Q*), ft/ln (90 th percentile)	13.3	103.2	98.8	2.9	46	39		17.1	23.1		17.1	75.1
Back of Queue (*Q*), veh/ln (90 th percentile)	0.6	4.6	4.5	0.1	2.1	1.8		0.8	1.0		0.8	3.4
Queue Storage Ratio (*RQ*) (90 th percentile)	0.17	0.00	0.00	0.03	0.00	0.00		0.00	0.52		0.00	1.70
Uniform Delay (d_1), s/veh	2.0	4.8	4.7	2.7	1.6	1.4		44.1	44.3		44.1	45.7
Incremental Delay (d_2), s/veh	0.1	0.5	0.5	0.0	0.5	0.5		0.1	0.4		0.1	3.2
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	2.1	5.3	5.2	2.7	2.1	1.9		44.2	44.7		44.2	48.9
Level of Service (LOS)	A	A	A	A	A	A		D	D		D	D
Approach Delay, s/veh / LOS	4.7	A		2.0	A		44.5	D		47.9	D	
Intersection Delay, s/veh / LOS	5.9						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.83	B	1.84	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.26	A	2.52	C	0.56	A	0.64	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

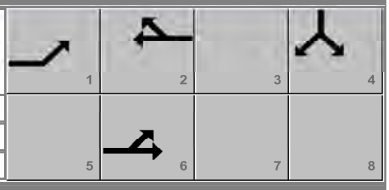
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	27 1/2 Road & Patterson	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	70	647			1589	304				385		214

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	59	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.0	38.0	41.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.0	0.0	0.0	0.0
Red	0.5	1.5	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6		2				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	10.0	54.0		44.0				46.0
Change Period, (*Y+R c*), s	4.0	6.0		6.0				5.0
Max Allow Headway (*MAH*), s	5.2	0.0		0.0				5.3
Queue Clearance Time (*g s*), s	3.9							14.0
Green Extension Time (*g e*), s	0.0	0.0		0.0				5.2
Phase Call Probability	1.00							1.00
Max Out Probability	1.00							0.02

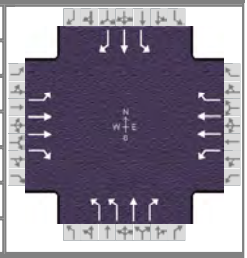
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				7		14
Adjusted Flow Rate (*v*), veh/h	58	533			872	167				464		258
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1795			1795	1610				1757		1522
Queue Service Time (*g s*), s	1.9	6.9			18.8	6.1				9.0		12.0
Cycle Queue Clearance Time (*g c*), s	1.9	6.9			18.8	6.1				9.0		12.0
Green Ratio (*g/C*)	0.46	0.48			0.38	0.38				0.41		0.41
Capacity (*c*), veh/h	280	1723			1364	612				1441		624
Volume-to-Capacity Ratio (*X*)	0.206	0.309			0.639	0.273				0.322		0.413
Back of Queue (*Q*), ft/ln (90 th percentile)	33.9	92.9			231.7	87.9				134.4		166.8
Back of Queue (*Q*), veh/ln (90 th percentile)	1.5	4.2			10.4	4.0				6.1		7.2
Queue Storage Ratio (*RQ*) (90 th percentile)	0.22	0.00			0.00	1.67				0.80		0.00
Uniform Delay (*d 1*), s/veh	18.5	11.0			22.2	17.5				20.1		21.0
Incremental Delay (*d 2*), s/veh	1.2	0.3			1.9	0.9				0.6		2.0
Initial Queue Delay (*d 3*), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (*d*), s/veh	19.7	11.4			24.1	18.4				20.6		23.0
Level of Service (LOS)	B	B			C	B				C		C
Approach Delay, s/veh / LOS	12.2		B	23.2		C	0.0			21.5		C
Intersection Delay, s/veh / LOS	19.9						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.70	A	2.11	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	1.20	A	2.37	B				F

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	29 Road & Patterson	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					

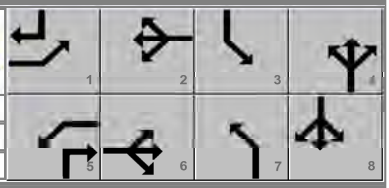


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	129	532	231	187	1461	98	194	173	49	73	271	360

28 1/4 is missing

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	50	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.5	1.5	26.5	9.5	1.0	29.0
Yellow	3.5	3.5	4.5	3.5	0.0	4.0
Red	1.0	1.0	2.0	1.0	0.0	1.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	12.0	33.0	18.0	39.0	14.0	34.0	15.0	35.0
Change Period, (*Y+R c*), s	4.5	6.5	4.5	6.5	4.5	5.0	4.5	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (*g s*), s	6.4		7.0		6.5	10.9	5.2	20.9
Green Extension Time (*g e*), s	0.0	0.0	0.2	0.0	0.3	3.7	0.1	2.8
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		0.13		1.00	0.06	0.34	0.38

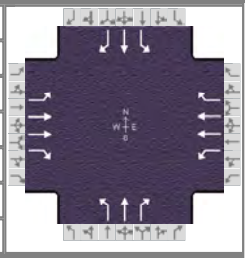
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	111	457	198	133	1042	70	234	208	17	88	327	373
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1795	1572	1767	1781	1585	1716	1870	1610	1753	1870	1610
Queue Service Time (*g s*), s	4.4	10.8	9.7	5.0	26.8	1.9	4.5	8.9	0.6	3.2	14.8	18.9
Cycle Queue Clearance Time (*g c*), s	4.4	10.8	9.7	5.0	26.8	1.9	4.5	8.9	0.6	3.2	14.8	18.9
Green Ratio (*g/C*)	0.34	0.26	0.26	0.42	0.32	0.32	0.38	0.29	0.43	0.40	0.30	0.38
Capacity (*c*), veh/h	226	951	417	457	1157	515	665	542	684	485	561	604
Volume-to-Capacity Ratio (*X*)	0.491	0.480	0.476	0.292	0.900	0.136	0.351	0.384	0.025	0.181	0.582	0.619
Back of Queue (*Q*), ft/ln (90 th percentile)	80.5	154.8	124.5	85.8	289.7	28.1	76.3	152.8	9.2	56.2	236.1	247.8
Back of Queue (*Q*), veh/ln (90 th percentile)	3.6	7.0	5.5	3.8	13.0	1.3	3.4	6.8	0.4	2.5	10.6	11.3
Queue Storage Ratio (*RQ*) (90 th percentile)	0.26	0.00	0.45	0.22	0.00	0.32	0.34	0.00	0.04	0.42	0.00	1.88
Uniform Delay (*d 1*), s/veh	25.5	31.2	26.3	22.0	24.4	14.1	21.8	28.4	16.7	19.7	29.7	25.4
Incremental Delay (*d 2*), s/veh	5.5	1.3	2.9	1.1	8.1	0.4	1.5	2.1	0.1	0.8	4.4	4.7
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	31.1	32.4	29.2	23.1	32.5	14.5	23.2	30.4	16.8	20.5	34.0	30.1
Level of Service (LOS)	C	C	C	C	C	B	C	C	B	C	C	C
Approach Delay, s/veh / LOS	31.4	C		30.5	C		26.3	C		30.7	C	
Intersection Delay, s/veh / LOS	30.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.34	B	2.18	B	2.44	B	2.44	B
Bicycle LOS Score / LOS	1.37	A	2.22	B	1.25	A	1.79	B

Copyright © 2020 University of Florida, All Rights Reserved.

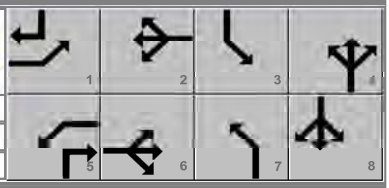
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	29 Road & Patterson	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	129	532	231	187	1461	98	194	173	49	73	271	360

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	50	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	7.5	1.5	26.5	9.5	1.0	29.0
Yellow	3.5	3.5	4.5	3.5	0.0	4.0
Red	1.0	1.0	2.0	1.0	0.0	1.0

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	12.0	33.0	18.0	39.0	14.0	34.0	15.0	35.0
Change Period, (*Y+R c*), s	4.5	6.5	4.5	6.5	4.5	5.0	4.5	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (*g s*), s	6.4		7.0		11.4	10.9	5.2	20.9
Green Extension Time (*g e*), s	0.0	0.0	0.2	0.0	0.0	3.7	0.1	2.8
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		0.13		1.00	0.06	0.34	0.38

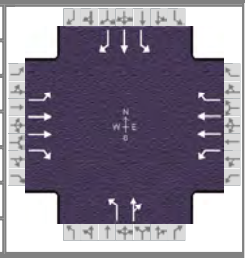
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	111	457	198	133	1042	70	234	208	17	88	327	373
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1795	1572	1767	1781	1585	1767	1870	1610	1753	1870	1610
Queue Service Time (*g s*), s	4.4	10.8	9.7	5.0	26.8	1.9	9.4	8.9	0.6	3.2	14.8	18.9
Cycle Queue Clearance Time (*g c*), s	4.4	10.8	9.7	5.0	26.8	1.9	9.4	8.9	0.6	3.2	14.8	18.9
Green Ratio (*g/C*)	0.34	0.26	0.26	0.42	0.32	0.32	0.38	0.29	0.43	0.40	0.30	0.38
Capacity (*c*), veh/h	226	951	417	457	1157	515	338	542	684	485	561	604
Volume-to-Capacity Ratio (*X*)	0.491	0.480	0.476	0.292	0.900	0.136	0.692	0.384	0.025	0.181	0.582	0.619
Back of Queue (*Q*), ft/ln (90 th percentile)	80.5	154.6	124.5	85.8	289.7	28.1	171.2	152.8	9.2	56.2	236.1	247.8
Back of Queue (*Q*), veh/ln (90 th percentile)	3.6	7.0	5.5	3.8	13.0	1.3	7.6	6.8	0.4	2.5	10.6	11.3
Queue Storage Ratio (*RQ*) (90 th percentile)	0.26	0.00	0.45	0.22	0.00	0.32	0.77	0.00	0.04	0.42	0.00	1.88
Uniform Delay (*d 1*), s/veh	25.5	31.2	26.3	22.0	24.4	14.1	23.6	28.4	16.7	19.7	29.7	25.4
Incremental Delay (*d 2*), s/veh	5.5	1.3	2.9	1.1	8.1	0.4	11.1	2.1	0.1	0.8	4.4	4.7
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	31.1	32.4	29.2	23.1	32.5	14.5	34.7	30.4	16.8	20.5	34.0	30.1
Level of Service (LOS)	C	C	C	C	C	B	C	C	B	C	C	C
Approach Delay, s/veh / LOS	31.4	C		30.5	C		32.1	C		30.7	C	
Intersection Delay, s/veh / LOS	31.0						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.17	B	2.18	B	2.44	B	2.44	B
Bicycle LOS Score / LOS	1.37	A	2.22	B	1.25	A	1.79	B

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.85
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	29 1/2 Road & Patterson	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	13	531	96	222	1549	265	48	34	67	150	106	64

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	32	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	1.5	1.6	53.8	9.0	10.6	0.0	1	2	3	4		
Yellow	3.5	3.5	5.0	4.0	4.0	0.0	5	6	7	8		
Red	0.5	0.5	1.5	0.0	1.0	0.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	5.5	60.3	11.1	65.9	13.0	15.6	13.0	15.6
Change Period, (*Y+R c*), s	4.0	6.5	4.0	6.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	4.5	0.0	4.5	0.0	3.7	4.7	3.7	4.7
Queue Clearance Time (*g s*), s	2.3		6.4		4.7	9.1	10.8	8.5
Green Extension Time (*g e*), s	0.0	0.0	0.8	0.0	0.0	1.5	0.0	1.5
Phase Call Probability	0.29		0.99		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.40	0.00	1.00	0.00

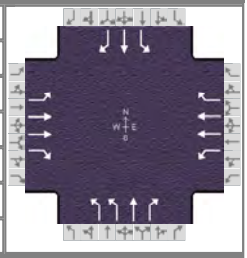
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	13	511	92	186	1300	222	56	119		176	125	75
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1795	1598	1795	1795	1560	1767	1618		1781	1841	1585
Queue Service Time (*g s*), s	0.3	1.5	0.4	4.4	17.8	2.6	2.7	7.1		8.8	6.5	4.5
Cycle Queue Clearance Time (*g c*), s	0.3	1.5	0.4	4.4	17.8	2.6	2.7	7.1		8.8	6.5	4.5
Green Ratio (*g/C*)	0.55	0.54	0.54	0.63	0.59	0.59	0.20	0.11		0.20	0.11	0.11
Capacity (*c*), veh/h	236	1930	859	629	2133	927	256	172		252	195	168
Volume-to-Capacity Ratio (*X*)	0.053	0.265	0.107	0.296	0.610	0.240	0.221	0.693		0.701	0.639	0.448
Back of Queue (*Q*), ft/ln (90 th percentile)	4.6	19.6	6.3	55.2	157.2	29.9	51.1	121.2		170.3	121.4	72.6
Back of Queue (*Q*), veh/ln (90 th percentile)	0.2	0.9	0.3	2.5	7.1	1.3	2.3	5.3		7.6	5.3	3.2
Queue Storage Ratio (*RQ*) (90 th percentile)	0.04	0.00	0.07	0.42	0.00	0.13	0.66	0.00		1.24	0.00	0.00
Uniform Delay (*d 1*), s/veh	11.3	2.0	1.5	7.5	8.0	3.1	33.8	43.1		36.4	42.9	42.0
Incremental Delay (*d 2*), s/veh	0.1	0.2	0.2	0.2	0.9	0.4	2.0	4.9		15.1	3.5	1.9
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	11.3	2.2	1.6	7.7	8.9	3.5	35.7	48.1		51.4	46.3	43.8
Level of Service (LOS)	B	A	A	A	A	A	D	D		D	D	D
Approach Delay, s/veh / LOS	2.3	A		8.1	A		44.1	D		48.2	D	
Intersection Delay, s/veh / LOS	14.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.89	B	2.07	B	2.46	B	2.46	B
Bicycle LOS Score / LOS	1.11	A	2.46	B	0.78	A	1.11	A

Copyright © 2020 University of Florida, All Rights Reserved.

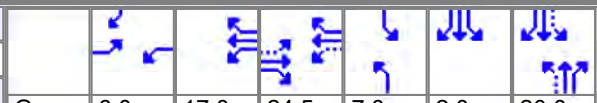
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	30 Road & Patterson	File Name	2045 NoBuild AM Optimized Timings.xus		
Project Description					

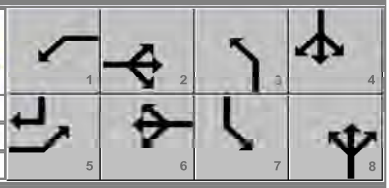


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	95	420	203	137	1188	17	438	57	49	42	138	279

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	60	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	6.0	17.0	24.5	7.0	2.0	20.0
Yellow	3.5	3.5	5.0	3.5	0.0	4.0
Red	0.5	0.5	1.5	0.5	0.0	1.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	10.0	31.0	31.0	52.0	11.0	25.0	13.0	27.0
Change Period, ($Y+R_c$), s	4.0	6.5	4.0	6.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.2	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (g_s), s	6.7		5.4		9.0	5.1	4.0	13.9
Green Extension Time (g_e), s	0.0	0.0	0.5	0.0	0.0	1.8	0.0	1.3
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		0.00		1.00	0.02	0.41	0.26

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	114	506	245	146	1268	18	528	69	58	51	166	225
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1795	1598	1795	1795	1598	1730	1870	1560	1810	1885	1585
Queue Service Time (g_s), s	4.7	10.9	12.2	3.4	23.9	0.3	7.0	3.0	3.1	2.0	7.5	11.9
Cycle Queue Clearance Time (g_c), s	4.7	10.9	12.2	3.4	23.9	0.3	7.0	3.0	3.1	2.0	7.5	11.9
Green Ratio (*g/C*)	0.30	0.24	0.24	0.54	0.46	0.46	0.27	0.20	0.20	0.29	0.22	0.28
Capacity (*c*), veh/h	266	879	391	654	1633	727	633	374	312	453	415	444
Volume-to-Capacity Ratio (*X*)	0.430	0.575	0.625	0.223	0.776	0.025	0.833	0.184	0.185	0.112	0.401	0.508
Back of Queue (*Q*), ft/ln (90 th percentile)	82.1	138.3	145.1	53	217.4	4.8	150.1	59.3	51.5	36.7	137	174
Back of Queue (*Q*), veh/ln (90 th percentile)	3.7	6.2	6.5	2.4	9.8	0.2	6.7	2.7	2.3	1.7	6.2	7.8
Queue Storage Ratio (*RQ*) (90 th percentile)	0.93	0.00	0.52	0.52	0.00	0.08	0.68	0.00	0.29	0.28	0.00	1.31
Uniform Delay (d_1), s/veh	25.9	25.6	25.9	9.8	12.6	7.4	36.3	33.2	33.2	26.0	33.4	30.2
Incremental Delay (d_2), s/veh	3.4	1.9	5.1	0.8	3.7	0.1	12.2	1.1	1.3	0.5	2.9	4.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	29.4	27.4	31.0	10.6	16.3	7.4	48.5	34.3	34.5	26.5	36.2	34.3
Level of Service (LOS)	C	C	C	B	B	A	D	C	C	C	D	C
Approach Delay, s/veh / LOS	28.7	C		15.6	B		45.8	D		34.1	C	
Intersection Delay, s/veh / LOS	27.2						C					

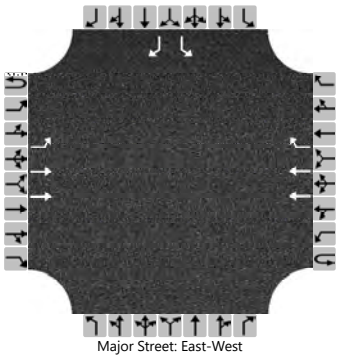
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	2.23	B	2.45	B	2.45	B
Bicycle LOS Score / LOS	1.20	A	1.82	B	1.57	B	1.22	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst		Intersection	28 RD
Agency/Co.	Stolfus and Associates	Jurisdiction	
Date Performed	4/30/2020	East/West Street	
Analysis Year	2018	North/South Street	
Time Analyzed	AM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Patterson ACP		

Lanes



what intersection?

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		1	0	1
Configuration		L	T				T	R						L		R
Volume (veh/h)	0	51	987				1760	266						49		72
Percent Heavy Vehicles (%)	3	3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized						No								No		
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.5		6.9
Critical Headway (sec)		4.16												6.86		6.96
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

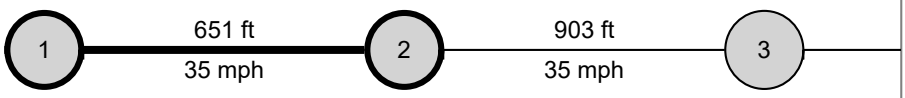
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		55												53		78
Capacity, c (veh/h)		232												16		256
v/c Ratio		0.24												3.30		0.31
95% Queue Length, Q_{95} (veh)		0.9												7.4		1.2
Control Delay (s/veh)		25.3												1520.1		25.1
Level of Service (LOS)		D												F		D
Approach Delay (s/veh)		1.2												630.5		
Approach LOS														F		

Copyright © 2020 University of Florida. All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	24 Road & Patterson	Market Street/Mall Access & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (24 Rd - Market St)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
1	35	35	2	2	651	651	50	50	0	0	100	0	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h				0.06	never	
1	Shared Lane Spillback Time, h				0.18		never
1	Base Free-Flow Speed, mph	41.58			42.05		
1	Running Time, s	15.01			15.32		
1	Running Speed, mph	29.57			28.98		
1	Through Delay, s/veh	8.80			43.66		
1	Travel Time, s	23.81			58.97		
1	Travel Speed, mph	18.64			7.53		
1	Stop Rate, stops/veh	0.35			0.92		
1	Spatial Stop Rate, stops/mi	2.85			7.48		
1	Through vol/cap Ratio	0.15			0.72		
1	Percent of Base FFS	44.83			17.90		
1	Level of Service	D			F		
1	Auto Traveler Perception Score	2.59			3.44		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	2.22		B	3.66		D
1	Bicycle Segment LOS Score / LOS	2.12		B	2.68		B
1	Transit Segment LOS Score / LOS	1.75		A	3.26		C

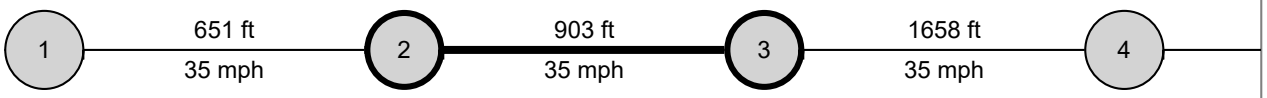
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	Market Street/Mall Access & Pat	Home Depot Access/Mesa Mall Access &		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (Market St - Home Depot)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
2	35	35	2	2	903	903	50	50	2	1	70	0	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h		never				
2	Shared Lane Spillback Time, h	never		never			
2	Base Free-Flow Speed, mph	41.72			42.05		
2	Running Time, s	18.29			18.72		
2	Running Speed, mph	33.67			32.89		
2	Through Delay, s/veh	4.93			1.93		
2	Travel Time, s	23.22			20.65		
2	Travel Speed, mph	26.51			29.81		
2	Stop Rate, stops/veh	0.19			0.06		
2	Spatial Stop Rate, stops/mi	1.09			0.38		
2	Through vol/cap Ratio	0.17			0.49		
2	Percent of Base FFS	63.55			70.89		
2	Level of Service	C			B		
2	Auto Traveler Perception Score	2.30			2.20		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	2.88		C	3.70		D
2	Bicycle Segment LOS Score / LOS	2.41		B	2.80		C
2	Transit Segment LOS Score / LOS	1.10		A	1.03		A

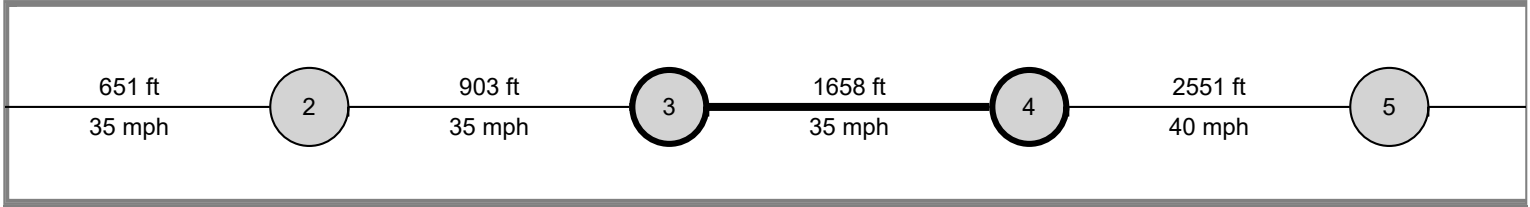
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	Home Depot Access/Mesa Mall /	24 1/2 Rd & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (Home Depot - 24 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
3	35	35	2	2	1658	1658	50	50	550	550	70	100	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never		never	never		never
3	Base Free-Flow Speed, mph	40.71			40.19		
3	Running Time, s	30.27			31.88		
3	Running Speed, mph	37.34			35.46		
3	Through Delay, s/veh	9.88			10.55		
3	Travel Time, s	40.15			42.44		
3	Travel Speed, mph	28.15			26.64		
3	Stop Rate, stops/veh	0.32			0.36		
3	Spatial Stop Rate, stops/mi	1.03			1.16		
3	Through vol/cap Ratio	0.16			0.59		
3	Percent of Base FFS	69.16			66.29		
3	Level of Service	B			C		
3	Auto Traveler Perception Score	2.29			2.31		
Multimodal Results (Segment)							
3	Pedestrian Segment LOS Score / LOS	3.04		C	3.83		D
3	Bicycle Segment LOS Score / LOS	2.50		B	2.91		C
3	Transit Segment LOS Score / LOS	1.01		A	1.31		A

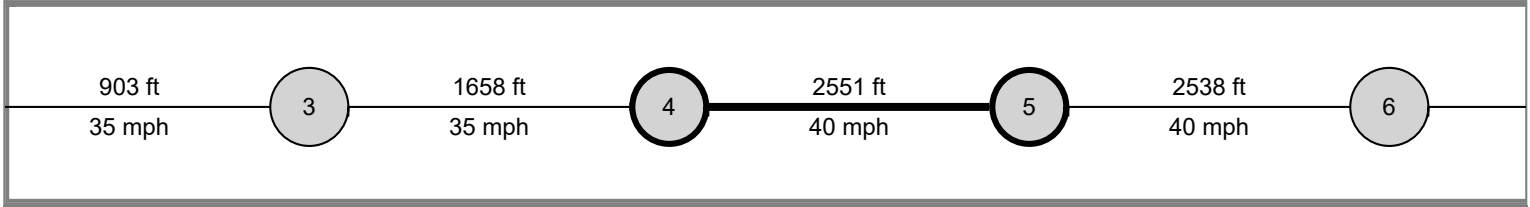
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	24 1/2 Rd & Patterson	25 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (24 1/2 Rd - 25 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
4	40	35	2	2	2551	2551	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never		never	never		never
4	Base Free-Flow Speed, mph	42.99			40.64		
4	Running Time, s	42.62			46.47		
4	Running Speed, mph	40.81			37.43		
4	Through Delay, s/veh	32.67			15.35		
4	Travel Time, s	75.30			61.82		
4	Travel Speed, mph	23.10			28.13		
4	Stop Rate, stops/veh	0.79			0.44		
4	Spatial Stop Rate, stops/mi	1.64			0.91		
4	Through vol/cap Ratio	0.34			0.75		
4	Percent of Base FFS	53.73			69.23		
4	Level of Service	C			B		
4	Auto Traveler Perception Score	2.39			2.28		
Multimodal Results (Segment)							
4	Pedestrian Segment LOS Score / LOS	2.99		C	3.53		D
4	Bicycle Segment LOS Score / LOS	2.58		B	2.91		C
4	Transit Segment LOS Score / LOS	1.42		A	1.20		A

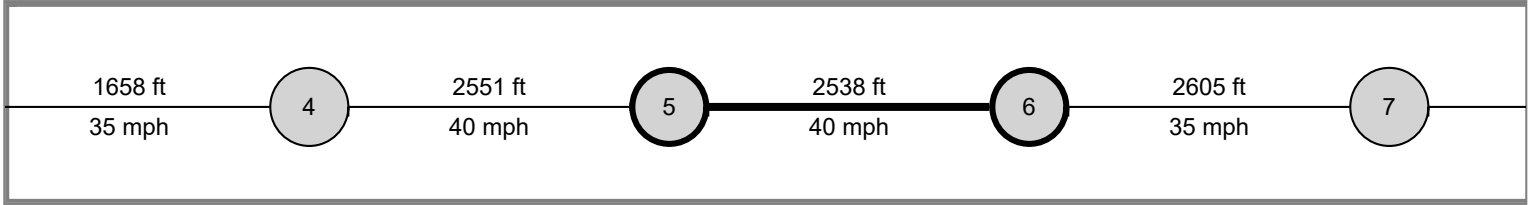
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	25 Road & Patterson	25 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (25 Rd - 25 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
5	40	40	2	2	2538	2538	50	50	260	260	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h		never			never	
5	Shared Lane Spillback Time, h	never		never	never		never
5	Base Free-Flow Speed, mph	43.12			43.12		
5	Running Time, s	42.32			43.49		
5	Running Speed, mph	40.89			39.79		
5	Through Delay, s/veh	8.14			23.34		
5	Travel Time, s	50.46			66.83		
5	Travel Speed, mph	34.29			25.89		
5	Stop Rate, stops/veh	0.24			0.59		
5	Spatial Stop Rate, stops/mi	0.49			1.23		
5	Through vol/cap Ratio	0.28			0.81		
5	Percent of Base FFS	79.52			60.04		
5	Level of Service	B			C		
5	Auto Traveler Perception Score	2.21			2.32		
Multimodal Results (Segment)							
5	Pedestrian Segment LOS Score / LOS	2.80		C	3.62		D
5	Bicycle Segment LOS Score / LOS	2.57		B	2.91		C
5	Transit Segment LOS Score / LOS	0.64		A	1.35		A

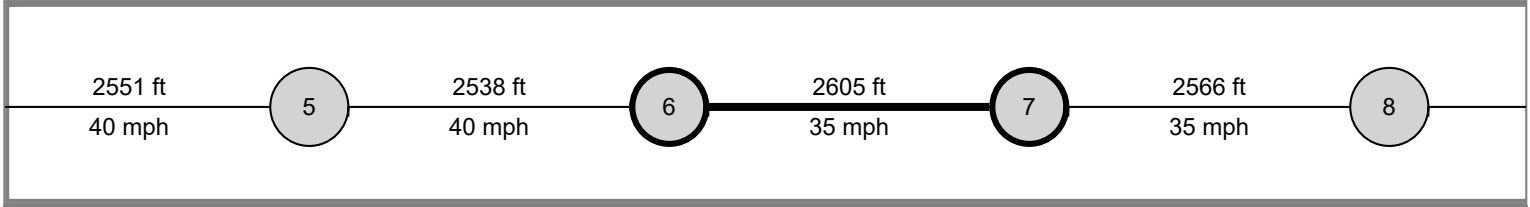
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	25 1/2 Road & Patterson	1st Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (25 1/2 Rd - 26 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
6	35	40	2	2	2605	2605	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
6	Bay/Lane Spillback Time, h		never			never	
6	Shared Lane Spillback Time, h	never		never	never		never
6	Base Free-Flow Speed, mph	40.74			43.09		
6	Running Time, s	45.86			44.19		
6	Running Speed, mph	38.73			40.20		
6	Through Delay, s/veh	29.53			13.90		
6	Travel Time, s	75.39			58.09		
6	Travel Speed, mph	23.56			30.58		
6	Stop Rate, stops/veh	0.72			0.33		
6	Spatial Stop Rate, stops/mi	1.46			0.68		
6	Through vol/cap Ratio	0.51			0.69		
6	Percent of Base FFS	57.83			70.96		
6	Level of Service	C			B		
6	Auto Traveler Perception Score	2.36			2.24		
Multimodal Results (Segment)							
6	Pedestrian Segment LOS Score / LOS	2.90		C	3.04		C
6	Bicycle Segment LOS Score / LOS	2.66		B	2.80		C
6	Transit Segment LOS Score / LOS	1.39		A	0.98		A

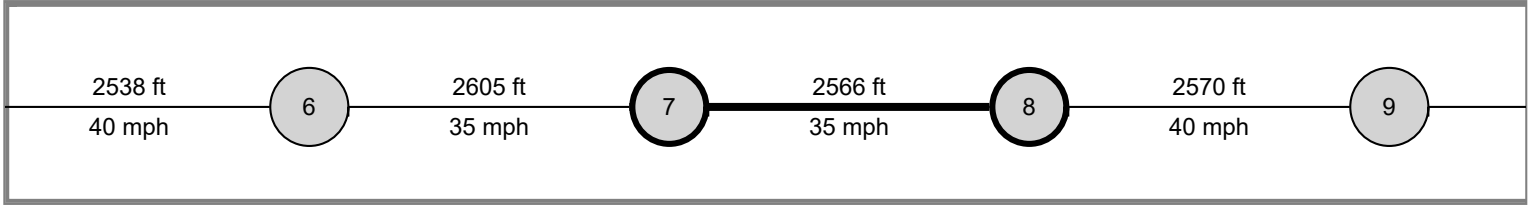
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	1st Street & Patterson	7th Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (26 Rd - 26 1/2)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
7	35	40	2	2	2566	2566	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
7	Bay/Lane Spillback Time, h		never			never	
7	Shared Lane Spillback Time, h	never		never	never		never
7	Base Free-Flow Speed, mph	39.83			42.18		
7	Running Time, s	46.35			44.16		
7	Running Speed, mph	37.75			39.62		
7	Through Delay, s/veh	10.19			33.27		
7	Travel Time, s	56.54			77.42		
7	Travel Speed, mph	30.95			22.60		
7	Stop Rate, stops/veh	0.27			0.75		
7	Spatial Stop Rate, stops/mi	0.55			1.53		
7	Through vol/cap Ratio	0.43			0.75		
7	Percent of Base FFS	77.70			53.58		
7	Level of Service	B			C		
7	Auto Traveler Perception Score	2.22			2.37		
Multimodal Results (Segment)							
7	Pedestrian Segment LOS Score / LOS	2.70		B	2.96		C
7	Bicycle Segment LOS Score / LOS	2.68		B	2.76		C
7	Transit Segment LOS Score / LOS	0.88		A	1.53		A

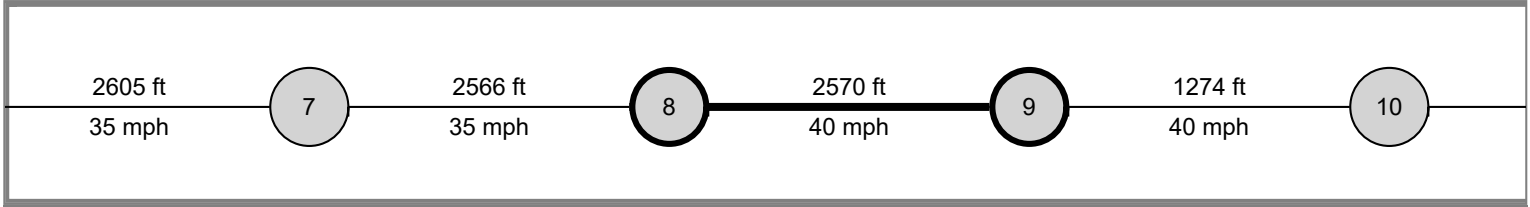
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	7th Street & Patterson	12th Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (26 1/2 Rd to 12th St)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
8	40	35	2	2	2570	2570	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
8	Bay/Lane Spillback Time, h		never			never	
8	Shared Lane Spillback Time, h	never		never	never		never
8	Base Free-Flow Speed, mph	42.34			39.99		
8	Running Time, s	44.02			46.24		
8	Running Speed, mph	39.80			37.90		
8	Through Delay, s/veh	42.61			12.47		
8	Travel Time, s	86.63			58.71		
8	Travel Speed, mph	20.23			29.85		
8	Stop Rate, stops/veh	0.88			0.31		
8	Spatial Stop Rate, stops/mi	1.81			0.64		
8	Through vol/cap Ratio	0.79			0.46		
8	Percent of Base FFS	47.77			74.63		
8	Level of Service	D			B		
8	Auto Traveler Perception Score	2.42			2.24		
Multimodal Results (Segment)							
8	Pedestrian Segment LOS Score / LOS	2.88		C	2.72		B
8	Bicycle Segment LOS Score / LOS	2.79		C	2.62		B
8	Transit Segment LOS Score / LOS	1.73		A	0.95		A

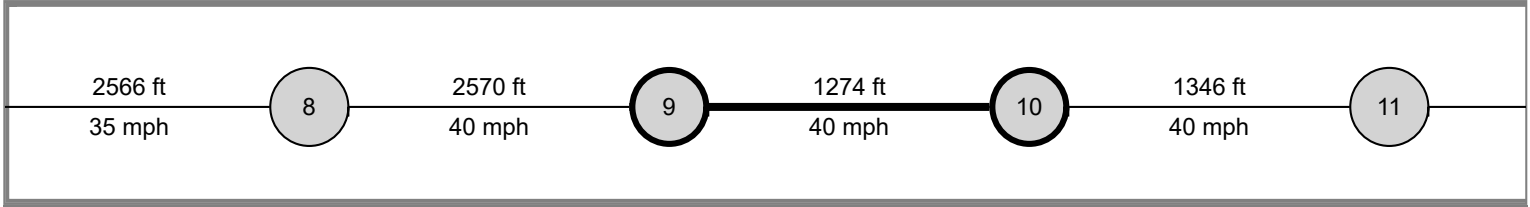
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	12th Street & Patterson	Patterson Rd & 15th St		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (12th St - 27 1/4 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
9	40	35	2	2	1274	1274	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
9	Bay/Lane Spillback Time, h				never	never	
9	Shared Lane Spillback Time, h				never		never
9	Base Free-Flow Speed, mph	42.29			39.94		
9	Running Time, s	23.65			24.85		
9	Running Speed, mph	36.74			34.96		
9	Through Delay, s/veh	2.01			38.03		
9	Travel Time, s	25.65			62.88		
9	Travel Speed, mph	33.86			13.81		
9	Stop Rate, stops/veh	0.07			0.72		
9	Spatial Stop Rate, stops/mi	0.30			2.98		
9	Through vol/cap Ratio	0.38			0.83		
9	Percent of Base FFS	80.07			34.58		
9	Level of Service	A			E		
9	Auto Traveler Perception Score	2.19			2.61		
Multimodal Results (Segment)							
9	Pedestrian Segment LOS Score / LOS	3.00		C	3.33		C
9	Bicycle Segment LOS Score / LOS	2.82		C	2.70		B
9	Transit Segment LOS Score / LOS	0.74		A	2.36		B

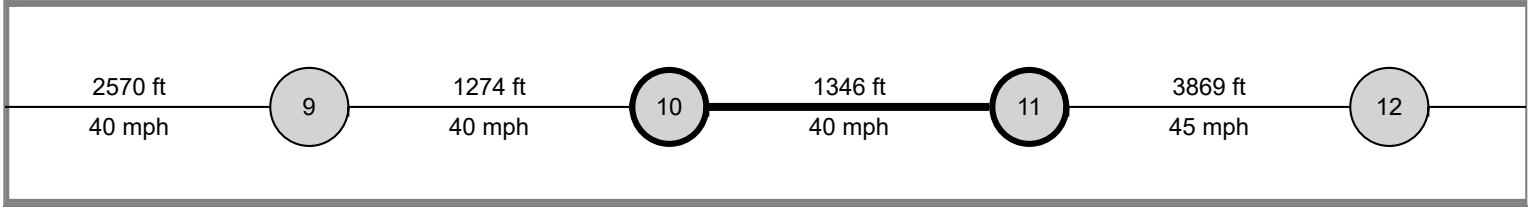
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	Patterson Rd & 15th St	27 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
10	40	40	2	2	1346	1346	50	50	0	0	70	70	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
10	Bay/Lane Spillback Time, h		never				
10	Shared Lane Spillback Time, h	never		never			
10	Base Free-Flow Speed, mph	44.07			44.07		
10	Running Time, s	24.12			24.09		
10	Running Speed, mph	38.05			38.10		
10	Through Delay, s/veh	24.13			3.87		
10	Travel Time, s	48.24			27.95		
10	Travel Speed, mph	19.02			32.83		
10	Stop Rate, stops/veh	0.60			0.16		
10	Spatial Stop Rate, stops/mi	2.36			0.62		
10	Through vol/cap Ratio	0.64			0.28		
10	Percent of Base FFS	43.16			74.49		
10	Level of Service	D			B		
10	Auto Traveler Perception Score	2.74			2.23		
Multimodal Results (Segment)							
10	Pedestrian Segment LOS Score / LOS	3.56		D	3.55		D
10	Bicycle Segment LOS Score / LOS	2.84		C	2.66		B
10	Transit Segment LOS Score / LOS	1.85		A	0.79		A

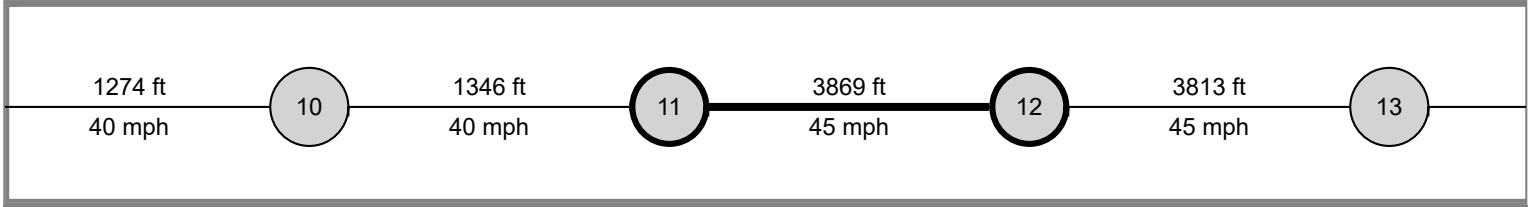
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	27 1/2 Road & Patterson	28 1/4 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (27 1/4 Rd - 27 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
11	45	40	2	2	3869	3869	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement		2	12	1	6	
11	Bay/Lane Spillback Time, h		never			never	
11	Shared Lane Spillback Time, h	never		never	never		
11	Base Free-Flow Speed, mph	45.84			43.49		
11	Running Time, s	60.41			62.49		
11	Running Speed, mph	43.67			42.22		
11	Through Delay, s/veh	29.37			11.38		
11	Travel Time, s	89.78			73.87		
11	Travel Speed, mph	29.38			35.71		
11	Stop Rate, stops/veh	0.73			0.33		
11	Spatial Stop Rate, stops/mi	0.99			0.45		
11	Through vol/cap Ratio	0.65			0.31		
11	Percent of Base FFS	64.10			82.11		
11	Level of Service	C			A		
11	Auto Traveler Perception Score	2.39			2.21		
Multimodal Results (Segment)							
11	Pedestrian Segment LOS Score / LOS	3.87		D	2.76		C
11	Bicycle Segment LOS Score / LOS	2.90		C	2.57		B
11	Transit Segment LOS Score / LOS	1.06		A	0.57		A

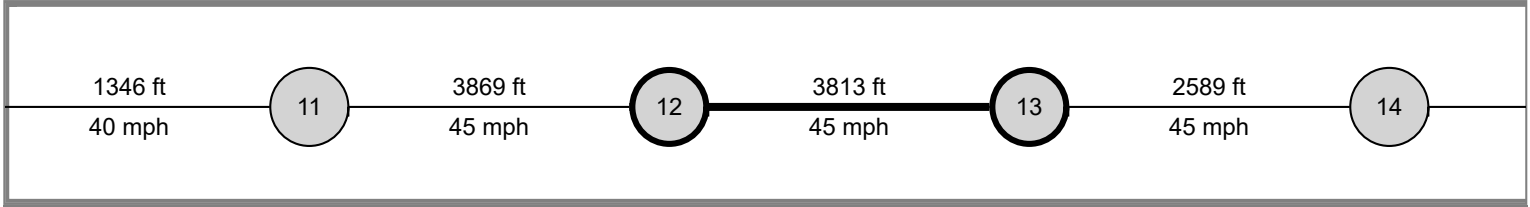
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	28 1/4 Road & Patterson	29 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (28 1/4 Rd - 29 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12	45	40	2	2	3813	3813	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
12	Bay/Lane Spillback Time, h	never	never			never	
12	Shared Lane Spillback Time, h	never		never	never		never
12	Base Free-Flow Speed, mph	44.90			42.55		
12	Running Time, s	60.03			62.97		
12	Running Speed, mph	43.30			41.28		
12	Through Delay, s/veh	32.49			16.34		
12	Travel Time, s	92.52			79.31		
12	Travel Speed, mph	28.10			32.78		
12	Stop Rate, stops/veh	0.67			0.37		
12	Spatial Stop Rate, stops/mi	0.93			0.51		
12	Through vol/cap Ratio	0.90			0.44		
12	Percent of Base FFS	62.57			77.03		
12	Level of Service	C			B		
12	Auto Traveler Perception Score	2.28			2.22		
Multimodal Results (Segment)							
12	Pedestrian Segment LOS Score / LOS	3.64		D	2.76		C
12	Bicycle Segment LOS Score / LOS	2.92		C	2.60		B
12	Transit Segment LOS Score / LOS	1.17		A	0.74		A

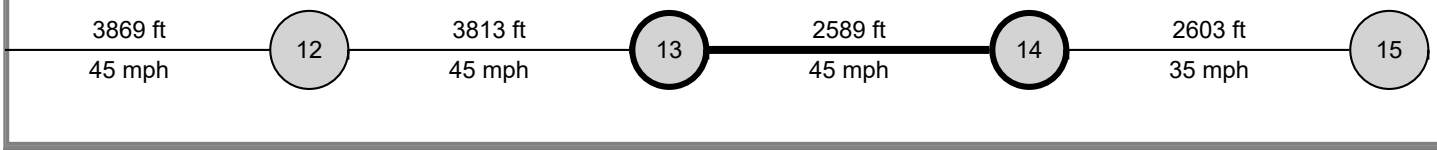
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	29 Road & Patterson	29 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (29 Rd - 29 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
13	45	45	2	2	2589	2589	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
13	Bay/Lane Spillback Time, h		never			never	
13	Shared Lane Spillback Time, h	never		never	never		never
13	Base Free-Flow Speed, mph	43.89			43.89		
13	Running Time, s	41.68			40.57		
13	Running Speed, mph	42.35			43.51		
13	Through Delay, s/veh	8.91			32.44		
13	Travel Time, s	50.59			73.01		
13	Travel Speed, mph	34.90			24.18		
13	Stop Rate, stops/veh	0.26			0.73		
13	Spatial Stop Rate, stops/mi	0.53			1.48		
13	Through vol/cap Ratio	0.61			0.48		
13	Percent of Base FFS	79.50			55.08		
13	Level of Service	B			C		
13	Auto Traveler Perception Score	2.22			2.36		
Multimodal Results (Segment)							
13	Pedestrian Segment LOS Score / LOS	3.48		C	3.37		C
13	Bicycle Segment LOS Score / LOS	3.02		C	2.72		B
13	Transit Segment LOS Score / LOS	0.81		A	1.38		A

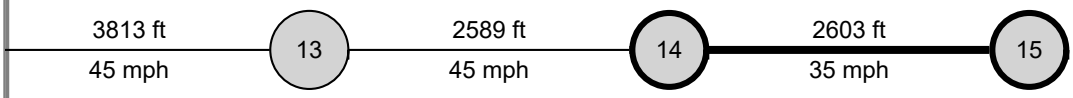
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 NoBuild AM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	29 1/2 Road & Patterson	30 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (29 1/2 Rd - 30 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
14	35	45	2	2	2603	2603	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
14	Bay/Lane Spillback Time, h					never	
14	Shared Lane Spillback Time, h				never		never
14	Base Free-Flow Speed, mph	40.82			45.52		
14	Running Time, s	46.83			40.63		
14	Running Speed, mph	37.90			43.68		
14	Through Delay, s/veh	16.25			2.19		
14	Travel Time, s	63.09			42.81		
14	Travel Speed, mph	28.13			41.45		
14	Stop Rate, stops/veh	0.37			0.07		
14	Spatial Stop Rate, stops/mi	0.75			0.14		
14	Through vol/cap Ratio	0.78			0.26		
14	Percent of Base FFS	68.92			91.07		
14	Level of Service	B			A		
14	Auto Traveler Perception Score	2.25			2.16		
Multimodal Results (Segment)							
14	Pedestrian Segment LOS Score / LOS	3.75		D	2.98		C
14	Bicycle Segment LOS Score / LOS	2.92		C	2.62		B
14	Transit Segment LOS Score / LOS	1.17		A	0.29		A

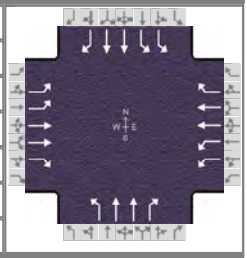
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	801.37	804.78
Facility Travel Speed, mph	26.83	26.72
Facility Base Free Flow Speed, mph	42.73	42.47
Facility Percent of Base FFS	62.79	62.91
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.23	C	3.15	C
Bicycle Facility LOS Score / LOS	2.76	C	2.72	C
Transit Facility LOS Score / LOS	1.16	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

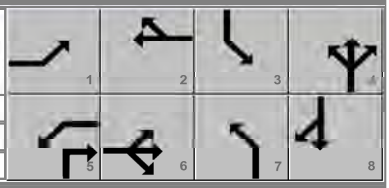
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.91
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	24 Road & Patterson	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	127	195	207	583	327	359	53	741	341	467	936	45

Signal Information			
Cycle, s	100.0	Reference Phase	6
Offset, s	85	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.2	4.1	15.0	7.2	3.8	32.7	
Yellow	3.5	3.5	4.0	3.5	3.5	4.0	
Red	0.5	0.5	1.0	0.5	0.5	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	2.0	3.0	1.1	3.0	2.0	3.0
Phase Duration, s	15.2	20.0	23.3	28.1	11.2	37.7	19.0	45.5
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	11.2		20.5		4.0	22.6	16.8	26.7
Green Extension Time (g_e), s	0.0	0.0	0.0	0.0	0.2	10.1	0.0	12.5
Phase Call Probability	1.00		1.00		0.80	1.00	1.00	1.00
Max Out Probability	1.00		1.00		0.00	0.84	1.00	0.77

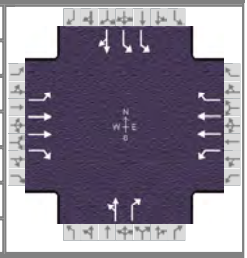
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	370	568	603	641	359	395	58	814	375	513	1029	49
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1675	1752		1716	1738		1810	1738	1585	1730	1752	1518
Queue Service Time (g_s), s	9.2	15.0		18.5	8.9		2.0	20.6	14.9	14.8	24.7	2.0
Cycle Queue Clearance Time (g_c), s	9.2	15.0		18.5	8.9		2.0	20.6	14.9	14.8	24.7	2.0
Green Ratio (*g/C*)	0.26	0.15		0.19	0.23		0.40	0.33	0.52	0.15	0.40	0.40
Capacity (*c*), veh/h	688	526		664	803		275	1136	824	519	1418	614
Volume-to-Capacity Ratio (*X*)	0.538	1.081		0.966	0.447		0.211	0.717	0.455	0.989	0.725	0.081
Back of Queue (*Q*), ft/ln (90 th percentile)	156.9	383.6		308.3	141.9		33.9	283.7	179.7	280.2	318.3	28.8
Back of Queue (*Q*), veh/ln (90 th percentile)	6.8	16.9		13.7	6.2		1.5	12.4	8.0	12.5	14.0	1.2
Queue Storage Ratio (*RQ*) (90 th percentile)	0.88	0.00		1.39	0.00		0.26	0.00	1.02	2.11	0.00	0.44
Uniform Delay (d_1), s/veh	34.2	49.8		40.0	33.0		20.7	29.6	15.1	42.4	25.1	18.3
Incremental Delay (d_2), s/veh	1.1	62.8		24.8	1.6		0.5	2.1	0.6	36.6	1.9	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	35.3	112.7	0.0	64.8	34.6	0.0	21.2	31.7	15.6	79.0	27.0	18.4
Level of Service (LOS)	D	F	A	E	C	A	C	C	B	E	C	B
Approach Delay, s/veh / LOS	50.0	D		38.7	D		26.4	C		43.5	D	
Intersection Delay, s/veh / LOS	40.4						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.59	C	2.58	C	2.57	C
Bicycle LOS Score / LOS	0.97	A	1.64	B	1.52	B	1.80	B

Copyright © 2020 University of Florida, All Rights Reserved.

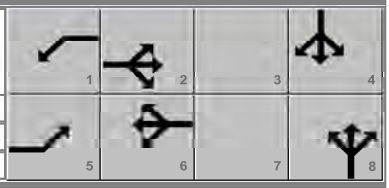
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	Market Street/Mall Acce…	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	159	732	141	31	905	336	124	82	34	315	28	257

Signal Information					EB			WB			NB			SB		
Cycle, s	100.0	Reference Phase	2													
Offset, s	97	Reference Point	Begin													
Uncoordinated	No	Simult. Gap E/W	On	Green	1.4	6.5		29.7	24.0	15.5	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	3.5		4.0	4.0	4.0	0.0					
				Red	0.5	0.5		1.0	1.0	1.0	0.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	3.0	1.1	3.0		11.0		10.0
Phase Duration, s	15.9	45.2	5.4	34.7		20.5		29.0
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0		5.0		5.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.4
Queue Clearance Time (g_s), s	11.6		2.4			15.1		22.2
Green Extension Time (g_e), s	0.3	0.0	0.0	0.0		0.3		1.8
Phase Call Probability	1.00		0.27			1.00		1.00
Max Out Probability	0.01		0.00			0.12		0.00

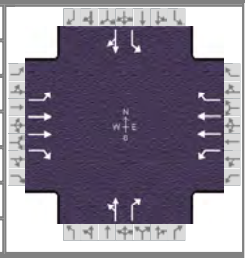
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	243	1120	216	11	332	123		248	41	380	343	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1711	1766	1610	1810	1766	1522		1844	1610	1702	1635	
Queue Service Time (g_s), s	9.6	21.9	2.8	0.4	6.4	5.1		13.1	2.2	9.5	20.2	
Cycle Queue Clearance Time (g_c), s	9.6	21.9	2.8	0.4	6.4	5.1		13.1	2.2	9.5	20.2	
Green Ratio (*g/C*)	0.44	0.40	0.40	0.31	0.30	0.30		0.15	0.15	0.24	0.24	
Capacity (*c*), veh/h	511	1421	648	180	1049	452		285	249	816	392	
Volume-to-Capacity Ratio (*X*)	0.476	0.788	0.333	0.063	0.317	0.273		0.871	0.165	0.465	0.876	
Back of Queue (*Q*), ft/ln (90 th percentile)	108.9	164.5	33.9	7.5	103.4	78.9		226.1	34.9	147.8	271.6	
Back of Queue (*Q*), veh/ln (90 th percentile)	4.7	7.3	1.5	0.3	4.6	3.4		10.3	1.6	6.5	12.3	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.74	0.00	0.27	0.07	0.00	0.74		0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	17.1	13.1	4.6	25.2	22.6	20.9		41.3	36.7	32.5	36.6	
Incremental Delay (d_2), s/veh	0.1	2.1	0.6	0.1	0.7	1.4		11.9	0.1	0.2	5.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	17.2	15.2	5.3	25.2	23.4	22.3		53.2	36.8	32.7	41.9	
Level of Service (LOS)	B	B	A	C	C	C		D	D	C	D	
Approach Delay, s/veh / LOS	14.2	B		23.1	C		50.9	D		37.0	D	
Intersection Delay, s/veh / LOS	24.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.91	B	2.12	B	2.47	B	2.45	B
Bicycle LOS Score / LOS	1.51	B	1.75	B	0.96	A	1.68	B

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

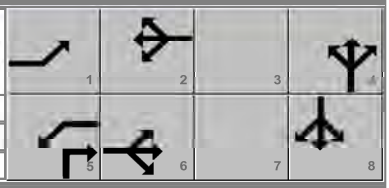
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.84
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	Home Depot Access/Me…	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	85	760	227	130	876	65	279	72	249	88	45	127

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	78	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	Off
Force Mode	Fixed	Simult. Gap N/S	Off

Green	5.4	1.8	32.9	14.6	26.4	0.0	
Yellow	3.5	0.0	4.0	4.0	4.0	0.0	
Red	0.5	0.0	1.0	1.0	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2		4		8
Case Number	1.1	3.0	1.1	3.0		11.0		10.0
Phase Duration, s	11.2	39.7	9.4	37.9		31.4		19.6
Change Period, (*Y+R c*), s	4.0	5.0	4.0	5.0		5.0		5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0		5.4		5.5
Queue Clearance Time (*g s*), s	7.0		5.5			23.8		13.9
Green Extension Time (*g e*), s	0.4	0.0	0.3	0.0		2.5		0.7
Phase Call Probability	0.97		0.93			1.00		1.00
Max Out Probability	0.05		0.00			0.83		1.00

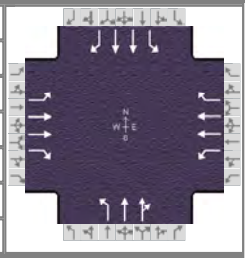
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	132	1178	352	96	647	48		418	296	105	205	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1711	1766	1598	1810	1752	1610		1827	1610	1767	1677	
Queue Service Time (*g s*), s	5.0	31.4	9.4	3.5	15.8	2.5		21.8	15.4	5.4	11.9	
Cycle Queue Clearance Time (*g c*), s	5.0	31.4	9.4	3.5	15.8	2.5		21.8	15.4	5.4	11.9	
Green Ratio (*g/C*)	0.40	0.35	0.35	0.38	0.33	0.33		0.26	0.32	0.15	0.15	
Capacity (*c*), veh/h	318	1225	554	174	1153	530		482	511	257	244	
Volume-to-Capacity Ratio (*X*)	0.415	0.961	0.635	0.552	0.561	0.091		0.867	0.580	0.407	0.839	
Back of Queue (*Q*), ft/ln (90 th percentile)	91.7	323.1	102.5	62.2	233.8	39.2		345.9	204.8	99.4	203.2	
Back of Queue (*Q*), veh/ln (90 th percentile)	3.9	14.3	4.6	2.8	10.3	1.8		15.7	9.3	4.4	9.2	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.68	0.00	0.51	0.57	0.00	0.00		0.00	2.33	0.75	0.00	
Uniform Delay (*d 1*), s/veh	22.6	18.7	8.0	25.1	30.1	28.5		35.1	28.5	38.8	41.6	
Incremental Delay (*d 2*), s/veh	1.1	16.9	5.0	3.6	1.8	0.3		13.1	1.6	1.5	17.2	
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	23.7	35.6	13.0	28.7	31.9	28.8		48.3	30.1	40.3	58.8	
Level of Service (LOS)	C	D	B	C	C	C		D	C	D	E	
Approach Delay, s/veh / LOS	29.9	C		31.3	C		40.7	D		52.5	D	
Intersection Delay, s/veh / LOS	34.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.92	B	1.92	B	2.44	B	2.47	B
Bicycle LOS Score / LOS	1.54	B	1.54	B	1.67	B	1.00	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

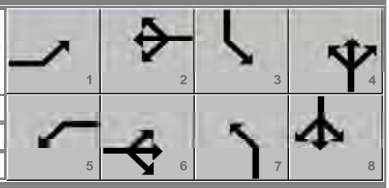
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.92
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	24 1/2 Rd & Patterson	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	102	670	251	267	735	282	254	410	206	227	333	100

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	61	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.9	1.6	40.8	6.0	2.0	22.1						
Yellow	3.5	0.0	4.0	3.5	0.0	4.0						
Red	0.5	0.0	1.5	0.5	0.0	1.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	12.9	46.3	14.5	48.0	10.0	27.1	12.0	29.1
Change Period, (*Y+R c*), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	8.0		9.2		8.0	20.5	10.0	10.8
Green Extension Time (*g e*), s	1.0	0.0	1.4	0.0	0.0	1.6	0.0	6.1
Phase Call Probability	0.99		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	1.00	1.00	0.41

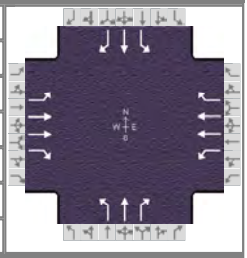
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	182	1197	449	235	647	248	276	353	317	247	362	109
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1697	1781	1610	1810	1766	1598	1767	1856	1646	1767	1738	1397
Queue Service Time (*g s*), s	6.0	31.1	24.2	7.2	11.8	12.7	6.0	18.3	18.5	8.0	8.8	6.4
Cycle Queue Clearance Time (*g c*), s	6.0	31.1	24.2	7.2	11.8	12.7	6.0	18.3	18.5	8.0	8.8	6.4
Green Ratio (*g/C*)	0.50	0.41	0.41	0.51	0.42	0.42	0.28	0.22	0.22	0.30	0.24	0.24
Capacity (*c*), veh/h	393	1454	658	292	1500	678	300	410	364	241	838	337
Volume-to-Capacity Ratio (*X*)	0.464	0.823	0.682	0.804	0.432	0.366	0.921	0.860	0.870	1.026	0.432	0.323
Back of Queue (*Q*), ft/ln (90 th percentile)	101.4	426.6	321.8	125.9	161.5	181.3	222.4	314.7	290.1	217.7	140.7	98.6
Back of Queue (*Q*), veh/ln (90 th percentile)	4.3	19.1	14.6	5.7	7.2	8.2	9.9	14.0	13.1	9.7	6.1	3.9
Queue Storage Ratio (*RQ*) (90 th percentile)	0.76	0.00	1.46	0.95	0.00	0.73	1.67	0.00	0.00	1.64	0.00	0.00
Uniform Delay (*d 1*), s/veh	16.0	31.1	28.2	22.1	17.6	25.8	37.4	37.5	37.6	34.4	32.1	31.2
Incremental Delay (*d 2*), s/veh	1.1	4.8	5.0	6.6	0.8	1.4	32.5	16.3	19.2	64.8	0.5	0.8
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	17.0	36.0	33.3	28.7	18.4	27.2	70.0	53.7	56.8	99.3	32.6	32.0
Level of Service (LOS)	B	D	C	C	B	C	E	D	E	F	C	C
Approach Delay, s/veh / LOS	33.4	C		22.5	C		59.5	E		55.5	E	
Intersection Delay, s/veh / LOS	39.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.27	B	2.42	B	2.45	B	2.44	B
Bicycle LOS Score / LOS	1.40	A	1.64	B	1.27	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

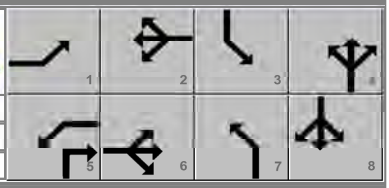
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.87
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	25 Road & Patterson	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	66	921	181	281	905	147	223	338	257	218	317	110

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	38	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.0	14.0	18.0	7.0	3.0	22.0	
Yellow	3.5	3.5	4.5	3.5	3.5	4.0	
Red	0.5	0.5	1.5	0.5	0.5	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	31.0	42.0	13.0	24.0	18.0	34.0	11.0	27.0
Change Period, ($Y+R_c$), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	5.2		11.0		12.6	21.4	9.0	21.6
Green Extension Time (g_e), s	0.5	0.0	0.0	0.0	0.2	4.1	0.0	0.2
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		1.00		1.00	0.80	1.00	1.00

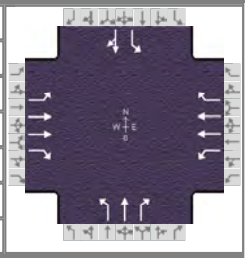
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	108	1501	295	218	701	114	256	389	278	251	364	126
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1781	1585	1795	1795	1585	1753	1811	1610	1795	1811	1585
Queue Service Time (g_s), s	3.2	36.0	9.4	9.0	18.0	6.8	10.6	19.4	12.9	7.0	19.6	6.8
Cycle Queue Clearance Time (g_c), s	3.2	36.0	9.4	9.0	18.0	6.8	10.6	19.4	12.9	7.0	19.6	6.8
Green Ratio (*g/C*)	0.47	0.36	0.36	0.27	0.18	0.18	0.38	0.29	0.38	0.29	0.22	0.22
Capacity (*c*), veh/h	545	1282	571	234	646	285	338	525	612	257	398	349
Volume-to-Capacity Ratio (*X*)	0.197	1.171	0.517	0.931	1.084	0.399	0.757	0.740	0.455	0.976	0.914	0.363
Back of Queue (*Q*), ft/ln (90 th percentile)	52.9	786.2	104.8	216	390.1	125.2	196	311.2	177.4	210.5	367.2	111.4
Back of Queue (*Q*), veh/ln (90 th percentile)	2.3	35.2	4.7	9.7	17.6	5.6	8.6	13.5	8.1	9.5	15.9	5.0
Queue Storage Ratio (*RQ*) (90 th percentile)	0.30	0.00	0.66	1.22	0.00	0.96	0.88	0.00	1.01	1.59	0.00	0.84
Uniform Delay (d_1), s/veh	15.4	22.3	12.0	33.3	40.2	40.2	25.3	32.1	23.2	36.3	38.1	33.1
Incremental Delay (d_2), s/veh	0.8	85.0	3.1	38.9	57.8	3.5	14.6	9.0	2.4	50.4	28.0	2.9
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	16.2	107.3	15.1	72.1	98.0	43.7	39.9	41.1	25.7	86.7	66.1	36.0
Level of Service (LOS)	B	F	B	E	F	D	D	D	C	F	E	D
Approach Delay, s/veh / LOS	87.9	F		86.5	F		36.1	D		67.9	E	
Intersection Delay, s/veh / LOS	74.0						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.13	B	2.44	B	2.45	B
Bicycle LOS Score / LOS	1.60	B	1.75	B	2.01	B	1.71	B

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.82
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	25 1/2 Road & Patterson	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	92	1205	144	181	1180	147	93	190	189	184	159	75

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	80	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.6	0.1	48.9	6.0	1.0	17.4	1	2	3	4		
Yellow	3.5	0.0	4.5	3.5	0.0	4.0	5	6	7	8		
Red	0.5	0.0	1.5	0.5	0.0	1.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	11.6	54.9	11.7	55.0	10.0	22.4	11.0	23.4
Change Period, (*Y+R c*), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.3	5.2	5.3
Queue Clearance Time (*g s*), s	4.9		5.3		7.3	16.1	9.0	17.9
Green Extension Time (*g e*), s	0.3	0.0	0.6	0.0	0.0	0.9	0.0	0.5
Phase Call Probability	0.95		0.97		1.00	1.00	1.00	1.00
Max Out Probability	0.17		0.00		1.00	1.00	1.00	1.00

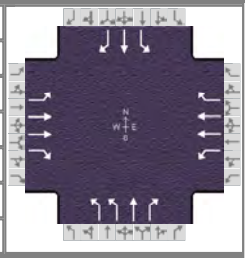
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	111	1449	173	123	805	100	113	232	230	224	285	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1781	1598	1781	1781	1572	1767	1885	1585	1682	1754	
Queue Service Time (*g s*), s	2.9	26.8	1.5	3.3	5.0	0.3	5.3	11.6	14.1	7.0	15.9	
Cycle Queue Clearance Time (*g c*), s	2.9	26.8	1.5	3.3	5.0	0.3	5.3	11.6	14.1	7.0	15.9	
Green Ratio (*g/C*)	0.56	0.49	0.49	0.57	0.49	0.49	0.23	0.17	0.17	0.24	0.18	
Capacity (*c*), veh/h	473	1740	781	279	1744	770	184	328	276	241	323	
Volume-to-Capacity Ratio (*X*)	0.234	0.833	0.222	0.443	0.462	0.130	0.617	0.706	0.836	0.931	0.884	
Back of Queue (*Q*), ft/ln (90 th percentile)	45.6	193.5	21.2	54.5	55.3	6.4	115.7	199.4	227.4	189.2	283.2	
Back of Queue (*Q*), veh/ln (90 th percentile)	2.1	8.7	1.0	2.4	2.5	0.3	5.1	9.0	10.2	8.0	12.6	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.35	0.00	0.17	0.41	0.00	0.05	1.04	0.00	2.57	1.41	0.00	
Uniform Delay (*d 1*), s/veh	11.1	9.5	2.9	17.8	3.7	1.2	32.9	38.9	39.9	38.4	39.8	
Incremental Delay (*d 2*), s/veh	0.3	4.4	0.6	1.3	0.7	0.3	14.5	7.0	19.3	42.6	23.5	
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	11.5	13.9	3.5	19.0	4.4	1.4	47.4	45.9	59.3	81.0	63.3	
Level of Service (LOS)	B	B	A	B	A	A	D	D	E	F	E	
Approach Delay, s/veh / LOS	12.7	B		5.9	A		51.5	D		71.1	E	
Intersection Delay, s/veh / LOS	24.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.09	B	1.90	B	2.45	B	2.45	B
Bicycle LOS Score / LOS	1.94	B	2.00	B	1.44	A	1.33	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

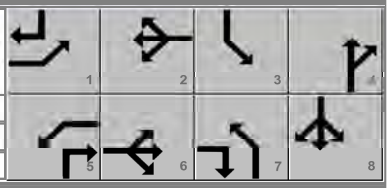
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.77
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	1st Street & Patterson	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	115	1234	197	217	1180	124	210	394	193	165	311	80

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	50	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.8	36.0	7.0	3.2	27.5	0.0
Yellow	3.5	3.0	3.5	0.0	4.0	0.0
Red	0.5	2.5	0.5	0.0	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	2.0	3.0	1.1	3.0
Phase Duration, s	11.8	41.4	11.9	41.5	14.2	35.8	11.0	32.5
Change Period, (*Y+R c*), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	6.4		7.0		9.6	28.4	9.0	21.8
Green Extension Time (*g e*), s	0.6	0.0	0.7	0.0	0.6	2.4	0.0	4.2
Phase Call Probability	0.97		0.98		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	1.00	1.00	0.87

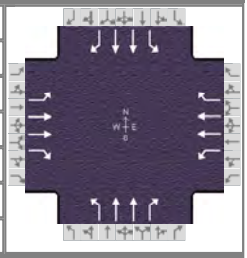
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	129	1385	221	144	784	82	273	512	251	214	404	104
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1766	1598	1781	1781	1572	1743	1856	1598	1810	1885	1610
Queue Service Time (*g s*), s	4.4	35.9	7.6	5.0	16.1	2.4	7.6	26.4	11.4	7.0	19.8	4.5
Cycle Queue Clearance Time (*g c*), s	4.4	35.9	7.6	5.0	16.1	2.4	7.6	26.4	11.4	7.0	19.8	4.5
Green Ratio (*g/C*)	0.44	0.36	0.46	0.44	0.36	0.36	0.10	0.31	0.39	0.35	0.28	0.35
Capacity (*c*), veh/h	329	1267	737	212	1280	565	357	571	617	216	519	569
Volume-to-Capacity Ratio (*X*)	0.393	1.093	0.300	0.680	0.612	0.146	0.764	0.896	0.406	0.993	0.778	0.183
Back of Queue (*Q*), ft/ln (90 th percentile)	75.5	695.5	99.6	76	184.5	35.4	131.5	423.2	152.7	181.8	306.4	66.5
Back of Queue (*Q*), veh/ln (90 th percentile)	3.4	30.9	4.5	3.4	8.3	1.6	5.9	18.8	6.9	8.3	13.8	3.0
Queue Storage Ratio (*RQ*) (90 th percentile)	0.57	0.00	0.75	0.69	0.00	0.32	0.99	0.00	1.15	1.65	0.00	0.00
Uniform Delay (*d 1*), s/veh	20.3	31.3	13.8	21.8	20.5	14.1	43.7	33.1	22.3	31.6	33.4	22.4
Incremental Delay (*d 2*), s/veh	0.9	52.8	0.9	3.3	1.3	0.3	6.0	16.3	0.6	59.1	7.3	0.2
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	21.3	84.2	14.6	25.1	21.9	14.5	49.7	49.4	23.0	90.6	40.7	22.6
Level of Service (LOS)	C	F	B	C	C	B	D	D	C	F	D	C
Approach Delay, s/veh / LOS	70.6	E		21.7	C		43.1	D		52.9	D	
Intersection Delay, s/veh / LOS	50.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.28	B	2.11	B	2.44	B	2.44	B
Bicycle LOS Score / LOS	2.14	B	2.12	B	2.20	B	1.68	B

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

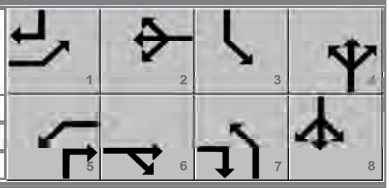
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.80
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	7th Street & Patterson	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	147	1222	163	202	934	172	245	586	275	151	311	173

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	10	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.3	2.1		31.9	6.0	3.7	29.0					
Yellow	3.5	0.0		4.0	3.5	0.0	4.0					
Red	0.5	0.0		1.0	0.5	0.0	1.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	15.5	39.0	13.3	36.9	10.0	34.0	13.7	37.6
Change Period, (*Y+R c*), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	11.3		8.5		8.0	19.2	9.0	10.8
Green Extension Time (*g e*), s	0.3	0.0	0.9	0.0	0.0	9.8	0.7	13.6
Phase Call Probability	0.99		0.99		1.00	1.00	0.99	1.00
Max Out Probability	1.00		0.00		1.00	0.58	0.05	0.32

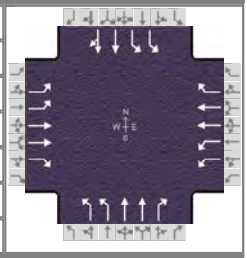
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	172	1429	160	179	827	148	306	733	328	189	389	216
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1766	1359	1810	1781	1542	1767	1795	1591	1795	1809	1586
Queue Service Time (*g s*), s	9.3	34.0	4.3	6.5	19.5	7.6	6.0	17.2	15.1	7.0	8.1	8.8
Cycle Queue Clearance Time (*g c*), s	9.3	34.0	4.3	6.5	19.5	7.6	6.0	17.2	15.1	7.0	8.1	8.8
Green Ratio (*g/C*)	0.11	0.34	0.40	0.41	0.32	0.32	0.35	0.29	0.38	0.40	0.33	0.44
Capacity (*c*), veh/h	207	1203	557	240	1136	492	360	1041	610	309	1181	701
Volume-to-Capacity Ratio (*X*)	0.829	1.188	0.288	0.744	0.728	0.301	0.850	0.704	0.537	0.612	0.329	0.309
Back of Queue (*Q*), ft/ln (90 th percentile)	160.8	745.7	46.9	98	241.4	132.7	209.2	223.1	174.5	117.8	127.7	121
Back of Queue (*Q*), veh/ln (90 th percentile)	7.3	33.1	2.1	4.5	10.8	5.8	9.3	10.1	7.9	5.3	5.8	5.5
Queue Storage Ratio (*RQ*) (90 th percentile)	0.91	0.00	0.30	0.74	0.00	0.87	0.94	0.00	0.99	1.07	0.00	0.00
Uniform Delay (*d 1*), s/veh	42.5	20.5	8.8	22.0	25.7	27.3	32.2	27.1	20.5	22.7	25.4	18.1
Incremental Delay (*d 2*), s/veh	13.7	91.7	1.1	4.8	3.1	1.2	17.8	1.7	1.0	2.8	0.2	0.4
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	56.2	112.1	9.9	26.8	28.8	28.4	50.0	28.7	21.5	25.4	25.6	18.4
Level of Service (LOS)	E	F	A	C	C	C	D	C	C	C	C	B
Approach Delay, s/veh / LOS	97.4	F		28.4	C		31.8	C		23.6	C	
Intersection Delay, s/veh / LOS	52.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.44	B	2.45	B	2.47	B
Bicycle LOS Score / LOS	2.04	B	1.83	B	1.61	B	1.14	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

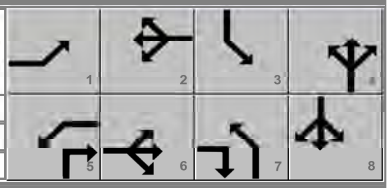
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.80
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	12th Street & Patterson	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	246	1289	117	106	795	151	145	629	146	288	542	238

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	59	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.0	6.0	29.5	7.0	26.0	0.0	
Yellow	3.5	3.5	4.0	3.5	4.0	0.0	
Red	0.5	0.5	1.5	0.5	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	23.0	45.0	13.0	35.0	11.0	31.0	11.0	31.0
Change Period, (*Y+R c*), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	7.1		4.6		5.7	23.0	9.0	28.0
Green Extension Time (*g e*), s	1.6	0.0	0.2	0.0	0.1	2.6	0.0	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.07		1.00		1.00	1.00	1.00	1.00

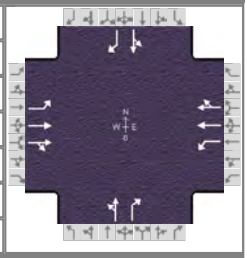
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	327	1715	156	136	1020	194	181	786	183	360	515	460
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1730	1766	1605	1743	1795	1598	1730	1781	1572	1743	1870	1670
Queue Service Time (*g s*), s	5.1	39.5	6.3	2.6	27.7	7.1	3.7	21.0	8.5	7.0	26.0	26.0
Cycle Queue Clearance Time (*g c*), s	5.1	39.5	6.3	2.6	27.7	7.1	3.7	21.0	8.5	7.0	26.0	26.0
Green Ratio (*g/C*)	0.50	0.40	0.47	0.38	0.30	0.30	0.33	0.26	0.35	0.33	0.26	0.26
Capacity (*c*), veh/h	818	1396	747	458	1059	471	386	926	550	424	486	434
Volume-to-Capacity Ratio (*X*)	0.400	1.229	0.208	0.297	0.963	0.411	0.469	0.849	0.332	0.850	1.059	1.059
Back of Queue (*Q*), ft/ln (90 th percentile)	76.1	1123.4	118.3	45.7	370.4	93.2	68.2	314.8	127.7	151.7	574.5	527
Back of Queue (*Q*), veh/ln (90 th percentile)	3.4	49.8	5.4	2.1	16.7	4.2	3.1	14.1	5.7	6.8	25.7	23.6
Queue Storage Ratio (*RQ*) (90 th percentile)	0.43	0.00	0.81	0.17	0.00	0.70	0.31	0.00	0.58	1.15	0.00	0.00
Uniform Delay (*d 1*), s/veh	18.2	33.0	17.8	26.2	29.1	17.5	27.1	35.1	23.9	29.9	37.0	37.0
Incremental Delay (*d 2*), s/veh	0.9	107.1	0.4	1.4	17.8	2.2	4.1	9.6	1.6	18.8	57.4	59.7
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	19.1	140.1	18.2	27.6	46.9	19.7	31.1	44.7	25.5	48.7	94.4	96.7
Level of Service (LOS)	B	F	B	C	D	B	C	D	C	D	F	F
Approach Delay, s/veh / LOS	113.5	F		41.1	D		39.5	D		82.9	F	
Intersection Delay, s/veh / LOS	76.4						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.57	C	2.44	B	2.58	C	2.58	C
Bicycle LOS Score / LOS	2.19	B	1.57	B	1.44	A	1.59	B

Copyright © 2020 University of Florida, All Rights Reserved.

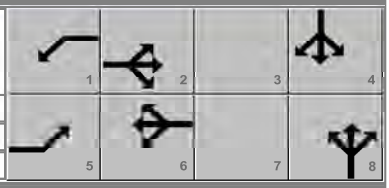
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.95
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	Patterson Rd & 15th St	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	69	1629	30	22	1052	27	14	4	36	43	2	64

Signal Information												
Cycle, s	100.0	Reference Phase	2									
Offset, s	53	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	3.4	2.1	76.1	6.4	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	0.0	0.0		
				Red	0.0	0.0	0.0	0.0	0.0	0.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		7.0		7.0
Phase Duration, s	9.5	82.2	7.4	80.1		10.4		10.4
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0		4.0		4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	3.0		2.4			4.3		6.2
Green Extension Time (g_e), s	0.2	0.0	0.0	0.0		0.3		0.3
Phase Call Probability	0.92		0.56			0.99		0.99
Max Out Probability	0.00		0.00			0.00		0.00

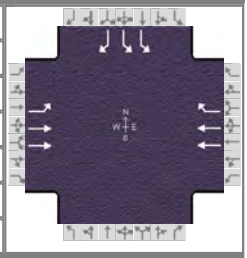
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	90	1077	1077	30	729	724		19	38		47	67
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1856	1844	1781	1885	1868		1529	1585		1434	1585
Queue Service Time (g_s), s	1.0	26.7	27.3	0.4	1.7	1.6		0.0	2.3		2.1	4.2
Cycle Queue Clearance Time (g_c), s	1.0	26.7	27.3	0.4	1.7	1.6		1.1	2.3		3.2	4.2
Green Ratio (*g/C*)	0.82	0.78	0.78	0.79	0.76	0.76		0.06	0.06		0.06	0.06
Capacity (*c*), veh/h	442	1451	1441	222	1434	1421		163	102		163	102
Volume-to-Capacity Ratio (*X*)	0.203	0.742	0.747	0.133	0.508	0.509		0.117	0.371		0.291	0.659
Back of Queue (*Q*), ft/ln (90 th percentile)	6.7	178.7	177.3	6.3	12.1	11.6		18	37		46.2	68.4
Back of Queue (*Q*), veh/ln (90 th percentile)	0.3	7.9	8.1	0.3	0.5	0.5		0.8	1.7		2.1	3.1
Queue Storage Ratio (*RQ*) (90 th percentile)	0.08	0.00	0.00	0.07	0.00	0.00		0.00	0.84		0.00	1.55
Uniform Delay (d_1), s/veh	1.8	4.4	4.5	6.8	0.3	0.3		44.2	44.8		45.2	45.7
Incremental Delay (d_2), s/veh	0.1	2.2	2.3	0.0	0.2	0.2		0.1	0.8		0.4	2.7
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	1.8	6.6	6.7	6.8	0.5	0.5		44.3	45.7		45.6	48.4
Level of Service (LOS)	A	A	A	A	A	A		D	D		D	D
Approach Delay, s/veh / LOS	6.4	A		0.6	A		45.2	D		47.2	D	
Intersection Delay, s/veh / LOS	6.0						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.83	B	1.84	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.99	B	1.44	A	0.58	A	0.68	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

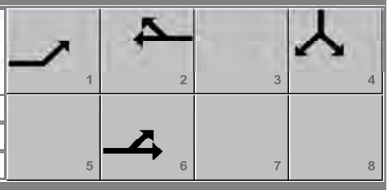
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	27 1/2 Road & Patterson	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	217	1478			941	362				543		135

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	19	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	16.0	48.0	21.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.0	0.0	0.0	0.0
Red	0.5	1.5	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6		2				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	20.0	74.0		54.0				26.0
Change Period, (*Y+R c*), s	4.0	6.0		6.0				5.0
Max Allow Headway (*MAH*), s	5.2	0.0		0.0				5.3
Queue Clearance Time (*g s*), s	7.3							20.1
Green Extension Time (*g e*), s	0.8	0.0		0.0				0.5
Phase Call Probability	1.00							1.00
Max Out Probability	0.20							1.00

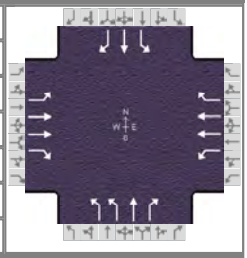
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				7		14
Adjusted Flow Rate (*v*), veh/h	233	1589			1082	416				654		163
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1795			1795	1610				1757		1522
Queue Service Time (*g s*), s	5.3	17.9			19.9	15.0				18.1		9.5
Cycle Queue Clearance Time (*g c*), s	5.3	17.9			19.9	15.0				18.1		9.5
Green Ratio (*g/C*)	0.66	0.68			0.48	0.48				0.21		0.21
Capacity (*c*), veh/h	449	2441			1723	773				738		320
Volume-to-Capacity Ratio (*X*)	0.519	0.651			0.628	0.539				0.887		0.509
Back of Queue (*Q*), ft/ln (90 th percentile)	116.9	134.8			219.3	161.6				284.7		150.6
Back of Queue (*Q*), veh/ln (90 th percentile)	5.1	6.1			9.9	7.3				12.9		6.5
Queue Storage Ratio (*RQ*) (90 th percentile)	0.77	0.00			0.00	3.06				1.70		0.00
Uniform Delay (*d 1*), s/veh	15.9	4.8			15.1	13.1				38.3		34.9
Incremental Delay (*d 2*), s/veh	3.2	1.0			1.5	2.2				14.8		5.7
Initial Queue Delay (*d 3*), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (*d*), s/veh	19.1	5.8			16.5	15.3				53.1		40.6
Level of Service (LOS)	B	A			B	B				D		D
Approach Delay, s/veh / LOS	7.5	A		16.2	B		0.0			50.6	D	
Intersection Delay, s/veh / LOS	19.2						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.67	A	2.09	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	2.17	B	1.78	B				F

Copyright © 2020 University of Florida, All Rights Reserved.

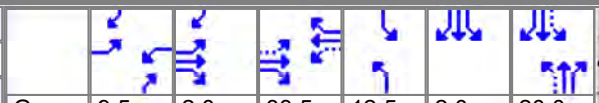
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	29 Road & Patterson	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					

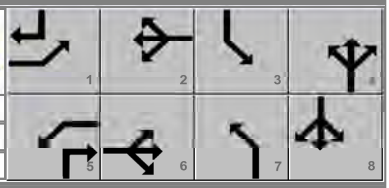


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	220	1249	310	126	809	57	245	273	267	161	95	166

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	69	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	9.5	2.0	33.5	12.5	2.0	20.0	
Yellow	3.5	0.0	4.5	3.5	0.0	4.0	
Red	1.0	0.0	2.0	1.0	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	16.0	42.0	14.0	40.0	17.0	25.0	19.0	27.0
Change Period, (*Y+R c*), s	4.5	6.5	4.5	6.5	4.5	5.0	4.5	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (*g s*), s	9.7		8.4		8.4	19.1	10.1	8.3
Green Extension Time (*g e*), s	0.1	0.0	0.1	0.0	0.5	0.4	0.2	3.1
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		1.00		1.00	1.00	0.91	0.13

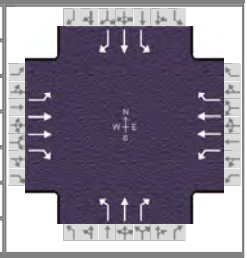
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	222	1258	312	177	1134	80	295	329	280	194	114	140
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1795	1572	1767	1781	1585	1716	1870	1610	1753	1870	1610
Queue Service Time (*g s*), s	7.7	34.6	10.3	6.4	31.1	4.1	6.4	17.1	14.8	8.1	5.1	6.3
Cycle Queue Clearance Time (*g c*), s	7.7	34.6	10.3	6.4	31.1	4.1	6.4	17.1	14.8	8.1	5.1	6.3
Green Ratio (*g/C*)	0.45	0.36	0.36	0.43	0.34	0.34	0.32	0.20	0.30	0.34	0.22	0.34
Capacity (*c*), veh/h	289	1274	558	240	1193	531	906	374	475	350	411	539
Volume-to-Capacity Ratio (*X*)	0.767	0.987	0.559	0.736	0.950	0.150	0.326	0.879	0.588	0.555	0.278	0.259
Back of Queue (*Q*), ft/ln (90 th percentile)	150.4	392.1	103.6	103.4	414.9	89.4	106.3	317.8	208.2	145.6	98.7	99.9
Back of Queue (*Q*), veh/ln (90 th percentile)	6.7	17.7	4.6	4.6	18.6	4.0	4.7	14.2	9.5	6.4	4.4	4.5
Queue Storage Ratio (*RQ*) (90 th percentile)	0.49	0.00	0.38	0.26	0.00	1.03	0.48	0.00	0.95	1.09	0.00	0.76
Uniform Delay (*d 1*), s/veh	25.4	23.4	12.1	19.7	32.6	28.2	25.1	38.8	30.1	25.9	32.4	24.2
Incremental Delay (*d 2*), s/veh	13.5	18.9	3.0	12.8	12.6	0.4	1.0	24.2	5.3	6.2	1.7	1.2
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	38.8	42.3	15.1	32.6	45.2	28.6	26.0	63.1	35.3	32.2	34.1	25.4
Level of Service (LOS)	D	D	B	C	D	C	C	E	D	C	C	C
Approach Delay, s/veh / LOS	37.1	D		42.6	D		42.4	D		30.5	C	
Intersection Delay, s/veh / LOS	39.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.33	B	2.18	B	2.45	B	2.45	B
Bicycle LOS Score / LOS	2.26	B	1.47	A	1.98	B	1.23	A

Copyright © 2020 University of Florida, All Rights Reserved.

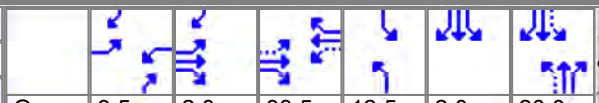
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	29 Road & Patterson	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					

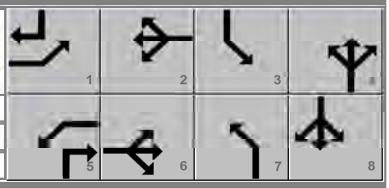


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	220	1249	310	126	809	57	245	273	267	161	95	166

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	69	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	9.5	2.0	33.5	12.5	2.0	20.0	
Yellow	3.5	0.0	4.5	3.5	0.0	4.0	
Red	1.0	0.0	2.0	1.0	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	16.0	42.0	14.0	40.0	17.0	25.0	19.0	27.0
Change Period, (*Y+R c*), s	4.5	6.5	4.5	6.5	4.5	5.0	4.5	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (*g s*), s	9.7		8.4		14.5	19.1	10.1	8.3
Green Extension Time (*g e*), s	0.1	0.0	0.1	0.0	0.0	0.4	0.2	3.1
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		1.00		1.00	1.00	0.91	0.13

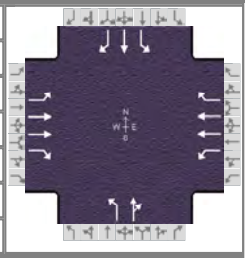
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	222	1258	312	177	1134	80	295	329	280	194	114	140
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1795	1572	1767	1781	1585	1767	1870	1610	1753	1870	1610
Queue Service Time (*g s*), s	7.7	34.6	10.3	6.4	31.1	4.1	12.5	17.1	14.8	8.1	5.1	6.3
Cycle Queue Clearance Time (*g c*), s	7.7	34.6	10.3	6.4	31.1	4.1	12.5	17.1	14.8	8.1	5.1	6.3
Green Ratio (*g/C*)	0.45	0.36	0.36	0.43	0.34	0.34	0.32	0.20	0.30	0.34	0.22	0.34
Capacity (*c*), veh/h	289	1274	558	240	1193	531	459	374	475	350	411	539
Volume-to-Capacity Ratio (*X*)	0.767	0.987	0.559	0.736	0.950	0.150	0.643	0.879	0.588	0.555	0.278	0.259
Back of Queue (*Q*), ft/ln (90 th percentile)	150.4	391.8	103.6	103.4	414.5	89.4	216.9	317.8	208.2	145.6	98.7	99.9
Back of Queue (*Q*), veh/ln (90 th percentile)	6.7	17.7	4.6	4.6	18.5	4.0	9.6	14.2	9.5	6.4	4.4	4.5
Queue Storage Ratio (*RQ*) (90 th percentile)	0.49	0.00	0.38	0.26	0.00	1.03	0.98	0.00	0.95	1.09	0.00	0.76
Uniform Delay (*d 1*), s/veh	25.4	23.4	12.1	19.7	32.6	28.2	27.9	38.8	30.1	25.9	32.4	24.2
Incremental Delay (*d 2*), s/veh	13.5	18.9	3.0	12.8	12.6	0.4	6.8	24.2	5.3	6.2	1.7	1.2
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	38.8	42.3	15.1	32.6	45.2	28.6	34.7	63.1	35.3	32.2	34.1	25.4
Level of Service (LOS)	D	D	B	C	D	C	C	E	D	C	C	C
Approach Delay, s/veh / LOS	37.1	D		42.6	D		45.2	D		30.5	C	
Intersection Delay, s/veh / LOS	39.8						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.16	B	2.18	B	2.45	B	2.45	B
Bicycle LOS Score / LOS	2.26	B	1.47	A	1.98	B	1.23	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.85
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	29 1/2 Road & Patterson	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	91	1484	73	99	859	129	86	98	235	155	29	32

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	54	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.8	2.7	37.1	9.0	5.0	17.9	1	2	3	4		
Yellow	3.5	0.0	5.0	4.0	4.0	4.0	5	6	7	8		
Red	0.5	0.0	1.5	0.0	0.0	1.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	8.8	43.6	11.5	46.3	22.0	31.9	13.0	22.9
Change Period, (*Y+R c*), s	4.0	6.5	4.0	6.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	4.5	0.0	4.5	0.0	3.7	4.8	3.7	4.8
Queue Clearance Time (*g s*), s	5.0		7.0		5.8	25.6	10.3	4.0
Green Extension Time (*g e*), s	0.3	0.0	0.6	0.0	0.2	1.3	0.0	2.3
Phase Call Probability	0.91		0.98		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.00	0.60	1.00	0.01

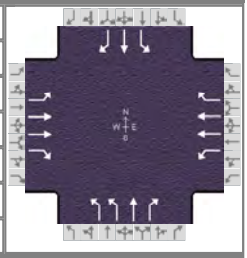
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	88	1438	71	148	1287	193	101	392		182	34	38
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1795	1598	1795	1795	1560	1767	1607		1781	1841	1585
Queue Service Time (*g s*), s	3.0	37.1	3.2	5.0	33.3	8.8	3.8	23.6		8.3	1.6	2.0
Cycle Queue Clearance Time (*g c*), s	3.0	37.1	3.2	5.0	33.3	8.8	3.8	23.6		8.3	1.6	2.0
Green Ratio (*g/C*)	0.42	0.37	0.37	0.45	0.40	0.40	0.38	0.27		0.27	0.18	0.18
Capacity (*c*), veh/h	175	1333	593	206	1430	621	605	432		245	329	283
Volume-to-Capacity Ratio (*X*)	0.503	1.078	0.119	0.719	0.900	0.311	0.167	0.907		0.744	0.104	0.133
Back of Queue (*Q*), ft/ln (90 th percentile)	47.3	666	76.9	72.7	398.5	147.8	65.4	353.5		168.2	28.5	31.2
Back of Queue (*Q*), veh/ln (90 th percentile)	2.2	30.0	3.5	3.3	18.0	6.5	2.9	15.3		7.5	1.3	1.4
Queue Storage Ratio (*RQ*) (90 th percentile)	0.36	0.00	0.91	0.55	0.00	0.63	0.84	0.00		1.23	0.00	0.00
Uniform Delay (*d 1*), s/veh	23.4	32.7	22.7	20.6	26.5	21.8	20.5	35.4		31.3	34.4	34.5
Incremental Delay (*d 2*), s/veh	1.5	44.8	0.3	3.4	7.1	0.9	0.6	17.9		18.4	0.1	0.2
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	24.9	77.5	22.9	24.0	33.6	22.7	21.1	53.2		49.7	34.5	34.8
Level of Service (LOS)	C	F	C	C	C	C	C	D		D	C	C
Approach Delay, s/veh / LOS	72.2	E		31.4	C		46.7	D		45.5	D	
Intersection Delay, s/veh / LOS	50.6						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.92	B	2.10	B	2.44	B	2.45	B
Bicycle LOS Score / LOS	2.09	B	1.54	B	1.30	A	0.91	A

Copyright © 2020 University of Florida, All Rights Reserved.

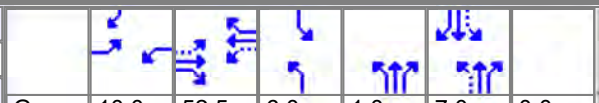
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	30 Road & Patterson	File Name	2045 NoBuild PM Optimized Timings.xus		
Project Description					

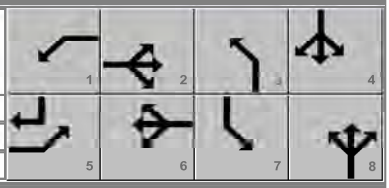


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	227	1174	319	72	669	69	258	132	104	47	83	128

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	53	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	10.0	52.5	6.0	1.0	7.0	0.0
Yellow	3.5	5.0	3.5	0.0	4.0	0.0
Red	0.5	1.5	0.5	0.0	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	18.0	63.0	14.0	59.0	11.0	13.0	10.0	12.0
Change Period, (*Y+R c*), s	4.0	6.5	4.0	6.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.2	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (*g s*), s	7.6		4.9		9.0	10.0	4.8	7.2
Green Extension Time (*g e*), s	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.26		0.48		1.00	1.00	1.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	273	1414	384	127	1178	121	311	159	124	57	100	43
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1795	1598	1795	1795	1598	1730	1870	1560	1810	1885	1585
Queue Service Time (*g s*), s	5.6	6.7	2.3	2.9	14.8	1.6	7.0	8.0	8.0	2.8	5.2	2.2
Cycle Queue Clearance Time (*g c*), s	5.6	6.7	2.3	2.9	14.8	1.6	7.0	8.0	8.0	2.8	5.2	2.2
Green Ratio (*g/C*)	0.68	0.56	0.56	0.62	0.52	0.52	0.14	0.08	0.08	0.13	0.07	0.21
Capacity (*c*), veh/h	488	2028	903	378	1884	839	431	150	125	181	132	333
Volume-to-Capacity Ratio (*X*)	0.561	0.697	0.426	0.336	0.625	0.145	0.722	1.063	0.994	0.314	0.758	0.130
Back of Queue (*Q*), ft/ln (90 th percentile)	79.1	49.5	28.1	53.5	143.6	22.5	42.4	250	200.8	57.5	133.7	36.8
Back of Queue (*Q*), veh/ln (90 th percentile)	3.6	2.2	1.3	2.4	6.5	1.0	1.9	11.2	8.8	2.6	6.0	1.6
Queue Storage Ratio (*RQ*) (90 th percentile)	0.90	0.00	0.10	0.53	0.00	0.38	0.19	0.00	1.13	0.44	0.00	0.28
Uniform Delay (*d 1*), s/veh	9.7	1.5	1.3	8.6	7.4	4.6	41.7	46.0	46.0	39.3	45.7	32.1
Incremental Delay (*d 2*), s/veh	3.2	1.4	1.0	2.4	1.6	0.4	10.0	91.3	79.1	4.5	32.8	0.8
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	12.9	2.8	2.3	11.0	8.9	4.9	51.7	137.3	125.1	43.8	78.5	32.9
Level of Service (LOS)	B	A	A	B	A	A	D	F	F	D	E	C
Approach Delay, s/veh / LOS	4.1	A		8.8	A		90.0	F		58.8	E	
Intersection Delay, s/veh / LOS	20.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.25	B	2.22	B	2.46	B	2.46	B
Bicycle LOS Score / LOS	2.20	B	1.29	A	1.47	A	0.82	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Two-Way Stop-Control Report

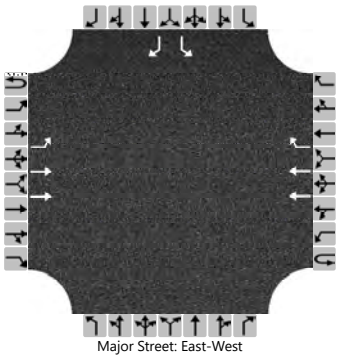
General Information

Analyst	
Agency/Co.	Stolfus and Associates
Date Performed	4/30/2020
Analysis Year	2018
Time Analyzed	AM
Intersection Orientation	East-West
Project Description	Patterson ACP

Site Information

Intersection	28 RD
Jurisdiction	
East/West Street	
North/South Street	
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	0	2	1		0	0	0		1	0	1
Configuration		L	T				T	R						L		R
Volume (veh/h)	0	57	1861				1221	130						77		83
Percent Heavy Vehicles (%)	3	3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized						No							No			
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.5		6.9
Critical Headway (sec)		4.16												6.86		6.96
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

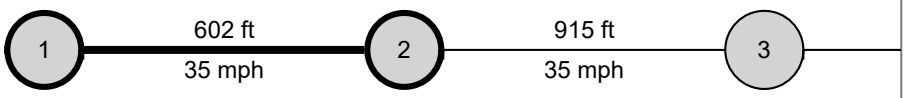
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		62												84		90
Capacity, c (veh/h)		450												21		401
v/c Ratio		0.14												3.92		0.22
95% Queue Length, Q_{95} (veh)		0.5												10.7		0.9
Control Delay (s/veh)		14.3												1682.2		16.6
Level of Service (LOS)		B												F		C
Approach Delay (s/veh)		0.4												818.1		
Approach LOS														F		

Copyright © 2020 University of Florida. All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	24 Road & Patterson	Market Street/Mall Access & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (24 Rd - Market St)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
1	35	35	2	2	602	602	50	50	0	0	100	0	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h				0.15	1.19	0.03
1	Shared Lane Spillback Time, h				0.24		0.07
1	Base Free-Flow Speed, mph	41.58			42.05		
1	Running Time, s	14.47			14.87		
1	Running Speed, mph	28.37			27.61		
1	Through Delay, s/veh	23.38			112.51		
1	Travel Time, s	37.85			127.37		
1	Travel Speed, mph	10.84			3.22		
1	Stop Rate, stops/veh	0.56			1.58		
1	Spatial Stop Rate, stops/mi	4.93			13.84		
1	Through vol/cap Ratio	0.32			1.08		
1	Percent of Base FFS	26.08			7.66		
1	Level of Service	F			F		
1	Auto Traveler Perception Score	2.95			4.67		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	2.26		B	3.79		D
1	Bicycle Segment LOS Score / LOS	2.29		B	2.42		B
1	Transit Segment LOS Score / LOS	2.64		B	4.03		D

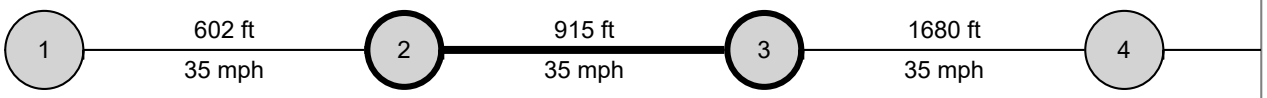
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	Market Street/Mall Access & Pat	Home Depot Access/Mesa Mall Access &		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (Market St - Home Depot)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
2	35	35	2	2	915	915	50	50	2	1	70	0	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h	never	never				
2	Shared Lane Spillback Time, h	never		never			
2	Base Free-Flow Speed, mph	41.72			42.05		
2	Running Time, s	18.64			19.02		
2	Running Speed, mph	33.47			32.81		
2	Through Delay, s/veh	31.92			15.23		
2	Travel Time, s	50.56			34.25		
2	Travel Speed, mph	12.34			18.22		
2	Stop Rate, stops/veh	0.78			0.34		
2	Spatial Stop Rate, stops/mi	4.51			1.97		
2	Through vol/cap Ratio	0.56			0.79		
2	Percent of Base FFS	29.58			43.32		
2	Level of Service	F			D		
2	Auto Traveler Perception Score	2.88			2.44		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	2.98		C	3.29		C
2	Bicycle Segment LOS Score / LOS	2.53		B	2.69		B
2	Transit Segment LOS Score / LOS	2.52		B	2.00		A

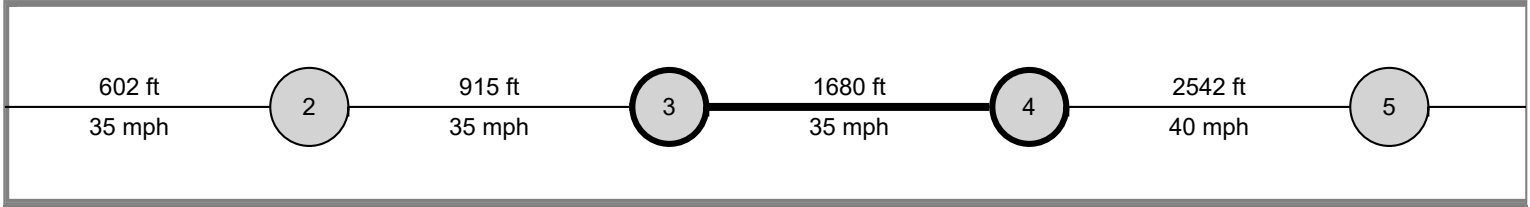
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	Home Depot Access/Mesa Mall /	24 1/2 Rd & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (Home Depot - 24 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
3	35	35	2	2	1680	1680	50	50	550	550	70	100	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never		never	never	never
3	Shared Lane Spillback Time, h	never		never	never		never
3	Base Free-Flow Speed, mph	40.72			40.21		
3	Running Time, s	31.22			32.19		
3	Running Speed, mph	36.69			35.59		
3	Through Delay, s/veh	18.44			35.58		
3	Travel Time, s	49.66			67.77		
3	Travel Speed, mph	23.07			16.90		
3	Stop Rate, stops/veh	0.51			0.64		
3	Spatial Stop Rate, stops/mi	1.59			2.00		
3	Through vol/cap Ratio	0.43			0.96		
3	Percent of Base FFS	56.65			42.04		
3	Level of Service	C			D		
3	Auto Traveler Perception Score	2.38			2.45		
Multimodal Results (Segment)							
3	Pedestrian Segment LOS Score / LOS	3.66		D	3.52		D
3	Bicycle Segment LOS Score / LOS	2.73		B	2.87		C
3	Transit Segment LOS Score / LOS	1.50		A	2.16		B

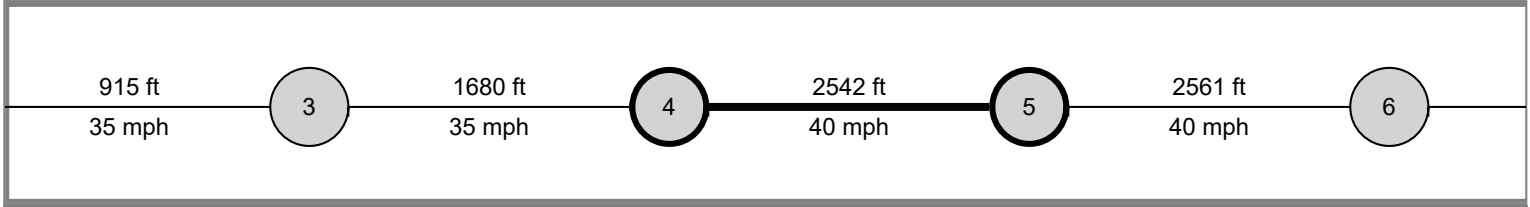
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	24 1/2 Rd & Patterson	25 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (24 1/2 Rd - 25 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
4	40	35	2	2	2542	2542	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h	never	4.15	never	never	never	never
4	Shared Lane Spillback Time, h	never		never	never		never
4	Base Free-Flow Speed, mph	42.99			40.64		
4	Running Time, s	43.07			46.71		
4	Running Speed, mph	40.25			37.11		
4	Through Delay, s/veh	97.98			35.96		
4	Travel Time, s	141.04			82.67		
4	Travel Speed, mph	12.29			20.96		
4	Stop Rate, stops/veh	1.37			0.87		
4	Spatial Stop Rate, stops/mi	2.84			1.81		
4	Through vol/cap Ratio	1.08			0.82		
4	Percent of Base FFS	28.59			51.59		
4	Level of Service	F			C		
4	Auto Traveler Perception Score	2.59			2.42		
Multimodal Results (Segment)							
4	Pedestrian Segment LOS Score / LOS	3.11		C	3.48		C
4	Bicycle Segment LOS Score / LOS	2.79		C	2.93		C
4	Transit Segment LOS Score / LOS	2.60		B	1.80		A

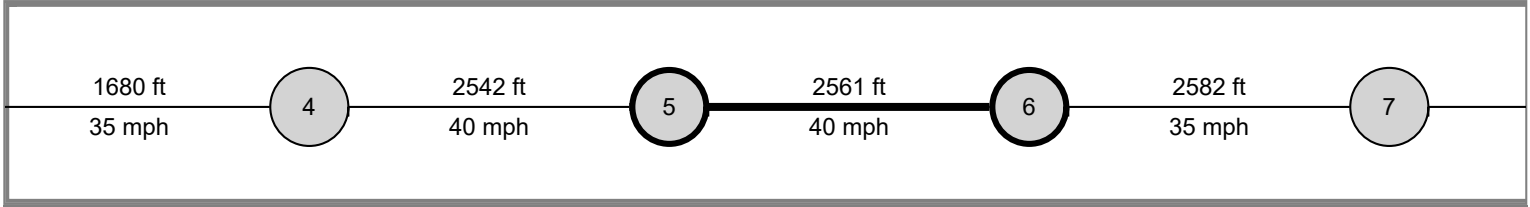
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	25 Road & Patterson	25 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (25 Rd - 25 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
5	40	40	2	2	2561	2561	50	50	260	260	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h		never		never	1.04	never
5	Shared Lane Spillback Time, h	never		never	never		never
5	Base Free-Flow Speed, mph	43.13			43.13		
5	Running Time, s	43.22			44.51		
5	Running Speed, mph	40.40			39.23		
5	Through Delay, s/veh	4.42			107.29		
5	Travel Time, s	47.64			151.80		
5	Travel Speed, mph	36.65			11.50		
5	Stop Rate, stops/veh	0.12			1.31		
5	Spatial Stop Rate, stops/mi	0.25			2.70		
5	Through vol/cap Ratio	0.46			1.17		
5	Percent of Base FFS	84.98			26.67		
5	Level of Service	A			F		
5	Auto Traveler Perception Score	2.18			2.56		
Multimodal Results (Segment)							
5	Pedestrian Segment LOS Score / LOS	3.20		C	3.93		D
5	Bicycle Segment LOS Score / LOS	2.77		C	3.01		C
5	Transit Segment LOS Score / LOS	0.59		A	2.84		C

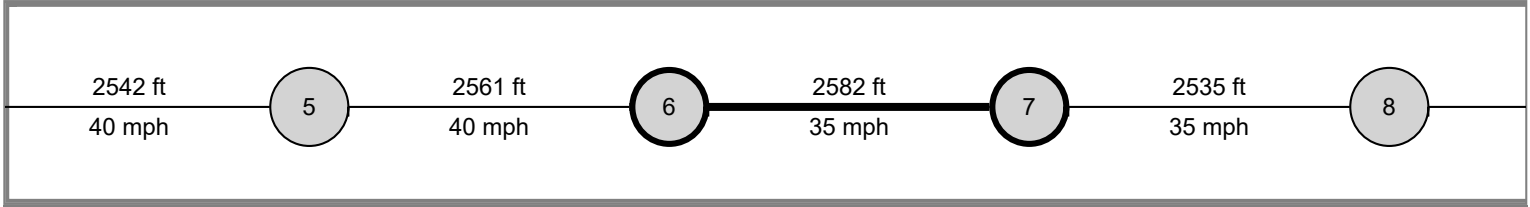
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	25 1/2 Road & Patterson	1st Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (25 1/2 Rd - 26 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
6	35	40	2	2	2582	2582	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
6	Bay/Lane Spillback Time, h		never			never	
6	Shared Lane Spillback Time, h	never		never	never		never
6	Base Free-Flow Speed, mph	40.73			43.08		
6	Running Time, s	45.93			44.61		
6	Running Speed, mph	38.33			39.47		
6	Through Delay, s/veh	21.87			13.88		
6	Travel Time, s	67.80			58.49		
6	Travel Speed, mph	25.97			30.10		
6	Stop Rate, stops/veh	0.54			0.28		
6	Spatial Stop Rate, stops/mi	1.10			0.58		
6	Through vol/cap Ratio	0.61			0.83		
6	Percent of Base FFS	63.75			69.87		
6	Level of Service	C			B		
6	Auto Traveler Perception Score	2.30			2.23		
Multimodal Results (Segment)							
6	Pedestrian Segment LOS Score / LOS	3.24		C	3.40		C
6	Bicycle Segment LOS Score / LOS	2.80		C	2.96		C
6	Transit Segment LOS Score / LOS	1.26		A	1.10		A

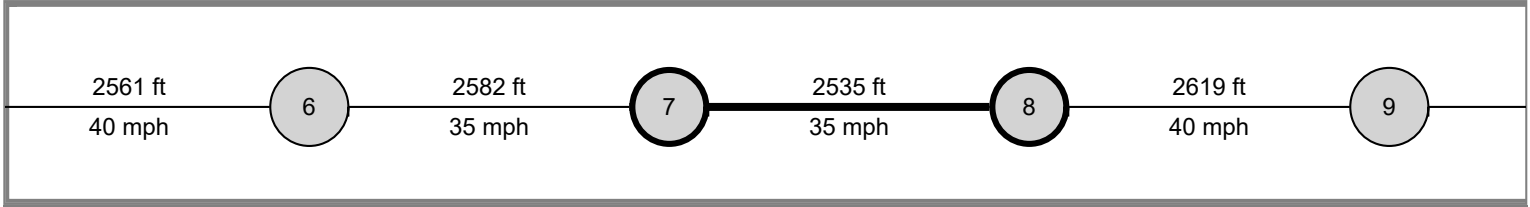
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	1st Street & Patterson	7th Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (26 Rd - 26 1/2)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
7	35	40	2	2	2535	2535	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
7	Bay/Lane Spillback Time, h	never	never		never	1.92	never
7	Shared Lane Spillback Time, h	never		never	never		never
7	Base Free-Flow Speed, mph	39.80			42.15		
7	Running Time, s	46.36			44.79		
7	Running Speed, mph	37.28			38.59		
7	Through Delay, s/veh	28.78			83.23		
7	Travel Time, s	75.15			128.02		
7	Travel Speed, mph	23.00			13.50		
7	Stop Rate, stops/veh	0.67			1.27		
7	Spatial Stop Rate, stops/mi	1.40			2.64		
7	Through vol/cap Ratio	0.73			1.09		
7	Percent of Base FFS	57.78			32.03		
7	Level of Service	C			F		
7	Auto Traveler Perception Score	2.35			2.55		
Multimodal Results (Segment)							
7	Pedestrian Segment LOS Score / LOS	3.10		C	3.42		C
7	Bicycle Segment LOS Score / LOS	2.80		C	2.97		C
7	Transit Segment LOS Score / LOS	1.51		A	2.56		B

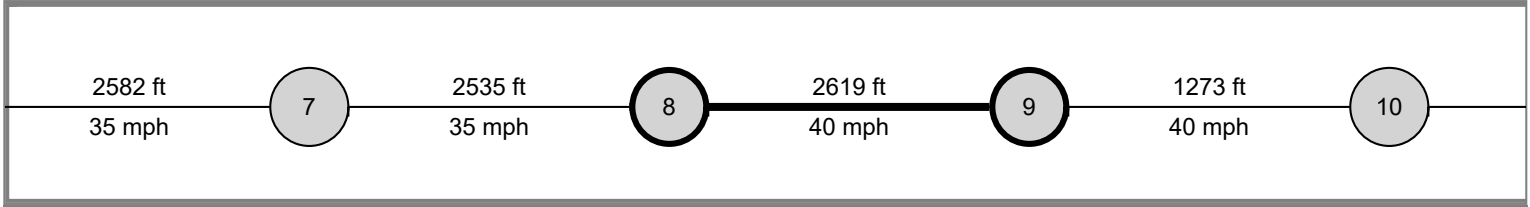
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	7th Street & Patterson	12th Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (26 1/2 Rd to 12th St)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
8	40	35	2	2	2619	2619	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
8	Bay/Lane Spillback Time, h	never	never	never	never	1.03	never
8	Shared Lane Spillback Time, h	never		never	never		never
8	Base Free-Flow Speed, mph	42.37			40.02		
8	Running Time, s	45.32			48.68		
8	Running Speed, mph	39.40			36.68		
8	Through Delay, s/veh	47.70			112.15		
8	Travel Time, s	93.02			160.83		
8	Travel Speed, mph	19.20			11.10		
8	Stop Rate, stops/veh	0.90			1.30		
8	Spatial Stop Rate, stops/mi	1.82			2.61		
8	Through vol/cap Ratio	0.96			1.19		
8	Percent of Base FFS	45.30			27.74		
8	Level of Service	D			F		
8	Auto Traveler Perception Score	2.42			2.55		
Multimodal Results (Segment)							
8	Pedestrian Segment LOS Score / LOS	3.11		C	3.52		D
8	Bicycle Segment LOS Score / LOS	2.85		C	2.97		C
8	Transit Segment LOS Score / LOS	1.89		A	2.86		C

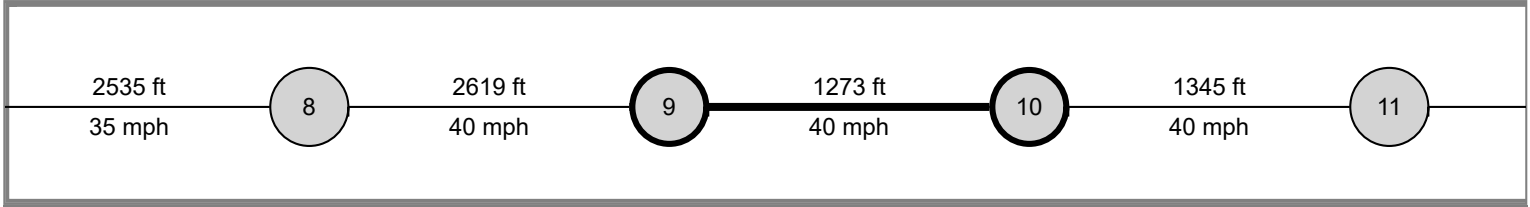
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	12th Street & Patterson	Patterson Rd & 15th St		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (12th St - 27 1/4 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
9	40	35	2	2	1273	1273	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
9	Bay/Lane Spillback Time, h				never	0.35	never
9	Shared Lane Spillback Time, h				never		never
9	Base Free-Flow Speed, mph	42.29			39.94		
9	Running Time, s	23.94			26.20		
9	Running Speed, mph	36.26			33.13		
9	Through Delay, s/veh	0.46			140.13		
9	Travel Time, s	24.40			166.33		
9	Travel Speed, mph	35.57			5.22		
9	Stop Rate, stops/veh	0.01			1.73		
9	Spatial Stop Rate, stops/mi	0.06			7.16		
9	Through vol/cap Ratio	0.51			1.23		
9	Percent of Base FFS	84.10			13.06		
9	Level of Service	A			F		
9	Auto Traveler Perception Score	2.15			3.38		
Multimodal Results (Segment)							
9	Pedestrian Segment LOS Score / LOS	3.33		C	4.47		E
9	Bicycle Segment LOS Score / LOS	2.78		C	3.05		C
9	Transit Segment LOS Score / LOS	0.71		A	3.80		D

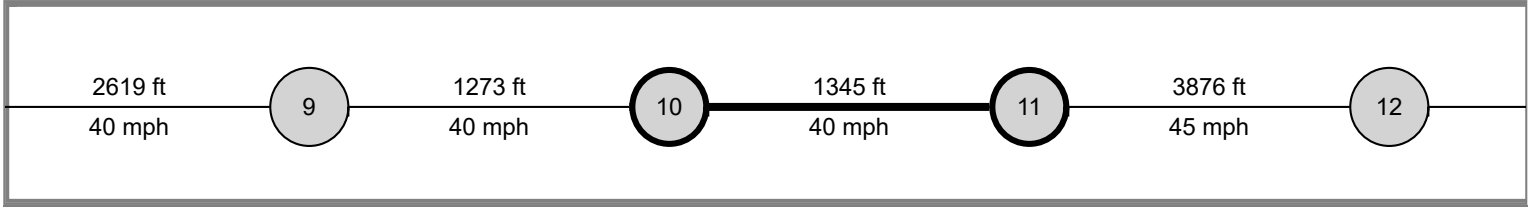
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	Patterson Rd & 15th St	27 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
10	40	40	2	2	1345	1345	50	50	0	0	70	70	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
10	Bay/Lane Spillback Time, h		never				
10	Shared Lane Spillback Time, h	never		never			
10	Base Free-Flow Speed, mph	44.07			44.07		
10	Running Time, s	24.45			25.16		
10	Running Speed, mph	37.50			36.45		
10	Through Delay, s/veh	16.55			6.64		
10	Travel Time, s	41.00			31.80		
10	Travel Speed, mph	22.37			28.83		
10	Stop Rate, stops/veh	0.46			0.19		
10	Spatial Stop Rate, stops/mi	1.79			0.74		
10	Through vol/cap Ratio	0.63			0.74		
10	Percent of Base FFS	50.75			65.43		
10	Level of Service	C			C		
10	Auto Traveler Perception Score	2.64			2.25		
Multimodal Results (Segment)							
10	Pedestrian Segment LOS Score / LOS	3.97		D	4.79		E
10	Bicycle Segment LOS Score / LOS	2.96		C	3.01		C
10	Transit Segment LOS Score / LOS	1.63		A	1.25		A

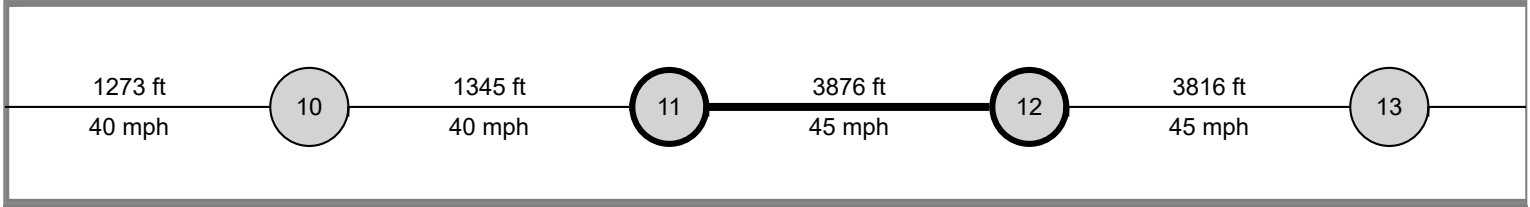
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	27 1/2 Road & Patterson	28 1/4 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (27 1/4 Rd - 27 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
11	45	40	2	2	3876	3876	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement		2	12	1	6	
11	Bay/Lane Spillback Time, h	never	never			never	
11	Shared Lane Spillback Time, h	never		never	never		
11	Base Free-Flow Speed, mph	45.84			43.49		
11	Running Time, s	60.70			64.97		
11	Running Speed, mph	43.53			40.68		
11	Through Delay, s/veh	35.63			5.78		
11	Travel Time, s	96.33			70.75		
11	Travel Speed, mph	27.43			37.36		
11	Stop Rate, stops/veh	0.75			0.18		
11	Spatial Stop Rate, stops/mi	1.02			0.24		
11	Through vol/cap Ratio	0.90			0.65		
11	Percent of Base FFS	59.84			85.89		
11	Level of Service	C			A		
11	Auto Traveler Perception Score	2.40			2.18		
Multimodal Results (Segment)							
11	Pedestrian Segment LOS Score / LOS	3.97		D	3.87		D
11	Bicycle Segment LOS Score / LOS	2.91		C	3.04		C
11	Transit Segment LOS Score / LOS	1.22		A	0.68		A

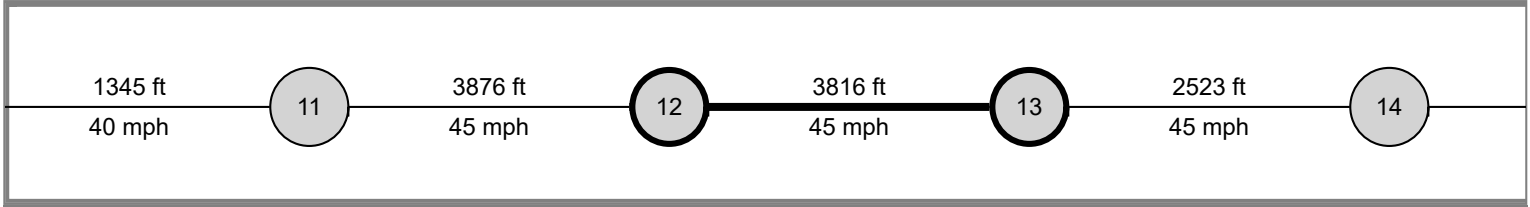
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	28 1/4 Road & Patterson	29 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (28 1/4 Rd - 29 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12	45	40	2	2	3816	3816	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
12	Bay/Lane Spillback Time, h	never	never	never		never	never
12	Shared Lane Spillback Time, h	never		never	never		never
12	Base Free-Flow Speed, mph	44.91			42.56		
12	Running Time, s	60.34			65.36		
12	Running Speed, mph	43.12			39.81		
12	Through Delay, s/veh	45.20			33.90		
12	Travel Time, s	105.54			99.26		
12	Travel Speed, mph	24.65			26.21		
12	Stop Rate, stops/veh	0.92			0.85		
12	Spatial Stop Rate, stops/mi	1.28			1.17		
12	Through vol/cap Ratio	0.95			0.87		
12	Percent of Base FFS	54.90			61.59		
12	Level of Service	C			C		
12	Auto Traveler Perception Score	2.33			2.32		
Multimodal Results (Segment)							
12	Pedestrian Segment LOS Score / LOS	3.62		D	3.76		D
12	Bicycle Segment LOS Score / LOS	2.91		C	3.02		C
12	Transit Segment LOS Score / LOS	1.45		A	1.38		A

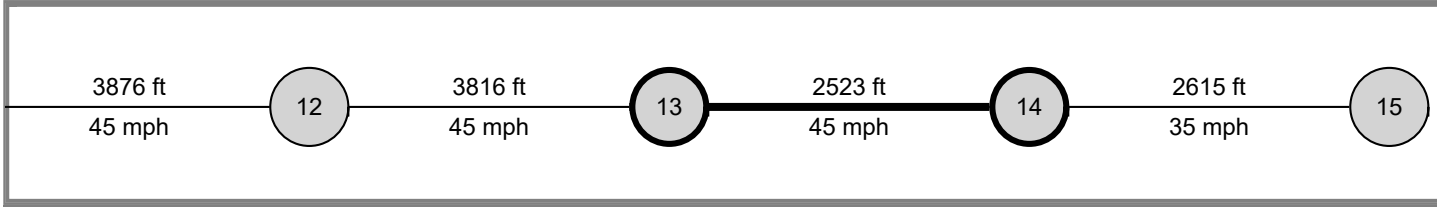
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	29 Road & Patterson	29 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (29 Rd - 29 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
13	45	45	2	2	2523	2523	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
13	Bay/Lane Spillback Time, h	never	never	never	never	never	never
13	Shared Lane Spillback Time, h	never		never	never		never
13	Base Free-Flow Speed, mph	43.83			43.83		
13	Running Time, s	40.55			40.76		
13	Running Speed, mph	42.43			42.20		
13	Through Delay, s/veh	33.55			42.27		
13	Travel Time, s	74.10			83.03		
13	Travel Speed, mph	23.21			20.72		
13	Stop Rate, stops/veh	0.78			0.78		
13	Spatial Stop Rate, stops/mi	1.63			1.63		
13	Through vol/cap Ratio	0.90			0.99		
13	Percent of Base FFS	52.97			47.27		
13	Level of Service	C			D		
13	Auto Traveler Perception Score	2.39			2.39		
Multimodal Results (Segment)							
13	Pedestrian Segment LOS Score / LOS	3.65		D	3.62		D
13	Bicycle Segment LOS Score / LOS	2.93		C	3.02		C
13	Transit Segment LOS Score / LOS	1.60		A	1.84		A

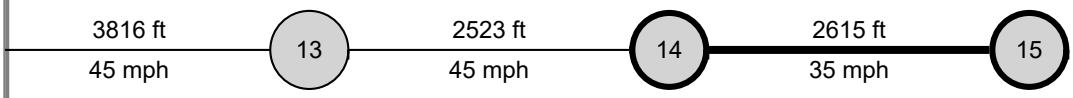
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 NoBuild PM Optimized Tim	Analysis Year	2045	System Cycle Length, s	100
Intersections	29 1/2 Road & Patterson	30 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (29 1/2 Rd - 30 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
14	35	45	2	2	2615	2615	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
14	Bay/Lane Spillback Time, h				never	2.24	never
14	Shared Lane Spillback Time, h				never		never
14	Base Free-Flow Speed, mph	40.82			45.52		
14	Running Time, s	47.02			41.94		
14	Running Speed, mph	37.92			42.52		
14	Through Delay, s/veh	8.94			77.51		
14	Travel Time, s	55.96			119.44		
14	Travel Speed, mph	31.86			14.93		
14	Stop Rate, stops/veh	0.24			1.23		
14	Spatial Stop Rate, stops/mi	0.49			2.49		
14	Through vol/cap Ratio	0.63			1.08		
14	Percent of Base FFS	78.05			32.79		
14	Level of Service	B			F		
14	Auto Traveler Perception Score	2.21			2.53		
Multimodal Results (Segment)							
14	Pedestrian Segment LOS Score / LOS	3.55		D	4.09		D
14	Bicycle Segment LOS Score / LOS	2.85		C	3.00		C
14	Transit Segment LOS Score / LOS	0.92		A	2.39		B

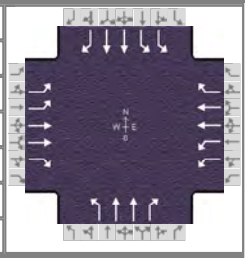
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	960.05	1381.81
Facility Travel Speed, mph	22.36	15.53
Facility Base Free Flow Speed, mph	42.73	42.46
Facility Percent of Base FFS	52.33	36.59
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.37	2.44

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.43	C	3.75	D
Bicycle Facility LOS Score / LOS	2.83	C	2.97	C
Transit Facility LOS Score / LOS	1.47	A	1.97	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

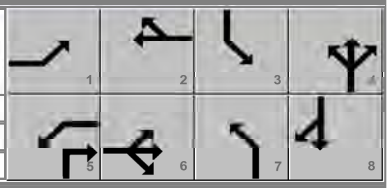
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.91
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	24 Road & Patterson	File Name	2045 ACP AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	216	235	72	125	217	278	87	934	412	412	633	71

Signal Information			
Cycle, s	100.0	Reference Phase	6
Offset, s	85	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.8	1.9	20.0	8.4	3.0	36.9	
Yellow	3.5	0.0	4.0	3.5	3.5	4.0	
Red	0.5	0.0	1.0	0.5	0.5	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	2.0	3.0	1.1	3.0	2.0	3.0
Phase Duration, s	13.7	26.9	11.8	25.0	12.4	41.9	19.4	48.9
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	11.7		5.8		5.1	28.4	14.7	15.9
Green Extension Time (g_e), s	0.0	0.0	0.4	0.0	0.5	8.5	0.6	19.8
Phase Call Probability	1.00		0.98		0.93	1.00	1.00	1.00
Max Out Probability	1.00		0.17		0.00	0.89	1.00	0.56

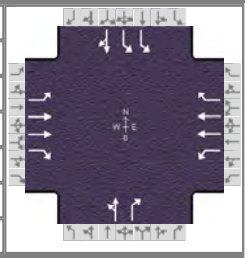
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	539	587	180	137	238	305	96	1026	453	453	696	78
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1675	1752		1716	1738		1810	1738	1585	1730	1752	1518
Queue Service Time (g_s), s	9.7	15.7		3.8	5.9		3.1	26.4	22.1	12.7	13.9	3.0
Cycle Queue Clearance Time (g_c), s	9.7	15.7		3.8	5.9		3.1	26.4	22.1	12.7	13.9	3.0
Green Ratio (*g/C*)	0.30	0.22		0.08	0.20		0.45	0.37	0.45	0.15	0.44	0.44
Capacity (*c*), veh/h	705	767		269	695		422	1283	709	532	1539	667
Volume-to-Capacity Ratio (*X*)	0.765	0.765		0.512	0.343		0.227	0.800	0.639	0.851	0.452	0.117
Back of Queue (*Q*), ft/ln (90 th percentile)	89.8	243.7		68.1	103		50	352.9	264.3	206.6	189.3	42.9
Back of Queue (*Q*), veh/ln (90 th percentile)	3.9	10.7		3.0	4.5		2.3	15.4	11.8	9.2	8.3	1.8
Queue Storage Ratio (*RQ*) (90 th percentile)	0.50	0.00		0.31	0.00		0.38	0.00	1.50	1.56	0.00	0.66
Uniform Delay (d_1), s/veh	31.4	36.4		44.3	34.4		16.3	28.2	21.4	41.2	19.6	16.6
Incremental Delay (d_2), s/veh	5.4	7.2		1.9	1.2		0.4	3.6	2.1	11.3	0.3	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	36.8	43.6	0.0	46.2	35.6	0.0	16.7	31.9	23.5	52.4	19.9	16.7
Level of Service (LOS)	D	D	A	D	D	A	B	C	C	D	B	B
Approach Delay, s/veh / LOS	34.8	C		21.8	C		28.5	C		31.7	C	
Intersection Delay, s/veh / LOS	30.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.59	C	2.57	C	2.56	C
Bicycle LOS Score / LOS	0.96	A	1.05	A	1.79	B	1.50	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

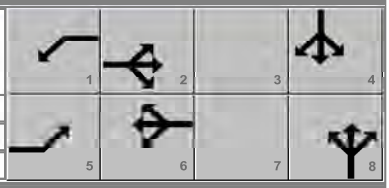
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	Market Street/Mall Acce…	File Name	2045 ACP AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	71	848	83	25	580	94	30	12	19	87	17	44

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	1	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	1.7	3.0	65.6	6.3	4.4	0.0	
Yellow	3.5	0.0	4.0	4.0	4.0	0.0	
Red	0.5	0.0	1.0	1.0	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	3.0	1.1	3.0		11.0		10.0
Phase Duration, s	8.7	73.6	5.7	70.6		9.4		11.3
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0		5.0		5.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	3.8		2.3			4.7		6.3
Green Extension Time (g_e), s	0.2	0.0	0.0	0.0		0.0		0.1
Phase Call Probability	0.94		0.34			0.87		0.99
Max Out Probability	0.00		0.00			0.03		1.00

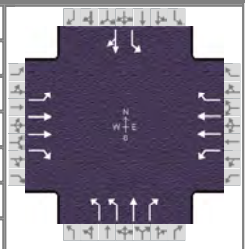
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	99	1178	115	15	342	55		51	23	105	73	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1711	1766	1610	1810	1766	1522		1834	1610	1702	1682	
Queue Service Time (g_s), s	1.8	8.1	0.9	0.3	4.4	1.4		2.7	1.4	3.0	4.3	
Cycle Queue Clearance Time (g_c), s	1.8	8.1	0.9	0.3	4.4	1.4		2.7	1.4	3.0	4.3	
Green Ratio (*g/C*)	0.71	0.69	0.69	0.67	0.66	0.66		0.04	0.04	0.06	0.06	
Capacity (*c*), veh/h	763	2425	1105	385	2319	999		80	70	216	107	
Volume-to-Capacity Ratio (*X*)	0.129	0.486	0.104	0.038	0.147	0.055		0.634	0.327	0.486	0.690	
Back of Queue (*Q*), ft/ln (90 th percentile)	20.9	79.6	10.9	3.6	62.4	18.5		52	22.7	52.4	74.5	
Back of Queue (*Q*), veh/ln (90 th percentile)	0.9	3.5	0.5	0.2	2.8	0.8		2.4	1.0	2.3	3.4	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.14	0.00	0.09	0.03	0.00	0.17		0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	4.4	2.8	1.7	5.7	8.0	6.9		47.0	46.4	45.3	45.9	
Incremental Delay (d_2), s/veh	0.0	0.6	0.2	0.0	0.1	0.1		3.1	1.0	0.6	2.9	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	4.5	3.4	1.9	5.8	8.1	7.0		50.1	47.4	45.9	48.8	
Level of Service (LOS)	A	A	A	A	A	A		D	D	D	D	
Approach Delay, s/veh / LOS	3.3	A		7.9	A		49.3	D		47.1	D	
Intersection Delay, s/veh / LOS	9.7						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.86	B	2.06	B	2.47	B	2.46	B
Bicycle LOS Score / LOS	1.48	A	1.18	A	0.61	A	0.78	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

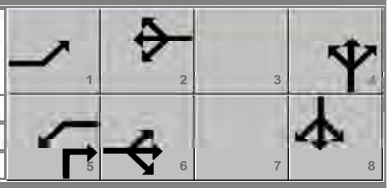
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.84
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	Home Depot Access/Me…	File Name	2045 ACP AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	756	189	87	571	13	70	21	47	25	30	28

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	37	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	Off
Force Mode	Fixed	Simult. Gap N/S	Off

Green	3.9	0.3	65.3	5.6	5.9	0.0	
Yellow	3.5	0.0	4.0	4.0	4.0	0.0	
Red	0.5	0.0	1.0	1.0	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2		4		8
Case Number	1.1	3.0	1.1	3.0		9.0		10.0
Phase Duration, s	8.2	70.6	7.9	70.3		10.9		10.6
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0		5.0		5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0		5.4		5.4
Queue Clearance Time (g_s), s	3.3		3.0			5.2		5.9
Green Extension Time (g_e), s	0.3	0.0	0.2	0.0		0.7		0.1
Phase Call Probability	0.85		0.79			0.99		0.94
Max Out Probability	0.00		0.00			0.01		1.00

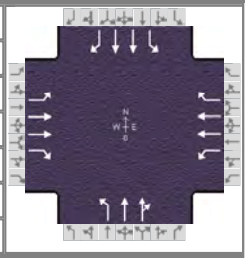
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	67	1307	327	56	367	8	83	25	56	30	69	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1711	1766	1598	1810	1752	1610	1743	1900	1610	1767	1748	
Queue Service Time (g_s), s	1.3	9.2	2.0	1.0	2.8	0.1	2.3	1.3	3.2	1.6	3.9	
Cycle Queue Clearance Time (g_c), s	1.3	9.2	2.0	1.0	2.8	0.1	2.3	1.3	3.2	1.6	3.9	
Green Ratio (*g/C*)	0.69	0.66	0.66	0.69	0.65	0.65	0.06	0.06	0.10	0.06	0.06	
Capacity (*c*), veh/h	749	2316	1047	313	2287	1051	207	113	159	98	97	
Volume-to-Capacity Ratio (*X*)	0.090	0.564	0.312	0.179	0.160	0.008	0.403	0.222	0.352	0.302	0.709	
Back of Queue (*Q*), ft/ln (90 th percentile)	16.9	84.5	25.6	13.7	36.8	1.9	42	25.3	54.6	31.6	80.6	
Back of Queue (*Q*), veh/ln (90 th percentile)	0.7	3.7	1.2	0.6	1.6	0.1	1.9	1.1	2.5	1.4	3.7	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.13	0.00	0.13	0.12	0.00	0.00	0.24	0.00	0.25	0.24	0.00	
Uniform Delay (d_1), s/veh	5.1	2.8	1.2	5.7	4.3	4.8	45.3	44.8	42.1	45.3	46.4	
Incremental Delay (d_2), s/veh	0.1	0.9	0.7	0.4	0.1	0.0	1.8	1.4	1.9	2.4	12.6	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	5.1	3.7	2.0	6.0	4.5	4.8	47.1	46.2	44.0	47.8	59.0	
Level of Service (LOS)	A	A	A	A	A	A	D	D	D	D	E	
Approach Delay, s/veh / LOS	3.4	A		4.7	A		45.9	D		55.6	E	
Intersection Delay, s/veh / LOS	8.7						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.23	B	1.87	B	2.46	B	2.47	B
Bicycle LOS Score / LOS	1.45	A	1.15	A	0.76	A	0.65	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.92
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	24 1/2 Rd & Patterson	File Name	2045 ACP AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	40	724	70	147	442	121	144	138	62	211	307	83

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	11	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.4	0.4	50.9	7.0	2.5	12.3	1	2	3	4		
Yellow	3.5	0.0	4.0	3.5	3.5	4.0	5	6	7	8		
Red	0.5	0.0	1.5	0.5	0.5	1.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	8.4	56.4	8.8	56.8	11.0	17.3	17.5	23.8
Change Period, ($Y+R_c$), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	4.1		4.6		9.0	8.0	12.8	10.6
Green Extension Time (g_e), s	0.4	0.0	0.5	0.0	0.0	4.3	0.8	4.4
Phase Call Probability	0.88		0.94		0.99	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	0.00	0.16	0.00

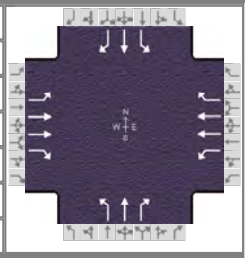
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	78	1404	136	100	301	82	157	111	106	229	334	90
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1697	1781	1610	1810	1766	1598	1767	1856	1665	1767	1738	1397
Queue Service Time (g_s), s	2.1	23.7	1.7	2.6	4.3	3.0	7.0	5.6	6.0	10.8	8.6	5.6
Cycle Queue Clearance Time (g_c), s	2.1	23.7	1.7	2.6	4.3	3.0	7.0	5.6	6.0	10.8	8.6	5.6
Green Ratio (*g/C*)	0.55	0.51	0.51	0.56	0.51	0.51	0.19	0.12	0.12	0.28	0.19	0.19
Capacity (*c*), veh/h	575	1813	820	251	1811	819	274	228	204	384	654	263
Volume-to-Capacity Ratio (*X*)	0.135	0.774	0.166	0.398	0.166	0.101	0.571	0.488	0.520	0.597	0.510	0.343
Back of Queue (*Q*), ft/ln (90 th percentile)	33.1	187.8	23	41.7	67.6	44.7	135.1	106.9	102.8	167.9	140.1	88.1
Back of Queue (*Q*), veh/ln (90 th percentile)	1.4	8.4	1.0	1.9	3.0	2.0	6.0	4.7	4.6	7.4	6.1	3.5
Queue Storage Ratio (*RQ*) (90 th percentile)	0.25	0.00	0.10	0.32	0.00	0.18	1.02	0.00	0.00	1.26	0.00	0.00
Uniform Delay (d_1), s/veh	10.8	9.3	4.3	14.2	12.3	14.6	36.3	40.9	41.1	30.3	36.5	35.2
Incremental Delay (d_2), s/veh	0.1	2.9	0.4	1.3	0.2	0.2	3.5	2.3	2.9	2.1	0.9	1.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	10.9	12.2	4.7	15.6	12.4	14.8	39.8	43.2	44.0	32.5	37.3	36.3
Level of Service (LOS)	B	B	A	B	B	B	D	D	D	C	D	D
Approach Delay, s/veh / LOS	11.5	B		13.5	B		42.0	D		35.5	D	
Intersection Delay, s/veh / LOS	20.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.26	B	2.41	B	2.46	B	2.45	B
Bicycle LOS Score / LOS	1.24	A	1.12	A	0.80	A	1.03	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

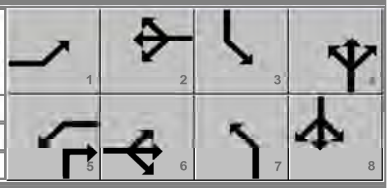
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.87
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	25 Road & Patterson	File Name	2045 ACP AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	83	774	55	206	687	109	125	261	120	190	305	41

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	35	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.0	1.0	36.0	6.0	24.0	0.0
Yellow	3.5	3.5	4.5	3.5	4.0	0.0
Red	0.5	0.5	1.5	0.5	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	15.0	47.0	10.0	42.0	10.0	29.0	14.0	33.0
Change Period, ($Y+R_c$), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	6.3		5.9		8.0	17.1	10.9	19.3
Green Extension Time (g_e), s	0.2	0.0	0.0	0.0	0.0	2.7	0.0	3.2
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		1.00		1.00	0.76	1.00	0.58

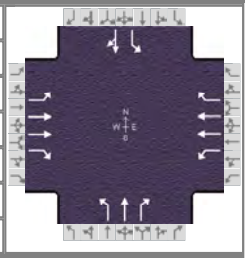
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	135	1261	90	113	376	60	144	300	121	218	351	47
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1781	1585	1795	1795	1585	1753	1811	1610	1795	1811	1585
Queue Service Time (g_s), s	4.3	29.1	1.6	3.9	9.1	2.9	6.0	15.1	5.7	8.9	17.3	2.2
Cycle Queue Clearance Time (g_c), s	4.3	29.1	1.6	3.9	9.1	2.9	6.0	15.1	5.7	8.9	17.3	2.2
Green Ratio (*g/C*)	0.49	0.41	0.41	0.42	0.36	0.36	0.30	0.24	0.30	0.36	0.28	0.28
Capacity (*c*), veh/h	517	1460	650	220	1292	571	262	435	483	338	507	444
Volume-to-Capacity Ratio (*X*)	0.262	0.864	0.138	0.512	0.291	0.104	0.549	0.690	0.250	0.646	0.691	0.106
Back of Queue (*Q*), ft/ln (90 th percentile)	71.3	284.2	23.1	71	145	65.6	122.7	254.4	90.9	159.9	279.4	35.4
Back of Queue (*Q*), veh/ln (90 th percentile)	3.1	12.7	1.0	3.2	6.5	2.9	5.4	11.0	4.1	7.2	12.1	1.6
Queue Storage Ratio (*RQ*) (90 th percentile)	0.40	0.00	0.14	0.40	0.00	0.50	0.55	0.00	0.52	1.21	0.00	0.27
Uniform Delay (d_1), s/veh	14.8	17.0	7.6	20.0	30.3	24.7	28.6	34.6	26.5	25.2	32.1	26.7
Incremental Delay (d_2), s/veh	1.1	6.6	0.4	7.0	0.5	0.3	8.0	8.7	1.2	9.2	7.5	0.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	16.0	23.6	8.1	27.0	30.8	25.0	36.6	43.3	27.7	34.4	39.7	27.2
Level of Service (LOS)	B	C	A	C	C	C	D	D	C	C	D	C
Approach Delay, s/veh / LOS	22.0	C		29.4	C		38.3	D		36.8	D	
Intersection Delay, s/veh / LOS	28.9						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.12	B	2.11	B	2.45	B	2.44	B
Bicycle LOS Score / LOS	1.35	A	1.44	A	1.42	A	1.50	B

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.82
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	25 1/2 Road & Patterson	File Name	2045 ACP AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	32	934	51	137	986	90	73	89	98	212	149	118

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	89	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.2	1.4	45.1	6.0	9.0	10.2	1	2	3	4		
Yellow	3.5	0.0	4.5	3.5	3.5	4.0	5	6	7	8		
Red	0.5	0.0	1.5	0.5	0.5	1.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	9.2	51.1	10.6	52.6	10.0	15.2	23.0	28.2
Change Period, (*Y+R c*), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.3	5.2	5.3
Queue Clearance Time (*g s*), s	3.0		3.5		6.4	9.3	14.5	19.9
Green Extension Time (*g e*), s	0.0	0.0	0.1	0.0	0.0	0.9	0.5	1.5
Phase Call Probability	0.65		0.83		1.00	1.00	1.00	1.00
Max Out Probability	0.07		0.01		1.00	1.00	1.00	1.00

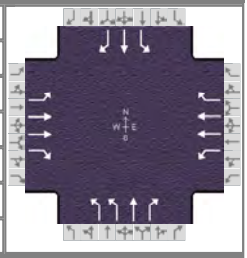
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	38	1108	60	64	460	42	89	109	120	259	326	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1781	1598	1781	1781	1572	1767	1885	1585	1682	1719	
Queue Service Time (*g s*), s	1.0	21.0	1.4	1.5	7.5	1.4	4.4	5.5	7.3	12.5	17.9	
Cycle Queue Clearance Time (*g c*), s	1.0	21.0	1.4	1.5	7.5	1.4	4.4	5.5	7.3	12.5	17.9	
Green Ratio (*g/C*)	0.50	0.45	0.45	0.52	0.47	0.47	0.16	0.10	0.10	0.31	0.23	
Capacity (*c*), veh/h	504	1608	721	306	1659	732	212	192	162	443	399	
Volume-to-Capacity Ratio (*X*)	0.075	0.689	0.084	0.209	0.278	0.057	0.420	0.564	0.739	0.584	0.816	
Back of Queue (*Q*), ft/ln (90 th percentile)	15.6	217.5	20.4	20	108.4	39.5	90.8	106.8	129.9	202.3	278.8	
Back of Queue (*Q*), veh/ln (90 th percentile)	0.7	9.7	0.9	0.9	4.8	1.8	4.0	4.8	5.8	8.6	12.4	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.12	0.00	0.16	0.15	0.00	0.30	0.82	0.00	1.47	1.50	0.00	
Uniform Delay (*d 1*), s/veh	12.3	14.9	9.9	10.2	15.2	14.2	37.2	42.8	43.6	28.3	36.4	
Incremental Delay (*d 2*), s/veh	0.1	2.2	0.2	0.4	0.3	0.1	6.0	3.7	13.7	5.5	11.7	
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	12.4	17.1	10.1	10.6	15.5	14.3	43.2	46.4	57.3	33.9	48.1	
Level of Service (LOS)	B	B	B	B	B	B	D	D	E	C	D	
Approach Delay, s/veh / LOS	16.6	B		14.9	B		49.6	D		41.8	D	
Intersection Delay, s/veh / LOS	25.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.10	B	1.90	B	2.46	B	2.45	B
Bicycle LOS Score / LOS	1.51	B	1.71	B	1.01	A	1.45	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

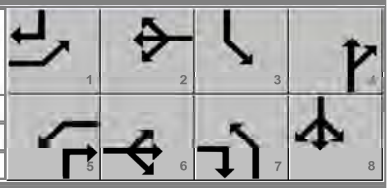
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.77
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	1st Street & Patterson	File Name	2045 ACP AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	54	966	180	173	1046	40	114	213	143	178	475	67

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	47	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.9	2.5	29.3	6.3	3.5	34.9	
Yellow	3.5	0.0	3.0	3.5	0.0	4.0	
Red	0.5	0.0	2.5	0.5	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	2.0	3.0	1.1	3.0
Phase Duration, s	8.9	34.8	11.4	37.3	10.3	39.9	13.9	43.4
Change Period, ($Y+R_c$), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	3.7		5.4		6.2	13.4	9.9	32.0
Green Extension Time (g_e), s	0.1	0.0	0.4	0.0	0.3	8.7	0.0	6.5
Phase Call Probability	0.71		0.93		0.98	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	0.11	1.00	0.43

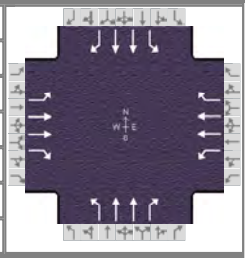
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	44	789	147	95	576	22	148	277	186	231	617	87
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1766	1598	1781	1781	1572	1743	1856	1598	1810	1885	1610
Queue Service Time (g_s), s	1.7	18.5	3.6	3.4	12.9	0.8	4.2	11.4	7.6	7.9	30.0	3.2
Cycle Queue Clearance Time (g_c), s	1.7	18.5	3.6	3.4	12.9	0.8	4.2	11.4	7.6	7.9	30.0	3.2
Green Ratio (*g/C*)	0.34	0.29	0.36	0.37	0.32	0.32	0.06	0.35	0.42	0.46	0.38	0.43
Capacity (*c*), veh/h	302	1036	570	269	1132	500	221	647	676	472	724	698
Volume-to-Capacity Ratio (*X*)	0.146	0.762	0.258	0.355	0.509	0.044	0.669	0.427	0.275	0.489	0.852	0.125
Back of Queue (*Q*), ft/ln (90 th percentile)	28.8	213.8	47.2	50.7	172.4	11.9	76.7	176.8	108.7	122.8	425.8	46.7
Back of Queue (*Q*), veh/ln (90 th percentile)	1.3	9.5	2.1	2.3	7.7	0.5	3.5	7.8	4.9	5.6	19.2	2.1
Queue Storage Ratio (*RQ*) (90 th percentile)	0.22	0.00	0.36	0.46	0.00	0.11	0.58	0.00	0.82	1.12	0.00	0.00
Uniform Delay (d_1), s/veh	24.1	23.9	10.6	19.4	26.8	18.6	45.8	24.9	18.8	17.6	28.2	17.0
Incremental Delay (d_2), s/veh	0.3	4.5	0.9	0.7	1.0	0.1	4.9	0.6	0.3	1.1	7.5	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	24.3	28.3	11.5	20.1	27.8	18.7	50.7	25.5	19.1	18.8	35.7	17.1
Level of Service (LOS)	C	C	B	C	C	B	D	C	B	B	D	B
Approach Delay, s/veh / LOS	25.6	C		26.4	C		29.7	C		29.8	C	
Intersection Delay, s/veh / LOS	27.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	2.11	B	2.43	B	2.43	B
Bicycle LOS Score / LOS	1.77	B	1.84	B	1.49	A	2.03	B

Copyright © 2020 University of Florida, All Rights Reserved.

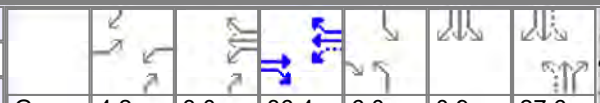
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.80
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	7th Street & Patterson	File Name	2045 ACP AM.xus		
Project Description					

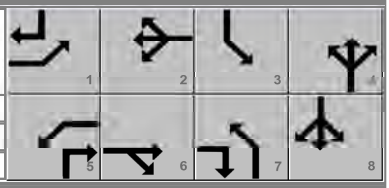


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	69	716	189	238	1007	106	80	301	147	168	654	204

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	11	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.2	3.0	36.4	6.0	0.9	27.6
Yellow	3.5	0.0	4.0	3.5	3.5	4.0
Red	0.5	0.0	1.0	0.5	0.5	1.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	8.2	41.4	11.2	44.4	10.0	32.6	14.8	37.4
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	5.1		6.9		6.0	9.7	9.9	21.7
Green Extension Time (g_e), s	0.2	0.0	0.4	0.0	0.4	12.7	1.0	10.7
Phase Call Probability	0.79		0.98		0.94	1.00	1.00	1.00
Max Out Probability	0.00		0.12		0.00	0.32	0.00	0.47

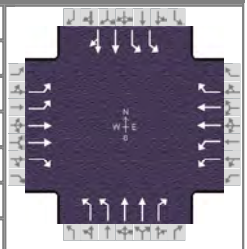
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	57	587	134	142	602	60	100	376	168	210	818	255
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1766	1373	1810	1781	1543	1767	1795	1591	1795	1809	1586
Queue Service Time (g_s), s	3.1	13.4	7.9	4.9	11.0	2.4	4.0	7.7	7.0	7.9	19.7	12.1
Cycle Queue Clearance Time (g_c), s	3.1	13.4	7.9	4.9	11.0	2.4	4.0	7.7	7.0	7.9	19.7	12.1
Green Ratio (*g/C*)	0.04	0.36	0.42	0.45	0.39	0.39	0.34	0.28	0.35	0.40	0.32	0.37
Capacity (*c*), veh/h	75	1287	594	373	1404	608	233	989	553	439	1173	581
Volume-to-Capacity Ratio (*X*)	0.749	0.456	0.225	0.382	0.429	0.099	0.429	0.380	0.303	0.478	0.697	0.439
Back of Queue (*Q*), ft/ln (90 th percentile)	65.5	195.6	150.6	57.2	144.9	35.8	70.6	119.4	99	125.5	268.6	160.8
Back of Queue (*Q*), veh/ln (90 th percentile)	3.0	8.7	6.7	2.6	6.5	1.6	3.1	5.4	4.5	5.7	12.2	7.2
Queue Storage Ratio (*RQ*) (90 th percentile)	0.37	0.00	0.97	0.43	0.00	0.23	0.32	0.00	0.56	1.14	0.00	0.00
Uniform Delay (d_1), s/veh	45.8	26.9	25.5	13.3	18.4	18.2	25.2	25.4	20.6	20.7	29.5	23.9
Incremental Delay (d_2), s/veh	15.6	0.9	0.7	0.7	0.7	0.2	1.8	0.3	0.4	1.2	1.3	0.7
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	61.4	27.8	26.3	14.0	19.1	18.5	27.0	25.7	21.0	21.9	30.8	24.7
Level of Service (LOS)	E	C	C	B	B	B	C	C	C	C	C	C
Approach Delay, s/veh / LOS	30.0	C		18.1	B		24.7	C		28.1	C	
Intersection Delay, s/veh / LOS	25.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.43	B	2.45	B	2.47	B
Bicycle LOS Score / LOS	1.47	A	1.88	B	1.02	A	1.55	B

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

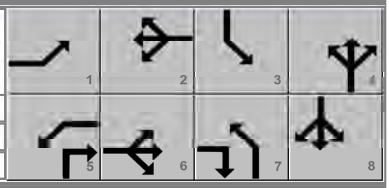
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.80
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	12th Street & Patterson	File Name	2045 ACP AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	135	571	179	382	1138	114	224	501	122	96	570	107

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	19	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.0	26.5	7.0	39.0	0.0	0.0
Yellow	3.5	4.0	3.5	4.0	0.0	0.0
Red	0.5	1.5	0.5	1.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	13.0	32.0	13.0	32.0	11.0	44.0	11.0	44.0
Change Period, ($Y+R_c$), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	4.4		6.5		6.8	15.0	3.9	20.5
Green Extension Time (g_e), s	0.2	0.0	0.3	0.0	0.0	11.8	0.1	10.2
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		1.00		1.00	0.37	1.00	0.50

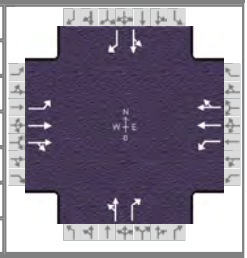
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	127	537	168	224	667	67	280	626	153	120	435	411
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1730	1766	1603	1743	1795	1598	1730	1781	1572	1743	1870	1765
Queue Service Time (g_s), s	2.4	13.8	8.4	4.5	15.7	2.1	4.8	13.0	5.6	1.9	18.5	18.5
Cycle Queue Clearance Time (g_c), s	2.4	13.8	8.4	4.5	15.7	2.1	4.8	13.0	5.6	1.9	18.5	18.5
Green Ratio (*g/C*)	0.36	0.26	0.34	0.36	0.26	0.26	0.46	0.39	0.48	0.46	0.39	0.39
Capacity (*c*), veh/h	582	936	537	618	951	423	627	1389	755	723	729	688
Volume-to-Capacity Ratio (*X*)	0.218	0.573	0.313	0.362	0.701	0.158	0.447	0.451	0.202	0.166	0.597	0.597
Back of Queue (*Q*), ft/ln (90 th percentile)	40.3	198.5	145.2	79.4	202.2	32.5	80.5	188.9	82.6	31.3	275.4	263.6
Back of Queue (*Q*), veh/ln (90 th percentile)	1.8	8.8	6.6	3.6	9.1	1.5	3.6	8.4	3.7	1.4	12.3	11.8
Queue Storage Ratio (*RQ*) (90 th percentile)	0.23	0.00	1.00	0.30	0.00	0.24	0.36	0.00	0.37	0.24	0.00	0.00
Uniform Delay (d_1), s/veh	23.0	35.3	28.1	25.5	27.9	17.7	18.5	22.6	15.0	16.3	24.2	24.3
Incremental Delay (d_2), s/veh	0.5	1.6	0.9	1.4	3.6	0.7	2.3	1.1	0.6	0.5	3.6	3.8
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	23.5	36.9	29.0	26.8	31.5	18.3	20.8	23.6	15.6	16.8	27.8	28.1
Level of Service (LOS)	C	D	C	C	C	B	C	C	B	B	C	C
Approach Delay, s/veh / LOS	33.2	C		29.5	C		21.7	C		26.6	C	
Intersection Delay, s/veh / LOS	27.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.58	C	2.44	B	2.57	C	2.57	C
Bicycle LOS Score / LOS	1.40	A	2.17	B	1.36	A	1.28	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

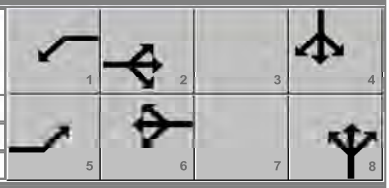
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	Patterson Rd & 15th St	File Name	2045 ACP AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	140	623	15	51	1800	194	12	3	20	12	3	61

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	9	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.2	2.8	75.4	6.6	0.0	0.0
Yellow	4.0	0.0	4.0	4.0	0.0	0.0
Red	0.0	0.0	0.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		7.0		7.0
Phase Duration, s	10.0	82.2	7.2	79.4		10.6		10.6
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0		4.0		4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (g_s), s	4.0		2.3			3.4		6.5
Green Extension Time (g_e), s	0.3	0.0	0.0	0.0		0.3		0.3
Phase Call Probability	0.99		0.53			0.98		0.98
Max Out Probability	0.00		0.00			0.00		0.00

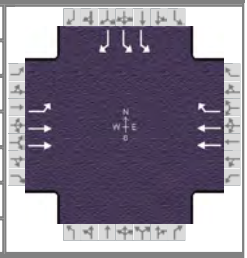
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	178	408	405	27	536	518		18	24		18	73
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1856	1840	1781	1885	1820		1514	1585		1514	1585
Queue Service Time (g_s), s	2.0	3.6	3.7	0.3	3.3	2.9		0.0	1.4		0.0	4.5
Cycle Queue Clearance Time (g_c), s	2.0	3.6	3.7	0.3	3.3	2.9		1.0	1.4		1.0	4.5
Green Ratio (*g/C*)	0.82	0.78	0.78	0.79	0.75	0.75		0.07	0.07		0.07	0.07
Capacity (*c*), veh/h	564	1451	1439	616	1422	1373		165	105		165	105
Volume-to-Capacity Ratio (*X*)	0.316	0.281	0.281	0.044	0.377	0.377		0.109	0.229		0.109	0.699
Back of Queue (*Q*), ft/ln (90 th percentile)	13.3	36.1	35.9	3	33.5	29.8		17.1	23.1		17.1	75.1
Back of Queue (*Q*), veh/ln (90 th percentile)	0.6	1.6	1.6	0.1	1.5	1.4		0.8	1.0		0.8	3.4
Queue Storage Ratio (*RQ*) (90 th percentile)	0.17	0.00	0.00	0.03	0.00	0.00		0.00	0.52		0.00	1.70
Uniform Delay (d_1), s/veh	1.9	1.6	1.6	2.4	1.0	0.9		44.0	44.3		44.0	45.7
Incremental Delay (d_2), s/veh	0.1	0.5	0.5	0.0	0.6	0.6		0.1	0.4		0.1	3.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	2.0	2.0	2.1	2.5	1.6	1.5		44.1	44.7		44.1	48.8
Level of Service (LOS)	A	A	A	A	A	A		D	D		D	D
Approach Delay, s/veh / LOS	2.0	A		1.6	A		44.4	D		47.9	D	
Intersection Delay, s/veh / LOS	4.5						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.83	B	1.84	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	1.26	A	2.52	C	0.56	A	0.64	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

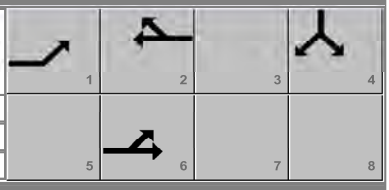
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	27 1/2 Road & Patterson	File Name	2045 ACP AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	80	647			1589	304				395		214

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	88	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.0	43.0	31.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.0	0.0	0.0	0.0
Red	0.5	1.5	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6		2				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	15.0	64.0		49.0				36.0
Change Period, (*Y+R c*), s	4.0	6.0		6.0				5.0
Max Allow Headway (*MAH*), s	5.2	0.0		0.0				5.3
Queue Clearance Time (*g s*), s	3.4							16.1
Green Extension Time (*g e*), s	0.1	0.0		0.0				4.3
Phase Call Probability	1.00							1.00
Max Out Probability	0.12							0.18

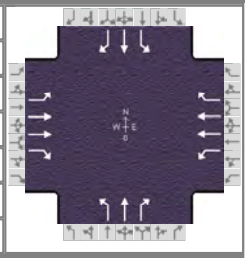
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				7		14
Adjusted Flow Rate (*v*), veh/h	64	515			872	167				476		258
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1795			1795	1610				1757		1522
Queue Service Time (*g s*), s	1.4	5.1			17.3	5.7				10.8		14.1
Cycle Queue Clearance Time (*g c*), s	1.4	5.1			17.3	5.7				10.8		14.1
Green Ratio (*g/C*)	0.56	0.58			0.43	0.43				0.31		0.31
Capacity (*c*), veh/h	402	2082			1543	692				1089		472
Volume-to-Capacity Ratio (*X*)	0.158	0.247			0.565	0.241				0.437		0.546
Back of Queue (*Q*), ft/ln (90 th percentile)	22.2	68.6			214.2	81				161.8		199.7
Back of Queue (*Q*), veh/ln (90 th percentile)	1.0	3.1			9.7	3.7				7.4		8.6
Queue Storage Ratio (*RQ*) (90 th percentile)	0.15	0.00			0.00	1.53				0.97		0.00
Uniform Delay (*d 1*), s/veh	9.8	6.9			19.2	15.0				27.5		28.7
Incremental Delay (*d 2*), s/veh	0.6	0.2			1.2	0.7				1.3		4.5
Initial Queue Delay (*d 3*), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (*d*), s/veh	10.5	7.1			20.5	15.7				28.8		33.2
Level of Service (LOS)	B	A			C	B				C		C
Approach Delay, s/veh / LOS	7.5	A		19.7	B		0.0			30.3	C	
Intersection Delay, s/veh / LOS	20.0						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.69	A	2.10	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	1.21	A	2.37	B				F

Copyright © 2020 University of Florida, All Rights Reserved.

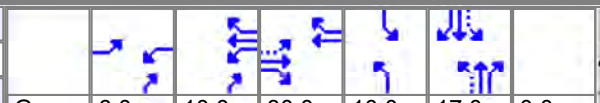
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.85
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	28 1/4 Road & Patterson	File Name	2045 ACP AM.xus		
Project Description					

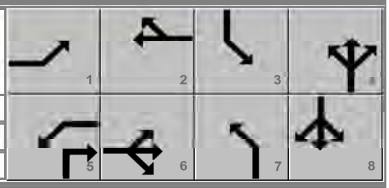


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	53	718	264	289	1672	73	290	31	81	80	31	32

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	95	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	Off
Force Mode	Fixed	Simult. Gap N/S	On



Green	6.0	10.0	30.0	10.0	17.0	0.0
Yellow	3.5	4.0	4.5	3.5	4.0	0.0
Red	0.5	0.0	1.5	0.5	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	10.0	36.0	24.0	50.0	18.0	26.0	14.0	22.0
Change Period, ($Y+R_c$), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	3.1	0.0	3.2	5.3	5.2	5.3
Queue Clearance Time (g_s), s	3.2		9.1		16.0	5.7	6.0	4.0
Green Extension Time (g_e), s	0.0	0.0	0.2	0.0	0.0	0.9	0.1	0.9
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		0.00		1.00	0.01	1.00	0.02

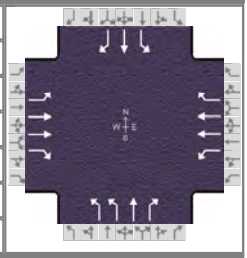
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	31	419	154	151	871	38	341	36	95	94	36	38
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1795	1585	1795	1795	1610	1795	1900	1610	1810	1900	1610
Queue Service Time (g_s), s	1.2	6.5	4.2	7.1	18.4	2.0	14.0	1.5	3.7	4.0	1.6	2.0
Cycle Queue Clearance Time (g_c), s	1.2	6.5	4.2	7.1	18.4	2.0	14.0	1.5	3.7	4.0	1.6	2.0
Green Ratio (*g/C*)	0.36	0.30	0.30	0.20	0.44	0.44	0.33	0.21	0.41	0.27	0.17	0.17
Capacity (*c*), veh/h	327	1077	476	359	1579	708	529	399	660	470	323	274
Volume-to-Capacity Ratio (*X*)	0.094	0.389	0.324	0.419	0.552	0.054	0.645	0.091	0.144	0.200	0.113	0.138
Back of Queue (*Q*), ft/ln (90 th percentile)	20.5	91	55.6	111.3	229.4	54.2	241	29.7	56.6	72.2	31.9	33.6
Back of Queue (*Q*), veh/ln (90 th percentile)	0.9	4.1	2.5	5.0	10.3	2.5	10.9	1.4	2.6	3.3	1.4	1.5
Queue Storage Ratio (*RQ*) (90 th percentile)	0.08	0.00	0.19	0.42	0.00	0.56	0.91	0.00	0.00	0.66	0.00	0.00
Uniform Delay (d_1), s/veh	22.3	16.8	12.6	33.5	21.8	24.5	28.2	31.8	18.5	28.1	35.1	35.3
Incremental Delay (d_2), s/veh	0.4	0.8	1.4	2.4	0.9	0.1	6.0	0.5	0.5	1.0	0.7	1.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	22.7	17.6	13.9	35.8	22.7	24.6	34.2	32.3	19.0	29.1	35.8	36.3
Level of Service (LOS)	C	B	B	D	C	C	C	C	B	C	D	D
Approach Delay, s/veh / LOS	16.9	B		24.7	C		30.9	C		32.2	C	
Intersection Delay, s/veh / LOS	24.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.12	B	2.10	B	2.45	B	2.45	B
Bicycle LOS Score / LOS	1.49	A	2.46	B	1.27	A	0.77	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

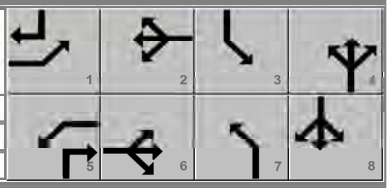
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	29 Road & Patterson	File Name	2045 ACP AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	129	532	231	187	1461	98	194	173	49	73	271	360

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	50	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.5	36.5	8.5	4.0	22.0	0.0
Yellow	3.5	4.5	3.5	0.0	4.0	0.0
Red	1.0	2.0	1.0	0.0	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	13.0	43.0	13.0	43.0	13.0	27.0	17.0	31.0
Change Period, ($Y+R_c$), s	4.5	6.5	4.5	6.5	4.5	5.0	4.5	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (g_s), s	5.7		6.6		7.1	11.8	5.4	21.8
Green Extension Time (g_e), s	0.1	0.0	0.1	0.0	0.1	2.9	0.1	1.6
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		1.00		1.00	0.31	0.06	1.00

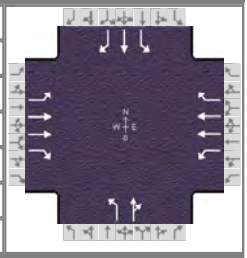
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	111	457	198	134	1046	70	234	208	17	88	327	373
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1795	1572	1767	1781	1585	1716	1870	1610	1753	1870	1610
Queue Service Time (g_s), s	3.7	8.8	6.9	4.6	23.6	1.5	5.1	9.8	0.7	3.4	15.7	19.8
Cycle Queue Clearance Time (g_c), s	3.7	8.8	6.9	4.6	23.6	1.5	5.1	9.8	0.7	3.4	15.7	19.8
Green Ratio (*g/C*)	0.45	0.36	0.36	0.45	0.36	0.36	0.30	0.22	0.31	0.36	0.26	0.35
Capacity (*c*), veh/h	282	1310	574	460	1300	579	559	411	491	430	486	556
Volume-to-Capacity Ratio (*X*)	0.392	0.349	0.346	0.291	0.805	0.121	0.418	0.507	0.034	0.205	0.671	0.672
Back of Queue (*Q*), ft/ln (90 th percentile)	69.4	124.2	89.3	78.4	223.2	21.1	89.4	171.5	11.6	60.6	256.2	263.9
Back of Queue (*Q*), veh/ln (90 th percentile)	3.1	5.6	4.0	3.5	10.0	0.9	4.0	7.7	0.5	2.7	11.5	12.0
Queue Storage Ratio (*RQ*) (90 th percentile)	0.22	0.00	0.33	0.20	0.00	0.24	0.40	0.00	0.05	0.46	0.00	2.00
Uniform Delay (d_1), s/veh	21.9	21.6	15.6	18.6	19.3	9.9	27.0	34.2	24.4	22.3	33.2	27.9
Incremental Delay (d_2), s/veh	3.0	0.5	1.2	1.1	3.7	0.3	2.3	4.4	0.1	1.1	7.2	6.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	24.9	22.1	16.8	19.7	23.0	10.2	29.3	38.6	24.5	23.3	40.4	34.3
Level of Service (LOS)	C	C	B	B	C	B	C	D	C	C	D	C
Approach Delay, s/veh / LOS	21.2	C		21.9	C		33.4	C		35.6	D	
Intersection Delay, s/veh / LOS	26.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.33	B	2.18	B	2.45	B	2.44	B
Bicycle LOS Score / LOS	1.37	A	2.22	B	1.25	A	1.79	B

Copyright © 2020 University of Florida, All Rights Reserved.

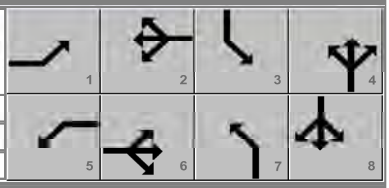
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.85
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	29 1/2 Road & Patterson	File Name	2045 ACP AM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	13	531	96	222	1549	265	48	34	67	150	106	64

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	48	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	1.5	2.2	50.4	7.0	1.0	10.4	
Yellow	3.5	3.5	5.0	4.0	4.0	4.0	
Red	0.5	0.5	1.5	0.0	0.0	1.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	5.5	56.9	11.7	63.2	11.0	15.4	16.0	20.4
Change Period, ($Y+R_c$), s	4.0	6.5	4.0	6.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	4.5	0.0	4.5	0.0	3.7	4.7	3.7	4.7
Queue Clearance Time (g_s), s	2.3		6.9		4.7	9.1	10.3	8.1
Green Extension Time (g_e), s	0.0	0.0	0.8	0.0	0.0	1.3	0.1	1.4
Phase Call Probability	0.29		0.99		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	0.01	1.00	0.00

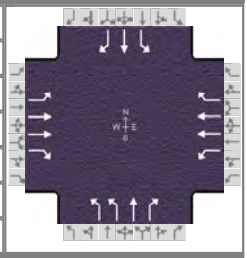
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	13	511	92	187	1304	223	56	119		176	125	75
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1795	1598	1795	1795	1560	1767	1618		1781	1841	1585
Queue Service Time (g_s), s	0.3	7.1	2.7	4.9	22.6	6.6	2.7	7.1		8.3	6.1	4.2
Cycle Queue Clearance Time (g_c), s	0.3	7.1	2.7	4.9	22.6	6.6	2.7	7.1		8.3	6.1	4.2
Green Ratio (*g/C*)	0.52	0.50	0.50	0.60	0.57	0.57	0.17	0.10		0.24	0.15	0.15
Capacity (*c*), veh/h	210	1810	806	566	2034	884	281	168		327	283	244
Volume-to-Capacity Ratio (*X*)	0.060	0.282	0.115	0.330	0.641	0.252	0.201	0.708		0.539	0.441	0.309
Back of Queue (*Q*), ft/ln (90 th percentile)	4.9	93.9	73	55.3	225.4	113.6	51.9	121.9		148.5	112.7	66.8
Back of Queue (*Q*), veh/ln (90 th percentile)	0.2	4.2	3.3	2.5	10.2	5.0	2.3	5.3		6.6	5.0	3.0
Queue Storage Ratio (*RQ*) (90 th percentile)	0.04	0.00	0.86	0.42	0.00	0.48	0.67	0.00		1.08	0.00	0.00
Uniform Delay (d_1), s/veh	13.0	11.9	11.4	8.3	12.2	9.7	35.3	43.3		32.2	38.4	37.6
Incremental Delay (d_2), s/veh	0.1	0.3	0.2	0.2	1.1	0.5	1.6	5.4		6.2	1.1	0.7
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	13.1	12.1	11.6	8.5	13.3	10.2	36.9	48.7		38.5	39.5	38.3
Level of Service (LOS)	B	B	B	A	B	B	D	D		D	D	D
Approach Delay, s/veh / LOS	12.1	B		12.4	B		44.9	D		38.8	D	
Intersection Delay, s/veh / LOS	17.8						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.90	B	2.08	B	2.46	B	2.45	B
Bicycle LOS Score / LOS	1.11	A	2.46	B	0.78	A	1.11	A

Copyright © 2020 University of Florida, All Rights Reserved.

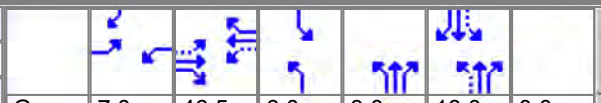
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	AM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	30 Road & Patterson	File Name	2045 ACP AM.xus		
Project Description					

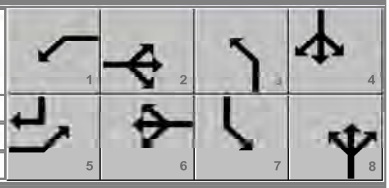


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	95	420	203	137	1188	17	438	57	49	42	138	279

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	55	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	7.0	46.5	6.0	3.0	18.0	0.0
Yellow	3.5	5.0	3.5	0.0	4.0	0.0
Red	0.5	1.5	0.5	0.0	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	11.0	53.0	11.0	53.0	13.0	26.0	10.0	23.0
Change Period, (*Y+R c*), s	4.0	6.5	4.0	6.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.2	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (*g s*), s	5.1		6.1		11.0	5.0	4.2	14.4
Green Extension Time (*g e*), s	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.8
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		1.00		1.00	0.02	1.00	1.00

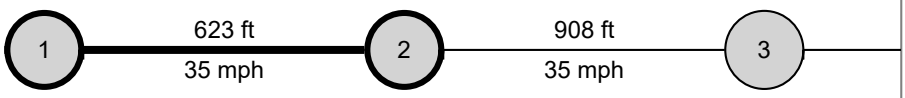
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	114	506	245	147	1271	18	528	69	58	51	166	225
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1795	1598	1795	1795	1598	1730	1870	1560	1810	1885	1585
Queue Service Time (*g s*), s	3.1	4.1	4.6	4.1	22.8	0.3	9.0	3.0	3.0	2.2	7.9	12.4
Cycle Queue Clearance Time (*g c*), s	3.1	4.1	4.6	4.1	22.8	0.3	9.0	3.0	3.0	2.2	7.9	12.4
Green Ratio (*g/C*)	0.54	0.46	0.46	0.54	0.46	0.46	0.28	0.21	0.21	0.24	0.18	0.25
Capacity (*c*), veh/h	293	1669	743	487	1669	743	655	393	328	386	339	396
Volume-to-Capacity Ratio (*X*)	0.390	0.303	0.329	0.301	0.761	0.024	0.805	0.175	0.177	0.131	0.490	0.569
Back of Queue (*Q*), ft/ln (90 th percentile)	53.5	53.8	56.3	70	203.5	4.5	113.6	58.2	50.6	40	147.1	184.1
Back of Queue (*Q*), veh/ln (90 th percentile)	2.4	2.4	2.5	3.2	9.2	0.2	5.1	2.6	2.2	1.8	6.6	8.2
Queue Storage Ratio (*RQ*) (90 th percentile)	0.61	0.00	0.20	0.69	0.00	0.08	0.51	0.00	0.29	0.30	0.00	1.39
Uniform Delay (*d 1*), s/veh	15.7	6.5	6.5	11.9	11.5	6.7	34.2	32.4	32.4	29.7	36.9	32.8
Incremental Delay (*d 2*), s/veh	2.6	0.3	0.8	1.6	3.3	0.1	10.2	1.0	1.2	0.7	5.0	5.8
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	18.4	6.8	7.3	13.5	14.9	6.8	44.4	33.4	33.6	30.4	41.9	38.6
Level of Service (LOS)	B	A	A	B	B	A	D	C	C	C	D	D
Approach Delay, s/veh / LOS	8.5	A		14.6	B		42.3	D		38.9	D	
Intersection Delay, s/veh / LOS	21.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.27	B	2.23	B	2.45	B	2.45	B
Bicycle LOS Score / LOS	1.20	A	1.82	B	1.57	B	1.22	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	24 Road & Patterson	Market Street/Mall Access & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (24 Rd - Market St)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
1	35	35	2	2	623	623	50	50	0	0	100	0	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	41.58			42.05		
1	Running Time, s	14.68			14.98		
1	Running Speed, mph	28.93			28.35		
1	Through Delay, s/veh	8.14			43.57		
1	Travel Time, s	22.83			58.56		
1	Travel Speed, mph	18.61			7.25		
1	Stop Rate, stops/veh	0.32			0.89		
1	Spatial Stop Rate, stops/mi	2.75			7.56		
1	Through vol/cap Ratio	0.15			0.77		
1	Percent of Base FFS	44.75			17.25		
1	Level of Service	D			F		
1	Auto Traveler Perception Score	2.57			3.46		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	2.20		B	3.65		D
1	Bicycle Segment LOS Score / LOS	2.10		B	2.67		B
1	Transit Segment LOS Score / LOS	1.75		A	3.30		C

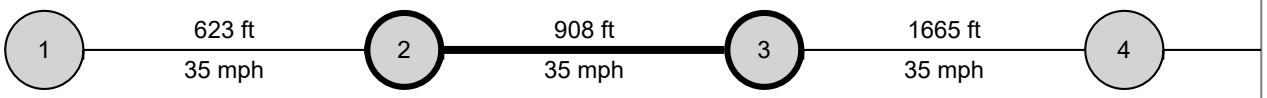
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	Market Street/Mall Access & Pat	Home Depot Access/Mesa Mall Access &		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (Market St to Home Depot)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
2	35	35	2	2	908	908	50	50	0	0	70	70	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	41.48			41.48		
2	Running Time, s	18.43			18.98		
2	Running Speed, mph	33.59			32.62		
2	Through Delay, s/veh	4.46			3.39		
2	Travel Time, s	22.89			22.37		
2	Travel Speed, mph	27.05			27.68		
2	Stop Rate, stops/veh	0.18			0.12		
2	Spatial Stop Rate, stops/mi	1.03			0.70		
2	Through vol/cap Ratio	0.16			0.49		
2	Percent of Base FFS	65.20			66.73		
2	Level of Service	C			C		
2	Auto Traveler Perception Score	2.29			2.24		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	2.88		C	3.75		D
2	Bicycle Segment LOS Score / LOS	2.41		B	2.81		C
2	Transit Segment LOS Score / LOS	1.06		A	1.17		A

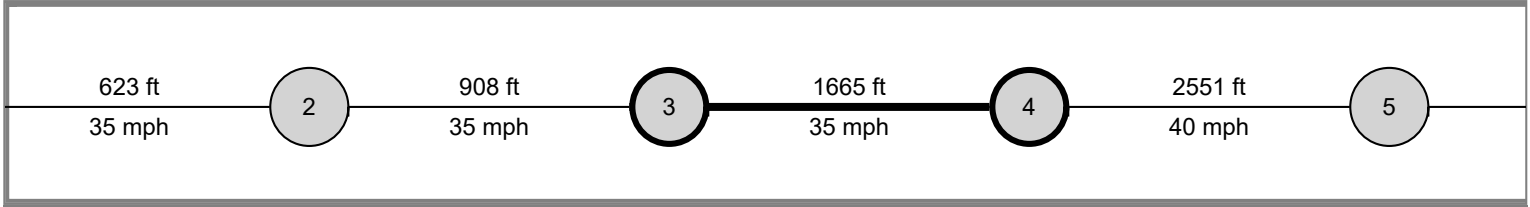
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	Home Depot Access/Mesa Mall /	24 1/2 Rd & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (Home Depot - 24 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
3	35	35	2	2	1665	1665	50	50	550	550	70	100	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h						
3	Shared Lane Spillback Time, h						
3	Base Free-Flow Speed, mph	40.84			40.32		
3	Running Time, s	30.30			31.90		
3	Running Speed, mph	37.46			35.59		
3	Through Delay, s/veh	12.44			3.67		
3	Travel Time, s	42.74			35.57		
3	Travel Speed, mph	26.56			31.92		
3	Stop Rate, stops/veh	0.40			0.11		
3	Spatial Stop Rate, stops/mi	1.26			0.36		
3	Through vol/cap Ratio	0.17			0.56		
3	Percent of Base FFS	65.04			79.16		
3	Level of Service	C			B		
3	Auto Traveler Perception Score	2.33			2.19		
Multimodal Results (Segment)							
3	Pedestrian Segment LOS Score / LOS	3.04		C	3.86		D
3	Bicycle Segment LOS Score / LOS	2.50		B	2.91		C
3	Transit Segment LOS Score / LOS	1.12		A	0.96		A

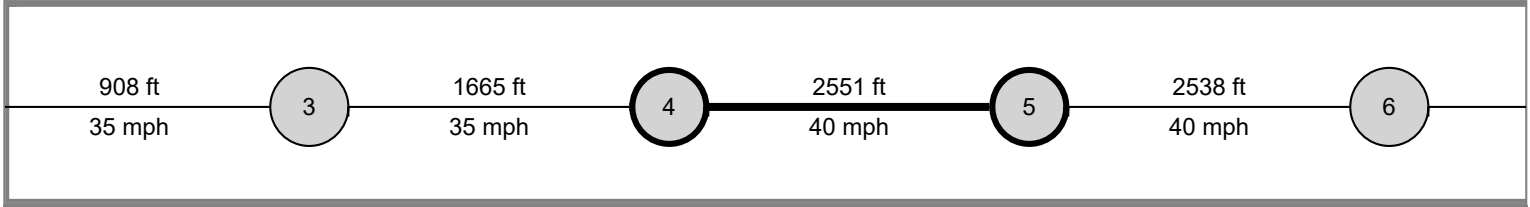
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	24 1/2 Rd & Patterson	25 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (24 1/2 Rd - 25 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
4	40	35	2	2	2551	2551	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h						
4	Shared Lane Spillback Time, h						
4	Base Free-Flow Speed, mph	43.32			40.97		
4	Running Time, s	42.33			46.11		
4	Running Speed, mph	41.09			37.72		
4	Through Delay, s/veh	30.81			12.21		
4	Travel Time, s	73.14			58.32		
4	Travel Speed, mph	23.78			29.82		
4	Stop Rate, stops/veh	0.80			0.28		
4	Spatial Stop Rate, stops/mi	1.65			0.59		
4	Through vol/cap Ratio	0.29			0.77		
4	Percent of Base FFS	54.90			72.79		
4	Level of Service	C			B		
4	Auto Traveler Perception Score	2.39			2.23		
Multimodal Results (Segment)							
4	Pedestrian Segment LOS Score / LOS	2.90		C	3.50		C
4	Bicycle Segment LOS Score / LOS	2.58		B	2.90		C
4	Transit Segment LOS Score / LOS	1.36		A	1.09		A

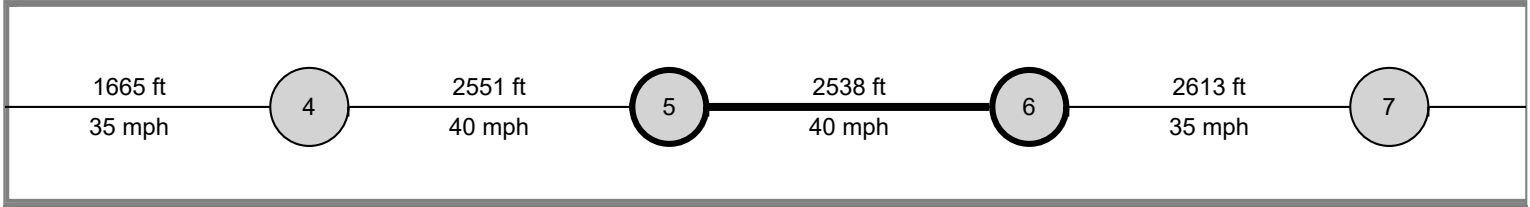
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	25 Road & Patterson	25 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (25 Rd - 25 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
5	40	40	2	2	2538	2538	50	50	260	260	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h						
5	Shared Lane Spillback Time, h						
5	Base Free-Flow Speed, mph	42.96			42.96		
5	Running Time, s	42.47			43.65		
5	Running Speed, mph	40.74			39.65		
5	Through Delay, s/veh	15.54			23.59		
5	Travel Time, s	58.01			67.24		
5	Travel Speed, mph	29.83			25.74		
5	Stop Rate, stops/veh	0.45			0.51		
5	Spatial Stop Rate, stops/mi	0.94			1.07		
5	Through vol/cap Ratio	0.28			0.86		
5	Percent of Base FFS	69.44			59.91		
5	Level of Service	B			C		
5	Auto Traveler Perception Score	2.28			2.30		
Multimodal Results (Segment)							
5	Pedestrian Segment LOS Score / LOS	2.74		B	3.86		D
5	Bicycle Segment LOS Score / LOS	2.58		B	2.91		C
5	Transit Segment LOS Score / LOS	0.92		A	1.36		A

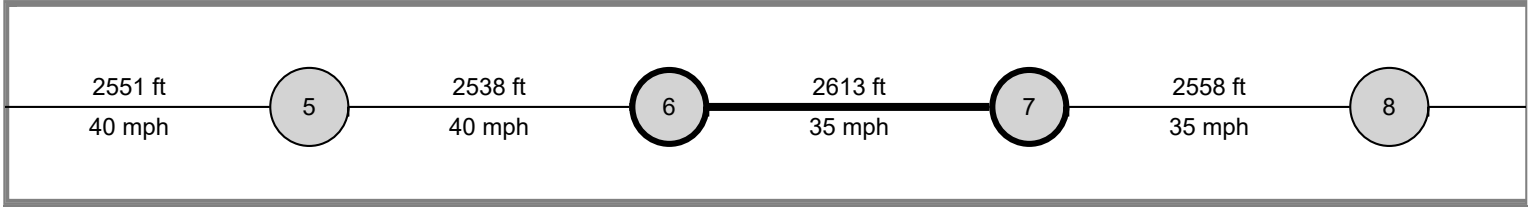
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	25 1/2 Road & Patterson	1st Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (25 1/2 Rd - 26 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
6	35	40	2	2	2613	2613	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
6	Bay/Lane Spillback Time, h						
6	Shared Lane Spillback Time, h						
6	Base Free-Flow Speed, mph	40.98			43.33		
6	Running Time, s	45.74			44.08		
6	Running Speed, mph	38.95			40.42		
6	Through Delay, s/veh	27.77			17.11		
6	Travel Time, s	73.50			61.19		
6	Travel Speed, mph	24.24			29.12		
6	Stop Rate, stops/veh	0.67			0.43		
6	Spatial Stop Rate, stops/mi	1.36			0.87		
6	Through vol/cap Ratio	0.51			0.69		
6	Percent of Base FFS	59.14			67.19		
6	Level of Service	C			B		
6	Auto Traveler Perception Score	2.35			2.27		
Multimodal Results (Segment)							
6	Pedestrian Segment LOS Score / LOS	2.90		C	3.00		C
6	Bicycle Segment LOS Score / LOS	2.66		B	2.80		C
6	Transit Segment LOS Score / LOS	1.34		A	1.08		A

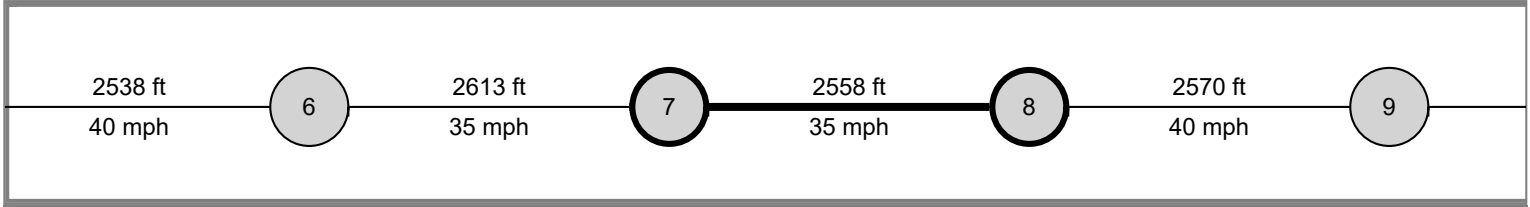
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	1st Street & Patterson	7th Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (26 Rd - 26 1/2)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
7	35	40	2	2	2558	2558	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
7	Bay/Lane Spillback Time, h						
7	Shared Lane Spillback Time, h						
7	Base Free-Flow Speed, mph	40.40			42.75		
7	Running Time, s	45.60			43.48		
7	Running Speed, mph	38.24			40.12		
7	Through Delay, s/veh	19.06			28.35		
7	Travel Time, s	64.67			71.83		
7	Travel Speed, mph	26.97			24.28		
7	Stop Rate, stops/veh	0.50			0.59		
7	Spatial Stop Rate, stops/mi	1.04			1.22		
7	Through vol/cap Ratio	0.43			0.76		
7	Percent of Base FFS	66.77			56.81		
7	Level of Service	C			C		
7	Auto Traveler Perception Score	2.30			2.32		
Multimodal Results (Segment)							
7	Pedestrian Segment LOS Score / LOS	2.68		B	3.01		C
7	Bicycle Segment LOS Score / LOS	2.68		B	2.76		C
7	Transit Segment LOS Score / LOS	1.15		A	1.39		A

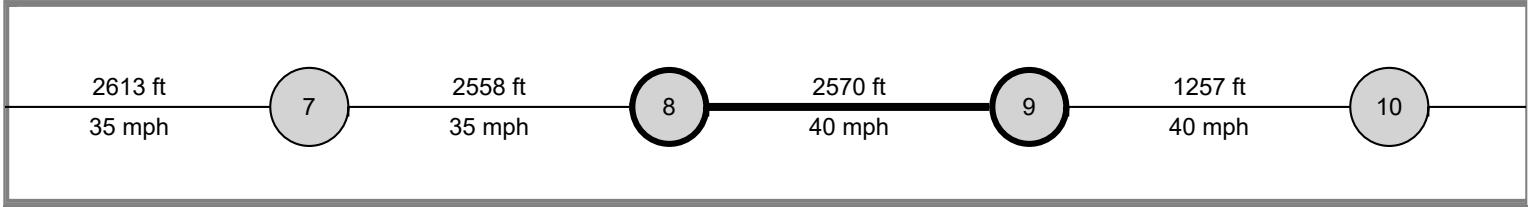
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	7th Street & Patterson	12th Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (26 1/2 Rd to 12th St)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
8	40	35	2	2	2570	2570	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
8	Bay/Lane Spillback Time, h						
8	Shared Lane Spillback Time, h						
8	Base Free-Flow Speed, mph	43.08			40.73		
8	Running Time, s	43.32			45.45		
8	Running Speed, mph	40.45			38.55		
8	Through Delay, s/veh	31.46			27.81		
8	Travel Time, s	74.78			73.26		
8	Travel Speed, mph	23.43			23.92		
8	Stop Rate, stops/veh	0.67			0.72		
8	Spatial Stop Rate, stops/mi	1.38			1.48		
8	Through vol/cap Ratio	0.70			0.46		
8	Percent of Base FFS	54.39			58.72		
8	Level of Service	C			C		
8	Auto Traveler Perception Score	2.35			2.36		
Multimodal Results (Segment)							
8	Pedestrian Segment LOS Score / LOS	2.90		C	2.65		B
8	Bicycle Segment LOS Score / LOS	2.79		C	2.64		B
8	Transit Segment LOS Score / LOS	1.46		A	1.38		A

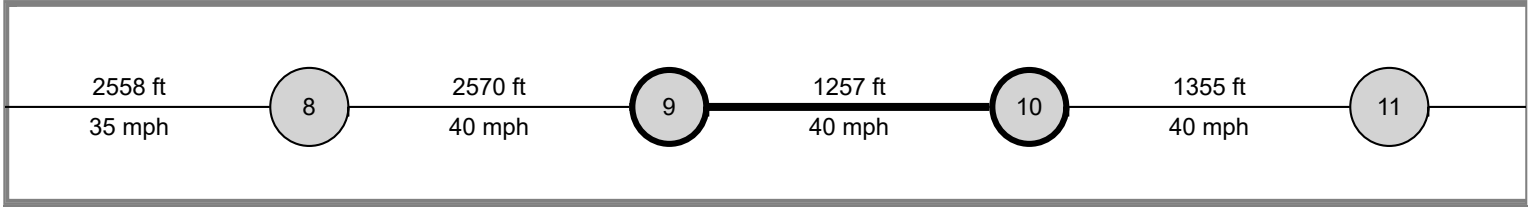
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	12th Street & Patterson	Patterson Rd & 15th St		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (12th St - 27 1/4 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
9	40	35	2	2	1257	1257	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
9	Bay/Lane Spillback Time, h						
9	Shared Lane Spillback Time, h						
9	Base Free-Flow Speed, mph	42.61			40.26		
9	Running Time, s	23.36			24.41		
9	Running Speed, mph	36.68			35.11		
9	Through Delay, s/veh	1.57			36.87		
9	Travel Time, s	24.93			61.28		
9	Travel Speed, mph	34.38			13.98		
9	Stop Rate, stops/veh	0.05			0.84		
9	Spatial Stop Rate, stops/mi	0.23			3.55		
9	Through vol/cap Ratio	0.38			0.57		
9	Percent of Base FFS	80.68			34.73		
9	Level of Service	A			E		
9	Auto Traveler Perception Score	2.17			2.71		
Multimodal Results (Segment)							
9	Pedestrian Segment LOS Score / LOS	2.79		C	3.33		C
9	Bicycle Segment LOS Score / LOS	2.82		C	2.70		B
9	Transit Segment LOS Score / LOS	0.71		A	2.34		B

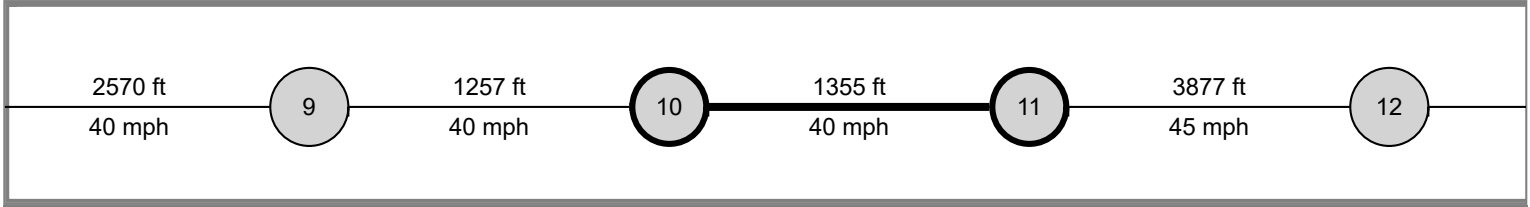
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	Patterson Rd & 15th St	27 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
10	40	40	2	2	1355	1355	50	50	0	0	70	70	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
10	Bay/Lane Spillback Time, h						
10	Shared Lane Spillback Time, h						
10	Base Free-Flow Speed, mph	44.07			44.07		
10	Running Time, s	24.25			24.22		
10	Running Speed, mph	38.10			38.15		
10	Through Delay, s/veh	20.49			2.04		
10	Travel Time, s	44.74			26.26		
10	Travel Speed, mph	20.65			35.18		
10	Stop Rate, stops/veh	0.55			0.08		
10	Spatial Stop Rate, stops/mi	2.14			0.31		
10	Through vol/cap Ratio	0.56			0.28		
10	Percent of Base FFS	46.86			79.84		
10	Level of Service	D			B		
10	Auto Traveler Perception Score	2.70			2.19		
Multimodal Results (Segment)							
10	Pedestrian Segment LOS Score / LOS	3.57		D	3.56		D
10	Bicycle Segment LOS Score / LOS	2.84		C	2.68		B
10	Transit Segment LOS Score / LOS	1.70		A	0.65		A

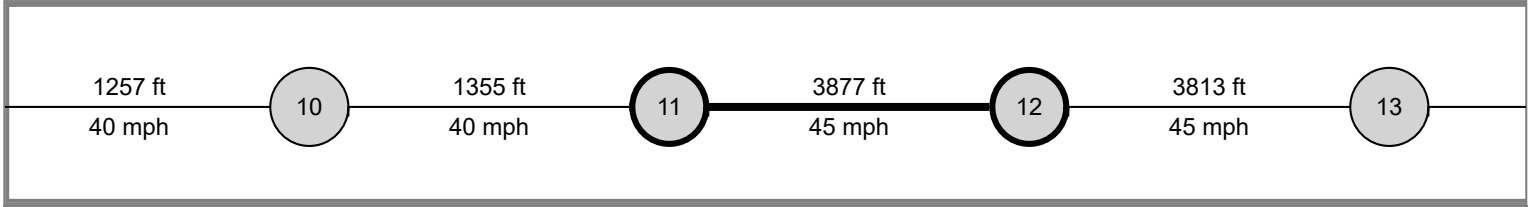
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	27 1/2 Road & Patterson	28 1/4 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (27 1/2 RD - 28 1/4 RD)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
11	45	40	2	2	3877	3877	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement		2	12	1	6	
11	Bay/Lane Spillback Time, h						
11	Shared Lane Spillback Time, h						
11	Base Free-Flow Speed, mph	45.57			43.22		
11	Running Time, s	60.87			63.04		
11	Running Speed, mph	43.43			41.93		
11	Through Delay, s/veh	22.73			7.12		
11	Travel Time, s	83.60			70.16		
11	Travel Speed, mph	31.62			37.68		
11	Stop Rate, stops/veh	0.62			0.24		
11	Spatial Stop Rate, stops/mi	0.84			0.33		
11	Through vol/cap Ratio	0.55			0.25		
11	Percent of Base FFS	69.38			87.16		
11	Level of Service	B			A		
11	Auto Traveler Perception Score	2.37			2.19		
Multimodal Results (Segment)							
11	Pedestrian Segment LOS Score / LOS	3.86		D	2.93		C
11	Bicycle Segment LOS Score / LOS	2.90		C	2.60		B
11	Transit Segment LOS Score / LOS	0.91		A	0.47		A

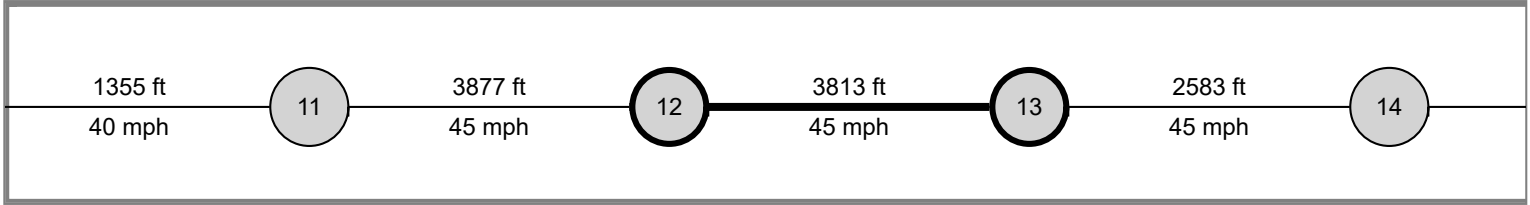
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	28 1/4 Road & Patterson	29 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (28 1/4 Rd - 29 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12	45	40	2	2	3813	3813	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
12	Bay/Lane Spillback Time, h						
12	Shared Lane Spillback Time, h						
12	Base Free-Flow Speed, mph	45.78			43.43		
12	Running Time, s	59.75			61.76		
12	Running Speed, mph	43.51			42.09		
12	Through Delay, s/veh	22.99			17.55		
12	Travel Time, s	82.74			79.31		
12	Travel Speed, mph	31.42			32.78		
12	Stop Rate, stops/veh	0.49			0.41		
12	Spatial Stop Rate, stops/mi	0.68			0.57		
12	Through vol/cap Ratio	0.80			0.39		
12	Percent of Base FFS	68.64			75.47		
12	Level of Service	B			B		
12	Auto Traveler Perception Score	2.24			2.22		
Multimodal Results (Segment)							
12	Pedestrian Segment LOS Score / LOS	3.56		D	2.91		C
12	Bicycle Segment LOS Score / LOS	2.93		C	2.62		B
12	Transit Segment LOS Score / LOS	0.95		A	0.75		A

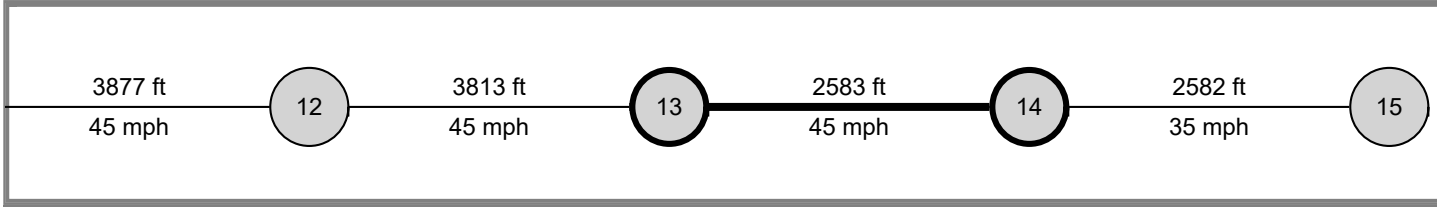
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	29 Road & Patterson	29 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (29 Rd - 29 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
13	45	45	2	2	2583	2583	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
13	Bay/Lane Spillback Time, h						
13	Shared Lane Spillback Time, h						
13	Base Free-Flow Speed, mph	44.94			44.94		
13	Running Time, s	41.59			40.48		
13	Running Speed, mph	42.34			43.51		
13	Through Delay, s/veh	13.34			22.15		
13	Travel Time, s	54.93			62.63		
13	Travel Speed, mph	32.06			28.12		
13	Stop Rate, stops/veh	0.40			0.56		
13	Spatial Stop Rate, stops/mi	0.82			1.14		
13	Through vol/cap Ratio	0.64			0.35		
13	Percent of Base FFS	71.34			62.57		
13	Level of Service	B			C		
13	Auto Traveler Perception Score	2.26			2.31		
Multimodal Results (Segment)							
13	Pedestrian Segment LOS Score / LOS	3.59		D	3.37		C
13	Bicycle Segment LOS Score / LOS	3.02		C	2.71		B
13	Transit Segment LOS Score / LOS	0.98		A	1.09		A

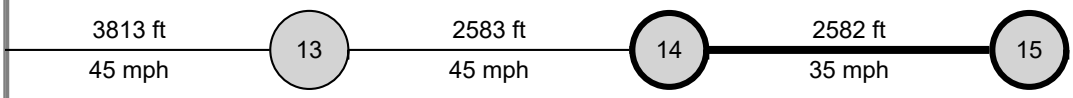
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	AM Peak	Number of Iterations	15
File Name	2045 ACP AM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	29 1/2 Road & Patterson	30 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (29 1/2 Rd - 30 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
14	35	45	2	2	2582	2582	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
14	Bay/Lane Spillback Time, h						
14	Shared Lane Spillback Time, h						
14	Base Free-Flow Speed, mph	40.81			45.51		
14	Running Time, s	46.49			40.31		
14	Running Speed, mph	37.87			43.67		
14	Through Delay, s/veh	14.85			12.14		
14	Travel Time, s	61.35			52.45		
14	Travel Speed, mph	28.70			33.57		
14	Stop Rate, stops/veh	0.34			0.36		
14	Spatial Stop Rate, stops/mi	0.70			0.74		
14	Through vol/cap Ratio	0.76			0.28		
14	Percent of Base FFS	70.31			73.75		
14	Level of Service	B			B		
14	Auto Traveler Perception Score	2.24			2.25		
Multimodal Results (Segment)							
14	Pedestrian Segment LOS Score / LOS	3.63		D	2.97		C
14	Bicycle Segment LOS Score / LOS	2.91		C	2.62		B
14	Transit Segment LOS Score / LOS	1.13		A	0.71		A

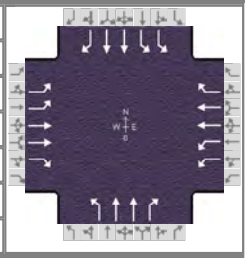
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	784.82	800.42
Facility Travel Speed, mph	27.36	26.83
Facility Base Free Flow Speed, mph	43.04	42.77
Facility Percent of Base FFS	63.57	62.72
Facility Level of Service	C	C
Facility Auto Traveler Perception Score	2.32	2.29

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.20	C	3.21	C
Bicycle Facility LOS Score / LOS	2.76	C	2.73	C
Transit Facility LOS Score / LOS	1.13	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

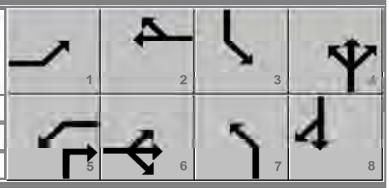
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.91
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	24 Road & Patterson	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	127	195	207	583	327	359	53	741	341	467	936	45

Signal Information			
Cycle, s	100.0	Reference Phase	6
Offset, s	85	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	12.8	5.3	19.1	7.2	2.8	26.8	
Yellow	3.5	3.5	4.0	3.5	3.5	4.0	
Red	0.5	0.5	1.0	0.5	0.5	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	2.0	3.0	1.1	3.0	2.0	3.0
Phase Duration, s	16.8	24.1	26.1	33.4	11.2	31.8	18.0	38.6
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	10.8		19.9		4.2	24.4	16.0	29.6
Green Extension Time (g_e), s	2.0	0.0	2.2	0.0	0.2	2.4	0.0	3.7
Phase Call Probability	1.00		1.00		0.80	1.00	1.00	1.00
Max Out Probability	0.06		0.78		0.00	1.00	1.00	1.00

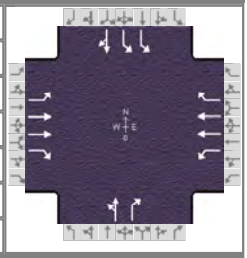
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	379	582	618	641	359	395	58	814	375	513	1029	49
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1675	1752		1716	1738		1810	1738	1585	1730	1752	1517
Queue Service Time (g_s), s	8.8	16.1		17.9	8.3		2.2	22.4	15.8	14.0	27.6	2.2
Cycle Queue Clearance Time (g_c), s	8.8	16.1		17.9	8.3		2.2	22.4	15.8	14.0	27.6	2.2
Green Ratio (*g/C*)	0.32	0.19		0.22	0.28		0.34	0.27	0.49	0.14	0.34	0.34
Capacity (*c*), veh/h	823	670		759	988		224	931	775	484	1176	509
Volume-to-Capacity Ratio (*X*)	0.461	0.870		0.844	0.364		0.261	0.875	0.484	1.060	0.875	0.097
Back of Queue (*Q*), ft/ln (90 th percentile)	148.3	267.8		256.2	131.4		38.3	332.2	192.3	312.8	380.2	33
Back of Queue (*Q*), veh/ln (90 th percentile)	6.4	11.8		11.4	5.7		1.7	14.5	8.6	14.0	16.7	1.4
Queue Storage Ratio (*RQ*) (90 th percentile)	0.83	0.00		1.16	0.00		0.29	0.00	1.09	2.36	0.00	0.51
Uniform Delay (d_1), s/veh	29.3	39.5		37.3	28.6		25.4	35.0	17.1	43.0	31.2	22.8
Incremental Delay (d_2), s/veh	0.6	14.4		6.3	0.9		0.9	9.5	0.7	57.6	7.7	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	29.9	53.9	0.0	43.6	29.5	0.0	26.3	44.5	17.8	100.6	38.9	22.9
Level of Service (LOS)	C	D	A	D	C	A	C	D	B	F	D	C
Approach Delay, s/veh / LOS	27.0	C		27.6	C		35.6	D		58.3	E	
Intersection Delay, s/veh / LOS	37.6						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.58	C	2.58	C	2.58	C
Bicycle LOS Score / LOS	0.97	A	1.64	B	1.52	B	1.80	B

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

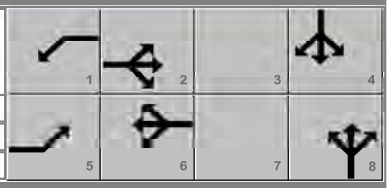
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	Market Street/Mall Acce…	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	159	732	141	31	905	336	124	82	34	315	28	257

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	14	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	1.4	6.6	29.4	24.0	15.6	0.0	
Yellow	3.5	3.5	4.0	4.0	4.0	0.0	
Red	0.5	0.5	1.0	1.0	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	3.0	1.1	3.0		11.0		10.0
Phase Duration, s	15.9	45.0	5.4	34.4		20.6		29.0
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0		5.0		5.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.4
Queue Clearance Time (g_s), s	11.6		2.4			15.1		22.2
Green Extension Time (g_e), s	0.4	0.0	0.0	0.0		0.5		1.8
Phase Call Probability	1.00		0.27			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

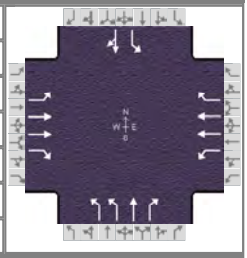
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	252	1160	223	11	332	123		248	41	380	343	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1711	1766	1610	1810	1766	1522		1844	1610	1702	1635	
Queue Service Time (g_s), s	9.6	24.7	3.3	0.4	3.5	1.3		13.1	2.2	9.5	20.2	
Cycle Queue Clearance Time (g_c), s	9.6	24.7	3.3	0.4	3.5	1.3		13.1	2.2	9.5	20.2	
Green Ratio (*g/C*)	0.43	0.40	0.40	0.31	0.29	0.29		0.16	0.16	0.24	0.24	
Capacity (*c*), veh/h	537	1413	644	162	1039	448		288	252	818	393	
Volume-to-Capacity Ratio (*X*)	0.469	0.821	0.347	0.070	0.320	0.276		0.861	0.163	0.464	0.874	
Back of Queue (*Q*), ft/ln (90 th percentile)	139.9	198.3	40.8	7.5	51.9	22.3		206.4	34.8	147.7	263.2	
Back of Queue (*Q*), veh/ln (90 th percentile)	6.0	8.8	1.9	0.3	2.3	1.0		9.4	1.6	6.5	12.0	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.95	0.00	0.33	0.07	0.00	0.21		0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	20.7	14.9	5.4	25.8	10.7	4.3		41.1	36.5	32.5	36.5	
Incremental Delay (d_2), s/veh	0.1	3.0	0.8	0.1	0.8	1.5		3.0	0.1	0.2	2.5	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	20.8	17.9	6.1	25.9	11.5	5.8		44.1	36.6	32.6	39.0	
Level of Service (LOS)	C	B	A	C	B	A		D	D	C	D	
Approach Delay, s/veh / LOS	16.7	B		10.3	B		43.0	D		35.6	D	
Intersection Delay, s/veh / LOS	22.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.91	B	2.12	B	2.47	B	2.45	B
Bicycle LOS Score / LOS	1.51	B	1.75	B	0.96	A	1.68	B

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

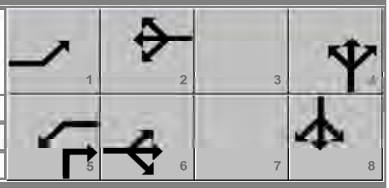
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.84
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	Home Depot Access/Me…	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	85	760	227	130	876	65	279	72	249	88	45	127

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	81	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	Off
Force Mode	Fixed	Simult. Gap N/S	Off

Green	5.0	2.1	41.0	15.0	18.0	0.0	
Yellow	3.5	0.0	4.0	4.0	4.0	0.0	
Red	0.5	0.0	1.0	1.0	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2		4		8
Case Number	1.1	3.0	1.1	3.0		9.0		10.0
Phase Duration, s	11.0	48.1	9.0	46.0		23.0		20.0
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0		5.0		5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0		5.4		5.5
Queue Clearance Time (g_s), s	6.6		5.0			19.4		13.8
Green Extension Time (g_e), s	0.6	0.0	0.3	0.0		0.0		1.2
Phase Call Probability	0.98		0.93			1.00		1.00
Max Out Probability	0.00		0.01			1.00		0.27

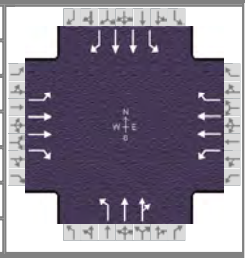
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	138	1234	369	96	647	48	332	86	296	105	205	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1711	1766	1598	1810	1752	1610	1743	1900	1610	1767	1677	
Queue Service Time (g_s), s	4.6	32.3	21.7	3.0	15.1	2.1	8.6	3.9	17.4	5.4	11.8	
Cycle Queue Clearance Time (g_c), s	4.6	32.3	21.7	3.0	15.1	2.1	8.6	3.9	17.4	5.4	11.8	
Green Ratio (*g/C*)	0.48	0.43	0.43	0.46	0.41	0.41	0.18	0.18	0.23	0.15	0.15	
Capacity (*c*), veh/h	379	1521	688	190	1437	660	626	341	369	266	252	
Volume-to-Capacity Ratio (*X*)	0.364	0.811	0.536	0.506	0.450	0.073	0.530	0.251	0.804	0.394	0.812	
Back of Queue (*Q*), ft/ln (90 th percentile)	72.7	446.6	327.4	52.9	225	31.8	139.4	73.6	258.6	98.6	188.7	
Back of Queue (*Q*), veh/ln (90 th percentile)	3.1	19.8	14.8	2.4	9.9	1.4	6.3	3.3	11.8	4.4	8.6	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.54	0.00	1.64	0.48	0.00	0.00	0.78	0.00	1.18	0.74	0.00	
Uniform Delay (d_1), s/veh	15.8	31.4	34.7	22.3	26.2	20.9	37.2	35.2	36.4	38.4	41.1	
Incremental Delay (d_2), s/veh	0.8	4.4	2.7	2.8	1.0	0.2	1.1	0.5	12.7	1.4	9.7	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	16.5	35.8	37.4	25.0	27.2	21.1	38.3	35.8	49.1	39.7	50.8	
Level of Service (LOS)	B	D	D	C	C	C	D	D	D	D	D	
Approach Delay, s/veh / LOS	34.6	C		26.6	C		42.5	D		47.0	D	
Intersection Delay, s/veh / LOS	35.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.27	B	1.91	B	2.45	B	2.47	B
Bicycle LOS Score / LOS	1.54	B	1.54	B	1.67	B	1.00	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.92
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	24 1/2 Rd & Patterson	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	102	670	251	267	735	282	254	410	206	227	333	100

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	6	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.7	1.9	38.0	7.0	3.4	17.5	1	2	3	4		
Yellow	3.5	0.0	4.0	3.5	3.5	4.0	5	6	7	8		
Red	0.5	0.0	1.5	0.5	0.5	1.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	13.7	43.5	15.7	45.4	18.4	29.9	11.0	22.5
Change Period, (*Y+R c*), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	8.8		10.3		14.2	19.9	9.0	11.6
Green Extension Time (*g e*), s	1.0	0.0	1.3	0.0	0.1	5.0	0.0	5.3
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	0.61	1.00	0.56

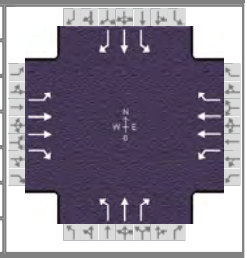
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	195	1283	481	235	647	248	276	353	317	247	362	109
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1697	1781	1610	1810	1766	1598	1767	1856	1646	1767	1738	1397
Queue Service Time (*g s*), s	6.8	33.9	20.1	8.3	13.3	7.4	12.2	17.7	17.9	7.0	9.6	7.0
Cycle Queue Clearance Time (*g c*), s	6.8	33.9	20.1	8.3	13.3	7.4	12.2	17.7	17.9	7.0	9.6	7.0
Green Ratio (*g/C*)	0.48	0.38	0.38	0.50	0.40	0.40	0.34	0.25	0.25	0.25	0.18	0.18
Capacity (*c*), veh/h	383	1352	611	294	1410	638	398	461	409	234	609	244
Volume-to-Capacity Ratio (*X*)	0.510	0.949	0.786	0.799	0.459	0.389	0.693	0.765	0.774	1.056	0.595	0.445
Back of Queue (*Q*), ft/ln (90 th percentile)	110	396.4	164.8	152.5	186.5	92.2	193.8	275.9	251.4	243.4	153.5	110.8
Back of Queue (*Q*), veh/ln (90 th percentile)	4.7	17.7	7.5	6.9	8.3	4.2	8.6	12.2	11.3	10.8	6.7	4.4
Queue Storage Ratio (*RQ*) (90 th percentile)	0.82	0.00	0.75	1.16	0.00	0.37	1.46	0.00	0.00	1.83	0.00	0.00
Uniform Delay (*d 1*), s/veh	17.1	21.6	12.5	28.2	21.6	12.0	26.9	34.9	35.0	38.5	38.0	36.9
Incremental Delay (*d 2*), s/veh	1.3	13.7	8.8	6.4	1.0	1.6	5.4	5.9	7.1	74.6	1.3	1.8
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	18.4	35.3	21.3	34.6	22.6	13.6	32.3	40.8	42.0	113.0	39.3	38.7
Level of Service (LOS)	B	D	C	C	C	B	C	D	D	F	D	D
Approach Delay, s/veh / LOS	30.2	C		23.1	C		38.7	D		64.6	E	
Intersection Delay, s/veh / LOS	35.4						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.28	B	2.43	B	2.44	B	2.45	B
Bicycle LOS Score / LOS	1.40	A	1.64	B	1.27	A	1.08	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

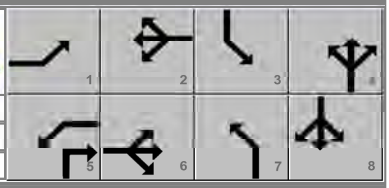
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.87
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	25 Road & Patterson	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	66	921	181	281	905	147	223	338	257	218	317	110

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	45	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.0	6.0	30.0	6.0	3.0	22.0	
Yellow	3.5	3.5	4.5	3.5	3.5	4.0	
Red	0.5	0.5	1.5	0.5	0.5	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	20.0	46.0	10.0	36.0	17.0	34.0	10.0	27.0
Change Period, ($Y+R_c$), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	4.9		8.0		12.8	21.4	8.0	21.6
Green Extension Time (g_e), s	0.3	0.0	0.0	0.0	0.0	4.1	0.0	0.2
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.02		1.00		1.00	0.80	1.00	1.00

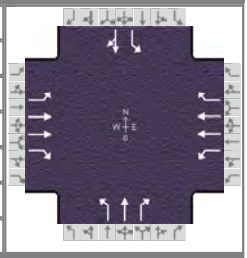
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	107	1498	294	218	701	114	256	389	278	251	364	126
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1781	1585	1795	1795	1585	1753	1811	1610	1795	1811	1585
Queue Service Time (g_s), s	2.9	40.0	10.6	6.0	17.7	5.6	10.8	19.4	13.6	6.0	19.6	6.8
Cycle Queue Clearance Time (g_c), s	2.9	40.0	10.6	6.0	17.7	5.6	10.8	19.4	13.6	6.0	19.6	6.8
Green Ratio (*g/C*)	0.48	0.40	0.40	0.36	0.30	0.30	0.37	0.29	0.35	0.28	0.22	0.22
Capacity (*c*), veh/h	433	1424	634	180	1077	476	321	525	564	239	398	349
Volume-to-Capacity Ratio (*X*)	0.248	1.052	0.464	1.210	0.651	0.239	0.799	0.740	0.494	1.050	0.914	0.363
Back of Queue (*Q*), ft/ln (90 th percentile)	46.9	629.5	123.9	298.7	256.5	88.5	206.3	311.2	187.1	252.5	367.2	111.4
Back of Queue (*Q*), veh/ln (90 th percentile)	2.1	28.2	5.5	13.5	11.6	4.0	9.1	13.5	8.5	11.4	15.9	5.0
Queue Storage Ratio (*RQ*) (90 th percentile)	0.26	0.00	0.77	1.69	0.00	0.68	0.93	0.00	1.06	1.91	0.00	0.84
Uniform Delay (d_1), s/veh	13.2	25.3	14.7	28.9	34.1	27.4	26.0	32.1	25.5	37.8	38.1	33.1
Incremental Delay (d_2), s/veh	1.3	37.9	2.3	129.9	2.6	1.0	18.5	9.0	3.1	71.8	28.0	2.9
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	14.5	63.2	17.0	158.8	36.7	28.4	44.5	41.1	28.6	109.6	66.1	36.0
Level of Service (LOS)	B	F	B	F	D	C	D	D	C	F	E	D
Approach Delay, s/veh / LOS	53.3	D		61.5	E		38.3	D		75.6	E	
Intersection Delay, s/veh / LOS	55.7						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	2.12	B	2.44	B	2.45	B
Bicycle LOS Score / LOS	1.60	B	1.75	B	2.01	B	1.71	B

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

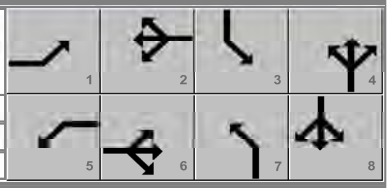
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.82
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	25 1/2 Road & Patterson	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	92	1205	144	181	1180	147	93	190	189	184	159	75

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	3	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.6	0.2	48.2	6.0	2.0	17.0						
Yellow	3.5	0.0	4.5	3.5	0.0	4.0						
Red	0.5	0.0	1.5	0.5	0.0	1.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	11.6	54.2	11.8	54.4	10.0	22.0	12.0	24.0
Change Period, (*Y+R c*), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.3	5.2	5.3
Queue Clearance Time (*g s*), s	4.9		5.5		7.3	16.1	10.0	17.7
Green Extension Time (*g e*), s	0.6	0.0	0.7	0.0	0.0	0.9	0.0	1.0
Phase Call Probability	0.95		0.97		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	1.00	1.00	1.00

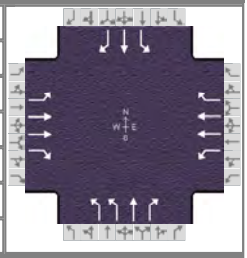
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	110	1445	173	130	848	106	113	232	230	224	285	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1781	1598	1781	1781	1572	1767	1885	1585	1682	1754	
Queue Service Time (*g s*), s	2.9	35.8	5.8	3.5	12.0	1.2	5.3	11.6	14.1	8.0	15.7	
Cycle Queue Clearance Time (*g c*), s	2.9	35.8	5.8	3.5	12.0	1.2	5.3	11.6	14.1	8.0	15.7	
Green Ratio (*g/C*)	0.56	0.48	0.48	0.56	0.48	0.48	0.23	0.17	0.17	0.25	0.19	
Capacity (*c*), veh/h	415	1717	770	249	1723	761	192	320	269	254	333	
Volume-to-Capacity Ratio (*X*)	0.265	0.841	0.224	0.522	0.492	0.139	0.592	0.724	0.856	0.885	0.857	
Back of Queue (*Q*), ft/ln (90 th percentile)	45.4	443.4	83.8	62.5	136.7	16.9	114.2	201.6	232.6	159.2	271.1	
Back of Queue (*Q*), veh/ln (90 th percentile)	2.1	19.8	3.8	2.8	6.1	0.7	5.1	9.1	10.4	6.7	12.0	
Queue Storage Ratio (*RQ*) (90 th percentile)	0.34	0.00	0.66	0.47	0.00	0.13	1.03	0.00	2.63	1.18	0.00	
Uniform Delay (*d 1*), s/veh	12.1	23.7	13.5	22.0	10.9	4.1	33.1	39.3	40.3	36.9	39.2	
Incremental Delay (*d 2*), s/veh	0.4	4.7	0.6	2.0	0.8	0.3	12.7	7.8	21.8	33.2	18.6	
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	12.6	28.4	14.1	24.0	11.7	4.4	45.8	47.1	62.1	70.1	57.8	
Level of Service (LOS)	B	C	B	C	B	A	D	D	E	E	E	
Approach Delay, s/veh / LOS	26.0	C		12.4	B		52.9	D		63.2	E	
Intersection Delay, s/veh / LOS	31.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.09	B	1.90	B	2.45	B	2.45	B
Bicycle LOS Score / LOS	1.94	B	2.00	B	1.44	A	1.33	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

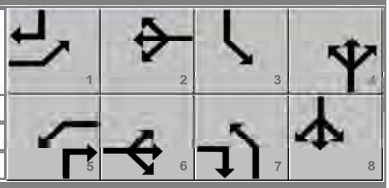
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.77
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	1st Street & Patterson	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	115	1234	197	217	1180	124	210	394	193	165	311	80

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	72	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.8	0.1	35.7	9.0	2.4	26.6	
Yellow	3.5	0.0	3.0	3.5	0.0	4.0	
Red	0.5	0.0	2.5	0.5	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	11.8	41.2	11.9	41.3	13.0	31.6	15.4	33.9
Change Period, (*Y+R c*), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (*g s*), s	6.2		7.2		7.5	28.5	10.3	21.4
Green Extension Time (*g e*), s	0.5	0.0	0.7	0.0	1.5	0.0	1.1	4.4
Phase Call Probability	0.97		0.98		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.00	1.00	0.00	0.83

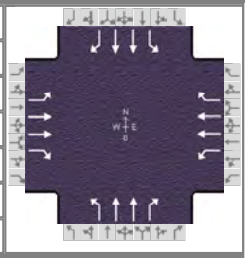
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	126	1349	215	150	817	86	273	512	251	214	404	104
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1766	1598	1781	1781	1572	1743	1856	1598	1810	1885	1610
Queue Service Time (*g s*), s	4.2	35.7	7.5	5.2	20.1	4.4	5.5	26.5	12.2	8.3	19.4	4.4
Cycle Queue Clearance Time (*g c*), s	4.2	35.7	7.5	5.2	20.1	4.4	5.5	26.5	12.2	8.3	19.4	4.4
Green Ratio (*g/C*)	0.43	0.36	0.45	0.44	0.36	0.36	0.36	0.27	0.34	0.38	0.29	0.37
Capacity (*c*), veh/h	299	1261	714	212	1276	563	590	492	550	279	545	590
Volume-to-Capacity Ratio (*X*)	0.420	1.070	0.301	0.707	0.640	0.152	0.462	1.040	0.456	0.768	0.741	0.176
Back of Queue (*Q*), ft/ln (90 th percentile)	62.9	627.7	99.1	82.4	269	93	89.7	556.4	163.5	140.8	296.1	64.8
Back of Queue (*Q*), veh/ln (90 th percentile)	2.9	27.8	4.5	3.7	12.0	4.1	4.0	24.7	7.4	6.4	13.4	2.9
Queue Storage Ratio (*RQ*) (90 th percentile)	0.48	0.00	0.75	0.75	0.00	0.85	0.68	0.00	1.24	1.28	0.00	0.00
Uniform Delay (*d 1*), s/veh	18.2	29.6	14.3	23.0	30.4	26.8	24.7	36.7	25.5	25.2	32.2	21.4
Incremental Delay (*d 2*), s/veh	1.1	44.3	0.9	3.7	1.5	0.4	0.8	51.2	0.8	6.2	5.8	0.2
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	19.3	73.9	15.2	26.7	31.9	27.2	25.5	88.0	26.4	31.4	37.9	21.6
Level of Service (LOS)	B	F	B	C	C	C	C	F	C	C	D	C
Approach Delay, s/veh / LOS	62.4	E		30.8	C		56.6	E		33.6	C	
Intersection Delay, s/veh / LOS	49.0						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.28	B	2.11	B	2.44	B	2.44	B
Bicycle LOS Score / LOS	2.14	B	2.12	B	2.20	B	1.68	B

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

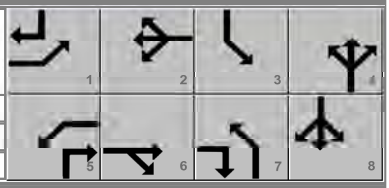
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.80
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	7th Street & Patterson	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	147	1222	163	202	934	172	245	586	275	151	311	173

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	26	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.2	2.2	44.6	5.0	3.0	19.0	
Yellow	3.5	0.0	4.0	3.5	0.0	4.0	
Red	0.5	0.0	1.0	0.5	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	14.4	51.8	12.2	49.6	12.0	27.0	9.0	24.0
Change Period, ($Y+R_c$), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	9.8		7.2		10.0	21.8	7.0	13.2
Green Extension Time (g_e), s	0.8	0.0	1.1	0.0	0.0	0.2	0.0	4.4
Phase Call Probability	0.98		0.99		1.00	1.00	0.99	1.00
Max Out Probability	0.00		0.00		1.00	1.00	1.00	0.97

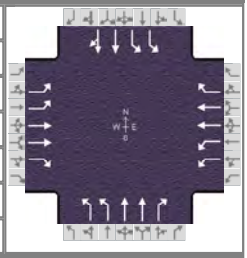
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	142	1184	133	184	851	152	306	733	328	189	389	216
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1766	1417	1810	1781	1543	1767	1795	1589	1795	1809	1577
Queue Service Time (g_s), s	7.8	15.7	0.9	5.2	13.1	2.2	8.0	19.8	18.0	5.0	9.8	11.2
Cycle Queue Clearance Time (g_c), s	7.8	15.7	0.9	5.2	13.1	2.2	8.0	19.8	18.0	5.0	9.8	11.2
Green Ratio (*g/C*)	0.10	0.47	0.55	0.53	0.45	0.45	0.28	0.22	0.30	0.24	0.19	0.29
Capacity (*c*), veh/h	188	1653	789	345	1589	689	288	789	481	163	686	466
Volume-to-Capacity Ratio (*X*)	0.756	0.716	0.168	0.534	0.535	0.221	1.064	0.929	0.681	1.161	0.566	0.465
Back of Queue (*Q*), ft/ln (90 th percentile)	141.4	126.5	12.3	88.9	145.6	29.6	291.8	303.5	220.2	239.2	154.6	153.3
Back of Queue (*Q*), veh/ln (90 th percentile)	6.4	5.6	0.5	4.0	6.5	1.3	12.9	13.7	9.9	10.8	7.0	6.9
Queue Storage Ratio (*RQ*) (90 th percentile)	0.80	0.00	0.08	0.67	0.00	0.19	1.32	0.00	1.25	2.17	0.00	0.00
Uniform Delay (d_1), s/veh	48.0	6.9	1.8	15.8	12.4	5.3	37.0	34.6	27.7	38.1	36.8	28.9
Incremental Delay (d_2), s/veh	7.0	2.2	0.4	1.4	1.0	0.5	70.9	17.4	4.3	120.4	1.4	1.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	55.0	9.1	2.2	17.2	13.3	5.8	107.9	51.9	32.1	158.6	38.1	29.9
Level of Service (LOS)	D	A	A	B	B	A	F	D	C	F	D	C
Approach Delay, s/veh / LOS	12.9	B		13.0	B		59.7	E		64.5	E	
Intersection Delay, s/veh / LOS	34.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.43	B	2.42	B	2.45	B	2.49	B
Bicycle LOS Score / LOS	2.04	B	1.83	B	1.61	B	1.14	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

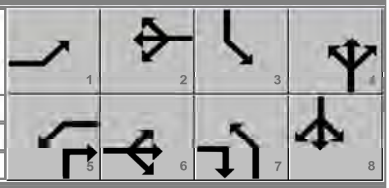
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.80
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	12th Street & Patterson	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	246	1289	117	106	795	151	145	629	146	288	542	238

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	49	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.0	45.5	5.0	1.0	20.0	0.0
Yellow	3.5	4.0	3.5	3.5	4.0	0.0
Red	0.5	1.5	0.5	0.5	1.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phase Duration, s	10.0	51.0	10.0	51.0	9.0	25.0	14.0	30.0
Change Period, ($Y+R_c$), s	4.0	5.5	4.0	5.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	5.2	0.0	5.2	5.2	5.2	5.2
Queue Clearance Time (g_s), s	7.2		4.0		6.1	22.0	9.8	27.0
Green Extension Time (g_e), s	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	1.00		1.00		1.00	1.00	1.00	1.00

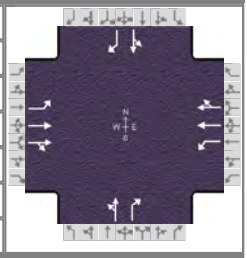
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	333	1743	158	137	1024	194	181	786	183	360	515	460
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1730	1766	1606	1743	1795	1598	1730	1781	1572	1743	1870	1670
Queue Service Time (g_s), s	5.2	45.5	5.5	2.0	19.6	4.5	4.1	20.0	9.7	7.8	25.0	25.0
Cycle Queue Clearance Time (g_c), s	5.2	45.5	5.5	2.0	19.6	4.5	4.1	20.0	9.7	7.8	25.0	25.0
Green Ratio (*g/C*)	0.52	0.46	0.51	0.52	0.46	0.46	0.25	0.20	0.26	0.32	0.25	0.25
Capacity (*c*), veh/h	570	1607	811	353	1633	727	317	712	409	493	468	417
Volume-to-Capacity Ratio (*X*)	0.584	1.084	0.195	0.387	0.627	0.268	0.572	1.104	0.446	0.731	1.102	1.102
Back of Queue (*Q*), ft/ln (90 th percentile)	78.2	804.4	105.4	33.1	221.7	58.7	81	470.4	147.8	139.3	619.7	567.1
Back of Queue (*Q*), veh/ln (90 th percentile)	3.5	35.7	4.8	1.5	10.0	2.6	3.6	21.0	6.6	6.3	27.7	25.4
Queue Storage Ratio (*RQ*) (90 th percentile)	0.44	0.00	0.73	0.13	0.00	0.44	0.37	0.00	0.67	1.05	0.00	0.00
Uniform Delay (d_1), s/veh	16.3	28.3	14.0	22.1	16.6	8.9	31.7	40.0	31.0	28.2	37.5	37.5
Incremental Delay (d_2), s/veh	2.7	45.3	0.3	2.6	1.5	0.7	7.3	65.8	3.5	9.2	72.2	74.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	19.0	73.6	14.4	24.7	18.2	9.6	39.0	105.8	34.5	37.4	109.7	111.9
Level of Service (LOS)	B	F	B	C	B	A	D	F	C	D	F	F
Approach Delay, s/veh / LOS	61.3	E		17.6	B		84.0	F		91.0	F	
Intersection Delay, s/veh / LOS	62.4						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.56	C	2.42	B	2.59	C	2.59	C
Bicycle LOS Score / LOS	2.19	B	1.57	B	1.44	A	1.59	B

Copyright © 2020 University of Florida, All Rights Reserved.

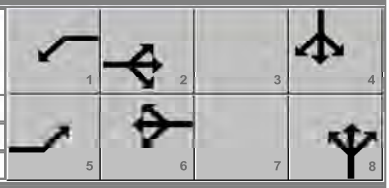
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	Patterson Rd & 15th St	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	69	1629	30	22	1052	27	14	4	36	43	2	64

Signal Information												
Cycle, s	100.0	Reference Phase	2									
Offset, s	66	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	3.2	2.3	75.4	7.1	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	0.0	0.0		
				Red	0.0	0.0	0.0	0.0	0.0	0.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6		8		4
Case Number	1.1	4.0	1.1	4.0		7.0		7.0
Phase Duration, s	9.5	81.8	7.2	79.4		11.1		11.1
Change Period, (*Y+R c*), s	4.0	4.0	4.0	4.0		4.0		4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0		3.3		3.3
Queue Clearance Time (*g s*), s	3.0		2.3			4.6		6.8
Green Extension Time (*g e*), s	0.2	0.0	0.0	0.0		0.4		0.3
Phase Call Probability	0.92		0.53			1.00		1.00
Max Out Probability	0.00		0.00			0.00		0.00

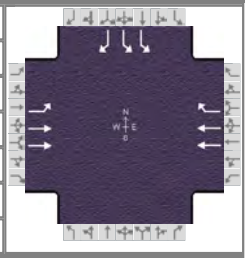
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	90	1083	1083	27	668	663		22	43		54	77
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1856	1844	1781	1885	1868		1526	1585		1433	1585
Queue Service Time (*g s*), s	1.0	27.0	27.6	0.3	22.3	22.6		0.0	2.6		2.4	4.8
Cycle Queue Clearance Time (*g c*), s	1.0	27.0	27.6	0.3	22.3	22.6		1.2	2.6		3.6	4.8
Green Ratio (*g/C*)	0.81	0.78	0.78	0.79	0.75	0.75		0.07	0.07		0.07	0.07
Capacity (*c*), veh/h	388	1443	1433	216	1422	1409		172	112		172	112
Volume-to-Capacity Ratio (*X*)	0.232	0.751	0.756	0.125	0.470	0.470		0.126	0.387		0.316	0.688
Back of Queue (*Q*), ft/ln (90 th percentile)	14.2	176.2	174.8	5.2	292	291.3		20.5	42.1		52.7	78.2
Back of Queue (*Q*), veh/ln (90 th percentile)	0.6	7.8	7.9	0.2	13.2	13.2		0.9	1.9		2.4	3.5
Queue Storage Ratio (*RQ*) (90 th percentile)	0.18	0.00	0.00	0.06	0.00	0.00		0.00	0.95		0.00	1.77
Uniform Delay (*d 1*), s/veh	5.2	4.4	4.4	6.2	11.2	11.4		43.7	44.4		44.9	45.4
Incremental Delay (*d 2*), s/veh	0.1	2.3	2.3	0.1	0.7	0.7		0.1	0.8		0.4	2.8
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (*d*), s/veh	5.2	6.6	6.8	6.3	11.9	12.1		43.8	45.2		45.2	48.2
Level of Service (LOS)	A	A	A	A	B	B		D	D		D	D
Approach Delay, s/veh / LOS	6.6	A		11.9	B		44.8	D		47.0	D	
Intersection Delay, s/veh / LOS	10.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.83	B	1.84	B	2.31	B	2.31	B
Bicycle LOS Score / LOS	2.21	B	1.58	B	0.59	A	0.70	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

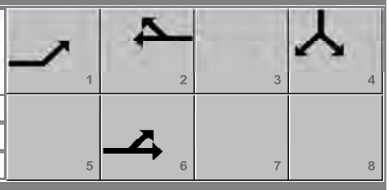
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	27 1/2 Road & Patterson	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	227	1478			941	362				558		135

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	56	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	33.0	31.0	21.0	0.0	0.0	0.0
Yellow	3.5	4.5	4.0	0.0	0.0	0.0
Red	0.5	1.5	1.0	0.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6		2				4
Case Number	1.0	4.0		7.3				9.0
Phase Duration, s	37.0	74.0		37.0				26.0
Change Period, (*Y+R c*), s	4.0	6.0		6.0				5.0
Max Allow Headway (*MAH*), s	5.2	0.0		0.0				5.3
Queue Clearance Time (*g s*), s	5.6							20.7
Green Extension Time (*g e*), s	1.4	0.0		0.0				0.2
Phase Call Probability	1.00							1.00
Max Out Probability	0.00							1.00

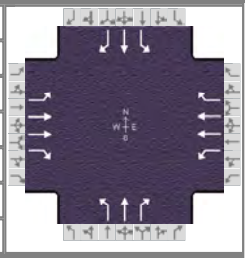
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6			2	12				7		14
Adjusted Flow Rate (*v*), veh/h	243	1584			1005	386				672		163
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1795			1795	1610				1757		1522
Queue Service Time (*g s*), s	3.6	19.8			27.3	22.6				18.7		9.5
Cycle Queue Clearance Time (*g c*), s	3.6	19.8			27.3	22.6				18.7		9.5
Green Ratio (*g/C*)	0.66	0.68			0.31	0.31				0.21		0.21
Capacity (*c*), veh/h	665	2441			1113	499				738		320
Volume-to-Capacity Ratio (*X*)	0.366	0.649			0.903	0.774				0.911		0.509
Back of Queue (*Q*), ft/ln (90 th percentile)	45.7	157.7			403.4	346.4				298.7		150.6
Back of Queue (*Q*), veh/ln (90 th percentile)	2.0	7.1			18.2	15.7				13.6		6.5
Queue Storage Ratio (*RQ*) (90 th percentile)	0.30	0.00			0.00	6.56				1.79		0.00
Uniform Delay (*d 1*), s/veh	6.6	5.7			38.5	35.9				38.6		34.9
Incremental Delay (*d 2*), s/veh	1.2	1.0			10.1	9.4				17.4		5.7
Initial Queue Delay (*d 3*), s/veh	0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (*d*), s/veh	7.8	6.7			48.6	45.3				56.0		40.6
Level of Service (LOS)	A	A			D	D				E		D
Approach Delay, s/veh / LOS	6.9	A		47.7	D		0.0			53.0	D	
Intersection Delay, s/veh / LOS	30.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	0.67	A	2.12	B	2.32	B	2.32	B
Bicycle LOS Score / LOS	2.18	B	1.78	B				F

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

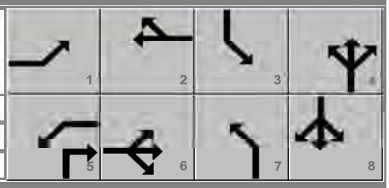
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.85
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	28 1/4 Road & Patterson	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	38	1469	329	159	965	46	288	30	259	116	37	47

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	72	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	Off
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.0	46.0	14.0	2.0	8.0	0.0	
Yellow	3.5	4.5	3.5	0.0	4.0	0.0	
Red	0.5	1.5	0.5	0.0	1.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	2.0	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	15.0	52.0	15.0	52.0	20.0	15.0	18.0	13.0
Change Period, ($Y+R_c$), s	4.0	6.0	4.0	6.0	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	5.2	0.0	3.1	0.0	3.2	5.4	5.2	5.4
Queue Clearance Time (g_s), s	2.9		10.4		18.0	12.0	8.4	5.3
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.7
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.05		1.00		1.00	1.00	0.77	1.00

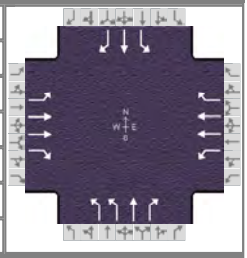
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	38	1456	326	156	944	45	339	35	305	136	44	55
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1795	1585	1795	1795	1610	1795	1900	1610	1810	1900	1610
Queue Service Time (g_s), s	0.9	35.0	9.9	8.4	23.7	2.4	16.0	1.7	10.0	6.4	2.2	3.3
Cycle Queue Clearance Time (g_c), s	0.9	35.0	9.9	8.4	23.7	2.4	16.0	1.7	10.0	6.4	2.2	3.3
Green Ratio (*g/C*)	0.57	0.46	0.46	0.11	0.46	0.46	0.24	0.10	0.21	0.22	0.08	0.08
Capacity (*c*), veh/h	388	1651	729	197	1651	741	436	190	338	392	152	129
Volume-to-Capacity Ratio (*X*)	0.097	0.882	0.447	0.788	0.572	0.061	0.778	0.186	0.901	0.348	0.286	0.429
Back of Queue (*Q*), ft/ln (90 th percentile)	13.8	366.2	109.6	150.8	325.4	67.2	286.2	35.6	304.4	114.7	47.4	65.2
Back of Queue (*Q*), veh/ln (90 th percentile)	0.6	16.5	4.9	6.8	14.7	3.1	12.9	1.6	13.8	5.2	2.2	3.0
Queue Storage Ratio (*RQ*) (90 th percentile)	0.05	0.00	0.38	0.57	0.00	0.69	1.08	0.00	0.00	1.04	0.00	0.00
Uniform Delay (d_1), s/veh	12.1	19.0	10.9	42.7	31.0	24.4	35.9	41.3	38.5	32.9	43.3	43.8
Incremental Delay (d_2), s/veh	0.4	5.5	1.5	18.7	1.0	0.1	12.8	2.1	29.3	2.4	4.7	10.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	12.5	24.5	12.3	61.4	32.0	24.5	48.7	43.4	67.8	35.4	48.0	53.9
Level of Service (LOS)	B	C	B	E	C	C	D	D	E	D	D	D
Approach Delay, s/veh / LOS	22.1	C		35.7	D		57.0	E		42.1	D	
Intersection Delay, s/veh / LOS	33.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.10	B	2.10	B	2.46	B	2.46	B
Bicycle LOS Score / LOS	2.27	B	1.62	B	1.61	B	0.88	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

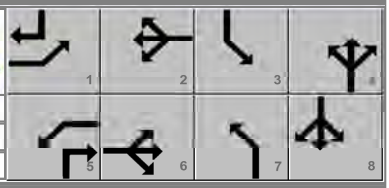
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	29 Road & Patterson	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	220	1249	310	126	809	57	245	273	267	161	95	166

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	8	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.5	5.5	29.5	10.5	6.5	9.0	
Yellow	3.5	3.5	4.5	3.5	3.5	4.0	
Red	1.0	1.0	2.0	1.0	1.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	24.0	46.0	14.0	36.0	26.0	25.0	15.0	14.0
Change Period, ($Y+R_c$), s	4.5	6.5	4.5	6.5	4.5	5.0	4.5	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (g_s), s	8.3		7.8		8.4	19.1	12.0	8.8
Green Extension Time (g_e), s	0.6	0.0	0.1	0.0	1.0	0.4	0.0	0.1
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.01		1.00		0.00	1.00	1.00	1.00

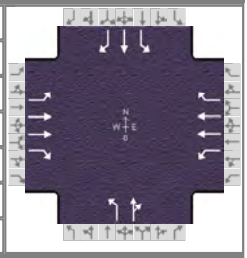
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	230	1304	324	153	983	69	295	329	280	194	114	140
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1795	1572	1767	1781	1585	1716	1870	1610	1753	1870	1610
Queue Service Time (g_s), s	6.3	33.9	13.5	5.8	27.1	3.2	6.4	17.1	14.8	10.0	5.9	6.8
Cycle Queue Clearance Time (g_c), s	6.3	33.9	13.5	5.8	27.1	3.2	6.4	17.1	14.8	10.0	5.9	6.8
Green Ratio (*g/C*)	0.51	0.40	0.40	0.39	0.30	0.30	0.32	0.20	0.30	0.20	0.09	0.29
Capacity (*c*), veh/h	433	1418	621	255	1051	468	950	374	475	264	168	459
Volume-to-Capacity Ratio (*X*)	0.530	0.920	0.521	0.601	0.936	0.148	0.311	0.879	0.588	0.736	0.680	0.305
Back of Queue (*Q*), ft/ln (90 th percentile)	87.3	396.6	153.6	107.8	382.1	49.5	106.1	317.8	208.2	190.7	135.9	108.1
Back of Queue (*Q*), veh/ln (90 th percentile)	3.9	17.9	6.8	4.8	17.1	2.2	4.7	14.2	9.5	8.4	6.1	4.9
Queue Storage Ratio (*RQ*) (90 th percentile)	0.28	0.00	0.56	0.27	0.00	0.57	0.48	0.00	0.95	1.43	0.00	0.82
Uniform Delay (d_1), s/veh	13.3	25.1	17.7	26.9	36.9	26.0	25.3	38.8	30.1	36.8	44.1	28.0
Incremental Delay (d_2), s/veh	3.4	8.7	2.3	7.0	12.0	0.5	0.9	24.2	5.3	16.7	20.0	1.7
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	16.8	33.8	20.0	33.8	48.9	26.5	26.1	63.1	35.3	53.5	64.1	29.7
Level of Service (LOS)	B	C	B	C	D	C	C	E	D	D	E	C
Approach Delay, s/veh / LOS	29.3	C		45.7	D		42.4	D		48.8	D	
Intersection Delay, s/veh / LOS	38.4						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.32	B	2.19	B	2.45	B	2.46	B
Bicycle LOS Score / LOS	2.26	B	1.47	A	1.98	B	1.23	A

Copyright © 2020 University of Florida, All Rights Reserved.

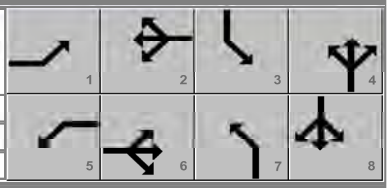
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.85
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	29 1/2 Road & Patterson	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	91	1484	73	99	859	129	86	98	235	155	29	32

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	58	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.6	1.8	44.2	9.0	9.0	8.0
Yellow	3.5	0.0	5.0	4.0	4.0	4.0
Red	0.5	0.0	1.5	0.0	0.0	1.0

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	4.0	1.1	3.0
Phase Duration, s	8.6	50.7	10.3	52.4	26.0	26.0	13.0	13.0
Change Period, (*Y+R c*), s	4.0	6.5	4.0	6.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	4.5	0.0	4.5	0.0	3.7	4.8	3.7	4.8
Queue Clearance Time (*g s*), s	4.6		6.0		6.1	23.0	11.0	4.2
Green Extension Time (*g e*), s	0.3	0.0	0.5	0.0	0.2	0.0	0.0	0.9
Phase Call Probability	0.91		0.98		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.00	1.00	1.00	1.00

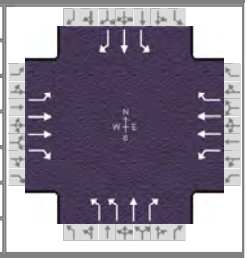
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	88	1438	71	135	1168	175	101	392		182	34	38
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1795	1598	1795	1795	1560	1767	1607		1781	1841	1585
Queue Service Time (*g s*), s	2.6	33.7	1.3	4.0	20.8	2.4	4.1	21.0		9.0	1.7	2.2
Cycle Queue Clearance Time (*g c*), s	2.6	33.7	1.3	4.0	20.8	2.4	4.1	21.0		9.0	1.7	2.2
Green Ratio (*g/C*)	0.49	0.44	0.44	0.50	0.46	0.46	0.32	0.21		0.17	0.08	0.08
Capacity (*c*), veh/h	250	1585	706	222	1649	716	543	337		232	147	127
Volume-to-Capacity Ratio (*X*)	0.352	0.907	0.100	0.606	0.709	0.245	0.186	1.161		0.785	0.232	0.297
Back of Queue (*Q*), ft/ln (90 th percentile)	40.3	251.3	18.3	67.6	184.3	30.7	73.2	567.9		190.6	33.2	36.6
Back of Queue (*Q*), veh/ln (90 th percentile)	1.8	11.3	0.8	3.0	8.3	1.4	3.2	24.6		8.5	1.5	1.6
Queue Storage Ratio (*RQ*) (90 th percentile)	0.31	0.00	0.22	0.51	0.00	0.13	0.94	0.00		1.39	0.00	0.00
Uniform Delay (*d 1*), s/veh	16.5	14.8	7.8	23.0	12.7	4.8	24.6	39.5		39.0	43.1	43.3
Incremental Delay (*d 2*), s/veh	0.6	6.3	0.2	1.9	1.9	0.6	0.8	100.2		22.9	0.8	1.3
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	17.1	21.1	8.0	24.9	14.6	5.4	25.4	139.7		61.9	43.9	44.6
Level of Service (LOS)	B	C	A	C	B	A	C	F		E	D	D
Approach Delay, s/veh / LOS	20.3	C		14.4	B		116.2	F		56.9	E	
Intersection Delay, s/veh / LOS	32.9						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.91	B	2.10	B	2.45	B	2.46	B
Bicycle LOS Score / LOS	2.09	B	1.54	B	1.30	A	0.91	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Signalized Intersection Results Summary

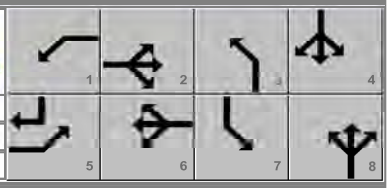
General Information				Intersection Information	
Agency	Stolfus and Associates			Duration, h	0.250
Analyst	Max Rusch	Analysis Date		Area Type	Other
Jurisdiction		Time Period	PM Peak	PHF	0.83
Urban Street	Patterson Rd	Analysis Year	2045	Analysis Period	1> 7:00
Intersection	30 Road & Patterson	File Name	2045 ACP PM.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	227	1174	319	72	669	69	258	132	104	47	83	128

Signal Information			
Cycle, s	100.0	Reference Phase	2
Offset, s	90	Reference Point	Begin
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	11.0	2.0	53.5	6.0	3.0	5.0	
Yellow	3.5	0.0	5.0	3.5	0.0	4.0	
Red	0.5	0.0	1.5	0.5	0.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	17.0	62.0	15.0	60.0	13.0	13.0	10.0	10.0
Change Period, (*Y+R c*), s	4.0	6.5	4.0	6.5	4.0	5.0	4.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.2	0.0	4.2	4.3	4.2	4.3
Queue Clearance Time (*g s*), s	8.0		4.4		10.4	10.0	4.9	7.0
Green Extension Time (*g e*), s	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.58		0.12		1.00	1.00	1.00	1.00

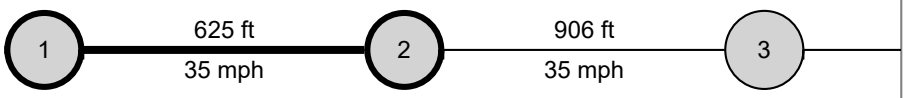
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	273	1414	384	116	1080	111	311	159	124	57	100	43
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1795	1598	1795	1795	1598	1730	1870	1560	1810	1885	1585
Queue Service Time (*g s*), s	6.0	8.6	3.0	2.4	15.9	2.4	8.4	8.0	8.0	2.9	5.0	2.3
Cycle Queue Clearance Time (*g c*), s	6.0	8.6	3.0	2.4	15.9	2.4	8.4	8.0	8.0	2.9	5.0	2.3
Green Ratio (*g/C*)	0.66	0.56	0.56	0.64	0.54	0.54	0.15	0.08	0.08	0.11	0.05	0.18
Capacity (*c*), veh/h	487	1992	887	388	1920	855	455	150	125	181	94	285
Volume-to-Capacity Ratio (*X*)	0.562	0.710	0.433	0.299	0.562	0.130	0.683	1.063	0.994	0.314	1.061	0.152
Back of Queue (*Q*), ft/ln (90 th percentile)	84.6	61.1	34	40	176.4	33.1	146.6	250	200.8	58.8	183	38.9
Back of Queue (*Q*), veh/ln (90 th percentile)	3.8	2.8	1.5	1.8	8.0	1.5	6.6	11.2	8.8	2.7	8.3	1.7
Queue Storage Ratio (*RQ*) (90 th percentile)	0.96	0.00	0.12	0.39	0.00	0.56	0.66	0.00	1.13	0.45	0.00	0.29
Uniform Delay (*d 1*), s/veh	9.6	2.0	1.8	7.0	10.3	7.7	39.9	46.0	46.0	41.0	47.5	34.6
Incremental Delay (*d 2*), s/veh	3.2	1.5	1.1	2.0	1.2	0.3	8.1	91.3	79.1	4.5	110.2	1.1
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	12.7	3.5	2.8	9.0	11.5	8.0	47.9	137.3	125.1	45.5	157.7	35.7
Level of Service (LOS)	B	A	A	A	B	A	D	F	F	D	F	D
Approach Delay, s/veh / LOS	4.6	A		10.9	B		88.0	F		99.5	F	
Intersection Delay, s/veh / LOS	23.0						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.25	B	2.21	B	2.46	B	2.46	B
Bicycle LOS Score / LOS	2.20	B	1.29	A	1.47	A	0.82	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	24 Road & Patterson	Market Street/Mall Access & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (24 Rd - Market St)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
1	35	35	2	2	625	625	50	50	0	0	100	0	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
1	Bay/Lane Spillback Time, h						
1	Shared Lane Spillback Time, h						
1	Base Free-Flow Speed, mph	41.58			42.05		
1	Running Time, s	14.73			15.15		
1	Running Speed, mph	28.93			28.12		
1	Through Delay, s/veh	11.51			53.88		
1	Travel Time, s	26.24			69.04		
1	Travel Speed, mph	16.24			6.17		
1	Stop Rate, stops/veh	0.28			1.01		
1	Spatial Stop Rate, stops/mi	2.34			8.50		
1	Through vol/cap Ratio	0.32			0.87		
1	Percent of Base FFS	39.06			14.68		
1	Level of Service	E			F		
1	Auto Traveler Perception Score	2.50			3.64		
Multimodal Results (Segment)							
1	Pedestrian Segment LOS Score / LOS	2.37		B	3.85		D
1	Bicycle Segment LOS Score / LOS	2.30		B	2.45		B
1	Transit Segment LOS Score / LOS	2.00		A	3.52		D

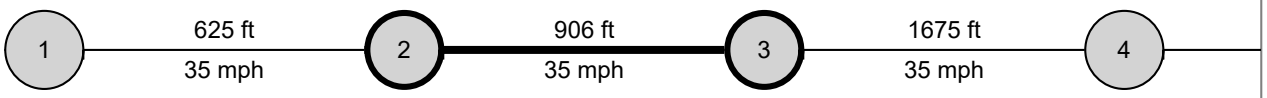
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	Market Street/Mall Access & Pat	Home Depot Access/Mesa Mall Access &		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (Market St to Home Deopt Access)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
2	35	35	2	2	906	906	50	50	0	0	70	70	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
2	Bay/Lane Spillback Time, h						
2	Shared Lane Spillback Time, h						
2	Base Free-Flow Speed, mph	41.48			41.48		
2	Running Time, s	18.59			19.12		
2	Running Speed, mph	33.23			32.31		
2	Through Delay, s/veh	27.20			17.86		
2	Travel Time, s	45.79			36.98		
2	Travel Speed, mph	13.49			16.70		
2	Stop Rate, stops/veh	0.75			0.40		
2	Spatial Stop Rate, stops/mi	4.35			2.33		
2	Through vol/cap Ratio	0.45			0.82		
2	Percent of Base FFS	32.53			40.27		
2	Level of Service	E			D		
2	Auto Traveler Perception Score	2.85			2.50		
Multimodal Results (Segment)							
2	Pedestrian Segment LOS Score / LOS	2.99		C	3.54		D
2	Bicycle Segment LOS Score / LOS	2.53		B	2.74		B
2	Transit Segment LOS Score / LOS	2.38		B	2.16		B

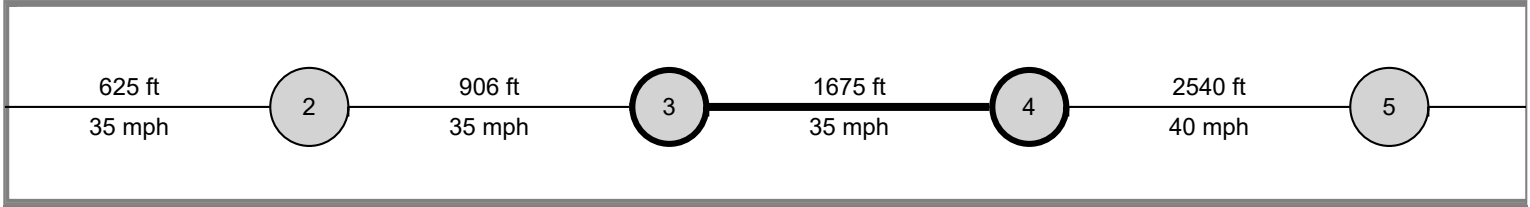
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	Home Depot Access/Mesa Mall /	24 1/2 Rd & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (Home Depot - 24 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
3	35	35	2	2	1675	1675	50	50	550	550	70	100	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h						
3	Shared Lane Spillback Time, h						
3	Base Free-Flow Speed, mph	40.85			40.33		
3	Running Time, s	31.05			32.12		
3	Running Speed, mph	36.78			35.56		
3	Through Delay, s/veh	22.56			35.80		
3	Travel Time, s	53.61			67.92		
3	Travel Speed, mph	21.30			16.81		
3	Stop Rate, stops/veh	0.60			0.88		
3	Spatial Stop Rate, stops/mi	1.90			2.77		
3	Through vol/cap Ratio	0.46			0.81		
3	Percent of Base FFS	52.15			41.69		
3	Level of Service	C			D		
3	Auto Traveler Perception Score	2.43			2.57		
Multimodal Results (Segment)							
3	Pedestrian Segment LOS Score / LOS	3.66		D	3.49		C
3	Bicycle Segment LOS Score / LOS	2.75		C	2.87		C
3	Transit Segment LOS Score / LOS	1.65		A	2.18		B

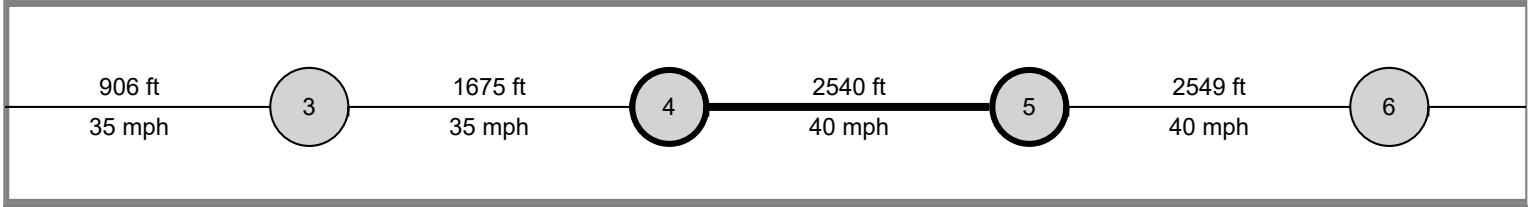
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	24 1/2 Rd & Patterson	25 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (24 1/2 Rd - 25 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
4	40	35	2	2	2540	2540	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h						
4	Shared Lane Spillback Time, h						
4	Base Free-Flow Speed, mph	43.32			40.97		
4	Running Time, s	42.73			46.56		
4	Running Speed, mph	40.53			37.20		
4	Through Delay, s/veh	36.66			35.33		
4	Travel Time, s	79.39			81.89		
4	Travel Speed, mph	21.81			21.15		
4	Stop Rate, stops/veh	0.84			0.75		
4	Spatial Stop Rate, stops/mi	1.75			1.55		
4	Through vol/cap Ratio	0.65			0.95		
4	Percent of Base FFS	50.36			51.62		
4	Level of Service	C			C		
4	Auto Traveler Perception Score	2.41			2.38		
Multimodal Results (Segment)							
4	Pedestrian Segment LOS Score / LOS	3.28		C	3.56		D
4	Bicycle Segment LOS Score / LOS	2.79		C	2.97		C
4	Transit Segment LOS Score / LOS	1.61		A	1.81		A

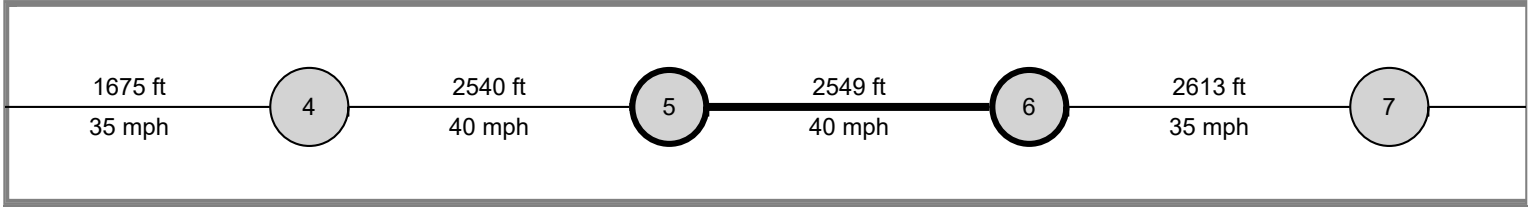
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	25 Road & Patterson	25 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (25 Rd - 25 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
5	40	40	2	2	2549	2549	50	50	260	260	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h						
5	Shared Lane Spillback Time, h						
5	Base Free-Flow Speed, mph	42.96			42.96		
5	Running Time, s	43.26			44.48		
5	Running Speed, mph	40.17			39.08		
5	Through Delay, s/veh	11.67			63.19		
5	Travel Time, s	54.94			107.67		
5	Travel Speed, mph	31.64			16.14		
5	Stop Rate, stops/veh	0.33			1.07		
5	Spatial Stop Rate, stops/mi	0.68			2.21		
5	Through vol/cap Ratio	0.49			1.05		
5	Percent of Base FFS	73.64			37.57		
5	Level of Service	B			F		
5	Auto Traveler Perception Score	2.24			2.48		
Multimodal Results (Segment)							
5	Pedestrian Segment LOS Score / LOS	3.23		C	3.94		D
5	Bicycle Segment LOS Score / LOS	2.80		C	3.01		C
5	Transit Segment LOS Score / LOS	0.89		A	2.29		B

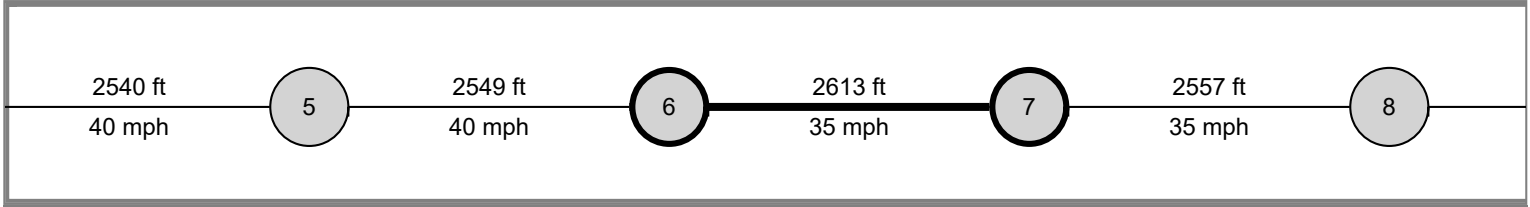
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	25 1/2 Road & Patterson	1st Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (25 1/2 Rd - 26 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
6	35	40	2	2	2613	2613	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
6	Bay/Lane Spillback Time, h						
6	Shared Lane Spillback Time, h						
6	Base Free-Flow Speed, mph	40.98			43.33		
6	Running Time, s	46.23			44.84		
6	Running Speed, mph	38.54			39.73		
6	Through Delay, s/veh	31.92			28.42		
6	Travel Time, s	78.15			73.26		
6	Travel Speed, mph	22.80			24.32		
6	Stop Rate, stops/veh	0.80			0.75		
6	Spatial Stop Rate, stops/mi	1.61			1.52		
6	Through vol/cap Ratio	0.64			0.84		
6	Percent of Base FFS	55.62			56.12		
6	Level of Service	C			C		
6	Auto Traveler Perception Score	2.38			2.37		
Multimodal Results (Segment)							
6	Pedestrian Segment LOS Score / LOS	3.26		C	3.52		D
6	Bicycle Segment LOS Score / LOS	2.82		C	2.97		C
6	Transit Segment LOS Score / LOS	1.52		A	1.51		A

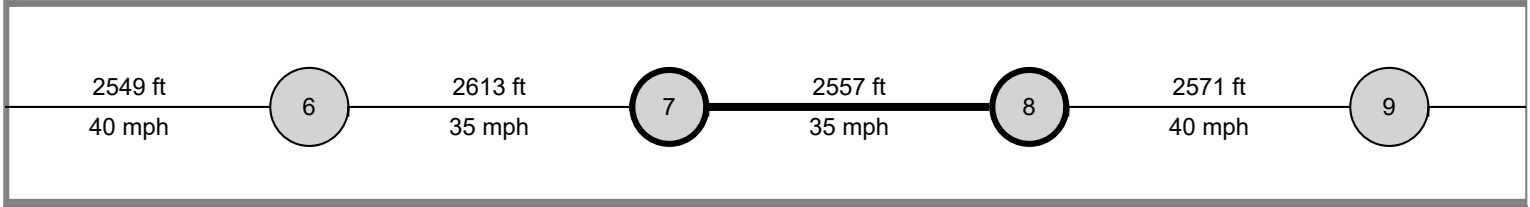
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	1st Street & Patterson	7th Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (26 Rd - 26 1/2)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
7	35	40	2	2	2557	2557	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
7	Bay/Lane Spillback Time, h						
7	Shared Lane Spillback Time, h						
7	Base Free-Flow Speed, mph	40.39			42.74		
7	Running Time, s	46.14			44.48		
7	Running Speed, mph	37.78			39.20		
7	Through Delay, s/veh	13.33			73.91		
7	Travel Time, s	59.47			118.38		
7	Travel Speed, mph	29.31			14.73		
7	Stop Rate, stops/veh	0.36			1.18		
7	Spatial Stop Rate, stops/mi	0.74			2.44		
7	Through vol/cap Ratio	0.54			1.07		
7	Percent of Base FFS	72.57			34.45		
7	Level of Service	B			F		
7	Auto Traveler Perception Score	2.25			2.52		
Multimodal Results (Segment)							
7	Pedestrian Segment LOS Score / LOS	3.10		C	3.61		D
7	Bicycle Segment LOS Score / LOS	2.82		C	2.99		C
7	Transit Segment LOS Score / LOS	1.05		A	2.41		B

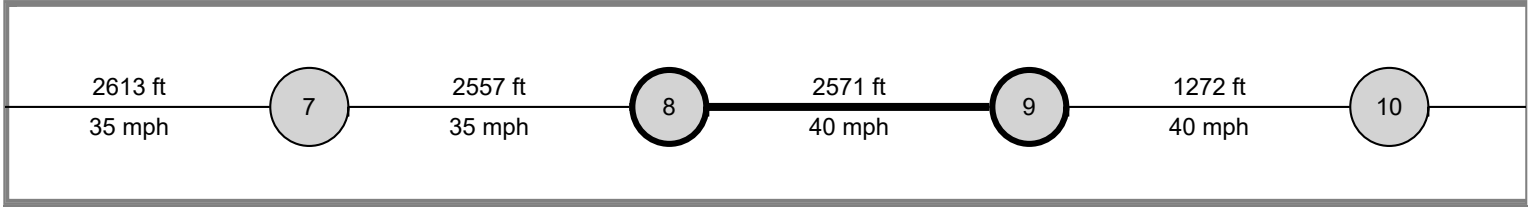
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	7th Street & Patterson	12th Street & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (26 1/2 Rd to 12th St)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
8	40	35	2	2	2571	2571	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
8	Bay/Lane Spillback Time, h						
8	Shared Lane Spillback Time, h						
8	Base Free-Flow Speed, mph	43.08			40.73		
8	Running Time, s	43.87			46.49		
8	Running Speed, mph	39.96			37.70		
8	Through Delay, s/veh	30.19			9.06		
8	Travel Time, s	74.06			55.55		
8	Travel Speed, mph	23.67			31.55		
8	Stop Rate, stops/veh	0.74			0.21		
8	Spatial Stop Rate, stops/mi	1.51			0.43		
8	Through vol/cap Ratio	0.72			0.72		
8	Percent of Base FFS	54.95			77.47		
8	Level of Service	C			B		
8	Auto Traveler Perception Score	2.37			2.20		
Multimodal Results (Segment)							
8	Pedestrian Segment LOS Score / LOS	3.48		C	3.38		C
8	Bicycle Segment LOS Score / LOS	2.92		C	2.90		C
8	Transit Segment LOS Score / LOS	1.50		A	0.95		A

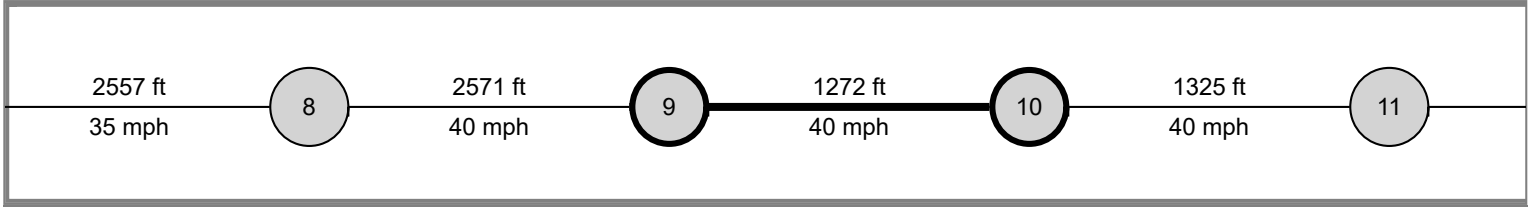
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	12th Street & Patterson	Patterson Rd & 15th St		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (12th St - 27 1/4 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
9	40	35	2	2	1272	1272	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
9	Bay/Lane Spillback Time, h						
9	Shared Lane Spillback Time, h						
9	Base Free-Flow Speed, mph	42.63			40.28		
9	Running Time, s	23.82			26.02		
9	Running Speed, mph	36.41			33.34		
9	Through Delay, s/veh	11.98			117.38		
9	Travel Time, s	35.80			143.39		
9	Travel Speed, mph	24.23			6.05		
9	Stop Rate, stops/veh	0.54			1.55		
9	Spatial Stop Rate, stops/mi	2.24			6.42		
9	Through vol/cap Ratio	0.47			1.18		
9	Percent of Base FFS	56.83			15.02		
9	Level of Service	C			F		
9	Auto Traveler Perception Score	2.49			3.23		
Multimodal Results (Segment)							
9	Pedestrian Segment LOS Score / LOS	3.17		C	4.47		E
9	Bicycle Segment LOS Score / LOS	2.75		B	3.04		C
9	Transit Segment LOS Score / LOS	1.44		A	3.67		D

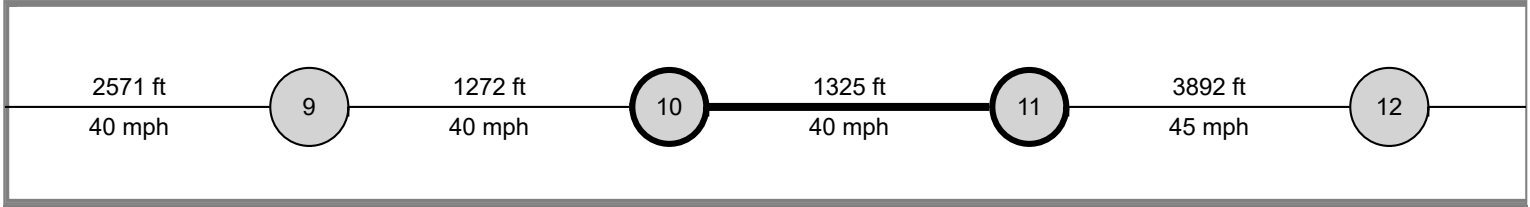
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	Patterson Rd & 15th St	27 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
10	40	40	2	2	1325	1325	50	50	0	0	70	70	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	1	6	16	5	2	12
10	Bay/Lane Spillback Time, h						
10	Shared Lane Spillback Time, h						
10	Base Free-Flow Speed, mph	44.07			44.07		
10	Running Time, s	24.07			24.87		
10	Running Speed, mph	37.53			36.32		
10	Through Delay, s/veh	48.58			6.69		
10	Travel Time, s	72.66			31.56		
10	Travel Speed, mph	12.43			28.62		
10	Stop Rate, stops/veh	0.99			0.18		
10	Spatial Stop Rate, stops/mi	3.96			0.73		
10	Through vol/cap Ratio	0.90			0.75		
10	Percent of Base FFS	28.21			64.95		
10	Level of Service	F			C		
10	Auto Traveler Perception Score	3.02			2.25		
Multimodal Results (Segment)							
10	Pedestrian Segment LOS Score / LOS	3.86		D	4.80		E
10	Bicycle Segment LOS Score / LOS	2.93		C	2.98		C
10	Transit Segment LOS Score / LOS	2.63		B	1.27		A

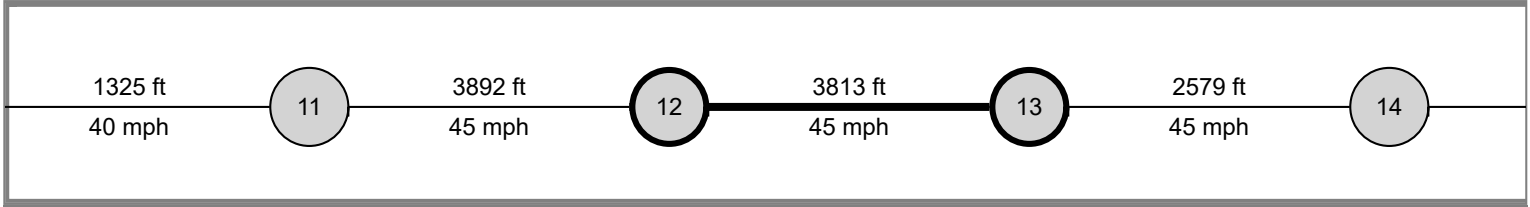
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	28 1/4 Road & Patterson	29 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (28 1/4 Rd - 29 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12	45	40	2	2	3813	3813	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
12	Bay/Lane Spillback Time, h						
12	Shared Lane Spillback Time, h						
12	Base Free-Flow Speed, mph	45.78			43.43		
12	Running Time, s	59.68			64.10		
12	Running Speed, mph	43.56			40.56		
12	Through Delay, s/veh	48.95			18.73		
12	Travel Time, s	108.62			82.83		
12	Travel Speed, mph	23.93			31.39		
12	Stop Rate, stops/veh	0.97			0.49		
12	Spatial Stop Rate, stops/mi	1.34			0.68		
12	Through vol/cap Ratio	0.94			0.83		
12	Percent of Base FFS	52.28			72.27		
12	Level of Service	C			B		
12	Auto Traveler Perception Score	2.34			2.24		
Multimodal Results (Segment)							
12	Pedestrian Segment LOS Score / LOS	3.61		D	3.80		D
12	Bicycle Segment LOS Score / LOS	2.85		C	3.04		C
12	Transit Segment LOS Score / LOS	1.48		A	1.03		A

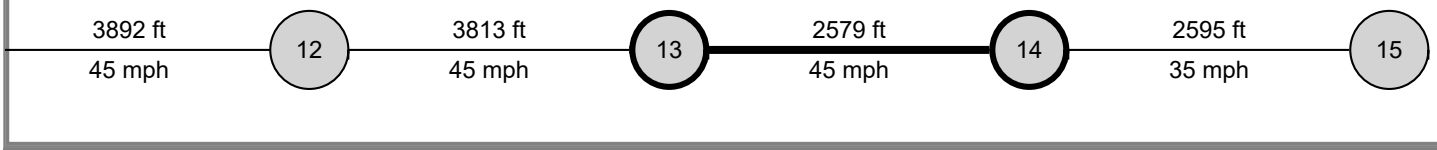
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	29 Road & Patterson	29 1/2 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (29 Rd - 29 1/2 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
13	45	45	2	2	2579	2579	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
13	Bay/Lane Spillback Time, h						
13	Shared Lane Spillback Time, h						
13	Base Free-Flow Speed, mph	44.94			44.94		
13	Running Time, s	41.22			41.73		
13	Running Speed, mph	42.65			42.14		
13	Through Delay, s/veh	14.59			33.80		
13	Travel Time, s	55.82			75.53		
13	Travel Speed, mph	31.50			23.28		
13	Stop Rate, stops/veh	0.35			0.76		
13	Spatial Stop Rate, stops/mi	0.72			1.56		
13	Through vol/cap Ratio	0.71			0.92		
13	Percent of Base FFS	70.09			51.80		
13	Level of Service	B			C		
13	Auto Traveler Perception Score	2.25			2.38		
Multimodal Results (Segment)							
13	Pedestrian Segment LOS Score / LOS	3.96		D	3.85		D
13	Bicycle Segment LOS Score / LOS	2.89		C	3.05		C
13	Transit Segment LOS Score / LOS	0.98		A	1.63		A

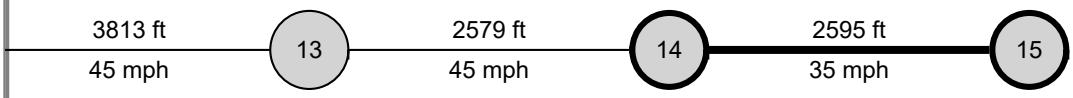
Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

HCS7 Urban Street Segment Report

General Information				Streets Information	
Agency	Stolfus and Associates			Number of Intersections	15
Analyst	Max Rusch	Analysis Date		Number of Segments	14
Jurisdiction		Time Period	PM Peak	Number of Iterations	15
File Name	2045 ACP PM.xus	Analysis Year	2045	System Cycle Length, s	100
Intersections	29 1/2 Road & Patterson	30 Road & Patterson		Analysis Period	1> 7:00
Project Description					



Basic Segment Information (29 1/2 Rd - 30 Rd)

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
14	35	45	2	2	2595	2595	50	50	0	0	90	90	0.0	0.0

		Westbound			Eastbound		
Segment Output Data		WBL	WBT	WBR	EBL	EBT	EBR
Segment	Movement	5	2	12	1	6	16
14	Bay/Lane Spillback Time, h						
14	Shared Lane Spillback Time, h						
14	Base Free-Flow Speed, mph	40.82			45.52		
14	Running Time, s	46.50			41.62		
14	Running Speed, mph	38.05			42.51		
14	Through Delay, s/veh	11.46			21.15		
14	Travel Time, s	57.96			62.77		
14	Travel Speed, mph	30.53			28.19		
14	Stop Rate, stops/veh	0.34			0.42		
14	Spatial Stop Rate, stops/mi	0.69			0.85		
14	Through vol/cap Ratio	0.56			0.91		
14	Percent of Base FFS	74.79			61.92		
14	Level of Service	B			C		
14	Auto Traveler Perception Score	2.24			2.27		
Multimodal Results (Segment)							
14	Pedestrian Segment LOS Score / LOS	3.75		D	4.08		D
14	Bicycle Segment LOS Score / LOS	2.84		C	3.00		C
14	Transit Segment LOS Score / LOS	0.99		A	1.22		A

Facility Output Data	Westbound	Eastbound
Facility Travel Time, s	964.15	1079.36
Facility Travel Speed, mph	22.28	19.91
Facility Base Free Flow Speed, mph	43.04	42.78
Facility Percent of Base FFS	51.77	46.54
Facility Level of Service	F	F
Facility Auto Traveler Perception Score	2.39	2.38

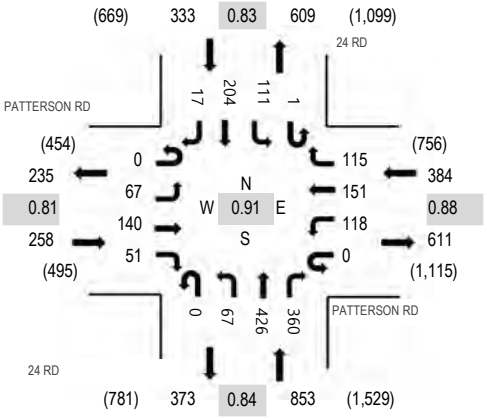
Multimodal Results (Facility)				
Pedestrian Facility LOS Score / LOS	3.50	C	3.86	D
Bicycle Facility LOS Score / LOS	2.82	C	2.98	C
Transit Facility LOS Score / LOS	1.51	A	1.63	A

Copyright © 2020 University of Florida, All Rights Reserved.

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

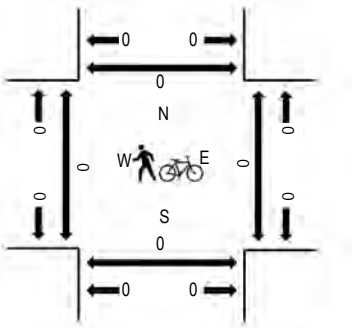
Location: 1 24 RD & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



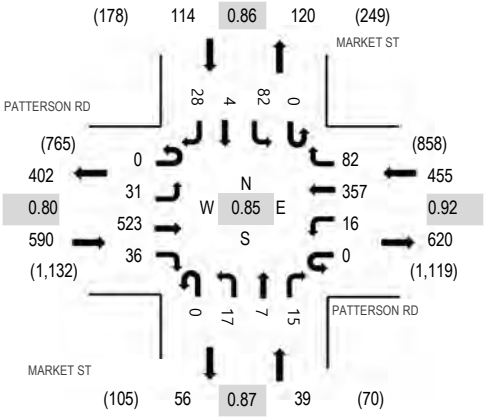
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				24 RD Northbound				24 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	6	25	5	0	23	23	16	0	10	98	47	0	14	33	3	303	1,726	0	0	0	0
7:15 AM	0	16	29	13	0	29	33	28	0	12	105	86	0	20	52	5	428	1,828	0	0	0	0
7:30 AM	0	27	39	15	0	24	41	35	0	17	111	95	1	31	60	4	500	1,782	0	0	0	0
7:45 AM	0	9	43	11	0	36	31	31	0	14	125	115	0	28	47	5	495	1,743	0	0	0	0
8:00 AM	0	15	29	12	0	29	46	21	0	24	85	64	0	32	45	3	405	1,723	0	0	0	0
8:15 AM	0	13	25	23	0	51	30	20	0	11	69	64	0	17	50	9	382		0	0	0	0
8:30 AM	0	18	42	15	0	42	46	29	0	23	79	67	1	37	57	5	461		0	0	0	0
8:45 AM	0	10	39	16	0	35	33	24	0	18	107	83	0	44	58	8	475		0	0	0	0
Count Total	0	114	271	110	0	269	283	204	0	129	779	621	2	223	402	42	3,449		0	0	0	0
Peak Hour	0	67	140	51	0	118	151	115	0	67	426	360	1	111	204	17	1,828		0	0	0	0

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

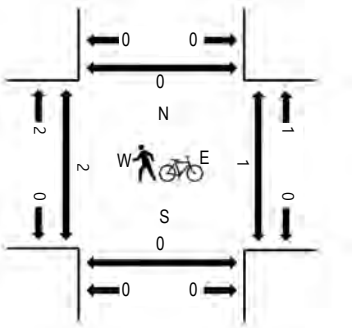
Location: 2 MARKET ST & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

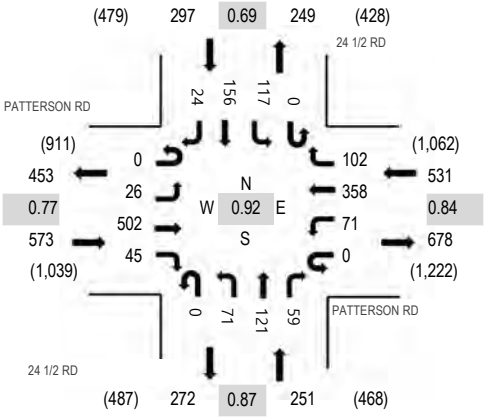
Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				MARKET ST Northbound				MARKET ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	6	72	8	0	0	55	11	0	2	2	1	0	1	0	8	166	1,058	0	0	0	0
7:15 AM	0	12	107	6	0	0	83	16	0	3	1	1	0	11	1	3	244	1,166	0	0	0	0
7:30 AM	0	16	138	6	0	2	90	20	0	4	1	3	0	6	4	7	297	1,176	0	0	0	0
7:45 AM	0	10	174	9	0	4	90	24	0	3	2	2	0	26	1	6	351	1,198	0	1	0	0
8:00 AM	0	6	122	10	0	6	85	12	0	2	2	4	0	17	1	7	274	1,180	0	0	0	0
8:15 AM	0	6	98	5	0	5	86	17	0	6	1	5	0	17	2	6	254		0	0	0	0
8:30 AM	0	9	129	12	0	1	96	29	0	6	2	4	0	22	0	9	319		0	0	0	0
8:45 AM	0	15	142	14	0	3	96	27	0	6	2	5	0	12	5	6	333		0	0	0	0
Count Total	0	80	982	70	0	21	681	156	0	32	13	25	0	112	14	52	2,238		0	1	0	0
Peak Hour	0	31	523	36	0	16	357	82	0	17	7	15	0	82	4	28	1,198		0	1	0	0

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

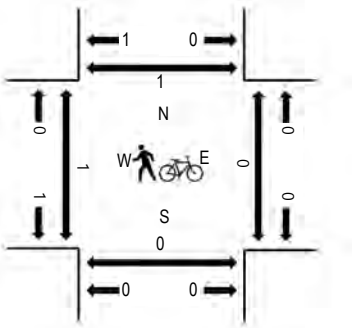
Location: 3 24 1/2 RD & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



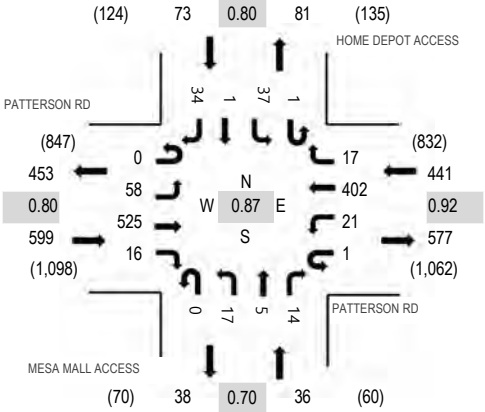
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				24 1/2 RD Northbound				24 1/2 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	5	58	6	0	6	67	24	0	12	30	9	0	13	14	2	246	1,553	0	0	0	0
7:15 AM	0	6	100	7	0	20	78	47	0	11	48	14	0	32	44	6	413	1,652	0	0	0	0
7:30 AM	0	8	124	10	0	15	93	24	0	21	34	12	0	43	54	10	448	1,582	1	0	0	1
7:45 AM	0	6	162	19	0	15	93	16	0	21	22	20	0	28	39	5	446	1,518	0	0	0	0
8:00 AM	0	6	116	9	0	21	94	15	0	18	17	13	0	14	19	3	345	1,495	0	0	0	0
8:15 AM	0	3	99	10	0	20	94	15	0	12	13	25	0	22	22	8	343		0	0	0	0
8:30 AM	0	6	120	15	0	24	106	8	0	17	24	14	0	21	21	8	384		0	0	0	0
8:45 AM	0	5	124	15	0	33	112	22	0	18	24	19	0	20	29	2	423		0	0	0	0
Count Total	0	45	903	91	0	154	737	171	0	130	212	126	0	193	242	44	3,048		1	0	0	1
Peak Hour	0	26	502	45	0	71	358	102	0	71	121	59	0	117	156	24	1,652		1	0	0	1

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

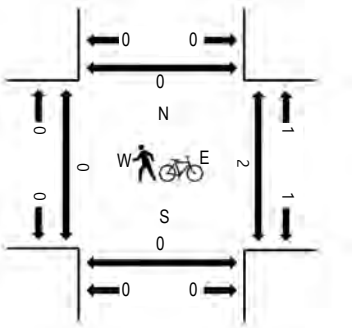
Location: 4 MESA MALL ACCESS & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



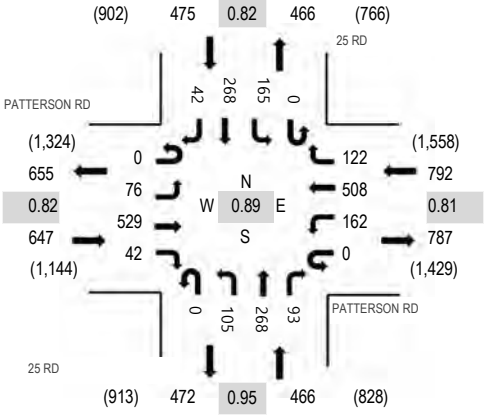
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				MESA MALL ACCESS Northbound				HOME DEPOT ACCESS Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	3	67	3	0	2	63	2	0	0	0	1	0	2	1	5	149	994	0	0	0	1
7:15 AM	0	7	116	0	0	3	92	0	0	0	0	2	0	2	3	3	228	1,106	0	0	0	0
7:30 AM	0	5	150	2	0	3	107	5	0	1	1	3	0	5	0	5	287	1,122	0	0	0	0
7:45 AM	0	14	170	6	0	2	108	5	0	3	2	2	0	11	0	7	330	1,149	0	0	0	0
8:00 AM	0	7	123	5	1	3	98	3	0	3	2	3	1	7	1	4	261	1,120	0	2	0	0
8:15 AM	0	13	100	2	0	6	90	5	0	3	1	5	0	6	0	13	244		0	0	0	0
8:30 AM	0	24	132	3	0	10	106	4	0	8	0	4	0	13	0	10	314		0	0	0	0
8:45 AM	0	21	116	9	0	6	98	10	0	6	0	10	0	11	0	14	301		0	0	0	0
Count Total	0	94	974	30	1	35	762	34	0	24	6	30	1	57	5	61	2,114		0	2	0	1
Peak Hour	0	58	525	16	1	21	402	17	0	17	5	14	1	37	1	34	1,149		0	2	0	0

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

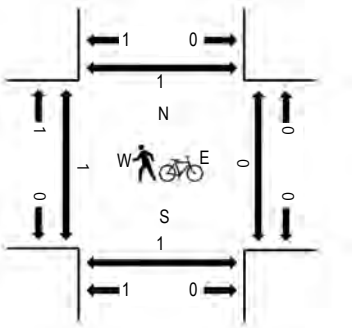
Location: 5 25 RD & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



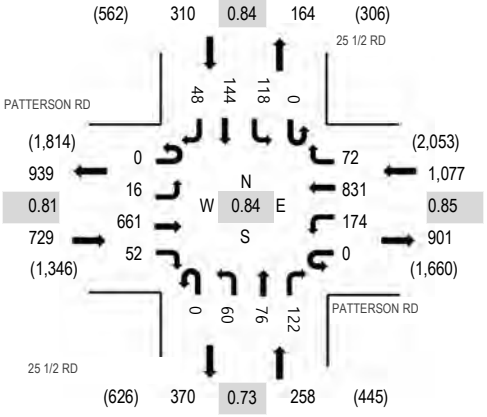
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				25 RD Northbound				25 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	4	69	5	0	27	91	19	0	13	34	11	0	32	49	4	358	2,148	0	0	0	0
7:15 AM	0	10	113	9	0	37	141	16	0	15	47	18	0	42	61	8	517	2,330	0	0	0	0
7:30 AM	0	18	146	10	0	47	118	23	0	22	66	27	0	49	63	12	601	2,380	0	0	1	0
7:45 AM	0	26	168	4	0	47	132	29	0	31	63	25	0	50	86	11	672	2,319	0	0	0	0
8:00 AM	0	16	105	14	0	26	133	37	0	24	65	21	0	33	60	6	540	2,284	1	0	0	0
8:15 AM	0	16	110	14	0	42	125	33	0	28	74	20	0	33	59	13	567		0	0	0	0
8:30 AM	0	10	122	9	0	25	132	21	0	24	51	25	0	45	62	14	540		0	0	0	0
8:45 AM	0	8	112	26	0	64	169	24	0	41	56	27	0	26	67	17	637		0	0	0	0
Count Total	0	108	945	91	0	315	1,041	202	0	198	456	174	0	310	507	85	4,432		1	0	1	0
Peak Hour	0	76	529	42	0	162	508	122	0	105	268	93	0	165	268	42	2,380		1	0	1	0

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

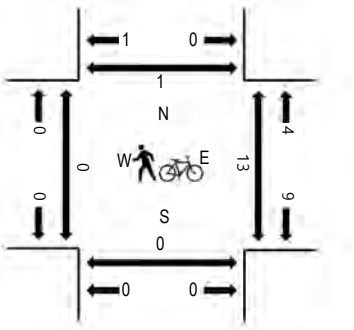
Location: 6 25 1/2 RD & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



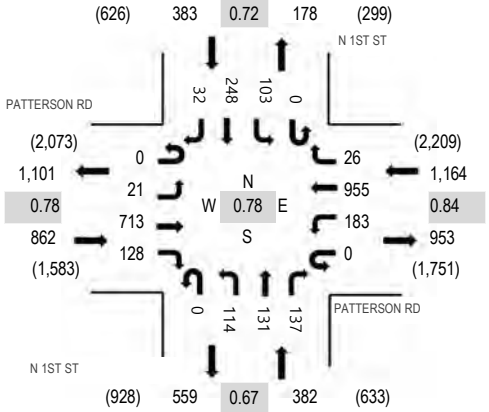
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				25 1/2 RD Northbound				25 1/2 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	3	85	12	0	24	154	20	0	6	7	9	0	20	14	7	361	2,115	0	1	0	0
7:15 AM	0	3	149	5	0	24	211	23	0	6	5	20	0	26	19	7	498	2,296	0	0	0	0
7:30 AM	0	3	178	16	0	23	191	19	0	7	14	19	0	39	26	18	553	2,335	1	0	0	0
7:45 AM	0	8	207	12	0	49	243	28	0	21	15	26	0	45	33	16	703	2,374	0	0	0	0
8:00 AM	0	3	144	10	0	42	218	20	0	6	21	18	0	23	30	7	542	2,291	0	0	0	0
8:15 AM	0	1	140	12	0	43	194	16	0	10	15	26	0	28	37	15	537		0	2	0	0
8:30 AM	0	4	170	18	0	40	176	8	0	23	25	52	0	22	44	10	592		0	11	0	0
8:45 AM	0	3	149	11	0	46	232	9	0	20	33	41	0	24	36	16	620		0	4	0	0
Count Total	0	28	1,222	96	0	291	1,619	143	0	99	135	211	0	227	239	96	4,406		1	18	0	0
Peak Hour	0	16	661	52	0	174	831	72	0	60	76	122	0	118	144	48	2,374		0	13	0	0

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

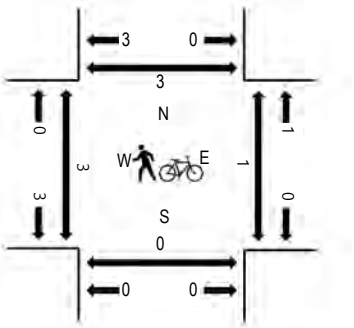
Location: 7 N 1ST ST & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

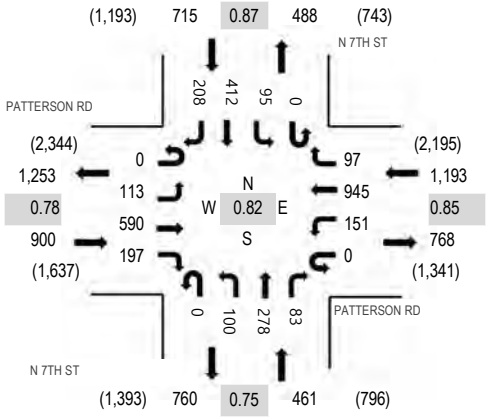
Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				N 1ST ST Northbound				N 1ST ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	4	92	11	0	18	181	2	0	10	12	17	0	17	21	8	393	2,545	0	0	0	0
7:15 AM	0	5	153	24	0	31	233	2	0	20	14	30	0	19	40	6	577	2,772	2	0	0	0
7:30 AM	0	3	174	43	0	45	204	6	0	28	27	36	0	28	80	4	678	2,791	3	0	0	2
7:45 AM	0	8	227	42	0	52	285	8	0	32	51	59	0	29	93	11	897	2,719	0	0	0	0
8:00 AM	0	4	150	22	0	46	244	6	0	33	33	18	0	18	37	9	620	2,506	0	1	0	0
8:15 AM	0	6	162	21	0	40	222	6	0	21	20	24	0	28	38	8	596		0	0	0	0
8:30 AM	0	2	192	29	0	39	195	13	0	21	24	23	0	25	32	11	606		0	0	0	0
8:45 AM	0	6	179	24	0	66	251	14	0	30	23	27	0	24	34	6	684		0	0	0	1
Count Total	0	38	1,329	216	0	337	1,815	57	0	195	204	234	0	188	375	63	5,051		5	1	0	3
Peak Hour	0	21	713	128	0	183	955	26	0	114	131	137	0	103	248	32	2,791		3	1	0	2

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

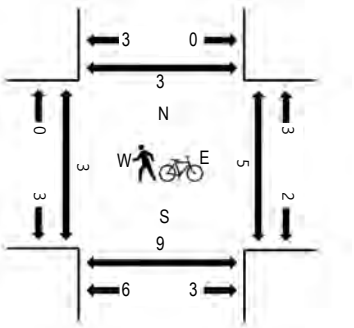
Location: 8 N 7TH ST & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

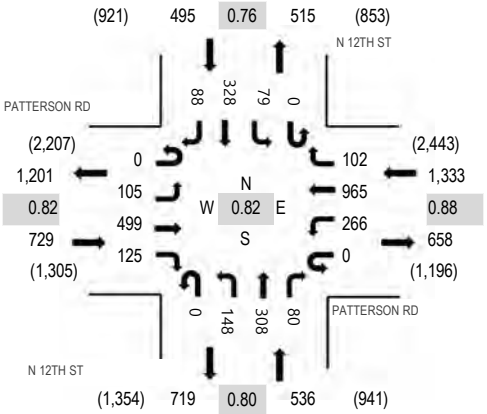
Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				N 7TH ST Northbound				N 7TH ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	11	67	32	0	20	169	1	0	25	26	12	0	7	61	26	457	2,838	1	0	2	0
7:15 AM	0	13	115	49	0	28	215	6	0	20	52	14	0	7	80	35	634	3,181	2	1	3	0
7:30 AM	0	22	151	53	0	46	225	16	0	11	58	22	0	13	93	37	747	3,269	0	0	1	0
7:45 AM	0	39	187	64	0	38	287	27	0	34	98	21	0	21	123	61	1,000	3,213	1	1	2	0
8:00 AM	0	27	120	38	0	35	228	40	0	23	84	21	0	34	95	55	800	2,983	0	0	3	1
8:15 AM	0	25	132	42	0	32	205	14	0	32	38	19	0	27	101	55	722		1	1	2	0
8:30 AM	0	19	143	65	0	44	203	11	0	19	37	16	0	11	80	43	691		0	0	1	1
8:45 AM	0	18	150	55	0	38	259	8	0	37	53	24	0	7	81	40	770		4	0	6	4
Count Total	0	174	1,065	398	0	281	1,791	123	0	201	446	149	0	127	714	352	5,821		9	3	20	6
Peak Hour	0	113	590	197	0	151	945	97	0	100	278	83	0	95	412	208	3,269		2	2	8	1

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

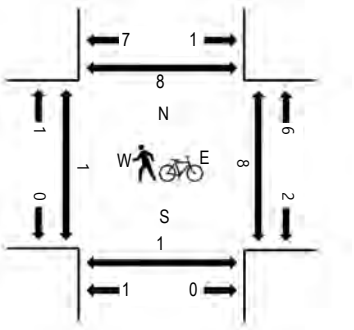
Location: 9 N 12TH ST & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



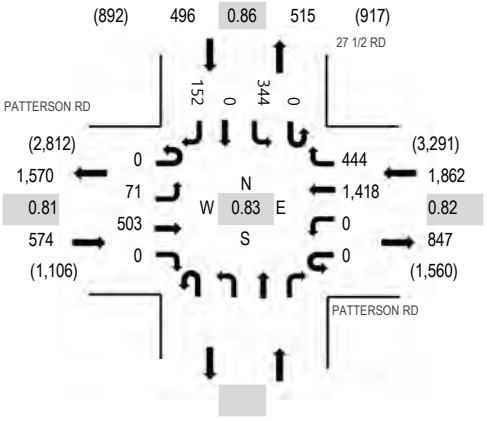
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				N 12TH ST Northbound				N 12TH ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	9	56	14	0	36	154	13	0	22	35	19	0	6	34	11	409	2,689	2	1	1	0
7:15 AM	0	20	94	22	0	47	204	13	0	27	45	15	0	10	70	10	577	3,042	0	0	0	0
7:30 AM	0	24	109	34	0	87	240	26	0	28	74	18	0	20	76	21	757	3,093	1	1	0	1
7:45 AM	0	41	143	37	0	67	283	34	0	43	103	21	0	22	120	32	946	3,064	0	4	0	7
8:00 AM	0	24	124	23	0	58	266	23	0	39	73	20	0	21	72	19	762	2,921	0	2	0	0
8:15 AM	0	16	123	31	0	54	176	19	0	38	58	21	0	16	60	16	628		0	0	0	0
8:30 AM	0	18	117	32	0	73	222	18	0	33	49	18	0	30	97	21	728		0	2	0	0
8:45 AM	0	21	128	45	0	62	247	21	0	38	76	28	0	17	103	17	803		4	1	3	0
Count Total	0	173	894	238	0	484	1,792	167	0	268	513	160	0	142	632	147	5,610		7	11	4	8
Peak Hour	0	105	499	125	0	266	965	102	0	148	308	80	0	79	328	88	3,093		1	7	0	8

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

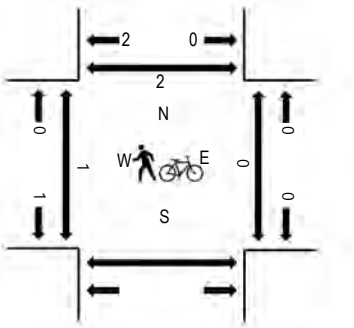
Location: 10 27 1/2 RD & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



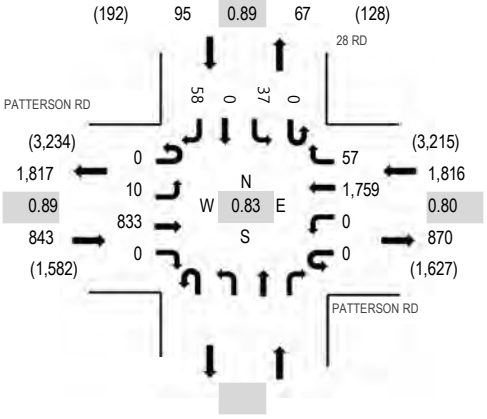
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				Northbound				27 1/2 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	8	70	0	0	0	204	79					0	46	0	16	423	2,728	0	0		0
7:15 AM	0	12	104	0	0	0	317	105					0	86	0	28	652	2,932	0	0		0
7:30 AM	0	13	122	0	0	0	381	110					0	99	0	45	770	2,844	0	0		0
7:45 AM	0	18	151	0	0	0	417	152					0	96	0	49	883	2,724	0	0		0
8:00 AM	0	28	126	0	0	0	303	77					0	63	0	30	627	2,561	1	0		1
8:15 AM	0	16	119	0	0	0	250	80					0	59	0	40	564		0	0		0
8:30 AM	0	16	115	0	0	0	325	87					0	65	0	42	650		0	0		0
8:45 AM	0	27	161	0	0	0	315	89					0	78	0	50	720		0	0		1
Count Total	0	138	968	0	0	0	2,512	779					0	592	0	300	5,289		1	0		2
Peak Hour	0	71	503	0	0	0	1,418	444					0	344	0	152	2,932		1	0		1

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

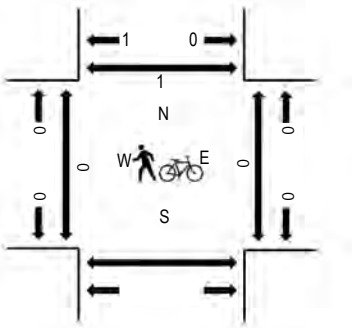
Location: 11 28 RD & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



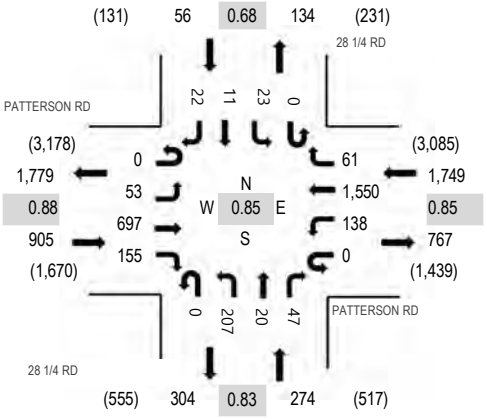
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				Northbound				28 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	2	110	0	0	0	284	11					0	12	0	15	434	2,601	0	0		0
7:15 AM	0	2	184	0	0	0	394	6					0	10	0	14	610	2,754	0	0		0
7:30 AM	0	2	214	0	0	0	471	12					0	11	0	17	727	2,689	0	0		0
7:45 AM	0	4	236	0	0	0	542	27					0	7	0	14	830	2,574	0	0		0
8:00 AM	0	2	199	0	0	0	352	12					0	9	0	13	587	2,388	0	0		0
8:15 AM	0	4	197	0	0	0	318	7					0	6	0	13	545		0	0		0
8:30 AM	0	5	191	0	0	0	387	7					0	9	0	13	612		0	0		0
8:45 AM	0	10	220	0	0	0	370	15					0	12	0	17	644		1	0		1
Count Total	0	31	1,551	0	0	0	3,118	97					0	76	0	116	4,989		1	0		1
Peak Hour	0	10	833	0	0	0	1,759	57					0	37	0	58	2,754		0	0		0

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

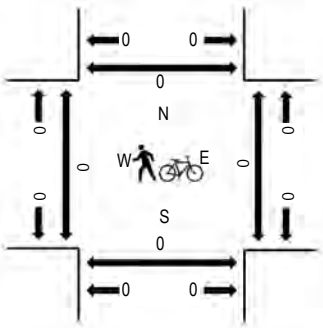
Location: 12 28 1/4 RD & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

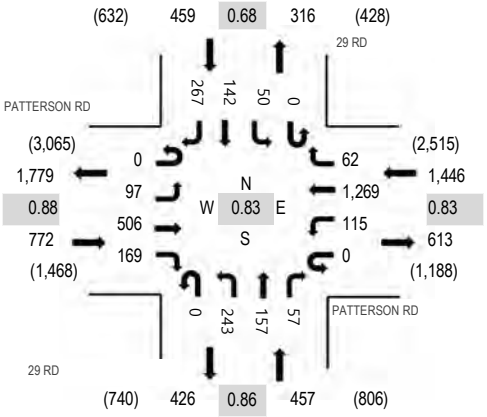
Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				28 1/4 RD Northbound				28 1/4 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	8	101	12	0	16	268	8	0	29	2	8	0	1	1	2	456	2,799	0	0	0	0
7:15 AM	0	9	153	32	0	21	352	17	0	41	4	11	0	7	1	7	655	2,984	0	0	0	0
7:30 AM	0	19	188	33	0	40	424	18	0	57	2	12	0	6	3	4	806	2,929	0	0	0	0
7:45 AM	0	14	198	50	0	46	458	13	0	69	9	8	0	3	6	8	882	2,790	0	0	0	0
8:00 AM	0	11	158	40	0	31	316	13	0	40	5	16	0	7	1	3	641	2,604	0	0	0	0
8:15 AM	0	8	152	46	0	28	268	9	0	48	7	13	0	6	4	11	600		0	0	1	0
8:30 AM	0	10	148	43	0	23	344	6	0	38	6	19	0	13	6	11	667		0	0	0	0
8:45 AM	0	16	184	37	0	27	328	11	0	44	6	23	0	4	8	8	696		0	0	0	0
Count Total	0	95	1,282	293	0	232	2,758	95	0	366	41	110	0	47	30	54	5,403		0	0	1	0
Peak Hour	0	53	697	155	0	138	1,550	61	0	207	20	47	0	23	11	22	2,984		0	0	0	0

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

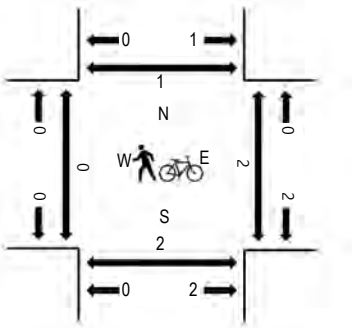
Location: 13 29 RD & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



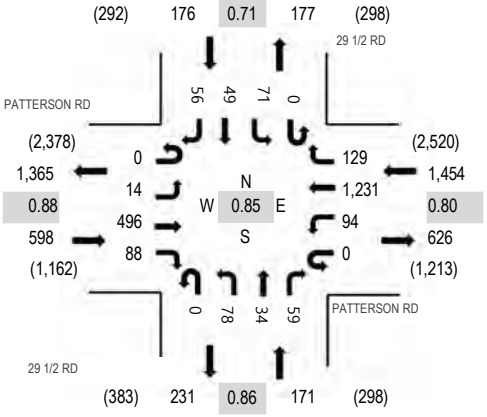
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				29 RD Northbound				29 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	10	66	33	0	19	229	6	0	31	9	6	0	1	13	30	453	2,967	0	1	0	0
7:15 AM	0	18	106	46	0	23	297	13	0	68	30	11	0	5	18	41	676	3,134	0	0	0	0
7:30 AM	0	29	138	39	0	29	357	26	0	62	56	15	0	16	43	80	890	2,993	0	1	0	0
7:45 AM	0	33	141	47	0	41	377	19	0	53	50	17	0	23	56	91	948	2,725	0	1	2	1
8:00 AM	0	17	121	37	0	22	238	4	0	60	21	14	0	6	25	55	620	2,454	0	0	0	0
8:15 AM	0	7	125	43	0	25	206	2	0	55	9	22	0	10	12	19	535		1	0	0	0
8:30 AM	0	15	125	39	0	31	268	2	0	62	8	27	0	5	16	24	622		0	0	0	1
8:45 AM	0	18	162	53	0	24	249	8	0	82	18	20	0	6	6	31	677		0	1	1	1
Count Total	0	147	984	337	0	214	2,221	80	0	473	201	132	0	72	189	371	5,421		1	4	3	3
Peak Hour	0	97	506	169	0	115	1,269	62	0	243	157	57	0	50	142	267	3,134		0	2	2	1

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

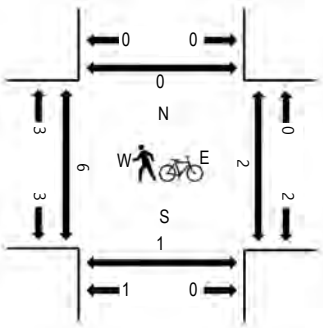
Location: 14 29 1/2 RD & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

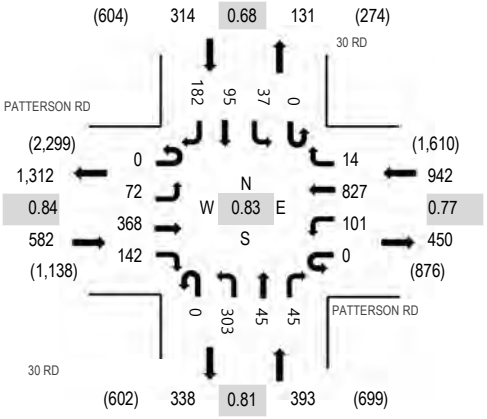
Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				29 1/2 RD Northbound				29 1/2 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	6	64	7	0	17	208	21	0	7	2	4	0	7	4	12	359	2,291	0	0	1	0
7:15 AM	0	4	98	14	0	18	290	25	0	21	9	14	0	16	6	12	527	2,399	4	2	1	0
7:30 AM	0	2	131	21	0	30	382	43	0	28	8	11	0	8	17	18	699	2,332	2	0	0	0
7:45 AM	0	6	150	26	0	31	338	43	0	17	10	23	0	26	17	19	706	2,175	0	0	0	0
8:00 AM	0	2	117	27	0	15	221	18	0	12	7	11	0	21	9	7	467	1,981	0	0	0	0
8:15 AM	0	13	127	16	0	13	205	15	0	12	2	23	0	20	7	7	460		0	0	0	0
8:30 AM	0	4	126	16	0	18	268	22	0	22	6	21	0	27	6	6	542		0	0	0	0
8:45 AM	0	11	153	21	0	23	241	15	0	16	4	8	0	7	4	9	512		0	0	0	0
Count Total	0	48	966	148	0	165	2,153	202	0	135	48	115	0	132	70	90	4,272		6	2	2	0
Peak Hour	0	14	496	88	0	94	1,231	129	0	78	34	59	0	71	49	56	2,399		6	2	1	0

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

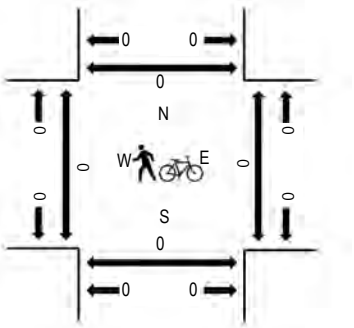
Location: 15 30 RD & PATTERSON RD AM
Date: Tuesday, March 3, 2020
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



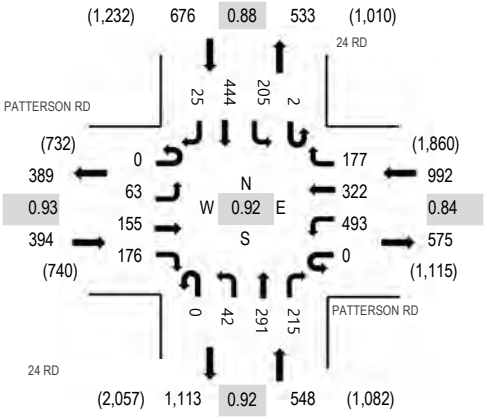
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				30 RD Northbound				30 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	2	53	10	0	9	119	4	0	63	3	4	0	10	15	38	330	2,120	0	0	0	0
7:15 AM	0	4	94	25	0	21	184	3	0	69	7	10	0	9	20	42	488	2,231	0	0	0	0
7:30 AM	0	11	87	35	0	33	271	3	0	89	8	13	0	18	32	68	668	2,188	0	0	0	0
7:45 AM	0	30	114	51	0	30	213	4	0	96	16	9	0	5	27	39	634	2,052	0	0	0	0
8:00 AM	0	27	73	31	0	17	159	4	0	49	14	13	0	5	16	33	441	1,931	0	0	0	0
8:15 AM	0	26	90	46	0	19	132	4	0	53	10	9	0	12	8	36	445		0	1	0	2
8:30 AM	0	32	97	41	0	18	164	5	0	66	9	17	0	8	21	54	532		0	0	0	0
8:45 AM	0	28	99	32	0	17	169	8	0	42	12	18	0	9	28	51	513		0	0	0	0
Count Total	0	160	707	271	0	164	1,411	35	0	527	79	93	0	76	167	361	4,051		0	1	0	2
Peak Hour	0	72	368	142	0	101	827	14	0	303	45	45	0	37	95	182	2,231		0	0	0	0

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

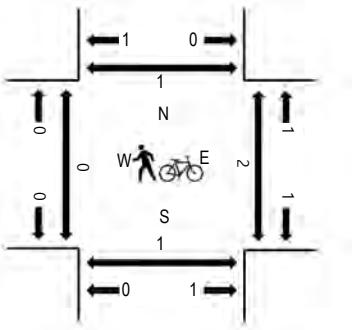
Location: 1 24 RD & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

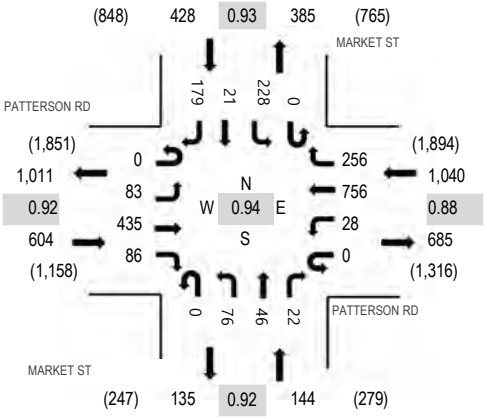
Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				24 RD Northbound				24 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	17	24	32	0	95	81	40	0	11	76	67	0	58	97	4	602	2,470	0	0	0	0
4:15 PM	0	14	39	46	0	94	69	36	0	15	68	73	0	49	96	4	603	2,566	0	0	0	0
4:30 PM	0	13	43	48	0	123	93	50	0	9	72	66	2	63	119	7	708	2,610	0	0	0	0
4:45 PM	0	16	44	37	0	95	60	36	0	13	66	40	0	52	93	5	557	2,468	0	1	1	1
5:00 PM	0	16	43	51	0	147	96	51	0	10	78	50	0	41	107	8	698	2,444	0	0	0	0
5:15 PM	0	18	25	40	0	128	73	40	0	10	75	59	0	49	125	5	647		0	0	0	0
5:30 PM	0	12	33	45	0	111	76	37	1	5	59	42	0	42	99	4	566		0	0	1	0
5:45 PM	0	16	31	37	0	127	62	40	0	10	62	45	0	37	64	2	533		0	0	0	1
Count Total	0	122	282	336	0	920	610	330	1	83	556	442	2	391	800	39	4,914		0	1	2	2
Peak Hour	0	63	155	176	0	493	322	177	0	42	291	215	2	205	444	25	2,610		0	1	1	1

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

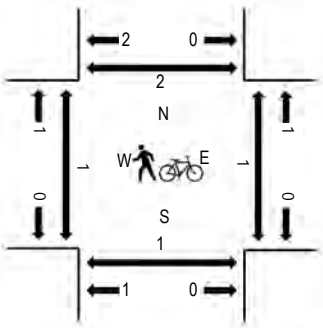
Location: 2 MARKET ST & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

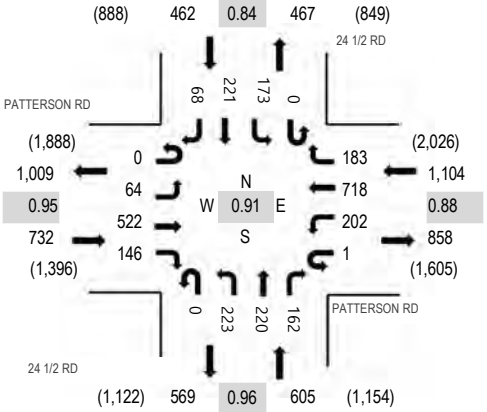
Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				MARKET ST Northbound				MARKET ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	19	111	25	1	7	160	59	0	19	9	7	0	63	9	32	521	2,095	0	0	0	0
4:15 PM	0	31	121	24	0	4	121	54	0	15	10	16	0	35	8	48	487	2,157	0	2	1	1
4:30 PM	0	17	131	27	0	3	203	67	0	22	11	1	0	50	7	50	589	2,216	0	0	0	0
4:45 PM	0	26	95	18	0	12	146	51	0	17	13	8	0	66	7	39	498	2,120	1	0	1	0
5:00 PM	0	20	109	19	0	7	224	63	0	17	15	6	0	52	3	48	583	2,084	0	1	0	1
5:15 PM	0	20	100	22	0	6	183	75	0	20	7	7	0	60	4	42	546		0	0	0	1
5:30 PM	1	21	79	12	0	2	146	79	0	15	7	13	0	55	5	58	493		0	0	0	0
5:45 PM	0	23	75	12	0	3	158	60	0	11	8	5	0	50	1	56	462		0	0	0	1
Count Total	1	177	821	159	1	44	1,341	508	0	136	80	63	0	431	44	373	4,179		1	3	2	4
Peak Hour	0	83	435	86	0	28	756	256	0	76	46	22	0	228	21	179	2,216		1	1	1	2

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

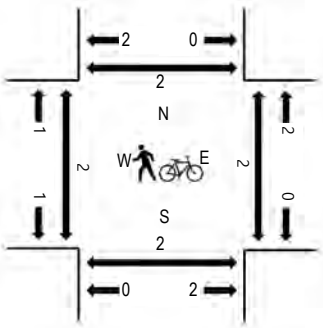
Location: 3 24 1/2 RD & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



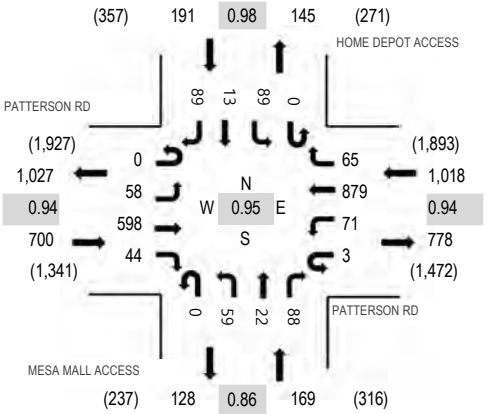
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				24 1/2 RD Northbound				24 1/2 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	16	123	35	0	47	157	35	0	55	54	33	0	42	58	11	666	2,775	0	1	0	0
4:15 PM	0	24	127	35	0	56	170	48	0	59	57	35	0	44	54	12	721	2,903	0	0	2	0
4:30 PM	0	10	128	39	1	42	171	40	0	61	58	39	0	41	53	18	701	2,892	0	0	0	0
4:45 PM	0	16	122	38	0	49	168	47	0	43	59	43	0	42	48	12	687	2,781	0	1	0	0
5:00 PM	0	14	145	34	0	55	209	48	0	60	46	45	0	46	66	26	794	2,689	1	0	0	0
5:15 PM	0	13	120	50	0	57	172	39	0	55	59	39	0	41	41	24	710		2	0	0	0
5:30 PM	0	13	110	35	0	45	131	38	0	57	37	35	0	27	42	20	590		2	0	0	0
5:45 PM	0	10	101	38	0	43	142	16	0	37	52	36	0	40	62	18	595		0	1	1	1
Count Total	0	116	976	304	1	394	1,320	311	0	427	422	305	0	323	424	141	5,464		5	3	3	1
Peak Hour	0	64	522	146	1	202	718	183	0	223	220	162	0	173	221	68	2,903		1	1	2	0

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

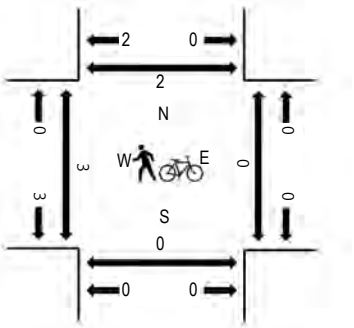
Location: 4 MESA MALL ACCESS & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



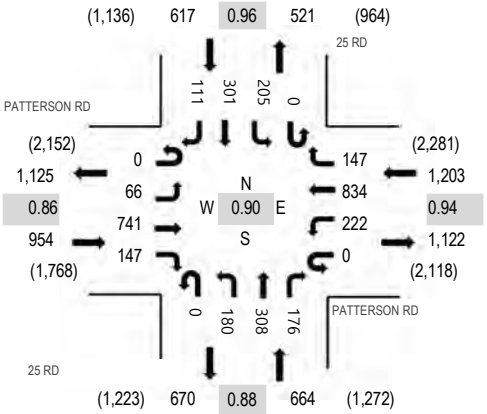
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				MESA MALL ACCESS Northbound				HOME DEPOT ACCESS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	22	147	13	0	21	204	10	0	13	4	20	0	20	6	21	501	1,986	0	0	0	0
4:15 PM	0	19	148	9	1	14	183	19	0	9	6	22	0	22	6	19	477	2,029	0	0	1	0
4:30 PM	0	11	162	16	1	19	227	22	0	12	5	16	0	22	3	24	540	2,078	0	0	0	0
4:45 PM	0	18	135	13	0	22	171	16	0	18	5	23	0	24	4	19	468	1,994	0	0	0	0
5:00 PM	0	14	150	8	1	15	241	15	0	16	8	27	0	21	1	27	544	1,921	3	0	0	1
5:15 PM	0	15	151	7	1	15	240	12	0	13	4	22	0	22	5	19	526		0	0	0	1
5:30 PM	0	9	133	8	0	15	203	9	0	17	7	16	0	16	3	20	456		0	0	0	0
5:45 PM	0	8	118	7	0	6	182	8	0	11	5	17	0	14	1	18	395		0	0	0	1
Count Total	0	116	1,144	81	4	127	1,651	111	0	109	44	163	0	161	29	167	3,907		3	0	1	3
Peak Hour	0	58	598	44	3	71	879	65	0	59	22	88	0	89	13	89	2,078		3	0	0	2

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

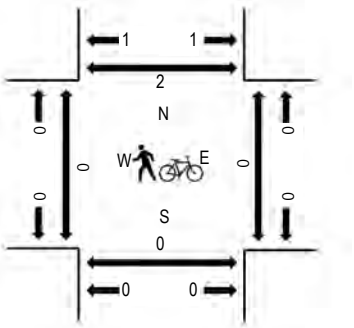
Location: 5 25 RD & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



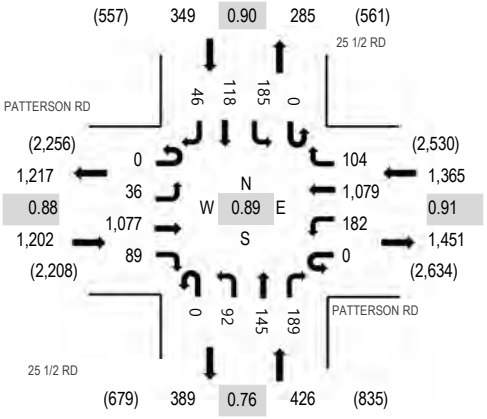
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				25 RD Northbound				25 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	16	171	35	0	56	184	31	0	41	59	57	0	44	67	30	791	3,260	0	0	0	1
4:15 PM	0	9	153	31	0	55	236	27	0	54	64	53	0	42	72	27	823	3,420	0	0	0	0
4:30 PM	0	15	180	36	0	51	209	36	0	45	69	38	0	55	73	28	835	3,438	0	0	0	1
4:45 PM	0	19	173	34	0	56	197	33	0	39	68	50	0	51	63	28	811	3,333	0	0	0	0
5:00 PM	0	18	212	46	0	56	227	42	0	57	86	49	0	49	81	28	951	3,197	0	0	0	0
5:15 PM	0	14	176	31	0	59	201	36	0	39	85	39	0	50	84	27	841		0	0	0	0
5:30 PM	0	18	161	27	0	37	174	37	0	30	78	39	0	41	67	21	730		0	0	0	0
5:45 PM	0	13	157	23	0	34	180	27	0	30	64	39	0	39	49	20	675		0	2	0	3
Count Total	0	122	1,383	263	0	404	1,608	269	0	335	573	364	0	371	556	209	6,457		0	2	0	5
Peak Hour	0	66	741	147	0	222	834	147	0	180	308	176	0	205	301	111	3,438		0	0	0	1

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

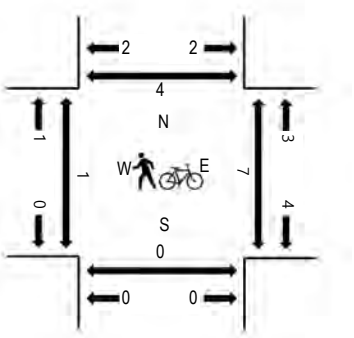
Location: 6 25 1/2 RD & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



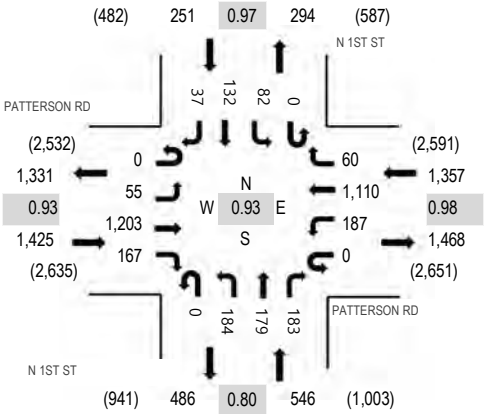
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				25 1/2 RD Northbound				25 1/2 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	12	253	30	0	46	244	30	0	31	48	65	0	25	23	9	816	3,081	0	21	0	0
4:15 PM	0	7	210	15	0	35	253	17	0	24	41	45	0	24	21	10	702	3,205	1	0	0	3
4:30 PM	0	12	252	19	0	43	263	25	0	19	32	32	0	53	28	9	787	3,342	1	2	0	3
4:45 PM	0	5	257	20	0	35	255	33	0	26	26	48	0	39	21	11	776	3,217	0	0	0	1
5:00 PM	0	10	314	18	0	40	305	30	0	22	46	58	0	44	36	17	940	3,049	0	3	0	0
5:15 PM	0	9	254	32	0	64	256	16	0	25	41	51	0	49	33	9	839		0	1	0	0
5:30 PM	0	15	215	14	0	38	229	19	0	9	39	34	0	37	11	2	662		0	1	0	0
5:45 PM	0	11	216	8	0	29	210	15	0	8	22	43	0	16	20	10	608		0	2	0	0
Count Total	0	81	1,971	156	0	330	2,015	185	0	164	295	376	0	287	193	77	6,130		2	30	0	7
Peak Hour	0	36	1,077	89	0	182	1,079	104	0	92	145	189	0	185	118	46	3,342		1	6	0	4

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

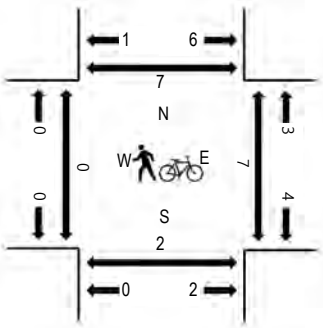
Location: 7 N 1ST ST & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

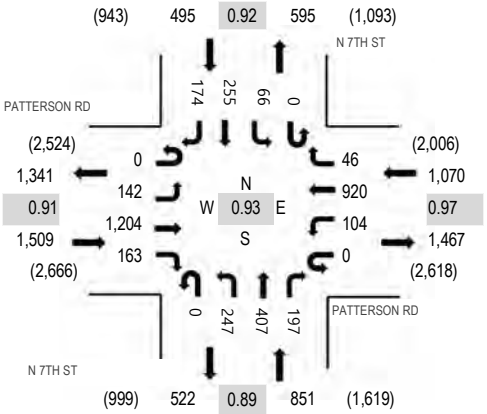
Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				N 1ST ST Northbound				N 1ST ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	18	300	41	0	33	255	17	0	47	47	31	0	14	36	10	849	3,406	0	2	2	0
4:15 PM	0	17	220	35	0	49	291	14	0	44	34	43	0	15	36	8	806	3,524	0	6	0	1
4:30 PM	0	19	278	37	0	44	297	15	0	33	44	49	0	16	32	12	876	3,579	0	2	1	1
4:45 PM	0	11	287	49	0	50	269	13	0	48	38	46	0	24	34	6	875	3,440	0	4	0	3
5:00 PM	0	16	326	41	0	47	281	22	0	60	52	60	0	22	32	8	967	3,305	0	0	0	2
5:15 PM	0	9	312	40	0	46	263	10	0	43	45	28	0	20	34	11	861		0	1	1	0
5:30 PM	0	9	250	42	0	37	241	13	0	30	40	32	0	7	31	5	737		0	0	0	1
5:45 PM	0	18	223	37	0	34	239	11	0	23	55	31	0	17	44	8	740		0	0	0	0
Count Total	0	117	2,196	322	0	340	2,136	115	0	328	355	320	0	135	279	68	6,711		0	15	4	8
Peak Hour	0	55	1,203	167	0	187	1,110	60	0	184	179	183	0	82	132	37	3,579		0	7	2	6

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

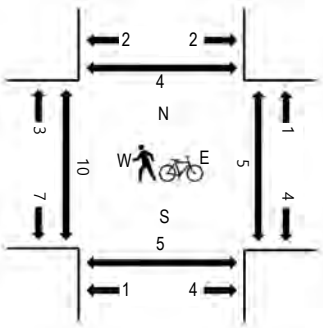
Location: 8 N 7TH ST & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



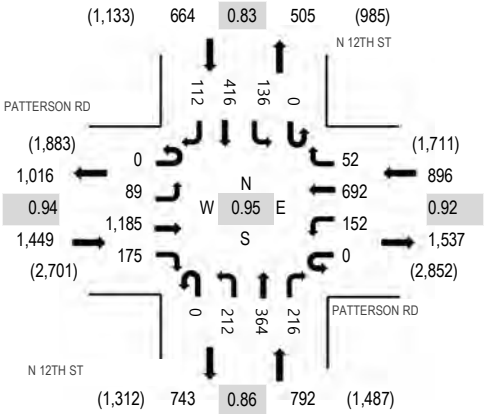
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				N 7TH ST Northbound				N 7TH ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	29	282	43	0	26	194	13	0	69	94	56	0	13	70	47	936	3,646	0	1	2	0
4:15 PM	0	33	198	39	0	28	232	7	0	65	89	41	0	13	57	46	848	3,768	5	0	0	0
4:30 PM	0	39	263	34	0	27	231	8	0	66	95	48	0	19	56	49	935	3,925	5	2	1	1
4:45 PM	0	35	273	42	0	27	235	17	0	60	82	53	0	16	49	38	927	3,803	2	2	2	2
5:00 PM	0	35	338	42	0	21	238	9	0	62	127	51	0	11	79	45	1,058	3,588	1	0	2	0
5:15 PM	0	33	330	45	0	29	216	12	0	59	103	45	0	20	71	42	1,005		1	0	0	0
5:30 PM	0	19	236	31	0	27	181	8	0	52	101	56	0	22	42	38	813		1	1	0	1
5:45 PM	0	22	196	29	0	25	183	12	0	42	71	32	0	6	60	34	712		0	0	0	1
Count Total	0	245	2,116	305	0	210	1,710	86	0	475	762	382	0	120	484	339	7,234		15	6	7	5
Peak Hour	0	142	1,204	163	0	104	920	46	0	247	407	197	0	66	255	174	3,925		9	4	5	3

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

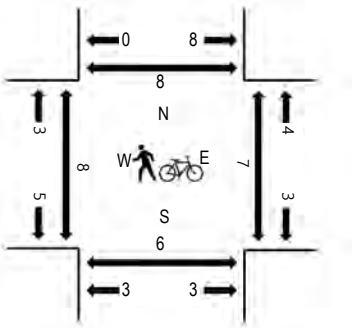
Location: 9 N 12TH ST & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



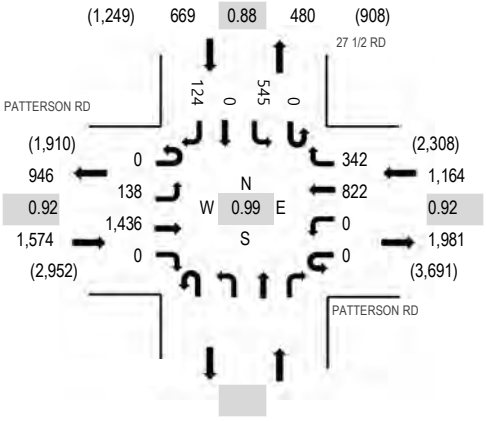
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				N 12TH ST Northbound				N 12TH ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	26	285	33	0	32	142	15	0	43	104	67	0	25	80	29	881	3,531	5	2	0	1
4:15 PM	0	25	236	37	0	34	207	14	0	45	73	49	0	30	64	16	830	3,646	2	1	0	1
4:30 PM	0	18	276	43	0	35	196	10	0	48	89	50	0	30	90	23	908	3,801	2	2	0	0
4:45 PM	0	26	277	42	0	34	179	11	0	65	83	44	0	27	94	30	912	3,700	0	1	1	0
5:00 PM	0	20	315	43	0	41	159	16	0	51	106	74	0	39	110	22	996	3,501	1	1	0	7
5:15 PM	0	25	317	47	0	42	158	15	0	48	86	48	0	40	122	37	985		2	1	1	1
5:30 PM	0	16	287	49	0	37	128	13	0	43	82	36	0	22	62	32	807		0	0	3	0
5:45 PM	0	24	205	29	0	45	132	16	0	38	72	43	0	30	67	12	713		1	1	2	0
Count Total	0	180	2,198	323	0	300	1,301	110	0	381	695	411	0	243	689	201	7,032		13	9	7	10
Peak Hour	0	89	1,185	175	0	152	692	52	0	212	364	216	0	136	416	112	3,801		5	5	2	8

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

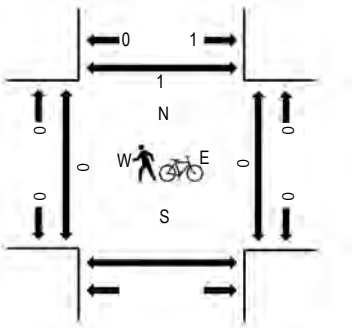
Location: 10 27 1/2 RD & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



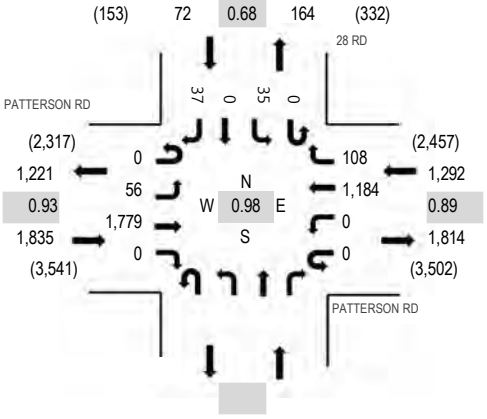
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				Northbound				27 1/2 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	56	346	0	0	0	221	59					0	135	0	30	847	3,347	0	0		0
4:15 PM	0	33	320	0	0	0	225	78					0	140	0	21	817	3,360	0	0		0
4:30 PM	0	31	332	0	0	0	225	106					0	122	0	31	847	3,407	0	0		0
4:45 PM	0	31	350	0	0	0	219	81					0	126	0	29	836	3,258	0	0		0
5:00 PM	0	35	369	0	0	0	190	76					0	159	0	31	860	3,162	0	0		1
5:15 PM	0	41	385	0	0	0	188	79					0	138	0	33	864		0	0		0
5:30 PM	0	34	279	0	0	0	204	60					0	105	0	16	698		0	0		0
5:45 PM	0	33	277	0	0	0	222	75					0	108	0	25	740		0	0		0
Count Total	0	294	2,658	0	0	0	1,694	614					0	1,033	0	216	6,509		0	0		1
Peak Hour	0	138	1,436	0	0	0	822	342					0	545	0	124	3,407		0	0		1

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

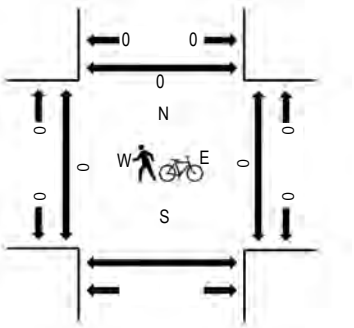
Location: 11 28 RD & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



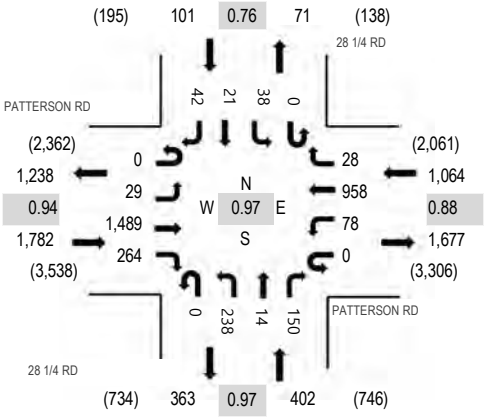
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				Northbound				28 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	12	455	0	0	0	265	22					0	9	0	3	766	3,145	0	0		0
4:15 PM	0	12	452	0	0	0	306	28					0	9	0	9	816	3,199	0	0		0
4:30 PM	0	12	423	0	0	0	335	26					0	5	0	6	807	3,184	0	0		0
4:45 PM	0	17	423	0	0	0	276	21					0	10	0	9	756	3,071	0	0		0
5:00 PM	0	15	481	0	0	0	267	33					0	11	0	13	820	3,006	0	0		0
5:15 PM	0	13	493	0	0	0	249	33					0	5	0	8	801		0	0		0
5:30 PM	0	8	367	0	0	0	256	29					0	11	0	23	694		0	0		0
5:45 PM	0	17	341	0	0	0	277	34					0	7	0	15	691		0	0		0
Count Total	0	106	3,435	0	0	0	2,231	226					0	67	0	86	6,151		0	0		0
Peak Hour	0	56	1,779	0	0	0	1,184	108					0	35	0	37	3,199		0	0		0

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

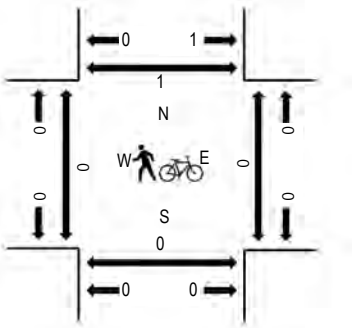
Location: 12 28 1/4 RD & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



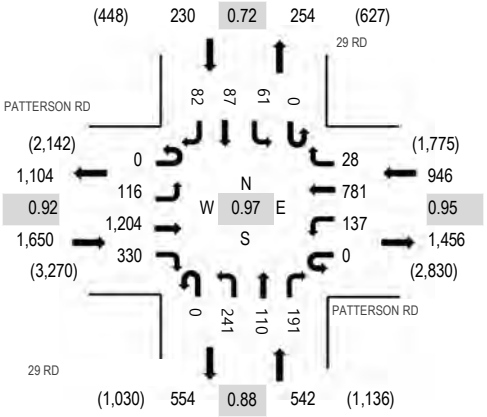
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				28 1/4 RD Northbound				28 1/4 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	11	395	66	0	23	205	1	0	66	2	25	0	13	5	12	824	3,339	1	0	0	0
4:15 PM	0	9	378	72	0	21	255	9	0	63	5	28	0	8	3	12	863	3,349	0	0	0	0
4:30 PM	0	9	369	60	0	17	278	6	0	55	2	42	0	10	6	8	862	3,340	0	0	0	0
4:45 PM	0	7	348	76	0	21	207	8	0	63	2	39	0	9	6	4	790	3,250	0	0	0	1
5:00 PM	0	4	394	56	0	19	218	5	0	57	5	41	0	11	6	18	834	3,201	0	0	0	0
5:15 PM	0	9	398	74	0	38	210	7	0	51	5	34	0	9	4	15	854		0	0	0	0
5:30 PM	0	5	365	66	0	19	211	4	0	42	4	35	0	5	4	12	772		0	0	0	1
5:45 PM	0	7	311	49	0	20	254	5	0	40	7	33	0	6	3	6	741		0	2	0	0
Count Total	0	61	2,958	519	0	178	1,838	45	0	437	32	277	0	71	37	87	6,540		1	2	0	2
Peak Hour	0	29	1,489	264	0	78	958	28	0	238	14	150	0	38	21	42	3,349		0	0	0	1

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

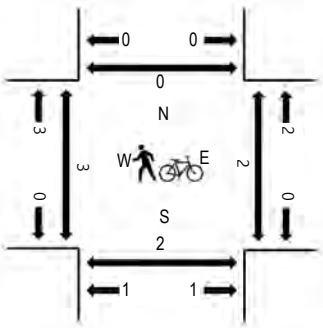
Location: 13 29 RD & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



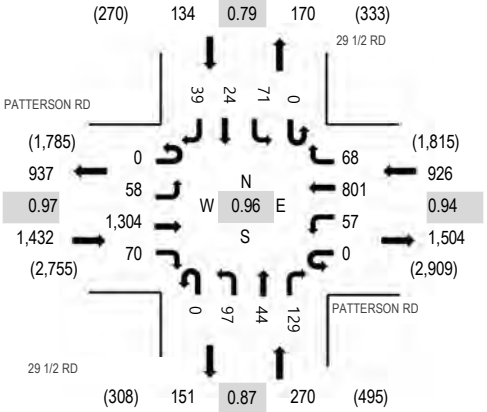
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				29 RD Northbound				29 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	31	322	99	0	34	175	7	0	56	30	53	0	19	29	17	872	3,368	0	0	0	0
4:15 PM	0	32	292	83	0	32	200	11	0	67	27	49	0	18	10	24	845	3,318	2	0	0	0
4:30 PM	0	29	294	73	0	32	214	4	0	67	26	47	0	16	35	29	866	3,361	0	0	0	0
4:45 PM	0	24	296	75	0	39	192	6	0	51	27	42	0	8	13	12	785	3,327	1	0	2	0
5:00 PM	0	44	302	80	0	32	183	6	0	54	32	42	0	11	19	17	822	3,261	1	1	0	0
5:15 PM	0	58	315	82	0	24	177	12	0	66	51	52	0	17	16	18	888		0	0	0	0
5:30 PM	0	44	283	76	0	23	157	7	0	60	49	41	0	20	24	48	832		0	1	1	0
5:45 PM	0	28	244	64	0	24	177	7	0	70	35	42	0	5	12	11	719		2	0	2	0
Count Total	0	290	2,348	632	0	240	1,475	60	0	491	277	368	0	114	158	176	6,629		6	2	5	0
Peak Hour	0	116	1,204	330	0	137	781	28	0	241	110	191	0	61	87	82	3,368		3	0	2	0

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

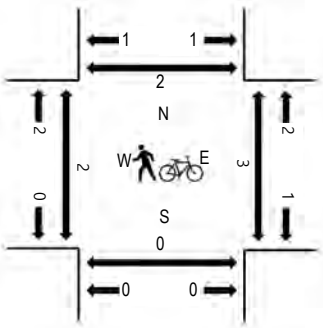
Location: 14 29 1/2 RD & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



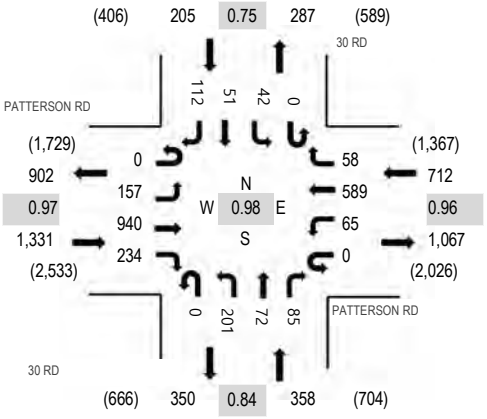
Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				29 1/2 RD Northbound				29 1/2 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	5	330	19	0	18	191	21	0	26	8	44	0	14	4	8	688	2,762	2	0	0	1
4:15 PM	0	18	327	14	0	20	199	19	0	32	8	37	0	25	8	14	721	2,739	0	1	0	1
4:30 PM	0	20	333	17	0	8	223	14	0	22	12	18	0	15	8	7	697	2,707	0	1	0	0
4:45 PM	0	15	314	20	0	11	188	14	0	17	16	30	0	17	4	10	656	2,647	0	1	0	0
5:00 PM	0	15	290	14	0	15	200	14	0	26	10	40	0	24	3	14	665	2,573	2	0	0	2
5:15 PM	0	19	328	22	0	27	182	17	0	17	8	36	0	28	4	1	689		0	0	0	0
5:30 PM	0	14	308	23	0	14	178	20	0	16	9	21	0	24	6	4	637		0	0	0	0
5:45 PM	0	13	271	6	0	14	189	19	0	11	5	26	0	9	9	10	582		0	1	0	0
Count Total	0	119	2,501	135	0	127	1,550	138	0	167	76	252	0	156	46	68	5,335		4	4	0	4
Peak Hour	0	58	1,304	70	0	57	801	68	0	97	44	129	0	71	24	39	2,762		2	3	0	2

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

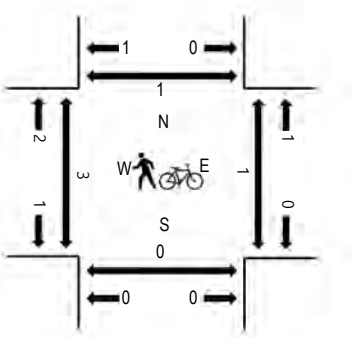
Location: 15 30 RD & PATTERSON RD PM
Date: Tuesday, March 3, 2020
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	PATTERSON RD Eastbound				PATTERSON RD Westbound				30 RD Northbound				30 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	39	237	66	0	19	146	20	0	55	20	22	0	8	12	24	668	2,606	2	1	0	0
4:15 PM	0	46	221	54	0	14	151	10	0	45	18	23	0	15	12	41	650	2,536	0	0	0	0
4:30 PM	0	33	234	68	0	14	152	15	0	54	12	16	0	12	12	30	652	2,546	1	0	0	1
4:45 PM	0	39	248	46	0	18	140	13	0	47	22	24	0	7	15	17	636	2,486	0	0	0	0
5:00 PM	0	46	212	50	0	9	150	11	0	43	23	15	0	7	8	24	598	2,404	0	0	0	0
5:15 PM	0	37	239	55	0	14	138	13	0	53	30	25	0	10	20	26	660		0	0	0	0
5:30 PM	0	37	212	54	0	17	121	14	0	37	17	26	0	12	15	30	592		0	0	0	0
5:45 PM	0	41	173	46	0	15	144	9	0	40	24	13	0	15	13	21	554		1	1	0	0
Count Total	0	318	1,776	439	0	120	1,142	105	0	374	166	164	0	86	107	213	5,010		4	2	0	1
Peak Hour	0	157	940	234	0	65	589	58	0	201	72	85	0	42	51	112	2,606		3	1	0	1

Appendix E - Access Plan Methodology and Evaluation Process

Memorandum

TO: Patterson Road Access Plan Project Team
FROM: Janet Lundquist
DATE: March 17, 2020
PROJECT: **Patterson Road Access Study**
RE: Access Plan Methodology

This memorandum describes the general approach proposed by Stolfus & Associates, Inc. (Stolfus) to develop the Patterson Road Access Plan. The purpose of this memorandum is to outline, for the benefit of the City of Grand Junction, the primary assumptions that will be used in developing the recommended access plan and to document agency concurrence with the proposed methodology. A separate methodology for the related traffic engineering elements of the project has been prepared documenting the primary assumptions and procedures that will be used to develop future traffic projections and analysis.

STUDY AREA
The study area consists of approximately 7.0 miles of Patterson Road between I-70B (23.75 Road) and Lodgepole Street (30.75 Road). The study area is located within the City of Grand Junction in Mesa County, Colorado.

ACCESS GUIDANCE
The Street Plan Functional Classification Map within the Grand Junction Circulation Plan identifies the corridor as a Minor Arterial from I-70B (23.75 Road) to 25 Road and a Principal Arterial from 25 Road to Lodgepole Street (30.75 Road). Guidance from the Transportation Engineering Design Standards (TEDS) for applicable classifications will be considered in developing the Access Plan. Currently, the study corridor falls under two categories:

Principal Arterial
A principal arterial is a 4-lane roadway with a right-of-way of 110 feet that includes a center median and detached sidewalks. The posted speed limits range from 35 mph-45 mph. Direct access is subordinate to through traffic movements. Full movement intersections are spaced 1/2 mile apart. Exceptions to ½ mile spacing may be permitted if no reasonable alternative exists, the need for the intersection is justified, and spacing meets the functional intersection area. One access is granted per parcel if reasonable access cannot be obtained from a lower classification roadway.

Within the Principal Arterial segment, a majority of accesses will be limited to right-in/right-out movements due to the median separated roadway and to reduce vehicle conflicts. Major intersections will be full movement and will be given priority since they serve many properties and interests. These intersections may currently be signalized or may reasonably be expected to meet signal warrants in the future. Three-quarter (left-in, right-in, right-out only) movements may be permitted if operations at adjacent full movement intersections are improved and design standards are met. Single or individual

properties are typically not granted a three-quarter movement access. Accommodation for passenger vehicle U-turns at major intersections is recommended to provide alternatives for restricted left-turn movements.

Minor Arterial

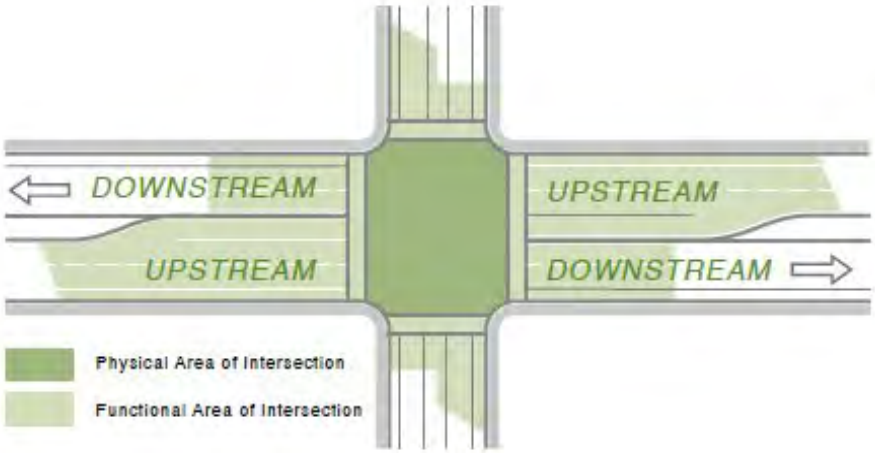
A minor arterial is a 4-lane roadway with a right-of-way of 80 feet, a center median or turn lane, and attached sidewalks. The posted speed limit is 35 mph. Direct access is subordinate to through traffic movements. Full movement intersections are spaced 1/4 mile apart. Exceptions to 1/4 mile spacing may be permitted if no reasonable alternative exists, the need for the intersection is justified, and spacing for the functional intersection area is met. One access is granted per parcel if reasonable access cannot be obtained from a lower classification roadway.

The Minor Arterial typical section allows for a center turn lane or a median. For the purposes of the Access Plan the most restrictive condition will be considered first. Within the Minor Arterial segment, a majority of accesses will be limited to right-in/right-out movements to reduce vehicle conflicts and with the assumption that the segment will be a median separated roadway. Major intersections will be full movement and will be given priority since they serve many properties and interests. These intersections may currently be signalized or may reasonably be expected to meet signal warrants in the future. Three-quarter movements may be permitted if operations at adjacent full movement intersections are improved and design standards are met. Single or individual properties are typically not granted a three-quarter movement access. Accommodation for passenger vehicle U-turns at major intersections is recommended to provide alternatives for restricted left-turn movements.

ACCESS PLAN APPROACH

The following assumptions regarding access points will be used during the development of the Access Plan:

- The existing posted speed limits will be retained through the Plan.
- Maximum 1-mile out of direction travel standard (1/2 mile each way) on Patterson Road.
- While intersection spacing guidance from TEDS will be used as a guideline, minimum full movement intersection spacing will be based on the following measures:
    - Functional Intersection Area – AASHTO and the TRB Access Management Manual indicate separation of access points by a distance not less than the functional area of the intersection. The functional intersection area extends upstream and downstream from the physical intersection. The upstream distance is a combination of the storage length, deceleration and taper length, and the perception-reaction distance required for the speed of the segment. The downstream distance is measured as either acceleration length or decision sight distance. Providing acceleration length allows vehicles to accelerate to normal speed without conflict. Providing decision sight distance allows drivers to pass through an intersection before considering potential conflicts at the next intersection. Based on the suburban character of Patterson Road through this segment, the need for acceleration lanes is low. Therefore, we will use decision sight distance as the controlling downstream functional intersection distance.



The functional intersection area will depend on the speed of the segment and the number of projected turning vehicles. As an example, in a 45-mph suburban section with a maximum of 100 turning vehicles during the peak hour, the upstream and downstream functional intersection areas (FIA) are as follows:

- Upstream FIA = 100' (SHAC storage) + 350'(AASHTO decel + taper) + 100'(Access Management Manual suburban perception-reaction) = 550'
- Downstream FIA = 590'(Access Management Manual suburban DSD)

For additional explanation of the functional intersection area, refer to attached excerpts from AASHTO A Policy on Geometric Design of Highways and Streets, 2018 and TRB Access Management Manual, 2014. The most current guidance available from AASHTO will be used for deceleration and taper lengths.

Ideally, the full functional intersection area will be provided between full movement intersections. At a minimum, the physical length needed to accommodate storage length, deceleration and taper length will be provided between intersections for the current speed limit to ensure that proposed improvements will meet current design standards on opening day upon construction.

- o Other site-specific considerations as appropriate, including: locations of existing intersections, physical and/or right-of-way limitations, community and stakeholder input, type of access/traffic using access, etc.

- Three-quarter movement access points may be allowed if spacing meets functional intersection area for major intersections and traffic volumes and operations support a three-quarter movement.
- Relocate private access outside of the functional intersection area, if feasible.
- Consolidate private access to one access per ownership unless extenuating circumstances are identified related to property size, circulation and/or business operations. Multiple parcels under one ownership will be considered a single property or ownership.
- Share private accesses or locate public accesses to serve multiple properties, wherever possible.

- Eliminate direct private access to Patterson Road if reasonable access to the local street network is available. As described in TEDS Chapter 29.12.050: If a property has frontage on more than one street, access will be permitted only on those street frontages where design and safety standards can be met. The primary access shall be on the lower-order street.
- For the purposes of the access evaluation, it is assumed that Patterson Road will become a four-lane roadway with median separation based on the roadway classifications identified in the Grand Junction Circulation and TEDS. The appropriateness of additional access points between full movement intersections will be considered on a case-by-case basis. If such access is appropriate, it will be limited to right-in, right-out unless extenuating circumstances suggest that ¾ movement is more appropriate.
- The Grand Junction Circulation Plan and TEDS will be considered in identifying future access points. Any information available from the update that may impact the Patterson Road corridor will be considered. Additional or modified connections that provide circulation will be identified, if applicable. These local alternate routes may be adopted separately by the City in their Street Plan Functional Classification Map, if deemed beneficial.

- Potential techniques for access management will be identified within the study document, but specific techniques will not be identified for each access point. Full movement intersections may be signalized when warranted or other traffic control recognized by the MUTCD may be implemented.

ACCESS PLAN EVALUATION

The project team will develop a single overall recommended long-term access scenario. While options for specific areas may be identified and evaluated during the overall development of the plan, multiple corridor scenarios will not be developed and compared beyond those defined in the Traffic Methodology Memo. In order to provide a logical means for determining whether the Access Plan meets the purpose and need of the project, a compatibility index was developed. The index identifies a set of evaluation criteria that correspond with each access related project goal defined by the project team at the beginning of the project. A simple rating system that identifies if the plan is favorable, neutral or unfavorable with respect to each criterion is defined. Each of the three ratings under each criterion is given a definition specific to the criterion to assist in the evaluation. In cases where the access plan evaluation requires a comparison, the criteria will be measured against the 2045 No-AMP scenario. Please refer to the attached compatibility index for evaluation criteria and definitions.

IMPLEMENTATION

The improvements recommended in the Access Plan will represent a long-range plan to implement over time as traffic and safety needs arise and as funding becomes available. Construction of the improvements recommended may be completed using public and/or private funding. The following cases will trigger construction.

1. A property redevelops or changes use, resulting in an increase in traffic to and from the site of 20% or more. In this case, improvements at the specific access point may be required by the City. As part of the development review process, additional transportation improvements may also be necessary to address specific traffic-related impacts created by the development. These improvements will be compatible with the Access Management Plan (AMP). Upon redevelopment, the City may require property owners to provide legally defined cross-access easements for shared access points, as defined by the AMP. If a property does not redevelop, the property owner will not be required to construct access modifications. (Private Funding).

2. The City may obtain funding to complete improvements to a segment of the Patterson Road corridor. (Public Funding)

3. A safety or operational issue develops that can be mitigated through the implementation of access management techniques consistent with the AMP. Depending on the extent and type of safety or operational issue, improvements may address a segment of the Patterson Road corridor or may be limited to an isolated location or access point. (Public Funding)

It is important to remember that implementation of improvements recommended in the Access Plan will only occur if one of the triggers listed above are met. If a trigger is not met, a change to the existing condition will not be made. In short, if nothing changes, nothing changes.

A single access management plan table will be developed for this segment of Patterson Road. An access ID number and a reference point will identify the location of each access point in the table. A control point will be established for Patterson Road at I-70B (23.75 Road) to establish reference points. All other access point locations will be measured from the control point established. The access management plan table will provide a listing of each existing and future access point in the study area. For each access point the following information is provided: location, description of the current access status, the future configuration (Access Plan), and the condition(s) for change. Future exhibits graphically illustrating the Access Plan will be used for reference. In case of discrepancy, the access management plan table takes precedence over graphical illustrations.

PUBLIC INVOLVEMENT

The public involvement plan for the Access Plan will include presentations to City Council and Planning Commission. In advance of the public Open Houses a workshop will be held for the City Council and Planning Commission to explain:

- Project background information
- Access management principles and techniques
- Summary of the project process
- Benefits of Access Control Plans
- Preliminary Draft Plan

A group stakeholder meeting will be held in advance of the public first Open House with other agencies including Mesa County, CDOT, Emergency Services, School District, Grand Valley Irrigation Company and Mesa Regional Transportation Planning Organization.

Two public Open Houses will be held to gather input from property owners, tenants, and the general public. All property owners adjacent to the Patterson Road corridor within the project study area will be invited to the open houses with a post card via first class mail. A legal notice and a display ad will be published in the Grand Junction Sentinel in advance of the public Open Houses. The project team will coordinate with the City Manager's office for publications of the Open House Materials on the City website. Exhibits presenting access management principles, the study process, and the recommended draft AMP will be displayed at the Open Houses. The second Open House will present changes to the Plan based upon input from the public and project stakeholders from the first open house and one-on-one meetings. Representatives from the project team will be available for questions and discussion at all open houses.

The project team will hold one-on-one meetings after the first Open House for access points of concern or requiring complex solutions. Additional meetings with stakeholders may also take place during the one-on-one meetings. The purpose of these meetings will be to resolve outstanding issues that require detailed discussion beyond the level possible during a public meeting.

PLAN ACCEPTANCE

The final Access Plan Report and AMP Table will be presented to the Planning Commission and City Council. The final acceptance of the Plan will be in the form of a Resolution adopting the Plan and/or adopting a local ordinance. The final Access Plan will be incorporated within the Grand Junction Circulation Plan. The local alternate routes identified within the Access Plan may be adopted separately by the City in their Street Plan Functional Classification Map.

Access Plan Compatibility Index

The Access Plan will be evaluated using the following criteria to determine if the Plan meets the established project goals. In cases where the evaluation requires a comparison, the criteria will be measured against the 2045 No-Build scenario.

		Status with Respect to Criteria		
Project Goal	**Evaluation Criteria**	**Favorable (+)**	**Neutral (0)**	**Unfavorable (-)**
Provide effective and efficient through travel for traffic on Patterson Road utilizing the existing right-of-way and identify if additional right-of-way is needed.	Corridor Travel Speeds/Time	Increases/improves from No-Build scenario	Little or no change from No-Build scenario	Decreases/degrades from No-Build scenario
	Functional Intersection Area	Full functional intersection area provided between intersections.	At a minimum, accommodates turn lane storage, decel and taper lengths between intersections without overlap.	Turn lane storage, decel and taper lengths overlap between intersections.
	Number of Conflict Points	Fewer conflict points per mile	Number of conflict points maintained	More conflict points per mile
	Right-of-way	Proposed AMP improvements can be implemented within the existing right-of-way	Proposed AMP improvements will require minimal right-of-way typical to a public project which may include minor ROW or easements on a few properties.	Proposed AMP improvements will require significant right-of-way purchase which may include full takes and/or impacts to numerous properties.
Provide safe, effective, and efficient access to and from Patterson Road for businesses, residents, and guests to support the economic viability of the City of Grand Junction and Mesa County.	Intersection Sight Distance	More intersections have adequate sight distance	Same number of intersections have adequate sight distance	Fewer intersections have adequate sight distance
	Intersection LOS or Critical Movements	More intersections or left turn movements operating at better LOS	Intersections or left turn movements operating at similar LOS	More intersections or left turn movements operating worse LOS
	Conformance with Grand Junction TEDS manual	More locations meet auxiliary lane standards	Some locations meet auxiliary lane standards	Fewer locations meet auxiliary lane standards
	Out of Direction Travel Distance	Less out-of-direction travel distance is required	No change	More out-of-direction travel distance is required
	Intersection Crash Risk	Reduced by implementing needed physical improvements and access control measures	Maintained by implementing needed physical improvements only	Increased due to failure to implement needed physical improvements or access control measures
	Business Market Area	Expands market area for the majority of businesses in the corridor	Market area maintained for a majority of businesses in the corridor	Reduced market area for a majority of businesses in the corridor
Maintain compatibility with existing and proposed street network connections that provide local circulation to support the transportation system.	Local Route Circulation	Improve circulation via local routes	Maintain circulation via local routes	Reduce circulation via local routes
	Serviceability of Local Routes to Developments and Properties within the Study Area	Improve serviceability of local routes	Maintain serviceability of local routes	Reduce serviceability of local routes
Support alternative modal choices, including transit, pedestrian, and bicycle routes.	Pedestrian/Bicycle Parallel Access	Number of access points reduced	Number of access points maintained	Number of access points increased
	Pedestrian/Bicycle Crossing Opportunities	Number of potential warranted signalized full movement intersections with opportunities for crossings increased compared to No-Build	No changes to number of potential warranted signalized full movement intersections with opportunities for crossings compared to No-Build	Number of potential warranted signalized full movement intersections with opportunities for crossings decreased compared to No-Build
	Transit Opportunities	Increases opportunities to expand future transit plans	Maintains compatibility with future transit plans	Reduces compatibility with future transit plans
Provide a plan that can be implemented in phases.	Public Support	Has positive public support	Has balanced public support	Does not have public support
	Phasing Opportunities	Plan recommendations can be segmented into logical, compatible pieces funded by private development	Plan recommendations can be segmented into logical, compatible pieces requiring public & private funding	Plan recommendations not easily segmented and require significant public investment to implement
	Physical Constraints	No physical constraints	Manageable physical constraints	Physical constraints are not manageable
	Funding Opportunities	Commitment for public and/or private funding	Opportunity for public and/or private funding	Opportunity for public and/or private funding unlikely
Maintain compatibility with previous local planning efforts, such as, the GVCP Plan, Ballot 2A measure, and the One Grand Junction Comprehensive Plan.	Compatibility with Local Planning	Expands/improves upon previous local planning recommendations	Consistent with previous local planning recommendations	Not consistent with previous local planning efforts

Access Plan Compatibility Index

The Access Plan will be evaluated using the following criteria to determine if the Plan meets the established project goals. In cases where the evaluation requires a comparison, the criteria will be measured against the 2045 No-Build scenario.

Project Goal	Evaluation Criteria	Rating	Reasoning
Provide effective and efficient through travel for traffic on Patterson Road utilizing the existing right-of-way and identify if additional right-of-way is needed.	Corridor Travel Speeds/Time	Favorable	The segment PFFS is approximately 1% better with the AMP. Generally the travel speed and corridor travel time are better than the No-Build.
	Functional Intersection Area	Neutral	Generally full functional intersection area is provided between intersections. There are a few locations, including between 24 Rd and Market St and a few 3/4 movement locations where only turn lane requirements can be met or a variance is required. In addition, conditional safety access points are identified for public road intersections inside the functional intersection area that have alternative circulation options, These access points may be closed in the future if safety issues develop.
	Number of Conflict Points	Favorable	Access points decrease from 283 to 149-160 total access points and there are over 125 restricted movement access points resulting in a significant reduction in conflict points.
	Right-of-way	Neutral	Typical ROW easements for a public project anticipated to install identified auxiliary lanes and to install a barrier median through the narrow segment between 1st St and Mira Vista.
Provide safe, effective, and efficient access to and from Patterson Road for businesses, residents, and guests to support the economic viability of the City of Grand Junction and Mesa County.	Intersection Sight Distance	Favorable	Restricting movements at locations with sight distance concerns such as between 24 1/2 Road and the Home Depot access and in the narrow section between 1st St and Mira Vista has reduced the risk of conflicts due to sight distance.
	Intersection LOS or Critical Movements	Neutral	5 intersections operate at better LOS, 3 intersections operate at worse LOS. Generally, the intersection results are similar to the No Build scenario or slightly better.
	Conformance with Grand Junction TEDS Manual	Favorable	The Plan allows for full movement intersections and 3/4 movement access points to meet the auxiliary lane standards by protecting functional intersection areas at intersections.
	Out of Direction Travel Distance	Unfavorable	Out of direction travel increases due to the application of limited movement intersections. The 1-mile out-of-direction travel standard established at the beginning of the project is followed using 3/4 movement's where signals are spaced farther apart.
	Intersection Crash Risk	Favorable	The intersection crash risk has been reduced by implementing needed physical improvements and access control measures through anticipated implementation of raised medians throughout the corridor to restrict movements.
	Business Market Area	Favorable	The market area is maintained for a majority of businesses in the corridor as evidenced by improved/unchanged travel times.
Maintain compatibility with existing and proposed street network connections that provide local circulation to support the transportation system.	Local Route Circulation	Favorable	The Plan is consistent with the GJCP Plan and recommends alternative routes that will help improve circulation via existing and proposed local routes to provide circulation for restricted movement access points at adjacent full movement intersections.
	Serviceability of Local Routes to Developments and Properties within the Study Area	Favorable	Access points are compatible with routes identified in the GJCP Plan to serve major traffic generators and consistent with travel patterns. Full movement access points and 3/4 movements serve public road intersections or private access points supporting multiple properties.
Support alternative modal choices, including transit, pedestrian, and bicycle routes.	Pedestrian/Bicycle Parallel Access	Favorable	The number of access points is reduced along the corridor thereby reducing conflicts for parallel ped/bike routes.
	Pedestrian/Bicycle Crossing Opportunities	Neutral	No changes to number of signalized full movement intersections with opportunities for crossings compared to No-Build. Recommend further traffic and safety analysis of future opportunities for mid-block crossings to support pedestrian accessibility and transit access.
	Transit Opportunities	Neutral	The Plan maintains compatibility with future transit plans along the corridor.
Provide a plan that can be implemented in phases.	Public Support	Neutral	Generally the public supports improving Patterson Road. Some individual property owners view the plan unfavorably as it relates to their individual property, but not as it relates to the entire corridor. Property owners that participated in the outreach program helped form the plan and several revisions were incorporated based on public comment. In particular, several conditional right-in,right-out access points were added to clearly denote where redevelopment would trigger the closure of the access rather than a public project.
	Phasing Opportunities	Favorable	The plan recommendations can be segmented into logical, compatible pieces funded by private development. Conditional access points provided for interim development conditions. (Public funding may be used to implement plan, if available).
	Physical Constraints	Neutral	Beyond the narrow segment between 1st St and Mira Vista, few physical constraints have been identified and are anticipated to be manageable. (Several physical constraints identified during the development of the plan through one-on-one meetings and observation resulted in modifications to the plan.)
	Funding Opportunities	Favorable	Plan implementation has potential for public and/or private funding as redevelopment and corridor development occurs. Several public projects that support access and circulation are already funded through the Ballot 2A measure. City of Grand Junction is actively applying access management principles and plan recommendations with developments currently in process.
Maintain compatibility with previous local planning efforts, such as, the GJCP Plan, Ballot 2A measure, and the One Grand Junction Comprehensive Plan.	Compatibility with Local Planning	Favorable	The Plan is compatible with existing planning and will improves upon previous local planning recommendations including the GJCP Plan, Ballot 2A measure, and One Grand Junction Comprehensive Plan. The AMP has expanded upon the GJCP Plan to identify additional circulation routes.

Functional Intersection Area References

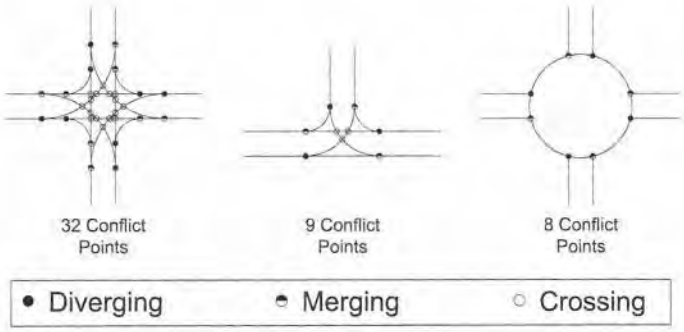


Figure 9-1. Conflict Points at Various Intersection Types

9.2.2 Intersection Functional Area

An intersection is defined by both its functional and physical areas (*18*), as illustrated in Figure 9-2. The functional area of an intersection extends both upstream and downstream from the physical intersection area and includes any auxiliary lanes and their associated channelization.

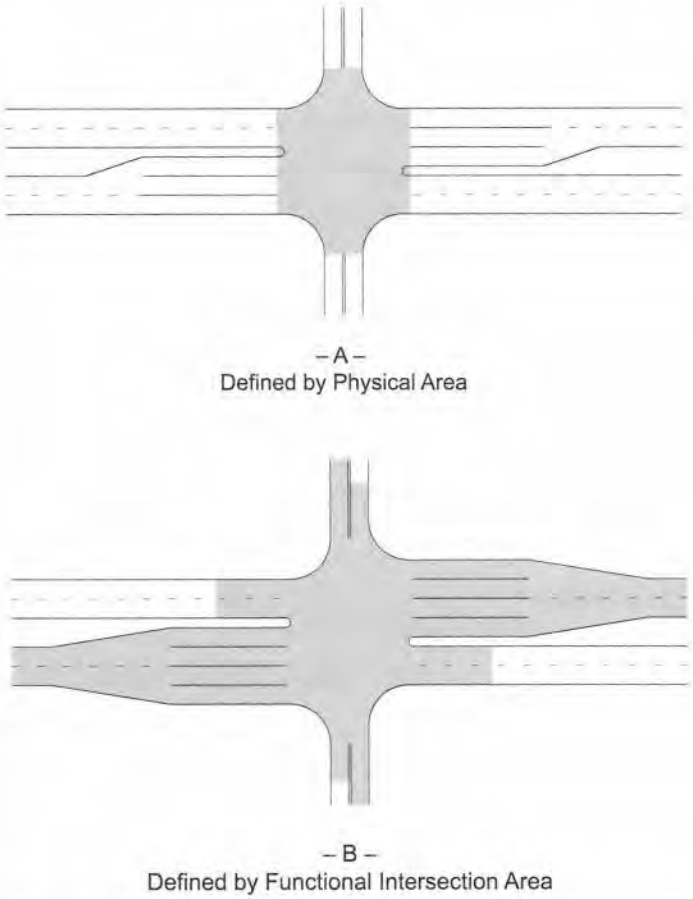


Figure 9-2. Physical and Functional Area of an Intersection

The functional area on the approach to an intersection or driveway consists of three basic elements: (1) perception–reaction decision distance, (2) maneuver distance, and (3) queue-storage distance. These elements are shown in Figure 9-3. The distance traveled during the perception–reaction time will depend upon vehicle speed, driver characteristics, and driver familiarity with the location. Where there is a left- or right-turn lane, the maneuver distance includes the length needed for both braking and lane changing. In the absence of turn lanes, it involves braking to a comfortable stop. The storage length should be sufficient to accommodate the longest queue expected most of the time. Ideally, driveways should not be located within the functional area of an intersection, as shown in Figure 9-2, or within the influence area of an adjacent driveway.

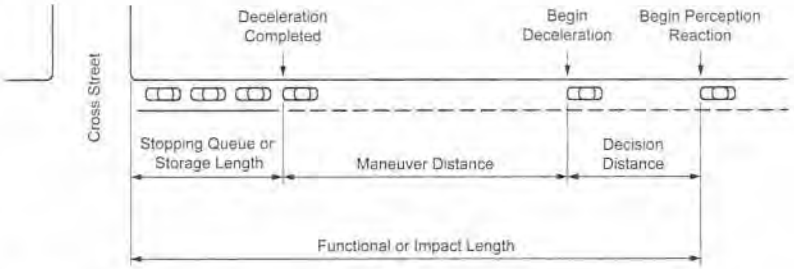


Figure 9-3. Elements of the Functional Area of an Intersection

9.2.3 Design Objectives

The key to any intersection design is achieving a set of fundamental design principles that includes speed reductions, lane alignments, and human factors needs. The goal of any intersection design, regardless of type or location, should be to implement the following principles:

- Reduce vehicle speeds through the intersection, as appropriate;
- Provide the appropriate number of lanes and lane assignment to achieve adequate capacity, lane volume, and lane continuity;
- Provide channelization that operates smoothly, is intuitive to drivers, and results in vehicles naturally using the intended lanes;
- Provide adequate accommodation for the design vehicles;
- Meet the needs of pedestrians and bicyclists; and
- Provide appropriate sight distance and visibility.

Each element described above influences the operational efficiency and potential for crashes at intersections. When developing a design, the appropriate balance of operational performance for various modes, safety, and cost considerations should be sought throughout the design process. Favoring one component of the design may negatively affect another.

Deceleration lanes are advantageous on higher speed roads, because the driver of a vehicle leaving the roadway has no choice but to slow down on the through-traffic lane if a deceleration lane is not provided. The failure to brake by the following drivers, because of a lack of alertness, may result in rear-end collisions. Acceleration lanes are advantageous on roads without stop control, particularly those with higher operating speeds and/or higher volumes. Acceleration lanes are not desirable at all-way stop-controlled or signalized intersections where entering drivers can wait for an opportunity to merge without disrupting through traffic. For additional design guidance related to lengths and other aspects of deceleration and acceleration auxiliary lanes, refer to Section 10.9.6.

9.7.2 Deceleration Lanes

Figure 9-32 illustrates the upstream functional area of an intersection in relation to the components of deceleration lane length, which consist of the perception–reaction distance, the lane change and deceleration distance (also called the maneuver distance), and the storage length (also called the queue storage distance) (*39*).

Desirably, the total physical length of the auxiliary lane should be the sum of the length for these three components (lane change, deceleration, and storage distances). Common practice, however, is to accept a moderate amount of deceleration within the through lanes and to consider the taper length as a part of the deceleration within the through lanes. Each component of the deceleration lane length is discussed below.

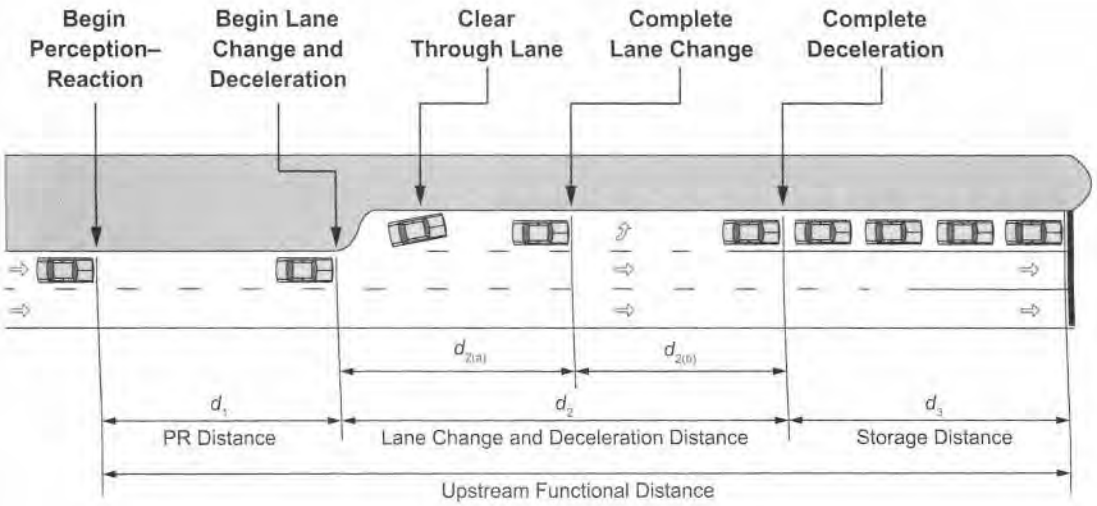
9.7.2.1 Perception–Reaction Distance

The perception–reaction distance (d_1) in Figure 9-32 represents the distance traveled while a driver recognizes the upcoming turn lane and prepares for the left-turn maneuver. The distance increases with perception–reaction time and speed. The perception–reaction time varies with the driver's familiarity with the roadway segment and state of alertness; for example, an alert driver who is familiar with the roadway and traffic conditions has a smaller perception–reaction time than an unfamiliar driver. Traffic conditions on urban and suburban roadways could result in drivers having a higher level of alertness than those on highways in rural areas. Therefore, a value of 1.5 s is often used as the perception–reaction time for suburban, urban, urban core, and rural town contexts, and 2.5 s is often used for rural contexts (*44*).

Provision for deceleration clear of the through-traffic lanes is a desirable objective on arterial roads and streets and should be incorporated into design, whenever practical. Approximately two-thirds of the drivers observed making left turns in a research study concerning turn lanes used deceleration rates greater than 6.5 ft/s^2 [2.0 m/s^2] to come to a stop at the stop line (*16*). A turn lane design based on that rate will accommodate the preferred behavior of 85 percent of turning drivers at high-speed sites. Table 9-20 presents the estimated distances needed by drivers to maneuver from the through lane into a left- or right-turn lane and brake to a stop based on an equivalent deceleration rate of 6.5 ft/s^2 [2.0 m/s^2]. These distances are based on accommodat-

ing observed driver behavior; drivers and vehicles are capable of much greater comfortable, controlled deceleration, when needed. Since provision of deceleration length based deceleration at a rate of 6.5 ft/s² [2.0 m/s²] is not always practical, it should be noted that drivers are capable of much higher deceleration rates. For example, the stopping sight distance calculations in Chapter 3 use 11.2 ft/s² [3.4 m/s²] as a comfortable, controlled deceleration threshold for most drivers and the *Access Management Manual* (*48*) presents distances for "limiting conditions" based on the equivalent of a 9.9-ft/s² [3.0-m/s²] deceleration rate throughout the full deceleration length (i.e., taper and full-width deceleration lane). Thus, deceleration rates greater than 6.5 ft/s² [2.0 m/s²] may be used where needed.

As noted above, it is not practical on many facilities to provide the full length of the auxiliary lane for deceleration due to constraints such as restricted right-of-way, distance available between adjacent intersections, and storage needs. However, research has demonstrated that providing a left- and right-turn lane on any intersection approach has a substantial crash reduction benefit (*22*). Therefore, turn lanes should be installed where warranted (see Section 9.7.3), even where the distances in Table 9-20 cannot be achieved.



Where:

d_1 = distance traveled while driver recognizes upcoming turn lane and prepares for the left-turn maneuver

$d_{2(a)}$ = distance traveled while decelerating and changing lanes from the through-lane into the turn lane

$d_{2(b)}$ = distance traveled during deceleration after lane change

d_3 = distance provided for the storage of the queue of stopped vehicles waiting to turn

Figure 9-32. Functional Area Upstream of an Intersection Illustrating Components of Deceleration Lane Length

Table 9-20. Desirable Lane Change and Deceleration Distances

U.S. Customary		Metric	
Speed (mph)	Lane Change and Deceleration Distance (ft)	Speed (km/h)	Lane Change and Deceleration Distance (m)
20	70	30	25
25	105	40	35
30	150	50	50
35	205	55	65
40	265	65	85
45	340	70	105
50	415	80	130
55	505	90	155
60	600	95	185
65	700	105	215
70	815	110	250

Notes:

1. The lane change and deceleration lengths are shown as d_2 in Figure 9-32.
2. Deceleration lengths are based on a 6.5 ft/s² [2.0 m/s²] deceleration throughout the entire length. Larger deceleration rates may be used when deceleration lengths based on 6.5 ft/s² [2.0 m/s²] are impractical.
3. Access points should not be located in the deceleration areas.

9.7.2.2 Storage Length

A deceleration lane should be sufficiently long to store the number of vehicles likely to accumulate in a queue during a critical period. The storage length should be sufficient to avoid spillback of turning vehicles into the through-travel lanes waiting for a signal change or for a gap in the opposing traffic flow.

At signalized intersections, the storage length needed should be determined by an intersection traffic analysis, and will depend on the signal cycle length, the signal phasing arrangement, and the rate of arrivals and departures of turning vehicles. The storage length is a function of the probability of occurrence of events and should usually be based on 1.5 to 2 times the average number of vehicles that would need to be stored per signal cycle, which should be estimated based on the design volume or directly from traffic counts. Where turning lanes are designed for two-lane operation, the storage length is reduced to approximately half of that needed for single-lane operation. For further information, refer to the *Highway Capacity Manual* (*49*).

The storage length needed for a left-turn lane for any set of turning movement volumes and an assumed probability the storage length will be exceeded can be determined with the following sequence of equations, adapted from (*16*):

14

Functional Intersection Area and Access Location

14.1 INTRODUCTION

The area around an urban intersection is complex and unique. It is affected by the numerous conflicts that can occur within and near the intersection. Consequently, the design and control of access features, geometrics, and operations in the vicinity of intersections must be explicitly considered. Considerations include

- Geometrics within and near the intersection, such as number and width of lanes, presence of raised medians, curb returns, channelization features, and turn lanes;
- Traffic conditions, including the volume, peak times, mix of vehicle types, speeds, traffic control, and queuing;
- Driver performance and human factors, including perception–reaction time, deceleration characteristics, and drivers' understanding of traffic controls;
- Transit, pedestrian, and bicycle presence, considering the number, frequency, and location of transit stops, pedestrian crossings, and bicycle lanes; and
- Land use activities that require access, generate travel demand, and require transportation service for patrons and deliveries.

Management of conflicts within the intersection area requires identification of the functional area of the intersection. The functional area of an intersection extends both upstream and downstream from the physical intersection area and includes the longitudinal limits of auxiliary lanes. The influence area associated with a driveway includes (*a*) the impact length (the distance back from a driveway in which cars begin to be affected), (*b*) the perception–reaction distance, and (*c*) the car length.

Thus, the functional intersection area includes any area upstream or downstream of an intersection where intersection operation and conflicts significantly influence driver behavior, vehicle operations, or traffic conditions. Consequently, the functional intersection area can always be expected to be larger than the physical intersection, as shown in Exhibit 14-1. Although the intersection depicted in Exhibit 14-1 is a typical at-grade intersection,

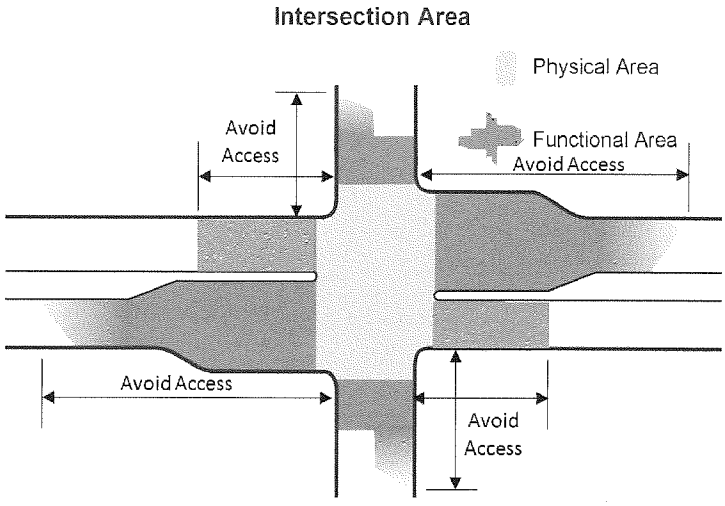


EXHIBIT 14-1 Functional area in which access should be avoided (*1*).

the concept of functional intersection area applies to stop-controlled intersections, signalized intersections, and roundabouts.

Ideally, no access should be provided within these functional distances. If access must be provided within the functional distance, the challenge is to determine the best location and the type of access that may be permitted. This chapter provides methods and guidelines for determining the upstream and downstream functional distances of an intersection, how to manage access connections within the functional area, and how to determine the best location, or window, where access can be provided with the least negative impact on the intersection. Also addressed are considerations relative to connection on opposite sides of a roadway, as well as the location of transit access.

14.2 UPSTREAM FUNCTIONAL DISTANCE

The presence of an auxiliary lane, such as a right-turn lane, can potentially extend the functional intersection area if the transition from the through lane to the turn lane requires additional time and attention by the driver. As illustrated in Exhibit 14-2, the upstream functional distance of an intersection on a roadway consists of three elements:

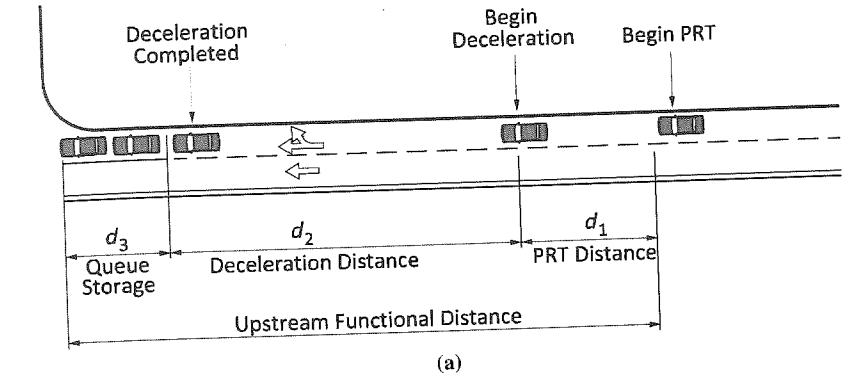
- Distance traveled during a perception–reaction time (d_1);
- Deceleration distance while the driver maneuvers to a stop (d_2); and
- Queue storage (d_3).

The minimum physical length consists of the perception–reaction distance (d_1), the deceleration–maneuver distance (d_2), plus the queue storage (d_3). Exhibit 14-2*a* demonstrates the upstream functional intersection area for locations without a turn lane; Exhibit 14-2*b* represents the upstream functional intersection area at locations where a right-turn lane is present.

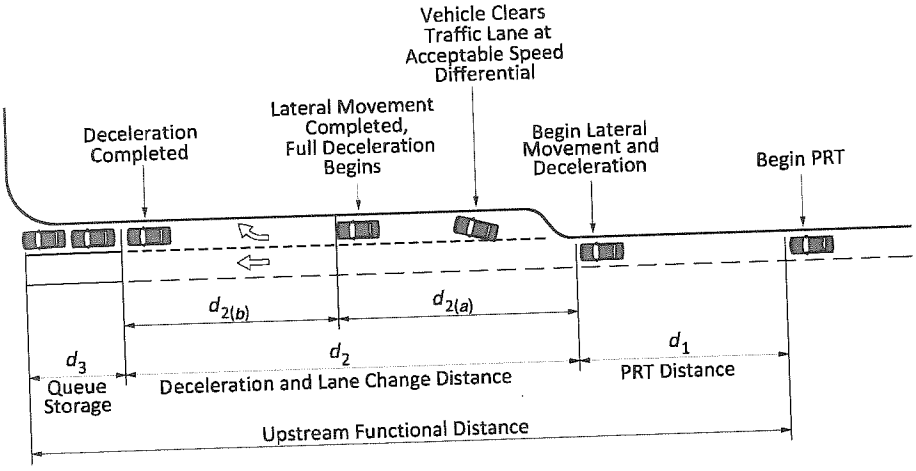
The functional intersection area is defined for through lanes on the basis of the same three elements: perception–reaction distance, deceleration to a stop at the back of the queue, and size of the queue. Thus, the functional intersection area is defined by the largest functional intersection distance of the lanes on an approach.

14.2.1 Distance Traveled During Perception–Reaction Time

Distance d_1 in Exhibit 14-2 increases with perception–reaction time and speed. The perception–reaction time varies with the driver's familiarity with the roadway segment and state of alertness. The perception–reaction time of an alert driver who is familiar with the roadway and traffic conditions is less than that of an unfamiliar driver.



(a)



Where

$d_{2(a)}$ = distance traveled while decelerating and transitioning from the through lane into the turn lane and

$d_{2(b)}$ = distance traveled under full deceleration and lane-change maneuver.

(b)

EXHIBIT 14-2 Upstream functional intersection area: (*a*) without a turn bay and (*b*) with a turn bay (*1*, *2*). (NOTE: PRT = perception–reaction time.)

Additionally, traffic conditions on urban and suburban roadways result in drivers having a higher level of alertness than drivers on rural highways. Thus, a value of 1.5 s is often used as the perception–reaction time for urban and suburban conditions, and 2.5 s is often used for rural situations (*1*). Exhibit 14-3 demonstrates the perception–reaction distances for a variety of speed and perception–reaction time values.

14.2.2 Distance Traveled During Deceleration–Maneuver

During low-volume conditions and in locations with only a few driveways, deceleration characteristics of the vehicles and their drivers determine the length of the deceleration–maneuver distance (d_2). Studies have determined, however, that with increasing and closely spaced driveway density, the additional influence of driveway maneuvers introduces associated delays and reduced roadway capacity (*3*). Consequently, the deceleration–maneuver distance can also be influenced by ambient traffic activities, including driveway maneuvers. National Cooperative Highway Research Program (NCHRP) Report 420 (*3*) introduced the concept of probability-based impact lengths that take into consideration these additional operational constraints. The distance traveled during the deceleration–maneuver component

EXHIBIT 14-3 Distance Traveled During Driver's Perception–Reaction

Speed (mph)	Perception–Reaction Distance (d_1) (ft), by Perception–Reaction Time						
	1.0 s	1.5 s	2.0 s	2.5 s	3.0 s	3.5 s	4.0 s
20	30	45	60	75	90	105	120
25	35	55	75	90	110	130	145
30	45	65	85	110	130	155	175
35	50	75	105	130	155	180	205
40	60	90	120	145	175	205	235
45	65	100	130	165	200	230	265
50	75	110	145	185	220	255	295
55	80	120	160	200	240	285	325
60	90	130	175	220	265	265	355
65	95	145	190	240	285	335	380
70	105	155	205	255	310	360	410
75	110	165	220	275	330	385	440

NOTE: Distances rounded to 5 ft.

of upstream functional distance may be determined by two parameters:

1. Deceleration distance and
2. Impact distance.

The largest length should then be conservatively applied.

The deceleration method provides values of d_2 for a wide range of speeds on the basis of deceleration rate; the impact method is applicable only for select speeds of 30, 40, 45, and 50 mph. For the impact distance method, the difference in the recommended distance for 30 and 35 mph is very small (on the order of 20% or less); thus, it is suggested that the 30-mph curve also be used for 35 mph.

The deceleration and impact methods are described in detail in the following subsections.

14.2.2.1 Deceleration Distance

Gates et al. (*4*), Chang et al. (*5*), and Williams (*6*) reported similar deceleration rates for drivers braking to a stop at a traffic signal without changing lanes. The research by Gates et al. (*4*) is the most recent and the most detailed and is used as the basis for the deceleration–maneuver distances in Exhibit 14-4. Gates et al. also reported that deceleration rate is related to drivers traveling at a slower speed before braking and thereby using a lower average deceleration rate than those traveling at a higher initial speed (*4*). Thus, the deceleration distances at slower speeds (less than 40 mph) are slightly longer (15 ft or less) than the deceleration–maneuver distances given in Exhibit 14-4. The conservative and recommended deceleration distance for locations with left-turn or right-turn lanes is associated with the column labeled "Most Drivers" in Exhibit 14-4. Because turn-lane operations are more complex than queuing in a through lane, the column labeled "Limiting Conditions" can be applied to through lanes or shared right-turn lanes, as the sighting conditions and braking to the back of the queue are straightforward and less complex than those of the turning lanes.

As demonstrated in Exhibit 14-2, more distance is required for d_2 at turn-lane locations than for d_2 at locations without turn lanes. In general, a vehicle will reduce speed by approximately 10 mph while maneuvering into a turn lane. Because of the attention needed to accomplish the lane change, the vehicle does not initiate full deceleration until it has cleared the through lane. Consequently, the full deceleration portion of d_2 [referred to as $d_{2(b)}$ (see Exhibit 14-2*b*)] begins at a lower speed than the initial intersection

EXHIBIT 14-4 Deceleration–Maneuver Distance Based on Average Deceleration Rate

Speed (mph)	Deceleration–Maneuver Distance (d_2) (ft)	
	Most Drivers[a]	Limiting Conditions[b]
20	60	45
25	95	70
30	135	100
35	185	135
40	240	175
45	305	220
50	375	275
55	455	330
60	540	395
65	635	460
70	735	535
75	840	610

NOTE: Deceleration while steering straight ahead. Distances rounded to 5 ft.

[a]Eighty-five percent of drivers traveling at a speed of 40 mph or less were reported to use a deceleration rate of 7.2 ft/s² or less. Thus, the distance for d_2 given in the table accommodates 85% of drivers; only 15% will require a longer distance (*4*).

[b]Based on 50th percentile of drivers using a deceleration rate of 9.9 ft/s², yielding a shorter deceleration–maneuver distance (*4*). Braking distances to determine AASHTO stopping sight distance are based on 11.2 ft/s² (*7*).

EXHIBIT 14-5 Distance Traveled During Lane Change and Deceleration to a Stop

Speed (mph)	Distance Traveled (ft)		
	Deceleration[a] and Lateral Movement [$d_{2(a)}$]	Full Deceleration Distance[b] [$d_{2(b)}$]	Total Distance (d_2)
20	55	15	70
25	70	35	105
30	90	60	150
35	130	95	225
40	155	135	290
45	175	185	360
50	200	240	440
55	220	305	525
60	380	375	655
65	310	455	755
70	335	540	875
75	360	635	995

NOTE: Distance traveled rounded to 5 ft.

[a]Deceleration while moving laterally from through lane into turn lane:

Speed (mph)	*Time in Lateral Movement (s)*	*Deceleration Rate (ft/s²)*
≤30	2.5	5.9
30–55	3	4.9
≥60	3.5	4.2

[b]7.2 ft/s².

approach speed. Exhibit 14-5 presents distances similar to those shown in Exhibit 14-4 that directly define the two distances that collectively result in the d_2 value. These candidate values are based on assumed values for time in lateral movement and their respective deceleration rates. Exhibit 14-6 shows how one agency has adapted d_2 values on the basis of deceleration for its jurisdiction.

EXHIBIT 14-6 Alternative Values for d_2 from the Lincoln, Nebraska, *Access Management Policy* (*8*)

Speed (mph)	d_2 (ft)	AASHTO (ft)
15	NA	80
20	NA	115
25	80	155
30	115	200
35	155	250
40	200	305
45	250	360
50	305	425
55	360	496

NOTE: AASHTO values for stopping sight distance after 10-mph speed reduction before entering the turn lane (assumes deceleration rate of 11.2 ft/s²); NA = not available.

14.2.2.2 Impact Distance

Impact distance is the distance upstream of an access connection at which the brake lights of a through vehicle in the curb lane are activated in response to the interference of a right-turning vehicle. This impact distance concept is based on the research in NCHRP 420 (*3*). This empirical method for determining d_2 has two advantages: (*a*) a value for d_2

EXHIBIT 14-7 Suggested Percentage of Through Vehicles That Will Sustain an Impact, by Functional Roadway Category

Functional Roadway Category	Through Vehicles Sustaining Impact[a] (%)
Principal arterial	2–4
Minor arterial	4–10
Major collector	5–20
Minor collector	10–30
Local	na

NOTE: na = not applicable.
[a]May also be stated as "the probability that a through vehicle must decelerate because of a preceding turning vehicle."

can be obtained for different probabilities that a through vehicle will sustain an impact (see Exhibit 14-7) and (*b*) the probability that a through vehicle will sustain an impact can be estimated for a queue distance d_2.

Exhibit 14-8 depicts these impact distances. For example, if it is acceptable to affect 10% of through vehicles on a 40-mph roadway, the d_2 distance is approximately 250 ft. This distance is comparable to the 240 ft for most drivers based on the deceleration–maneuver distance in Exhibit 14-4.

EXHIBIT 14-9 Example of Calculation of d_2 by Impact Method

Estimation of d_2 by the impact method:

Given a principal arterial where 2% probability of impact is considered acceptable,

if

speed = 45 mph

then

d_2 = 460 ft (according to Exhibit 14-8).

Estimation of probability of impact given d_2:

If

impact distance = 220 ft and
speed = 40 mph,

then

probability of impact ≈ 20%
(according to Exhibit 14-8).

A limitation of the impact distance for determining d_2 is that data are available for only four speeds; in contrast, the deceleration method provides a d_2 value for all speeds. The examples in Exhibit 14-9 demonstrate the use of the impact method to estimate d_2.

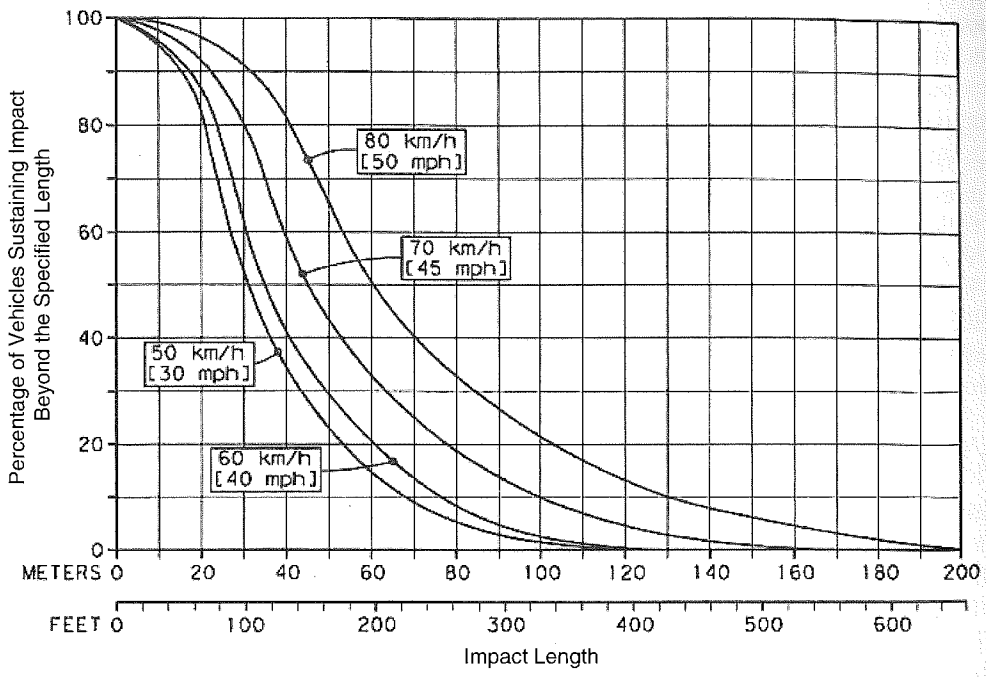


EXHIBIT 14-8 Cumulative frequency distribution of impact lengths.
[SOURCE: Research conducted in association with NCHRP Report 420 (*3*).]

14.2.3 Queue Storage

In rural areas, turn volumes are typically low and speeds are high. Although queue storage (d_3) is short, long upstream functional distances result from the long distances traveled during drivers' perception–reaction times plus the long maneuver distances.

In urban areas, different traffic conditions are encountered in peak and off-peak periods. In peak periods, traffic volumes are high and speeds are slow in comparison with off-peak conditions. Peak periods commonly require more queue storage and less maneuver distance, as well as shorter distances for the perception–reaction (decision-making) process. The upstream functional distance may thus be determined by the peak or the off-peak, whichever results in the greater sum of $d_1 + d_2 + d_3$. Thus, determination of the upstream functional distance requires calculation for both the peak and off-peak, especially for urban roadways.

As illustrated in Exhibit 14-2, the physical length of a turn bay is the functional length minus the distance traveled during the driver's perception–reaction time (i.e., $d_2 + d_3$). The physical length, which is an access design topic, is discussed in Chapter 16. The functional distance for a specific approach can be calculated by adding the appropriate distance for d_1 from Exhibit 14-3 to the maneuver distance (d_2) plus queue storage (d_3) by using procedures presented in Chapter 16. When traffic volumes and speeds are different in peak and off-peak periods, the sum of $d_1 + d_2 + d_3$ is calculated for both the peak and off-peak for the through lanes and the turn lanes; the largest distance is the upstream functional intersection distance.

The examples in Exhibit 14-10 demonstrate the calculation for the overall functional intersection distance. For the purposes of these examples, a queue storage length (d_3) is assumed. In the calculation of the upstream functional distance of a specific access connection, the procedures presented in Chapter 16 would be used.

14.3 DOWNSTREAM FUNCTIONAL DISTANCE

The downstream functional distance can be affected by various factors:

- **Geometric features**—acceleration lanes, bus bays, bus pullouts, parked vehicles, midblock pedestrian crossings, bulb-outs;
- **Operational effects**—speeds, right and left turns into driveways, right and left turns out of driveways, bicycles, multilane cross sections, two-way left-turn lanes (TWLTLs), bus stops and reentry points, major weaving movement from the side access to a downstream left-turn opportunity; and
- **Human factors**—driver perception–reaction times, acceleration and deceleration characteristics, and drivers' sighting ability.

Drivers must have the time and distance provided by the downstream functional distance to deal with traffic conflicts, roadside activities, and roadway features. This requirement may be addressed by providing sight distance to see and avoid conflicts or by assuring there is adequate distance to accelerate to roadway speed.

Research conducted for NCHRP Project 03-99, "Development and Application of Access Management Guidelines," suggests that the nonemergency driving activity associated with driveway detection and reaction, during which a vehicle may reduce speed to accommodate driveway activities, results in driver perception–reaction times that range from 2.8 s for left-turn driveway maneuvers up to 6.5 s for right-turn driveway maneuvers. An average perception–reaction time associated with access management activities is approximately 2.8 s, with an 85th percentile perception–reaction duration of 4.3 s. These lengths are considerably longer than the values based on geometric design associated with the AASHTO geometric design policy for alert drivers (*7*).

The downstream functional distances discussed in the following subsections help to limit access points that are close enough to the intersection to create unacceptable conflicts, cause breakdowns in platoons, and generate shock waves when slower vehicles enter the traffic stream. If conditions are restricted, a variance in determination of the downstream functional distance may be offered. If conditions are not complex, reduced stopping sight distance or perception–reaction times may be accepted, if a study of the conditions shows these changes are acceptable. Principal and strategic arterials would not receive this variance.

EXHIBIT 14-10 Examples of Calculation of Overall Functional Intersection Distance

Example 1. Determination of upstream functional distance for a rural roadway environment

Given a perception–reaction time of 3.5 s and a speed of 65 mph, the upstream functional intersection distance is calculated as follows:

If

d_1 (Exhibit 14-3) = 335 ft,
d_2 (Exhibit 14-4) = 635 ft, and
d_3 (assuming one vehicle) = 25 ft,

then

upstream functional distance = 1,195 ft.

Example 2. Comparison of upstream functional distance for peak and off-peak conditions for a suburban roadway environment

Given

perception–reaction time = 1.5 s,
off-peak speed = 45 mph,
peak speed = 30 mph,
assumed off-peak queue storage = 75 ft, and
assumed peak queue storage = 225 ft,

Find the upstream functional distance on the basis of

Method A, deceleration–maneuver distance or
Method B, impact distance.

Method A: Upstream Functional Distance Based on Deceleration–Maneuver Distance

Component	*Off-Peak (ft)*	*Peak (ft)*
d_1 (Exhibit 14-3)	100	65
d_2 (Exhibit 14-4)	305	135
d_3 (assumed)	75	225
Upstream functional distance	480	425

Solution: The off-peak distance is longer than the peak period distance; thus, the upstream functional distance is 480 ft.

Method B. Upstream Functional Distance Based on Impact Distance

Component	*Off-Peak (ft)*	*Peak (ft)*
d_1 (Exhibit 14-3)	100	65
d_2 (Exhibit 14-4, 15% probability of impact)	280	190
d_3 (assumed)	75	225
Upstream functional distance	455	480

Solution: The peak period distance is longer; thus, the upstream functional distance is 480 ft.

14.3.1 Adequate Downstream Acceleration Distance

Sufficient distance must be provided for vehicles leaving the intersection from a stop to accelerate to normal roadway speed. Access points within this distance would introduce unacceptable conflicts and unexpected operations. These acceleration distances are given in Exhibit 14-11.

The total acceleration lane length, including the taper distance, would be the required downstream functional distance. If an acceleration lane is not provided, the downstream functional distance would be the acceleration distance alone. Acceleration rates are much

EXHIBIT 14-11 Ideal Downstream Functional Distance Based on Acceleration

Speed (mph)	Acceleration Distance[a] (ft)	Typical Taper Distance[b] (ft)	Downstream Functional Distance[c] (ft)
20	100	60	160
25	150	80	230
30	220	100	320
35	320	120	440
40	440	140	580
45	580	160	740
50	770	180	950
55	1,000	200	1,200
60	1,300	220	1,520
65	1,750	240	1,990
70	2,320	260	2,580

[a]Based on AASHTO (*7*, Figure 2-24).
[b]Based on AASHTO (*7*, Figure 9-49 and p. 9-127).
[c]Acceleration lane length.

less than comfortable deceleration rates, which may result in acceleration lane lengths and downstream functional distances that exceed upstream functional distances at some intersections. No driveway access should be allowed in the acceleration-based ideal downstream intersection distance.

14.3.2 Sufficient Downstream Sight Distance

If a vehicle is not required to stop at a traffic signal, the driver requires sufficient time to identify conflicts and associated downstream operational constraints after he or she has successfully navigated the intersection. The available distance must be long enough so that the driver can see, understand, and react to downstream conditions. Depending on the complexity of the downstream configuration, a distance longer than stopping sight distance may be necessary. Stopping sight distance provides perception–reaction time plus braking distance to a single clearly discernible hazard in the middle of the roadway. The downstream functional distance often must provide sight distance to more subtle and complex situations, both within the traffic stream and along the roadside. Consequently, a longer sight distance, such as decision sight distance, should be provided.

Use of decision sight distance for recommended downstream functional distances recognizes the added complexity, increased conflicts, and added difficulty in viewing both roadside and traffic stream conditions through increased perception–reaction times and longer braking or maneuver times. These values are given in Exhibit 14-12.

Decision sight distance to a stop is a logical minimum downstream functional distance for arterials and is based on adequate perception–reaction and maneuver times plus braking to a stop. Multilane arterials may use decision sight distance for changes in speed, path, or direction that accommodate safe, smooth, comfortable operations. Decision sight distance for a change in speed, path, or direction provides sufficient travel time to adjust to traffic conditions and make a lane change in multilane facilities. The larger of the distances—acceleration distance versus decision sight distance—should be used to determine the downstream functional distance.

14.4 IDENTIFYING THE ACCESS WINDOW

AASHTO states, "Ideally, driveways should not be situated within the functional area of an intersection or in the influence area of an

EXHIBIT 14-12 Ideal Downstream Functional Distance Based on Decision Sight Distance to Stop and for Change in Speed, Path, or Direction

Speed (mph)	Decision Sight Distance to Stop (ft)			Decision Sight Distance (ft) for Change in Speed, Path, or Direction		
	Rural[a]	Suburban[b]	Urban[c]	Rural[d]	Suburban[e]	Urban[f]
20	130	215	305	305	340	430
25	180	280	400	375	400	525
30	220	350	490	450	535	620
35	275	425	590	525	625	720
40	330	505	690	600	715	825
45	395	590	800	675	800	930
50	465	680	910	750	890	1,030
55	535	775	1,030	865	980	1,135
60	610	875	1,150	990	1,125	1,280
65	695	980	1,275	1,050	1,220	1,365
70	780	1,090	1,410	1,105	1,275	1,445
75	875	1,200	1,545	1,180	1,365	1,545

[a]Stop on a rural road with perception–reaction time (PRT) = 3.0 s.
[b]Stop on a suburban road with PRT = 6.0 s.
[c]Stop on an urban road with PRT = 9.1 s.
[d]Change in speed, path, or direction on a rural road, PRT = 10.2 to 11.2 s.
[e]Change in speed, path, or direction on a suburban road, PRT = 12.1 to 12.9 s.
[f]Change in speed, path, or direction on an urban road, PRT = 14.0 to 14.5 s.

adjacent driveway" (*7*, p. 9-182). To identify where access can best be located, it is helpful to first identify where access should not be located (Exhibit 14-13). The remaining window is where access can be located with the least interference to the abutting roadway and with the most benefit and flexibility for the site (*1*).

The steps in determining the location and size of the access window are as follows:

1. Locate nearby intersections (streets and driveway connections).
2. Arrange these intersections in descending order of importance; for example, arterial-to-arterial intersections are the most important, arterial–collector intersections are next in importance, and so on.
3. Define the upstream functional area of each intersection (i.e., the distance traveled during perception–reaction time plus maneuver distance plus queue storage). Note the largest queue may be in a through lane.
4. Define the downstream functional area of each intersection.
5. Identify the window in which direct access can best be provided. The larger the window, the greater the flexibility in site layout, including building location, site circulation design, and driveway design. Keep in mind that traffic queue lengths (and, therefore, upstream functional areas) are sensitive to changing traffic volumes and intersection traffic control.
6. Ask the question, how much flexibility is there for the site access and circulation to accommodate changing traffic conditions?
7. If the access window is very small or if there is no access window, additional questions need to be asked:
   - How much interference will be caused by the site development and direct access to the abutting street? What safety and operational problems can be expected?
   - Can the site traffic that is necessary for a successful development adequately enter or exit the site? If not, how much traffic can be accommodated and at what times of the day?

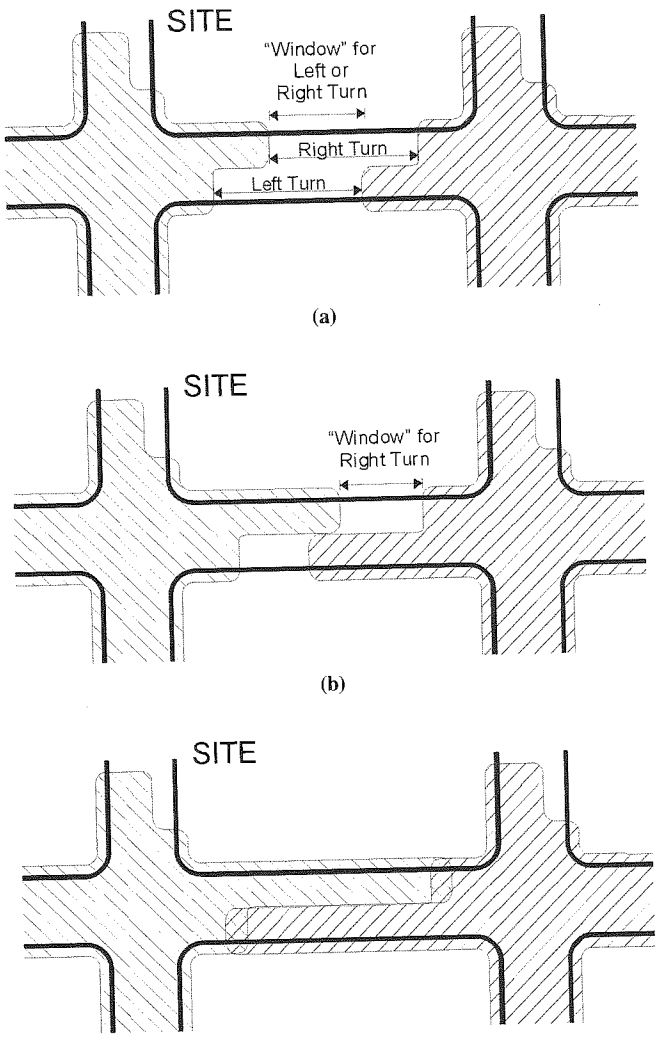


EXHIBIT 14-13 Window of opportunity for direct access drive: (*a*) left or right turn, (*b*) right turn only, and (*c*) no window (*1*).

14.5 ACCESS CONNECTIONS WITHIN THE FUNCTIONAL AREA

Although it is desirable to avoid access within the functional area, this is not always possible in urban areas, where short street spacing and small property frontages are common. If the property frontage is within the functional intersection area and alternative access is not available or cannot be provided at reasonable cost, it may be necessary to permit an access connection. Locating a connection within the functional area may be necessary if (*a*) no other reasonable access to the property is available or (*b*) topographic conditions preclude locating the access beyond the upstream or downstream functional distance. In such cases, including the following conditions in the access permit can minimize the adverse impacts of the connection:

1. Require that the access connection be located as far as possible from the intersection.
2. Limit movements to right in, right out by provision of a nontraversable median or flexible pylons (see Exhibits 14-14 and 14-15 for examples).
3. Specify the maximum volume entering and leaving the driveway in the 1-h peak and in a 24-h period.
4. Require the applicant to agree to close the access connection if and when alternative access becomes available.

If the property frontage is within the functional intersection area, and alternative access is not available or cannot be provided at reasonable cost, it may be necessary to permit an access connection.

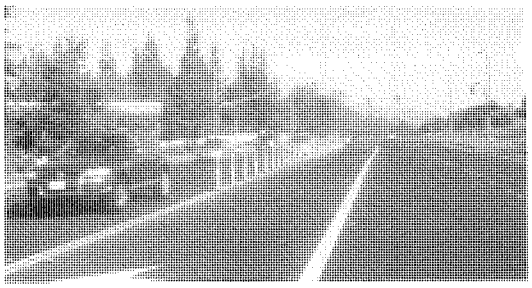


EXHIBIT 14-14 Installation of flexible pylons to restrict movements on opposite sides of this roadway and permit right-in, right-out only.
(Photograph by V. G. Stover.)

EXHIBIT 14-16 Problem resulting from an access connection located within the left-turn queue length.
(Photograph by V. G. Stover.)

Exhibit 14-16 illustrates a problem that can occur when an access connection is located within the upstream functional distance of an intersection. After exiting from a driveway that is within the upstream functional intersection distance, a driver blocks the through traffic lanes while waiting to enter the left-turn lane. Corrective actions might be to make the driveway a one-way entrance only and to use flexible pylons between the left-turn lane and the adjacent through lane.

14.5.1 Driveways and Auxiliary Lanes

The placement of a driveway within the physical boundaries of a turn lane or located in the upstream deceleration lanes or downstream acceleration lanes should be avoided. Placing a driveway within the turn-lane boundaries creates a driver expectancy problem: drivers of trailing vehicles expect the leading vehicle to turn at the intersection and often must stop abruptly to accommodate the vehicle turning into the driveway. Similarly, drivers should be introduced to one decision at a time. Positioning a driveway in acceleration or deceleration lanes or adjacent to lanes where acceleration and deceleration movements are expected to occur creates unexpected vehicle conflicts with turning vehicles.

EXHIBIT 14-15 Nontraversable median installed circa 2009 on Southwest Parkway at Texas Avenue, College Station, Texas, as a retrofit action to restrict left turns at a driveway serving a strip commercial center.
(Photograph by V. G. Stover.)

14.5.2 Corner Clearance

Corner clearance represents the distance that is provided between an intersection and the nearest driveway. Because it is a special case of access spacing, it is addressed in Chapter 15. Section 15.4 discusses how corner clearance is determined and is integrated with the functional intersection area.

14.6 CONNECTIONS ON OPPOSITE SIDES OF A ROADWAY

Access connections on opposite sides of a roadway present specific access location and management issues. Closely spaced connections on opposite sides of an undivided roadway or on a roadway with a TWLTL result in jog maneuvers instead of separate and distinct turning movements, as illustrated in Exhibit 14-17. Such connections can also result in conflicting left turns, as illustrated in Exhibit 14-18.

Separation of the access connections to create two separately functioning T-intersections

Patterson Road Functional Intersection Area										
Major Intersection	Speed Limit	Dir.	2045 Left Turn Projection (vph)		[2] 2045 90th %-ile Queue (ft/ln)		Required Storage (ft)	[1]Full-Decel Length/ Decel Distance (ft)	Perception-Reaction Time (ft)	Total Length (ft)
			AM Peak	PM Peak	AM Peak	PM Peak				
24 Rd	35 mph	EB	216	127	90	148	148	215	75	438
	35 mph	WB	125	583	68	256	256	215	75	546
Market St	35 mph	EB	71	159	21	140	140	215	75	430
	35 mph	WB	25	31	4	8	50	215	75	340
Mesa Mall Access	35 mph	EB	39	85	17	73	73	215	75	363
	35 mph	WB	87	130	14	53	53	215	75	343
24 1/2 Rd	35 mph	EB	40	102	33	110	110	215	75	400
	35 mph	WB	147	267	42	153	153	215	75	443
Commerce Blvd	40 mph	EB					50	275	90	415
	40 mph	WB					50	275	90	415
25 Rd	40 mph	EB	83	66	71	47	71	275	90	436
	40 mph	WB	206	281	71	299	299	275	90	664
25 1/2 Rd	40 mph	EB	32	92	16	45	50	275	90	415
	40 mph	WB	137	181	20	63	63	275	90	428
N 1st St	40 mph	EB	54	115	29	63	63	275	90	428
	35 mph	WB	173	217	51	82	82	215	75	372
N 7th St	35 mph	EB	69	147	66	141	141	215	75	431
	40 mph	WB	238	202	57	89	89	275	90	454
N 12th St	35 mph	EB	135	246	40	78	78	215	75	368
	40 mph	WB	382	106	79	33	79	275	90	444
15th St	35 mph	EB	140	69	13	14	50	215	75	340
	40 mph	WB	51	22	3	5	50	275	90	415
27 1/2 Rd	35 mph	EB	80	227	22	46	50	215	75	340
28 Rd	40 mph	EB					50	275	90	415
28 1/4 Rd	40 mph	EB	53	38	21	14	50	275	90	415
	40 mph	WB	289	159	111	151	151	275	90	516
W Indian Creek Dr	45 mph	EB					50	345	100	495
	45 mph	WB					50	345	100	495
29 Rd	40 mph	EB	129	220	69	87	87	275	90	452
	45 mph	WB	187	126	78	108	108	345	100	553
29 1/2 Rd	45 mph	EB	13	91	5	40	50	345	100	495
	45 mph	WB	222	99	55	68	68	345	100	513
30 Rd	45 mph	EB	95	227	54	85	85	345	100	530
	45 mph	WB	137	72	70	40	70	345	100	515

[1] Does not account for grades

[2] TEDS Storage Length reported for unsignalized intersections

(3) Bay tapers shall be symmetrical reverse curves in accordance with the following:

(i) Use 60-foot reverse curve for 25 to 35 miles per hour.

(ii) Use 90-foot reverse curve for 40 to 50 miles per hour.

(iii) Use 140-foot reverse curve for 55 to 65 miles per hour.

Assuming 12' turn lane and 4' median

	R=60'	R=90'
Length (ft	54	60
Equivalent	4.5:1	5:1

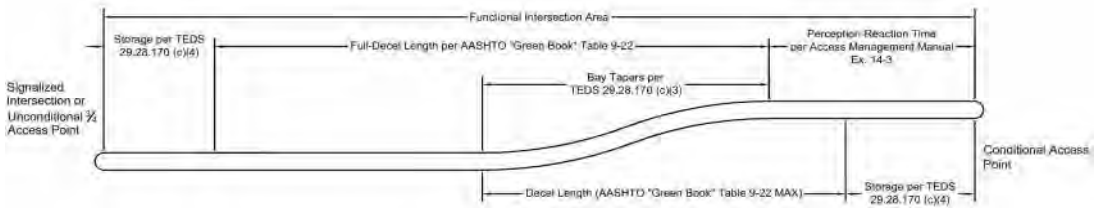
Minimum Storage Lengths for Unsignalized Turn Lanes

Turning VPH	≤60	100	200	300
Required Storage Length	50	100	175	250

(4) Storage lengths for turn lanes at signalized intersections shall be determined based on a signal timing analysis that predicts the 90 percent queue length required for the turn lane.

Full-Decel Length					
	35 mph	40 mph	45 mph	50 mph	55 mph
Greenbook	-	275 ft	-	425 ft	-
TAMU Greenbook calc	215 ft	275 ft	345 ft	425 ft	510 ft
SHAC Table 4-6	310 ft	370 ft	435 ft	500 ft	600 ft

* shortest length was selected



Appendix F - Access Management Plan Tables

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
1	0.060	LT	2384 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops.
2	0.133	RT	2381, 2385, 2387 Patterson Rd	Unsignalized Full Movement	Conditional Shared Unsignalized 3/4 Movement	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-054-09-001 and parcel no. 2945-054-00-087 and any adjacent properties with same ownership upon redevelopment. If a public project is funded prior to redevelopment, parcel no. 2945-054-09-001 must provide a cross access agreement to parcel no. 2945-054-00-087 or the access shall be restricted to Right-In/Right-Out.
3	0.149	LT	2384 Patterson Rd	Unsignalized Full Movement	Conditional Unsignalized Full Movement	Movements may be restricted when safety or operational issues occur. Access will be restricted to Right-In/Right-Out when property redevelops.
4	0.157	LT	2388 Patterson Rd	Unsignalized Full Movement	Close - Access via Rae Lynn St	When property redevelops, safety or operational issues occur, or when a public project is funded.
5	0.167	RT	2386 Hwy 6 & 50	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Access will close when alternate access is available via Access 2. Cross access agreements required between parcel no. 2945-054-09-001 and parcel no. 2945-054-00-087 and any adjacent properties with same ownership upon redevelopment.
6	0.222	RT	Rae Lynn St (private)	Unsignalized Full Movement	Conditional Safety Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. If a safety or operational issue develops, the access may be closed - alternate access to 24 Rd available.
7	0.226	LT	Rae Lynn St (public)	Unsignalized Full Movement	Conditional Safety Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. Once Rae Lynn St is extended to Leland Ave (and to 24 Rd), the access may be closed if a safety or operational issue develops.
8	0.292	RT	24 Rd	Signalized Full Movement	Signalized Full Movement	
9	0.292	LT	24 Rd	Signalized Full Movement	Signalized Full Movement	
10	0.421	RT	Commercial access for Mesa Mall	Signalized Full Movement	Signalized Full Movement	
11	0.421	LT	Market St	Signalized Full Movement	Signalized Full Movement	
12	0.498	LT	2412 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-043-022-002 and parcel no. 2945-043-01-001 and any adjacent properties with same ownership upon redevelopment.
13	0.505	LT	2422 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 12 or 14	When property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-043-022-002 and parcel no. 2945-043-01-001 and any adjacent properties with same ownership upon redevelopment.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
14	0.534	LT	2422 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Access will be closed when alternate access to Access 12 is available. Cross access agreements required between parcel no. 2945-043-022-002 and parcel no. 2945-043-01-001 and any adjacent properties with same ownership upon redevelopment.
15	0.600	LT	2424, 2428, 2430, 2436 Patterson Rd (Home Depot)	Signalized Full Movement	Signalized Full Movement	
16	0.600	RT	Commercial access for Mesa Mall	Signalized Full Movement	Signalized Full Movement	
17	0.675	LT	2430, 2436 Patterson Rd	Unsignalized 3/4 Movement	Conditional Safety Right-In Only	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. If a safety or operational issue develops, the access may be closed - alternate access via Access 15 available.
18	0.734	LT	2436, 2438, 2440 Patterson Rd and 625 24 1/2 Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
19	0.814	LT	2442, 2444 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
20	0.855	LT	2446, 2448 Patterson Rd	Right-In/Right-Out	Shared Right-In Only	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
21	0.944	LT	24 1/2 Rd	Signalized Full Movement	Signalized Full Movement	
22	0.944	RT	24 1/2 Rd	Signalized Full Movement	Signalized Full Movement	
23	1.009	LT	2452, 2454 Patterson Rd	Right-In/Right-Out	Conditional Right-In/Right-Out	Access will close upon redevelopment and when alternate access to Flatop Ln is available.
24	1.031	RT	2451, 2463, 2465 Patterson Rd and 590 24 1/2 Rd	Unsignalized Full Movement	Shared Conditional Safety Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. If a safety or operational issue develops, the access may be closed - alternate access via 24 1/2 Rd and Commerce Blvd available.
25	1.071	LT	2460, 2464 Patterson Rd	Unsignalized Full Movement	Shared Right-In Only	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no 2945-044-10-002 and parcel no 2945-044-18-000 and any adjacent properties with same ownership upon redevelopment.
26	1.113	LT	2470, 2472, 2474 Patterson Rd (north side)	Unsignalized Full Movement	Shared Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no 2945-044-10-002 and parcel no 2945-044-18-000 and any adjacent properties with same ownership upon redevelopment.If a public project is funded prior to redevelopment, parcel no. 2945-044-18-000 must provide a cross access agreement to parcel no. 2945-044-10-002 or the access shall be restricted to Right-In/Right-Out.
27	1.113	RT	Commerce Blvd (south side)	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
28	1.176	LT	2470, 2472, 2474 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no 2945-044-00-065 and parcel no 2945-044-17-000 and any adjacent properties with same ownership upon redevelopment.
29	1.235	LT	2478 Patterson Rd	Unsignalized Full Movement	Shared Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-044-00-068, parcel no 2945-044-00-065 and parcel no 2945-044-17-000 and any adjacent properties with same ownership upon redevelopment. If a public project is funded prior to redevelopment, parcel no. 2945-044-17-000 must provide a cross access agreement to parcel no. 2945-044-00-068 and parcel no. 2945-044-00-065 or the access shall be restricted to Right-In/Right-Out.
30	1.308	LT	2482 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-044-00-068, parcel no 2945-04-17-000 and parcel no. 2945-044-05-000 and any adjacent properties with same ownership upon redevelopment.
31	1.325	RT	2488 Commerce Blvd	Unsignalized Full Movement	Close - Access via Commerce Blvd	When property redevelops, safety or operational issues occur, or when a public project is funded.
32	1.358	LT	2486, 2490 2494 Patterson Rd	Unsignalized Full Movement	Shared Conditional Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Access will close when alternate access is available via Access 30. Cross access agreements required between parcel no. 2945-044-00-068 and parcel no. 2945-044-05-000 and any adjacent properties with same ownership upon redevelopment.
33	1.404	RT	599 25 Rd	Right In-Right Out	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops - access via 25 Rd. Cross access agreements required between property numbers 2945-091-06-001, 2945-091-06-002, and 2945-091-06-003 and any adjacent properties with same ownership upon redevelopment.
34	1.424	LT	2498 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops - access via 25 Rd. Cross access agreements required between parcel no. 2945-044-05-002 and parcel no. 2945-044-05-000 and any adjacent properties with same ownership upon redevelopment.
35	1.459	LT	25 Rd	Signalized Full Movement	Signalized Full Movement	
36	1.459	RT	25 Rd	Signalized Full Movement	Signalized Full Movement	
37	1.492	RT	596 25 Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops - access via 25 Rd.
38	1.538	RT	2515 Patterson Rd	Unsignalized 3/4 Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops - access via Access 38a.
38a	1.590	RT	2515 Patterson Rd	None	Right-In/Right-Out	When property redevelops.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
39	1.600	LT	Foresight Cir (outbound)	Unsignalized Full Movement	Right-Out Only	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
40	1.619	LT	Foresight Cir (inbound)	Unsignalized Full Movement	Right-In Only	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
41	1.648	RT	Northgate Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
42	1.715	LT	2526, 2528 Patterson Rd, 606 East Foresight Cir	Shared Right In-Right Out	Shared Right-In/Right-Out	
43	1.768	LT	2532 Patterson Rd	Unsignalized 3/4 Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
44	1.861	LT	Burkey St	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
47	1.975	LT	25 1/2 Rd	Signalized Full Movement	Signalized Full Movement	
48	1.975	RT	25 1/2 Rd	Signalized Full Movement	Signalized Full Movement	
49	2.040	LT	2554, 2555, 2556, 2558, 2560 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.Cross access agreements required between parcel no. 2945-034-17-001 and parcel no. 2945-034-17-002 and any adjacent properties with same ownership upon redevelopment.
50	2.092	LT	2562 Patterson Rd - Consolidated with properties at Accesses 50 through 55	Unsignalized Full Movement	Right-Out Only	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
51	2.104	LT	2566 Patterson Rd - Consolidated with properties at Accesses 50 through 55	Unsignalized Full Movement	Close - access via Accesses 50 and 53	When property redevelops, safety or operational issues occur, or when a public project is funded.
52	2.124	LT	2570 Patterson Rd - Consolidated with properties at Accesses 50 through 55	Unsignalized Full Movement	Close - access via Accesses 50 and 53	When property redevelops, safety or operational issues occur, or when a public project is funded.
53	2.141	LT	2570 Patterson Rd - Consolidated with properties at Accesses 50 through 55	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when properties redevelop, safety or operational issues occur or when a public project is funded.Cross access agreements required for properties currently served by Access 53, 56, 57, 58, 59, 61 upon redevelopment.
54	2.138	RT	Cider Mill Rd - Consolidated with properties at Accesses 50 through 55	Unsignalized Full Movement	Right In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
55	2.146	LT	2570 Patterson Rd - Consolidated with properties at Accesses 50 through 55	Unsignalized Full Movement	Close - access via Accesses 50 and 53	When property redevelops, safety or operational issues occur, or when a public project is funded.
56	2.165	LT	2572 Patterson Rd	Unsignalized Full Movement	Close - access via Access 53 or 61	When property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required for properties currently served by Access 53, 56, 57, 58, 59, 61 upon redevelopment.
57	2.181	LT	2574 Patterson Rd	Unsignalized Full Movement	Close - access via Access 53 or 61	When property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required for properties currently served by Access 53, 56, 57, 58, 59, 61 upon redevelopment.
58	2.204	LT	2576 Patterson Rd	Unsignalized Full Movement	Close - access via Access 53 or 61	When property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required for properties currently served by Access 53, 56, 57, 58, 59, 61 upon redevelopment.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
59	2.209	LT	2580 Patterson Rd	Unsignalized Full Movement	Close - access via Access 61	When property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required for properties currently served by Access 53, 56, 57, 58, 59, 61 upon redevelopment.
60	2.253	RT	Unaddressed Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops or when alternate access to a public road is available.
61	2.229	LT	2580 Patterson Rd	Unsignalized Full Movement	Conditional Unsignalized 3/4 Movement	Access 61 is a conditional 3/4 movement and is conditional upon the developer demonstrating the left turn lanes into the site meet TEDS requirements based on projected traffic volumes. Access 61 will be restricted to RIRO if safety or operational issues develop. Cross access agreements required for properties currently served by Access 53, 56, 57, 58, 59, 61 upon redevelopment.
62	2.266	RT	25 3/4 Rd	Unsignalized Full Movement	Conditional Unsignalized 3/4 Movement	Access 62 and Access 64 shall be evaluated to determine if a 3/4 movement may be implemented at both locations. A design variance or speed reduction must be justified and approved by the City to allow 3/4 movement at both locations. Otherwise, one location must be restricted to RIRO as determined by the City. Movements may be restricted when adjacent properties redevelop, safety or operational issues occur or when a public project is funded.
63	2.255	LT	2582, 2584 Patterson Rd	Shared Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
64	2.353	LT	Meander Dr	Unsignalized Full Movement	Conditional Unsignalized 3/4 Movement	Access 62 and Access 64 shall be evaluated to determine if a 3/4 movement may be implemented at both locations. A design variance or speed reduction must be justified and approved by the City to allow 3/4 movement at both locations. Otherwise, one location must be restricted to RIRO as determined by the City. Movements may be restricted when adjacent properties redevelop, safety or operational issues occur or when a public project is funded.
65	2.353	RT	Meander Ct	Unsignalized 3/4 Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
66	2.430	LT	2594, 2596 Patterson Rd	Shared Right In-Right Out	Shared Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when adjacent properties redevelop - access via Meander Dr or 26 Rd.
67	2.487	LT	26 Rd (N 1st St)	Signalized Full Movement	Signalized Full Movement	
68	2.487	RT	N 1st St (26 Rd)	Signalized Full Movement	Signalized Full Movement	
69	2.561	RT	Park Dr	Right In-Right Out	Conditional Safety Right-In/Right-out	If a safety or operational issue develops, the access may be closed - alternate access to 1st St via Belaire Dr available.
70	2.651	RT	2615 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 71	When property redevelops, safety or operational issues occur, or when a public project is funded.
71	2.674	RT	2615 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops - access via Lost Lane. Cross access agreements required between parcel no. 2945-112-00-004 and parcel no. 2945-112-11-018 and any adjacent properties with same ownership upon redevelopment.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
72	2.706	RT	2621 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops and alternate acccess to Access 73 is available. Cross access agreements required between parcel no. 2945-112-11-018, parcel no 2945-112-11-019, parcel no 2945-112-00-004, and any adjacent properties with same ownership upon redevelopment.
73	2.714	RT	2623 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.Cross access agreements required between parcel no. 2945-112-11-018, parcel no 2945-112-11-019, and any adjacent properties with same ownership upon redevelopment.
74	2.718	LT	2626 Patterson Rd	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. The connection to Horizon Place will be a public street and all appropriate Rights-Of-Way shall be dedicated upon redevelopment.
75	2.722	RT	2623 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops and alternate acccess to Access 73 is available.Cross access agreements required between parcel no. 2945-112-11-018, parcel no 2945-112-11-019, and any adjacent properties with same ownership upon redevelopment.
76	2.732	RT	2625 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops.
77	2.740	LT	2626 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 74	When property redevelops, safety or operational issues occur, or when a public project is funded.
78	2.746	RT	2625 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
79	2.749	LT	2628 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops and alternate acccess to Access 83 is available.Cross access agreements required between parcel no. 2945-023-00-038, parcel no 2945-023-00-039, and any adjacent properties with same ownership upon redevelopment.
80	2.756	RT	326 Belaire Dr	Unsignalized Full Movement	Close - Access via Belaire Dr	When property redevelops, safety or operational issues occur, or when a public project is funded.
81	2.761	LT	2628 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 79 or 83	When property redevelops, safety or operational issues occur, or when a public project is funded.
82	2.765	RT	336 Belaire Dr	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops - access via Belaire Dr.
83	2.768	LT	2630 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-023-00-040, parcel no 2945-023-00-039, parcel no. 2945-023-00-038, and any adjacent properties with same ownership upon redevelopment.
84	2.779	LT	2630 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 83	When property redevelops, safety or operational issues occur, or when a public project is funded.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
85	2.785	LT	2632 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops and alternate acccess to Access 87 or 83 is available.Cross access agreements required between parcel no. 2945-023-00-040, parcel no. 2945-023-00-042, parcel no 2945-023-00-039, and any adjacent properties with same ownership upon redevelopment.
86	2.794	RT	Mira Vista Rd	Unsignalized Full Movement	Conditional Unsignalized 3/4 Movement	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Conditions are that movements may be further restricted to Right-In/Right-Out when safety or operational issues occur.
87	2.807	LT	2634 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-023-00-041, parcel no 2945-023-00-042, parcel no. 2945-023-14-010, parcel no. 2945-023-00-040 and any adjacent properties with same ownership upon redevelopment.
88	2.818	LT	2634 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 87	When property redevelops, safety or operational issues occur, or when a public project is funded.
89	2.829	LT	2636, 2638 Patterson Rd	Unsignalized Full Movement	Shared Right-in/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-023-00-041, parcel no. 2945-023-00-042, parcel no 2945-023-14-009, parcel no. 2945-023-14-010 and any adjacent properties with same ownership upon redevelopment.
90	2.848	LT	2640 Patterson Rd	Unsignalized Full Movement	Close - Access via 89	When property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-023-14-008, parcel no 2945-023-14-009, parcel no. 2945-023-14-010 and any adjacent properties with same ownership upon redevelopment.
91	2.859	LT	2640 Patterson Rd	Unsignalized Full Movement	Close - Access via 89	When property redevelops, safety or operational issues occur, or when a public project is funded.
92	2.867	LT	2642 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-023-14-008, parcel no 2945-023-14-009 and any adjacent properties with same ownership upon redevelopment. Access will close when property redevelops and cross access to 89 is available.
93	2.867	RT	2635 N 7th St	Unsignalized Full Movement	Conditional Unsignalized 3/4 Movement	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Conditions are that movements may be further restricted to Right-In/Right-Out when safety or operational issues occur.
94	2.878	LT	2642 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 92	When property redevelops, safety or operational issues occur, or when a public project is funded.
95	2.894	LT	2644 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 96	When property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-023-14-006, parcel no 2945-023-14-007 and any adjacent properties with same ownership upon redevelopment.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
96	2.910	LT	2646 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-023-14-006, parcel no 2945-023-14-007 and any adjacent properties with same ownership upon redevelopment.
97	2.943	LT	2646, 2648 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
98	2.960	LT	2648 Patterson Rd	Unsignalized Full Movement	Close - Access via 26 1/2 Rd or Access 97	When property redevelops, safety or operational issues occur, or when a public project is funded.
99	3.000	LT	26 1/2 Rd (N 7th St)	Signalized Full Movement	Signalized Full Movement	
100	3.000	RT	N 7th St (26 1/2 Rd)	Signalized Full Movement	Signalized Full Movement	
101	3.072	LT	N 8th Ct	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
102	3.136	RT	2661 Patterson Rd, 750 Wellington Ave	Unsignalized 3/4 Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
103	3.164	LT	2666 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops - access via Viewpoint Dr.
104	3.190	LT	View Point Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
105	3.216	LT	2674 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when adjacent properties redevelop - access via Viewpoint Dr.
106	3.262	LT	26 3/4 Rd	Unsignalized Full Movement	Conditional Unsignalized Full Movement	Conditions are that movements may be restricted when safety or operational issues occur.
107	3.308	LT	2416 26 3/4 Rd, 935, 959 Northern Way	Unsignalized Full Movement	Close - Access via Northern Way	When property redevelops, safety or operational issues occur, or when a public project is funded.
108	3.333	LT	Northern Way	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
109	3.333	RT	Private road, 2683 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
110	3.353	RT	2683 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when alternate access is available to Access 109, 114, or 116.
111	3.358	LT	960 Northern Way	Unsignalized Full Movement	Close - Access via Northern Way	When property redevelops, safety or operational issues occur, or when a public project is funded.
112	3.368	LT	2686 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 115	When property redevelops, safety or operational issues occur, or when a public project is funded.
113	3.376	RT	2683 Patterson Rd	Unsignalized Full Movement	Conditional Right Out Only	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops.
114	3.391	RT	2687 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, with redevelopment, or when a public project is funded. Cross access agreements required between parcel no. 2945-111-27-005, parcel no. 2945-111-27-000 and parcel no. 2945-111-00-009 and any adjacent properties with same ownership upon redevelopment.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
115	3.395	LT	2686 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
116	3.426	RT	2691, 2695, 2699 Patterson Rd, 2531 N 12th St	Shared Unsignalized Full Movement	Conditional Unsignalized 3/4 Movement	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-111-27-005, parcel no. 2945-111-27-000 and parcel no. 2945-111-00-009 and any adjacent properties with same ownership upon redevelopment. If a public project is funded prior to redevelopment, parcel no. 2945-111-00-005 and/or 2945-111-27-000 must provide a cross access agreement to parcel no. 2945-111-27-009 or the access shall be restricted to Right-In/Right-Out. If safety or operational issues develop at Access 116, access will be restricted to Right-In-Right-Out.
117	3.447	RT	2691, 2695, 2699 Patterson Rd, 2531 N 12th St	Unsignalized Full Movement	Right In/Right-Out	When property redevelops, safety or operational issues occur, or when a public project is funded.
118	3.456	LT	2686 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 115	When property redevelops, safety or operational issues occur, or when a public project is funded. Access closure will require coordination with Grand Valley Transit since they use this access point to stop on the hospital site.
119	3.515	LT	N 12th St	Signalized Full Movement	Signalized Full Movement	
120	3.515	RT	N 12th St	Signalized Full Movement	Signalized Full Movement	
121	3.560	LT	2702 Patterson Rd	Right In-Right Out	Close - Access via 12th St	When property redevelops, safety or operational issues occur, or when a public project is funded.
122	3.574	LT	2708 Patterson Rd	Right In-Right Out	Close - Access via Access 124	When property redevelops, safety or operational issues occur, or when a public project is funded.
123	3.585	RT	2600 N 12th St	Unsignalized 3/4 Movement	Unsignalized 3/4 Movement	
124	3.592	LT	2708 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
125	3.619	LT	2710 Patterson Rd	Right In-Right Out	Right-In/Right-Out	
126	3.639	LT	2714 Patterson Rd	Right In-Right Out	Conditional Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. A single shared access will be provided at Access 126/127 when cross access agreements are established and the other access will be closed. Cross access agreements required between parcel no. 2945-013-00-013 and 2945-013-00-014 and any adjacent properties with same ownership upon redevelopment.
127	3.643	LT	2718 Patterson Rd	Right In-Right Out	Conditional Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. A single shared access will be provided at Access 126/127 when cross access agreements are established and the other access will be closed. Cross access agreements required between parcel no. 2945-013-00-013 and 2945-013-00-014 and any adjacent properties with same ownership upon redevelopment.
128	3.659	LT	2718 Patterson Rd	Unsignalized Full Movement	Close- Access via Access 126 or 127	When property redevelops, safety or operational issues occur, or when a public project is funded.
129	3.664	RT	2721 Patterson Rd	Unsignalized Full Movement	Conditional Unsignalized 3/4 Movement	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Conditions are that movements may be further restricted to Right-In/Right-Out when safety or operational issues occur.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
130	3.744	RT	2721 Patterson Rd	Unsignalized Full Movement	Right-Out Only	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
131	3.773	RT	N 15th St	Signalized Full Movement	Signalized Full Movement	
132	3.773	LT	N 15th St	Signalized Full Movement	Signalized Full Movement	
133	3.805	LT	2726 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops - access via 27 1/4 Rd.
134	3.811	LT	2728 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
135	3.837	RT	2680 N 15th St	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops - access via 15th St.
136	3.853	LT	2734 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via Access 136a. Cross access agreements required between parcel no. 2945-013-00-030, parcel no. 2945-013-00-031, and any adjacent properties with same ownership upon redevelopment.
136a	3.863	LT	2734/2736 Patterson Rd Property Line	None	Shared Right-In/Right-Out	Shared access at the property line when either property redevelops. Movements may be restricted to right-in/right-out when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-013-00-030, parcel no. 2945-013-00-031, and any adjacent properties with same ownership upon redevelopment.
137	3.872	LT	2736 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via Access 136a. Cross access agreements required between parcel no. 2945-013-00-030, parcel no. 2945-013-00-031, and any adjacent properties with same ownership upon redevelopment.
138	3.875	RT	2737, 2741, 2745 Patterson Rd	Unsignalized Full Movement	Right In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-122-28-004, parcel no. 2945-122-40-003, and any adjacent properties with same ownership upon redevelopment.
139	3.887	RT	2737 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 138	When property redevelops, safety or operational issues occur, or when a public project is funded.
140	3.902	LT	2738 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
141	3.934	RT	2737, 2741, 2745 Patterson Rd	Unsignalized Full Movement	Shared Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops and access to Access 141a or 138 is available. Cross access agreements required between parcel no. 2945-122-28-002, parcel no. 2945-122-40-003, parcel no. 2945-122-40-004 and any adjacent properties with same ownership upon redevelopment.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
141a	3.948	RT		None	Shared Right-In/Right-Out	Shared access at the property line when either property redevelops. Movements may be restricted to right-in/right-out when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-122-28-002, parcel no. 2945-122-40-003, and any adjacent properties with same ownership upon redevelopment.
142	3.942	LT	2742 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via Access 142a.Cross access agreements required between parcel no. 2945-013-00-33, parcel no. 2945-013-22-003, and any adjacent properties with same ownership upon redevelopment.
142a	3.955	LT	2742 Patterson Rd, Empty lot	None	Shared Right-In/Right-Out	Shared access at the property line when either property redevelops. Movements may be restricted to right-in/right-out when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-013-00-33, parcel no. 2945-013-22-003, and any adjacent properties with same ownership upon redevelopment.
143	3.967	LT	Empty lot	Signalized Full Movement	Close - Access via 27 1/2 Rd	When property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-013-00-33, parcel no. 2945-013-22-003, and any adjacent properties with same ownership upon redevelopment.
144	4.015	LT	Empty lot	Signalized Full Movement	Close - Access via 27 1/2 Rd	When property redevelops, safety or operational issues occur, or when a public project is funded.
145	4.049	LT	27 1/2 Rd	Signalized Full Movement	Signalized Full Movement	
145a	4.049	RT	South leg 27 1/2 Rd	None	Signalized Full Movement	Installation of the south leg of 27 1/2 Rd may be implemented when the property redevelops, if desired and approved by the City. Access 148 must be restricted to RIRO if implemented.
146	4.061	RT	2751, 2765 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops and/or access to Access 145a or 148 becomes available.
147	4.121	LT	Spring Valley Cir	Unsignalized 3/4 Movement	Conditional Safety Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
148	4.121	RT	2751, 2765 Patterson Rd	Unsignalized Full Movement	Shared Conditional Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. If Access 145a is implemented, access must be restricted to RIRO.
149	4.250	RT	2771, 2773, 2775 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-121-00-002 and parcel no. 2945-121-00-019 and any adjacent properties with same ownership upon redevelopment.
150	4.258	LT	Beechwood St	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
151				Not used		

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
152	4.292	RT	2777 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-121-00-018 and parcel no. 2945-121-00-003 and any adjacent properties with same ownership upon redevelopment.
153	4.323	LT	2778 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
154	4.356	LT	Pheasant Trail Ct	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
155	4.356	RT	El Corona Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
156	4.384	RT	Mount View Dr	Unsignalized Full Movement	Proposed Configuration requires additional study	
157	4.457	RT	Mantey Heights Dr	Unsignalized Full Movement	Proposed Configuration requires additional study	
158	4.504	RT	Santa Fe Dr	Unsignalized Full Movement	Proposed Configuration requires additional study	
159	4.546	LT	28 Rd	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
160	4.558	RT	2801 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
161	4.584	RT	E Park Ave	Unsignalized Full Movement	Proposed Configuration requires additional study	
162	4.620	RT	2811 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via Camino Del Rey Dr or Rio Grande Drive.
163	4.677	RT	Rio Grande Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
164	4.677	LT	2814 Patterson Rd, 615 28 1/4 Rd	Right-In/Right-Out	Right-In/Right-Out	
165	4.739	RT	2813, 2815, 2825 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
166	4.776	RT	2813, 2815, 2825 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 165	When property redevelops, safety or operational issues occur, or when a public project is funded.
167	4.828	RT	28 1/4 Rd	Signalized Full Movement	Signalized Full Movement	
168	4.828	LT	28 1/4 Rd	Signalized Full Movement	Signalized Full Movement	
169	4.866	RT	2827 Patterson Rd	Unsignalized Full Movement	Close - Access via 28 1/4 Rd	When property redevelops, safety or operational issues occur, or when a public project is funded.
170	4.916	RT	2835 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
171	4.930	LT	2844 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 176	When property redevelops, safety or operational issues occur, or when a public project is funded.
172	4.946	RT	Grand Cascade Way	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
173	4.972	LT	2844 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 176	When property redevelops, safety or operational issues occur, or when a public project is funded.
174	4.980	LT	2844 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 176	When property redevelops, safety or operational issues occur, or when a public project is funded.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
175	5.000	LT	2844 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 176	When property redevelops, safety or operational issues occur, or when a public project is funded.
176	5.037	LT	2844 Patterson Rd	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2943-064-00-082, parcel no. 2943-064-00-083, and parcel no. 2943-062-00-101 and any adjacent properties with same ownership upon redevelopment.
177	5.048	LT	2844 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 176	When property redevelops, safety or operational issues occur, or when a public project is funded.
178	5.082	LT	2854 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 176	When alternate access to Access 176 is available. Cross access agreements required between parcel no. 2943-064-00-082 and parcel no. 2943-062-00-101 and any adjacent properties with same ownership upon redevelopment.
179	5.111	LT	2856 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 176	When alternate access to Access 176 is available. Cross access agreements required between parcel no. 2943-064-00-083 and parcel no. 2943-062-00-101 and any adjacent properties with same ownership upon redevelopment.
180	5.153	LT	2844 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via Access 176.
181	5.165	RT	Legends Way	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
182	5.189	LT	2872 Patterson Rd	Unsignalized Full Movement	Close - Access via 28 3/4 Rd	When property redevelops, safety or operational issues occur, or when a public project is funded.
183	5.229	LT	2872 Patterson Rd	Unsignalized Full Movement	Close - Access via 28 3/4 Rd	When property redevelops, safety or operational issues occur, or when a public project is funded.
184	5.248	LT	28 3/4 Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
185	5.264	RT	598 Sinatra Way	Unsignalized Full Movement	Close - Access via Naples Dr	Access closing with Bella Dimora subivision redevelopment
186	5.277	LT	604 28 3/4 Rd	Unsignalized Full Movement	Close - Access via 28 3/4 Rd	When property redevelops, safety or operational issues occur, or when a public project is funded.
187	5.280	RT	598 Sinatra Way	Unsignalized Full Movement	Close - Access via Naples Dr	Access closing with Bella Dimora subivision redevelopment
188	5.288	LT	2876 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
189	5.302	LT	2876 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 188	When property redevelops, safety or operational issues occur, or when a public project is funded.
190	5.303	RT	598 Sinatra Way	Unsignalized Full Movement	Close - Access via Naples Dr	Access closing with Bella Dimora subivision redevelopment
191	5.326	RT	2879 Patterson Rd	Unsignalized Full Movement	Close - Access via W Indian Creek Dr	When property redevelops, safety or operational issues occur, or when a public project is funded.
192	5.360	RT	W Indian Creek Dr	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
193	5.360	LT	W Indian Creek Dr	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
194	5.438	RT	Belhaven Way	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
195	5.447	RT	2893 Patterson Rd	Unsignalized Full Movement	Close - Access via Belhaven Way	When property redevelops, safety or operational issues occur, or when a public project is funded. Belhaven Way to be widened to full width with redevelopment or a public project.
196	5.488	LT	E Indian Creek Dr	Unsignalized Full Movement	Conditional Safety Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. If a safety or operational issue develops, the access may be closed - alternate access via W Indian Creek Dr available.
197	5.488	RT	2893 Patterson Rd	Unsignalized Full Movement	Close - Access via Belhaven Way	When property redevelops, safety or operational issues occur, or when a public project is funded.
198	5.527	RT	2893 Patterson Rd	Right-In/Right-Out	Close - Access via Belhaven Way	When property redevelops, safety or operational issues occur, or when a public project is funded.
199	5.572	RT	29 Rd	Signalized Full Movement	Signalized Full Movement	
200	5.572	LT	29 Rd	Signalized Full Movement	Signalized Full Movement	
201	5.610	LT	2902, 2904, 2906 Patterson Rd, 606, 608 29 Rd	Right In-Right Out	Shared Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when adjacent properties redevelop - access via 29 Road,
202	5.645	LT	2908 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements are required between properties currently served by Access 202, 203, 204, and 206 upon redevelopment. Access points shall be consolidated and shared between these properties as redevelopment occurs. Proposed configuration to be approved by the City.
203	5.662	LT	2910 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements are required between properties currently served by Access 202, 203, 204, and 206 upon redevelopment. Access points shall be consolidated and shared between these properties as redevelopment occurs. Proposed configuration to be approved by the City.
204	5.679	LT	2912 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements are required between properties currently served by Access 202, 203, 204, and 206 upon redevelopment. Access points shall be consolidated and shared between these properties as redevelopment occurs. Proposed configuration to be approved by the City.
205	5.679	RT	2901, 2903, 2905, 2913, 2915 Patterson Rd	Unsignalized 3/4 Movement	Unsignalized 3/4 Movement	
206	5.696	LT	2914 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements are required between properties currently served by Access 202, 203, 204, and 206 upon redevelopment. Access points shall be consolidated and shared between these properties as redevelopment occurs. Proposed configuration to be approved by the City.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
207	5.719	RT	2901, 2903, 2905, 2913, 2915 Patterson Rd	Right In-Right Out	Right-In/Right-Out	Cross access agreements required between parcel no. 2943-082-33-003, parcel no. 2943-082-33-002 and parcel no. 2943-082-00-043 and any adjacent properties with same ownership upon redevelopment.
208	5.732	LT	Partee Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
209	5.750	RT	2917 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops and alternative access to Access 207 is available.Cross access agreements required between parcel no. 2943-082-33-003, parcel no. 2943-082-33-002 and parcel no. 2943-082-00-043 and any adjacent properties with same ownership upon redevelopment.
210	5.764	LT	2918 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via Partee Dr.
211	5.792	LT	Cris-Mar St	Unsignalized Full Movement	Conditional Unsignalized Full Movement	Movements may be restricted to Right-In/Right-Out when Bonito Ave is connected to 29 1/2 Rd.
212	5.795	RT	Redwing Ln	Unsignalized Full Movement	Conditional Unsignalized Full Movement	Movements may be restricted to 3/4 when Bonito Ave is connected to 29 1/2 Rd or safety or operational issues occur.
213	5.829	LT	Parcel Number: 2943-053-40-000	Unsignalized Full Movement	Gated Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
214	5.836	LT	2926 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
215	5.858	LT	2926 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 214	When property redevelops, safety or operational issues occur, or when a public project is funded.
216	5.858	RT	29 1/4 Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
217	5.880	LT	2934 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
218	5.891	LT	2934 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 217	When property redevelops, safety or operational issues occur, or when a public project is funded.
219	5.897	LT	2938 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
220	5.905	LT	2938 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 219	When property redevelops, safety or operational issues occur, or when a public project is funded.
221	5.931	LT	29 3/8 Rd	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
222	5.931	RT	29 3/8 Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
223	5.951	LT	2940 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops or when alternative access to 29 3/8 Rd is available.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
224	5.969	LT	2942 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops and alternative access to 29 1/2 Rd via Penny Lane is available.Cross access agreements required between parcel no. 2943-053-00-051 and parcel no. 2943-053-00-052 and any adjacent properties with same ownership upon redevelopment.
225	5.974	RT	2939 Patterson Rd	Unsignalized Full Movement	Close - Access via Colanwood St.	When property redevelops, safety or operational issues occur, or when a public project is funded.
226	6.000	LT	2944 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops and alternative access to 29 1/2 Rd via Penny Lane is available.Cross access agreements required between parcel no. 2943-053-00-051 and parcel no. 2943-053-00-052 and any adjacent properties with same ownership upon redevelopment.
227	6.020	RT	Colanwood St	Unsignalized Full Movement	Conditional Safety Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. If a safety or operational issue develops, the access may be closed - alternate access via Wellington Ave or Parkway Dr available.
228	6.025	LT	2948 Patterson Rd	Unsignalized 3/4 Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via 29 1/2 Rd.
229	6.041	RT	2945 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
230	6.057	RT	599 29 1/2 Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via 29 1/2 Rd.
231	6.087	RT	29 1/2 Rd	Signalized Full Movement	Signalized Full Movement	
232	6.087	LT	29 1/2 Rd	Signalized Full Movement	Signalized Full Movement	
233	6.160	RT	E Greenfield Cir	Unsignalized Full Movement	Conditional Safety Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. If a safety or operational issue develops, the access may be closed - alternate access via Bookcliff Ave available.
234	6.188	LT	Pioneer Rd	Unsignalized Full Movement	Conditional Safety Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. If a safety or operational issue develops, the access may be closed - alternate access via Bonito Ln available.
235	6.243	LT	Broken Spoke Rd	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when safety or operational issues occur, or when a public project is funded.
236	6.282	RT	Darby Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
237	6.345	LT	Maintenance access	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when access to Access 241 is available.
238	6.352	RT	2977 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
239	6.391	LT	2980 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 241	When property redevelops, safety or operational issues occur, or when a public project is funded.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
240	6.400	RT	Placer St	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
241	6.404	LT	2982 Patterson Rd	Unsignalized Full Movement	Shared Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
242	6.484	LT	2982 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 241	When property redevelops, safety or operational issues occur, or when a public project is funded.
243	6.474	RT	Maintenance access	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when alternate access to Access 245 or 30 Rd is available. Cross access agreements required between parcel no. 2943-081-00-042 and parcel no. 2943-081-00-051 and any adjacent properties with same ownership upon redevelopment.
244	6.497	LT	Hudson Bay Dr	Unsignalized Full Movement	Conditional Safety Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. If a safety or operational issue develops, the access may be closed - alternate access via F 1/4 Rd available.
245	6.497	RT	599 30 Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via 30 Rd. Cross access agreements required between parcel no. 2943-081-00-042 and parcel no. 2943-081-00-051 and any adjacent properties with same ownership upon redevelopment.
246	6.528	LT	2992 Patterson Rd	Unsignalized 3/4 Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. When property redevelops, a right turn lane must be provided or access will be closed.
247	6.532	RT	599 30 Rd	Unsignalized Full Movement	Close - Access via Access 245	When property redevelops, safety or operational issues occur, or when a public project is funded.
248	6.600	RT	30 Rd	Signalized Full Movement	Signalized Full Movement	
249	6.600	LT	30 Rd	Signalized Full Movement	Signalized Full Movement	
250	6.667	LT	Ronlin Dr	Unsignalized Full Movement	Conditional Safety Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. If a safety or operational issue develops, the access may be closed - alternate access via E Vista Dr available.
251	6.721	LT	Agana Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
252	6.721	RT	Agana Dr	Unsignalized Full Movement	Close - Access via Seranade Dr	When adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
253	6.776	LT	Starlight Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
254	6.831	LT	Serenade St	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
255	6.831	RT	Serenade St	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
256	6.863	RT	3027 Patterson Rd	Unsignalized Full Movement	Close - Access via McMullin Dr	When property redevelops, safety or operational issues occur, or when a public project is funded.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
257	6.863	LT	3026 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via Access 258. Cross access agreements required between parcel no. 2943-043-00-143 and parcel no. 2943-043-00-082 and any adjacent properties with same ownership upon redevelopment.
258	6.882	LT	3026 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2943-043-00-143 and parcel no. 2943-043-00-082 and any adjacent properties with same ownership upon redevelopment.
259	6.897	LT	3028 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via Access 258. Cross access agreements required between parcel no. 2943-043-00-143, parcel no. 2943-043-00-082 and parcel no 2943-043-00-195 and any adjacent properties with same ownership upon redevelopment.
260	6.911	LT	3030 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via Access 263. Cross access agreements required between parcel no. 2943-043-00-195 and parcel no. 2943-043-00-082 and any adjacent properties with same ownership upon redevelopment.
261	6.913	RT	McMullin Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
262	6.962	RT	Gerken Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
263	6.962	LT	Round Table Rd	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
264	6.991	RT	599 Grand Valley Dr	Unsignalized Full Movement	Close - Access via Grand Valley Dr	When property redevelops, safety or operational issues occur, or when a public project is funded.
265	7.002	RT	599 Grand Valley Dr	Unsignalized Full Movement	Close - Access via Grand Valley Dr	When property redevelops, safety or operational issues occur, or when a public project is funded.
266	7.016	RT	Grand Valley Dr	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
267	7.016	LT	Grand Valley Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
268	7.039	RT	598 Grand Valley Dr	Unsignalized Full Movement	Close - Access via Grand Valley Dr	When property redevelops, safety or operational issues occur, or when a public project is funded.
269	7.053	RT	3047 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur or when a public project is funded. Access will be closed when property redevelops - access via Wellington Ave or Kirby Lane.
270	7.060	LT	3044 Patterson Rd	Unsignalized Full Movement	Close - access via Stoney Brook Ln	When property redevelops, safety or operational issues occur, or when a public project is funded.

ACCESS MANAGEMENT PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
271	7.082	RT	3047 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops or when alternate access to Wellington Ave or Kirby Lane is available.
272	7.111	RT	3049 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via Wellington Ave.
273	7.120	LT	Mesa Valley Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
274	7.147	LT	3054 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 276	When property redevelops, safety or operational issues occur, or when a public project is funded.
275	7.147	RT	Shoshone St	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
276	7.168	LT	3054 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
277	7.221	LT	Cottage Meadows Ct	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
278	7.243	RT	3065 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 284, 286 and Wellington Ave	When property redevelops, safety or operational issues occur, or when a public project is funded.
279	7.256	LT	3064 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
280	7.264	LT	3066 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops and alternate access to Orange Grove Way is available. Cross access agreements required between parcel no. 2943-044-00-217, and parcel no. 2943-044-37-002 and any adjacent properties with same ownership upon redevelopment.
281	7.276	LT	3068 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via Orange Grove Way.
282	7.279	RT	3067 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
283	7.290	LT	3068 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 281	When property redevelops, safety or operational issues occur, or when a public project is funded.
284	7.295	RT	3073 Patterson Rd	Gated Unsignalized Full Movement	Gated Unsignalized Full Movement	When property redevelops, close access - access via Access 286.
285	7.319	RT	3073 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 284 and 286	When property redevelops, safety or operational issues occur, or when a public project is funded.
286	7.341	RT	3073 Patterson Rd	Gated Unsignalized Full Movement	Gated Unsignalized Full Movement	When property redevelops, realign Access 286 across from Lodgepole St. Realigned access does not need to be gated.
287	7.349	LT	Lodgepole St	Unsignalized Full Movement	Unsignalized Full Movement	

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3A

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3B

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3C

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3D

PATTERSON ROAD AMP EXHIBIT

NOTE:
A DESIGN VARIANCE OR SPEED REDUCTION MUST BE JUSTIFIED AND APPROVED BY THE CITY TO ALLOW 3/4 MOVEMENT AT BOTH ACCESS 62 AND 64. OTHERWISE, RI-RO WILL BE APPLIED TO ONE LOCATION AS DETERMINED BY THE CITY.

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- **G** GATED ACCESS POINT
- **C** CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- **S** CONDITIONAL SAFETY ACCESS POINT

FIGURE 3E

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3F

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3G

PATTERSON ROAD AMP EXHIBIT

NOTE:
A SINGLE SHARED RI-RO FOR THESE PROPERTIES WILL BE PROVIDED.

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3H

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 31

PATTERSON ROAD AMP EXHIBIT

NOTE:
ALTERNATIVE ROUTE TO SIGNAL AT 28 1/4 ROAD VIA HAWTHORNE AVE.

NOTE:
THIS STUDY DOES NOT DEFINE CONDITIONS FOR ACCESS 156, 157, 158, AND 161. FURTHER STUDY IS REQUIRED FOR LONG-TERM CONDITIONS OF THESE ACCESS POINTS.

0 200 400 800 Feet

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3J

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3K

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3L

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3M

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3N

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 30

PATTERSON ROAD AMP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3P

Exhibit 12

Proposed Patterson Rd Access Control Plan (ACP)

Public Comments Received Since June 1, 2021

Grand Junction Speaks
Published Comments for June 8, 2021 Planning Commission Meeting
Patterson Road Access Control Plan

Patterson Rd. access plan. I have been a resident of Mantey Heights for 21 years. I feel this plan has some issues that need to be addressed. There needs to be more than 1 full movement intersection at Patterson Rd. I suggest Mantey Heights Dr. and Santa Fe Dr. as full movement. These two streets provide the quickest and safest access for emergency vehicles. Mount View Dr. and Park St. would be poor choices for full movement. Mount View Dr. is to narrow to allow for two way traffic. Park St. is to close to 28 Rd. intersection. As there have been no accidents in recent history at Patterson Rd. from this subdivision, I feel this would be a good choice. We need to be able to access Patterson Rd. westbound at more than one intersection. I feel the residents who actually live in Mantey Heights should be listened to carefully when considering this plan.

06/07/2021 5:36 am

Ken Ritter
136 Santa Fe Dr.
Grand Junction Co., 81501

This is comment on the Patterson adjustments to the street out there. We recently we've done on the Patterson and business I-70 intersection where the RV park is. You can no longer make a left hand turn into that RV park because of the things that they put down the middle of the road, so people have to either go through the light find a way to get turn it around with her RV and come back or go around and come back into it and you cannot get in to the Shell station but making a left into it anymore because the concrete thing down the center of the road. If this is going to happen all the way down Patterson this is going to be very inconvenient for all of the people that live on Patterson that are going down and have to make a left hand turn apparently what they're working on his everybody have to go around the city making right hand turns. To me, it's just it's a waste of money and time to do this and inconvenience the people that live on Patterson on either side of it. Thank you.

06/03/2021 8:31 am

Arthur Edwards
616 Lodgepole Street
Grand Junction, 81504

The Patterson project sounds like it's a pretty extensive. Patterson already has way too much traffic on it as it is right now so I don't know if anything is going to improve it, but sounds like you're going to be, with development and everything, it's going to have way more traffic then then it can bear. One of the points is this idea only be able to make right turns when you leave turn right and when you're coming in you have to turn right. If you're heading west from where we live that's no problem but if you want to head east you're

going to have to go down to 15th Street or maybe 12th Street take that to Orchard and then get on Orchard back to 29 Road or some other Road--28 1/4--and then come back up and get back on Patterson so you're going to be not only are you causing more problem, but now you're adding extra traffic to some of the other streets that didn't have that much traffic so now you're spreading that traffic to other roads that are already overburdened. When we're coming back in again if we're coming from the East turning right onto our area is no problem but if we're coming from the other direction so we can't turn left into our area here so to turn what we have to turn left at 27 1/2 Road or 28 1/4 Road but 28 or quarter Road doesn't go through it anywhere so that doesn't do us any good we have to turn left 27 1/2 Road and then there's no through streets to get back to where we live so we have to go all the way down as far as Cortland and come all the way back around 28 Road which is a long drawn out way to get back to where we live cause there's none of these other roads go through so they're going to have something about making some of these other roads go through as well as as you know bottlenecking Patterson with just right turns if you want to turn left like in the City Market you're not going to be able to do that probably. So I think that this needs to be considered a little bit more and need to figure out some way how you're going to have access to the other places around here you can't put in any more traffic lights cause right now there's you know you'd be having stop go stop go and that's not going to do any good we need to have the traffic keep moving so it it's a real problem and I don't know that the solution that you have is is that well thought out or that expeditious. Thank you, goodbye.

05/31/2021 3:15 pm

James Vidmar
2453 Springside Court
Grand Junction, 81506

Catherine Hursh
114 Mantey Heights Drive
Grand Junction, CO 81501
cahursh@gmail.com

June 2, 2021

Grand Junction Planning Commision
250 N. 5th Street
Grand Junction, Colorado. 81501

RE: Patterson Road Access Control Plan

Greetings,

As a homeowner, directly affected by upcoming decisions to be made concerning Patterson Road access, I would like to voice statements, not addressed by the City of Grand Junction. Traveling Patterson Road., at all times of the day, I experience the "traffic flow" first hand.

IMHO, controlling traffic at posted speed limits is key to keep traffic moving, not cutting access off to tax paying property owners who have businesses and/or reside in adjacent neighborhoods to Patterson Rd.!

Fact: The majority of drivers travel Patterson at speeds in excess of (10 to 15mph) above the posted speed limit.
Fact: Accidents regularly occur at intersections, where speeding cars run red lights.
Fact: Traveling at posted speed limits allow vehicles to avoid most, if not all, stop lights.

What is the Grand Junction Planning Commission's vision for Patterson Road? Clearly, the proposed City plan for Patterson Rd is moving towards making Patterson Road a dedicated freeway. What other options have been considered to reduce an almost total reliance on Patterson Rd.? What other options besides access restriction have been studied?

Please consider putting the current Patterson Road Access Plan on hold until alternative solutions are explored. These alternatives might include:

1. Exploring the expansion of alternative routes, such as 29rd to I70.
2. Utilizing G Road., changing stop signs to stop lights, to assist traffic flow.
3. Putting in right hand turn lanes, to let traffic easily exit Patterson Rd.
4. Consider lowering speed limits through residential areas, such as Mantey Heights.
5. Actively enforcing speed limits on Patterson Road.

Regards,

Catherine Hursh

Thank you for your consideration.

PATTERSON ROAD ACCESS CONTROL PLAN
OBJECTIONS TO THE PLAN

TOPIC: Closure of access points in the Mantey Heights Subdivision.
Presented To: Dave Thornton City Planner
Dated: June 4, 2021

Background: Mantey Heights is one of the oldest subdivisions in the city subdivided by Mr. Mantey in the 1930's and was here long before Patterson Road was even widened or large commercial and business/hospital developments were implemented. The streets are original within the subdivision having been one lane dirt roads into the late 70's, early 80's and are still for all intents and purposes able to accommodate one lane of traffic suitably. The streets within the subdivision have always had dedicated pre-existing access points to Patterson Road.

Issues for the City Planning Department

1. Safety

A) Blocking any access point to and from the subdivision would cause a major safety issue. A house catches on fire, a resident has a heart attack, someone has to be rushed to the hospital due to anaphylactic shock, or stroke, how do the emergency vehicles and residents navigate in a timely manner when minutes and seconds count with extremely limited access onto Patterson Road. How are fire trucks and ambulances supposed to navigate in and around the subdivision with concrete barriers in the way. Not to mention City trash trucks, and persons with RV's and or boats.

3. Residents of Mantey Heights

A) Those who live in the neighborhood don't have any problem navigating the exiting and entering on and off of Patterson Road. When you choose to live in the Mantey Heights area you except the surrounding for what they are and as far as Patterson Road access is concerned patience and the proper use of the turn lane is one of those aspects which we have all come to be able to navigate with ease. How are people within the subdivision with large camper trailers and boats supposed to access and exit with such restrictions. We are opposed to closure of any of our access points.

2. Traffic and Demands on Patterson Road

A) Stop rezoning land on Patterson to commercial and high density multi

residential /use from 12th street East. Those types of development should be allocated to the land west of First toward highway 6&50 there is certainly plenty of land in that area to accommodated any such developments. Reroute traffic by way of widening G and F ½ road, and revise North Avenue to make it a viable thoroughfare

Examples on this side of 12th are the Corona Del Rey parcel that was changed to R8, and the parcel on the North corner of Patterson and 28¼ Road was made into a three story apartment/ commercial plat against the rejection of the surrounding neighborhoods. Thank goodness the original design for a gas station on the corner of that parcel was never built, along with the rejection of a Drive-Through Bank on 27½ Road. Now the City is being asked to rezone the acreage behind Faith Heights Church from B1 to MU. Too dense for the area.

Stop creating more traffic. Patterson Road was never meant to be a second I-70 Business Loop. Once adopted the plan is there to stay in the files for future use and review and it is heinous for the City to even consider Patterson Road as a 7 lane thoroughfare as Mr. Prall mentioned in our first meeting. Alternatives can and must be looked at.

B) Matchett Park a traffic nightmare waiting to happen. Development of the Matchett property into a massive multi use community center and playing fields that brings in tournament with hundreds of vehicles which only have Patterson Road to use to enter and exit is unthinkable along with everyday use from school district 51 (Paul Cain Athletic Director), Fire Football Club (Mr. Johnson), and various clubs.

Adversities;

1. Volume of vehicles, including City trucks for maintenance.
2. Noise output to ours and surrounding neighborhoods from events and maintenance.
3. Added air, trash, noise pollution putting a strain on our existing neighborhood.

The City Of Grand Junction has had a long standing problem of long range planning not taking existing neighborhoods and surrounding areas into consideration when it comes to development. We should not be held liable today for the past and or future over development or with the implementation of a plan developed by staff and consultants who do not live in this area. No to any closures of access points in Mantey Heights. The entire "Plan" is flawed.

Gloria J Deschamp
124 Mount View Drive
Mantey Heights Subdivision
Grand Junction, CO 81501

Dear Mayor McDaniel and Councilmembers

A raceway is not a solution.

I read where one resident stated that the study by the expert from out of town was a waster of money, and conversation that anyone could have come up with an idea to make Patterson Road a raceway by forcing everyone to make right hand turns. Wow what a great idea to cut-off the convenience of those who actually live along, and pay for the road, for those 20% who will use Patterson as a raceway. Lets get real, what do you think will happen when the residents are forced to only make right hand turns—- traffic will move faster, the traffic volume will increase because it will become a raceway and nothing will have been solved. The Patterson access control plan only creates a new heap of issues, not to mention the likelihood of more severe accidents.

Gary Lucero

RECEIVED
JUN 07 2021
CITY PLANNING DIVISION

Dear Mayor McDaniel and Councilmembers

More pollution, congestion, traffic movements, dangers.

We in Mantey Heights are only a small community of 55 households. Many chose to live here because of its unique character and convenience to town. The Patterson access control plan is a sucker punch to our lifestyle. Ninety percent of the residents here are elderly or have troubling health issues and we try to look out for one another. Convenience of access is paramount to our needs. We have been told that, if we want to travel west, we will be permitted to make "U" turns on Patterson at the nearest traffic light, after we make a right hand turn to get onto Patterson and travel down Patterson to 28 1/4 Road, which is unsafe because of it's history of accidents. If we use the national average of 10.5 trips per day per household and say 80% of those trips are to the west, then our little community will be making 462 "U" turns on Patterson per day. "U" turns are generally not a comfortable traffic movement. Another solution we were told is to do the right hand turn and then drive around various residential streets to get to our destination. Just using the destination of City Market on 12th and Patterson, as an example, it would require that we drive around the city streets for 3.5 miles to make a round trip. Many of these miles will interrupt the quietness of other residential streets. Many of these miles will require many more turning movements to get to a destination. The impacted residential areas will see increased congestion, interrupted lifestyle and many potential dangers to children and others. The current Patterson access control plan is not a solution, it creates pollution, it creates unintended congestion, it creates many potential dangers, it requires more time in the car by Mantey Heights residents, it requires more miles traveled, it requires many more turning movements, and/or an uncomfortable "U" turn movement. These are real issues that we will have to live with once the "expert from out of town" has collected their fee and goes back to their office; furthermore, the issues of this letter only speak to those of us in Mantey Heights, but the figures here are compounded by many tens of thousands of those who live on the Residential section of Patterson Road. Please do not adopt this short-sighted Patterson access control plan.

Diane Lucero

RECEIVED
JUN 07 2021
CITY PLANNING DIVISION

David Thornton

From: comdev
Sent: Monday, June 7, 2021 4:37 PM
To: Tamra Allen; David Thornton; Rick Dorris
Cc: Isabella Vaz
Subject: FW: Patterson Road Access Control Plan

Another Patterson Rd comment

From: Diane Lucero <diane.lucero@gmail.com>
Sent: Monday, June 7, 2021 13:51
To: Council <council@gjcity.org>; comdev <comdev@gjcity.org>
Subject: Patterson Road Access Control Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Dear City Council Members and City Staff,
I am writing this letter with the hope that you will listen to the concerns of the residents of this community.
I understand that it is important for any local government to make plans for long term changes in their city as the city grows.
My concern for the proposed changes submitted for the Patterson Road Access Control Plan is that it is only partially developed and does not address numerous issues of the residents who live in the Patterson Road corridor area. Patterson Road is basically a residential corridor from 12th Street to 32 Road.
This plan will make access onto Patterson Road difficult and inconvenient for the people who live on the southside of Patterson Road and who make the majority of their trips from their homes with left hand turns to get to town.
The proposed plan states that it was written and developed to improve safety, and decrease travel times.
Common sense says that if people are encouraged to make u-turns and travel 2, 3 and 4 extra miles because of extreme limitations for ingress and egress in their neighborhood, so they can travel west, there is LESS SAFETY and INCREASED TRAVEL TIME.
I encourage all of you to take a look at other proposed long term projects for the city and to reroute some of the traffic away from Patterson Road to relieve congestion before you consider codification of this plan.
You have stated that this plan is a living document that can change, but if you codify this plan how easy will it be to change later?
Please, I implore you to listen to the residents of this city who live in the Patterson Road corridor area. We have not had any safety issues with ingress and egress in the Mantey Heights Neighborhood section of Patterson Road and hope that you will leave our four streets, Mount View Drive, Mantey Heights Drive, Santa Fe Drive and East Park Avenue as they are, with no changes.
Thank you, Diane Lucero

Grand Junction Speaks
Published Comments for June 8, 2021 Planning Commission Meeting
Patterson Road Access Control Plan

My name is Duane Harris, I reside at 623 28&3/4 Rd Grd Jct. right against the "Matchett Park property. I see on one of the many scenarios of proposed access to "Patterson" road, would include cutting a city street right across the very heart of the park area. From 28 & 1/4 road east toward and tie into "Indian wash/village" subdivision. Then a motorist would still have to make their way through that subdivision to get to "Patterson" Rd. And still put you on the wrong side of the only stop light at 29Rd. It really makes no sense. It would also negatively impact future and current plans for the park area itself. Mayor Wortman has called the Matchett Park area a "Diamond in the ruff" If this plan is adopted, the Mayor's diamond would become a lump of coal in the dirt. I, and many neighbors, are adamantly opposed to this proposal, thank you for your time.

06/07/2021 5:05 pm

Duane A Harris
623 28 3/4 Rd.
Grand Junction, 81506

David Thornton

From: comdev
Sent: Tuesday, June 8, 2021 8:13 AM
To: Tamra Allen; David Thornton; Rick Dorris
Subject: FW: Mantey Heights/Roadways

From: Anita Ballenger <anitaballenger@icloud.com>
Sent: Monday, June 7, 2021 19:11
To: comdev <comdev@gjcity.org>
Subject: Mantey Heights/Roadways

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

To Whom it May Concern,

Solutions are achievable without closing Mantey Heights streets. Quit using the closing of Mantey Heights streets as a means to deflect from taking action on a more comprehensive traffic plan i.e. make F /12 Road and G Road an alternative east-west route. Mantey Heights must not be taken advantage of unfairly for something they did not create. If the city is going to continue to approve major projects along G Road (Community Hospital, commercial projects, Canyon View Park) then G Road should be designed to handle the corresponding traffic.

Broader city planning and implementation needs to be completed before using Mantey Heights as a scape goat.

In the recent past city taxes should have been more wisely invested e.g. How many times is 24 Road going to be redesigned and rebuilt. The Riverside Parkway was nearly 100% over budget after it was refinanced for lack of money and multiple whopping change orders and it is still a mess where it dumps into 25 Road. Now first street is being torn up after being completed last year. Until the city can design more wisely and not be so careless with taxpayers money we are very suspect of any plans unless we are completely informed and have more than adequate time to address the issues.

Because of covid-19 much of this plan was insidiously undertaken during a time when people had pandemic health issues on their mind, and did not go to meetings; therefore, people have not genuinely had sufficient time to address or even think about the issue(s).

Anita Ballenger

David Thornton

From: Gary Lucero <lindyfever@yahoo.com>
Sent: Monday, June 7, 2021 9:02 PM
To: Council
Subject: Parks and Patterson

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Dear Mayor McDaniel,

Large city parks are a treasure. Canyon View Park hosts thousands of athletes and spectators each week for softball, soccer, football, tennis, baseball and a long list of other sports. When Matchett Park is developed it will be the largest city park. There should be a good plan for direct access between the two parks. Because both to these parks are proximate to G Road it is only logical to take measures to provide direct and smooth traffic flow between the two major parks. I hope the city doesn't plan to make people drive to Patterson and then back up to G Road to get to and from the parks; any foresight concerning this item could eliminate pressure on Patterson Road.

Gary Lucero

David Thornton

From: comdev
Sent: Tuesday, June 8, 2021 8:13 AM
To: Tamra Allen; David Thornton; Rick Dorris
Subject: FW: Mantey Heights

From: Brooke Ballenger <ballenger.brooke@yahoo.com>
Sent: Monday, June 7, 2021 19:36
To: comdev <comdev@gjcity.org>
Subject: Mantey Heights

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

To Whom it May Concern,

We strongly disagree that any of the Mantey Heights access streets to Patterson Road be closed, especially Santa Fe Drive because it is presently one of the safest exits to Patterson. Right only turning out of Mantey Heights will force the Mantey Heights residents to unnecessarily reroute through other parts of the city to get to the hospital, groceries and other basic needs. Yikes, more driving everywhere, with more turns, which exponentially increases danger points for drivers, bicyclists, pedestrians, children.....this is planned chaos plain and simple.

Brooke

David Thornton

From: Anita Ballenger <anitaballenger@icloud.com>
Sent: Monday, June 7, 2021 7:38 PM
To: Council
Subject: Mantey Heights

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

To Whom it May Concern,

We strongly disagree that any of the Mantey Heights access streets to Patterson Road be closed, especially Santa Fe Drive because it is presently one of the safest exits to Patterson. Right only turning out of Mantey Heights will force the Mantey Heights residents to unnecessarily reroute through other parts of the city to get to the hospital, groceries and other basic needs. Yikes, more driving everywhere, with more turns, which exponentially increases danger points for drivers, bicyclists, pedestrians, children.....this is planned chaos plain and simple.

Brooke

David Thornton

From: Anita Ballenger <anitaballenger@icloud.com>
Sent: Monday, June 7, 2021 7:13 PM
To: Council
Subject: Mantey Heights/Roadways

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

To Whom it May Concern,

Solutions are achievable without closing Mantey Heights streets. Quit using the closing of Mantey Heights streets as a means to deflect from taking action on a more comprehensive traffic plan i.e. make F /12 Road and G Road an alternative east-west route. Mantey Heights must not be taken advantage of unfairly for something they did not create. If the city is going to continue to approve major projects along G Road (Community Hospital, commercial projects, Canyon View Park) then G Road should be designed to handle the corresponding traffic.

Broader city planning and implementation needs to be completed before using Mantey Heights as a scape goat.

In the recent past city taxes should have been more wisely invested e.g. How many times is 24 Road going to be redesigned and rebuilt. The Riverside Parkway was nearly 100% over budget after it was refinanced for lack of money and multiple whopping change orders and it is still a mess where it dumps into 25 Road. Now first street is being torn up after being completed last year. Until the city can design more wisely and not be so careless with taxpayers money we are very suspect of any plans unless we are completely informed and have more than adequate time to address the issues.

Because of covid-19 much of this plan was insidiously undertaken during a time when people had pandemic health issues on their mind, and did not go to meetings; therefore, people have not genuinely had sufficient time to address or even think about the issue(s).

Anita Ballenger

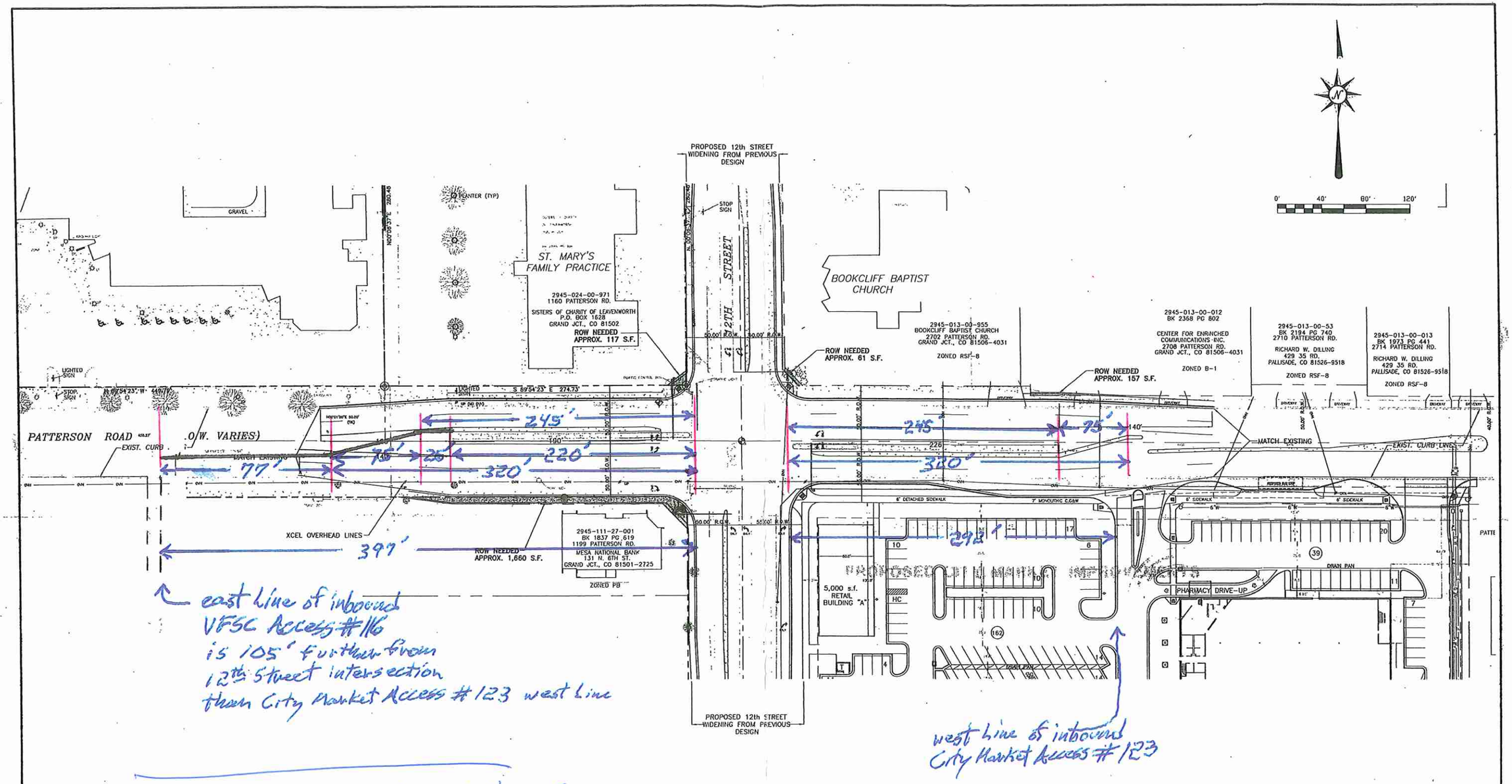
Isabella Vaz

From: Mike Jacob <abyz1000@hotmail.com>
Sent: Tuesday, June 8, 2021 4:01 PM
To: Council; comdev
Subject: Patterson access

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

I was informed yesterday of the plan to convert Patterson to a right turn access only. I laughed. I thought he was joking. He assures me that he isn't. Please tell me you aren't serious. Aren't there enough traffic boondogles in Grand Junction? Like 1st and Grand? Please don't add to them. This is a terrible idea.

Mike Jacob
2180 Standing Rock Dr



Ron Gibb, representing Village Fair Shopping Center provided Planning Commission this 2 page handout at the beginning of the meeting on June 8, 2021.

ISSUES IDENTIFIED WITH PROPOSED PATTERSON WIDENING AS SHOWN:

1. APPARENT RIGHT-OF-WAY REQUIREMENTS IN SHADED AREAS.
2. XCEL ELECTRIC (AND ANY OTHER UTILITY) OVERHEAD LINES TO BE RELOCATED OR UNDERGROUND.

ISSUES NOT ASSESSED WITH PROPOSED PATTERSON WIDENING AS SHOWN:

1. SET BACK AND LANDSCAPE CODE COMPLIANCE OR CREATION OF ANY NON-CONFORMING USE OF PARCELS WHERE WIDENING OCCURS.

ROLLAND ENGINEERING
405 Ridges Blvd
Grand Jct, CO 81503
(970) 243-8300

City Market Food & Pharmacy

12th & PATTERSON INTERSECTION

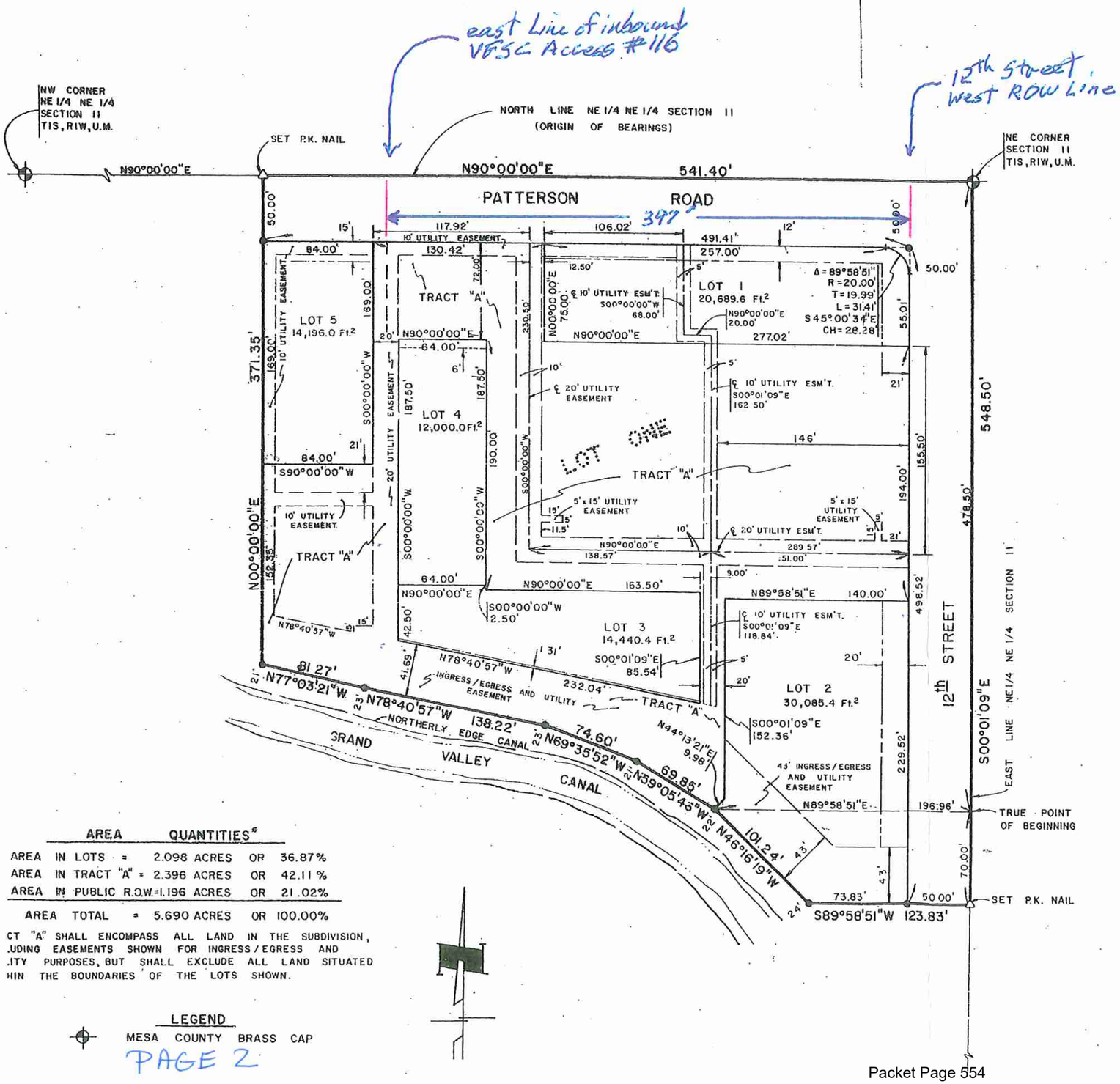
Designed	KTS	Checked	TDR	Proj #	2002	Sheet
Drawn	KTS	Date	7/15/02	Rv.		Of

C:\WORK\2002\SITE-DEVL\Patt12.dwg Thu Aug 01 10:36:09 2002

PAGE 1

VILLAGE FAIR SUBDIVISION

AS AMENDED



AREA QUANTITIES

AREA IN LOTS	= 2.098 ACRES	OR	36.87%
AREA IN TRACT "A"	= 2.396 ACRES	OR	42.11%
AREA IN PUBLIC R.O.W.	= 1.196 ACRES	OR	21.02%
AREA TOTAL	= 5.690 ACRES	OR	100.00%

CT "A" SHALL ENCOMPASS ALL LAND IN THE SUBDIVISION, .UDING EASEMENTS SHOWN FOR INGRESS/EGRESS AND .ITY PURPOSES, BUT SHALL EXCLUDE ALL LAND SITUATED HIN THE BOUNDARIES OF THE LOTS SHOWN.

LEGEND

⊕ MESA COUNTY BRASS CAP

PAGE 2

DEDICATION

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned Village Fair, A Limited Partnership, Earl A. Jensen, General Partner, is the owner of Lots One and Two Village Fair as filed and recorded in Book 13 at Page 1 of the Mesa County Records, a Subdivision situated in the City of Grand Junction, County of Mesa, State of Colorado and a part of the NE¼ NE¼ of Section 11, Township 1 South, Range 1 West of the Ute Meridian as shown on the accompanying plat thereof; said real property being more particularly described as follows:

Commencing at the NE Corner of said Section 11; Thence S 00°01'09" E along the East line NE¼NE¼ of said Section 11, a distance of 478.50 feet to the TRUE POINT OF BEGINNING. Thence continuing S 00°01'09" E along said East line NE¼NE¼ of Section 11, a distance of 70.00 feet; Thence S 89°58'51" W 123.83 feet to a point on the Northerly right-of-way of the Grand Valley Canal. Thence N 46°16'19" W along said Northerly right-of-way of the Grand Valley Canal a distance of 101.24 feet; Thence E 89°58'51" E 196.96 feet to the TRUE POINT OF BEGINNING.

That said owner has caused the real property to be laid out and surveyed as Village Fair Subdivision as amended, a subdivision of a part of the City of Grand Junction, County of Mesa, State of Colorado.

That said owner does hereby dedicate and set apart all of the streets as shown on the accompanying plat to the use of the public forever, and dedicates to the Public Utilities those portions of said real property which are labeled as utility easements on the accompanying plat as perpetual easements for the installation and maintenance of utilities, irrigation and drainage facilities, including but not limited to electric lines, gas lines, telephone lines, storm and sanitary sewer lines; together with the right to trim interfering trees and brush; with perpetual right of ingress and egress for the installation and maintenance of said lines. Such easements and rights shall be used in a reasonable and prudent manner. Tract "A" and all easements shown for ingress and egress, whether or not a part of Tract "A" are hereby reserved and set aside for the use, occupancy and enjoyment of the Owners of the Lots within Village Fair Subdivision as amended for the uses and purposes set forth in that certain declaration of covenants, conditions, and restrictions for Village Fair Subdivision as amended included in the records of Mesa County, Colorado including, but not restricted to, access for postal service, trash, fire, police, and emergency vehicles.

IN WITNESS WHEREOF, said owner has caused its name to be hereunto subscribed this 20th day of January A.D. 1982.

Village Fair, A Limited Partnership

Earl A. Jensen

Earl A. Jensen, General Partner

STATE OF COLORADO)
) ss
COUNTY OF MESA)

The foregoing instrument was acknowledged before me this 20 day of January A.D., 1982 by Earl A. Jensen General Partner of Village Fair, a Limited Partnership.

My commission expires: Aug 28, 1985 Witness my hand and official seal.

Notary Public
2780 Crossroads Blvd.
Grd. Jct. Co.

NOTARY PUBLIC STATE OF COLORADO

CITY APPROVAL

This plat of Village Fair Subdivision as amended, a subdivision of the City of Grand Junction, County of Mesa and State of Colorado was approved and accepted on this 26th day of January A.D., 1982.

James E. Wysocki — City Manager
Louis R. Bank — President of Council
Daryl K. Thum — Director of Development
Jane S. Quimby — Chairman, Grand Junction Planning Commission
Ronald P. Rish — Grand Junction City Engineer

CLERK AND RECORDERS CERTIFICATE

STATE OF COLORADO)
) ss # 1282799
COUNTY OF MESA)

I hereby certify that this instrument was filed in my office at 4:56 o'clock P. M. this 11th day of February A.D., 1982 and is duly recorded in Plat Book 13, Page 11.

Earl Sawyer — Clerk and Recorder
By Hazel M. Hukey — Deputy
Fees: $ 10.00

SURVEYORS CERTIFICATE

I James T. Patty Jr., do hereby certify that the accompanying plat of Village Fair Subdivision as amended, a subdivision of the City of Grand Junction, County of Mesa, State of Colorado, has been prepared under my direction and accurately represents a field survey of same.

James T. Patty Jr. 1-20-82
James T. Patty Jr.
Registered Land Surveyor
Colorado Registration No. 9960

JAMES T. PATTY JR. REGISTERED 9960 LAND SURVEYOR STATE OF COLORADO

The following Table includes comments the City received from community members reviewing the Janaury 2021 draft Patterson Road Access Control Plan online at GJSpeaks.org. The Planning and Engineering team at the City and with the City's Consutlant team at Stolfus & Associates reviewed the comments, met with or contacted neighborhoods and individuals, then conducted further study and analysis for each comment and access point questioned. Many changes were made in the April 2021 Final Draft Access Control Plan where a solution could be found to 1) maintain better long term access to properties and 2) to further the goals of the Access Control Plan. CONDITIONS NOTES: RIRO = Right In Right Out; 3/4 Movement = Right In Right Out Left In; Full Movement = Right In Right Out Left In Left Out

Name	Area/Location of Concern / Public Comments	Access Point(s)	Draft Condition (January 2021)	Changes Made to Final Draft ACP (April 2021)
Cris-Mar Neighbors	**Cris-Mar Neighorhood Meeting** - previously summarized. Requesting a note be added that the access control measures would not be added until the Bonito/Penny Lane connection to 29 1/2 Road is added. Improvements needed to Bonito for two blocks east of 29 Road to accommodate additional traffic.	211/212	211-RIRO, 212-3/4 movement	Add connection between Penny Lane and Bonito on the alt routes map. Make Cris Mar and Redwing conditional unsignalized full movement. Cris Mar goes to RIRO and Redwing goes to 3/4 upon connection to 29 1/2 Road.
Mantey Heights Neighbors	**Mantey Heights Neighorhood Meeting** - Approximately 25 people attended the meeting at 4:00 on Thursday 3/18. Speeding is big concern. They are concerned about emergency access, tight streets due to vegetation, sight distance. I would like to look into the possibility of a left out accel lane at access 157. We have received 3 letters: Gloria Deschamp (124 Mount View Drive); Beth McKee (135 Carlitos Ave), and Marc Burdick and Colin Carman (114 Camino Del Rey Dr). Gary Lucero is the primary contact.	156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. An option to select either 156 or 157 as a conditional full movement to be restricted to 3/4 if safety/ operational issues occur will be included in the Plan. The other access will become RIRO. From an operational/ safety/ spacing standpoint, 156 is preferred. From the neighborhood's perspective, 157 is preferred, but 157 can only be implemented if sight distance is improved to meets standards. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.
Vanderen-Ford Heights Subdivision Neighbors	**Mira Vista/Belair/Mayfair Neighborhood Meeting** - 23 people attended the meeting at 5:00 on Thursday 3/18. They are adamant about not sharing anything access/road/etc with St. Mary's. Their CC&R's restrict their neighborhood to only residential uses therefore they argue that St. Mary's Hospital will not be able to expand to the west even if they do own all of it. They want the lefts out of Patterson at access 93 (St. Mary's) to be eliminated and then they will be fine. At peak hours the neighborhood already uses access 86 as a 3/4. Would like for it to be at least 3/4. One individual asked we consider just restricting full motion access for certain hours of the day. We received one letter from Bill Crawford (2551 Mayfair Dr). Danielle Schuster is the primary contact.	86/86a/93	86 - Conditional RIRO, 86a - Conditional 3/4, 93 - Conditional RIRO	Eliminate 86a. Make 86 and 93 conditional 3/4 with conditions to restrict to RIRO if safety or operational issues develop.
	Patterson Gardens - Barbara Sundermeier is concerned about no 3/4 access at 129. She states that it is unrealistic to think that someone can make a U-turn at the access #123 City Market 3/4 access. Rick and Andrew have already weighed in via email stating 3/4 access is possible and not get into the functional intersection area of Patterson and 15th.	129	129-RIRO	Change Access 129 to conditional 3/4 with conditions to restrict to RIRO if safety or operational issues develop.

Name	Area/Location of Concern / Public Comments	Access Point(s)	Draft Condition (January 2021)	Changes Made to Final Draft ACP (April 2021)
Danielle Wills-Olivas	**ACCESS #3** - self-storage company - Concern that large truck traffic entering and exiting the storage unit facility with only a right in right out option will find it difficult to make U-turns further west on Patterson Road near the I-70 B intersection to go east.	1/3	1-closed, 3-RIRO	I-70 B to 24 Rd provides alternate access to get back to Patterson going east or to enter from the west. Change Access 3 to unsignalized full movement (conditional) with condition to restrict movements only when left turn improvements are implemented at I-70B. Change Access 1 to conditional RIRO with condition to close upon redevelopment only.
Susan Waterhouse	**ACCESS #29** and other north access around Patterson Village Square between 24 1/2 and 25 Road - Impact these changeswill have on intersections at 24 1/2 and 25 Road is a cnocern. Often it takes more than one light cycle now to make a left. By making everyone on my block go to these intersections to make left turns makes the situation worse. Are there plans to increase turn lanes or make changes to improve traffic flow at these intersections.	29	29-Conditional 3/4 - no change proposed	Not all left turns will need to be accommodated at 24 1/2 Rd/25 Rd. Multiple options for eastbound movements are provided including left turns at Commerce, U-turns along Patterson, access to Flat Top. The traffic study for the ACP identified some auxiliary lane improvements at 24 1/2 Rd and 25 Rd along Patterson, but did not identify the need for improvements on these roads. The City will continue to monitor how traffic reroutes and traffic volumes increase at public road intersections to identify the need for additional improvements at signalized intersections in the future.
Anne Landman	**ACCESS #44** - Need to retain full movement at Burkey Street (Post Office Annex access). **ACCESS #106 and #108** - Concerned with limiting tunring movements into the Northen Way neighborhood.	44/106/108	44-3/4 movement (no change) 106- 3/4 movement, 108-RIRO(no change)	Burkey Street has a 3/4 movement allowing left-turns in. Blichman Avenue to the north provides access back to 25 Rd for left turns out. Access 106 is changed to conditional full movement to be restricted to 3/4 only with safety or operational issues. Either U-turns at 7th Street or re-routing via 7th to Bookcliff or 7th to Horizon will achieve movements to the east for vehicles not comfortable making left turns at 106. Left turn movements can be made at Access 106 - no change proposed for Access 108.
Interested Developer	**ACCESS 53 and 61** - Developer interested in potential for 3/4 movement at both Access 53 and 61.	53/61	53-conditional 3/4 movement, 61-conditional 3/4 movement (conditions changed)	Conditions were removed from Access 53 and it will be a 3/4 movement. Access 61 is a conditional 3/4 movement and is conditional upon the developer demonstrating the left turn movements meet TEDS requirements based on projected traffic volumes. Access 61 will be restricted to RIRO if safety or operational issues develop.
Willi Goemmel	**ACCESS #69** - E Park Avenue - Extra traffic would not be good using Park Aveune	69	69- Safety RIRO (no change)	Park Avenue will be restricted to RIRO when a median is constructed on Patterson. It has the potential to close if safety or operational issues ever occurred at that location due to its proximity to 1st St. Alternate access to 1st Street already exists. The access restrictions are not expected to increase traffic to the neighborhood.
Randall Zmerzli	**ACCESS 70 and 71** - Property owner at Access 70 and 71.	70/71	70-closed (no change), 71-conditional RIRO(no change)	Add cross access between 71 and 72. Access 71 will close upon redevelopment.
Dan O'Connor	**ACCESS 70 and 71** - Potential buyer for Access 70 and 71. Interested in maintaining one access to Patterson in addition to the Lost Lane access currently proposed by the plan.	70/71	70-closed (no change), 71-conditional RIRO(no change)	Add cross access between 71 and 72. Access 71 will close upon redevelopment.

Name	Area/Location of Concern / Public Comments	Access Point(s)	Draft Condition (January 2021)	Changes Made to Final Draft ACP (April 2021)
John. E Smith	**ACCESS #86** - Mira Vista Rd - Don't limit this intersection to RI / RO only.	86/86a/93	86 - Conditional RIRO, 86a - Conditional 3/4, 93 - Conditional RIRO	Eliminate 86a. Make 86 and 93 conditional 3/4 with conditions to restrict to RIRO if safety or operational issues develop.
Ronald W Gibbs	**ACCESS # 116 and #117** - Wants 3/4 Movement for west bound Patterson Traffic in to Village Fair Shopping Center @ 12th and Patterson	114/116/117	114-conditional RIRO, 116-RIRO, 117- closed	Change Access 117 to RIRO. Change Access 116 to conditional RIRO - cannot close until truck circulation can be accommodated on site. 3/4 movement at 116 was evaluated and determined to be too close to 12th St. Change access 114 to conditional 3/4 - conditioned upon providing access to parcels both east/west.
Patricia Star	**ACCESS #129 and #130** - Concerned with safety issues and access to Patterson Gardens Townhomes between 12th and 15th Streets	129/130	129-RIRO, 130- right-out only (no change)	Change Access 129 to conditional 3/4 with conditions to restrict to RIRO if safety or operational issues develop.
Gloria J Deschamp	**ACCESS #156** - Mt View Drive - Mantey Heights - I have had no problems navigating the entering and existing onto Patterson Road, no to any closures.	156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. An option to select either 156 or 157 as a conditional full movement to be restricted to 3/4 if safety/ operational issues occur will be included in the Plan. The other access will become RIRO. From an operational/ safety/ spacing standpoint, 156 is preferred. From the neighborhood's perspective, 157 is preferred, but 157 can only be implemented if sight distance is improved to meets standards. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.
Janice E Hart	**ACCESS # 156-158 and #160-163** - Mantey Heights - Access from the east	156/157/158/161/163	156-RIRO, 157 - RIRO, 158-Closed, 161-3/4 movement (no change), 163- RIRO)(no change)	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. An option to select either 156 or 157 as a conditional full movement to be restricted to 3/4 if safety/ operational issues occur will be included in the Plan. The other access will become RIRO. From an operational/ safety/ spacing standpoint, 156 is preferred. From the neighborhood's perspective, 157 is preferred, but 157 can only be implemented if sight distance is improved to meets standards. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.

Name	Area/Location of Concern / Public Comments	Access Point(s)	Draft Condition (January 2021)	Changes Made to Final Draft ACP (April 2021)
Kitty Nicholason	**Access #157 and #158** - Don't close #158, easier to see from #158 than #157 (Santa Fe Drive, Mantey Heights)	156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. An option to select either 156 or 157 as a conditional full movement to be restricted to 3/4 if safety/ operational issues occur will be included in the Plan. The other access will become RIRO. From an operational/ safety/ spacing standpoint, 156 is preferred. From the neighborhood's perspective, 157 is preferred, but 157 can only be implemented if sight distance is improved to meets standards. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.
Jeff Anderson	**Access #157 and #158** - Don't close #158, easier to see from #158 than #157 (Santa Fe Drive, Mantey Heights) Santa Fe Drive, Mantey Heights	156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. An option to select either 156 or 157 as a conditional full movement to be restricted to 3/4 if safety/ operational issues occur will be included in the Plan. The other access will become RIRO. From an operational/ safety/ spacing standpoint, 156 is preferred. From the neighborhood's perspective, 157 is preferred, but 157 can only be implemented if sight distance is improved to meets standards. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.
Karen E Perrin	**Access #157 and #158** - Don't close #158, easier to see from #158 than #157 (Santa Fe Drive, Mantey Heights)	156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. An option to select either 156 or 157 as a conditional full movement to be restricted to 3/4 if safety/ operational issues occur will be included in the Plan. The other access will become RIRO. From an operational/ safety/ spacing standpoint, 156 is preferred. From the neighborhood's perspective, 157 is preferred, but 157 can only be implemented if sight distance is improved to meets standards. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.

Name	Area/Location of Concern / Public Comments	Access Point(s)	Draft Condition (January 2021)	Changes Made to Final Draft ACP (April 2021)
Ray McGuinness	**Access #157 and #158** - Don't close #158, easier to see from #158 than #157 (Santa Fe Drive, Mantey Heights)	156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. An option to select either 156 or 157 as a conditional full movement to be restricted to 3/4 if safety/ operational issues occur will be included in the Plan. The other access will become RIRO. From an operational/ safety/ spacing standpoint, 156 is preferred. From the neighborhood's perspective, 157 is preferred, but 157 can only be implemented if sight distance is improved to meets standards. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.
Tod Pace	**Access #158** - Don't close #158 (Santa Fe Drive, Mantey Heights)	156/157/158	156-RIRO, 157 - RIRO, 158-Closed	The proximity of Access 158 to 28 Rd is concerning from a safety and operational standpoint. Access 158 will be changed to a safety RIRO- conditions note closure only if safety or operational issues develop. Add connection between Camino Del Rey and Rio Grande. An option to select either 156 or 157 as a conditional full movement to be restricted to 3/4 if safety/ operational issues occur will be included in the Plan. The other access will become RIRO. From an operational/ safety/ spacing standpoint, 156 is preferred. From the neighborhood's perspective, 157 is preferred, but 157 can only be implemented if sight distance is improved to meets standards. Access 161 (E Park Ave) will be a 3/4 movement providing left-turn access from the east. Connection between Camino Del Rey and Rio Grande will connect 163 to 161.
James Vidmar	**ACCESS 159 -** difficult to turn left. Need a connector road between 28 Road and 28 1/4 Road to allow neighborhood to access the 28 1/4 Road traffic light.	159	159-3/4 movement (no change)	City is currently connecting Hawthorne to 28 1/4 Rd to address left-turn out need. This connection was previously identified in the City's Street plan before the ACP.
Brenda Walker	**ACCESS #168** - Don't connect 28 1/4 Road with Hawthorne Drive. Going to 29 Road as an alternate route to go west on Patterson Road adds additional time to commute.	168	168 signalized full movement (no change)	The Hawthorne connection was already planned prior to the ACP and is currently moving forward. You will still be able to use 28 Rd to go west on Patterson. You will just need to reroute to go east on Patterson.
Kaylynn Tompkins	**ACCESS # 184** - 28 3/4 Road - Don't connect Matchett Park with Navajo Way. Against making 28 3/4 Road a RI / RO.	184	184-RIRO (no change)	The plan attempts to balance 3/4 movements to the north and south of Patterson and to provide 3/4 movements where the most vehicles/properties can be served. 28 3/4 is too close to Legends Way to provide a 3/4 movement. The connection between Navajo and Matchett Park is meant to provide alternate routes for the neighborhoods on the north to reach a traffic signal for left turn movements.
Brad Tompkins	**ACCESS #168** - Don't connect 28 1/4 Road with Hawthorne Drive and Matchett Park and with Indian Creek Subdivision, instead provide a connection from Indian Creek to 29 Road. **ACCESS #184** - 28 3/4 Road - Don't like limitiing 28 3/4 Road to right in and right out only.	168/184	168 signalized full movement (no change), 184-RIRO(no change)	City is currently connecting Hawthorne to 28 1/4 Rd to address need. This connection was previously identified in the City's Street plan before the ACP. While a connection from Indian Creek to 29 Road would be beneficial, the availability of land to make that connection without impacting homes in Indian Creek is not available. Crossing of a major drainageway would also be required to connect to 29 Rd.

Name	Area/Location of Concern / Public Comments	Access Point(s)	Draft Condition (January 2021)	Changes Made to Final Draft ACP (April 2021)
Ruth Morrison-Morin	**ACCESS #216** - 29 1/4 Road - Concerned with limiting 29 1/4 Road to right only. To go westbound on Patterson Road will add 3 to 5 minutes to my commute as I will have to go south and make my way over to 29 Road, then sit at a stoplight that backs up in the left turn lane now at Patterson.	216	216-RIRO (no change)	Implementation of this plan will occur over time as needed. A median will be added in this section when safety and operations on Patterson calls for it. In the future, it is anticipated that making left turns from 29 1/4 will become more difficult and finding an alternate route will actually be faster and safer than waiting for a gap in traffic on Patterson Rd. Currently there are no plans to implement a median in this segment.
Margaret E Molnar	**ACCESS #233** - E Greenfield Cir - no access to 29 1/2 Road, 30 Road too far away for circulation	233	233-Safety RIRO(no change)	Access 233 is too close to 29 1/2 Rd to provide left-turns in. When a median is implemented at 29 1/2 Rd, Greenfield will be restricted to RIRO. It will only be closed if safety or operational issues develop. Alternate left-turn in access is available at Placer St. In addition, u-turns are available at either Placer or 30 Rd for left-turn movements out. Out of direction travel to u-turn at Placer St is less than 1/2 mile total.
Laura Johnson	**ACCESS #235 and #244** - Oxbow and Trading Post subdivisions - One full access to these subdivison wold be helpful instead of access required to go to 30 Road.	235/244	235-RIRO, 244-Safety RIRO(no change)	Change 235 to 3/4. 241 is also 3/4 and will provide access to neighborhoods. The plan looks to identify key locations with appropriate spacing for traffic signals for ideal operations on Patterson Rd for full movement intersections, which is basically already in place at 1/2 mile spacing. The plan has identified additional 3/4 movement access between signals where operations are improved and multiple properties/businesses can be served. Access 244 is too close to 30 Rd to provide anything more than RIRO. Alternate access via F 1/4 Rd is available and if safety or operational issues develop at 244, the access will close.
Interested Developer	**ACCESS 246** - Developer interested in RIRO at Access 246	246	246- Conditional RIRO (conditions changed)	Change conditions for 246 conditional RIRO to property owner constructing right turn lane when redevelopment occurs.
Ruth Kinnett	**ACCESS #266** - Grand Valley Drive - Concern this will make Grand Valley Dirve a throughfare.Don't eliminate the center lane, need for turn movements and emergency vehicles.	262/266	262-3/4 movement, 266-RIRO	Change 3/4 movement to Access 266 and change Access 262 to RIRO. Access 266 provides more connectivity and better circulation for the City overall and the location doesn't create overlapping left issues on Patterson. May increase traffic and speeds on Grand Valley, but probably a similar amount of traffic at Gerken with the 3/4 at 262. The plan has considered emergency services and alternate circulation routes for emergency services and the general public.
Daniel Nordmeyer	**ACCESS #266** - Grand Valley Drive - The better choice for a south bound road would be Grand Valley Drive, it is a straight road all the way to E 1/2 Road. The plan for Patterson Road between 30 and 31 Roads needs work.	262/266	262-3/4 movement, 266-RIRO	Change 3/4 movement to Access 266 and change Access 262 to RIRO. We agree that 266 provides more connectivity and better circulation for the City overall and the location doesn't create overlapping left issues on Patterson. May increase traffic and speeds on Grand Valley, but probably a similar amount of traffic at Gerken with the 3/4 at 262.
T. Dykema	**GENERAL COMMENTS** - Enforce traffic laws	N/A	N/A	This plan supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.

NAME	GENERAL COMMENTS	Access Point(s)	Draft Condition (January 2021)	Changes Made to Final Draft ACP (April 2021)
Bruce Schwenke	**GENERAL COMMENTS** - Enforce Traffic Laws. Suggest flashing yellow arrows in intersection turn lanes.	N/A	N/A	This plan supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.The City is considering implementing flashing yellow arrows as funding is available and signals are upgraded.
Tom Matthews	**GENERAL COMMENTS** - All this project will do is direct more traffic onto Patterson Road and 29 Road.	N/A	N/A	This project is meant to allow Patterson to operate to accommodate traffic for it's classification, which is a major arterial. Patterson is a key east-west arterial for the City. If improvements to Patterson are not made, congestion will occur and traffic will look for alternate routes either north or south of Patterson to meet the demand.
Julie Bauer	**GENERAL COMMENTS** - Supports controlling turn movements	N/A	N/A	Thank you for your input.
Katherine Hardwick	**GENERAL COMMENTS** - Don't push traffic into neighborhoods, reduce speed limits and enforce traffic laws	N/A	N/A	This project is meant to allow Patterson to operate to accommodate traffic for it's classification, which is a major arterial. Major arterials proiritize through movements and higher speeds. Patterson is a key east-west arterial for the City. If improvements to Patterson are not made, congestion will occur and traffic will look for alternate routes either north or south of Patterson to meet the demand. This plan also supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.
Molly Nelson	**GENERAL COMMENTS** - Reduce speed limits and enforce traffic laws	N/A	N/A	This project is meant to allow Patterson to operate to accommodate traffic for it's classification, which is a major arterial. Major arterials proiritize through movements and higher speeds. Patterson is a key east-west arterial for the City. If improvements to Patterson are not made, congestion will occur and traffic will look for alternate routes either north or south of Patterson to meet the demand. This plan also supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.
Tiffany Hoover	**GENERAL COMMENTS** - Enforce traffic laws	N/A	N/A	This plan supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.
B Anderson	**GENERAL COMMENTS** - Concerned about the additional traffic in neighborhoods due to the need to access their homes through neighborhood streets that tie into north/south streets such as 30 Road and 31 Road.	N/A	N/A	The plan does result in additional circulation by neighborhood traffic. The volumes anticipated are very low and neighborhood traffic may already be choosing to take these routes during peak hours. We do not believe we have created any cut-through routes that would increase traffic from outside the neighborhood.

NAME	GENERAL COMMENTS	Access Point(s)	Draft Condition (January 2021)	Changes Made to Final Draft ACP (April 2021)
Pamela Gayle Fults	**GENERAL COMMENTS** - Don't approve any new subdivisions that have to access Patterson Rd. Not fair homeowner has to build a new driveway to existing garage when existing driveway is closed to garage.	N/A	N/A	All new subdivisions will be subject to this ACP in the future. Any homes that have access to a garage today have conditions on their access closure to only occur if redevelopment occurs. Otherwise access to the garage remains.
Kent Beverly	**GENERAL COMMENTS** - Enforce traffic laws.	N/A	N/A	This plan supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.
Kevin Molick	My comments don't exactly pertain to the changes proposed on Patterson rd but rather an observation as a newcomer to GJ. I moved my from my Denver home of forty years and a growing recreational manufacturing business here almost three years ago hoping to grow my business and find a slower paced life on the western slope. I live barely 100 yards from Patterson Rd where I get to witness an amazingly huge amount of idiot drivers either " rolling coal" in their oversized noisy air polluting trucks or any number of crotch rockets and noisy little souped up cars intending to see how fast and loud they can get from 28 Rd to 29 Rd! If there ever were a reason to pack up both my home and business this would be it! If it weren't for the fact that we love our house and aren't ones to move as a knee jerk reaction because we live near what friend that's lived here a long time has started the road " Neanderthal Blvd". It makes me incredibly tense every time I venture out onto Patterson (aka Neanderthal). We Don't need to make the road faster! We need to make it a more evenly paced road with ways to slow the stretches down so as to not make it appealing the the " rolling coal trucks and drag racers". I don't have any great suggestions but I think some smarter engineers ought to be able to come up with some solutions. Maybe there needs to be ways to break up the speedways while creating a more even flow.	N/A	N/A	Access Management is a proven technique both in the US and Europe used to make traffic flow smoother and easier and extend the life of arterial corridors. It is not specifically a traffic calming technique, but is meant to improve safety and congestion on the most critical connections and highest volume streets in cities. In addition, raised medians have been shown to have traffic calming results. This project is meant to allow Patterson to operate to accommodate traffic for it's classification, which is a major arterial. Major arterials prioritize through movements and higher speeds. Patterson is a key east-west arterial for the City. If improvements to Patterson are not made, congestion will occur and traffic will look for alternate routes either north or south of Patterson to meet the demand.
Tyler Hardwick	**GENERAL COMMENTS** - Don't push traffic into neighborhoods, reduce speed limits and enforce traffic laws	N/A	N/A	This project is meant to allow Patterson to operate to accommodate traffic for it's classification, which is a major arterial. Major arterials proiritize through movements and higher speeds. Patterson is a key east-west arterial for the City. If improvements to Patterson are not made, congestion will occur and traffic will look for alternate routes either north or south of Patterson to meet the demand. This plan also supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.

NAME	GENERAL COMMENTS	Access Point(s)	Draft Condition (January 2021)	Changes Made to Final Draft ACP (April 2021)
Gwen Costello	**GENERAL COMMENT** - 25 Road and Commerce Blvd - about existing business on Commerce Blvd not being affected as long as new development doesn't occur	35/36/27	35/36-signalized full movement(no change), 27-3/4 movement (no change)	Commerce Blvd will likely be restricted to 3/4 movement with a public project.
Susan Sederstrom	**QUESTION**: (E Greenfield Cir and Patterson Road). Question: What is the definition of "Conditional Safety Access Point"	233	233-Safety RIRO(no change)	Conditional safety access point means if a safety or operational issue develops at this intersection, it will be closed. These are the only conditions that a closure could occur. Alternate access to other streets has been confirmed at all locations with a Conditional Safety designation. Specifically at Greenfield, a circulation via BookCliff Ave is available to multiple other access points.
Danielle Schuster	**QUESTION**: (Mira Vista). "Hello, I live at 306 Belaire Dr. According to the proposed plan our street Mira Vista would eventually be closed once a new street is constructed next door on hospital property. Here are my questions: Will the city of Grand Junction be buying the homes/property from St. Mary's in order to make a new road? Or would the entrance to our neighborhood be controlled by St. Mary's? That sounds worrisome to only be able to access our homes through a private property street. Will this new street (86A) have a street name? How will people know where to turn to access Belaire Dr? Once Mira Vista is closed, will the City make an effort to provide an aesthetically pleasing street closure? (i.e. a brick wall, or row of trees) Or will we be stuck with a florescent metal gate indicating closure? Thank you"	86/86a/93	86 - Conditional RIRO, 86a - Conditional 3/4, 93 - Conditional RIRO	Based on additional public feedback, the plan has been changed as follows:Eliminate 86a. Make 86 and 93 conditional 3/4 with conditions to restrict to RIRO if safety or operational issues develop.

NAME	GENERAL COMMENTS	Access Point(s)	Draft Condition (January 2021)	Changes Made to Final Draft ACP (April 2021)
James Schultz	**GENERAL COMMENTS:** My name is James Schultz and I worked for 30 years as a real estate consultant with Monument Realty, RE\MAX 4000, and RE\MAX Two Rivers from 1981 through 2011. I also have my Accredited Land Consultant designation through the Realty Land Institute, Rocky Mountain Region. I worked on developing land in the county and in the city and created several parcels that were built on, from home sites, recreation sites, and commercial/residential (Multi-Use) along 24 Rd. through Kathy Portner.I have traveled a lot of Europe and of course, a lot of the USA, and I cannot believe you would build (and have built) such attrocities in this county as double round-a-bouts, reverse lane changes (22 Rd Overpass), 1st street from Orchard to Patterson with speed bumps(thanks to Pat Gormley), and others. Now, you are contemplating destroying Patterson Road for 7 miles? Kathy Portner called it "calming traffic". Why don't you force all of the traffic control people to move out along Patterson and see how they like trying to negotiate their travel under those conditions? Watch what happens to emergency vehicles such as fire engines and rescue squads trying to hurry to their destinations. How many people will suffer from that? I'll bet they avoid 1st Street past Pat Gormley's house. Most businesses will be hurt by this plan along Patterson as well.Why not study the means that other growing cities use to make traffic flow smoother and easier. That would be the best thing for all parties, rather than "calming traffic" and making everybody suffer for it. Perhaps a few patrolmen, especially at night, with radar guns would solve the problem spoken of, and raise some money for the City of Grand Junction.Think about the suffering....	N/A	N/A	Access Management is a proven technique both in the US and Europe used to make traffic flow smoother and easier and extend the life of arterial corridors. It is not a traffic calming technique, but is meant to improve safety and congestion on the most critical connections and highest volume streets in cities. The plan has been reviewed with emergency services, alternate routes for circulation have been identified, and improved operations will improve the time to get to the hospital on Patterson. This plan supports law enforcement in being able to enforce traffic laws. Passive traffic control like signage is not proven to work in controlling traffic movements and puts extra pressure on already stretched law enforcement resources to enforce.

Proposed Patterson Rd Access Control Plan (ACP)

April 2021 Draft Public Comments

Additional Public Comments Received

Proposed Patterson Road Access Control Plan April 2021 Draft

May 26, 2021

Grand Junction Speaks
Published Comments for May 19, 2021 Patterson Access Control Meeting
Patterson Road Access Control Plan

I live on Patterson between 1st and 7th, on of the last owner-occupied homes left between mall and 27Road. I have lived there for almost 25 years. Yes, the traffic is increasing, but this plan is not the solution. Connecting 29 Road to the Interstate and finishing that project and developing G Road will make a bigger difference. I really wish the city would look forward! Look at all the growth on the north side, then look at how those people will be able to travel the valley east and west. That is why Patterson is so busy. Options are limited. Develop G Road now while you can and get the 29 Road access to I-70 done. After that, reevaluate Patterson.
Now I would like to address the plan itself in my area. Putting a median in Patterson is exactly the opposite thing to do! In the afternoon when the eastbound traffic is stopped, both lanes can be stopped and full. Has anyone given reasonable thought to the ambulances getting to the hospital and fire trucks from the Pomona station?? They can and do use the center lane all the time!! Keping the center lane open is exactly how people get on and off Patterson!! It is how I have done it safely for 25 years!!
I would ask every council member to come visit and observe what I see out my front window! This is a real invitation! Come look into our backyards on the north side. Then tell me the plan for our area is realistic. Come observe the people walking or riding a bike until they get to Mira Vista and they have to try to cross Patterson because there isn't a sidewalk on the south side. (Someone will be sadly hit and seriously hurt soon.) And notice the bottleneck that is a reality, not just a blip on an aerial view! I'd echo another suggestion that the speed limit needs to be reduced and monitored between 1st and 7th.
Instead of messing with Patterson, develop G Road NOW while you can and get the 29 Road access to I-70 done. After that, reevaluate the needs on Patterson.

05/17/2021 5:05 pm

Ms. Terry Porter
2632 PATTERSON RD
GRAND JCT, 81506-1941

The Patterson Road Access Control Plan misses the mark.

The “right hand turn only”, creates a hardship for those who live in communities along F Road (Patterson) by not allowing them to access their homes or their work by forcing them to find alternative routes through sub-divisions, to gain access to F Road (Patterson) as they commute. The changes will cause traffic into the neighborhoods that are not designed to handle major traffic, I strongly ask you to support our community and find a better alternative. You have to allow our residents who live North and South of F Road the ability to access their homes without asking them to find alternatives that don’t exist.

As an example, with the controlled right-hand turn onto Patterson Road, you will be forcing

people to travel school zones which should have limited traffic for the safety of children. Have you considered the extra traffic on 30 Road and how it will impact Fruitvale Elementary among other schools in the area. What about the emergency services that need to be able to access roads for the protection and security of the people of Grand Junction. Personally, this will force my neighbors and I to travel through the school zone to gain access to town and work, This is not convenient for anyone.

My family has lived and owned our property since 1973. We have seen numerous changes to Patterson Road in the last 48 years. Going from a two-lane road with farms and open space to subdivisions, businesses increasing the traffic on one of the main roads that connect the East and West side of the Grand Valley. With this plan we will lose the right to access to our property that has always been granted to us and the freedom to travel to the West. I strongly oppose this plan. Not a benefit to the citizens of the communities North and South of F Road (Patterson).

What the planning team needs to be focus on is completing:
- The 29 Road access to I-70, leaving it unfinished is not a benefit to anyone.
- An additional artery that travels East to West that can take addition commuters.

Planning team you need to do better, this proposal is not it.

05/17/2021 4:57 pm

Moschetti Family
598 GRAND VALLEY DR
GRAND JUNCTION, 81504

The City should try traffic enforcement first.
Patterson road is a raceway with cars exceeding the speed limit by 10 to 15 MPH.
You very seldom see an officer writing a ticket.

Asking an outside firm to find a fix for Patterson and you will get exactly what the staff tells them they want.
This whole plan makes no sense and is a waste of money.

Go ahead and hook up Hawthorne and you will solve most of the accident at 28 and Patterson without limiting left turns.

05/17/2021 12:48 pm

Larry William Clever
2822 Ridge Drive
Grand Junction, 81506

We, Jack, and Karen Perrin, live in the Mantey Heights area – Jack since 1967 and Karen since 1982. We have an incredibly special neighborhood – one of the oldest "subdivisions" in the Grand Junction area (I would say "City", but we were not in the G.J. City limits until the late 1980's I believe). We have seen F Road go from a two- lane road to 5 lanes and the traffic increase to the point that Patterson Road is now one of the most travelled roads in Grand Junction.
According to the latest flyer from the City, one of the major access management points made is that the City wants to "decrease travel times and provides smoother traffic flow"

(along Patterson Road) – i.e., make it possible for a traveler to get from Clifton to the Mall in the shortest amount of time. This is NOT WHAT A ROAD THAT SERVES RESIDENTIAL PROPERTIES should be about!

Our specific concerns are:

• Speed limits need to be reduced to NO MORE THAN 35 mph. We realize that this is not specifically addressed in the Patterson Road Access Control Plan, but by reducing the speeds – and enforcing the speed limits – the safety of residents entering and leaving Patterson Road will be enhanced – and safety must be a major goal of any access plan.

• The four roads that access Patterson from our neighborhood need to remain as is!!

o With the upcoming changes that are planned for 28 Road, there will be no reason to shut down or limit the access to any of the Mantey Heights access roads. Mantey Heights Drive itself is the most used (and widest) road in the neighborhood. It definitely needs full movement access.

o If we are allowed only one road that allows left-hand turns out of the neighborhood, it will cause traffic to back-up and will make people attempt turns that are unsafe. The ACP will in fact, create a safety hazard that is not present right now.

• We are not in favor of the proposed plan to extend Camino Del Rey to Rio Grand Drive. We were promised by the City of Grand Junction when they developed the Ridge Heights Subdivision that they would not develop that specific road and create a thoroughfare from our neighborhood to Ridge Heights. Apparently promises do not mean a thing to the City! Yes, it would allow us a round-about way to make a left-hand turn to Patterson (after driving through Ridge Height Subdivision, making a left turn onto 28 ¼ Rd – then to Patterson) – but it means creating more traffic for Ridge Heights – a residential neighborhood!! It also means that east bound Patterson Road traffic will exit through our neighborhood when traffic backs-up – going through our residential area – then Ridge Heights -so that they can get to 28 ¼ Rd. more quickly!

o The Mantey Heights roads are narrow roads (pretty much single-lane) with no sidewalks – if you have enjoyed driving our streets on Christmas Eve to enjoy the luminaria display you know what I mean. The residents, many who are older and/or disabled – also children on bikes and people with dogs enjoy walking the neighborhood – which means they are in the streets. By increasing outside traffic to people who are in a hurry, the City is creating a situation that will be endangering our lives and the lives of the rest of our neighbors.

Bottom line: decrease speeds on Patterson Road and then leave our neighborhood roads as they are!

05/16/2021 2:36 pm

Karen E Perrin
131 Carlitos Ave
Grand Junction, 81501

The following comments are submitted by Red Bud, LLC and Village Fair Association, Inc. seeking to have the City change the April 2021 Draft of the Patterson Access Control Plan, (herein the "April 2021 ACP") to provide for ¾ movement access for west bound Patterson traffic into the Village Fair Shopping Center at access point #116, (herein "AP #116").

The Village Fair Shopping Center, (herein "VFSC") is located on the southwest corner of Patterson Road and 12th Street. The VFSC consists of 17 commercial businesses located on a land area of just over 5.5 acres. For over 20 years, Red Bud, LLC has owned the two retail

buildings within the VFSC, which are located at 2695 Patterson Road, and which contain 14 commercial retail units occupied by small locally owned businesses. The VFSC also contains a restaurant building located at 2691 Patterson Road, which is currently a Which Wich sandwich shop; a building located at 2699 Patterson Road, which most recently was occupied as a bank; and, a restaurant building located at 2531 N. 12th Street, which is currently the Breckenridge Ale House. Village Fair Association, Inc. is the Commercial Owner's Association charged with managing the driveways, parking lots, and other common areas of the VFSC.

In the April 2021 ACP the two access points which serve the VFSC from Patterson Road are AP #116 and AP #117. Both AP #116 and AP #117 are currently full movement access points, specifically allowing west bound Patterson Road traffic to access the VFSC, but the 2021 ACP proposes that all west bound Patterson traffic be denied direct access to the VFSC.

The economic viability of the VFSC, and the 17 small locally owned businesses located therein, depends upon west bound Patterson Road traffic being able to easily and directly access the VFSC by a 3/4 movement driveway at AP #116.

AP #116 currently accommodates customer access and truck deliveries to the VFSC, and is currently a full movement driveway. It is planned as a conditional right-in / right-out driveway, to be restricted as a full movement driveway when safety or operational issues occur or a public project is funded to reconstruct the signalized intersection at 12th Street and Patterson Road, and "once on-site truck circulation can be accommodated at another access."

AP #116 should be maintained as an unconditional ¾ movement access point rather than being planned as a conditional right-in / right-out driveway, for the following reasons:

1. WEST BOUND PATTERSON ROAD TRAFFIC CAN SAFELY CROSS EAST BOUND PATTERSON ROAD AT AP #116 BECAUSE OF THE UNIQUE LACK OF FEEDER TRAFFIC ONTO EAST BOUND PATTERSON BETWEEN 7TH STREET AND 12TH STREET.

Traffic from west bound Patterson Road turning across the two east bound lanes of Patterson Road does not now, and will not in the future, pose any traffic safety concerns. The south side of Patterson Road between 7th Street and 12th Street has only six access points contributing limited traffic to east bound Patterson over this ½ mile stretch. The lack of traffic turning onto east bound Patterson Road in this area is because the Grand Valley Irrigation Canal parallels the south side of Patterson Road for a considerable distance, so there are only a few access points to feed vehicle traffic on to east bound Patterson Road. Because of the lack of access points onto the south side of Patterson Road, the signal at 7th Street allows for consistent wide breaks in the traffic on east bound Patterson, which easily and safely accommodate vehicles turning from west bound Patterson across east bound Patterson.

2. AP #116 WHICH SERVES THE VFSC, AND IS CURRENTLY PLANNED AS A CONDITIONAL RIGHT-IN / RIGHT-OUT ACCESS POINT, IS LOCATED 85 FEET FURTHER FROM THE 12TH STREET INTERSECTION THAN AP #123 WHICH SERVES THE CITY MARKET PROPERTY AND WHICH IS PLANNED AS A ¾ MOVEMENT ACCESS POINT FOR WEST BOUND PATTERSON ROAD TRAFFIC.

Fundamental fairness would dictate that if AP #123 can safely remain a ¾ movement

access point to the City Market property for west bound Patterson traffic, then AP #116 can also remain a ¾ movement access point serving the VFSC. AP #116 is located 377 feet west of the west right-of-way line for 12th Street, while AP #123, the ¾ movement access point serving the City Market property, is only 292 feet east of the east right-of-way line for 12th Street. AP #116 is 85 feet further from the 12th Street intersection than AP #123.

While City Staff has argued that the traffic que for AP #116 will back traffic toward the 12th Street intersection, while the que for AP #123 backs traffic away from 12th Street, we have pointed out that VFSC only needs a two car que in order to accommodate AP #116 as a ¾ movement access point. AP #116 currently works fine as a full movement driveway, as does AP #117. AP #117 currently has a two car que and is approximately 110 feet closer to the 12th Street than AP #116. It presents no operational or safely issues.

Since the April 2021 ACP now provides for a ¾ movement access point at AP #114 serving the property just west of the VFSC, the same center lane should accommodate both the ¾ movement access at AP #116 and a continuous and longer que for AP #114, without creating any risk of traffic backup onto the west bound travel lanes of Patterson.

Allowing ¾ traffic movement at AP #116 would support 17 local businesses on 5.5 acres, without causing the start of the ¾ movement que to be located any closer to the 12th Street intersection than the current ¾ movement driveway (AP #123) which serves the City Market property.

We would request that you change the April 2021 ACP to provide that AP #116 be a non-conditional ¾ movement access point serving the VFSC.

Ronald W. Gibbs, President
Village Fair Association, Inc.

Ronald W. Gibbs, Manager
Red Bud, LLC

05/16/2021 11:56 am

Ronald W Gibbs
2258 Willow Wood RD
Grand Junction, 81507

I live in the Cody Subdivision and I never have a hard time crossing Patterson. I do have to wait for traffic to clear in each direction but very doable. If I had to do right in, right out it would take me way out of my way to where I need to go causing more congestion in those areas and using much more gas. Maybe in areas with more traffic this may work but out past 29 road I don't see that as needed. Why don't you want to widen the road, that makes much more sense to me. The only accidents I have seen while traveling Patterson is at lights anyway, not as people are coming on or getting off Patterson at other streets. What are the accident rates on the side streets? What are the accidents at lights? The only accident I had on Patterson was stopped at a light and being rear ended. Are any of the planning committee that has suggested this living close to Patterson? I'm very concerned what this will do and I think it's as bad of an idea as backwards parking on 7th street was a few years ago. Only to cost more in the future to correct.

05/14/2021 8:50 am

Verna Bunn
591 Eastwood St.

RECEIVED
MAY 18 2021
BY:

May 14, 2021

To: Grand Junction City Council
Re. Mantey Heights Subdivision, Grand Junction, Colorado, Proposed Patterson Road ACP

Dear Council Members:

Paramount Statement: Using the most forceful (polite) language, Mantey Heights Subdivision egress/ingress points to Patterson Road (Mt. View Drive, Mantey Heights Drive and Santa Fe Drive) NEED TO REMAIN AS CURRENTLY ESTABLISHED.

Why?

Mantey Heights Subdivision is shaped in a 'U' (or more precisely as a 'W') with the three main egress/ingress points available to residents—Mt. View Drive, Mantey Heights Drive and Santa Fe Drive. It is imperative that these three points of connection with Patterson Road be 'left intact' and as currently configured. This is SO important for reasons of Safety and ease of use. (Safety for emergency vehicles gaining access to the Subdivision and ease of use for residents needing to 'turn left' to go to St. Mary's and Community Hospitals)

Ease of Use:

Even during 'morning and evening rush hour', residents of Mantey Heights can gain entrance to Patterson Road.
During 'rush hour', residents only have to 'wait for a break in the traffic on Patterson Road'.
This 'break in traffic' during rush hour is supplied by the Stop Lights at 27 ½ on the west and 28 ¼ on the east. AT OTHER TIMES OF THE DAY, IT IS VERY EASY TO GAIN ENTRANCE ONTO PATTERSON ROAD. Point: If something isn't 'broke', please don't try to fix it!

Another Factor-near term:

There is a 'City Project' set for Spring 2022 that will 'extend' 28 ¼ going north from Patterson Road up to Hawthorn. This Project will probably relieve some of the traffic 'pressure' on Patterson Road. Thank You for this!!

Expression of Appreciation:

Messieurs Trent Prall and Rick Dorris are appreciated and commended for taking time to visit our subdivision citizens and listen to our concerns. BRAVO!!!!

Thomas Conrad Tucker Mary Tucker

Thomas Conrad and Mary Tucker, 2551 Santa Fe Drive, Grand Junction, CO 81501
970-245-5356

From: jeanne parkhurst <jeannepark7777@msn.com>
Sent: Wednesday, May 26, 2021 9:17 AM
To: Council <council@gjcity.org>
Subject: Patterson Access Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Sent from Mail for Windows 10
Dear City council leaders,

We live in Mantey heights and have been following closely the future plans for Patterson access to our area. We have had many meetings of just the residents and then planning commission representatives to clarify the intent and to express our own concerns.

Our needs have not changed . We do not want access to our neighborhood closed off at any street. We are not a two way street and the circle from Santa FE to Mantey Heights Rd allows for both residents and commercial vehicles plus fire, ambulance, garbage etc to enter and exit easily.
Except for a portion of Santa FE the roads are sub standard, no curb or sidewalks and the matt width is narrow and need to be improved or brought up to code.

We want to be able to get to St Mary 's and City Market which is a left turn. We are some of the original residents to this area of GJ and the roads should not be compromised.

Separate from your plan to make it easier to travel fast on Patterson we wish to have the speed limit at 35 miles an hr for safety and have people ticketed to encourage this behavior. This is the least expensive solution to helping control traffic . There are other Rd's that could be developed for your plan. Randall Reitz has pointed out that the inconvenience to residents and people accessing services is inconvenient and contributes to the congestion on Patterson.

Please listen to these concerns . Jeanne and George Parkhurst

5/26/21

Dear Mayor and City Council Members,

I am writing this letter in regard to the City of Grand Junction, Colorado, "Patterson Road Access Control Plan". I am a resident in the Mantey Heights neighborhood. I have lived in this neighborhood over 31 years.

This plan still needs a lot of work, it should not be considered for final approval. There are many flaws to this plan and not enough consideration and concern for the residents who live off of the Patterson Road corridor.

This plan proposes to:

SAFETY

Reduces number of conflict crashes

According to the Grand Junction Police Department there have been zero automobile accidents in the Mantey Heights section of Patterson Road, which includes; Mount View Drive, Mantey Heights Drive, Santa Fe Drive and Park Ave. in 2019 and 2020.

At one of our neighborhood meetings with the Director of Public Works, Trent Prall, he suggested that after turning right, we drive down to the nearest traffic light which would be Patterson Road and 28 1/4 Road and make a U-turn in order to go west on Patterson Road. Seriously? In my mind that seems way more dangerous than turning left on any neighborhood street.

Provides safe access to businesses and residents

This is a flawed statement. How can access be safe if there is only one street out of four that you can turn left on? The majority of residents in the Mantey Heights neighborhood turn left. How can that be safe if cars are backed up on the only street that allows a left hand turn? As it is today, we all, (residents in Mantey Heights) use any one of the four streets in our neighborhood to turn left. We all wait patiently for a break in traffic before proceeding with a left hand turn. It is only common sense that patience will not last long if cars are backed up even 3 deep and having to wait for 10-15 minutes to exit because there is only one street that allows for a left hand turn. Impatient drivers don't make safe drivers.

— over —

INCREASED ABILITY TO ACCOMMODATE TRAFFIC DEMANDS

Decreases travel times and provides smoother traffic flow

How can this plan possibly decrease travel times when every neighborhood is required to make a right hand turn only, when exiting the neighborhood? That would mean every person needing to go left for the very short distance of a half mile, can't. Instead, we would be required to travel an extra mile or two and even three to accommodate a right turn only.

Postpones the need for additional lanes for traffic

The city of Grand Junction has been talking about opening 29 road all the way to the interstate and making G Road another east west access since the 1980's. Why is that not being done? We as concerned residents are hearing things like: the city doesn't have the money? Seriously? Those plans have been in the works, I repeat, since the 1980's. Where is the money?

GOOD ACCESS MANAGEMENT IS GOOD FOR BUSINESS

Preserves property values

How are property values preserved when access and exiting into a neighborhood is difficult?

Increases roadway efficiency resulting in broader market area

The section of Patterson Road from 12th street to 32 Road is highly residential. In the Mantey Heights area there are 3 nursing homes. A broader market area is not something this residential area needs.

In summary, Mantey Heights has not had any problems with access or exiting the neighborhood and there should be no need to fix something that does not need to be fixed.
Please, I implore you to stop this "Access Control Plan" until the needs of the people who elected you are considered. We live in this area of concern and we know what our needs are, please listen to us.

Thank you for your time.
Diane Lucero

Diane Lucero

Mayor McDaniel and Councilmembers

Too Extreme

The city paid for another study and this one is for access along Patterson Road. Many comments, from the public, written to city officials clearly explain many shortcomings of the Patterson Access CONTROL Plan, yet it appears the city council members wish to codify the plan with all its apparent flaws as a form of law. The company hired, Stolfus and Associates says the ACP is a living and changeable document, but who has ever had success on changing something that has been codified; the ominous job and cost of providing the burden of proof to get codification changed would be too overwhelming, having to take on all the city departments, elected officials, city attorney and other experts the city would deploy on anyone wanting to make a change to this "living and changeable" document. It seems that if the study has been completed the appropriate city department heads can make good use of any pertinent information as needed. Codifying a plan that has so many people up in arms is too extreme.

Concerned citizen regarding the Patterson Access Control Plan

Gary Lucero

We have attempted to contact you by using the email on the City - City Council website, but we have not had a response from you.

You may also call by telephone if you like. 970-243-9549

Public Comments on the Proposed Patterson Rd Access Control Plan Received on the **April 2021 Draft**

Grand Junction Speaks
Published Comments for May 19, 2021 Patterson Access Control Meeting
Patterson Road Access Control Plan

First, thank you to Trent Prall and others who made time to meet with the MIra Vista neighborhood twice, hear our concerns and make some changes in response to our input! I persist in believing it is a BAD idea to create access 74 onto Patterson Rd where it is a funnel between 26 Rd and Mira Vista. The goal should be to divert traffic AWAY from this area, not bring more in. Any changes should involve traffic flow NE on the proposed extension of Horizon Court to send traffic North or South on 7th St. Some flow might still come back S on 7th to Patterson, then right on Patterson into the 'funnel'. Many would head to F 1/2 or G to go to neighborhoods Northwest and West of Horizon ct. Others who would have proceeded out #74 would likely have headed S on 26 Rd. These parties could still head south, only on 7th street to other areas and avoid the 'funnel'. It is lacking the foresight expected of a long range access plan to do anything that increases traffic on the narrowed stretch from 26 Rd. to Mira Vista.

Closing the Left turn possibility from St. Mary's access 93 sooner rather than later would also help divert traffic from the "funnel". Thank you for your work o this plan and for accepting public input.

Finally, considering a roundabout at Wellington & 7th Street, with pedestrian bridge access to the St. Mary's parking structure would greatly assist in traffic flow through the area, including Patterson and 7th street.

05/11/2021 6:34 pm

Cherlyn Crawford
2551 Mayfair Drive
Grand Junction, 81501

The prospective the city planners have planned for Patterson under the title "Patterson Access Control" is in actuality, not access. Mr. Schram states it well when he said, that if the lights are set correctly, left turns onto and from Patterson are easily accessible as it is. The left turn light on 7th south bound is a super issue. It needs to be set appropriately for the traffic demands.
Another point made is that the argument for safety on turns seems to be mostly at the traffic lights. So, limiting the access to streets with r/i and r/o is not giving us 'safer streets'
All the points Mr. Klesner stated were very true and I agree with them all. Talking to my neighbors they not only don't know about this new project you are proposing, they don't know why. Most agree that all is good now, why mess up a good thing?
Also, the idea that you don't want to put in 7 lanes when it's obvious that at some time that is the route you will go anyways, why do all this? Is this busy work?
This plan is not going to expedite traffic flow, on the contrary, it will cause people to spend more time in their cars and on the roads.
I am opposed to this plan and would like the planners to look at other areas of our streets

that need more attention: 29 Road I-70 access for instance.

05/06/2021 10:10 am

Linda A Lynch
1160 Rood Ave.
GRAND JUNCTION, 81501

I too, am against the plan to limit access on Patterson. Here are the reasons -
1) I know the city feels like they have communicated well about the proposed plans, but I do not feel like this is true. Every (I don't say this lightly) person that I talked with about the proposed plan, that lives off of Patterson did not know about it. I know communication is hard but, in my opinion, people are not informed.
1a) It is hard to keep up with the proposal. Time is a limited commodity. With public hearings changing and moving, We have given up trying to carve out time to attend.
2)I feel the addition of many more right-hand turn lanes would be valuable. This would help slower drivers stay in the right lane and allow better traffic flow. I realize this does not address the left hand accidents but does address the traffic flow.
3) I read "the desire to not have to add additional lanes of traffic to Patterson Road (7 lanes) is paramount." Why is this a bad idea? Is it solely because of land limitations and cost? Starting 7 lanes on Patterson now seems like a logical step that we will eventually head to anyway. So why spend the money on this proposal and then spend more money later in future years?
4) I daily turn left onto and off of Patterson. The limited access will cause frustration by drivers and I would say more accidents. A frustrated driver is a poor driver.
5) Most of all, I am concerned simply about access. To cause drivers to go through neighborhoods, for instance, Spring Valley Circle, will bring down property values and cause problems between residents and businesses. (If I am traveling West on Patterson, and want to turn into Northeast Christian Church, The natural thing would be to go through Spring Valley Circle and come down 271/2, then turning right into the church). I am sure this scenario is repeated many times in the 7 miles of proposed limited access. An alternative route would be to take North Ave or Orchard Ave. Both already being congested roadways. I have not seen, as part of the study, the consequences of the extra strain on these roadways.
In summary, This proposed plan causes extra travel time, confusion by drivers on how to get into business and residents, daily frustration and is only a temporary solution to the problem.
Thank you for allowing this avenue of comments to be used.

05/03/2021 11:51 am

Myron Klesner
2751 Patterson Rd
Grand Junction, 81506

I live in Belhaven Subdivision. RinRout. I work Left. So I will have to go through the neighboring subdivision, lot of children in order to get to work. Or, go way out of my way. Also closing access to the Unity Church at 29 & Patterson. So now those people will have to turn into my subdivision and go into their church, then out through my subdivision, into the neighboring subdivision to leave. This is stupid.

You say there is an access road at the east end of Cascade. Not. Dead end. If you could go through there, you end up in the church's lot. Closed access.
Also, fire dept located at the top of the hill Patterson & 28 3/4 rd. Say there is a fire on Mantey Heights Dr. Oh can't turn left into there, RinRout. Someone's place is on fire and the fire dept has to go a different route. Adds 5- 10 min more burning time. All the dept is a block away!
Seriously people. Think about this. Most accidents that I have seen, and I have lived here in this area for 13 years (Belhaven), in GJ 51 years, happen at the lights!! People running the light because the timer is set for like 3 cars to turn on. Or someone just stupid enough to run the light and the others not paying attention. I have never seen an accident in front of my subdivision, Indian Creek subdivision or the Legends. Top of the hill by the fire dept, yes. Light at 29 & Patterson. Yes.
Obviously, you don't any of you wanting this, live in our areas. Why spend our money on something so stupid as this.

Barb Malone

05/02/2021 2:25 pm

Barbara Malone
585 Belhaven Wat
Grand Junction, 81501

In the area of 29 1/2 Road to 30 Road along Patterson. The proposed changes to the access, on the north side specifically, are not in the best interest of those of us living in that area. I realize that most of us in the area are not inside the city of Grand Junction, and quite frequently it seems like we are forgotten.

In the area of the Oxbow, Trading Post, Little Trio, Single Tree, Aspenwood Meadows, Brookside and Brookwood Subdivisions, there are over 500 homes currently in the area designated to become RIRO only access, and that is without the soon to be subdivision where we were promised Burke Park. The proposal for future medians would force all 500+ homes, some 1000+ vehicles, heading home on East bound Patterson, to make the left turn (north) at 30 Road. Broken Spoke Road alone has over 60 homes, many with multiple vehicles.

Without access to 29 1/2 Road, the subdivisions in that area are not equipped to handle the influx of daily vehicle traffic. And while we are not (yet) inside of the city limits of Grand Junction, this organization may not be aware, but there are no sidewalks, few street lights, and a limited of stop signs within those subdivisions.

For the proposed changes to make functional sense for the area, at a bare minimum F 1/2 Road would need to be connected to 29 1/2 Road. There appears to be new developments in the area of Brett Dr, so additional access at 29 1/2 Road and G Road should be added as well. We would also like to see the City push to connect 29 Road to I-70 to help ease congestion through the middle part of town during peak hours. But ultimately there needs to be a better plan in place for how the City will grow over these proposed 20 years. There are really only 4 main roads that travel west to east; Patterson Road, North Ave, Pitkin/Ute, and Riverside Parkway. Those are all congested during peak times, and without expanding or adding additional thoroughfares the left turn access on Patterson will not be the issue facing the City traffic controllers.

It continues to be frustrating for the City of Grand Junction to make decisions for our area without consulting the people that live in this area. We are nearly completely surrounded by City properties, and yet we have no say in how or when changes are made

05/01/2021 9:42 pm

Rachel Crites
609 Fort Uncompahgre Dr
Grand Junction, 81504

My name is Steve Schram and I currently live at 2720 N 8th Ct. I do have a few issues with your plan as it affects my ingress/egress from N 8th Ct. As long as you do not mess with the light timing on 12th st. there are always gaps allowing for LiLo access from/to N 8th Ct. If you only allow for a RiRo ingress/egress I will be forced to make a rather long detour north on 7th to Horizon, east to the 12th St round about and then south on 12th street to the Patterson-12th st signal light. All just to make a left hand turn onto Patterson to head east. That is too much of an inconvenience if there are presently traffic breaks in the Patterson traffic flow to allow for a left hand turn out of and into N 8th Ct.

Let me make the decision if I want to wait for a break.

As for the light on 7th St., there are issues. There are times when I have to make a left-hand turn from Patterson onto 7th to go south. I can find enough of a traffic break to move across 2 lanes and into the third turn lane. That also tells you that there is enough of a break in traffic to make a left hand turn out of N 8th Ct.

The problem at the 7th st and Patterson turn signal is that there are times the light sequence only gives enough time for a few cars to turn south on 7th. Traffic then backs up down Patterson east of the turn signal until the next left hand signal to turn south on 7th, which can have a longer time. You never know how much time you will get in the turn lane to turn south onto 7th St., it can be aggravatingly short, or long enough to clear the turn lane. You just never know which one you are going to get.

I see the congestion on Patterson and know that something needs to be done. Yet your plan does not address the growing congestion on Patterson. It does not direct traffic off of Patterson, instead it directs traffic onto Patterson. Unless you plan on upping the speed limit to 60 mph or putting in 6 lanes, the number of vehicles moving down Patterson per lane, per minute will develop the same congestion.

A better solution would be to widen Orchard, improve signalling and direct a portion of the traffic off of Patterson onto Orchard.

As an aside, if you want to solve some traffic problems, take the intersection between 1st st,, hiway 6 and 50 and Broadway and put in a round about. What a mess.

04/29/2021 11:12 am

Steve Schram
2720 Nth 8th Ct.
Grand Junction, 81506

David Thornton

From: Rick Dorris
Sent: Friday, May 7, 2021 9:37 AM
To: Prinster, Daniel
Cc: Gara Ross; David Thornton; Heather Rienks; Trenton Prall
Subject: RE: [EXTERNAL EMAIL] Patterson Access Control Plan

Thanks Dan – appreciate the feedback.

You are correct, the pink arrow is identifying a change between different versions of the plan and it is present to show the previous public street at 86A, which would have been near the utility corridor and remove houses, has been deleted.

Thanks,

Rick Dorris, PE, CFM
Development Engineer
City of Grand Junction, CO
970-256-4034
rickdo@gjcity.org

City Hall is currently closed to the public on Tuesdays and Thursdays. City Hall will be open on Mondays, Wednesdays, and Fridays, however, we encourage you to conduct business online, by phone or by appointment as possible. I will be available by email and phone during regular work hours.

From: Prinster, Daniel <dan.prinster@sclhealth.org>
Sent: Friday, May 7, 2021 9:25 AM
To: Rick Dorris <rickdo@gjcity.org>
Cc: Gara Ross <gara.ross@sclhealth.org>; David Thornton <davidth@gjcity.org>; Heather Rienks <heather.rienks@sclhealth.org>
Subject: Re: [EXTERNAL EMAIL] Patterson Access Control Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Rick
Sorry for the late reply. I wanted to confirm that, on behalf of St. Mary's, we can accept the proposed plan. I do want to reiterate that keeping our Patterson entrance (#93 on the image) as multifunctional as possible is our desire. Also, related to entrance 86 and the Mira Vista neighborhood, we are willing to collaborate. But our corporate office (SCL Health) would be opposed to giving away the homes along our property to create a new access road. Finally, I also want to confirm that the pink arrow between 86 and 93 is no longer under consideration. This is a major utility hub and corridor for the hospital and putting an entrance where the arrow is located would be very expensive and disruptive to the hospital.

Good luck with the project. Some of this work has been needed for a while.

Dan

On Wed, Apr 21, 2021 at 10:40 AM Rick Dorris <rickdo@gjcity.org> wrote:

Dan and Gara,

The City is still working on the Access Control Plan we talked to you on months ago. We have increased our public outreach, talked to many people and HOAs, and revised the plan since we last talked. I think it is now more favorable to St. Mary's. The last plan called for a new street between Mira Vista and the St. Mary's access with the existing access being limited to right in right out or possibly right in only. The new plan calls for the existing access to be a conditional 3/4 movement, the Mira Vista access to be a conditional 3/4 movement, and eliminates the new street between the two, see attached map.

The attached table lists the conditions on the movement.

Keep in mind this is a long-range plan and the three conditions that trigger changes are 1) an increase in development that increases traffic by 20%, 2) safety or operational issues arise, or 3) a City funded project occurs. It could be a long time before anything changes from the current situation. If a median project were funded, the City would evaluate to determine if there is enough horizontal room between 7th Street and the existing access to construct back-to-back left turn lanes. If it works, and there are no safety or operational issues, the City will keep the 3/4 movement into the existing access. If it doesn't work, the access would have to be limited to right in right out.

I hope this meets with your approval. Please call or email if you want to discuss. The plan will be presented to City Council on May 19th to discuss and decide what adoption direction to take.

Thanks,

Rick Dorris, PE, CFM
Development Engineer
City of Grand Junction
250 N. 5th Street
Grand Junction, CO 81501
work: 970-256-4034
email: rickdo@gjcity.org

This electronic message and all contents contain information from SCL Health which may be privileged, confidential or otherwise protected from disclosure. The information is intended to be for the addressee only. If you are not the addressee, any disclosure copy distribution or use of the contents of this message is prohibited. If you have received this electronic message in error, please notify us immediately and destroy the original message and all copies.

David Thornton

From: David Thornton
Sent: Monday, May 3, 2021 3:14 PM
To: billcherieanne@bresnan.net
Cc: Trenton Prall; Rick Dorris
Subject: RE: FW: Patterson Rd revised plan

Good afternoon Cheryln,

Thanks for your email and questions and I will try to clarify and answer each question. I know Trent Prall, Public Works Director has set up a meeting for your neighborhood for Tuesday, May 11th at 5:15 pm, we're meeting along the street in front of 306 Belaire Drive.

I will answer each question below and highlight the answers. I have copied Trent Prall and Rick Dorris from the project team to this email. I invite them to add to of better clarify anything I have included here. Thanks, Dave

From: billcherieanne@bresnan.net <billcherieanne@bresnan.net>
Sent: Thursday, April 29, 2021 5:41 PM
To: David Thornton <davidth@gjcity.org>
Subject: RE: FW: Patterson Rd revised plan

Thank you so much for the clarification. I found it!
A few questions:

1) As the owner of 2551 Mayfair Dr., directly south of units 72 & 23 on the Meander to Mira Vista plan, I am wondering if the property owner of 72 & 73 is responsible for paying for these changes, and further, if they or the city is required to do some sort of better fencing between our property to the south or if we would be required to do that (this will create much more activity than the current back yard of one home). Also, how do they get permission to access 2615 Patterson for their driveway? Does this come to pass only if 2615 does more development?

Answer: Changes to accesses 72 and 73 will occur when development occurs Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops and alternate access to Access 73 is available. Cross access agreements required between parcels, and any adjacent properties with same ownership upon redevelopment. Permission to access between parcels would occur with the joint access easement. Fencing/buffering may occur or be required with future redevelopment of these parcels as per the Zoning and Development Code requirements at the time of development.

2) Our neighborhood had suggested St. Mary's access point 93 become only a right out because their flood of traffic as soon as the light stops westbound Patterson traffic is what makes it hard for us to turn Left. I am not clear what a 3/4 access means (because that is what Mira Vista becomes, and we still want to be able to turn left because at many times of the day, we can.

Answer: Movements may be restricted when safety or operational issues occur, or when a public project is funded. Conditions are that movements may be further restricted to Right-In/Right-Out when safety or operational issues occur. Note, allowing ONLY for a right turn out for St Mary's (and NO right turn in) is problematic for the hospital site circulation, ingress for emergency vehicles, etc. Right now Access 93 has full access, but as traffic continues to increase, restrictions may occur and limit traffic to a right in/right out only. These right in/right out conditions are the same for Access 86 at Mira Vista Road.

3) Is the pink blob at the corner of Bel Air and Mira Vista there to signify a change ie, that you are no longer merging the Mira Vista neighborhood access with St. Mary's by removing a house?

Answer: Yes the pink arrow is showing that there was a change made between the January draft Plan and the new proposed April Draft Plan maps. Yes the ACP no longer is recommending closing Mira Vista Road and is not recommending extending Belaire Drive to the east to connect to the Hospital facility's internal road network.

An unrelated note, but one I believe worthy of consideration, is a roundabout at the intersection of Wellington and 7th street. All of this expansion would be on St. Mary's property to accommodate their flow of traffic in and out of the parking garage and help flow IF the access on Patterson did not allow a west bound (left) exit.
Answer: There is no round-about consideration for Wellington Avenue at this time.

I see no acknowledgement that the utility easement between 2551 Mayfair Drive and plan property 72 contains an irrigation ditch which runs from the southwest corner of 2615 Patterson north and west of two duplexes, then back east to enter between the above mentioned properties (as well as power poles). This ditch continues east until it crosses under Patterson Rd at access 80 and continues in a north east trajectory where you have proposed cross accesses north of access 81-90. These are a part of the Fruitridge Ditch system laterals. The slope is almost flat and requires regular cleanout even of those areas that are piped due to low water flow and minimal slope. Burying it all is NOT a workable option unless someone plans to pay for a pressurized system (meaning community tax dollars and not the victims of this traffic management plan).
Answer: Consideration of utility easements and irrigation facilities will be considered at the time of street construction affecting these, it is not part of the Patterson Road Access Control Plan (ACP).

Thank you for your time and clarification.
Cherlyn Crawford

From: "David Thornton"
To: "billcherieanne@bresnan.net"
Cc: "Trenton Prall", "Rick Dorris"
Sent: Thursday April 29 2021 6:20:41PM
Subject: FW: Patterson Rd revised plan

Cherlyn,

You will find the maps as individual map sheets under "Files" as you scroll down on the GJSpeaks.com website past the "Staff Presentation". You will want to click on the Meander Drive to Mira Vista Road file.

David Thornton

From: BRENDA STJOHN - Voicemail box 1450 <voicemail-noreply@jivecommunications.com>
Sent: Monday, May 3, 2021 1:59 PM
To: David Thornton
Subject: Voicemail from BRENDA STJOHN at (970) 433-3321 on May 3 2021 1:59 PM
Attachments: 1620071941-00000bf6.mp3

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

You received a new voicemail message

New voicemail message

Time: Monday, May 3 2021 1:59 PM

From: BRENDA STJOHN (970) 433-3321

Duration: 20 seconds

Voicemail box: 1450

© 2021 LogMeIn Inc
320 Summer St, Boston, MA 02210, United States
Follow us on Twitter, LinkedIn, Facebook

May 4, 2021
Spoke to Brenda St John about Patterson Rd Access near 28 1/4 Road and Mutchett Park. She is good with ACP and its recommendations.

David Thornton

From: Trenton Prall
Sent: Friday, April 23, 2021 5:40 PM
To: Gary Lucero
Cc: Rick Dorris; David Thornton
Subject: Re: Mantey Heights / Patterson Access Control Plan
Attachments: Patterson Rd ACP - Mantey Heights Changes 20210423.pdf

Mr. Lucero,

I really appreciated the March 18 neighborhood meeting and wanted to follow up with you on the changes that have been made since then. For your reference I have attached the revised map and specific text from the plan for each of the access points for your reference. The primary changes are noted with pink arrows on the first page of the exhibits.

Access 156 is now a conditional full motion.
Access 158 is now a right-in/right-out unless safety concerns arise.

Please also note the light pink line that depicts a proposed connection between Camino Del Rey and Rio Grande Dr which will provide the Mantey Heights neighborhood an opportunity to get out to 28 1/4 Road and the signalized intersections there.

We realize that there are some geometrics and landscaping that will need to be addressed within the Mantey Heights before some of the modifications to Patterson access controls could be implemented.

I would also like to schedule another neighborhood meeting the week of May 10th. I am available after 5:00 Monday or after 4:00 on Thursday that week. Please let me know what may work for you and your neighborhood.

Thank you,

Trent Prall, PE
Public Works Director
City of Grand Junction
970-256-4047 / 970-201-6384

From: Trenton Prall <trentonp@gjcity.org>
Sent: Thursday, April 22, 2021 9:34 AM
To: Gary Lucero <lindyfever@yahoo.com>
Subject: Re: Mantey Heights

Ms. Lucero,

Here is the latest on the Patterson Road Access Control Plan.

We have received a fair amount of feedback and will be incorporating that into a final draft that will be available on www.GJSpeaks.com early next week. A newsletter will also be sent out to 2600 recipients as well outlining the new time frame. You will be able to provide comments at the website through Monday, May 17th at 5:30 pm. City Council will be discussing the ACP with the Planning Team at the May 19th City Council meeting at 5:30 pm. The tentative schedule for Plan adoption is a public hearing with Planning Commission in June and public hearing before City Council in July.

I will be personally sending you a copy of the revised plans pertaining to the Mantey Heights neighborhood tomorrow.

I would also like to schedule another neighborhood meeting the week of May 10th. I am available after 5:00 Monday and Wednesday or after 4:00 on Thursday that week. Please let me know what may work for you and your neighborhood.

Thank you,

Trent Prall, PE
Public Works Director
City of Grand Junction
970-256-4047 / 970-201-6384

From: Gary Lucero <lindyfever@yahoo.com>
Sent: Thursday, April 22, 2021 9:31 AM
To: Trenton Prall <trentonp@gjcity.org>
Subject: Re: Mantey Heights

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Hi Trent.
I have not heard anything from you for three weeks.
Do you have any updates?
Thanks

On Tuesday, March 30, 2021, 4:50:48 PM MDT, Trenton Prall <trentonp@gjcity.org> wrote:

Gary,

The soonest Planning Commission meeting at this point would be May 11 with City Council proposed for June 2.

We will be preparing a new draft of the Access Control Plan for review and will notice everyone as we did a few weeks ago.

Once the draft is available for review, I would like to have another neighborhood meeting in the late April time frame.

In the meantime, if you have any questions please let me know.

Thank you,

Trent Prall, PE
Public Works Director
City of Grand Junction
970-256-4047 / 970-201-6384
trentonp@gjcity.org

From: Gary Lucero <lindyfever@yahoo.com>
Sent: Tuesday, March 30, 2021 1:37 PM
To: Trenton Prall <trentonp@gjcity.org>
Subject: Mantey Heights

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Hi Trent.
Please advise as to what the new meeting schedule is with GJ Planning and the GJ Council.

Gary Lucero

p.s. Please confirm that you received this email

PATTERSON ROAD ACP EXHIBIT

LEGEND

- BUS STOP
- BUS STOP - PULL OFF
- CROSS ACCESS - EXISTING
- CROSS ACCESS - PROPOSED
- PARCEL
- TRAIL
- PROPOSED CITY STREET OR PRIVATE CONNECTION
- PLANNED CITY STREET
- PLAN CHANGES SINCE JANUARY ACP PLAN

ACCESS POINT INFORMATION

- SIGNALIZED FULL MOVEMENT
- UNSIGNALIZED FULL MOVEMENT
- 3/4 MOVEMENT
- RIGHT IN - RIGHT OUT
- CLOSE
- SIGNALIZED INTERSECTION
- RIGHT IN ONLY
- RIGHT OUT ONLY
- G GATED ACCESS POINT
- C CONDITIONAL ACCESS POINT
  SEE ACCESS TABLE FOR CONDITIONS.
  TYPICALLY CLOSES WITH REDEVELOPMENT.
- S CONDITIONAL SAFETY ACCESS POINT

PAGE 10

ACCESS CONTROL PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street.
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
152	4.292	RT	2777 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded. Cross access agreements required between parcel no. 2945-121-00-018 and parcel no. 2945-121-00-003 and any adjacent properties with same ownership upon redevelopment.
155	4.356	RT	El Corona Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
156	4.384	RT	Mount View Dr	Unsignalized Full Movement	Conditional Unsignalized Full Movement	Access will be restricted to 3/4 movement when safety or operational issues occur.
157	4.457	RT	Manley Heights Dr	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
158	4.504	RT	Santa Fe Dr	Unsignalized Full Movement	Conditional Safety Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded. If a safety or operational issue develops, the access may be closed - alternate access to E Park Ave available.

ACCESS CONTROL PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
160	4.558	RT	2801 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
161	4.584	RT	E Park Ave	Unsignalized Full Movement	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
162	4.620	RT	2811 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will be closed when property redevelops - access via Camino Del Rey Dr or Rio Grande Drive.
165	4.739	RT	2813, 2815, 2825 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.

David Thornton

From: Trenton Prall
Sent: Friday, April 23, 2021 5:50 PM
To: Danielle Schuster
Cc: Rick Dorris; David Thornton
Subject: Re: Patterson rd plan- Mira Vista dr.
Attachments: Patterson Rd ACP - Mira Vista Changes 20210423.pdf

Danielle,

I really appreciated the March 18 neighborhood meeting and the input provided. I wanted to follow up with you on the changes that have been made since then. For your reference I have attached the revised map and specific text from the plan for each of the access points for your reference. The primary changes are noted with pink arrows on the first page of the attachment.

Access 86 is now a conditional 3/4 movement.
Access 86a has been deleted. That was the proposed access through St. Mary's for the Belaire Dr / Mira Vista neighborhood which was clearly articulated as undesirable for the neighborhood.
Access 93 is now a 3/4 movement specific to St. Mary's.

Please let me know if you have any comments, questions or concerns but look forward to meeting with you and your neighborhood on Tuesday May 11th at 5:15. I appreciate you setting up another opportunity to discuss the proposed changes.

Thank you,

Trent Prall, PE
Public Works Director
City of Grand Junction
970-256-4047 / 970-201-6384

From: Danielle Schuster <dnbschuster@gmail.com>
Sent: Wednesday, April 21, 2021 6:31 AM
To: Trenton Prall <trentonp@gjcity.org>
Subject: Re: Patterson rd plan- Mira Vista dr.

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Trent,
Thank you for the update.
I look forward to seeing the revised plan.

Could we plan for a neighborhood meeting on Tuesday may 11th at 5:15?!

Thanks.

Sent from my iPhone

On Apr 20, 2021, at 17:58, Trenton Prall <trentonp@gjcity.org> wrote:

Ms. Schuster,

Here is the latest on the Patterson Road Access Control Plan.

We have received a fair amount of feedback and will be incorporating that into a final draft that will be available on www.GJSpeaks.com early next week. A newsletter will also be sent out to 2600 recipients as well outlining the new time frame. You will be able to provide comments at the website through Monday, May 17th at 5:30 pm. City Council will be discussing the ACP with the Planning Team at the May 19th City Council meeting at 5:30 pm. The tentative schedule for Plan adoption is a public hearing with Planning Commission in June and public hearing before City Council in July.

I will be personally sending you a copy of the revised plans pertaining to the Mira Vista/Belaire neighborhood by the end of this week.

I would also like to schedule another neighborhood meeting the week of May 10th. I am available after 5:00 Monday through Wednesday or after 4:00 on Thursday that week. Please let me know what may work for you and your neighborhood.

Thank you,

Trent Prall, PE
Public Works Director
City of Grand Junction
970-256-4047 / 970-201-6384

<Outlook-vwtjveiy.png>

From: Danielle Schuster <dnbschuster@gmail.com>
Sent: Tuesday, April 20, 2021 9:07 AM
To: Trenton Prall <trentonp@gjcity.org>
Subject: Re: Patterson rd plan- Mira Vista dr.

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Good morning,

As we near the end of April I am checking in to see if we need to schedule a follow-up meeting with the neighborhood. If you team has done any revising to the plans I know we would be interested in that.

As far as the petition, may I give that to you at the next meeting? I have a neighbor or two that are quite elusive and I'd like to give them a chance to sign if they would like.

Thanks Trent!

~Danielle

On Mar 30, 2021, at 5:49 PM, Trenton Prall <trentonp@gjcity.org> wrote:

Danielle,

I appreciate the check-in as well as you taking the lead on representing your neighborhood. I was out last week but yesterday we have had discussions with our consultant regarding your neighborhood and a couple of others along the corridor. We have a follow up meeting scheduled Thursday. We will be preparing a new draft of the Access Control Plan for review and will notice everyone as we did a few weeks ago. The soonest Planning Commission meeting at this point would be May 11 with City Council proposed for June 2.

Once the revised draft is available for review, I would like to have another neighborhood meeting in the late April time frame.

As far as sharing the petition, if you could please scan it and email it to me that would be great. I can pick up a hard copy when we meet later in April.

In the meantime, if you have any questions please let me know.

Thank you,

Trent Prall, PE
Public Works Director
City of Grand Junction
970-256-4047 / 970-201-6384
trentonp@gjcity.org

<pastedImagebase640.png>

From: Danielle Schuster <dnbschuster@gmail.com>
Sent: Tuesday, March 30, 2021 9:33 AM
To: Trenton Prall <trentonp@gjcity.org>
Subject: Patterson rd plan- Mira Vista dr.

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Hello Trent,

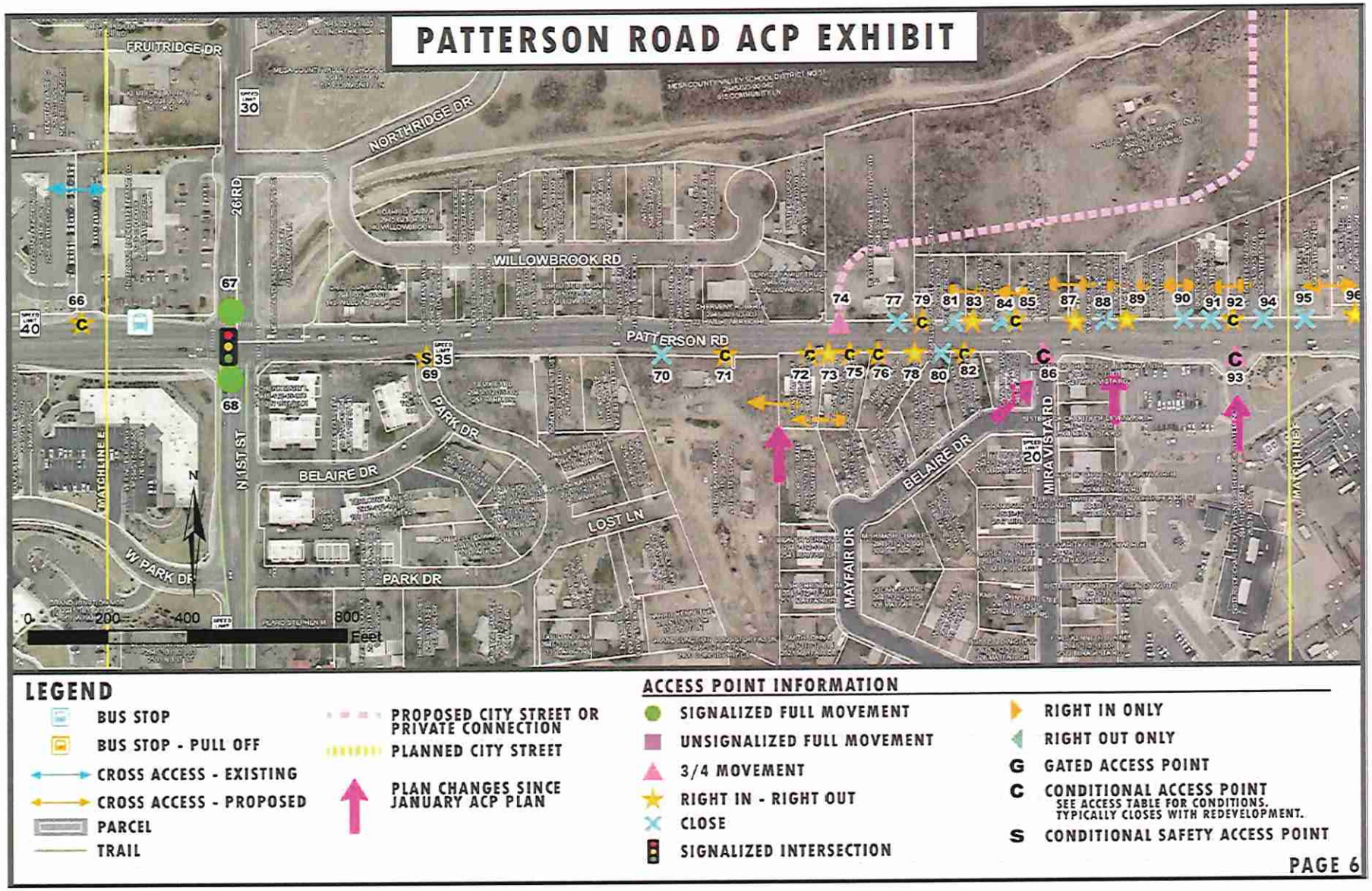
First, Thank you again for your time on the 18th. I know you must have a lot of people bending your ear about these plans and it seems to get people worked up, so I thank you for being so patient and professional.

As the organizer of our neighborhood group I am just checking in with you about the plan for Mira Vista.
Has there been any further conversation or change in plans that I may relate to my neighbors? I understand the next planning commission meeting is April 27th?

I have a petition that has been signed by a majority of the neighborhood asking that the entrance not be modified. I do not know if this document will change anything but we are hoping to make our position known. Can I get this document to you at some time before the 27th? I know it is past the public comment timeframe, however I would like it to be in the record along with our covenants.

Best,

Danielle Schuster
306 Belaire Dr.


PATTERSON ROAD ACP EXHIBIT
FRUITRIDGE DR
NORTHRIDGE DR
26 RD
WILLOWBROOK RD
PATTERSON RD
N 1ST ST
PARK DR
BELAIRE DR
LOST LN
W PARK DR
MAYFAIR DR
MIRAVISTA RD
HATCHLINE E
0 200 400 800 Feet
LEGEND
BUS STOP
BUS STOP - PULL OFF
CROSS ACCESS - EXISTING
CROSS ACCESS - PROPOSED
PARCEL
TRAIL
PROPOSED CITY STREET OR PRIVATE CONNECTION
PLANNED CITY STREET
PLAN CHANGES SINCE JANUARY ACP PLAN
ACCESS POINT INFORMATION
SIGNALIZED FULL MOVEMENT
UNSIGNALIZED FULL MOVEMENT
3/4 MOVEMENT
RIGHT IN - RIGHT OUT
CLOSE
SIGNALIZED INTERSECTION
RIGHT IN ONLY
RIGHT OUT ONLY
G GATED ACCESS POINT
C CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.
S CONDITIONAL SAFETY ACCESS POINT
PAGE 6

ACCESS CONTROL PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
70	2.651	RT	2615 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 71	When property redevelops, safety or operational issues occur, or when a public project is funded.
71	2.674	RT	2615 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops - access via Lost Lane. Cross access agreements required between parcel no. 2945-112-00-004 and parcel no. 2945-112-11-018 and any adjacent properties with same ownership upon redevelopment.
72	2.706	RT	2621 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops and alternate acccess to Access 73 is available. Cross access agreements required between parcel no. 2945-112-11-018, parcel no 2945-112-11-019, parcel no 2945-112-00-004, and any adjacent properties with same ownership upon redevelopment.
73	2.714	RT	2623 Patterson Rd	Unsignalized Full Movement	Shared Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.Cross access agreements required between parcel no. 2945-112-11-018, parcel no 2945-112-11-019, and any adjacent properties with same ownership upon redevelopment.

ACCESS CONTROL PLAN
PATTERSON ROAD
I-70B(MP 0.000) to Lodgepole St (MP 7.349)

* All access points are defined by the approximate reference point (milepost) (in hundredths of a mile) based on GIS.

1. Oriented from direction of reference point (W-E)
2. MUTCD - Manual on Uniform Traffic Control Devices
3. Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
4. Unless otherwise specified, conditions listed refer to proposed configuration.
5. Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
6. Implement with land development, redevelopment or use change
7. If the City of Grand Junction improves Patterson Road or if safety or operational issues develop, access modifications may be implemented as long as reasonable access to the local street
8. Conditional proposed configurations may be further restricted under certain circumstances. Refer to conditions for implementation.
9. Cross Access Easements shall be required between properties upon redevelopment if the plan shows cross access but easements do not exist.

Access ID No.	Mile Post **	Side	Description	Existing Configuration	Proposed Configuration [2,3,8]	Conditions for Implementation [2,4,5,6,7,9]
75	2.722	RT	2623 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops and alternate acccess to Access 73 is available.Cross access agreements required between parcel no. 2945-112-11-018, parcel no 2945-112-11-019, and any adjacent properties with same ownership upon redevelopment.
76	2.732	RT	2625 Patterson Rd	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops.
78	2.746	RT	2625 Patterson Rd	Unsignalized Full Movement	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
80	2.756	RT	326 Belaire Dr	Unsignalized Full Movement	Close - Access via Belaire Dr	When property redevelops, safety or operational issues occur, or when a public project is funded.
82	2.765	RT	336 Belaire Dr	Unsignalized Full Movement	Conditional Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Access will close when property redevelops - access via Belaire Dr.
86	2.794	RT	Mira Vista Rd	Unsignalized Full Movement	Conditional Unsignalized 3/4 Movement	Movements may be restricted when safety or operational issues occur, or when a public project is funded. Conditions are that movements may be further restricted to Right-In/Right-Out when safety or operational issues occur.

David Thornton

From: Rick Dorris
Sent: Wednesday, April 21, 2021 10:38 AM
To: Gara Ross; dan.prinster@sclhealth.org
Cc: David Thornton
Subject: Patterson Access Control Plan
Attachments: Patterson ACP Access Points Table.pdf; Patterson ACP - 4-16-21 - Maps 6.pdf

Dan and Gara,

The City is still working on the Access Control Plan we talked to you on months ago. We have increased our public outreach, talked to many people and HOAs, and revised the plan since we last talked. I think it is now more favorable to St. Mary's. The last plan called for a new street between Mira Vista and the St. Mary's access with the existing access being limited to right in right out or possibly right in only. The new plan calls for the existing access to be a conditional 3/4 movement, the Mira Vista access to be a conditional 3/4 movement, and eliminates the new street between the two, see attached map.

The attached table lists the conditions on the movement.

Keep in mind this is a long-range plan and the three conditions that trigger changes are 1) an increase in development that increases traffic by 20%, 2) safety or operational issues arise, or 3) a City funded project occurs. It could be a long time before anything changes from the current situation. If a median project were funded, the City would evaluate to determine if there is enough horizontal room between 7th Street and the existing access to construct back-to-back left turn lanes. If it works, and there are no safety or operational issues, the City will keep the 3/4 movement into the existing access. If it doesn't work, the access would have to be limited to right in right out.

I hope this meets with your approval. Please call or email if you want to discuss. The plan will be presented to City Council on May 19th to discuss and decide what adoption direction to take.

Thanks,

Rick Dorris, PE, CFM
Development Engineer
City of Grand Junction
250 N. 5th Street
Grand Junction, CO 81501
work: 970-256-4034
email: rickdo@gjcity.org

David Thornton

From: David Thornton
Sent: Tuesday, April 20, 2021 11:48 AM
To: Ron Gibbs
Cc: Rick Dorris; Trenton Prall
Subject: RE: Village Fair Shopping Center - Patterson Road Access Control plan

Absolutely, I will let you know when Planning Commission will be hearing this item. You can also keep track of the planning process by going to GJSpeaks.com where we will upload the maps and tables soon. The Final Access Control Plan will be available there when its finalized, most likely late May. At GJSpeaks.org you can download documents or print them from your computer directly from the site.

Our current tentative schedule for Planning Commission is late June, but once a date has been finalized, you will be notified.

Thanks for your email and I understand your disappointment.

Dave

From: Ron Gibbs <rongibbs@bresnan.net>
Sent: Tuesday, April 20, 2021 10:41 AM
To: David Thornton <davidth@gjcity.org>
Subject: RE: Village Fair Shopping Center - Patterson Road Access Control plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Mr. Thornton,

I am disappointed in the outcome of our meeting given the comments of you and Rick Dorris at that meeting which seemed favorable to a ¾ movement driveway at Access point #116. Will you please advise me of where and when I can get a hard-copy of the April 2021 Access Control Plan.

Also, will you please keep me informed as to when this matter will go before the Planning Commission, and whether I will be able to attend in person to raise my objections. If I will not be able to attend in person, please give me detailed instructions as to how I will be able to attend the Planning Commission remotely and how I will be able to address the Commissioners at that meeting.

Thanks.

Ron Gibbs, President
Village Fair Association, Inc.

Ron Gibbs, Manager
Red Bud, LLC

David Thornton

From: David Thornton
Sent: Monday, April 19, 2021 3:15 PM
To: Ron Gibbs
Cc: Trenton Prall; Rick Dorris; andrew@stolfusandassociates.com; Michelle Hansen
Subject: RE: Village Fair Shopping Center - Patterson Road Access Control plan

Ron,

Thanks for your email. You were on my list to contact early this week on the latest draft changes to the ACP. We just received the revised April draft over the weekend from the City's Consultant team Stolfus & Associates. They have worked with City staff on each public comment received as part of the public review of the January draft Patterson Road ACP. We have fortunately been able to better analyze how accesses are being used today and expected to be used in the future from the public input received, our conversation with you on site was a great help. Looking into the long term needs of properties along Patterson Road and meeting the goals of the Plan to provide the best access possible as traffic grows to higher levels of congestion is very important. In addition, the desire to not have to add additional lanes of traffic to Patterson Road (ie. 7 lanes) is paramount. The new draft ACP has been modified where possible as an April 2021 Final draft. Within next few days, the maps and tables for Patterson Road will be uploaded to GJSpeaks for public review and comment. Please check GJSpeaks.org for these documents. Here is how the April draft Plan affects your properties.

For the Village Fair Shopping Center area these changes include the following.

	Area/Location of Concern / Public Comments	Access Point(s)	Draft Condition (January 2021)	Changes M
	ACCESS # 116 and #117 - Wants 3/4 Movement for west bound Patterson Traffic in to Village Fair Shopping Center @ 12th and Patterson	114/116/117	114-conditional RIRO, 116-RIRO, 117- closed	Change Acc be accomm Change acc

Unfortunately as you see in the note above, the ¾ movement for Access #116 was determined to be too close to 12th Street even after further investigation and analysis. The long term solutions for the Shopping Center when traffic is at it future levels is for Access #114 to be made into a ¾ movement with cross access internally to the shopping center as Rick and I discussed with you when we met. From an engineering perspective that is the best solution. With that said, just as we discussed previously, this is a long range plan and existing access configurations will remain at this time without the trigger of new development occurring, a City project in the works, or a safety concern arising for a need to make changes.

I know this is not everything you were asking for or that Rick and I had hoped the Plan would provided with the further analysis. Not allowing ¾ movement for Access #116 in the future will require westbound Patterson traffic to turn left at 12th Street, then make a right turn into the shopping center. This movement can be made safely.

Please let us know if you have any further questions or would like to meet.

Thanks,

Dave

David Thornton, AICP
Principal Planner
Community Development Department
City of Grand Junction
www.gjcity.org
Phone: 970-244-1450

From: Ron Gibbs <rongibbs@bresnan.net>
Sent: Monday, April 19, 2021 10:12 AM
To: David Thornton <davidth@gjcity.org>
Subject: Village Fair Shopping Center - Patterson Road Access Control plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Mr. Thornton,

I did not have an email address for Rick Dorris or I would have included him in this email. Would you please forward a copy of this email to him?

I have not heard from you or Rick since our meeting of March 25, 2021, where we discussed potential changes to the Patterson Road Access Control Plan as it affects the Village Fair Shopping Center at access points 116 and 117. It was my understanding that Rick and you were willing to change the plan so that Access Point # 117 was reflected on the plan as a right in/right out driveway, and Access Point # 116 was reflected on the plan as either a full movement access, or at a minimum was a ¾ movement access, allowing left turns into the Village Fair Shopping Center for west bound Patterson Road traffic at this location.

I just wanted to follow up to see where things stand with regard to this matter.

Thank you.

Ronald W. Gibbs, President
Village Fair Association, Inc.

Ronald W. Gibbs, Manager
Red Bud, LLC
2258 Willow Wood RD
Grand Junction, CO 81507

Phone: (970) 242-5482
Email: rongibbs@bresnan.net

David Thornton

From: Isabella Vaz
Sent: Monday, April 12, 2021 12:12 PM
To: Trenton Prall; Rick Dorris; David Thornton; comdev
Subject: FW: Patterson Road Access Control Plan

Looks like this was originally sent to Trent, as well, but I wanted to forward from ComDev inbox as well.

Thank you,

Isabella Vaz
Planning Technician
City of Grand Junction
isabellav@gjcity.org
970.256.4087

From: w.ellinwood@bresnan.net <w.ellinwood@bresnan.net>
Sent: Monday, April 12, 2021 9:40 AM
To: Trenton Prall <trentonp@gjcity.org>; comdev <comdev@gjcity.org>
Subject: Patterson Road Access Control Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Trent Prall, Director of public Works
Rick Dorris, Development Engineer
Planning Commission

I have been a resident of the Mantey Heights neighborhood just south of Patterson Road for 30 years. I am opposed to the City's plan to close-off Sante Fe Drive and route all traffic in and out of the neighborhood via Mantey Heights Drive.

Routing all traffic through Mantey Heights Dr. would destroy the property values and quality of life for residents along that street. People have a lot invested in their homes. Safety would be an issue too. Mantey Heights Dr. is little more than a one-lane road. Two vehicles can't pass in opposite directions without one moving way over. Also, there is not a good line of sight looking west for a turn onto Patterson due to a cement retaining wall. The City hired a consultant (Stolfus and Associates) to formulate this plan, but I'm certain they did not drive through our neighborhood and no residents were interviewed. I suspect the consultation was done from their desks using maps and traffic volume data.

Of course, Patterson Road is an important east-west transportation corridor in the valley and traffic volumes have increased dramatically over the last 30 years. However, there are still many dozens of residential neighborhoods along this corridor, especially east of 12th street. The City seems to have adopted the philosophy of accommodating the ever increasing traffic volumes at all costs, including at the expense of long-standing residential areas. The City should give some consideration to these neighborhoods, and to safety, by first attempting to mitigate the traffic volume and speed on Patterson Rd.

Completion of the 29 Rd-Interstate interchange that has been talked about for so long would help. Another thought is to reduce the speed limit on Patterson to 35 mph between 1st St and 29 Rd. It's already 35 mph between 1st and 12th. If the interchange were open, many drivers would opt for the Interstate for east-west travel rather than go 35 mph on Patterson. Also, there has been little enforcement of the speed limits on Patterson Rd in recent tears. Many vehicles travel at 50 mph or more with impunity. Vehicles commonly speed-up to run a yellow light, making the intersections at 12th and Patterson and 29 Rd and Patterson dangerous. Accident frequency data bears this out.

I understand that changes are contemplated with safety in mind, but the current proposal would decrease traffic safety with regard to Mantey Heights. Even at current traffic volumes, a safe left or right turn from Sante Fe Dr or Mantey Heights Dr can be made most times of the day. Residents of Mantey Heights know this because we all do it several times every day.

Thank you for your consideration.

Sincerely,

William Ellinwood
130 Carlitos Ave.

April 10, 2021

Mr. Trent Prall, Director of Public Works
Mr. Rick Dorris, City Engineer
Planning Commission
City Council

All:

Thank you for your efforts at making Patterson Road safer.

Here are my comments on improving safety from my perspective after living at Carlitos Ave, about a block and half off Patterson and Santa Fe Drive for 30 years.

- Don't close Santa Fe Dr. completely. A right-hand turn only (outbound) is acceptable. It should remain an option to turn inbound into Santa Fe from Patterson. There are times it is the safest option depending on traffic and speeds. That decision is always made when approaching from either direction. We look to see where traffic gaps or cars are in the turn lane and how closely someone is following. There are times when turning in on Santa Fe is not safe, so we proceed to Mantey Heights Dr. We make these decisions in real time when we are entering our subdivision for our safety and those of cars traveling on Patterson.

- Closing Santa Fe would impact the safety of those who live here and negotiate in and out every day successfully. It would also cause a host of unsafe traffic patterns within our neighborhood itself. We have no sidewalks and narrow, almost one-lane roads. Cars deviating all over to get in or out is dangerous for our neighbors.

- Turning left onto Patterson is a safety issue. We need at least one street to do this. Mantey Heights would be ok if you took the fence and retaining wall back 10 feet at 105 Mantey Heights, so there is a line of sight, and you could see oncoming traffic. A deceleration lane to turn into Mantey Heights would also be an answer. If you make this the primary ingress/egress, we need small speed humps to keep the speed at 20mph or less on Mantey Heights.

- Mountain View, the street on the west side of our subdivision, is an underused street and one of the safest for turning on and off Patterson at busy times. Two things would make this option safer. Remove the overgrown juniper bushes at the top of the hill, at 124 Mountain View, so that that corner can be navigated safely. You can see these trees on your city GPS application; they consume nearly half of the street. They need to be removed. It is probably a code enforcement issue. The second improvement would be to remove the decorative wall that the subdivision Corona Del Mar was allowed to construct along Patterson. That would improve the line of sight for a left or right turn out of Mountain View.

- Speed enforcement on Patterson must begin. I sensed at the neighborhood meeting you are aware of this and tired of hearing it. The entire corridor should be 35 mph. When traffic is congested, we are moving at 30 mph, and that is adequate flow. It allows us to turn in and out of our subdivision with improved safety. Why are we restricted in and out because those who have made Patterson an aggressive speedway are breaking the law? Speeding motorists need to be cited.

- Of course, the 29 Rd. Interchange is essential to move cars off of Patterson and onto the Interstate. What would be the process to make that a priority for funding?

- Finally, the Patterson Rd intersections at 12th and 29 Rd. are dangerous because people are speeding, running the yellow/red lights. Every light change, every day. Why not cameras and citations? We have a problem on this road, and we need to employ as many solutions as possible.

Thank you for considering these observations.

Sincerely,

Karen Milbank
karen.milbank@gmail.com
130 Carlitos Ave.
Grand Junction, Co 81501
970 712 0465

April 10, 2021

Mr. Trent Prall, Director of Public Works
Mr. Rick Dorris, City Engineer
Planning Commission
City Council

I have been a resident of the Mantey Heights neighborhood for 30 years. I am opposed to the city's plan to close off Santa Fe Drive and route all traffic in and out of the neighborhood via Mantey Heights Drive.

Routing all traffic through Mantey Heights would destroy all the property value and quality of life for those residents. People have a lot invested in their homes. Safety would be an issue too. Mantey Heights Dr. is little more than a one-lane road. Two vehicles can't pass in the opposite direction without one moving over. Also, there is no good line of sight for a turn onto Patterson due to a cement retaining wall.

There are still dozens of residential neighborhoods along Patterson Rd. Corridor, especially east of 12th St. The City seems to have adopted the philosophy of accommodating the increasing traffic volume at costs, including at the expense of long-standing residential areas. The city should give some consideration to these neighborhoods by attempting to mitigate the traffic volumes and speed on Patterson Rd.

Completion of the 29 Rd.interstate interchange that has been talked about for so long would help. Another thought is to reduce the speed limit on Patterson to 35 mph between 1st and 29 Rd. It's already 35cmph between 1st and 12th St. If the interchange were open most drivers would choose the Interstate. There has been little enforcement of the speed limit along Patterson Rd. in recent years. Many vehicles are traveling at 50 mph or more with impunity. Also, cars commonly speed up to run a yellow light, making the intersections at 12th St. and 29 Rd and Patterson dangerous.

I understand that changes are contemplated with safety in mind, but the current plan would decrease safety. Even at current traffic volumes, a safe left or right turn from Santa Fe or Mantey Heights can be made most times of the day. Residents of Mantey Heights know this because we all do it several times each day.

Thank you for your consideration.

Sincerely,

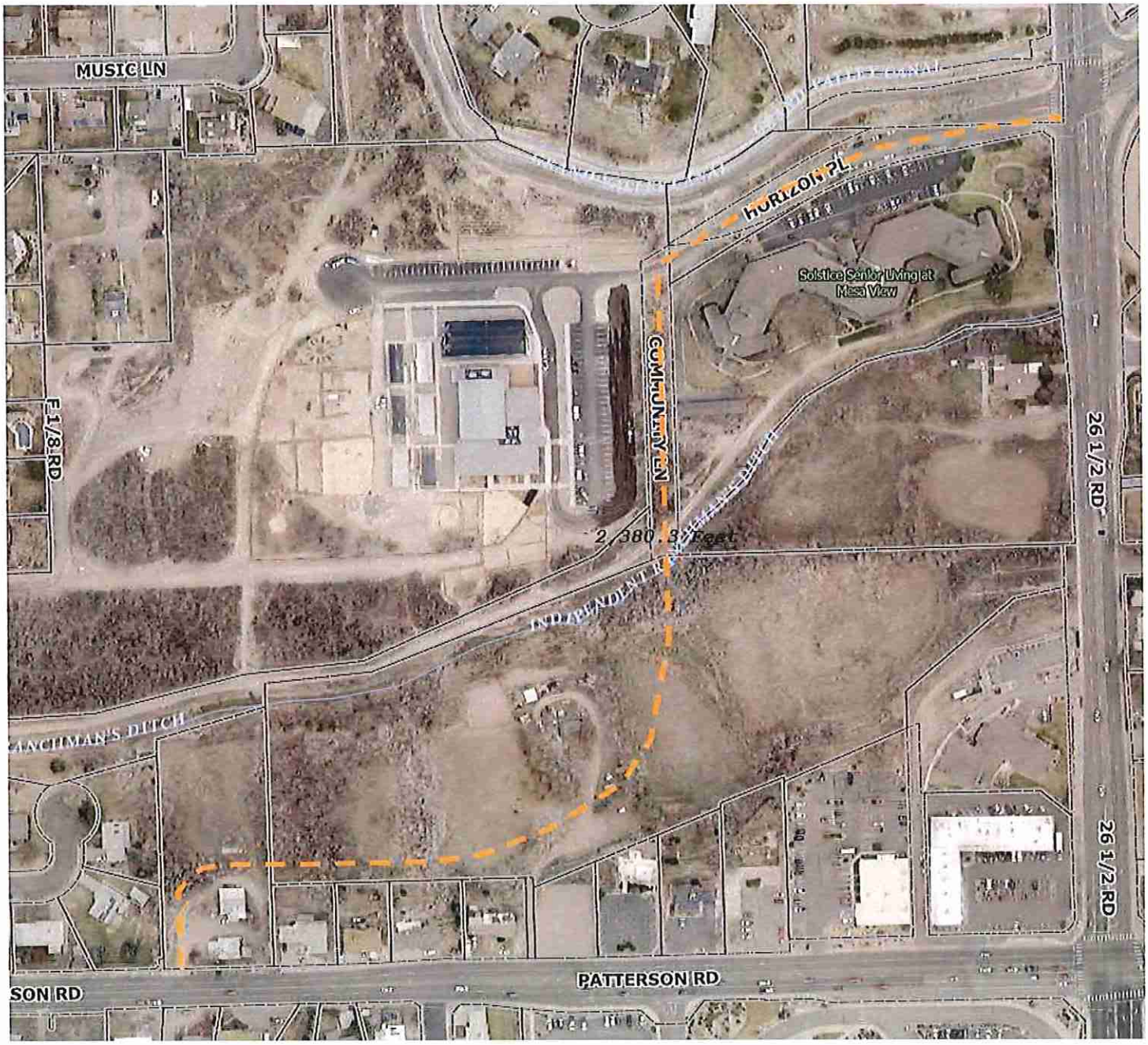
William Ellinwood

David Thornton

From: Trenton Prall
Sent: Friday, April 9, 2021 11:01 AM
To: Carol Beaver
Cc: Rick Dorris; David Thornton; Michelle Hansen; Andrew Amend
Subject: Re: 2626 Patterson Rd.

Good morning Ms. Beaver,

This email is to confirm that the construction of the proposed public street at Access #74 on the proposed Patterson Road Access Control Plan would only occur with redevelopment of the property at 2626 Patterson Road. If the property was redeveloped, the exact alignment/location of the road would be developed at that time. The pink line shown on the access control plan just represents the desired connectivity between Patterson Road, 2626 Patterson Road, 2636 Patterson Road, Community Lane, Horizon Place and ultimately to the signalized intersection at 26 1/2 Rd (aka 7th Street) as shown with the orange dashed line below:



Please let me know if you would like to meet and further discuss while you are in town next week.

Thank you,

Trent Prall, PE
Public Works Director
City of Grand Junction
970-256-4047 / 970-201-6384

STAY POSITIVE | TEST NEGATIVE

From: Carol Beaver <caroljbeaver@yahoo.com>
Sent: Friday, April 9, 2021 8:31 AM
To: Trenton Prall <trentonp@gjcity.org>
Subject: 2626 Patterson Rd.

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Hi Trent,

Following up on our conversation yesterday regarding proposed road directly through my property at 2626 Patterson. #74 is the indicator on the 'plan.'

I am the new owner of the property, and any conversation the the Merkel Family had with the city is no longer valid or in any way to be construed as such.

I am awaiting your email to reaffirm our conversation regarding no road being developed through that property.

Very sincerely,
Carol Beaver

801-706-1590

Additional Public Comments Received on the Proposed Patterson Rd Access Control Plan on the

January 2021 Draft

Not included in the GJSpeaks – Response to Public Comments

David Thornton

From: Trenton Prall
Sent: Friday, April 2, 2021 2:57 PM
To: Rick Dorris; David Thornton
Subject: Fwd: Voicemail from RANDALL ZMERZLI at (970) 261-8692 on Apr 2 2021 2:49 PM
Attachments: 1617396589-00000571.mp3

Dave, Rick,

Can one of you please call this gentleman back regarding the Patterson Road access control plan? I'm on the road this afternoon and I don't have access to the control plan graphically.

If not, just let me know and I will contact him on Monday.

Thank you,

Trent Prall, PE
Public Works Director
City of Grand Junction
970-256-4047 / 970-201-6384

From: RANDALL ZMERZLI - Voicemail box 4047 <voicemail-noreply@jivecommunications.com>
Sent: Friday, April 2, 2021, 2:50 PM
To: Trenton Prall
Subject: Voicemail from RANDALL ZMERZLI at (970) 261-8692 on Apr 2 2021 2:49 PM

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

4/2/2021
I spoke to RANdy About his property And Access points #70 & #71 As well As future Access to Lost LANE that stubs into his property.
Dave T.

GoTo

You received a new voicemail message

New voicemail message

Time: Friday, April 2 2021 2:49 PM

David Thornton

From: Trenton Prall
Sent: Tuesday, March 30, 2021 4:51 PM
To: Gary Lucero
Cc: Rick Dorris; David Thornton; Tamra Allen
Subject: Re: Mantey Heights

Gary,

The soonest Planning Commission meeting at this point would be May 11 with City Council proposed for June 2.

We will be preparing a new draft of the Access Control Plan for review and will notice everyone as we did a few weeks ago.

Once the draft is available for review, I would like to have another neighborhood meeting in the late April time frame.

In the meantime, if you have any questions please let me know.

Thank you,

Trent Prall, PE
Public Works Director
City of Grand Junction
970-256-4047 / 970-201-6384
trentonp@gjcity.org

From: Gary Lucero <lindyfever@yahoo.com>
Sent: Tuesday, March 30, 2021 1:37 PM
To: Trenton Prall <trentonp@gjcity.org>
Subject: Mantey Heights

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Hi Trent.
Please advise as to what the new meeting schedule is with GJ Planning and the GJ Council.

Gary Lucero

p.s. Please confirm that you received this email

David Thornton

From: Trenton Prall
Sent: Tuesday, March 30, 2021 5:49 PM
To: Danielle Schuster
Cc: Rick Dorris; David Thornton; Tamra Allen
Subject: Re: Patterson rd plan- Mira Vista dr.

Danielle,

I appreciate the check-in as well as you taking the lead on representing your neighborhood. I was out last week but yesterday we have had discussions with our consultant regarding your neighborhood and a couple of others along the corridor. We have a follow up meeting scheduled Thursday. We will be preparing a new draft of the Access Control Plan for review and will notice everyone as we did a few weeks ago. The soonest Planning Commission meeting at this point would be May 11 with City Council proposed for June 2.

Once the revised draft is available for review, I would like to have another neighborhood meeting in the late April time frame.

As far as sharing the petition, if you could please scan it and email it to me that would be great. I can pick up a hard copy when we meet later in April.

In the meantime, if you have any questions please let me know.

Thank you,

Trent Prall, PE
Public Works Director
City of Grand Junction
970-256-4047 / 970-201-6384
trentonp@gjcity.org

From: Danielle Schuster <dnbschuster@gmail.com>
Sent: Tuesday, March 30, 2021 9:33 AM
To: Trenton Prall <trentonp@gjcity.org>
Subject: Patterson rd plan- Mira Vista dr.

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Hello Trent,

First, Thank you again for your time on the 18th. I know you must have a lot of people bending your ear about these plans and it seems to get people worked up, so I thank you for being so patient and professional.

As the organizer of our neighborhood group I am just checking in with you about the plan for Mira Vista.
Has there been any further conversation or change in plans that I may relate to my neighbors? I understand the next planning commission meeting is April 27th?

I have a petition that has been signed by a majority of the neighborhood asking that the entrance not be modified. I do not know if this document will change anything but we are hoping to make our position known. Can I get this document to you at some time before the 27th? I know it is past the public comment timeframe, however I would like it to be in the record along with our covenants.

Best,

Danielle Schuster
306 Belaire Dr.

We, the undersigned homeowners, are opposed to changing the Mira Vista Rd entrance to Patterson Rd from its present location:

1). 2522 Mira Vista Drive Kenneth B Ford

2). 2527 Mira Vista Drive Danny G Knipe

3). 2537 Mira Vista Drive Melissa Shreder

4). 2547 Mira Vista Drive Richard Castle

5). 2557 Mira Vista Drive Nahi Ortiz

6). 328 Mayfair Drive Dwight Russell

7). 318 Mayfair Drive

8). 308 Mayfair Drive

9). 353 Mayfair Drive

10). 343 Mayfair Drive

11). 333 Mayfair Drive

12). 323 Mayfair Drive

13). 313 Mayfair Drive

14). 303 Mayfair Drive

15). 2551 Mayfair Drive Cherilyn Crawford

16). 2541 Mayfair Drive

17). 2531 Mayfair Drive

18). 2521 Mayfair Drive John & Linda Smith

19). 309 Belaire Drive Charley & Geri McKissnock

20). 319 Belaire Drive

21). 306 Belaire Drive

22). 316 Belaire Drive

23). 326 Belaire Drive

24). 336 Belaire Drive

25). 346 Belaire Drive M Nicole Cannon
Bill Cannon

From: ANDREW JANSKY - Voicemail box 4082 <voicemail-noreply@jivecommunications.com>
Sent: Monday, March 22, 2021 1:07 PM
To: Gail Howe <gailh@gjcity.org>
Subject: Voicemail from ANDREW JANSKY at (970) 778-5641 on Mar 22 2021 1:05 PM

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

You received a new voicemail message

New voicemail message

Time:	Monday, March 22 2021 1:05 PM
From:	ANDREW JANSKY (970) 778-5641
Duration:	1 minute 20 seconds
Voicemail box:	4082

© 2021 LogMeIn Inc
320 Summer St, Boston, MA 02210, United States
Follow us on Twitter, LinkedIn, Facebook

3/22/21
I Spoke to Andrew About the proposed ACP and Answered All of his questions. He does not live on the corridor, nor own a business there, but is a concerned citizen. He was good with the direction the Plan is going.
Dave T.

David Thornton

From: Isabella Vaz
Sent: Monday, March 22, 2021 11:26 AM
To: Rick Dorris; Trenton Prall; David Thornton
Subject: FW: Input: Patterson Access-Patricia Star:)

All – please see below for the entirety of Ms. Star's comment/question.

Thank you,

Isabella Vaz
Planning Technician
City of Grand Junction
isabellav@gjcity.org
970.256.4087

From: pstarcevic@charter.net <pstarcevic@charter.net>
Sent: Monday, March 22, 2021 11:18 AM
To: Isabella Vaz <isabellav@gjcity.org>
Subject: FW: Input: Patterson Access-Patricia Star:)

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Hi Isabella, Thank you for contacting me so soon !

I was impressed with the input from other's regarding needed Law Enforcement of Patterson Road and other Safety issues. I live at Patterson Gardens Townhomes-between 12th Street & 15th Streets. I hear the City is planning on waiting on our Townhomes exits. Regarding Safety issue: I grew up Safety: my Father (still living) worked as a Nationally Certified Safety Supervisor/Director. If one of Patterson Gardens Townhomes exits is closed-Consider just two townhomes on fire or blowing up as on 7th Street(about 7yrs ago) and Only One entrance/exit for emergency personnel and residents trying to enter or exit onto Patterson Road--Chaos with how many possible deaths? I Lived on 7th Street(1730 N 7th St #1) I lived first hand the damage and chaos--Two homes blew up and Thank God the neighbor Boy's escaped. I got a call and I circled back home-the Firemen would not rescue my sweet puppy (like a child to me) I could not get medicine or anything else and slept in my car that first night.
So, we have Senior citizens that live in Patterson Gardens along with family's with small children and some CMU students--how many might lose their lives with Only 'One' entrance/exit ?

Most Sincerely
Patricia Star

March 21, 2021

The Honorable Duke Wortmann, Mayor
Mr. Trent Prall, Director of Public Works
City of Grand Junction
250 North 5th Street
Grand Junction, Colorado

Dear Mayor Wortmann and Mr. Prall;

We are homeowners and residents of the Mantey Heights Neighborhood and write to urge your consideration of our opinions regarding the City's proposed plan for Patterson Road (The Patterson Road Access Study). It is my understanding that you have already heard from our neighbors with similar concerns. We were unfortunately unable to make the neighborhood meeting last week. We do appreciate that you both made time to come visit Mantey Heights and hear from our neighbors and friends.

Patterson Road is no doubt an important and busy thoroughfare for Grand Junction. The closure of Santa Fe Drive will not increase public safety and access to Patterson. We utilize Santa Fe Drive multiple times a day and choose that road as it is much safer than Park Avenue. Park Avenue is situated with very poor westward facing visual access to oncoming eastbound traffic. That is due to both an arc of Patterson between Santa Fe and Park and existing residential fencing. These very factors have led to several traffic accidents at that very intersection. Santa Fe is much safer with much better visibility. We also do not believe that a broad policy, affecting the streets of Mantey Heights, to make left turns illegal ,is well suited. While it is true that making a left turn from the Neighborhood on to Patterson is, at times, nearly impossible due to traffic, there are many times when it is entirely safe to do so due to low-cross traffic volume. We work at Colorado Mesa University and St. Mary's Hospital - both west of the neighborhood. Having to always turn right, head east and utilize 28 ¼ Road and other surface streets would add time, distance and more navigation to our commutes. We urge you to reconsider that proposed policy.

Of a more pressing matter, we strongly urge you to assess and reexamine the presence and policy of traffic control and law enforcement on Patterson Road. We rarely see any police presence enforcing traffic laws on Patterson. On a nearly daily basis we witness the following: speeding, frequent lane changes, tailgating, failure to stop on red lights, failure to stop at stop signs, and occasionally road rage. We cannot recall a single time in the last five years seeing a traffic stop along our section of Patterson. Increasing police presence and enforcement will improve the safety profile of Patterson. This action could be commenced immediately.

Thank you for taking the time consider our opinions and suggested regarding the future of Patterson Road

Sincerely,

Marc A. Burdick

Marc A. Burdick

Colin E. Carman

Colin E. Carman, PhD

114 Camino Del Rey Drive, Grand Junction, CO 81501

Transmitted via electronic mail

PATTERSON ROAD ACCESS CONTROL PLAN

TOPIC: Closure of access points in the Mantey Heights Subdivision.
Presented To: Mayor Duke Wortman, City of Grand Junction
Trent Prall, Director of Public Works, City of Grand Junction
Date: March 18, 2021

Background: Mantey Heights is one of the oldest subdivisions in the city and was here long before Patterson Road was even widened or large commercial and business/hospital developments were implemented. The streets are original within the subdivision and have always had pre-existing access points to Patterson Road.

Issues for the City, Planning Commission, Public Works, and any other Entity.

1. Safety

A) Blocking any access point to and from the subdivision would cause a major safety issue. A house catches on fire, a resident has a heart attack, someone has to be rushed to the hospital due to anaphylactic shock, or stroke, how do the emergency vehicles and residents navigate in a timely manner when minutes and seconds count.

3. Residents of Mantey Heights

A) Those who live in the neighborhood don't have any problem navigating the exiting and entering on and off of Patterson Road. When you choose to live in the Mantey Heights area you except the surrounding for what they are and as far as Patterson Road access is concerned patience and the proper use of the turn lane is one of those aspects which we have all come to be able to navigate with ease. We are opposed to closure of any of our access points.

2. Traffic and Demands on Patterson Road

A) Stop rezoning land on Patterson to commercial and high density multi residential /use from 12Th street East. Those types of development should be allocated to the land west of First toward highway 6&50 there is certainly plenty of land in that area to accommodated any such developments. Examples on this side of 12th are the Corona Del Rey parcel that was changed to R8, and the parcel on the North corner of Patterson and 28&¼ Road was made into a three story apartment/ commercial plat against the rejection of the surrounding neighborhoods. Thank goodness the original design for a gas station on the

corner of that parcel was never built, along with the rejection of a Drive-Through Bank on 27 &½ Road. Stop creating more traffic.

B) Matchett Park a traffic nightmare waiting to happen. Development of the Matchett property into a massive multi use playing field that brings in tournament with hundreds of vehicles which only have Patterson Road to use to enter and exit is unthinkable along with everyday use from school district 51 (Paul Cain Athletic Director), Fire Football Club (Mr. Johnson), and various clubs.
Adversities;

1. Volume of vehicles, including City trucks for maintenance.
2. Noise output to ours and surrounding neighborhoods from events and maintenance.
3. Added air, trash, noise pollution putting a strain on our existing neighborhood.

The City Of Grand Junction has had a long standing problem of long range planning not taking existing neighborhoods and surrounding areas into consideration when it comes to development. We should not be held liable today for the past and or with the implementation of a plan developed by staff and consultants who do not live in this area. No to any closures of access points in Mantey Heights.

Gloria J Deschamp
124 Mount View Drive
Mantey Heights Subdivision
Grand Junction, CO 81501

Meeting Thursday, March 18th, 2021
Meeting Time 3:20pm
Meeting Location: Patterson Road and Santa Fe Drive
Meeting Invitees: Mayor Duke Wortman, Director of Public Works Trent Prall

We the residents of the Mantey Heights neighborhood have serious concerns regarding the Patterson Access Control Plan.

Primary list of concerns:
We strongly disagree that any of the Mantey Heights access streets to Patterson Road be closed, especially Santa Fe Drive because it is presently one of the safest exits to Patterson.

If people could be made to drive slower there would not be a need to redesign Patterson Road in front of Mantey Heights. We would like to see the city reduce speeds before any drastic design measures are taken. Can the city promise that the speed of traffic on Patterson will not increase if a raceway is opened up? What can the city do to reduce traffic speeds on Patterson?

Can you promise new signage and police patrolling to address the speed of traffic along a reworked Patterson raceway? It stands to reason that if Patterson Road carries a major flow of traffic then it should have a major level of speed enforcement.

Can we be assured that there will not be any narrowing to the Patterson Road turn lane width and corresponding striping? Residents of the Mantey Heights neighborhood successfully petitioned to have the center lane of Patterson Road widened to provide for a greater degree of safety for those exiting and entering Mantey Heights.

Some of the residents reside in Mantey Heights to be close to St. Mary's Hospital. Many of us shop at City Market on 12th and Patterson. Can there be road caps placed on Patterson to allow for left hand turns?

Can there be any changes.to a designated intersection to ensure a safe line of site for traffic entering Patterson? e.g. assurance that the turning radius will be clear of vegetation, or building improvements.

Can a designated street be made wide enough to accommodate two vehicles entering and exiting Patterson simultaneously?

Grand Junction City Councilman Kreig Andrews has commented that one size does not fit all and that there are three unique sections along Patterson Road and that each section should be handled independently of the other - roughly from 24 Road to 12th Street, 12th Street to 28 1/4 Road and 28 1/4 Road East.

Comments:

Because this is presented by the city as a Phased Implementation it seems that the drastic measures proposed by the city could be delayed until such time as other traffic routes are completed, such as Ridge Road, F 1/2 Road, G Road and 29 Road to the Interstate.

There is currently poor line of site at some interior Mantey Heights intersections because of vegetation overgrowth and this will become an even greater concern because traffic within the neighborhood will be forced to reroute to a designated exit to Patterson Road.

What the residents of Mantey Heights need is for the exits onto Patterson be more safe with better sight lines, especially because Patterson Road is such a high traffic street. Lines of site should be at a higher standard for those streets accessing a major road.

Some road repair will need to be addressed within Mantey Heights.

There will be increased traffic pressure on other parts of the city if right hand turns are implemented and how will those concerns be addressed? What about the safety of the increased traffic to those other areas that are more pedestrian and bicycle friendly?

Travel times will be increased for all the rerouted traffic. Pollution will increase from all the rerouting of traffic to get around the city. Traffic will gravitate to the next nearest location and then make a left turn across Patterson and then make a "u" turn somewhere to get back onto Patterson. This makes absolutely no sense.

In the recent past city taxes should have been more wisely spent e.g. How many times is 24 Road going to be redesigned and rebuilt? The Riverside Parkway was nearly 100% over budget after it was refinanced for lack of money and multiple whopping change orders and is a mess where it dumps into 25 Road. Hence, until the city can design more wisely and not be so careless with the taxpayers money we are very suspect of any city plans unless we are completely informed and have more than adequate time to address the issues. If the city was more careful with our money many road improvement projects could have already been implemented. Now First Street is being torn up after having been completed last year.

Gary Lucero 3/14/21
Diane Lucero Diane Lucero 3/14/21
3/14/21
Joe M. Perrin 3/15/21
Karyn E Perrin 3/15/21
3/14/21
3/15/2021
3/14/21
3/15/21
3/14/21
3/15/21
3/14/21
3/14/21
Joyce Mueller
3/14/21
Peter Mueller
3-14-2021
3/14/2021
Shirley Masson + TOD Pace 3/18/21
3/14/2021
Thomas G. Tucker
3/14/2021
Mary Tucker 3-18-21
3/14/2021

Meeting Thursday, March 18th, 2021
Meeting Time 3:20pm
Meeting Location: Patterson Road and Santa Fe Drive
Meeting Invitees: Mayor Duke Wortman, Director of Public Works Trent Prall

We the residents of the Mantey Heights neighborhood have serious concerns regarding the Patterson Access Control Plan.

Primary list of concerns:
We strongly disagree that any of the Mantey Heights access streets to Patterson Road be closed, especially Santa Fe Drive because it is presently one of the safest exits to Patterson.

If people could be made to drive slower there would not be a need to redesign Patterson Road in front of Mantey Heights. We would like to see the city reduce speeds before any drastic design measures are taken. Can the city promise that the speed of traffic on Patterson will not increase if a raceway is opened up? What can the city do to reduce traffic speeds on Patterson?

Can you promise new signage and police patrolling to address the speed of traffic along a reworked Patterson raceway? It stands to reason that if Patterson Road carries a major flow of traffic then it should have a major level of speed enforcement.

Can we be assured that there will not be any narrowing to the Patterson Road turn lane width and corresponding striping? Residents of the Mantey Heights neighborhood successfully petitioned to have the center lane of Patterson Road widened to provide for a greater degree of safety for those exiting and entering Mantey Heights.

Some of the residents reside in Mantey Heights to be close to St. Mary's Hospital. Many of us shop at City Market on 12th and Patterson. Can there be road caps placed on Patterson to allow for left hand turns?

Can there be any changes.to a designated intersection to ensure a safe line of site for traffic entering Patterson? e.g. assurance that the turning radius will be clear of vegetation, or building improvements.

Can a designated street be made wide enough to accommodate two vehicles entering and exiting Patterson simultaneously?

Grand Junction City Councilman Kreig Andrews has commented that one size does not fit all and that there are three unique sections along Patterson Road and that each section should be handled independently of the other - roughly from 24 Road to 12th Street, 12th Street to 28 1/4 Road and 28 1/4 Road East.

Comments:

Because this is presented by the city as a Phased Implementation it seems that the drastic measures proposed by the city could be delayed until such time as other traffic routes are completed, such as Ridge Road, F 1/2 Road, G Road and 29 Road to the Interstate.

There is currently poor line of site at some interior Mantey Heights intersections because of vegetation overgrowth and this will become an even greater concern because traffic within the neighborhood will be forced to reroute to a designated exit to Patterson Road.

What the residents of Mantey Heights need is for the exits onto Patterson be more safe with better sight lines, especially because Patterson Road is such a high traffic street. Lines of site should be at a higher standard for those streets accessing a major road.

Some road repair will need to be addressed within Mantey Heights.

There will be increased traffic pressure on other parts of the city if right hand turns are implemented and how will those concerns be addressed? What about the safety of the increased traffic to those other areas that are more pedestrian and bicycle friendly?

Travel times will be increased for all the rerouted traffic. Pollution will increase from all the rerouting of traffic to get around the city. Traffic will gravitate to the next nearest location and then make a left turn across Patterson and then make a "u" turn somewhere to get back onto Patterson. This makes absolutely no sense.

In the recent past city taxes should have been more wisely spent e.g. How many times is 24 Road going to be redesigned and rebuilt? The Riverside Parkway was nearly 100% over budget after it was refinanced for lack of money and multiple whopping change orders and is a mess where it dumps into 25 Road. Hence, until the city can design more wisely and not be so careless with the taxpayers money we are very suspect of any city plans unless we are completely informed and have more than adequate time to address the issues. If the city was more careful with our money many road improvement projects could have already been implemented. Now First Street is being torn up after having been completed last year.

3/18/21 124 Mountain View Dr.

Janice Hart & Daniel Hart 3/18/21 110 Mt View Dr.

Will Goemel & John Hume 3/18/21 112 E. Park Ave.

[illegible] 3-18-21 109 SANTA FE DR

William E. Ellenwood 3/18/21 130 Carlitos Ave

Jen Ritter 3/18/21 136 Santa Fe Dr. G.J. 81501

[illegible] 3/18/21 113 MANTEY HTS. DR.

Beth McKee 3/18/21 135 CARLITOS AVE

Tony Taylor 3-18-21 104 Monterey Heights Drive

March 18, 2021

Mayor Wortman, Director of Public Works Trall:

As a Mantey Heights resident, I'm writing to express my concern regarding the Patterson Access Control Plan, as well as the longstanding issues of burgeoning traffic and excessive speeding along Patterson Road.

Our list of concerns in answer to the Access Control Plan has been received by your offices, and we feel united in our effort to resist the proposed changes.

In addition, we have often in the past alerted City officials to the growing danger of drivers speeding along Patterson Road. Speeds well in excess of 60 mph are a common occurrence, and yet rarely has there been a police presence to curb such dangerous infractions of the posted speed limits, which run from 30 to 45 mph. We feel this simply encourages the overt breaking of the law. Many of us have noted the seemingly offset timing of the stoplights along Patterson Road. Are the stoplights timed in conjunction with the posted speed limits? If not, the City could be sued in any serious accident case, further draining the City coffers.

And yet the higher calling of public conscience ought to be focused on the vulnerable drivers who are consistently in the line of fire of the Patterson Road speedsters. Will it take a death within a family to finally alert City officials to the danger of allowing drivers to speed at will?

In comparison to this possibility, the noise level of the traffic along Patterson can seem very dim, and yet many residential neighborhoods bordering Patterson Road are hounded on a 24-hour basis by the accelerating engine racket along this thoroughfare. Due to the lax patrol car presence, drivers prone to excessive speeding appear to know that they can cut in and out of traffic to their hearts' content. Tailgating... no problem.

We in the neighborhoods bordering Patterson also suffer from this behavior by watching the devaluation of our homes. Neighborhoods which were constructed in the earliest days of Grand Junction's development seem to be put at the lowest level of the City Planning totem pole, in the name of Hurry-up Growth. Long-treasured communities are told to get with the new programs.

Of course, the real issue began when Patterson Road was allowed to replace I-70, for drivers who preferred zipping along without using the highway. We've allowed those coming to and through town to forget what highways are made for. There are entire contingents of workers, shoppers and bar-hoppers coming from Clifton and points west who think nothing of jetting along Patterson instead of using the highway.

Enforcing the current speed limits along Patterson would put a real pause on this behavior. Certainly complaints would flood your desks downtown, but eventually the idea would dawn on the speeders. Something like, Hey, maybe putting lives at risk is no longer okay.

I hope to hear from you soon about these issues.

Beth McKee
135 Carlitos Ave
970-260-4642
bathwings@gmail.com

David Thornton

From: Trenton Prall
Sent: Wednesday, March 17, 2021 6:43 PM
To: Rick Dorris; David Thornton
Cc: Tamra Allen; Michelle Hansen
Subject: Fw: Access Control Plan - Cris-Mar Subdivision Neighborhood Meeting notes

Meeting started at 4:00 3/17. There were approximately 11 attendees representing 8 properties.

I provided a brief overview of the Access Control Plan and addressed some of the concerns shared at the 2/23 Planning Commission Meeting by other residents of Cris-Mar subdivision such as connectivity of Bonito through Penny Lane to 29 1/2 Road and the Bonito width concerns closer to 29 Road.

David Scanga - would like note added that connection from Bonito through Penny Lane to 29 1/2 Road be constructed prior to implementation of access control plan at Partee (208), Crismar (211) and 29 3/8 (221) are implemented.

Linda Barker - wanted more information on the plan.

Ray and Wilma - 92 yrs old - just listening but asked about timing of implementation of access control as well as 29 Road construction. I shared that we were at least 4-5 years out on 29 Road Interchange. Access control would most likely be further out than that.

Richard and Cheryl - Bonito access concerns along with all of the growth and development to the north will need improvements to 29 Road and 29 1/2 Road. The City and County will need to work on improvements to both corridors to handle the new growth.

Jim - Bonito access to 29 Road is narrow. I agreed that improvements would be needed over time. Linda Barker asked if sidewalks would be part of the improvements and I shared that would be likely on at least one side as we have done in many other streets of the community developed in the 1940's-1950's when sidewalks were not required of developers.

Ken Frederick - 3/4 at Cris-Mar (211) would be great. I shared that it was considered but that 29 3/8 was preferred from a spacing standpoint. None-the-less, I ensured that I would ask the question about the possibility.

Carl Lengyel - No accidents seen at access points, so why this plan. I shared that the plan is a long term vision and that implementation for the entire corridor is over many years. Most of the implementation will happen with redevelopment, as safety concerns emerge, or as part of City project which for the Patterson Rd corridor would most likely be at signalized intersections for many years.

Aldis and Rachel
- When 29 Road is constructed, will trucks be allowed to come through the neighborhoods? Trucks will be allowed but still need to look at the demand for truck access. Most will stick to state highways to get to Patterson Road and North Ave and would not be likely to frequently use this corridor.

- Bonito access to 29 Road and 29 1/2 Road increasing traffic with people "short cutting" 29 Rd and Patterson Rd Intersection. I shared that could already happen today with 29 3/8. The connection of Bonito to Penny Lane to 29 1/2 Road would be fairly circuitous and short cutting there would be unlikely.
- "U-Turns are unsafe" - statistically they are safer than lefts out.
- Need right turn lanes all over town. Fall 2019 Ballot Initiative for Road Expansion projects there is money for 5 additional right turn lanes on Patterson Road.
- For access control will medians or other access control on the sides of Patterson Road be used? "Pork chops" such as at the Maverick are not as effective as medians. Therefore medians are recommended to ensure compliance.
- Bike Lane concerns - especially Patterson Road but also 29 Road are not that great due to traffic and that this plan should also address bikes, ped, and transit. I shared the City will be working on a bike/ped plan.
- Timing of west bound Patterson left turn to southbound 29 Road and requested signal timing be included in this plan. Signal is extremely short...at most 3 cars. I committed to investigate. Signal timing would be part of a separate transportation study and not included in this access control plan.

Carl Lengyel - plan is reliant on development of two vacant properties. I shared Mr. Scanga's request for a note to be added that access control for access to Crismar would be contingent on the connection to 29 1/2 Road be constructed before implementation of the plan.

I shared that Planning Commission is currently scheduled for March 23 and City Council for April 7, however will most likely move back into April and May respectively due to ensuring more opportunities for the community to participate.

Meeting ended at 5:05.

Thank you,

Trent Prall, PE
Public Works Director
City of Grand Junction
970-256-4047 / 970-201-6384

From: David M. Scanga <dscanga@hfak.com>
Sent: Wednesday, March 17, 2021 5:09 PM
To: Trenton Prall <trentonp@gjcity.org>
Subject: Access Control Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Trent-- Thank you for taking the time to come out and meet in person and then having a one hour video conference call with people in our subdivision on the access control plan. Your willingness to discuss issues in a frank manner and listen to the concerns of homeowners is greatly appreciated. The background and information you provided was informative and helpful. Thank you for the work you are doing to help our community.

March 16, 2021

Trent Prall

Public Works Director

City of Grand Junction

Patterson Road

Access Study

Dear Sir:

I have some questions about the change of access for access number 86 (Mira Vista Rd).

First, it looks like the access plan is treating our neighborhood with 32 houses in it and only one entrance and exit the same way as a single house driveway is at other locations on Patterson Road. I know this is a narrow section of Patterson, but our 32 houses should get the same courtesy as one of the single house driveways that are keeping their access, though it be a right-in right-out.

Second, the access at Mira Vista Road will be a conditional right-in right-out access, which is Fine, but this access will be closed when the access 86a is built on St. Mary's property. When is that construction planned for?

Third, when this does occur, it looks like our neighborhood will be a private subdivision of St. Marys. St. Marys already owns eight or more of the houses on the east side of the neighborhood and I am concerned that St. Marys will want to expand in the future by taking up the neighborhood, similar to what CMU is doing to the nearby neighborhoods next to them.

Finally, I am surprised that St. Marys is willing to take out one of their houses to provide a new entrance to our neighborhood. Why would they do that? I don't see any other location where the plan is to take out one of the houses to provide a new access. Did St. Marys offer this property up? I would be surprised to hear that Stolfus told them that they would need to lose a property in order to build a new access. Just a little suspicious of St. Marys motives.

Sincerely

Bill Crawford

Bill Crawford

2551 Mayfair Drive

Grand Junction, CO 81501

3-10-21

Dear City Staff: Community Development,

We have received your mailing re access management on Patterson Rd.

We live in Mantey Heights on Santa Fe Dr. Your plan will do nothing but increase traffic on Patterson and will punish all residents of Mantey Heights. Roads are there to give access to homes and business and not as you say provide "smoother traffic flow". Traffic flow would be controlled if you control the speed limit. The majority of people drive over the limit and tail gate so no one is safe making a right hand or left hand turn. We moved here in September and have been dismayed at the rude drivers who want to use Patterson as a speed way for where ever they are going.

Patterson and Santa Fe Dr are access to our home and we have a right to use our street and to make a left had turn to the middle lane to get to services with out having to travel the wrong direction, make crazy turns just to get to daily services ie grocery store.

It is our experience that traffic always increases when you make it easier to travel fast. This is not a free way, a major highway and it is not a race track. It is our home. Follow the law and ticket for speeding and tailgating.

Also the roads into Mantey heights are not two way . We care about our neighbors and we do not want to damage their property if we have only one road in. Mantey Heights is an old , lovey, neighborhood that deserves access without stress.

Sincerely,

Jeanne and George Parkhurst.

2-28-2021

To: Grand Junction Traffic Control
RE: Traffic on Patterson Rd in City Limits

My husband and I saw on the news your idea to make concrete left turn lanes in the new continuous middle lane of Patterson Rd.

We would like to present some feedback and ideas. #1. Instead of spending all that money on construction and disrupting traffic for the duration of said construction, use the money to hire a couple of police officers to just patrol Patterson and keep speed under control. Speed is a big factor. We are careful to control our speed. It is common for us to be constantly passed by speeders on Patterson.

#2. Since speeding is so common, it might be a good idea to put up more speed limit signs with blinking lights to catch people's attention. The drivers starting in Clifton on Patterson and heading west seem to think 45 mph applies all the way thru to the mall area. The 35 mph section from 12th Street to 1st Street is completely ignored.

Thanks for taking time to read and consider our ideas and observations.

Roger + Linda Jarboe
588½ Gerken Rd.
Grand Junction, CO
81504

Roger Jarboe
Linda Jarboe

P.S. →

We have lived in Grand Junction 9 years. We traverse Patterson daily.* In those 9 years, we have seen G.J. Police cars maybe a total of 6 times - 3 of those times were at accidents.

* at varied times.

NOTICE OF PUBLIC HEARING

An application for the following request has been received and tentatively scheduled for public hearings, in the City Hall Auditorium, 250 North 5th Street, on the dates indicated below.

Options for attending and submitting public comment for Planning Commission are:

- Attend the meeting at City Hall, 250 N 5th Street.
- Provide comment in advance at www.GJSpeaks.org by 5:30 PM on June 7, 2021. Meeting information and presentation will be available online by 5 PM on June 1, 2021.
- Comment by phone by calling 970-609-9688 and dialing **6910**
- Attend the meeting virtually. Register for the meeting online: https://bit.ly/2SbP5Ia

Attend the City Council hearing or for more information on how to participate visit the City's website at www.gjcity.org/129/Agendas-Minutes or call 970-244-1509.

AVISO DE AUDIENCIA PÚBLICA

Se recibió un trámite para la siguiente solicitud y se programó tentativamente para audiencias públicas, en el Auditorio del Ayuntamiento, 250 North 5th Street, en las fechas indicadas a continuación.

Las opciones para asistir y enviar comentarios públicos a la Comisión de Planificación son:

- Asista a la reunión en el Ayuntamiento, 250 N 5th Street.
- Proporcione comentarios por adelantado en www.GJSpeaks.org antes de las 5:30 pm el 7 de junio de 2021. La información y la presentación de la reunión estarán disponibles en línea a las 5 PM el 1 de junio de 2021.
- Comenta por teléfono, llamando al 970-609-9688 y marcando **6910**
- Asista a la reunión virtualmente. Regístrese para la reunión en línea: https://bit.ly/2SbP5Ia

Asista a la audiencia del Concejo Municipal o para obtener más información sobre cómo participar, visite el sitio web de la Ciudad en www.gjcity.org/129/Agendas-Minutes or call 970-244-1509.

PLANNING COMMISSION: Tuesday, June 8, 2021 at 5:30 PM

CITY COUNCIL: Wednesday, July 7, 2021 at 5:30 PM

COMISIÓN DE PLANIFICACIÓN: Martes, 8 de junio de 2021 a las 5:30 PM

AYUNTAMIENTO: Miércoles, 7 de julio de 2021 a las 5:30 PM

CPA-2021-17 – Patterson Road Access Control Plan - PATTERSON ROAD FROM HWY 6&50 TO LODGEPOLE STREET

Consider a request by the City of Grand Junction to adopt the Patterson Road Access Control Plan (ACP), an element of the City's Comprehensive Plan as Title 38, Volume III, of the Municipal Code.

CPA-2021-17 – Plan de control de acceso de la calle Patterson – PATTERSON ROAD DESDE HWY 6 & 50 HASTA LODGEPOLE

Consideración de una solicitud de la Ciudad de Grand Junction para adoptar el Plan de Control de Acceso Vial (ACP) de Patterson, un elemento del Plan Integral de la Ciudad como Título 38, Volumen III, del Código Municipal.

Planner/Planificador: Dave Thornton, Phone/Teléfono: 970-244-1450, Email/Correo electrónico: davidth@gjcity.org

PATTERSON ROAD ACCESS CONTROL PLAN

PUBLIC COMMENT BEING ACCEPTED ON WWW.GJSPEAKS.ORG UNTIL MARCH 22 AT 5:30PM

PATTERSON ROAD ACCESS CONTROL PLAN

CONTACT CITY STAFF

COMDEV@GJCITY.ORG
970-244-1430

CITY OF Grand Junction COLORADO
COMMUNITY DEVELOPMENT

«OWNER»
«JOINT_OWNER»
«MAILING_ADDRESS»
«MAILING_CITY» «MAILING_STATE»
«MAILING_ZIP»

PATTERSON ROAD ACCESS CONTROL PLAN

You have received this mailing because you live or own property or a business near Patterson Road. The City has been conducting an Access Control Plan (ACP) study of the Patterson Road corridor between I-70 Business Loop on the West and Lodgepole Street on the east. The study is currently a final draft and is being considered by the City Planning Commission before it goes to City Council. After hearing public testimony of the need for more public engagement, the Planning Commission tabled their decision to provide time for additional public input. At the March 23rd public hearing, Planning Commission will provide a recommendation to City Council who will consider the plan on April 7, 2021.

The Planning Team, made up of City staff and the City's consultant, Stolfus and Associates, has already met with business owners and residents and received great input that has shaped the ACP. Review the plan on www.gjspeaks.org and contact City staff with any comments or suggestions.

Thank you for engaging with us in this important long-range plan that seeks to protect an important east-west transportation corridor in our community. The draft Patterson Road Access Control Plan study can be viewed at www.gjspeaks.org. You can provide comments at the website through Monday, March 22, 2021 at 5:30pm.

WHAT IS ACCESS MANAGEMENT?

The systematic control of the location, spacing, design, and operation of driveays, median openings, and street connections to a roadway

SAFETY

- Reduces number of conflict points and potential crashes
- Provides safe access to businesses and residents

INCREASED ABILITY TO ACCOMOMODATE TRAFFIC DEMANDS

- Decreases travel times and provides smoother traffic flow
- Results in less air pollution

GOOD ACCESS MANAGEMENT IS GOOD FOR BUSINESS

- Preserves property values
- Increases roadway efficiency resulting in a broader market area

PHASED IMPLEMENTATION

The Plan will be implemented in phases as changes occur in the corridor which generate the need.

CONSTRUCTION OF IMPROVEMENTS MAY BE PUBLICLY AND/OR PRIVATELY FUNDED.

PORTIONS OF THE PLAN WILL BE IMPLEMENTED BASED ON THE FOLLOWING TRIGGERS:

- Redevelopment that increases traffic greater than 20%
- Planned publicly funded projects
- Safety or operational issues develop

THE PLAN IS A LIVING DOCUMENT THAT CAN CHANGE.

CONTACT CITY STAFF

COMDEV@GJCITY.ORG
970-244-1430

PATTERSON ROAD ACCESS CONTROL PLAN

PUBLIC COMMENT BEING ACCEPTED ON WWW.GJSPEAKS.ORG UNTIL MAY 17 AT 5:30PM

PATTERSON ROAD ACCESS CONTROL PLAN

CONTACT CITY STAFF

COMDEV@GJCITY.ORG
970-244-1430

CITY OF Grand Junction COLORADO
COMMUNITY DEVELOPMENT

«OWNER»
«JOINT_OWNER»
«MAILING_ADDRESS»
«MAILING_CITY» «MAILING_STATE»
«MAILING_ZIP»

PATTERSON ROAD ACCESS CONTROL PLAN

You have received this mailing because you live or own property or a business near Patterson Road. The City has been conducting an Access Control Plan (ACP) study of the Patterson Road corridor between I-70 Business Loop on the West and Lodgepole Street on the East. The City is inviting the public to review the current draft of the project, provide input and ideas, and review edits that have already been suggested by the public. New input received has been invaluable in shaping the latest draft of the ACP to be a Plan that benefits the entire community.

Proposed changes to the January draft ACP have been made to the maps and tables that will be included in the final April 2021 draft Plan document. The maps and tables for Patterson Road have been uploaded to www.GJSpeaks.org for public review and comment. Community members can provide comments at the website through Monday, May 17th at 5:30 pm. City Council will be discussing the ACP at their May 19th meeting at 5:30 pm. The tentative schedule for Plan adoption is a public hearing with Planning Commission in June and public hearing before City Council in July.

Thank you for engaging with us in this important long-range plan that seeks to protect an important east-west transportation corridor in our community.

WHAT IS ACCESS MANAGEMENT?

The systematic control of the location, spacing, design, and operation of driveays, median openings, and street connections to a roadway

SAFETY

- Reduces number of conflict points and potential crashes
- Provides safe access to businesses and residents

INCREASED ABILITY TO ACCOMOMODATE TRAFFIC DEMANDS

- Decreases travel times and provides smoother traffic flow
- Postpones the need for additional lanes for traffic

GOOD ACCESS MANAGEMENT IS GOOD FOR BUSINESS

- Preserves property values
- Increases roadway efficiency resulting in a broader market area

PHASED IMPLEMENTATION

The Plan will be implemented in phases as changes occur in the corridor which generate the need.

CONSTRUCTION OF IMPROVEMENTS MAY BE PUBLICLY AND/OR PRIVATELY FUNDED.

PORTIONS OF THE PLAN WILL BE IMPLEMENTED BASED ON THE FOLLOWING TRIGGERS:

- Redevelopment that increases traffic greater than 20%
- Planned publicly funded projects
- Safety or operational issues develop

THE PLAN IS A LIVING DOCUMENT THAT CAN CHANGE.

CONTACT CITY STAFF

COMDEV@GJCITY.ORG
970-244-1430

PATTERSON ROAD ACCESS CONTROL PLAN
ANSWERS TO FREQUENTLY ASKED QUESTIONS

What is an Access?

An access, as related to roadways, is a location where vehicles, bicycles, or pedestrians may enter and/or exit a roadway. Access may be public, such as a street, or private, such as a driveway to a business or residence. Every property owner has the right of reasonable access to the general street system.

Why is access management beneficial?

Access management benefits communities by preserving and improving traffic operations along the most critical roadways. Efficiently managing existing roadways so that they are operating to their fullest capacity costs less than investing in new roadways. Applying access management techniques can increase roadway capacity by 20% to 40%. Access management also has tremendous safety benefits. Studies have shown a 30% to 60% reduction in crashes on roadways where access management techniques are implemented.

The reduction in vehicle conflicts has the added benefit of improving traffic flow, reducing travel times, increasing fuel efficiency and contributing less to air pollution. Access management is also good for business, providing safe access to customers and retaining more of a community's original market area.

What is an Access Control Plan?

An Access Control Plan (ACP) provides a unified vision of the future access needs for a particular roadway corridor. The goals are to define safe, effective, and efficient access to support the economic viability of the corridor, utilize existing right of way, allow for smooth passage of through traffic on the roadway, maintain compatibility with local planning efforts and the existing and proposed street network connections and circulations, provide a plan that can be implemented in phases, and support alternative modal choices.

An ACP defines existing and future access locations with consideration for spacing, traffic movements, circulation, and alternative access opportunities. The ACP does not define specific roadway improvements or funding sources. It is a long-range planning document that identifies access conditions that will be implemented as roadway and land-use characteristics change.

Why is adopting an ACP beneficial?

An ACP allows Grand Junction to make decisions about access that are more consistent with the local vision, land use, and the local transportation system as a whole. In addition, the ACP addresses access on a corridor-wide basis rather than an individual, first-come, first-serve basis. An ACP considers how adjacent access points impact each other and provides property owners with security in the planned access for their property. Recommendations of the ACP consider adjacent land use, corridor specific conditions and local plans for future improvements. Closer access spacing and increased level of access may also be recommended where technical analyses can demonstrate adequate traffic safety and operations.

How is the ACP implemented?

The ACP will be implemented in phases as changes and growth occur around the City. Portions of the plan will be implemented based on the following triggers:

1. Redevelopment that increases traffic
2. Planned publicly funded project
3. Safety or operational issue

What area does the ACP include?

The ACP study area covers approximately 7.1 miles of Patterson Road from US 6/US 50 to Lodgepole Street.

How long will it take to complete the Access Plan?

The ACP study began in January 2020 and is expected to be completed in the summer of 2021.

Patterson Road Access Control Plan File # CPA-2021-17

Agenda item can be viewed online here at 44:25

Consider a request by the City of Grand Junction to adopt the Patterson Road Access Control Plan (ACP), an element of the City's Comprehensive Plan as Title 38, Volume III, of the Municipal Code.

Staff Presentation

Dave Thornton, Principal Planner, introduced exhibits into the record.

Trent Prall, Public Works Director, Michelle Hansen, Stolfus and Associates, and Rick Dorris, Development Engineer, gave a presentation regarding the request.

Questions for Staff

Commissioner Gatseos asked a question regarding clarification on what safety or operational issue scenarios would trigger construction and implementation of the Plan.

Commissioner Gatseos asked if there were any publicly funded projects slated for Patterson Road.

Commissioner Scissors asked a question regarding non-motorized transportation along the Patterson corridor.

Commissioner Gatseos asked a question regarding how much Staff time has been spent with concerned citizens to explain the Plan.

Commissioner Ehlers asked a question regarding questions that came up in the public comment.

Public Hearing

The public hearing was opened at 5 p.m. on Tuesday, February 2, 2021 via www.GJSpeaks.org.

Comments from Lois Dunn, Ruth Kinnett, Nova Turner, Peter Firmin, William Ferguson, Heather Pool, Merton Fisher, Virginia Brown, John Edwards, Tim Kubat, Patricia Johns, KJ Kraich, Seth Thomas, and Robert Garrison were submitted via GJSpeaks regarding the request.

David Scanga, Jeff Tipton, Marie Frederick, Rachel Strautins, Tom Parish, Virginia Brown, and Karen Newell all spoke regarding the request.

The public hearing was closed at 7:47 p.m. on February 23, 2021.

DRAFT

Staff Response
Trent Prall and Michelle Hansen provided response to citizen comment.

Questions for Staff
Commissioner Teske had a question regarding the differences between the Patterson Road corridor and the North Avenue corridor.

Commissioner Teske asked a question regarding cross-access.

Discussion
Commissioner Gatseos made a comment regarding the request.

Commissioner Susuras made a comment opposing the request.

Commissioner Scissors made a comment regarding the request.

Commissioner Haitz made a comment regarding the request.

Commissioner Ehlers made a comment regarding the request.

Commissioner Gatseos made a comment regarding the request.

Motion and Vote
Commissioner Ehlers made the following motion, “Mr. Chairman, on the Patterson Road Access Control Plan, CPA-2021-17, I move that Planning Commission continue this item for the March 23rd meeting.”

Commissioner Susuras seconded the motion. The motion carried 6-0.

DRAFT

GRAND JUNCTION PLANNING COMMISSION
June 8, 2021 MINUTES
5:30 p.m.

The meeting of the Planning Commission was called to order at 5:30 p.m. by Vice Chair Christian Reece.

Those present were Planning Commissioners; Vice Chair Christian Reece, George Gatseos, Keith Ehlers, Sandra Weckerly, and Shanon Secrest.

Also present were Jamie Beard (Assistant City Attorney), Tamra Allen (Community Development Director), Trent Prall (Public Works Director), Rick Dorris (Development Engineer), Dave Thornton (Principal Planner), and Senta Costello (Associate Planner).

There were 21 members of the public in attendance.

CONSENT AGENDA

Commissioner Ehlers moved to adopt Consent Agenda Item #1. Commissioner Gatseos seconded the motion. The motion carried 5-0.

1. **Approval of Minutes**

Minutes of Previous Meeting(s) from May 25, 2021.

REGULAR AGENDA

1. **Orchard Mesa Road Petition Right-of-Way Vacation File # VAC-2021-126**

Consider a request by the City of Grand Junction to vacate a portion of Road Petitioned Right-of-Way which crosses several parcels in Orchard Mesa.

Staff Presentation

Senta Costello, Associate Planner, introduced exhibits into the record and provided a presentation regarding the request.

Questions for Staff

Commissioners Gatseos asked a question regarding a comment submitted via GJSpeaks.org.

Public Hearing

The public hearing was opened at 5 p.m. on Tuesday, June 1, 2021 via www.GJSpeaks.org.

DRAFT

Mr. Jim Hartnett left a comment via GJSpeaks.org.

The public hearing was closed at 5:52 p.m. on June 8, 2021.

Questions for Applicant or Staff
None.

Discussion
None.

Motion and Vote
Commissioner Gatseos made the following motion, “Madam Chair, on the right-of-way vacation request, City file number VAC-2021-126, I move that the Planning Commission forward a recommendation of approval to City Council with the findings of fact as listed in the staff report.”

Commissioner Ehlers seconded the motion. The motion carried 5-0.

2. Patterson Road Access Control Plan File # CPA-2021-17

Consider a request by the City of Grand Junction to adopt the Patterson Road Access Control Plan (ACP), as Volume III, Title 38 of the Municipal Code.

Staff Presentation
Dave Thornton, Principal Planner, introduced exhibits into the record. Trent Prall, Public Works Director, introduced Michelle Hansen, Stolfus and Associates, who provided a presentation regarding the request. Mr. Thornton provided a Code Analysis regarding the request.

Questions for Staff
Commissioner Gatseos asked a question regarding TEDS standards and specifically number of access points and another question regarding U-turns.

Commissioner Reece asked a question regarding what an amendment process would look like, medians, designs for what implementation would look like, conditional access points, and the Grand Junction Circulation Plan.

Commissioner Ehlers asked questions regarding the Corner Square development (access points 60 and 62) about feedback/response from business owners and the undeveloped property owners in Corner Square and how access 62 is impacted. Mr. Prall responded that staff didn’t receive feedback from Corner Square property owners and explained the connection to the Grand Junction Circulation Plan.

DRAFT

Commissioner Ehlers asked questions regarding access point 117 at Village Fair and what exactly would have to happen to change from a full-movement access to ¾ access. Mr. Prall confirmed.

1:45:30 Commissioner Reece asked what quantifies an increase in public safety. Mr. Prall explained that it is a combination of frequency and nature of those accidents that are happen. He explained there are national standards to compare to.

1:46:40 Commissioner Gatseos asked a follow-up question, specifically if one accident would trigger the closing of that access. Ms. Hansen elaborated on the nature of accident and if access management would assist in the promotion of safety.

1:48:20 Commissioner Ehlers asked a question regarding signal light cycling throughout the corridor and looking at it as an alternative to queuing lengths. Ms. Hansen responded that signal light cycling is adjusted in the model. Commissioner Ehlers asked if there was a segment in the plan that encourages staff to look at alternative methods. Mr. Prall explained that the City is constantly upgrading technology.

1:53:34 Commissioner Ehlers asked a question on what options does a developer have to amend the plan. Mr. Prall and Ms. Hansen provided an answer.

1:56:30 Commissioner Reece asked a follow-up question about if the amendment would happen concurrently with the development plan. Ms. Allen provided an answer.

1:57:57 Commissioner Ehlers provided a recap of the discussion thus far regarding the implementation process.

Commissioner Reece asked a question regarding the connection for Penny Lane to Bonito Avenue.

Commissioner Gatseos asked questions regarding the feedback received from the Chamber of Commerce business community.

Public Hearing
The public hearing was opened at 5 p.m. on Tuesday, June 1, 2021 via www.GJSpeaks.org.

The following made comments via GJSpeaks: James Vidmar, Arthur Edwards, Ken Ritter, and Duane A Harris.

The following made comments on the request: Ron Gibbs (President of the Village Fair Association), Donna Wallace, Verna Dunn, Nova Tucker, Ruth Kennett, Mark Rybeck (390 Talus Lane), Terry Porter (2632 Patterson Road), Dave Ramsey (Spring Valley

DRAFT

Subdivision), Beth McKee (Mantey Heights), Diane Lucero (Mantey Heights), Thomas Tucker (2551 Santa Fe Drive), Karen Perrin (131 Carlitos Ave), Tony Taylor (104 Mantey Heights Drive), Alan Wright (121 Mantey Heights Drive), and Gary Lucero (Mantey Heights).

Planning Commission took a recess at 8:22 p.m.

Planning Commission resumed at 8:30 p.m.

The public hearing was closed at 8:31 p.m. on June 8, 2021.

3:04:47 Response to Comment
Trent Prall gave a response to public comment.

3:18:08 Questions for Applicant or Staff
Commissioner Gatseos: “Could you address the 116 and 117 access points and the request for a ¾ movement compared to the City Market distance?” Ms. Hansen responded.

3:28:45 Commissioner Secrest asked a question about what would trigger implementation of a change of access. Mr. Prall and Ms. Hansen responded.

3:36:47 Commissioner Reece asked a question regarding the parcel at 115 Camino Del Rey Drive. Commissioner Reece asked a question about the potential for Code amendments to the proposed Plan. Ms. Allen responded. Commissioner Reece asked a question about raised medians. Mr. Prall responded. Commissioner Reece asked a question about public engagement opportunities in the future regarding the proposed plan. Mr. Prall and Ms. Hansen responded.

Discussion
3:37:38 Commissioner Ehlers made a statement regarding the request.

3:43:02 Commissioner Reece made a statement regarding the request.

3:49:18 Commissioner Gatseos made a statement regarding the request.

3:53:25 Commissioner Weckerly made a statement regarding the request.

3:56:30 Commissioner Secrest made a statement regarding the request.

There was some discussion on how to pose the motion amongst the Commissioners and staff.

DRAFT

Motion and Vote

Commissioner Ehlers made the following motion, “Madam Chair, on the Patterson Road Access Control Plan, CPA-2021-17, I move that Planning Commission forward a recommendation of adoption of the Patterson Road ACP as an element of the Grand Junction Comprehensive Plan and implementing the Comprehensive Plan with the findings of fact as listed in the staff report.”

Commissioner Gatseos seconded the motion.

Commissioner Ehlers says his motion is compelled by the consideration of the access points in prior discussion (Access 114,116 and 117), around some mechanism for how this is paid for especially regarding transportation impact fee credits or something along those lines, and lastly that there is an acknowledgement that there is a significant portion of this corridor that is largely already developed residential area and that perhaps is a little bit too much in those areas. Commissioner Ehlers noted he is paraphrasing previous discussion.

Commissioner Reece stated she would add: 1) an evaluation of the 1st trigger in the 3 types of implementation, which states "A property redevelops or changes use, resulting in an increase in traffic to and from the site of 20% or more,” and to address the access points in the Darby Lane area of the Plan.

The motion failed 1-4 with Commissioners Reece, Gatseos, Weckerly, and Secrest voting NO.

Summary of discussion:

- Revisit access points 114, 116, and 117.
- Provide a mechanism of how to pay for improvements such as the use of Transportation Capacity Payments (TCP) funds.
- The Plan is largely residential that is unfairly being treated, needs to be addressed.
- Further evaluate the 1st trigger in the 3 types of implementation, which states “A property redevelops or changes use, resulting in an increase in traffic to and from the site of 20% or more.”
- Revisit Darby Lane (#236) and Placer Street (#240) access points.

3. Other Business

None.

4. Adjournment

The meeting adjourned at 9:32 p.m.

DRAFT

From: Karen Milbank
To: Council
Cc: Karen Perrin
Subject: Patterson Access Control Plan
Date: Tuesday, June 15, 2021 3:06:49 PM

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Dear City Council:
We have written letters and concur with our Mantey Heights neighbors- please don't adopt this Patterson Access Control Plan until we have the 29 Rd. Interchange in place which will be a game changer.
We have 4 access points in and out of our subdivision- Mtn. View, Mantey Heights, Santa Fe and Park. We use them all to safely navigate Patterson depending on time of day and traffic flow. There have been few if any accidents year over year. In part because we know what we are doing, and there are no streets on the N. side, or across Patterson from our subdivision.
You can can increase safety by controlling speeding with cameras and citations. Please limit in/out on all future subdivisions and businesses.
Thanks for preserving our historic neighborhoods.
Karen Milbank and William Ellinwood

Sent from my iPhone

From: Diane Lucero
To: Council
Subject: Patterson Road Access Control Plan
Date: Tuesday, June 15, 2021 2:57:07 PM

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Dear City Council,
I am writing this letter after reviewing your City Council Meeting agenda for tomorrow 6/16/21.
I attended the Planning Commission meeting on 6/8/21 specifically because they were addressing the Patterson Road Access Control Plan (ACP). It was very clear to me that the Planning Commision had many questions and concerns about the ACP and in the end denied the approval of the ACP.
One of my concerns and observations after attending the Planning Commision meeting was that the Planning Department kept referring to the plan as if it was not going to be implemented right away, but that things in the plan were for 20 years in the future. However, when having our neighborhood meetings with the planning department there were several times when I understood that the changes in the ACP would take place very soon. One of the changes being the egress and ingress into neighborhoods.
Again, the whole topic of U-Turns being an acceptable way to change directions is totally unacceptable to me. I am an older driver (over 55 years of age) as well as over 90% of the residents in my neighborhood. Just the other day a car in front of me at the 28 1/4 Road and Patterson Road intersection, made a u-turn in front of me from the left hand turn lane when the left turn arrow turned green. I was startled and very relieved I did not immediately follow the driver or I would have definitely hit him as he made his u-turn. I am convinced U-turns are very dangerous.
Please, I ask that you confirm the Planning Commission's stance, to deny the Patterson Road Access Control Plan, and DO NOT codify this plan.

Sincerely, Diane Lucero

From: Diane Belt
To: Council
Subject: Patterson Road
Date: Tuesday, June 15, 2021 2:41:56 PM

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

I would like to respectfully request that you give this Access Control Plan more research and consideration. I live in a neighborhood off Patterson and must drive Patterson to get anywhere from home. I urge you to listen to the Planning Dept. denial to this plan and do further study to a more efficient way to improve traffic concerns on Patterson Rd. thank you, Diane and Jerry Belt

Catherine Hursh
114 Mantey Heights Drive
Grand Junction, CO 81501
cahursh@gmail.com

June 15, 2021

Grand Junction City Council
250 N. 5th Street
Grand Junction, Colorado. 81501

RE: Patterson Road Access Control Plan

Greetings,

As a homeowner, directly affected by upcoming decisions to be made concerning Patterson Road access, I would like to voice statements, not addressed by the City of Grand Junction. Traveling Patterson Road, at all times of the day, I experience the "traffic flow" first hand.

IMHO, controlling traffic at posted speed limits is key to keep traffic moving, not cutting access off to tax paying property owners who have businesses and/or reside in adjacent neighborhoods to Patterson Road!

Fact: The majority of drivers travel Patterson at speeds in excess of (10 to 15mph) above the posted speed limit.
Fact: Accidents regularly occur at intersections, where speeding cars run red lights.
Fact: Traveling at posted speed limits allow vehicles to avoid most, if not all, stop lights.

What is the Grand Junction City Council's vision for Patterson Road and Grand Junction, as a whole? Do we want a city where traffic flow takes precedence over a Citizen's access to their homes and businesses?

Clearly, the proposed City plan for Patterson Rd is moving towards making Patterson Road a dedicated freeway. What other options have been considered to reduce an almost total reliance on Patterson Rd.? What options besides access restriction have been studied?

Please consider putting the current Patterson Road Access Plan on hold until alternative solutions are explored. These alternatives might include:

1. Exploring the expansion of alternative routes, such as 29rd to I70.
2. Utilizing G Road., changing stop signs to stop lights, to assist traffic flow.
3. Putting in right hand turn lanes, to let traffic easily exit Patterson Rd.
4. Consider lowering speed limits through residential areas, such as Mantey Heights.
5. Actively enforcing speed limits on Patterson Road.

Regards,

Catherine Hursh

From: GLORIA DESCHAMP
To: Council
Subject: Patterson Road Access Control Plan
Date: Wednesday, June 16, 2021 6:36:14 AM

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Dear Council Members,

I am reiterating my previous letter sent to members on 5/18 about the council's responsibility to reject the Patterson Road Access Plan as in brief, it does not address the residential issues but targets Patterson road only.

That being said it is common knowledgeable from 14th street east Patterson Road is encompassed by residential areas and the Plan as is falls incompetently short of consideration of the existing neighborhoods.

I have also sent a letter to the Planning Commission objecting to the Plan on 6/4 for their consideration, it should be in their files of objections.

As a body the City Council needs to take a forceful and adjective stance on the rejection of the Patterson Road Access Plan as it is unnecessary as a similar plan was in the Redlands.

Sincerely,

Gloria J Deschamp
124 Mount View Dr
Mantey Heights

From: anita ballenger
To: Council
Subject: Patterson Road
Date: Tuesday, June 15, 2021 10:57:08 PM

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

City Council Members,

The future of Patterson is being bantered about like it is some immaterial element of our lives, but the essence of Patterson is that it is inextricable to our daily lives.

The Northeast area of the city around Patterson Road is a nice residential area.

Patterson Road is nearly all residential between 14th Street and 32 Road. It is presently a good residential corridor, lets keep it that way; not every major street has to be commercialized, and making a raceway would take away from the residential character of the area.

The Redlands is a nice area with top-end property values and Broadway is essentially a residential corridor with the exception of a few planned retail centers. Some years ago planners tried to cut off access along Broadway in much the same way they are wanting to cut off access along Patterson Road. The people of the Redlands got that control plan stopped. Like those on the Redlands, we on this residential section of Patterson would like to protect our property values and keep this as a residential corridor. The Patterson Access Control Plan would hurt our area and devalue our properties.

The ACP is wrought with issues. We do not like the ACP. We do not want the ACP. The ACP is not good for us.

Best,
Anita

Sent from my iPhone

From: Gary Lucero
To: Council
Subject: Planning Commission Recommends Denial
Date: Tuesday, June 15, 2021 8:08:21 PM

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Mayor McDaniel and Councilmembers

Planning Commission Recommends Denial

We were very pleased that the Planning Commission members appreciated the great amount of input from the public and it was clear that they weighed the information, seeing that the ACP had good merit, but it was not something that should be codified. They recognized/commented that Patterson east of 14th Street is predominantly residential and comes with a whole different set of issues than the retail/business areas of Patterson.

We could see that the commissioners took our concerns to heart by the questions that were asked. One crucial question that deserved a very clear and detailed answer concerned what does Joe Citizen do if he wants to change a codified plan that is touted to be “living and can change.” The answer of course that was implied, but not fully stated is that Joe Citizen would have to come up with heaps of time and money to hire experts in engineering, traffic, planning, impacts, send out the required notifications, have presentations before various

entities, have multiple hearings with the planning commission and multiple hearings with the city council. It is easy of course for city staff to make changes because they have endless time, staff and resources as compared to Joe Citizen who would be burdened with a clear hardship.

Two other take aways from the Planning Commission meeting was that the ACP was said to be for the future, for twenty years from now which begs the question, if the city continues to change and all types of infrastructure will be altered/installed around the city, could the code essentially be outdated the day it is adopted? Secondly, we were given the impression on several occasions that a number of the ACP items would be promptly put in place, but at the Council and Commission meetings the pitch is that this is for the future, for twenty years from now; there was clearly a conflict in the information.

Of course we agree with the findings of the Planning Commission that the Patterson Access Control Plan should be denied.

Some years back planners attempted to do very much the same thing on Broadway, in the Redlands, as the ACP on Patterson, but the people of the Redlands were able to get that plan stopped.

In talking with several engineers that know TED standards, backwards and forwards, they point out that the RFP for this ACP study was to only look at Patterson

Road. The study did NOT include the evaluation of the impact on side streets; in other words, it only looked at Patterson and did not even consider the people who live off of Patterson. The ACP study in its present form falls seriously short of being a plan that can be used to address both Patterson and all the subdivision side streets.

Cordially, Gary Lucero

Janet Grant

118 Mantey Heights Dr
Grand Junction,CO 81501

June 15, 2021

Grand Junction City Council

Dear City Council Members,

We bought our house in Mantey Heights in 1994, we planned to live in our home for the rest of our lives. Our neighborhood is unique, we know our neighbors, we help each other. I know many of our neighbors have written letters with ideas for helping the Patterson ACP.

I agree with all of them. I also want to personalize it. If the speed limits were lowered and enforced Patterson Rd would be safe to enter and turn off of. Imagine your elderly mother trying to go to the grocery at City Market and entering Patterson Rd, turning right to eventually turn left in someone else's neighborhood. Or your daughter trying to turn a U turn in the first few years of driving without getting broadsided at a stoplight while 3 people run the red light.

I still do not understand why Patterson Rd has been targeted as a route to the west end of Grand Junction. Please consider placing the Patterson ACP aside at this time and work on the current problems of speed control.

Sincerely,

Janet Grant

Your Name

From: dyerwolfnboo@gmail.com
To: Council
Subject: Mantey Heights
Date: Tuesday, June 15, 2021 6:54:29 PM

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

I moved into the singular Mantey Heights neighborhood in 1995 and have, thankfully, never seen it changed in the slightest. So, when the Council started tampering with our private little dwelling space I was surprised and shook up after my briefing.
All of the streets in this small hamlet are too narrow to allow another lane and all the neighbors are happy to slow down and let the other driver pass. Although, it would help if we could get sone police assistance in order for the cars to obey the 20 mph.
The drivers appear to be oblivious to the fact that this family area abounds with dogs, children, chickens and even kids learning how to ride bikes.
I would fully support the presence of the occasional policeman supervising.
Only a pipe dream, alas, as the cops can't slow down the vehicles on Patterson St.
If your speed on this crosstown avenue is anywhere below 55 mph in this 40 mph zone you're holding up traffic.
Sincerely yours,
Dyer O'Connor

Kitty Nicholason

109 Santa Fe Drive
Grand Junction, CO 81501

970.243.9911
970.778.8427

kitty.n@bresnan.net

June 15, 2021

Grand Junction City Council
250 N. 5th Street
Grand Junction, Colorado. 81501

RE: PATTERSON ROAD ACCESS CONTROL PLAN

Dear Council Members,

I am a home-owner — for 31 years now — in Mantey Heights. No one is surprised that things have changed since 1990, especially the traffic. I deal with it because I have to. There is ***No. Other. Way.*** to get out of my neighborhood than via Patterson Road.

Perhaps better plans could have been made long ago, but apparently they weren't.

So...what can we do about it now?

Make huge sweeping changes that will probably be expensive and disrupt current situations, possibly making them worse — all with no guarantee they will work?

I suggest we start with one small, but totally logical, action and see if improvement results: **Lower the speed limit and enforce it in select areas.**

Select the areas that are targeted for major changes (such as the Mantey Heights frontage) and reduce the speed limit there. Let the less problematic areas remain 40 or 45. And take a stab at enforcing those as well.

Thank you,
Kitty Nicholason

PS: But if money were no object, I'd say let's get 29 Road to I-70 ASAP!

From: ruthkk97@gmail.com
To: Council
Subject: Patterson Road Access Control Plan
Date: Tuesday, June 15, 2021 4:34:13 PM

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Dear City Council Members,

I am writing this email to urge you to accept the decision of the City Planning Department about the Patterson Road Access Control Plan. They turned it down and with good reason.

I have been following this close, written letters with my concerns and spoke to the Planning Department meeting when this decision was made. Let me reiterate the points made.

1. Patterson Road Access plan doesn't take into consideration that from 14th Street to 32 Road is predominately residential and taking this road to this level, takes away the residential character of the area.
2. Not allowing right hand turns on Patterson is foolish as it will be pushing traffic into narrow streets – through residential neighborhoods where children play. That and expecting people to go to the nearest stoplight to make a U-turn is not well thought out. (Can you imaging a senior citizen, confused by the new rules and regulations trying to negotiate a U-Turn in traffic?) and never doubt that you will be there yourselves one day.
3. Patterson Road Access plan is jumping to a conclusion about "fixing the problem" of traffic accidents in this corridor without considering alternatives, such as making all left hand turns at stop lights with arrow only. This alone would eliminate 75% of the problem.
4. Get more police/sheriff/highway patrol out on Patterson Road to curtail the speedsters and the "artful dodgers" that are racing to get nowhere fast.
5. Divert more traffic to I-70 Business Loop to take pressure off Patterson Road.
6. Add a few more – well timed stop lights on Patterson Road.
7. Work with the county and the state to finish the 29 Road project. This alone will relieve a large percentage of the traffic on Patterson Road.
8.

These are just a few of the issues I and others see with this project. I am all for making traffic flow more smoothly and efficiently, but the alternatives need to be tried first and will most certainly cost less that a total revamp of this roadway.

Sincerely,
Ruth Kinnett
Property Owner
599 Grand Valley Drive

Selestina Sandoval

From: Ken Brodel <kenbrodel@yahoo.com>
Sent: Friday, July 2, 2021 9:46 AM
To: Council
Subject: Right turn only on Patterson

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Good morning,
It has come to my attention that it is being proposed that residents can only turn right onto Patterson Road when exiting their subdivision. Is this due to safety issues stemming from an excess of accidents due to people turning left onto Patterson? If not, surely you understand the extreme inconvenience this would create for many residents. Turning right and then making a u-turn as an alternative creates another set of problems that could result in safety issues.

Please let me know the logic behind this proposal.

Thanks,
Kendall Brodel
2526 El Corona Drive

Sent from iPhone

Selestina Sandoval

From: Gary Langdon <gjopa2010@gmail.com>
Sent: Friday, July 2, 2021 12:23 PM
To: Council
Subject: Patterson Access Control Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

To the Council's Members

I am writing this letter because I can not be there in person.
Here are just a few of the reasons this plan will not work:

1) The safety of our neighborhood children walking to the Elementary School while drivers are as you say "snake through our streets" to get to a different way to Patterson. How safe is that? Did you even think of the children with this idea?

2) What about the emergency vehicles entering these neighborhoods and then needing to make a left onto Patterson to get to a hospital?
Seconds matter when saving a life.

3) I do not want traffic being forced to drive through our neighborhood to find the only road out of our subdivision instead of having Patterson to exit on in both directions.

4)I am assuming those who planned all this do not live in the Patterson neighborhoods this would affect.

If you really want to help the flow of traffic on Patterson, instead of blocking people from making left hand turns there are other ways to do it. Safety for our children should be of the most concern to everyone.

Thank you,
Gary Langdon
587 Eastwood St
Grand Junction81504

Selestina Sandoval

From: Dee Reeves <da2reeves@aol.com>
Sent: Friday, July 2, 2021 4:59 PM
To: Council
Subject: Patterson Access Control Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

City Council Members,

The Patterson Road Access Control Plan misses the mark. The "right hand turn only", creates a hardship for those who live in communities along F Road (Patterson) by not allowing them to access their homes or their work by forcing them to find alternative routes through sub-divisions, to gain access to F Road (Patterson) as they commute. The changes will cause traffic into the neighborhoods that are not designed to handle major traffic, I strongly ask you to support our community and find a better alternative.

You have to allow our residents who live North and South of F Road the ability to access their homes without asking them to find alternatives that don't exist. As an example, I live on 29 3/8 road south of Patterson and a new neighborhood has been built two streets to the west at the end of Redwing Lane south of Patterson. This connects to Dawn Drive . The new subdivision has VERY NARROW streets with poor traffic movement. I have observed vehicles not stopping at the stop signs on the east - west route through the neighborhood: Wellington Avenue at 29 1/4, 29 3/8 and Colanwood Drive. My neighbors on the corner of Wellington have seen multiple near accidents. This is a danger to the children, walkers and seniors in this once quiet neighborhood. Now you are proposing to sen

Also if attempting to exit the area via Dawn Drive, it is nearly impossible to turn left (south) on 29 Road. Traffic is very heavy during peak traffic hours on 29 Road with the left turn lane at 29 and Patterson backing up PAST the Safeway entrance on 29 Road.

My family has lived and owned our property since 1973. We have seen numerous changes to Patterson Road in the last 48 years. Going from a two-lane road with farms and open space to subdivisions, businesses increasing the traffic on one of the main roads that connect the East and West side of the Grand Valley. With this plan we will lose the right to access to our property that has always been granted to us and the freedom to travel to the West. I strongly oppose this plan. Not a benefit to the citizens of the communities North and South of F Road (Patterson). What the planning team needs to be focus on is completing:

- The 29 Road access to I-70, leaving it unfinished is not a benefit to anyone.
- An additional artery that travels East to West that can take addition commuters.

Planning team you need to do better, this proposal is not it.
Thank you for your time and attention to this matter.

Doris A Reeves
da2reeves@aol.com
596 29 3/8 Road
Grand Junction, CO 81504
970-245-0261

Selestina Sandoval

From: PAUL SCHLEISMAN <pschleis@aol.com>
Sent: Saturday, July 3, 2021 12:20 PM
To: Council
Subject: Patterson access control plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

My name is Paul Schleisman, After talking with members of our HOA, We are all apposed to the planning commission control plan for Patterson. We all feel the plan makes no sense to use, the victims of this plan. We are all apposed to the plan. Leave well enough alone.

Sent from the all new AOL app for Android

Selestina Sandoval

From: ensworth@aol.com
Sent: Saturday, July 3, 2021 1:58 PM
To: Council
Subject: Patterson Access Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

I drive Patterson Avenue everyday The access plan is a proposed solution that would be worse than the problem it seeks to solve. Many of the sub-divisions along Patterson do not provide access to adjoining sub-divisions. So you are condemning residents to wander around like mice in a maze seeking access to Patterson, wasting time, fuel, energy and adding to air pollution and traffic in residential neighborhoods. I hope the council will reject this proposal and go back to the drawing board. Thank you for your consideration. C. Ensworth

Selestina Sandoval

From: Mlles Brekke <bre8me@icloud.com>
Sent: Monday, July 5, 2021 10:16 AM
To: Council
Subject: Patterson Access Control Plan (ACP)

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

This is a stupid idea! Snake through residential streets - irate speeders with small children playing in streets - accidents waiting to happen. Perhaps one way streets for Orchard and Patterson? Not what you proposed in your notice

Sent from my iPhone

Selestina Sandoval

From: arlene mc adam <mcadam8@yahoo.com>
Sent: Monday, July 5, 2021 11:26 AM
To: Council
Subject: Patterson ACP

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

I am in opposition to the proposed plan to change access along Patterson Road. This proposed plan would affect the many residents along this road, but also the employees and customers to the many businesses along the route. Emergency access would be greatly affected and would create unnecessary hardships to many.

I own property on East Indian Creek Drive. There isn't any "back way" to access a road to leave the sub-division. It would mean at least an additional mile every time I leave my driveway to shop, go to a bank, or carry on every day business. What about the many people who are looking for access to a route to make that "u-turn". The congestion at the very limited u-turn lanes would be overwhelming.

Patterson Road is a "speedway" now. With no left turns allowed, it would give the law breakers unfettered access to do as they please. There aren't enough cops now to patrol the streets. This would be a disaster for anyone along this route.

Watch what would happen to property values if this is allowed to proceed.

The City has made it very difficult to find access to these proposed changes. What is the City Council trying to do to the city by proposing changes so radical that any person using Patterson Road will be affected?. THIS NEEDS A LOT MORE INPUT FROM CITIZENS ;AFFECTED, AND NOT UNDER THE CLOAK OF DARKNESS!!!!!!!

Arlene McAdam
606 East Indian Creek Drive

Selestina Sandoval

From: Terri O'Brien <obrien2.realty@yahoo.com>
Sent: Monday, July 5, 2021 11:27 AM
To: Council
Subject: APC

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

We live on E. Indian Creek Drive and we are opposed to the Patterson ACP for at least one of the entrances to our subdivision. The right-in/right-out for E. Indian Creek Drive would be okay, but the 3/4 for W. Indian Creek Drive is not good. We have never had an issue of making a left hand turn off of W. Indian Creek onto Patterson. That entrance is far enough from 29 road and there is a good middle turn lane there. We are opposed to the 3/4 designation for W. Indian Creek Drive.

Terri O'Brien

Selestina Sandoval

From: JOHN LALLEMENT <ljohn40@msn.com>
Sent: Monday, July 5, 2021 12:29 PM
To: Council
Subject: Fw: ACP

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

There is a house for sale across the street from us. There is a young couple in our family looking to buy a house.
No one is suggesting they even look at this house because of the ACP. Why buy a house in a neighborhood where the City of Grand Junction is more concerned about people driving past than they are about the people living in the neighborhood?

The ACP plan would force us to drive a half mile in the wrong direction, wait through who knows how many light changes
to turn left, and then drive back the way we came in order to go to the City Market in Clifton, either the old or the new Clifton
Library, or any of the restaurants that are closest to us. It is only an extra mile you might say, but that extra mile costs gas, time, and
wear and tear on our vehicle.

On the subject of Libraries, has Mesa County been informed not to waste their time and money on a new Library that the City of Grand
Junction is doing their best to prevent the Libraires closest patrons from using?

Highway 50 is just to the south of us. I-70 is just to the north of us, why is it so important to speed people through a residential neighborhood?
I understand that because of where we live, we are not able to vote for the city commissioners, do you think the people speeding through our neighborhood
are your voters? We moved to Grand Junction 5 years ago and we like our neighborhood and the convivence to most things. Honestly though if we would
have known about the ACP we would never have bought our house. And how is the ACP going to affect property values in these neighborhoods which now will
have much more traffic than the neighborhood streets were planned for? Using Cottage Meadows, which is a dead-end street, as a major entrance will funnel
vehicles down our street day and night. We have grandchildren who love to ride on the sidewalks and go to get our mail, there will be too much traffic to allow
them safely to continue to do these things.

If you really want to help the traffic on Patterson, lower the speed limits to 40 and 35 and put in more stop lights. The ACP is only going to allow drivers who now think 45 is
to slow to go even faster than the 50 or 55 they do now. While you are thinking about the neighborhoods you want to destroy the question was asked and
never answered at the last meeting about emergency vehicles and turning left.

Please think about the people living in the neighborhoods on either side of Patterson and what you are doing to them and vote no on the ACP.

Lynett Lallement
3053 Camelot Place
Grand Junction, CO
81504

Selestina Sandoval

From: Lois Dunn <loisgdunn@gmail.com>
Sent: Monday, July 5, 2021 12:38 PM
To: Council
Subject: PATTERSON ACCESS CONTROL PLAN (ACP)

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Honorable Council Members:
We note the Final Meeting" is approaching on July 7, 2021 at 5:30 p.m.
Surely you have heard enough on this topic and would like to move this forward.

Please consider - there are huge consequences for passing the ACP. It is far more than SAFETY. Every neighborhood accessing Patterson will feel the impact. Intersections are already impacted by traffic - since that is where most accidents are. Put some U-Turns in the mix and it will stifle traffic more than helping. Living off Patterson, I see how many cars get through on a turn signal: 3-5 cars.

As a real estate broker, I have noted how far one would drive to make a right turn when accessing Patterson. It is several miles every time. This causes frustration, use of gas, more pollution.

When "The Lodge" was going through the process, extensive traffic studies were done. The studies showed a limited time during the day when traffic did not permit left turns. The Lodge complied with this study and timed their shift work to allow for traffic flow. The Lodge and everyone on Patterson recognizes the safety risk for emergency vehicles not being able to turn left; as well as the inconvenience to neighborhoods.

For those of us accessing Patterson by necessity; we know the times it is possible to turn left and the times it is impossible. Again, the accidents are at the intersections, not the access points between.

Yes a study was done naming safety and traffic flow. We as citizens are the losers for
* Passing the ACP
* Possibly codifying the ACP (which will ad tremendous time & cost for anyone asking for any change.

Thank you for your time & consideration.

Sincerely,

Lois Dunn, Broker

--
Lois Dunn

Invest in Colorado West, Inc.
2019 GJARA Realtor of the Year
2019 CAR Bill Good Memorial Award
970-261-5408
loisgdunn@gmail.com

Selestina Sandoval

From: John Oconnor <sixgun6x@gmail.com>
Sent: Monday, July 5, 2021 12:38 PM
To: Council
Subject: opposition to ACP for Patterson rd

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

I would like to take the time to state my opposition to the ACP plans for Patterson rd. What information I can find about the plan, and its been difficult and from what I've gathered. talking with my neighbors. We have to make u turns in order to cross Patterson. This is not a good plan in my humble opinion. Please do not change it to that
Thank You
John O'Connor

Selestina Sandoval

From: JOHN LALLEMENT <ljohn40@msn.com>
Sent: Monday, July 5, 2021 1:37 PM
To: Council
Subject: Access Control Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

Grand Junction City Council members.

I retired to the area known as Fruitvale about six years ago. Please forgive my ignorance on the subject of governance within Mesa County. Perhaps you could direct me to a publication or web site where I may be able to educate myself. A Sentinel article referencing a web meeting in July were my introduction to the ACP.

I am of the understanding, Fruitvale-Clifton residents have no direct input on matters before the council, other than that raised by Mesa County Commissioners. I do not know if this is factual, or generally speaking, an accurate statement.

I have three questions:

1. What entity provides the city of Grand Junction the authority to dramatically and negatively impact traffic along Patterson in favor of motorists over residents?
2. Has the council completed or contracted a report such as Clifton--Fruitvale Governance Fiscal Impact Analysis?
3. If so, how may I obtain a copy?

Thank you for your time.

John Lallement
3050 Camelot Place
Grand Junction, CO 80514

Selestina Sandoval

From: jmv2453@aol.com
Sent: Monday, July 5, 2021 2:41 PM
To: Council
Subject: Patterson Road Access Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

To Whom It May Concern:

As a resident who lives just off Patterson the plan as proposed is not workable. At many points our access to and from Patterson is quite limited. Right now there is way too much traffic on Patterson. Getting onto Patterson at certain times of the day is time consuming. Development along Patterson needs to be curtailed so as to keep it from becoming over crowded. Send the current proposal back to the drawing board we need more input and insight to come up with a plan that does not limit existing access to Patterson or cause undo travel just to get home when a simple turn from Patterson would get one home in seconds as opposed to having to travel around the back roads for several minutes adding time to the commute and adding more traffic to the quiet neighborhoods that would see increased traffic from people having to take a long way around just to get home.

James Vidmar
Pheasant Ridge sub

Selestina Sandoval

From: Janice Booth <jbooth@bresnan.net>
Sent: Monday, July 5, 2021 7:19 PM
To: Council
Subject: Patterson Access Control Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

To whom it may concern:

We live in the Indian Village on Patterson and 29 road. We DO NOT want to make only right hand turns out of our development. Please leave it as it is.

Thank you!

Janice Booth
613 ½ Arapahoe Way
GJ

Selestina Sandoval

From: Janice Booth <jbooth@bresnan.net>
Sent: Monday, July 5, 2021 7:21 PM
To: Council
Subject: Patterson Access Control Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

To whom it may concern:

My wife and I live in the Indian Village. We **DO NOT** want to make only right hand turns out of our subdivision. Please leave the turning situation as it is.

Thank you!

John Booth
Indian Village
GJ

Selestina Sandoval

From: Andrea Barber <anbarber7@gmail.com>
Sent: Monday, July 5, 2021 7:21 PM
To: Council
Subject: Don't codify the Patterson Access Control Plan!

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

To whom it may concern:

I'm writing to express my dissent for the Patterson Access Control Plan. I understand the plan has not been recommended by the Planning Commission, nor have other traffic route changes been considered. This plan, as it stands, is foolish, dangerous and confusing, both to long-standing residents and visitors to the area. This is not the right solution for Patterson. Please, do not vote to codify this plan.

Thank you kindly for your time,

Andrea Barber
Mesa County Resident

Dear GJ City Council:

We are residents of 575 Pioneer Road in Grand Junction and reside in a neighborhood off of Patterson where there is a proposal to make changes to how we access Patterson Road. The information from the Patterson Road Access Study shows that you seek to make Darby Drive a "Right In - Right Out" intersection.

We vehemently disagree with this change and here are the reasons why:

#1. We agree that safety should be your number one priority, so we would encourage you to spend the time, money and energy working to provide a safer Grand Junction for residents. Every week we witness speeding, tailgating, aggressive lane switching, texting, applying makeup while driving and excessive red light running. Working with GJPD to make traffic safety a high priority, or installing traffic cameras with ticketing capabilities, makes more sense than causing traffic to start making U turns or to "snake" through neighborhoods looking for an alternative route. We live in a nice neighborhood that would be dramatically altered by people trying to take a shortcut to 30 road. It seems that you're simply trading one "unsafe" practice for another. You're trading making a left hand turn for U turns and increased neighborhood traffic. Our neighborhood, in particular, has many eldery residents who are very active out walking during the day and there are many young children and pets that could be put in harm's way as well.

#2. We think there is more of a safety concern having vehicle after vehicle doing U turns into the intersection area. Having lived in an area that had numerous U turns, Grand Junction does not have long enough turn lanes or light duration.

#3. Since we are currently paying "Joe Biden" prices for gasoline, plus we will be paying 14 cents more per gallon next year with Governor Polis' gas tax increase, we are not interested in the longer routes that will be necessary to avoid a left hand turn onto Patterson. Not to mention, more stop and go driving will be bad for vehicles, plus it will be detrimental to the air quality in Grand Junction.

#4. We personally feel like this is government overreach. We were taught to make left hand turns when learning to drive nearly 40 years ago and we've had no problems since that time, as both of our drivers' records remain accident free. We are perfectly capable of choosing how to make a left hand turn safely, and don't need the government to protect us from ourselves. We are also intelligent enough to know when the traffic is heavy and to choose a different route out of our neighborhood.

Thank you for allowing us to share our opinions on why this is a terrible idea and we absolutely do not want to see this change made.

Carmen Woodland
Scott Ball
575 Pioneer Road
Grand Junction, CO

Selestina Sandoval

From: Jay Hosburgh <hosburgh@earthlink.net>
Sent: Tuesday, July 6, 2021 9:25 AM
To: Council
Subject: Patterson Rd. Access Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

We are writing to express our concerns related to the planned modiifications to Patterson Rd.

Rather than repeat the valid arguments against this plan, which you have already received, we are respectfully requesting you follow the recommendations of your own Planning Commission, and reject this plan, without codification.

Sincerely,

Jay and Shelia Hosburgh

Selestina Sandoval

From: Jody Green <jodybowman1552@gmail.com>
Sent: Tuesday, July 6, 2021 7:34 AM
To: Council
Subject: Patterson road change or improvement program

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

As you know the planning commission gave you all a big no on this. I myself think it's a waste of money to be doing this project. Yes it'll make flow on Patterson maybe move quicker. But it also could create dangers of people going in and out of their subdivisions and local businesses. There are other areas in the city that need upgrade such as d road. It should have been four lanes all the way through on the parkway highly congested early morning and from 4:00 to 7:00 in the evening. Just one of your concerns citizens. Letting you know how I feel about some of your projects that you have in the making. Start spending our tax money wisely. Thank you Jody Green

Selestina Sandoval

From: Cindy Hosburgh <cynhosburgh@gmail.com>
Sent: Tuesday, July 6, 2021 11:56 AM
To: Council
Subject: Patterson Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

07/06/2021

Grand Junction City Council Members

I am writing today to strongly urge you to AGREE with the City Planning Dept, and cast a 'NO' vote for the Patterson Road Plan. The plan is not only dangerous for the neighborhoods on and around Patterson, but also for the signaled intersections on Patterson.

Please consider all of the ramifications this plan will carry before, during and after completion.
Vote to DROP this plan!!!

Respectfully,
Pete & Cindy Hosburgh
Orchard Mesa.

Selestina Sandoval

From: Dona Ramsey <drsramsey@gmail.com>
Sent: Tuesday, July 6, 2021 11:24 AM
To: Council
Subject: Proposed Patterson Traffic Project

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

July 5, 2021

Dear Grand Junction City Council Members:

We have the following **serious concerns** surrounding the proposed Patterson Traffic Plan. The County Commissioners saw the obvious flaws in this plan and voted against it. We hope and pray you will too.

We are concerned for the increased danger for innocent children living in neighborhoods where smart city planners want to reroute traffic; traffic often in a hurry and possibly distracted (14th-32 Road). Pushing through the Patterson Plan before doing other simple traffic measures is like putting the cart before the horse.

We are concerned for the dangerous U-turns at stoplights for older folks, or for "impaired" folks ("impaired distractions such as:" pot, alcohol, drugs, cell phones). Most of the accidents along Patterson are located at intersections and the planners want to force more dangerous maneuvers/ at these intersections, such as U-turns.

We are concerned for the decrease in property value by the proposed increase of traffic in quiet neighborhoods. Patterson is nearly all residential between 14th Street and 32 Road, PLEASE... lets keep it that way; not every major street has to be commercialized e.g. Broadway is nearly all residential except for a few planned commercial centers; hence, the Redlands has been able to protect their neighborhoods and maintain high property values.

We are concerned for the more wear and tear on city surface streets by increasing traffic. The residents along Patterson are being forced to sacrifice their convenience to accommodate the faster movement of the 20% of drivers (outsiders) who do not even pay property taxes here. Think of all the lawn service people with their trailers, trash trucks, FedX, UPS, DHL, moving vans etcetera that will have to snake through streets.

We are concerned for the proposed increased air pollution and noise pollution in the neighborhoods. The Plan is to make Patterson a raceway which will make it more dangerous/difficult for Patterson residents to access Patterson.

We are concerned for the need for increased police presence in neighborhoods that normally don't have a large police presence. The national average of trips per household is 10.5 and some locations, along Patterson, have hundreds of households that will be forced to reroute through their neighbors quiet streets which equates to thousands of multiple maneuvers to get to a signaled intersection, on a daily basis.

The Plan is so myopic that it does not even look at other routes that could carry some of the east west traffic. With all its shortcomings and many major issues, safety and otherwise, the city council wishes to codify the plan with all its apparent flaws as a form of law by writing it into the city code.

Imagine the ominous mountain of work that would be required to change something codified.

CODIFICATION MUST BE STOPPED.

Respectfully,

David and Dona Ramsey

1918 Barberry Court (Spring Valley)

Grand Junction, CO 81506

Selestina Sandoval

From: GLORIA DESCHAMP <GLORIADESCHAMP@msn.com>
Sent: Tuesday, July 6, 2021 11:23 AM
To: Council
Subject: Patterson Road Access Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

It is with great hope and certain expectations that the members of the City Council have received my previous correspondence concerning the Patterson Road Access Plan and that I do not have to reiterate my objection. As is known the Planning Commission has concurred Patterson Road is residential in fact from 14th street East and that inconclusive data has been set forth by the consultants in their study.
NO TO THE PLAN.

Sincerely,

Gloria J Deschamp
124 Mount View Drive
Mantey Heights Subdivision
Grand Junction, CO 81501
Sent from Mail for Windows 10

Selestina Sandoval

From: don & Jo nelms <donnelms608@gmail.com>
Sent: Tuesday, July 6, 2021 2:57 PM
To: Council
Subject: 5ai Ordinance adopting Patterson Road Access

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

I AM NOT for this Patterson road access control Plan.
This is a residential street and needs to remain residential.
North Ave is a highway & Business Loop I-70 is a highway. Make an effort to clean those highways up.
Please,
Joanne Nelms

Selestina Sandoval

From: Michael Miller <memrealtor@gmail.com>
Sent: Tuesday, July 6, 2021 2:21 PM
To: Council
Subject: Patterson Road Access Plan

** - EXTERNAL SENDER. Only open links and attachments from known senders. DO NOT provide sensitive information. Check email for threats per risk training. - **

To our City Council, Thank you for all your efforts in overseeing our City and Community.
I would like respectfully and strongly ask you to decline doing the Patterson Access Plan. I do not see this as the best for our Community. While Patterson is a main East - West street it is a highly residential area . As a Realtor I experience weekly driving on and off Patterson in my business all along Patterson. Simply faster is not better! Please decline passing this plan.

Sincerely, Mike Miller

RE/MAX 4000

120 W. Park Dr.

Grand Junction, CO 81505

(970) 216-8171

MEMRealtor@gmail.com

www.mikemillerrealestate.net

http://zillow.review/MikeMiller

The highest compliment I can receive is the referral of your friends, family and business associates.

RECEIVED
JUL 06 2021
BY:

WE THE PEOPLE OF INDIAN VILLAGE ARE AGINST THE PATTERSON ROAD ACCESS CONTROLL PLAN AND WE DO NOT WANT IT AS PART OF THE NEW CITY CODE!

NAME	DATE
DAVID D WIGGEN	07/02/21
Donald D. Wiggen	7/02/21
Carol Ann Wiggen	7/02/21
[illegible]	7-2-21
Robert Jimenez	7-2-21
Shirley Jimenez	7-2-21
Evan C. Richards	7-2-21
[illegible]	7-4-21
[illegible]	7-5-21
Tracey Reaves	7.5.21
Walter Schaub	7-5-21
Catherine Schaub	7-5-2021
[illegible]	7-5-2021
Jamie Mai	7-5-2021
Katie McCulley	7-5-2021
Britt Daniels	7-5-2021
Pam Johnson	7/5/2021
Forrest Daniels	7/5/2021
LINDA TALBOT	7.5.21
[illegible]	7/5/21

WE THE PEOPLE OF INDIAN VILLAGE ARE AGINST THE PATTERSON ROAD ACCESS CONTROLL PLAN AND WE DO NOT WANT IT AS PART OF THE NEW CITY CODE!

NAME	DATE
RICHARD HALTMAN	7/5/21
Dan Booth	7/6/21
John Booth	7/5/21

We the People/Residents of 28 3/4 Road are petitioning the City Council to NOT adopt the Patterson Access Control Plan as part of the city code. The Plan is ill-conceived. The Plan especially does not even begin to address all the issues of the property tax paying residents along our street and only kicks the can down the road.

Name	Date
Tiffany Hendricks	7-4-21
	7-4-21
J C Carpenter	7-4-21
Carol Carpenter	7-4-21
	7-4-21
Michelle Cowgill	7-4-21
	7/4/21
	7/4/21
	7-4-21
Jack Denka	7-4-21
	7-4-21
Carissa Harvey	7-4-21
	7/4/21
	7/4/21
	7/5/21
Mick Dodd	7/5/21

RECEIVED
JUL 06 2021
BY:

We the People/Residents of 28 3/4 Road are petitioning the City Council to NOT adopt the Patterson Access Control Plan as part of the city code. The Plan is ill-conceived. The Plan especially does not even begin to address all the issues of the property tax paying residents along our street and only kicks the can down the road.

Name	Date
[signature]	7.4.2021
Duane Harris	7.4.2021
Linda Harris	07-07-2021
Kay Jongel	7-4-21
[signature]	7-4-21
[signature]	7/4/21
[signature]	7/4/21
B. Brian Gardner	7-14-21
[signature]	7/4/21
Pamela Harris	7/4/2021
Billy Cartright	7/4/2021
[signature]	7/4/21
Ann Pinto	7/4/21
Mary Kay Franklin	7/4/21
[signature]	7/4/2021

Grand Junction City Council

Regular Session

Item #3.c.

Meeting Date: July 21, 2021

Presented By: John Shaver, City Attorney

Department: City Attorney

Submitted By: John Shaver

Information

SUBJECT:

A Resolution Affirming the Constitutional Rights of the Citizens of Grand Junction, Colorado

RECOMMENDATION:

Staff recommends adoption of the resolution.

EXECUTIVE SUMMARY:

The purpose of this item is to affirm the Constitutional Rights of Grand Junction citizens.

BACKGROUND OR DETAILED INFORMATION:

At the July 7, 2021 City Council meeting, a number of citizens requested that City Council declare Grand Junction as a Constitutional sanctuary. Although the City Council recognizes, supports and affirms that all Constitutional rights and protections are of utmost importance to the citizens of Grand Junction, and that the City Council does not value any one person's constitutional rights or protections above another person's, the City Council has no lawful power or basis to declare Grand Junction as a Constitutional sanctuary as has been petitioned recently by certain persons.

FISCAL IMPACT:

N/A

SUGGESTED MOTION:

I move to adopt/deny Resolution No. xx-21, a A Resolution Affirming the Constitutional Rights of the Citizens of Grand Junction, Colorado

Attachments

1. Resolution

RESOLUTION NO. _____

AFFIRMING THE CONSTITUTIONAL RIGHTS OF THE CITIZENS OF GRAND JUNCTION, COLORADO

RECITALS:

The United States Constitution states that it and the laws of the United States which shall be made in pursuance thereof; and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land.

The Constitution and the first 10 amendments to it, commonly known as the Bill of Rights provides important limitations on the government. The Bill of Rights is unique in that it is a statement of "negative liberties"– a statement of what the government will not do - which protects the fundamental rights of United States citizens from government infringing on freedom of religion, speech, the press, assembly; the right to petition the government for redress of grievances; the right to keep and bear arms, among other rights, and protection from unreasonable search and seizure, criminal prosecution and punishment without due process; and guarantees a speedy trial by a jury of one's peers, among other protections.

Article II of the Colorado Constitution, in 25 sections, comprises Colorado's Bill of Rights. Article II vests all power in and acknowledges that the same is derived from the people and that all government of right originates from the people, is founded upon their will and is instituted solely for the good of the whole.

The Charter of the City of Grand Junction is the City's constitution. The Charter is derived under the authority of the Colorado Constitution, principally Article XX, Section 6. Those provisions establish the Colorado Constitution as organic law of the City that in whole and in part extend to all municipal matters.

While the City Council firmly acknowledges and affirms the fundamental rights and protections held by the people of the City, and the people derive benefits from Constitutional rights, including life, liberty, property, and other economic benefits, the City Council has shared authority with the State and limited, if any authority with the Federal government.

Accordingly, and although the City Council recognizes, supports and affirms that all Constitutional rights and protections are of utmost importance to the citizens of Grand Junction, and that the City Council does not value any one person's constitutional rights or protections above another person's, the City Council has no lawful power or basis to declare Grand Junction as a Constitutional sanctuary as has been petitioned recently by certain persons. The City Council has faith in the Constitution and the people that support and abide by it and each Councilmember affirms his or her oath of office, and on behalf of the City pledges to uphold the United States Constitution, the Colorado Constitution, and the Charter and ordinances of the City of Grand Junction.

DRAFT

NOW, THEREFORE, BE IT RESOLVED that the City Council expresses its support for the peaceful assembly of persons, the right for the same to peacefully and lawfully petition the government for redress of grievances and for each and every person to lawfully benefit from any and all rights or protections provided to the people by the United States Constitution and the Bill of Rights, the Colorado Constitution, and the Charter of the City of Grand Junction, Colorado.

DRAFT

Grand Junction City Council

Regular Session

Item #4.a.i.

Meeting Date: July 21, 2021

Presented By: Kristen Ashbeck, Principal Planner/CDBG Admin

Department: Community Development

Submitted By: Kristen Ashbeck Principal Planner

Information

SUBJECT:

2021-2025 Five-Year Community Development Block Grant (CDBG) Program Consolidated Plan and 2021 Annual Action Plan

RECOMMENDATION:

Staff recommends approval of the actions

EXECUTIVE SUMMARY:

City Council will conduct a public hearing and consider adoption of the 2021-2025 CDBG Program Five Year Consolidated Plan and the 2021 Annual Action Plan included in the Five Year Plan.

BACKGROUND OR DETAILED INFORMATION:

CDBG funds are an entitlement grant to the City of Grand Junction which became eligible for the funding in 1996. The 2021 Program Year marks the City's 26th year of eligibility. In addition to consideration of funding projects for the 2021 program year, the City must adopt a new Five-Year Consolidated Plan. The City's 2021 Program Year will begin September 1, 2021. Applications for funding were solicited and received by the City in March 2021 and Council approved funding for thirteen projects at its hearing on June 16, 2021. The purpose of this hearing is 1) adopt the 2021-2025 Five-Year Consolidated Plan; and 2) adopt the 2021 Annual Action Plan included in the Five-Year Consolidated Plan.

2021-2025 Five-Year Consolidated Plan

The U.S. Department of Housing and Urban Development (HUD) requires the City of Grand Junction to develop and submit a Five- Year Consolidated Plan in order to apply for and receive its annual entitlement of CDBG funds. 2020 was the last program year

under the 2016 Consolidated Plan. Meetings with and gathering information from local agencies and organizations that provide services to or assist persons with low to moderate income have been ongoing since Winter 2021. A draft Five-Year Consolidated Plan was completed in June 2021 and was made available for public review through July 19, 2021.

The national objectives of the CDBG program are to develop viable communities by providing a suitable living environment, decent affordable housing and expanding economic opportunities for persons with low to moderate income. The Grand Junction Five-Year Consolidated Plan identifies housing and community development goals and strategic objectives that will further these national objectives. These are outlined in detail in the attached Executive Summary of the Plan. Generally, the overall goals and objectives are the same as presented in the previous Plan but some specific items that arose in discussions have been added to the objectives as presented in the Five-Year Consolidated Plan.

2021 Program Year Annual Action Plan

For each CDBG program year, a new Annual Action Plan is completed and adopted as part of the Five-Year Consolidated Plan. This is a public hearing to receive input regarding the 2021 Program Year Annual Action Plan. On June 16, 2021, the Grand Junction City Council approved the 2021 CDBG funding requests totaling $469,557 for the thirteen activities listed below. The 2021 Program Year Annual Action Plan is included within the attached Five-Year Consolidated Plan.

	PROJECT	FUNDING
1	Program Administration	$25,000
2	Counseling and Education Center Low Income Counseling	$10,000
3	HopeWest Caregiver Support for Low-Mod Income Families	$10,000
4	STRiVE Repair Accessible Bus	$7,942
5	REC Chipeta Elementary Transportation	$27,000
6	Partners Purchase Vehicle for WCCC	$14,468
7	HomewardBound Homeless Shelter Remodel	$40,000
8	GVCO Appliances for Mother Teresa Place	$50,000
9	MindSprings Health Oasis Clubhouse Remodel	$29,788
10	Karis, Inc. The House Remodel	$40,000
11	HRWC Emergency Repairs for Mobile Homes	$25,000
12	HRWC Critical Home Repair	$10,000
13	City of Grand Junction 27 Road Safe Routes to School	$180,359

FISCAL IMPACT:

The 2021 CDBG Congressional appropriation to the City of Grand Junction is $469,557.

SUGGESTED MOTION:

I move to (adopt/deny) Resolution 56-21 regarding the 2021-2025 CDBG Five-Year Consolidated Plan and (adopt/deny) Resolution 57-21 regarding the 2021 Program Year Annual Action Plan as a part of the City of Grand Junction 2021 Five-Year Consolidated Plan for the Grand Junction Community Development Block Grant (CDBG) Program.

Attachments

1. June 2021 DRAFT Five Year Consolidated Plan
2. Resolution Adopting CDBG 5-Year Consolidated Plan
3. RES-Adopting 2021 CDBG Annual Action Plan 071521

FIVE YEAR CONSOLIDATED PLAN AND FIRST YEAR ACTION PLAN

2021-2025

City of Grand Junction, Colorado

Community Development Block Grant (CDBG) Program
U.S. Department of Housing and Urban Development

The City of Grand Junction Community Development Block Grant (CDBG) 2021-2025 Five Year Consolidated Plan and 2021 Annual Action Plan was produced by the Grand Junction Community Development Department Office

El Plan Consolidado de Cinco Años de la Ciudad de Grand Junction (CDBG) 2021-2025 y el Plan de Acción Anual 2021 fue elaborado por la Oficina del Departamento de Desarrollo Comunitario de Grand Junction

For more information on the plan contact:

Para obtener más información sobre el plan ponerse en contacto:

Kristen Ashbeck
Principal Planner/CDBG Administrator
City of Grand Junction
Community Development Division
250 North 5th Street
Grand Junction, Colorado 81501

(970) 244-1491
kristena@gjcity.org

ES-05 Executive Summary - 24 CFR 91.200(c), 91.220(b)

1. Introduction

The U.S. Department of Housing and Urban Development (HUD) requires the City of Grand Junction to develop and submit a Five-Year Consolidated Plan in order to apply for and receive Community Development Block Grant (CDBG) funds. This plan identifies housing and community development goals and strategic objectives and serves as the basis for the city's grant application to HUD.

CDBG funds are awarded to communities by HUD via a formula including the poverty level in a community, condition of housing stock and population size. The CDBG program was established by the Housing and Community Development Act of 1974 in order to develop viable communities, decent housing, a suitable living environment and expand economic opportunities for persons with low to moderate income. The national objectives of the CDBG program allow communities to assist persons with lower income through housing, jobs and public service activities. CDBG funds can also address slum and blight in a community or address an urgent need such as rebuilding a community after a natural disaster.

2. Summary of Objectives and Outcomes Identified in the Plan Needs Assessment Overview

The 2021–2025 Five-Year Consolidated Plan ("Consolidated Plan" or "Plan") process was conducted in accordance with the Citizen Participation Plan. Citizens, agencies, and public officials participated by providing information throughout the process regarding community needs and services. The plan document was written by City of Grand Junction staff. The plan includes information gathered through recent reports and data, and interviews, meetings and questionnaires from local agencies and organizations. As a result of the planning process, the following Five-Year Goals and Objectives have been established.

GOAL 1: Suitable Living Environment
This goal will address non-housing community development infrastructure and facilities. Public improvements will be neighborhood based and primarily include street, sidewalk, storm drainage, solid waste and parks and recreation improvements. This goal will also include acquisition, construction, rehabilitation or other improvements to public facilities that are owned and operated by other entities and organizations that serve low- and moderate-income persons.

Anticipated Funding 2021-2025: $1,036,232

GOAL 2: Decent Affordable Housing
This goal is to increase the inventory of affordable housing units, maintain and rehabilitate existing low- and moderate-income housing, and remove lead-based paint or other hazards and deficiencies in residential units.

Anticipated Funding 2021-2025: $530,260

GOAL 3: Creating Economic Opportunities
This goal addresses economic development and the creation of jobs and supportive services such as childcare and youth/young adult employment programs.

Anticipated Funding 2021-2025: $100,000

GOAL 4: Suitable Living Environment - Homeless
This goal addresses shelter, housing, services and other activities to support homeless individuals and families.

Anticipated Funding 2021-2025: $360,548

GOAL 5: Suitable Living Environment - Special Needs/Human Services-Elderly/Youth/Minorities
This goal will provide activities to support special needs populations, other human services for populations such as elderly, youth and minorities.

Anticipated Funding 2021-2025: $345,410

3. Evaluation of past performance

A review of past Consolidated Annual Performance and Evaluation Reports (CAPERs) for the City of Grand Junction demonstrates a strong and consistent record of performance in the use of allocated CDBG funds. It is integral to determine what has been accomplished and what work is necessary to address the many and varied needs in the community. In Grand Junction, this evaluation included a review of past Consolidated Plans and Annual Action Plans as well as accomplishments reported to HUD each year. Through this evaluation the City was able to compare the needs identified through the Consolidated Plan and compare them to the activities that have taken place in the past to determine if there are continued or new needs relative to those activities. Priority needs and goals were then formulated and/or updated to meet current needs with attention to what has been successful in the past and what is needed in the future. In the past five years, the City has focused its efforts on funding activities that benefit special needs populations, homeless, affordable housing, and neighborhood improvements, with consistent funding each year. In addition, during the 2019-2020 Program Years, additional funds received via the CARES Act were allocated to activities to prevent, prepare for and respond to coronavirus and its impacts on our community.

4. Summary of citizen participation process and consultation process

Several opportunities were provided for citizen input on the development of the plan as well as the final draft of the plan. As required in the Citizen Participation Plan, the City held public meetings and met with service providers and focus groups to gather input for the plan. Presentations were made to the City Council regarding the plan and CDBG funded activities throughout plan development. Draft copies

of the plan were made available to the public through the internet, the public library, and the City Community Development Department office. Copies of the plan were also distributed to organizations and agencies that participated in its development. The draft Five-Year Consolidated Plan was made available for public comment from June 19, 2021 through July 19, 2021.

5. Summary of public comments

To be Included in Final Document

6. Summary of comments or views not accepted and the reasons for not accepting them

To Be Included in Final Document

PR-05 Lead and Responsible Agencies 24 CFR 91.200(b)

1. Describe agency/entity responsible for preparing the Consolidated Plan and those responsible for administration of each grant program and funding source

The following are the agencies/entities responsible for preparing the Consolidated Plan and those responsible for administration of each grant program and funding source.

Agency Role	Name	Department/Agency
Lead Agency	GRAND JUNCTION	
CDBG Administrator	GRAND JUNCTION	Community Development Department

Table 1 – Responsible Agencies

The City of Grand Junction is the lead agency administering the development and implementation of this plan. The Grand Junction Housing Authority, Housing Resources of Western Colorado, the Mesa County Health Department, and many local nonprofit and faith-based organizations are key stakeholders and decision-makers in administering activities described in the plan. The City of Grand Junction is entering its twenty-sixth year as an entitlement community that receives Community Development Block Grant (CDBG) funding. This plan covers requirements for use of those funds. The time period covered by this plan is September 1, 2021 through August 31, 2025.

Consolidated Plan Public Contact Information

City of Grand Junction Community Development Department
Kristen Ashbeck Principal Planner/CDBG Administrator
250 North 5th Street
Grand Junction Colorado 81501
970-244-1491
kristena@gjcity.org

PR-10 Consultation – 91.100, 91.110, 91.200(b), 91.300(b), 91.215(l) and 91.315(l)

1. Introduction

Development of the 2021 Consolidated Plan was a community effort, managed by the City of Grand Junction. The City held consultations and communicated electronically with representatives of various organizations, who met in focus groups to formulate the 2021-2025 Five-Year Consolidated Plan. The community entities participated in identifying the needs of the low- and moderate-income persons in the Grand Junction area. Drafts of the plan were made available to the agencies for review. The participating agencies are summarized in Table 2.

Summary of Activities to Enhance Coordination between Public and Assisted Housing Providers and Private and Governmental Health, Mental Health and Service Agencies

The City of Grand Junction provides for and encourages coordination between public and assisted housing providers and private and governmental health, mental health and other service agencies. The City provides and requests opportunities to interact with these agencies through the CDBG planning process, including identification of priority needs, adoption of goals, objectives and strategies, development of the Five-Year Consolidated Plan and Annual Action Plans, substantial amendments to the plans, and the Consolidated Annual Performance and Evaluation Report (CAPER). The City has on-going interaction with these agencies as sub-recipients or through participation in various local organizations and ad-hoc work groups. Specific activities to enhance coordination with these entities include City participation in the homeless coalition, housing and fair housing training opportunities, Housing Colorado design charettes for sites to be developed by the Grand Junction Housing Authority, ongoing meeting with economic development partners and coordination to form a Grand Valley-wide housing coalition.

Coordination with the Continuum of Care and Efforts to Address the Needs of Homeless

The Continuum of Care (CoC) is a local system for helping people experiencing or are at imminent risk of homelessness by providing housing and services appropriate to the range of needs in the community. The most recent point in time survey was conducted in January 2020 and resulted in an estimated population of 1,074 sheltered individuals and 485 unsheltered individuals. In Grand Junction, the shelter component is served by: HomewardBound of the Grand Valley (HBGV), Rescue Mission, Grand Valley Catholic Outreach (GVCO), the Latimer House and Karis, Inc. Food and day services are provided by GVCO Day Center and Soup Kitchen, District 51 REACH, KidsAid program, Salvation Army Day Center and meals and food banks. The housing component is provided by the Grand Junction Housing Authority (GJHA) Next Step program, the Phoenix Project, GVCO Permanent Supportive Housing and Karis, Inc. Case management is covered by many agencies but primarily GVCO, GJHA and HBGV. The City coordinates with all of these agencies in various ways as previously described.

Consultation with the Continuum(s) of Care to Determine Allocation of ESG Funds

The City of Grand Junction does not receive ESG Funds but does provide letters of support/certification for other agencies that seek these funds, indicating that their goals are consistent with the Five-Year Consolidated Plan.

2. Other Agencies Who Participated in the Consolidated Plan Process

See Table 2 beginning on the following page.

Table 2 – Agencies, Groups, Organizations who Participated

1	**Agency/Group/Organization**	City of Grand Junction
	Agency/Group/Organization Type	Other government - Local
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Economic Development Plan Coordination; Non-Housing Public Infrastructure
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The City of Grand Junction was the lead coordinating agency for development of the Consolidated Plan. Several departments helped identify non-housing community development needs.
2	**Agency/Group/Organization**	Grand Junction Housing Authority
	Agency/Group/Organization Type	Housing PHA Services - Housing Service-Fair Housing
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Lead-based Paint Strategy Public Housing Needs Homelessness Strategy Homeless Needs - Families with children Homelessness Needs - Veterans Non-Homeless Special Needs Market Analysis Anti-poverty Strategy

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The Grand Junction Housing Authority participated in focus group meetings, provided data and reviewed draft sections of the Plan. The agency provided data for the Grand Valley Housing Needs Assessment (HNA). The information provided was used to develop the HNA which, in turn, helped guide the 2021-2025 Consolidated Plan. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
3	**Agency/Group/Organization**	Housing Resources of Western Colorado
	Agency/Group/Organization Type	Housing Services - Housing Service-Fair Housing
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Lead-based Paint Strategy Anti-poverty Strategy

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Housing Resources of Western Colorado participated in focus group meetings, provided data and reviewed draft sections of the Plan. The agency provided data for the Grand Valley Housing Needs Assessment (HNA). The information provided was used to develop the HNA which, in turn, helped guide the 2021-2025 Consolidated Plan. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
4	**Agency/Group/Organization**	Grand Valley Catholic Outreach
	Agency/Group/Organization Type	Housing Services - Housing Services-homeless Services-Employment Service-Fair Housing Food, meals, clothing, veterans
	What section of the Plan was addressed by Consultation?	Homelessness Strategy Homeless Needs - Chronically homeless Homeless Needs - Families with children Homelessness Needs - Veterans Anti-poverty Strategy

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Grand Valley Catholic Outreach is a faith-based organization that participated in focus group meetings, provided data and reviewed draft sections of the Plan. The agency provided data for the Grand Valley Housing Needs Assessment (HNA). The information provided was used to develop the HNA which, in turn, helped guide the 2021-2025 Consolidated Plan. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
5	**Agency/Group/Organization**	MESA COUNTY HEALTH DEPARTMENT
	Agency/Group/Organization Type	Services-Children Services-Elderly Persons Services-Persons with Disabilities Services-Health Services-Employment Health Agency Child Welfare Agency Other government - County Major Employer
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Non-Homeless Special Needs Economic Development

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The Mesa County Health Department participated in focus group meetings, provided data and reviewed draft sections of the Plan. The 2018-2020 Mesa County Community Health Needs Assessment Report developed by the Department provided information used to identify priority community needs. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
6	**Agency/Group/Organization**	Mind Springs Health West
	Agency/Group/Organization Type	Services-Health Health Agency
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Non-Homeless Special Needs
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Mind Springs Health participated in focus group meetings and provided data for the Grand Valley Housing Needs Assessment (HNA). The information provided was used to develop the HNA which, in turn, helped guide the 2021-2025 Consolidated Plan. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.

7	**Agency/Group/Organization**	STRiVE
	Agency/Group/Organization Type	Housing Services-Children Services-Persons with Disabilities Services-Health
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Non-Homeless Special Needs
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	STRiVE participated in focus group meetings, provided data and reviewed draft sections of the Plan. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
8	**Agency/Group/Organization**	Hilltop Health Services Corporation
	Agency/Group/Organization Type	Housing Services - Housing Services-Children Services-Elderly Persons Services-Persons with Disabilities Services-Victims of Domestic Violence Services - Victims Major Employer
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Non-Homeless Special Needs

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Hilltop participated in focus group meetings and provided data. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
9	**Agency/Group/Organization**	HomewardBound of the Grand Valley
	Agency/Group/Organization Type	Services-homeless
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Homelessness Strategy Homeless Needs - Chronically homeless Homeless Needs - Families with children Homelessness Needs - Veterans
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	HomewardBound participated in focus group meetings, provided data and reviewed draft sections of the Plan. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
10	**Agency/Group/Organization**	Marillac Clinic
	Agency/Group/Organization Type	Services-Children Services-Elderly Persons Services-homeless Services-Health Health Agency
	What section of the Plan was addressed by Consultation?	Homeless Needs - Chronically homeless Non-Homeless Special Needs

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Marillac Health participated in focus group meetings and provided data. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
11	**Agency/Group/Organization**	Western Colorado AIDS Project (Westcap)
	Agency/Group/Organization Type	Services-Persons with HIV/AIDS
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Non-Homeless Special Needs
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Western Colorado Health Network (formerly Westcap) participated in focus group meetings, provided data and reviewed draft sections of the plan. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
12	**Agency/Group/Organization**	CENTER FOR INDEPENDENCE
	Agency/Group/Organization Type	Services-Elderly Persons Services-Persons with Disabilities
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Non-Homeless Special Needs

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The Center for Independence participated in focus group meetings and provided data. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
13	**Agency/Group/Organization**	Mesa County Valley School District 51
	Agency/Group/Organization Type	Services-Children Services-homeless Major Employer
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Homeless Needs - Families with children Homelessness Needs - Unaccompanied youth
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The REACH Program of School District 51 participated in focus group meetings, provided data and reviewed draft sections of the Plan. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
14	**Agency/Group/Organization**	Rocky Mountain Communities
	Agency/Group/Organization Type	Housing Services - Housing Service-Fair Housing

	What section of the Plan was addressed by Consultation?	Housing Need Assessment Lead-based Paint Strategy Public Housing Needs Homelessness Strategy Homeless Needs - Families with children Homelessness Needs - Veterans Non-Homeless Special Needs Market Analysis Anti-poverty Strategy
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Rocky Mountain Communities participated in focus group meetings and provided data. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
15	**Agency/Group/Organization**	Karis Inc.
	Agency/Group/Organization Type	Housing Services - Housing Services-Children Services-Victims of Domestic Violence Services - Victims
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Homelessness Strategy Homeless Needs - Chronically homeless Homeless Needs - Families with children Homelessness Needs - Unaccompanied youth

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Karis, Inc. participated in focus group meetings and provided data. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
16	**Agency/Group/Organization**	Volunteers of America, Colorado
	Agency/Group/Organization Type	Housing Services - Housing Services-Elderly Persons Service-Fair Housing
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Lead-based Paint Strategy Public Housing Needs Homelessness Strategy Homeless Needs - Families with children Homelessness Needs - Veterans Non-Homeless Special Needs Market Analysis Anti-poverty Strategy
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Volunteers of America, Colorado participated in focus group meetings and provided data. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
17	**Agency/Group/Organization**	Grand Junction Economic Partnership
	Agency/Group/Organization Type	Economic Development

	What section of the Plan was addressed by Consultation?	Economic Development Anti-poverty Strategy
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The Grand Junction Economic Partnership (GJEP) provided data and participates as an Economic Development partner. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
18	**Agency/Group/Organization**	Latin Anglo Alliance
	Agency/Group/Organization Type	Minority Services
	What section of the Plan was addressed by Consultation?	Non-Homeless Special Needs Minority
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Members of the Latin Anglo Alliance participated in focus group meetings and provided feedback regarding the community survey that was conducted as part of the Grand Valley Housing Needs Assessment. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
19	**Agency/Group/Organization**	Riverside Education Center
	Agency/Group/Organization Type	Services-Children Services-Education Minority Services
	What section of the Plan was addressed by Consultation?	Non-Homeless Special Needs Minority Needs

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The Riverside Education Center participated in focus group meetings and provided data. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
20	**Agency/Group/Organization**	Riverside Task Force Incorporated
	Agency/Group/Organization Type	Minority Services Neighborhood Organization
	What section of the Plan was addressed by Consultation?	Non-Homeless Special Needs Minority Needs
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Riverside Task Force participated in focus group meetings and provided data. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
21	**Agency/Group/Organization**	Grand Junction Chamber of Commerce
	Agency/Group/Organization Type	Business and Civic Leaders
	What section of the Plan was addressed by Consultation?	Economic Development Anti-poverty Strategy

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The Grand Junction Chamber of Commerce provided data and participates as an Economic Development partner. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
22	**Agency/Group/Organization**	Grand Junction Veterans Administration
	Agency/Group/Organization Type	Housing Services - Housing Other government - Federal Veterans Services
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Homelessness Needs - Veterans
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The Grand Junction Veterans Administration participated in focus group meetings and provided data. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
23	**Agency/Group/Organization**	Habitat for Humanity of Mesa County
	Agency/Group/Organization Type	Housing
	What section of the Plan was addressed by Consultation?	Housing Need Assessment

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Habitat for Humanity of Mesa County participated in focus group meetings and provided data. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
24	**Agency/Group/Organization**	COLORADO HOUSING AND FINANCE AUTHORITY
	Agency/Group/Organization Type	Housing Services - Housing Other government - State
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Public Housing Needs Market Analysis Anti-poverty Strategy
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	The Grand Junction Office of the Colorado Housing and Finance Authority participated in focus group meetings and provided data. Representatives from over 30 public and private agencies and organizations that provide services in the areas of housing, health, homeless, advocacy, education, neighborhood engagement, community development, fair housing, human services, and substance abuse as well as public/private lenders, non-profit builders and developers, realtors and advocacy groups attended the meetings. Discussions helped identify the priority needs for the Consolidated Plan.
25	**Agency/Group/Organization**	Builders, Developers and Homebuilder Advocacy
	Agency/Group/Organization Type	Housing For-Profit Builders and Developers
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Market Analysis

	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	A number of private for-profit builders, developers, engineers and homebuilders advocacy groups participated in focus group meetings. Discussions informed goals of the Consolidated Plan. Included: Anthony Properties, Austin Civil Group, River City Consultants, Chaparral West, Associated Members for Growth and Development and the Homebuilders Association of Western Colorado.
26	**Agency/Group/Organization**	Realty and Lending
	Agency/Group/Organization Type	Business Leaders Real Estate and Lending
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Market Analysis
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Several private realtors and lending institutions participated in focus group meetings. Discussions informed development of the Consolidated Plan. Included: Bank of Colorado and Coldwell Banker.

Identify any Agency Types not consulted and provide rationale for not consulting

There were no agencies identified that were not consulted. In the past, there has been limited participation by entities that represent minorities but the Riverside Task Force, the Latino Chamber of Commerce, Hispanic Affairs Project and the Latin Anglo Alliance all participated in the planning process for development of this Five-Year Consolidated Plan.

Other local/regional/state/federal planning efforts considered when preparing the Plan

Name of Plan	Lead Organization	How do the goals of your Strategic Plan overlap with the goals of each plan?
Continuum of Care	Homeless Coalition	Goals regarding homeless activities in the Consolidated Plan overlap with the goals and priorities of the Continuum of Care plan.
Comprehensive Plan	City of Grand Junction	Goals addressing land use, neighborhoods and housing in the Consolidated Plan complement similar goals in the adopted 2020 One Grand Junction Comprehensive Plan.

Name of Plan	Lead Organization	How do the goals of your Strategic Plan overlap with the goals of each plan?
Grand Valley Housing Needs Assessment	City of Grand Junction	Goals regarding the development of affordable housing, homelessness and special needs housing align with those identified in the Grand Valley Housing Needs Assessment completed in April 2021.
Analysis of Impediments to Fair Housing	City of Grand Junction	Goals regarding the development of housing are consistent with findings of impediments and actions in the Analysis of Impediments to Fair Housing Choice.

Table 3 – Other local / regional / federal planning efforts

Cooperation and Coordination with Other Public Entities

As previously described, the State Continuum of Care Plan was consulted to analyze homeless needs and address them in the Consolidated Plan. In addition, the 2020 One Grand Junction Comprehensive Plan helped guide goals of the Consolidated Plan in the areas of housing and infrastructure needs and the 2018-2020 Mesa County Community Health Needs Assessment provided input to priority community needs. Long range Community Development Department staff participated in focus group and general public meetings for the Consolidated Plan.

PR-15 Citizen Participation – 91.105, 91.115, 91.200(c) and 91.300(c)

1. Summary of Citizen Participation Process

As required in the Citizen Participation Plan, the City held public meetings, met with housing agencies, service providers and focus groups to gather input for the plan. Presentations were made to the City Council regarding the plan and CDBG funded activities. Draft copies of the plan were made available to participating agencies and organizations and to the general public through the internet, the public library, and the City Community Development Department office. The draft Five-Year Consolidated Plan was made available for public comment from June 19, 2021 through July 19, 2021.

Five public/focus group meetings were held in February and March 2021 to gather additional information, data and comments on elements of the Five-Year Consolidated Plan. The focus group topics included homelessness and special needs, new construction and retention of existing housing units, rental housing, and local government.

In addition, a public survey was distributed and stakeholders, local government officials and the general public were invited to comment on elements of the Consolidated Plan. Results of these efforts helped determine priorities of the community in setting goals for the Consolidated Plan.

Sort Order	**Mode of Outreach**	**Target of Outreach**	**Summary of response/attendance**	**Summary of comments received**	**Summary of comments not accepted and reasons**
1	Public/Focus Group Meetings	Minorities Non-English Speaking - Specify other language: Spanish Persons with disabilities Non-targeted/broad community Residents of Public and Assisted Housing	Approximately 40 persons attended a series of five virtual meetings concerning services and special needs, housing development and housing partners on February 17 and 18 and March 22 and 23, 2021.	Housing: rapid housing cost, low vacancies, increase difficulty finding /staying in market housing. Low Income: high deposits, paperwork. Disabled: transportation, few ADA units. Immigrants, voucher holders, working class also discussed. Homelessness: few affordable units, mental health/addiction, legal/financial background. Supply of Housing: biggest gap multifamily, increase in building	No comments not accepted.

				costs for new/rehab, impacts of pandemic.	
2	Public/Focus Group Meetings	Minorities Non-English Speaking - Specify other language: Spanish Persons with disabilities Non-targeted/broad community Residents of Public and Assisted Housing	1,853 responses were received for the survey which was distributed for the Grand Valley Housing Needs Assessment but which asked many broader questions regarding community needs.	The survey results included broad-based representation of citizens from varied parts of the City; range of age groups; range of income levels; and minorities. 45% indicated one or more challenges; strong desire for housing stock to accommodate wide range of residents.	No comments not accepted.

Table 4 – Citizen Participation Outreach

Needs Assessment

NA-05 Overview

The Needs Assessment of the Five-Year Consolidated Plan, in conjunction with information gathered through consultations and the citizen participation process, provides a picture of the City's needs related to affordable housing, special needs housing and services, community development and homelessness. From this Needs Assessment, the City identified those of highest priority which form the basis of the Strategic Plan and the programs and projects to be undertaken in the next five years.

NA-10 Housing Needs Assessment - 24 CFR 91.205 (a,b,c)

Summary of Housing Needs

Most of the data tables in this section were pre-populated with default data based on the most recent data available to HUD (2017 American Community Survey - ACS and the 2017 Comprehensive Housing Affordability Strategy - CHAS). The City of Grand Junction has replaced and/or supplemented these with alternative data sources, including information gathered through completion of the *Grand Valley Housing Needs Assessment* and the 2019 ACS as available.

Demographics	Base Year: 2010	Most Recent Year: 2019	% Change
Population	60,246	64,941	8%
Households	23,265	25,495	10%
Median Income	$52,389.00	$52,504.00	0%

Table 5 - Housing Needs Assessment Demographics

Alternate Data Source Name:
2019 5-YR ACS Data

Number of Households Table

	0-30% HAMFI	>30-50% HAMFI	>50-80% HAMFI	>80-100% HAMFI	>100% HAMFI
Total Households	3,905	3,040	4,205	2,170	12,175
Small Family Households	1,220	570	1,030	605	5,755
Large Family Households	155	135	305	95	795
Household contains at least one person 62-74 years of age	515	540	925	565	2,385
Household contains at least one person age 75 or older	290	890	915	325	1,340
Households with one or more children 6 years old or younger	750	384	695	265	1,435

Table 6 - Total Households Table

Data Source: 2013-2017 CHAS

Housing Needs Summary Tables

1. Housing Problems (Households with one of the listed needs)

	Renter					Owner				
	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total
NUMBER OF HOUSEHOLDS										
Substandard Housing - Lacking complete plumbing or kitchen facilities	110	220	90	10	430	0	0	0	0	0
Severely Overcrowded - With >1.51 people per room (and complete kitchen and plumbing)	0	45	20	0	65	0	0	0	10	10
Overcrowded - With 1.01-1.5 people per room (and none of the above problems)	60	15	130	4	209	70	10	25	0	105
Housing cost burden greater than 50% of income (and none of the above problems)	2,145	785	170	0	3,100	445	329	234	60	1,068

	Renter					Owner				
	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total
Housing cost burden greater than 30% of income (and none of the above problems)	205	665	1,005	255	2,130	120	250	555	465	1,390
Zero/negative Income (and none of the above problems)	165	0	0	0	165	140	0	0	0	140

Table 7 – Housing Problems Table

Data Source: 2013-2017 CHAS

2. Housing Problems 2 (Households with one or more Severe Housing Problems: Lacks kitchen or complete plumbing, severe overcrowding, severe cost burden)

	Renter					Owner				
	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total
NUMBER OF HOUSEHOLDS										
Having 1 or more of four housing problems	2,320	1,070	415	15	3,820	515	339	259	70	1,183
Having none of four housing problems	515	950	1,840	860	4,165	245	690	1,690	1,225	3,850
Household has negative income, but none of the other housing problems	165	0	0	0	165	140	0	0	0	140

Table 8 – Housing Problems 2

Data Source: 2013-2017 CHAS

3. Cost Burden > 30%

	Renter				Owner			
	0-30% AMI	>30-50% AMI	>50-80% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	Total
NUMBER OF HOUSEHOLDS								
Small Related	810	330	325	1,465	205	195	260	660
Large Related	135	110	40	285	20	0	120	140
Elderly	345	575	400	1,320	260	249	284	793
Other	1,230	675	445	2,350	99	134	129	362
Total need by income	2,520	1,690	1,210	5,420	584	578	793	1,955

Table 9 – Cost Burden > 30%

Data Source: 2013-2017 CHAS

4. Cost Burden > 50%

	Renter				Owner			
	0-30% AMI	>30-50% AMI	>50-80% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	Total
NUMBER OF HOUSEHOLDS								
Small Related	790	185	40	1,015	185	85	60	330
Large Related	135	95	0	230	0	0	0	0
Elderly	255	375	115	745	165	134	164	463
Other	1,135	330	50	1,515	95	114	10	219
Total need by income	2,315	985	205	3,505	445	333	234	1,012

Table 10 – Cost Burden > 50%

Data Source: 2013-2017 CHAS

5. Crowding (More than one person per room)

	Renter					Owner				
	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total
NUMBER OF HOUSEHOLDS										
Single family households	60	60	55	4	179	0	10	25	0	35

	Renter					Owner				
	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total
Multiple, unrelated family households	0	0	75	0	75	70	0	0	10	80
Other, non-family households	0	0	20	0	20	0	0	0	0	0
Total need by income	60	60	150	4	274	70	10	25	10	115

Table 11 – Crowding Information – 1/2

Data Source: 2013-2017 CHAS

	Renter				Owner			
	0-30% AMI	>30-50% AMI	>50-80% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	Total
Households with Children Present	0	0	0	0	0	0	0	0

Table 12 – Crowding Information – 2/2

Data Source Comments: Data not available for this jurisdiction.

Number and Type of Single Person Households in Need of Housing Assistance

Based on statistics from the Grand Junction Housing Authority, there are 1,238 single person households in need of housing, which is over half of all households on the housing wait list. Of the 1,238 single person households, 41% (509) are disabled persons and 22% (273) are elderly. By far, the majority (72%) are within the 30% or below median household income. The Hispanic ethnicity for the single person households (124) on the waitlist is below the percentage of the overall population in Grand Junction with 10% being Hispanic. Proportionately, there are more Native American (3.8%) and African American (3.3%) single person households on the wait list than are represented in the general population of Grand Junction. The largest age group of single person households in need of housing is 60-69 years old (nearly 64%).

Number and Type of Families in Need of Housing Assistance Who are Disabled or Victims of Domestic Violence, Dating Violence, Sexual Assault and Stalking

The Grand Junction Housing Authority reports that there are 1,024 households with disabled persons on its wait list which is 45% of all persons on the list. Primarily, these are persons with physical disabilities requiring units with accessibility features. As previously described, the STRiVE organization works directly with approximately 1,027 disabled persons in the community and owns and operates group homes and has clients in both HUD 811 and Section 8 housing. Additionally, STRiVE has two medical group homes that house severely disabled persons. The remainder of the adults with disabilities served

by STRiVE are in community rentals, in host homes similar to foster care, or live with their families. This still leaves approximately 129 adults who face difficulties finding affordable accessible housing. Even though the clientele of STRiVE is people with intellectual disabilities, dual diagnosis is very common in its clients - many also have mental illness or physical disabilities.

Of the other populations that include victims of domestic violence, date violence, sexual assault and stalking, Karis, Inc. operates a 5-bed facility for persons aged 18 to 24 that are of this population. Hilltop Community Resources owns and operates the Latimer House which provides victims of domestic violence with crisis shelter, case management, advocacy, individual and group counseling, children's services, transitional housing, 24-hour crisis line, and community outreach and education. The Mesa County District Attorney's Office reported 830 domestic violence cases in 2019 and Hilltop provided 188 individuals (113 adults and 75 children) with emergency shelter, demonstrating there is a gap for housing assistance for these populations.

Most Common Housing Problems

Of the typically defined housing problems of overcrowding, incomplete facilities and cost burden, the latter is the most common type of housing problem in Grand Junction with 32% of households cost burdened or severely cost burdened. There are very few households experiencing overcrowding (0.9 percent of renters) and incomplete facilities (0.3 percent of all housing units). However, based on the recent housing needs survey, discussion with housing focus groups and the statistics regarding vacant units, there appears to be a need for rehabilitation of existing housing stock to improve substandard units and render some of the vacant units habitable.

Populations/Household Types More Affected than Others by Problems

Renter households in the Grand Junction area face housing problems at a higher rate than owner households, with 51.2% of renter households facing housing problems in 2019 ACS data. Households with income less than 30% of HAMFI faced the highest rate of housing problems, at 81%. Typically, elderly, non-family households face housing problems at a rate higher than average for the Grand Junction area.

Data is available for households within the City of Grand Junction which breaks down housing problems by racial and ethnic groups. Analysis of this data indicates that Black, Asian and American Indian households face housing problems at rates of over 50% of households experiencing problems. This is discussed in greater detail in Section NA-15, Disproportionately Greater Need: Housing Problems.

Characteristics and Needs of Low-income Individuals and Families with Children

Extremely low-income households (those at or below 30% of the area median income) that spend in excess of 50% of their income for housing are at imminent risk of losing permanent housing. These households are most at risk and unable to recover from a single event such as major medical expense or loss of a job and are unable to retain their housing. Among the households in this group are single-parent households with children that have a greater need for affordable housing, accessible day care, health care and other supportive services. Because of their lower income and higher living expenses,

single-parent households are at imminent risk of becoming homeless. The high incidence of mental illness, drug or alcohol addictions and other disabilities among the homeless populations also indicates that lower income persons subject to such disabilities may be at higher risk of losing their housing and becoming homeless.

The Grand Valley Homeless Coalition will continue to use results of the Vulnerability Index study to formulate solutions for homeless issues. In its Continuum of Care Plan, the Coalition identified priority needs are transitional housing, case management, and housing placement. The strategy is to provide a continuous housing and service network for persons working to permanently leave the streets.

Preliminary information suggests that half of these households may benefit from Housing First intervention, and the other half can benefit from Rapid Re-housing. The Housing Authority has had good success in recent years with its Next Step Program which provides intensive case management for these families. 98% of families that have participated in this program have successfully transitioned to the Housing Choice Voucher Program.

Estimates of At-Risk Populations

Grand Junction does not provide estimates of at-risk populations, but the Vulnerability Index study completed within the last five years helped the community better identify the at-risk group and its needs from which local coalitions are working on addressing.

Housing Characteristics Linked with Instability and an Increased Risk of Homelessness

In addition to households experiencing homelessness, those who currently have housing but are at imminent risk of homelessness must also be considered in addressing homeless needs. Two of the best measures used to determine whether households have the potential to become homeless are income and housing costs. Renter households with extremely low incomes (30 % or less of median family income) and high housing costs (50% or more of income) are at an imminent risk of homelessness. While these two categories of households are at risk of becoming homeless, several different subpopulations are also vulnerable to homelessness and include:

- People discharged from institutions
- Victims of domestic violence
- Non-elderly, low-income, single-person households
- Members of families living in overcrowded, unstable conditions

The actual number of households in these conditions in Grand Junction has not been determined but, in order to assist those at imminent risk of homelessness, the City collaborates with agencies that have programs in place specifically aimed at providing affordable housing for a variety of populations.

Discussion

The primary concern with households in the Grand Junction area is cost burden or severe cost burden. This problem is disproportionately greater in extremely low to low-income

households. Affected households with disabled or elderly persons as well as those with children require additional attention because these needs are further compounded by limited to no income household members and often the additional needs for special amenities and services. Special attention is also required for other households characterized as those who are prone to housing instability and programs that can be used to assist them.

NA-15 Disproportionately Greater Need: Housing Problems – 91.205 (b)(2)

Introduction

If any one racial or ethnic group faces housing problems at a rate greater than ten percentage points above than the jurisdiction average, then that groups is said to have a disproportionate share of housing problems. Black, Asian, and American Indian households face housing problems at a rate of 100 percent, exceeding the overall jurisdiction average of 65%. As for ethnicity, Hispanic homeowner households face a disproportionate share of housing problems at income levels at 50% and below HAMFI.

0%-30% of Area Median Income

Housing Problems	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	2,830	540	370
White	2,285	420	305
Black / African American	15	10	0
Asian	0	0	4
American Indian, Alaska Native	50	0	0
Pacific Islander	10	0	0
Hispanic	410	100	60

Table 13 - Disproportionally Greater Need 0 - 30% AMI

Data Source: 2013-2017 CHAS

*The four housing problems are:
1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than one person per room, 4.Cost Burden greater than 30%

30%-50% of Area Median Income

Housing Problems	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	1,925	745	0
White	1,490	680	0
Black / African American	4	0	0
Asian	15	0	0
American Indian, Alaska Native	4	0	0
Pacific Islander	0	0	0

Housing Problems	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Hispanic	335	65	0

Table 14 - Disproportionally Greater Need 30 - 50% AMI

Data Source: 2013-2017 CHAS

*The four housing problems are:
1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than one person per room, 4. Cost Burden greater than 30%

50%-80% of Area Median Income

Housing Problems	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	2,415	1,785	0
White	1,920	1,350	0
Black / African American	55	0	0
Asian	19	15	0
American Indian, Alaska Native	55	0	0
Pacific Islander	0	0	0
Hispanic	310	395	0

Table 15 - Disproportionally Greater Need 50 - 80% AMI

Data Source: 2013-2017 CHAS

*The four housing problems are:
1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than one person per room, 4.Cost Burden greater than 30%

80%-100% of Area Median Income

Housing Problems	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	835	1,255	0
White	725	1,125	0
Black / African American	0	0	0
Asian	0	0	0
American Indian, Alaska Native	0	0	0

Housing Problems	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Pacific Islander	0	0	0
Hispanic	115	120	0

Table 16 - Disproportionally Greater Need 80 - 100% AMI

Data Source: 2013-2017 CHAS

*The four housing problems are:

1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than one person per room, 4.Cost Burden greater than 30%

Discussion

Refer to NA-15 Introduction discussion above.

NA-20 Disproportionately Greater Need: Severe Housing Problems – 91.205 (b)(2)

Introduction

A disproportionate housing need refers to any racial or ethnic group at a given income level experience housing problems at a greater rate (10 percentage points or more) than the income level as a whole. Severe housing problems include: inadequate housing, severe overcrowding (1.51 persons or more per room), and housing cost burden of 50% or greater. The following tables identify the extent of severe housing problems by income and race.

0%-30% of Area Median Income

Severe Housing Problems*	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	2,495	880	370
White	1,980	740	305
Black / African American	0	25	0
Asian	0	0	4
American Indian, Alaska Native	50	0	0
Pacific Islander	10	0	0
Hispanic	405	105	60

Table 17 – Severe Housing Problems 0 - 30% AMI

Data Source: 2013-2017 CHAS

*The four severe housing problems are:
1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than 1.5 persons per room, 4. Cost Burden over 50%

30%-50% of Area Median Income

Severe Housing Problems*	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	1,165	1,505	0
White	915	1,255	0
Black / African American	0	4	0
Asian	15	0	0
American Indian, Alaska Native	0	4	0
Pacific Islander	0	0	0
Hispanic	159	240	0

Table 18 – Severe Housing Problems 30 - 50% AMI

Data Source: 2013-2017 CHAS

*The four severe housing problems are:
1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than 1.5 persons per room, 4.Cost Burden over 50%

50%-80% of Area Median Income

Severe Housing Problems*	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	875	3,335	0
White	655	2,615	0
Black / African American	0	55	0
Asian	0	34	0
American Indian, Alaska Native	55	0	0
Pacific Islander	0	0	0
Hispanic	165	540	0

Table 19 – Severe Housing Problems 50 - 80% AMI

Data Source: 2013-2017 CHAS

*The four severe housing problems are:
1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than 1.5 persons per room, 4.Cost Burden over 50%

80%-100% of Area Median Income

Severe Housing Problems*	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	175	1,920	0
White	175	1,680	0
Black / African American	0	0	0
Asian	0	0	0
American Indian, Alaska Native	0	0	0
Pacific Islander	0	0	0
Hispanic	0	230	0

Table 20 – Severe Housing Problems 80 - 100% AMI

Data Source: 2013-2017 CHAS

*The four severe housing problems are:
1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than 1.5 persons per room, 4. Cost Burden over 50%

Discussion

For the 0 to 30% HAMFI income levels for racial and ethnicity information, it appears that American Indian and Hispanic households are more likely to experience severe housing problems. In the income category of 30 to 50% HAFMI, Asian and Hispanic households are more likely to experience severe housing problems and in the 50 to 80 percent HAMFI, the incidence of severe housing problems is minimal except for in American Indian/Alaska Native households.

NA-25 Disproportionately Greater Need: Housing Cost Burdens – 91.205 (b)(2)

Introduction

A disproportionate housing need refers to any racial or ethnic group at a given income level that experiences housing problems at a greater rate (10 percentage points or more) than the income level as a whole. The following tables identify the extent of housing cost burden by race.

Housing Cost Burden

Housing Cost Burden	<=30%	30-50%	>50%	No / negative income (not computed)
Jurisdiction as a whole	15,265	4,305	4,345	370
White	13,145	3,650	3,500	305
Black / African American	30	85	0	0
Asian	105	30	15	4
American Indian, Alaska Native	65	19	50	0
Pacific Islander	0	0	10	0
Hispanic	1,780	455	645	60

Table 21 – Greater Need: Housing Cost Burdens AMI

Data Source: 2013-2017 CHAS

Discussion

The most common type of housing problem in Grand Junction is cost burden, with approximately one-third (31%) of all residents facing cost burden to some extent. However, renters experience cost burden at a rate greater than all households. Over half of renters (53%) are cost burdened.

NA-30 Disproportionately Greater Need: Discussion – 91.205(b)(2)

The Disproportionately Greater Need section of the Five-Year Consolidated Plan has considered the housing needs for all households in comparison to the households by race in the Grand Junction area. Also considered are the housing needs of minority households in comparison to all households. As defined by HUD, a disproportionately greater need among any racial or ethnic group has housing problems at a rate higher than the percentage of persons in that category as a whole. The primary area of housing problems for any household is cost burden. There are a total of 8,813 cost burdened households in the Grand Junction area; that is, households that spend more than 30 percent of their household income on housing. 31.6% of all households are cost burdened. Of those other than White, Hispanic households make up the largest percentage of cost-burdened households, at 12.8%. Other minorities including Asian and American Indian/Alaskan Native households make up a total of 1% of households that experience cost burden.

Are there any income categories in which a racial or ethnic group has disproportionately greater need than the needs of that income category as a whole?

There are a total of 8,813 cost burdened households in the Grand Junction area; that is, households that spend more than 30 percent of their household income on housing. 31.6% of all households are cost burdened. Of those other than White, Hispanic households make up the largest percentage of cost-burdened households, at 12.8%. Other minorities including Asian and American Indian/Alaskan Native households make up a total of 1% of households that experience cost burden.

If they have needs not identified above, what are those needs?

NA

Are any of those racial or ethnic groups located in specific areas or neighborhoods in your community?

The City utilizes a map that illustrates the specific concentrations of racial and ethnic groups within the Grand Junction community, primarily focusing on the Hispanic population since it comprises the largest minority group (17% of total population). There are concentrations in some areas of the eastern edge of the Grand Junction city limits that exceed the disproportionate share threshold. In addition, there are known neighborhoods just west of downtown that have a high concentration of minority household but do not show up on the maps since they are averaged in with a population of a very large census tract that is not broken down by block group.

NA-35 Public Housing – 91.205(b)

Introduction

The City of Grand Junction has no public housing units but recently coordinated completion of the *Grand Valley Housing Needs Assessment* to examine the current local housing situation. The report includes a thorough assessment of local market conditions, a detailed forecast of current and future demand across the spectrum of housing needs, identification of housing challenges and recommendations and actions to begin to address the market needs. It is anticipated that City staff and community entities will continue to collaborate on efforts based on the *Housing Needs Assessment* and the subsequent housing strategy developed for the City towards the end of the 2020 Program Year (August 31, 2021).

The Grand Junction Housing Authority has disposed of its remaining public housing known as Capital Terrace and now no longer holds any public housing. Several other local organizations hold vouchers, primarily for special needs populations. The City of Grand Junction has worked closely with the Grand Junction Housing Authority as it has phased out public housing in Grand Junction and constructs developments in a more sustainable affordable housing model as opportunities arise. The City has a history of providing building and development fee deferrals, reductions and grant funds to the Housing Authority and other housing providers for the construction of new affordable units.

Totals in Use

Program Type									
	Certificate	Mod-Rehab	Public Housing	Vouchers					
				Total	Project - based	Tenant - based	Special Purpose Voucher		
							Veterans Affairs Supportive Housing	Family Unification Program	Disabled *
# of units vouchers in use	0	0	0	1,429	82	824	179	130	214

Table 22 - Public Housing by Program Type

***includes Non-Elderly Disabled, Mainstream One-Year, Mainstream Five-year, and Nursing Home Transition**

Alternate Data Source Name:
Mesa County Current Affordable Housing Stock

Characteristics of Residents

Program Type								
	Certificate	Mod-Rehab	Public Housing	Vouchers				
				Total	Project - based	Tenant - based	Special Purpose Voucher	
							Veterans Affairs Supportive Housing	Family Unification Program
Average Annual Income	0	0	0	12,297	8,511	12,344	8,088	0
Average length of stay	0	0	0	4	1	4	1	0
Average Household size	0	0	0	2	3	2	1	0
# Homeless at admission	0	0	0	45	1	44	0	0
# of Elderly Program Participants (>62)	0	0	0	215	0	215	0	0
# of Disabled Families	0	0	0	356	0	352	1	0
# of Families requesting accessibility features	0	0	0	970	16	950	1	0
# of HIV/AIDS program participants	0	0	0	0	0	0	0	0
# of DV victims	0	0	0	0	0	0	0	0

Table 23 – Characteristics of Public Housing Residents by Program Type

Data Source: PIC (PIH Information Center)

Race of Residents

Program Type									
Race	Certificate	Mod-Rehab	Public Housing	Vouchers					
				Total	Project - based	Tenant - based	Special Purpose Voucher		
							Veterans Affairs Supportive Housing	Family Unification Program	Disabled *
White	0	0	0	935	13	918	1	0	0
Black/African American	0	0	0	19	1	18	0	0	0
Asian	0	0	0	4	1	3	0	0	0
American Indian/Alaska Native	0	0	0	12	1	11	0	0	0
Pacific Islander	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
***includes Non-Elderly Disabled, Mainstream One-Year, Mainstream Five-year, and Nursing Home Transition**									

Table 24 – Race of Public Housing Residents by Program Type

Data Source: PIC (PIH Information Center)

Ethnicity of Residents

Program Type									
Ethnicity	Certificate	Mod-Rehab	Public Housing	Vouchers					
				Total	Project - based	Tenant - based	Special Purpose Voucher		
							Veterans Affairs Supportive Housing	Family Unification Program	Disabled *
Hispanic	0	0	0	165	2	163	0	0	0
Not Hispanic	0	0	0	805	14	787	1	0	0
*includes Non-Elderly Disabled, Mainstream One-Year, Mainstream Five-year, and Nursing Home Transition									

Table 25 – Ethnicity of Public Housing Residents by Program Type

Data Source: PIC (PIH Information Center)

Public Housing Tenants and Applicants on Waiting List for Accessible Units

As of March 2021, there are 954 or 42% of the applicants on the Grand Junction Housing Authority wait list for accessible units. The need for accessible units is due to a mix of disabilities whether physical, employment or mental disability. Those with a physical disability typically have the greater need for housing accommodation due to limited physical mobility or the use of a wheelchair. The typical wait time for an accessible unit can be one to two years.

Most Immediate Needs of Residents of Public Housing and Housing Choice Voucher Holders

As of March 2021, there are 791 families with children on the Grand Junction Housing Authority waiting list for vouchers. The total number of children in these families is 1,530. Of the families with children on the wait list, 75% are single-parent, female-headed households. The greatest need is for one- and two-bedroom rental units. Over half (56%) of those on the waiting list are seeking housing with only one bedroom while 27% of those on the waiting list are seeking housing with two bedrooms. 42% of those on the wait list are disabled and 15% of those on the wait list are Hispanic.

Comparison to the Housing Needs of the Population at Large

Compared to the population at large, there appears to be a larger need for affordable housing for single persons and disabled persons. The overall need for housing in the general market is for two-bedroom units and larger versus the large need for one-bedroom units for those seeking Housing Choice Vouchers. 21.7% of the general population is disabled, yet 42% of those on the voucher waiting list are disabled. The numbers for Hispanic households on the waiting list is consistent with the overall population. Approximately 17% of the general population of the Grand Junction area is Hispanic and 15% on the voucher wait list are Hispanic.

NA-40 Homeless Needs Assessment – 91.205(c)

Introduction

Organizations and agencies that serve the homeless keep records of the number of persons served in their facilities and programs. The School District 51 REACH program works with homeless youth and reports an additional 388 students that may be staying in other housing situations and are still considered homeless but not captured in the Point in Time (PIT) count. Additional information from the homeless shelter shows a total homeless population of 936 served in the past year. The racial/ethnic breakdown of those served included 83% white, 13% Hispanic and 16.8% all other races/ethnicities. The special needs populations served by the shelter included 27% chronically homeless, 26% severely mentally ill, 15% chronic substance abuse, and 18% veterans.

Additional information for this section was available from the Ten-Year Plan to End Homelessness in the Grand Valley created by the Grand Valley Coalition for the Homeless and the Vagrancy and Vulnerability Index study coordinated by the Grand Junction Housing Authority. Results and actions taken with these efforts will be reported in the City's subsequent Annual Action Plan and CAPER documents.

The nature and extent of homelessness in Grand Junction includes homeless families, victims of domestic violence, and the chronically homeless. Grand Junction does have a traditional homeless shelter and other facilities/programs that provide emergency shelter. In addition, supportive services for the homeless are provided in many ways through a number of local agencies and organizations. Grand Junction participates in the annual PIT survey to determine general numbers of homeless, their age and some characteristics of their situation such as disabilities, veteran status and other chronic physical illness or dependency. The most recent results available are from the January 2020 PIT.

Homeless Needs Assessment

Population	Estimate the # of persons experiencing homelessness on a given night		Estimate the # experiencing homelessness each year	Estimate the # becoming homeless each year	Estimate the # exiting homelessness each year	Estimate the # of days persons experience homelessness
	Sheltered	Unsheltered				
Persons in Households with Adult(s) and Child(ren)	0	0	0	0	0	0

Population	Estimate the # of persons experiencing homelessness on a given night		Estimate the # experiencing homelessness each year	Estimate the # becoming homeless each year	Estimate the # exiting homelessness each year	Estimate the # of days persons experience homelessness
	Sheltered	Unsheltered				
Persons in Households with Only Children	0	110	500	100	250	60
Persons in Households with Only Adults	485	607	750	100	100	100
Chronically Homeless Individuals	250	0	250	50	50	365
Chronically Homeless Families	0	0	0	0	0	0
Veterans	21	6	25	3	10	50
Unaccompanied Child	34	28	100	25	25	50
Persons with HIV	0	0	0	0	0	0

Table 26 - Homeless Needs Assessment

Alternate Data Source Name:
Grand Valley Homeless PIT and Statistics
Data Source Comments: If zero, data is not available for jurisdiction

Description of Homeless

Estimates are provided; however, several categories of homeless populations can be further described as follows.

- Chronically Homeless - approximately 485 persons are provided shelter and/or other supportive services through numerous agencies/organizations
- Families with Children - approximately 102 persons are served through HomewardBound of the Grand Valley and other agencies/organizations
- Veterans and Their Families - 516 are served through VASH, Grand Valley Catholic Outreach and Housing Resources of Western Colorado
- Unaccompanied Youth - 403 are identified and served through Karis, Inc. and Mesa County Valley School District 51

Nature and Extent of Homelessness:

Race:	Sheltered:
White	894
Black or African American	63
Asian	6
American Indian or Alaska Native	62
Pacific Islander	5
Ethnicity:	**Sheltered:**
Hispanic	140
Not Hispanic	934

Alternate Data Source Name:
Grand Valley Homeless PIT and Statistics

Estimate of Number and Type of Families in Need of Housing Assistance

As of March 2021, there are 791 or over one-third (34.9%) of the households on the GJHA wait list that are families with children that include a total of 1,530 children. The majority of all wait list households (75%) are single-parent, female-headed households. 18% of the households on the wait list are veteran family households with a total of 745 children. Similar to the overall households with families numbers, the majority of these (77%) are single-parent, female-headed households.

Describe the Nature and Extent of Homelessness by Racial and Ethnic Group

The racial and ethnic status of homeless individuals is fairly consistent with the overall population demographics of the Grand Junction community. Approximately 93% of the general population of Grand Junction identifies as White, while statistics from HomewardBound of the Grand Valley indicate that 96% of those served at the community homeless shelter are White (including Hispanic persons). Similarly, 17% of the general population of Grand Junction identifies as Hispanic, while shelter statistics indicate 13% of the persons served are Hispanic. Thus, there does not appear to be a disproportionate share of a particular race or ethnic group that is homeless.

Describe the Nature and Extent of Unsheltered and Sheltered Homelessness.

The 2020 Point in Time survey indicates that 31% of persons counted were considered unsheltered. Extrapolating this to the 1,300 persons reported in the community homeless shelter statistics, means that there are nearly 250 homeless persons considered unsheltered in the Grand Junction area. According to the Mesa County Current Affordable housing data, there are a totalof 1,171 permanent, deeply subsidized units in Mesa County which demonstrates a need for subsidized or affordable efficiency units. Some of these units are reserved for elderly and disabled persons and some for families but only 107 units (9%) are reserved specifically for chronically homeless individuals.

Summary of Services and Facilities for the Homeless

• HomewardBound - shelter for 90, overflow transported to churches. Priority order: families, women, Recovery Program Veterans, medical exceptions, working men and non-working men.
• GVCO - Day Center with showers, laundry, job search, telephone, mail, and storage to homeless adults. Twice a week medical and counseling personnel visit for preventive care, testing, counseling and vaccinations.
• GVCO - 63 units supportive transitional and permanent housing with counseling and skills training for chronically homeless with mental or physical impairments, and free of drug abuse.
• Phoenix Project is a partnership between Housing Resources of Western Colorado, HomewardBound and GJHA. 8 units provide affordable, stable housing and case management services to homeless veterans.
• GJHA, HomewardBound and GVCO provide case management for persons at risk of homelessness, including housing and foreclosure prevention counseling and rent assistance.
• Grand Valley Peace and Justice, Benevolent Community Partnership Interfaith and public and private agencies provide outreach to the homeless and assessment of needs and services. Developed the 10-Year Plan to End Homelessness.
• Grand Junction Police Department Community Resource Unit - build relationships and coordinate assistance in finding services for homeless persons.
• GVCO soup kitchen provides one hot meal, 6 days a week.
• Rescue Mission - meals and clothing.
• Salvation Army - food, clothing, counseling and household items and operates Hope House for substance abuse clients; daytime Warming Shelter for homeless families.
• Mind Springs Health - individual or group counseling and psychiatric services.
• Mesa County Health Department - family planning, well child clinic, immunizations and HIV/STD testing.
• Marillac Clinic - dental, vision, medical and mental care and case management for homeless or low income adults and children. Have established several satellite clinics and services to better serve vulnerable populations.
• Western Colorado Health Network (formerly Western Colorado Aids Project WestCAP) - case management, testing, support and referrals for HIV positive individuals; prevention and education for general public.
• Counseling and Education Center - services to families, adults, adolescents, youth and very young children to the underinsured and uninsured
• GVCO provides emergency housing for families looking for affordable housing and saving for deposits and monthly rent.
• Hilltop Community Resources operates the Latimer House, providing safety for victims of domestic violence. Services include shelter, support groups, 24-hour crisis line, safety planning and support.
• Families in need can access services through GJHA, HomewardBound, GVCO or the School District. Homeless students receive free breakfast and lunch, waived student fees, backpacks, school supplies, a snack bag, a new sweatshirt, a hygiene bag, a bus pass and may access the Kids Aid Backpack Program which provides one pack per week of non-perishable food.

• Next Step Housing Program - rental assistance through local partners: GJHA, Mesa County Department of Human Services, GVCO, HomewardBound, Hilltop and School District 51. The program provides payments, case management and transitional housing for homeless and near homeless families.

NA-45 Non-Homeless Special Needs Assessment - 91.205 (b,d)

Introduction

The recent economic recession due to the COVID-19 pandemic, loss of employment, decrease in public benefits, and lack of affordable and accessible childcare are all contributing factors to the needs of persons with special needs and/or lower income. Throughout Grand Junction and Mesa County, many facilities and agencies provide services to assist persons who are not homeless but require supportive services.

Due to the fact that Grand Junction is the largest community on Colorado's Western Slope and Eastern Utah, medical and other special needs services are provided here that are not available in smaller communities. As a consequence, the percentage of the special needs population in Grand Junction may be higher than surrounding communities at approximately 15.7% of the total population under age 65. The ability of persons with chronic mental illness, physical and developmental disabilities, and HIV/AIDS to compete in the housing market for appropriate housing at an affordable price is limited in many cases by their lack of income and also by their need for special housing accommodations.

Out of the total persons on the Grand Junction Housing Authority wait list, 42% are disabled and another 24% are elderly. STRiVE, a service provider for persons with developmental disabilities, has a wait list for its Section 8 housing at any given time of 9 individuals and 30 families with children.

Agencies that provide services to persons with disabilities in Grand Junction indicate that a lack of rental assistance and accessible units keeps many clients in nursing homes. GJHA has 199 Section 8 vouchers set aside in Grand Junction specifically for persons with disabilities. Additionally, STRiVE helps approximately 80 clients live independently in group homes, and administers 17 HUD 811 vouchers and 14 Section 8 vouchers. STRiVE estimates that there are 129 disabled adults who face difficulties finding affordable accessible housing.

Hilltop Community Resources, Inc. provides housing for 170 disabled persons. The Housing Authority gives preference to persons with a disability. The Housing Authority's Linden Pointe development includes four accessible 2-bedroom apartments and one accessible 3-bedroom apartment. In addition, all first-floor units at Linden Pointe are accessible and fully adaptable to persons with disabilities, Arbor Vista has 8 accessible units, Walnut Park has 12 accessible units and a total of 19 accessible units are available at the new Highlands and 2814 Apartments. Properties that are managed by Housing Resources of Western Colorado include a total of 12 accessible units.

Not all disabilities involve a mobility impairment. Some persons with disabilities have visual impairments, cognitive impairments, or mental health disabilities. Local agencies indicate an increase in the number of homeless persons with disabilities. Because of the aging population, it is estimated that the number of housing units needed by persons with disabilities over the next five years will continue to increase. The service providers estimate that more than 350 additional vouchers or other housing opportunities are needed to adequately serve the housing need for persons with disabilities.

Characteristics of Special Needs Populations

Disabled persons and an ever-growing senior/elderly group comprise the greatest number of special needs populations in Grand Junction. The most common type of disability is a physical disability, followed by an employment disability. Those aged 65 and older have a disability rate of over 40.8%, and those aged 16 to 64 had a disability rate of 20.9%. By 2040, the State Demographer projects that the number of elderly residents in the Grand Junction area will exceed 52,000, accounting for 23% of the total population.

Housing and Supportive Service Needs for Special Needs Populations

Elderly persons typically need assistance with personal care and providing for themselves, while frail elderly require medical care, daily living assistance and other services. Most seniors prefer to live in their own homes, with relatives or in independent living situations. The removal of architectural barriers from the homes of elderly and the physically disabled is a cost-effective way to maintain independent and safe housing for persons with special needs. Supportive services at various levels are also a necessary component of housing for these populations.

Based on individual situations, both persons with mental illness and persons impaired by chronic substance abuse need a range of services such as case management, treatment, housing, financial assistance and employment in order to improve and stabilize their lives. Each person's needs must be carefully evaluated in order for them to be provided with the most appropriate services.

Since low income mentally ill persons and/or those with chronic substance abuse may be particularly vulnerable to homelessness, it is important to pay attention to their housing needs in order to prevent recurring homelessness. Persons with HIV/AIDS need a variety of supportive services to maintain their physical health and self-sufficiency. This population needs access to physician services, case management, clinic services, nutrition centers and rental assistance. In Grand Junction, the needs of these populations are determined through the agencies that work directly with them on a day-to-day basis and in individualized consultations.

The latest collection of data and an analysis of group homes in Grand Junction examined the capacity of various group settings and provides some information about the capacity to serve this varied population. There are three types of properties: small facilities, larger facilities, and institutional settings with significant levels of capacity. It was found that small facilities have a capacity of 110 beds serving those with development disabilities as well as those needing assistance with living. At the time the data was gathered, there were 17 beds available, but only one in the assisted living environments. Larger facilities have a total of 80 beds available, serving assisted living arrangements as well as permanent childcare and transitional housing. The larger institutional settings have 1,233 beds, with 250 of them available. There were 151 beds available in the assisted living centers and 70 more beds available in long term care. From this information, it appears that there is some capacity of existing facilities that provide housing and supportive services for special needs populations. However, some of these options are not affordable and with the growth of the population comes additional demand for housing for a selection

of special populations, such as the disabled, seniors or those needing care with services. This is acutely true for the aging population, with its rapidly rising share of seniors. The real needs of these populations are more accurately depicted in the housing wait list statistics compiled by the Grand Junction Housing Authority.

Size and Characteristics of the Persons with HIV/AIDS and Their Families

Ten persons in the Grand Junction area receive housing assistance through the federal Housing for Persons with AIDS (HOPWA) program administered by the Colordo Health Network (CHN - formerly Western Colorado AIDS Project - WestCAP). CHN provides medical case management, emergency financial assistance, advocacy/referral, prevention and education programs and HIV/HCV rapid testing. Some clients can access Housing Choice vouchers through the Housing Authority, but do not receive specific preference on the wait list. CHN currently has 25 clients on the wait list with 6 clients on the Tenant Based Rental Assistance program. In the past year, the State Department of Public Health and Environment has recognized this demand and the agency has been able to exceed the cap of $1,000 per year on housing assistance. They have also been able to obtain a medical waiver from primary and HIV care physicians to also exceed the $1,000 cap on housing assistance. CHN also utilizes the Critical Events source of funding for some clients that meet certain criteria which can provide $6,000 per month for up to six months for crisis prevention, retention of care and stabilization.

NA-50 Non-Housing Community Development Needs – 91.215 (f)

Need for Public Facilities

The primary area of Non-Housing Community Development need is the upgrade and expansion of facilities for the local agencies and organizations that provide a variety of human services in the facilities. This includes upgrades or expansion of homeless, medical and mental health, and educational facilities, senior, disabled and youth activity centers and public infrastructure in low- and moderate-income neighborhoods.

The growing disparity between local pay scales and rising housing costs requires two incomes for many families to maintain their household expenses. Due to the scheduling challenges of two income families, those with children may not be able to hold two jobs without outside childcare. For the single-parent household, childcare is a major concern and continues to be a non-housing community need.

The Mesa County Community Health Needs Assessment and discussions with a variety of housing and service providers identified early childhood and youth programs and facilities as an ongoing community need. While there are several opportunities available after school that have been expanded over the last few years, there is still a need for more facilities and programs that are better coordinated with transportation alternatives available in the Grand Junction area.

A summary of the non-housing community development needs is below.

- Childcare for people transitioning to work and working low income
- Better coordination between public transportation planning and location of childcare facilities for low/moderate income families
- Childcare with more flexible and weekend hours of operation
- Youth-oriented activities and programs that are coordinated in schedule and location for transportation to and from the facilities
- Expansion of medical and mental health facilities
- Improvement and expansion of senior activity centers
- Improved access to healthy food outlets
- Facilities for abused adults and children
- Improvement and expansion of centers for the disabled
- Improvement and expansion of other facilities where human and public facilities are provided
- Continue strengthening community workforce through the Mesa County Workforce Center, Western Colorado Community College and other educational institutions

Determination of Needs

The needs were determined through concerns identified in the *Mesa County Community Needs Assessment* and review and discussion with various local entities. In addition, review of past CDBG

expenditures provides a picture of the type of non-housing community development facilities in the community and characterizes the needs for their improvement or expansion.

Need for Public Improvements

Community Development Block Grant (CDBG) funds are limited with the City currently receiving approximately $460,000 annually. Generally, the City provides infrastructure and urban services and community development needs through its general funds and programs such as its Capital Improvement Program (CIP) and Parks and Recreation programs and projects. Over the past 25 years, the City has used approximately one-third of the CDBG funds received towards public improvements projects in eligible low- and moderate-income neighborhoods. Through the life of this Five-Year Consolidated Plan, it is anticipated that CDBG funds may be spent on similar eligible infrastructure and community development projects with the following priorities located within low- and moderate-income neighborhoods.

- Pedestrian and ADA-accessible connections/sidewalks for safe routes to school, access to public transit, shopping areas and places of employment
- Drainage improvements, particularly to alleviate flooding
- Street improvements/reconstruction
- Park improvements and facilities

Determination of Needs

These needs were determined through analysis of past CDBG activity funding practices and discussions with City of Grand Junction staff in various departments. Neighborhood-based CDBG-funded projects are identified in areas of the City with 51 percent or greater households of low and moderate income.

Need for Public Services

Medical Services

According to the Mesa County Community Needs Assessment, medical services is one of the leading household issues and barriers. While the lack of healthcare insurance is a problem for some households (14.7%), the inability to get an appointment as soon as needed was identified as the top barrier to receiving health care as well as financial challenges with paying deductibles and co-pays. Other concerns listed were the cost of any service, taking time from work to address health issues, and finding a service provider that would accept new patients.

The Mesa County Health Department provides the following services, many of which target and primarily serve low- and moderate-income persons of the Grand Junction community.

- Community Health Services—immunizations, family planning and WIC
- Environmental Health—food safety, water and air quality
- Health Promotion and Education

• Disease surveillance and community health assessment
• Emergency Preparedness and Response
The Marillac Clinic, MindSprings Health mental health center, Primary Care Partners, Family Practice and other agencies complete an Integrated Care or Medical Home Model for those individuals that cannot afford insurance. The model attempts to lower medical costs and provide the best medical and mental services to low-income persons and families.

Transportation
The *Mesa County Community Needs Assessment* listed transportation as an important issue and one of the top household barriers. The lack of transportation was one of the most frequently mentioned barriers to employment identified by not self-sufficient households (e.g. those whose income is unable to support a basic needs budget). It is clear that there are opportunities to improve and promote alternate methods of commuting to work and school or for other transportation needs.

Summary of General Public Services Needs
• Increase/improve medical services/facilities for low income persons
• Address increasing healthcare needs of uninsured and immigrant persons
• Healthcare assistance and services for undocumented residents
• Address growing problem that more physicians are not accepting Medicare and Medicaid
• Increased opportunities for dental care
• Provide more transportation alternatives
• Expand GVT routes and increase hours of operation to accommodate work shifts and weekend employment

Determination of Needs

The needs were determined through concerns identified in the *Mesa County Community Needs Assessment* and review and discussion with various local entities. In addition, review of past CDBG expenditures provides a picture of the type of public services in the community and characterize the needs for their improvement or expansion.

Housing Market Analysis

MA-05 Overview

The evaluation of the state of Grand Junction's housing market, as well as the existing need for housing, emerging housing trends, and future housing demand are derived from a variety of sources of information. These included the 2017 and 2019 American Community Survey (ACS) data, and the *2021 Grand Valley Housing Needs Assessment.*

The housing stock in the Grand Junction area rose to 27,973 units reported in the 2019 ACS data. Owner-occupied units accounts for 58.1% of total units, up from 56.4% reported in 2014 ACS data. There was a decrease in the number of vacant units. 6.3% of housing units were vacant in 2010, and 2017 ACS data indicates 5.7% housing units are vacant.

MA-10 Number of Housing Units – 91.210(a)&(b)(2)

Introduction

As measured between the 2014 and 2019 ACS data, the type of housing has shifted slightly. Most (72.6%) of the housing stock has been built since 1970. The proportion of single-family homes has remained steady, accounting for 73.5 percent of the housing stock in 2014 data and 72.9% of the housing stock reported in 2019 ACS data. All other housing types have remained steady as well during this time.

All residential properties by number of units

Property Type	Number	%
1-unit detached structure	17,240	62%
1-unit, attached structure	1,363	5%
2-4 units	3,006	11%
5-19 units	2,791	10%
20 or more units	1,898	7%
Mobile Home, boat, RV, van, etc	1,575	6%
Total	***27,873***	***100%***

Table 27 – Residential Properties by Unit Number

Alternate Data Source Name:
2019 5-YR ACS Data

Unit Size by Tenure

	Owners		Renters	
	Number	%	Number	%
No bedroom	30	0%	1,272	12%
1 bedroom	353	2%	4,076	37%
2 bedrooms	5,504	37%	8,789	80%
3 or more bedrooms	23,766	160%	7,978	72%
Total	***29,653***	***199%***	***22,115***	***201%***

Table 28 – Unit Size by Tenure

Alternate Data Source Name:
2019 5-YR ACS Data

Number and Targeting of Units Assisted with Federal, State, and Local Programs

The Housing Choice Voucher program is the primary program for assisting very low-income families, the elderly and the disabled to afford decent, safe, and sanitary housing in the private market. The Grand Junction Housing Authority administers the majority of the 1,429 vouchers that are available in Grand Junction. Over half of the available vouchers target populations other than typical families including, homeless, physically and mentally disabled, AIDS/HIV, veterans and victims of domestic violence.

Assessment of Units Expected to be Lost from the Affordable Housing Inventory

The Grand Junction Housing Authority and Housing Resources of Western Colorado keep current regarding units throughout the community that may be lost as affordable housing inventory due to a variety of reasons. For example, Housing Resources of Western Colorado (HRWC) purchased the 91-unit Garden Village Apartment complex at a time when it was changing ownership and appeared it would revert to market rate housing. HRWC continues to own and operate the complex as deeply subsidized (tenants pay 30% of their income for rent) housing that includes a mix of 1, 2, 3 and 4-bedroom apartments. HRWC also purchased an unfinished subdivision to be developed as 50 duplex units known as Grand Valley. The majority of homes are constructed as self-help housing but intend to retain some of the units as affordable rentals. Similarly, the Grand Junction Housing Authority purchased the Nellie Bechtel senior apartment complex that was also on the real estate market in order to preserve affordability and ultimately add a subsidy contract to the property. The Housing Authority operates Nellie Bechtel as it does its other senior housing complexes, with some project-based housing choice vouchers. No other units in the inventory have been specifically identified at this time that have no contract or are expected to go out of subsidy. One development, Monument Ridge, recently extended its contract. Certainly, as opportunities arise, local housing agencies will continue to respond through acquisition or other intervention as funding allows.

Availability of Housing Units Versus Needs of Population

The existence of a wait list maintained by the Grand Junction Housing Authority which currently has 2,266 households certainly suggests that the availability of housing units does not meet the needs of the population. Waiting time can be up to two years for an appropriate and affordable housing unit depending on applicant needs.

Need for Specific Types of Housing

While 56% of those on the Grand Junction Housing Authority waitlist are for single-bedroom units, another 35% of those on the waitlist are families with children, suggesting a broad need for affordable housing units with two to three bedrooms (26% of bedroom size needs on the waitlist). 66% of those on the wait list are disabled or elderly, many of whom are single adults in need of accessible, 1-bedroom units. In addition, population statistics demonstrate that the households with six or more persons grew substantially and households with one and five persons also grew at a rate higher than the average growth rate. The mix of types of households is also undergoing considerable change, with single parent and non-family households making up a larger share of all households.

Discussion

In addition to the information presented here, a Housing Needs Survey was conducted with the *Grand Valley Housing Needs Assessment*. The survey demonstrated the highest rated needs were rental assistance largely due to rent increase (32% of respondents fear rents going up so the unit is no longer affordable, 20% struggle to pay rents and utilities, and 12% fear eviction) and rental housing rehabilitation (the cost of repairs and upkeep is prohibitive). The survey also indicated that the highest importance of proximity of housing to amenities included quality K-12 schools, grocery stores, and public transportation. The highest need for special needs housing included disabled and senior housing,

emergency shelters and shelters for youth. This is consistent with discussions with, and information provided by, local agencies and organizations.

MA-15 Housing Market Analysis: Cost of Housing - 91.210(a)

Introduction

The cost of housing varied in the Grand Junction area in 2020 depending on location but the median home sales price was $287,000. Median rents followed a similar trend, with a median gross rent of $981 and an average gross rent of $1,075 reported in 2019 ACS data.

Permit data for new housing construction for Mesa County is available through the U.S. Census Bureau starting in 1980 through 2017 ACS data as well as recent information from local sources. There was a large increase in housing production in the 2000s until 2008 when the recession occurred. Since that time, total newly constructed housing units reached a low of 284 in 2011 but rose to 802 in 2018 and 779 in 2020. Overall, despite some fluctuation with the recession and the COVID-19 pandemic, housing valuation has continued to rise, reaching present value close to $260,000.

Cost of Housing

	Base Year: 2010	Most Recent Year: 2019	% Change
Median Home Value	215,800	237,100	10%
Median Contract Rent	627	770	23%

Table 29 – Cost of Housing

Alternate Data Source Name:
2019 5-YR ACS Data

Rent Paid	Number	%
Less than $500	1,223	17.0%
$500-999	4,804	51.8%
$1,000-1,499	3,269	25.9%
$1,500-1,999	1,125	2.7%
$2,000 or more	339	2.5%
Total	***10,760***	***99.9%***

Table 30 - Rent Paid

Alternate Data Source Name:
2019 5-YR ACS Data

Housing Affordability

% Units affordable to Households earning	Renter	Owner
30% HAMFI	775	No Data
50% HAMFI	2,160	510

% Units affordable to Households earning	Renter	Owner
80% HAMFI	6,220	2,295
100% HAMFI	No Data	3,940
Total	***9,155***	***6,745***

Table 31 – Housing Affordability

Data Source: 2013-2017 CHAS

Monthly Rent

Monthly Rent ($)	Efficiency (no bedroom)	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom
Fair Market Rent	670	611	861	1,248	1,573
High HOME Rent	0	0	0	0	0
Low HOME Rent	0	0	0	0	0

Table 32 – Monthly Rent

Alternate Data Source Name:
2019 5-YR ACS Data
Data Source Comments: Monthly median rent. City of Grand Junction does not receive HOME funds.

Amount of Housing for Households of All Income Levels

The *Grand Valley Housing Needs Assessment* concluded that there is a clear unmet housing need for many households. This represents existing households with a housing problem, especially those with cost burdens. Nearly 9,000 households had a cost burden or severe cost burden, representing 34% percent of the population. Renters are even more impacted by this concern with 53% of households experiencing a cost burden. This suggests a broad need for housing for households at most, if not all, income levels. See more detailed information in the Discussion section below.

Housing Affordability and Potential Changes to Home Values or Rents

The production of rental/multifamily housing dropped off in recent years but appears to be increasing. Rising prices have resulted in many renter households experiencing cost burdens. This is not likely to change as value continues to rise since the recession of a decade ago, the impacts of the COVID-19 pandemic, and the availability becomes smaller unless more affordable rental/multifamily units are produced in the near future.

Comparison of HOME/Fair Market Rent to Area Median Rent

Results of the survey information responses gathered for the *Grand Valley Housing Needs Assessment* indicated a median rent of $594 in Grand Junction and a market rate median rent of $818. This is consistent with the Fair Market Rents reported in the table above. As new housing development is proposed, or as units are identified for rehabilitation, a market analysis with particular attention to affordability of 3–4-bedroom units should be kept in mind. The rent distribution in Grand Junction has shifted significantly since 2010, with considerable losses in the share of units with rents

below $650. In 2010, over a third (38%) of the units were less than $650 a month. This share has been reduced to 23% while the share of units priced over $1,250 a month increased from 13% to 27% since 2010.

Discussion

More detailed data on the information associated with these housing problems are provided by the 2013 to 2017 Comprehensive Housing Affordability Strategy (CHAS) data, customized by HUD. CHAS data are created to demonstrate the extent of housing problems and housing needs, particularly among low-income households who may need housing assistance. The CHAS data also segments households by HUD Area Median Family Income (HAMFI). HUD calculates HAMFI for each jurisdiction in order to establish Fair Market Rent values and income limits for HUD programs, making a series of adjustments that tailor the figure to each area.

Households that experience one or more of the housing problems as previously discussed are considered to have unmet housing needs. These households can be of any income level, race, ethnicity or family type. There was an estimated 8,813 households (34%) with cost burden in the Grand Junction area in 2019, representing the majority of households with any housing problem. This includes 3,084 owner households and 5,710 renter households. Of these households with housing problems, the majority are at or below 80 percent HUD Area Median Income (HAMFI). Owner households at 30 percent HAMFI or lower have the highest rate of the cost burden housing problem.

MA-20 Housing Market Analysis: Condition of Housing – 91.210(a)

Introduction

Overall, HUD data and the *Grand Valley Housing Needs Assessment* show that Grand Junction's housing stock does not have significant defects such as incomplete facilities. This is most likely due to the relatively young age of the housing, with only 27.4% of the units constructed before 1970. Only 3.3% of all households lack complete kitchen or plumbing facilities. However, despite the relatively good condition of housing, many of Grand Junction's apartment complexes and other housing units were constructed during the economic boom of the late 1970s to early 1980s and are now experiencing need for repairs and rehabilitation.

Definitions

A reasonable definition of "standard condition" is a housing unit that meets applicable federal standards and local building codes. A housing unit in "substandard condition but suitable for rehabilitation" is any building that does not meet applicable federal standards and/or local building codes, but does not endanger the life, health and safety of the public, and can still be repaired for a reasonable cost. Data show that 21.8% of owner units and 35.2% of renter units have one of the housing problems discussed in the Needs Assessment section of this report. On the other hand, a majority (77.2%) of owner units has no problems and nearly half (43.6%) of renter units have no problem conditions. Generally, renter units are more likely to have one or more problem conditions than are owner units.

Condition of Units

Condition of Units	Owner-Occupied		Renter-Occupied	
	Number	%	Number	%
With one selected Condition	3,080	21%	5,435	49%
With two selected Conditions	28	0%	389	3%
With three selected Conditions	0	0%	36	0%
With four selected Conditions	0	0%	0	0%
No selected Conditions	11,250	78%	5,148	46%
Total	***14,358***	***99%***	***11,008***	***98%***

Table 33 - Condition of Units

Alternate Data Source Name:
2019 5-YR ACS Data

Year Unit Built

Year Unit Built	Owner-Occupied		Renter-Occupied	
	Number	%	Number	%
2000 or later	4,670	32%	2,180	20%
1980-1999	3,765	26%	3,168	29%

Year Unit Built	Owner-Occupied		Renter-Occupied	
	Number	%	Number	%
1950-1979	4,395	31%	4,245	38%
Before 1950	1,550	11%	1,525	14%
Total	***14,380***	***100%***	***11,118***	***101%***

Table 34 – Year Unit Built

Data Source: 2013-2017 CHAS

Risk of Lead-Based Paint Hazard

Risk of Lead-Based Paint Hazard	Owner-Occupied		Renter-Occupied	
	Number	%	Number	%
Total Number of Units Built Before 1980	5,945	41%	5,770	52%
Housing Units build before 1980 with children present	2,305	16%	1,240	11%

Table 35 – Risk of Lead-Based Paint

Data Source:

2013-2017 ACS (Total Units) 2013-2017 CHAS (Units with Children present)

Vacant Units

	Suitable for Rehabilitation	Not Suitable for Rehabilitation	Total
Vacant Units	1,522	0	1,522
Abandoned Vacant Units	574	0	574
REO Properties	397	0	397
Abandoned REO Properties	0	0	0

Table 36 - Vacant Units

Alternate Data Source Name:
2013-2017 CHAS
Data Source Comments: If blank or 0, data is not available for this jurisdiction.

Need for Owner and Rental Rehabilitation

Analysis of units in Grand Junction shows that there are 1,591 vacant units, many of which could be suitable for rehabilitation and 95 units in the foreclosure process as of December 2020. An example of substandard housing that is suitable for rehabilitation is a unit that has lead-based paint. If the unit can be renovated to remove and replace the paint at a reasonable cost, it may be considered suitable for rehabilitation. Housing constructed prior to 1980 should be inspected for lead-based paint hazards and rehabilitated where possible.

Estimated Number of Housing Units Occupied by Low- or Moderate-Income Families with LBP Hazards

Of the approximately 3,545 pre-1980 units with children present, many may be occupied by low- to moderate-income households (0- to 80 percent HAMFI), based on income distribution in Grand Junction.

Discussion

Further examination of these statistics shows that 41% of all owner-occupied units were constructed before 1980 and therefore at risk of lead-based paint hazard. 52% of renter units were constructed before 1980 and are also therefore at risk. Of the owner-occupied pre-1980 units, 16% are occupied by families with children and of the renter-occupied pre-1980 units, 11% are occupied by families with children.

MA-25 Public and Assisted Housing – 91.210(b)

Introduction

As stated in the Needs Assessment section of this report, the City of Grand Junction has no public housing units but, within the City, the Grand Junction Housing Authority (GJHA) owns and operates many housing developments. The City has worked closely with GJHA as it has phased out public housing in Grand Junction and constructs developments in a more sustainable affordable housing model with some combination of other funding or subsidy program such as Low-Income Housing Tax Credits, Housing Trust Fund, or tax exempt conduits. The City has a history of providing building and development fee deferrals, reductions and grant funds to the Housing Authority and other housing providers for the construction of new affordable units.

Totals Number of Units

	Program Type								
	Certificate	Mod-Rehab	Public Housing	Vouchers					
				Total	Project -based	Tenant -based	Special Purpose Voucher		
							Veterans Affairs Supportive Housing	Family Unification Program	Disabled *
# of units vouchers available	0	0	0	977	54	923	433	1,158	1,345
# of accessible units									

***includes Non-Elderly Disabled, Mainstream One-Year, Mainstream Five-year, and Nursing Home Transition**

Table 37 – Total Number of Units by Program Type

Data Source: PIC (PIH Information Center)

Number and Physical Condition of Public Housing

Since there is no public housing in the area, the local housing agencies in the Grand Junction area maintain a list of current affordable housing stock. The most recent update (March 2020) includes nineteen deeply subsidized developments with a total of 1,171 housing units; seven tax credit/affordable developments with a total of 547 housing units; and six more affordable developments with a total of 69 housing units. The properties include a mix of 1-to-4-bedroom units in both large block buildings as well as complexes of multiple smaller buildings. All are presently in good, habitable condition although some of the multifamily developments that were constructed in the late 1970s to early 1980s need rehabilitation which is an ongoing activity for the local entities. As previously stated, there are no units that are expected to be lost from

the inventory. The characteristics of the housing market as described in this Consolidated Plan indicates the ongoing need for subsidized rental units in addition to the need for additional standard units that are affordable.

Public Housing Condition

Public Housing Development	Average Inspection Score
NA	

Table 38 - Public Housing Condition

Restoration and Revitalization Needs of Public Housing

The subsidized units remain occupied with very few vacancies available, thereby indicating the need for continued renovation of older units as needed or as other older properties are acquired by the local housing agencies. Many of the ongoing needs are simply cosmetic upgrades such as paint and flooring but eventually there are systems needs on aging units such as roofing, replacement of evaporative coolers or other HVAC needs, some of which have been funded with CDBG and more are expected during the life of this Consolidated Plan.

Public Housing Agency's Strategy for Improving Residents' Living Environment

The Grand Junction Housing Authority, Housing Resources of Western Colorado and other housing providers in the Grand Junction area are continuously evaluating and upgrading properties. The enhancements that are a result of this ongoing analysis have proven to increase the quality and marketability of properties along with increasing tenant satisfaction. The Next Step and Family Stabilization Project are bridges that help families overcome the obstacles they encounter in attaining self-sufficiency. Other agencies in the Grand Junction area support these programs including the Mesa County Valley School District 51, many local human service agencies, job training programs and other assistance with guiding families through challenges faced daily.

Discussion

No further discussion

MA-30 Homeless Facilities and Services – 91.210(c)

Introduction

This section of the Consolidated Plan describes the facilities and services that assist persons who are not homeless but who require supportive housing and programs to address their needs including elderly, frail elderly, persons with disabilities, persons with alcohol or other drug addiction and persons with HIV/AIDS and their families. This can include persons returning from mental and physical health institutions to ensure they receive appropriate housing with supportive services. Additionally, there are a number of persons and families that are at risk of becoming homeless that also need assistance. There are numerous local entities that help fill the gaps for these populations from counseling to rental assistance.

Facilities and Housing Targeted to Homeless Households

	Emergency Shelter Beds		Transitional Housing Beds	Permanent Supportive Housing Beds	
	Year-Round Beds (Current & New)	Voucher / Seasonal / Overflow Beds	Current & New	Current & New	Under Development
Households with Adult(s) and Child(ren)	0	173	0	0	0
Households with Only Adults	0	961	0	0	0
Chronically Homeless Households	0	40	0	0	0
Veterans	0	221	0	0	0
Unaccompanied Youth	0	34	0	0	0

Table 39 - Facilities and Housing Targeted to Homeless Households

Alternate Data Source Name:
Grand Valley Homeless PIT and Statistics
Data Source Comments: If zero, data is not available for this jurisdiction.

Services Targeted to Homeless Persons

The result of strong collaboration between homeless providers, nonprofits, citizens and stakeholders in the Grand Junction area, individuals and families who are at risk of homelessness or are homeless is that this population can seek help throughout the community. The Continuum of Care, food banks, mental and chemical health services, church programs and many more coordinate a wide variety of resources and programs. These include but are not limited to the following entities and programs/services that are available to individuals and families in Grand Junction.

- Emergency shelter housing units with case management
- Emergency shelter for victims of domestic abuse
- Direct payment assistance to prevent homelessness including food, utilities, medical expenses
- Special needs housing programs for chemically dependent and mentally ill individuals
- Medical and dental health services
- Mental health services
- ESL classes, job training, and technology classes

Facilities and Services that Meet the Needs of Homeless Persons

The Grand Valley Coalition for the Homeless maintains a list of resources that is distributed through local entities that serve homeless populations. The subcategories on the list include the following areas that are further summarized.

<u>Emergency Shelter, Transitional/Permanent Housing</u>

HomewardBound of the Grand Valley - temporary night shelter for families, women and men.
Transitional housing/case management for homeless families and veterans
Rescue Mission - meals and food boxes
Latimer House - counseling, advocacy, referral to safe house
Salvation Army - day shelter, lunch
Grand Valley Catholic Outreach - day center with laundry, showers, mail and phone. Almost Home publication for locating affordable housing. Case management and housing for individuals, families.
Transitional housing, permanent housing and emergency financial assistance
Karis, Inc. Shelter and transitional housing for families, individuals, youth

<u>Veterans Services</u>

VA Medical Center and Health Clinic - assistance for eligible Veterans in finding housing, community resources and VA benefits
Disabled American Veterans/Vietnam Veterans of America - VA benefits, clothing
Grand Junction Veterans Center - Counseling and outreach. Medical referrals, VA benefits

<u>Health Care</u>

Marillac Clinic - dental, vision medical care and case management for low income, uninsured individuals.
Farmworker health
St. Mary's Family Practice - sliding scale medical services

Child and Migrant Services - migrant and farmworkers care and referral
Mind Springs Health - crises line, counseling, psychiatric services, sliding scale fees
Mesa County Health Department - child clinic, immunizations, HID/STD testing, sliding scale fees
Western Colorado AIDS Project - case management, testing, support and referrals for HIV+ individuals, prevention education for public
Hilltop - prenatal and child health care services and insurance. Guidance, support services and case management for families
Center for Independence - assistance for individuals with disabilities
Counseling and Education Center - affordable individual and family counseling, sliding scale fees
Salvation Army - substance abuse rehabilitation program including temporary housing

Education and Employment

Mesa County Workforce Center - job listings, job search assistance, GED classes
Vocational Rehabilitation - Skill development and job training for persons with disabilities
School District 51 REACH Program - advocacy for homeless families with school aged children
Job Corps - job training for at risk youth ages 16 to 24.

MA-35 Special Needs Facilities and Services – 91.210(d)

Persons with Disabilities

Since Grand Junction is the largest community between Denver and Salt Lake City, medical and other special needs services are provided here that are not available in smaller communities. Therefore, the percentage of special needs persons in Grand Junction may be higher than surrounding communities at approximately 10% of the population under the age of 65. The ability of persons with chronic mental illness, physical and developmental disabilities, and HIV/AIDS to compete in the housing market for appropriate housing at an affordable price is limited in many cases by their lack of income and by their need for special housing accommodations and supportive services.

Thirty percent of persons on the Grand Junction Housing Authority wait list are disabled. Agencies that provide services to persons with disabilities in Grand Junction indicate that a lack of rental assistance and accessible units keeps many clients in nursing homes. GJHA has 199 Housing Choice vouchers set aside in Grand Junction specifically for persons with disabilities. Additionally, STRiVE, a service provider for persons with developmental disabilities helps approximately 100 clients live independently in group homes, and administers 14 vouchers.

Hilltop Community Resources, Inc. provides housing for 170 disabled persons. The Housing Authority gives preference to persons with disabilities and all of its developments include accessible units. Properties that are managed by Housing Resources of Western Colorado include a total of 12 accessible units.

Not all disabilities involve a mobility impairment. Some persons have visual impairments, cognitive impairments, or mental health disabilities. The rental market could be better educated as to how best to serve persons with other disabilities.

Local agencies indicate an increase in the number of homeless persons with disabilities. Because of the aging population, it is estimated that the number of housing units needed by persons with disabilities over the next five years will continue to increase. The service providers estimate that more than 350 additional vouchers or other housing opportunities are needed to adequately serve the housing need for persons with disabilities.

Persons with HIV/AIDS

Ten persons in the Grand Junction area receive housing assistance through the federal Housing for Persons with AIDS (HOPWA) program administered by Colorado Health Network, Inc. (CHN) dba Western Colorado AIDS Project (WestCAP). CHN provides medical case management, emergency financial assistance, advocacy/referral, prevention and education programs and HIV/HCV rapid testing. Some clients are able to access Housing Choice vouchers (formerly Section 8) through GJHA, but do not receive specific preference on the waiting lists. CHN currently has a waiting list of 25 persons seeking housing. CHN is predicting that its client needs will continue to increase in the next few years.

Elderly Persons

The number of elderly persons in the community will increase in the coming years. Many will begin to experience limitations in mobility and self-care as they age. Currently, approximately 24% of applicants on the wait list are elderly. GJHA currently has 417 units of affordable senior/disabled rental housing within four developments.

Supportive Housing Needs

Supportive housing is permanent, affordable housing that is tied to a range of support services that enable tenants to live independently and participate in community life. It is a cost effective and successful alternative to more expensive and less effective emergency services or institutional settings. Supportive housing can help people with psychiatric disabilities, people with histories of addition, formerly homeless people, frail seniors, families, young adults aging out of foster care, individuals leaving correctional facilities and people living with HIV/AIDS to live independently in the community. Tenants of supportive housing typically fall into at least two of these categories.

Supportive Housing for Persons Returning from Mental and Physical Health Institutions

The City of Grand Junction does not receive any ESG, Supportive Housing, Shelter Plus Care, or Section 8 SRO program funds. Local agencies in the community that receive such funds have their own discharge coordination policies in place. For example, HomewardBound has policies in place to accommodate most people who are released from publicly funded institutions. The Grand Junction Homeless Shelter is available so that they need not be discharged to the streets. This includes persons discharged from correctional facilities, foster care, mental health facilities and health care facilities. For the vast majority of the persons in this situation, the shelter is a viable alternative to sleeping on the streets. For those discharged from health care facilities with need for follow-up care or a recuperation period, the shelter has a policy allowing limited daytime shelter during periods of recovery. Other alternatives to homelessness for this population in the Grand Junction area include the Freedom House for formerly incarcerated persons and the Rescue Mission. One continuing gap in services is shelter or housing for convicted sex offenders. There are currently no organizations that serve this segment of the homeless or potentially homeless population.

Actions to Address Housing and Supportive Services

The City of Grand Junction will support housing and supportive services needs through the annual allocation of CDBG funds to the extent possible to the entities that address these needs. However, CDBG funding is limited, particularly for funding requests for human services that provide supportive needs. Otherwise, the community relies on these agencies to leverage CDBG funds or retain other funds for their ongoing supportive housing and special needs activities. The City will provide certification of inclusion in the Consolidated Plan and letters of support as these agencies and organizations seek funding from other sources.

MA-40 Barriers to Affordable Housing – 91.210(e)

Negative Effects of Public Policies on Affordable Housing and Residential Investment

Community engagement efforts for the *Grand Valley Housing Needs Assessment* (HNA), included extensive outreach efforts to community stakeholders. Participants represented a wide range of groups with housing needs; and included stakeholders involved in providing housing services and other services for vulnerable populations, along with stakeholders involved in economic development and developers of single family and multifamily housing. Discussion of barriers to housing development included land costs, fees, NIMBYism/community resistance, the speed of approval process, and natural features. Other concerns were current state of the housing market, rising cost of materials, lack of adequate public transportation and lack of affordable housing development policies. Many of these factors are out of the control of a local government but the latter could be considered a negative effect of public policies on affordable housing and residential investment. The stakeholder discussions also suggested a series of recommendations and actions pertaining to public policy that are listed below. Based on these, the City has an opportunity to continue this discussion with other housing interests and work towards making changes to public policies to better support affordable housing and residential investment.

- Look into options for manufactured housing replacement and ownership
- More regional cooperation between the City and County
- Encourage mixed developments with varied housing types sharing parks and neighborhood amenities
- Promote more integration of housing services and other services

MA-45 Non-Housing Community Development Assets – 91.215 (f)

Introduction

The Non-Housing Community Development section of the Consolidated Plan provides a brief summary of the City's priority non-housing community development needs that are eligible for assistance under HUD CDBG categories and priorities. This component of the Consolidated Plan outlines the City's specific long-term and short-term community development objectives including economic development activities that create jobs. The objectives are in accordance with the primary goal of the CDBG program to develop viable urban communities by providing decent housing and a suitable living environment and expanding economic opportunities, principally for low- and moderate-income persons. In Grand Junction, economic development activities are primarily managed and supported by the Business Incubator Center (BIC), the Grand Junction Economic Partnership (GJEP), the Mesa County Workforce Center, the Grand Junction Chamber of Commerce, and the Western Colorado Latino Chamber of Commerce. GJEP continues to seek more business and economic opportunities for community residents. There is currently an inadequate number of jobs that pay wages above federal poverty guidelines. BIC and GJEP work to address the needs of commercial enterprises and coordinate with job training and job search resources available through the Mesa County Workforce Center.

Economic Development Market Analysis

Business Activity

Business by Sector	Number of Workers	Number of Jobs	Share of Workers %	Share of Jobs %	Jobs less workers %
Agriculture, Mining, Oil & Gas Extraction	1,004	1,433	4	3	-1
Arts, Entertainment, Accommodations	3,110	5,350	12	12	0
Construction	1,707	2,813	7	6	-1
Education and Health Care Services	6,526	10,636	26	24	-2
Finance, Insurance, and Real Estate	1,346	2,524	5	6	1
Information	395	677	2	2	0
Manufacturing	1,185	2,556	5	6	1
Other Services	1,967	3,295	8	8	0
Professional, Scientific, Management Services	1,235	1,896	5	4	-1
Public Administration	1,252	2,560	5	6	1
Retail Trade	3,105	6,479	12	15	3
Transportation and Warehousing	1,038	1,925	4	4	0
Wholesale Trade	1,024	1,719	4	4	0
Total	24,894	43,863	--	--	--

Table 40 - Business Activity

Alternate Data Source Name:
2018 Longitudinal Employer-Household Dynamics

Labor Force

Total Population in the Civilian Labor Force	31,637
Civilian Employed Population 16 years and over	28,128
Unemployment Rate	6.90
Unemployment Rate for Ages 16-24	19.80
Unemployment Rate for Ages 25-65	7.60

Table 41 - Labor Force

Alternate Data Source Name:
2019 5-YR ACS Data.1

Occupations by Sector	Number of People
Management, business and financial	11,450
Farming, fisheries and forestry occupations	77
Service	5,767
Sales and office	6,111
Construction, extraction, maintenance and repair	2,860
Production, transportation and material moving	3,160

Table 42 – Occupations by Sector

Alternate Data Source Name:
2019 5-YR ACS Data.1

Travel Time

Travel Time	Number	Percentage
< 30 Minutes	28,185	92%
30-59 Minutes	1,429	5%
60 or More Minutes	1,096	4%
Total	***30,710***	***100%***

Table 43 - Travel Time

Alternate Data Source Name:
2019 5-YR ACS Data.1

Education

Educational Attainment by Employment Status (Population 16 and Older)

Educational Attainment	In Labor Force		
	Civilian Employed	Unemployed	Not in Labor Force
Less than high school graduate	1,631	335	895
High school graduate (includes equivalency)	4,967	407	1,763
Some college or Associate's degree	6,861	757	2,212
Bachelor's degree or higher	8,537	369	1,634

Table 44 - Educational Attainment by Employment Status

Alternate Data Source Name:
2019 5-YR ACS Data.1

Educational Attainment by Age

	Age				
	18–24 yrs	25–34 yrs	35–44 yrs	45–65 yrs	65+ yrs
Less than 9th grade	136	194	377	272	450
9th to 12th grade, no diploma	565	571	392	1,055	806
High school graduate, GED, or alternative	1,717	2,052	1,535	3,550	2,981
Some college, no degree	4,374	2,384	1,791	3,056	2,374
Associate's degree	392	701	663	1,235	776
Bachelor's degree	678	2,375	1,537	3,215	2,186
Graduate or professional degree	28	667	995	1,751	1,737

Table 45 - Educational Attainment by Age

Alternate Data Source Name:
2019 5-YR ACS Data.1

Educational Attainment – Median Earnings in the Past 12 Months

Educational Attainment	Median Earnings in the Past 12 Months
Less than high school graduate	26,213
High school graduate (includes equivalency)	32,220
Some college or Associate's degree	30,935
Bachelor's degree	42,784
Graduate or professional degree	56,452

Table 46 – Median Earnings in the Past 12 Months

Alternate Data Source Name:
2019 5-YR ACS Data.1

Major Employment Sectors

The top three major employment sectors in Grand Junction are Education and Health Care Services, Retail Trade, and Arts, Entertainment and Accommodations.

Workforce and Infrastructure Needs of Business Community

The Grand Junction Economic Partnership (GJEP) regularly conducts strategic planning meetings to set primary action items for the community. The most recent meeting determined the following items will be of highest priority.

- GJEP expansion to provide coworking, events and office space to tech startups
- Grow the tech/remote worker sector while continuing traditional recruitment efforts
- Commission a transportation study to help find solutions to freight issues
- Identify "Distresses" criteria and move toward becoming a "Not Distressed" community
- Colorado Mesa University/Western Colorado Community College skills mapping to identify skills gaps
- Northstar/community vision update
- Sustainable long-term funding
- Foreign Trade Zone

Workforce and Infrastructure Needs of Business Community

Following the economic recession of a decade ago and the effects of the COVID-19 pandemic, Grand Junction is experiencing an increase in housing production, new commercial development and interest in the community for increased industrial development that is beginning to create a positive economic impact in the community. The community continues to grow as a regional hub for transportation, medical and government facilities, and employment. Grand Junction continues to partner with State and regional agencies to improve its established roadway network and is working to improve wireless and broadband technology in the area. These investments in infrastructure will serve as the foundation for future economic development.

BIC provides educational services and business tools in support of the launch, growth, stabilization and long-term success of business enterprises in Mesa County. Their primary services include a supportive entrepreneurial community; free business consulting and low-cost training; business loans and financing; and Colorado State Tax Credits. BIC targets individuals and businesses, start-up and existing, mainly in the Mesa County area. Some of its programs are specific to low- and moderate-income individuals. However, there are other programs that are not income specific. Clients are provided education and training, financing, and one-on-one business consulting. The BIC facility also provides affordable rental space for a start-up business, a shared use commercial kitchen for food related businesses, and a shared Make It space for small industry. The Small Business Development Corporation that oversees the BIC is consistently a top producer in job creation or retention and capital formation.

In addition, Mesa County is active in promoting job training and placement through the Workforce Center operated under the Mesa County Human Service Department. The agency provides integrated

and comprehensive employment preparation and placement services to jobseekers throughout the Grand Junction area.

Skills and Education of Current Workforce Correspond to Employment Opportunities

The Grand Junction area's workforce is ever growing and with quality partnerships with local educational institutions that ensure that employer's needs are being met. In particular, GJEP has a strong partnership with the Mesa County Workforce Center. The center offers many educational and training opportunities for its clients to meet the continual need for skill enhancement, development of incumbent workers, and worker re-training to meet the ever-changing demands of the local economy. Western Colorado Community College also provides training for employees and works with local employers to customize training. The College has 29 career-oriented associate degrees and certificate programs that are specifically designed to assist veterans, their spouses, displaced workers, and anyone else who would like to improve their role in the workforce. The programs are within a variety of industry clusters including agriculture, business, culinary, computer technology, construction, surveying, medical technology, law enforcement and transportation services.

Current Workforce Training Initiatives that Support Consolidated Plan

Workforce training initiatives in Grand Junction are undertaken through GJEP, Western Colorado Community College and the Mesa County Workforce Center. Specific initiatives offered are discussed above and are consistent with the City's overall goals of the Consolidated Plan.

Economic Development Initiatives Undertaking

A partnership of local entities has created an Economic Development Plan and has ongoing communication as the economic climate changes.

MA-50 Needs and Market Analysis Discussion

Areas of Concentration of Multiple Housing Problems

According to 24 CFR Subtitle A 5.425, HUD defines "substandard" to mean housing which is dilapidated, without operable indoor plumbing or a usable flush toilet or bathtub inside the unit for the family's exclusive use, without electricity or with inadequate or unsafe electrical service, without a safe or adequate source of heat, and should but does not have a kitchen, or has otherwise been declared unfit for habitation by the government. A housing unit is considered dilapidated if: 1) the unit does not provide safe and adequate shelter, and in its present condition endangers the health, safety and wellbeing of residents; or 2) the unit has one or more critical defects, or a combination of intermediate defects in sufficient number or extent to require considerable repair or rebuilding. The defects may involve original construction, or they may result from continued neglect or lack of repair or from serious damage to the structure. "Concentration" is defined similar to "disproportionate share" - an area has concentration if the share threshold is ten percentage points higher than the overall average in an area. The concentration of substandard housing stock overlaps with the concentration of low to moderate income families. These areas are primarily located in the older core of downtown or on Orchard Mesa. Another concentration area is in the eastern end of the Grand Valley but is outside the City limits.

Areas of Concentration of Racial or Ethnic Minorities or Low-Income Families

As above, "concentration" is defined similar to "disproportionate share" - an area has concentration if the share threshold is ten percentage points higher than the overall average in an area. The primary racial or ethnic concentration is with Hispanic households which are concentrated in areas on the periphery of the central area of Grand Junction. The concentration of low-income families coincides with the households described above with multiple housing problems.

Market Characteristics in Areas of Concentration

Housing in these areas/neighborhoods is generally more affordable and there tends to be a greater mix of housing types since the majority of subsidized and non-subsidized multifamily housing options exist in these areas.

Community Assets in Areas of Concentration

Since these areas are closer to the core of the City, they are served by public transit and have a mix of uses including commercial centers, schools and parks. The neighborhoods along North Avenue on the periphery of the core are in close proximity to the Mesa County Health Department which now includes a satellite of the Marillac Clinic and the Mesa County Workforce Center.

Strategic Opportunities in Areas of Concentration

Many of these areas/neighborhoods overlap with low- and moderate-income neighborhoods that are eligible for the use of CDBG funds. Each Program Year, the City attempts to fund at least one activity with CDBG funds that will make a public improvement in these eligible neighborhoods.

MA-60 Broadband Needs of Housing Occupied by Low- and Moderate-Income Households - 91.210(a)(4), 91.310(a)(2)

Need for Broadband Including Low- and Moderate-Income Households and Neighborhoods

For many Americans, access to computers and high-speed Internet connections in an integral part of their everyday lives. As most of information, services, and resources have transitioned to online access, digital inequality has a direct impact on low income household's social inequality. According to HUD's Office of Policy Development, in the Digital Inequality and Low-Income Households Report, the disparate access to broadband can correlate with the inequality of income, education, race, and ethnicity.

As part of the 2008 Broadband Data Improvement Act, the U.S. Census Bureau began asking about computer and Internet use in the American community Survey (ACS). Federal agencies use these statistics to measure and monitor the nationwide development of broadband networks and to allocate resources intended to increase access to broadband technologies, particularly among groups with traditionally low levels of access.

Need for Increased Competition with Multiple Service Providers

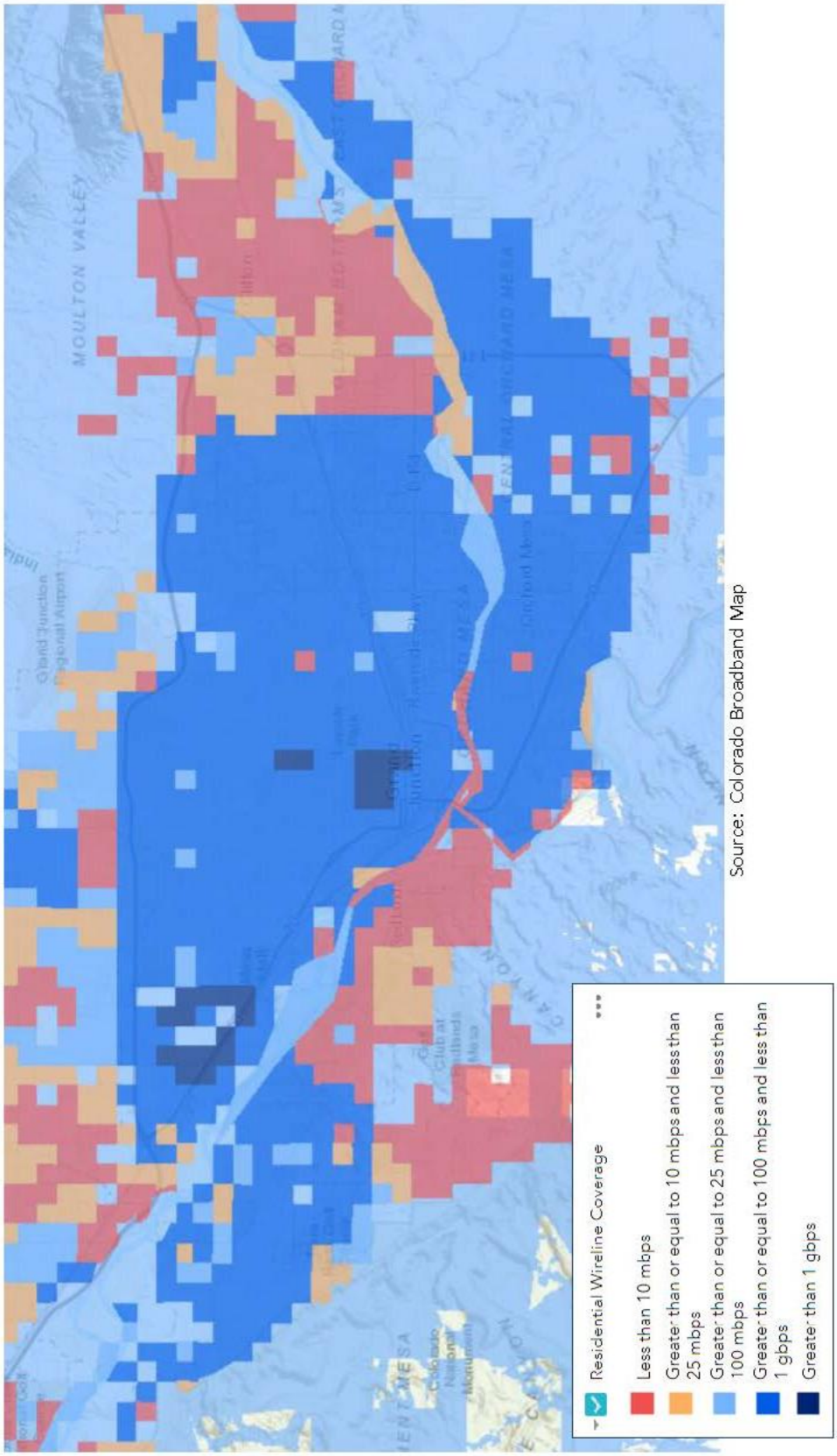
Throughout the United States, there is a significant digital divide; a gap between those who have ready access to the internet and computers and those who do not. The divide is perpetuated by limitations that are geographical as well as financial, where persons cannot afford to pay a monthly service fee for Broadband service (an internet connection fast enough to stream a video). Nationwide, less than half of households living on or under $20,000 are connected. This lack of internet access in communities supports a deficit in opportunity, education, and other prospects.

The following map from the Colorado Broadband Map that is updated twice annually, shows the coverage area and speeds of internet services within the Grand Junction area. Generally, the area within the Grand Junction City limits is consistently served with internet speeds greater than or equal to 100 mbps and less than 1 gbps with some pockets of greater or lesser service speeds. Information from the State of Colorado broadband data indicates six wireless, two satellite and one fixed service providers in the area.

While the map shows availability of service, it does not reflect the actual household level usage of broadband. The most recent ACS data updated in January 2021 indicates 92% of households in Mesa County (within which Grand Junction is located) have a computer in the home and 85% have some type of internet access. Thus, it is apparent that the community is generally well-connected but, from a fair housing perspective, ensuring that residential broadband is available to housing developments both within and in the outskirts of the city will support community viability and improve the quality of life for residents.

A public workshop of the Grand Junction City Council included a discussion with the local broadband service providers. The workshop was attended by representation of the Chamber of Commerce and other interested parties. The providers discussed the challenges of 2020 and ensuring service to the community, the Federal program that provides funding to bring Broadband to low-income households, how to partner with other entities to provide refurbished devices to accomplish connecting citizens, public-private partnerships to help build the infrastructure (such as adding conduit when reconstructing a road), a digital literacy grant program to educate users on devices and services, and an awareness program to provide information on the available programs and services. Generally, the current greater priority is assisting citizens with access as opposed to expanding infrastructure.

Grand Junction Broadband Service



Source: Colorado Broadband Map

MA-65 Hazard Mitigation - 91.210(a)(5), 91.310(a)(3)

Increased Natural Hazard Risks Associated with Climate Change.

Geographically, Grand Junction is located in the high desert on the Western Slope of Colorado along the Colorado and Gunnison Rivers. Compared to many other parts of the United States, the Grand Junction area is a relatively safe place to live. The chances of earthquake and tornado damage in Grand Junction is lower than the Colorado average and is much lower than the national average. The most dangerous threats face on the Western Slope in Grand Junction are floods and wildfires. Of the two, natural hazard risk from wildfires is most likely to increase due to climate change as average temperatures rise and drought increases. Most floods in Grand Junction come from the Colorado River when spring runoff from mountain snowpack occurs. As drought increases from climate change, the risk of flooding may actually decrease due to lower runoff water levels.

Vulnerability of Low- and Moderate-Income Households to Natural Hazard Risks

The majority of the low- and moderate-income neighborhoods within the Grand Junction city limits are located outside the areas most susceptible to the risk of flooding from the Colorado River. However, there are some neighborhoods, primarily in the Orchard Mesa area of the City that are susceptible to flooding from blocked or overtopped irrigation and drainage ditches. The City works cooperatively with private drainage and irrigation companies to alleviate these risks whenever and wherever possible. For example, the City has used CDBG funds in the past to increase the capacity of storm drainage systems in portions of Orchard Mesa and in the Riverside and El Poso neighborhoods closer to the river to alleviate such risks.

Newly constructed housing requires environmental reviews and/or must meet environmental guidelines required by City and Mesa County Codes and/or the Low-Income Housing Tax Credit (LIHTC) program depending on funding for the development. Such review helps ensure developments on the entire spectrum of housing type and affordability do not experience an increased risk of natural hazards.

Strategic Plan

SP-05 Overview

The purpose of the Five-Year Consolidated Plan Strategic Plan is to propose measurable goals for actions that will address issues set by HUD requirements for the use of CDBG funding in Grand Junction. These goals include projects that serve homeless, special needs and low- and moderate-income populations, address fair housing and lead-based paint issues, overcome institutional barriers to the production and preservation of affordable housing, and foster economic development and neighborhood revitalization. To ensure that the City of Grand Junction meets these goals, the City will collaborate with nonprofit agencies, governmental entities at all levels, the business community, the faith-based community and City residents.

SP-10 Geographic Priorities – 91.215 (a)(1)

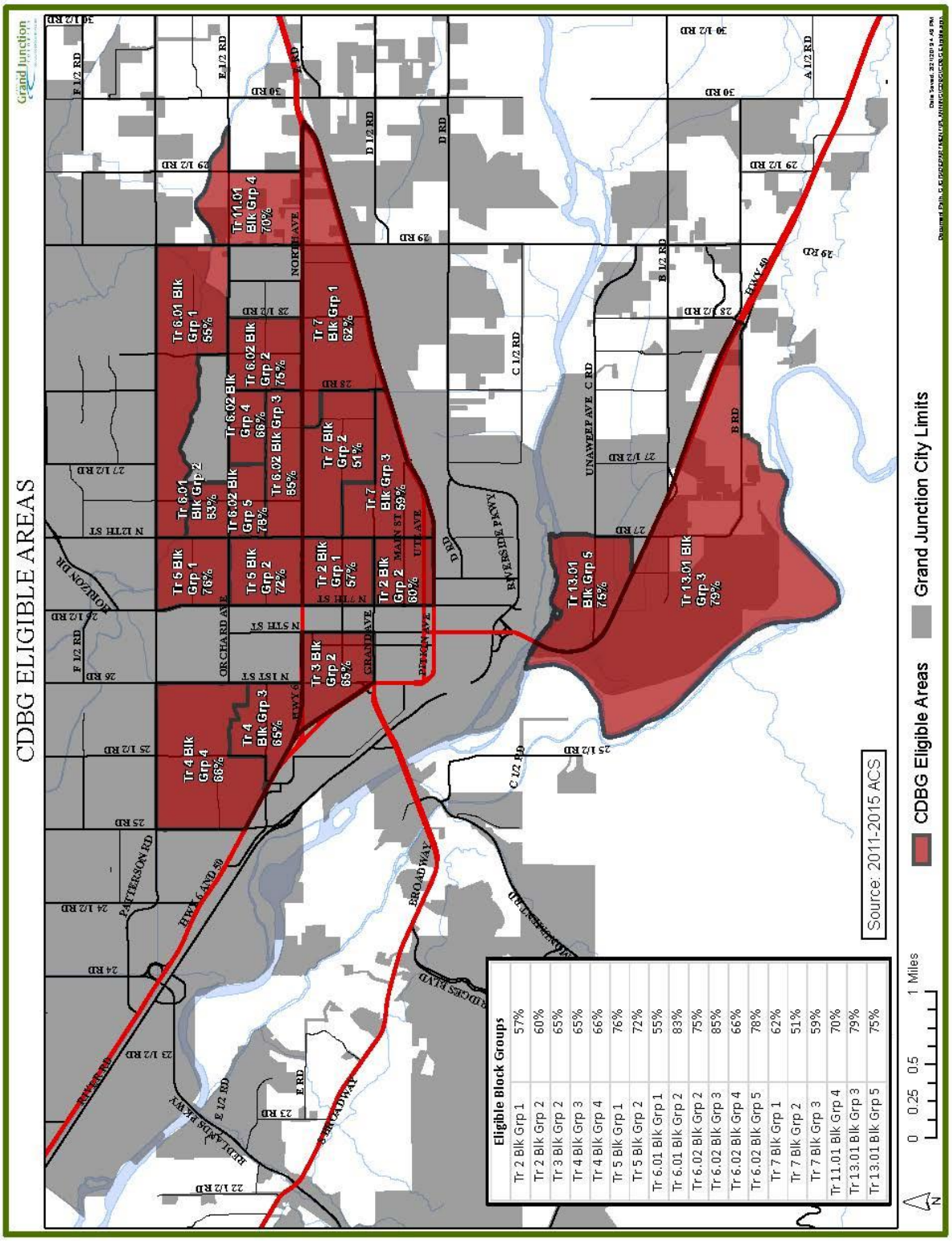
Table 47 - Geographic Priority Areas

1	**Area Name:**	Census Tracts
	Area Type:	Low and Moderate Income
	Other Target Area Description:	Low and Moderate Income
	HUD Approval Date:	
	% of Low/ Mod:	
	Revital Type:	
	Other Revital Description:	
	Identify the neighborhood boundaries for this target area.	The census tracts that have 51 percent or greater households of low- and moderate-income are considered target areas for expenditure of CDBG funds.
	Include specific housing and commercial characteristics of this target area.	Generally, these tracts are in the older, more established portions of the core of Gfrand Junction. Areas on the periphery tend to have newer homes and commercial areas that are not low- and moderate-income neighborhoods.
	How did your consultation and citizen participation process help you to identify this neighborhood as a target area?	These areas are established by the 2017 HUD CPD updated LMISD mapping.
	Identify the needs in this target area.	There are public infrstructure needs to improve neighborhood walkability/complete streets, safe routes to school, improved storm drainage to mitigate flooding, and improve or add neighborhood parks and recreational opportunities. There are also needs for some public faciilties such as neighborhood community centers, daycares and commercial opportunities.
	What are the opportunities for improvement in this target area?	Thre are opportunities to expend CDBG funds to address the needs identified above as limited funds allow.
	Are there barriers to improvement in this target area?	The primary barrier is the limited amount of CDBG funds received by the City to be able to address all needs.
	Area Name:	City-Wide

2	**Area Type:**	Local Target area
	Other Target Area Description:	
	HUD Approval Date:	
	% of Low/ Mod:	
	Revital Type:	Comprehensive
	Other Revital Description:	
	Identify the neighborhood boundaries for this target area.	NA
	Include specific housing and commercial characteristics of this target area.	NA
	How did your consultation and citizen participation process help you to identify this neighborhood as a target area?	NA
	Identify the needs in this target area.	NA
	What are the opportunities for improvement in this target area?	NA
	Are there barriers to improvement in this target area?	NA

General Allocation Priorities

Over the next five years, community development projects or needs may arise in eligible low- and moderate-income neighborhoods that may be funded with CDBG dollars whether carried out by the City of Grand Junction or subrecipient organizations. The basis for determining eligible areas is if 51 percent of the households in the area are of low and moderate income according to the 2017 HUD CPD updated LIMSD map for Grand Junction. This primarily includes downtown, areas just north and east of downtown and Orchard Mesa. All recipient agencies and organizations must report expenditure within the City limits of Grand Junction or for persons that reside within the City limits of Grand Junction. In addition, CDBG funding must meet national objective requirements of serving low- and moderate-income persons or clientele of presumed benefit.


CDBG ELIGIBLE AREAS
Grand Junction
Eligible Block Groups
Tr 2 Blk Grp 1 57%
Tr 2 Blk Grp 2 60%
Tr 3 Blk Grp 2 65%
Tr 4 Blk Grp 3 65%
Tr 4 Blk Grp 4 66%
Tr 5 Blk Grp 1 76%
Tr 5 Blk Grp 2 72%
Tr 6.01 Blk Grp 1 55%
Tr 6.01 Blk Grp 2 83%
Tr 6.02 Blk Grp 2 75%
Tr 6.02 Blk Grp 3 85%
Tr 6.02 Blk Grp 4 66%
Tr 6.02 Blk Grp 5 78%
Tr 7 Blk Grp 1 62%
Tr 7 Blk Grp 2 51%
Tr 7 Blk Grp 3 59%
Tr 11.01 Blk Grp 4 70%
Tr 13.01 Blk Grp 3 79%
Tr 13.01 Blk Grp 5 75%
Source: 2011-2015 ACS
0 0.25 0.5 1 Miles
CDBG Eligible Areas
Grand Junction City Limits

SP-25 Priority Needs - 91.215(a)(2)

The priority needs for Grand Junction are grouped into five categories: Non-Housing Community Development Infrastructure and Facilities; Special Needs Populations and Other Human Services; Economic Development and Childcare; Increase the Inventory of Affordable Housing Units; and Homeless. These categories generally reflect the distribution of CDBG funds that has occurred over the last 25 years and which is expected to continue in order to address a broad range of community needs with a limited amount of funding.

Table 48 – Priority Needs Summary

1	**Priority Need Name**	Non-Housing Infrastructure and Facilities
	Priority Level	High
	Population	Extremely Low Low Moderate Large Families Families with Children Elderly Public Housing Residents Chronic Homelessness Individuals Families with Children Mentally Ill Chronic Substance Abuse veterans Persons with HIV/AIDS Victims of Domestic Violence Unaccompanied Youth Elderly Frail Elderly Persons with Mental Disabilities Persons with Physical Disabilities Persons with Developmental Disabilities Persons with Alcohol or Other Addictions Persons with HIV/AIDS and their Families Victims of Domestic Violence Non-housing Community Development

	Geographic Areas Affected	Low and Moderate Income City-Wide
	Associated Goals	Suitable Living Environment - Non-Housing Suitable Living Environment - Homeless Suitable Living Env - Special Needs/Minorities
	Description	Provision of basic citizen services such as public works and utilities, police and fire protection, parks and recreation, general planning, code enforcement and historic preservation.
	Basis for Relative Priority	Priority needs listed are all of equal importance, not further prioritized
2	**Priority Need Name**	Special Needs Populations and Other Human Services
	Priority Level	High
	Population	Extremely Low Low Moderate Large Families Families with Children Elderly Public Housing Residents Chronic Homelessness Individuals Families with Children Mentally Ill Chronic Substance Abuse veterans Persons with HIV/AIDS Victims of Domestic Violence Unaccompanied Youth Elderly Frail Elderly Persons with Mental Disabilities Persons with Physical Disabilities Persons with Developmental Disabilities Persons with Alcohol or Other Addictions Persons with HIV/AIDS and their Families Victims of Domestic Violence

	Geographic Areas Affected	City-Wide
	Associated Goals	Suitable Living Env - Special Needs/Minorities
	Description	This need involves the following objectives: 1) Support efforts to reduce the possibility of catastrophic expense; 2) Increase the number of group homes and facilities that can accommodate individuals with physical and cognitive disabilities; 3) Support programs helping the elderly, persons with HIV/AIDS, homeless and other special needs populations; 4) Increase access to drug and/or alcohol treatment programs and resources for victims of domestic violence; and 5) Promote and support activities and programs for minority populations including youth, especially homeless and at-risk youth.
	Basis for Relative Priority	Priority needs listed are all of equal importance, not further prioritized.
3	**Priority Need Name**	Economic Development and Childcare
	Priority Level	High

	Population	Extremely Low Low Moderate Large Families Families with Children Elderly Public Housing Residents Chronic Homelessness Individuals Families with Children Mentally Ill Chronic Substance Abuse veterans Persons with HIV/AIDS Elderly Frail Elderly Persons with Mental Disabilities Persons with Physical Disabilities Persons with Developmental Disabilities Persons with Alcohol or Other Addictions Persons with HIV/AIDS and their Families Victims of Domestic Violence
	Geographic Areas Affected	City-Wide
	Associated Goals	Creating Economic Opportunities
	Description	Create economic opportunities through the following strategies: 1) Increase access to employment; 2) support activities that foster increased household stability and/or increased household income; 3) support efforts intended to expand and/or diversify the local business base and increase pay scales; 4) support efforts of job creation for low and moderate income households, possibly linking housing rehabilitation with job training; 5) support activities to provide workforce education and training; and 6) increase the availability of affordable childcare for children of the working poor and people entering the workforce.
	Basis for Relative Priority	Priority needs listed are all of equal importance, not further prioritized.

4	**Priority Need Name**	Increase the Inventory of Affordable Housing Units
	Priority Level	High
	Population	Extremely Low Low Moderate Large Families Families with Children Elderly Public Housing Residents Chronic Homelessness Individuals Families with Children Mentally Ill Chronic Substance Abuse veterans Persons with HIV/AIDS Victims of Domestic Violence Unaccompanied Youth Elderly Frail Elderly Persons with Mental Disabilities Persons with Physical Disabilities Persons with Developmental Disabilities Persons with Alcohol or Other Addictions Persons with HIV/AIDS and their Families Victims of Domestic Violence
	Geographic Areas Affected	City-Wide
	Associated Goals	Decent Affordable Housing

	Description	This priority need includes the following objectives: 1) increase the number of affordable rental housing units including SROs; 2) increase the number and type of home ownership opportunities available to low/moderate income households, especially for minority and special needs populations; 3) identify, rehabilitate or remove units to reduce substandard and/or vacant housing units; 4) Preserve the existing stock of affordable housing units; 5) reduce the impact of barriers to affordable housing and impediments to fair housing; 6) establish and support programs that include the provision of security deposits, legal services and other advocate programs helping renters and owners obtain and retain housing; and 7) evaluate and reduce lead-based paint hazards in housing units.
	Basis for Relative Priority	Priority needs listed are all of equal importance, not further prioritized.
5	**Priority Need Name**	Homeless
	Priority Level	High
	Population	Extremely Low Low Large Families Families with Children Elderly Chronic Homelessness Individuals Families with Children Mentally Ill Chronic Substance Abuse veterans Persons with HIV/AIDS Victims of Domestic Violence Unaccompanied Youth Elderly Frail Elderly Persons with Mental Disabilities Persons with Physical Disabilities Persons with Developmental Disabilities Persons with Alcohol or Other Addictions Persons with HIV/AIDS and their Families Victims of Domestic Violence

	Geographic Areas Affected	City-Wide
	Associated Goals	Suitable Living Environment - Homeless
	Description	Homeless needs include the following objectives: 1) provide shelter for homeless adults; 2) provide shelter for homeless families; 3) provide shelter for unaccompanied homeless youth; 4) increase the number of transitional housing units with supportive services for homeless individuals and families; 5) improve homeless prevention activities; and 6) provide permanent supportive housing opportunities.
	Basis for Relative Priority	Priority needs listed are all of equal importance, not further prioritized.

SP-30 Influence of Market Conditions – 91.215 (b)

Affordable Housing Type	Market Characteristics that will influence the use of funds available for housing type
Tenant Based Rental Assistance (TBRA)	Increase in rents in those rental products that are most attainable to very low income. Lowering of vacancy rates overall for workforce units. Limited number of public housing units.
TBRA for Non-Homeless Special Needs	Increase in rents and low vacancy rates. Limited number of units to rehabilitate existing housing stock for accessibility.
New Unit Production	Increase in development costs; decrease in federal sources of capital funding especially to provide a mix of housing types; increase in demand for local workforce housing that existing housing stock cannot meet.
Rehabilitation	Homebuilders/developers state that rental rates do not support rehabilitation. In support of stabilization priorities and the existence of high property tax rates; maintenance of existing housing stock.
Acquisition, including preservation	Land acquisition and development cost increase; in urban/infill areas where preservation is more cost effective than new construction since infrastructure already exists.

Table 49 – Influence of Market Conditions

SP-35 Anticipated Resources - 91.215(a)(4), 91.220(c)(1,2)

Introduction

The Federal resources available to the City of Grand Junction are Community Development Block Grant funds. The City does not qualify for HOME funds. However, other agencies and organizations in the community are able to leverage funds from other sources including the Housing Choice Voucher Program, Low Income Housing Tax Credits, the Weatherization Program, Energy Assistance Programs, NeighborWorks, SBG and ESG funds.

Program	Source of Funds	Uses of Funds	Expected Amount Available Year 1				Expected Amount Available Remainder of ConPlan $	Narrative Description
			Annual Allocation: $	Program Income: $	Prior Year Resources: $	Total: $		
CDBG	public - federal	Acquisition Admin and Planning Economic Development Housing Public Improvements Public Services	469,557	0	0	469,557	1,840,000	Total CDBG projected to be available for 5-Year plan: Entitlement $ 2,309,557

Table 50 - Anticipated Resources

Leveraging of Federal Funds

The City of Grand Junction shares HUD's goals of using CDBG funds to seed programs and projects that will ultimately prove financially self-sufficient and demonstrate growth in the program or service provided. The City of Grand Junction does not have matching requirements for CDBG funds. However, as the City is assessing projects for potential funding, the ability of the applicant to leverage other funding sources whether public or private to complete a proposed project is reviewed. In many cases, recipients have been able to leverage other public and private funding sources by using CDBG dollars for the required local match.

The funds provided through the City's CDBG program over the past 25 years have leveraged a substantial amount of other public and private resources despite difficult economic circumstances in recent years. The amount of funds leveraged by subrecipients is reported in the CAPER each Program Year. Typically, for every one CDBG dollar allocated, subrecipients are able to leverage five times that from other resources.

Public Land Used to Address Needs

Some activities within the non-housing community development goals will be accomplished within City rights-of-way and on City-owned properties to be able to make infrastructure and facilities improvements that will benefit low- and moderate-income neighborhoods in Grand Junction including streets, utilities and parks and recreation facilities.

SP-40 Institutional Delivery Structure – 91.215(k)

Responsible Entity	Responsible Entity Type	Role	Geographic Area Served
City of Grand Junction	Government	Economic Development Homelessness Non-homeless special needs Ownership Planning Public Housing Rental neighborhood improvements public facilities public services	Jurisdiction
Grand Junction Housing Authority	PHA	Public Housing Rental	Jurisdiction
Housing Resources of Western Colorado	Non-profit organizations	Ownership Rental	Region
Grand Valley Catholic Outreach	Community/Faith-based organization	Homelessness Non-homeless special needs Rental public facilities public services	Jurisdiction
MESA COUNTY	Government	Economic Development Non-homeless special needs Planning public facilities public services	Region
Mind Springs Health West	Non-profit organizations	Homelessness Non-homeless special needs public facilities public services	Region

Responsible Entity	Responsible Entity Type	Role	Geographic Area Served
STRiVE	Non-profit organizations	Non-homeless special needs public facilities public services	Region
Hilltop Health Services Corporation	Non-profit organizations	Non-homeless special needs Rental public facilities public services	Region
HomewardBound of the Grand Valley	Non-profit organizations	Homelessness	Jurisdiction
Marillac Clinic	Non-profit organizations	Non-homeless special needs public facilities public services	Region
Rocky Mountain Communities	Private Industry	Rental	Region
Volunteers of America, Colorado	Non-profit organizations	Rental	Nation
MESA YOUTH SERVICES	Non-profit organizations	Non-homeless special needs public facilities public services	Jurisdiction
Western Colorado AIDS Project (Westcap)	Non-profit organizations	Homelessness Non-homeless special needs public services	Region
CENTER FOR INDEPENDENCE	Non-profit organizations	Economic Development Non-homeless special needs public facilities public services	Region
Mesa County Valley School District 51	Public institution	Homelessness neighborhood improvements public facilities public services	Region

Responsible Entity	Responsible Entity Type	Role	Geographic Area Served
Business Incubator Center	Other	Economic Development public facilities	Region
Karis Inc.	Non-profit organizations	Homelessness Non-homeless special needs Rental public services	Jurisdiction
St Marys Hospital Foundation Senior Programs	Non-profit organizations	Non-homeless special needs public facilities public services	Region
Grand Junction Economic Partnership	Other	Economic Development	Region
Latin Anglo Alliance	Non-profit organizations	Non-homeless special needs public facilities public services	Jurisdiction
Riverside Education Center	Non-profit organizations	Non-homeless special needs public facilities public services	Jurisdiction
Riverside Task Force Incorporated	Non-profit organizations	Non-homeless special needs neighborhood improvements public services	Jurisdiction
Rocky Mountain SER Head Start Program	Non-profit organizations	Non-homeless special needs public facilities public services	Nation
Grand Junction Veterans Administration	Government	Homelessness Non-homeless special needs Rental public services	Nation
Habitat for Humanity of Mesa County	Non-profit organizations	Ownership	Nation

Responsible Entity	Responsible Entity Type	Role	Geographic Area Served
Colorado Housing & Finance Authority	Government	Ownership	State

Table 51 - Institutional Delivery Structure

Assess Strengths and Gaps in the Institutional Delivery System

STRENGTHS

• High degree of collaboration and networking - agencies and organizations periodically meet to share ideas, problem-solve, and strategize the best method to meet the needs of low to moderate income and presumed benefit residents in Grand Junction

• There is an active Homeless Coalition and ad-hoc Housing Coalition that meets to discuss targeted needs and strategies and maintain/update its 10-year plan to end homelessness

• Training on various housing and human services topics provided in community by local agencies and organizations and HUD representatives

GAPS

• Need for existing ad-hoc housing coalition to formalize to take actions addressed in the Housing Strategy to be developed later in 2021

• Continue to improve communication and coordination with internal and external customers for programs administered through different nonprofit agencies and organizations and faith-based initiatives

• Sustainability of funded programs that address needs

• Isolation of community - limited opportunities to attend HUD or training by other agencies or networking opportunities that are typically provided in large cities (e.g. CDBG Users Group and non-profit training meetings in Denver)

• Many agencies and organizations serve a large population that does not reside in the Grand Junction city limits; therefore, expenditure of CDBG for their projects, services and programs is limited in support of their entire operations.

Homelessness Prevention Services	Available in the Community	Targeted to Homeless	Targeted to People with HIV
Homelessness Prevention Services			
Counseling/Advocacy	X	X	
Legal Assistance	X	X	X
Mortgage Assistance	X		X
Rental Assistance	X		X
Utilities Assistance	X		
Street Outreach Services			
Law Enforcement	X	X	

Street Outreach Services			
Mobile Clinics	X	X	X
Other Street Outreach Services	X	X	
Supportive Services			
Alcohol & Drug Abuse	X	X	
Child Care	X		
Education	X		
Employment and Employment Training	X		
Healthcare	X	X	X
HIV/AIDS	X		
Life Skills	X		
Mental Health Counseling	X	X	X
Transportation	X		

Table 52 - Homeless Prevention Services Summary

Service Delivery System to Meet the Needs of Homeless Persons

As evidenced on the table above, there are many services targeted to homeless persons and persons with HIV and mainstream services available to and used by homeless persons and persons with HIV within Grand Junction. Since the community is a central hub of service for Western Colorado and Eastern Utah, there are more services provided here than in other small cities of similar size. Thus, there are outreach activities to be able to serve these populations, many of which come to Grand Junction from areas outside of the jurisdictional boundaries due to the services provided here, and there is high demand/use of the services as the numbers of these populations increase.

Strengths and Gaps of Service Delivery System

STRENGTHS

• High degree of collaboration and networking - agencies and organizations periodically meet to share ideas, problem-solve, and strategize the best method to meet the needs of low to moderate income and presumed benefit residents in Grand Junction

• There is an active Homeless Coalition and ad-hoc Housing Coalition that meets to discuss targeted needs and strategies and maintain/update the 10-year plan to end homelessness

• Training on various housing and human services topics provided in community by local agencies and organizations and HUD representatives

GAPS

• Need for existing ad-hoc housing coalition to formalize to take actions addressed in the Housing Strategy to be developed later in 2021

• Continue to improve communication and coordination with internal and external customers for

programs administered through different nonprofit agencies and organizations and faith-based initiatives
• Sustainability of funded programs that address needs
• Isolation of community - limited opportunities to attend HUD or training by other agencies or networking opportunities that are typically provided in large cities (e.g. CDBG Users Group and non-profit training meetings in Denver)
• Many agencies and organizations serve a large population that does not reside in the Grand Junction city limits; therefore, expenditure of CDBG for their projects, services and programs is limited in support of their entire operations.

Strategy for Overcoming Gaps

The role of the City Community Development Department in administering the CDBG program is to initiate strategic planning for the development of viable communities, to evaluate competitive proposals, to recommend appropriate HUD funding, and to monitor and report appropriate regulatory compliances. The Community Development Department is also responsible for certifying consistency with the Consolidated Plan for any activities receiving HUD funds. The Consolidated Plan strategy includes developing, strengthening and/or continuing relationships with internal and external entities, many of which are described above.

• Grand Junction City Council and Administration Staff
• Grand Junction Community Development Department and Departments of Police, Public Works and Utilities and Parks and Recreation
• HUD CPD, FHEO, Labor and Environmental Staff
• Housing Partners - Form a Housing Coalition to develop housing strategies: Grand Junction Housing Authority, Housing Resources of Western Colorado, Habitat for Humanity, Grand Valley Catholic Outreach, Hilltop, STRiVE. Karis, Inc. and other private housing providers
• Economic Development Partners
• Local Planning Organizations
• Homeless Coalition and Partners included in the Coalition
• Human Services Providers
• Mesa County and State of Colorado

SP-45 Goals Summary – 91.215(a)(4)

Sort Order	Goal Name	Start Year	End Year	Category	Geographic Area	Needs Addressed	Funding	Goal Outcome Indicator
1	Suitable Living Environment - Non-Housing	2021	2025	Non-Housing Community Development	Census Tracts City-Wide	Non-Housing Infrastructure and Facilities	CDBG: $1,036,232	Public Facility or Infrastructure Activities other than Low/Moderate Income Housing Benefit: 5000 Persons Assisted Public service activities other than Low/Moderate Income Housing Benefit: 5000 Persons Assisted
2	Decent Affordable Housing	2021	2025	Affordable Housing Public Housing Homeless Non-Homeless Special Needs	City-Wide	Increase the Inventory of Affordable Housing Units	CDBG: $530,260	Rental units constructed: 100 Household Housing Unit Homeowner Housing Added: 40 Household Housing Unit Homeowner Housing Rehabilitated: 30 Household Housing Unit Housing for People with HIV/AIDS added: 5 Household Housing Unit

Sort Order	Goal Name	Start Year	End Year	Category	Geographic Area	Needs Addressed	Funding	Goal Outcome Indicator
3	Creating Economic Opportunities	2021	2025	Economic Development	City-Wide	Economic Development and Childcare	CDBG: $100,000	Jobs created/retained: 20 Jobs Businesses assisted: 5 Businesses Assisted Other: 1 Other
4	Suitable Living Environment - Homeless	2021	2025	Homeless Non-Housing Community Development Special Needs Populations and Other Human Services	City-Wide	Non-Housing Infrastructure and Facilities Homeless	CDBG: $360,548	Homeless Person Overnight Shelter: 1300 Persons Assisted Overnight/Emergency Shelter/Transitional Housing Beds added: 25 Beds Homelessness Prevention: 25 Persons Assisted
5	Suitable Living Env - Special Needs/Minorities	2021	2025	Non-Housing Community Development Special Needs Populations and Other Human Services	City-Wide	Non-Housing Infrastructure and Facilities Special Needs Populations and Other Human Services	CDBG: $345,410	Other: 2000 Other

Table 53 – Goals Summary

Goal Descriptions

1	**Goal Name**	Suitable Living Environment - Non-Housing
	Goal Description	This goal will address Non-Housing Community Development Infrastructure. Public improvements will be neighborhood based and primarily include street, sidewalk, storm drainage, solid waste, parks and recreation improvements. This goal will also include acquisition, construction, rehabilitation or other improvements to other public facilities that are owned and operated by other entities and organizations that serve low- and moderate-income persons.
2	**Goal Name**	Decent Affordable Housing
	Goal Description	This goal is to increase the inventory of affordable housing units, maintain/rehabilitate existing low- and moderate-income housing, and remove lead-based hazards in residential units.
3	**Goal Name**	Creating Economic Opportunities
	Goal Description	This goal addresses economic development and the creation of jobs and supportive childcare and other service needs categories.
4	**Goal Name**	Suitable Living Environment - Homeless
	Goal Description	This goal addresses shelter, housing, services and other activities to support homeless individuals and families.
5	**Goal Name**	Suitable Living Env - Special Needs/Minorities
	Goal Description	This goal will provide activities to support Special Needs Populations and Other Human Services, Youth and Minority Populations need categories.

Estimate Number of Low-Income families Provided Affordable Housing as Defined by HOME

N/A - the City of Grand Junction does not provide affordable housing and is not allocated any HOME funds.

SP-50 Public Housing Accessibility and Involvement – 91.215(c)

Need to Increase the Number of Accessible Units

N/A - the City of Grand Junction does not have public housing units; therefore, there are no applicable Section 504 requirements.

Activities to Increase Resident Involvements

Residents of all housing developments, including those in accessible units, owned and operated by the Grand Junction Housing Authority and Housing Resources of Western Colorado are encouraged to participate in their respective housing communities. Participation typically involves volunteering to serve on a community board or committee that meets with staff to discuss issues, concerns and ways to resolve them to improve housing conditions for all residents.

SP-55 Barriers to Affordable Housing – 91.215(h)

Community engagement efforts for the *Grand Valley Housing Needs Assessment* (HNA), included extensive outreach efforts to community stakeholders. Participants represented a wide range of groups with housing needs; and included stakeholders involved in providing housing services and other services for vulnerable populations, along with stakeholders involved in economic development and developers of single family and multifamily housing. Discussion of barriers to housing development included land costs, fees, NIMBYism/community resistance, the speed of approval process, and natural features. Other concerns were current state of the housing market, rising cost of materials, lack of adequate public transportation and lack of affordable housing development policies. Many of these factors are out of the control of a local government but the latter could be considered a negative effect of public policies on affordable housing and residential investment. The stakeholder discussions also suggested a series of recommendations and actions pertaining to public policy that are listed below. Based on these, the City has an opportunity to continue this discussion with other housing interests and work towards making changes to public policies to better support affordable housing and residential investment.

- Look into options for manufactured housing replacement and ownership
- More regional cooperation between the City and County
- Encourage mixed developments with varied housing types sharing parks and neighborhood amenities
- Promote more integration of housing services and other services

Strategy to Remove or Ameliorate the Barriers to Affordable Housing

The *Housing Needs Assessment* includes several ideas of critical barriers and possible actions recommended by stakeholders during development of the Assessment and the Five-Year Consolidated Plan. A number of housing challenges were identified in general as well as applicable to various special needs groups. Phase 2 of the Grand Valley Housing Needs Assessment to be completed near the beginning of the 2021 Program Year will develop more specific strategies for the City of Grand Junction to take steps, along with housing partners, to overcome the challenges. Some general recommendations identified in the 2016 Housing Needs Assessment and reiterated during development of the *2021 Housing Needs Assessment* are summarized below. As strategies are developed and progress is made, results will be reported in the City's CAPER in future years.

Encourage Low to Moderate Income Housing

- Encourage affordable housing development through density bonus, fee deferments or waivers, and other forms of cost benefits to developers.
- Increase the density of housing is some areas that could accommodate higher density rental development to maximize housing in residential zone districts

Encourage Rental Housing Development

- Assess areas that can accommodate additional rental/multifamily development within range of existing infrastructure and accommodations.
- Encourage rental developments through development incentives and fee waivers.

• Review zoning requirements that may limit rental/multifamily developments and areas of increased density, especially in areas adjacent to existing amenities and infrastructure.

SP-60 Homelessness Strategy – 91.215(d)

Outreach to Homeless Persons to Assess Individual Needs

The Grand Junction Housing Authority completed the Vulnerability Index study as a basis for reaching out to homeless persons and assessing their needs. Results of the study presented suggested strategies for ongoing outreach, assessment and forms of assistance. The community, largely through the already-established Homeless Coalition will further refine the suggestions and develop a more detailed strategy plan for addressing the needs of the homeless population. Future endeavors may be funded with City CDBG funds and accomplishments reported in the City's annual CAPER.

Address Emergency and Transitional Housing Needs of Homeless Persons

In order to develop a strategy to prevent homelessness, a method must be developed to determine exactly what the magnitude of the problem is. Therefore, a point in time survey will be in January of each year. A comparison of year-over-year numbers should accurately predict the magnitude of the problem. Other data can also be accumulated which will indicate the causes of homelessness. The Beyond Charity community effort maintains this base data as part of its 10-year Plan to End Homelessness. Emergency shelter can be used to house individuals temporarily or additional single room occupancy units (SROs) or other bare-basics housing options can be made available. Once basic housing is secured, employment and/or training is more easily accessed.

Transitional housing programs may be developed for chronically homeless persons that will need casework and other resources to get back to self-sufficiency. Most often these programs allow individuals to stay in supported housing up to two years to develop resources to prevent recurrent homelessness. Some homeless individuals who are disabled will need to be transitioned to permanent supportive housing with necessary supportive casework. Some chronically homeless people will never be otherwise – preferring to live home free. The 10-Year Plan to End Homelessness includes specific goals and strategies in six areas, including identification of the lead agent/agency and a target completion date: Housing, Supportive Services, Income Benefits/Jobs, Outreach, Education/Public Awareness and Data Collection and Analysis. As strategies are completed, they are reported in the City's CAPER each program year.

Helping Homeless Persons Transition to Permanent Housing and Independent Living,

The strategy for ending chronic homelessness is much the same as the strategy for ending homelessness. The difference is in the behaviors which seem to be more entrenched in the chronically homeless –those with a longstanding recurrent pattern of homelessness. In order to help these individuals get back into productive society, housing options such as those described above must be partnered with intensive case management including the areas of job skills training, mental health, work ethic, and substance abuse.

The Colorado Coalition for the Homeless is the agency responsible for the Continuum of Care (CoC) for a large part of Colorado. The Coalition’s Rural Initiatives Program is a collaboration currently uniting 14

homeless service providers including HomewardBound of the Grand Valley and Grand Valley Catholic Outreach in Grand Junction. The initiative provides rental assistance and support services to help families and individuals move from homelessness to housing stability and self-sufficiency.

The Grand Valley Coalition for the Homeless is made up of various human service providers helping the homeless in Grand Junction as well as interested citizens and homeless persons. This coalition meets monthly, coordinates and finds projects and activities that provide services to the homeless population, often requiring the partnering of multiple organizations and agencies. The Grand Valley Coalition for the Homeless is part of the Colorado Coalition for the Homeless Balance of State Continuum of Care (CoC). The City of Grand Junction, the jurisdiction responsible for the Five-Year Consolidated Plan, participates with the Grand Valley Coalition and is supportive of the coordinated efforts to helping homeless persons make the transition to permanent housing and independent living.

Help Low-Income Individuals and Families Avoid Becoming Homeless

Families and individuals who are at imminent risk of becoming homeless can often avoid homelessness with help which can be in the form of professional case management or concerned trained mentors. Money management or the lack of it often is an issue. Underemployment or unemployment, injury or illness or divorce can also quickly lead to homelessness. An active job market or job training can help. Programs aimed toward keeping youth in school along with life skills training are crucial to preventing homelessness in the future.

Private industry, nonprofit organizations, government and industry can collaborate in the in the community goal to end homelessness. Some components of the strategy against homelessness includes the following:

• Housing Authority and Partners – The Next Step program, designed to house 50 homeless families with children in school, and Permanent Supportive Housing units operated by Grand Valley Catholic Outreach and HomewardBound are examples of a collaborative effort of government and private and nonprofit agencies to transition people from homelessness to self-sufficiency. All of these programs leverage HUD dollars with collaborative community support to address homeless needs.
• Training programs offered through a collaboration of the Workforce Center, the Business Incubator Center, Grand Junction Economic Partnership, Western Colorado Community College, local government and others that are designed to work with entry level and more skilled employees to help individuals earn more income, which is a key to being able to afford housing. Incentives to employers to encourage their participation in these efforts are crucial.
• Affordable housing – Improve and increase housing through community housing providers and public-private collaborative and on-going work of the ad-hoc Housing Coalition.
• Expand preemptive efforts to provide services to persons at risk of homelessness.

SP-65 Lead Based Paint Hazards – 91.215(i)

All activities funded with CDBG dollars through the City of Grand Junction must comply with federal regulations concerning lead-based paint. Lead-based paint reduction regulations are incorporated into all legal agreements between the City and CDBG sub-recipients. Any residential units or facilities constructed prior to 1978 involved in a CDBG activity must undergo a lead-based paint evaluation by a certified inspector. Any CDBG-funded rehabilitation or demolition activities must comply with lead-safe regulations and mitigation practices.

How Actions Relate to Extent of Lead Poisoning Hazards

The number of cases of children with elevated levels of lead in their blood has dropped significantly over the last decade. The State of Colorado no longer supports a significant lead-based paint testing program state-wide. Thus, the Mesa County Health Department does not proactively test persons (primarily children) unless there is reason to believe that a person has been exposed to lead. Over the past decade, testing of physician-referred children resulted in very few cases of abnormal results.

How Actions are Integrated into Housing Policies and Procedures

The Colorado Department of Public Health and Environment, Air Pollution Control Division is responsible for developing and implementing lead certification and abatement regulations for child occupied facilities and target housing a mandated by state statute. The statute governs the inspection and assessment of lead-based paint and hazards, lead contaminated soil and dust, and the abatement of lead-based paint hazards. Childhood lead poisoning has been identified as the number one preventable environmental health threat to children in the United States. In Colorado, the Childhood Lead Poisoning Prevention Program is funded by the Center for Disease Control (CDC) and includes overarching strategies in partnership building, surveillance, case investigation and management, prevention and evaluation.

The strategies focus on three general areas of concern:

1. Identifying children who are at risk of lead poisoning, testing those children, and initiating action;
2. Educating parents and the public at large about the risks of lead poisoning and the role we each play in preventing it; and
3. Identifying and controlling sources of lead in our environment.

The program resources may be accessed at: cdphe.colorado.gov/lead-colorado-childhood-lead-poisoning-prevention-program.

The Mesa County Health Department operates under the State's guidance and acts as needed to help educate the community and perform testing as identified. Local housing providers and landlords are knowledgeable about the risk of lead-based paint and typical housing application screening procedures are careful to identify any households that include children under the age of 6 or anyone that is pregnant. So as not to take a possible risk, it is common policy that these households are not accommodated in housing units that were constructed pre-1978.

The *Mesa County Community Health Needs Assessment 2018-2020* included the map on the following page that illustrates lead risk in the county by census tract. Within the City limits, many of the highest-risk areas correspond with low- and moderate-income neighborhoods. Thus, it is important that landlords, tenants, educators and medical staff are cognizant of the potential risk when in contact with children that may reside in these areas to be able to recognize the concern and take necessary actions.

MESA COUNTY LEAD RISK BY CENSUS TRACT

SP-70 Anti-Poverty Strategy – 91.215(j)

The disparity between wages and housing costs continues to create an increasing need for an effective community response to realize the potential of resources and identify priorities. It is recommended that an Anti-Poverty Coalition be formed to lead implementation of this strategy.

Goals

Provide opportunities for all citizens to realize increased stability and household income
Form an Anti-Poverty Coalition

Programs and Policies

A. Collect data - point in time, human services, school district, vulnerability index

B. Focus on a continuum of prevention and intervention by age and type of persons
1) Support efforts of existing and develop new partnerships
2) Develop work ethic programs.
• Partner with School District 51 to establish work requirements for graduation
• Reduce drop-out rates in high school
3) Develop programs to help people be better prepared for retirement

C. Encourage efforts to raise earned income levels.
1) Increase employability of the workforce including recipients of public benefits.
• The Mesa County Workforce Center engages recipients of public benefits in employment training programs, linking them with potential employers, and supporting their movement into the workforce.
• Support Partners Western Colorado Conservation Corps which targets at-risk youth and has a structured training and employment program.
• Develop a pipeline to work model that will link people to potential employers.
• Work with employers on providing job training and advancement opportunities.
• Focus on entry level job training for people who lack entry-level job skills and cannot yet obtain or be successful in an entry-level job.
2) Support efforts to maintain a strong diversified economic base.

D. Encourage increased access to employment
1) Public Transportation
• Extend service hours of Grand Valley Transit routes to help low and moderate income persons access employment
• Increase frequency and total number of Grand Valley Transit routes and expand the service area
• Develop a pipeline to work model that will link people to potential employers
2) Address Childcare Needs
• Provide affordable childcare for low income workers.
• Provide childcare to children of parents that work evenings and weekends, not just weekday, daytime

hours.
• Provide childcare for special needs children

E. Foster increased household stability
1) Support existing and promote new educational programs such as: life skills, homebuyer education, home maintenance, parenting, family planning, financial management, literacy, healthy recreational activities, tenant responsibilities, energy efficient programs and technical skill/vocational training.
2) Maintain and expand existing drug and alcohol rehabilitation services.
3) Maintain and expand existing services to people with special needs.

F. Support efforts to provide assistance to avoid, reduce or cope with economic emergencies and catastrophic expense
1) Provide essential healthcare to the uninsured
• Continue support of existing programs (e.g. Marillac Clinic, St. Mary's Medicine Center)
2) Support and maintain efforts to reduce and control energy costs for low income persons energy programs (e.g. LEAP).

G. Focus affordable housing development near centers of high employment or along public transportation routes such as downtown, Mesa Mall, North Avenue and Horizon Drive.

Coordination between Actions to Reduce Poverty and Affordable Housing Plan
Representatives of agencies and organizations of a housing coalition and the Homeless Coalition would also be participants on an Anti-Poverty Coalition to ensure coordination of goals, policies and implementation strategies and minimize duplication of efforts.

SP-80 Monitoring – 91.230

The City of Grand Junction Community Development Department is charged with coordinating the Consolidated Plan strategic plan in conjunction with the Comprehensive Plan, the City Council and City Manager/Administration Office. The City and its department coordinate their efforts and work with a variety of housing and human services providers, neighborhood groups and other community organizations. The City of Grand Junction measures the performance of these organizations by analyzing project goals and achievements and through the analysis of community indicators such as employment, income, housing and homelessness data.

The Annual Action Plan identifies and quantifies the anticipated benefits that will result from each activity and links each activity to associated Consolidated Plan goals. The quarterly reporting process and the Integrated Disbursement and Information System (IDIS) reporting system assist in gauging the actual productivity and effectiveness of each CDBG activity as well as the program as a whole. Activity achievements are reported in the annual CAPER. These achievements help redefine community goals, reassess community needs and re-establish funding priorities for subsequent years.

All sub-recipients of CDBG funds must enter into a legal agreement with the City specifying how and when the grant funds will be spent. The City does not disburse payment to grant recipients until the contract has been executed and the grant recipient provides evidence of performance. Each subrecipient must provide progress reports as specified in the Subrecipient Agreement and performance data is reported in the IDIS system as projects proceed and are completed. In addition, the activities are also reported annually through the Federal Funding Accounting and Transparency Act (FFATA) Subaward Reporting System (FSRS). The city regularly reviews federal regulation compliance, financial management and record keeping systems, and procurement processes when applicable for each project. HUD routinely monitors the City of Grand Junction via review of required reporting. The last such review took place with the 2019 Program Year Consolidated Annual Program Evaluation Report submitted in November 2020 upon completion of the 2019 Program Year on August 31, 2020. Review of the report concluded that the City generally complies with all requirements for administration and reporting of the CDBG program. A concurrent FHEO review of the 2019 CAPER noted that the City must direct and document use of its CDBG funds to more equitably serve the population, particularly the Hispanic and racial minority populations. This recognition will be addressed in greater detail as the City funds activities and reports accomplishments in the future.

2021 ANNUAL ACTION PLAN

AP-15 Expected Resources – 91.220(c)(1,2)

The Federal resources available to the City of Grand Junction are Community Development Block Grant funds. The City does not qualify for HOME funds. However, other agencies and organizations in the community are able to leverage funds from other sources including the Housing Choice Voucher Program, Low Income Housing Tax Credits, the Weatherization Program, Energy Assistance Programs, NeighborWorks, SBG and ESG funds.

Program	Source of Funds	Uses of Funds	Expected Amount Available Year 1				Expected Amount Available Remainder of ConPlan $	Narrative Description
			Annual Allocation: $	Program Income: $	Prior Year Resources: $	Total: $		
CDBG	public - federal	Acquisition Admin and Planning Economic Development Housing Public Improvements Public Services	469,557	0	0	469,557	1,840,000	Total CDBG projected to be available for 5-Year plan: Entitlement $ 2,309,557

Table 54 - Expected Resources – Priority Table

Funding Leverage

The City of Grand Junction shares HUD's goals of using CDBG funds to seed programs and projects that will ultimately prove financially self-sufficient and demonstrate growth in the program or service provided. The City of Grand Junction does not have matching requirements for CDBG funds. However, as the City is assessing projects for potential funding, the ability of the applicant to leverage other funding sources whether public or private to complete a proposed project is reviewed. In many cases, recipients have been able to leverage other public and private funding sources by using CDBG dollars for the required local match.

The funds provided through the City's CDBG program over the past 25 years have leveraged a substantial amount of other public and private resources despite difficult economic circumstances in recent years. The amount of funds leveraged by subrecipients is reported in the CAPER each Program Year. Typically, for every one CDBG dollar allocated, subrecipients are able to leverage five times that from other resources.

Public Land Used to Address Needs Identified

Some activities within the non-housing community development goals will be accomplished within City rights-of-way and on City-owned properties to be able to make infrastructure and facilities improvements that will benefit low- and moderate-income neighborhoods in Grand Junction including streets, utilities and parks and recreation facilities.

AP-20 Annual Goals and Objectives – Table 55 Goals Summary

Sort Order	Goal Name	Start Year	End Year	Category	Geographic Area	Needs Addressed	Funding	Goal Outcome Indicator
1	Suitable Living Environment - Non-Housing	2021	2025	Non-Housing Community Development	Census Tracts City-Wide	Non-Housing Infrastructure and Facilities	CDBG: $210,147	Public Facility or Infrastructure Activities other than Low/Moderate Income Housing Benefit: 4984 Persons Assisted
2	Decent Affordable Housing	2021	2025	Affordable Housing Public Housing Homeless Non-Homeless Special Needs	City-Wide	Increase the Inventory of Affordable Housing Units	CDBG: $85,000	Homeowner Housing Rehabilitated: 25 Household Housing Unit Housing for Homeless added: 40 Household Housing Unit
3	Creating Economic Opportunities	2021	2025	Economic Development	City-Wide		CDBG: $0	
4	Suitable Living Environment - Homeless	2021	2025	Homeless Non-Housing Community Development Special Needs Populations and Other Human Services	City-Wide	Non-Housing Infrastructure and Facilities Homeless	CDBG: $80,000	Homeless Person Overnight Shelter: 1492 Persons Assisted
5	Suitable Living Env - Special Needs/Minorities	2021	2025	Non-Housing Community Development Special Needs Populations and Other Human Services	City-Wide	Special Needs Populations and Other Human Services	CDBG: $69,410	Public service activities other than Low/Moderate Income Housing Benefit: 278 Persons Assisted

Goal Descriptions

1	**Goal Name**	Suitable Living Environment - Non-Housing
	Goal Description	
2	**Goal Name**	Decent Affordable Housing
	Goal Description	
3	**Goal Name**	Creating Economic Opportunities
	Goal Description	
4	**Goal Name**	Suitable Living Environment - Homeless
	Goal Description	
5	**Goal Name**	Suitable Living Env - Special Needs/Minorities
	Goal Description	

CDBG 2021 Action Plan Projects
PATTERSON RD
ORCHARD AVE
NORTH AVE
GRAND AVE
MAIN ST
UTE AVE
PITKIN AVE
D RD
RIVERSIDE PKWY
UNAWEEP AVE
HWY 6
HWY 6 AND 50
BROADWAY
F 1/2 RD
E 1/2 RD
E RD
D 1/2 RD
C 1/2 RD
25 RD
25 1/2 RD
26 RD
26 1/2 RD
27 RD
27 1/2 RD
28 RD
28 1/2 RD
29 RD
30 RD
30 1/2 RD
31 RD
N 1ST ST
N 5TH ST
N 7TH ST
N 12TH ST
1 CEC Low Income Counseling 2708 Patterson
2 HopeWest Extended Care 3090 North 12th Street
3 STRIVE Repair Accessible Bus 790 Wellington Avenue
4 REC Chipeta Elementary Transportation 950 Chipeta Avenue
5 Partners WCCC Vehicle Purchase 2818-1/2 North Avenue
6 Homeless Shelter Remodel 2853 North Avenue
7 GVCO Mother Teresa Place Appliances 301 South 4th Street
8 MindSprings Health Oasis Clubhouse Remodel 450 Ouray Avenue
9 Karis The House Remodel 2705 North 8th Court
10 HRWC Mobile Home Emergency Repair 524 30 Road
11 HRWC Critical Home Repair 524 30 Road
12 27 Road Safe Neighborhood Route Unaweep Avenue to B-3/4 Road
N
0 0.25 0.5 Miles
PROJECTS
POLICE
FIRE
HOSPITAL
SCHOOL
Grand Junction

o

AP-35 Projects – 91.220(d)

The purpose of the Program Year Action Plan is to identify One-Year Strategies for each of the Objectives set in the Five-Year Consolidated Plan. The Consolidated Plan strategies are accomplished by utilizing a variety of resources including the annual allocation of CDBG funds. For each program year, a new one-year action plan is completed and adopted as part of the Five-Year Consolidated Plan. On June 16, 2021 the Grand Junction City Council approved 2021 CDBG funding requests totaling $469,557 for thirteen activities which will be made a part of the 2021 Action Plan. The total amount is based on the City's allocation for the 2021 Program Year.

#	Project Name
1	2021 Program Administration
2	CEC Low Income
3	HopeWest Extended Caregiver Support for Low-Mod Income Families
4	STRiVE Repair Accessible Bus
5	Riverside Educational Center (REC) Chipeta Elementary After School Program Transportation
6	Mesa County Partners WCCC Vehicle Purchase
7	HomewardBound Homeless Shelter Remodel
8	Grand Valley Catholic Outreach (GVCO) Appliances for Mother Teresa Place
9	Mind Springs Health (MSH) Oasis Clubhouse Rehabilitation
10	Karis Inc. The House Remodel
11	HRWC Emergency Repair for Mobile Homes
12	HRWC Critical Home Repair Program
13	27 Road from Unaweep to B.75 Road Safe Neighborhood Route

Table 55 – Project Information

Reasons for Allocation Priorities and Obstacles to Addressing Underserved Needs

All funds are expended within the City limits or are directed to services and public improvements for city residents. The City does not limit the use of CDBG funds to any specific location within the City. Nor does the City limit the use of CDBG funds to any groups based on race, minority or ethnic concentration. All funds will be used for persons with low to moderate income within the City limits. CDBG allocation priorities are based on need, income level of persons to be served and whether or not a proposed activity meets one of the national objectives and the City's objectives outlined in the Five-Year Consolidated Plan. All CDBG funds received from HUD during the 2021-2025 timeframe will be used to address at least one of the priority need categories outlined in the Five-Year Consolidated Plan. Allocation of investments must be within the City limits and, as applicable, in areas of low to moderate income which are more prevalent in the central and east/southeast parts of the city. Areas of racial/minority concentration are more prevalent in the central and eastern parts of the city. Refer to the map of the locations of the 2021 project locations included in the attachments.

AP-38 Project Summary

1	**Project Name**	2021 Program Administration
	Target Area	City-Wide
	Goals Supported	
	Needs Addressed	
	Funding	CDBG: $25,000
	Description	General program administration, fair housing activities, annual reports to HUD, a portion of staff salary, staff training and monitoring activities.
	Target Date	8/31/2022
	Estimate the number and type of families that will benefit from the proposed activities	NA - Program Administration
	Location Description	NA - Program Administration
	Planned Activities	General program administration, fair housing activities, annual reports to HUD, a portion of staff salary, staff training and monitoring activities.
2	**Project Name**	CEC Low Income
	Target Area	City-Wide
	Goals Supported	Suitable Living Env - Special Needs/Minorities
	Needs Addressed	Special Needs Populations and Other Human Services
	Funding	CDBG: $10,000
	Description	CEC provides counseling to individuals in crisis or those dealing with difficult emotional issues and ensures access to professional counseling, regardless of income or ability to pay.
	Target Date	8/31/2022
	Estimate the number and type of families that will benefit from the proposed activities	10
	Location Description	2708 Patterson Road - location of main program office.

	Planned Activities	CDBG funds will provide 175 more sessions of counseling for at least 10 more clients seeking care.
3	**Project Name**	HopeWest Extended Caregiver Support for Low-Mod Income Families
	Target Area	City-Wide
	Goals Supported	Suitable Living Env - Special Needs/Minorities
	Needs Addressed	Special Needs Populations and Other Human Services
	Funding	CDBG: $10,000
	Description	HopeWest is a community resource focused on changing the way our community experiences aging, illness and grief. The Extended Care Support (ECS) program assists families with additional hospice aide to manage care of a family member nearing the end of life. Families purchase this additional care from HopeWest for $30/hour which is cost-prohibitive for low-mod income families.
	Target Date	8/31/2022
	Estimate the number and type of families that will benefit from the proposed activities	50 families of hospice patients
	Location Description	3090 North 12th Street - Main Program Office
	Planned Activities	CDBG funds will be used to offer scholarships for those who qualify for the program.
4	**Project Name**	STRiVE Repair Accessible Bus
	Target Area	City-Wide
	Goals Supported	Suitable Living Env - Special Needs/Minorities
	Needs Addressed	Special Needs Populations and Other Human Services
	Funding	CDBG: $7,942
	Description	STRiVE provides supports for individuals representing the broad spectrum of intellectual/developmental disabilities and their families. The 30-person capacity bus was donated to STRiVE and well maintained but is in need of some repairs which will extend the useful life of the vehicle for approximately 15 years.
	Target Date	8/31/2022

	Estimate the number and type of families that will benefit from the proposed activities	118 clients that are Grand Junction residents will directly benefit from this service
	Location Description	790 Wellington Avenue - location of main program office
	Planned Activities	CDBG funds will be used to repair its wheelchair accessible bus used to transport clients to appointments and other community services.
5	**Project Name**	Riverside Educational Center (REC) Chipeta Elementary After School Program Transportation
	Target Area	Census Tracts
	Goals Supported	Suitable Living Env - Special Needs/Minorities
	Needs Addressed	Special Needs Populations and Other Human Services
	Funding	CDBG: $27,000
	Description	REC is a community collaboration that provides after-school tutoring and extracurricular activities for qualifying students to improve academic achievement and foster positive social and emotional development. REC provides transportation home for students enrolled in REC programming at Chipeta Elementary.
	Target Date	8/31/2022
	Estimate the number and type of families that will benefit from the proposed activities	50 students enrolled in the Riverside Education Center after school programming attend at Chipeta Elementary
	Location Description	950 Chipeta Avenue - location of school
	Planned Activities	CDBG funds will be used to purchase a 14-passenger bus for this purpose.
6	**Project Name**	Mesa County Partners WCCC Vehicle Purchase
	Target Area	City-Wide
	Goals Supported	Suitable Living Env - Special Needs/Minorities
	Needs Addressed	Special Needs Populations and Other Human Services Economic Development and Childcare
	Funding	CDBG: $14,468

	Description	Mesa County Partners provides one-to-one mentoring that recruits, trains, and supervises adult volunteers who are matched with high-risk youth. Partners also operates the Western Colorado Conservation Corps (WCCC) that provides employment opportunities for at-risk youth and young adults.
	Target Date	8/31/2022
	Estimate the number and type of families that will benefit from the proposed activities	50
	Location Description	2818-1/2 Road - Main Program Office
	Planned Activities	CDBG funds will be used to purchase a vehicle to transport WCCC members to area projects.
7	**Project Name**	HomewardBound Homeless Shelter Remodel
	Target Area	City-Wide
	Goals Supported	Suitable Living Environment - Homeless
	Needs Addressed	Homeless
	Funding	CDBG: $40,000
	Description	The HomewardBound Community Homeless Shelter provides homeless individuals and families with short-term shelter and meals with support services for transitioning to stable housing, community integration and independence.
	Target Date	8/31/2022
	Estimate the number and type of families that will benefit from the proposed activities	1242
	Location Description	2853 North Avenue - location of community homeless shelter
	Planned Activities	CDBG funds will be used to update the necessary security measures at the community homeless shelter.
8	**Project Name**	Grand Valley Catholic Outreach (GVCO) Appliances for Mother Teresa Place
	Target Area	City-Wide

	Goals Supported	Decent Affordable Housing
	Needs Addressed	Increase the Inventory of Affordable Housing Units
	Funding	CDBG: $50,000
	Description	GVCO operates 12 core programs to meet the needs of those in distress including financial aid to prevent homelessness, transitional or permanent housing, the Outreach Day Center and the Soup Kitchen. Mother Teresa Place will be a new, 40-unit multifamily complex to provide a home for homeless and those vulnerable on the street.
	Target Date	8/31/2022
	Estimate the number and type of families that will benefit from the proposed activities	40
	Location Description	301 South 4th Street - location of new housing units
	Planned Activities	CDBG funds will be used to purchase the major appliances for the new units.
9	**Project Name**	Mind Springs Health (MSH) Oasis Clubhouse Rehabilitation
	Target Area	City-Wide
	Goals Supported	Suitable Living Environment - Non-Housing
	Needs Addressed	Special Needs Populations and Other Human Services Homeless
	Funding	CDBG: $29,788
	Description	MSH is a community mental health center that provides a variety of mental health and substance abuse services. The Oasis CLubhouse located at 450 Ouray Avenue serves low-income individuals, many of which are experiencing homelessness.
	Target Date	8/31/2022
	Estimate the number and type of families that will benefit from the proposed activities	449 - 378 city residents and 71 homeless persons
	Location Description	450 Ouray Avenue

	Planned Activities	CDBG funds will be used to rehablitate the nearly century old home including kitchen updates, roof repair, replacing HVAC and tree removal.
10	**Project Name**	Karis Inc. The House Remodel
	Target Area	City-Wide
	Goals Supported	Suitable Living Environment - Homeless
	Needs Addressed	Homeless
	Funding	CDBG: $40,000
	Description	Karis Inc. provides services and housing to homeless youth ages 13-24. The House provides temporary housing and services to homeless youth.
	Target Date	8/31/2022
	Estimate the number and type of families that will benefit from the proposed activities	250 unaccompanied homeless youth
	Location Description	2705 North 8th Court
	Planned Activities	CDBG funds will be used to remodel the home to include improving HVAC, remodeling bathrooms and kitchen, painting, and creating a more open floor plan that will add spaces for youth to work with staff on homework and job applications.
11	**Project Name**	HRWC Emergency Repair for Mobile Homes
	Target Area	City-Wide
	Goals Supported	Decent Affordable Housing
	Needs Addressed	Increase the Inventory of Affordable Housing Units
	Funding	CDBG: $25,000
	Description	Housing Resources of Western Colorado (HRWC) operates the Single Family Owner Occupied Housing Rehabilitation Program that removes deficiencies or health and safety hazards, corrects substandard conditions and code deficiencies, improves accessibility and improves energy efficiency for owner-occupied housing. Other sources of funds may not be used for mobile home repair. CDBG funds will be used for mobile homes repairs to improve the community blighted housing stock, reducing the client's chance of becoming homeless due to a substandard unit.

	Target Date	8/31/2022
	Estimate the number and type of families that will benefit from the proposed activities	5 households in mobile home units
	Location Description	TBD - City-wide
	Planned Activities	CDBG funds will be used for mobile homes repairs to improve the community blighted housing stock, reducing the client's chance of becoming homeless due to a substandard unit.
12	**Project Name**	HRWC Critical Home Repair Program
	Target Area	City-Wide
	Goals Supported	Decent Affordable Housing
	Needs Addressed	Increase the Inventory of Affordable Housing Units
	Funding	CDBG: $10,000
	Description	Housing Resources of Western Colorado (HRWC) provides low-moderate income residents with a 24-hour Critical Home Repair Program.
	Target Date	8/31/2022
	Estimate the number and type of families that will benefit from the proposed activities	20 low-mod income households
	Location Description	TBD - City-wide
	Planned Activities	CDBG funds will be used to provide labor and materials/equipment for repairs/improvements including pest infestations, roof repair, HVAC repair, correcting carbon monoxide issues, frozen pipes and electrical problems.
13	**Project Name**	27 Road from Unaweep to B.75 Road Safe Neighborhood Route
	Target Area	Census Tracts
	Goals Supported	Suitable Living Environment - Non-Housing
	Needs Addressed	Non-Housing Infrastructure and Facilities
	Funding	CDBG: $180,359

	Description	27 Road in the Orchard Mesa area of Grand Junction provides a neighborhood route to access commercial areas along U.S. Highway 50, Orchard Mesa Middle School, Eagle Rim Park and neighborhoods in the vicinity including several low-moderate income neighborhoods on the south side of U.S. Highway 50. This project will complete a safe pedestrian route along 27 Road.
	Target Date	8/31/2022
	Estimate the number and type of families that will benefit from the proposed activities	4535 - population in low-moderate income Census tract (greater than 51% low-mod income)
	Location Description	West side of 27 Road between Unaweep Avenue and B-3/4 Road
	Planned Activities	CDBG funds will be used to construct 1,200 feet of new curb, gutter and sidewalk, 4 accessible ramps and one crosswalk along 27 Road to complete a safe neighborhood pedestrian connection between Unaweep Avenue and B.75 Road.

AP-50 Geographic Distribution – 91.220(f)

All funds are expended within the City limits or are directed to services and public improvements for city residents. The City of Grand Junction does not limit the use of CDBG funds to any specific geographical location within the City. Nor does the City of Grand Junction limit the use of CDBG funds to any specific groups based on race, minority or ethnic concentration. All funds will be used to serve persons with low to moderate income who live within the Grand Junction city limits. CDBG allocation priorities are based on need, income level of persons to be served and whether or not a proposed activity meets one of the national objectives and the City's objectives outline in the Five-Year Consolidated Plan. All CDBG funds received from HUD during the 2021-2025 timeframe will be used to address at least one of the priority need categories outlined in the Five-Year Consolidated Plan.

Target Area	Percentage of Funds
Census Tracts	44
City-Wide	56

Table 56 - Geographic Distribution

Rationale for Priorities for Allocating Investments Geographically

Allocation of investments must be within the City limits and, as applicable, in areas of low- to moderate-income households. These areas are more prevalent in the central and east/southeast parts of the city and areas of racial/minority concentration are more prevalent in the central and eastern parts of the city. Refer to the map included in the attachments that illustrates the locations of the 2021 Program Year projects.

AP-55 Affordable Housing – 91.220(g)

The housing stock in the Grand Junction area rose to 27,973 units reported in the 2019 ACS data. Owner-occupied units accounts for 58.1% of total units, up from 56.4% reported in 2014 ACS data. There was a decrease in the number of vacant units. 6.3% of housing units were vacant in 2010, and 2017 ACS data indicates 1,594 units or 5.7% housing units are vacant. This is a slight increase over the number of units vacant reported in the previous Five-Year Consolidated Plan. This number is a concern since they are not available to the market which has the capacity and need for more units. However, these units may present opportunities for rehabilitation and should be further assessed.

In terms of housing production, the number of permits issued for construction for all units in Mesa County peaked in 2006 before declining sharply a decade ago. Since then the number of new permits per year has steadily risen over the past decade. As measured between the 2014 and 2019 ACS data, the type of housing has shifted slightly. Most (72.6%) of the housing stock has been built since 1970. The proportion of single-family homes has remained steady, accounting for 73.5 percent of the housing stock in 2014 data and 72.9% of the housing stock reported in 2019 ACS data. All other housing types has remained steady as well during this time.

The median home value increased to $237,100 reported in the 2019 ACS data which is a 10% increase

over the 2010 data. The 2019 ACS data also reported a 1.8 % vacancy for rental units with a median rent of $770 which is 23% increase since 2010. Households that experience housing problems such as overcrowding, substandard utilities and cost burdens are considered to have unmet housing needs. There were 9,000 such households reported in the most 2019 ACS data. The most common type of housing problem is cost burden - households that spend more than 30% of their income on housing. Based on this evaluation and the *Grand Valley Housing Needs Assessment*, the highest need is for rental assistance for lower income housing and those with special needs to ease cost burdens; provision of more affordable multifamily units; and provision of more transitional and emergency housing.

One Year Goals for the Number of Households to be Supported	
Homeless	1,562
Non-Homeless	25
Special-Needs	0
Total	1,587

Table 57 - One Year Goals for Affordable Housing by Support Requirement

One Year Goals for the Number of Households Supported Through	
Rental Assistance	0
The Production of New Units	40
Rehab of Existing Units	26
Acquisition of Existing Units	0
Total	66

Table 58 - One Year Goals for Affordable Housing by Support Type

Discussion

The 2021 Annual Action Plan includes four activities that are represented in the Tables 11 and 12, that entail rehabilitation of housing units or in support of the construction of new units in order to maintain them as decent, affordable housing: 1) Grand Valley Catholic Outreach will construct 40 new multifamily units for homeless and vulnerable populations; 2) Karis, Inc. will remodel The House which provides services and shelter to homeless youth; Housing Resources of Western Colorado will provide emergency repairs for mobile homes; and 4) Housing Resources of Western Colorado will provide critical emergency repairs for eligible low- and moderate-income households.

AP-60 Public Housing – 91.220(h)

The City of Grand Junction has no public housing units but coordinated completion of the most recent *Grand Valley Housing Needs Assessment* to examine the current local housing situation. The report includes a thorough assessment of local market conditions, a detailed forecast of current and future demand across the spectrum of housing needs, identification of housing challenges and recommendations and actions to begin to address the market needs. The next phase of the study is to develop a housing strategy for the City which is to be completed early in the 2021 Program Year. It is anticipated that City officials and staff and community entities will continue to collaborate on efforts based on the *Housing Needs Assessment* as well as to develop housing strategies.

The Grand Junction Housing Authority no longer holds any public housing. Several other local organizations hold vouchers, primarily for special needs populations. The City of Grand Junction has worked closely with the Grand Junction Housing Authority as it has phased out public housing in Grand Junction and constructs developments in a more sustainable affordable housing model. The City has a history of providing building and development fee deferrals or reductions and grants funds to the Housing Authority and other housing providers for the construction of new affordable units.

There are no public housing units in the Grand Junction area. Consequently, the City will not be spending any CDBG funds on public housing in the 2021 Program Year but will continue to support the housing entities in the community in their pursuit of other funding sources. Most recently, 2019 CDBG funds were used to replace windows in a 98-unit apartment complex owned and operated by Housing Resources of Western Colorado and 2020 CDBG funds were allocated for foundation repairs of an 8-plex apartment building owned and operated by the Grand Junction Housing Authority. In addition, the City recently provided financial support for a new 60-unit affordable housing complex owned and operated by the Grand Junction Housing Authority known as the 2814 Apartments.

Actions Planned During Next Year to Address Needs of Public Housing

The City will not be undertaking actions in the next year to address the needs of public housing specifically but there are four projects that address the upgrade of existing units and support the construction of new units as reported and described in section AP-55.

Actions to Encourage Public Housing Residents to become More Involved in Management

Residents of all housing developments, including those in accessible units, owned and operated by the Grand Junction Housing Authority and Housing Resources of Western Colorado are encouraged to participate in their respective housing communities. Participation typically involves volunteering to serve on a community board or committee that meets with staff to discuss issues, concerns and ways to resolve them to improve housing conditions for all residents.

Financial Assistance Provided to PHA

The Grand Junction Housing Authority (GJHA) is not designated as troubled but the City has participated in various GJHA activities, including financial assistance when requested and as funds allowed. Most

recently, the City allocated approximately 50% of its CDBG-CV funds to GJHA for emergency housing assistance and the 2020 Program Year included an allocation to the GJHA for the rehabilitation of 8 affordable housing units.

AP-65 Homeless and Other Special Needs Activities – 91.220(i)

Homelessness presents a growing challenge to Grand Junction. The combination of low wages, high unemployment rate, rising housing costs and recent impacts of the COVID pandemic is making a growing percentage of the general population vulnerable to loss of housing, and making it more difficult for the homeless to work their way off of the streets. In addition, the high percentage of individuals and families without health insurance benefits makes many households vulnerable to housing loss in the event of an expensive major illness.

Prior to 2000, local homeless data was primarily informal, as there had not been a coordinated effort to build local demographic statistics. Although it is very difficult to accurately determine the number of homeless, Grand Junction has regularly completed a count since 2000. The most recent point in time survey available was conducted in January 2020 and resulted in an estimated population of 1,074 sheltered and 485 unsheltered homeless persons. The results show that 12.7% of the homeless are under 18, while 26.8% are under 25. Three-quarters of the individuals who took the survey said they have some sort of disability, with chronic physical illness and substance abuse being the most common.

One-Year Goals and Actions to Reduce and End Homelessness

CDBG are the only federal funds allocated to the City that can be used to address homeless needs and to prevent homelessness. For the 2021 Program Year Action Plan, funds will be allocated to a project to be completed by HomewardBound of the Grand of the Grand Valley to improve the Community Homeless Shelter. The Karis, Inc. activity will fund rehabilitation of a group home that shelters unaccompanied homeless youth. The Grand Valley Catholic Outreach project will ultimately provide transitional housing for 40 homeless and vulnerable persons. In addition, other 2021 activities will address homeless persons as a portion of the clients served by several organizations including Mind Springs Health and the Counseling and Education Center.

Generally, the City of Grand Junction is supportive of the community's homeless providers. The Colorado Coalition for the Homeless is responsible for the Balance of State Continuum of Care (CoC) for Grand Junction. Over the past decade, Grand Valley Catholic Outreach has constructed 63 new apartments in 3 complexes that are used for permanent housing for the homeless. The City assisted with these projects through CDBG funds, development fee relief and general funds and is participating in the proposed new Mother Teresa Place project currently underway in partnership with Grand Valley Catholic Outreach. As these projects are completed, they are reported through the MHIS system by the Coalition as part of the plan to end chronic homelessness. Obstacles include insufficient CDBG funding to help fund these and other needed projects that help the homeless population of Grand Junction. The City will also continue to support the various homeless providers with letters of support and letters of consistency with the Consolidated Plan as they compete for and request outside funding including other federal and state grants for homeless activities including prevention.

Addressing Emergency Shelter and Transitional Housing Needs of Homeless Persons

The Grand Valley Homeless Coalition will continue to use results of the Vulnerability Index study to

formulate solutions form homeless issues. In its Continuum of Care Plan, the Coalition identified priority needs are transitional housing, case management, and housing placement. The Plan is to provide a continuous housing and service network for persons working to permanently leave the streets. As previously discussed, the City will grant 2021 CDBG funds to HomewardBound of the Grand Valley, Karis, Inc. and Grand Valley Catholic Outreach towards projects to both rehabilitate existing facilities and build new units for the purpose of providing shelter for vulnerable populations.

Helping Homeless Persons Transition to Permanent Housing and Independent Living

The community homeless shelter has adopted a new strategy that re-examines its role in the continuum of care that will focus attention on the shelter as a beginning rather than an end on moving individuals and families on a path from homelessness to self-sustainability in housing and employment. HomewardBound is working with many other local agencies to coordinate services provided to transition homeless individuals and families to permanent housing and independent living. Previously, CDBG funds were used to help HomewardBound purchase a property for construction of a new family center to house these services which opened at the end of the 2019 Program Year. In recent years, the City funded several CDBG activities to rehabilitate and expand the Homeless Day Center that is operated by Grand Valley Catholic Outreach. In addition, the three projects previously discussed to be funded in 2021 for HomewardBound of the Grand Valley, Karis, Inc. and Grand Valley Catholic Outreach will support the transition of homeless persons to permanent housing.

Helping Low-Income Individuals and Families Avoid Becoming Homeless

Local agencies in the community have their own discharge coordination policies. For example, Homeward Bound has policies in place to accommodate most people who are released from publicly funded institutions. The Grand Junction Community Homeless Shelter is available so that no one needs to be discharged to the streets. This includes persons discharged from correctional facilities, foster care, and mental and general health care facilities. For the vast majority of the persons in this situation, the Grand Junction Community Homeless Shelter is a viable alternative to sleeping on the streets. For those discharged from health care facilities with need for follow-up care or a rehabilitation period, there is a policy allowing limited daytime shelter at the shelter during periods of recovery. Other alternatives to homelessness for this population in Mesa County include the Freedom House, for formerly incarcerated persons, and the Rescue Mission.

Discussion

Through development of the Consolidated Plan, the community identified needs in the following community development areas: Transportation, Medical Services, Child Care and Youth. The high priority non-housing community development need summarized in Section NA 50 of the Five-Year Consolidated Plan includes the following:

- Childcare for people transitioning to work and working low income
- Better coordination between public transportation and location of childcare
- Childcare with more flexible and weekend hours of operation

• Youth-oriented activities and programs that are coordinated in schedule and location for transportation to and from the facilities.
• Expansion of medical and mental health facilities
• Improvement and expansion of senior activity centers
• Facilities for abused adults and children
• Improvement and expansion of centers for the disabled
• Improvement and expansion of other facilities where human and public facilities are provided

In the past 5 years, the City funded Partners, STRiVE, Karis, Inc., the Marillac Clinic, Western Slope Center for Children, Riverside Educational Center and HopeWest for projects related to child education, day care and other youth needs. Funds have also been allocated several years for the Foster Grandparent Program which serves early and elementary-aged children with special programs at various childcare and education locations.

In addition, the City of Grand Junction supports homeless facilities and a variety of community services and programs, many of which are eligible for CDBG funding. Such projects funded for the 2021 Program Year are:
• Counseling and Education Center
• Karis,Inc.
• Mind Springs Health
• HomewardBound of the Grand Valley
• HopeWest
• Riverside Educational Center
• Housing Resources of Western Colorado
• STRiVE

AP-75 Barriers to Affordable Housing – 91.220(j)

Community engagement efforts for the *Grand Valley Housing Needs Assessment (HNA)*, included extensive outreach efforts to community stakeholders. Participants represented a wide range of groups with housing needs; and included stakeholders involved in providing housing services and other services for vulnerable populations, along with stakeholders involved in economic development and developers of single family and multifamily housing. Discussion of barriers to housing development included land costs, fees, NIMBYism/community resistance, the speed of approval process, and natural features. Other concerns were current state of the housing market, rising cost of materials, lack of adequate public transportation and lack of affordable housing development policies. Many of these factors are out of the control of a local government but the latter could be considered a negative effect of public policies on affordable housing and residential investment. The stakeholder discussions also suggested a series of recommendations and actions pertaining to public policy that are listed below. Based on these, the City has an opportunity to continue this discussion with other housing interests and work towards making changes to public policies to better support affordable housing and residential investment.

- Look into options for manufactured housing replacement and ownership
- More regional cooperation between the City and County
- Encourage mixed developments with varied housing types sharing parks and neighborhood amenities
- Promote more integration of housing services and other services

Actions to Remove Negative Effects of Public Policies that are Barriers to Affordable Housing

Based on the *Housing Needs Assessment*, the City will partner with others to develop an affordable housing strategic plan. Other actions to be undertaken in this area are outlined in the Analysis of Impediments to Fair Housing as listed below.

- Review zoning requirements that may limit multifamily developments
- Encourage mixed income development
- Encourage affordable housing development through incentives.

2021 activities that will accomplish fair housing goals are listed below.

- Administration funds will be used to improve information available to citizens regarding fair housing, allow for staff to attend appropriate training and, complete all HUD program requirements and reporting.
- Five 2021 activities will improve/increase services for special needs populations that will help stabilize lives and move them towards self-sufficiency
- Four 2021 activities will improve facilities for agencies that serve low and moderate income persons and help them attain fair and affordable housing.
- Three 2021 projects will improve physical infrastructure of low and moderate income neighborhoods and maintain the value of affordable housing areas.
- The City will continue to update and implement its Comprehensive Plan and update the Zoning and

Development Code that help remove housing impediments/barriers.
• The local transit system will continue to expand its operating hours and routes to be more available to persons using the bus to travel to locations for education and employment.
• The City will continue to work with economic development partners to promote development of new businesses or expand existing ones and improve wage levels.

As described in the Five-Year Consolidated Plan and in AP-35, there are many community needs and obstacles to addressing them. These include a growing need for services, limited funds, availability of accessible and affordable housing, gaps in affordability, and increased compliance and technical skills required for administering the CDBG program.

AP-85 Other Actions – 91.220(k)

As described in this Plan and in the Projects section of the 2021 Action Plan, there are a variety of community needs and obstacles to addressing them. These include a growing need for services as the community grows and ages, limited federal, state and local funds, availability of accessible and affordable housing, the increased cost of housing, gaps in affordability of owner-occupied and rental housing for populations at specific income levels, and increased compliance and technical skills required for administering the CDBG program. Actions planned to address some of these challenges are further discussed below.

Actions to Address Obstacles to Meeting Underserved Needs

Obstacles to meeting underserved needs include, but are not limited to:

1) The decrease in financial support available to local government and organizations.

2) The number of foreclosures within the community caused by job loss and other factors, increasing the number of households in need of housing and other services.

3) The disparity of wage level and housing costs, increasing poverty, increasing unemployment and an aging population demanding more services.

Actions planned to address these obstacles involve many of the coordination and participation activities that are ongoing in the community, many of which are discussed throughout the Consolidated Plan.

a) Support agencies and organizations as they seek funding for activities to be able to leverage as much financial support as possible for priority projects.
b) Support and promote classes offered by local housing entities that address foreclosure prevention.
c) Continue economic development efforts with partners; support and coordinate with local housing agencies that provide affordable housing options; and support ongoing activities and services that promote family stabilization.

Actions to Foster and Maintain Affordable Housing

During the 2021 Program Year, there are four activities that support the construction of new units as well as rehabilitation of existing housing units to be funded with CDBG that will help foster and maintain affordable housing: Karis, Inc. The House rehabilitation; Grand Valley Catholic Outreach Mother Teresa Place; and two projects to be carried out by Housing Resources of Western Colorado to rehabilitation mobile homes and other owner-occupied units.

Actions to Reduce Lead-Based Paint Hazards

The City of Grand Junction estimates that 10,000 housing units in Grand Junction were constructed prior to 1978 and that a high percentage of these homes may contain lead-based paint. While it is not known the number of the homes containing lead-based paint that are occupied by low- to moderate-income

residents, it is known that older homes are typically more affordable and that a high percentage of these older housing units are occupied by low- and moderate-income persons.

All activities funded with CDBG dollars through the City of Grand Junction must comply with federal regulations concerning lead-based paint. Lead-based paint reduction regulations are incorporated into all legal agreements between the City and grant subrecipients. Any residential units or facilities constructed prior to 1978 involved in a CDBG activity must undergo a lead-based paint evaluation by a certified inspector. Any CDBG-funded rehabilitation or demolition activities must comply with lead-safe regulations and mitigation practices.

The number of child cases with elevated lead levels in their blood has dropped significantly over the past few decades. The State of Colorado no longer supports a lead-based paint testing program state-wide. Thus, Mesa County Health Department does not proactively test persons unless there is reason to believe the person has been exposed to lead. Between 2010 and 2014 testing of physician-referred children resulted in only 3 cases of abnormal results, none of which contained acute levels.

Actions to be Taken

1) Housing Resources of Western Colorado and the Grand Junction Housing Authority will continue to meet the requirements of the Federal Rule.
2) The City of Grand Junction will investigate, identify, coordinate and/or support additional efforts to address this potential health hazard. This includes compliance with the Federal Rule as it applies to the expenditure of CDBG funds on the 2021 activities to which it applies.
3) The Grand Junction Housing Authority and other local entities will continue to provide information to residents concerning potential hazards of lead-based paint.

Actions to Reduce the Number of Poverty-Level Families

The Anti-Poverty Strategy is an effort to reduce the number of people earning low- to moderate-income wages and at risk of homelessness. This Strategy outlines activities to:

- Collect demographic data regarding poverty levels to identify the problem and monitor trends.
- Focus on a continuum of prevention and intervention strategies/activities by age group to prevent/deter persons from entering poverty situations,
- Encourage efforts to raise earned income levels and maintain a diversified economic base.
- Increase the employability of recipients of public benefits.
- Attract higher paying employers to Grand Junction.
- Increase access to employment through expansion of the public transportation system and availability of responsible affordable childcare;
- Foster increased household stability through educational programs, drug and alcohol rehabilitation programs, and services to persons with special needs.
- Support efforts to reduce the possibility of catastrophic expense by providing healthcare to uninsured and public transportation to reduce costs to low-income persons.

• Focus affordable housing development near employment centers.

Actions to be Taken

a) Collect data regarding poverty levels and local demographics to better identify the problem and monitor trends including the following:

• Point in Time Homeless Survey
• Mesa County Human Services data
• School District 51 data including Free and Reduced Lunch statistics
• Grand Junction Housing Authority depth of poverty data

b) Continue Work on an Anti-Poverty Coalition

Economic Development Partners continue to work on issues and forming an Anti-Poverty Coalition. The Coalition would be responsible for implementing the Anti-Poverty Strategy. Currently, many agencies provide programs and services that improve poverty status including Grand Valley Catholic Outreach, Red Cross and the Grand Valley Interfaith Network.

c) The Homeless Coalition will continue to address results of the Vagrancy and Vulnerability study to better understand the needs of poverty-level families and the homeless situation.

Actions to Develop Institutional Structure

The City Community Development Department provides the staff and framework for the institutional structure for administration of the Community Development Block Grant program with assistance from the Finance Department. No gaps have been identified in the institutional delivery system. The City will continue to facilitate and foster relationships with agencies to strengthen public services, work with other local jurisdictions and organizations to improve the community, and participate in community efforts that allow for information sharing and dialogue concerning affordable housing, homelessness and special needs populations.

Actions to Enhance Coordination between Public and Private Housing and Service Agencies

The City of Grand Junction will work with public and private housing and human service agencies to enhance coordination in the implementation of the Five-Year Consolidated Plan and each subsequent Annual Action Plan. Some of the actions the City will take are listed below.

• Coordinate meetings with community agencies and organizations to discuss community needs, funding opportunities, and potential partnerships.
• Participate in Homeless and Housing Coalitions
• Offer technical assistance to agencies to discuss the sources of funding available, associated timelines for applying for funds and most impactful uses of funds.
• Offer technical assistance for potential developers and/or property owners that are considering new development or rehabilitation of existing housing.
• Survey housing units to determine rehabilitation needs to maintain affordable housing.

• Provide letters of support on behalf of affordable housing project proposals or other proposals from agencies that are requesting funding from external sources.
• Facilitate agency to collaboration to help the low-income homeowner population they serve.

Discussion

As discussed in the Strategic Plan section of the Five-Year Consolidated Plan, the Community Development Department uses monitoring efforts to ensure that programs funded with CDBG are compliant with federal, state and local requirements. To achieve this goal, the City has developed a monitoring procedure for all CDBG funded projects. In the 2021 Program Year, staff will perform desk monitoring, technical assistance and on-site monitoring both pre- and post-award, which often includes consultation with HUD CPD staff to ensure program compliance. The amount of monitoring will vary dependent on the subrecipient's previous CDBG experience, performance and complexity of the project. Also, the City ensures compliance during setup, update and closeout of activity information in the Department of Housing and Urban Development (HUD) Integrated Disbursement and Information System (IDIS). IDIS tracks funds drawn and provides another level of monitoring to ensure project eligibility and program compliance. Additionally, regularly updating IDIS helps verify that subrecipients are on track with timely expenditures and outcomes. This ongoing review helps the City of Grand Junction identify needs of the subrecipient and provide additional support and technical assistance as necessary.

AP-90 Program Specific Requirements – 91.220(l)(1,2,4)

Projects planned with all CDBG funds available during the year are identified in Table 56. The City of Grand Junction will not incur program income for any of its 2021 Program Year activities. Inasmuch as possible, CDBG funds will be entirely expended to benefit persons of low and moderate income or presumed benefit except for Program Administration funds.

Community Development Block Grant Program (CDBG)
Reference 24 CFR 91.220(l)(1)

Projects planned with all CDBG funds expected to be available during the year are identified in the Projects Table. The following identifies program income that is available for use that is included in projects to be carried out.

1. The total amount of program income that will have been received before the start of the next program year and that has not yet been reprogrammed	0
2. The amount of proceeds from section 108 loan guarantees that will be used during the year to address the priority needs and specific objectives identified in the grantee's strategic plan.	0
3. The amount of surplus funds from urban renewal settlements	0
4. The amount of any grant funds returned to the line of credit for which the planned use has not been included in a prior statement or plan	0
5. The amount of income from float-funded activities	0
Total Program Income:	**0**

Other CDBG Requirements

1. The amount of urgent need activities	0
2. The estimated percentage of CDBG funds that will be used for activities that benefit persons of low and moderate income. Overall Benefit - A consecutive period of one, two or three years may be used to determine that a minimum overall benefit of 70% of CDBG funds is used to benefit persons of low and moderate income. Specify the years covered that include this Annual Action Plan.	100.00%

RESOLUTION NO. ____

RESOLUTION ADOPTING THE 2021-2025 FIVE-YEAR CONSOLIDATED PLAN FOR THE GRAND JUNCTION COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROGRAM

RECITALS.

WHEREAS, the City of Grand Junction was designated as an Entitlement Community by the U.S. Department of Housing and Urban Development in 1996;

WHEREAS, this designation entitles Grand Junction to an annual grant of funds under the CDBG Program;

WHEREAS, to be eligible for funding, the City of Grand Junction must submit an annual Program Year Action Plan to be adopted as part of the City's Five-Year Consolidated Plan which serves as a federally-required planning document that guides community development efforts in Grand Junction;

WHEREAS, the primary objective of the City's Consolidated Plan and CDBG Program is the development of viable urban communities by providing decent housing and a suitable living environment and expanding economic opportunities, principally for persons of low- and moderate-income;

WHEREAS, the planning process in developing the 2021 Program Year Action Plan included citizen participation and interagency involvement;

WHEREAS, the 2021 Five-Year Consolidated Plan included a process of setting local priority needs and objectives through a coordinated effort with non-profit and government agencies in the community that serve low income and special needs populations; and

WHEREAS, the 2021 Five-Year Consolidated Plan established a strategic plan that addresses the priority needs, goals and strategies identified by the community that will be undertaken between 2021 and 2025.

NOW THEREFORE BE IT RESOLVED, that the Grand Junction City Council formally adopts the 2021 Community Development Block Grant Program Five-Year Consolidated Plan.

Adopted this ___ day of _____, 2021.

_____
President of City Council

ATTEST:

_____
City Clerk

RESOLUTION NO. ____

RESOLUTION ADOPTING THE 2021 PROGRAM YEAR ANNUAL ACTION PLAN AS A PART OF THE CITY OF GRAND JUNCTION 2021 FIVE-YEAR CONSOLIDATED PLAN FOR THE GRAND JUNCTION COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROGRAM

RECITALS.

WHEREAS, the City of Grand Junction was designated as an Entitlement Community by the U.S. Department of Housing and Urban Development in 1996;

WHEREAS, this designation entitles Grand Junction to an annual grant of funds under the CDBG Program;

WHEREAS, to be eligible for funding, the City of Grand Junction must submit an annual Program Year Action Plan to be adopted as part of the City's Five-Year Consolidated Plan which serves as a federally-required planning document that guides community development efforts in Grand Junction;

WHEREAS, the primary objective of the City's Consolidated Plan and CDBG Program is the development of viable urban communities by providing decent housing and a suitable living environment and expanding economic opportunities, principally for persons of low- and moderate-income;

WHEREAS, the planning process in developing the 2021 Program Year Annual Action Plan included citizen participation and interagency involvement;

WHEREAS, the 2021 Five-Year Consolidated Plan included a process of setting local priority needs and objectives through a coordinated effort with non-profit and government agencies in the community that serve the low income and special needs populations; and

WHEREAS, the 2021 Five-Year Consolidated Plan established a strategic plan that addresses the priority needs, goals and strategies identified by the community that will be undertaken in the next five years, including the activities included in the 2021 Annual Action Plan.

NOW THEREFORE BE IT RESOLVED, that the Grand Junction City Council formally adopts the 2021 Program Year Annual Action Plan as a part of the City of Grand Junction 2021 five-year Consolidated Plan for the Grand Junction Community Development Block Grant (CDBG) program.

Adopted this _____ day of _____, 2021.

_____
President of City Council

Attest:

_____
City Clerk

Grand Junction City Council

Regular Session

Item #4.a.ii.

Meeting Date: July 21, 2021

Presented By: Kristen Ashbeck, Principal Planner/CDBG Admin

Department: Community Development

Submitted By: Kristen Ashbeck

Information

SUBJECT:

An Ordinance Amending Ordinance No. 4754 that Adopted the Institutional and Civic Facility Master Plan for Colorado Mesa University (CMU) to Include a Larger Area for Campus Expansion within which Administrative Right-of-Way Vacations Apply, Located at 1100 North Avenue

RECOMMENDATION:

Planning Commission heard the request at its June 22, 2021 meeting and voted (5-0) to recommended approval.

EXECUTIVE SUMMARY:

By Ordinance 4754, the City approved an Institutional and Civic Master Plan for Colorado Mesa University (CMU) and an administrative process for future vacations of right-of-way interior to the campus once certain conditions are met. A map of the area to which the administrative process applies was attached to the Ordinance. CMU is requesting that the Master Plan and the Ordinance be amended with a new map that reflects an expanded area for future campus development.

BACKGROUND OR DETAILED INFORMATION:

BACKGROUND

Section 21.02.190 of the Zoning and Development Code sets forth a process to consider Master Plans for major institutional and civic facilities that provide a needed service to the community. The Colorado Mesa University (CMU) Campus Facilities Master Plan (Master Plan) as originally approved by the City in 2017 by Ordinance 4754 provides an overview of CMU's future long term objective to expand the existing main campus westward toward North 7th Street.

In conjunction with approval of the Master Plan, the City approved an administrative review process for future vacations of right-of-way interior to the campus shown within the red outlined area on the attached map once certain conditions are met. CMU requests the vacation of alley and street rights-of-way in order to aid in the continued westward expansion efforts planned for the campus. The vacation requests occur piecemeal as CMU acquires properties on both sides of any given right-of-way. CMU owns most of the property shown within the original 2017 Master Plan boundary which also depicted the area to which the administrative vacation process currently applies.

CMU continues to acquire properties on the west side of the original boundary to North 7th Street. Thus, CMU is requesting that a new map be adopted as part of the Master Plan to better depict anticipated campus growth to the west to North 7th Street. No other amendments to the 2017 Master Plan are proposed at this time.

One of the purposes of the Institutional and Civic Master Plan review is to take a comprehensive look at the right-of-way to be vacated and incorporated into the overall campus expansion plan. Until the administrative vacation process was approved in 2017, right-of-way had been vacated on a piecemeal basis as CMU acquired property. Each request had to be approved by separate ordinance by the City Council. Rather than continuing to take each request forward as separate ordinances, CMU proposed and the City approved, a process was established by which right-of-way within the identified boundary could be reviewed and approved administratively once certain conditions have been met.

All vacations have required that CMU own the property on both sides of the right-of-way, provide for general circulation, emergency access, private access easements, if necessary, and compliance with Xcel Energy easement requirements as set forth in Ordinance 4754. All City utilities within the rights-of-way are subject to the terms and conditions of the Colorado Mesa University and City of Grand Junction Utility Easement and Maintenance Agreement-CMU Main Campus. These conditions are not proposed to change with this Master Plan amendment.

To date, the administrative vacation process has been successfully completed for many right-of-way vacations in the past four years since adoption of the Master Plan and approval of the administrative process.

NOTIFICATION REQUIREMENTS

A virtual Neighborhood Meeting was held on March 31, 2021, with nine area residents along with representatives from Colorado Mesa University and City staff in attendance. President Foster presented an overview of the west campus development and its relationship to the proposed amendment requested by the application to the City. Most questions and comments from citizens regarded recent and current construction projects on campus and traffic in the campus vicinity. There were no specific questions or concerns regarding the proposed amendment to the Master Plan.

In addition, notice was completed consistent with the provisions in Section 21.02.080 (g) of the Zoning and Development Code. The subject property was posted with an application sign on June 9, 2021. Per Code, mailed notice of the public hearings before Planning Commission and City Council in the form of notification cards was sent to surrounding property owners within 500 feet of the subject property, as well as neighborhood associations within 1000 feet and notice of this public hearing was published in the Grand Junction Daily Sentinel.

ANALYSIS

Per Section 21.02.190 (c) of the Grand Junction Zoning and Development Code, in reviewing a Master Plan or an amendment thereto, the decision-making body shall consider the following:

(1) Conformance with the Comprehensive Plan and other area, corridor or neighborhood plans;

The 2017 Master Plan was reviewed and approved under the 2010 Comprehensive Plan and found to have met Goals 4 and 12 by supporting the continued development of the City Center into a vibrant and growing area with jobs and also by being a regional provider of goods and services. The 2017 Master Plan and the proposed amendment are also in conformance with the 2020 One Grand Junction Comprehensive Plan. Specifically, Plan Principle 4: Downtown and University District Strategy 1 encourages and supports the cultivation of an energetic and livable university district that balances the needs of the community and the students.

Therefore, Staff finds this criterion has been met.

(2) Conformance with the Grand Valley Circulation Plan and general transportation planning requirements;

The Master Plan complies with the Grand Valley Circulation Plan and Transportation Engineering Design Standards (TEDS). Access to and through the campus is provided for in the Master Plan and interim access will be maintained with the phased expansion.

Therefore, staff finds this criterion has been met.

(3) Adequate parking, adequate stormwater and drainage improvements, minimization of water, air or noise pollution, limited nighttime lighting and adequate screening and buffering potential;

CMU provides for all parking, as well as stormwater and drainage improvements needed as development occurs. The campus setting and surrounding perimeter streets provides for large areas of separation of the CMU facilities and surrounding community.

Therefore, staff finds this criterion has been met.

(4) Adequacy of public facilities and services; and

Adequate public facilities and services are available or may be extended/improved to serve the campus.

Therefore, staff finds this criterion has been met.

(5) Community benefits from the proposal.

CMU provides multiple community benefits as an educational institution and economic driver.

Therefore, staff finds this criterion has been met.

FINDINGS OF FACT AND RECOMMENDATION

After reviewing the Colorado Mesa University application, FMP-2021-279 for an amendment to the Institutional and Civic Facility Master Plan, the following findings of fact and conclusions have been determined:

1. The requested amendment to the Institutional and Civic Facility Master Plan, is consistent with the Comprehensive Plan.

2. The applicable review criteria in Section 21.02.190 (c) of the Grand Junction Zoning and Development Code have been met or addressed.

3. Right-of-way vacation in the identified planning area (Exhibit A attached to the ordinance) is presumed and conditionally approved on condition that CMU petitions for vacation(s), which shall be reviewed and approved administratively subject to the Director finding that CMU has met all of the following conditions:

a. CMU must own properties on both sides of the right-of-way (streets and/or alleys) to be vacated; and,

b. Private easement agreements must be provided to benefit any remaining privately owned property(ies) where access to the property(ies) is or may be claimed by the owner(s) to be compromised by the vacation; and,

c. CMU shall plan for and propose circulation and emergency access to standards mutually acceptable and agreed to by the City and CMU, to establish and preserve public safety and legal access for both public and private users; and,

d. All City utilities shall be subject to the terms and conditions of the Colorado Mesa University and City of Grand Junction Utility Easement and Maintenance Agreement-CMU Main Campus; and,

e. CMU shall dedicate as applicable necessary utility easements to Xcel Energy and/or other utility providers.

4. Notice shall be given of all vacation petition decisions right-of-way vacations in the designated Master Plan area and exceptions to the Director's decision shall be forwarded to the City Council for record review as provided in this Ordinance and the Recitals thereto.

The Planning Commission recommended approval of the Institutional and Civic Facility Master for Colorado Mesa University, FMP-2021-279 to the City Council with the findings of facts and conclusions and conditions listed in the staff report.

FISCAL IMPACT:

Council has directed staff to evaluate on a case-by-case basis the value of selling Right-of-Way (ROW) at the time of a vacation request. ROW recently acquired by the City has been valued at $5.00 to $6.00 per square foot. The value of ROW will be determined at the time each vacation request is made; however, based on past City Council direction, the City has not been compensated for vacated ROW.

SUGGESTED MOTION:

I move to (adopt/deny) Ordinance No. 5011 amending the Institutional and Civic Facility Master Plan for Colorado Mesa University to include a larger area within which requests for public right-of-way vacations may be administratively reviewed and approved.

Attachments

1. Development Application
2. Planning Commission Minutes - 2021 - June 22 - Draft
3. CMU Master Plan Amendment GJ Speaks Comments
4. CMU Plan Amendment Ordinance (3)

Development Application

We, the undersigned, being the owner's of the property adjacent to or situated in the City of Grand Junction, Mesa County, State of Colorado, as described herein do petition this:

Petition For: Institutional/Civic Master Plan

Please fill in blanks below ***only*** for Zone of Annexation, Rezones, and Comprehensive Plan Amendments:

Existing Land Use Designation: Civic / Residential

Existing Zoning: B1 / Residential

Proposed Land Use Designation: Civic / Residential

Proposed Zoning: B1 / Residential

Property Information

Site Location: CMU West Campus

Site Acreage:

Site Tax No(s):

Site Zoning:

Project Description: Request to update the area identified by the existing City of Grand Junction ordinance #4754 which allows an Administrative Public ROW Vacation Process to correlate with the CMU Master Plan Boundary that extends to 7th Street to the west, Orchard Avenue to the north, and North Avenue to the south.

Property Owner Information	Applicant Information	Representative Information
Name:	Name: Colorado Mesa University	Name: 3SE, LLC - Keith Ehlers
Street Address:	Street Address:	Street Address: 2662 Lookout Ln
City/State/Zip:	City/State/Zip: GJ, CO 81505	City/State/Zip: GJ, CO 81503
Business Phone #:	Business Phone #: 970-261-6360	Business Phone #: 9702107680
E-Mail:	E-Mail: detwiler@coloradomesa.edu	E-Mail: kehlers@threesail.net
Fax #:	Fax #:	Fax #:
Contact Person:	Contact Person: Dave Detwiler	Contact Person: Keith Ehlers
Contact Phone #:	Contact Phone #: 970-261-6360	Contact Phone #:

NOTE: Legal property owner is owner of record on date of submittal.

We hereby acknowledge that we have familiarized ourselves with the rules and regulations with respect to the preparation of this submittal, that the foregoing information is true and complete to the best of our knowledge, and that we assume the responsibility to monitor the status of the application and the review comments. We recognize that we or our representative(s) must be present at all required hearings. In the event that the petitioner is not represented, the item may be dropped from the agenda and an additional fee may be charged to cover rescheduling expenses before it can again be placed on the agenda.

Signature of Person Completing the Application: Date: 4-3-21

Signature of Legal Property Owner: Date:

General Project Report

CMU Administrative ROW Vacation Process

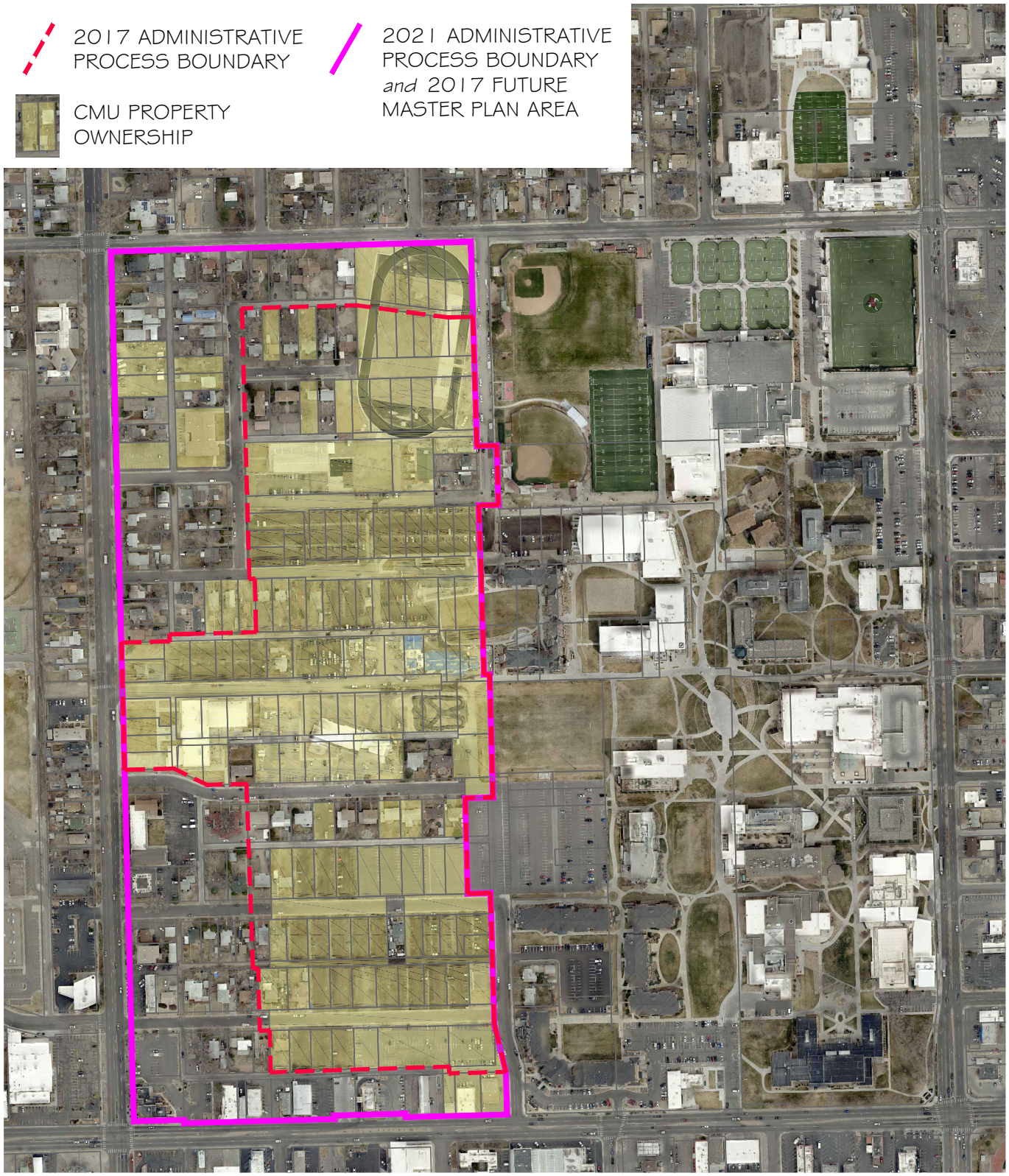
In June of 2017 an ordinance was passed by the Grand Junction City Council to provide very specific criteria that, if met, would accommodate the implementation of the approved Institutional Master Plan of Colorado Mesa University (CMU) by allowing an administrative process for the vacation of public right of way (ROW) so long as all the criteria were met. Examples of the criteria is that all properties adjacent to the vacation must be owned by CMU and access must be maintained for any properties not owned by CMU within the Master Plan area. The initial passing of the ordinance was done with the concept of a 'pilot program' in mind and therefore initially limited the administrative process to an area directly adjacent to the campus (as it existed at the that time) and was most likely to be acquired by CMU in the near future. As of today, nearly all of the initially approved area is under the ownership of CMU and the pursuit of fulfilling the master plan remains underway. It is for this reason, CMU hereby requests approval of this application to take the next incremental step in the previously approved master plan by expanding the area in which an administrative process for public right of way vacation is allowed, subject to the same restrictive criteria previously approved. See the submitted map (CMU_West Master Plan_Exhibit A.pdf) for details.

A neighborhood meeting was held with many of the remaining property owners in the area in attendance. The feedback was overwhelmingly positive in regards to the application and applauded CMU for it historical handling of campus development in the area. A few comments were brought forth regarding the overall parking and traffic conditions related to students on their way to and from classes and the dormitories.

This proposed amendment has been well received throughout the process thus far. CMU and its representatives are available at any time for further discussion or questions on the matter. Thank you for your consideration of this application.

COLORADO MESA UNIVERSITY

West Campus Master Plan
2021 PROGRESS UPDATE
(Revised Exhibit 'A')



Neighborhood meeting Attendance & Notes:

Attendees for zoom meeting (zoom profile name):

Kristen Ashbeck - City of Grand Junction Planning
Tim Foster - CMU Presidnt
Derek Wagner - CMU
Keith Ehlers - 3SE Planning (CMU Representative)
Greg Vigil
Karen Peterson
Sarah
John Manfro joined with neighbor Chris
Kevin's iPhone
Logan
Sheri

Notes:

- President Foster facilitated a power point presentation of the general CMU status update.
- President Foster then walked through recent development of the west campus and its relationship to the proposed amendment represented by the application
- Mr. Manfro inquired about a recent interaction with a surveyor on 8th street and the purpose of the survey.
- Mr. Manfro commented about the road width of Mesa Ave in regards to traffic/parking conflicts and painting curbs red where applicable. Ms. Ashbeck clarified that as a City issue and would follow up with appropriate departments at the City.
- Mr. Manfro gave positive comments about the quality of what CMU has developed.
- Mr. Manfro commented on potholes in surrounding roads.
- Mark and Karen Peterson complimented the construction that has been done.
- Mark and Karen Peterson asked the city to look into parking lot entrance congestion
- Mark and Karen Peterson inquired if campus security was still in affect. President Foster responded in the affirmative.
- Greg Vigil complimented the Maverick Hotel and associated traffic and construction crews beng pleasant.
- President Foster thanked attendees and concluded the meeting.

GRAND JUNCTION PLANNING COMMISSION
June 22, 2021 MINUTES
5:30 p.m.

The meeting of the Planning Commission was called to order at 5:30 p.m. by Chair Andrew Teske.

Those present were Planning Commissioners; Chair Andrew Teske, George Gatseos, Ken Scissors, Andrea Haitz, and Sandra Weckerly.

Also present were Jamie Beard (Assistant City Attorney), David Thornton (Principal Planner), Kristen Ashbeck (Principal Planner), and Felix Landry (Planning Supervisor).

There were 7 members of the public in attendance.

CONSENT AGENDA

Commissioner Scissors moved to adopt Consent Agenda Item #1. Commissioner Gatseos seconded the motion. The motion carried 5-0.

1. **Approval of Minutes**

Minutes of Previous Meeting(s) from June 8, 2021.

REGULAR AGENDA

1. **CMU Master Plan Amendment** **File # FMP-2021-279**

Amend Ordinance 4754 amending the Institutional and Civic Facility Master Plan for Colorado Mesa University (CMU) to include a larger area for campus expansion to which administrative right-of-way vacations apply, Located at 1100 North Avenue.

Staff Presentation

Kristen Ashbeck, Principal Planner, introduced exhibits into the record and provided a presentation regarding the request.

Questions for Staff

Commissioner Gatseos asked a question regarding the administrative review process.

Applicant Presentation

Derek Wagner, representing Colorado Mesa University, made a statement regarding the request.

DRAFT

Questions for Applicant
None.

Public Hearing
The public hearing was opened at 5 p.m. on Tuesday, June 15, 2021 via www.GJSpeaks.org.

The following made comments about the request: Gerald Bigley, Ken Bassinger, Jim Kagle, Laura Baytower, and Philip Geurin.

The following made comments regarding the request on GJSpeaks: Bradley G. Davenport and Steve Allerton.

The public hearing was closed at 5:49 p.m. on May 11, 2021.

Applicant Response to Comment
Mr. Wagner responded to public comment.

Questions for Applicant/Staff
Commissioner Gatseos made a comment in support of the request.

Commissioner Haitz asked a question regarding a comment submitted via GJSpeaks and concerns brought up by North Avenue business owners.

Motion and Vote
Commissioner Gatseos made the following motion, "Chairman, on the Amended Institutional and Civic Facility Master Plan for Colorado Mesa University, FMP-2021-279, I move that the Planning Commission forward to the City Council a recommendation of approval with the findings of facts and conclusions and conditions stated in the staff report."

Commissioner Scissors seconded the motion. The motion carried 5-0.

2. Other Business

None.

3. Adjournment

The meeting adjourned at Scissors motioned to adjourn, Weckerly seconded, meeting adjourned at 5:59 p.m.

DRAFT

Grand Junction Speaks
Published Comments for June 22, 2021 Planning Commission Meeting
CMU Master Plan Amendment

Regarding the Notice of Public Hearing for the Colorado Mesa University Master Plan Amendment: I contacted Kristen Ashbeck, Planner, and through our conversation I came to understand that as CMU purchases properties and pursues vacating alleyways for their expansion projects that they are required to provide access to existing property owners. In constructing the new track facility we were left with an alley with no through traffic, making it difficult to access my alley garage and parking area with my truck and trailer as I had been able to do previously. I feel that the use of dead end alleys should be a last resort as anyone that finds themselves in the alley now must turn themselves around by trespassing on someone else's property or backing completely down the alley. As well, the city sanitation trucks have to back out now and access would be more difficult for a fire truck. Additionally, with no parking on Orchard, all those existing property owners like myself rely on alley access. I feel that in light of this that my access has already been compromised. I request that I be made aware of further changes that CMU may wish to implement that might affect my or my tenant's access. Brad Davenport, 817 Orchard Avenue.
June 17, 2021, 2:36 PM

Bradley G. Davenport
2265 Tanglewood Rd.
Grand Junction, 81507-1262

Thank you for the timely presentation of CMU's request for amending the expansion plan. My major concern is parking. As the university has expanded , when school is in session, N 9th Street (My family has lived here since 1991) becomes a parking lot. I'd like to hear and see how CMU is meeting this challenge. Steve Allerton 1945 N 9th Street.
June 15, 2021, 5:13 PM

Steve Allerton
1945 N 9th
Grand Junction, 81501

CITY OF GRAND JUNCTION, COLORADO

ORDINANCE NO.

AN ORDINANCE AMENDING ORDINANCE 4754 TO REVISE THE AREA FOR FUTURE COLORADO MESA UNIVERSITY CAMPUS AREA WITHIN WHICH RIGHTS OF WAY MAY BE VACTED BY ADMINISTRATIVE REVIEW AND ACTION

LOCATED IN THE COLORADO MESA UNIVERSITY AREA
(Generally 7th to Cannell Streets and North to Orchard Avenue)

RECITALS:

Section 21.02.190 of the Zoning and Development Code (Code) sets forth a process to consider Master Plans for major institutional and civic facilities that provide service to the community. The Colorado Mesa University (CMU) Campus Facilities Master Plan adopted by the City in 2017 provides an overview of CMU's future long term objective to expand the existing main campus westward toward North 7th Street.

In conjunction with the Master Plan adoption, the City approved a CMU request of an administrative review process for future vacations of right-of-way interior to the campus, (shown within the red dashed area on Exhibit A) upon satisfaction of the conditions established in Ordinance 4754 and included in this ordinance.

CMU is now requesting that the area within which the administrative review process may apply be expanded to the purple line shown on Exhibit A attached to better coincide with anticipated future westerly growth of the university campus. The new map effectively amends the 2017 adopted Master Plan.

In accordance with the development of the campus anticipated in the Master Plan, CMU requests the vacation of alley and street right-of-ways in order to aid in the continued westward expansion planned for the campus. Prior to passage of Ordinance 4754, right-of-way vacation requests occurred in a piecemeal fashion, generally as CMU acquired properties on both sides of any given right-of-way. That process was unwieldy and tended to be confusing because the vacations were often not understood in the context of the overall plan of development. Presently, CMU owns the majority of the property shown within the "2017 Master Plan" boundary, outlined in the dashed red line on Exhibit A, and most sections of right-of-way within that area have already been vacated. Consistent with the terms or all prior vacations all vacations pursuant to this ordinance shall require that CMU own the property on both sides of the right-of-way, provide for general circulation, emergency access, private access easements, if necessary, and compliance with Xcel Energy easement requirements. City utilities are addressed pursuant to the terms and conditions of the *Colorado Mesa University and City of Grand Junction Utility Easement and Maintenance Agreement-CMU Main Campus*. Upon application by CMU for a vacation(s) that is supported by the approved Master Plan and if the conditions provided in the Ordinance are met or are not met, as reasonably determined by the Community Development Director, in her sole discretion, the Director shall provide written notice to CMU of her findings; if no protest is made to the findings then the vacation will be approved (or denied) after the 20th business day after notice. As further provided in the Ordinance, CMU shall provide written notice of the Director's findings of satisfaction of the conditions to the property owners 500 feet of the area of the petitioned vacation within 10 days of the date of the Director's notice to CMU finding satisfaction of the conditions.

If any owner takes exception to the Director's findings of satisfaction of the conditions, he/she may request in writing, stating with particularity the finding(s) to which exception is taken, that the Director's decision be considered by City Council.

If CMU takes exception to the Director's findings that conditions are not satisfied, it may request in writing, stating with particularity the finding(s) to which exception is taken, that the Director's decision be considered by City Council. The City Council shall schedule a review of the Director's decision, on the record, within 20 days of the property owner's request.

Upon finding of full and complete satisfaction of the conditions, whether by the Director or the City Council, the Director shall affect the vacation(s) by recording her findings, which shall include reference to the authority granted her by this Ordinance.

The City Council finds that the request to allow conditional approval of vacations of rights of way consistent with the CMU Master Plan is appropriate to and supported by the Comprehensive Plan, the Grand Valley Circulation Plan and Sections 21.02.190 (c) and 21.02.100 of the Grand Junction Zoning and Development Code.

The Planning Commission, having heard and considered the request, found the criteria of the Code to have been met, and recommended approval of the amendment to the Institutional and Civic Master Plan to expand the area within which vacation of rights-of-way may be administratively reviewed and approved subject to full and complete satisfaction of the conditions set forth.

NOW, THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION THAT:

The Colorado Mesa University Institutional and Civic Facility Master Plan is amended subject to the following findings and conditions:

The requested Institutional and Civic Facility Master Plan, including the proposed amendment to expand the area within which vacations of right-of-way may be reviewed and approved administratively, is consistent with the 2020 One Grand Junction Comprehensive Plan. Specifically, Plan Principle 4: Downtown and University District Strategy 1 encourages and supports the cultivation of an energetic and livable university district that balances the needs of the community and the students.

1. The applicable review criteria in Section 21.02.190 (c) of the Grand Junction Zoning and Development Code have been met or addressed.

2. The foregoing Recitals are incorporated herein and made a part hereof.

3. Right-of-way vacation in the identified planning area (Exhibit A) is presumed and conditionally approved on condition that CMU petitions for vacation(s), which shall be reviewed and approved administratively subject to the Director finding that CMU has met all of the following conditions:

    a. CMU must own properties on both sides of the right-of-way (streets and/or alleys) to be vacated; and,

    b. Private easement agreements must be provided to benefit any remaining privately owned property(ies) where access to the property(ies) is or may be claimed by the owner(s) to be compromised by the vacation; and,

c. CMU shall plan for and propose circulation and emergency access to standards mutually acceptable and agreed to by the City and CMU, to establish and preserve public safety and legal access for both public and private users; and,

d. All City utilities shall be subject to the terms and conditions of the *Colorado Mesa University and City of Grand Junction Utility Easement and Maintenance Agreement-CMU Main Campus; and,*

e. CMU shall dedicate as applicable necessary utility easements to Xcel Energy and/or other utility providers.

4. Notice shall be given of all vacation petition decisions right-of-way vacations in the designated Master Plan area and exceptions to the Director's decision shall be forwarded to the City Council for record review as provided in this Ordinance and the Recitals thereto.

Introduced for first reading on this _____ day of _____, 2021 and ordered published in pamphlet form.

PASSED and ADOPTED this _____ day of _____, 2021 and ordered published in pamphlet form.

_____
President of City Council

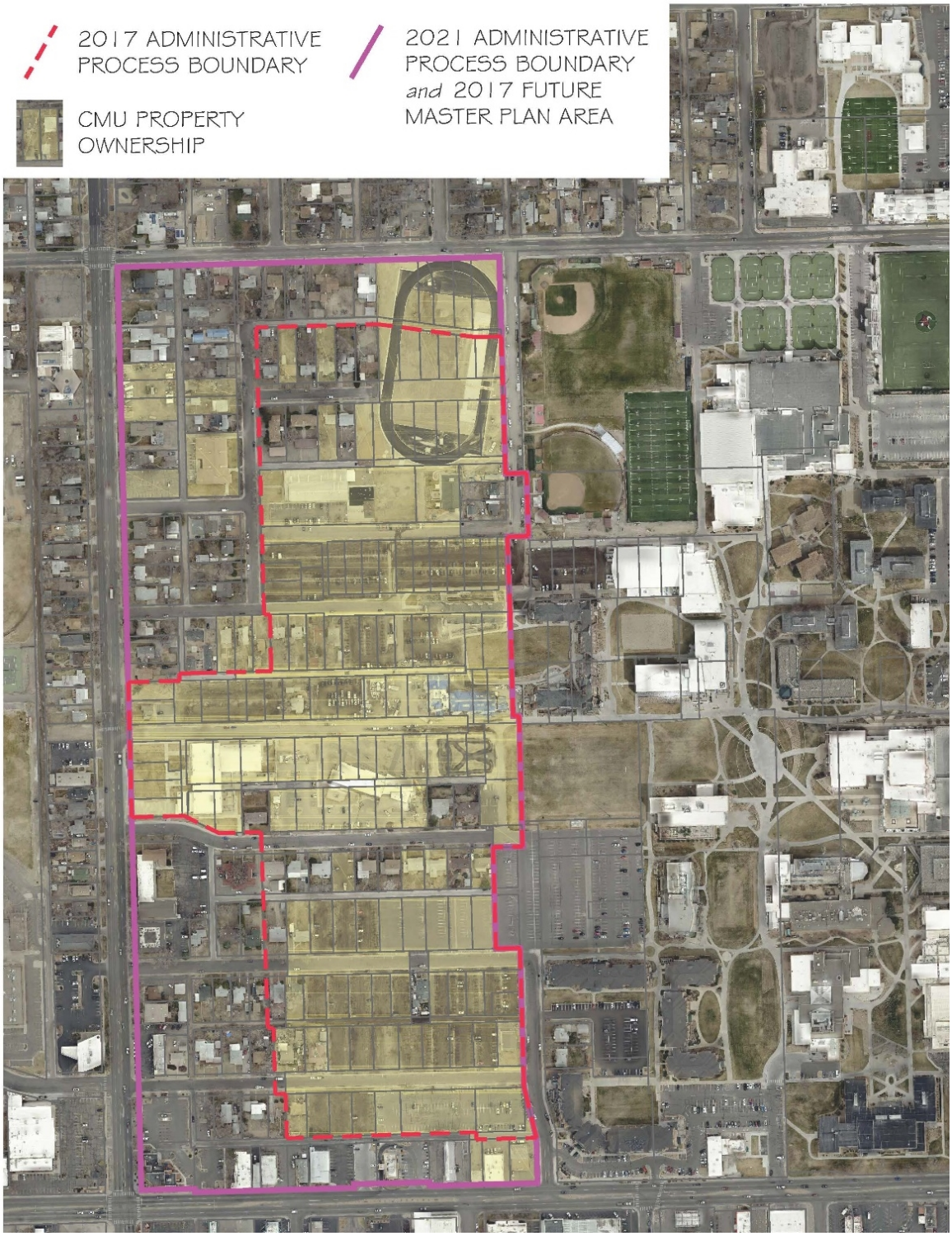
ATTEST:

_____
City Clerk

EXHIBIT A

COLORADO MESA UNIVERSITY

West Campus Master Plan
2021 PROGRESS UPDATE



Grand Junction City Council

Regular Session

Item #4.a.iii.

Meeting Date: July 21, 2021

Presented By: Kenneth Haley, Engineering Manager

Department: Public Works - Engineering

Submitted By: Trent Prall, Public Works Director

Information

SUBJECT:

A Resolution Creating and Establishing Alley Improvement District No. ST-21

RECOMMENDATION:

Staff Recommends the City Council conduct a public hearing and review and adopt proposed resolution.

EXECUTIVE SUMMARY:

A successful petition has been submitted requesting a Local Improvement District be created to reconstruct the East/West Alley from 8th to 9th Street, between Grand Avenue and Ouray Avenue. The public hearing and resolution is required to form the district.

BACKGROUND OR DETAILED INFORMATION:

People's Ordinance No. 33 authorizes the City Council to create improvement districts and levy assessments when requested by a majority of the owners of the property to be assessed. Council may also establish assessment rates by resolution. Assessment rates for alleys are based on percentages of total assessable costs the City will contribute for three property uses: 85% per abutting foot for residential single-family uses, 75% per abutting foot for residential multi-family uses, and 50% per abutting foot for non-residential uses.

A summary of the process that follows submittal of the petition is provided below.

Date	Steps	Action
June 16, 2021	1.	City Council passes a Resolution declaring its intent to create an improvement district. The Resolution acknowledges receipt of the petition and gives notice of a public hearing.
July 21, 2021	2.	Council conducts a public hearing and passes a Resolution creating the Improvement District. The public hearing is for questions regarding validity of the submitted petitions.
	3.	City Manager awards the construction contract.
Proposed for Fall 2020	4.	Construction.
	5.	After construction is complete, the project engineer prepares a Statement of Completion identifying all costs associated with the Improvement District.
	6.	Council passes a Resolution approving and accepting the improvements, gives notice of a public hearing concerning a proposed Assessing Ordinance, and conducts a first reading of a proposed Assessing Ordinance.
	7.	Council conducts a public hearing and second reading of the proposed Assessing Ordinance. The public hearing is for questions about the assessments.
	8.	The adopted Ordinance is published.
	9.	The property owners have 30 days from final publication to pay their assessment in full. Assessments not paid in full will be amortized over a ten-year period. Amortized assessments may be paid in full at anytime during the ten-year period.

FISCAL IMPACT:

The project is currently budgeted within the City's approved 2021 budget for an estimated cost of $100,000 with offsetting revenues for property owner share estimated at $29,000.

SUGGESTED MOTION:

I move to (adopt/deny) Resolution 58-21, a resolution creating and establishing Alley Improvement District No. ST-21 within the corporate limits of the City of Grand Junction, Colorado, Authorizing the reconstruction of certain alleys, adopting details, plans and specifications for the paving thereon and providing for the payment thereof.

Attachments

1. Intent to Create ST21 - Summary and Exhibit
2. Resolution

SUMMARY SHEET

PROPOSED ALLEY IMPROVEMENT DISTRICT
8th STREET TO 9th STREET
GRAND AVENUE TO OURAY AVENUE

Owner	Property Address	Footage	Property Type	Owner Share	Cost per Foot	Estimated Assessment
* SHULL CASSIDEE C	801 Ouray Ave	50	Residential	15%	$ 18.75	$ 937.50
* KIRK STEVE T and ALLEN TAMRA L	811 Ouray Ave	50	Residential	15%	$ 18.75	$ 937.50
* BECTON JOSHUA	821 Ouray Ave	50	Residential	15%	$ 18.75	$ 937.50
* STCLAIR COLIN and STCLAIR CARRIE	829 Ouray Ave	50	Residential	15%	$ 18.75	$ 937.50
* BERRYMAN RALPH W and BERRYMAN GERTRUDE A	835 Ouray Ave	50	Residential	15%	$ 18.75	$ 937.50
HEGER FRANK E and HEGER CARLA J	841 Ouray Ave	50	Residential	15%	$ 18.75	$ 937.50
* HALE CYNTHIA BOETTCHER-	853 Ouray Ave	50	Residential	15%	$ 18.75	$ 937.50
BOGER CHARLEE A	859 Ouray Ave	50	Residential	15%	$ 18.75	$ 937.50
* PHILLIPS BRET E and PHILLIPS LISA A	420 N 8th St	75	Commercial	50%	$ 62.50	$ 4,687.50
* DENMARK PROPERTIES LLC	816 Grand Ave	50	Multifamily	25%	$ 31.25	$ 1,562.50
WAYMAN BONNY and WAYMAN DARREN	828 Grand Ave	75	Multifamily	25%	$ 31.25	$ 2,343.75
PEASE WILLARD JR TRUSTEE and PEASE DEBRA TRUSTEE, PEASE FAMILY LIVING TRUST	838 Grand Ave	50	Commercial	50%	$ 62.50	$ 3,125.00
GRIBBEN JOHN M and JAHNKE ANDREA	844 Grand Ave	50	Commercial	50%	$ 62.50	$ 3,125.00
850 GRAND LLC	850 Grand Ave	50	Commercial	50%	$ 62.50	$ 3,125.00
HAND-TREECE CYNTHIA MARAE	858 Grand Ave	50	Commercial	50%	$ 62.50	$ 3,125.00
	Total	800				$ 28,593.75

Estimated Cost to Construct	$ 100,000.00
Estimated Cost to Owners	$ 28,593.75
Estimated Cost to City	$ 71,406.25

Assessments may be paid in full upon completion of project or may be paid over a ten-year period, in which event, a one-time charge of 6% will be added to the principal balance to which simple interest will accrue at the rate of 6% per annum on the declining balance.

* Represent owners signing in favor of the improvements are 8/15 or 53% of the owners and 53% of the assessable footage.

PROPOSED ALLEY IMPROVEMENT DISTRICT

8TH STREET TO 9TH STREET

GRAND AVENUE TO OURAY AVENUE

RESOLUTION NO. _____

A RESOLUTION CREATING AND ESTABLISHING ALLEY IMPROVEMENT DISTRICT NO. ST-21 WITHIN THE CORPORATE LIMITS OF THE CITY OF GRAND JUNCTION, COLORADO, AUTHORIZING THE RECONSTRUCTION OF CERTAIN ALLEYS, ADOPTING DETAILS, PLANS AND SPECIFICATIONS FOR THE PAVING THEREON AND PROVIDING FOR THE PAYMENT THEREOF

WHEREAS, a majority of the owners of the property to be assessed have petitioned the City Council, under the provisions of Chapter 28 of the City of Grand Junction Code of Ordinances, as amended, and People's Ordinance No. 33, that an Alley Improvement District be created, for the special benefit of the real property hereinafter described, to construct and install improvements to the following described alley:

- East/West Alley from 8th St to 9th St, between Grand Avenue and Ouray Avenue

WHEREAS, the City Council has found and determined, and does hereby find and determine, that the construction of alley improvements as petitioned for is necessary for the health, safety and welfare of the residents of the territory to be served and would be of special benefit to the property included within said District; and

WHEREAS, on the 16th day of June, 2021, the City Council of the City of Grand Junction, Colorado, passed a Resolution Stating its Intent to Create Alley Improvement District No. ST-21, authorizing the City Engineer to prepare full details, plans and specifications for the paving thereon together with a map of the District to be assessed, and authorizing Notice of Intention to Create said District; and

WHEREAS, the City Engineer has fully and strictly complied with the directions so given, and has filed such specifications and map, all in accordance with said Resolution and the requirements of Ordinance No. 178, as amended, of said City; and

WHEREAS, Notice of Intention to create said District was duly published.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION, COLORADO:

1. That the real property (also known as the “District Lands”) to be assessed with a portion of the costs of the proposed services, labor, materials and improvements which the City may deem appropriate, is described as follows:

Lots 1 through 29, Block 70, City of Grand Junction, AND ALSO;

Lot 2, Hunt Simple Subdivision;
All in the City of Grand Junction, and Mesa County, Colorado.

2. That the proposed services, labor, materials and improvements necessary to accommodate the request of the owners of the District Lands shall include, but may not be limited to, the design, construction, installation, placement and inspection of base course material and concrete paving, together with any other services or facilities required to accomplish this request as deemed necessary by the City Engineer ("District Improvements"), all of which shall be installed in accordance with the General Conditions, Specifications and Details for Public Works and Utility Projects of the City of Grand Junction.

3. That the assessments to be levied against and upon each respective property which is part of the District Lands shall be determined by multiplying the linear footage that each respective property abuts the alley right-of-way by the appropriate Residential Single-Family, Residential Multi-Family or Non-Residential assessment rate as defined by City Resolution No. 16-97, passed and adopted on the 17th day of February, 1997, and as established by City Resolution No. 57-99, passed and adopted on the 21st day of April, 1999, and as established by City Ordinance No. 4280, passed and adopted on the 20th day of August, 2008, as follows:

(a) The Residential Single-Family assessment rate shall be fifteen (15) percent of the total contracted construction costs for their abutting footage. The Residential Single-Family assessment rate shall apply to all properties having only one residential housing unit which is arranged, designed and intended to be occupied as a single housekeeping unit, and all vacant properties located within a residential single-family residential zone;

(b) The Residential Multi-Family assessment rate shall be twenty-five (25) percent of the total contracted construction costs for their abutting footage. The Residential Multi-Family assessment rate shall apply to all properties having a structure or structures which are arranged, designed and intended to be the residence of more than one housekeeping unit independent of other housekeeping units, and properties which are necessary for and appurtenant to the use and occupancy of multi-family residential uses, such as parking lots, clubhouses and recreation facilities, and all vacant properties located within a multi-family residential zone;

(c) The Non-Residential assessment rate shall be fifty (50) percent of the total contracted construction costs for their abutting footage. Except as provided in Section 3(d) below, the Non-Residential assessment rate shall apply to all properties which are used and occupied for any purpose other than single-family or multi-family residential purposes, and all vacant properties located within any zone other than residential;

(d) Properties from which a business or commercial use is conducted ("home occupation") which also serve as a single-family or multi-family residence may be assessed the applicable single-family or multi-family assessment rate if such home occupation conforms with or has been authorized by the Zoning and Development Code of the City;

(e) Pursuant to City Resolution No. 61-90, passed and adopted on 19th day of September, 1990, properties having alley frontage on more than one side shall be assessed the applicable assessment rate for the frontage on the longest side only.

(f) The assessment rates described above shall be applicable as of the date of the final reading of the assessing ordinance.

4. That the assessments to be levied against the District Lands to pay a portion of the costs of the District Improvements shall be due and payable, without demand, within thirty (30) days after the ordinance assessing such costs against and upon the District Lands becomes final. The failure by any owner(s) to pay the whole assessment within said thirty (30) day period shall be conclusively considered as an election on the part of said owner(s) to pay such owner's assessment in ten (10) annual installments, in which event an additional six percent (6%) one-time charge for costs of collection and other incidentals shall be added to the principal amount of such owner's assessment. Assessments to be paid in installments shall accrue simple interest at the rate of six percent (6%) per annum on the unpaid balance and shall be payable at the time the next installment of general taxes, by the laws of the State of Colorado, is payable, and each annual installment shall be paid on or before the same date each year thereafter until paid in full.

5. That the City Engineer is hereby authorized and directed to prepare full details, plans and specifications for the District Improvements, together with a map of the District depicting the District Lands to be assessed from which the amount of the assessments to be levied against each individual property may be readily ascertained, all as required by Ordinance No. 178, as amended, City of Grand Junction, Colorado.

PASSED and **ADOPTED** this ____day of _____, 2021.

BY ORDER OF THE CITY COUNCIL
CITY OF GRAND JUNCTION, COLORADO

PASSED and **ADOPTED** this ____day of _____, 2021.

_____
C.B. McDaniel
President of the City Council

Attest:

_____
Wanda Winkelmann
City Clerk

Summary of Discussion at the July 19, 2021 City Council Workshop
Direction to Staff for the Drafting of Regulations for Marijuana Stores

The Council is enabled by the passage of April 2021 referred measures 2A and 2B to regulate and tax marijuana businesses. At the City Council's July 19, 2021 Workshop, Councilmembers considered several topics related to marijuana stores. Topics included: a) possible mechanisms for limiting where stores may be located and how many stores should initially be licensed; b) how licensees should be selected; and c) the special sales tax rate applicable to marijuana businesses.

The following reflects the City Council's consensus direction to guide the drafting of an ordinance(s) for more future consideration. The Staff's understanding of the Council's general direction is as follows:

- Zone for marijuana businesses in a manner similar to zoning for general retail sales;
- Require separation between marijuana stores and parks, schools, and rehabilitation facilities;
- Identify districts/areas throughout the City and establish separate numerical limits for stores that may occupy each, resulting in a total limit of approximately 10 stores City-wide;
- License marijuana stores through a process that combines elements of a merit-based review and a random lottery;
- Provide options for merit-based review criteria for Council's consideration; and,
- Set a special marijuana sales and use tax rate at 6%.

Location and Number. A range of options exist to regulate the location and number of marijuana businesses, the two of which are interrelated. At the July 19th Workshop, City Council discussed zoning of marijuana stores, buffering between marijuana stores and other land-uses, and two approaches for a direct numerical limit, or cap, for marijuana stores. These two approaches are a City-wide cap and a cap-by-district approach, which would involve identifying or establishing discrete areas of the City for the purpose of establishing a separate cap for each area or district.

Zoning. The City Council directs staff to:

1. Draft regulations in which zoning regulations for marijuana stores reflect the zoning of general retail sales under the existing Land Use and Development Code. Zones where general retail sales are currently permitted are the C-1 (Light

Commercial), C-2 (General Commercial), B-1 (Neighborhood Business), B-2 (Downtown Business), M-U (Mixed Use), MXG-3 (Mixed Use General), and MXOC (Mixed Use Opportunity Corridor) districts.

2. Consider the preference of the Downtown Development Authority to develop additional restrictions for Main Street between 1st Street and 8th Street, including the prohibition of marijuana stores on the ground floor of buildings.

Buffering. Councilmembers discussed a wide range of options for buffering marijuana stores from other land-uses and from other marijuana stores. After review, Council directs staff to:

3. Draft regulations based on the buffering approach identified as Alternative 4, which includes buffering from: Schools including CMU and WCCC (1000 feet); Regional and Neighborhood Parks (500 feet); and Rehabilitation Facilities (500 feet).

Numerical Cap. Council discussed the pros and cons of establishing a total numerical cap for marijuana stores in the City, as well as the compatibility of a cap with principles such as reducing the impact of marijuana stores on the community and fostering a free market environment. The potential for a cap was also considered in relation to various approaches to buffering, as described above. A city-wide numerical cap was also considered in relation to a cap-by-district approach. Another option considered was a cap-by-district approach that would yield a total of approximately 10 stores, and would assign the opportunity for more stores in areas of anticipated high demand. Adoption of that approach will require staff to develop new alternatives for district areas and store allocation based on district for council consideration. The Council directs staffs to:

4. Draft regulations to implement a cap-by-district approach.

5. Develop and present to Council alternatives for district areas with the result being approximately 10 stores with the allotment in the districts reflecting anticipated demand.

Licensing Process. The City Council discussed three alternatives for the licensing of marijuana stores. One is a random, or lottery process. In this process, stores that meet baseline expectations for financial viability and lack of criminal history or prior code violations would be randomly selected for licensing until all available licenses are granted. Another is a competitive, or merit-based, process, akin to a Request for Proposals (RFP) process, which would rank stores based on detailed criteria that reflect

policy aims to be determined by the Council. The third option is a hybrid process combining a merit-based review and lottery. Those applicants found to meet a high standard of merit would enter into a pool for random selection. The Council directs staff to:

6. Draft regulations to implement a hybrid selection process

7. Prepare a range of options for review criteria, reflective of examples throughout the state, known policy goals of the City Council, and criteria that reflect the pursuit of public benefit on the part of marijuana business operators.

8. Develop a range of approaches that aligns the hybrid selection process with the limits on location and number described above.

Rate of Taxation. Referred measure 2A enables Council to set a special marijuana sales and use tax rate between 5% and 15%. This special tax would be applied in addition to other applicable state and local taxes. The express purpose of the special tax as approved in measure 2A is “For the improvement and protection of the community and health and welfare of its citizens as follows: The enforcement of regulations on the related marijuana industry and other costs related to the implementation of the use and regulation of regulated marijuana and lawful utilization of marijuana; and building, operating and maintaining the highest priority(ies) of the adopted Parks and Recreation Open Space (PROS) Plan which include indoor and outdoor recreation and park facilities, capital improvements and enhancements to the City’s parks, trails and open space system.” In addition, applicable tax revenue from the City’s base sales tax of 3.25% applied to marijuana sales would be directed to the General Fund (2%), the .75% Sales Tax Capital Improvement Fund (.75%), and the First Responder Fund (.5%).

Councilmembers stated multiple goals to be met through a tax rate determination; one goal is to collect tax revenue for the priorities of the Parks, Recreation and Open Space Master Plan and enforcement needs related to regulated marijuana businesses as stated in the question. Another goal is to foster market conditions that would be comparable to the Town of Palisade, which also regulates and taxes retail marijuana sales. The rate of taxation in Palisade is not a flat rate, but a bracketed assessment with a minimum of 5% and a substantially higher rate on smaller purchases. With these goals in mind, Council directs staff to:

9. Draft amendments to the Municipal Tax Code that would reflect a 6% special marijuana sales and use tax rate.