

PLANNING COMMISSION AGENDA VIRTUAL MEETING

TUESDAY, FEBRUARY 9, 2021 @ 5:30 PM

Options for Virtual Public Participation:

- 1. Provide written comment at www.GJspeaks.org or by emailing comdev@gicity.org
- 2. Comment by phone. Dial the telephone number (970) 609-9688 and enter the four-digit code provided for each item on the agenda. You can then leave a message, which will be submitted as a public comment both as an audio file and as text translation.
- Attend the meeting virtually using the link below:

https://attendee.gotowebinar.com/register/1377924877105876752

After registering, you will receive a confirmation email containing information about joining the webinar.

Please email the <u>Secretary to the Planning Commission</u> for more information on how to participate in Planning Commission meetings.

Call to Order - 5:30 PM

Consent Agenda

Minutes of Previous Meeting(s) from January 12, 2021.

Regular Agenda

 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. | <u>Staff Presentation</u> | Phone-in comments dial 1205

Other Business

Adjournment

GRAND JUNCTION PLANNING COMMISSION January 12, 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, Vice Chair Christian Reece, George Gatseos, Keith Ehlers, Ken Scissors, and Kim Kerk.

Also present were Jamie Beard (Assistant City Attorney), Tamra Allen (Community Development Director), and Kristen Ashbeck (Principal Planner).

There were 0 members of the public in virtual attendance.

CONSENT AGENDA

Commissioner Reece moved to adopt Consent Agenda Item #1. Commissioner Scissors seconded the motion. The motion carried 7-0.

Approval of Minutes

Minutes of Previous Meeting(s) from December 1, 2020 and December 8, 2020.

REGULAR AGENDA

1. Dos Rios PD/ODP Amendment

File # PLD-2020-121

Consider a request by the City of Grand Junction for a Rezone/Amendment to the Planned Development (PD) zone district and Outline Development Plan (ODP) for the Riverfront at Dos Rios, located on the northeast bank of the Colorado River between Highway 50 and Hale Avenue.

View presentation here at XXXX

Staff Presentation

Kristen Ashbeck, Principal Planner, introduced exhibits into the record and provided a presentation regarding the request.

Questions for Staff

Commissioners Scissors, Reece, and Gatseos asked questions regarding the request.

Public Hearing

The public hearing was opened at 5 p.m. on Tuesday, January 5, 2021 via www.GJSpeaks.org.

None.

The public hearing was closed at 5:48 p.m. on January 12, 2021.

Questions for Applicant or Staff

None.

Discussion

None.

Motion and Vote

Commissioner Gatseos made the following motion, "Chairman Teske, on the Rezone and Amendment to Planned Development (PD) with a BP (Business Park) default zone district and an Outline Development Plan for a mixed use development known as the Riverfront at Dos Rios, file number PLD-2020-121, I move that the Planning Commission forward a recommendation of approval to City Council with the findings of fact listed in the staff report."

Commissioner Kerk seconded the motion. The motion carried 7-0.

Dual Immersion Academy ROW and Public Easement Vacation File # VAC-2020-245, VAC-2020-246

Consider a request by Mesa County Valley School District 51 to vacate a public alley right-of-way adjacent to five properties located at 520, 522, 538, 542 and 552 West Main Street and a public sewer easement located at 552 West Main Street.

Application was withdrawn.

Other Business

None.

4. Adjournment

Commissioner Reece moved to adjourn the meeting. Commissioner Scissors seconded the motion. The meeting adjourned at 5:52 p.m.



Grand Junction Planning Commission

Regular Session

Item #1.

Meeting Date: February 9, 2021

Presented By: Trent Prall, Public Works Director, Michelle Hansen, David Thornton,

Principal Planner

Department: Community Development

Submitted By: David Thornton, Principal Planner

Information

SUBJECT:

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. | <u>Staff Presentation</u> | Phone-in comments dial **1205**

RECOMMENDATION:

Staff recommends approval.

EXECUTIVE SUMMARY:

In 2020, the City engaged Stolfus and Associates to study and prepare an Access Control Plan (ACP) for the 7.0-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. The ACP works to plan, coordinate, regulate, and design access to and from adjacent property including future development.

Throughout 2020, Stolfus' work inventoried access points, count traffic, determined existing and future traffic demands, performed a safety analysis for Patterson Road and prepared a draft Plan that was presented to City Council at the August 3, 2020 Workshop. A public open house was held on October 1, 2020 and the final document was publicly reviewed through GJSpeaks. Virtual one-on-ones were held January 13,

2021 along with follow-up phone calls to concerned property owners to discuss individual access related concerns. The proposed final draft Plan was presented to City Council at the February 1, 2021 Workshop.

Upon adoption, the Patterson Road Access Control Plan (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. The proposed final Patterson Road ACP will be presented for adoption.

BACKGROUND OR DETAILED INFORMATION:

BACKGROUND

The City engaged, in January of 2020, the consulting firm 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.

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.

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, they 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 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. There has been a total of 14 webpage views and the informational videos have been viewed 71 times by the public.

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 final plan.

The Planning Commission reviewed the draft ACP in a workshop on December 3, 2020 between the two open houses. They will hold a public hearing and consider a recommendation for adoption of the Plan in a public hearing on February 9, 2021. City Council will review the draft ACP in a workshop on February 1, 2021. City Council first reading is currently proposed for February 17th with 2nd reading and public hearing and consideration for adoption of an ordinance at the March 3rd City Council meeting.

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 without the construction of 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:

- 1. 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.
- 2. Provide safe, effective, and efficient access to and from Patterson Road for businesses, residents, and guests to support the economic viability of the City.
- 3. 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 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
 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 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.

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.
- 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.
- Planned publicly funded project by the City.
- 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.

CONCLUSIONS

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 fourlane 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 corridorwide 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.

IV. 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 February 2, 2020 in the Grand Junction Sentinel. Mailed notice and posting are not required for Comprehensive Plan Amendments.

V. ANALYSIS

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)(2) 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) 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. 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. As it is implemented, the Patterson Road ACP will systematically control the location, spacing, design, and operation of driveways, median openings, and street connections to allow for safer and better traffic flow and provide effective access to properties and public street connections to Patterson Road. Existing traffic continues to increase and projected to further increase over the next 20 years. Today's traffic demand and increasing future traffic are subsequent events that support the need for the ACP study and establish an access control plan for the Patterson Road corridor.

Staff finds this criterion has been met.

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

As noted in criterion (i), the condition of the corridor or traffic increases in the Patterson Road corridor have changed and are predicted to increase in the future, supporting the ACP as an important Plan implementing the City's Comprehensive Plan.

Therefore, Staff finds that this criterion has 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;

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.

Staff finds that this criterion has been met.

VI. STAFF 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:

- 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)(2) of the Grand Junction Municipal Code have been met.

Therefore, Staff recommends approval.

SUGGESTED MOTION:

Mr. Chairman, 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.

Attachments

- Patterson Rd Access Study
- Patterson Rd Access Study- Appendices
- Proposed ordinance _ Pattterson Rd Access Control Plan

City of Grand Junction Patterson Road Access Study

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

January 2021



PATTERSON ROAD ACCESS STUDY

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

January 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



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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 Control 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 Control Plan (ACP) 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 accessmanaged 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 ACP 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 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. The ACP 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 ACP 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 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 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 ACP 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 ACP 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 ACP 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.

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, 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 ACP 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 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.

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

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.



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 Control Plan (ACP) 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 ACP limit begins at the co-located highways US 6, US 50 and I-70B. The ACP 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 ACP so any recommendations for those areas outside City limits may only be implemented as part of an annexation. The limits of the Patterson Rd ACP are illustrated in Figure 1.

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



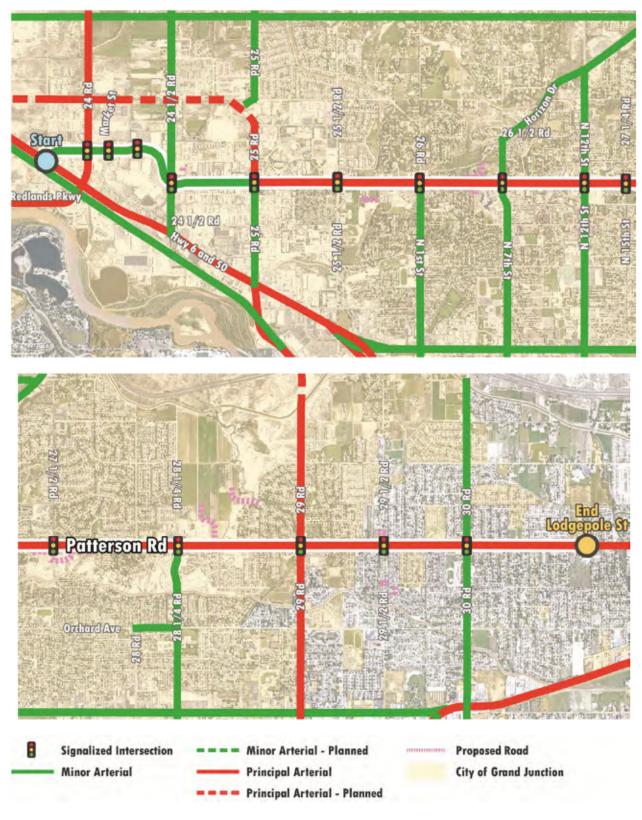


Figure 1. Study Area



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 ACP, 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 ACP 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 Control 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. The project team updated City Council on project progress and development on several occasions. An in-person presentation was made to council and updates were provided via written memorandums from City staff. Final presentations to City Council for plan adoption will be held in a public hearing on March 3, 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 ACP 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 ACP. 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 ACP. 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.

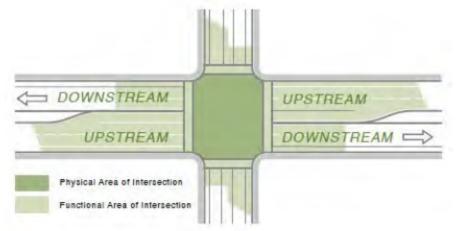


2.2 Guiding Principles

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.

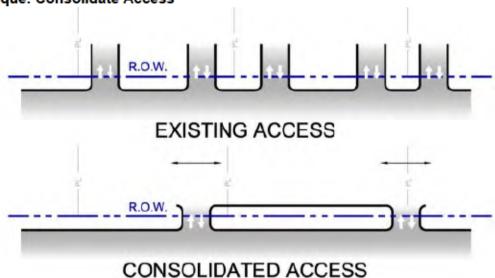


2.3 Techniques

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

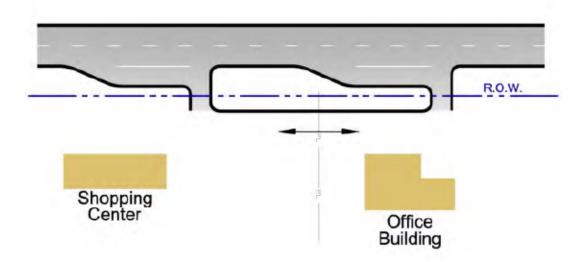


Consolidate access points by:

- 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

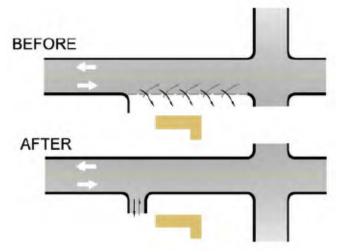


Technique: Connect Adjacent Properties



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

Technique: Define Driveways

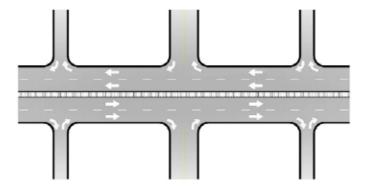


Define driveways to provide clear identification of entrance and exit locations.

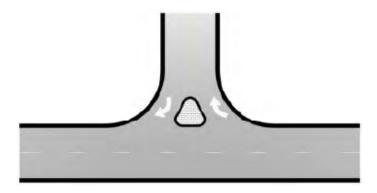


Principle: Minimize the number of locations where vehicles merge, split, or cross

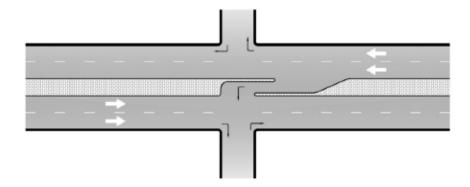
Technique: Install Medians and Islands



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.

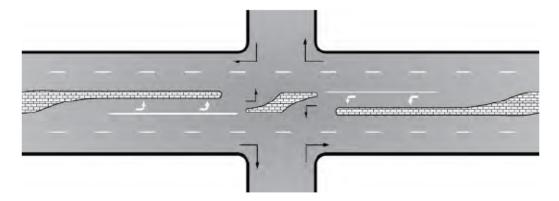


Right-in/right-out with channelizing island eliminates left turn movements at specific locations. This technique is a potential interim solution where a median may be unreasonable to construct for a single property due to space constraints at time of development.



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.

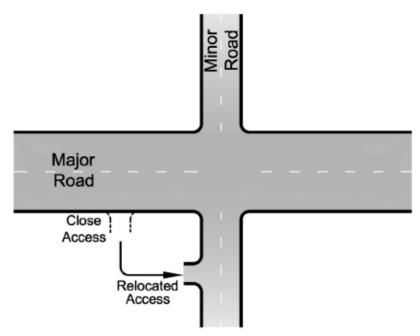




A ¾ movement limits left turn movements where increased access is beneficial on both sides of the street.

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
 McMullin Dr
 - 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

 - 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

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



Table 1. Intersection Level of Service of Safety

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



Of the reported crashes, 74 crashes (6.2%) were at or related to a driveway on Patterson Rd. Figure 2 shows the number 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 Control Plan (ACP) 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 ACP was developed using a 4-step process:

Step One - Methodology and Compatibility Index

A traffic methodology and ACP 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 ACP 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 ACP methodology memo and compatibility index can be found in Appendix E.

Step Two – Development of the Access Control 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 Control Plan

A draft ACP 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 ACP 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 ACP 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 ACP is presented in Figure 3 (A-P).

Table 2. Compatibility Evaluation Summary

Table 2. Compatibility Evaluation Summary						
Project Goal	Evaluation Criteria	Rating				
	Corridor Travel Speeds/Time	Favorable				
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.	Functional Intersection Area	Neutral				
	Number of Conflict Points	Favorable				
	Right-of-way	Neutral				
	Intersection Sight Distance	Favorable				
	Intersection LOS or Critical Movements	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.	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	Local Route Circulation	Favorable
proposed street network connections that provide local circulation to support the transportation system.	Serviceability of Local Routes to Developments and Properties within the Study Area	Favorable
	Pedestrian/Bicycle Parallel Access	Favorable
Support alternative modal choices, including transit, pedestrian, and bicycle routes.	Pedestrian/Bicycle Crossing Opportunities	Neutral
	Transit Opportunities	Neutral
	Public Support	Neutral
Provide a plan that can be implemented in phases.	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 Control Plan (ACP) 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 ACP limits full movement access to major signalized intersections. Functional intersection area was considered in evaluating the spacing between major intersections and \% movement intersections. 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 ACP 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.

The narratives in this section are intended to serve as a summary of the key features of the ACP. The figures are intended to provide a graphical representation of the ACP. A detailed explanation of each access in the study area, by reference point, is presented in the ACP Table in Appendix F. Reference the ACP 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 Control Plan

Key features of the ACP are summarized by major intersections on the following pages and illustrated in Figure 3. The ACP will reduce the number of access points from 283 to between 149 and 160 as the corridor and land use along the corridor changes. This reduction in access includes the following:

- 71 access closures/consolidations
- 79 conditional access points that will close upon redevelopment
- 12 conditional safety right-in/right-out access points that will close if safety or operational issues develop

In addition, there are also over 180 access points with restricted movements including right-in/right-out access, right-in or right-out only, \(^3\)4 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 2600 to 1000, a total reduction in conflict points of 60%.

There are 15 signalized full movement intersections in the plan. Full movement signalized intersections have been confirmed as part of the ACP; 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 lane 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)

- While I-70B is not identified as an access point in the ACP, this T-intersection is anticipated to remain full movement with the potential for signalization, if warranted and permitted by CDOT.
- 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 ACP 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.
- Access 5 is a conditional right-in/right-out movement and will close when a connection to Access 2 is available.
- 6) 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 ACP Table are met. Refer to the ACP Table for conditions of implementation.

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

- 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 ACP Table for conditions of implementation.







BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL

TRAIL

PROPOSED CITY STREET OR PRIVATE CONNECTION



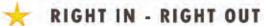
PLANNED CITY STREET

ACCESS POINT INFORMATION











SIGNALIZED INTERSECTION



RIGHT IN ONLY





CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3A

Home Depot/Mesa Mall Access (15/16) to 24 1/2 Rd (Figure 3B)

- 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.
- 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 ACP Table for conditions of implementation.

24 1/2 Rd to 25 Rd (Figure 3B-C)

- 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 ACP 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 ACP Table for conditions of implementation.
- 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.







BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING

CROSS ACCESS - PROPOSED



PARCEL

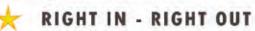
TRAIL

PROPOSED CITY STREET OR PRIVATE CONNECTION PLANNED CITY STREET









CLOSE

SIGNALIZED INTERSECTION



RIGHT IN ONLY



GATED ACCESS POINT

CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3B

25 Rd to 25 1/2 Rd (Figure 3C-E)

- 25 Rd and 25 ½ Rd will remain full movement signalized intersections.
- 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).
- 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 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 ACP Table for conditions of implementation.

25 1/2 Rd to 26 Rd/1st St (Figure 3E-F)

- 25½ Rd and 26 Rd/1st St will remain full movement signalized intersections.
- 2) Conditional ¾ movement intersections are proposed at Access 53, 61, 62 and 64. Based on future land-use plans, either Access 53 or 61 may be a ¾ movement to serve multiple properties on the north, with the other access as a right-in/right-out. Access 61 provides better spacing with 25 ½ Rd. 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 ACP 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.







BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



TRAIL

PARCEL

IVATE CONNECTION

PLANNED CITY STREET

PROPOSED CITY STREET OR

3/4 MOVEMENT



RIGHT IN - RIGHT OUT

SIGNALIZED FULL MOVEMENT

UNSIGNALIZED FULL MOVEMENT



CLOSE

SIGNALIZED INTERSECTION



RIGHT IN ONLY



RIGHT OUT ONLY



GATED ACCESS POINT



CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3C





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL TRAIL

PROPOSED CITY STREET OR PRIVATE CONNECTION

PLANNED CITY STREET

UNSIGNALIZED FULL MOVEMENT



3/4 MOVEMENT



RIGHT IN - RIGHT OUT

SIGNALIZED FULL MOVEMENT



CLOSE

- SIGNALIZED INTERSECTION



RIGHT IN ONLY



RIGHT OUT ONLY



GATED ACCESS POINT

CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

- - CONDITIONAL SAFETY ACCESS POINT

FIGURE 3D





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING

CROSS ACCESS - PROPOSED



PARCEL



TRAIL

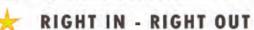
PROPOSED CITY STREET OR PRIVATE CONNECTION PLANNED CITY STREET

ACCESS POINT INFORMATION





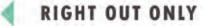






SIGNALIZED INTERSECTION







C CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

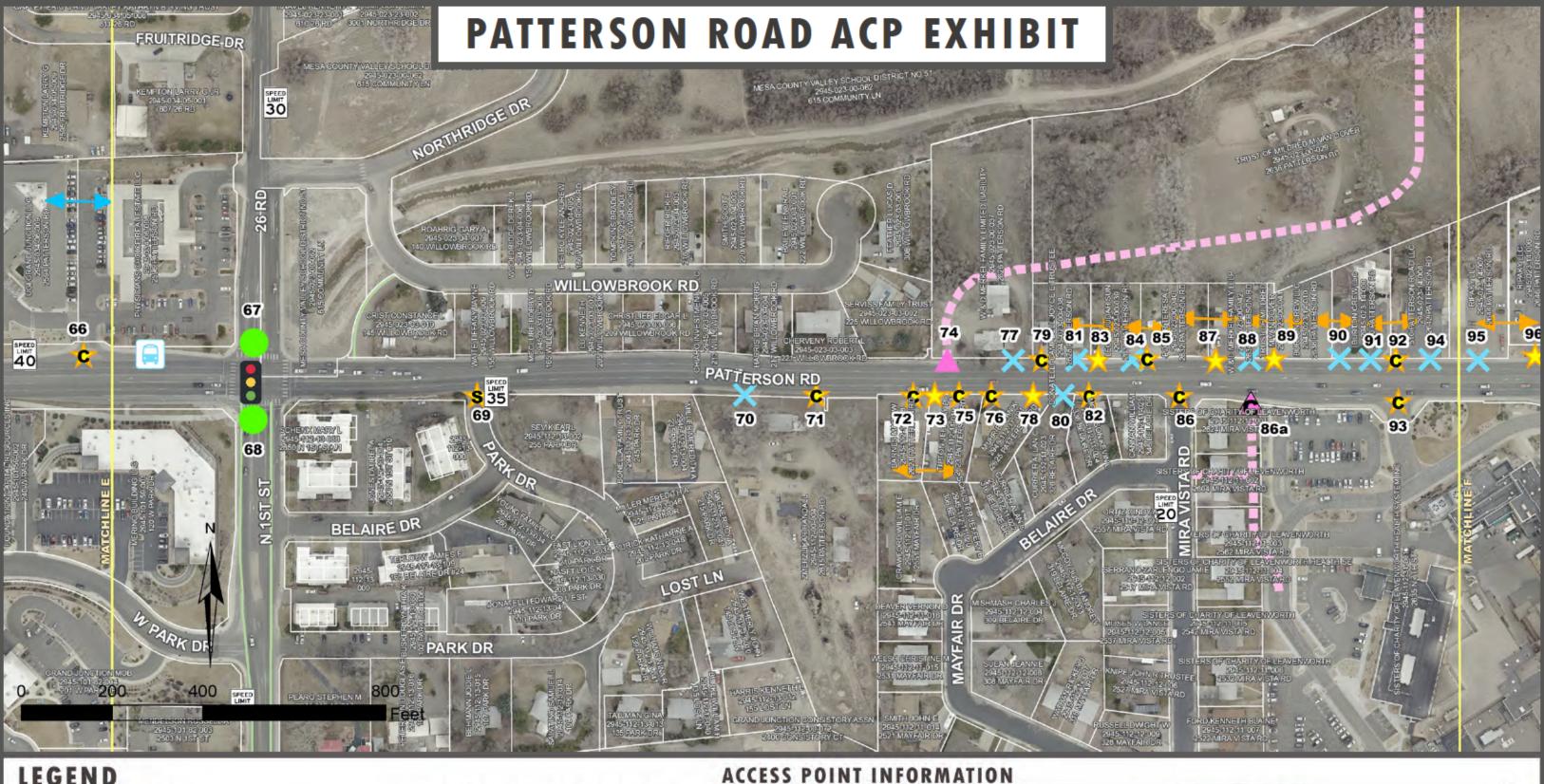
S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3E

26 Rd/1st St to 26 1/2 Rd/7th St (Figure 3F-G)

- 26 Rd/1st St and 26 ½ Rd/7th St will remain full movement signalized intersections.
- 3/4 movement intersections are proposed at Access 74 and 86a. A public road connection between Access 74 to Horizon Place is proposed to support circulation for future redevelopment in the area.
- 3) On the south side of Patterson Rd, only a single ¾ movement can be accommodated. To serve as many properties as possible, Access 86a was proposed as a ¾ movement. Access 86a is located far enough away from 26 ½ Rd/7th St to provide full auxiliary lane lengths and can serve both the St. Mary's Hospital and the Vanderen-Ford Heights subdivision. Connection between Mira Vista Rd and the 86a access road is required. When this connection is available, the Mira Vista Rd intersection with Patterson Rd will be closed. Similarly, Access 93 will close when Access 86a is available and on-site truck circulation to the hospital can be achieved through Access 86a. If Access 86a cannot accommodate trucks, Access 93 will be restricted to right-in only. Coordination between the City, hospital and Vanderen-Ford Heights subdivision will be required to achieve this access configuration.
- 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 ACP 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 ACP Table for conditions of implementation.







BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL

TRAIL

PROPOSED CITY STREET OR IVATE CONNECTION

PLANNED CITY STREET



3/4 MOVEMENT

CLOSE



RIGHT IN - RIGHT OUT

SIGNALIZED FULL MOVEMENT

UNSIGNALIZED FULL MOVEMENT



SIGNALIZED INTERSECTION

- RIGHT IN ONLY
- RIGHT OUT ONLY
- **GATED ACCESS POINT**
- CONDITIONAL ACCESS POINT
 SEE ACCESS TABLE FOR CONDITIONS.
 TYPICALLY CLOSES WITH REDEVELOPMENT.
- CONDITIONAL SAFETY ACCESS POINT

FIGURE 3F

26 1/2 Rd/7th St to 12th St (Figure 3G-H)

- 26 ½ Rd/7th St and 12th St will remain full movement signalized intersections.
- A ¾ movement intersection is proposed at 26 ¾ Rd (Access 106).
- 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 ACP Table for conditions of implementation.
- 4) While Access 117 is a more direct route into the commercial center, it will be closed to allow for an extension of the 12th St eastbound right turn lane at 12th St, if ever needed. Closing Access 116 and just restricting Access 117 to right-in/right-out may be considered with a median project that commences prior to redevelopment of the property.

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

- 1) 12th St and 15th St will remain full movement signalized intersections.
- 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) 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.
- 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.
- 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 ACP Table for conditions of implementation.







BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED PARCEL



TRAIL

PROPOSED CITY STREET OR PRIVATE CONNECTION

PLANNED CITY STREET











SIGNALIZED INTERSECTION







CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3G





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL TRAIL



PROPOSED CITY STREET OR IVATE CONNECTION

PLANNED CITY STREET

UNSIGNALIZED FULL MOVEMENT



3/4 MOVEMENT

CLOSE



RIGHT IN - RIGHT OUT

ACCESS POINT INFORMATION

SIGNALIZED FULL MOVEMENT



SIGNALIZED INTERSECTION



RIGHT IN ONLY



RIGHT OUT ONLY



GATED ACCESS POINT



CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3H

15th St to 27 1/2 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 ACP Table for conditions of implementation.
- 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.





BUS STOP - PULL OFF

CROSS ACCESS - EXISTING

CROSS ACCESS - PROPOSED

PARCEL TRAIL

PLANNED CITY STREET

UNSIGNALIZED FULL MOVEMENT

3/4 MOVEMENT

RIGHT IN - RIGHT OUT

CLOSE

SIGNALIZED INTERSECTION

RIGHT OUT ONLY

GATED ACCESS POINT

CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 31

27 1/2 Rd to 28 1/4 Rd (Figure 3I-K)

- 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.
- If Access 145a is implemented, Access 146 must close and Access 148 must be restricted to right-in/right-out. ¼ 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.
- Access 162 is identified as conditional right-in/right-out and will close upon redevelopment. Refer to the ACP Table for conditions of implementation.
- 6) 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.

28 1/4 Rd to 29 Rd (Figure 3K-L)

- 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 ACP 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 ACP Table for conditions of implementation.
- Belhaven Way should be widened to full public street standards to provide access to the current Church of Christ property to the east.







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







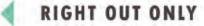




SIGNALIZED INTERSECTION



RIGHT IN ONLY

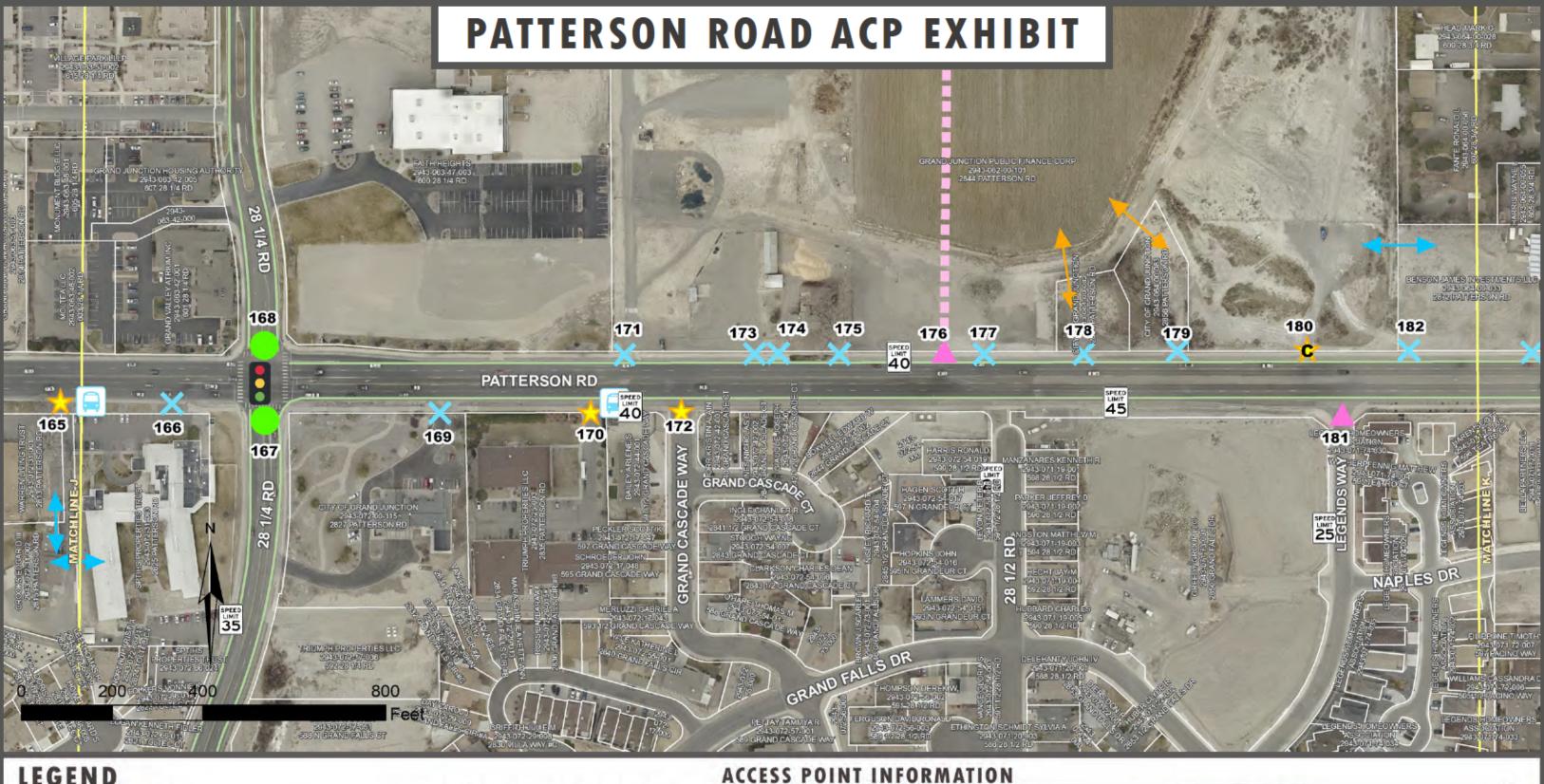




CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3J





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL

TRAIL

PROPOSED CITY STREET OR PRIVATE CONNECTION

PLANNED CITY STREET

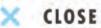
3/4 MOVEMENT



RIGHT IN - RIGHT OUT

SIGNALIZED FULL MOVEMENT

UNSIGNALIZED FULL MOVEMENT



SIGNALIZED INTERSECTION

RIGHT IN ONLY



RIGHT OUT ONLY



GATED ACCESS POINT



CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3K

29 Rd to 29 1/2 Rd (Figure 3L-M)

- 29 Rd and 29 ½ Rd will remain full movement signalized intersections. Access 205 to Safeway, Redwing Ln, 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 ACP 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) 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 ACP Table for conditions of implementation.

29 1/2 Rd to 30 Rd (Figure 3M-O)

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







BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED PARCEL



TRAIL

IVATE CONNECTION

PLANNED CITY STREET







CLOSE

SIGNALIZED INTERSECTION

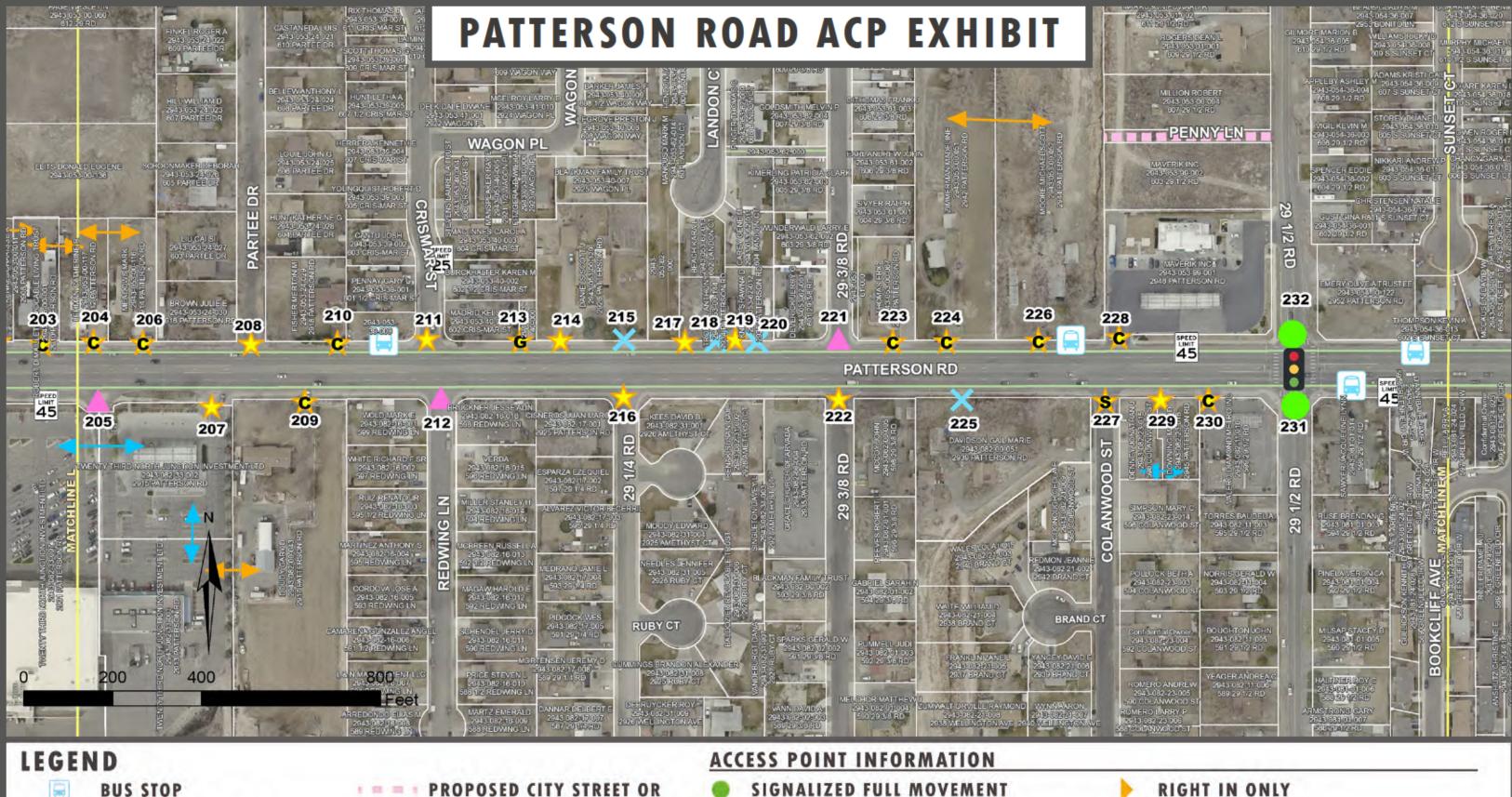




CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3L





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL TRAIL



PROPOSED CITY STREET OR VATE CONNECTION

PLANNED CITY STREET

3/4 MOVEMENT

CLOSE



RIGHT IN - RIGHT OUT

UNSIGNALIZED FULL MOVEMENT



SIGNALIZED INTERSECTION



RIGHT IN ONLY



RIGHT OUT ONLY



GATED ACCESS POINT



CONDITIONAL ACCESS POINT SEE ACCESS TABLE FOR CONDITIONS. TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3M





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL

TRAIL

PROPOSED CITY STREET OR IVATE CONNECTION

PLANNED CITY STREET



3/4 MOVEMENT

CLOSE



RIGHT IN - RIGHT OUT

SIGNALIZED FULL MOVEMENT

UNSIGNALIZED FULL MOVEMENT



SIGNALIZED INTERSECTION



RIGHT IN ONLY



RIGHT OUT ONLY



GATED ACCESS POINT



CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3N

30 Rd to Lodgepole St (Figure 30-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, Gerken Rd, 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 ACP 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 ACP Table for conditions of implementation.
- 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 ACP Table for conditions of implementation.







BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL TRAIL

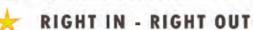
PROPOSED CITY STREET OR PRIVATE CONNECTION

PLANNED CITY STREET











SIGNALIZED INTERSECTION

CLOSE

- RIGHT IN ONLY
- RIGHT OUT ONLY
- **GATED ACCESS POINT**
- CONDITIONAL ACCESS POINT
 SEE ACCESS TABLE FOR CONDITIONS.
 TYPICALLY CLOSES WITH REDEVELOPMENT.
- CONDITIONAL SAFETY ACCESS POINT

FIGURE 30





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL TRAIL



PROPOSED CITY STREET OR PRIVATE CONNECTION



PLANNED CITY STREET

3/4 MOVEMENT



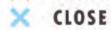
RIGHT IN - RIGHT OUT

ACCESS POINT INFORMATION

SIGNALIZED FULL MOVEMENT

UNSIGNALIZED FULL MOVEMENT

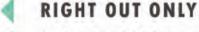


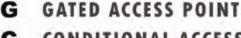


SIGNALIZED INTERSECTION



RIGHT IN ONLY





CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

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 25 % Rd
- 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
- 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.

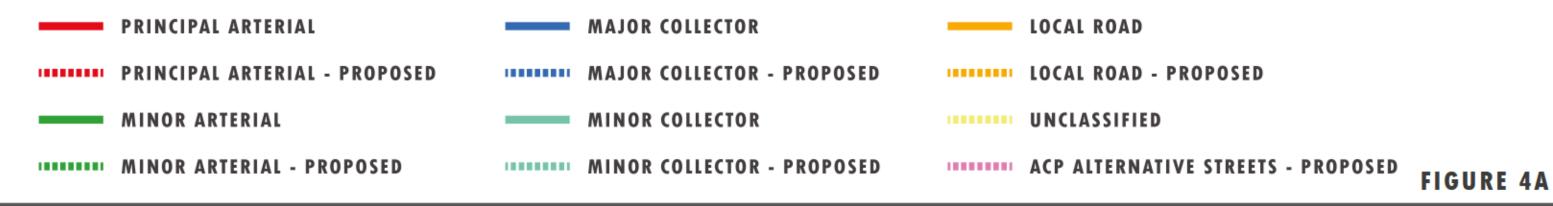
In support of alternate modes, the ACP also considered pedestrian, bicycle and transit access throughout the corridor. Overall, reducing access points reduces potential conflict points for pedestrians, cyclists and buses traveling Patterson Rd. Grand Valley Transit (GVT) provides fixed route transit 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 ACP will not affect existing GVT routes and no new access points conflict with existing GVT stops.

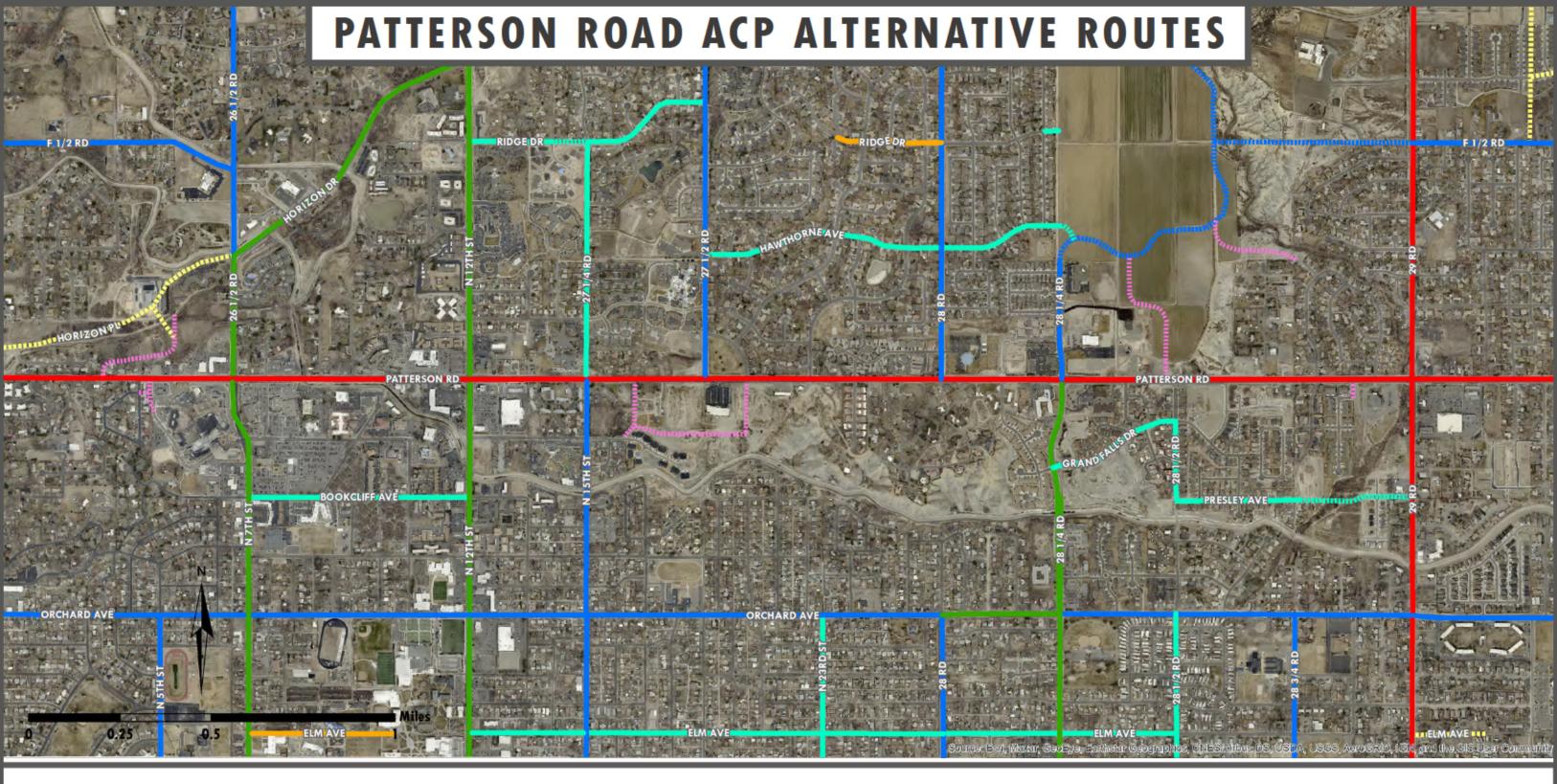
The ACP also supports the accommodation of pedestrian and bicycle crossings at full movement signalized intersections. As intersections are improved and sidewalk is added throughout the corridor, pedestrian crossings should be implemented and upgraded to current ADA standards. Further traffic and safety analysis of future opportunities for mid-block crossings to support pedestrian accessibility and transit access is recommended.





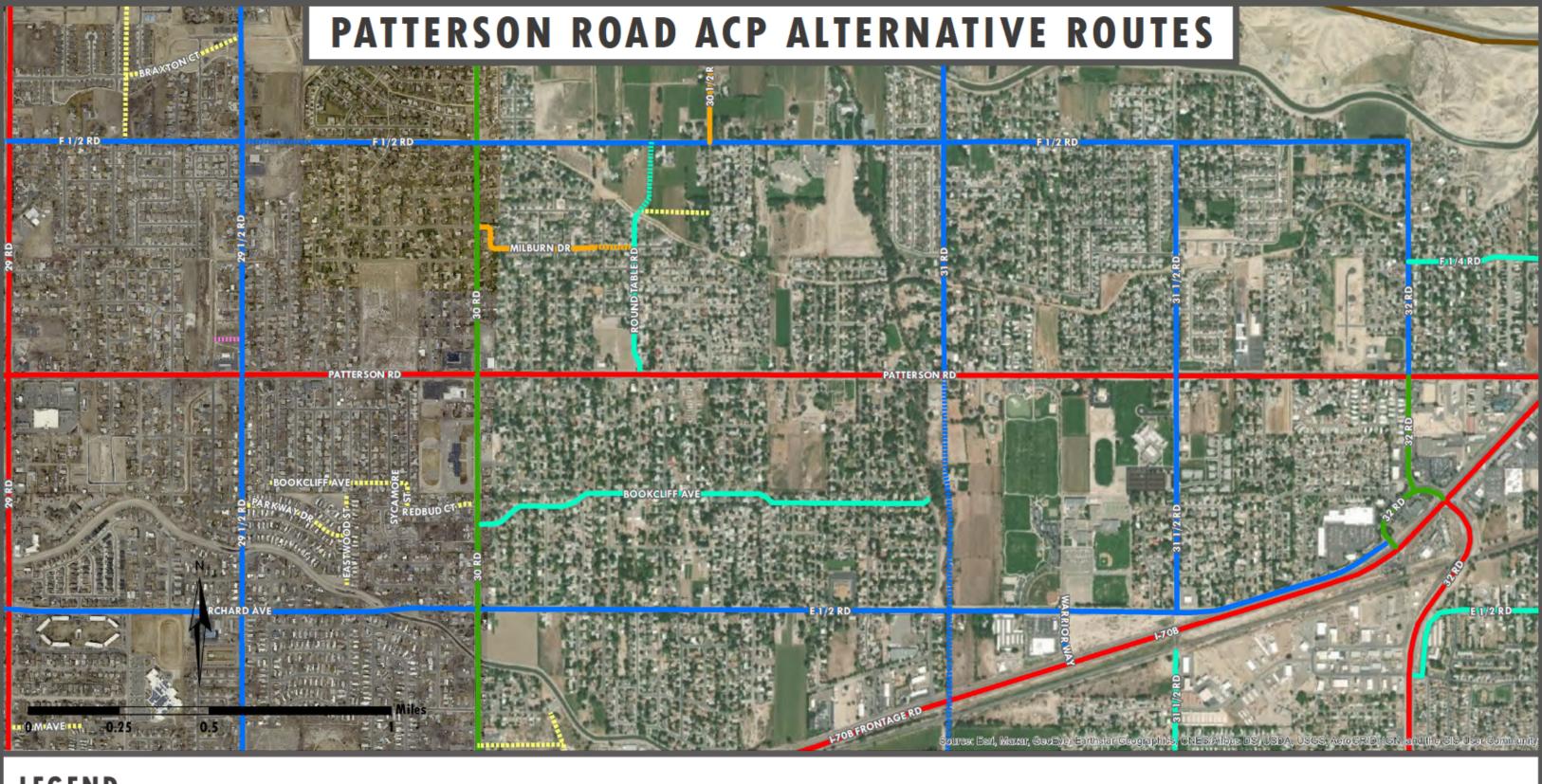












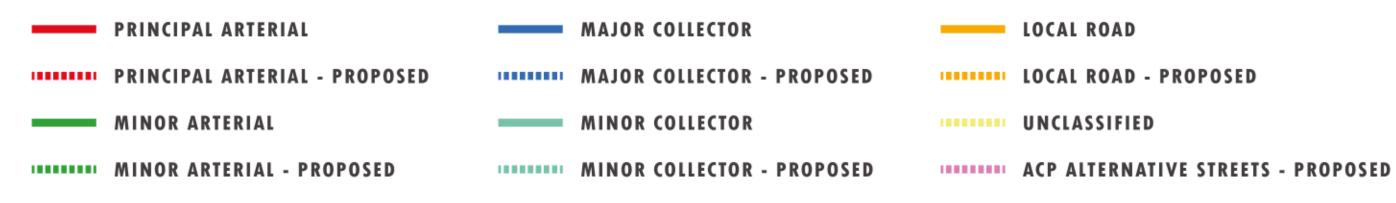


FIGURE 4C

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



8.0 LIST OF ACRONYMS

AASHTO = American Association of State Highway and Transportation Officials

ACP = Access Control 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 Control 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

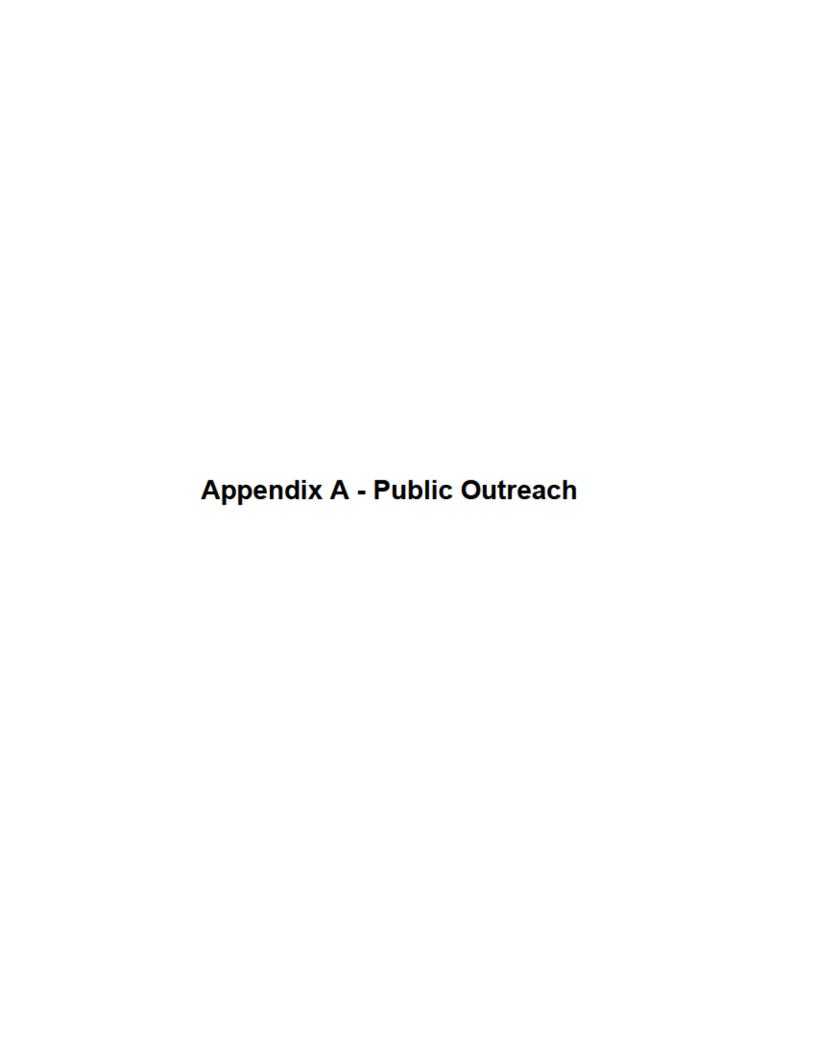
Volume-to-Capacity Ratio (v/c) – The sufficiency of an intersection to accommodate vehicular demand. A v/c over 1.00 means the traffic demand exceeds the capacity.



City of Grand Junction Patterson Road Access Study Appendices

US 6 / US 50 / I-70B to Lodgepole Street January 2021





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:

- Redevelopment that increases traffic
- 2. Planned publicly funded project
- 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@gicity.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:

- La reurbanización que incrementa el trafico
- El proyecto planificado financiado por fondos públicos
- 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@gicity.org



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



Open House 1 October 1, 2020

___ THURSDAY

OCTOBER 1, 2020
JUEVES
1 DE OCTUBRE DEL 2020

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

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





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

PLAN DE CONTROL DE ACCESO DE LA CALLE PATTERSON

LA CIUDAD DE GRAND JUNCTION

UNA EXCHIBION 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 GISPFAKS 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

Grand Junction

STOLFUS & ASSOCIATES, INC. 5690 DTC BLVD. STE. 330W GREENWOOD VILLAGE, CO 80111



PATTERSON ROAD ACCESS CONTROL PLAN

OPEN HOUSE

FOR THE
PATTERSON ROAD

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

GRAND JUNCTION, CO

FOR MORE INFORMATION, CONTACT:

ANDREW AMEND

STOLFUS & ASSOCIATES, INC.

600 28 1/4 RD

(303)221-2330
ANDREW@STOLFUSANDASSOCIATES.COM
FOR ONLINE PRESENTATION, MAPS, AND

FOR ONLINE PRESENTATION, MAPS, AND COMMENTS, PLEASE SEE GJSPEAKS.ORG

SI HABLA ESPAÑOL, FOR FAVOR VISITE GJSPEAKS.ORG O ASISTA A NUESTRA EXHIBICIÓN ABIERTA AL PÚBLICO





PATTERSON ROAD ACCESS CONTROL PLAN COMMENT SHEET - PUBLIC OPEN HOUSE October 1, 2020

Name:	Roger Titmus		R	eprese	nting:	Stinker St	ores		
Addres	ss: 2498 Patterson Road	_City:_	Grand J	unction	Sta	ite: CO	Zip:	81505	
Phone:	208 337 2830	E:	mail: _	rtitmus	<u>@stinker.</u>	.com			
	survey (English only) can also be con Spanish clients, please print this form								
1. Ar	e you a (check all that apply):								
X	Property Owner on Patterson Road	i			Comm	uter thro	ugh cor	ridor	
	Renter/Lessee on Patterson Road				Other				
X	Business Owner on Patterson Road	i							
	f the following issues in the Patterson	n Road c	orridor,	pleas	e mark 1	up to thre	ee that a	re most important	t to
you.	Safatr		0		Diamel	a A aaaaa			
× ×	** 1.90 at 1.4		0		_	e Access ty Impac			
-	Driveway Access		0			Street In		ns	
0			0		Bus Se		iciscono	113	
0 0 7 8 0	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								
0	 I support the Access Control Plan I support the Access Control Plan, but have concerns about access at particular locations. Please note those areas: 							iote	
Ø	I do not support the Access Contro	ol Plan							
5. Do	you have any other comments, quest	ions, or	concern	ıs?					
	e goal is to improve traffic flow on Patterson, re	_			•		_	•	
	ses drivers to stack up at bottleneck points, wa								
	re are several east/west roads in Grand Juncti	_			•	•		_	
	brakes is to take 170, but there are few direct r ic flow. Better north/south connectivity solves				_			rstate will improve	

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	penny wagner g whoa Damail. com
Cary Orouz	Comer Currents	25 + PATTERION /CONST	970 201-2225	gcerone a gma. 1. com
Michael Shafer	Resident	2745 Patterson	970-250-5739	mikegico @gmail.com
Hand ambright	Bookchist Liginors	3026 Patterson	970-250-8378	gjnana Chotmailicon
Matt barling	Cross Orchards Myseum		970 242 0971 X2	-271 mdarling@west comuseum.on
	Cotry toget Count	1.		
Monty Luellen		129 5 130 - and	ernal about single as	ation 623-0759 or UPS Store
•		follow upon	accessodotermin	ation 623-0759 orups store
	i final and a second se	ots SAU adT		Matt Darling f Cross Orchards Historic Site
	pes	Theupsstore, com/1349 sunday clo		arling@westcomuseum.org
	M9 00:3 - MA 0 M9 00:5 - MA 0	and the state of t	of WESTERN	v.museumofwesternco.com
	053	Several Section (CO 81506	3073 F Road	970-242-0971 X 2-221 970-261-7839
		Monty & Therese Luellen, owners	PO Box 20,000 Grand Junction, CO 81502-	5020
			~(

Patterson Road Access Control Plan One-on-One Meeting Sign Up

Name	Representing	Address	Notes
			Called and left voice messages multiple time and reached out via
Penny Wagner	Grand View HOA	28 Road	email, but never received a response.
			Met with owner to discuss his dry cleaning business access to
			Patterson. Agreed to allow RIRO access instead of closing it, as
Gary Crone	Comet	25 Rd & Patterson	proposed in the original plan.
			Contacted resident and he stated there was no need for a
			meeting. He had spoken with other community members and they
Michael Shafer	Resident	2745 Patterson	are not concerned about the ACP at this time.
	5		Met with owner and agreed to revise the ACP so that trucks could
Pam Hambright	Bookchief Liquors	3026 Patterson	continue to circulate through her business.
		0070 5 5 1	Met with representatives and agreed that no modifications to the
Matt Darling	Cross Orchards Museum	3073 F Rd	ACP were needed at the property.
			0
			Contacted owner and he stated there was no need for a meeting,
Mantalandian			but that he would like to be informed of the final access
Monty Luellen			determination for his properties two Patterson access points.
			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
Dr. Bill Merkel	W & D MERKEL FAMILY	2626 Patterson	information about the new owner.
DI. BIII WEIKEI	W & D WERREL I AWIET	2020 Fallerson	Met with representatives and agreed to modify the modify the
Gara Ross, Executive Assistant to	SCL Health St Mary's		ACP to better serve the hospital's needs. We also made small
Michelle Shiao and Dan Prinster	Medicine Center	2686 Patterson	access modifications to their property at 12th Street
Wichelle Offido and Darri Tirister	Wedicine Center	2000 1 attersori	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
Pastor Seth Thomas	Northeast Christian Church	2751 Patterson	will be shown in the Revised ACP.
r dator con monda	Northouse Chinstian Charon	27011 attorson	Contacted the church office and was referred to the head of their
			planning committee. Called a left voice messages, but have not
Bill Wade	CHURCH OF CHRIST OF GRAND JUNCTION	2893 Patterson	received a response.
			The representative initiated contact with us to be kept informed of
			the ACP status, but has not responded to our follow-up meeting
Trent Spendrup	Hope Plaza	2482 Patterson	requests.
		I	

Open House 2 January 6-12, 2021

PATTERSON ROAD ACCESS CONTROL PLAN

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







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 MAS INFORMACION, CONTACTAR A:
DAVID THORNTON, AICP
PRINCIPAL PLANNER
CITY OF GRAND JUNCTION
970-244-1450
DAVIDTH@GJCITY.ORG

Grand Junction

Stolfus

STOLFUS & ASSOCIATES, INC. 5690 DTC BLVD. STE. 330W GREENWOOD VILLAGE, CO 80111

PATTERSON ROAD ACCESS CONTROL PLAN FROM HIGHWAY 6 & 50 TO LODGEPOLE STREET

JUNCTION INVITES YOU TO THE VIRTUAL

THE CITY OF GRAND

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



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



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Main: 303 221 2330 | andrew@stolfusandassociates.com

From: Andrew Amend

To: <u>vickik@netpolarity.com; diqwells@aol.com</u>
Cc: <u>Rick Dorris; David Thornton; Michelle Hansen</u>

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



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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



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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 Business Owner on Patterson Road,

Commuter through corridor Are you a (check all that apply):

Q3 Safety,

Of the following issues in the Patterson Road corridor, Property Impacts please mark up to three that are most important to you.

Q4 Modification of circulation on my property

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

What statement best reflects how you feel about the

Access Control Plan?

Q5 I support the Access Control Plan, but have concerns about access at particular locations.

Patterson Road Access Control Plan Comment Sheet - Virtual Open House January 6-12, 2021

SurveyMonkey

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 Property Owner on Patterson Road,

Are you a (check all that apply): Business Owner on Patterson Road

Q3 Safety,

Of the following issues in the Patterson Road corridor, Mobility through the corridor,

please mark up to three that are most important to you.

Driveway Access

Q4 Restricting the turning movements to/from my property,

Other:

If you own property, a business, or live along Patterson reducing the number of access points to my property

Road, what are your concerns regarding the Access
Control Plan?

Q5 I do not support the Access Control Plan.

What statement best reflects how you feel about 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

2745 Patterson Address

City **Grand Junction**

State CO

Zip 81506

Phone Number 9702505739

Email mikegjco@gmail.com

Q2 Property Owner on Patterson Road

Are you a (check all that apply):

Q3 Safety,

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you. **Driveway Access**

also reducing and restricting (4&5)

Q4 Relocation of access point on my property,

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access

Control Plan?

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

Patterson Road Access Control Plan Comment Sheet - Virtual Open House January 6-12, 2021

SurveyMonkey

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 Business Owner on Patterson Road

Are you a (check all that apply):

Q3 Mobility through the corridor,

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Driveway Access

Q4 Accessing my property/business from a roadway other than Patterson Road If you own property, a business, or live along Patterson

Road, what are your concerns regarding the Access Other: Control Plan? also modification and restriction (3&5)

Q5 I support the Access Control Plan, but have concerns about access at particular locations. What statement best reflects how you feel about 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::

Patterson W of 2Y road

Patterson Road Access Control Plan Comment Sheet - Virtual Open House January 6-12, 2021

SurveyMonkey

Q6

Do you have any other comments, questions, or concerns?

none

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 Property Owner on Patterson Road

Are you a (check all that apply):

Q3 Driveway Access,

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

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:

Property Impacts

also reducing and restricting (4&5) AND closing access to our garage - de-valuing our property

Q5

Q4

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

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

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 Property Owner on Patterson Road,

Are you a (check all that apply): Business Owner on Patterson Road

Q3 Safety,

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Mobility through the corridor, Local Street Intersections

Q4 Reducing the number of access points to my property

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

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

COMPLETE

Collector: Patterson Road...al Open House (Web Link) Monday, October 05, 2020 1:35:45 PM Started: Monday, October 05, 2020 1:42:36 PM Last Modified:

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

Control Plan?

Renter/Lessee on Patterson Road, Are you a (check all that apply):

Commuter through corridor

Q3

Of the following issues in the Patterson Road corridor, Driveway Access, please mark up to three that are most important to you.

Property Impacts

Q4 Restricting the turning movements to/from my property, Other:

If you own property, a business, or live along Patterson and relocation - future access Road, what are your concerns regarding the Access

Q5 What statement best reflects how you feel about the

I support the Access Control Plan, but have concerns about access at particular locations.

Access Control Plan? If you chose "I support the Access Control Plan, but have concerns about access at particular locations.", please note those areas::

Safety,

reduce speed to encourage alternate routes

Property Owner on Patterson Road,

Patterson Road Access Control Plan Comment Sheet - Virtual Open House January 6-12, 2021

SurveyMonkey

Q6

Do you have any other comments, questions, or concerns?

none

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 Business Owner on Patterson Road

Are you a (check all that apply):

Q3 Safety,

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Mobility through the corridor,

Local Street Intersections

Q4 Modification of circulation on my property,
Other:

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

also restriction and relocation

Q5 I support the Access Control Plan.,

What statement best reflects how you feel about 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.

Patterson Road Access Control Plan Comment Sheet - Virtual Open House January 6-12, 2021

SurveyMonkey

Q6

Do you have any other comments, questions, or concerns?

none

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 Property Owner on Patterson Road

Are you a (check all that apply):

Q3 Safety,

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Mobility through the corridor,

Local Street Intersections

Q4 Accessing my property/business from a roadway other than Patterson Road

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Other: and reducing (#4)

Q5 I support the Access Control Plan.

What statement best reflects how you feel about the Access Control Plan?

Patterson Road Access Control Plan Comment Sheet - Virtual Open House January 6-12, 2021

SurveyMonkey

Q6

Do you have any other comments, questions, or concerns?

Excellent and knowledgeable staff on hand

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 Commuter through corridor,

Are you a (check all that apply):

Other (please specify):

Grandview subdivision

Q3 Safety

Of the following issues in the Patterson Road corridor,

Q4

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

please mark up to three that are most important to you.

Accessing my property/business from a roadway other than Patterson Road

Other:

Hawthorne Ave to 28 1/4 road - I support that

Q5 I support the Access Control Plan.

What statement best reflects how you feel about the Access Control Plan?

19/56

Patterson Road Access Control Plan Comment Sheet - Virtual Open House January 6-12, 2021 SurveyMonkey

Q6

Do you have any other comments, questions, or concerns?

Hawthorne needs to go through to 28 1/4 road

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 Property Owner on Patterson Road,

Are you a (check all that apply): Other (please specify):

property owner off of patterson rd

Q3 Safety

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

If you own property, a business, or live along Patterson

Control Plan?

Q4

Sharing access with my neighbor,

Other:

keeping it from property

Q5 I support the Access Control Plan.

What statement best reflects how you feel about the Access Control Plan?

Road, what are your concerns regarding the Access

Do you have any other comments, questions, or concerns?

Can't be done soon enough Thank you for your plan!

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 Commuter through corridor

Are you a (check all that apply):

Q3 Safety,

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Pedestrian Access,

Bicycle Access

Q4 Sharing access with my neighbor,
Other:

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Q5 I support the Access Control Plan.

What statement best reflects how you feel about the Access Control Plan?

Do you have any other comments, questions, or concerns?

Can't be done soon enough! Thank you!

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 Renter/Lessee on Patterson Road,

Are you a (check all that apply): Other (please specify):

Resident From 30 to Grand Valley Drive

Q3 Safety

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Q4 Restricting the turning movements to/from my property

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

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

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 Commuter through corridor

Are you a (check all that apply):

Q3 Safety

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Q4 Restricting the turning movements to/from my property

If you own property, a business, or live along Patterson Road, what are your concerns regarding 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

Q5

What statement best reflects how you feel about the Access Control Plan? Patterson Road Access Control Plan Comment Sheet - Virtual Open House January 6-12, 2021

SurveyMonkey

Q6

Do you have any other comments, questions, or concerns?

none

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 Iorena@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.

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 34 access occurs and attempt to damage the least number of businesses with this decision?

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 Property Owner on Patterson Road,

Are you a (check all that apply): Business Owner on Patterson Road

Q3 Safety,

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Property Impacts

Q4 Modification of circulation on my property,

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access

Other:
also reducing and restricting (4&5)

Control Plan?

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

Patterson Road Access Control Plan Comment Sheet - Virtual Open House January 6-12, 2021

SurveyMonkey

Q6

Do you have any other comments, questions, or concerns?

not at this time

COMPLETE

Collector: Patterson Road...al Open House (Web Link) Thursday, October 15, 2020 8:16:29 AM Started: 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 Property Owner on Patterson Road,

Renter/Lessee on Patterson Road, Are you a (check all that apply):

Business Owner on Patterson Road,

Commuter through corridor

Q3 Safety,

please mark up to three that are most important to you.

Of the following issues in the Patterson Road corridor, Mobility through the corridor,

Driveway Access

Q4 Restricting the turning movements to/from my property, Other:

If you own property, a business, or live along Patterson No access other than Patterson, neighbor not willing to do Road, what are your concerns regarding the Access pass through, and if he was it would cause speeding Control Plan?

problems in parking lot. So don't really blame him.

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.

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 Iynn@gjangelos.com

Q2 Property Owner on Patterson Road,

Are you a (check all that apply): Business Owner on Patterson Road,

Commuter through corridor

Q3 Mobility through the corridor,

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 Restricting the turning movements to/from my property

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access

Control Plan?

Q5 I do not support the Access Control Plan.

What statement best reflects how you feel about the Access Control Plan?

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.

COMPLETE

Collector: Patterson Road...al Open House (Web Link) Started: Tuesday, January 05, 2021 4:45:16 PM Tuesday, January 05, 2021 4:49:23 PM Last Modified:

Time Spent: 00:04:07 IP Address: 98.234.51.223

Page 1

Q1

Please provide your contact information.

Name Haixia Zhang

2478 Patterson Rd Address

City GJ State CO Zip 81505

Phone Number 4156376343

Email hzhang@netpolarity.com

Q2 Renter/Lessee on Patterson Road,

Business Owner on Patterson Road, Are you a (check all that apply):

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 Mobility through the corridor,

Of the following issues in the Patterson Road corridor, Driveway Access, please mark up to three that are most important to you.

Property Impacts

Q4 Relocation of access point on my property

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

Patterson Road Access Control Plan Comment Sheet - Virtual Open House January 6-12, 2021

SurveyMonkey

Q5

I do not support the Access Control Plan.

What statement best reflects how you feel about 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

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

Do you have any other comments, questions, or concerns?

getting to my home while traveling east for 12th street

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 Property Owner on Patterson Road,

Are you a (check all that apply): Business Owner on Patterson Road

Q3 Safety,

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Mobility through the corridor, Local Street Intersections

Q4 Restricting the turning movements to/from my property

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

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

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 Commuter through corridor,

Other (please specify): Are you a (check all that apply):

Frequentl bicycle rider in the neighborhood

Q3 Safety,

Bicycle Access Of the following issues in the Patterson Road corridor,

please mark up to three that are most important to you.

Q4 Relocation of access point on my property,

If you own property, a business, or live along Patterson

Road, what are your concerns regarding the Access Control Plan?

What statement best reflects how you feel about the

Access Control Plan?

Q5

I support the Access Control Plan.

43 / 56

to be accepted.

Not a property owner but I had to check a box for the survey

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 Commuter through corridor,

Other (please specify): Are you a (check all that apply):

Board member museums of Western Colorado (Cross

Orchards)

Q3 Safety,

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you. Mobility through the corridor,

Pedestrian Access,

Bicycle Access,

Property Impacts,

Local Street Intersections,

Bus Service

Q4 Relocation of access point on my property

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access

Control Plan?

Patterson Road Access Control Plan Comment Sheet - Virtual Open House January 6-12, 2021

SurveyMonkey

Q5

I support the Access Control Plan.

What statement best reflects how you feel about 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 Commuter through corridor,

Are you a (check all that apply):

Other (please specify):

Project Engineer

Q3 Safety,

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Q4 Accessing my property/business from a roadway other than Patterson Road

Local Street Intersections

Road, what are your concerns regarding the Access
Control Plan?

Other:
making sure SurveyMonkey works

Q5 I support the Access Control Plan.

What statement best reflects how you feel about 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

Zip

Control Plan?

Please provide your contact information.

Name Roger Titmus

Address 3184 Elder St

City Boise State Idaho

Phone Number 2083750942

Email rtitmus@stinker.com

Q2 Property Owner on Patterson Road,

83705

Are you a (check all that apply): Business Owner on Patterson Road

Q3 Driveway Access,

Of the following issues in the Patterson Road corridor, Property Impacts please mark up to three that are most important to you.

Q4 Other:

If you own property, a business, or live along Patterson
Road, what are your concerns regarding the Access

All of the above

Q5 I do not support the Access Control Plan.

What statement best reflects how you feel about the Access Control Plan?

Patterson Road Access Control Plan Comment Sheet - Virtual Open House January 6-12, 2021 SurveyMonkey

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 Other (please specify):

Are you a (check all that apply): Springside Ct is very close to Patterson Rd. A stop light is

needed badly at 28 Rd and Patterson.

Q3 Safety,

Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.

Mobility through the corridor, Local Street Intersections

Q4 Respondent skipped this question

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?

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 Monday, January 11, 2021 8:59:10 PM Last Modified:

Time Spent: 00:05:51 IP Address: 98.127.108.244

Page 1

Q1

Please provide your contact information.

Nicholas A Sechrist Name

2530 Falls View Cir Address

City **Grand Junction**

State CO

Zip 81505

Phone Number 9702706485

ns2chiro@msn.com Email

Q2 **Business Owner on Patterson Road**

Are you a (check all that apply):

Q3 Mobility through the corridor,

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 Restricting the turning movements to/from my property

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access

Control Plan?

Q5 I do not support the Access Control Plan.

What statement best reflects how you feel about 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.

Nathan Williams Name

Address 1915 Monument Canyon Drive

City **Grand Junction**

State CO

81507 Zip

Phone Number 9702703733

Email nathan.w.williams1@gmail.com

Q2 Property Owner on Patterson Road,

Are you a (check all that apply): Renter/Lessee on Patterson Road,

Business Owner on Patterson Road,

Commuter through corridor

Q3 Mobility through the corridor,

Of the following issues in the Patterson Road corridor, Property Impacts, please mark up to three that are most important to you.

Local Street Intersections

Q4 Reducing the number of access points to my property

If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access

Control Plan?

Q5 I do not support the Access Control Plan.

What statement best reflects how you feel about the Access Control Plan?

Q6

Do you have any other comments, questions, or concerns?

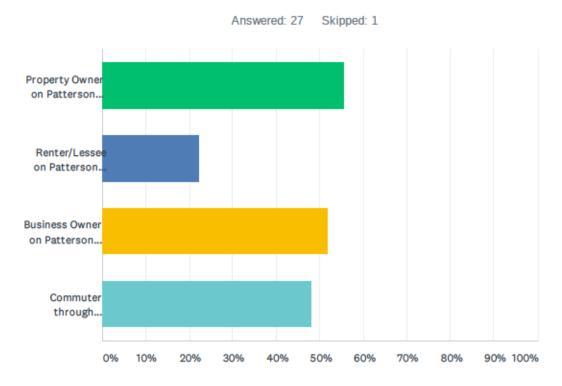
The access plan as written will have severe deleterious impacts to my business and the several businesses in the Foresight Park. We need to have same access we have now.

Q1 Please provide your contact information.

Answered: 28 Skipped: 0

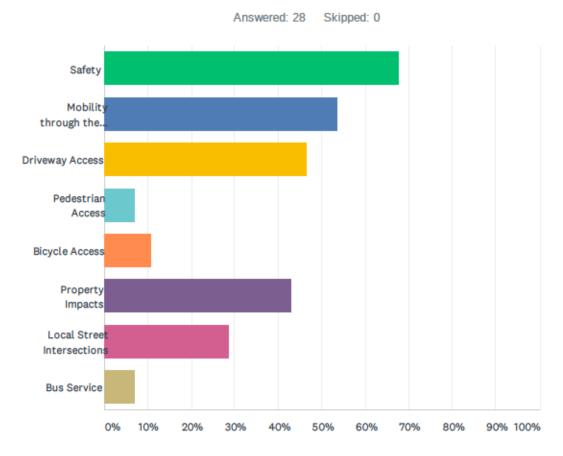
ANSWER CHOICES	RESPONSES	
Name	100.00%	28
Address	100.00%	28
City	100.00%	28
State	100.00%	28
Zip	100.00%	28
Phone Number	85.71%	24
Email	82.14%	23

Q2 Are you a (check all that apply):



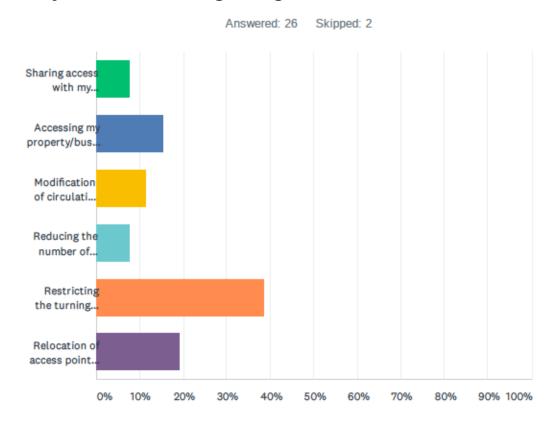
ANSWER CHOICES	RESPONSES	
Property Owner on Patterson Road	55.56%	15
Renter/Lessee on Patterson Road	22.22%	6
Business Owner on Patterson Road	51.85%	14
Commuter through corridor	48.15%	13
Total Respondents: 27		

Q3 Of the following issues in the Patterson Road corridor, please mark up to three that are most important to you.



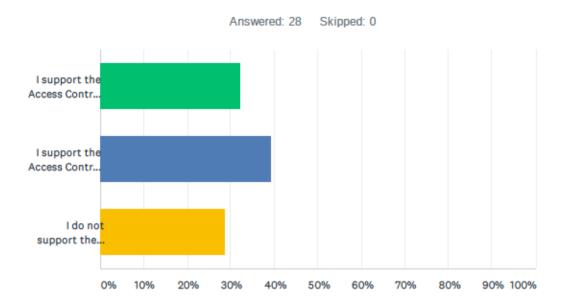
ANSWER CHOICES	RESPONSES	
Safety	67.86%	19
Mobility through the corridor	53.57%	15
Driveway Access	46.43%	13
Pedestrian Access	7.14%	2
Bicycle Access	10.71%	3
Property Impacts	42.86%	12
Local Street Intersections	28.57%	8
Bus Service	7.14%	2
Total Respondents: 28		

Q4 If you own property, a business, or live along Patterson Road, what are your concerns regarding the Access Control Plan?



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

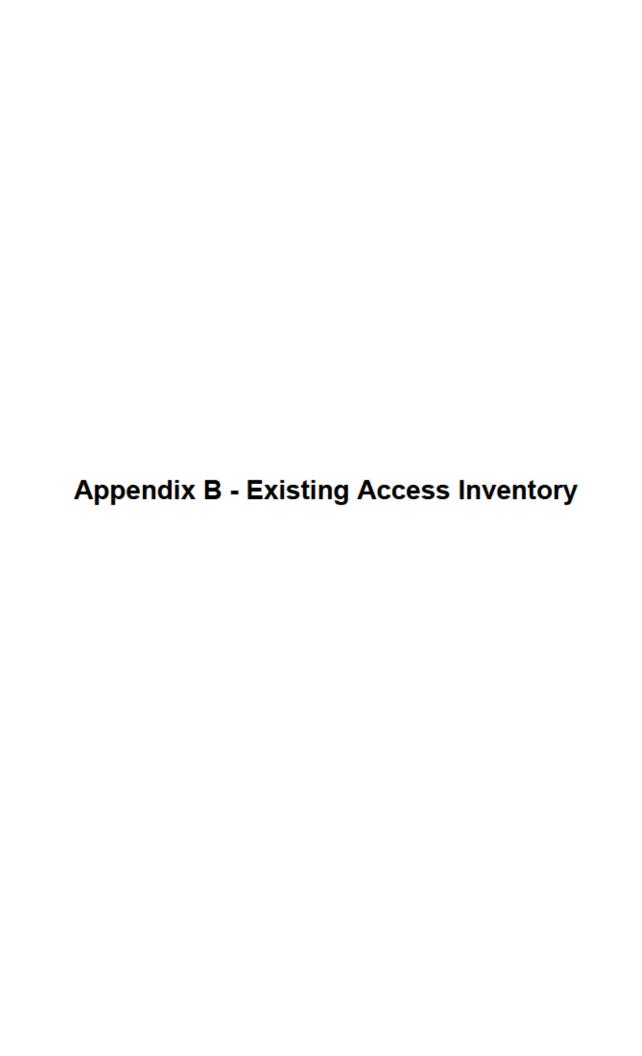
Q5 What statement best reflects how you feel about the Access Control Plan?



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

Q6 Do you have any other comments, questions, or concerns?

Answered: 27 Skipped: 1



- * 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.
- 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.
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Access ID No.	Mile Post	Side	Description	Туре	Surface Material	Gate* (Y/N)	Existing Configuration
1	0.060	LT	2384 Patterson Rd	ВА	Concrete	Υ	Unsig. Full Movement
2	0.133	RT	2381, 2385, 2387 Patterson Rd	ВА	Asphalt	N	Unsig. Full Movement
3	0.149	LT	2384 Patterson Rd	ВА	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	ВА	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	ВА	Asphalt	N	Sig. Full Movement
16	0.600	RT	2424, 2428, 2430, 2436 Patterson Rd North, and Mesa Mall South	ВА	Asphalt	N	Sig. Full Movement
17	0.675	LT	2430, 2436 Patterson Rd	ВА	Asphalt	N	Unsig. 3/4 Movement
18	0.734	LT	2436, 3438, 2440 Patterson Rd and 625 24 1/2 Rd	ВА	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	ВА	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	ВА	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

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- 1. Oriented from direction of reference point (W-E)
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- 3. Full movement intersections shall accommodate U-turns for design vehicle
- 4. Unless otherwise specified, conditions listed refer to proposed configuration.
- 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.
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Access ID No.	Mile Post	Side	Description	Туре	Surface Material	Gate* (Y/N)	Existing Configuration
25	1.071	LT	2460, 2464 Patterson Rd	ВА	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	ВА	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

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- 4. Unless otherwise specified, conditions listed refer to proposed configuration.
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Access ID No.	Mile Post	Side	Description	Туре	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

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Access ID No.	Mile Post	Side	Description	Туре	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 Unsig. Full
85	2.785	LT	2632 Patterson Rd	R	Concrete	N	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

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94	2.878	LT	2642 Patterson Rd	ВА	Asphalt	N	Right In-Left In
95	2.894	LT	2644 Patterson Rd	ВА	Asphalt	N	Unsig. Full Movement
96	2.910	LT	2646 Patterson Rd	ВА	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	ВА	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	ВА	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

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Access ID No.	Mile Post	Side	Description	Туре	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 Right In-Right
125	3.619	LT	2710 Patterson Rd	BA	Concrete	N	Out Right In-Right
126	3.639	LT	2714 Patterson Rd	R	Concrete/Gravel	N	Out Right In-Right
127	3.643	LT	2718 Patterson Rd	R	Concrete	N	Out Unsig. Full
128	3.659	LT	2718 Patterson Rd	R	Asphalt	N	Movement Unsig. Full
129	3.664	RT	2721 Patterson Rd	R	Asphalt	N 	Movement Unsig. Full
130	3.744	RT RT	2721 Patterson Rd	R PRS	Asphalt	N	Movement Sig. Full
131	3.773	LT	N 15th St N 15th St	PRS	Asphalt Asphalt		Movement Sig. Full
133	3.805	LT	2726 Patterson Rd	R	Concrete/Gravel	N	Movement Unsig. Full
134	3.811	LT	2728 Patterson Rd	R	Gravel	N	Movement 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

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Access ID No.	Mile Post	Side	Description	Туре	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

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Access ID No.	Mile Post	Side	Description	Туре	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

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Access ID No.	Mile Post	Side	Description	Туре	Surface Material	Gate* (Y/N)	Existing Configuration
186	5.277	LT	604 28 3/4 Rd	ВА	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	ВА	Concrete/Gravel	N	Unsig. Full Movement
198	5.527	RT	2893 Patterson Rd	ВА	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	РО	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	ВА	Asphalt	N	Right In-Right Out

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Access ID No.	Mile Post	Side	Description	Туре	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	Υ	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	Υ	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	Υ	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

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Access ID No.	Mile Post	Side	Description	Туре	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 Unsig. Full
244	6.497	LT	Hudson Bay Dr	PRU	Asphalt		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
2 53	6.776	LT	Starlight Dr	PRU	Asphalt		Unsig. Full Movement

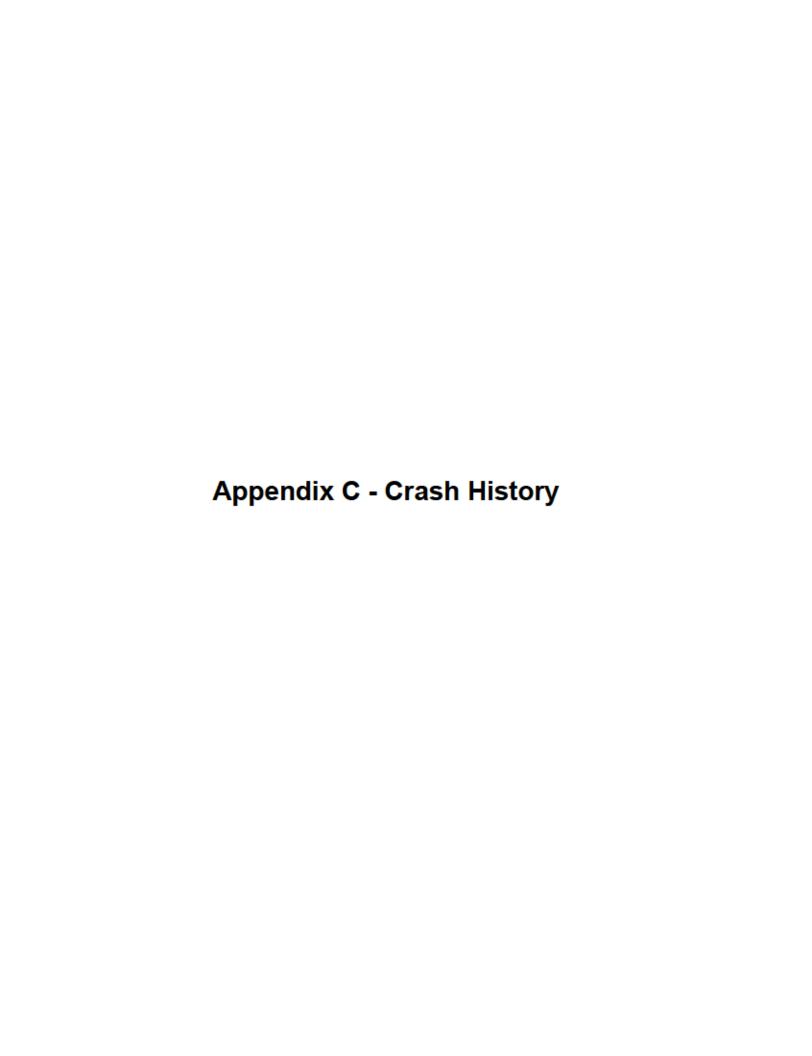
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254	6.831	LT	Serenade St	PRU	Asphalt		Unsig. Full Movement
255	6.831	RT	Serenade St	PRU	Asphalt		Unsig. Full Movement
256	6.863	RT	3027 Patterson Rd	R	Concrete/Gravel	N	Unsig. Full Movement
257	6.863	LT	3026 Patterson Rd	BA	Asphalt	N	Unsig. Full Movement
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

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Access ID No.	Mile Post	Side	Description	Туре	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	ВА	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	ВА	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



*	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Acoldent Type	Dir	Vehicle 1 Movement	Vehlole 2 Movement
1 2	PATTERSON RD & NORTH GATE DR PATTERSON RD & 1ST ST	1/8/2014	11:35:00 AM 10:01:00 AM	PDO	0		At Intersection At Intersection	Front to Rear Front to Rear	8 E	Backing Going Straight	Stop in Traff Stop in Traff
3	PATTERSON RD & 7TH ST	1/7/2014	10:23:00 AM	PDO	0		At Intersection	Front to Near Front to Side	N	Left Turn	Going Straight
4 5	PATTERSON RD & 12TH ST 25 RD & PATTERSON RD	1/8/2014	10:19:00 AM 12:30:00 PM	PDO	50	South	At intersection Non-int	Front to Side Front to Rear	N N	Right Turn Going Streight	Going Straight Stop in Traff
6	24 1/2 RD & PATTERSON RD	1/10/2014	2:48:00 PM	PDO	30	South	Intersection Related	Front to Rear	N	Going Straight	Stop in Traff
7	18T ST & PATTERSON RD PATTERSON RD & 29 RD	1/17/2014	8:31:00 AM 12:42:00 PM	PDO	25	North	Non-Int	Front to Rear	8	Going Streight	Stop in Traff
8	PATTERSON RD & 29 RD PATTERSON RD & 24 RD	1/19/2014		PDO	0		At Intersection Intersection Related	Front to Side	W E	Left Turn Going Streight	Going Straight Stop in Traff
10	24 1/2 RD & PATTERSON RD	1/24/2014		PDO	62	South	Non-int	Same Dir Side Side	8	Going Straight	Going Straight
11	W. INDIAN CREEK DR & PATTERSON RD PATTERSON RD & 12TH ST	1/24/2014	3:17:00 PM	PDO	50	West	Non-int At Intersection	Front to Rear Front to Front	E	Going Straight Left Turn	Stop in Traff Going Straight
13	PATTERSON RD & 25 RD		12:14:00 PM	PDO	0		At Intersection	Front to Front	w	Left Turn	Going Straight
14	PATTERSON RD & MIRA VISTA RD 12TH ST & PATTERSON RD	1/30/2014	6:21:00 PM 1:04:00 PM	PDO	200 100	West South	Non-Int Non-Int	Front to Rear	E N	Going Straight Going Straight	Slowing Stop in Treff
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 PATTERSON RD & 27 1/2 RD	2/3/2014	5:30:00 PM 6:30:00 AM	PDO	0		At Intersection At Intersection	Front to Side	W	Right Turn Going Streight	Going Straight Left Turn
19	PATTERSON RD & 29 RD	2/4/2014	7:30:00 AM	PDO	0		Intersection Related	Front to Rear	8	Slowing	Stop in Traff
20	PATTERSON RD & PARTEE DR PATTERSON RD & 24 1/2 RD	2/8/2014	10:25:00 AM 11:49:00 AM	PDO	30	West	Non-Int	Same Dir Side Side Front to Side	w	Changing Lanes	Going Streight
22	PATTERSON RD & 30 RD	2/8/2014	6:47:00 PM	PDO	350	West	At Intersection Drive Acc Relat	Front to Side	E	Left Turn	Going Straight Going Straight
23	PATTERSON RD & 8TH CT	2/10/2014	3:34:00 PM	PDO	Ö		Non-int	Front to Rear	E	Going Straight	Stop in Traff
24 25	PATTERSON RD & SERANADE ST PATTERSON RD & GREENFIELD CIR EAST	2/13/2014		PDO	50	West	Drive Acc Relat At Intersection	Opp Dir Side Side Light/Util Pole	_ 8 E	Left Turn Right Turn	Going Straight 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 28	25 RD & PATTERSON RD PATTERSON RD & 12TH ST	2/19/2014 2/22/2014	3:31:00 PM 3:20:00 PM	PDO	150 200	North West	Drive Acc Relat	Front to Side Front to Side	N N	Left Turn Right Turn	Going Straight Going Straight
29	24 1/2 RD & PATTERSON RD		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		PDO	25	West	Intersection Related	Front to Reer	E	Changing Lanes	Stop in Traff
31	PATTERSON RD & 7TH ST 25 RD & PATTERSON RD	2/28/2014 3/3/2014	1:58:00 PM 2:08:00 PM	PDO	100	West North	Non-Int Drive Acc Relat	Front to Rear Front to Side	W	Going Straight Left Turn	Going Straight Going Straight
33	PATTERSON RD & 24 1/2 RD	3/4/2014	11:23:00 AM	PDO	0		At Intersection	Same Dir Side Side	Ë	Right Turn	Stop in Traff
34 35	7TH ST & PATTERSON RD PATTERSON RD & 27 1/2 RD	3/5/2014	1:57:00 PM 7:50:00 PM	PDO	417 1320	North East	Drive Acc Relat Non-int	Overturning Same Dir Side Side	8 E	Going Streight Changing Lanes	Left Turn Going Streight
38	PATTERSON RD & 27 1/2 RD	3/8/2014	3:24:00 PM	PDO	100	East	Non-Int Non-Int	Front to Rear	W	Going Straight	Stop in Traff
37	1708 & PATTERSON RD	3/9/2014	3:15:00 PM	NJ	1298	West	Non-Int	Front to Rear	w	Going Straight	Going Straight
38	PATTERSON RD & 7TH ST PATTERSON RD & 1ST ST		10:00:00 AM 12:48:00 PM	PDO	20 300	East	Intersection Related Non-int	Front to Rear Front to Rear	w	Going Straight Going Straight	Slowing Stop in Treff
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 42	PATTERSON RD & 7TH ST PATTERSON RD & 7TH ST		11:31:00 AM 2:01:00 PM	PDO	0		Intersection Related At Intersection	Front to Rear Front to Side	E	Going Streight Going Streight	Stop in Treff Left Turn
43	24 RD & PATTERSON RD	3/18/2014		PDO	80	South	At Intersection Non-Int	Front to Side	- W	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 Streight	Stop in Treff
45 48	PATTERSON RD & 12TH ST PATTERSON RD & 7TH ST	3/20/2014	4:42:00 PM 7:36:00 AM	PDO	778	West	Non-int At Intersection	Front to Rear Front to Side	E	Going Streight Going Streight	Stop in Traff Going Straight
47	PATTERSON RD & BEECHWOOD ST	3/24/2014		PDO	0		At Intersection	Front to Side	8	Right Turn	Going Streight
48	PATTERSON RD & 26 1/4 RD PATTERSON RD & 1/2TH ST	3/24/2014	4:35:00 PM 11:54:00 AM	PDO	0		Non-Int	Front to Reer	w	Going Streight	Slowing
50	PATTERSON RD & 12TH ST	3/26/2014		PDO	0		At Intersection At Intersection	Front to Rear Front to Rear	- W	Going Straight Left Turn	Stop in Treff
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 53	24 1/2 RD & PATTERSON RD PATTERSON RD & 27 1/2 RD	3/30/2014	11:00:00 AM 8:00:00 AM	PDO	500	South	Drive Acc Relat At Intersection	Front to Side Front to Front	E W	Left Turn Going Streight	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 3:39:00 PM	PDO	0	Own	At Intersection	Front to Side	w	Left Turn	Going Streight
56 57	24 1/2 RD & PATTERSON RD PATTERSON RD & 12TH ST	4/3/2014	1:47:00 PM	PDO	500 100	South East	Drive Acc Relat Non-Int	Front to Side Front to Rear	w	Left Turn Going Streight	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 60	24 1/2 RD & PATTERSON RD PATTERSON RD & HOME DEPOT	4/4/2014 4/5/2014	12:09:00 PM 11:58:00 AM	PDO	500	South	Drive Acc Relat	Front to Side	E W	Left Turn Going Streight	Going Straight Stop in Traff
61	PATTERSON RD & 29 1/2 RD	4/8/2014	2:09:00 PM	PDO	100	East	Intersection Related	Front to Rear	w	Slowing	Stop in Traff
62	PATTERSON RD & 24 RD PATTERSON RD & 29 RD	4/8/2014	2:57:00 PM	PDO	0		At Intersection Intersection Related	Front to Side Front to Front	N E	Left Turn Right Turn	Going Straight Left Turn
64	PATTERSON RD & 27 1/2 RD		7:40:00 AM	PDO	0		At Intersection	Front to Side	w	Going Streight	Left Turn
65	PATTERSON RD & 24 RD		9:04:00 AM	PDO	0		At Intersection	Front to Reer	w	Going Streight	Going Streight
66	PATTERSON RD & 7TH ST		4:39:00 PM 2:11:00 PM	PDO	241	South	Intersection Related At Intersection	Front to Rear Front to Front	N E	Going Straight Right Turn	Stop in Treff Left Turn
68	PATTERSON RD & MEANDER DR		3:44:00 PM	PDO	0		At Intersection	Front to Side	w	Left Turn	Going Straight
69 70	7TH ST & PATTERSON RD PATTERSON RD & 30 RD		2:09:00 PM 2:37:00 PM	PDO	30	South	Non-int At intersection	Front to Rear Front to Side	N E	Going Straight Left Turn	Stop in Treff
71	RIO GRANDE DR & PATTERSON RD	4/21/2014	4:42:00 PM	PDO	40	East	Non-Int	Front to Reer	E	Going Streight	Stop in Traff
72 73	1ST ST & PATTERSON RD SERANADE ST & PATTERSON RD		5:00:00 PM 7:16:00 AM	PDO	20	South	Intersection Related	Front to Reer	N	Going Streight	Stop in Traff
74	24 RD & PATTERSON RD		10:53:00 AM	PDO	50	North	At Intersection Intersection Related	Perk Motor Veh Front to Rear	- W	Other Becking	Parked Stop in Traff
75	PATTERSON RD & MARKET STREET		12:28:00 PM	PDO	0		At Intersection	Front to Side	E	Left Turn	Going Streight
76 77	PATTERSON RD & 7TH ST PATTERSON RD & 27 1/2 RD	4/27/2014 4/28/2014	3:11:00 PM 5:22:00 PM	PDO	500	West	At Intersection Non-Int	Front to Rear Front to Rear	N E	Right Turn Going Streight	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 80	PATTERSON RD & 15TH ST PATTERSON RD & 28 RD	5/1/2014 5/2/2014	8:18:00 AM 5:45:00 PM	PDO	300	West	Drive Acc Relat At Intersection	Front to Rear Front to Front	w	Going Streight Left Turn	Stop in Traff 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 83	PATTERSON RD & 24 RD PATTERSON RD & 7TH ST	5/5/2014 5/5/2014	4:11:00 PM 1:11:00 PM	PDO	0 530	West	At Intersection Non-int	Front to Side	N	Going Straight	Going Straight Stop in Traff
84	PATTERSON RD & 7TH ST PATTERSON RD & 24 RD	5/8/2014		PDO	530	www.	Non-int At Intersection	Front to Rear Front to Rear	w	Going Straight Going Straight	Stop in Traff Going Straight
85	PATTERSON RD & 28 1/4 RD	5/8/2014	7:08:00 AM	PDO	0		At Intersection	Front to Side	Ë	Going Streight	Left Turn
86	PATTERSON RD & GRAND CASCADE WAY PATTERSON RD & 1ST ST	5/8/2014 5/9/2014	8:00:00 AM 10:13:00 AM	PDO	400 100	East West	Non-Int Non-Int	Same Dir Side Side Same Dir Side Side	W	U-Turn Changing Lanes	Going Straight Going Straight
88	PATTERSON RD & RIO GRANDE DR	5/13/2014	5:09:00 PM	PDO	10	East	Non-Int	Front to Reer	E	Going Streight	Stop in Traff
89	PATTERSON RD & PARTEE DR		7:52:00 AM	PDO	200	East	Non-Int	Front to Rear	w	Going Streight	Slowing
90	PATTERSON RD & 15TH ST PATTERSON RD & 7TH ST	5/21/2014	8:30:00 AM 9:32:00 PM	PDO	0		At Intersection At Intersection	Front to Side Front to Side	W	Going Streight Going Streight	Left Turn 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 PATTERSON RD & 12TH ST	8/2/2014 8/4/2014	3:14:00 PM 10:52:00 AM	PDO	275	Foot	At Intersection Intersection Related	Front to Side Same Dir Side Side	W	Right Turn Changing Lanes	Going Straight Changing Lanes
95	PATTERSON RD & 12TH ST PATTERSON RD & 29 RD	6/4/2014		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 PATTERSON RD & 29 RD	6/6/2014 6/7/2014	9:58:00 AM 10:51:00 PM	PDO	0		At Intersection At Intersection	Front to Side Front to Front	8 E	Left Turn	Going Straight 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 PATTERSON RD & 28 RD	6/13/2014 6/14/2014	3:14:00 PM 9:44:00 AM	PDO	20	South	Intersection Related At Intersection	Front to Rear Front to Side	N S	Going Straight Left Turn	Stop in Traff Going Straight
102	PATTERSON RD & 28 RD	6/15/2014	3:08:00 PM	PDO	50	East	Intersection Related	Front to Side	w	Going Streight	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 Treff
104	PATTERSON RD & 29 1/2 RD PATTERSON RD & 12TH ST	6/18/2014 6/20/2014		PDO	100	East	Non-int At intersection	Front to Rear Front to Side	w	Going Straight Left Turn	Slowing 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	8/21/2014		PDO	250	East	Non-Int	Front to Rear	w	Going Straight	Stop in Traff
108	PATTERSON RD & 25 3/4 RD PATTERSON RD & 12TH ST	8/28/2014 8/27/2014		PDO	139	East	Non-int At Intersection	Wild Animal Same Dir Side Side	- W	Going Straight Right Turn	UNK 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 PATTERSON RD & SANTA FE DR	8/28/2014 7/1/2014	8:44:00 AM 5:21:00 PM	PDO	0		At Intersection Non-Int	Front to Side Front to Rear	8 E	Right Turn Going Streight	Going Straight Stop in Traff
113	PATTERSON RD & SANTA PE DR	7/1/2014		PDO	200	East	Drive Acc Relat	Front to Near Front to Side	N	Left Turn	Going Straight
114	25 3/4 RD & PATTERSON RD	7/2/2014		NJ	0		At Intersection	Front to Side	N	Left Turn	Going Straight
115	25 RD & PATTERSON RD	7/8/2014	3:23:00 PM 3:43:00 PM	PDO	10	South	Intersection Related At Intersection	Front to Rear Front to Side	N S	Going Straight Left Turn	Stop in Traff Going Straight
116	PATTERSON RD & 28 RD										

*	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	NJ	0		At Intersection	Front to Side	8	Left Turn	Going Straight
120	PATTERSON RD & 29 RD 28 1/4 RD & PATTERSON RD	7/22/2014 7/25/2014	11:15:00 AM 1:37:00 PM	PDO	50	South	At Intersection At Intersection	Front to Front Front to Rear	N	Left Turn Going Streight	Going Straight Stop in Traff
122	PATTERSON RD & MEANDER DR PATTERSON RD & 29 RD	7/30/2014 8/1/2014	12:24:00 PM 6:05:00 PM	PDO	0		At Intersection At Intersection	Front to Side Rear to Rear	N W	Going Streight Left Turn	Going Streight Going Streight
124	PATTERSON RD & 29 RD	8/1/2014	6:55:00 PM	NJ	1238	West	Non-Int	Front to Rear	E	Going Streight	Stop in Traff
125	PATTERSON RD & MARKET STREET PATTERSON RD & FORESIGHT CIR SOUTH	8/2/2014 8/4/2014	4:29:00 PM 3:08:00 PM	PDO	20 30	West East	Non-int Non-int	Front to Rear Front to Rear	W	Going Straight Going Straight	Stop in Traff Slowing
127 128	PATTERSON RD & MEANDER DR PATTERSON RD & 24 1/2 RD	8/4/2014 8/6/2014	9:49:00 AM 4:09:00 PM	PDO	40	West	At Intersection Intersection Related	Front to Side Same Dir Side Side	8 E	Right Turn Right Turn	Going Streight Going Streight
129	PATTERSON RD & MARKET STREET	8/9/2014	12:19:00 PM	PDO	350	East	Drive Acc Relat	Front to Side	8	Left Turn	Going Straight
130	PATTERSON RD & 29 1/2 RD PATTERSON RD & 12TH ST	8/11/2014	7:25:00 AM 9:24:00 AM	PDO	200	East East	Non-Int Non-Int	Front to Rear Front to Rear	w	Going Straight Going Straight	Stop in Traff Stop in Traff
132	PATTERSON RD & EAST INDIAN CREEK D	8/11/2014	5:42:00 PM 10:44:00 AM	PDO	0		At Intersection	Front to Reer	E	Going Streight	Stop in Treff
134	24 1/2 RD & PATTERSON RD	8/14/2014	1:23:00 PM	PDO	0 500	South	At Intersection At Intersection	Front to Side Front to Side	8 E	Right Turn Left Turn	Going Streight Going Streight
135	PATTERSON RD & 25 RD PATTERSON RD & 24 1/2 RD	8/15/2014 8/15/2014	11:13:00 AM 5:08:00 PM	PDO	0		Drive Acc Relat At Intersection	Front to Reer	N	Going Straight Going Straight	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 Treff
138	24 RD & PATTERSON RD PATTERSON RD & MEANDER DR	8/19/2014 8/20/2014	12:20:00 PM 4:05:00 PM	PDO INJ	15	East	At Intersection At Intersection	Same Dir Side Side Front to Rear	SE W	Left Turn Going Streight	Left Turn Stop in Treff
140	PATTERSON RD & 27 1/2 RD I-70B & PATTERSON RD	8/20/2014 8/20/2014	9:00:00 AM 1:57:00 PM	PDO	250	West	Non-int At Intersection	Front to Rear Sign	E	Going Streight Left Turn	Stop in Traff 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 Streight
143	PATTERSON RD & 12TH ST PATTERSON RD & RIO GRANDE DR	8/21/2014 8/22/2014	7:23:00 AM 5:23:00 PM	PDO	20	East	Intersection Related Intersection Related	Front to Rear Front to Rear	W	Going Straight Slowing	Right Turn Stop in Treff
145	PATTERSON RD & 28 1/4 RD 12TH ST & PATTERSON RD	8/23/2014 8/23/2014	9:00:00 AM 5:11:00 PM	PDO	632 150	East South	Drive Acc Relat Non-int	Front to Rear Same Dir Side Side	W	Going Streight Changing Lanes	Slowing Going Streight
147	PATTERSON RD & 7TH ST	8/25/2014	10:38:00 AM	PDO	100	West	Non-Int	Front to Reer	W	Going Streight	Slowing
148	PATTERSON RD & 27 1/2 RD 29 RD & PATTERSON RD	8/25/2014 8/26/2014	4:48:00 PM 12:19:00 PM	PDO	700 350	West South	Non-Int Drive Acc Relat	Front to Rear Same Dir Side Side	E N	Going Straight Right Turn	Slowing Right Turn
150	PATTERSON RD & 12TH ST	8/27/2014	8:53:00 AM	NJ	775	West	Intersection Related	Front to Rear	W	Going Streight	Stop in Traff
151 152	7TH ST & PATTERSON RD PATTERSON RD & 1ST ST	8/27/2014 8/27/2014	3:40:00 PM 2:02:00 PM	PDO	30	South West	Intersection Related Non-Int	Front to Rear Front to Rear	W	Going Streight Going Streight	Going Streight Slowing
153	PATTERSON RD & 7TH ST PATTERSON RD & MARKET STREET	8/27/2014 8/28/2014	3:32:00 PM 10:58:00 AM	PDO	200	West	Non-Int At Intersection	Front to Rear Front to Side	E	Going Streight Going Streight	Going Streight 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 PATTERSON RD & 29 RD	9/1/2014 9/2/2014	6:48:00 PM 4:22:00 PM	PDO NJ	0 512	West	Intersection Related Non-Int	Front to Rear Front to Rear	E	Going Streight Going Streight	Stop in Traff Stop in Traff
158 159	PATTERSON RD & MIRA VISTA DR PATTERSON RD & 24 1/2 RD	9/2/2014 9/3/2014	6:01:00 PM 10:33:00 AM	PDO	377 250	West	Drive Acc Relat	Front to Side	N	Left Turn Right Turn	Going Streight Going Streight
160	25 RD & PATTERSON RD	9/4/2014	3:18:00 PM	NJ	150	North	Drive Acc Relat	Front to Side	N	Left Turn	Going Streight
161	PATTERSON RD & 28 1/4 RD PATTERSON RD & 1ST ST	9/5/2014 9/6/2014	4:28:00 PM 7:42:00 PM	PDO	250 750	East East	Non-int Non-int	Front to Rear Front to Rear	w	Changing Lanes Going Streight	Going Straight Slowing
163	PATTERSON RD & 25 RD PATTERSON RD & 15TH 8T	9/8/2014 9/11/2014	4:53:00 PM 7:39:00 AM	PDO	0		At Intersection At Intersection	Other Harm Obj Front to Side	8 W	Backing Going Streight	Stop in Treff
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 Streight
166	PATTERSON RD & 12TH ST PATTERSON RD & BURKEY ST	9/14/2014	9:39:00 PM 9:38:00 AM	PDO	0		At Intersection At Intersection	Overturning Front to Reer	W	Left Turn Going Straight	Going Straight Right Turn
168	28 RD & PATTERSON RD PATTERSON RD & MESA VALLEY DR	9/15/2014 9/17/2014	1:14:00 PM 6:19:00 PM	PDO	30	North	Intersection Related	Front to Rear	N	Backing	Stop in Treff
169	PATTERSON RD & 12TH ST	9/22/2014	11:18:00 AM	NJ	0		At Intersection	Front to Side	E	Changing Lanes Left Turn	Other Going Streight
171	PATTERSON RD & CRIS-MAR ST PATTERSON RD & BEECHWOOD ST	9/22/2014	2:54:00 PM 8:03:00 AM	PDO	0		Non-int Intersection Related	Same Dir Side Side Front to Rear	w	Changing Lanes Going Straight	Going Straight Slowing
173	PATTERSON RD & 24 RD	9/25/2014 9/25/2014	1:49:00 PM 2:12:00 PM	PDO	0		At Intersection	Same Dir Side Side	w	Left Turn	Left Turn
175	PATTERSON RD & 24 1/2 RD 25 RD & PATTERSON RD	9/29/2014	4:09:00 PM	NJ	150	North	At Intersection Drive Acc Relat	Same Dir Side Side Front to Side	E	Right Turn Left Turn	Going Streight Going Streight
176	PATTERSON RD & 12TH ST PATTERSON RD & 24 1/2 RD	9/29/2014 9/29/2014	11:26:00 AM 7:22:00 PM	PDO	100	East	Non-int At intersection	Same Dir Side Side Front to Rear	E	Changing Lanes Left Turn	Going Streight Going Streight
178 179	PATTERSON RD & 25 1/2 RD 24 RD & PATTERSON RD	9/30/2014	1:39:00 PM 5:48:00 PM	PDO	165	South	At Intersection Intersection Related	Front to Side Front to Rear	W	Going Streight	Going Streight
180	PATTERSON RO & MARKET STREET	10/2/2014	1:53:00 PM	PDO	0	South	At Intersection	Front to Side	W	Going Streight Going Streight	Slowing Left Turn
181	PATTERSON RD & 1ST ST PATTERSON RD & 27 1/2 RD	10/3/2014	12:31:00 PM 1:15:00 PM	PDO	1150	East	Drive Acc Relat	Front to Rear Front to Side	- W	Going Streight Left Turn	Stop in Traff Left Turn
183	PATTERSON RD & HOME DEPOT	10/13/2014	2:38:00 PM	PDO	0		At Intersection	Front to Side	8	Right Turn	Going Streight
184	PATTERSON RD & 25 1/2 RD 24 1/2 RD & PATTERSON RD	10/15/2014	6:21:00 PM 11:59:00 AM	PDO	600 500	West South	Non-int Drive Acc Relat	Front to Side Front to Side	E	U-Turn Going Streight	Going Streight Going Streight
186	PATTERSON RD & EL CORONA DR PATTERSON RD & 26 344 RD	10/15/2014		PDO	150	West	Intersection Related At Intersection	Front to Rear Curb	E 8	Going Straight Left Turn	Stop in Treff Going Streight
188	PATTERSON RD & 24 RD	10/17/2014	4:01:00 PM	PDO	0		At Intersection	Front to Side	8	Right Turn	Going Streight
189	PATTERSON RD & 29 RD PATTERSON RD & PHEASANT TRAIL CT	10/18/2014	2:33:00 PM	PDO	150	East	At Intersection Non-int	Front to Rear Same Dir Side Side	w	Going Streight Other	Stop in Traff Going Straight
191	PATTERSON RD & 28 RD PATTERSON RD & PARK DR		12:32:00 PM 6:58:00 PM	PDO	0		At Intersection At Intersection	Front to Side Same Dir Side Side	8 E	Left Turn Changing Lanes	Going Straight Going Straight
193	PATTERSON RD & 7TH ST	10/21/2014	7:57:00 AM	NJ	0		At Intersection	Front to Rear	E	Going Streight	Stop in Traff
194	1708 & PATTERSON RD PATTERSON RD & 28 RD		3:48:00 PM 9:24:00 PM	PDO	200	West	Intersection Related At Intersection	Front to Rear Front to Rear	w	Going Straight Going Straight	Slowing Right Turn
198	PATTERSON RD & SPRING VALLEY CIR PATTERSON RD & 12TH ST	11/4/2014	7:49:00 AM 1:29:00 PM	PDO	500	West	Non-int Non-int	Front to Rear Front to Rear	w	Going Streight Going Streight	Going Straight Stop in Traff
198	PATTERSON RD & PIONEER RD	11/5/2014	11:54:00 AM	PDO	0		At Intersection	Bicycle Collision	8	Going Streight	Going Straight
199 200	PATTERSON RD & 25 RD PATTERSON RD & VIEWPOINT DR		9:04:00 PM 11:48:00 AM	PDO	50	East	At Intersection Non-int	Front to Side Front to Rear	w	Left Turn Changing Lanes	Going Streight Slowing
201 202	PATTERSON RD & HOME DEPOT PATTERSON RD & 24 RD	11/8/2014	6:08:00 PM 4:36:00 PM	PDO	500 300	East East	Non-Int Non-Int	Front to Rear Same Dir Side Side	w	Going Streight Changing Lanes	Slowing Going Streight
203	PATTERSON RD & 7TH ST	11/11/2014	5:43:00 PM	PDO	0		At Intersection	Front to Side	w	Right Turn	Going Streight
204	PATTERSON RD & 26 3/4 RD PATTERSON RD & 15TH ST	11/12/2014	5:39:00 PM 2:03:00 PM	PDO	0		At Intersection At Intersection	Front to Rear Front to Side	E N	Going Streight Right Turn	Stop in Traff Going Straight
206 207	PATTERSON RD & 27 1/2 RD PATTERSON RD & 29 1/2 RD	11/18/2014	4:05:00 PM 5:40:00 PM	PDO	0		Non-Int At Intersection	Front to Rear Front to Front	E	Going Streight Going Streight	Going Streight Left Turn
208	PATTERSON RD & 12TH ST	11/19/2014	8:50:00 AM	NJ	266	East	Non-Int	Front to Rear	W	Going Straight	Slowing
209 210	PATTERSON RD & 12TH ST PATTERSON RD & 7TH ST		12:45:00 PM 11:23:00 AM	PDO	693	East	Non-int At intersection	Front to Rear Front to Side	N	Going Streight Left Turn	Slowing Going Streight
211	PATTERSON RD & 12TH ST PATTERSON RD & HOME DEPOT		5:23:00 PM 1:24:00 PM	PDO NJ	150	East	Intersection Related At Intersection	Front to Rear Front to Side	w	Going Straight Left Turn	Slowing Going Streight
213	PATTERSON RD & 28 RD	11/25/2014	11:06:00 AM	NJ	0		At Intersection	Front to Side	8	Left Turn	Going Streight
214 215	29 RD & PATTERSON RD PATTERSON RD & BROKEN SPOKE RD	11/28/2014 11/28/2014	7:22:00 PM 6:57:00 AM	PDO	190	North	Drive Acc Relat At Intersection	Front to Side Front to Rear	- W	Left Turn Going Streight	Going Straight Stop in Traff
216	MARKET STREET & PATTERSON RD	11/28/2014	2:01:00 PM 12:57:00 PM	PDO	40	North	Non-Int	Same Dir Side Side	8	Changing Lanes	Going Straight
217 218	PATTERSON RD & HOME DEPOT PATTERSON RD & VIEWPOINT DR	12/1/2014	7:40:00 AM	PDO	0		At Intersection Non-Int	Front to Side Wild Animal	W	Right Turn Going Streight	Going Streight UNK
219 220	PATTERSON RD & 12TH ST PATTERSON RD & 27 1/2 RD		5:49:00 PM 1:24:00 PM	PDO	100	West	Non-int Intersection Related	Same Dir Side Side Front to Rear	N E	Changing Lanes Going Streight	Going Straight Slowing
221 222	PATTERSON RD & 1ST ST PATTERSON RD & 12TH ST	12/5/2014	9:55:00 PM 7:47:00 AM	PDO	0	East	At Intersection Non-int	Front to Front Same Dir Side Side	W	Left Turn	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	Changing Lanes Right Turn	Going Streight Going Streight
224 225	MEANDER DR & PATTERSON RD PATTERSON RD & 24 1/2 RD		5:18:00 PM 6:17:00 PM	PDO	200	West	Non-Int At Intersection	Front to Rear Same Dir Side Side	E	Slowing Going Streight	Stop in Traff Going Straight
226	PATTERSON RD & 15TH ST	12/12/2014	3:39:00 PM	PDO	300	East	Intersection Related	Front to Rear	W	Going Streight	Slowing
227 228	PATTERSON RD & 25 1/2 RD PATTERSON RD & 12TH ST	12/14/2014	8:16:00 PM 10:44:00 PM	PDO	0		At intersection At intersection	Front to Rear Front to Side	w	Going Streight Left Turn	Stop in Traff Going Straight
0.00	1708 & PATTERSON RD PATTERSON RD & 7TH ST		5:24:00 PM 5:23:00 PM	INJ PDO	0		At Intersection At Intersection	Front to Side Front to Rear	E N	Left Turn Going Streight	Going Straight Stop in Traff
229				NJ	0		At Intersection	Opp Dir Side Side	W	Left Turn	Going Straight
230 231	PATTERSON RD & 25 1/2 RD	12/16/2014						The second secon			Walter Co. Co.
230 231 232 233	PATTERSON RD & 25 1/2 RD PATTERSON RD & MIRA VISTA DR PATTERSON RD & 28 1/4 RD	12/22/2014 12/23/2014	10:13:00 AM 2:28:00 PM	PDO NJ	0		Non-Int At Intersection	Front to Front Front to Side	w	Spun Out of Cntrl Left Turn	Going Streight Going Streight
230 231 232	PATTERSON RD & 25 1/2 RD PATTERSON RD & MIRA VISTA DR	12/22/2014 12/23/2014 12/23/2014	10:13:00 AM	PDO	0	South	Non-Int		W	Spun Out of Cntrl	

*	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		11:10:00 AM	PDO	0		Non-int	Sign	E	Right Turn	UNK
238 239	PATTERSON RD & 25 RD PATTERSON RD & 29 RD	1/1/2015	8:01:00 PM 1:10:00 PM	PDO	120	E	Driveway Access Related Non-Intersection	Front to Front Side to Side Same Dir	w	Left Turn Changing Lanes	Straight Straight
240	PATTERSON RD & 25 RD	1/8/2015	4:31:00 PM 3:20:00 PM	PDO	1150	w	Intersection Related At Intersection	Front to Front	E	Left Turn Slowing	Streight Stopped
242	PATTERSON RD & W INDIAN CREEK DR	1/8/2015	5:38:00 PM	PDO			Non-Intersection	Front to Rear	E	Streight	Stopped
243 244	PATTERSON RD & E INDIAN CREEK DR PATTERSON RD & 27 1/2 RD	1/0/2015	10:27:00 AM 5:05:00 PM	PDO			At Intersection Non-Intersection	Front to Side Front to Rear	N E	Left Turn Streight	Streight/following road Slowing
245 246	PATTERSON RD & 24 1/2 RD PATTERSON RD & N 12TH ST	1/17/2015	2:08:00 PM 9:58:00 AM	PDO			At Intersection At Intersection	Front to Side Front to Rear	W	Left Turn	Streight Streight
247	PATTERSON RD & 25 RD	1/23/2015	12:47:00 PM	NJ	607	w	Non-intersection	Front to Rear	W	U-Tum	Straight
248 249	PATTERSON RD & MARKET ST PATTERSON RD & 25 RD	1/27/2015	10:00:00 AM 3:58:00 PM	NJ NJ			At Intersection At Intersection	Front to Side Front to Rear	W	Streight Streight	Straight Stopped
250	PATTERSON RD & 25 RD PATTERSON RD & 25 1/2 RD	1/30/2015	2:36:00 PM	PDO			At Intersection	Sign	8	Streight	UNK
251 252	PATTERSON RD & MARKET ST	2/2/2015 2/4/2015	3:48:00 PM 7:39:00 PM	PDO	600	E	At Intersection At Intersection	Front to Rear Front to Side	E W	Streight Left Turn	Straight Straight
253 254	PATTERSON RD & N 7TH ST PATTERSON RD & N 1ST ST	2/10/2015	5:34:00 PM 11:32:00 AM	PDO	300	W E	Non-Intersection At Intersection	Front to Rear	E	Straight Straight	Stopped 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
256 257	24 1/2 RD & PATTERSON RD PATTERSON RD & N 1ST ST	2/11/2015	6:48:00 PM 12:34:00 PM	PDO	500 50	8 E	Intersection Related Non-Intersection	Side to Side Same Dir	W	U-Turn Streight	Straight Stopped
258	PATTERSON RD & N 7TH ST	2/18/2015	4:28:00 PM	PDO	350 50	W	Non-Intersection	Front to Reer	E	Streight	Stopped
250 260	N 7TH ST & PATTERSON RD PATTERSON RD & 25 1/2 RD	2/19/2015 2/21/2015	8:47:00 PM	PDO	300	8 E	Intersection Related Driveway Access Related	Front to Rear Front to Rear	W	Changing Lanes Straight	Stopped Right Turn
261 262	N 12TH ST & PATTERSON RD 25 RD & PATTERSON RD	2/23/2015 2/24/2015	12:44:00 PM 3:16:00 PM	PDO	40 100	8 N	Intersection Related Driveway Access Related	Front to Rear Front to Side	N	Straight Slowing	Stopped Streight
263	30 RD & PATTERSON RD	2/24/2015	7:30:00 PM	PDO	20	8	Intersection Related	Front to Rear	N	Streight	Stopped
264 265	PATTERSON RD & 25 RD PATTERSON RD & BEECHWOOD ST		5:23:00 PM 11:07:00 AM	PDO	100	E	Non-Intersection At Intersection	Front to Rear Curb	E	Straight Left Turn	Stopped Streight
266	24 1/2 RD & PATTERSON RD PATTERSON RD & 29 RD	2/28/2015	12:43:00 PM	PDO	100	w	At Intersection	Side to Side Same Dir	E	Right Turn	Streight
267 268	PATTERSON RD & MIRA VISTA RD	2/28/2015 3/2/2015	10:13:00 PM 5:37:00 PM	PDO	75	E	Intersection Related Non-Intersection	Front to Rear Side to Side Same Dir	Ē	Streight Changing Lanes	Stopped Streight
289 270	PATTERSON RD & 25 1/2 RD PATTERSON RD & N 15TH ST	3/3/2015 3/5/2015	12:41:00 PM 11:17:00 PM	PDO	80	E	Intersection Related Non-Intersection	Front to Rear Front to Rear	w	Slowing Straight	Stopped Stopped
271	24 RD & PATTERSON RD	3/6/2015	3:48:00 AM	PDO	726	N	Non-Intersection	Sign	8	Streight	UNK
272 273	PATTERSON RD & 29 RD N 12TH ST & PATTERSON RD	3/8/2015 3/7/2015	8:48:00 AM 8:45:00 PM	PDO NJ	300	8	Intersection Related Non-Intersection	Front to Rear All Other Peda	W 8	Streight Streight	Slowing
274	25 RD & PATTERSON RD	3/9/2015	2:20:00 PM	PDO	150	N	Driveway Access Related	Front to Front	N	Left Turn	Streight
275 276	PATTERSON RD & N 15TH ST PATTERSON RD & 27 1/2 RD	3/10/2015 3/11/2015	3:47:00 PM 5:52:00 AM	PDO	900 300	E W	Non-intersection Non-intersection	Front to Rear Front to Rear	w	Streight Streight	UNK Stopped
277 278	PATTERSON RD & 30 3/4 RD PATTERSON RD & 27 1/2 RD	3/12/2015	11:10:00 AM 5:22:00 PM	PDO	200	w	At Intersection Non-Intersection	Front to Side Front to Rear	W	Streight Streight	Streight Streight
279	29 1/2 RD & PATTERSON RD	3/13/2015	12:33:00 PM	PDO	20	N	Intersection Related	Front to Rear	8	Streight	Straight
280	PATTERSON RD & N 12TH ST PATTERSON RD & PATTERSON RD	3/16/2015	8:37:00 AM 1:28:00 PM	PDO			At Intersection At Intersection	Front to Side Light Pole / Utility Pole	W	Streight Left Turn	Straight Straight
282	PATTERSON RD & 29 1/2 RD	3/19/2015	6:44:00 AM	PDO	300	w	Non-Intersection	Front to Rear	W	Streight	Stopped
283 284	PATTERSON RD & EL CORONA DR PATTERSON RD & 25 1/2 RD	3/19/2015	8:10:00 PM 6:43:00 AM	PDO			At Intersection At Intersection	Front to Rear Front to Front	E 8	Straight Left Turn	Straight Straight
285 286	PATTERSON RD & MEANDER DR PATTERSON RD & MARKET ST	3/20/2015	1:53:00 PM 8:08:00 AM	PDO			Driveway Access Related At Intersection	Front to Front Front to Side	W	Left Turn Straight	Straight
287	24 1/2 RD & PATTERSON RD	3/21/2015	1:09:00 PM	PDO	500	8	Driveway Access Related	Front to Side	E	Left Turn	Straight Straight
288 289	PATTERSON RD & 29 RD PATTERSON RD & PARK DR	3/23/2015		PDO	50	w	At Intersection Non-intersection	Front to Rear Guard Rail	w	Streight Streight	Stopped
290	PATTERSON RD & 29 RD	3/27/2015	4:38:00 PM	PDO	100	E	Driveway Access Related	Side to Side Same Dir	8	Right Turn	Straight
291	PATTERSON RD & BURKEY ST N 12TH ST & PATTERSON RD	3/30/2015	7:32:00 AM 5:33:00 PM	PDO	50	E	Intersection Related At Intersection	Front to Rear Side to Side Same Dir	W	Streight Right Turn	Stopped Streight
293	PATTERSON RD & N 1ST ST	4/1/2015	12:23:00 PM	PDO			At Intersection	Front to Rear	E	Streight	Stopped
294 295	PATTERSON RD & N 7TH ST PATTERSON RD & 27 1/2 RD	4/1/2015 4/2/2015	6:01:00 PM 7:09:00 PM	PDO	50	w	At Intersection Intersection Related	Front to Side Front to Rear	_ 8 E	Straight Straight	Straight Stopped
296 297	PATTERSON RD & 25 RD PATTERSON RD & N 15TH ST	4/2/2015 4/9/2015	4:54:00 PM 5:29:00 PM	PDO	100	E	Driveway Access Related At Intersection	Other - Non Collision Front to Reer	N E	Right Turn	Streight
298	25 RD & PATTERSON RD	4/8/2015	3:47:00 PM	PDO	140	N	Driveway Access Related	Front to Ride	Ē	Streight Left Turn	Stopped Straight
299 300	PATTERSON RD & 25 1/2 RD PATTERSON RD & 24 RD	4/9/2015 4/11/2015	11:27:00 AM	PDO	50	E	Intersection Related At Intersection	Front to Rear	W E	Streight Left Turn	Stopped Streight
301	PATTERSON RD & 27 1/2 RD	4/11/2015	11:52:00 AM	NJ	20	w	Non-Intersection	Front to Rear	w	Streight	Stopped
302 303	24 1/2 RD & PATTERSON RD PATTERSON RD & PATTERSON RD	4/11/2015 4/11/2015	7:44:00 PM 12:38:00 PM	PDO	492	8	Driveway Access Related At Intersection	Front to Side Front to Rear	W	Left Turn Streight	Straight Stopped
304 305	PATTERSON RD & 29 1/2 RD	4/12/2015 4/13/2015	11:38:00 AM 6:03:00 PM	NJ	200	-	At Intersection	Front to Front	8	Left Turn	Streight
306	PATTERSON RD & FORESIGHT CIR PATTERSON RD & PATTERSON RD	4/13/2015	8:17:00 AM	PDO	380	E	Driveway Access Related At Intersection	Front to Side Traffic Signal Pole	w	Changing Lanes Right Turn	Straight UNK
307 308	PATTERSON RD & SPRING VALLEY CIR PATTERSON RD & 28 RD		8:18:00 AM 5:15:00 PM	PDO	100	E	At Intersection Non-Intersection	Front to Side Front to Rear	8 E	Right Turn Streight	Streight 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
310 311	PATTERSON RD & N 12TH ST PATTERSON RD & N 15TH ST		10:13:00 AM 6:29:00 PM	PDO	600	w	Driveway Access Related At Intersection	Front to Side Front to Side	8 E	Left Turn Streight	Streight Streight
312	PATTERSON RD & NORTHERN WAY PATTERSON RD & MARKET ST	4/19/2015	3:17:00 AM	PDO			Non-Intersection	Guard Rail	w	Streight	UNK
313 314	PATTERSON RD & N 15TH ST		8:03:00 AM 4:51:00 PM	INJ INJ			At Intersection At Intersection	Overturning Front to Rear	W	Left Turn Slowing	Straight Stopped
315 316	PATTERSON RD & SPRING VALLEY CIR PATTERSON RD & N 12TH ST		8:25:00 AM 7:48:00 AM	PDO	60 750	W E	Non-Intersection Intersection Related	Front to Rear Front to Rear	w	Streight Streight	Streight Stopped
317	24 RD & PATTERSON RD	4/22/2015	4:58:00 PM	PDO	100	8	Intersection Related	Front to Rear	N	Streight	Straight
318 319	PATTERSON RD & N 7TH ST N 12TH ST & PATTERSON RD		7:54:00 PM 7:20:00 PM	PDO	260	8	At Intersection Driveway Access Related	Front to Side Front to Side	8 E	Streight Right Turn	Streight Streight
320	PATTERSON RD & 25 RD		11:53:00 PM	PDO			Parking Lot	Front to Side	w	Right Turn	Parked
321 322	PATTERSON RD & N 1ST ST PATTERSON RD & N 12TH ST	5/7/2015	9:44:00 AM	FAT			At Intersection At Intersection	Front to Side	E	Streight Left Turn	Left Turn Streight
323 324	PATTERSON RD & MARKET ST PATTERSON RD & 25 RD	5/7/2015 5/8/2015	5:28:00 PM 11:57:00 AM	PDO			Intersection Related At Intersection	Front to Rear Front to Front	W 8	Streight Left Turn	Stopped Streight
325	24 RD & PATTERSON RD	5/9/2015	12:36:00 PM	PDO	100	8	Non-intersection	Side to Side Same Dir	N	Changing Lanes	Stopped
326 327	25 RD & PATTERSON RD PATTERSON RD & 24 1/2 RD	5/10/2015	1:29:00 PM 3:35:00 PM	PDO			At Intersection At Intersection	Front to Front Front to Front	N E	Left Turn	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
329 330	PATTERSON RD & 25 1/2 RD PATTERSON RD & N 7TH ST	5/14/2015 5/15/2015	3:28:00 PM 9:45:00 PM	PDO			At Intersection At Intersection	Front to Front Front to Front	- W	Straight Straight	Left Turn Streight
331 332	PATTERSON RD & 25 RD N 12TH ST & PATTERSON RD	5/16/2015 5/17/2015	7:02:00 PM 7:43:00 PM	PDO	50	w	At Intersection At Intersection	Front to Rear Front to Side	E	Slowing Straight	Stopped Left Turn
333	PATTERSON RD & N 1ST ST	5/18/2015	3:50:00 PM	NJ	500	E	Driveway Access Related	Front to Rear	w	Streight	Stopped
334 335	PATTERSON RD & 25 RD 29 1/2 RD & PATTERSON RD	5/19/2015 5/22/2015		PDO	84	8	At Intersection Intersection Related	Front to Side Front to Side	8	Left Turn Left Turn	Stopped Streight
336	24 1/2 RD & PATTERSON RD	5/23/2015	5:37:00 PM	PDO	500	8	Driveway Access Related	Front to Front	E	Left Turn	Straight
337 338	24 1/2 RD & PATTERSON RD 25 RD & PATTERSON RD		5:37:00 PM 7:57:00 AM	PDO	500 129	8 N	Driveway Access Related Driveway Access Related	Front to Front Front to Side	E	Left Turn	Streight Streight
339	PATTERSON RD & 28 1/4 RD	5/27/2015	11:32:00 AM	PDO	460	W	Non-Intersection	Front to Rear	E	Streight	Slowing
340	PATTERSON RD & N 12TH ST PATTERSON RD & 29 1/2 RD	5/27/2015 6/2/2015	4:54:00 PM 2:08:00 PM	PDO	200 400	E	Non-intersection Intersection Related	Front to Rear Front to Rear	E W	Streight Streight	Slowing Stopped
342 343	24 1/2 RD & PATTERSON RD PATTERSON RD & 30 RD	6/5/2015	3:53:00 PM 4:28:00 PM	PDO	500 100	8 W	Driveway Access Related	Front to Side Front to Rear	E	Left Turn	Streight
344	25 RD & PATTERSON RD	6/11/2015	12:08:00 PM	PDO	150	N	Intersection Related Driveway Access Related	Front to Side	E	Streight Right Turn	Stopped Streight
345 346	PATTERSON RD & N 7TH ST PATTERSON RD & PATTERSON RD	6/12/2015 6/13/2015	1:02:00 PM 1:26:00 PM	PDO			At Intersection At Intersection	Front to Side Front to Rear	W	Right Turn Streight	Straight Stopped
347	PATTERSON RD & DARBY DR	6/14/2015	1:00:00 PM	NJ			At Intersection	Malbox	E	Streight	Right Turn
348 349	PATTERSON RD & N 12TH ST PATTERSON RD & N 12TH ST	6/15/2015 6/15/2015	2:38:00 AM 7:20:00 PM	PDO			At Intersection At Intersection	Front to Side Side to Side Opp Dir	W	Streight Left Turn	Straight Straight
350	25 RD & PATTERSON RD	6/17/2015	3:01:00 PM	PDO	50	8	Driveway Access Related	Front to Side	W	Right Turn	Streight
351 352	PATTERSON RD & 27 1/2 RD PATTERSON RD & FORESIGHT CIR	6/18/2015 6/19/2015		PDO			At Intersection At Intersection	Front to Rear Front to Side	8	Streight Left Turn	Stopped Streight
353	PATTERSON RD & N 12TH ST	6/19/2015	8:33:00 PM	PDO			At Intersection	Front to Side	8	Straight	Straight

*	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	8/22/2015 8/28/2015	12:43:00 PM 1:00:00 PM	PDO	268	E	Non-intersection	Side to Side Same Dir	E	Changing Lanes	Streight
356 357	PATTERSON RD & 30 RD PATTERSON RD & 25 1/2 RD	6/30/2015 6/30/2015	1:00:00 PM 10:11:00 AM	PDO			At Intersection At Intersection	Front to Side Front to Rear	w	Left Turn Changing Lance	Streight Slowing
358 359	PATTERSON RD & 30 RD PATTERSON RD & COMMERCE BLVD	7/3/2015 7/8/2015	1128:00 AM 12:34:00 PM	NJ PDO	300	w	At Intersection Alley Related	Front to Side Side to Side Same Dir	W	Streight Weaving	Straight Straight
360	PATTERSON RD & 29 RD	7/8/2015	5:43:00 PM	PDO	300	- "	Intersection Related	Front to Rear	Ē	Backing	Stopped
361 362	PATTERSON RD & E INDIAN CREEK DR PATTERSON RD & N 1ST ST	7/14/2015 7/21/2015	5:11:00 PM 10:05:00 AM	PDO			Non-intersection At Intersection	Front to Rear All Other Peda	E W	Slowing Right Turn	Slowing
363	PATTERSON RD & N 12TH ST	7/21/2015	3:59:00 PM	PDO	25	E	Non-Intersection	Front to Rear	E	Streight	Stopped
384 385	PATTERSON RD & RIO GRANDE DR DR PATTERSON RD & 28 1/4 RD	7/21/2015 7/23/2015	11:18:00 AM 5:28:00 PM	PDO			Intersection Related At Intersection	Front to Rear Front to Rear	E	Straight Straight	Straight Stopped
366	PATTERSON RD & 27 1/2 RD N 12TH ST & PATTERSON RD	7/23/2015 7/24/2015	11:58:00 PM 2:03:00 PM	PDO	500	W	Non-Intersection At Intersection	Front to Rear	w	Streight Streight	Stopped Right Turn
368	25 RD & PATTERSON RD	7/25/2015	5.58:00 PM	PDO			At Intersection	Front to Reer	N	Streight	Stopped
389 370	PATTERSON RD & 24 1/2 RD PATTERSON RD & N 12TH ST	7/25/2015 7/28/2015	10:43:00 AM 2:00:00 PM	PDO	300	w	At Intersection Driveway Access Related	Rear to Side Side to Side Same Dir	E	Left Turn Changing Lanes	Streight Changing Lanes
371	24 1/2 RD & PATTERSON RD	7/28/2015	3:16:00 PM	PDO	500	8	Non-Intersection	Side to Side Same Dir	N	Changing Lanes	Streight
372 373	PATTERSON RD & 25 1/2 RD N 12TH ST & PATTERSON RD	7/29/2015 7/29/2015	12:15:00 PM 2:32:00 PM	PDO	25	N	At Intersection Intersection Related	Front to Front Front to Rear	- W	Left Turn Streight	Streight Stopped
374	PATTERSON RD & 25 RD	7/30/2015	2:28:00 PM	INJ	450		At Intersection	Front to Side	w	Left Turn	Streight
375 376	PATTERSON RD & 29 1/2 RD PATTERSON RD & N 12TH ST	7/30/2015 8/4/2015	5:30:00 PM 9:08:00 PM	PDO	150	w	Non-intersection At Intersection	Front to Rear Front to Side	W	Streight Left Turn	Stopped Streight
377 378	PATTERSON RD & 24 RD PATTERSON RD & 26 1/4 RD	8/5/2015 8/6/2015	3:32:00 PM 8:58:00 AM	PDO			Intersection Related At Intersection	Front to Rear All Other Peda	E 8	Streight Right Turn	Stopped
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 18T ST PATTERSON RD & N 12TH ST	8/12/2015	5:29:00 PM 9:50:00 AM	PDO	500	w	Non-intersection At intersection	Front to Side Side to Side Same Dir	E	Changing Lanes Straight	Streight Right Turn
382	PATTERSON RD & 27 1/2 RD	8/14/2015	3:54:00 PM	PDO			Intersection Related	Front to Rear	8	Streight	Streight
383 384	PATTERSON RD & 29 1/2 RD PATTERSON RD & MEANDER DR	8/15/2015 8/20/2015	7:17:00 PM 11:53:00 AM	PDO	203	E	At Intersection Driveway Access Related	Front to Side Side to Side Same Dir	E	Left Turn Changing Lanes	Streight Streight
385	PATTERSON RD & 30 RD	8/21/2015	2:45:00 PM	INJ			At Intersection	Front to Side	E	Streight	Streight
386	PATTERSON RD & 29 1/2 RD PATTERSON RD & 27 1/2 RD	8/21/2015 8/22/2015	3:40:00 PM 3:37:00 PM	PDO	133 50	E W	Non-Intersection At Intersection	Front to Rear	E	Streight Streight	Stopped Stopped
388	PATTERSON RD & PARTEE DR	8/23/2015 8/24/2015	9:58:00 PM 3:45:00 PM	NJ NJ			Intersection Related At Intersection	Front to Side	E 8	Left Turn	Streight
390	PATTERSON RD & BURKEY ST PATTERSON RD & BURKEY ST	8/25/2015	10:59:00 AM	INJ			At Intersection	All Other Peda	8	Left Turn Right Turn	Streight UNK
391 392	PATTERSON RD & BEECHWOOD ST PATTERSON RD & N 15TH ST	8/28/2015 8/27/2015	7:51:00 AM 2:53:00 PM	PDO			Non-Intersection Intersection Related	Front to Rear Front to Side	W	Streight Right Turn	Stopped Streight
393	PATTERSON RD & N 15TH ST	8/27/2015	2:53:00 PM	PDO			Intersection Related	Front to Rear	8	Right Turn	Streight
394 395	PATTERSON RD & MARKET ST PATTERSON RD & PATTERSON RD	8/28/2015 8/28/2015	5:03:00 PM 8:48:00 AM	PDO			At Intersection Non-Intersection	Front to Side Front to Rear	w	Left Turn Slowing	Straight Stopped
396	PATTERSON RD & 30 RD	8/29/2015	8:38:00 PM	PDO	0.7.5	_	At Intersection	Front to Rear	W	Slowing	Stopped
397 398	PATTERSON RD & GRAND CASCADE WAY PATTERSON RD & 25 RD	9/1/2015 9/2/2015	7:40:00 AM 1:47:00 PM	PDO	250 500	E	Non-intersection Intersection Related	Front to Rear Front to Rear	w	Streight Slowing	Slowing Stopped
399	PATTERSON RD & 24 RD	9/2/2015	11:35:00 AM	PDO	30	E	Intersection Related	Front to Rear	w	Streight	Stopped
400	25 RD & PATTERSON RD 24 1/2 RD & PATTERSON RD	9/3/2015 9/4/2015	3:27:00 PM 4:57:00 PM	PDO	150 500	N 8	Driveway Access Related Driveway Access Related	Front to Side Front to Side	E	Left Turn	Streight Streight
402 403	PATTERSON RD & 24 1/2 RD PATTERSON RD & WINDIAN CREEK DR	9/4/2015 9/7/2015	3:00:00 PM 7:34:00 PM	PDO	150	E	At Intersection	Front to Side Sign	W	Left Turn Streight	Streight
404	PATTERSON RD & 30 RD	9/8/2015	1:01:00 PM	PDO	148	Ē	Non-intersection	Fence	Ē	Streight	UNK
405 406	25 RD & PATTERSON RD PATTERSON RD & 24 1/2 RD	9/9/2015	12:33:00 PM 6:14:00 PM	PDO	150	N E	Driveway Access Related Driveway Access Related	Front to Side	N N	Left Turn	Streight Streight
407	PATTERSON RD & 28 1/4 RD	9/10/2015	5:03:00 PM	PDO	200	_	At Intersection	Front to Side	W	Left Turn	Streight
408 409	24 RD & PATTERSON RD PATTERSON RD & N 12TH ST	9/11/2015 9/11/2015	7:08:00 PM 8:04:00 PM	NJ NJ			Intersection Related At Intersection	Front to Rear Front to Side	W	Streight Left Turn	Stopped Streight
410	N 1ST ST & PATTERSON RD		11:30:00 AM	PDO	25	8	Intersection Related	Front to Reer	N	Streight	Stopped
411 412	PATTERSON RD & 28 RD 24 RD & PATTERSON RD	9/14/2015 9/15/2015	10:13:00 AM 7:35:00 PM	PDO			At Intersection At Intersection	Front to Side Front to Front	8 E	Left Turn Left Turn	Streight Streight
413 414	30 RD & PATTERSON RD PATTERSON RD & 29 1/2 RD	9/18/2015	6:30:00 PM 3:57:00 PM	PDO	258	8	Non-intersection At Intersection	Other Fixed Object Front to Side	W	Streight Left Turn	UNK Straight
415	PATTERSON RD & 24 1/2 RD	9/24/2015	5:38:00 PM	NJ			At Intersection	Front to Front	E	Streight	Left Turn
416	PATTERSON RD & 29 RD 25 RD & PATTERSON RD	9/25/2015 9/28/2015	1:31:00 PM 9:28:00 AM	PDO	75 100	E N	Intersection Related Driveway Access Related	Side to Side Same Dir Front to Side	E	Changing Lanes Left Turn	Streight Streight
418	PATTERSON RD & MEANDER DR	9/28/2015	5:18:00 PM	PDO			Non-Intersection	Front to Rear	E	Straight	Stopped
419 420	PATTERSON RD & N 1ST ST PATTERSON RD & N 12TH ST	9/29/2015 9/29/2015	3:49:00 PM 8:38:00 AM	PDO	220 100	E	At Intersection Non-Intersection	Front to Rear Front to Rear	w	Slowing Slowing	Stopped Slowing
421 422	N 12TH ST & PATTERSON RD PATTERSON RD & 29 RD	9/29/2015 9/29/2015	7:55:00 AM 3:49:00 PM	PDO	100	N	Intersection Related At Intersection	Front to Rear Front to Rear	8	Streight Streight	Stopped 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
424 425	PATTERSON RD & N 12TH ST PATTERSON RD & 25 RD	10/3/2015	9:13:00 AM 1:20:00 PM	PDO	100 60	W	Driveway Access Related Intersection Related	Front to Reer	w	Slowing Changing Lanes	Stopped Stopped
426	29 RD & PATTERSON RD	10/9/2015	5:38:00 PM	PDO	50	8	At Intersection	Front to Rear	8	Streight	Slowing
427 428	29 RD & PATTERSON RD PATTERSON RD & 25 RD		5:38:00 PM 3:07:00 PM	PDO			At Intersection At Intersection	Front to Rear Front to Rear	w	Left Turn Streight	Left Turn Stopped
429 430	PATTERSON RD & 29 1/2 RD PATTERSON RD & 29 1/2 RD		5:31:00 PM 8:51:00 AM	PDO			At Intersection At Intersection	Front to Side Front to Side	E	Left Turn	Straight
431	29 RD & PATTERSON RD	10/13/2015	7:55:00 AM	PDO	393	8	Non-Intersection	Front to Side	8	Right Turn Left Turn	Streight Streight
432 433	PATTERSON RD & 24 1/2 RD PATTERSON RD & NORTHERN WAY		4:07:00 PM 11:50:00 AM	PDO NJ			At Intersection Driveway Access Related	Side to Side Same Dir Front to Side	E	Right Turn Streight	Streight Streight
434	24 1/2 RD & PATTERSON RD	10/16/2015	8:47:00 PM	INJ	500	8	At Intersection	Front to Side	E	Left Turn	Streight
435 436	PATTERSON RD & N 1ST ST PATTERSON RD & N 7TH ST		1:58:00 PM 1:08:00 PM	PDO	150	E	Non-Intersection At Intersection	Front to Rear Side to Side Same Dir	w s	Streight Right Turn	Stopped Left Turn
437	PATTERSON RD & 29 RD 30 RD & PATTERSON RD	10/16/2015	7.19:00 PM 5:06:00 PM	PDO			At Intersection	Front to Side	W	Left Turn	Streight
438 439	PATTERSON RD & 29 1/2 RD	10/19/2015	7:29:00 AM	PDO	30	E	At Intersection Intersection Related	Front to Rear Front to Rear	N	Slowing Right Turn	Stopped Streight
440 441	PATTERSON RD & N 1ST ST PATTERSON RD & N 12TH ST		4:18:00 PM 2:05:00 PM	PDO	268	w	Intersection Related Intersection Related	Front to Rear Side to Side Same Dir	E 8	Streight Right Turn	Stopped Left Turn
442	PATTERSON RD & MIRA VISTA RD	10/24/2015	2:54:00 PM	NJ	250	w	Non-Intersection	Front to Side	E	Changing Lanes	Streight
443	PATTERSON RD & N 8TH CT N 12TH ST & PATTERSON RD		12:51:00 PM 8:26:00 PM	PDO	200	E	Intersection Related Intersection Related	Front to Rear Front to Side	W	Slowing Right Turn	Stopped Stopped
445	PATTERSON RD & NORTHERN WAY	10/27/2015	9:15:00 AM	NJ	308	E	Non-Intersection	Front to Front	E	Left Turn	Streight
446	N 12TH ST & PATTERSON RD PATTERSON RD & 25 RD	10/30/2015	9:44:00 AM 2:28:00 PM	PDO	75 360	N E	Intersection Related Non-Intersection	Front to Rear Side to Side Same Dir	8 W	Straight Changing Lanes	Stopped Streight
448	PATTERSON RD & 27 1/2 RD	10/31/2015	12:09:00 PM	INJ	820	W	Non-Intersection	Front to Rear	W	Streight	Slowing
449 450	PATTERSON RD & N 1ST ST PATTERSON RD & MARKET ST	11/1/2015	11:02:00 AM 1:42:00 PM	PDO NJ	25 1114	E	Intersection Related Intersection Related	Front to Rear Side to Side Same Dir	w	Straight Changing Lanes	Stopped Streight
451 452	24 1/2 RD & PATTERSON RD PATTERSON RD & RIO GRANDE DR DR	11/3/2015	5:40:00 PM 4:15:00 PM	INJ INJ	500	8 E	At Intersection Non-intersection	Front to Side Front to Rear	E	Left Turn Streight	Streight Stopped
453	29 RD & PATTERSON RD	11/9/2015	8:35:00 AM	INJ	417	8	Driveway Access Related	Front to Side	8	Left Turn	Streight
454 455	N 12TH ST & PATTERSON RD N 12TH ST & PATTERSON RD	11/10/2015	3:52:00 PM 4:39:00 PM	PDO	625	8	Non-Intersection At Intersection	Front to Rear Front to Side	N N	Streight Left Turn	Stopped Straight
456	MEANDER DR & PATTERSON RD	11/11/2015	1:09:00 PM	NJ	187		At Intersection	Side to Side Same Dir	8	Right Turn	Right Turn
457 458	PATTERSON RD & N 7TH ST PATTERSON RD & 27 1/2 RD	11/11/2015	3:28:00 PM 8:58:00 AM	PDO	400	E	Non-Intersection At Intersection	Front to Rear Side to Side Same Dir	E 8	Slowing Left Turn	Slowing 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	Streight	Stopped
460	PATTERSON RD & SPRING VALLEY CIR PATTERSON RD & 24 RD		8:54:00 AM 10:59:00 AM	PDO	70	E	At Intersection Intersection Related	Front to Rear Front to Rear	w	Slowing Straight	Stopped Stopped
462 463	PATTERSON RD & N 15TH ST PATTERSON RD & N 12TH ST		10:58:00 AM 1:42:00 PM	PDO	10	w	Intersection Related At Intersection	Vehicle Debris or Cargo Front to Side	E N	Slowing Left Turn	Stopped Streight
464	25 RD & PATTERSON RD	11/16/2015	8:30:00 PM	PDO	20	N	Intersection Related	Front to Rear	N	Backing	Stopped
465 466	25 RD & PATTERSON RD MARKET ST & PATTERSON RD		9:18:00 AM 12:59:00 PM	PDO	150	N	Driveway Access Related Driveway Access Related	Side to Side Opp Dir Front to Side	E	Backing Right Turn	Stopped Streight
467	PATTERSON RD & N 1ST ST	11/20/2015	3:50:00 PM	PDO	80	w	Intersection Related	Front to Rear	E	Slowing	Stopped
468 469	24 RD & PATTERSON RD N 12TH ST & PATTERSON RD	11/23/2015 11/23/2015	1:42:00 PM 9:54:00 PM	PDO	50	N	At Intersection Intersection Related	Front to Rear Front to Rear	8	Streight Streight	Stopped Stopped
470	PATTERSON RD & N 1ST ST	11/25/2015	4:38:00 PM 11:42:00 PM	PDO			At Intersection	Front to Front	W	Left Turn	Streight
471	PATTERSON RD & PARK DR			PDO	200	E	Non-Intersection	Wall or Building	E	Streight	UNK

_	Intersection	Date	Time	Severity	Prom Int		Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
3	N 15TH ST & PATTERSON RD	11/30/2015		PDO	150	N	Intersection Related	Front to Rear	8	Streight	Stopped
5	PATTERSON RD & N 1ST ST PATTERSON RD & N 12TH ST	12/1/2015	8:55:00 AM 5:14:00 PM	NJ NJ	25 200	E W	At Intersection Non-Intersection	Front to Rear Front to Rear	- W	Streight Streight	Stopped Stopped
8	PATTERSON RD & N 15TH ST	12/4/2015	1:54:00 PM	NJ			Intersection Related	Front to Side	w	Left Turn	Straight
8	PATTERSON RD & 25 RD PATTERSON RD & PARK DR	12/6/2015	10:21:00 AM 12:48:00 PM	NJ NJ	150	w	Non-Intersection Non-Intersection	Front to Rear Front to Rear	w	Streight Streight	Stopped Stopped
9	PATTERSON RD & 25 RD	12/7/2015	11:39:00 AM	PDO	150	E	Driveway Access Related	Front to Side	N	Left Turn	Streight
10	PATTERSON RD & N 1ST ST PATTERSON RD & 29 RD	12/9/2015 12/9/2015	5:50:00 PM 3:49:00 PM	PDO	600	w	Non-intersection At Intersection	Front to Rear Front to Side	E	Streight Left Turn	Stopped Streight
2	PATTERSON RD & 25 1/2 RD	12/11/2015	4:44:00 PM	PDO	10	w	At Intersection	Front to Rear	E	Streight	Stopped
3	24 1/2 RD & PATTERSON RD 24 1/2 RD & PATTERSON RD	12/15/2015	5:14:00 PM	PDO	500 50	8	Driveway Access Related Non-intersection	Front to Side Front to Rear	E	Left Turn Streight	Straight Stopped
5	PATTERSON RD & 28 1/4 RD	12/16/2015	12:55:00 PM	NJ	30	w	Intersection Related	Front to Rear	E	Slowing	Stopped
8	PATTERSON RD & SERANADE ST PATTERSON RD & N 7TH ST	12/17/2015	9:50:00 PM	PDO	240 300	E	Non-intersection	Light Pole / Utility Pole	W	Straight Straight	Straight
8	PATTERSON RD & N 12TH ST	12/18/2015		PDO	859	w	Driveway Access Related	Front to Side	w	Left Turn	Stopped Streight
0	PATTERSON RD & 25 1/2 RD PATTERSON RD & SERANADE ST	12/18/2015		PDO	276 290	w	Non-intersection	Front to Front Front to Side	E 8	Streight	Streight
и	PATTERSON RD & SERANADE ST		11:48:00 AM	NJ	290	E	Driveway Access Related At Intersection	Front to Side	N	Left Turn	Straight Straight
2	PATTERSON RD & NORTHERN WAY		12:45:00 PM	PDO	20	w	Non-intersection	Front to Front	E	Changing Lanes	Straight
3	PATTERSON RD & 25 RD PATTERSON RD & SERANADE ST	12/23/2015		PDO	475	w	Driveway Access Related Driveway Access Related	Front to Side Front to Front	8 E	Right Turn Left Turn	Straight Straight
6	PATTERSON RD & N 12TH ST	12/23/2015	1:20:00 PM	PDO	100	w	Intersection Related	Front to Rear	E	Streight	Stopped
6	PATTERSON RD & EL CORONA DR PATTERSON RD & MARKET ST	12/23/2015	3:00:00 PM 2:54:00 PM	PDO	348	E	At Intersection At Intersection	Front to Rear Front to Side	N S	Left Turn	Straight Straight
8	24 RD & PATTERSON RD	12/24/2015	9:18:00 PM	PDO	540	-	At intersection	Front to Side	w	Changing Lanes	Straight
9	PATTERSON RD & N 12TH ST	12/27/2015	5:31:00 PM	PDO			At Intersection	Rear to Side	E	Left Turn	Straight
1	N 12TH ST & PATTERSON RD MARKET ST & PATTERSON RD	12/28/2015	8:08:00 AM 2:30:00 PM	PDO	200 150	8 N	Driveway Access Related Non-Intersection	Front to Side Side to Side Same Dir	N S	Left Turn Passing	Straight Stopped
2	PATTERSON RD & 24 1/2 RD	12/30/2015	2:17:00 PM	PDO			At Intersection	Side to Side Same Dir	E	Changing Lanes	Streight
4	PATTERSON RD & RIO GRANDE DR DR PATTERSON RD & SERANADE ST	12/31/2015	2:31:00 PM 12:14:00 PM	PDO	145	E	Intersection Related Intersection Related	Front to Rear Front to Rear	E 8	Changing Lanes Streight	Stopped Stopped
5	24 1/2 RD & PATTERSON RD	1/1/2016	2:20:00 PM	PDO	25	8	At Intersection	Front to Rear	N	Slowing	Slowing
6	PATTERSON RD & N 1ST 24 1/2 RD & PATTERSON RD	1/2/2016	6:14:00 PM 1:32:00 PM	PDO	500	8	At Intersection	Front to Rear Front to Side	N	Right Turn	Right Turn Straight/followin
8	PATTERSON RD & N 7TH ST	1/5/2016	6:11:00 PM	PDO	300	W	Driveway Access Related Non-Intersection	Front to Side Front to Rear	E	Right Turn Straight/following RD	Straight/followin Stopped
	PATTERSON RD & VIEW POINT DR	1/7/2016	2:35:00 AM	PDO	161	w	Non-intersection	Concrete Highway	w	Straight/following RD	UNK
0	PATTERSON RD & LEGENDS WAY	1/7/2016	7:19:00 AM	PDO	0		At Intersection	Barrier Sign	E	Straight/following RD	UNK
1	PATTERSON RD & N ST	1/9/2016	5:30:00 PM	PDO	300	w	Non-Intersection	Side to Side Same Dir	E	Weaving	Straight/followin
3	PATTERSON RD & 30 PATTERSON RD & 24 1/2 RD	1/13/2016	4:11:00 PM 6:15:00 PM	PDO	239 500	w	Non-intersection Non-intersection	Front to Rear Side to Side Same Dir	W	Straight/following RD Straight/following RD	Stopped Straight/followin
4	28 1/4 RD & PATTERSON RD	1/15/2016	6:19:00 AM	NJ	0		At Intersection	Bicycle	8	Streight/following RD	Straight/followin
5 6	PATTERSON RD & 29 RD PATTERSON RD & N ST	1/20/2016	5:35:00 PM 12:34:00 PM	PDO	0		Intersection Related At Intersection	Front to Front	w	Left Turn	Straight/following
7	PATTERSON RD & N 15TH ST	1/24/2016	1:54:00 PM	PDO	0		At Intersection	Front to Side	w	Straightfollowing RD	Straight/followin
8	24 RD & PATTERSON RD	1/25/2016	3:13:00 PM	PDO	350	8	Highway Interchange	Front to Side	W	Right Turn	Straight/followin
9	PATTERSON RD & 28 34 RD RD PATTERSON RD & 30 RD	1/28/2016	10:53:00 AM 8:18:00 PM	PDO	100	E	Non-intersection At Intersection	Side to Side Same Dir Front to Rear	w	Changing Lanes Straight/following RD	Straight/followin
1	PATTERSON RD & N ST	1/30/2016	7:28:00 PM	PDO	0		At Intersection	Front to Rear	N	Right Turn	Straight/followin
3	PATTERSON RD & 25 RD RD NORTHERN WAY & PATTERSON RD	2/1/2016 2/1/2016	6:35:00 PM 4:02:00 PM	PDO	300	N	At Intersection Non-Intersection	Front to Front Rear to Side	8 E	Left Turn Backing	Straight/followin Straight/followin
4	25 RD & PATTERSON RD	2/5/2016	11:10:00 AM	PDO	130	N	Driveway Access Related	Front to Side	Ē	Right Turn	Streightfollowin
5	30 RD & PATTERSON RD	2/8/2016	8:56:00 AM	PDO	200	N	Driveway Access Related	Side to Side Same Dir	8	Passing	Right Turn
6	PATTERSON RD & RIO GRANDE DR	2/11/2016	5:28:00 PM	PDO	100	E	Non-intersection	Front to Rear Side to Side Opposite	E	Straight/following RD	Stopped
7	PATTERSON RD & 24 RD	2/15/2016	2:38:00 PM	PDO	0		At Intersection	Dir	w	Straight/following RD	Stopped
8	PATTERSON RD & 29 RD PATTERSON RD & N 12TH ST	2/16/2016	6:31:00 PM 6:42:00 PM	INJ INJ	0		At Intersection At Intersection	Front to Side Front to Rear	W	Left Turn Streight/following RD	Straight/followin Stopped
0	24 RD & PATTERSON RD	2/22/2016	8:28:00 PM	PDO	250	8	Intersection Related	Front to Side	w	Right Turn	Straight/followin
1 2	PATTERSON RD & MARKET ST PATTERSON RD & 25 RD	2/27/2016 2/29/2016	10:45:00 AM 3:05:00 AM	NJ NJ	50	w	At Intersection Intersection Related	Front to Side Tree	w	Straight/following RD Straight/following RD	Straight/followin
3	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/followin
4	PATTERSON RD & 25 RD	3/4/2016	1:01:00 PM	PDO	200	w	Intersection Related	Front to Reer	E	Straightfollowing RD	Slowing
5 6	PATTERSON RD & 24 1/2 RD RD PATTERSON RD & 29 3/8 RD RD	3/4/2016	5:18:00 PM 2:35:00 PM	PDO	93	Е	Intersection Related Driveway Access Related	Front to Rear Front to Rear	8 W	Right Turn Changing Lanes	Right Turn Right Turn
7	PATTERSON RD & BEECHWOOD ST	3/7/2016	3:48:00 PM	NJ	0		At Intersection	Front to Rear	W	Slowing	Stopped
8	PATTERSON RD & N 1ST 28 1/4 RD & PATTERSON RD	3/8/2016 3/8/2016	8:59:00 AM 8:41:00 AM	PDO	400 50	E N	Non-intersection Intersection Related	Front to Rear Front to Rear	W	Straight/following RD Slowing	Slowing Stopped
0	PATTERSON RD & NORTHERN WAY	3/10/2016	12:17:00 PM	NJ	100	E	Driveway Access Related	Side to Side Opposite	8	Left Turn	Straightfollowin
1	PATTERSON RD & N 12TH ST	3/10/2016	4:12:00 PM	PDO	80	N	Intersection Deleted	Dir Front to Rear		Siming	Stronger
2	24 1/2 RD & PATTERSON RD		1243:00 PM	PDO	500	8	Driveway Access Related	Front to Rear	w	Streightfollowing RD	Straight/followin
3	24 1/2 RD & PATTERSON RD		1:01:00 PM	PDO	500	8	Driveway Access Related	Front to Front	8	Left Turn	Straight/followin
4 5	PATTERSON RD & PIONEER RD PATTERSON RD & 25 RD		11:49:00 PM 2:05:00 PM	PDO	130	E	At Intersection Driveway Access Related	Front to Side Front to Rear	8 E	Left Turn Streight/following RD	Left Turn Slowing
8	PATTERSON RD & MEANDER DR	3/26/2016	5:01:00 PM	PDO	50	E	Non-intersection	Front to Rear	E	Straight/following RD	Slowing
7 3	PATTERSON RD & 28 1/4 RD RD PATTERSON RD & 27 1/2 RD RD	3/27/2016 3/29/2016	1:45:00 PM 6:19:00 PM	PDO	1600	E	Non-intersection At Intersection	Front to Side Side to Side Same Dir	E 8	U-Turn Right Turn	Straight/followin Straight/followin
ij	PATTERSON RD & N ST	4/2/2016	2:36:00 PM	NJ	318	w	Driveway Access Related	Front to Side	w	Left Turn	Straight/followin
0	PATTERSON RD & 28 1/4 RD PATTERSON RD & N 15TH ST		7:09:00 AM 11:22:00 AM	PDO	0		At Intersection	Front to Side Front to Rear	E	Straightfollowing RD Straightfollowing RD	Left Turn
2	PATTERSON RD & 25 RD	4/6/2016	4:32:00 PM	PDO	90	E	Intersection Related Driveway Access Related	Front to Rear	E	Straight/following RD	Slowing Slowing
3	25 RD & PATTERSON RD	4/8/2016	2:14:00 PM	NJ	100	N	Intersection Related	Front to Rear	8	Slowing	Stopped
5	PATTERSON RD & 29 3/8 RD PATTERSON RD & N ST		7:54:00 AM 10:53:00 AM	PDO	150	E	Non-intersection Intersection Related	Front to Rear Front to Rear	W	Straightfollowing RD Backing	Slowing Stopped
8	PATTERSON RD & MEANDER DR	4/12/2016	3:42:00 PM	PDO	0		Intersection Related	Side to Side Same Dir	W	Weaving	Straightfollowin
7	PATTERSON RD & N ST PATTERSON RD & 29 1/2 RD RD		1:47:00 PM 7:01:00 AM	PDO	880 297	w	Driveway Access Related Driveway Access Related	Other Object Bicycle	N 8	Right Turn Right Turn	UNK Straightfollowin
9	PATTERSON RD & N 7TH ST	4/15/2016	7:12:00 AM	PDO			At Intersection	Front to Front	E	Straight/following RD	Left Turn
0	PATTERSON RD & N ST PATTERSON RD & N ST	4/15/2016 4/18/2016	3:37:00 PM	PDO	300	E	Intersection Related	Front to Rear	w	Other	Passing
2	PATTERSON RD & N ST PATTERSON RD & 30 RD RD	4/19/2016	12:20:00 PM 9:15:00 AM	PDO			Intersection Related At Intersection	Front to Side Front to Front	N	Passing Left Turn	Straight/followin Straight/followin
3	PATTERSON RD & 28 RD RD	4/20/2016	2:00:00 PM	NJ			At Intersection	Front to Side	8	Left Turn	Left Turn
5	PATTERSON RD & PARK AVE PATTERSON RD & MIRA VISTA RD	4/20/2016 4/20/2016	2:00:00 PM 5:17:00 PM	PDO	20	E	Non-Intersection At Intersection	Side to Side Same Dir Front to Rear	E	Changing Lanes Straight/following RD	Straight/followin Stopped
8	PATTERSON RD & 28 RD RD	4/21/2016	12:01:00 PM	INJ			At Intersection	Front to Side	8	Left Turn	Straight/followin
7 8	30 RD & PATTERSON RD PATTERSON RD & BEECHWOOD ST		12:17:00 PM 8:00:00 AM	PDO	50	8	Intersection Related	Front to Rear	N	Slowing	Stopped Straight/followin
9	PATTERSON RD & 28 1/4 RD RD	4/22/2016	11:27:00 AM	PDO	100	w	Driveway Access Related Intersection Related	Front to Side Side to Side Same Dir	E	Left Turn Changing Lanes	Straight/followin
0	PATTERSON RD & 30 RD RD	4/23/2016	5:35:00 PM	INJ	225	w	At Intersection	Front to Rear	E	Slowing	Stopped
1 2	PATTERSON RD & N ST 24 RD & PATTERSON RD	4/27/2016 4/29/2016	7:38:00 AM 11:18:00 AM	INJ INJ	70	8	At Intersection Intersection Related	Front to Side Front to Rear	W	Left Turn Slowing	Streight/followin Stopped
3	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/followin
4	PATTERSON RD & 25 RD	5/2/2018	2:41:00 PM	NJ	100	E	Intersection Related	Front to Rear	W	Straight/following RD	Slowing
5 8	PATTERSON RD & 24 1/2 RD RD PATTERSON RD & N ST	5/2/2016 5/2/2016	5:18:00 PM 4:45:00 PM	PDO	600	w	At Intersection Non-Intersection	Front to Side Front to Rear	8 E	Left Turn Changing Lanes	Straight/followin Stopped
7	PATTERSON RD & N 12TH ST	5/3/2016	7:19:00 PM	NJ NJ	295	N	Non-Intersection	Side to Side Opposite	E	Left Turn	Straightfollowin
8	PATTERSON RD & N 121H ST	5/5/2016	4:14:00 PM	PDO	900	w		Dir Front to Reer			
9	PATTERSON RD & 25 RD RD	5/6/2016	11:58:00 AM	PDO	1433	w	Non-Intersection Driveway Access Related	Front to Rear Front to Side	- E	Straight/following RD Right Turn	Stopped Straight/followin
	PATTERSON RD & N ST PATTERSON RD & SPRING VALLEY CIR	5/8/2016	11:28:00 AM	NJ	100	W	Intersection Related	Front to Rear	E	Slowing	Stopped
0	DATTEDOON OF & CODING VALLEY OR	5/11/2016	2:28:00 PM	NJ	150	E	Non-Intersection At Intersection	Front to Rear Front to Side	W	Streight/following RD Left Turn	Slowing Straight/followin
0		5/15/2018	6:48:00 PM								
0 1 2 2 3	PATTERSON RD & BROKEN RD PATTERSON RD & 24 1/2 RD	5/15/2016 5/15/2016	6:48:00 PM 2:10:00 AM	PDO			At Intersection	Traffic Signal Pole	w	Streight/following RD	UNK
1 2	PATTERSON RD & BROKEN RD				75	w		Traffic Signal Pole Front to Rear Front to Side	_		

*	Intersection	Date	Time	Severity	Distance From Int		Road Description	Acoldent Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
588	PATTERSON RD & 29 1/2 RD RD	5/20/2016	4:39:00 PM	NJ	300	E	Intersection Related	Front to Rear	w	Slowing	Stopped
589 590	PATTERSON RD & NORTHGATE DR PATTERSON RD & 30 RD	5/24/2016 5/26/2016	3:20:00 PM 1:52:00 PM	PDO NJ	100	w	At Intersection Intersection Related	Side to Side Same Dir Front to Rear	N E	Left Turn Straight/following RD	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	Straightfollowing RD
592 593	24 RD & PATTERSON RD PATTERSON RD & 27 1/2 RD RD	6/1/2016 6/1/2016	6:14:00 PM 8:00:00 AM	PDO	350 250	8 W	Highway Interchange Driveway Access Related	Front to Rear Front to Side	NW N	Streightfollowing RD Left Turn	Stopped Streightfollowing 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
595 596	PATTERSON RD & 28 RD PATTERSON RD & N 12TH ST	6/1/2016	5:19:00 PM 5:10:00 PM	PDO NJ	70 300	E	Intersection Related Intersection Related	Front to Rear Front to Rear	E	Straight/following RD Straight/following RD	Stopped 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
598 599	PATTERSON RD & 25 RD RD PATTERSON RD & N ST	6/4/2016 6/7/2016	4:27:00 PM 9:57:00 AM	PDO	120 400	w	Driveway Access Related Non-Intersection	Front to Side Front to Rear	- 8 W	Left Turn Changing Lanes	Straightfollowing RD Straightfollowing 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 PATTERSON RD & N 15TH ST	6/8/2016 6/8/2016	8:58:00 AM 7:32:00 PM	PDO	300	E	Non-intersection At intersection	Front to Rear Front to Rear	W	Straight/following RD Straight/following RD	Slowing Stopped
603	PATTERSON RD & SPRING VALLEY CIR	6/9/2016	8:57:00 AM	PDO			At Intersection	Front to Rear	E	Streight/following RD	Slowing
604	24 RD & PATTERSON RD PATTERSON RD & 28 1/4 RD RD	6/10/2016 6/11/2016	4:57:00 PM 2:25:00 PM	PDO	500	w	Intersection Related Non-Intersection	Side to Side Same Dir Front to Rear	N E	Right Turn Slowing	Straight/following RD Stopped
606	PATTERSON RD & MARKET ST	6/14/2016 6/15/2016	9:19:00 AM 11:42:00 AM	NJ PDO	240	w	At Intersection	Front to Side	E	Straight/following RD	Left Turn
608	PATTERSON RD & VIEW POINT DR PATTERSON RD & N ST	6/16/2016	8:22:00 AM	PDO	10	E	Intersection Related Intersection Related	Front to Rear Front to Rear	w	Straight/following RD Slowing	Stopped Stopped
609	PATTERSON RD & RIO DR	6/20/2016 6/20/2016	10:22:00 PM 4:21:00 PM	NJ PDO	30		At Intersection	Front to Rear	8	Right Turn	Straight/following RD
611	PATTERSON RD & N 15TH ST PATTERSON RD & N ST	6/20/2016	8:21:00 PM	PDO	30	E	Intersection Related At Intersection	Front to Rear Front to Side	W	Straight/following RD Left Turn	Stopped Straight/following RD
612 613	PATTERSON RD & N ST 24 1/2 RD & PATTERSON RD	6/21/2016 6/22/2016	3:42:00 PM 4:28:00 PM	PDO	500	8	At Intersection At Intersection	Front to Side Front to Side	N E	Left Turn	Straight/following RD Straight/following RD
614	PATTERSON RD & 29 RD	6/22/2016	9:08:00 AM	PDO	500	•	At Intersection	Front to Side	E	Straight/following RD	Straight/following RD
615 616	PATTERSON RD & 25 RD RD PATTERSON RD & 28 RD	6/24/2016 6/25/2016	3:32:00 PM 10:30:00 AM	PDO	150	E	Driveway Access Related Non-Intersection	Front to Side	N	Left Turn	Straightfollowing RD Straightfollowing RD
617	PATTERSON RD & 28 1/4 RD RD	6/25/2016	12:40:00 PM	PDO	300	w	At Intersection	Front to Front	N	Straight/following RD Left Turn	Straight/following RD
618 619	PATTERSON RD & 28 RD RD PATTERSON RD & 29 RD	6/29/2016 6/29/2016	2:39:00 PM 3:04:00 PM	INJ INJ			At Intersection At Intersection	Side to Side Same Dir Front to Side	w	Right Turn Left Turn	Straightfollowing RD Straightfollowing RD
620	PATTERSON RD & 29 RD	7/1/2016	2:58:00 PM	NJ NJ			At Intersection	Front to Side	w	Left Turn	Straight/following RD
621 622	PATTERSON RD & N 7TH ST PATTERSON RD & 29 RD	7/1/2016 7/3/2016	1:04:00 PM 11:50:00 PM	PDO			At Intersection	Front to Side	W	Straight/following RD Straight/following RD	Straight/following RD UNK
623	PATTERSON RD & N ST	7/8/2016	5:05:00 PM	PDO	300	w	Driveway Access Related	Sign Front to Side	N	Left Turn	Straight/following RD
624 625	PATTERSON RD & 29 1/2 RD PATTERSON RD & LEGENDS WAY	7/11/2016 7/12/2016	6:45:00 AM 5:35:00 PM	NJ PDO	50	w	Non-Intersection Non-Intersection	Front to Rear Front to Rear	W	Straightfollowing RD Slowing	Stopped 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
627 628	PATTERSON RD & 28 1/4 RD RD PATTERSON RD & 29 1/2 RD	7/18/2016 7/17/2016	5:12:00 PM 1:51:00 PM	PDO	60	E	Non-Intersection Intersection Related	Front to Side Front to Rear	w	U-Turn Straight/following RD	Left Turn 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 PATTERSON RD & N ST	7/21/2016 7/24/2016	4:09:00 PM 5:22:00 PM	PDO NJ	500	8	Intersection Related At Intersection	Side to Side Same Dir Front to Side	w	Right Turn Left Turn	Straight/following RD Straight/following RD
632	PATTERSON RD & N 12TH ST	7/29/2016	6:29:00 PM	NJ	320	8	Non-Intersection	All Other Peda	W	Streight/following RD	Straight/following RD
633	PATTERSON RD & 25 1/2 RD RD PATTERSON RD & 27 1/2 RD	8/1/2016	5:32:00 PM 7:08:00 PM	PDO			At Intersection Driveway Access Related	Front to Side	_ 8 E	Left Turn Straight/following RD	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	Streight/following RD	Stopped
636 637	PATTERSON RD & 27 1/2 RD PATTERSON RD & MESA MALL ACCESS	8/5/2016 8/8/2016	4:05:00 PM 5:53:00 PM	NJ NJ	250 150	E W	Intersection Related Intersection Related	Front to Rear Front to Rear	W E	Straight/following RD Straight/following RD	Stopped 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 PATTERSON RD & BURKEY ST	8/8/2016 8/10/2016	4:52:00 PM 10:33:00 AM	PDO			At Intersection Non-Intersection	Front to Side Front to Rear	8 E	Left Turn Slowing	Straight/following RD Stopped
641	PATTERSON RD & BEECHWOOD ST PATTERSON RD & EL DR	8/11/2016	4:00:00 PM 3:28:00 PM	PDO			Driveway Access Related At Intersection	Front to Rear Front to Side	E	Streight/following RD	Right Turn
642 643	28 1/4 RD & PATTERSON RD	8/14/2016	5:05:00 PM	INJ			Non-Intersection	Side to Side Same Dir	8	Left Turn U-Turn	Left Turn Straightfollowing RD
644	PATTERSON RD & N ST PATTERSON RD & N 18T	8/15/2016	9:15:00 AM 3:44:00 PM	PDO	900	-	At Intersection Intersection Related	Front to Reer	N	Left Turn	Straight/following RD
645	PATTERSON RD & N ST	8/17/2016	7:42:00 PM	PDO	300	E	Intersection Related	Front to Rear Front to Rear	8	Streight/following RD Slowing	Stopped Stopped
647 648	PATTERSON RD & N 15TH ST PATTERSON RD & 25 1/2 RD RD	8/23/2016 8/26/2016	9:14:00 AM 2:48:00 AM	PDO NJ	40	E	Intersection Related At Intersection	Front to Rear Front to Side	w	Straightfollowing RD Right Turn	Streight/following RD Stopped
649	PATTERSON RD & N 12TH ST	8/26/2016	12:24:00 PM	PDO	104	N	Intersection Related	Side to Side Same Dir	8	Changing Lanes	Straight/following RD
650 651	PATTERSON RD & 30 RD PATTERSON RD & 29 RD	8/30/2016	8:20:00 PM 3:53:00 PM	NJ NJ			At Intersection At Intersection	Front to Side Front to Front	w	Streight/following RD Left Turn	Left Turn Streightfollowing RD
652	PATTERSON RD & N 12TH ST	9/5/2016	6:45:00 PM	PDO	200	8	Driveway Access Related	Side to Side Same Dir	8	Changing Lanes	Straight/following RD
653 654	PATTERSON RD & GRAND CASCADE WAY PATTERSON RD & MESA ACCESS	9/8/2016 9/7/2016	7:50:00 AM 9:11:00 AM	NJ NJ	400	E	Non-Intersection At Intersection	Front to Rear Front to Front	w	Straight/following RD Left Turn	Straight/following RD Straight/following RD
655	PATTERSON RD & PARK AVE	9/9/2016	5:18:00 PM	NJ			At Intersection	Front to Rear	E	Slowing	Stopped
656 657	25 RD & PATTERSON RD PATTERSON RD & 25 RD	9/9/2016	8:30:00 AM 7:00:00 AM	PDO NJ	120	N	Driveway Access Related At Intersection	Front to Side Front to Side	E	Right Turn Straight/following RD	Straight/following RD Straight/following RD
658	PATTERSON RD & N 7TH ST		2:58:00 PM	INJ	20	E	Intersection Related	Front to Rear	W	Straight/following RD	Right Turn
660	PATTERSON RD & PHEASANT TRAIL CT PATTERSON RD & 25 1/2 RD RD	9/13/2016	7:58:00 AM 7:58:00 AM	PDO	150	E	Non-Intersection At Intersection	Front to Rear Front to Rear	w	Straight/following RD Backing	Stopped Stopped
661	PATTERSON RD & 25 1/2 RD PATTERSON RD & MARKET ST	9/13/2016	7:57:00 AM 2:51:00 PM	PDO			At Intersection Intersection Related	Front to Side Front to Side	E	Straight/following RD Changing Lanes	Streight/following RD
663	PATTERSON RD & N 15TH ST	9/17/2016	8:39:00 PM	INJ			Intersection Related	Front to Rear	Ē	Straight/following RD	Straight/following RD Stopped
664 665	PATTERSON RD & GRAND CASCADE WAY PATTERSON RD & 24 1/2 RD RD	9/20/2016 9/21/2016		PDO	125 350	E	Non-Intersection Non-Intersection	Front to Rear Front to Side	W	Streightfollowing RD Left Turn	Stopped Streightfollowing RD
666	PATTERSON RD & PIONEER RD	9/26/2016	7:47:00 AM	PDO	530	-	Non-intersection	Front to Rear	w	Slowing	Stopped
667 668	PATTERSON RD & 29 RD PATTERSON RD & N ST	9/27/2016	6:41:00 AM 12:00:00 PM	PDO			At Intersection At Intersection	Front to Side Front to Front	N W	Left Turn	Straight/following RD Straight/following RD
669	25 1/2 RD & PATTERSON RD	9/29/2016	8:12:00 AM	NJ			Intersection Related	Front to Rear	8	Straight/following RD	Stopped
670 671	PATTERSON RD & 25 RD RD PATTERSON RD & N 1ST	9/29/2016 9/29/2016	1:45:00 PM 11:36:00 AM	PDO	1150	w	Driveway Access Related At Intersection	Front to Side Side to Side Same Dir	8 N	Left Turn Left Turn	Straight/following RD Left Turn
672	PATTERSON RD & 29 RD	9/30/2016	9:18:00 PM	PDO			At Intersection	Side to Side Opposite	w	Left Turn	Straightfollowing RD
673	PATTERSON RD & BURKEY ST		3:24:00 PM	NJ			Intersection Related	Other - Non Collision	E	Slowing	Slowing
674 675	25 RD & PATTERSON RD 25 RD & PATTERSON RD		9:47:00 AM 3:02:00 PM	PDO PDO	158 125	N N	Driveway Access Related Driveway Access Related	Front to Front Front to Front	E	Left Turn	Slowing Straightfollowing RD
676	PATTERSON RD & N ST	10/6/2016	11:59:00 AM	PDO			At Intersection	Front to Rear	E	Slowing	Stopped
677 678	24 1/2 RD & PATTERSON RD PATTERSON RD & N ST		11:08:00 AM 1:33:00 PM	PDO NJ	315	8	Non-Intersection At Intersection	Side to Side Same Dir Front to Front	8 W	Changing Lanes Left Turn	Straightfollowing RD Straightfollowing RD
679	PATTERSON RD & 25 RD RD	10/12/2018	8:20:00 PM	INJ	150	w	Intersection Related	Front to Side	8	Left Turn	Straight/following RD
680 681	PATTERSON RD & 24 RD PATTERSON RD & 25 1/2 RD		7:48:00 PM 10:08:00 AM	PDO	30	E	Intersection Related At Intersection	Front to Rear Front to Side	w	Straight/following RD Straight/following RD	Stopped Streightfollowing RD
682	PATTERSON RD & 30 RD	10/17/2016	4.53:00 PM	PDO			At Intersection	Front to Side	8	Straight/following RD	Straightfollowing RD
683 684	PATTERSON RD & MARKET ST PATTERSON RD & 25 1/2 RD RD		12:10:00 PM 4:32:00 PM	PDO	731	E	Non-Intersection Intersection Related	Side to Side Same Dir Front to Rear	N	Changing Lanes Stopped	Straight/following RD Stopped
685	PATTERSON RD & 29 RD	10/20/2018	3:38:00 PM	PDO	50	-	At Intersection	Front to Side	W	Left Turn	Straight/following RD
686 687	PATTERSON RD & 29 1/2 RD RD 24 1/2 RD & PATTERSON RD	10/21/2016	11:44:00 AM 6:26:00 PM	PDO	500	8	Intersection Related Intersection Related	Front to Rear Front to Side	E	Other Left Turn	Stopped Straightfollowing RD
688	PATTERSON RD & N 1ST	10/23/2018	1:40:00 AM	PDO			Intersection Related	Front to Front	W	Left Turn	Stopped
689	PATTERSON RD & N 7TH ST PATTERSON RD & MARKET ST		1:22:00 PM 2:42:00 PM	NJ NJ	400	w	Non-intersection At intersection	Front to Rear Front to Side	E	Straight/following RD Straight/following RD	Stopped Left Turn
691 692	PATTERSON RD & 29 RD PATTERSON RD & N 15TH ST	10/28/2018	4:00:00 PM 2:28:00 PM	PDO			At intersection At intersection	Front to Side	w	Straight/following RD	Slowing
693	PATTERSON RD & GRAND CASCADE WAY	11/4/2016	2:37:00 PM	NJ NJ	450	E	Non-Intersection	Front to Side Bicycle	E	Straight/following RD Straight/following RD	Straight/following RD Straight/following RD
694 695	PATTERSON RD & 24 1/2 RD PATTERSON RD & 28 RD RD		6:36:00 AM 12:09:00 PM	PDO	150	E	Non-Intersection	Curb Front to Side	W	Streight/following RD	UNK
696	PATTERSON RD & MIRA RD	11/10/2018	4:07:00 PM	PDO	300	E	At Intersection Driveway Access Related	Front to Side Front to Front	W	Left Turn	Straight/following RD Straight/following RD
697 698	PATTERSON RD & N 15TH ST PATTERSON RD & SPRING CIR	11/10/2018	9:04:00 AM 3:28:00 PM	PDO	225	w	Non-Intersection At Intersection	Front to Rear Front to Side	W	Streight/following RD Left Turn	Stopped Straight/following RD
			10:30:00 PM	INJ	150	8	Driveway Access Related	Front to Rear	N	Streightfollowing RD	Stopped
699	24 1/2 RD & PATTERSON RD										
699 700	PATTERSON RD & 24 1/2 RD RD	11/13/2018	6:19:00 PM	NJ PDO	1350	w	At Intersection	Front to Side	N	Left Turn	Straightfollowing RD Straightfollowing RD
699		11/13/2016	6:19:00 PM 11:47:00 AM 4:13:00 PM	PDO PDO	1350	w	At Intersection Non-intersection At Intersection	Front to Side Front to Front Wild Animal Side to Side Opposite	E E	Left Turn Right Turn Streight/following RD	Straightfollowing RD Straightfollowing RD UNK

704 705 706 707 708 709 709 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 730 731 732 733 734 735 735	PATTERSON RD & 24 1/2 RD RD PATTERSON RD & 50 RD PATTERSON RD & 50 RD PATTERSON RD & 25 34 RD 24 RD & PATTERSON RD 25 RD & PATTERSON RD 25 RD & PATTERSON RD PATTERSON RD & 25 RD RD PATTERSON RD & 25 RD RD PATTERSON RD & 25 RD RD PATTERSON RD & 26 1/4 RD RD PATTERSON RD & 26 1/4 RD RD PATTERSON RD & 10 N ST PATTERSON RD & N ST PATTERSON RD & N ST PATTERSON RD & MARKET ST PATTERSON RD & MARKET ST PATTERSON RD & MARKET ST PATTERSON RD & 1/2 RD RD PATTERSON RD & 25 RD RD PATTERSON RD & 25 RD RD PATTERSON RD & 26 RD RD PATTERSON RD & 26 RD RD PATTERSON RD & 1/2 RD RD	11/23/2016 11/23/2016 11/25/2016 11/25/2016 12/1/2016 12/1/2016 12/1/2016 12/5/2016 12/5/2016 12/5/2016 12/5/2016 12/5/2016 12/5/2016 12/5/2016 12/5/2016	5:45:00 PM 9:14:00 PM 11:00:00 AM 12:48:00 PM 4:15:00 PM 9:11:00 PM	PDO PDO PDO INJ PDO PDO PDO	300 500 200	w	At Intersection Non-Intersection Intersection Related	Front to Side Front to Rear Front to Rear	W E W	Left Turn Straight/following RD	Straight/following RD Slowing Stopped
706 707 707 708 709 710 711 712 713 714 715 716 717 716 717 717 720 721 722 723 724 725 727 727 727 728 729 730 731 732 733 733 734 735	PATTERSON RO & MARKET ST PATTERSON RO & 25 SM RD 24 RO & PATTERSON RD 25 RO & PATTERSON RD 25 RO & PATTERSON RD PATTERSON RO & 25 RD RD PATTERSON RO & 10 RD PATTERSON RO & 10 RD PATTERSON RO & 10 RD PATTERSON RO & MARKET ST PATTERSON RO & MARKET ST PATTERSON RO & MARKET ST PATTERSON RO & 10 RD RD PATTERSON RO & 10 RD RD PATTERSON RO & 25 RD RD PATTERSON RO & 10 N 12TH ST	11/23/2018 11/25/2018 11/25/2018 11/30/2018 12/1/2018 12/1/2018 12/5/2018 12/5/2018 12/5/2018 12/5/2018 12/5/2018 12/5/2018 12/5/2018 12/5/2018 12/1/2018	9:14:00 PM 9:14:00 PM 11:00:00 AM 12:48:00 PM 4:15:00 PM 9:11:00 PM 9:38:00 AM 7:42:00 PM 6:26:00 PM	PDO NJ PDO PDO PDO PDO	500		Intersection Related				
707 708 709 710 711 712 713 714 715 716 717 718 720 721 722 723 724 727 728 729 730 731 732 733 734 735	PATTERSON RD & 25 9M RD 24 RD & PATTERSON RD 25 RD & PATTERSON RD 25 RD & PATTERSON RD PATTERSON RD & 25 RD RD PATTERSON RD & 25 RD RD PATTERSON RD & 25 RD RD PATTERSON RD & 38 TP PATTERSON RD & N ST PATTERSON RD & N ST PATTERSON RD & N ST PATTERSON RD & MARKET ST PATTERSON RD & MARKET ST PATTERSON RD & MARKET ST PATTERSON RD & 12 TH ST PATTERSON RD & 25 RD RD PATTERSON RD & 25 RD RD PATTERSON RD & 26 RD RD PATTERSON RD & 27 RD RD PATTERSON RD & 28 RD RD PATTERSON RD & A N 27 RD RD	11/25/2018 11/29/2018 11/30/2018 12/1/2018 12/1/2018 12/1/2018 12/5/2018 12/5/2018 12/5/2018 12/5/2018 12/1/2018 12/1/2018 12/1/2018	9:14:00 PM 11:00:00 AM 12:48:00 PM 4:15:00 PM 9:38:00 AM 7:42:00 PM 6:26:00 PM	PDO PDO PDO PDO						Straight/following RD	
709 710 711 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 728 729 729 731 732 733 734 735	25 RO & PATTERSON RD PATTERSON RO & 25 RD RO PATTERSON RO & 25 RD RO PATTERSON RO & 20 14 RD RO PATTERSON RO & 14 RD RO PATTERSON RO & N ST PATTERSON RO & N ST PATTERSON RO & N ST PATTERSON RO & MARKET ST PATTERSON RO & MARKET ST PATTERSON RO & N 127H ST PATTERSON RO & N 127H ST PATTERSON RO & 14 RD RO PATTERSON RO & 25 RD RO PATTERSON RO & 25 RD RO PATTERSON RO & 25 RD RO PATTERSON RO & N 127H ST	11/30/2016 12/1/2016 12/1/2016 12/1/2016 12/5/2016 12/5/2016 12/5/2016 12/6/2016 12/10/2016 12/10/2016	12:48:00 PM 4:15:00 PM 9:11:00 PM 9:38:00 AM 7:42:00 PM 6:26:00 PM	PDO PDO PDO			Non-Intersection	Front to Rear	E	Streight/following RD	Slowing
711 712 713 714 715 716 716 717 718 719 720 721 722 723 724 725 728 727 728 729 730 731 732 733 734 736	PATTERSON RD & 27 1/2 RD PATTERSON RD & 28 1/4 RD RD PATTERSON RD & N ST PATTERSON RD & N ST PATTERSON RD & N ST PATTERSON RD & MARKET ST PATTERSON RD & MARKET ST PATTERSON RD & MARKET ST PATTERSON RD & N 1/211 ST PATTERSON RD & 1/2 RD RD PATTERSON RD & 25 1/4 RD RD PATTERSON RD & 25 1/4 RD RD PATTERSON RD & 25 1/2 RD RD PATTERSON RD & 26 1/2 RD RD PATTERSON RD & N 1/211 ST	12/1/2018 12/1/2018 12/5/2018 12/5/2018 12/5/2018 12/9/2018 12/10/2018 12/10/2018	9:11:00 PM 9:38:00 AM 7:42:00 PM 6:26:00 PM	PDO	200	8 N	At Intersection Driveway Access Related	Side to Side Same Dir Front to Side	N	Right Turn Left Turn	Straightfollowing RD Straightfollowing RD
712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 727 728 729 730 731 732 733 734 735	PATTERSON RD & 28 1/4 RD RD PATTERSON RD & N ST PATTERSON RD & N ST PATTERSON RD & N ST PATTERSON RD & MARKET ST PATTERSON RD & MARKET ST PATTERSON RD & MARKET ST PATTERSON RD & ST PATTERSON RD & 25 1/4 RD RD PATTERSON RD & 25 1/4 RD RD PATTERSON RD & 27 RD RD PATTERSON RD & 27 RD RD PATTERSON RD & 27 RD RD PATTERSON RD & 24 1/2 RD RD PATTERSON RD & N 27H ST	12/1/2016 12/5/2016 12/5/2016 12/5/2016 12/4/2016 12/10/2016 12/12/2016	9:38:00 AM 7:42:00 PM 6:28:00 PM		300 600	E	Non-Intersection Non-Intersection	Side to Side Same Dir Wild Animal	w	Changing Lanes Straight/following RD	Straight/following RD UNK
714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735	PATTERSON RD & N ST PATTERSON RD & N ST PATTERSON RD & MARKET ST PATTERSON RD & MARKET ST PATTERSON RD & MARKET ST PATTERSON RD & N 12TH ST PATTERSON RD & 25 RD RD PATTERSON RD & 25 RD RD PATTERSON RD & 25 RD RD PATTERSON RD & 21/2 RD RD PATTERSON RD & N 12TH ST	12/5/2018 12/5/2018 12/9/2018 12/10/2018 12/12/2018	6:26:00 PM	PDO	200	E	Intersection Related	Front to Rear	w	Slowing	Slowing
715 716 717 718 719 720 721 722 722 723 724 725 726 727 728 729 730 731 732 733 734 735	PATTERSON RD & N ST PATTERSON RD & MARKET ST PATTERSON RD & MARKET ST PATTERSON RD & N 12711 ST PATTERSON RD & SE 144 RD RD PATTERSON RD & 25 HD RD PATTERSON RD & 24 1/2 RD RD PATTERSON RD & 24 1/2 RD RD PATTERSON RD & N 12711 ST	12/5/2016 12/9/2016 12/10/2016 12/12/2016		PDO	400	w	At Intersection Non-Intersection	Front to Side Front to Rear	W	Left Turn Slowing	Streight/following RD Stopped
717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735	PATTERSON RD & MARKET ST PATTERSON RD & N 221 H RD RD PATTERSON RD & 29 14 RD RD PATTERSON RD & 25 RD RD PATTERSON RD & 24 1/2 RD RD PATTERSON RD & N 27H ST	12/10/2016		PDO	100	w	Non-Intersection	Side to Side Same Dir	W	Changing Lanes	Straight/following RD
719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735	PATTERSON RD & 28 1/4 RD RD PATTERSON RD & 25 RD RD PATTERSON RD & 24 1/2 RD RD PATTERSON RD & N 12TH ST		12:58:00 PM 2:24:00 PM	INJ INJ	395	E	At Intersection Driveway Access Related	Front to Side Front to Side	W 8	Streight/following RD Left Turn	Straight/following RD Straight/following RD
720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735	PATTERSON RD & 25 RD RD PATTERSON RD & 24 1/2 RD RD PATTERSON RD & N 12TH ST		10:14:00 AM	PDO			At Intersection	Front to Side	w	Streight/following RD	Straightfollowing RD
722 723 724 725 726 727 728 729 730 731 732 733 734 735	PATTERSON RD & N 12TH ST	12/14/2018	12:24:00 PM 1:31:00 PM	INJ INJ	155	w	At Intersection Intersection Related	Front to Side Front to Rear	E	Left Turn Slowing	Streightfollowing RD Stopped
723 724 725 726 727 728 729 730 731 732 733 734 735		12/19/2016		PDO	250 560	E	Driveway Access Related Intersection Related	Front to Side Front to Rear	N E	Right Turn Streightfollowing RD	Streightfollowing RD Stopped
725 726 727 728 729 730 731 732 733 734 735	PATTERSON RD & N 7TH ST	12/19/2016	42200 PM	PDO	60	E	Intersection Related	Front to Rear	w	Straightfollowing RD	Slowing
726 727 728 729 730 731 732 733 734 735	PATTERSON RD & 27 1/2 RD PATTERSON RD & 25 RD RD	12/19/2016	4:07:00 PM 12:15:00 PM	PDO	480	E	At Intersection Non-Intersection	Front to Rear Front to Rear	w	Straight/following RD Changing Lanes	Stopped Streightfollowing RD
728 729 730 731 732 733 734 735	25 1/2 RD & PATTERSON RD	1/2/2017	11:52:00 AM	PDO	250	N	Driveway Related	Front to Rear	N	Streight	Slowing
730 731 732 733 734 735	N 7TH ST & PATTERSON RD 24 1/2 RD & PATTERSON RD	1/9/2017	7:30:00 AM 8:20:00 PM	PDO	350 500	N 8	Non-Int Driveway Related	Side-Side Same Dir Front to Side	8 E	Spun Out Of Control	Spun Out Of Control Straight
731 732 733 734 735	24 1/2 RD & PATTERSON RD	1/18/2017	11:51:00 AM	PDO	500	8	Driveway Related	Front to Side	E	Left Turn	Straight
733 734 735	HWY 6 & 50 & PATTERSON RD PATTERSON RD & COLANWOOD ST	1/18/2017	1:10:00 PM 4:49:00 AM	PDO			At Intersection At Intersection	Front to Side Front to Side	E N	Left Turn Streight	Streight Streight
734 735	PATTERSON RD & N 1ST ST	1/19/2017	52400 PM	PDO			At Intersection	Front to Rear	w	Slowing	Stopped
735	24 1/2 RD & PATTERSON RD N 7TH ST & PATTERSON RD	1/21/2017	12:23:00 PM 9:35:00 AM	PDO	500	8	At Intersection At Intersection	Front to Side Front to Rear	8 8	Streight Streight	Straight Stopped
	29 RD & PATTERSON RD 25 RD & PATTERSON RD	1/23/2017	4:50:00 PM	PDO	30	8	Intersection Related	Front to Rear	N	Streight	Stopped
737	25 RD & PATTERSON RD PATTERSON RD & 29 RD	1/28/2017	3:16:00 PM 7:52:00 PM	PDO			Intersection Related At Intersection	Front to Rear Front to Side	W	Streight Left Turn	Stopped Straight
738 739	PATTERSON RD & 29 RD PATTERSON RD & MESA MALL ACCESS RD	1/27/2017	3:30:00 PM 7:55:00 PM	PDO			At Intersection At Intersection	Front to Rear Front to Side	W	Left Turn	Left Turn Streight
740	PATTERSON RD & N 1ST ST	1/29/2017	11:08:00 PM	PDO	415	w	Non-Int	Curb	w	Streight	UNK
741	PATTERSON RD & MARKET ST MARKET ST & PATTERSON RD	1/30/2017	5:08:00 PM 5:14:00 PM	INI	420	N	Intersection Related Non-Int	Front to Rear Curb	8	Straight Spun Out Of Control	Stopped UNK
743	PATTERSON RD & MEANDER DR	2/2/2017	6:10:00 PM	INJ	-20	.4	At Intersection	Front to Rear	w	Slowing	Straight
744 745	PATTERSON RD & 25 RD PATTERSON RD & SPRING VALLEY CIR	2/7/2017 2/8/2017	5:52:00 PM 10:19:00 AM	NJ NJ			At Intersection Intersection Related	Front to Side Bicycle	W	Left Turn Streight	Straight Stopped
746	24 1/2 RD & PATTERSON RD	2/0/2017	4:51:00 PM 5:22:00 PM	PDO	1000 245	8 W	Non-Int	Side-Side Same Dir	8 W	Changing Lanes	Straight
748	PATTERSON RD & CIDER MILL RD PATTERSON RD & 30 RD	2/0/2017	12:21:00 PM	PDO	30	w	Intersection Related Intersection Related	Front to Rear Front to Rear	E	Streight Streight	Stopped Slowing
749 750	PATTERSON RD & 25 RD PATTERSON RD & N 12TH ST	2/14/2017	10:41:00 AM 5:58:00 PM	PDO			At Intersection At Intersection	Front to Front Front to Side	N S	Left Turn Left Turn	Streight Streight
751	24 RD & PATTERSON RD	2/16/2017	5:39:00 PM	PDO	100	8	Intersection Related	Front to Rear	N	Straight	Stopped
752 753	PATTERSON RD & 29 RD PATTERSON RD & 26 1/4 RD	2/22/2017 2/25/2017	6:17:00 PM 10:04:00 PM	PDO			At Intersection At Intersection	Front to Side Front to Front	w	Left Turn Left Turn	Straight 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
755 756	25 1/2 RD & PATTERSON RD PATTERSON RD & N 7TH ST	2/28/2017 2/28/2017	10:41:00 AM 10:39:00 AM	PDO	160	8	Non-int At Intersection	Curb Front to Side	8 E	Streight Streight	UNK Left Turn
757	PATTERSON RD & 27 1/2 RD	3/1/2017	10:32:00 AM	NJ			At Intersection	Front to Side	E	Streight	Left Turn
758 759	PATTERSON RD & 29 RD PATTERSON RD & 29 1/2 RD	3/6/2017	5:21:00 PM 2:22:00 PM	INJ INJ	200 80	E W	Intersection Related Intersection Related	Front to Rear Front to Rear	W E	Slowing Slowing	Stopped Slowing
760	PATTERSON RD & MARKET ST	3/11/2017	3:02:00 PM	PDO	20	w	Intersection Related	Front to Rear	w	Streight	Stopped
761 762	PATTERSON RD & 24 1/2 RD PATTERSON RD & 25 RD	3/13/2017 3/16/2017	12:02:00 PM 9:41:00 PM	PDO	250	E	Intersection Related At Intersection	Front to Rear Front to Side	E	Streight Left Turn	Slowing Streight
763 764	PATTERSON RD & 24 RD 25 RD & PATTERSON RD	3/18/2017	11:28:00 AM 3:03:00 PM	PDO	50	N	At Intersection Intersection Related	Front to Side Front to Rear	N 8	Right Turn Streight	Left Turn Stopped
765	N 12TH ST & PATTERSON RD	3/20/2017	4:17:00 PM	PDO	30	N	Intersection Related	Front to Rear	8	Streight	Stopped
766	PATTERSON RD & 29 1/2 RD 29 RD & PATTERSON RD	3/23/2017	11:40:00 AM 4:52:00 PM	NJ PDO	250 75	E 8	At Intersection Intersection Related	Front to Rear Front to Rear	W	Straight Left Turn	Stopped Left Turn
768	PATTERSON RD & 25 RD	3/27/2017	11:12:00 AM	INJ	481	w	Driveway Related	Front to Side	8	Left Turn	Streight
769 770	PATTERSON RD & 30 RD PATTERSON RD & PARK DR	4/2/2017 4/5/2017	4:20:00 PM 7:13:00 PM	PDO	100	E	Intersection Related Non-Int	Front to Rear Guard Rail	E W	Straight Straight	Stopped UNK
771	PATTERSON RD & 30 RD	4/9/2017 4/9/2017	8:07:00 PM	NJ			Intersection Related	All Other Peds	N	Right Turn	Streight
772 773	PATTERSON RD & 24 RD PATTERSON RD & 29 RD	4/W2017 4/10/2017	1:53:00 PM 4:52:00 PM	PDO	200	w	At Intersection Non-Int	Front to Side Front to Rear	N E	Left Turn Streight	Straight Stopped
774 775	25 RD & PATTERSON RD 25 1/2 RD & PATTERSON RD	4/10/2017 4/12/2017	9:49:00 AM 4:37:00 PM	PDO	200 20	N N	Driveway Related Intersection Related	Front to Front Front to Rear	E 8	Right Turn Straight	Streight Stopped
776	PATTERSON RD & MESA MALL ACCESS RD	4/13/2017	6:48:00 PM	PDO			At Intersection	Front to Side	E	Streight	Straight
777 778	25 RD & PATTERSON RD PATTERSON RD & N 12TH ST	4/14/2017 4/14/2017	1:18:00 PM 2:47:00 PM	PDO	100	8	Intersection Related At Intersection	Front to Rear	N 8	Straight Left Turn	Stopped Left Turn
779	HWY 6 & 50 & PATTERSON RD	4/15/2017	4:29:00 PM	NJ			Hwy Interchange	Other - Non Collision	SW	Right Turn	UNK
780 781	PATTERSON RD & BROKEN SPOKE RD PATTERSON RD & COMMERCE BLVD	4/18/2017	TOUGH OF PART	PDO	305	E	At Intersection Driveway Related	Front to Side Front to Side	8	Streight Left Turn	Straight Straight
782 783	PATTERSON RD & MESA MALL ACCESS RD PATTERSON RD & 29 RD	4/20/2017 4/26/2017	1:04:00 PM 5:12:00 PM	PDO	30	E	Intersection Related Intersection Related	Front to Rear Side-Side Same Dir	W	Streight Other	Streight Stopped
784	PATTERSON RD & N 1ST ST	4/27/2017	11:35:00 AM	NJ			At Intersection	Front to Side	w	Left Turn	Straight
785 786	PATTERSON RD & 25 RD PATTERSON RD & MARKET ST	5/4/2017 5/4/2017	2:20:00 PM 7:28:00 PM	PDO	350	E	Non-Int At Intersection	Front to Rear Front to Side	W	Straight Straight	Stopped Streight
787	PATTERSON RD & 25 RD	5/5/2017	5:28:00 PM	NJ	135	w	Driveway Related	Front to Side	8	Left Turn	Streight
788 789	PATTERSON RD & N 7TH ST PATTERSON RD & STARLIGHT DR	5/5/2017 5/0/2017	12:58:00 PM 12:30:00 AM	PDO	130	E	At Intersection Non-int	Front to Rear Tree	w	Left Turn Streight	Left Turn UNK
790	PATTERSON RD & E INDIAN CREEK DR	5/9/2017	7:00:00 AM	PDO			At Intersection	School Age To/From School	E	Streight	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	8	Passing	Right Turn
792 793	PATTERSON RD & 28 1/4 RD 29 RD & PATTERSON RD	5/12/2017 5/17/2017	10:20:00 AM 11:02:00 AM	PDO	450 420	W 8	Non-Int Driveway Related	Front to Rear Front to Side	E W	Streight Left Turn	Stopped Straight
794	24 RD & PATTERSON RD	5/19/2017	10:07:00 AM	PDO			At Intersection	Side-Side Same Dir	8	Left Turn	Left Turn
795 796	PATTERSON RD & 25 1/2 RD PATTERSON RD & RIO GRANDE DR	5/20/2017 5/22/2017	8:22:00 PM 3:48:00 PM	PDO	222 40	W E	Intersection Related Intersection Related	Curb Front to Rear	W	Straight Slowing	UNK Stopped
797 798	PATTERSON RD & 29 RD PATTERSON RD & N 7TH ST	5/22/2017 5/28/2017	5:34:00 PM 11:20:00 PM	PDO	500	w	Intersection Related At Intersection	Front to Rear Front to Side	E	Slowing	Stopped
798	PATTERSON RD & 25 1/2 RD	5/30/2017	4:08:00 PM	NJ NJ	200	E	At Intersection Non-int	Front to Side Front to Rear	w	Straight Straight	Straight Stopped
800 801	PATTERSON RD & MIRA VISTA RD PATTERSON RD & 29 3/8 RD	5/30/2017 5/30/2017	2:58:00 PM 7:29:00 PM	PDO	330	E	Driveway Related Non-int	Front to Rear Side-Side Same Dir	E	Straight Weaving	Left Turn
802	PATTERSON RD & N 15TH ST	5/31/2017	4:32:00 PM	PDO	100	E	Intersection Related	Front to Rear	w	Changing Lanes	Straight Stopped
803 804	PATTERSON RD & N 12TH ST 27 1/2 RD & PATTERSON RD	6/4/2017 6/7/2017	3:05:00 PM 8:04:00 AM	PDO			At Intersection Intersection Related	Front to Side Front to Rear	N S	Streight Streight	Streight Stopped
805	PATTERSON RD & BEECHWOOD ST	6/8/2017	2:18:00 PM	PDO			Non-Int	Front to Rear	E	Streight	Stopped
806 807	PATTERSON RD & 29 RD PATTERSON RD & BEECHWOOD ST	6/8/2017 6/8/2017	7:24:00 AM 2:14:00 PM	PDO	265	E	Intersection Related At Intersection	Front to Rear Front to Rear	W	Streight Streight	Slowing Stopped
808	PATTERSON RD & N 15TH ST	6/12/2017	7:59:00 AM	NJ			At Intersection	Bicycle	N	Left Turn	Streight
809 810	PATTERSON RD & N 1ST ST PATTERSON RD & CIDER MILL RD	6/13/2017 6/15/2017	4:54:00 PM 5:12:00 PM	PDO NJ			At Intersection Non-Int	Front to Side Front to Rear	W	Left Turn Streight	Straight Straight
811	PATTERSON RD & N 15TH ST	6/17/2017	8:39:00 AM	PDO	-	_	At Intersection	Front to Side	W	Left Turn	Streight
812 813	PATTERSON RD & 25 1/2 RD N 12TH ST & PATTERSON RD	6/19/2017 6/20/2017	1:18:00 PM 4:13:00 PM	PDO	279	E	Driveway Related At Intersection	Front to Side Front to Rear	8	Left Turn Streight	Straight Stopped
814 815	PATTERSON RD & N 1ST ST PATTERSON RD & 24 RD	6/21/2017 6/21/2017	8:07:00 PM 2:10:00 PM	NJ PDO	380 449	w	Intersection Related	Front to Rear	E	Streight	Stopped
816	PATTERSON RD & 24 RD PATTERSON RD & N 7TH ST	6/21/2017 6/23/2017	5:28:00 PM	PDO	300	w	Driveway Related Intersection Related	Front to Front Front to Rear	N E	Right Turn Streight	Straight Stopped
817 818	PATTERSON RD & 25 1/2 RD PATTERSON RD & MARKET ST	6/26/2017 6/26/2017	11:53:00 AM 12:42:00 PM	INJ INJ	50	w	Intersection Related At Intersection	Front to Rear Front to Side	E W	Streight Streight	Stopped Streight
819 820	PATTERSON RD & MARKET ST PATTERSON RD & 27 1/2 RD N 7TH ST & PATTERSON RD	6/29/2017	9:28:00 AM 12:53:00 PM	INJ PDO	130	N	At Intersection At Intersection Driveway Related	Front to Side Front to Side Front to Side	E	Left Turn Right Turn	Straight Straight

### PATTERION ROLD 27 VISION 1700077 5.00.00 PM	oldent Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
PATTERSON ROLL SI FID 17000077 1901 00 AM 17000 00 E 1	Front to Side	W	Streight	Slowing
FATTERION NO. 2 SIGN 7700077 110202 AM POO	-Side Same Dir		Streight Left Turn	Left Turn Streight
PATTERON ROLL NET #1 770007 2-00 PM 1000 200 W	Front to Rear Front to Rear	w	Straight Left Turn	Stopped Straight
PATTERION RO. 2 M 196 77/2007 2:00 PM	Front to Rear	E	Streight	Stopped
Description	Guard Rail ront to Front	E	U-Turn Streight	UNK Stopped
SS POS ANTERBON RO 7410077 407 00 PM POS 260 N	-Side Same Dir Front to Side	r W	Changing Lanes Left Turn	Stopped
25 OF IND A PATTERSON RO	Front to Side	w	Left Turn	Straight Straight
SATERISON ROLES AS N ROLL M. CORPUT 290.00 PM POD 400 W Primemedion Related First First M. CORPUT 290.00 PM POD 500 W Related First M. CORPUT 290.00 PM POD 500 W Related First M. CORPUT 290.00 PM POD 500 W Related First M. CORPUT 290.00 PM POD 500 W Related First M. CORPUT 290.00 PM POD 500 W Related First M. CORPUT 290.00 PM POD 500 W Related First M. CORPUT 290.00 PM POD 500 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W Related First M. CORPUT 290.00 PM POD 290 W M. CORPUT 290.00 PM PO	Front to Front Front to Side	N E	Left Turn	Straight Straight
PATTERSON RO. A 1970 PATTERSON RO. A 1970	ront to Rear	E	Streight	Slowing
ATTERDON RIG A VIDEO CREATED COR ASSOCIATIVE COLOR COLOR COLOR	Front to Rear Front to Side	w	Slowing Straight	Stopped Straight
BATTERSON RO & SECHONOCO ST W100077 72:00 PM POO 25	-Side Same Dir		Changing Lanes	Streight
March	Bicycle Front to Rear	w	Streight Slowing	Straight Slowing
ALCOHOLOGICAL ALCOHOLOGICA	d Other Peds	N	Left Turn	Streight
MATTERSON RO A NOTHER	Front to Side Bicycle	w	Left Turn Streight	Straight Straight
BATTERSON ROLES 34 RG	-Side Same Dir Front to Side	W	Changing Lanes Left Turn	Slowing Streight
PATTERSON RO & 10 CH PATTERSON RO & 10 CH	ront to Rear	E	Streight	Slowing
A THE COLOR	Curb Front to Side	E	Changing Lanes Streight	Avoiding Object Streight
BATTERSON RO & COMMERCE BLVD S00.007 POO B Information Instituted From State Port Poo B Bottomy Related From State Poo B Bottomy Related From State Poo B Bottomy Related Poo B Bottomy Related Poo B Bottomy Related Poo B Bottomy Related Bottomy	ront to Front	W	Left Turn	Straight
Set PATTERDON RO	Front to Rear Front to Side	E	Straight Left Turn	Stopped Straight
SA DA PATTERSON RO B N 2719 ET 0802077 17000 PM POO 20	Front to Side	E	Streight	Straight
Set PATTERSON RO & N 171H ST S00077 1200.00 M POO 250 W Colemeny Residual First S00077 1200.00 M POO So	Other Object s-Side Same Dir	N W	Right Turn Left Turn	UNK Left Turn
Set PATTERSON RO & N STH ST SECOND 19.70 AM POO	Front to Side	N	Right Turn	Left Turn
BATTERSON DIA FORESTATERSON RO MARCHET R. M	Front to Side Front to Rear	N W	UNK	Straight Stopped
Best PATTERSON RD ATTERSON RD S000017 31-000 PM POO All Intersection First PATTERSON RD AND STATES TOTAL STA	Front to Side	NE	Streight	Straight
Bet PATTERSON RO AN TOTAL ST	Front to Side Front to Side	8 E	Left Turn Right Turn	Left Turn Left Turn
825 N. 1974 PATTERSON RO 91/20217 74:20 PM POO 750 N Non-hilt First	Front to Side	w	Right Turn	Streight
B64	Front to Side Front to Rear	E N	Streight Streight	Left Turn Stopped
666 PATERBON RD & WITH ST 0210077 24200 PM POO	ront to Rear Front to Rear	w	Slowing Straight	Stopped Stopped
B8	Front to Rear	N	Straight	Stopped
B86	ront to Rear	8	Right Turn	Right Turn
271	ront to Rear ront to Rear	8	Streight Right Turn	Stopped Right Turn
PATTERSON RD & 1912 F0	Front to Rear Curb	E	Changing Lanes Streight	Stopped UNK
FATTERSON RO & 50 RD	Guard Rail	W	Streight	UNK
PATTERSON RO & CRES HARR ST	Bicycle Front to Side	W	Left Turn Streight	Streight Left Turn
PATTERSON RD & SOR D	Front to Rear	w	Streight	Stopped
PATTERSON RD & 30 RD	Front to Rear Front to Rear	N E	Straight Straight	Straight Stopped
PATTERSON RD & 25 1/2 RD	Front to Rear	E	Streight	Stopped
Sept	Front to Rear Front to Rear	W	Streight Streight	Stopped Stopped
B85	Front to Front	N	Left Turn	Straight
B84	d Other Peds Front to Reer	8	Right Turn Other	Straight Stopped
B86	Front to Rear	w	Streight	Stopped
B85	Front to Rear Front to Rear	W	Streight Streight	Stopped Stopped
B88	Front to Rear Front to Rear	w	Slowing Straight	Stopped Stopped
BATTERSON RO & N 2711 ST 00210071 12:00 0 PM PDO	Front to Rear	w	Streight	Stopped
BATTERSON RD & N 25TH ST	-Side Same Dir Front to Side	r E	Changing Lanes Left Turn	Streight Streight
BM	-Side Same Dir	W	U-Turn	Right Turn
B86	Front to Side	8 W	Left Turn Slowing	Right Turn Stopped
B86	Guard Rail	W	Streight	UNK
B88	Front to Rear Sign	W	Left Turn Streight	Left Turn UNK
PATTERSON RD & 25 RD	Front to Rear	E	Streight	Stopped
PATTERSON RD & MARKET ST	Front to Side Front to Front	N 8	Left Turn Streight	Straight Straight
902 25 RD & PATTERSON RD 118/2017 1148/00 PM PDO 127 N Divewey Related From 903 PATTERSON RD & 25 RD 117/2017 447/00 PM PDO 150 E Intersection Related From 904 PATTERSON RD & 25 RD 118/2017 258/00 PM PDO 190 E Intersection Related From 905 PATTERSON RD & 24 RD 118/2017 258/00 PM PDO 942 E Non-Int Side-Side 906 PATTERSON RD & 24 1/2 11/10/2017 5-30 0 PM PDO 942 E Non-Int Side-Side 906 PATTERSON RD & 24 1/2 11/10/2017 6-30 0 PM PDO At Intersection First 907 PATTERSON RD & 24 1/2 11/10/2017 6-30 0 PM PDO At Intersection First 908 PATTERSON RD & 24 1/2 11/10/2017 10/24/00 PM PDO At Intersection First 908 PATTERSON RD & 24 1/2 11/10/2017 10/24/00 PM PDO At Intersection First 909 PATTERSON RD & 24 1/2 11/10/2017 10/24/00 PM PDO At Intersection First 909 PATTERSON RD & 24 1/4 11/17/2017 4-90 00 PM PDO PDO At Intersection First 909 PATTERSON RD & 25 RD 11/17/2017 4-90 00 PM PDO PDO At Intersection First 909 PATTERSON RD & 25 RD 11/17/2017 9-90 00 AM PDO At Intersection First 909 PATTERSON RD & 25 RD 11/17/2017 9-90 00 AM PDO At Intersection First 909 PATTERSON RD & 25 RD 11/17/2017 9-90 00 AM PDO At Intersection First 909 PATTERSON RD & 25 RD 11/17/2017 9-90 00 AM PDO At Intersection First 909 PATTERSON RD & 27 RD 9-90 PDO Intersection First 909 PATTERSON RD & 25 RD 11/19/2017 1-90 00 PM PDO Intersection Related First 909 PATTERSON RD & 25 RD 11/19/2017 1-90 00 PM PDO PATTERSON RD & 25 RD 11/19/2017 1-90 00 PM PDO At Intersection Related First 909 PATTERSON RD & 25 RD 11/19/2017 1-90 00 PM PDO At Intersection First 909 PATTERSON RD & 25 RD 11/19/2017 1-90 00 PM PDO At Intersection First 909 PATTERSON RD & 25 RD 11/19/2017 1-90 00 PM PDO At Intersection First 909 PATTERSON RD & 25 RD 12/1	Front to Side	W	Streight	Straight
PATTERSON RD & 25 RD	ront to Front	N	Slowing Left Turn	Stopped Straight
DOS PATTERSON RD & N 12TH ST	ront to Rear ront to Rear	w	Slowing Slowing	Stopped Stopped
PATTERSON RD 8, 28 142	-Side Same Dir	r NE	Changing Lanes	Streight
908 PATTERSON RD 8, 24 1/2 11/10/2017 3-19.00 PM PDO At Intersection Side-3i	Front to Side Front to Side	w	Left Turn	Streight Streight
910 29 RD & PATTERSON RD 11/13/2017 4:04:00 PM PDO 288 N Intersection Related From 11 PATTERSON RD & 29 I/4 11/17/2017 9:40:00 PM PDO Nor-Inst 364-58 11/17/2017 9:40:00 PM PDO All Intersection Related From 193 PATTERSON RD & 29 RD 11/17/2017 12:46:00 PM PDO All Intersection Related From 194 PATTERSON RD & N 171H ST 11/19/2017 10:30:00 AM PDO Intersection Related From 195 PATTERSON RD & N 171H ST 11/19/2017 12:46:00 PM PDO Intersection Related From 196 PATTERSON RD & N 171H ST 11/19/2017 2:36:00 PM PDO Intersection Related From 197 PATTERSON RD & N 171H ST 11/19/2017 2:36:00 PM PDO 10 W Intersection Related From 197 PATTERSON RD & N 151H ST 11/19/2017 1:34:00 PM PDO 50 W Drivewey Related From 198 PATTERSON RD & N 151H ST 11/19/2017 1:34:00 PM PDO All Intersection From 199 PATTERSON RD & N 151H ST 11/19/2017 2:36:00 PM PDO All Intersection From 199 PATTERSON RD & N 171H ST 11/19/2017 2:36:00 PM PDO All Intersection From 199 PATTERSON RD & N 171H ST 11/19/2017 2:36:00 PM PDO All Intersection From 199 PATTERSON RD & N 171H ST 12/19/2017 2:36:00 PM PDO All Intersection From 199 PATTERSON RD & N 171H ST 12/19/2017 2:36:00 PM PDO All Intersection From 199 PATTERSON RD & N 171H ST 12/19/2017 2:36:00 PM PDO All Intersection From 199 PATTERSON RD & N 171H ST 12/19/2017 2:30:00 PM PDO All Intersection From 199 PATTERSON RD & N 171H ST 12/19/2017 1:30:00 PM PDO All Intersection From 199 PATTERSON RD & N 171H ST 12/19/2017 1:30:00 PM PDO All Intersection From 199 PATTERSON RD & N 171H ST 12/19/2017 1:30:00 PM PDO All Intersection From 199 PATTERSON RD & N 171H ST 12/19/2017 1:30:00 PM PDO All Intersection From 199 PATTERSON RD & N 171H ST 12/19/2017 1:30:00 PM PDO All Intersection From 199 PATTERSON RD & N 181H	-Side Same Dir	r SE	Changing Lanes	Streight
PATTERSON RD 8 29 ND	Front to Side	W	Straight Passing	Straight Stopped
PATTERSON RD 8, 25 1/2	-Side Same Dir	r W	Weaving	Straight
PATTERSON RD & N 12TH ST	Front to Front Front to Rear	E	Straight Straight	Left Turn Stopped
916 PATTERSON RD & N 7TH ST 11/2/2017 2-38:00 PM PDO 10 W Intersection Related From PATTERSON RD & N 12TH ST 11/2/2017 1-34:00 PM PDO 350 W Driveway Related From PATTERSON RD & N 15TH ST 11/2/2017 1-34:00 PM PDO At Intersection From PATTERSON RD & 25 1/2 11/2/2017 1-34:00 PM PDO At Intersection From PATTERSON RD & 25 1/2 11/2/2017 2-30:00 PM PDO 950 S Driveway Related From PATTERSON RD & 25 1/2 11/2/2017 2-30:00 PM PDO 950 S Driveway Related From PATTERSON RD & N 17H ST 12/4/2017 8-37:00 PM PDO PDO At Intersection From PATTERSON RD & N 18T ST 12/4/2017 8-37:00 PM PDO PDO	Front to Rear	N	Left Turn	Left Turn
PATTERSON RD & N 12TH ST	ront to Rear ront to Rear	8 E	Streight Other	Slowing Stopped
PATTERSON RD & 25 1/2 11/28/2017 5:51:00 PM PDO PD	Front to Rear	W	Streight	Slowing
220 29 RD & PATTERSON RD 120/2017 2:90 0 PM PDO 350 8 Drivewey Related First	Front to Side Front to Side	E N	Streight Streight	Streight Left Turn
PATTERSON RO & FORESIGHT CIR 12/5/2017 3/38/00 PM PDO 480 E Intersection Related From PATTERSON RD & NIST ST 12/5/2017 5/27/00 PM PDO Intersection Related From PATTERSON RD & 28 RD 12/7/2017 2/37/00 PM PDO 40 E Intersection Related From PATTERSON RD & 24 I/2 12/8/2017 12/4/00 PM PDO At Intersection From PATTERSON RD & 24 RD 12/8/2017 12/00 PM PDO At Intersection From PATTERSON RD & 1/2/14/2017 1:11:00 PM PDO Intersection Related From PATTERSON RD & NOTH ST 12/14/2017 1:11:00 PM PDO At Intersection PDO At Intersection PDO At Intersection PDO AT INTERSON RD & NOTH ST 12/14/2017 1:50:00 PM PDO AT INTERSON RD & NOTH ST 12/14/2017 1:50:00 PM PDO AT INTERSON RD & NOTH ST 12/14/2017 1:50:00 PM PDO AT INTERSON RD & NOTH ST 12/14/2017 1:50:00 PM PDO AT INTERSON RD & NOTH ST 12/14/2017 1:50:00 PM PDO AT INTERSON RD & NOTH ST 12/14/2017 1:50:00 PM PDO AT INTERSON RD & 1/2017 1:50:00 PM PDO AT INTERSON RD & 1/2017 1:50:00 PM PDO PATTERSON RD & 2/2017 1:50:00 PM PDO PATTERSON RD & 2/2017 1:50:00 PM PDO PATTERSON RD & 2/2017 1:50:00 PM PDO 1:50:00 P	Front to Side	W	Left Turn	Streight
223 PATTERSON RD & 19T ST 125/2017 5/27/00 PM PDO PDO Intersection Related From PATTERSON RD & 25 RD 127/2017 2/37/00 PM PDO 40 E Intersection Related From PATTERSON RD & 24 RD 128/2017 12/45/00 PM PDO At Intersection At Intersection From PATTERSON RD & 24 RD 128/2017 11/40/2017 11/10 PM PDO At Intersection From PATTERSON RD & NTH ST 12/14/2017 11/10 PM PDO Intersection Related From PATTERSON RD & NORTH ST 12/14/2017 11/10 PM PDO At Intersection From PATTERSON RD & 10 RT ST 12/14/2017 11/10 PM PDO At Intersection From PATTERSON RD & 10 RT ST 12/14/2017 12/10 PM PDO At Intersection From PATTERSON RD & 29 RD 12/14/2017 13/10 PM PDO PDO At Intersection From PATTERSON RD & 29 RD 12/14/2017 13/10 PM PDO PD	Front to Front Front to Rear	W	Streight Streight	Streight Stopped
PATTERSON RD 8.24 1/2 1298/2017 1245/00 PM PDO At Intersection From 126 PATTERSON RD 8.24 RD 1298/2017 1:50 00 PM PDO At Intersection First 1271-4/2017 1:11/100 PM PDO Intersection Related First 128 PATTERSON RD 8.10 PM 1271-4/2017 1:550 0 PM PDO At Intersection First 1299 PATTERSON RD 8.10 PM 1271-4/2017 1:550 0 PM PDO At Intersection First 1299 PATTERSON RD 8.10 PM 1271-6/2017 2:40 00 PM PDO At Intersection First 1291-4/2017 1:550 0 PM PDO At Intersection First 1291-6/2017 1:550 0 PM PDO At Intersection First 1291-6/2017 1:550 0 PM PDO PATTERSON RD 8.29 RD 1271-7/2017 1:440 0 PM PDO 950 E Driveway Related First 1291-6/2017 1:500 PM PDO 1:500 PM PDO	Front to Rear Front to Rear	w	Streight Streight	Stopped
926 PATTERSON RD 8.24 RD 1298/2017 1:50:00 PM PDO At Intersection Related Fire 927 PATTERSON RD 8.171H ST 12714/2017 1:11:00 PM PDO Intersection Related Fire 928 PATTERSON RD 8.19T ST 12714/2017 1:50:00 PM PDO At Intersection Fire 929 PATTERSON RD 8.19T ST 12715/2017 9:50:00 PM PDO 100 W Non-Int Side-Si 930 PATTERSON RD 8.29 RD 12716/2017 2:40:00 PM PDO 350 E Drivwwy Related Fire 932 PATTERSON RD 8.20 RD 12717/2017 5:10:00 PM PDO 130 W Intersection Related Fire 933 PATTERSON RD 8.24 RD 12718/2017 2:35:00 PM PDO 160 W Intersection Related Fire 934 PATTERSON RD 8.25 1/2 1221/2017 8:00 PM PDO 4I Intersection Related Fire	Front to Rear Front to Front	E	Streight Left Turn	Slowing Streight
PATTERSON RD & HOME DEPOT SIGNAL 12/14/2017 1:55:00 PM PDO PDO At Intersection Fire	Front to Side	N	Streight	Left Turn
929 PATTERSON RD & N 1ST ST 12/15/2017 9:50.00 PM PDO 100 W Non-Int Side-Si	Front to Side Front to Side	w	Streight Left Turn	Left Turn Streight
831 PATTERSON RD & 29 RD 12/17/2017 5:31:00 PM PDO 350 E Drivwwy Related From 932 PATTERSON RD & AGANA 12/17/2017 1:44:00 PM PDO 130 W Intersection Related F 933 PATTERSON RD & 24 RD 1:2/18/2017 2:35:00 PM PDO 160 W Intersection Related From 934 PATTERSON RD & 25 1/2 12/21/2017 8:15:00 PM PDO At Intersection For	-Side Same Dir Front to Side	r E	Changing Lanes	Straight Straight
932 PATTERSON RD & AGANA 12/17/2017 1:44 00 PM PDO 130 W Intersection Related F 933 PATTERSON RD & 24 RD 12/18/2017 2:35:00 PM PDO 160 W Intersection Related From 934 PATTERSON RD & 25 1/2 12/21/2017 8:15:00 PM PDO Al Intersection All Intersection	Front to Side Front to Rear	N	Straight Right Turn	Straight
934 PATTERSON RD & 25 1/2 12/21/2017 6:15:00 PM PDO At Intersection From	Fence Front to Front	N NE	Left Turn Changing Lanes	UNK Streight
	Front to Side	E	Left Turn	Streight
	Front to Rear offic Signal Pole	W	Streight Left Turn	Stopped UNK
937 PATTERSON RD & 28 RD 12/25/2017 4:17:00 PM PDO At Intersection From	Front to Side Front to Rear	8 W	Left Turn Streight	Straight Stopped

*	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Acoldent Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
939	PATTERSON RD & N 12TH ST		10:07:00 PM	PDO	48.7		At Intersection	Front to Side	w	Left Turn	Straight
940	PATTERSON RD & 25 RD PATTERSON RD & 25 RD	1/3/2018	10:58:00 AM 3:01:00 PM	PDO	1215	N 8	Driveway Access Related Intersection Related	Front to Front	E N	Left Turn Streight/following road	Left Turn 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	Streight/following road
943	PATTERSON RD & 25 RD PATTERSON RD & 29 RD	1/4/2018	1:55:00 PM 5:50:00 PM	PDO	108	E	Driveway Access Related Intersection Related	Front to Side Front to Rear	N N	Left Turn Straightfollowing road	Streightfollowing 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	Streightfollowing road	UNK
946	PATTERSON RD & 24 1/2 RD PATTERSON RD & 24 1/2 RD	1/10/2018	2:14:00 PM 2:01:00 PM	PDO	500	8	At Intersection Intersection Related	Front to Rear Front to Side	8 E	Changing Lanes Left Turn	Stopped Stopped
948	PATTERSON RD & 30 RD	1/12/2018	10:15:00 AM	PDO	30	8	Intersection Related	Front to Rear	N	Straight/following road	Stopped
949 950	636 MARKET ST & PATTERSON RD PATTERSON RD & N 1ST ST	1/12/2018	5:15:00 PM 8:57:00 AM	PDO	224	N E	At Intersection Intersection Related	Front to Side Enbenkment	E N	Right Turn Right Turn	Left Turn Straight/following road
951 952	PATTERSON RD & 29 1/2 RD PATTERSON RD & 27 1/2 RD	1/19/2018	3:52:00 PM 8:20:00 PM	FAT PDO	0		At Intersection At Intersection	Front to Side Treffic Signal Pole	w	Left Turn	Streight/following road UNK
953	PATTERSON RD & HWY 6 & 50	1/19/2018		PDO	150	N	Non-intersection	Enbankment	ŵ	Straight/following road	UNK
954 955	PATTERSON RD & N 12TH ST PATTERSON RD & 28 1/4 RD	1/20/2018		PDO	200	8	Driveway Access Related At Intersection	Front to Side Curb	E N	Streight/following road Left Turn	Streight/following road UNK
956	PATTERSON RD & 25 RD	1/21/2018	12:47:00 PM	PDO	100	N	Intersection Related	Front to Rear	8	Streightfollowing road	Stopped
957 958	PATTERSON RD & N 12TH ST PATTERSON RD & 27 1/2 RD	1/21/2018	4:07:00 PM 8:54:00 AM	PDO	0		At Intersection At Intersection	Front to Side Side to Side Same Dir	W	Straight/following road Straight/following road	Streight/following road Stopped
950	PATTERSON RD & 29 RD	1/23/2018		PDO	73	8	Intersection Related	Front to Rear	N	Straightfollowing road	Stopped
960 961	PATTERSON RD & N 12TH ST PATTERSON RD & N 15TH ST	1/24/2018	5:49:00 PM 11:40:00 AM	PDO	600	E	Intersection Related Intersection Related	Front to Side	W	Right Turn Straightfollowing road	Left Turn Stopped
962	PATTERSON RD & 25 RD		10:13:00 AM	NJ	1500	E	Driveway Access Related	Front to Rear	w	Streightfollowing road	Slowing
963 964	PATTERSON RD & 24 1/2 RD PATTERSON RD & 27 1/2 RD	1/30/2018		PDO	1200	E	Non-intersection At Intersection	Side to Side Same Dir Front to Side	W	Changing Lanes Left Turn	Streight/following road Streight/following road
965	PATTERSON RD & N 15TH ST	2/2/2018		PDO	300	E	Non-Intersection	Side to Side Same Dir	w	Straight/following road	Streight/following road
966 967	PATTERSON RD & 29 RD PATTERSON RD & 25 RD	2/3/2018	1:00:00 PM 10:40:00 PM	PDO	200 50	8 N	Intersection Related At Intersection	Front to Rear Side to Side Same Dir	8	Straight/following road Changing Lanes	Stopped Streight/following road
968	PATTERSON RD & 28 1/4 RD	2/8/2018	7:40:00 AM	NJ	0		Intersection Related	Front to Rear	w	Streightfollowing road	Stopped
969 970	PATTERSON RD & 24 1/2 RD PATTERSON RD & GRAND CASCADE WY	2/8/2018 2/9/2018	11:14:00 AM 7:53:00 AM	PDO	50	E	Intersection Related Non-Intersection	Front to Rear Front to Rear	W	Straight/following road Straight/following road	Streight/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	Streightfollowing road	Stopped
972 973	PATTERSON RD & 25 1/2 RD PATTERSON RD & 25 1/2 RD	2/12/2018 2/13/2018		PDO	50 300	E	Intersection Related Intersection Related	Side to Side Same Dir Front to Rear	W	Changing Lanes Straightfollowing road	Streight/following road Slowing
974 975	PATTERSON RD & N 12TH ST PATTERSON RD & N 7TH ST	2/14/2018	5:14:00 PM	PDO	230	E	Intersection Related	Front to Rear	w	Straightfollowing road	Slowing
975	PATTERSON RD & N 7TH ST PATTERSON RD & N 7TH ST	2/14/2018	6:42:00 PM	PDO	0		At Intersection At Intersection	Front to Front Front to Front	N	Left Turn Left Turn	Streight/following road Streight/following road
977 978	PATTERSON RD & MARKET ST PATTERSON RD & N 12TH ST	2/15/2018		PDO	0		At Intersection Intersection Related	Front to Rear	w	Backing Changing Lance	Stopped
979	PATTERSON RD & N 7TH ST	2/20/2018	3:08:00 PM	PDO	0		At Intersection	Front to Side	N	Changing Lanes Left Turn	Streight/following road Streight/following road
980 981	PATTERSON RD & SPRING VALLEY CIR PATTERSON RD & GRAND CASCADE WY	2/22/2018	7:11:00 AM 6:51:00 AM	PDO	150 250	E	Non-Intersection Non-Intersection	Front to Side Front to Side	E	Streight/following road Streight/following road	Streight/following road Streight/following road
982	PATTERSON RD & 24 RD	2/22/2018	7:11:00 PM	PDO	0		At Intersection	Front to Side	N	Left Turn	Streight/following road
983 984	PATTERSON RD & 24 1/2 RD PATTERSON RD & N 12TH ST	2/25/2018 2/26/2018	11:44:00 AM 2:40:00 PM	PDO	50 100	w	Intersection Related Intersection Related	Front to Rear Side to Side Same Dir	E	Straight/following road Changing Lanes	Stopped Stopped
985	PATTERSON RD & 28 RD	2/28/2018	5:21:00 PM	PDO	70	E	Non-Intersection	Front to Rear	E	Streightfollowing road	Streight/following road
986	PATTERSON RD & 29 RD PATTERSON RD & N 7TH ST	2/28/2018 2/28/2018	7:41:00 AM 10:45:00 AM	PDO	0		At Intersection At Intersection	Front to Side Front to Side	E N	Left Turn Right Turn	Streight/following road Left Turn
988	PATTERSON RD & N 7TH ST	2/28/2018		PDO	0		At intersection	Front to Side	N	Left Turn	Streight/following road
989	PATTERSON RD & PARTEE DR PATTERSON RD & 27 1/2 RD	3/1/2018	7:45:00 AM 3:22:00 PM	PDO	300	w	Non-intersection At Intersection	Front to Rear Front to Rear	W E	Straight/following road Straight/following road	Stopped Slowing
991	PATTERSON RD & N 1ST ST	3/3/2018	10:01:00 AM	PDO	30	N	Intersection Related	Front to Rear	8	Streightfollowing road	Stopped
992 993	PATTERSON RD & N 7TH ST PATTERSON RD & 24 1/2 RD	3/3/2018 3/3/2018	10:38:00 AM 2:13:00 PM	PDO	20 400	N 8	Intersection Related At Intersection	Front to Rear Front to Side	8 E	Straight/following road Left Turn	Stopped Streight/following road
994	PATTERSON RD & 30 RD	3/5/2018	3:58:00 PM	PDO	0	144	At Intersection	Front to Reer	w	Streight/following road	Stopped
995 996	PATTERSON RD & N 1ST ST PATTERSON RD & 25 RD	3/8/2018 3/8/2018	5:20:00 PM 4:57:00 PM	PDO	160	w	Non-intersection At Intersection	Front to Rear Front to Side	W	Slowing Left Turn	Stopped Streight/following road
997 998	PATTERSON RD & 25 RD PATTERSON RD & 24 1/2 RD	3/8/2018 3/8/2018	10:47:00 AM 1:23:00 PM	PDO	15	E	Intersection Related At Intersection	Front to Rear Front to Side	W	Streightfollowing road Left Turn	Stopped Streight/following road
999	PATTERSON RD & BURKEY ST	3/8/2018	2:11:00 PM	PDO	0		At Intersection	Bicycle	8	Right Turn	Streight/following road
1000	PATTERSON RD & N 15TH ST PATTERSON RD & N 15T ST	3/8/2018	9:48:00 PM 4:08:00 PM	PDO	0		At Intersection Intersection Related	Front to Side Front to Rear	W E	Left Turn Straightfollowing road	Streight/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 PATTERSON RD & 24 1/2 RD	3/15/2018		PDO	181	N	Driveway Access Related At Intersection	Front to Front Front to Side	W E	Left Turn	Slowing Streight/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 PATTERSON RD & N 1ST ST	3/21/2018		PDO	370	w	Intersection Related At Intersection	Front to Rear Front to Side	E	Straight/following road Left Turn	Stopped Left Turn
1008	PATTERSON RD & MARKET ST		10:08:00 AM 12:30:00 PM	PDO	0		At Intersection	Front to Side	E	Streight/following road	Straight/following road
1010	PATTERSON RD & N 12TH ST PATTERSON RD & 30 RD	3/29/2018	7:10:00 AM	PDO	0		Intersection Related At Intersection	Front to Rear Front to Side	E	Straight/following road Straight/following road	Stopped Streightfollowing road
1011	PATTERSON RD & N 7TH ST PATTERSON RD & 29 RD	4/1/2018 4/2/2018	8:34:00 PM 1:11:00 PM	PDO	0		At Intersection At Intersection	Front to Rear Front to Side	8 W	Straight/following road Left Turn	Stopped Streight/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 PATTERSON RD & 24 RD	4/4/2018 4/6/2018		PDO	363	E	Intersection Related At Intersection	Front to Rear Front to Side	E N	Streight/following road	Stopped Streight/following road
1016	PATTERSON RD & 25 1/2 RD	4/9/2018	4:34:00 PM	PDO	0		Non-Intersection	Front to Rear	w	Streightfollowing road	Avoiding Object
1017	PATTERSON RD & 25 RD PATTERSON RD & 24 1/2 RD	4/12/2018 4/18/2018	3:42:00 PM 1:27:00 PM	PDO	170	N	At Intersection Driveway Access Related	Bicycle Front to Side	w	Straight/following road Left Turn	Right Turn Streight/following road
1019	PATTERSON RD & N 12TH ST		12:27:00 PM	PDO	40	8	Intersection Related	Front to Rear	N	Changing Lanes	Stopped
1020 1021	PATTERSON RD & N 1ST ST PATTERSON RD & MIRA VISTA RD	4/21/2018		PDO	300	w	At Intersection Non-intersection	Front to Side Front to Rear	W	Right Turn Streightfollowing road	Streight/following road Slowing
1022 1023	PATTERSON RD & VIEW POINT DR PATTERSON RD & 29 RD		3:54:00 PM 3:18:00 PM	PDO	200	E	At Intersection Intersection Related	All Other Peds Front to Rear	8 W	Right Turn Slowing	Streight/following road Stopped
1024	PATTERSON RD & N 12TH ST	5/2/2018	11:30:00 AM	PDO	100	8	Driveway Access Related	Side to Side Same Dir	N	Changing Lanes	Straight/following road
1025	PATTERSON RD & 24 1/2 RD PATTERSON RD & 30 RD	5/2/2018 5/2/2018	8:37:00 PM 3:12:00 PM	PDO	500 20	8 E	Driveway Access Related Intersection Related	Front to Side Front to Rear	E	Left Turn Straightfollowing road	Streight/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	Straightfollowing road	Stopped
1028	PATTERSON RD & N 15TH ST PATTERSON RD & 27 1/2 RD	5/3/2018 5/3/2018	5:29:00 PM 10:47:00 AM	PDO	500	E	Non-intersection At intersection	Front to Rear Front to Side	W E	Straight/following road Left Turn	Stopped Streight/following road
1030	PATTERSON RD & 25 RD PATTERSON RD & 24 RD	5/4/2018	12:31:00 PM	PDO	0		At Intersection	Front to Front Front to Side	N	Left Turn	Straight/following road
1031 1032	PATTERSON RD & N 7TH ST	5/5/2018 5/5/2018	9:05:00 PM 12:15:00 PM	PDO	0 570	w	At Intersection Intersection Related	Front to Rear	E	Left Turn Streightfollowing road	Streight/following road Stopped
1033	PATTERSON RD & 29 RD PATTERSON RD & 24 1/2 RD	5/8/2018 5/8/2018	4:32:00 PM 12:58:00 PM	PDO	466	8	At Intersection Driveway Access Related	Front to Rear Front to Side	W	Streight/following road Left Turn	Stopped Streight/following road
1035	PATTERSON RD & 25 RD	5/9/2018	1:32:00 PM	PDO	130	8	Driveway Access Related	Front to Side	E	Left Turn	Streight/following road
1038	PATTERSON RD & RIO GRANDE DR PATTERSON RD & N 12TH ST	5/9/2018 5/9/2018	4:10:00 PM 6:38:00 AM	PDO	0		Non-intersection At Intersection	Curb Front to Side	W	Streightfollowing road Streightfollowing road	UNK Streight/following road
1038	PATTERSON RD & 25 RD	5/11/2018	12:49:00 PM	PDO	230	8	Intersection Related	Front to Rear	N	Other	Stopped
1039	PATTERSON RD & N 12TH ST PATTERSON RD & 25 RD		6:30:00 PM 9:24:00 AM	PDO	400 1000	w	Driveway Access Related Driveway Access Related	Front to Rear Side to Side Same Dir	E W	Straightfollowing road Changing Lanes	Slowing 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	Streight/following road
1042	PATTERSON RD & MIRA VISTA RD 1-70B & PATTERSON RD	5/15/2018 5/16/2018		PDO	355	E	Intersection Related Driveway Access Related	Front to Rear Front to Side	UNK	UNK Changing Lanes	UNK Left Turn
1044	PATTERSON RD & 27 1/2 RD	5/18/2018	3:55:00 PM	NJ	250	w	Intersection Related	Overturning	E	Other	UNK
1045	PATTERSON RD & GRAND VALLEY DR PATTERSON RD & GRAND VALLEY DR		8:55:00 AM 8:55:00 AM	NJ NJ	155 155	w	Non-intersection Non-intersection	Front to Rear Front to Rear	E	Straight/following road Straight/following road	Streight/following road Streight/following road
1047	PATTERSON RD & SANTA FE DR	5/23/2018	7:18:00 AM 4:12:00 PM	PDO	50 200	E	Intersection Related	Front to Rear	W	Straight/following road	Slowing
1048	PATTERSON RD & N 15TH ST PATTERSON RD & 24 1/2 RD		4:12:00 PM 5:48:00 PM	PDO	200	E	Intersection Related At Intersection	Front to Rear Front to Side	UNK	UNK U-Turn	Slowing Left Turn
1050	PATTERSON RD & MARKET ST 636 MARKET ST & PATTERSON RD		7:18:00 AM	PDO	150 250	E	At Intersection	Light Pole / Utility Pole	E	Streight/following road	UNK
1051	PATTERSON RD & MEANDER DR	5/30/2018	2:38:00 PM	PDO	451	W	Intersection Related Driveway Access Related	Front to Side Bicycle	8	Right Turn Stopped	Streight/following road Streight/following road
	PATTERSON RD & 29 RD	5/30/2018	7:51:00 PM	PDO	780	w	Non-Intersection	Front to Rear	w	Streight/following road	Streight/following road
1053	PATTERSON RD & 25 ND PATTERSON RD & 25 1/2 RD	6/4/2018	4:24:00 PM	PDO	0		Intersection Related	Front to Rear	w	Straightfollowing road	Straight/following road

*	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 PATTERSON RD & 27 1/2 RD	6/6/2018 6/6/2018	11:58:00 AM	PDO	0		Intersection Related	Front to Rear	w	Slowing	Stopped
1058	PATTERSON RD & 27 1/2 RD PATTERSON RD & 25 RD	6/6/2018 6/7/2018	5:02:00 PM 12:50:00 PM	PDO	0 350	w	At Intersection Non-Intersection	Front to Rear Front to Rear	E	Straight/following road Slowing	Stopped Slowing
1060	PATTERSON RD & 24 1/2 RD PATTERSON RD & 28 3/4 RD	6/7/2018 6/8/2018	2:28:00 PM 4:42:00 PM	PDO	0		At Intersection Non-Intersection	Front to Side Front to Rear	E	Left Turn Straightfollowing road	Streight/following road Stopped
1062	PATTERSON RD & N 12TH ST	6/9/2018	12:38:00 PM	PDO	0		At Intersection	Front to Side	8	Streightfollowing road	Streight/following road
1063	PATTERSON RD & 24 1/2 RD PATTERSON RD & 29 1/2 RD	6/9/2018 6/12/2018	6:19:00 PM 7:05:00 AM	PDO	40	E	At Intersection Non-intersection	Front to Rear Side to Side Opposite	8 E	Right Turn Drove Wrong Way	Right Turn Streight/following road
1065	PATTERSON RD & 24 1/2 RD	6/12/2018	3:40:00 PM	PDO	0	-	At Intersection	Dir Front to Side	E	Left Turn	Straight/following road
1066	PATTERSON RD & 24 1/2 RD PATTERSON RD & 24 1/2 RD	6/14/2018 6/16/2018	4:22:00 PM 2:54:00 PM	PDO	500	8	Driveway Access Related At Intersection	Front to Side Front to Rear	E	Left Turn Straightfollowing road	Streight/following road Slowing
1068	PATTERSON RD & MCMULLIN DR	6/19/2018	5:13:00 PM	NJ	0		At Intersection	Front to Side	w	Left Turn	Streight/following road
1009	PATTERSON RD & N 7TH ST PATTERSON RD & 29 RD	6/20/2018 6/23/2018	11:25:00 AM 11:53:00 PM	PDO	150 750	W 8	Driveway Access Related Non-Intersection	Front to Side Front to Rear	- W	Straight/following road Straight/following road	Left Turn Slowing
1071	PATTERSON RD & 25 RD PATTERSON RD & MIRA VISTA RD	6/25/2018 6/27/2018	10:38:00 AM 2:28:00 PM	PDO	150 260	N	Intersection Related Non-Intersection	Front to Rear Front to Rear	8 UNK	Straight/following road	Stopped
1073	PATTERSON RD & COMMERCE BLVD	6/27/2018	8:55:00 AM	NJ	308	E	Driveway Access Related	Front to Side	8	Left Turn	Left Turn Streight/following road
1074	PATTERSON RD & N 7TH ST PATTERSON RD & 30 RD	6/27/2018 6/28/2018	9:45:00 AM 3:57:00 PM	PDO	580	w	Driveway Access Related At Intersection	Front to Side Front to Side	E	Left Turn Straightfollowing road	Streight/following road Streight/following road
1076	PATTERSON RD & N 18T ST PATTERSON RD & 25 RD	6/29/2018 7/2/2018	10:58:00 AM 2:23:00 PM	PDO	400 173	W	Intersection Related Driveway Access Related	Front to Rear Front to Side	E	Slowing Left Turn	Stopped Streight/following road
1078	PATTERSON RD & N 12TH ST	7/2/2018	3:48:00 PM	PDO	50	8	Non-Intersection	Front to Rear	N	Straightfollowing road	Slowing
1079	PATTERSON RD & 30 RD PATTERSON RD & 24 1/2 RD	7/2/2018 7/2/2018	11:19:00 PM 2:38:00 PM	PDO	0		Non-intersection At Intersection	Front to Rear Front to Front	E	Straight/following road Left Turn	Slowing Streight/following road
1081	PATTERSON RD & 24 RD PATTERSON RD & SPRING VALLEY CIR	7/5/2018 7/5/2018	10:04:00 AM 12:48:00 PM	PDO	80	N	Intersection Related Intersection Related	Side to Side Same Dir Front to Rear	8 W	Right Turn Straightfollowing road	Streight/following road Stopped
1083	PATTERSON RD & 28 RD	7/7/2018	10:39:00 AM	PDO	0		At Intersection	Front to Side	8	Left Turn	Streight/following road
1084	PATTERSON RD & 30 RD PATTERSON RD & N 1ST ST	7/8/2018 7/9/2018	7:48:00 PM 3:17:00 PM	PDO	0		At Intersection At Intersection	Front to Rear Front to Side	N 8	Straight/following road Left Turn	Streight/following road Streight/following road
1086	PATTERSON RD & N 12TH ST	7/9/2018	1:43:00 PM	PDO	0		At Intersection	Front to Rear	E	Streightfollowing road	Stopped
1087 1088	PATTERSON RD & 24 1/2 RD PATTERSON RD & N 12TH ST	7/12/2018 7/20/2018	12:57:00 PM 1:32:00 PM	PDO	150	E	At Intersection Driveway Access Related	Front to Side Front to Side	N	Left Turn Streight/following road	Straight/following road Straight/following road
1089	PATTERSON RD & 25 RD PATTERSON RD & 25 RD	7/22/2018 7/23/2018	12:41:00 PM 5:32:00 PM	PDO	132	N	At Intersection Driveway Access Related	Front to Rear Front to Front	E	Streightfollowing road Left Turn	Slowing Slowing
1091	636 MARKET ST & PATTERSON RD PATTERSON RD & 27 1/2 RD	7/24/2018 7/26/2018	9:08:00 AM 4:28:00 PM	PDO	224 50	N E	Driveway Access Related Non-intersection	Front to Side	E	Right Turn Straight/following road	Left Turn 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 1095	PATTERSON RD & 29 RD PATTERSON RD & PLACER ST	7/26/2018 7/26/2018	2:24:00 PM 10:52:00 AM	PDO	286	w	At Intersection Non-intersection	Front to Front Front to Front	E	Streight/following road Other	Left Turn Streight/following road
1096	PATTERSON RD & 28 1/4 RD PATTERSON RD & MARKET ST	7/29/2018 7/31/2018	4:29:00 PM 4:23:00 PM	PDO	0		At intersection At intersection	Front to Side Overturning	W	Left Turn Streightfollowing road	Streight/following road Streight/following road
1098	PATTERSON RD & N 7TH ST	8/6/2018	11:54:00 AM	PDO	250	w	Driveway Access Related	Front to Side	8	Left Turn	Streight/following road
1100	636 MARKET ST & PATTERSON RD PATTERSON RD & 30 RD	8/7/2018 8/8/2018	12:05:00 PM 4:08:00 PM	PDO	294	N	At Intersection At Intersection	Front to Side Front to Side	W	Right Turn Streight/following road	Left Turn Streight/following road
1101	636 MARKET ST & PATTERSON RD PATTERSON RD & 29 1/2 RD	8/12/2018 8/12/2018	2:24:00 PM 9:52:00 AM	PDO	220	N	Driveway Access Related At Intersection	Front to Side Front to Side	E	Right Turn	Left Turn Stopped
1103	PATTERSON RD & 25 RD	8/14/2018	2:18:00 PM	PDO	695	w	Non-Intersection	Side to Side Same Dir	8	Left Turn	Straight/following road
1104 1105	PATTERSON RD & 28 1/4 RD PATTERSON RD & 29 1/2 RD	8/14/2018 8/14/2018	3:19:00 PM 4:52:00 PM	PDO	0 245	w	At Intersection Intersection Related	Front to Side Other - Non Colleion	E	Streightfollowing road Other	Left Turn UNK
1106	PATTERSON RD & 29 RD PATTERSON RD & N 12TH ST	8/18/2018	6:10:00 AM 11:41:00 AM	PDO	50	N	At Intersection Intersection Related	All Other Peds Front to Rear	N S	UNK Changing Lanes	Streight/following road Stopped
1108	PATTERSON RD & 28 1/4 RD PATTERSON RD & N 12TH ST	8/22/2018 8/23/2018	3:35:00 PM 6:46:00 PM	PDO	0 20	E	At Intersection Intersection Related	Side to Side Same Dir Side to Side Same Dir	N N	Left Turn Right Turn	Left 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 PATTERSON RD & 25 RD	8/26/2018 8/26/2018	8:01:00 PM 8:17:00 PM	PDO	0		At Intersection At Intersection	Front to Side Front to Front	W	Left Turn	Straight/following road Straight/following road
1113	PATTERSON RD & N 15TH ST PATTERSON RD & N 7TH ST	8/27/2018 8/29/2018	5:43:00 PM 5:41:00 PM	PDO	685 150	E	Non-Intersection	Front to Rear Front to Rear	E	Streightfollowing road Streightfollowing road	Slowing Stopped
1115	PATTERSON RD & 25 RD	8/29/2018	12:27:00 PM	PDO	Ö	_	At Intersection	Front to Side	w	Left Turn	Streight/following road
1116	PATTERSON RD & N 18T ST PATTERSON RD & N 7TH ST	8/29/2018 8/29/2018	12:40:00 PM 5:28:00 PM	PDO	100	E	Intersection Related At Intersection	Front to Rear Front to Front	8	Streight/following road Right Turn	Stopped Streightfollowing road
1118	PATTERSON RD & N 15TH ST PATTERSON RD & 29 RD	9/4/2018 9/4/2018	8:03:00 AM 3:17:00 PM	PDO	175	w	Non-intersection At intersection	Front to Rear Front to Rear	W E	Streight/following road Streight/following road	Slowing Right Turn
1120	PATTERSON RD & 25 1/2 RD PATTERSON RD & N 7TH ST	9/5/2018 9/6/2018	5:27:00 PM 4:05:00 PM	PDO	200	N	At Intersection Driveway Access Related	Front to Side	E	Left Turn Right Turn	Straight/following road 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	Streight/following road
1123	PATTERSON RD & N 15TH ST PATTERSON RD & N 1ST ST	9/14/2018 9/14/2018		NJ NJ	15	w	At Intersection At Intersection	All Other Peda Front to Side	W	Left Turn Left Turn	Streightfollowing road Streightfollowing road
1125	PATTERSON RD & 24 1/2 RD PATTERSON RD & 25 RD		11:30:00 AM 12:38:00 PM	PDO	150	w	At Intersection Non-Intersection	Front to Side	W	Streight/following road Left Turn	Streight/following road Streight/following road
1127	PATTERSON RD & 30 RD PATTERSON RD & 24 1/2 RD		10:33:00 AM 1:53:00 PM	NJ PDO	0		At Intersection At Intersection	Front to Side Front to Side	8 N	Right Turn Streightfollowing road	Streight/following road
1129	PATTERSON RD & N 7TH ST	9/27/2018	5:25:00 PM	PDO	0		Intersection Related	Front to Rear	E	Streight/following road	Streightfollowing road Stopped
1130	PATTERSON RD & 24 1/2 RD PATTERSON RD & 25 RD	9/29/2018	2:15:00 PM 5:22:00 PM	PDO	500	8	Intersection Related Non-Intersection	Front to Rear Front to Rear	W	Slowing	Stopped Stopped
1132	PATTERSON RD & 24 1/2 RD PATTERSON RD & N 12TH ST	10/6/2018	7:48:00 PM 10:34:00 PM	PDO	500	8	At Intersection At Intersection	Front to Side	E 8	Streight/following road Streight/following road	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	Straightfollowing road	Slowing
1135 1136	PATTERSON RD & N 12TH ST PATTERSON RD & 25 RD	10/11/2018	2:25:00 PM	PDO	600	E	Non-Intersection Non-Intersection	Front to Rear Front to Rear	E	Slowing Straight/following road	Stopped Slowing
1137	PATTERSON RD & SERANADE ST PATTERSON RD & N 12TH ST	10/13/2018	10:32:00 PM 10:08:00 AM	PDO	158	E	Driveway Access Related At Intersection	Front to Side Front to Side	8 W	Left Turn Streightfollowing road	Streight/following road Streight/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 PATTERSON RD & 25 RD	10/19/2018	3:54:00 PM 12:30:00 PM	PDO	100	E	At Intersection Intersection Related	Front to Rear Front to Rear	W	Streight/following road Streight/following road	Streightfollowing road Stopped
1142 1143	PATTERSON RD & N 12TH ST PATTERSON RD & 27 1/2 RD		11:00:00 AM 11:09:00 AM	PDO	150 200	w	Driveway Access Related Non-Intersection	Front to Rear Front to Rear	W	Slowing	Slowing Slowing
1144	PATTERSON RD & COTTAGE MEADOWS PATTERSON RD & HWY 6 & 50	10/26/2018	6:04:00 PM	INJ NJ	0		At Intersection Non-Intersection	Other - Non Collision Enbankment	w	Changing Lanes Straightfollowing road	UNK
1146	PATTERSON RD & BEECHWOOD ST	10/27/2018	3:28:00 PM	PDO	50	w	Non-Intersection	Sign	W	Streight/following road	UNK
1147	PATTERSON RD & 30 RD PATTERSON RD & 28 1/4 RD	10/31/2018		PDO	200	w	At Intersection Intersection Related	Front to Rear Front to Rear	W E	Straight/following road Straight/following road	Stopped Slowing
1149 1150	PATTERSON RD & 25 RD PATTERSON RD & 24 1/2 RD	11/3/2018	4:05:00 PM 11:20:00 AM	PDO	492	E	Non-intersection At intersection	Front to Rear Front to Side	W	Streight/following road Left Turn	Stopped Streight/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	Straightfollowing road	Streight/following road
1152 1153	PATTERSON RD & 27 1/2 RD PATTERSON RD & 27 1/2 RD	11/7/2018	7:53:00 PM 6:48:00 PM	PDO	200	E	Intersection Related Driveway Access Related	Front to Rear Front to Side	N	Streightfollowing road Left Turn	Stopped Streight/following road
1154 1155	636 MARKET ST & PATTERSON RD PATTERSON RD & 28 1/4 RD		11:52:00 AM 6:22:00 PM	PDO	250 400	N W	Driveway Access Related Intersection Related	Front to Side Front to Rear	E	Right Turn UNK	Left Turn Stopped
1156 1157	PATTERSON RD & 25 RD	11/12/2018	5:28:00 PM	PDO	250	w	Driveway Access Related	Front to Side	E 8	Left Turn	Streight/following road
1158	PATTERSON RD & N 7TH ST PATTERSON RD & MIRA VISTA RD	11/13/2018	12:13:00 PM	PDO	500	W	At Intersection Non-intersection	Front to Rear	E	Left Turn Streightfollowing road	Straight/following road Slowing
1159	PATTERSON RD & 29 RD PATTERSON RD & 29 RD	11/14/2018		PDO	400	8	Driveway Access Related At Intersection	Front to Side Front to Rear	W E	Left Turn Slowing	Streight/following road Stopped
1161 1162	PATTERSON RD & 24 1/2 RD PATTERSON RD & MARKET ST	11/17/2018	2:38:00 PM	PDO	0		At Intersection At Intersection	Front to Front Front to Side	S N	Left Turn Right Turn	Streight/following road Left Turn
1163	PATTERSON RD & 30 RD	11/22/2018	5:08:00 PM	PDO	Ö	w	At Intersection	Front to Side	W	Left Turn	Streight/following road
1164 1165	PATTERSON RD & 30 RD PATTERSON RD & GRAND CASCADE WY	11/28/2018 11/29/2018		PDO	0		At Intersection Non-Intersection	Front to Side Front to Rear	8 E	Straight/following road Slowing	Streight/following road Slowing
1166	PATTERSON RD & 29 RD PATTERSON RD & BELHAVEN WY	11/29/2018 11/29/2018	4:20:00 PM 4:30:00 PM	PDO	0	N	At intersection At intersection	Front to Front Front to Side	W	Left Turn Left Turn	Streight/following road Streight/following road
1168	PATTERSON RD & N 12TH ST REDLANDS PKWY RAMP & PATTERSON RD	11/30/2018	6:07:00 PM	PDO	0	8	At Intersection	Side to Side Same Dir	E	Right Turn	Left Turn
1170	PATTERSON RD & N 1ST ST	12/5/2018	5:15:00 PM	PDO	400 50	E E	Highway Interchange Intersection Related	Front to Rear Front to Rear	W	Changing Lanes Slowing	Changing Lanes Stopped
1171	PATTERSON RD & N 12TH ST PATTERSON RD & N 1ST ST		9:26:00 AM 4:11:00 PM	PDO	150	w	At Intersection Non-Intersection	Front to Side Front to Rear	E	Right Turn Streight/following road	Streight/following road Stopped
1173	PATTERSON RD & 25 RD		12:09:00 PM	PDO	233	N	Driveway Access Related	Front to Side	Ē	Left Turn	Streight/following roa

*	Intersection	Date	Time	Severity	Distance From Int	Direction from Int	Road Description	Accident Type	Dir	Vehicle 1 Movement	Vehicle 2 Movement
\vdash									_		
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	Streight/following road
1175	PATTERSON RD & 24 1/2 RD	12/8/2018	2:21:00 PM	PDO	0		At Intersection	Front to Rear	N	Straightfollowing road	Stopped
1178	PATTERSON RD & 25 RD	12/10/2018	6:45:00 AM	PDO	0		At Intersection	Front to Side	N	Right Turn	Streight/following road
1177	PATTERSON RD & 24 RD	12/11/2018	8:57:00 PM	PDO	0		At Intersection	Front to Side	N	Left Turn	Streight/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	Streight/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	Streight/following road	Stopped
1181	PATTERSON RD & 24 1/2 RD	12/15/2018	4:58:00 PM	PDO	500	8	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	Streight/following road	Left Turn
1188	PATTERSON RD 8 20 1/2 RD	12/24/2018	2:50:00 PM	PDO	0		At Intersection	Front to Side	E	Straightfoliouing spart	Left Turn

Appendix D - Traffic Methodology, Data, and Analysis

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

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1.0 EXISTING TRAFFIC OPERATIONS

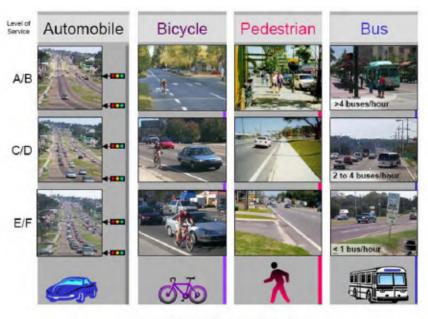
1.1 Traffic Volumes

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	Signalized Intersection	Unsignalized Intersection	
Service (LOS)	Average Intersection Delay (sec/veh)	Worst Movement (sec/veh)	Traffic Characteristics
Α	<= 10	<= 10	Free Flow / Insignificant Delays
В	> 10-20	> 10-15	Stable Flow / Minimal Delays
С	> 20-35	>15-25	Stable Flow / Acceptable Delays
D	> 35-55	>25-35	Nearing Unstable / Tolerable Delays
Е	> 55-80	>35-50	Unstable Flow / Significant Delays
F	> 80	> 50	Forced Flow / Excessive Delays

Table 2 - Urban Street LOS Criteria

LOS	Travel	Speed T	hreshold	by Base	Free-Flo	w Speed	d (mi/h)	Volume to		
LUS	55	50	45	40	35	30	25	Capacity Ratio		
Α	>44	>40	>36	>32	>28	>24	>20			
В	>37	>34	>30	>27	>23	>20	>17			
С	>28	>25	>23	>20	>18	>15	>13	<=10		
D	>22	>20	>18	>16	>14	>12	>10	\-1.0		
E	>17	>15	>14	>12	>11	>9	>8			
F	<=17	<=15	<=14	<=12	<=11	<=9	<=8			
F	F Any									

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 ACP, 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

		A	M		P	M
Intersection	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

AM PM											
Intersection	Delay		Delay								
mersesion	(sec)	LOS	(sec)	LOS							
24 Rd & Patterson Rd	31.4	С	48.6	D							
Market St & Patterson Rd	11.8	В	27.8	С							
Mesa Mall Access & Patterson Rd	8.4	Α	19.2	В							
24 1/2 Rd & Patterson Rd	15.7	В	27.4	С							
25 Rd & Patterson Rd	33.2	С	108.8	F							
25 1/2 Rd & Patterson Rd	21.7	С	34.0	С							
N 1st St & Patterson Rd	24.3	С	19.0	В							
N 7th St & Patterson Rd	26.1	С	28.2	С							
N 12th St & Patterson Rd	32.9	С	39.4	D							
N 15th St & Patterson Rd	5.1	Α	7.1	Α							
27 1/2 Rd & Patterson Rd	18.9	В	18.5	В							
28 1/4 Rd & Patterson Rd	18.4	В	19.0	В							
29 Rd & Patterson Rd	56.1	E	54.8	D							
29 1/2 Rd & Patterson Rd	19.0	В	14.1	В							
30 Rd & Patterson Rd	31.7	С	30.2	С							

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

				M			PM						
	Ea	stbour	ıd	We	stbour	nd	Ea	stboun	d	Westbound			
Segment	Travel			Travel			Travel			Travel			
	Speed	PFFS	LOS	Speed	PFFS	LO\$	Speed	PFFS	LOS	Speed	PFFS	LOS	
	MPH			MPH			MPH			MPH		oxdot	
24 Rd to Market St	12.3	29.2	F	24.8	59.7	С	12.7	30.1	Е	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	Е	18.0	43.1	D	
Mesa Mall Access to 24 1/2 Rd	30.2	75.2	В	30.3	74.5	В	26.3	65.5	С	28.9	70.9	В	
24 1/2 Rd to 25 Rd	34.8	85.5	Α	25.2	58.6	С	26.1	64.2	С	26.2	61.0	С	
25 Rd to 25 1/2 Rd	22.2	51.4	С	35.5	82.3	Α	7.4	17.2	F	30.4	70.4	В	
25 1/2 Rd to 1st St	31.5	73.1	В	29.6	72.6	В	21.6	50.1	С	33.2	81.6	Α	
1st St to 7th St	30.6	72.5	В	27.4	68.7	В	29.8	70.7	В	24.4	61.1	С	
7th St to 12th St	33.6	84.0	Α	23.6	55.7	С	25.9	64.7	С	22.6	53.4	С	
12th St to 15th St	14.7	36.8	Е	34.1	80.7	Α	14.5	36.3	Е	31.7	75.1	В	
15th St to 27 1/2 Rd	36.2	82.2	Α	27.0	61.3	С	32.8	74.5	В	26.4	59.8	С	
27 1/2 Rd to 28 1/4 Rd	36.5	84.0	Α	34.7	75.6	В	37.4	85.9	Α	36.4	79.4	В	
28 1/4 Rd to 29 Rd	35.8	84.1	Α	32.6	72.6	В	34.7	81.6	Α	32.4	72.2	В	
29 Rd to 29 1/2 Rd	27.6	62.8	С	31.1	70.8	В	24.5	55.9	С	36.8	83.7	Α	
29 1/2 Rd to 30 Rd	36.7	80.6	Α	20.5	50.2	С	37.4	82.1	Α	19.6	48.1	D	
Facility (24 Rd to 30 Rd)	29.2	68.7	В	28.5	66.8	С	21.9	51.5	F	27.3	64.0	С	

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 ACP 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 ACP scenario. Traffic operations or conditions in the 2045 No Build scenario may be unacceptable, with potential solutions to these issues proposed in the ACP 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

#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 ACP found that thirteen intersections warranted auxiliary lanes as listed in the table below.

Table 6-Required Auxiliary Lanes

I able 0-Kei	quired Auxiliary Lai							
		anting Auxiliary						
Intersection	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 ACP 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 ACP 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

		AM		PM					
Intersection	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

Table 6 - 2043 No Build Signalized Intersection Delay & LOS											
Intercetion	Α	М	PM								
Intersection	Delay (sec)	LOS	Delay (sec)	LOS							
24 Rd & Patterson Rd	38.2	D	40.4	D							
Market St & Patterson Rd	9.0	Α	24.4	С							
Mesa Mall Access & Patterson Rd	13.5	В	34.4	С							
24 1/2 Rd & Patterson Rd	22.6	C	39.5	D							
25 Rd & Patterson Rd	31.2	С	74.0	E							
25 1/2 Rd & Patterson Rd	20.9	С	24.4	С							
N 1st St & Patterson Rd	30.7	С	50.5	D							
N 7th St & Patterson Rd	20.4	C	52.5	D							
N 12th St & Patterson Rd	33.3	С	76.4	Е							
N 15th St & Patterson Rd	5.9	Α	6.0	Α							
27 1/2 Rd & Patterson Rd	19.9	В	19.2	В							
28 1/4 Rd & Patterson Rd	26.1	C	36.0	D							
29 Rd & Patterson Rd	30.1	С	39.2	D							
29 1/2 Rd & Patterson Rd	14.3	В	50.6	D							
30 Rd & Patterson Rd	27.2	С	20.1	С							

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

	i abie :	9 – 20	45 140	Dulle	I Faci	iity C	perau	ons				
	AM								P	M		
	Eastbound			Westbound			Eastbound			Westbound		
Segment	Travel			Travel			Travel			Travel		
	Speed	PFFS	LOS	Speed	PFFS	LOS	Speed	PFFS	LOS	Speed	PFFS	LOS
	MPH			MPH			MPH			MPH		
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	В	26.5	63.6	С	18.2	43.3	D	12.3	29.6	F
Mesa Mall Access to 24 1/2 Rd	26.6	66.3	С	28.2	69.2	В	16.9	42.0	D	18.4	56.7	С
24 1/2 Rd to 25 Rd	28.1	69.2	В	23.1	53.7	С	21.0	51.6	С	12.3	28.6	F
25 Rd to 25 1/2 Rd	25.9	60.0	С	34.3	79.5	В	11.5	26.7	F	36.7	85.0	Α
25 1/2 Rd to 1st St	30.6	71.0	В	23.6	57.8	С	30.1	69.9	В	26.0	63.8	С
1st St to 7th St	22.6	53.6	С	31.0	77.7	В	13.5	32.0	F	23.0	57.8	С
7th St to 12th St	29.9	74.6	В	20.2	47.8	D	11.1	27.7	F	19.2	45.3	D
12th St to 15th St	13.8	34.6	Е	33.9	80.1	Α	5.2	13.1	F	35.6	84.1	Α
15th St to 27 1/2 Rd	32.8	74.5	В	19.0	43.2	D	28.8	65.4	С	22.4	50.8	С
27 1/2 Rd to 28 1/4 Rd	35.7	82.1	Α	29.4	64.1	С	37.4	85.9	Α	27.4	59.8	С
28 1/4 Rd to 29 Rd	32.8	77.0	В	28.1	62.6	С	26.2	61.6	С	24.7	54.9	С
29 Rd to 29 1/2 Rd	24.2	55.1	С	34.9	79.5	В	20.7	47.3	D	23.2	53.0	С
29 1/2 Rd to 30 Rd	41.5	91.1	Α	28.1	68.9	В	14.9	32.8	F	31.9	78.1	В
Facility (24 Rd to 30 Rd)	26.7	62.9	С	26.8	62.8	С	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 ACP TRAFFIC OPERATIONS

3.1 Year 2045 ACP Scenario

The ACP scenario analyzes the traffic conditions assuming that all of the recommendations proposed by the ACP 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 ACP 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 ACP 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 ACP Required Auxiliary Lanes

Table 10 - 2040 ACF Required Auxiliary Lailes												
Intersection	Movement	Volume	Speed Limit	Taper Length	90% Queue Length	Total Length						
	SBR	71	40	90	43	133						
Patterson Rd & 24 Rd	EBR	207	35	60	0	60						
	WBR	359	35	60	0	60						
Patterson Rd & Market St	EBR	141	35	60	41	101						
	EBR	227	35	60	103	163						
Patterson Rd & Home Depot	NBL	279	20	60	139	199						
	NBR	249	20	60	205	265						
Datterson Dd 9 24 4/2 Dd	EBR	251	35	60	165	225						
Patterson Rd & 24 1/2 Rd	WBR	282	35	60	92	152						
Patterson Rd & 25 Rd	EBR	181	40	90	124	214						
Patterson Ru & 25 Ru	WBR	147	40	90	89	179						
Detteres Dd 8 05 4/0 Dd	EBR	144	40	90	84	174						
Patterson Rd & 25 1/2 Rd	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						
	SBL	288	40	90	139	229						
Patterson Rd & 12 St	WBL (Dual)	382	40	90	79	169						
	WBR	151	40	90	59	149						
Patterson Rd & 15 St	EBR	30	40	90	175	265						
Patterson Ru & 15 St	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						
Patterson Ru & 29 Ru	WBR	98	45	90	21	111						
	EBR	96	45	90	73	163						
Patterson Rd & 29 1/2 Rd	WBR	265	45	90	114	204						
Fallerson Ru & 25 1/2 Ru	NBL	86	35	60	73	133						
	SBL	155	35	60	191	251						
Patterson Rd & 30 Rd	EBR	319	35	60	34	94						
Fallerson Ru & Su Ru	WBR	69	45	90	33	123						

3.3 Geometric Changes to 2045 ACP Model

The required auxiliary lanes were included in the 2045 ACP HCS models. The following three changes were added to the 2045 ACP 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 ACP 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 ACP scenario. The HCS printouts of the results can be found in Appendix D.

Table 11 – 2045 ACP 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	С		

Table 12 - 2045 ACP Signalized Intersection Delay & LOS

Tuble 12 - 2040 AGI C		M	PM	
Intersection	Delay (sec)	LOS	Delay (sec)	LOS
24 Rd & Patterson Rd	30.1	С	37.6	D
Market St & Patterson Rd	9.7	Α	22.6	С
Mesa Mall Access & Patterson Rd	8.7	Α	35.5	D
24 1/2 Rd & Patterson Rd	20.5	С	35.4	D
25 Rd & Patterson Rd	28.9	С	55.7	E
25 1/2 Rd & Patterson Rd	25.7	С	31.1	С
N 1st St & Patterson Rd	27.8	С	49.0	D
N 7th St & Patterson Rd	25.6	С	34.8	С
N 12th St & Patterson Rd	27.4	С	62.4	E
N 15th St & Patterson Rd	4.5	Α	10.5	В
27 1/2 Rd & Patterson Rd	20.0	С	30.4	С
28 1/4 Rd & Patterson Rd	24.5	С	33.4	С
29 Rd & Patterson Rd	26.7	С	38.4	D
29 1/2 Rd & Patterson Rd	17.8	В	32.9	С
30 Rd & Patterson Rd	21.5	С	23.0	С

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 ACP Facility Operations

			A	M					P	М			
	Ea	Eastbound			Westbound			stboun	ıd	We	Westbound		
Segment	Travel Speed MPH	PFFS	LOS	Travel Speed MPH		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	Е	
Market St to Mesa Mall Access	27.7	66.7	С	27.1	65.2	С	16.7	40.3	D	13.5	32.5	Е	
Mesa Mall Access to 24 1/2 Rd	31.9	79.2	В	26.6	65.0	С	16.8	41.7	D	21.3	52.2	С	
24 1/2 Rd to 25 Rd	29.8	72.8	В	23.8	54.9	С	21.2	51.6	С	21.8	50.4	С	
25 Rd to 25 1/2 Rd	25.7	59.9	С	29.8	69.4	В	16.1	37.6	F	31.6	73.6	В	
25 1/2 Rd to 1st St	29.1	67.2	В	24.2	59.1	С	24.3	56.1	С	22.8	55.6	С	
1st St to 7th St	24.3	56.8	С	27.0	66.8	С	14.7	34.5	F	29.3	72.6	В	
7th St to 12th St	23.9	58.7	С	23.4	54.4	C	31.6	77.5	В	23.7	55.0	С	
12th St to 15th St	14.0	34.7	Е	34.4	80.7	Α	6.1	15.0	F	24.2	56.8	С	
15th St to 27 1/2 Rd	35.2	79.8	В	20.7	46.9	D	28.6	65.0	С	12.4	28.2	F	
27 1/2 Rd to 28 1/4 Rd	37.7	87.2	Α	31.6	69.4	В	36.6	84.6	Α	16.4	36.0	F	
28 1/4 Rd to 29 Rd	32.8	75.5	В	31.4	68.6	В	31.4	72.3	В	23.9	52.3	С	
29 Rd to 29 1/2 Rd	28.1	62.6	С	32.1	71.3	В	23.3	51.8	С	31.5	70.1	В	
29 1/2 Rd to 30 Rd	33.6	73.8	В	28.7	70.3	В	28.2	61.9	С	30.5	74.8	В	
Facility (24 Rd to 30 Rd)	26.8	62.7	С	27.4	63.6	С	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 ACP. This can mostly be attributed to the reduction of access points along the corridor.

3.5 Evaluated Alternatives

Prior to finalizing the ACP, 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 Control Plan (ACP) 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 Control Plan (ACP). 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 ACP 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 ACP 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 ACP'
- '2045 ACP'

The existing scenario will be evaluated using existing count data and the existing roadway geometry. The 2045 No ACP scenario will evaluate traffic conditions using volumes from the Year 2045 Travel Demand Model. Roadway developments that are expected to occur irrespective of this ACP will be incorporated into the models. The 2045 ACP scenario will analyze the study area assuming full implementation of the proposed ACP 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 ACP, 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 ACP and ACP 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 ACP, 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 ACP. As a result, while the future signal timings will ensure sufficient pedestrian crossing times, multimodal results will not be reported in this ACP.

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Queue Service				10.2	15.6	15.2	3.6	6.1		2.7	24.9	21.4	3.4	5.1	5.2		
Cycle Queue C				10.2	15.6	15.2	3.6	6.1		2.7	24.9	21.4	3.4	5.1	5.2		
Green Ratio (g		z imie (g i n i		0.47	0.38	0.38	0.08	0.33		0.36	0.28	0.36	0.09	0.29	0.29		
Capacity (c), v				564	694	629	267	607		462	508	564	301	528	513		
Volume-to-Capa		rtio (X)		0.518	0.629		0.485	0.25	_	0.159	0.922	0.701	0.409	0.231	0.235		
		/In (90 th percentile)	175	200.8		64.1	107.		45.9	425.2		58.6	90	91.2		
		eh/ln (90 th percent		7.6	8.8	7.9	2.8	4.7		2.1	18.6	12.2	2.6	4.0	3.9		
		RQ) (90 th percen	_	0.98	0.00	0.00	0.29	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 De	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)			С	С	С	D	С	С	С	Е	С	D	С	С			
Approach Delay, s/veh / LOS			20.3		С	31.7	7	С	43.8	3	D	33.3	3	С			
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Urban Street Intersection		Patterson Rd	A 0.00	File Na	sis Year	_	20 AM	_	Analysis	Period	1> 7:0	JU					
Intersection Market Street/Mall Acce Project Description					ame	Existii	ng AM.x	us					- 4	1419797			
Project Descrip	lion		_			_			_			_			Name .		
Demand Inform		EB			WB	.		NB		_	SB						
Approach Move				ī	ΤŢ	R	1	T	R	1	T	R	1	T T	R		
Demand (v), v				44	541	31	12	348	_	12	6	10	60	7	23		
Demand (v), verum					341	31	12	340	12	12		10	- 00		23		
Signal Informa	tion					$\overline{}$	- 1		JIL								
Cycle, s 100.0 Reference Phase 2				7 6	3	43.0		0.2		- 1		4		4			
Offset, s				_		- 2	3	_	17			1	2	3	4		
Uncoordinated	No				0.9	3.6 0.0	68.7 4.0	3.0 4.0	4.8	0.0			}		-4-		
Force Mode Fixed Simult. Gap N/S On				Red	0.5	0.0	1.0	1.0	1.0	0.0		5	6	7	Y		
T Gree mode	TIXOG	Cilitate Cup 1470	Oil			1010			111								
Timer Results				EBI		EBT	WB	L	WBT	NBL		NBT	SBI		SBT		
Assigned Phase	9			5		2	1	_	6	1101		8		_	4		
Case Number				1.1	+	4.0	1.1	\rightarrow	3.0		+	11.0	_	\rightarrow	10.0		
Phase Duration	•			8.5	-	77.3		-	73.7		_	8.0	_	$\overline{}$	9.8		
Change Period,		.) e		4.0		5.0	4.9		5.0			5.0	_		5.0		
Max Allow Head				3.1	\rightarrow	0.0	3.1	\rightarrow	0.0		_	3.3		-	3.3		
Queue Clearan				3.3	_	0.0	2.1	-	0.0		-	3.2	_	_	4.1		
				0.1	_	0.0	0.0	\rightarrow	0.0		0.0		_	\rightarrow	0.2		
Green Extensio Phase Call Prof		(g e), S		0.90	_	0.0	0.0	-	0.0			0.61	_	_	0.2		
				0.00	\rightarrow		0.00	_			\rightarrow	0.00		_			
Max Out Probal	ollity			0.00			0.00	,				0.00			0.00		
Movement Gro	up Res	sults			EB			WB			NB			SB			
Approach Move	_			L	T	R		T	R	L	T	R	L	T	R		
Assigned Move				5	2	12	1	6	16	3	8	18	7	4	14		
Adjusted Flow F) veh/h		85	555	545	7	208	43	Ť	22	12	72	36			
		ow Rate (s), veh/h/	ln	1711	1856	1820	1810	1766	1522		1839	1610	1702	1670			
Queue Service				1.3	16.3	16.4	0.1	1.0	0.2		1.2	0.7	2.1	2.1			
Cycle Queue C				1.3	16.3	16.4	0.1	1.0	0.2		1.2	0.7	2.1	2.1			
Green Ratio (g.		0 mmc (g v), 0		0.75	0.72	0.72	0.70	0.69	0.69		0.03	0.03	0.05	0.05	_		
Capacity (c), v	_			912	1342		369	2426	_		56	49	162	79			
Volume-to-Capa		tio (X)		0.093	0.414	_		0.086	_		0.388	0.246	0.447	0.455			
		/In (90 th percentile)	14.6	_	219.8	1.5	13.7	3		22.1	12.2	36.6	36.1			
		eh/In (90 th percent		0.6	10.1	10.0	0.1	0.6	0.1		1.0	0.6	1.6	1.6	-		
		RQ) (90 th percent		0.10	0.00	0.00	0.01	0.00	0.03		0.00	0.00	0.00	0.00			
Uniform Delay (· · · · ·	3.4	9.1	9.1	5.8	2.6	1.0		47.6	47.4	46.3	46.4			
Incremental De				0.0	0.9	0.9	0.0	0.1	0.1		1.6	1.0	0.7	1.5			
				0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0			
Initial Queue Delay (d 3), s/veh					9.9	10.0	5.8	2.7	1.1		49.2	48.3	47.1	47.9			
Control Delay (d), s/veh Level of Service (LOS)					A	В	A	A	A A		D D	D 40.3	D D	D D			
Approach Delay		9.5		A	2.5		A	48.9		D	47.3	_	D				
Intersection Del		9.3			1.8		71	40.8			B 47.3						
microecuon Dei	ay, arve					'	.0										
Multimodal Re			EB			WB			NB			SB					
didinoddi Ne		1.85	_	В	2.05		В	2.47		В	2.31		В				
Pedestrian LOS	Score	Pedestrian LOS Score / LOS Bicycle LOS Score / LOS															

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resul	ts Sur	nmar	у						
General Inform	nation								ntersect	tion Inf	ormatic	nn.		14741	되다		
	iation	Stolfus and Associa	otos						Duration,		0.250		- 1	44			
Agency			ates	Anaha	sia Date			_			_		- 2		N. A.		
Analyst		Max Rusch			sis Date		l:		Area Typ	e	Other				- :-		
Jurisdiction		D-# D4		Time F		AM P	еак		PHF	Desired	0.84	20	- 3 v		=		
Urban Street		Patterson Rd	0.4		sis Yea	_	^ ^ 4 4		Analysis	Period	1> 7:(00	- 13		7		
Intersection Home Depot Access/Me					ame	Existii	ng AM.x	us					- 4	1410000			
Project Descrip	tion		_	_	_	_	_	_	_	_	_	_	_	M I de M	MU		
Demand Inform	nation				EB			WB			NB		_	SB			
Approach Move				T	ΤŢ	T R	1	T	R		ΤT	R	1	Ιτ	R		
Demand (v), v				33	559	13	12	405	-	7	5	10	26	4	19		
Demand (V), V	CIVII			33	333	13	12	400	, 13	-	,	10	20		13		
Signal Informa	tion					$\overline{}$		بالرات		$\overline{}$			N.	-			
Cycle, s	100.0	Reference Phase	2		- X	13	- 2		IS A	25			7		V		
Offset, s	51	Reference Point	Begin	_	100	1 2	70.0	1.0	51			1	2	3	. 1		
Uncoordinated	No	Simult. Gap E/W	Off	Green Yellow		0.0	70.2 4.0	4.0	2.6 4.0	0.0		_			人		
Force Mode	Fixed	·			0.5	0.0	1.0	1.0	1.0	0.0			♦ .	7	-+-		
3.00		zamani Sup 1115	3	Red													
Timer Results				EBI		EBT	WB	L	WBT	NBI		NBT	SBI		SBT		
Assigned Phase	e			1	\neg	6	5	\neg	2		\neg	4		\neg	8		
Case Number				1.1	\neg	4.0	1.1	\rightarrow	3.0			11.0			10.0		
Phase Duration	S			8.2		78.5	4.9		75.2		\neg	7.6	_	\neg	9.0		
Change Period	-	c). S		4.0	_	5.0	4.0		5.0			5.0		\rightarrow	5.0		
Max Allow Head				5.2	\rightarrow	0.0	5.2	\rightarrow	0.0	-		5.4		$\overline{}$	5.4		
Queue Clearan				3.0	-	0.0	2.1	-	0.0	_	+	2.8	_	\rightarrow	3.7		
Green Extensio				0.3	_	0.0		0.0		_	_	0.1		$\overline{}$	0.2		
Phase Call Pro		(ge), 3		0.85	$\overline{}$	0.0	0.18	-	0.0	_		0.52			0.80		
Max Out Proba				0.00	-		0.00	_		_	\rightarrow	0.00		_	0.00		
Max Out 1 100a	Dility			0.00			0.00					0.00			0.00		
Movement Gro	up Res	sults			EB			WB			NB			SB			
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R		
Assigned Move	ment			1	6	16	5	2	12	7	4	14	3	8	18		
Adjusted Flow I	Rate (v), veh/h		67	587	582	7	236	8		14	12	31	27	$\overline{}$		
Adjusted Satura	ation Flo	ow Rate (s), veh/h/	'In	1711	1856	1840	1810	1752	1610		1846	1610	1767	1654			
Queue Service				1.0	12.4	12.4	0.1	2.5	0.2		0.8	0.7	1.7	1.6	$\overline{}$		
Cycle Queue C	learanc	e 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	$\overline{}$		
Capacity (c), v	_			883	1364	1353	376	2459	_		48	56	71	66			
Volume-to-Cap		itio (X)		0.076	0.430	_	0.019	0.096	_		0.299	0.213	0.437	0.413			
		/In (90 th percentile)	11.3	147.2	_	1.5	32.5	2.2		16.5	13.1	35.4	30.6			
		eh/ln (90 th percent		0.5	6.5	6.5	0.1	1.4	0.1		0.7	0.6	1.6	1.4			
		RQ) (90 th percen		0.08	0.00	0.00	0.01	0.00	0.00		0.00	0.15	0.27	0.00			
Uniform Delay				3.2	5.2	5.2	4.9	5.6	5.9		47.8	46.9	46.9	46.8			
Incremental De				0.0	0.9	0.9	0.0	0.1	0.0		4.9	2.7	5.9	5.7			
				0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0			
Initial Queue Delay (d 3), s/veh Control Delay (d), s/veh					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		D	D	D	D			
Approach Delay		6.0		A	5.7		A	51.3		D	52.7	_	D				
Intersection De		5.0			.4			01.0			A						
Marking a dal Da			EB			WB			NB			SB					
Multimodal Re	Pedestrian LOS Score / LOS							_			_						
Multimodal Re Pedestrian LOS		/LOS		1.85	5 I	В	1.86	6 I	B	2.46	; I	В	2.32	?	В		

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resul	ts Sur	nmar	у					
General Inform	ation			Intersection Information												
Agency	auon	Stolfus and Associa	atos						Duration,		0.250		- 1	1111		
		Max Rusch	ates	Apolye	sis Date			_			Other		- 2		V.	
Analyst Jurisdiction		Max Ruscii		Time F		AM P	nok	_	Area Typ PHF	е	0.92				-	
		Patterson Rd				-	Edk			Doring	_	20	- 3 -		-	
Urban Street Intersection		24 1/2 Rd & Patters			sis Year	_	ng AM.x		Analysis	Period	1> 7:(00	- 6			
	son	File Na	ame	EXISU	ig AM.x	us					PRI DAMANI					
Project Descript	lion		_			_	_		_	_		_			Name .	
Demand Inform	EB WB						/B NB					SB				
Approach Move	T	ΙT	T R	1	T	R	L T R			1	R					
Demand (v), v				26	502	45	71	358	_	71	121	59	117	156	24	
Demand (V), V	CIVII			20	302	45		330	102		121	33		130	24	
Signal Informa	tion					$\overline{}$	-									
Cycle, s	100.0	Reference Phase	2		- V	3	- 4		2 243	-			7	1	V	
Offset, s					-	27	3			2	17	1	2	3	- 10	
Uncoordinated				Green Yellow		0.7	59.9 4.0	5.3 3.5	2.9 0.0	9.5		_	7	τ .	人	
Force Mode	·				0.5	0.0	1.5	0.5	0.0	1.0		5	♦ .	7	8	
T CIGO IIICGC	T IACC	Omnum. Gup 1470	0	Red												
Timer Results				EBI		EBT	WB	L	WBT	NBI		NBT	SBI		SBT	
Assigned Phase	,			1	\neg	6	5	\neg	2	7	\neg	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	\neg	14.5	12.2	_	17.4	
Change Period,		ç). S				5.5	4.0	_	5.5	4.0	$\overline{}$	5.0	4.0		5.0	
Max Allow Head				5.2	\rightarrow	0.0	5.2	-	0.0	5.2	\rightarrow	5.2	5.2		5.2	
Queue Clearan				3.2	-	0.0	2.7	-	0.0	5.9	_	7.6		-	6.5	
Green Extensio				0.2	_	0.0	0.1	-	0.0	0.1	_	2.0	8.3 0.1	_	2.2	
Phase Call Prot		(9 =), 5		0.78	-	0.0	0.63	-	0.0	0.88	_	1.00	0.97	-	1.00	
Max Out Probat	_			0.00	-		0.00	_		1.00	_	0.03	1.00	_	0.01	
max out i iobai	Jiney			0.00			0.00			1.00		0.00	1.00		0.01	
Movement Gro	up Res	sults			EB		$\overline{}$	WB			NB			SB		
Approach Move	ment			L	Т	R	L	Т	R	L	Т	R	L	Т	R	
Assigned Move	ment			1	6	16	5	2	12	7	4	14	3	8	18	
Adjusted Flow F	Rate (v), veh/h		54	577	561	36	117	114	77	100	96	127	170	26	
Adjusted Satura	tion Flo	ow Rate (s), veh/h/	ln	1697	1870	1816	1810	1856	1716	1767	1856	1656	1767	1738	1397	
Queue Service				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 Cl	earanc	e Time (gε), 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		15 /1-		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), v				767	1134	1101	389	1111	1028	236	177	158	264	432	174	
Volume-to-Capa		itio (X)		0.071	0.509	_	0.092	0.106	_	0.328	0.564	0.606	0.482	0.392	0.150	
		/In (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	
		eh/ln (90 th percent		0.7	3.6	3.3	0.5	1.5	1.6	3.1	4.5	4.4	5.0	3.5	1.1	
		RQ) (90 th percen		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 (,	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 Del				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 De	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 (7.1	4.3	4.1	7.5	7.0	7.6	39.1	47.2	48.7	37.8	41.1	39.6				
	A	A	A	A	A	A	D	D	D	D	D	D				
	Level of Service (LOS) Approach Delay, s/veh / LOS						7.3		A	45.4		D	39.7		D	
Intersection Del		4.3		A 15	5.7		-				В					
	aj, 5/10	, 200				1										
Multimodal Re			EB			WB			NB			SB				
Pedestrian LOS		/LOS		2.24		В	2.39		В	2.31	_	В	2.30	_	В	
				1.00		A	0.96	_	A	0.71		A	0.75	_	A	
2.0,0.0 200 00	Bicycle LOS Score / LOS						0.50			0.7			0.70			

		HCS	7 Sig	nalize	d Int	ersec	tion R	les	ults	Sun	nmar	y				
General Inform	ation								Into	react	ion Info	ormatic	n		47441	slu
	lation	Stolfus and Associa	otos							ration,		0.250		1	jiř	
Agency			ates	Analys	ie Det				_					- 2		V.
Analyst Jurisdiction		Max Rusch		Analys		AM P	nok		PHI	а Тур	е	Other 0.87				∸
		Detteres Dd		Time F		_	eak		_		Did		20	- 3-4		-
Urban Street Intersection		Patterson Rd 25 Road & Patterson		Analys File Na		_			Ana	alysis	Period	1> 7:0)0	- 6		7
					ime	EXISU	ng AM.x	us						- 4	11000	eld.
Project Description					-	_	-		-	-	-	-	-			
Demand Information					EB WB NB								$\overline{}$	SB		
Approach Move	ement			L	Т	R	L	Т	тТ	R	L	T	R	L	Т	R
Demand (v), veh/h					532	37	157	5	24	105	92	241	91	174	270	37
Signal Information							<u> </u>	12						4		
Cycle, s	100.0	Reference Phase	2			T 🗮 🐣	5		MA.			_			>	Y
Offset, s						36.0	10.0		5.0	0.0	0.0				- 1	
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow	3.5	4.5	3.5	4.	.0	0.0	0.0		<u> </u>	<u> </u>	~	4
Force Mode Fixed Simult. Gap N/S On					0.5	1.5	0.5	1.	.0	0.0	0.0		5	₹ 6	7	8
Timer Results				EBL	-	EBT	WB	4	WI		NBL	-	NBT	SBL	-	SBT
Assigned Phase	e			1	-	6	5	4	2	_	7	-	4	3	-	8
Case Number				1.1	+	4.0	1.1	-	4.	_	1.1		3.0	1.1	-	3.0
Phase Duration				14.0 42.0		14.0	\rightarrow	42.0		14.0		30.0	14.0	_		
Change Period				4.0	+	6.0	4.0	\rightarrow	6.		4.0	\rightarrow	5.0	4.0	-	5.0
Max Allow Head				5.2	-	0.0	5.2	\rightarrow	0.	.0	5.2	_	5.2	5.2	-	5.2
Queue Clearan				5.5	+		3.7	\rightarrow		_	6.2	_	15.5	10.1	_	17.5
Green Extensio		(ge), S		0.2	-	0.0	0.1	\rightarrow	0.	.0	0.1	_	2.9	0.0	-	2.5
Phase Call Pro				1.00	\rightarrow		1.00	\rightarrow		_	1.00	_	1.00	1.00	-	1.00
Max Out Proba	bility			1.00			0.35	5		_	1.00		0.46	1.00		0.65
Movement Gro	un Res	ults			EB			W	B			NB			SB	
Approach Move	_	, uito			L T R L T R L T					R	L	T	R			
Assigned Move				1	6	16	5	2	_	12	7	4	14	3	8	18
Adjusted Flow F) veh/h		117	480	469	57	11	-	112	106	277	87	200	310	43
		ow Rate (s), veh/h/	ln	1753	1870	1827	1795	188	$\overline{}$	777	1753	1811	1610	1795	1811	1585
Queue Service				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 C				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		z miz (g z n z		0.46	0.36	0.36	0.46	0.3	_	0.36	0.35	0.25	0.35	0.35	0.25	0.25
Capacity (c), v	_			578	673	658	319	67	_	640	323	453	564	349	453	396
Volume-to-Capa		tio (X)		0.202	0.713	_	0.177	0.10	_	.175	0.327	0.612	0.155	0.574	0.685	0.107
		In (90 th percentile)	51.3	341.2	_	29	88	_	84.2	78.5	226.9	58.2	145.7	258.5	33.6
		eh/ln (90 th percent		2.3	15.3	14.8	1.3	4.0	_	3.8	3.5	9.8	2.6	6.6	11.2	1.5
		RQ) (90 th percen		0.29	0.00	0.00	0.16	0.0	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 2	25.4	24.2	33.2	22.3	25.3	33.9	28.9
Incremental De	lay (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
Control Delay (d), s/veh					35.8	35.5	18.3	27.	.0 2	25.9	26.9	39.3	22.9	32.0	42.1	29.4
Level of Service		В	D	D	В	С		С	С	D	С	С	D	С		
Approach Delay	Approach Delay, s/veh / LOS					С	24.9)	C	;	33.4		С	37.5		D
Intersection De	Intersection Delay, s/veh / LOS					33	3.2							С		
Multimodal Re					EB		_	W					NB		SB	
Pedestrian LOS				2.13	_	В	2.11	\rightarrow	В	_	2.29	_	В	2.29	_	В
Bicycle LOS Sc	ore / LC	os		1.09		Α	1.23	}	Α	١	1.26		Α	1.40)	Α

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ılts Su	mmar	У					
General Inform	nation								Intersec	tion Inf	ormatic	on		7470190		
Agency		Stolfus and Associa	ates						Duration	, h	0.250		-	**		
Analyst		Max Rusch		Analys	is Date	е			Area Typ	e	Other		<u>a</u> ,		٠	
Jurisdiction				Time F	eriod	AM P	eak		PHF		0.82		\$ →	= 1	==	
Urban Street		Patterson Rd		Analys	is Yea	r			Analysis	Period	1> 7:0	00	7		F	
Intersection		25 1/2 Road & Patt	terson	File Na	ame	Existi	ng AM.x	us						110		
Project Description													1	4 L 4-M	HIM	
Demand Inforr		ED.		-	14	'D		ND			SB					
Approach Move					EB T	R	+-	W	г R	+-	NB T	R	+-	R		
				17	678	43	138	_	33 90	40	55	83	133	108	48	
Demand (v), veh/h					0/0	43	130	00	3 90	40	33	0.0	133	100	40	
Signal Informa	Signal Information					1	- 1.0		J 20				5			
Cycle, s	cycle, s 100.0 Reference Phase 2				- K	- 2		T .		77	_			>	V	
Offset, s	, s 17 Reference Point Begin				3.4	2.1	53.9	8.0				1	2	3	1 4	
Uncoordinated	ordinated No Simult. Gap E/W On				3.5	0.0	4.5	3.		0.0			я	~	ለ ሀ	
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.5	0.4		0.0		5	7 €	7	8	
Timer Results				EBI		EBT	WB	L	WBT	NB	L	NBT	SBI	-	SBT	
Assigned Phas	e			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				7.4 59.9			9.6	-	62.0	12.0	_	18.6	12.0	_	18.6	
Change Period				4.0	_	6.0	4.0	\rightarrow	6.0	4.0	_	5.0	4.0	_	5.0	
Max Allow Hea				5.2	_	0.0	5.2	-	0.0	5.2	-	5.3	5.2		5.3	
Queue Clearan				2.5	-		3.0	-		4.2	_	7.9	10.0	_	12.5	
Green Extension		(ge), S		0.0	_	0.0	0.1	\rightarrow	0.0	0.0	_	1.5	0.0	-	1.1	
Phase Call Pro				0.43	_		0.69	-		1.00		1.00	1.00	_	1.00	
Max Out Proba	bility			0.00			0.00)		1.00)	0.14	1.00		0.66	
Movement Gro	oup Res	sults			EB			WE	3		NB		_	SB		
Approach Move	_	, and		L	T	R	T	T	R	L	T	R	L	T	R	
Assigned Move				1	6	16	5	2	12	7	4	14	3	8	18	
Adjusted Flow), veh/h		20	431	422	43	148	_	49	67	101	162	190		
		ow Rate (s), veh/h/	'In	1810	1870	1831	1781	187	_	1767	1885	1585	1682	1758		
Queue Service				0.5	12.5	11.9	1.0	2.5	_	2.2	3.2	5.9	8.0	10.5	\Box	
Cycle Queue C				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	0.5	6 0.56	0.22	0.14	0.14	0.22	0.14		
Capacity (c), v	/eh/h			701	1008	986	439	104	8 1013	226	256	215	303	239		
Volume-to-Cap	acity Ra	atio (X)		0.029	0.428	0.428	0.097	0.14	2 0.144	0.216	0.262	0.471	0.535	0.798		
Back of Queue	(Q), ft	/In (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		
		eh/In (90 th percent	•	0.3	7.5	7.0	0.7	1.8	_	1.9	2.7	4.3	6.4	8.1		
Queue Storage	Ratio (RQ) (90 th percen	tile)	0.05	0.00	0.00	0.11	0.0	_	0.39	0.00	1.09	1.13	0.00		
Uniform Delay				9.5	11.8	11.0	9.6	6.7	_	32.4	38.7	39.9	34.4	41.9		
Incremental De				0.0	1.2	1.2	0.1	0.2	_	2.2	0.8	2.3	6.6	10.7		
Initial Queue Do				0.0	0.0	0.0	0.0	0.0	_	0.0	0.0	0.0	0.0	0.0		
Control Delay (9.6	13.0	12.3	9.7	6.9	_	34.6	39.5	42.2	41.0	52.6		
Level of Service		A	В	<u>B</u>	A	A	A	С	D	D	D	D	<u> </u>			
Approach Delay				12.5		В	7.1		Α	39.6	j	D	47.3	5	D	
Intersection De				2	1.7						С					
Multimodal Re	sulte				EB			WE	3		NB		SI			
Pedestrian LOS		/I OS		2.08	_	В	1.89	_	В	2.30	_	В	2.30		В	
Bicycle LOS So				1.23	_	A	1.59	_	В	0.85	_	A	1.07	-	A	

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF Jurisdiction Time Period AM Peak 0.77 Urban Street Patterson Rd Analysis Year Analysis Period 1> 7:00 1st Street & Patterson Intersection File Name Existing AM.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L 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 73 Reference Point Offset, s Begin Green 2.9 3.4 48.3 5.5 1.7 19.7 Uncoordinated No Simult, Gap E/W On Yellow 3.5 0.0 3.0 3.5 0.0 4.0 0.0 1.0 Force Mode Fixed Simult. Gap N/S On Red 0.5 0.0 2.5 0.5 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 5.5 4.0 5.5 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 5.2 52 52 52 Queue Clearance Time (gs), s 2.4 3.4 5.3 11.7 7.3 18.4 Green Extension Time (ge), 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 0.17 1 00 0.41 Max Out Probability 0.00 0.00 0.73 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 16 566 105 56 159 159 147 162 186 122 325 39 Adjusted Flow Rate (v), veh/h 1855 1810 1810 1766 1598 1781 1870 1743 1856 1598 1885 1610 Adjusted Saturation Flow Rate (s), veh/h/ln 0.4 8.5 2.2 1.4 5.0 5.0 3.3 7.7 9.7 5.3 1.9 Queue Service Time (g_s), s 16.4 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 0.25 0.20 0.26 0.27 0.21 0.24 0.52 Capacity (c), veh/h 606 1705 859 489 967 959 399 366 416 329 404 391 0.027 0.332 0.123 0.114 0.165 0.165 0.367 0 443 0 446 0.372 0.804 0.100 Volume-to-Capacity Ratio (X) 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 0.05 0.00 0.23 0.18 0.00 0.00 0.42 0.00 1.05 0.84 0.00 0.00 Queue Storage Ratio (RQ) (90 th percentile) Uniform Delay (d 1), s/veh 11.6 129 7.5 99 144 143 30.7 35.3 30.9 29.037.3 294 0.0 Incremental Delay (d 2), s/veh 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 77 10.0 146 14.5 31.5 36.5 32 0 30.0 44 9 29.5 Level of Service (LOS) В R R В С D С D Α Α С С 12.5 В 13.9 В 33.3 C 39.9 Approach Delay, s/veh / LOS n Intersection Delay, s/veh / LOS 24.3 C Multimodal Results WB NB Pedestrian LOS Score / LOS 2.26 В 2.09 В 2.30 В 2.45 В Bicycle LOS Score / LOS 1.40 Α 1.73 В 1.30 A 1.29 A

HCS7 Signalized Intersection Results Summary																		
														o according to	e la c			
General Inform	nation	la						-	Intersec				- 1	4741	10			
Agency		Stolfus and Associa	ates					_	Duration		0.250		- 2					
Analyst		Max Rusch		Analys		_		-	Area Typ	e	Other	·			A- 1			
Jurisdiction				Time F		AM P	eak	_	PHF		0.80		- 4		7			
Urban Street		Patterson Rd		Analys	is Yea	_			Analysis	Period	1> 7:0	00	- X		6			
Intersection 7th Street & Patterson					ame	Existi	ng AM.x	us						ittr				
Project Descrip	tion												14 templ					
Demand Information					EB			W	В	_	NB		SB					
Approach Move					T	R	1	T		1	ΤT	R	1	T	R			
Demand (v), v				101	573	204	147	95	_	88	292	_	75	391	188			
Somana (V), Voisin																		
Signal Information					2	6	- 5		5	213	L		_					
Cycle, s	100.0	Reference Phase	2		1	TE .	₹ `	20	100	12 5	12		•	>	Y			
Offset, s	22	Reference Point	Begin	Green	4.4	2.0	49.4	5.7		19.5	-	-	2					
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.0	3.5		4.0		_		_ 🔨	Д			
Force Mode Fixed Simult. Gap N/S On					0.5	0.0	1.0	0.5		1.0		5	₹ .	1 l 7	8			
Timer Results				EBL	-	EBT	WB	L	WBT	NB	L	NBT	SBI	_	SBT			
Assigned Phase	e			1	\rightarrow	6	5	\dashv	2	7	\perp	4	3		8			
Case Number				2.0	_	3.0	2.0	\rightarrow	4.0	1.1	$\overline{}$	3.0	1.1	$\overline{}$	3.0			
Phase Duration						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 Head	dway (/	ИАН), s		5.2		0.0	5.2		0.0	5.2		5.2	5.2		5.2			
Queue Clearan	ce Time	e (gs), s		6.8			5.2			6.9		10.5	6.1		15.0			
Green Extensio	n Time	(ge), S		0.2		0.0	0.2		0.0	0.1		6.3	0.0		4.5			
Phase Call Prol	bability			0.91			0.82	2		0.95	5	1.00	0.93	3	1.00			
Max Out Proba	bility			0.26	6		0.00			1.00)	0.43	1.00)	0.73			
Movement Gro	oup Res	sults			EB			WE	3		NB			SB				
Approach Move	_			L	Т	R	L	Т	R	L	Т	R	L	Т	R			
Assigned Move	ment			1	6	16	5	2	12	7	4	14	3	8	18			
Adjusted Flow F	Rate (v), veh/h		87	496	154	61	217	_	110	365	81	94	489	235			
_		ow Rate (s), veh/h/	'In	1810	1766	1431	1810	1870		1767	1795	1588	1795	1809	1578			
Queue Service				4.8	3.9	1.0	3.2	7.9	_	4.9	8.5	3.8	4.1	12.6	13.0			
Cycle Queue C				4.8	3.9	1.0	3.2	7.9		4.9	8.5	3.8	4.1	12.6	13.0			
Green Ratio (g		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0.06	0.51	0.58	0.04	0.49	_	0.26	0.20	0.25	0.25	0.20	0.26			
Capacity (c), v	_			115	1818	842	79	924		240	736	395	269	706	410			
Volume-to-Capa		itio (X)		0.758	0.273	_	0.772	0.23		0.458	0.496	0.206	0.349	0.693	0.574			
		/In (90 th percentile)	98	52.9	13.1	61.6	124.	_	87.8	132.8	56.8	72.8	191.8	175.2			
		eh/ln (90 th percent		4.5	2.3	0.6	2.8	5.6		3.9	6.0	2.6	3.3	8.7	7.9			
Queue Storage	Ratio (RQ) (90 th percen	tile)	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					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			
Control Delay (d), s/veh					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)					Α	Α	D	В	В	С	С	С	С	D	С			
Approach Delay, s/veh / LOS					5	В	22.9)	С	31.8	3	С	37.2	2	D			
Intersection De				26	5.1						С							
Multim - d-1 D						1445												
Multimodal Re		11.00		2.42	EB	D	2.41	WE		0.00	_	NB		SB				
Pedestrian LOS				2.43	_	В	2.41	_	В	2.30	_	В	2.49	-	В			
Bicycle LOS Sc	ore / LC	78		1.37		Α	1.71		В	0.95		Α	1.16		Α			

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ılts Su	mmar	У							
General Inform	nation								Intersed	tion Inf	ormatic	on		74744124				
Agency		Stolfus and Associa	ates						Duration	, h	0.250		2	417				
Analyst		Max Rusch		Analys	is Date	е			Area Ty	pe	Other		<u>-</u> -		A 2			
Jurisdiction				Time F	eriod	AM P	eak		PHF		0.80		4	m t	=			
Urban Street		Patterson Rd		Analys	is Yea	r Existii	ng		Analysis	Period	1> 7:0	00			¥ C			
Intersection		12th Street & Patte	rson	File Na	ame	Existi	ng AM.x	us						5110				
Project Descrip	tion												1	4144	MU			
Demand Inform		EB		_	١٨	/D	_	NB			ep.							
Approach Move										+-	T	R	R L T					
				109	470	116	259	-	93 96	137	295	74	73	338	R 82			
Demand (v), veh/h					470	110	209	9	93 90	13/	290	/4	13	330	02			
Signal Informa	Signal Information					7			L U		-							
Cycle, s	Cycle, s 100.0 Reference Phase 2									1C	_			>	V			
Offset, s	Offset, s 69 Reference Point Begin				9.0	12.0	24.5	11			_	1	2	31	-			
Uncoordinated	ncoordinated No Simult. Gap E/W On				3.5	3.5	4.0	3.		0.0			я 📗	~	▲□			
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.5	1.5	0.		0.0		5	₹ .	117	8			
Timer Results				EBL	-	EBT	WB	니	WBT	NB	L	NBT	SBI	-	SBT			
Assigned Phase	e			1	\perp	6	5	\rightarrow	2	7	_	4	3	\rightarrow	8			
Case Number				1.1	4	3.0	1.1	4	4.0	1.1	_	3.0	1.1		4.0			
Phase Duration	, S					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 Head	dway (/	MAH), s		5.2	_	0.0	5.2		0.0	5.2		5.2	5.2		5.2			
Queue Clearan	ce Time	(gs), s		7.3			5.1	_		9.2		11.1	5.6		15.6			
Green Extension		(ge), s		0.1		0.0	0.6		0.0	0.1		4.2	0.1		2.8			
Phase Call Pro	bability			1.00			1.00			1.00)	1.00	1.00		1.00			
Max Out Proba	bility			1.00			0.00			1.00)	0.55	0.90		0.97			
Movement Gro	un Doe	ulte			EB			W	2		NB		SB					
Approach Move	_	suits		L T R				T	R	1	T	R	L	T	R			
Assigned Move				1	6	16	5	2	12	7	4	14	3	8	18			
Adjusted Flow F) veh/h		131	565	139	142	303	_	171	369	93	91	270	255			
		ow Rate (s), veh/h/	ln.	1781	1766	1602	1795	188		1781	1781	1572	1795	1870	1740			
Queue Service				5.3	14.0	5.9	3.1	14.	_	7.2	9.1	3.4	3.6	13.3	13.6			
Cycle Queue C				5.3	14.0	5.9	3.1	14.		7.2	9.1	3.4	3.6	13.3	13.6			
Green Ratio (g		0 mmc (g v), 0		0.34	0.24	0.36	0.52	0.4	_	0.32	0.21	0.46	0.32	0.21	0.21			
Capacity (c), v	_			433	866	570	599	763		316	748	723	362	393	365			
Volume-to-Cap		rtio (X)		0.302		_	0.237	0.39	_	_			0.252	0.688	0.698			
		/In (90 th percentile)	83.6	187.7	81.4	46.3	225	_	_	150	50.3	67.1	231.5	223.7			
		eh/ln (90 th percent		3.7	8.3	3.7	2.1	10.		6.0	6.7	2.2	3.0	10.4	10.0			
		RQ) (90 th percen	-	0.47	0.00	0.56	0.18	0.0	_	0.60	0.00	0.23	0.51	0.00	0.00			
Uniform Delay				23.3	31.9	21.2	9.5	29.	_	27.1	34.8	15.5	25.0	36.5	36.6			
Incremental De	lay (d 2), s/veh		1.1	2.3	0.6	8.0	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			
Control Delay (d), s/veh					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)					С	С	В	С	С	С	D	В	С	D	D			
Approach Delay		30.7		С	26.6	6	С	33.1	1	С	43.6	6	D					
Intersection De	Intersection Delay, s/veh / LOS					32	2.9						С					
Market						147			NO			000						
Multimodal Re					EB	-		WI		-	NB		SI					
Pedestrian LOS				2.44	_	В	2.27	$\overline{}$	В	2.30	_	В	2.45	_	B			
Bicycle LOS Sc	ore / LC	Jo		1.20		Α	1.88		В	1.01		Α	1.00	,	Α			

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resul	lts Sur	nmar	У				
General Inform	ation								Intersect	ion Inf	ormatic	\n		4.4413	되다
Agency	iation	Stolfus and Associa	atos					_	Duration,		0.250		1	44	
		Max Rusch	iles	Anaha	sis Date	_		_			Other		- 5		U.A.
Analyst Jurisdiction		Max Ruscii		Time F		AM P	ook	_	Area Typ PHF	е	0.83		^		-
		Patterson Rd				-				Dorind		20	- 3 -v		-
Urban Street Intersection		Patterson Rd & 15t	h Ot		sis Year	_	_	_	Analysis	Period	1> 7:0	JU	- 6		-
	lian	Patterson Rd & 15t	n St	File Na	ame	EXISU	ng AM.x	us					- 4	4 1 4 70	el d
Project Descript	lion		_			_	_		_			_			Name of Street
Demand Inform	nation				EB		_	WE	3		NB			SB	
Approach Move				T	ΙT	T R	1	T	R	1	ΤT	R	1	T	R
Demand (v), v				37	541	12	23	151	_	13	3	20	13	3	62
Demand (V), V	CIVII			31	341	12	23	131	0 23	13		20	13		02
Signal Informa	tion					$\overline{}$				$\overline{}$			K		1
Cycle, s	100.0	Reference Phase	2		- V	=3	- 4	T 100	4.2		_		7		4
Offset, s	47	Reference Point	Begin	_		9	35.0	0.7		-		1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow		2.5 0.0	75.9 3.5	6.7 3.5	0.0	0.0		_	,		rt-
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0	1.0	1.0	0.0	0.0		5	♦ 。	7	Y
T CIGO III GGC	Timed	Omnun. Gup 1476	0										_		
Timer Results				EBI		EBT	WB	L	WBT	NBL		NBT	SBI		SBT
Assigned Phase	9			1	$\overline{}$	6	5	$\overline{}$	2		$\overline{}$	8		\neg	4
Case Number				1.1	\rightarrow	4.0	1.1	\rightarrow	4.0		\rightarrow	7.0			7.0
Phase Duration	s			8.4	-	82.9	5.9	$\overline{}$	80.4		\neg	11.2		\neg	11.2
Change Period,		c) S		4.5	$\overline{}$	4.5	4.5	-	4.5		$\overline{}$	4.5		$\overline{}$	4.5
Max Allow Head				3.1	_	0.0	3.1	\rightarrow	0.0		_	3.3	-	$\overline{}$	3.3
Queue Clearan				2.6	-	0.0	2.2	-	0.0			3.4	_	\rightarrow	6.6
Green Extensio				0.1	_	0.0	0.0	\rightarrow	0.0		_	0.2		$\overline{}$	0.2
Phase Call Prot		(ge), 3		0.78	_	0.0	0.28	-	0.0			0.98			0.98
Max Out Probat				0.00	-		0.00	_			\rightarrow	0.00	_	_	0.00
Wax Out 1 lobal	Jility			0.00			0.00					0.00	_		0.00
Movement Gro	up Res	sults			EB		_	WB			NB			SB	
Approach Move	ment			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow F), veh/h		54	408	405	12	405	402		19	24		19	75
		ow Rate (s), veh/h/	ln	1781	1870	1856	1781	1870	1858		1508	1585		1508	1585
Queue Service				0.6	2.0	2.0	0.2	3.3	3.3		0.0	1.4		0.0	4.6
Cycle Queue Cl				0.6	2.0	2.0	0.2	3.3	3.3		1.1	1.4		1.1	4.6
Green Ratio (g				0.80	0.78	0.78	0.77	0.76	-		0.07	0.07		0.07	0.07
Capacity (c), v				632	1467	1455	597	1420	-		166	106		166	106
Volume-to-Capa		itio (X)		0.086	0.278		_	0.285	-		0.116	0.228		0.116	0.707
		/In (90 th percentile)	5.3	21.8	22	1.4	35.3	_		18.3	23.1		18.3	76.5
		eh/ln (90 th percent		0.2	1.0	1.0	0.1	1.6	1.6		0.8	1.0		0.8	3.4
		RQ) (90 th percen		0.07	0.00	0.00	0.02	0.00	_		0.00	0.52		0.00	1.73
Uniform Delay (2.2	0.8	0.8	2.6	1.5	1.6		44.0	44.2		44.0	45.7
Incremental Del				0.0	0.4	0.4	0.0	0.4	0.4		0.1	0.4		0.1	3.2
Initial Queue De				0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (••		2.2	1.2	1.3	2.6	2.0	2.0		44.2	44.6		44.2	48.9
Level of Service				A	A	A	A	A	A		D	D		D	D
Approach Delay				1.3		A	2.0		A	44.4	_	D	47.9		D
Intersection Del				1.3			.1						Α		_
	, JITC	, 200													
Multimodal Re	sults				EB			WB			NB			SB	
Pedestrian LOS		/LOS		1.83		В	1.84	_	В	2.31		В	2.31		В
Bicycle LOS Sc				1.07		A	2.05	_	В	0.56	_	A	0.64		A
, 200 00	J. J. E.			1.01			2.00			0.00			5.0		

	HCS	87 Sig	nalize	d In	tersec	tion F	Resul	ts Sun	nmary	/				
General Information	n							ntersect	ion Info	ormatic	n n		d Adel	isiu
	Stolfus and Associa	-1										1	JĮĮ	
Agency		ates			_		_	Duration,		0.250		- 2		V.
Analyst	Max Rusch		Analys					Area Type	e	Other			# T	-
Jurisdiction	5.0		Time F		AM P			PHF		0.83		- 3		
Urban Street	Patterson Rd		Analys				_	Analysis I	Period	1> 7:	00	- X		7
Intersection	27 1/2 Road & Patt	terson	File Na	ame	Existi	ng AM.x	us					_		
Project Description		_			_	_		_					4 f ey	JEJN
Demand Information	n.			EB			WB			NB			SB	
Approach Movemen			Ţ	ΤŢ	R	1	T T	R		T T	R		T T	R
Demand (v), veh/h			71	503	_	+-	1418	_	<u> </u>	÷	+"	344	÷	152
Demand (V), Venn			-/1	503		-	1410	9 444			•	344		132
Signal Information												K		
Cycle, s 100	.0 Reference Phase	2		14	T	7					/	-	- 4	^
Offset, s 47		Begin			-	-	\perp	_	_		- 1	2	3	4
Uncoordinated No		On	Green		59.0	20.0	0.0	0.0	0.0	$- \mathbf{n} $		_		
Force Mode Fixe	_	On	Yellow Red	0.5	4.5 1.5	1.0	0.0	0.0	0.0		5	4	7	
TOTAL PINCE	o Tollindit. Oap N/o	Oil	, tou	0.0	1.0	1.0	0.0	0.0	0.0					
Timer Results			EBI		EBT	WB		WBT	NBL		NBT	SBL		SBT
Assigned Phase			1		6			2	1100			1	_	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+	.P. 1 c		4.0	_	6.0		-	6.0				-	-	5.0
Max Allow Headway			5.2	\rightarrow	0.0	_	-	0.0		-		_	-	5.3
Queue Clearance Ti			3.2	-	0.0	-	-	0.0		-		-	-	12.9
			0.0	_	0.0	-	-	0.0		-		-	-	2.2
Green Extension Tin Phase Call Probabili			1.00	_	0.0	_	-	0.0		-		-	-	1.00
	ty		_	-		-	-	_		-		-	-	
Max Out Probability			1.00					_				_	-	0.67
Movement Group R	Results			EB			WB			NB			SB	
Approach Movemen			L	T	T R		T	R	L	Т	R	L	T	R
Assigned Movement			1	6			2	12				7		14
Adjusted Flow Rate			64	453	_		672	210				414		183
	Flow Rate (s), veh/h/	/In	1753	1795	_		1795	1610				1757		1522
Queue Service Time			1.2	7.1	_		8.8	4.9				10.7		10.9
Cycle Queue Cleara			1.2	7.1	+		8.8	4.9				10.7		10.9
Green Ratio (g/C)	nee time (g t), s		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			0.131	0.183	_		0.317	-				0.590		0.602
	, ft/ln (90 th percentile	1)	17.6	95			114.4	_				168.3		173.8
	, veh/in (90 th percent		0.8	4.3	+		5.2	2.8				7.7		7.5
	o (RQ) (90 th percen		0.12	0.00	1		0.00	1.17				1.01		0.00
Uniform Delay (d 1)			6.2	9.8	_		9.4	7.2				36.3		36.4
Incremental Delay (0.4	0.1	+		0.3	0.4				3.6		8.5
Initial Queue Delay (0.0	0.0	_		0.0	0.4				0.0		0.0
Control Delay (d), s			6.6	9.9			9.7	7.7				39.9		44.9
Level of Service (LO			A	9.9 A	+		9.1 A	A				D D		D 44.9
Approach Delay, s/v			9.5		A	9.2		A	0.0			41.4		D
Intersection Delay, s			9.0			9.2 3.9		^	0.0			B 41.4		U
milersection Delay. S	IVEILI LOS		_		T	ა.შ						0		
,														
				EB			WB			NB			SB	
Multimodal Results Pedestrian LOS Sco	.		0.66	EB	A	2.07	WB	В	2.32		В	2.32	SB	В

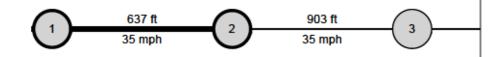
		HCS	7 Sig	nalize	d Int	ersec	tion F	Resu	lts Su	mmar	у				
														4.441	oter
General Inform	nation	la						-	Interse				- 1	410	24.0
Agency		Stolfus and Associa	ates					_	Duration		0.250				<u></u>
Analyst		Max Rusch		Analys		_		-	Area Ty	pe	Other				- E
Jurisdiction				Time F		AM P	eak	_	PHF		0.85		34	# T	===
Urban Street		Patterson Rd		Analys	is Yea	_			Analysis	Period	1> 7:0	00	×		7
Intersection		28 1/4 Road & Patt	terson	File Na	ame	Existi	ng AM.x	us					╛	11	
Project Descrip	tion												1	4 f 4 Y	HIL
Demand Inform	nation				EB		$\overline{}$	W	В	$\overline{}$	NB		$\overline{}$	SB	
Approach Move	ement			L	Т	R	L	T	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			53	697	155	138	15	61	207	20	47	23	11	22
Signal Informa	tion								1016					1 +	
Cycle, s	100.0	Reference Phase	2		J. 1	ž	Ħ *	١	71	7.5		_		(-	SZ
Offset, s	50	Reference Point	_			3	1		17" "	1C		- 1	2	3	
Uncoordinated	No		Begin	Green		50.0	5.0	1.0				_		_	1
		Simult. Gap E/W	Off	Yellow		4.5	3.5	3.5		0.0			♣ .	``\.'	Ф]
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	1.5	0.5	0.5	1.0	0.0		5	A 6	7	
Timer Results				EBI		EBT	WB	L	WBT	NB	L	NBT	SBI		SBT
Assigned Phase	e			1		6	5	\neg	2	7	$\neg \neg$	4	3	$\neg \vdash$	8
Case Number				1.1	\neg	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	\neg	16.0
Change Period,		c). S		4.0	\rightarrow	6.0	4.0		6.0	4.0		5.0	4.0		5.0
Max Allow Head				5.2	\neg	0.0	5.1	_	0.0	5.2	_	5.4	5.2		5.4
Queue Clearan				2.7	_		3.5	\rightarrow		12.0		6.1	3.3	-	3.5
Green Extensio				0.0	_	0.0	0.1	_	0.0	0.0	_	0.3	0.0	_	0.3
Phase Call Prol		(9-7,0		1.00	$\overline{}$	0.0	1.00	\rightarrow	0.0	1.00	_	1.00	1.00	$\overline{}$	1.00
Max Out Proba				0.10			0.30			1.00		0.05	1.00		0.24
Movement Gro	un Doc	ulto			EB			WE			NB			SB	
Approach Move	_	suits			T	R	-	T	R		T	R		T	R
				_	_	_	L.	_	_	_			L	_	-
Assigned Move		\ vah/h		1	6	16	5	2	12	7	70	14	3	8	18
Adjusted Flow F		**	n_	31	253	240	66	744	_	244	79		27	13	26
Queue Service		ow Rate (s), veh/h/	in	1810 0.7	1885 5.6	1767 5.2	1795 1.5	1799	_	1795 10.0	1687 4.1		1810	1900 0.6	1610 1.5
Cycle Queue C				0.7	5.6	5.2	1.5	11.5	_	10.0	4.1		1.3	0.6	1.5
Green Ratio (g		e fille (gt), s		0.60	0.50	0.50	0.60	0.50	_	0.23	0.16		0.16	0.11	0.11
Capacity (c), v	_			511	943	883	637	179	_	383	270		295	209	177
Volume-to-Capa		atio (V)		0.060	0.268	_	0.104	0.41	_	_			0.092	0.062	0.146
		/In (90 th percentile	1	11.3	84.3	75.5	21.5	136.	_	210	74.3		24	12.5	25.9
		eh/ln (90 th percent		0.5	3.8	3.4	1.0	6.2		9.5	3.4		1.1	0.6	1.2
		RQ) (90 th percen	_	0.04	0.00	0.00	0.08	0.00	_	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 De	lay (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 De	elay (d	з), 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/v	eh		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	e (LOS)			В	В	Α	Α	В	В	D	D		D	D	D
Approach Delay				9.7		Α	13.1	1	В	42.0		D	39.4	1	D
Intersection De						18	3.4						В		
Multimadal D								LAUT			ND			0.0	
Multimodal Re		11.00		2.00	EB	г.	0.00	WE		0.0	NB	D	0.00	SB	
Pedestrian LOS				2.09	_	В	2.09	_	В	2.4		B	2.30	_	B
Bicycle LOS Sc	ore / LC	79		1.37		Α	2.19	9	В	1.02	4	Α	0.54		Α

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ults	Sun	nmar	У				
General Inform	nation								Into	react	tion Info	ormatic	n.		a Ade I I	slu
	nation	Stolfus and Associa	otoc							ation,		0.250		- 1	Tit	
Agency			ates	Analus	ie Det				_					- 2		V.
Analyst Jurisdiction		Max Rusch		Analys		AM P	nok		PHF	а Тур -	е	Other 0.83			****	∸
		Detterre Dd		Time F		-	eak		_		Desired		20	- 1		-
Urban Street Intersection		Patterson Rd 29 Road & Patterson		Analys			ng AM.x		Ana	ilysis	Period	1> 7:0	00	- 8		7
	A:	29 Road & Pallers	on	File Na	ime	EXISU	ig Aivi.x	us						- 4	1 1 4 4 4	eld.
Project Descrip	tion		_	_	-	_	-		-	-	-	-	-			
Demand Inform	nation				EB		$\overline{}$	W	٧B			NB			SB	
Approach Move	ement			L	Т	R	L	Т	Т	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			97	506	169	115	12	269	62	243	157	57	50	142	267
Signal Informa	_	I			Ľ.		<u> </u>	4	_	24		4		A		*-
Cycle, s	100.0	Reference Phase	2		Γ,	1	5		517	- 1	7			2	× 3	
Offset, s	14	Reference Point	Begin	Green	9.5	45.5	7.5	4.		13.0					_ 1	HI COL
Uncoordinated	No	Simult. Gap E/W	On	Yellow		4.5	3.5	0.		4.0	0.0			4	``	4
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	2.0	1.0	0.	0	1.0	0.0	_	5	Y 6	7	8
Timer Results				EBL	7	EBT	WB		WB	RT.	NBL		NBT	SBI	_	SBT
Assigned Phase	ρ			1	-	6	5	+	2		7	-	4	3	-	8
Case Number				1.1	_	4.0	1.1	-	4.0	_	2.0		3.0	2.0	\rightarrow	3.0
Phase Duration	1.5			14.0		52.0	14.0	\rightarrow	52.	_	16.0	$\overline{}$	22.0	12.0		18.0
Change Period		c) s		4.5		6.5	4.5	\rightarrow	6.5		4.5	_	5.0	4.5		5.0
Max Allow Hea				4.1	_	0.0	4.1	\rightarrow	0.0		4.2	_	4.3	4.2	_	4.3
Queue Clearan				3.9	-	0.0	4.1	\rightarrow	0.0	-	13.5	-	11.3	5.3	$\overline{}$	15.0
Green Extension				0.1	_	0.0	0.1	\rightarrow	0.0	0	0.0	_	1.4	0.0	_	0.0
Phase Call Pro		(ye), 5		1.00		0.0	1.00	\rightarrow	0.0	-	1.00	-	1.00	1.00	. 	1.00
Max Out Proba				0.21	_		0.24	\rightarrow		_	1.00	-	0.67	1.00	-	1.00
max out i loba	Dility			0.21			0.2				1.00		0.01	1.00		1.00
Movement Gro	oup Res	sults			EB			W	В			NB			SB	
Approach Move	ement			L	Т	R	L	Т		R	L	T	R	L	T	R
Assigned Move	ment			1	6	16	5	2	1	12	7	4	14	3	8	18
Adjusted Flow	Rate (v), veh/h		76	273	254	81	470	0 4	462	293	189	27	60	171	261
Adjusted Satura	ation Flo	ow Rate (s), veh/h/	'in	1781	1885	1724	1767	187	70 18	839	1767	1870	1610	1753	1870	1610
Queue Service	Time (g s), S		1.9	11.1	11.4	2.1	17.	7 1	7.5	11.5	9.3	1.2	3.3	8.8	13.0
Cycle Queue C	learanc	e Time (g ε), s		1.9	11.1	11.4	2.1	17.	7 1	7.5	11.5	9.3	1.2	3.3	8.8	13.0
Green Ratio (g	/C)			0.55	0.46	0.46	0.55	0.4	6 0).46	0.12	0.17	0.27	0.08	0.13	0.23
Capacity (c), v	/eh/h			396	858	784	519	85	1 8	B37	203	318	427	131	243	362
Volume-to-Cap	acity Ra	atio (X)		0.191	0.318	0.324	0.155	0.55	53 0.	.553	1.441	0.595	0.062	0.458	0.704	0.722
		/In (90 th percentile		30.1	168.6	162	30.6	223	.4 21	16.5	589.3	172.8	19.8	74.1	176.5	226.6
		eh/In (90 th percent		1.3	7.6	7.2	1.4	10.	_	9.7	26.1	7.7	0.9	3.3	7.9	10.3
		RQ) (90 th percen	tile)	0.10	0.00	0.00	0.08	0.0	\rightarrow	0.00	2.66	0.00	0.09	0.56	0.00	1.72
Uniform Delay				12.0	22.8	22.9	10.7	18.	_	8.3	44.3	38.3	27.5	44.3	41.7	35.9
Incremental De				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 De		••		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 (12.8	23.5	23.7	11.2	20.	_	20.1	268.2	46.3	27.7	55.4	57.4	47.6
Level of Service				В	С	C	B	C	_	С	F 472	D	С	E	E	D
Approach Delay				22.2		С	19.5)	В		173.	1	F	52.0		D
Intersection De	iay, s/ve	en / LOS				56	5.1							E		
Multimodal Re	sults				EB			W	В			NB			SB	
Pedestrian LOS		/I OS		2.15		В	2.17	_	В		2.30	_	В	2.30	_	В
Bicycle LOS So				1.25	_	A	1.92	\rightarrow	В		1.33		A	1.30	-	A
2.0,30 200 00				1.20			7.02				1.00			7.00		

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resu	lts Sun	nmar	У				
General Inform	ation								Intersect	ion Inf	ormatic	n	l l	4.4413	되면
Agency	iation	Stolfus and Associa	atos					\rightarrow	Duration,		0.250		- 1	44	
		Max Rusch	aics	Apolye	sis Date			_			Other		- 2		V.
Analyst Jurisdiction		Max Ruscii		Time F		AM P	ook	-	Area Typ PHF	e	0.85			=====	-
		Patterson Rd				_	ean			Dorind	_	20	- 3 -		-
Urban Street			toroon		sis Year	_	20 AM v		Analysis	Period	1> 7:0	JU	- 13		-
Intersection		29 1/2 Road & Patt	terson	File Na	ame	EXIST	ng AM.x	us					- 4	*	CIG.
Project Descript	tion												_	N II W III	MILL.
Demand Inform	nation				EB		_	WE	3		NB		_	SB	
Approach Move				T.	ΙT	l R	1	T	R	1	ΤT	R	1	T T	R
Demand (v), v				14	496	88	94	123	_	78	34	59	71	49	56
Demand (V), V	CIVII			17	430	- 00	34	123	1 123	70	34	33		43	- 50
Signal Informa	tion					8		بالراك		$\overline{}$			N.		
Cycle, s	100.0	Reference Phase	2		- X K	- 2	-3	24	0.7		_		7		V
Offset, s	71	Reference Point	Begin	_		-	3	"	117"	٠		- 1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Green		3.1	50.1	14.		0.0	-1	_	_		\mathbf{A}
Force Mode	Fixed	Simult. Gap N/S	On	Yellow Red	0.5	0.0	5.0 1.5	4.0 1.0	4.0 1.0	0.0		_ =	↔ 。	7	.+-
1 Orce Mode	TIXEG	Ollifult. Cap 1470	Oll	Ittou	0.0	0.0	1.0	1.0	1.0	0.0					
Timer Results				EBI		EBT	WB	L	WBT	NBI		NBT	SBI		SBT
Assigned Phase	9			1	_	6	5	_	2			4		$\overline{}$	8
Case Number				1.1	\rightarrow	4.0	1.1	\rightarrow	4.0			12.0	_	\rightarrow	11.0
Phase Duration	·			5.5	-	56.6	8.6	$\overline{}$	59.8		$\overline{}$	19.3	_	-	15.5
Change Period,		c) s		4.0	_	6.5	4.0	-	6.5			5.0	_	$\overline{}$	5.0
Max Allow Head				4.5	-	0.0	4.5	\rightarrow	0.0		_	4.7	_	\rightarrow	4.7
Queue Clearan				2.3	$\overline{}$	0.0	4.4	_	0.0		-	13.7	_	-	9.7
Green Extensio				0.0	_	0.0	0.3	_	0.0		-	0.6	_	\rightarrow	0.9
Phase Call Prot		(g e), s		0.30	$\overline{}$	0.0	0.92	_	0.0		-	1.00	-	_	1.00
Max Out Probat				0.00	\rightarrow		0.92	_	_		\rightarrow	0.07		\rightarrow	0.00
Max Out Flobal	onity			0.00	_		0.00					0.07			0.00
Movement Gro	up Res	sults			EB			WB			NB		_	SB	
Approach Move	_			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move				1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F), veh/h		13	270	259	91	671	652		201		_	141	66
_		ow Rate (s), veh/h/	ln	1810	1885	1786	1795	1885	-		1669			1788	1585
Queue Service				0.3	5.1	4.5	2.4	22.7	_		11.7		_	7.7	3.9
Cycle Queue Cl				0.3	5.1	4.5	2.4	22.7	$\overline{}$		11.7		_	7.7	3.9
Green Ratio (g		5 mm (g 0), 0		0.52	0.50	0.50	0.56	0.53	$\overline{}$		0.14		_	0.11	0.11
Capacity (c), v				219	945	895	551	1004	-		238		_	188	167
Volume-to-Capa		tio (X)		0.058	0.286		0.166	0.669	_		0.845		_	0.752	0.396
		/In (90 th percentile)	5.2	71.9	61.3	35.2	-	2 214.6		191.8			138.3	62.9
		eh/In (90 th percent		0.2	3.2	2.8	1.6	10.7	_		8.3			6.1	2.8
		RQ) (90 th percen	-	0.04	0.00	0.00	0.27	0.00	_		0.00			0.00	0.00
Uniform Delay (tile)	14.4	7.7	6.6	10.9	12.8	_		41.8			43.5	41.8
Incremental Del				0.1	0.5	0.5	0.1	2.6	2.7		9.3			5.9	1.5
Initial Queue De				0.0	0.0	0.0	0.0	0.0	0.0		0.0		_	0.0	0.0
Control Delay (••		14.5	8.2	7.2	11.0	15.4	14.2		51.1			49.4	43.3
Level of Service				B	A	7.2 A	В	13.4 B	B		D D		_	D D	43.3 D
Approach Delay				7.9		A	14.5	_	В	51.1	_	D	47.5	_	D
Intersection Del				7.9			9.0		В	31.1			B 47.3		U
micraecuon Dei	ay, 5/VE	ai / LOO				18	J.U						U		
Multimodal Re	sulte				EB			WB			NB			SB	
Pedestrian LOS		/1.08		1.67		В	1.89	_	В	2.31		В	2.32	_	В
Bicycle LOS Sc				1.07		A	1.03	_	В	0.82	_	A	0.83	-	A
Dicycle LOS SC	OIE / LC	,,,		1.07		^	1.30		U	0.02		^	0.03		^

HCS7 Signalized Intersection Results Summary General Information Intersection Information															
Conoral Information								Intor	enet	ion Infe	ormatic	n.		47441	되면
	Stolfus and Associa	otoc						Durat			0.250		1	jiř	
Agency		ates	Anaba	is Dat				_					- 2		<u>\</u>
Analyst Jurisdiction	Max Rusch		Analys		AM P	nok		Area PHF	тур	e	Other 0.83			=====	*
	Detteres Dd		Time F		_	eak		_		Did		20	- 3 -		-
Urban Street	Patterson Rd		Analys		_	^ 14		Anaiy	ysis i	Period	1> 7:0	00	- B		7
Intersection	30 Road & Patterso	on	File Na	ame	EXISU	ng AM.x	us						- 4	11000	eld.
Project Description		_	-	-	_	-		-		-	-	-		A 10 TO 11 P	a para
Demand Information				EB		$\overline{}$	V	VB			NB			SB	
Approach Movement			L	Т	R	L	Т	т	R	L	T	R	L	Т	R
Demand (v), veh/h			72	368	142	101	8:	27	14	303	45	45	37	95	182
Signal Information	I =			Ľ.		<u> </u>	4	- 1	4		- 22			× .	\mathbf{A}
Cycle, s 100.0	Reference Phase	2		F .		5	-	517	5	7			€ 2	1	4
Offset, s 19	Reference Point	Begin	Green	10.2	40.8	8.5	6.	0 '	11.0	0.0	_		_		
Uncoordinated No	Simult. Gap E/W	On	Yellow		5.0	3.5	3.		4.0	0.0		~	~	>	₩
Force Mode Fixed	Simult. Gap N/S	On	Red	0.5	1.5	0.5	0.	5	1.0	0.0	-	5	6	7	8
Timer Results			EBL	7	EBT	WB		WB	_	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	\rightarrow	47.3	_	22.5		26.0	12.5		16.0
Change Period, (Y+R	c) s		4.0	_	6.5	4.0	\rightarrow	6.5	_	4.0	_	5.0	4.0		5.0
Max Allow Headway (A			4.1	_	0.0	4.2	\rightarrow	0.0	_	4.2	\rightarrow	4.3	4.2	_	4.3
Queue Clearance Time			4.5	-	0.0	6.2	\rightarrow	0.0	-	19.7	-	4.8	4.0	_	7.8
Green Extension Time			0.1	_	0.0	0.2	\rightarrow	0.0	-	0.0	_	1.1	0.0	_	0.4
Phase Call Probability	(y e), s		1.00		0.0	1.00	\rightarrow	0.0	-	1.00	-	1.00	1.00	-	1.00
Max Out Probability			0.19	\rightarrow		1.00	\rightarrow		-	1.00	$\overline{}$	0.00	0.73	$\overline{}$	1.00
max out i robubility			0.10			1.00				1.00		0.00	0.70		1.00
Movement Group Res	ults			EB			W	В			NB			SB	
Approach Movement			L	Т	R	L	Т	F	2	L	T	R	L	T	R
Assigned Movement			5	2	12	1	6	1	6	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h		87	321	294	145	60	7 60	03	365	54	53	45	114	108
Adjusted Saturation Flo	ow Rate (s), veh/h/	ln	1810	1885	1706	1795	188	35 18	74	1781	1870	1560	1810	1885	1585
Queue Service Time (g	g s), S		2.5	7.6	7.7	4.2	29.	4 29	9.4	17.7	2.4	2.8	2.0	5.8	5.8
Cycle Queue Clearance	e Time (g ε), s		2.5	7.6	7.7	4.2	29.	4 29	9.4	17.7	2.4	2.8	2.0	5.8	5.8
Green Ratio (g/C)			0.51	0.41	0.41	0.51	0.4	1 0.4	41	0.31	0.21	0.21	0.19	0.11	0.21
Capacity (c), veh/h			301	769	696	508	76	9 76	65	462	393	328	370	207	336
Volume-to-Capacity Ra			0.289	0.417	_	0.286	0.78			0.790	0.138	0.162	0.121	0.552	0.323
Back of Queue (Q), ft/	<u> </u>		41.6	98.3	92.5	67.9	449		7.2	285.8	45.5	46.2	37.5	122.3	97.4
Back of Queue (Q), ve			1.9	4.4	4.2	3.1	20.	_).2	12.8	2.0	2.0	1.7	5.5	4.4
Queue Storage Ratio (tile)	0.32	0.00	0.00	0.51	0.0	_	00	1.29	0.00	0.26	0.28	0.00	0.73
Uniform Delay (d 1), s		_	18.7	10.7	10.7	12.4	30.).7	29.9	32.1	32.3	33.2	42.2	33.3
Incremental Delay (d 2			1.6	1.1	1.3	1.4	8.0	_	.1	12.9	0.7	1.1	0.7	10.2	2.5
Initial Queue Delay (d)	••		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/ve			20.3	11.8	12.0	13.8	38.	$\overline{}$	3.8	42.8	32.9	33.4	33.9	52.3	35.9
Level of Service (LOS) Approach Delay, s/veh			C 12.9	В	B	B 36.1	L P	D		D 40.6	С	С	C 42.6	D	D D
Intersection Delay, s/ven			12.9			1.7		U	\dashv	40.0		D	42.0 C		U
intersection Delay, S/Ve	air LOS				3	1.7									
Multimodal Results				EB			W	В			NB			SB	
Pedestrian LOS Score	/LOS		2.10	_	В	2.23	_	В		2.30		В	2.30	_	В
Bicycle LOS Score / LO	os		1.07	_	Α	1.42	\rightarrow	Α		1.27		Α	0.93	_	Α

	HCS7 U	Jrban Street Seg	ment 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/Ma	Il Access & Patterson	Analysis Period	1> 7:00
Project Description					



Basic Segn	_						_							
Segment		l Limit		h Lanes	_	t Length		ection Wid		of RM		nt Curb		er Delay
	WB	EB	WB	EB	WB	EB	WB		WB	EB	WB	EB	WB	EB
1	35	35	2	2	637	637	50	50	0	0	100	0	0.0	0.0
								Vestboun				Eastbo	und	
Segment O	utnut Dat	ta.				WBL	_	WBT	WBI	-	EBL	Eastbo		EBR
Segment	Moveme					1	-	6	16	`	5	2	-	12
1			ck Time,	h		<u> </u>	-		10	_		neve	г	12
1		_	llback Tin				-		_	_	never	11040	`	never
1			Speed, m	-			_	41.58			110 401	42.0	5	TIC TCI
1		Time, s	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.				14.79		_		15.0		
1		Speed,	mph					29.37				28.8		
1		Delay, s	_					2.71				20.2		
1	Travel T							17.50				35.3		
1		peed, m	ph					24.82				12.2	9	
1	Stop Ra	te, stops	/veh					0.12				0.47	,	
1	Spatial 9	Stop Rate	e, stops/n	ni				0.97				3.88	3	
1	Through	vol/cap	Ratio					0.09				0.63	3	
1	Percent	of Base	FFS					59.69				29.2	3	
1	Level of							С				F		
1	Auto Tra	veler Pe	rception (Score				2.28				2.76	<u> </u>	
Multimodal														
1			ent LOS		os		2.30		В	\rightarrow	3.47			С
1			LOS Sco				2.00	_	Α	_	2.64			В
1	Transit 9	Segment	LOS Sco	re / LOS			1.18		A	_	2.57			В
Facility Out	nut Data						v	Vestboun				Eastbo	und	
Facility Trav							v	753.72		_		737.5		
Facility Trav								28.53				29.10		
Facility Base			mph					42.73				42.4		
Facility Pero			,					66.77				68.6		
Facility Leve								C		\neg		В		
Facility Auto			on Score					2.31				2.27	,	
Multimodal	Results	(Facility))											
Pedestrian F							3.20		С		3.14			С
Bicycle Faci							2.63		С		2.66			С
Transit Facil	ity LOS S	core / LC	S				1.01		Α		0.92	!		Α

			НС	S7 Urb	oan Str	eet S	Segment	Repor	t					
General Inf	ormation								1	Streets In	formatio	n		
Agency		Stolfus and	Associate	es						Number of	Intersect	ions	15	
Analyst		Max Rusch	1		Analys	sis Date				Number of	Seamen	ts	14	
Jurisdiction					Time F		AM Pea	ak		Number of			15	
File Name		Existing AM	1.xus			sis Year	r Existing	1		System Cy	/cle Lenat	th. s	100	
Intersection				cess & Pa			Access/Mesa			-		., -	1> 7:0	00
Project Des														
		<u> </u>	637 ft 35 mph		2	_	903 ft 35 mph	<u>_</u> (<u>)</u>	1665 35 m		-(-	<u>-</u>	_
	nent Informatio					L				1 -				_
Segment	Speed Limit		h Lanes	Segmen		_	section Wid		of RM	_	nt Curb	_	her De	
	WB EB		EB	WB	EB	WB		WB	EB	WB	EB	WE	\rightarrow	EB
2	35 35	2	2	903	903	50	50	2	1	70	0	0.0		0.0
							Veethound				Faatha	d		
Coamont O	utnut Data				WBI		WBT	WBF	,	EBL	Eastbo	_	EB	D
Segment O						-			`			-		
Segment 2	Movement	lhaak Tima	ь.		1	-	6	16	_	5	2	-	12	_
_	Bay/Lane Spil					_	never		-			-		
2	Shared Lane S	-			neve	r	41.72		_		42.0			_
2	Base Free-Flo Running Time		прп				18.20		-		18.5			
							33.83		_		33.1			
2	Running Spee Through Delay						5.69		-		9.94			
2	Travel Time, s	•					23.89		_		28.5			
2	Travel Speed,						25.77		_		21.5			
2	Stop Rate, sto	•					0.24		_		0.45			
2	Spatial Stop R		mi				1.42		_		2.62			
2	Through vol/ca		1111				0.10		_		0.41			
2	Percent of Bas	-					61.77		_		51.3			
2	Level of Servi						C		_		C			
2	Auto Traveler		Score				2.35		_		2.55			
_	Results (Segn		Ocoic				2.00				2.00			
2	Pedestrian Se	-	Score / I	os		2.71		В	$\overline{}$	3.63	3		D	
2	Bicycle Segme					2.22		В		2.77			С	
2	Transit Segme					1.12		A	$\overline{}$	1.62			A	
	Transit Cognic		0107 200							1.02				
Facility Ou	tput Data					V	Vestbound		\neg		Eastbo	und		
Facility Trav							753.72				737.5	51		
Facility Trav	el Speed, mph						28.53				29.1	6		
Facility Bas	e Free Flow Spe	ed, mph					42.73				42.4	7		
Facility Per	ent of Base FF	3					66.77				68.6	6		
Facility Leve	el of Service						С				В			
Facility Auto	Traveler Perce	ption Score					2.31				2.27	7		
	Results (Facili													
	Conilibration Con					2 20		_	10	2 4 4			-	

Pedestrian Facility LOS Score / LOS

Bicycle Facility LOS Score / LOS

Transit Facility LOS Score / LOS

С

С

3.20

2.63

1.01

С

С

3.14

2.66

0.92

				НС	S7 Urb	an Str	eet	Seg	ment	Report						
General Info	ormation										_	Streets Inf				
Agency		Sto	olfus and	Associate	:S							Number of	Intersecti	ons	15	i
Analyst		Ma	x Rusch			Analys	sis Da	ate				Number of	Segment	s	14	
Jurisdiction						Time F	Perio	d	AM Pea	ak		Number of	Iterations		15	i
File Name		Ex	isting AM	.xus		Analys	is Ye	еаг	Existing	,		System Cy	cle Lengt	h, s	10	0
Intersections	3	Но	me Depo	t Access/	Mesa Mal	24 1/2	Rd &	Patter	son			Analysis P	eriod		1>	7:00
Project Desc	cription	\neg														
637 35 m		2)—	903 ft 35 mph		3		166 35 n		<u>_</u> (4)-	2542 40 m		-(5)——
Dania Com	ont Inform	ation /	Homo D	onat 24	4/2 Dd\											
Basic Segm							Jan 4		m IAC-I	1	of Did	Descri	nt 0		th:	Dalari
Segment	Speed L			h Lanes	Segmen		_		on Wid	Length			nt Curb			Delay
	WB	EB	WB	EB	WB	EB	-	/B	EB	WB	EB	WB	EB	W	_	EB
3	35	35	2	2	1665	1665	5	0	50	550	550	70	100	0.	0	0.0
								West	bound				Eastbo	und		
Segment O	utnut Data					WBI		_	/BT	WBF		EBL	Easibo			EBR
	Movement					5	-	-	2	12	—		6			16
Segment 3			ak Tima	h		5				12	-	1	_			10
	Bay/Lane	_						ne	ver		-		neve			
3	Shared La			-		neve	r				-	never		$\overline{}$		
3	Base Free		Speed, m	ph					.71		_		40.19			
3	Running T							30	.21		\rightarrow		31.44	4		
3	Running S							37	.58		_		36.11	1		
3	Through D		/veh					7.	20				6.10			
3	Travel Tim	e, s						37	.41				37.54	1		
3	Travel Spe	ed, m	ph					30	.34				30.24	1		
3	Stop Rate,	stops	/veh					0.	27				0.25			
3	Spatial Sto	p Rate	e, stops/n	ni				0.	85				0.79			
3	Through vo	ol/cap	Ratio					0.	11				0.43			
3	Percent of	Base	FFS					74	.53		\neg		75.24	1		
3	Level of Se	ervice							В				В			
3	Auto Trave	eler Pe	rception S	Score				2.	27		\neg		2.26			
Multimodal	Results (Se	egmen	it)													
3	Pedestrian			Score / L	os		2.83			С		3.58)
3	Bicycle Se	gment	LOS Sco	re / LOS			2.29			В		2.82			0	:
3	Transit Se						0.81			Α	\neg	0.98		-	A	
Facility Out	put Data							West	bound		\neg		Eastbo	und		
Facility Trav	el Time, s							753	3.72				737.5	1		
Facility Trav	el Speed, m	ph						28	.53		\neg		29.16	6		
Facility Base	Free Flow	Speed	, mph					42	.73				42.47	7		
Facility Perc		_						66	.77				68.66	6		
Facility Leve									C				В			
Facility Auto			on Score						31				2.27	,		
Multimodal																
Pedestrian F							3.20			С		3.14		\vdash		
Bicycle Faci							2.63			С		2.66			C	;
Transit Facil	ity LOS Sco	re / LC	S				1.01			Α		0.92	!		A	1

				НС	S7 Url	oan Str	eet	Seg	ment	Repor	t				
General Info	ormation										\rightarrow	Streets In			
Agency		_	tolfus and		es							Number of			15
Analyst		N	lax Rusch			Analys			$\overline{}$			Number of			14
Jurisdiction		_				Time F			AM Pe			Number of			15
File Name			xisting AM			Analys			Existing]		System Cy	cle Lengt/	_	100
Intersections	8	2	4 1/2 Rd 8	Patterso	n	25 Roa	ad & F	atters	on			Analysis P	eriod	1	1> 7:00
Project Desc	cription														
903 35 m		3)—	1665 ft 35 mph		4		254 40 n		<u>_(</u>	<u>)</u>	2561 40 m		6)—
Basic Segm	nent Infor	mation	(24 1/2 R	d - 25 Rd)										
Segment	Speed			h Lanes		t Length	Inte	rsection	on Wid	Length	of RM	Perce	nt Curb	Othe	er Delay
ocyment	WB	EB	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	WB	EB
4	40	35	2	2	2542	2542	5	\rightarrow	50	0	0	90	90	0.0	0.0
_	40	33			2342	2342			30		U	30	30	0.0	0.0
								West	bound		$\overline{}$		Eastbo	und	
Segment O	utput Dat	a				WBI	L	V	/BT	WBF	₹	EBL	EBT	_	EBR
Segment	Moveme					5	$\overline{}$		2	12	\neg	1	6	\neg	16
4			ack Time,	h				ne	ver				neve	r	
4		_	oillback Tir			neve	r			neve	r	never			
4			Speed, m	-				42	.99			110101	40.64	4	
4	Running								.20		_		45.62		
4	Running								.07		-		37.9		
4	Through								.61		_		4.26		-
4	Travel T		3/10/1						.81		_		49.8		
4	Travel S		nnh						.19		_		34.7		
4	Stop Ra								69		_		0.12		
4	_		te, stops/r	ni					44		_		0.12		-
4	Through			···					17		_		0.51		
4	Percent								.59		_		85.5		
4	Level of								C		-				
4			erception :	Coore					36		-		2.18		
				Score					.30		_		2.18	•	
Multimodal			•	Coore / I	00	_	2.04		_		_	2.40	,	_	_
4	_		ment LOS				2.81		_	С	-	3.18			С
4			nt LOS Sco nt LOS Sco				2.35 1.22		-	B A	-	2.77 0.71			C A
4	Halisit	segillei	LUS SU	ne / LOS			1.22					0.7			^
Facility Out	put Data							West	bound		\neg		Eastbo	und	
Facility Trav								753	3.72				737.5	1	
Facility Trav	el Speed,	mph						28	.53				29.10	6	
Facility Base			d, mph					42	.73				42.4	7	
Facility Perc								66	.77				68.6	6	
Facility Leve									C				В		
Facility Auto			ion Score					2.	31				2.27	,	
Multimodal	Results	(Facility	/)												
Pedestrian F							3.20		\top	С	T	3.14	1		С
Bicycle Faci							2.63			C		2.66			С
Transit Facil	_						1.01			A		0.92			A
Transit Facil	, 2000	3010 1 L					1.01			^,		0.32			- 1

				НС	S7 Urk	an Str	eet	Seg	ment	Report						
General Info	ormation										_	Streets Inf				
Agency		Sto	olfus and	Associate	es							Number of	Intersecti	ons	15	i
Analyst		Ma	x Rusch			Analys	sis Da	ate				Number of	Segment	s	14	1
Jurisdiction						Time F	erio	d	AM Pea	ak		Number of	Iterations		15	i
File Name		Exi	isting AM	.xus		Analys	is Ye	ear	Existing)		System Cy	cle Lengt	h, s	10	0
Intersections	3	25	Road & I	Patterson		25 1/2	Road	d & Pat	terson			Analysis P	eriod		1>	7:00
Project Desc	ription	$\neg \vdash$														
1665 35 m		4)—	2542 ft 40 mph		5		256 40 n		— (6)_	2605 35 m		-(7)——
Basic Segm	ont Inform	ation (25 D4 - 1	05 4/2 DA												
Segment				h Lanes	Segmen	t Longth	Inte	orecetic	n Wid	Length	of DM	Doroce	nt Curb		thor	Delay
Segment	Speed L WB	-imit EB	WB	n Lanes EB	WB	EB	_	VB	EB	WB	EB	WB	EB	W		EB
5			_				_	_	50						_	
5	40	40	2	2	2561	2561	5	50	50	260	260	90	90	0.	U	0.0
								West	bound				Eastbo	und		
Segment O	utnut Data					WBL		_	/BT	WBF	,	EBL	EBT			EBR
Segment	Movemen	+				5	-		2	12	`	1	6	-		16
5	Bay/Lane		ck Timo	h				_		12	_	'	neve			10
5		_				Bovo	-	116	ver		-	DOVICE	Heve		_	20105
	Shared La			_		neve	r	42	42		+	never	42.41	_	_	never
5	Base Free		speea, m	ipn					.13		-		43.13		_	
5	Running T								.42		-		43.26		_	
5	Running S								.16		-		40.37		_	
5	Through D		/veh						75		+		35.44			
5	Travel Tim	_							.17		+		78.70			
5	Travel Spe								.51		_		22.19			
5	Stop Rate								23		_		0.83			
5	Spatial St	op Rate	e, stops/n	ni				0.	48				1.71			
5	Through v	ol/cap	Ratio					0.	14				0.71			
5	Percent of	f Base I	FFS					82	.34				51.44	4		
5	Level of S	ervice							A				С			
5	Auto Trave	eler Pe	rception	Score				2.	21				2.40			
Multimodal	Results (S	egmen	ıt)													
5	Pedestriar	n Segm	ent LOS	Score / L	os		2.64	ļ		В		3.44			(C
5	Bicycle Se	egment	LOS Sco	ore / LOS			2.39)		В		2.81			(С
5	Transit Se	gment	LOS Sco	re / LOS			0.54	ļ		Α		1.58			-	A
Facility Out	and Data							10/					Faatha	1		
Facility Out									bound		-		Eastbo			
Facility Trav									3.72		-		737.5		_	
Facility Trav		-							.53		-		29.16			
Facility Base		_	, mph						.73		+		42.47			
Facility Perc									.77		-		68.66)		
Facility Leve			-						C		\perp		В			
Facility Auto	Traveler Pe	erceptio	on Score					2.	31				2.27			
Multimodal	Results (F	acility)														
Pedestrian F							3.20)	T	С	\top	3.14			(<u> </u>
Bicycle Faci							2.63			С	\neg	2.66				C
Transit Facil							1.01			A		0.92				Α
														_		

					HCS7 (Jrb	an Str	eet	Seg	ment	Report						
General Inf	ormation												Streets Int	formation	1		
Agency		Sto	lfus and	1 Assoc	iates								Number of	Intersect	ions	15	
Analyst		Ma	x Rusch	1			Analys	sis Da	ate				Number of	Segment	s	14	,
Jurisdiction		\top					Time F			AM Pe	ak		Number of			15	
File Name		Fxi	isting AN	A xus			Analys	sis Ye	ear	Existin			System Cy	cle Lenat	h s	10	
Intersections		_	1/2 Roa		terson		1st Str			_	9		Analysis P		, 0	_	7:00
Project Des		-	172 1100		itoroon		130 00		er auc	13011			/ ulaiyolo i	Cilou			7.00
2542				2561			$\overline{}$		260)5 ft			2566			_	
40 m		5)— —	40 m		_	<u>•</u>			mph		<u>-</u>	35 m		_	8	
Rasic Segn	nent Informat	ion (25 1/2 F	2d - 26	Rd)												
Segment	Speed Lin	_		gh Lane		nent	Length	Inte	oreacti	on Wid	Length	of DM	Porces	nt Curb	0	ther	Delay
Segment		В	WB	gn Land EB			EB	_	VB	EB	WB	EB	WB	EB	W		EB
				-	_	\rightarrow		-	_						_	_	
6	35 4	10	2	2	260	5	2605	5	50	50	0	0	90	90	0.0	J	0.0
						-			Mont	th a run d		_		Faatha	d		
S	-tt D-t-					-	1A/DI			tbound	WDD		EDI	Eastbo	_		EDD
Segment O	_					4	WBI		V	VBT	WBR		EBL	EBT	-		EBR
Segment	Movement					4	5		-	2	12	-		6	-	_	16
6	Bay/Lane S					4			ne	ever		_		neve	r		
6	Shared Lane	_		_		4	neve	r				_	never				
6	Base Free-F	low S	Speed, r	mph					40).74				43.0	9		
6	Running Tim	ne, s							45	5.46				43.74	4		
6	Running Sp	eed, r	mph			П			39	9.07		Т		40.6	1		
6	Through De	lay, s	/veh			T			14	1.58				12.69	9		
6	Travel Time,	S				寸			60	0.04		\neg		56.42	2		
6	Travel Spee		oh			╗			29	9.58		\neg		31.4	В		
6	Stop Rate, s					╗			0	.47		\rightarrow		0.39)		
6	Spatial Stop	_		mi		7				.96		_		0.79			
6	Through vol					-				.16		-		0.42			
	Percent of B	_				-				2.62		-		73.0			
6			rro			-						-					
6	Level of Ser					-				В		-		В			
6 Multimodal	Auto Travele			Score		_				.28		_		2.26	•		
6	Pedestrian S		-	2 Score	/108	_		2.85		$\overline{}$	С	$\overline{}$	3.12	,	_		2
	Bicycle Seg					-		2.45		_		-					
6						-				-	В	-	2.73				3
6	Transit Segr	nent	LOS SC	ore / Lo)S	-		0.90)	_	A	-	0.88			<i>P</i>	4
Facility Out	put Data					7			West	tbound		$\overline{}$		Eastbo	und		
Facility Trav		_				7		_		3.72		_		737.5			
	el Speed, mpl	h				-				3.53		\rightarrow		29.10			
	Free Flow S		mnh			7				2.73		_		42.4			
_	ent of Base F	_	,рп			-				5.77		-		68.6			
Facility Leve		13				-				C		-		08.00 B			
_		onti-	n Caar			-						-			,		
Facility Auto	Traveler Per	eptio	ni Score	;					2	.31				2.27			
Multimodal	Results (Fac	ility)															
	acility LOS S							3.20)	$\overline{}$	С	T	3.14			(<u> </u>
	lity LOS Score					-		2.63			C	_	2.66				2
	ity LOS Score					-		1.01		_	A	-	0.92				<u> </u>
anon rate	,		_										0.02	•			-

				НС	S7 Urk	an Str	eet	Seg	ment	Report						
General Inf	ormation										_		formation			
Agency		_	olfus and	Associate	es								Intersecti		15	
Analyst		Ma	ax Rusch			Analys					_		Segment		14	
Jurisdiction		_				Time F	Perio	d	AM Pea	ak			Iterations		15	
File Name		Ex	cisting AM	.xus		Analys	is Ye	еаг	Existing]		System Cy	cle Lengt	h, s	100	
Intersections	5	1s	t Street &	Patterso	n	7th Str	eet &	Patte	rson		A	nalysis P	eriod		1> 7	7:00
Project Desc	cription															
2561 40 m		6)—	2605 ft 35 mph		7			66 ft mph	<u>_</u> (8)_	2569 40 m		_(!	9)-	
Basic Segm	ent Infor	mation	(26 Rd - 2	06 1/2)												
Segment	Speed			h Lanes	Segmen	t I enath	Into	oreacti	on Wid	Length	of RM	Parco	nt Curb	Ot	her D)elav
Jeyment	WB	EB	WB	EB	WB	EB	-	/B	EB	WB	EB	WB	EB	WE		EB
7	35	40	2	2	2566	2566	-	0	50	0	0	90	90	0.0	-	0.0
	33	40			2300	2300	3		30	U	U	90	90	U.C		0.0
								West	tbound		$\overline{}$		Eastbo	und		
Segment O	utput Dat	a				WBL			VBT	WBF		EBL	EBT		F	BR
Segment	Moveme					5		_	2	12	`	1	6	-		16
7			ack Time,	h				n	ever	12	_		neve	,		10
7		_	illback Tin			neve	-		evei		_	never	Heve	-	D/	ever
7				_		neve		20	9.83		_	nevei	42.18		He	ever
	_		Speed, m	ipn							-					
7	Running								5.92		-		43.76			
7	Running		_						3.10		-		39.98			
7	Through		s/ven						3.00		-		13.49			
7	Travel Ti								3.93		-		57.26			
7	Travel S								7.37		-		30.56			
7	Stop Rat	te, stops	s/veh					0	.57		_		0.40			
7		_	e, stops/n	ni				1	.16				0.82			
7	Through								.23				0.32			
7	Percent	of Base	FFS					68	3.72				72.45	5		
7	Level of	Service							В				В			
7	Auto Tra	veler Pe	erception	Score				2	.31				2.26			
Multimodal	Results (Segme	nt)													
7	Pedestri	an Segn	nent LOS	Score / L	.os		2.77	'		С		2.94	ļ		С	
7	Bicycle S	Segmen	t LOS Sco	ore / LOS			2.53			В		2.64	ļ.		В	
7	Transit S	egment	LOS Sco	re / LOS			1.07	,		Α		0.89)		Α	
Facility Out	_								tbound		-		Eastbo			
Facility Trav									3.72		-		737.5			
Facility Trav		_							3.53		_		29.16			
Facility Base			d, mph						2.73		_		42.47			
Facility Perc									5.77				68.66	ò		
Facility Leve							_		С				В			
Facility Auto	Traveler I	Percepti	on Score					2	.31				2.27			
Multimodal	Resulte (Facility	1													
Pedestrian F			-				3.20		_	С		3.14	ı		С	
Bicycle Faci							2.63			С		2.66			C	
Transit Facil											_					
Transit Facil	ity LUS S	core / L(Jo				1.01			Α		0.92	•		A	

				НС	S7 Urb	an Str	eet	Seg	ment	Report					
General Info	ormation										_		formation		
Agency		_	olfus and	Associate	es								Intersecti		15
Analyst		Ma	ax Rusch			Analys					_		Segment		14
Jurisdiction		_				Time F	Perio	d	AM Pea	ak			Iterations		15
File Name			isting AM			Analys	is Ye	еаг	Existing)			cle Lengt	h, s	100
Intersections	5	7ti	h Street &	Patterso	n	12th St	reet	& Patt	erson		A	nalysis P	eriod		1> 7:00
Project Desc	cription														
2605 35 mj		7)—	2566 ft 35 mph		®		256 40 r		<u>_</u> (9)_	1276 40 m		_(1	0
Basic Segm	nent Infor	mation	(26 1/2 R	d to 12th	St)										
Seament	Speed		_	h Lanes	Segmen	t I enath	Into	reaction	on Wid	Length	of RM	Parco	nt Curb	Ot	her Delay
Jeyment	WB	EB	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	WE	
8	40	35	2	2	2569	2569	_	0	50	0	0	90	90	0.0	
•	40	33	2		2309	2309	3		30	U	U	90	90	0.0	0.0
								West	bound		$\overline{}$		Eastbo	und	
Segment O	utput Dat	а				WBI			VBT	WBF		EBL	EBT		EBR
Segment	Moveme					5	_	_	2	12		1	6	_	16
8			ack Time,	h				_	ever	12	_	<u> </u>	neve	,	-10
8			illback Tin			neve	-	-	7401		_	never	IIC V C	-	never
8			Speed, m	-		Heve		42	2.34		_	Hevel	39.99		Hevel
8	_			ipii					3.73		-		46.13		
_	Running										-				
8	Running								0.05		-		37.97		
8	Through		s/ven						.49		-		6.04		
8	Travel Ti								.22		-		52.17		
8	Travel S								3.60		-		33.57		
8	Stop Ra								.83		-		0.19		
8	_		e, stops/n	nı					.71		-		0.39		
8	Through								.40		-		0.27		
8	Percent								.74		-		83.95		
8	Level of			-					С		-		A		
8	_		erception	Score				2.	.40				2.20		
Multimodal			-								_			_	
8			nent LOS				3.01		_	С	-	2.94		_	С
8		_	t LOS Sco				2.70		_	В	-	2.60		_	В
8	Transit S	Segment	LOS Sco	re / LOS			1.41			A	_	0.70)	_	A
Facility Out	_								bound				Eastbo		
Facility Trav									3.72				737.5		
Facility Trav								28	1.53				29.16	5	
Facility Base	e Free Flo	w Speed	d, mph					42	2.73				42.47	7	
Facility Perc									5.77				68.66	6	
Facility Leve									С				В		
Facility Auto	Traveler I	Percepti	on Score					2	.31				2.27	'	
Multimodal	Results (Facility)												
Pedestrian F			-				3.20		$\overline{}$	С	$\overline{}$	3.14	ļ.		С
Bicycle Faci							2.63			С		2.66			c
Transit Facil							1.01		_	A	_	0.92			A
Transit Facil	ny LOS S	COIE / L					1.01					0.92			

				НС	S7 Urk	an Str	eet	Seg	ment	Report					
General Info	ormation										S	treets Int	formation	1	
Agency		St	olfus and	Associate	es						N	lumber of	Intersecti	ons	15
Analyst		Ma	ax Rusch			Analys	sis Da	ate			N	lumber of	Segment	s	14
Jurisdiction						Time F	Perio	d	AM Pea	ak	N	lumber of	Iterations		15
File Name		Ex	isting AM	.xus		Analys	is Ye	ear	Existing]	S	system Cy	cle Lengt	h, s	100
Intersections	S	12	th Street	& Patters	on	Patters	on R	ld & 15	th St		A	nalysis P	eriod		1> 7:00
Project Desc	cription														
2566 35 mj		8)—	2569 ft 40 mph		9-		127 40 r	'6 ft nph	1	<u> </u>	1326 40 m		_(1	1)—
Basic Segm	nent Infor	mation	(12th St	27 1/4 R	d)										
Segment	Speed		_	h Lanes	Segmen	t Length	Inte	orsecti	on Wid	Length	of RM	Percer	nt Curb	Ott	her Delay
Jeyment	WB	EB	WB	EB	WB	EB	_	/B	EB	WB	EB	WB	EB	WE	
9	40	35	2	2	1276	1276	-	0	50	0	0	90	90	0.0	
9	40	33	2		1270	1270	3		30	U	U	90	90	0.0	0.0
								West	bound		$\overline{}$		Eastbo	und	
Segment O	utput Dat	a				WBL	_		VBT	WBF	2	EBL	EBT		EBR
Segment	Moveme					5			2	12		1	6	_	16
9			ack Time,	h				ne	ever	12	-		neve	_	-10
9			illback Tin			neve	r		3401		_	never	nove.	-	never
9			Speed, m			neve		42	2.30		_	IIC V CI	39.95		HEVEI
9	Running			рп			_		3.50		_		24.88		
9	Running								7.03		_		34.97		
9	Through								.00		_		34.28		
9	Travel T		S/ V CII						5.49		\rightarrow		59.16		
9	Travel S		nh						1.13		_		14.7		
9	Stop Ra								.08		_		0.75		
				ni.							_				
9			e, stops/n	11					.32		_		3.11		
9	Through Percent								.28		-		0.65 36.8		
).68		_				
9	Level of			D					A		-		E		
9			erception	score				2	.19				2.63		
Multimodal			-	0 //	00		2.00		_		_	2.22			
9			nent LOS				2.99		_	С	_	3.33			С
9		_	t LOS Sco				2.67		_	В	_	2.70		-	В
9	Transit S	segment	LOS Sco	re / LOS			0.68		_	A	_	2.25			В
Facility Out	_								bound		工		Eastbo		
Facility Trav	•								3.72				737.5		
Facility Trav								28	3.53				29.16	3	
Facility Base	Free Flo	w Speed	d, mph					42	2.73				42.47	<u> </u>	
Facility Perc									5.77				68.66	ò	
Facility Leve									С				В		
Facility Auto	Traveler	Percepti	on Score					2	.31				2.27	,	
Multimodal	Resulte /	Facility	1												
Pedestrian F			-				3.20		_	С	$\overline{}$	3.14			С
Bicycle Faci							2.63			C		2.66			С
Transit Facil	_														
Transit Facil	IIY LUS S	core / L(J5				1.01			Α		0.92			Α

				НС	S7 Urb	an Str	eet	Seg	ment	Report	:				
General Info	ormation											Streets In	formation	1	
Agency		St	olfus and	Associate	es							Number of	Intersecti	ons	15
Analyst		M	ax Rusch			Analys	sis Da	ate				Number of	Segment	S	14
Jurisdiction						Time F	erio	d	AM Pea	ak		Number of	Iterations		15
File Name		E	cisting AM	.xus		Analys	sis Ye	еаг	Existing)		System Cy	/cle Lengt	h, s	100
Intersections	6	Pa	atterson R	d & 15th	St	27 1/2	Road	1 & Pa	tterson			Analysis P	eriod		1> 7:00
Project Desc	cription														
2569 40 mj		9)	1276 ft 40 mph		10		132 40 r	26 ft mph	<u>_</u> (<u>)</u>	3888 45 m		-(1	2
Basic Segm	ont Infor	mation													
	Speed		Through	h Lanes	Segmen	t Longth	Into	reasti	on Wid	Longth	of RM	Doroca	nt Curb	04	her Delay
Segment	WB	EB	WB	EB	WB	EB	W		EB EB	WB	EB	WB	EB	WE	
40							_	\rightarrow							_
10	40	40	2	2	1326	1326	9	0	50	0	0	70	70	0.0	0.0
								Wast	bound		_		Eastbo	und	
Segment O	utnut Dat	a				WBI		_	VBT	WBF	,	EBL	EBT	_	EBR
Segment	Moveme					5	-	_	2	12	`	1	6	-	16
10	_		ack Time,	h		3		_		12	_		_	-	10
		_					-	ne	ever				neve	-	
10			illback Tin	-		neve	•		1.07	neve		never	44.0	,	
10	_		Speed, m	ipn					1.07		-		44.07		
10	Running								3.72		_		23.7		
10	Running								3.11		-		38.13		
10	Through		s/ven						.73		_		1.25		
10	Travel Ti	-							3.45		-		24.96		
10	Travel S						_		7.03		-		36.22		
10	Stop Rat								.33		-		0.05		
10	_	_	e, stops/n	ni					.32		-		0.19		
10	Through								.32		_		0.28		
10	Percent								.33		\rightarrow		82.20		
10	Level of								С		_		A		
10			erception	Score				2	.56				2.17		
Multimodal			•												
10			nent LOS				3.43		_	С	_	3.45		\vdash	С
10	Bicycle S	Segmen	t LOS Sco	re / LOS			2.78			С	_	2.72	2		В
10	Transit S	egment	LOS Sco	re / LOS			1.16			Α		0.57	7		Α
Facility Out	put Data							West	bound				Eastbo	und	
Facility Trave	el Time, s							75	3.72				737.5	1	
Facility Trave	el Speed,	mph						28	3.53		\neg		29.10	3	
Facility Base	Free Flo	w Speed	d, mph					42	2.73				42.4	7	
Facility Perc	ent of Bas	e FFS						66	5.77				68.66	6	
Facility Leve	of Service	e							С				В		
Facility Auto	Traveler F	Percepti	on Score					2	.31				2.27	'	
Multimodal	Resulte /	Facility	1												
Pedestrian F			-				3.20		_	С		3.14	ı		С
Bicycle Facil							2.63			C		2.66			С
Transit Facil															
Transit Facil	ity LUS S	core / L	03				1.01			A		0.92			Α

				НС	S7 Urk	oan Str	eet	Seg	ment	Report					_	
General Info	ormation											Streets In	formation	1		
Agency		Sto	lfus and	Associate	es						1	Number of	Intersecti	ons	15	i
Analyst		Ma	x Rusch			Analys	sis Da	ate			1	Number of	Segment	s	14	
Jurisdiction						Time F	erio	d	AM Pea	ak	1	Number of	Iterations		15	i
File Name		Exi	isting AM	.xus		Analys	is Ye	ear	Existing)		System Cy	cle Lengt	h, s	10	0
Intersections	3	27	1/2 Road	1 & Patter	son	28 1/4	Road	d & Pa	tterson			Analysis P	eriod		1>	7:00
Project Desc	cription															
1276 40 m		10)—	1326 ft 40 mph		11	_	388 45 r		<u>_</u> (1	<u>)</u>	3811 45 m		-(13)——
Dania Com	ont Inform	ation (27 4/4 D	d 27 4/2	D4\											
Basic Segm						41 a==#	Jan 4	n n n 1*	m 146-1	1	of DA	I De-	nt 0		th:	Delair
Segment	Speed L			h Lanes		t Length	_		on Wid	Length			nt Curb			Delay
- 44	WB	EB	WB	EB	WB	EB	_	/B	EB	WB	EB	WB	EB	W	_	EB
11	45	40	2	2	3888	3888	5	0	50	0	0	90	90	0.	U	0.0
								Woet	bound				Eastbo	und		
Segment O	utnut Data					WBI		_	/BT	WBF	,	EBL	Eastbo			EBR
	Movement					WDL	-	· ·	2	12			6			EDIX
Segment 11	Bay/Lane		ak Tima	h				D.C		12	_	1	<u> </u>			
		_					_	TIE	ever				neve			
11	Shared La					neve	r	- 45	0.1	neve		never	40.4	$\overline{}$		
11	Base Free		Speea, m	ipn					.84		-		43.49			
11	Running T	_							.16		-		62.64			
11	Running S		•						.06		_		42.32			
11	Through D		/veh						.34		_		9.91			
11	Travel Tim								.50		_		72.5			
11	Travel Spe							34	.65				36.54	1		
11	Stop Rate,	stops/	veh_					0.	48				0.40			
11	Spatial Sto	p Rate	e, stops/n	ni				0.	65				0.55			
11	Through vo	ol/cap	Ratio					0.	44				0.18			
11	Percent of	Base I	FFS					75	.59		$\neg \Box$		84.0	1		
11	Level of Se	ervice							В				Α			
11	Auto Trave	ler Pe	rception	Score				2.	34				2.22			
Multimodal	Results (Se	egmen	t)													
11	Pedestrian	Segm	ent LOS	Score / L	os		3.61		\neg	D		2.96	i		(
11	Bicycle Se	gment	LOS Sco	ore / LOS			2.81			С		2.55	5		E	3
11	Transit Se	gment	LOS Sco	re / LOS			0.69		\neg	Α		0.51			7	Α
Facility Out									bound		_		Eastbo			
Facility Trav									3.72		_		737.5			
Facility Trav									.53		_		29.10			
Facility Base		_	, mph						.73				42.47			
Facility Perc									.77				68.66	5		
Facility Leve									<u> </u>				В			
Facility Auto	Traveler Pe	rceptio	n Score					2	31				2.27			
Multimodal	Results (Fa	acility)														
Pedestrian F							3.20			С		3.14			-	2
Bicycle Faci							2.63			С		2.66				
Transit Facil							1.01		-	A		0.92				<u> </u>
Transit Facil	., 200 000	LO					1.01					0.32				•

				НС	S7 Url	oan Str	reet	Seg	ment	Repor	t				
General Info	ormation	_									\rightarrow	Streets In			
Agency		_	tolfus and		es	1			_		\rightarrow	Number of			15
Analyst			lax Rusch			Analys					\rightarrow	Number of			14
Jurisdiction		\rightarrow				Time F			AM Pe		\rightarrow	Number of			15
File Name			xisting AM			Analys			Existing	9	\rightarrow	System Cy		,	100
Intersections		2	8 1/4 Road	d & Patter	rson	29 Roa	ad & F	Patter	son			Analysis P	eriod		1> 7:00
Project Desc	cription	_					_	_			_				
1326 40 m		-(11)—	3888 ft 45 mph		12			11 ft mph	<u>_</u> (3)—	2585 45 m		14)—
Basic Segm	nent Infor	mation	(28 1/4 R	d - 29 Rd)										
Segment	Speed			h Lanes		t Length	Inte	ersecti	on Wid	Length	of RM	Perce	nt Curb	Othe	er Delay
Joymont	WB	EB	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	WB	EB
12	45	40	2	2	3811	3811	-	0	50	0	0	90	90	0.0	0.0
12	43	40			3011	3011			30		U	30	30	0.0	0.0
								Wes	tbound		т		Eastbo	und	
Segment O	utput Dat	a				WBI	L	V	VBT	WBF	₹	EBL	EBT		EBR
Segment	Moveme					5			2	12	\neg	1	6	\neg	16
12			ack Time,	h				n	ever		\rightarrow		neve	r	
12		_	pillback Tir			neve	r	-		neve	,	never			never
12			v Speed, m					44	1.90	11010		110101	42.5	5	110101
12	Running								9.68		_		62.8		
12	Running								3.54				41.3		
12	Through		-						0.06		_		9.82		
12	Travel T		3/ 10/1).74		_		72.6		
12	Travel S		mnh						2.58		_		35.7		
12	Stop Ra								.53				0.30		
12			ite, stops/r	ni					.74		_		0.41		
12	Through								.58		-		0.41		
12	Percent								2.57		-		84.0		
12	Level of								B		-		A	<u> </u>	
12	_		erception	Score					.25		-		2.20		
Multimodal				Score					.23		_		2.20		
12			ment LOS	Score / I	OS		3.58		$\overline{}$	D	$\overline{}$	2.95	5		С
12			nt LOS Sc				2.86		_	C	\rightarrow	2.57			В
12			nt LOS Sco				0.85		_	A	_	0.56			A
Facility Out	put Data							Wes	tbound				Eastbo	und	
Facility Trav								75	3.72		_		737.5	1	
Facility Trav		_							3.53		4		29.1		
Facility Base									2.73				42.4		
Facility Perc								66	5.77				68.6	6	
Facility Leve									С				В		
Facility Auto	Traveler	Percep	tion Score					2	.31				2.27		
Multimodal	Results	(Facilit	v)												
Pedestrian F							3.20		$\overline{}$	С	\top	3.14	1		С
Bicycle Faci							2.63			C		2.66			C
Transit Facil	_						1.01			A		0.92			A
	, 0	30,071										0.32			

				ŀ	ICS7 Ur	ban Str	eet	Segr	nent	Report						
General Inf	ormation											Streets Int	formation	1		
Agency		Sto	olfus and	l Associ	ates							Number of	Intersect	ions	15	i
Analyst		Ma	x Rusch	1		Analys	sis Da	ate			\neg	Number of	Segment	s	14	
Jurisdiction		\top				Time F	Perio	d	AM Pe	ak		Number of	Iterations	;	15	
File Name		Ex	isting AN	1.xus		Analys	sis Ye	ear	Existin	0		System Cy	cle Lenat	h. s	10	0
Intersections		_	Road &		on			d & Pat		-		Analysis P		, -	-	7:00
Project Des		+				202						, many one i			-	7.00
3888 45 m	ft (12)—	3811 45 m		13		258: 45 m)_	2609 35 m		_(15)
Basic Segn	nent Informa	tion ((29 Rd -	29 1/2	Rd)											
Segment	Speed Lir			gh Lane		nt Length	Inte	ersectio	n Wid	Length	of RM	Percei	nt Curb	O	ther	Delay
Joginon		EB	WB	EB	WB	EB	_	VB	EB	WB	EB	WB	EB	W		EB
13		45	2	2	2585	2585	-	50	50	0	0	90	90	0.0	_	0.0
13	45	43			2303	2303		,0	30	U		90	90	U.		0.0
								West	bound				Eastbo	und		
Segment O	utnut Data					WBI			BT	WBR		EBL	EBT	_		EBR
	Movement					5	_	-	2	12			6	-		16
Segment		nillha	ak Tima	ь.		3				12	-	1	_	-		10
13	Bay/Lane S	-		-		-		ne	ver		-		neve	-		
13	Shared Lan	_				neve	r				-	never				never
13	Base Free-I		Speed, r	mph				43			_		43.8			
13	Running Tir	_						41.	.28		_		40.3	4		
13	Running Sp	eed,	mph					42	.69				43.6	9		
13	Through De	elay, s	/veh					15	.41				23.5	В		
13	Travel Time	, s						56.	.69				63.9	2		
13	Travel Spee	ed, mp	ph					31.	.09				27.5	7		
13	Stop Rate,	stops	/veh					0.4	41		\neg		0.68	}		
13	Spatial Stop	Rate	e, stops/	mi				0.8	83				1.38			
13	Through vo							0.0	69				0.32			
13	Percent of E	_							.84		\neg		62.8			
13	Level of Ser								3		\rightarrow		С			
13	Auto Travel		rcention	Score					26		_		2.35			
	Results (Se										_		2.00			
13	Pedestrian	_	-	Score	/IOS		3.81		$\overline{}$	D	\neg	3.24				0
13	Bicycle Seg						2.95		+	С	-	2.62				3
13						_			_		-			-		
13	Transit Seg	ment	LUS 50	ore / LC	5		1.02		-	A	-	1.10				Α
Facility Out	nut Data							Mont	bound				Eastbo	und		
Facility Out						-			3.72		-					
Facility Trav						-					-		737.5			
	el Speed, mp								.53		-		29.1			
	Free Flow S	_	l, mph			-			.73		-		42.4		_	
_	ent of Base F	-FS							.77		_		68.6	5		
Facility Leve									<u> </u>				В			
Facility Auto	Traveler Per	ceptio	on Score)				2.	31				2.27			
Multimodal	Results (Fac	cility))													
	acility LOS S						3.20)		С	T	3.14			(0
	lity LOS Scor						2.63			С		2.66				<u> </u>
	ity LOS Scor						1.01			A		0.92				Α

								•		n						
				н	S7 Urb	oan Str	eet	Segm	ent	Report	:					
General Inf	ormation	la										treets Int		_	Les	
Agency		_	olfus and	Associate	es	1						Number of			15	
Analyst		Ma	x Rusch			Analys		_				Number of			14	
Jurisdiction						Time F		_	M Pea			Number of			15	
File Name Intersection	•	_	sting AM 1/2 Road		200	Analys		ar (E) Patterson	xisting)		System Cy		n, s	10	7:00
Project Des		29	1/2 R0a0	o Paller	SON	30 R0a	iu & r	allerson	1		<i>,</i>	Analysis P	eriou		12	7.00
		_														
3811 45 m		13)—	2585 ft 45 mph		14)-		2609 f		<u>_</u> (1	•) —					
Basic Segn	nent Informa	tion (2	29 1/2 R	d - 30 Rd)											
Segment	Speed Li	mit	Through	h Lanes	Segmen	t Length	Inte	rsection	Wid	Length	of RM	Percer	nt Curb	С	ther	Delay
	WB	EB	WB	EB	WB	EB	W	B E	В	WB	EB	WB	EB	W	В	EB
14	35	45	2	2	2609	2609	5(0 5	50	0	0	90	90	0.	.0	0.0
								Westbo					Eastbo		_	
Segment O	utput Data					WBI	-	WB.	T	WBF	₹	EBL	EBT			EBR
Segment	Movement					5	_	2		12	\rightarrow	1	6		_	16
14	Bay/Lane S	_											neve	Г	_	
14	Shared Lar											never			Ш	
14	Base Free-		Speed, m	ph				40.82					45.5			
14	Running Ti							46.8			_		40.6			
14	Running Sp		_					37.9			_		43.70			
14	Through De		/veh					40.02			-		7.82			
14	Travel Time							86.88			_		48.40			
14	Travel Spe							20.48			-		36.7			
14	Stop Rate,							0.92			_		0.23			
14	Spatial Sto			ni ————				1.86			_		0.47			
14	Through vo							0.81			_		0.29			
14	Percent of		FFS					50.10	5		-		80.6	3		
14	Level of Se							C			-		A		_	
14	Auto Trave			score				2.42					2.21			
14	Results (Se Pedestrian	_	-	Scoro / I	08		3.95		_	D		2.92	,	_		<u> </u>
14	Bicycle Seg					_	2.89			С	_	2.92				В
14	Transit Seg						1.77			A	_	0.54				A
Facility Ou	tput Data							Westbo	und				Eastbo	und		
Facility Trav	el Time, s							753.7	'2				737.5	1		
Facility Trav	el Speed, mp	h						28.53	3				29.1	6		
Facility Bas	e Free Flow S	Speed,	, mph					42.73	3				42.4	7		
Facility Pero	cent of Base I	FFS						66.7	7				68.6	6		
Facility Leve	el of Service							С					В			
Facility Auto	Traveler Per	rceptio	n Score					2.31					2.27			
	Results (Fa								_							
	Facility LOS						3.20		-	С	_	3.14				0
Bicycle Fac	ility LOS Sco	re / LO	S				2.63			С		2.66			(<u> </u>

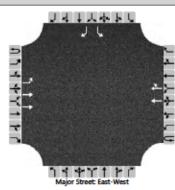
Transit Facility LOS Score / LOS

1.01

0.92

	HCS7 Two-Way Stop	o-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



	nd T R 1 12 D 1 R
Movement	T R 1 12
Priority	1 12
Number of Lanes 0 1 2 0 0 0 2 0 0 0 0 1 Configuration L T T TR L L Volume (veh/h) 0 10 833 1759 57 3 37 Percent Heavy Vehicles (%) 3 1	0 1
Configuration	
Volume (veh/h) 0 10 833 1759 57 37 Percent Heavy Vehicles (%) 3 1 3 3 Proportion Time Blocked 0 0 0 Right Turn Channelized No No Median Type Storage Undivided Volume (veh/h) 1 7.5 Base Critical Headway (sec) 4.1 7.5 6.86 6.86 Base Follow-Up Headway (sec) 2.2 3.5 3.5 5 Follow-Up Headway (sec) 2.21 3.53 3.53 3.53 3.53 Delay, Queue Length, and Level of Service Flow Rate, v (veh/h) 11 40 40	R
Percent Heavy Vehicles (%) 3 1 3 Proportion Time Blocked 0 0 Right Turn Channelized No No Median Type Storage Undivided Critical and Follow-up Headways Base Critical Headway (sec) 4.1 7.5 Critical Headway (sec) 4.12 6.86 Base Follow-Up Headway (sec) 2.2 3.5 Follow-Up Headway (sec) 2.21 3.53 Delay, Queue Length, and Level of Service Flow Rate, v (veh/h) 11 40	
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Undivided Critical and Follow-up Headways Base Critical Headway (sec) 4.1 Critical Headway (sec) 4.12 Critical Headway (sec) 4.13 Critical Headway (sec) 4.14 Critical Headway (sec) 4.15 Critical Headway (sec) 4.16 Critical Headway (sec) 4.17 Critical Headway (sec) 4.18 Critical Headway (sec) 4.19 Critical Headway (sec) 4.10 Critical Headway (sec) 4.11 Au Au Au Au Au Au Au Au Au	58
Percent Grade (%) Right Turn Channelized Median Type Storage Undivided Critical and Follow-up Headways Base Critical Headway (sec) 4.1 Critical Headway (sec) 4.12 Base Follow-Up Headway (sec) Elow-Up Headway (sec) Delay, Queue Length, and Level of Service Flow Rate, v (veh/h) 11	0
Right Turn Channelized Median Type Storage Undivided Critical and Follow-up Headways Base Critical Headway (sec) Critical Headway (sec) 4.1 Critical Headway (sec) 4.12 Base Follow-Up Headway (sec) Follow-Up Headway (sec) 2.2 Delay, Queue Length, and Level of Service Flow Rate, v (veh/h) 11	
Median Type Storage Undivided Critical and Follow-up Headways Base Critical Headway (sec) 4.1 7.5 Critical Headway (sec) 4.12 6.86 Base Follow-Up Headway (sec) 2.2 3.5 Follow-Up Headway (sec) 2.21 3.53 Delay, Queue Length, and Level of Service Flow Rate, v (veh/h) 11 40	
Critical and Follow-up Headways Base Critical Headway (sec) 4.1 7.5 Critical Headway (sec) 4.12 6.86 Base Follow-Up Headway (sec) 2.2 3.5 Follow-Up Headway (sec) 2.21 3.53 Delay, Queue Length, and Level of Service Flow Rate, v (veh/h) 11 40	
Base Critical Headway (sec) 4.1	
Critical Headway (sec) 4.12 6.86 Base Follow-Up Headway (sec) 2.2 3.5 Follow-Up Headway (sec) 2.21 3.53 Delay, Queue Length, and Level of Service 40	
Base Follow-Up Headway (sec) 2.2 3.5 Follow-Up Headway (sec) 2.21 3.53 Delay, Queue Length, and Level of Service 40	6.9
Follow-Up Headway (sec) 2.21 3.53 Delay, Queue Length, and Level of Service Flow Rate, v (veh/h) 11 40	6.90
Delay, Queue Length, and Level of Service Flow Rate, v (veh/h) 11 40	3.3
Flow Rate, v (veh/h) 11 40	3.30
Capacity, c (yeh/h) 294 26	63
	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	С
Approach Delay (s/veh) 0.2 253.5	
Approach LOS F	

Generated: 5/23/2020 10:07:28 AM

		HCS	7 Sig	nalize	d Int	ersec	tion R	Resi	ults Su	mmar	у				
General Inform	nation								Interse	tion Inf	ormatic	nn.		4 444 1	sių
	iation	Stolfus and Associa	atos						Duration		0.250		1	4111	
Agency Analyst		Max Rusch	ales	Analys	io Dot				Area Ty		Other		- 5		U A
Jurisdiction		Max Ruscii		Time F		PM P	nak		PHF	Je	0.92		·	- 1	7
		Dottomon Dd				_	ean			Doring		20	- 3 ×		- F
Urban Street Intersection		Patterson Rd 24 Road & Patterson	on.	File Na		r 2020	ng PM.x		Analysis	Period	1> 7:	00	- B		į,
	tion	24 Road & Fallers	OH	File Na	ime	EXISU	IG FIVI.X	us					- 4	111	eid
Project Descrip	tion		_	-	-	_	-		_	_	-	_			e para
Demand Inform	nation				EB			V	/B		NB			SB	
Approach Move	ement			L	Т	R	L	Т	T R	L	Т	R	L	Т	R
Demand (v), v	eh/h			63	155	176	493	3:	22 177	42	291	215	207	444	25
Signal Informa					7	_ *	= , ;	\	7 5	2			_		
Cycle, s	110.0	Reference Phase	_			. 2	13		5	4	12		2	>	Y
Offset, s	81	Reference Point	Begin	Green	10.7	6.6	36.8	6.	0 3.7	24.3				1	111011
Uncoordinated	No	Simult. Gap E/W	On	Yellow		3.5	4.0	3.		4.0			4	~	4
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.5	1.0	0.	5 0.0	1.0	_	5	, 6	7	8
Times Decults				EDI	7	EDT	VA/ID		MDT	NID		NDT	ODI	-	ODT
Timer Results				EBL 1	-	EBT 6	WB 5	-	WBT 2	NBI 7	-	NBT 4	SBI 3	-	SBT 8
Assigned Phase Case Number	e				-			-		_	-	_	_	-	_
	-			1.1	-	4.0	2.0	_	4.0	1.1	-	3.0	2.0		4.0
Phase Duration		> -	_	14.7	-	41.8	25.3	\rightarrow	52.4	10.0		29.3	13.7		32.9
Change Period				4.0	-	5.0	4.0	\rightarrow	5.0	4.0	\rightarrow	5.0	4.0	-	5.0
Max Allow Head				5.2	-	0.0	5.2	\rightarrow	0.0	5.2	-	5.2	5.2	-	5.2
Queue Clearan				10.1	-		18.1	_		4.1	_	19.3	8.9	-	15.3
Green Extensio		(g e), S	_	0.6		0.0	3.2	\rightarrow	0.0	0.1	_	5.0	0.8		6.3
Phase Call Pro				1.00	-		1.00	\rightarrow		0.75	$\overline{}$	1.00	1.00	_	1.00
Max Out Proba	bility			0.42			0.07			0.00		0.47	0.22		0.20
Movement Gro	oup Res	sults			EB			W	В		NB			SB	
Approach Move	_			L	T	I R	L	T		L	T	R	L	T	R
Assigned Move				1	6	16	5	2		7	4	14	3	8	18
Adjusted Flow F), veh/h		209	513	583	536	28	_	46	316	234	225	257	253
		ow Rate (s), veh/h/	/In	1810	1870	-	1743	188		1810	1885	1598	1743	1856	1819
Queue Service				8.1	27.4	36.8	16.1	11.	_	2.1	17.3	11.0	6.9	13.2	13.3
Cycle Queue C				8.1	27.4	36.8	16.1	11.	_	2.1	17.3	11.0	6.9	13.2	13.3
Green Ratio (g		z imie (g : n :		0.43	0.33	-	0.19	0.4		0.28	0.22	0.41	0.09	0.25	0.25
Capacity (c), v				512	626	528	674	813	_	268	416	661	307	471	462
Volume-to-Cap		atio (X)		0.408	0.820	-	0.795	0.35	_	_	0.761		0.734	0.546	0.548
		/In (90 th percentile	:)	132.4	415	740.9	228.3	171	_	_	272	149.4	120.3	205.3	209.7
		eh/ln (90 th percent		6.0	18.6	33.4	10.3	7.7		1.7	12.3	6.7	5.4	9.1	9.0
		RQ) (90 th percen		0.75	0.00	0.00	1.04	0.0	_	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 De	lay (d 2), s/veh		0.7	11.5	70.4	2.8	1.1	1 1.2	0.4	5.6	0.5	4.8	1.4	1.4
Initial Queue De	elay (d	з), 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 (••		21.6	43.6	112.3	45.1	22.		30.7	45.8	22.6	53.7	37.0	37.0
Level of Service				С	D	F	D	С	$\overline{}$	С	D	С	D	D	D
Approach Delay				70.8		E	33.5	5	С	35.5	5	D	42.1		D
Intersection De						48	3.6						D		
Multimodal Re	sults				EB			W	В		NB			SB	
Pedestrian LOS	Score	/ LOS		2.29		В	2.27	7	В	2.45	5	В	2.29		В
Bicycle LOS Sc	ore / LC	os		0.84		Α	1.38	3	Α	1.47	7	Α	1.09		Α

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resul	ts Sun	nmar	У				
General Information	tion								Intersect	ion Inf	ormatic	n	U	4.4413	되다
Agency		tolfus and Associa	ntoe						Duration,		0.250		- 1	477	
		ax Rusch	iles	Analys	sis Date			_			Other		- 2		V.
Analyst Jurisdiction	IM	ax Ruscii		Time F		PM Pe	nok		Area Typ PHF	е	0.94		^ - ·		-
	D.	attaman Dd		_		_	ean			Dorind	_	20	- 3-4		7
Urban Street Intersection		atterson Rd arket Street/Mall /	A 000		sis Year	_	on DM v		Analysis	Period	1> 7:0	00	- 6		-
		arket Street/Mail /	Acce	File Na	ame	EXISUI	ng PM.x	us					- 4	1 1	eld.
Project Description	n	_	_			_	_		_			_	-	N. S. P. L.	epe.
Demand Informati	tion				EB			WE	3		NB			SB	
Approach Moveme				T	ΙT	T R	1	T	R	1	ΤT	R	1	ΙT	R
Demand (v), veh/l				83	435	86	28	756	_	76	46	22	228	21	179
Demand (V), Verin	V11			0.5	433	- 00	20	730	250	10	40	22	220	21	113
Signal Information	on			_		$\overline{}$									1
		Reference Phase	2		- X	=======================================	4		V		-		4		4
	0 R	Reference Point	Begin	_	1.5	2	3	\rightarrow	17	-		1	2	3	4
		simult. Gap E/W	On	Green Yellow		2.2 3.5	56.7 4.0	9.7 4.0	4.0	0.0		7	}		rt-
		imult. Gap N/S	On	Red	0.5	0.5	1.0	1.0	1.0	0.0		5	6	7	Y
Torce mode Ti	ixed e	minut. Oup 100	Oll					1110							
Timer Results				EBI		EBT	WB	L	WBT	NBL		NBT	SBL		SBT
Assigned Phase	igned Phase					2	1	\neg	6		$\overline{}$	8		\neg	4
Case Number				1.1	\rightarrow	4.0	1.1	\rightarrow	3.0			11.0		-	10.0
Phase Duration, s				11.7	_	67.9	5.5	_	61.7		$\overline{}$	14.7			22.0
Change Period, (Y		s		4.0	_	5.0	4.0	-	5.0			5.0	_		5.0
Max Allow Headwa				3.1	\rightarrow	0.0	3.1	\rightarrow	0.0		_	3.3	-	-	3.4
Queue Clearance				7.4	-	0.0	2.3	_	0.0			9.6	_		15.9
Green Extension T				0.3	_	0.0	0.0	_	0.0		_	0.2	-	_	1.0
Phase Call Probab		, e ,, s		1.00	$\overline{}$	0.0	0.29	-	0.0			0.99	_		1.00
Max Out Probability				0.00	\rightarrow		0.00	_			\rightarrow	0.00	_	_	0.00
Max Out 1 Tobability	ıty			0.00			0.00					0.00	_		0.00
Movement Group	n Resul	ts			EB		_	WB			NB		_	SB	
Approach Moveme				L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Movemen	ent			5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate		veh/h		198	639	605	11	307	104		130	23	243	213	
Adjusted Saturation	on Flow	Rate (s), veh/h/l	ln	1810	1885	1777	1810	1795	1610		1843	1610	1757	1636	
Queue Service Tim				5.4	28.6	29.5	0.3	6.3	5.1		7.6	1.5	6.9	13.9	
Cycle Queue Clear		••		5.4	28.6	29.5	0.3	6.3	5.1		7.6	1.5	6.9	13.9	
Green Ratio (g/C)		(g - // -		0.60	0.57	0.57	0.53	0.52	_		0.09	0.09	0.15	0.15	
Capacity (c), veh/	_			691	1077	1015	219	1849	_		163	142	542	252	
Volume-to-Capacity)(X)		0.287	0.593	_		0.166	_		0.798	0.165	0.448	0.844	
Back of Queue (Q		` ')	79.8		387.5	5	103.7	_		134.6	24	115.8	197.5	
Back of Queue (Q				3.6	17.8	17.6	0.2	4.7	3.6		6.1	1.1	5.3	9.0	
Queue Storage Ra				0.55	0.00	0.00	0.05	0.00	_		0.00	0.00	0.00	0.00	
Uniform Delay (d 1				10.1	21.7	22.9	14.8	18.6	_		49.2	46.4	42.3	45.2	
Incremental Delay				0.1	2.0	2.1	0.0	0.2	0.3		3.4	0.2	0.2	3.0	
Initial Queue Delay				0.0	0.0	0.0	0.0	0.2	0.0		0.0	0.0	0.0	0.0	
Control Delay (d),				10.2	23.6	25.0	14.9	18.7	20.6		52.6	46.6	42.5	48.2	
Level of Service (L				B	C	C	B	В	C		D	D	D D	D 40.2	
Approach Delay, s/		OS		22.4		С	19.1		В	51.6		D	45.2		D
Intersection Delay,				22.4			7.8			31.0			C 45.2		
	s/veh	/TOS				21	.0						_		
microection Delay,	, s/veh	LOS													
		LOS			FR			WR			NR			SR	
Multimodal Result Pedestrian LOS So	ılts			1.89	EB	В	2.09	WB	В	2.48	NB	В	2.30	SB	В

		HCS	7 Sig	nalize	d Int	ersec	tion F	lesul	ts Sun	nmar	у				
General Informa	ation								ntersect	tion Inf	ormatic	\n		4.4413	되민
	ation	Stolfus and Associa	otos					-	Duration,		0.250		- 1	41	
Agency			ates	Anaha	is Data	_		_			_		- 2		N. A.
Analyst Jurisdiction		Max Rusch		Time F	sis Date	PM P	ook	_	Area Typ PHF	е	Other 0.91		^ - ·		-
		Patterson Rd		_		_	san			Dorind	_	20	- 3 -v		=
Urban Street			20/140		sis Year	_	na DM v		Analysis	Period	1> 7:0	JU	- 6		-
Intersection		Home Depot Acces	ss/me	File Na	ame	EXIST	ng PM.x	us					- 4	1/	700
Project Descripti	on												_	N I W I I	MINI
Demand Inform	ation				EB			WB			NB			SB	
Approach Mover				ī	T T	T R	1	T T	R	1	T	R	1	T T	R
Demand (v), ve				58	598	44	74	879	_	59	22	88	89	13	89
Demand (V), ve	IIVII			30	390	44	14	019	03	39		00	09	13	09
Signal Informat	ion			_		$\overline{}$		JIL					K.	-	_
	110.0	Reference Phase	2		7 K	-3	4.3	842	100	6.00		_	7		V
Offset, s	43	Reference Point	Begin		- 7	2	- 2		51			1	2	3	
Uncoordinated	No	Simult. Gap E/W	Off	Green		1.6	66.3	10.1		0.0		_	_		λ
	Fixed	Simult. Gap N/S	Off	Yellow Red	0.5	0.0	1.0	1.0	4.0 1.0	0.0			€ .	7	.+=
1 Orce Wode	. ixeu	Omituit. Oap N/O	Oil			0.0	1.0	1.0	1.0	0.0					
Timer Results						EBT	WB		WBT	NBL		NBT	SBI		SBT
Assigned Phase						6	5	_	2			4		_	8
Case Number	se Number					4.0	1.1	\rightarrow	3.0		-	11.0	_		10.0
Phase Duration,	e			9.2	_	73.0	7.6	_	71.3	-	-	14.3	_	_	15.1
Change Period,		.) e		4.0	_	5.0	4.0	-	5.0		_	5.0	_	$\overline{}$	5.0
Max Allow Head				5.2	\rightarrow	0.0	5.2	\rightarrow	0.0	-	_	5.5	-	$\overline{}$	5.5
Queue Clearanc				4.8	-	U.U	2.9		0.0		_	8.3	_	$\overline{}$	9.3
				0.6	_	0.0	0.2	_	0.0	\vdash	-	1.0	_	-	0.8
Green Extension Phase Call Prob		(g e), S		0.0	$\overline{}$	U.U	0.72	_	U.U		_	1.00	_	_	1.00
				0.00	_		0.72	\rightarrow		_	\rightarrow			\rightarrow	0.09
Max Out Probab	ility			0.00			0.00	_				0.00	_		0.09
Movement Grou	un Res	ults			EB			WB			NB			SB	
Approach Mover	_	· unto		L	T	R	L	T	R	L	T	R	L	T	R
Assigned Moven				1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow R) veh/h		121	677	663	42	500	37	<u> </u>	89	97	98	112	
-		ow Rate (s), veh/h/l	'In	1781	1885	1839	1810	1809	1610		1833	1585	1810	1642	
Queue Service T				2.8	20.4	20.2	0.9	10.1	1.7		5.1	6.3	5.7	7.3	
Cycle Queue Cle				2.8	20.4	20.2	0.9	10.1	1.7		5.1	6.3	5.7	7.3	
Green Ratio (g/		c fillic (g c), 3		0.65	0.62	0.62	0.64	0.60	0.60		0.08	0.12	0.09	0.09	
Capacity (c), ve				594	1165	1136	297	2181	_		155	186	167	151	
Volume-to-Capa		tio (X)		0.204	0.581			0.229	-		0.574	0.520	0.587	0.741	
		In (90 th percentile))	41.9		227.6	13.4	154.9			101.7	106.3	108.9	127.4	
		eh/In (90 th percent		1.9	10.7	10.3	0.6	7.0	1.1		4.6	4.8	4.9	5.8	
		RQ) (90 th percent		0.32	0.00	0.00	0.12	0.00	0.00		0.00	1.20	0.82	0.00	
Uniform Delay (ille)	8.0	9.7	9.4	8.9	16.3	14.8		48.4	45.6	47.9	48.7	
Incremental Dela				0.2	1.9	2.0	0.3	0.2	0.1		48.4	3.2	47.9	9.7	
						0.0		0.2	0.1		0.0				
Initial Queue Del				0.0 8.2	0.0	11.4	9.2	16.6	14.9		53.2	0.0 48.8	0.0 52.5	0.0 58.4	
Control Delay (o					11.6		_	_	_						
Level of Service				A 11.3	В	В	A 15.0	B	B	50.0	D	D	D 55.7	E	_
Approach Delay,				11.2		B 46	15.9	,	В	50.9	,	D			E
Intersection Dela	ay, s/ve	en / LOS				19	9.2						В		
Multimodal Res	ulte				EB			WB			NB			SB	
	- Line				_					2.11		_		_	
Pedestrian LOS	Score	/1.0S		1.88	}	В	1.88	3	В	2.46	j II	В	2.32	, I	В

		HCS	7 Sig	nalize	d Int	ersec	tion R	Resu	ilts Sur	nmar	У				
General Inform	ation								Intersec	tion Inf	ormatic	n.		a Ade I I	slu
	iation	Stolfus and Associa	otos					-	Duration		0.250		1	itti	
Agency			ates	Analys	in Date								- 2		V.
Analyst Jurisdiction		Max Rusch		Analys		PM P	ook	-	Area Typ	е	Other 0.91				<u></u>
		Detteres Dd		Time F			eak	-		Desired		20	- 3 -		-
Urban Street		Patterson Rd				2020	ng PM.x		Analysis	Period	1> 7:(JU	- B		7
Intersection	4:	24 1/2 Rd & Patters	son	File Na	ime	EXISU	ig Pivi.x	us					- "	111	eld.
Project Descrip	tion		_	-	-	_	-	-	_	-	-	-			
Demand Inform	nation				EB		$\overline{}$	W	В	$\overline{}$	NB		$\overline{}$	SB	
Approach Move	ement			L	Т	R	L	T	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			53	515	161	204	72	0 174	219	222	166	170	208	80
Signal Informa	tion				7	*	= .		5	213			4		
Cycle, s	110.0	Reference Phase	2		- 6	2	T 🗮 🐣	- 6	5 5	7 5	2			>	Y
Offset, s	23	Reference Point	Begin	Green	5.3	0.5	58.3	9.0		13.0					1
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.0	3.5	3.5	4.0		<u>_</u> _	<u> </u>	~	4
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.5	0.5	0.5	1.0		5	₹ 6	7	8
	ner Results														
Timer Results				EBL 1	-	EBT	WB	<u>-</u>	WBT	NBI	-	NBT	SBL	-	SBT
	mer Results ssigned Phase ase Number hase Duration, s hange Period, (Y+R c), s ax Allow Headway (MAH), s ueue Clearance Time (g s), s					6	5	-	2	7	_	4	3	-	8
	nase Number nase Duration, s nange Period, (Y+R c), s					4.0	1.1	-	4.0	1.1	-	4.0	1.1	-	3.0
				9.3	_	63.8	9.7	\rightarrow	64.3	18.4	_	23.4	13.0		18.0
				4.0	-	5.5	4.0	_	5.5	4.0	\rightarrow	5.0	4.0	_	5.0
				5.2	_	0.0	5.2	\rightarrow	0.0	5.2	\rightarrow	5.2	5.2	$\overline{}$	5.2
Queue Clearan	ce Time	e (gs), s		5.1	-		5.4	_		14.4		15.0	11.0		8.7
Green Extension		(ge), S		0.4	_	0.0	0.5	\rightarrow	0.0	0.1	_	3.4	0.0	\rightarrow	3.6
Phase Call Pro	_			0.97	\rightarrow		0.98	-		1.00	\rightarrow	1.00	1.00	-	1.00
Max Out Proba	bility			0.01	_		0.00			1.00		0.36	1.00		0.30
Movement Gro	un Pas	eulte			EB			WE	2		NB			SB	
Approach Move	_	suits			T	R	L	T	R	L	T	R	L	T	R
Assigned Move				1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F) veh/h		112	740	692	123	277		241	224	202	187	229	88
		ow Rate (s), veh/h/	ln.	1781	1885	1732	1795	188		1810	1885	1622	1795	1781	1585
Queue Service				3.1	31.2	29.8	3.4	5.8	_	12.4	12.4	13.0	9.0	6.7	5.7
Cycle Queue C				3.1	31.2	29.8	3.4	5.8		12.4	12.4	13.0	9.0	6.7	5.7
Green Ratio (g		e fille (gt), s		0.58	0.53	0.53	0.58	0.53	_	0.27	0.17	0.17	0.20	0.12	0.12
Capacity (c), v				552	1000	918	252	100		365	316	272	243	421	188
Volume-to-Capa		atio (X)		0.203	0.740	_	0.489	0.27	_	0.659	0.710	0.743	0.770	0.542	0.469
		/In (90 th percentile)	50.3	382.9		57.3	90.1	_	195.6	204.2	192	186.6	116.6	94.6
		eh/ln (90 th percent		2.3	17.3	14.2	2.6	4.1		8.9	9.2	8.7	8.4	5.2	4.2
		RQ) (90 th percen		0.38	0.00	0.00	0.43	0.00	_	1.48	0.00	0.00	1.41	0.00	0.00
Uniform Delay				11.1	16.7	13.9	17.4	8.2	_	34.5	43.2	43.5	41.0	45.7	45.3
Incremental De				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 De	elay (d	з), 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 (••		11.4	21.1	19.0	19.3	8.8	_	39.1	47.5	49.8	55.8	47.2	47.8
Level of Service				В	С	В	В	Α	Α	D	D	D	Е	D	D
Approach Delay				19.5		В	10.6		В	45.2		D	50.5		D
Intersection De							7.4						С		
Multimodal Re	sults				EB			WE	3		NB			SB	
Pedestrian LOS	Score	/LOS		2.26		В	2.41	1	В	2.30		В	2.31		В
Bicycle LOS Sc	ore / LC	os		1.15		Α	1.48	3	Α	1.04		Α	0.90		Α

HCS7 Signalized Intersection Results Summary General Information Intersection Information Duration, h 0.250 Agency Stolfus and Associates Analyst Max Rusch Analysis Date Area Type Other PHF 0.90 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2020 1> 7:00 Analysis Period 25 Road & Patterson Intersection File Name Existing PM.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L 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 2 510 102 Reference Point Offset, s Begin Green 16.9 40.2 12.5 21.4 0.0 0.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 4.5 3.5 4.0 0.0 0.0 0.0 Force Mode Fixed Simult. Gap N/S On Red 0.5 1.5 0.5 1.0 0.0 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 4 3 8 1 7 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 6.0 6.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 4.0 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 5.2 5.2 52 52 Queue Clearance Time (gs), s 5.6 6.5 11.6 21.7 13.1 21.3 Green Extension Time (ge), 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 1.00 1 00 Max Out Probability 0.02 0.04 1.00 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 131 890 872 141 318 304 200 342 179 228 334 123 Adjusted Flow Rate (v), veh/h 1810 1885 1795 1885 1781 1885 1598 1795 1870 1610 Adjusted Saturation Flow Rate (s), veh/h/ln 1778 1786 3.6 40.2 40.2 12.0 12.9 9.6 19.7 9.0 11.1 19.3 7.3 Queue Service Time (g s), s 45 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) 0.37 0.37 0.35 0.31 0.52 0.37 0.52 0.37 0.31 0.19 0.19 0.19 Capacity (c), veh/h 530 689 650 341 689 653 269 367 556 269 364 313 1 291 1 342 0 412 0.462 0.465 0.933 0.322 0.845 0.919 0.394 Volume-to-Capacity Ratio (X) 0.247 0.744 Back of Queue (Q), ft/ln (90 th percentile) 56.2 1399 1481. 79.1 168.5 177.5 184.7 373.2 134.3 221.2 363.5 120.5 3 6 Back of Queue (Q), veh/ln (90 th percentile) 2.6 63.1 66.3 36 7.6 79 8.3 168 61 10.0 16.3 55 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 39.5 20.4 43.6 Uniform Delay (d 1), s/veh 11.9 40.3 20.7 22.5 31.7 26.3 32.2 43.5 38.6 Incremental Delay (d 2), s/veh 1.0 141.2 163.2 3.1 1.9 20 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) В F C C D F С F D F 179.6 F 23.4 С Е Approach Delay, s/veh / LOS 56.7 63.2 F Intersection Delay, s/veh / LOS 108.8 Multimodal Results ΕB WB NB SB Pedestrian LOS Score / LOS 2.13 В 2.11 В 2.30 В 2.30 В Bicvcle LOS Score / LOS 1.36 Α 1.59 1.68 В 1.62 В

	HCS	7 Sig	nalize	d Int	ersec	tion F	Resu	ılts Su	mmar	У				
General Information								Interse	tion Inf	ormatic	on		4741	ie l
Agency	Stolfus and Associa	ates						Duration	ı, h	0.250)		7.4	
Analyst	Max Rusch		Analys	is Dat	е			Area Ty	pe	Other	7	<u> </u>		٠
Jurisdiction			Time F	eriod	PM P	eak		PHF		0.89		\$ →	= 1	==
Urban Street	Patterson Rd		Analys	is Yea	r 2020			Analysis	Period	1> 7:0	00	7		¥ .
Intersection	25 1/2 Road & Patt	terson	File Na	ame	Existi	ng PM.x	us						110	
Project Description												T	A F SY	HIM
Demand Information				ED.			10/	n	-	ND			OD	
Approach Movement				EB T	R	+-	T T		+-	NB T	R	1	SB T	R
Demand (v), veh/h			36	1077	-	182	_	_	_	145	189	185	118	46
Demand (v), vervii			30	1071	69	102	10	79 104	92	143	109	163	110	40
Signal Information					15	_			4			<u> </u>		
Cycle, s 110.0	Reference Phase	2	1	- K	- 2		٠,		17	_			1	V
Offset, s 28	Reference Point	Begin	Green	6.2	1.5	54.5	11.				1	2	3	1 4
Uncoordinated No	Simult. Gap E/W	On	Yellow		0.0	4.5	3.5		0.0			я 📗	~	ለ ሀ
Force Mode Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.5	0.5		0.0		5	ያ ፣	7	8
Timer Results			EBL 1	-	EBT 6	WB	니	WBT	NB	L	NBT	SBL		SBT
Assigned Phase						5	\rightarrow	2	7	_	4	3	\rightarrow	8
Case Number			1.1	-	4.0	1.1	$\overline{}$	4.0	1.1	$\overline{}$	3.0	1.1	-	4.0
Phase Duration, s			10.2	_	60.5	11.8	$\overline{}$	62.1	15.0	-	22.7	15.0		22.7
Change Period, (Y+R			4.0	_	6.0	4.0	_	6.0	4.0	_	5.0	4.0	-	5.0
Max Allow Headway (5.2	_	0.0	5.2	_	0.0	5.2	-	5.3	5.2	$\overline{}$	5.3
Queue Clearance Time			3.4	-		5.2	_		7.0	_	16.0	12.6	_	12.7
Green Extension Time	(ge), S		0.1	_	0.0	0.3	$\overline{}$	0.0	0.1	-	1.7	0.0	$\overline{}$	2.3
Phase Call Probability			0.78	_		0.97	-		1.00		1.00	1.00	\rightarrow	1.00
Max Out Probability			0.00		_	0.02	2	_	1.00	,	0.85	1.00		0.39
Movement Group Res	sults			EB			WE	3	_	NB			SB	
Approach Movement			L	Т	R	L	Т	R	L	Т	R	L	Т	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	\Box
Adjusted Saturation Flo	ow Rate (ε), veh/h/	'in	1767	1885	1834	1795	188	5 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 Clearanc	e 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 Ra	atio (X)		0.112	0.860	0.869	0.503	0.39	0 0.391	0.346	0.541	0.819	0.673	0.643	
Back of Queue (Q), ft	/In (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), v		_	0.9	26.1	26.1	2.8	7.4	_	4.3	6.8	9.8	8.5	7.8	ш
Queue Storage Ratio (tile)	0.15	0.00	0.00	0.47	0.00	_	0.87	0.00	2.45	1.43	0.00	\vdash
Uniform Delay (d 1), s			11.2	27.0	27.2	24.6	14.1	_	32.7	42.4	44.6	34.6	43.2	ш
Incremental Delay (d a			0.1	9.3	10.2	2.0	1.0	_	3.2	2.1	14.1	11.2	3.7	\vdash
Initial Queue Delay (d			0.0	0.0	0.0	0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/v			11.3	36.3	37.4	26.6	15.0	$\overline{}$	35.8	44.6	58.7	45.8 D	46.8	
Level of Service (LOS) Approach Delay, s/veh			B 26.1	D	D D	C 16.0	B	B	D 40.0	D	E	D 46.3	D	D
			36.1			16.0	,	В	49.0	,	D		·	D
Intersection Delay, s/ve	en / LUS				34	1.0						С		
Multimodal Results				EB			WE	3		NB			SB	
Pedestrian LOS Score	/LOS		2.09	_	В	1.90	_	В	2.30	_	В	2.30	_	В
Bicycle LOS Score / LO			1.60		В	1.75	_	В	1.28		Α	1.13	-	Α

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.93 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2020 Analysis Period 1> 7:00 1st Street & Patterson Intersection File Name Existing PM.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L 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 74 Reference Point Offset, s Begin Green 6.8 1.0 59.6 7.5 0.5 16.2 Uncoordinated No Simult, Gap E/W On Yellow 3.5 0.0 3.0 3.5 0.0 4.0 0.0 1.0 Force Mode Fixed Simult. Gap N/S On Red 0.5 0.0 2.5 0.5 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 5.5 4.0 5.5 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 5.3 52 53 Queue Clearance Time (gs), s 3.5 4.9 7.1 14.0 6.5 9.6 Green Extension Time (ge), s 0.2 0.0 0.5 0.0 0.5 2.7 02 3.1 Phase Call Probability 0.85 0.97 1.00 1.00 0.93 1.00 0.70 0.19 0.37 0.08 Max Out Probability 0.00 0.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 1 6 5 2 7 4 8 18 62 1358 189 114 360 354 198 192 197 88 142 40 Adjusted Flow Rate (v), veh/h 1795 1610 1781 1885 1757 1885 1598 1795 1885 1610 Adjusted Saturation Flow Rate (s), veh/h/ln 1781 1851 1.5 25.1 3.6 2.9 6.9 5.1 10.6 12.0 4.5 7.6 2.2 Queue Service Time (g s), s 6.6 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 0.55 0.55 0.22 0.22 0.22 0.61 0.15 0.15 0.21 Capacity (c), veh/h 521 1943 989 296 1037 1018 576 287 356 225 278 337 0.119 0.699 0.191 0.386 0.347 0.348 0.343 0.671 0.553 0.392 0.511 0.118 Volume-to-Capacity Ratio (X) 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 21 4.0 3.8 4.0 8.1 7.6 3.7 6.1 1.6 0.17 0.00 0.34 0.44 0.00 0.00 0.66 0.00 0.73 0.00 0.00 Queue Storage Ratio (RQ) (90 th percentile) 1.28 Uniform Delay (d 1), s/veh 88 11 8 54 143 6.9 6.5 35.8 44 0 37.9 364 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 74 7.0 36.3 47.9 39.8 37.9 45.3 35.5 Level of Service (LOS) R В D D D D Α Α D D Α Α 12.5 В 8.3 41.3 41.5 Approach Delay, s/veh / LOS Α D n Intersection Delay, s/veh / LOS 19.0 В Multimodal Results WB NB Pedestrian LOS Score / LOS 2.26 В 2.09 В 2.30 В 2.46 В Bicycle LOS Score / LOS 1.75 В 1.69 В 1.46 A 0.93 A

		HCS	7 Sig	nalize	d Int	ersec	tion R	Resi	ults Su	mmar	у				
General Inform	nation								Intoreo	ction Inf	ormatic	n.		4 Adell	slu
	lation	Stolfus and Associa	otos						Duration		0.250		- 1	1111	
Agency			ales	Analys	in Date								- 2		V.
Analyst Jurisdiction		Max Rusch		Analys		PM P	nok		Area Ty	pe	Other 0.93		- = =	m 1	→
		Detterre Dd		Time F			eak			Desiral		20	- 1		-
Urban Street Intersection		Patterson Rd 7th Street & Patters	200			2020	ng PM.x		Analysis	Period	1> 7:	00	- R		Ž
	tion	rui Sireei & Paller	SON	File Na	ime	EXISU	ig PM.x	us					- 4	1111	HICI.
Project Descrip	tion		_	-	-	_	-		_	_	-	-			
Demand Inform	nation				EB			W	/B	$\overline{}$	NB		$\overline{}$	SB	
Approach Move	ement			L	Т	R	L	Т	T R	L	T	R	L	T	R
Demand (v), v	eh/h			142	1204	163	104	9:	20 46	247	407	197	66	255	174
Signal Informa	_				7	- 7	1	=	5	2 di	L		_		
Cycle, s	110.0	Reference Phase	2		1	R	1	2	2 24	17 5	12		2	3	Y
Offset, s	15	Reference Point	Begin	Green	7.5	0.4	46.5	7.						1	1
			On	Yellow		3.5	4.0	3.					→ -	· /·	4
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.5	1.0	0.	5 0.5	1.0	-	5	¥ 6 ,	↓ 7	8
Timor Doculte	mer Results signed Phase					EBT	WB		WBT	NBI		NBT	SBI		SBT
	ncoordinated No Simult. Gap E/W orce Mode Fixed Simult. Gap N/S of the Results signed Phase asse Duration, stange Period, (Y+Rc), stange Period, (Y+Rc), stange Period (MAH), stange Clearance Time (gs), stange Period (ge), s					6	5	-	2	7		4	3	-	8
Case Number	mer Results signed Phase ase Number ase Duration, s nange Period, (Y+Rc), s ax Allow Headway (MAH), s ueue Clearance Time (gs), s een Extension Time (ge), s					3.0	2.0	-	4.0	1.1		3.0	1.1		3.0
	nase Number nase Duration, s nange Period, (Y+R c), s					55.9	11.5	-	51.5	19.4	-	31.6	11.1		23.3
	use Number uase Duration, s uange Period, (Y+R c), s uax Allow Headway (MAH), s					5.0	4.0	\rightarrow	5.0	4.0		5.0	4.0		5.0
				4.0 5.2	_	0.0	5.2	\rightarrow	0.0	5.2	\rightarrow	5.2	5.2	_	5.2
				11.6		0.0	7.2	\rightarrow	0.0	14.8	_	12.9	5.5	-	12.9
				0.4	_	0.0	0.2	_	0.0	0.6	_	7.2	0.1	_	5.4
		(3-7-		0.99			0.93	\rightarrow		1.00	-	1.00	0.89		1.00
Max Out Proba	nase Duration, s hange Period, (Y+R c), s ax Allow Headway (MAH), s ueue Clearance Time (g s), s reen Extension Time (g e), s hase Call Probability ax Out Probability						0.01	\neg		1.00		0.20	1.00		0.50
Movement Gro	_	sults		_	EB		_	W		-	NB		_	SB	
Approach Move				L	T	R	L	T		┡	T	R	L	T	R
Assigned Move				1	6	16	5	2	_	7	4	14	3	8	18
Adjusted Flow		••		156	1326	151	89	414	_	266	438	198	71	274	187
		ow Rate (s), veh/h/	'in	1795	1795	1438	1795	188	_	1810	1795	1590	1810	1781	1562
Queue Service				9.6	30.6	2.7	5.2	17.	_	12.8	10.9	10.1	3.5	7.7	10.9
Cycle Queue C Green Ratio (g		e Time (gε), s		9.6 0.11	30.6 0.46	0.60	5.2 0.07	17. 0.4		12.8 0.32	10.9 0.24	0.31	3.5 0.23	7.7 0.17	10.9 0.27
Capacity (c), v				193	1659	889	122	79	_	410	868	493	283	591	430
Volume-to-Cap		atio (V)		0.809	0.799	_	0.729	0.51	_	_	0.504		0.251	0.464	0.435
		/In (90 th percentile)	172.2		_	91.1	25	_	_	159.6		61.6	128.5	151.8
		eh/ln (90 th percent		7.8	14.3	1.4	4.1	11.		8.9	7.2	6.1	2.8	5.7	6.8
		RQ) (90 th percen		0.98	0.00	0.19	0.69	0.0	_	0.89	0.00	0.77	0.56	0.00	0.00
Uniform Delay				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 De	lay (d 2), s/veh		9.8	3.4	0.3	8.5	1.8	3 1.8	2.9	0.6	0.8	0.7	0.8	1.0
Initial Queue De	elay (d	з), 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/v	eh		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	e (LOS)			E	С	Α	D	С	С	С	С	С	С	D	С
Approach Delay	y, s/veh	/LOS		23.1		С	28.1		С	31.5	5	С	38.3	3	D
Intersection De	lay, s/ve	eh / LOS				28	3.2						С		
Marking								140			NO			0.5	
Multimodal Re		11.00		244	EB	D	2.42	W		0.00	NB	D	0.40	SB	<u> </u>
Pedestrian LOS				2.44	_	В	2.43	\rightarrow	B	2.30		B	2.49	_	B
Bicycle LOS So	ore / LC	Jo		1.80		В	1.43		Α	1.23	<u> </u>	Α	0.93)	Α

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.95 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2020 Analysis Period 1> 7:00 12th Street & Patterson Intersection File Name Existing PM.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R Demand (v), veh/h 89 1185 175 152 692 52 212 364 216 136 416 112 Signal Information Д. Cycle, s 110.0 Reference Phase 2 STO 85 Reference Point Offset, s Begin Green 12.5 44.0 10.3 2.6 18.1 0.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 4.0 3.5 3.5 4.0 0.0 0.0 Force Mode Fixed Simult. Gap N/S On Red 0.5 1.5 0.5 1.0 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 5.5 4.0 5.5 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 52 52 52 Queue Clearance Time (gs), s 5.2 9.1 12.3 14.1 9.0 18.8 Green Extension Time (ge), 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 0.23 0.59 1 00 1.00 Max Out Probability 1.00 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 97 1295 191 210 521 508 223 383 227 143 287 269 Adjusted Flow Rate (v), veh/h 1810 1809 1593 1795 1885 1809 1598 1810 1885 1741 Adjusted Saturation Flow Rate (s), veh/h/ln 1781 1838 3.2 36.3 7.1 25.5 25.8 10.3 10.1 12.1 7.0 16.5 16.8 Queue Service Time (g s), s 6.1 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 0.34 0.22 0.34 0.26 0.40 0.40 0.16 0.16 Capacity (c), veh/h 349 1447 883 288 754 735 354 812 540 329 310 287 0.279 0.895 0.217 0.730 0.691 0.691 0.631 0.472 0.421 0.435 0.925 0.938 Volume-to-Capacity Ratio (X) 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 0.32 0.00 0.55 0.49 0.00 0.00 0.81 0.00 0.78 0.96 0.00 0.00 Queue Storage Ratio (RQ) (90 th percentile) Uniform Delay (d 1), s/veh 196 286 11 0 222 28.3 292 294 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 6 336 37.7 39 0 30.5 37.2 80.4 84.9 Level of Service (LOS) С C В С С D n С D С F 30.8 C 33 4 C 36.3 D 73.3 Approach Delay, s/veh / LOS E Intersection Delay, s/veh / LOS 39.4 D Multimodal Results WB NB Pedestrian LOS Score / LOS 2.43 В 2.28 В 2.30 В 2.46 В Bicycle LOS Score / LOS 1.75 В 1.27 A 1.18 A 1.06 A

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resul	ts Sun	nmar	У				
General Inform	ation								Intersect	ion Inf	ormatic	n.		4.441	되면
Agency	lation	Stolfus and Associa	ntoe						Duration,		0.250		1	46	
		Max Rusch	alco	Analys	sis Date			_			Other		- 2		V.
Analyst Jurisdiction		Max Ruscii		Time F		PM P	ook		Area Typ PHF	e	0.95		^		-
		Patterson Rd		_		_	ean			Dorind	_	20	- 3 -v		-
Urban Street Intersection		Patterson Rd & 15t	th Ct	File Na	sis Year		ng PM.x		Analysis	Period	1> 7:0	JU	- B		-
	lion	ratterson Ru & 15t	ıı ət	rile iva	ame	EXISU	ng FIVI.X	us					- 4	1 1 2 70	e c
Project Descript	lion														
Demand Inform	nation				EB			WE	3		NB			SB	
Approach Move				T	ΙT	T R	1	T	R	1	ΤT	R	1	Ιτ	R
Demand (v), v				90	1577	-	35	100	_	20	6	53	65	5	85
Demand (V), V	CIVII			30	1311	33	33	100	2 33	20		33	0.5	, ,	0.5
Signal Informa	tion		_	_		$\overline{}$	-			$\overline{}$			K		1
Cycle, s	110.0	Reference Phase	2		7 6	=3	4	- FE	0.2				7		4
Offset, s	88	Reference Point	Begin	_		3	30.4	25	17	-		1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow		1.0 0.0	83.4 3.5	8.5 3.5	0.0	0.0		_	,		rt-
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0	1.0	1.0	0.0	0.0		5	♦ 。	7	Y
T CIGO III GGC	Tinou	Omnun. Gup 1476	0										_		
Timer Results				EBI		EBT	WB	L	WBT	NBI		NBT	SBI		SBT
Assigned Phase	-			1		6	5	\neg	2			8		\neg	4
Case Number				1.1	\neg	4.0	1.1	\rightarrow	4.0			7.0			7.0
Phase Duration	S			9.1		88.9	8.1	-	87.9		\neg	13.0		\neg	13.0
Change Period,		c) S		4.5	_	4.5	4.5	_	4.5			4.5			4.5
Max Allow Head				3.1	_	0.0	3.1	\rightarrow	0.0		_	3.3	-	$\overline{}$	3.3
Queue Clearan				3.1	-	0.0	2.6	-	0.0			5.7	_	_	8.1
Green Extensio				0.1	_	0.0	0.0	_	0.0		_	0.4		_	0.4
Phase Call Prot		(ge), 3		0.92	-	0.0	0.72	-	0.0			1.00		_	1.00
Max Out Probat				0.00	\rightarrow		0.00	_	_		\rightarrow	0.00	_	\rightarrow	0.00
Wax Out 1 lobal	Jility			0.00			0.00					0.00	_		0.00
Movement Gro	up Res	sults			EB			WB			NB			SB	
Approach Move	_			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow F), veh/h		83	750	745	42	632	624		27	56		74	89
_		ow Rate (s), veh/h/	ln	1781	1856	1840	1781	1885	1860		1522	1585		1435	1585
Queue Service				1.1	9.9	10.1	0.6	9.6	9.3		0.0	3.7		3.8	6.1
Cycle Queue Cl				1.1	9.9	10.1	0.6	9.6	9.3		1.7	3.7		5.5	6.1
Green Ratio (g		z mine (g z n z		0.80	0.77	0.77	0.79	0.76	-		0.08	0.08		0.08	0.08
Capacity (c), v	_			437	1424	1412	355	1430	-		175	122		174	122
Volume-to-Capa		itio (X)		0.191	0.527		0.119	0.442	-		0.156	0.457		0.425	0.733
		/In (90 th percentile)	9.9	90.1	88.7	5.5	90.9	86.4		28.7	60.2		80.3	100.9
		eh/ln (90 th percent		0.4	4.0	4.0	0.2	4.1	3.9		1.3	2.7		3.6	4.5
		RQ) (90 th percen		0.12	0.00	0.00	0.06	0.00	0.00		0.00	1.36		0.00	2.28
Uniform Delay (,,,,,	2.8	2.1	2.2	3.2	3.0	2.8		47.6	48.6		49.4	49.7
Incremental Del				0.1	1.1	1.1	0.0	0.6	0.7		0.2	1.0		0.6	3.2
Initial Queue De				0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (••		2.9	3.3	3.3	3.2	3.6	3.5		47.8	49.6		50.0	52.8
Level of Service				A	A	A	A	A	A		D D	D		D	D
Approach Delay				3.3		A	3.5		A	49.0		D	51.6		D
Intersection Del				3.3			.1		,,	73.0			A		
microccion Del	ay, arve	LOO					. 1								
Multimodal Re	sults				EB			WB			NB			SB	
Pedestrian LOS		/10S		1.84	_	В	1.84		В	2.31		В	2.31		В
Bicycle LOS Sc				1.97		В	1.42	_	A	0.62	_	A	0.76	_	A
Diojoio E00 00	3,5 / LC			1.31			1.42		, ,	0.02		,,	0.70		7.1

		HCS	7 Sig	nalize	d In	ersec	tion F	Resul	ts Sun	nmary	/				
General Inform	ation								Intersect	ion Inf	rmatic	. n	1	d Adel	ोह्म ए
	lation	Stolfus and Associa	atoo								0.250		- 1	JŲ	
Agency			ates	Anabe	io Dot			_	Duration,		_		- 2		V.
Analyst		Max Rusch		Analys			l:	_	Area Typ	9	Other			m = 1	-
Jurisdiction		D-# D4		Time F		PM P	еак	_	PHF	D11	0.99	20	- 3		
Urban Street		Patterson Rd		Analys				_	Analysis	Period	1> 7:	00	- 6		÷
Intersection		27 1/2 Road & Patt	erson	File Na	ame	EXIST	ng PM.x	us					- 1		
Project Descript	tion		_	_	_	_	_	_	_	_	_	_		M P P	pepo
Demand Inform	nation				EB			WE	3		NB		_	SB	
Approach Move					ΤŢ	R	1	T	R	1	ΤT	R	1	ΤŢ	R
Demand (v), v				138	1436	_	+-	822	_	÷	÷	+"	545	÷	124
Demand (V), V	CIVII			130	1430		•	022	. 342				343		124
Signal Informa	tion						ا ارات		$\overline{}$	$\overline{}$			K.	_	
Cycle, s	110.0	Reference Phase	2		≓	T							-		^
Offset, s	88	Reference Point	Begin			-	-	ا ــــ		٠		- 1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Green		64.4	20.3	0.0	0.0	0.0			_		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow Red	0.5	4.5 1.5	1.0	0.0	0.0	0.0		5	→ 』	7	
1 Orce Mode	TIACU	Ollifult. Cap 14/0	Oil	Ittou	0.0	1.0	1.0	0.0	0.0	0.0					
Timer Results				EBI		EBT	WB	L	WBT	NBL		NBT	SBL		SBT
Assigned Phase	9			1	_	6		_	2				1		4
Case Number				1.0	_	4.0		\rightarrow	7.3		_			\rightarrow	9.0
Phase Duration	e .			14.3	_	84.7	_	_	70.4		_		_	_	25.3
Change Period,		c) s		4.0	_	6.0		_	6.0					\rightarrow	5.0
Max Allow Head				5.2	\rightarrow	0.0		_	0.0		_			_	5.3
Queue Clearan				4.0	_	0.0	-	-	0.0		-		-	\rightarrow	18.7
Green Extensio				0.2	_	0.0	_	-	0.0		-		_	-	0.7
Phase Call Pro		(y e), s		1.00	-	0.0	-	-	0.0		-		-	-	1.00
Max Out Probal				0.43	_		-	-	_		-		-	-	1.00
Max Out Plobal	onity			0.43											1.00
Movement Gro	up Res	sults			EB			WB			NB			SB	
Approach Move	_			L	Т	I R		Т	R	L	Т	R	L	T	R
Assigned Move				1	6	1		2	12	_			7	Ė	14
Adjusted Flow F), veh/h		99	1028	_	_	932	388				551		125
		ow Rate (s), veh/h/	ln	1810	1795	_		1795	-				1757		1610
Queue Service				2.0	13.4	_	_	13.3					16.7		7.6
Cycle Queue C				2.0	13.4	-		13.3	-				16.7		7.6
Green Ratio (g		· · · · · · · · · · · · · · · · · · ·		0.70	0.72	_	_	0.59	0.59				0.18		0.18
Capacity (c), v	_			431	2568	_		2101	-				649		297
Volume-to-Capa		atio (X)		0.229	0.400	-	_	0.443	-				0.849		0.422
		/In (90 th percentile)	30.5	150.9	-		154.1	_				263.8		124.3
		eh/ln (90 th percent		1.4	6.8			6.9	5.2				12.0		5.7
		RQ) (90 th percen	•	0.20	0.00			0.00	2.18				1.58		0.00
Uniform Delay (the)	7.2	6.9			9.7	7.7				43.4		39.7
Incremental De				0.9	0.3			0.6	1.1				13.1		4.3
Initial Queue De				0.0	0.0	1	-	0.0	0.0				0.0		0.0
Control Delay (8.1	7.3			10.2	8.8				56.4		44.0
Level of Service				A	7.3 A	-		B	_				50.4 E		D 44.0
Approach Delay				7.3		A	9.8		A	0.0			54.1		D
				1.3					^	0.0					U
Intersection Del	ay, S/VE	m / LUS				1	8.5						В		
Multimodal Re	eulte				EB			WB			NB			SB	
Pedestrian LOS		/1.08		0.66	_	A	2.08		В	2.32		В	2.32	_	В
Bicycle LOS Sc				1.80	_	В	1.46	-	_	2.32		D	2.32	-	F
Dicycle LOS SC	ole / LC	00		1.00	_	ט	1.40	,	Α						r

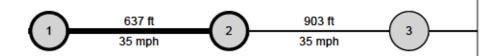
		HCS	7 Sig	nalize	d Int	ersec	tion F	Resu	ilts Su	mmar	у				
														4人41	ele:
General Inform	nation	la						-		ction Inf			- 1	411	HQ.
Agency		Stolfus and Associa	ates					_	Duration		0.250				<u></u>
Analyst		Max Rusch		Analys		_		-	Area Ty	pe	Other				- E
Jurisdiction				Time F		PM P	eak	_	PHF		0.97		34	m]t	===
Urban Street		Patterson Rd		Analys	is Yea	r 2020			Analysis	Period	1> 7:0	00	×		7
Intersection		28 1/4 Road & Patt	terson	File Na	ame	Existi	ng PM.x	us					╛	11	
Project Descrip	tion												1	A LAM	ejn.
Demand Inform	nation				EB		$\overline{}$	W	В		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	T	R	L	T	R
Demand (v), v	eh/h			29	1509	266	95	91	3 26	226	14	156	39	22	45
Signal Informa	tion								- 100					1 + 1	
Cycle, s	110.0	Reference Phase	2		J. 1	7	Ħ *	٩	11	7.5		_		(-	STZ
			_			-	1		117" "	17		- 1	2	3	Y
			Begin	Green Yellow		57.8	7.0	0.4			_	_		_ "	The same
	rce Mode Fixed Simult. Gap N/S Conner Results signed Phase					4.5	3.5	3.5					♣ .	``\ . '	ф.
Force Mode	er Results igned Phase lee Number lise Duration, s and Reference Point Be Simult. Gap E/W Co Simult. Gap N/S					1.5	0.5	0.5	5 1.0	0.0	-	5	A 6	7	
Timer Results	coordinated No Simult. Gap E/W Corce Mode Fixed Simult. Gap N/S Corce Mode Fixed Simult. Gap N/S Corce Results signed Phase se Number ase Duration, s ange Period, (Y+R c), s ange Period, (MAH), s seue Clearance Time (g s), s					EBT	WB	L	WBT	NB	L	NBT	SBI	_	SBT
Assigned Phase	ncoordinated No Simult. Gap E/W Corce Mode Fixed Simult. Gap N/S Corce No. 10 Corce Mode Fixed Simult. Gap N/S Corce Mode Fixed Simu					6	5	\neg	2	7	\neg	4	3		8
Case Number	ssigned Phase ase Number hase Duration, s hange Period, (Y+R c), s ax Allow Headway (MAH), s					4.0	1.1	\neg	3.0	1.1	$\neg \vdash$	4.0	1.1	$\neg \vdash$	4.0
Phase Duration	nase Number nase Duration, s nange Period, (Y+R c), s ax Allow Headway (MAH), s					63.8	13.2	2	63.8	15.4	1	22.0	11.0	<u> </u>	17.6
	signed Phase se Number ase Duration, s ange Period, (Y+R c), s ax Allow Headway (MAH), s eue Clearance Time (g s), s een Extension Time (g e), s ase Call Probability					6.0	4.0	\neg	6.0	4.0		5.0	4.0		5.0
Max Allow Head	signed Phase se Number ase Duration, s ange Period, (Y+R c), s ax Allow Headway (MAH), s seen Extension Time (g c), s ase Call Probability					0.0	5.1	\neg	0.0	5.2		5.4	5.2		5.4
				2.5	\neg		4.2			13.4	1	13.2	4.1	-	4.9
	ase Duration, s ange Period, (Y+R c), s ax Allow Headway (MAH), s are Clearance Time (g s), s ase Call Probability ax Out Probability					0.0	0.1	\neg	0.0	0.0		0.5	0.0		0.8
	ncoordinated No Simult. Gap E/W orce Mode Fixed Simult. Gap N/S of Sim						1.00	7		1.00		1.00	1.00		1.00
	ssigned Phase						1.00			1.00)	1.00	1.00		0.38
Movement Gro	ase Number ase Duration, s anange Period, (Y+R c), s ax Allow Headway (MAH), s ax Allow Headway (MGH), s ax Even Extension Time (g c), s axe Call Probability ax Out Probability ax Out Probability by overment Group Results approach Movement asigned Movement asigned Movement by dijusted Flow Rate (v), veh/h adjusted Saturation Flow Rate (s), veh/h/ln							WE	1		NB			SB	
	_	Juita			EB T	R		T	R	1	T	R		T	R
				1	6	16	5	2	12	7	4	14	3	8	18
) voh/h		18	561	532	90	868	$\overline{}$	233	175	14	40	23	46
_		**	'ln	1810	1885	1786	1810	179		_	1631		1810	1900	1610
				0.5	15.8	14.2	2.2	13.5	_	11.4	11.2		2.1	1.2	2.9
				0.5	15.8	14.2	2.2	13.5	_	11.4	11.2		2.1	1.2	2.9
Green Ratio (g		5 mm (g 5), 5		0.61	0.53	0.53	0.61	0.53	_	0.24	0.15		0.18	0.11	0.11
Capacity (c), v	_			460	991	939	407	188	_	372	252		223	218	184
Volume-to-Capa		atio (X)		0.039	0.566		0.222	0.46	_	_			0.180	0.104	0.252
		/In (90 th percentile)	7.2	169.1	_	33.9	148.	_	206.4	186.8		40.1	24.1	51.9
		eh/ln (90 th percent		0.3	7.6	6.4	1.5	6.7	_	9.4	8.5		1.8	1.1	2.4
		RQ) (90 th percen	_	0.03	0.00	0.00	0.13	0.00	_	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 7.6	37.3	44.0		38.4	43.6	44.4
Incremental De	lay (d 2), s/veh		0.1	1.8	1.9	8.0	0.5	0.0	7.7	14.7		1.8	1.0	3.2
Initial Queue De	elay (d	з), 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/v	eh		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)			В	В	В	В	В	Α	D	E		D	D	D
Approach Delay	y, s/veh	/LOS		10.9)	В	12.0)	В	50.9)	D	44.2	2	D
Intersection De	lay, s/ve	eh / LOS				19	9.0						В		
Multimadal D								1875			ND			00	
Multimodal Re		11.00		2.00	EB	D	0.00	WE		0.0	NB	D	0.01	SB	
Pedestrian LOS				2.09	-	В	2.09	_	В	2.40		В	2.31	_	В
Bicycle LOS Sc	ore / LC	J8		2.02	2	В	1.37		Α	1.10		Α	0.58	5	Α

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ults	Sun	nmar	y				
General Inform	nation										tion Inf			- 1	111	시니
Agency		Stolfus and Associa	ates							ration,		0.250		2 100		U
Analyst		Max Rusch		Analys		_			_	ea Typ	е	Other		-		A- 2-
Jurisdiction				Time F		PM P	eak		PH			0.95		4 ↑	uļ.	===
Urban Street		Patterson Rd		Analys	is Yea	2020			Ana	alysis	Period	1> 7:0	00	×		7
Intersection		29 Road & Patterso	on	File Na	ame	Existi	ng PM.x	us							110	
Project Descrip	tion		_	_	_	_	_			_	_	_	_	ħ	A L SA	rjri
Demand Inform	nation				EB			v	VB			NB			SB	
Approach Move				T	T	R	1	_	T	R	1	T	R	1	T	R
Demand (v), v				155	1207		127	-	66	28	238	136	183	52	83	76
Domaila (v), v	0.011			100	1201	0.0	121				200	100	100	02	-	
Signal Informa	tion				2		<u></u>	TĮ.		П	$\overline{}$	L.				-
Cycle, s	110.0	Reference Phase	2		P .			-	to						>	P
Offset, s	18	Reference Point	Begin	Green	11.5	51.5	9.5	17	7.0	0.0	0.0	_	1	2	3 (-
Uncoordinated	No	Simult. Gap E/W	On	Yellow		4.5	3.5	4.		0.0	0.0			7	< ·	4
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	2.0	1.0	1.		0.0	0.0			♀ □	7	8
Timer Results						EBT	WB	L		ВТ	NBI	-	NBT	SBI	-	SBT
Assigned Phase						6	5	4	2	2	7	\bot	4	3		8
Case Number						4.0	1.1	_	4.	.0	2.0		3.0	2.0		3.0
Phase Duration	ase Duration, s					58.0	16.0		58	3.0	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 Head	dway (/	ИАН), s		4.1		0.0	4.1		0.	.0	4.2		4.3	4.2		4.3
Queue Clearan	ce Time	e (gs), s		5.0			6.5				11.5		10.8	5.3		6.7
Green Extension		(ge), S		0.1		0.0	0.2		0.	.0	0.0		0.9	0.0		1.2
Phase Call Pro	bability			1.00			1.00)			1.00		1.00	1.00)	1.00
Max Out Proba	bility			0.11	_		0.50)			1.00		0.44	1.00		0.07
Movement Gro	oup Res	sults			EB			W	В			NB			SB	
Approach Move	_			L	T	R	T	T	_	R	L	T	R	L	T	R
Assigned Move				1	6	16	5	2	_	12	7	4	14	3	8	18
Adjusted Flow F) veh/h		111	562	523	158	49	_	491	251	143	156	55	87	27
		ow Rate (s), veh/h/	ln	1795	1885	1751	1795	188	_	1861	1795	1826	1598	1711	1826	1560
Queue Service				3.0	27.5	27.7	4.5	19.	_	19.7	9.5	7.9	8.8	3.3	4.7	1.5
Cycle Queue C				3.0	27.5	27.7	4.5	19.	_	19.7	9.5	7.9	8.8	3.3	4.7	1.5
Green Ratio (g		(g - _{//} -		0.57	0.47	0.47	0.57	0.4	_	0.47	0.09	0.15	0.26	0.09	0.15	0.26
Capacity (c), v	_			408	883	820	357	88	_	871	155	282	414	148	282	404
Volume-to-Cap		itio (X)		0.272	0.637	0.637	0.443	0.5	_	0.564	1.616			0.370	0.310	0.068
		/In (90 th percentile)	47.1	378.7	366.9	73	245	_	241.3		151.1		70.7	95.1	23.7
		eh/ln (90 th percent		2.1	17.1	16.3	3.3	11.	_	10.8	26.1	6.6	6.1	3.0	4.2	1.0
		RQ) (90 th percent		0.15	0.00	0.00	0.18	0.0	_	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 De				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 De				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 (13.8	30.6	31.4	18.9	20.	_	20.5	355.0	49.0	36.1	54.4	44.1	31.1
Level of Service				В	С	С	В	С	-	С	F	D	D	D	D	С
Approach Delay				29.4	_	С	20.4	_	_	С	184.		F	45.3		D
Intersection De							1.8							D		
Multimodal Re					EB		_	W				NB			SB	
Pedestrian LOS				2.15	_	В	2.17	\rightarrow		В	2.30		В	2.30	-	В
Bicycle LOS Sc	ore / LC	OS		1.94		В	1.29)	P	A	1.39		Α	0.77		Α

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resu	ılts 9	Sun	nmar	y				
General Inform	ation								Intor	reacti	ion Infe	ormatio	n		d Ade L L	되면
	iation	Stolfus and Associa	otos					-		ation,		0.250		- 1	44	
Agency		Max Rusch	ates	Anaha	ie Det			_				_		- 12		V.
Analyst Jurisdiction		Max Rusch		Analys		PM P	ook	-	PHF	Туре	•	Other 0.97		- 3-2	=====	∸
		Detteres Dd		Time F		_	еак	-					10	- 3 -		-
Urban Street Intersection		Patterson Rd 29 1/2 Road & Patt				r 2020	ng PM.x		Anai	ysis i	Period	1> 7:0	00	- 6		7
	4:	29 1/2 Road & Pall	lerson	File Na	ame	EXISU	ng PM.x	us						- 4	4 1 4 7 1	el d
Project Descrip	tion		_	-	-	_	-	-	-	-	-	-	-			e para
Demand Inform	nation				EB		$\overline{}$	W	'B			NB			SB	
Approach Move	ement			L	Т	R	L	Т	Г	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			69	1265	73	61	79	93	59	82	46	124	84	19	32
Signal Informa					7	K 4	= .		S.				- 13	4		
Cycle, s	110.0	Reference Phase	2		L. K	2	75		589			_			3	Y
Offset, s	56	Reference Point	Begin	Green	4.0	0.5	61.9	28	.0	0.0	0.0			-		1
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	5.0	4.0		0.0	0.0		<u>_</u> _	<u> </u>	-	4
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.5	1.0) (0.0	0.0		5	7 €	7	8
	ner Results															
Timer Results	mer Results signed Phase use Number hase Duration, s					EBT	WB	L	WB		NBL	-	NBT	SBI	-	SBT
	ssigned Phase ase Number hase Duration, s					6	5	-	2	_		-	4	_	-	8
				1.1	-	4.0	1.1	-	4.0	-		$\overline{}$	8.0	_	-	7.0
				8.0	\rightarrow	68.4	8.6	\rightarrow	69.0	\rightarrow		_	33.0	<u> </u>		33.0
				4.0	\rightarrow	6.5	4.0	_	6.5	\rightarrow		\rightarrow	5.0	_	_	5.0
				4.5	_	0.0	4.5	$\overline{}$	0.0			_	4.8		\rightarrow	4.8
Queue Clearan	ce Time	e (g s), S		3.4	_		4.0	_		_			30.0		_	16.0
		(ge), S		0.1	_	0.0	0.1	\rightarrow	0.0			_	0.0	\vdash	\rightarrow	1.5
				0.81	\rightarrow		0.91	\rightarrow		_		\rightarrow	1.00			1.00
Max Out Proba	imer Results ssigned Phase ase Number hase Duration, s hange Period, (Y+R c), s ax Allow Headway (MAH), s ueue Clearance Time (g s), s reen Extension Time (g e), s hase Call Probability ax Out Probability ovement Group Results pproach Movement ssigned Movement djusted Flow Rate (v), veh/h						0.04		_	_	_		1.00			80.0
Movement Gre	un Dos	ulte			EB			WE	2	-		NB			SB	
	_	uits			T	R	L	T	_	R	L	T	R		T	R
				1	6	16	5	2		12	7	4	14	3	8	18
) veh/h		54	525	514	79	562	\rightarrow	48	-	260	14	-	106	33
		ow Rate (s), veh/h/	ln.	1810	1885	1849	1810	188	_	339		1009		_	712	1572
Queue Service				1.4	9.7	9.3	2.0	11.2	_	0.6		14.0			0.0	1.8
Cycle Queue C				1.4	9.7	9.3	2.0	11.2	_	0.6		28.0			14.0	1.8
Green Ratio (g		e fille (gt), s		0.60	0.56	0.56	0.60	0.57	_	.57		0.25			0.25	0.25
Capacity (c), v				363	1062	1041	403	107	_	044		300			241	400
Volume-to-Capa		tio (X)		0.148	0.494	_	0.197	0.52	_	525		0.865			0.441	0.082
		/In (90 th percentile)	20	102.1	_	29.9	116.	_	0.5		282.7			106.8	27.3
		eh/ln (90 th percent		0.9	4.6	4.4	1.4	5.2	_	.9		12.6			4.6	1.2
		RQ) (90 th percen	-	0.15	0.00	0.00	0.23	0.00	_	.00		0.00			0.00	0.00
Uniform Delay	(d 1), s	/veh		10.3	5.5	5.2	9.9	5.8	5	5.4		43.6			35.5	31.2
Incremental De	lay (d 2), s/veh		0.1	1.1	1.1	0.2	1.3	1	.4		22.2			1.3	0.1
Initial Queue De	elay (d	з), s/veh		0.0	0.0	0.0	0.0	0.0	0	0.0		0.0			0.0	0.0
Control Delay (••		10.4	6.6	6.3	10.1	7.2	_	6.7		65.9			36.8	31.3
Level of Service				В	Α	Α	В	Α	$\overline{}$	Α		E			D	С
Approach Delay	y, s/veh	/ LOS		6.6		Α	7.2		Α		65.9		E	35.5	5	D
Intersection De	lay, s/ve	h/LOS				14	1.1							В		
Multimodal Re					EB			WE				NB			SB	
Pedestrian LOS				1.67	_	В	1.89	$\overline{}$	В	$\overline{}$	2.29	_	В	2.29	-	В
Bicycle LOS Sc	ore / LC	os		1.68		В	1.26	6	Α		0.92		Α	0.72	2	Α

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ılts Su	mmar	У				
General Inform	nation								Intersec	tion Inf	ormatic	on		474	되면
Agency		Stolfus and Associa	ates						Duration	, h	0.250		-	***	
Analyst		Max Rusch		Analys	is Date	е			Area Typ	ре	Other		<u> </u>		٠. [2]
Jurisdiction				Time F	eriod	PM P	eak		PHF		0.96		2 -	11 1	===
Urban Street		Patterson Rd		Analys	is Yea	r 2020			Analysis	Period	1> 7:0	00	7		F .
Intersection		30 Road & Patterso	on	File Na	ame	Existi	ng PM.x	us						110	
Project Descrip	tion												1	4 I PY	MU
Demand Inform	nation				EB		_	W	'D	_	NB			SB	
Approach Move					T	R	+-	_	r R	+-	T	R	1	T	R
Demand (v), v				155	933	219	55	_	30 52	197	87	80	36	55	97
Demand (V), V	enn			100	933	219	33	30	50 52	197	01	00	30	33	91
Signal Informa	tion		_		2	1			L UE		- 10				1
Cycle, s	110.0	Reference Phase	2		P	T ≓				7.2	- 1		4	1	4
Offset, s	26	Reference Point	Begin	Green	10.0	1.0	41.5	10		0.0		1	2	1.3	4
Uncoordinated	No	Simult. Gap E/W	On	Yellow		3.5	5.0	3.		0.0		<i>></i>	→		stz
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.5	1.5	0.4		0.0		5	- 6	7	Y 8
Timer Results				EBL		EBT	WB	니	WBT	NB	L	NBT	SBI	L	SBT
Assigned Phase	e			5	\bot	2	1	4	6	3	_	8	7	\rightarrow	4
Case Number				1.1	_	4.0	1.1	4	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 Head				4.1	\perp	0.0	4.2	_	0.0	4.2		4.2	4.2		4.2
Queue Clearan	ce Time	(gs), s		7.1			5.1	_		12.0		6.6	3.6		4.7
Green Extension		(ge), s		0.3		0.0	0.1	\perp	0.0	0.0		0.7	0.0		8.0
Phase Call Pro	bability			1.00			1.00)		1.00		1.00	1.00)	1.00
Max Out Proba	bility			0.05			0.50			1.00)	0.00	0.06	6	0.00
Movement Gro	un Das	ulte			EB			WE	2		NB			SB	
Approach Move	_	suits			T	R	L	T	R	L	T	R	L	T	R
Assigned Move				5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow F) veh/h		161	619	581	92	537	_	205	91	82	38	57	5
		ow Rate (s), veh/h/	ln.	1795	1885	1761	1810	188	_	1767	1900	1610	1810	1900	1572
Queue Service				5.1	23.6	23.8	3.1	29.	_	10.0	4.3	4.6	1.6	2.7	0.2
Cycle Queue C				5.1	23.6	23.8	3.1	29.	_	10.0	4.3	4.6	1.6	2.7	0.2
Green Ratio (g		c fillic (gt), 3		0.53	0.42	0.42	0.47	0.3	_	0.31	0.22	0.22	0.31	0.22	0.35
Capacity (c), v	_			371	797	744	319	711	_	460	415	351	428	415	558
Volume-to-Capa		rtio (X)		0.435		0.780	0.289	0.75	_	_			0.088	0.138	0.009
		/In (90 th percentile)	82.2	203.4	_	56.1	449	_	164.7	83.8	77.4	29.1	51.8	3.7
		eh/ln (90 th percent		3.7	9.2	8.8	2.6	20.		7.3	3.8	3.5	1.3	2.4	0.2
		RQ) (90 th percen	-	0.62	0.00	0.00	0.43	0.0	_	0.74	0.00	0.44	0.22	0.00	0.03
Uniform Delay				19.5	12.9	12.9	18.0	36.	_	29.8	35.3	35.4	27.0	34.7	23.0
Incremental De	lay (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 De	elay (d	з), 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 (22.0	18.0	18.4	20.3	43.9	9 44.3	32.9	36.5	37.0	27.4	35.4	23.0
Level of Service	e (LOS)			С	В	В	С	D	D	С	D	D	С	D	С
Approach Delay	y, s/veh	/LOS		18.6		В	42.2	2	D	34.7	7	С	31.7	7	С
Intersection De	lay, s/ve	h/LOS				30).2						С		
Multimodal Re					EB	_		WE			NB	_		SB	
Pedestrian LOS				2.11	_	В	2.24	-	В	2.30	_	В	2.30	_	В
Bicycle LOS Sc	ore / LC	JS		1.61		В	1.08	3	Α	1.11		Α	0.65)	Α

	HCS7 U	Jrban Street Seç	ment 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/Ma	II Access & Patterson	Analysis Period	1> 7:00
Project Description					



Basic Segn	_						_							
Segment		l Limit		h Lanes	_	t Length	-	ection Wid		of RM	_	nt Curb		r Delay
	WB	EB	WB	EB	WB	EB	WB		WB	EB	WB	EB	WB	EB
1	35	35	2	2	637	637	50	50	0	0	100	0	0.0	0.0
							v	Vestbound				Eastbo	und	
Segment O	utnut Dat	ta				WBL	_	WBT	WBF	,	EBL	EBT		EBR
Segment	Moveme					*****	-	2	12	`	1	6	_	LUIX
1			ck Time,	h			\rightarrow		12		0.02	neve	г	
1		_	llback Tin				_			_	0.15			never
1			Speed, m				_	41.58				42.0	5	
1		Time, s						14.85		\neg		15.1	5	
1		Speed,	mph					29.24				28.6	7	
1		Delay, s	_					18.20				19.1	2	
1	Travel T	īme, s						33.05				34.2	7	
1	Travel S	peed, m	ph					13.14				12.6	7	
1	Stop Ra	te, stops	/veh					0.55				0.46	j	
1	Spatial	Stop Rate	e, stops/n	ni				4.53				3.77	,	
1	Through	vol/cap	Ratio					0.17				0.22	2	
1	Percent	of Base	FFS					31.60				30.14	4	
1	Level of							E				Е		
1			rception (Score				2.88				2.75	<u> </u>	
Multimodal														
1				Score / L	os		2.52	_	В	_	3.63			D
1				re / LOS		_	2.20		В	_	2.65			В
1	Transit 9	Segment	LOS Sco	re / LOS			2.34		В	_	2.55			В
Facility Out	nut Data						v	Vestbound				Eastbo	und	
Facility Trav							v	786.87				983.1		
Facility Trav								27.34		_		21.89		
Facility Base			, mph					42.73		_		42.4		
Facility Pero			,					63.99				51.5		
Facility Leve								С				F		
Facility Auto			on Score					2.32		\neg		2.34		
Multimodal														
Pedestrian F						_	3.47		С		3.69)		D
Bicycle Faci	_						2.77		С		2.89			С
Transit Faci	ity LOS S	core / LC	S				1.10		A		1.37	<u>'</u>		Α

				HC	S7 Urb	oan Str	eet S	Segme	ent	Report						
General Inf	ormation											Streets Int	formation	1		
Agency		St	tolfus and /	Associate	es							Number of	Intersecti	ons	15	
Analyst		M	ax Rusch			Analys	is Dat	e				Number of	Segment	s	14	
Jurisdiction		\perp				Time F	eriod	PN	1 Pea	ak		Number of	Iterations		15	
File Name		E	xisting PM.	.xus		Analys	is Yea	ır 20:	20			System Cy	cle Lengt	h, s	110)
Intersection	S	M	arket Stree	et/Mall Ad	cess & P	at Home I	Depot	Access/I	Mesa	a Mall Acc	ess &	Analysis P	eriod		1>	7:00
Project Des	cription	\perp														
	(1)—	637 ft 35 mph		2		903 ft 35 mph		<u></u>)-	1674 35 m		-(4	-
D O	41.5		(11111111111111-		D41											
	nent Informa					41 a==#	lat-	nastis – 1	A/G-2	1	of D14	Dress	nt 0	-	h	Dalari
Segment	Speed Li WB	mit EB	Through WB	EB	Segmen	t Length EB	WE	section V		Length WB	OT RM	WB	nt Curb	W	_	Delay EB
2			_						_				EB		$\overline{}$	
	35	35	2	2	903	903	50) DI	U	2	1	70	0	0.0		0.0
							,	Westbou	ınd				Eastbo	und		
Segment O	utput Data					WBL	_	WBT		WBR		EBL	EBT			EBR
Segment	Movement					5	-	2		12	-	1	6	_	_	16
2	Bay/Lane S	pillba	ack Time. I	h		Ť	\rightarrow	never		12	\rightarrow		Ť			-10
2	Shared Lar	_				neve	,				_			_		
2	Base Free-							41.72			\neg		42.0	5		
2	Running Ti							18.36			_		18.7		_	
2	Running Sp	_						33.53			\rightarrow		32.83			
2	Through De							15.91			_		24.10		_	
2	Travel Time							34.27			\rightarrow		42.9			
2	Travel Spe		nph					17.97			\neg		14.3			
2	Stop Rate,	_	•					0.56			\rightarrow		0.71			
2	Spatial Sto			ni				3.26			\neg		4.13			
2	Through vo							0.23			\rightarrow		0.59			
2	Percent of	_						43.06			\neg		34.12	2		
2	Level of Se	rvice						D			\neg		Е			
2	Auto Trave	er Pe	erception S	Score				2.66					2.81			
Multimoda	Results (Se	gme	nt)													
2	Pedestrian	Segr	ment LOS	Score / L	os		2.93			С	\neg	3.87	,		D)
2	Bicycle Seg	men	t LOS Sco	re / LOS			2.47			В		2.77	'		С	;
2	Transit Seg	men	t LOS Sco	re / LOS			1.86			Α		2.37	,		В	}
Facility Ou							١	Westbou	ınd				Eastbo	und		
Facility Trav								786.87					983.1			
	el Speed, mp							27.34					21.89			
_	e Free Flow S	_	d, mph					42.73					42.47			
	cent of Base	FS						63.99					51.53	3		
	el of Service							С					F			
Facility Auto	Traveler Per	cepti	ion Score					2.32					2.34			

Multimodal Results (Facility)
Pedestrian Facility LOS Score / LOS

Bicycle Facility LOS Score / LOS

Transit Facility LOS Score / LOS

С

С

3.47

2.77

1.10

D

С

3.69

2.89

1.37

				H	CS7 Url	oan Str	eet	Seg	ment	Report						
General Inf	ormation										\neg	Streets Int	formation	1		
Agency		Stol	lfus and	Associat	es							Number of	Intersect	ons	15	
Analyst		Max	x Rusch			Analys	sis Da	ate				Number of	Segment	s	14	
Jurisdiction		\neg				Time F			PM Pe	ak	_	Number of			15	
File Name		Exis	sting PM	1.xus		Analys	sis Ye	аг	2020			System Cy	cle Lengt	h, s	110	,
Intersections	s				/Mesa Ma				rson			Analysis P			-	7:00
Project Des	cription	\top														
637	-	2	<u> </u>	903 ft		(3) -			74 ft		<u> </u>	2569		_(;	5)	
35 m	pn \		_	35 mph	1			351	mph			40 m	ph			_
Basic Segn	nent Informa	tion (F	Home D	epot - 24	1/2 Rd)											
Segment	Speed Lir			h Lanes		t Length	Inte	ersecti	on Wid	Length	of RM	Percer	nt Curb	Ot	her I	Delay
3-3		EB	WB	EB	WB	EB	W	_	EB	WB	EB	WB	EB	WE	_	EB
3	35	35	2	2	1674	1674	50	0	50	550	550	70	100	0.0	7	0.0
								West	tbound		\neg		Eastbo	und		
Segment O	utput Data					WBI	- 1	٧	VBT	WBR	2	EBL	EBT	$\overline{}$	- 1	EBR
Segment	Movement					5	\neg		2	12	\neg	1	6	\neg		16
3	Bay/Lane S				ne	ever		\neg		neve	r					
3	Shared Lan	_				neve	r				\neg	never		\neg		
3	Base Free-F						_	40).72		\neg		40.20	,		
3	Running Tin			-				30	0.68		\neg		31.84	4	_	
3	Running Sp		nph						7.21		\neg		35.84			
3	Through De								.84		_		11.5			
3	Travel Time								9.52		\rightarrow		43.3			
3	Travel Spee		h						3.88		_		26.3			
3	Stop Rate,								.27		\rightarrow		0.35			
3	Spatial Stop	_		ni					.85		_		1.11		_	
3	Through vo		•						.28		-		0.58			
3	Percent of E	_).93		_		65.49		_	
3	Level of Ser		-						В		\rightarrow		C	_		
3	Auto Travel		contion	Score					.27		-		2.31		_	
	Results (Se			ocore					.21		_		2.51			
3	Pedestrian	_	-	Score /	108		3.21		_	С	\neg	3.66			D	
3	Bicycle Seg						2.61		_	В	-	2.84		-	C	
3	Transit Seg						0.99		_		-			\vdash		
	Transit Seg	ment L	_05 500	Jie / LOS			0.99		_	A		1.30			Α	
Facility Out	tout Data							West	tbound				Eastbo	und		
Facility Trav									6.87		_		983.1		_	
	el Speed, mp	h							7.34		\rightarrow		21.89			
	e Free Flow S		mph						2.73		_		42.4			
	ent of Base F								3.99		\rightarrow		51.5			
_	el of Service								C		_		F			
	Traveler Per	centio	n Score						.32				2.34			
1 donney Auto	Traveler I CI	Jopani	00016						.52				2.04			
Multimodal	Results (Fac	cility)														
	Facility LOS S		LOS				3.47		$\overline{}$	С	T	3.69)		D	
	ility LOS Scor						2.77			С		2.89			C	
	lity LOS Score						1.10			A		1.37			Ā	
Transit r att	200 0001	J, LO					1.10			/1		1.51)

				НС	S7 Urk	an Str	eet	Seg	ment	Report					
General Info	ormation										_		formation		
Agency		Sto	olfus and	Associate	es						N	lumber of	Intersecti	ons	15
Analyst		Ma	ax Rusch			Analys	is Da	ate			N	lumber of	Segment	s	14
Jurisdiction						Time F	erio	d	PM Pea	ak	N	lumber of	Iterations		15
File Name		Ex	isting PM	.xus		Analys	is Ye	ear	2020		5	system Cy	/cle Lengt	h, s	110
Intersections	S	24	1/2 Rd &	Patterso	n	25 Roa	id & F	Patters	son		A	nalysis P	eriod		1> 7:00
Project Desc	cription														
903 35 m		3)—	1674 ft 35 mph	_	4			69 ft mph)_	2562 40 m		-(•	5)—
Basic Segm	nent Infor	mation	(24 1/2 R	d - 25 Rd)										
Segment	Speed			h Lanes	Segmen	t Length	Inte	ersecti	on Wid	Length	of RM	Percei	nt Curb	Ot	her Delay
Joynient	WB	EB	WB	EB	WB	EB	_	/B	EB	WB	EB	WB	EB	WE	
4	40	35	2	2	2569	2569	_	0	50	0	0	90	90	0.0	
_	40	33	-		2303	2303			30	U		30	30	0.0	0.0
								West	tbound		o		Eastbo	und	
Segment O	utput Dat	a				WBL			VBT	WBF		EBL	EBT		EBR
Segment	Moveme					5			2	12		1	6	_	16
4			ck Time,	h				ne	ever		_		neve	,	
4		_	illback Tin			neve	-			neve		never	IIC V C	-	
4	_		Speed, m			Heve		42	3.00	Heve		Hevel	40.65		
	_			pn							-				
4	Running								3.15		_		46.64		
4	Running								0.60		-		37.55		
4	Through		s/ven						3.66		-		20.46		
4	Travel T								5.81		-		67.10		
4	Travel S								5.22		-		26.10		
4	Stop Ra	te, stops	/veh					0	.55		_		0.54		
4	Spatial 9	Stop Rat	e, stops/n	ni				1	.12				1.12		
4	Through	vol/cap	Ratio					0	.46				0.74		
4	Percent	of Base	FFS					60).98				64.22	2	
4	Level of	Service							С				С		
4	Auto Tra	veler Pe	rception	Score				2	.31				2.31		
Multimodal	Results ((Segmer	nt)												
4	Pedestri	an Segn	nent LOS	Score / L	.os		3.32			С		3.68	3		D
4	Bicycle \$	Segment	LOS Sco	re / LOS			2.70			В		2.86	6		С
4	Transit 9	Segment	LOS Sco	re / LOS			1.18			Α		1.36	i		Α
Facility Out	but Data							West	tbound		_		Eastbo	und	
Facility Trav	_								6.87				983.1		
Facility Trav									7.34		\rightarrow		21.89		
Facility Base			1 mph						2.73		_		42.47		
Facility Perc			, mpn						3.99		_		51.53		
Facility Leve									C				51.50 F	,	
Facility Auto			on Score						.32				2.34		
Multimodal															
Pedestrian F							3.47			С		3.69			D
Bicycle Faci	_						2.77			С		2.89			С
Transit Facil	ity LOS S	core / LC	os				1.10			Α		1.37	7		Α

				Н	CS7 Url	oan Str	eet	Seg	ment	Report						
General Inf	ormation											Streets Int	formation	1		
Agency		Sto	lfus and	Associa	es							Number of	Intersect	ions	15	
Analyst		Ma	x Rusch			Analys	sis Da	ate				Number of	Segment	s	14	
Jurisdiction		\top				Time F			PM Pe	ak		Number of	Iterations	;	15	
File Name		Exi	sting PN	1.xus		Analys	sis Ye	еаг	2020			System Cy	cle Lengt	h, s	110	,
Intersections	3			Patterso	n				tterson			Analysis P		•	-	7:00
Project Des	cription	\top														
1674 35 m		4)—	2569 f		(5)-			62 ft mph	—(°) }	2572 35 m		_(7)	
_					-											
Basic Segn	nent Informa	tion (2	25 Rd -	25 1/2 R	1)											
Segment	Speed Lir	mit	Throug	h Lanes	Segmen	t Length	Inte	ersecti	on Wid	Length	of RM	Percer	nt Curb	Ot	her l	Delay
	WB E	EB	WB	EB	WB	EB	W	/B	EB	WB	EB	WB	EB	W	3	EB
5	40	40	2	2	2562	2562	5	0	50	260	260	90	90	0.0		0.0
									tbound		_		Eastbo			
Segment O	_					WBI	L	<u>\</u>	NBT	WBR		EBL	EBT			EBR
Segment	Movement		5			2	12	_	1	6	_		16			
5	Bay/Lane S				n	ever			never	0.65						
5	Shared Lan	e Spil	lback Ti	me, h		neve	r					never		\perp	(0.25
5	Base Free-l	Flow S	Speed, n	nph				4:	3.13				43.13	3		
5	Running Tin	ne, s						4:	3.02				44.5	1		
5	Running Sp	eed, r	mph					4(0.61				39.2	5		
5	Through De	elay, s/	/veh					14	4.48				190.3	9		
5	Travel Time	, s						5	7.50				234.9	0		
5	Travel Spee	ed, mp	h					3(0.38				7.44			
5	Stop Rate,	stops/	veh					0	.41		\Box		1.93	}		
5	Spatial Stop	Rate	, stops/r	mi				0	.84		\neg		3.97			
5	Through vol	I/cap F	Ratio					0	.39				1.31			
5	Percent of E	Base F	FS					7(0.44				17.2	4		
5	Level of Ser	rvice							В				F			
5	Auto Travel	er Per	ception	Score				2	.26				2.78			
Multimodal	Results (Se	gmen	t)													
5	Pedestrian	Segm	ent LOS	Score /	LOS		3.22		\neg	С	\neg	4.11			D	
5	Bicycle Seg	ment	LOS Sc	ore / LOS	3		2.71			В		3.00)		С	;
5	Transit Seg	ment l	LOS Sc	ore / LOS			0.95			Α		3.37	,		С	
Facility Out	put Data							Wes	tbound				Eastbo	und		
Facility Trav	el Time, s							78	6.87				983.1	2		
Facility Trav	el Speed, mp	h						2	7.34				21.89	9		
Facility Base	Free Flow S	Speed,	, mph					42	2.73				42.4	7		
Facility Perc	ent of Base F	FS						6:	3.99				51.5	3		
Facility Leve	of Service								С				F			
Facility Auto	Traveler Per	ceptio	n Score					2	.32				2.34			
	Results (Fac															
	acility LOS S						3.47			С	_	3.69			D	
	lity LOS Scor						2.77			С	_	2.89			С	
Transit Facil	ity LOS Score	e / LO	S			<u> </u>	1.10			Α		1.37			A	ı

				Н	CS7 Ur	ban Str	eet	Segn	nent	Report						
General Inf	ormation										\neg	Streets Int	ormation	1		
Agency		Sto	olfus and	l Associa	tes						\neg	Number of	Intersect	ons	15	
Analyst		Ma	x Rusch	1		Analys	sis Da	ite				Number of	Segment	s	14	,
Jurisdiction		\top				Time F			PM Pea	ak	_	Number of			15	
File Name		Fxi	isting PN	M xus		Analys	sis Ye	ar 2	2020		\rightarrow	System Cy	cle Lenat	h s	11	
Intersections		_		d & Patt	erson			Patters				Analysis P		., .	-	7:00
Project Des		-	1/2 1100	u u i uu	DISON	130 00	oot a	T dittors	-			/ trialy 515 T	Cilou		-	7.00
		_														
2569 40 m		5)—	2562 40 mp		(₆)-		2572 35 mp		— (7)	2566 35 m		-(8)——
D i . O			105 410 5													
	nent Informa						Lei		1000		,	T =	10.			D :
Segment	Speed Lir		_	gh Lanes		t Length	_	rsection		Length			nt Curb	_		Delay
		EB	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	WI	_	EB
6	35	40	2	2	2572	2572	50	0	50	0	0	90	90	0.0)	0.0
								Westb	ound				Eastbo	und		
Segment O	utput Data					WBI	L	WE	3T	WBR		EBL	EBT			EBR
Segment	Movement		5		2		12		1	6			16			
6	Bay/Lane S	pillba	ck Time	, h				nev	er		\neg		neve	r		
6	Shared Lan	e Spi	llback Ti	me, h		neve	r				$\neg \vdash$	never		\neg		
6	Base Free-I	Flow	Speed, r	mph				40.7	73		\neg		43.0	3		
6	Running Tir			•				45.5	51		\neg		44.3	1		
6	Running Sp	_	mnh					38.5			\rightarrow		39.5			
6	Through De		_					7.2			_		36.9		_	
6	Travel Time		VVCII					52.7			-		81.2			
6			n.b.					33.2			-				_	
	Travel Spee										+		21.5			
6	Stop Rate,	_						0.2			+		0.84		_	
6	Spatial Stop			mı		_		0.4			+		1.73		_	
6	Through vo	_						0.3			_		0.87			
6	Percent of E	Base I	FFS					81.6	31		_		50.12	2		
6	Level of Se	rvice						Α					С			
6	Auto Travel	er Pe	rception	Score				2.2	1				2.40			
Multimodal	Results (Se	gmen	ıt)													
6	Pedestrian	Segm	ent LOS	S Score /	LOS		3.26			С		3.95)
6	Bicycle Seg	ment	LOS So	ore / LO	S		2.71		Т	В	$\neg \vdash$	2.97	•		(
6	Transit Seg	ment	LOS Sc	ore / LO	3		0.75		Т	Α	$\neg \vdash$	1.72			7	4
Facility Out	put Data							Westb	ound		\neg		Eastbo	und		
Facility Trav	el Time, s							786.	87				983.1	2		
Facility Trav	el Speed, mp	h						27.3	34		\neg		21.89)		
	Free Flow S		l. mph					42.7			\neg		42.4			
_	ent of Base F	_	,p.ri					63.9			_		51.5			
Facility Leve								C					51.5.			
_	Traveler Per	contic	on Coore								-					
racility Auto	Travelet Per	cepuo	JII SCOIE	,				2.3	2				2.34			
Multimodal	Results (Fac	cility\	1													
	acility LOS S						3.47		T	С	_	3.69	1)
	lity LOS Scor						2.77			C	-	2.89) C
									+		-					
Transit Faci	ity LOS Score	e / LU	<i>1</i> 3				1.10			Α	L	1.37			F	4

				Н	CS7 Urb	oan Str	eet	Segr	nent	Report						
General Inf	ormation											Streets Int	formation	1		
Agency		Sto	lfus and	l Associat	es							Number of	Intersect	ions	15	
Analyst		Max	x Rusch	1		Analys	sis Da	ate				Number of	Segment	s	14	,
Jurisdiction		\top				Time F		-	PM Pe	ak	\neg	Number of			15	
File Name		Exis	sting PN	M xus		Analys	sis Ye	ar	2020		\neg	System Cy	cle Lenat	h s	110	
Intersection	s	_	_	& Patterso	n			Patter			\neg	Analysis P		, -	-	7:00
Project Des		+	0001	a i uttoroc		raroa	001.0	- T Gitton	-			7 indiyolo 1	onou		<u> </u>	7.00
1 Toject Des	оприон	_													_	
2562 40 m		6)——	2572 ft 35 mph	$\overline{}$	7)-		2566 35 m		(8)_	2567 40 m		$\overline{}$	9)——
40 111	рп			35 mpi				35 111	рп			40 111	рп		ノ _	
Basic Segn	nent Informat	ion (2	26 Rd -	26 1/2)												
Segment	Speed Lin			gh Lanes	Seamen	t Length	Inte	ersectio	n Wid	Length	of RM	Percei	nt Curb	0	ther	Delay
223		В	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	w		EB
7		10	2	2	2566	2566	-	0	50	0	0	90	90	0.0	_	0.0
,	33 4	·	2		2300	2300	,		30	U		30	30	U.		0.0
								West	ound				Eastbo	und		
Segment O	utnut Data					WBI			BT	WBR		EBL	EBT			EBR
Segment	Movement					5	_)	12	`	1	6			16
7	Bay/Lane Sp	nillhac	ek Timo	h		- 3				12	-		_	-		10
							_	ne	ver		\rightarrow		neve	<u>'</u>	_	
7	Shared Lane	_				neve	r		00		-	never	40.4			never
7	Base Free-F		Speed, r	mph				39.			\rightarrow		42.1			
7	Running Tim	_						46.			\rightarrow		45.0		_	
7	Running Spe		_					37.			_		38.82	2		
7	Through Del	lay, s/	veh					25.	35				13.6	1		
7	Travel Time,	S						71.	85				58.6	В		
7	Travel Spee	d, mp	h					24.	35				29.8	2		
7	Stop Rate, s	tops/	veh					0.6	64				0.36	i		
7	Spatial Stop	Rate	, stops/	mi				1.3	32		\neg		0.74			
7	Through vol	/cap F	Ratio					0.5	52				0.70)		
7	Percent of B	_						61.			\neg		70.69	9		
7	Level of Ser							C			\rightarrow		В			
7	Auto Travele		ception	Score				2.3			_		2.25			
	Results (Seg										_		2.20			
7	Pedestrian S		•	S Score / I	OS		3.33		$\overline{}$	С	\neg	3.59	`)
7	Bicycle Segr						2.74		+	В	-	2.94				<u>, </u>
7									+		-			-		
	Transit Segr	nent L	105 50	ore / LOS			1.37		-	A	_	1.09			-	4
Facility Out	nut Data							Month	aund		_		Faatha	und		
Facility Out									ound		-		Eastbo			
Facility Trav	·							786			-		983.1			
	el Speed, mpl							27.			+		21.89			
	Free Flow S		mph					42.			-		42.4		_	
_	ent of Base F	FS						63.			_		51.5	3		
Facility Leve													F			
Facility Auto	Traveler Pero	ceptio	n Score)				2.3	32				2.34			
Multimodal	Results (Fac	ility)														
	acility LOS S		LOS				3.47		T	С	\top	3.69)
	lity LOS Score						2.77			С		2.89			(2
	ity LOS Score						1.10			A	\neg	1.37				A .
															_	

Streets Information						НС	S7 Urb	oan Str	eet	Segn	nent	Report							
Stoffus and Associates																			
Max Rusch	General Inf	ormation												Streets In	formation	1			
	Agency		Sto	olfus and	d Ass	sociate	es							Number of	Intersect	ions	15		
	Analyst		Ma	x Rusch	h			Analys	sis Da	ate				Number of	Segment	s	14		
File Name			\top							_	PM Pe	ak					15		
The Street & Patterson 12th Street & Patterson 12th Street & Patterson 12th Street & Patterson 1>7:00	File Name		Fx	istina PN	M xu	S		Analys	sis Ye	ar	2020			System Cy	cle Lenat	h s	-		
Project Description			_	_			n									, 0	-		
Basic Segment Information (26 1/2 Rd to 12th St) Segment Seg			+	· ouout		11101001		TEUT O		a r atto				ruidiyolo i	onou		<u> </u>	7.00	
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	1 Toject Desi	лриоп	_																
Basic Segment Information (26 1/2 Rd to 12th St)	_	-	7)——				8				9)_			_(10)——	
Segment	35 111	ρii \			3.	o mpii		$\overline{}$		40 111	рп			40 111	рп		<u>ー</u>		
Segment	Basic Segn	ent Informa	tion (26 1/2 F	Rd to	o 12th	St)												
WB								t Lenath	Inte	ersection	n Wid	Length	of RM	Percei	nt Curb	0	ther	Delav	
Segment Output Data	Ougmont				_				-					_		_		_	
Westbound	-			_	+					_						_	_		
Segment Output Data WBL WBT WBR EBL EBT EBR		40 .	33		4	2	2307	2307	3	U	30	U	U	90	90	U.	,	0.0	
Segment Output Data WBL WBT WBR EBL EBT EBR										Weeth	ound				Eastho	und			
Segment Movement 5	Soament O	utnut Data			_			WDI				WDD	-	EDI				CDD	
S									-				-						
B						_	_	_		12	-		_	\rightarrow		16			
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 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	_		_		_			neve	٢	nev	/er		\rightarrow	never	neve	r			
8								neve	r				\rightarrow	never				never	
8	8	Base Free-I	Flow 9	Speed, r	mph					42.	34				39.9	9			
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 A Auto Traveler Perception Score 2.38 2.30 Multimodal Results (Segment) 3.56 D 3.64 D 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 Base Free Flow	8	Running Tin	ne, s							44.	36		\perp		47.5	7			
8	8	Running Sp	eed,	mph						39.4	46				36.8	0			
8	8	Through De	lay, s	/veh						33.	07		\neg		20.1	3			
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 Facility Output Data Westbound Facility Travel Time, s Facility Fravel Time, s Facility Fravel Speed, mph 27.34 21.89 983.12 Facility Percent of Base FFS 63.99 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53	8	Travel Time	, s							77.	42		\neg		67.6	9			
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 Facility Output Data Westbound Facility Travel Time, s Facility Fravel Time, s Facility Fravel Speed, mph 27.34 21.89 983.12 Facility Percent of Base FFS 63.99 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53 51.53	8	Travel Spee	d, m	ph						22.	61				25.8	6			
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 Travel Speed, mph 42.73 42.47 Facility Percent of Base FFS 63.99 51.53 Facility Level of Service C F	8									0.7	7		\neg		0.51				
8			_		/mi								\neg						
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 2.34 Multimodal Results (Facility) <td col<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td></td>	<td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>													-					
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			_		_				_				-						
8 Auto Traveler Perception Score 2.38 2.30 Multimodal Results (Segment) Segment Segment LOS Score / LOS 3.56 D 3.64 D 8 Pedestrian 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				113									-						
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					0								\rightarrow						
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 42.47 Facility Percent of Base FFS 63.99 51.53 Facility Level of Service C Facility Auto Traveler Perception Score 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					Sco	ore				2.3	88		_		2.30				
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 Percent of Base Fres 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			_	-	2.0		00		2.50		_		_	0.00					
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											+-		-			_			
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	8	Transit Seg	ment	LOS Sc	ore	LOS			1.56			A	_	1.37				4	
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	Facility Out	put Data								Westb	ound		7		Eastbo	und			
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																			
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										\rightarrow									
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										_									
Facility Level of Service C F Facility Auto Traveler Perception Score 2.32 2.34 Multimodal Results (Facility) C 3.69 D Pedestrian Facility LOS Score / LOS 2.77 C 2.89 C			_	, mpn									-						
Multimodal Results (Facility) 2.32 2.34 Pedestrian Facility LOS Score / LOS 3.47 C 3.69 D Bicycle Facility LOS Score / LOS 2.77 C 2.89 C			го										-			3			
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			••	0									-						
Pedestrian Facility LOS Score / LOS 3.47 C 3.69 D Bicycle Facility LOS Score / LOS 2.77 C 2.89 C	Facility Auto	Traveler Per	ceptic	on Score	9					2.3	32				2.34				
Pedestrian Facility LOS Score / LOS 3.47 C 3.69 D Bicycle Facility LOS Score / LOS 2.77 C 2.89 C	Multimodal	Results (Fac	cility))															
Bicycle Facility LOS Score / LOS 2.77 C 2.89 C									3.47			С	\Box	3.69)		Г)	
·												С	\neg	2.89)		(2	
																	-	4	

				H	ICS7 Ur	ban Str	eet	Segn	nent	Report						
General Inf	ormation											Streets Int	formation	1		
Agency		Sto	olfus and	d Associ	ates							Number of	Intersect	ions	15	
Analyst		Ma	x Rusch	1		Analys	sis Da	ate				Number of	Segment	s	14	
Jurisdiction		\top				Time F			PM Pe	ak	_	Number of			15	
File Name		Fx	isting PI	M xus		Analys	sis Ye	ar 2	2020		\neg	System Cy	cle Lenat	h s	11	
Intersections		_	th Street		rson			d & 15th			_	Analysis P		, 0	-	7:00
Project Des		+	ar oucc	t or r and	13011	i attore	, on 10	u u 150				7 trialy 515 T	Cilou		112	7.00
1 Toject Des	приоп	_														
2566 35 m		8)—	2567 40 mj		(9)-		1271 40 mj)_	1321 40 m		_(11)——
			_		_	_	_	_		_						_
Basic Segn	ent Informa	tion (12th St	- 27 1/4	Rd)											
Segment	Speed Lir			gh Lane		nt Length	Inte	ersection	. Wid	Length	of RM	Percei	nt Curb	0	ther	Delay
ocyment		EB	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	W		EB
9			_	_			-	_	50					_	_	
9	40	35	2	2	1271	1271	5	U	50	0	0	90	90	0.	,	0.0
								Westb	ound		7		Eastbo	und		
Somment O	utnut Data					WBI				WBR		EBL				EBR
Segment O							_	WE					EBT			
Segment	Movement					5	_	2		12	-	1	6			16
9	Bay/Lane S	_				-	_	nev	er		-	never	neve	r		never
9	Shared Lan	_				neve	Г				\rightarrow	never			'	never
9	Base Free-l	Flow	Speed, r	mph				42.2	29				39.9	4		
9	Running Tir	ne, s						23.7	76				25.4	5		
9	Running Sp	eed,	mph					36.4	48				34.0	5		
9	Through De	lay, s	/veh					3.5	4				34.3	6		
9	Travel Time	, s						27.3	30				59.8	2		
9	Travel Spee	ed, m	ph					31.7	74				14.4	9		
9	Stop Rate,							0.1	3		\rightarrow		0.80)		
9	Spatial Stop	_		mi				0.5			\neg		3.31			
9	Through vo							0.4			_		0.89			
9	Percent of E	_					_	75.0			-		36.2			
			113								-					
9	Level of Se			0				B			-		E 2.63	,		
	Auto Travel			Score				2.2			_		2.67			
	Results (Se	_	-	Coore	1100	_	2 57	,	_	D	_	4.07	,	_)
9							3.57		+		-			-	_	
9	Bicycle Seg					-	2.73		+	В	-	2.93		-		<u> </u>
9	Transit Seg	ment	LOS Sc	ore / LO	S		0.91		_	A	_	2.40)			3
Facility Out	nut Data							Weath	ound		_		Faatha	und		
Facility Out						-		Westb			-		Eastbo			
Facility Trav	•	_				-		786.			-		983.1			
	el Speed, mp					-		27.3			-		21.8			
	Free Flow S	_	i, mpn			-		42.7			-		42.4			
_	ent of Base F	-FS						63.9			_		51.5	3		
Facility Leve						-		С			_		F			
Facility Auto	Traveler Per	ceptio	on Score	9				2.3	2				2.34			
Multimodal	Results (Fac	cility))													
	acility LOS S						3.47			С		3.69	1		Г)
	lity LOS Scor						2.77			C	-	2.89			_	<u> </u>
	ity LOS Scor						1.10		-	A		1.37				
TTATISIL FACI	ity LOS SCOI	e / LC	,,,			1	1.10			^		1.37				4

				шс	S7 Urb	an Str	oot	San	ment	Denort					_	
		_		п	SI UIL	Jan Su	CCL	Sey	mem	Keport		_	_			
Company												Cton oto Ind				
General Inf	ormation	Stolfus a	nd A	oo o o i o t							\rightarrow	Streets Int Number of			15	
Agency				ssociate	es	Anaba	: D	-1-	_		\rightarrow				-	
Analyst		Max Rus	cn			Analys			DM D-	-1.	-	Number of			14	
Jurisdiction		F				Time F			PM Pe	ак	\rightarrow	Number of			15	
File Name		Existing F				Analys			2020		\rightarrow	System Cy		h, s	110	
Intersection		Pattersor	n Rd	& 15th	St	27 1/2	Road	1 & Pa	tterson			Analysis P	eriod		1>	7:00
Project Des	cription															
2567 40 m		9		1271 ft 40 mph		10			21 ft mph)-	3900 45 m		_(1	2	
Basic Segn	nent Informatio	on														
Segment	Speed Limi	t Thro	ugh	Lanes	Segmen	t Length	Inte	ersecti	on Wid	Length	of RM	Percer	nt Curb	Ot	her	Delay
	WB EE	3 WB		EB	WB	EB	W	/B	EB	WB	EB	WB	EB	W	3	EB
10	40 40) 2		2	1321	1321	5	0	50	0	0	70	70	0.0)	0.0
									tbound		_		Eastbo	_		
Segment O	utput Data					WBL		V	VBT	WBR		EBL	EBT			EBR
Segment	Movement		5			2	12		1	6			16			
10	Bay/Lane Spi				n	ever				neve	r					
10	Shared Lane	Spillback	Time	e, h		neve	r			never		never				
10	Base Free-Fle	ow Speed	, mp	h				44	1.07				44.07	7		
10	Running Time	e, s						23	3.96		$\neg \vdash$		24.17	7		
10	Running Spe	ed, mph						37	7.59		\neg		37.27	7		
10	Through Dela	ıy, s/veh						10).22		\neg		3.28			
10	Travel Time, s							34	1.18		\neg		27.4	4		
10	Travel Speed							20	6.35		\neg		32.82	2		
10	Stop Rate, sto	ops/veh						0	.31		\neg		0.10			
10	Spatial Stop F	•	s/mi						.26		\neg		0.40			
10	Through vol/o								.44		\rightarrow		0.53			
10	Percent of Ba								9.80		_		74.48		_	
10	Level of Servi								C		-		В	_		
10	Auto Traveler		n Sc	ore					.55		_		2.20		_	
	Results (Segr		,,,, OC	Joic					.00		_		2.20			
10	Pedestrian Se	•	28.8	core / I	OS		3.87	,	$\overline{}$	D	\neg	4.14		_		
10	Bicycle Segm	_					2.90		_	C	-	2.96		\vdash	C	
10	Transit Segm						1.28		_	A	_	0.89		_	A	
10	Transit Segin	ent LOS S	SCOIL	7 203			1.20		_			0.05				1
Facility Out	tput Data							Wes	tbound		т		Eastbo	und		
Facility Trav									6.87		\neg		983.1			
	el Speed, mph								7.34		\neg		21.89			
	e Free Flow Sp								2.73		\neg		42.4		_	
	ent of Base FF								3.99		\rightarrow		51.53			
Facility Leve									C		\dashv		F			
_	Traveler Perce	eption Sco	re						.32		\rightarrow		2.34			
	Results (Facil															
Pedestrian I	Facility LOS Sc	ore / LOS					3.47			С		3.69	1		D)
Bicycle Faci	lity LOS Score	/LOS					2.77	•		С		2.89	1		С	;
Transit Faci	ity LOS Score	/ LOS					1.10			Α		1.37			Α	

				НС	S7 Urk	oan Str	eet	Seg	ment	Report					_	
General Inf	ormation											Streets In	formation	1		
Agency		Sto	olfus and	Associate	es						1	Number of	Intersecti	ons	15	i
Analyst		Ma	x Rusch			Analys	is Da	ate			1	Number of	Segment	s	14	+
Jurisdiction		$\neg \neg$				Time F	Perio	d	PM Pea	ak	1	Number of	Iterations		15	
File Name		Exi	isting PM	l.xus		Analys	is Ye	еаг	2020		5	System Cy	cle Lengt	h, s	11	0
Intersections	3		_	d & Patter	son	28 1/4			tterson			Analysis P			1>	7:00
Project Des	cription	-													_	
1271 40 m		10)—	1321 ft 40 mph		11)		390 45 r		_(1		3811 45 m		_(13)——
Basic Segn	ont Inform	ation (27 4/4 D	d 27 1/2	Dd\											
						t Longth	Je-t-	oreo et:	on Mid	Longth	of DM	Dores	nt Curb		ther	Dolov
Segment	Speed I			h Lanes		t Length	_		on Wid	Length		_	nt Curb			Delay
	WB	EB	WB	EB	WB	EB	_	/B	EB	WB	EB	WB	EB	W	_	EB
11	45	40	2	2	3900	3900	5	0	50	0	0	90	90	0.	0	0.0
								Mont	bound		_		Faatha	und		
Sogment O	utnut Data					WBL		_	bound /BT	WBF	-	EBL	Eastbo EBT			EBR
Segment O	_					WBL	-	V								EBR
Segment	Movemen		ole Tione	_		_			2	12	-	1	6			
11	Bay/Lane	_						ne	ever		-		neve	٢		
11	Shared La			_		neve	r			neve		never				
11	Base Free	e-Flow 9	Speed, m	ıph				45	.85				43.50)		
11	Running 1	lime, s						60	.72				63.94	4		
11	Running S	Speed, I	mph					43	.79				41.59	9		
11	Through [Delay, s	/veh					12	.38				7.25			
11	Travel Tim	ne, s						73	.10				71.20)		
11	Travel Sp	eed, mp	ph					36	.38				37.3	5		
11	Stop Rate	, stops/	/veh					0	34		\neg		0.28			
11	Spatial St	op Rate	e, stops/n	ni				0	46				0.39			
11	Through v	/ol/cap	Ratio					0	47				0.40			
11	Percent of								.35		\neg		85.87			
11	Level of S								В		_		Α			
11	Auto Trav		rception :	Score					.31		$\overline{}$		2.20			
Multimodal													2.20			
11	Pedestria			Score / I	os		3.81		$\overline{}$	D	$\overline{}$	3.59)
11	Bicycle Se						2.86		_	С	_	2.87		\vdash		<u> </u>
11	Transit Se						0.62		_		_	0.57		-		
	Transit Se	gment	LUS SCC	ne / LOS			0.02			A		0.57		-	,	4
Facility Out	nut Data							West	bound		$\overline{}$		Eastbo	und		
Facility Trav									6.87		_		983.1			
Facility Trav		nnh							.34		_		21.89			
Facility Base			mph						.73		_		42.47		_	
		_	, mpn								_					
Facility Pero									.99		-		51.53			
Facility Leve			- 0						C		_		F			
Facility Auto	raveler Po	erceptio	on Score					2	32				2.34			
Multimodal	Results (F	acility)														
Pedestrian F							3.47	,	$\overline{}$	С	$\overline{}$	3.69)		Г)
Bicycle Faci							2.77			С		2.89				
Transit Facil							1.10		_	A	-	1.37				A
anon racii	, 200 000		_									1.01				-

				НС	S7 Urk	oan Str	eet	Seg	ment	Report	t				
General Inf	ormation											treets In	formation	1	
Agency		Sto	olfus and	Associate	es						N	lumber of	Intersect	ions	15
Analyst		Ma	x Rusch			Analys					_		Segment		14
Jurisdiction						Time F	Perio	d	PM Pea	ak	<u> </u>	lumber of	Iterations	3	15
File Name		Ex	isting PM	.xus		Analys	sis Ye	аг	2020			system Cy	cle Lengt	h, s	110
Intersections	S	28	1/4 Road	l & Patter	son	29 Roa	ad & F	Patters	son		A	nalysis P	eriod		1> 7:00
Project Des	cription						_	_							
1321 40 m		11)—	3900 ft 45 mph		12		381 45 i	1 ft nph	<u>_</u> (1	3)—	2585 45 m		14)—
Basic Segn	nent Inforr	mation (28 1/4 R	d - 29 Rd	1										
Segment	Speed			h Lanes		t Length	Inte	rsecti	on Wid	Length	of RM	Percei	nt Curb	Oth	er Delay
Joymont	WB	EB	WB	EB	WB	EB	_	/B	EB	WB	EB	WB	EB	WB	_
12	45	40	2	2	3811	3811	-	0	50	0	0	90	90	0.0	0.0
				اأرا	30.1			أوز						J.0	0.0
								West	bound				Eastbo	und	
Segment O	utput Data	a				WBI	L	V	VBT	WBF	2	EBL	EBT		EBR
Segment	Moveme	nt				5			2	12		1	6		16
12	Bay/Lane	e Spillba	ck Time,	h				n	ever		$\neg \vdash$		neve	r	
12	Shared L	ane Spi	llback Tin	ne, h		neve	г			neve	г	never			never
12	Base Fre	e-Flow	Speed, m	ph				44	.90		$\neg \neg$		42.5	5	
12	Running	Time, s						59	.86		\neg		63.8	5	
12	Running	Speed,	mph					43	3.41		\neg		40.69	9	
12	Through	Delay, s	/veh					20).26		\neg		11.02	2	
12	Travel Ti	me, s						80).12		\neg		74.8	7	
12	Travel Sp	peed, m	ph					32	2.43				34.70)	
12	Stop Rat	e, stops	/veh					0	.51		\neg		0.28		
12	Spatial S	top Rate	e, stops/n	ni				0	.71		$\neg \vdash$		0.39		
12	Through	vol/cap	Ratio					0	.57				0.57	,	
12	Percent of	of Base	FFS					72	2.23		$\neg \vdash$		81.5	5	
12	Level of	Service							В		$\neg \vdash$		Α		
12	Auto Trav	veler Pe	rception	Score				2	.25				2.20		
Multimodal	Results (Segmer	ıt)												
12	Pedestria	an Segn	ent LOS	Score / L	.os		3.78			D		3.55	5		D
12	Bicycle S	Segment	LOS Sco	re / LOS			2.88			С		2.86	6		С
12	Transit S	egment	LOS Sco	re / LOS			0.87			Α		0.73	3		Α
Facility Out								West	bound				Eastbo	und	
Facility Trav	el Time, s							78	6.87				983.1	2	
Facility Trav									7.34				21.89	9	
Facility Base		_	l, mph						2.73				42.4		
Facility Pero								63	3.99				51.5	3	
Facility Leve									С				F		
Facility Auto	Traveler F	Perception	on Score					2	.32				2.34		
Multimodal	Doculte //	Eacility													
Pedestrian F							3.47			С		3.69			D
Bicycle Faci							2.77			C		2.89			С
Transit Faci							1.10			A		1.37			A
TTATISIL FACI	ity LUS SC	JOIN / LC	,,,				1.10			^		1.37			

				I	HCS7 L	Jrba	n Str	eet	Seg	ment	Report						
General Inf	ormation												Streets In	formation	1		
Agency		Sto	olfus and	l Assoc	ates								Number of	Intersect	ions	15	
Analyst		Ma	x Rusch	1		\neg	Analys	is Da	ate	$\overline{}$			Number of	Segment	s	14	
Jurisdiction							Time F	erio	d	PM Pe	ak		Number of	Iterations	5	15	
File Name		Exi	isting PN	/l.xus			Analys	is Ye	ar	2020			System Cy	cle Lengt	h, s	110	0
Intersection	s		Road &		on		29 1/2	Road	1 & Pa	tterson			Analysis P	eriod		1>	7:00
Project Des	cription																
3900 45 m		12)—	3811 45 m		-(13)-			85 ft mph	_(1	<u>)</u>	2619 35 m		_(15	1
Segment Speed Limit Through Lanes Segment Length Intersection Wid Length of RM															_		
Segment							_	-	_					nt Curb	_	_	Delay
			_	_	_	_		-	\rightarrow				WB	EB	W	\rightarrow	EB
13	45	45	2	2	258	5 2	2585	5	0	50	0	0	90	90	0.0	0	0.0
						-											
2						+	IMPI		_		IMPE	_	EDI	Eastbo	_		EDD
	_					-		-	<u> </u>				EBL	EB1			EBR
	_					-	5	_	<u> </u>	_	12	-	1	6	\rightarrow		16
- 12		_				-		_	n	ever		\rightarrow		neve	r		
13	Shared La					-	neve	r				-	never			r	never
13	Base Free		Speed, n	nph		_				3.89		_		43.8			
13	Running T					_				0.98		\rightarrow		40.9	8		
13	Running S		_			_				3.01		_		43.0			
13	Through D		/veh			_			- 6	5.98		_		30.8	8		
13	Travel Tim					_				7.96		_		71.8			
13	Travel Spe	ed, mp	oh						3	6.75				24.5	3		
13	Stop Rate,	, stops/	/veh			\perp			0).18				0.77	<u> </u>		
13	Spatial Sto	p Rate	e, stops/i	mi					0).38				1.57	7		
13	Through vo	ol/cap l	Ratio						0).53				0.64	1		
13	Percent of	Base I	FFS						8	3.72				55.8	8		
13	Level of Se	ervice								Α				С			
13	Auto Trave	eler Pe	rception	Score					2	2.20				2.38	}		
Multimodal	Results (Se	egmen	ıt)														
13	Pedestrian	n Segm	ent LOS	Score	/LOS			3.67			D		3.41	l		С	,
13	Bicycle Se	gment	LOS Sc	ore / LO	os			2.85			С		2.90)		С	;
13	Transit Se	gment	LOS Sc	ore / LC	S	\perp		0.63			Α	\perp	1.42	2		A	
Facility Out						-				tbound		\rightarrow		Eastbo			
Facility Trav						-				6.87		\rightarrow		983.1			
	el Speed, m					+				7.34		\rightarrow		21.8			
	e Free Flow		, mph			+				2.73		\rightarrow		42.4			
_	cent of Base					+			6	3.99		\rightarrow		51.5	3		
_	el of Service					_				С		_		F			
Facility Auto	Traveler Pe	erceptio	on Score)					2	2.32				2.34			
Multimodal	Results (Fa	acilitat															
	Facility LOS					_		3.47			С		3.69				
	ility LOS Sco					+		2.77			C						
	lity LOS Sco					-						-	2.89			C	
Transit Faci	iity LUS 500	ile / LU	13					1.10			A		1.37			A	Ł.

		Stolfus and Associate Max Rusch Existing PM.xus 29 1/2 Road & Patter tion 2585 ft 45 mph t Information (29 1/2 Rd - 30 Rd Speed Limit Through Lanes WB EB WB EB 35 45 2 2 Tut Data Tovement ay/Lane Spillback Time, h hared Lane Spillback Time, h		°07 Hel	on Ctr	oot	Coan	aont	Donor				_	_	
_		Stolfus and Associates Max Rusch Existing PM.xus 29 1/2 Road & Patterso ption 2585 ft 45 mph Through Lanes WB EB WB EB 35 45 2 2 put Data Movement Bay/Lane Spillback Time, h Shared Lane Spillback Time, h Shared Lane Spillback Time, h Running Time, s Running Speed, mph Through Delay, s/veh Travel Time, s Travel Speed, mph Stop Rate, stops/veh Spatial Stop Rate, stops/mi Through vol/cap Ratio Percent of Base FFS Level of Service Auto Traveler Perception Score Results (Segment) Pedestrian Segment LOS Score / LOS Sircycle Segment LOS Score / LOS Transit Segment LOS Score / LOS		.S/ UII	an Su	eel	Segn	ient	Kepor		_	_			_
Company											Ctoo oto los				
	ormation	Ctalfus and	Accoriate							\rightarrow			•	15	:
				es	Amaka	i- D-	4- 1							-	
		Max Rusch						DM Do	ok .					-	
		Cuintina DM			_		\rightarrow		ак	\rightarrow				-	
	•			200						$\overline{}$			n, s	_	
		29 1/2 R0a0	a Paller	SON	30 R0a	u & r	allerso	т			Analysis P	enou		12	7.00
1 Toject Des	Сприоп														
3811	ıft	3	2585 ft		11/		2619	ft		5					
45 m	ph		45 mph	,			35 mj	ph		ン					
Dania Sagn	nent Informatio	n /20 4/2 D	d 20 Dd												
	Time Period PM Peak Number of Iterations 15 lile Name Existing PM.xus Analysis Year 2020 System Cycle Length, s 110 litersections 29 1/2 Road & Patterson 30 Road & Patterson Analysis Period 1> 7:00 roject Description 3811 ft 13 2585 ft 14 2619 ft 15 45 mph 13 45 mph 15 asic Segment Information (29 1/2 Rd - 30 Rd) legment Speed Limit Through Lanes Segment Length Intersection Wid Length of RM Percent Curb Other Delay WB EB														
Segment						_					_		_		_
44			_										-		
14	35 45	2		2019	2019	5	U	50	U	U	90	90	U.	U	0.0
							Westh	ound				Fastbo	und		
Segment O	utput Data				WRI				WBI	2	FBI				FBR
						_				`					
		lhack Time	h							-		_	r		-10
										_	never	11040	•		
		-					40.8	83		_	HEVEI	45.5	2		
			ipii			_				_				_	
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			Score							_				_	
			ocore				2.4	.5		_		2.13	,		
			Score / I	OS		3 27		$\overline{}$			3.40	1		_	,
								+		_					
Facility Ou	tput Data						Westb	ound		_		Eastbo	und		
										\neg					
	·						27.3	34							
		eed, mph								-					
										_					
										-			_		
		ption Score											ļ.		
	Results (Facil														
Pedestrian	Facility LOS Sco	ore / LOS				3.47			С		3.69))
	ility LOS Score					2.77			С		2.89)		(
	liby LOC Coore					4.40					4 27				

Transit Facility LOS Score / LOS

1.10

1.37

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.91 Jurisdiction Time Period AM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 24 Road & Patterson Intersection File Name 2045 NoBuild AM Optimized Timings.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L 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 85 Reference Point Offset, s Begin Green 7.8 3.0 18.4 8.4 2.6 37.8 Uncoordinated No Simult, Gap E/W On Yellow 3.5 3.5 4.0 3.5 0.0 4.0 Force Mode 1.0 0.0 1.0 Fixed Simult. Gap N/S On Red 0.5 0.5 0.5 Timer Results **EBL EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 5.0 4.0 5.0 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 5.2 52 52 Queue Clearance Time (gs), s 14.5 5.8 5.0 28.1 13.0 16.8 Green Extension Time (ge), 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 1.00 0.27 0.85 1 00 0.62 Max Out Probability 0.02 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 540 587 180 137 238 305 96 1026 453 454 696 78 Adjusted Flow Rate (v), veh/h 1675 1752 1716 1738 1810 1585 1730 1752 1518 Adjusted Saturation Flow Rate (s), veh/h/ln 1738 12.5 15.4 3.8 6.0 3.0 26.1 21.7 11.0 14.8 3.2 Queue Service Time (g s), s 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) 0.25 0.18 0.38 0.11 0.40 0.35 0.08 0.46 0.46 0.40 Capacity (c), veh/h 847 890 269 641 391 1314 723 381 1417 614 0.637 0.660 0.512 0.372 0.245 0.781 0.626 1.193 0 491 0.127 Volume-to-Capacity Ratio (X) 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 22 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 0.00 0.71 2.62 Uniform Delay (d 1), s/veh 242 36 1 443 35.7 16.5 27.5 20.7 44 5 22 1 187 109.8 Incremental Delay (d 2), s/veh 1.8 3.8 1.9 1.5 0.5 3.0 1.8 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 22.5 188 Level of Service (LOS) С n D n В C В С C Α Α 28 6 C 22.3 C 27.4 C 71.0 Approach Delay, s/veh / LOS F Intersection Delay, s/veh / LOS 38.2 D Multimodal Results WB NB Pedestrian LOS Score / LOS 2.44 В 2.59 С 2.57 С 2.57 С Bicycle LOS Score / LOS 0.96 A 1.05 Α 1.79 В 1.50 В

		HCS	7 Sig	nalize	d Int	ersec	tion F	≀esul	lts Sur	nmar	у				
General Inform	ation								Intersect	tion Inf	ormatic	nn.		47441	ыŲ
	iauon	Stolfus and Associa	otos						Duration,		0.250		- 1	411	
Agency			ates	Anaha	is Date	_					_		- 1		N. A.
Analyst		Max Rusch			is Date		l:	_	Area Typ	е	Other				- :-
Jurisdiction		D-# D4		Time F		AM P	еак		PHF	Desiral	0.83	20			=
Urban Street		Patterson Rd	A			2045	N-D-S	_	Analysis		1> 7:(00	- 1		
Intersection		Market Street/Mail	Acce	File Na	ame	2045	NoBuild	AM O	ptimized	Timings	s.xus		- 4	11	100
Project Descrip	tion			-	_						_		_	A L & Y	MIII.
Demand Inform	nation				EB			WE	3		NB			SB	
Approach Move				T	T	R	1	T	R	1	T	R	1	T	R
Demand (v), v				71	848	83	25	580	_	30	12	19	87	17	44
Demand (V), V	CIVII				040	0.5	23	300	7 34	30	12	13	07		
Signal Informa	tion			_		$\overline{}$	- 4				-				1
Cycle, s	100.0	Reference Phase	2		- ×	-3	- 2	C .	V		- 34		4		4
Offset, s	52	Reference Point	Begin			- 2	-	-	17	-	-	1	2	3	-
Uncoordinated	No	Simult. Gap E/W	On	Green		3.0	65.6	4.4	6.4 4.0	0.0		7			-4-
Force Mode	Fixed	Simult. Gap N/S	On	Yellow Red	0.5	0.0	1.0	1.0	1.0	0.0		5	6	7	Y
T OFCC MODE	TIXCU	Cilitate: Cap 1470	Oll	1100	0.0	0.0	1.0								
Timer Results				EBI		EBT	WB	L	WBT	NBI		NBT	SBI		SBT
Assigned Phase	e			5	$\overline{}$	2	1	$\overline{}$	6			8		$\overline{}$	4
Case Number				1.1	_	3.0	1.1		3.0			11.0		\rightarrow	10.0
Phase Duration	s			8.7	_	73.6	5.7	_	70.6	_		9.4	_	_	11.4
Change Period,	-	c) s		4.0	\rightarrow	5.0	4.0	-	5.0		+	5.0	_	\rightarrow	5.0
Max Allow Head				3.1	_	0.0	3.1	_	0.0	-	_	3.3	_	$\overline{}$	3.3
Queue Clearan				3.7	-	0.0	2.3	-	0.0			4.7	_		6.3
Green Extensio				0.2	_	0.0	0.0	_	0.0	-	_	0.0	_	-	0.3
Phase Call Pro		(y e), s		0.94	$\overline{}$	0.0	0.34	-	0.0	_		0.87		_	0.99
Max Out Proba				0.00	\rightarrow		0.00			-	\rightarrow	1.00		_	0.32
Wax Out Floba	Dility			0.00			0.00					1.00			0.32
Movement Gro	up Res	sults			EB		_	WB			NB		_	SB	
Approach Move	_			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow F), veh/h		99	1179	115	15	342	_		51	23	105	73	
_		ow Rate (s), veh/h/	'In	1711	1766	1610	1810	1766	-		1834	1610	1702	1682	
Queue Service				1.7	4.6	0.3	0.3	4.7	2.3		2.7	1.4	3.0	4.3	
Cycle Queue C				1.7	4.6	0.3	0.3	4.7	2.3		2.7	1.4	3.0	4.3	
Green Ratio (g		(g - _{//} -		0.71	0.69	0.69	0.67	0.66	-		0.04	0.04	0.06	0.06	
Capacity (c), v				759	2423	1104	402	2317	_		80	70	217	107	
Volume-to-Capa		atio (X)		0.130	0.487	_	0.037	0.148	-		0.634	0.327	0.482	0.685	_
		/In (90 th percentile)	22.5	43.1	4.7	3.4	67.8	_		52	22.7	52.4	74.4	
		eh/In (90 th percent		1.0	1.9	0.2	0.2	3.0	1.3		2.4	1.0	2.3	3.4	
		RQ) (90 th percen		0.15	0.00	0.2	0.03	0.00	_		0.00	0.00	0.00	0.00	
Uniform Delay (4.8	1.4	0.6	5.2	8.7	11.6		47.0	46.4	45.2	45.8	
Incremental De				0.0	0.6	0.0	0.0	0.1	0.1		3.1	1.0	0.6	2.9	
Initial Queue De				0.0	0.0	0.2	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (••		4.8	1.9	0.0	5.2	8.8	11.7		50.1	47.4	45.8	48.7	
Level of Service				A.0	A	A	A	A	В		D	D D	D D	D	
Approach Delay				2.0		A	9.1	_	A	49.3		D	47.0		D
Intersection Delay				2.0			.0		A	49.3			A 47.0		U
micraecuon De	ay, 5/VE	ai / LOO				9	.u						^		
Multimodal Re	sults				EB			WB			NB			SB	
Pedestrian LOS		/LOS		1.86	_	В	2.00	_	В	2.47	_	В	2.46		В
				1.48	_			\rightarrow	A	0.61		_			

	HCS	87 Sig	nalize	d Int	ersec	tion F	Resul	ts Sur	nmar	у			_	
General Information								ntersect	tion Inf	ormatic	nn.		47441	ыų
	Stolfus and Associa	otos						Duration,		0.250		- 1	44	
Agency		ales	Anaha	is Data	_		_			_		- 1		<u></u>
Analyst Jurisdiction	Max Rusch		Time F	sis Date	AM P	nok	_	Area Typ PHF	е	Other 0.84		- 3		
	Patterson Rd				_	ean			Dorind		20	- 13-		-
Urban Street		20/140			2045	NaDuild	_	Analysis		1> 7:0	00	- 12		
Intersection	Home Depot Acces	ss/me	File Na	ame	2045	NoBulia	AM O	otimized	rimings	s.xus		- 4	1 (50.00
Project Description												_	A DESCRIPTION	epi.
Demand Information	•			EB			WB			NB		_	SB	
Approach Movement			ī	T T	T R	1	T	R	1	T T	R	1	T	R
Demand (v), veh/h			39	756	189	87	571	_	70	21	47	25	30	28
Demand (V), Venin			33	730	103	07	311	13	70	21		23	30	20
Signal Information					$\overline{}$		بالرات		$\overline{}$	- 10		K.		_
Cycle, s 100.0	Reference Phase	2		- V	=3	4		IS A	28			7		V
Offset, s 27	Reference Point	Begin		- 7	- 2	-	-	51			1	2	3	
Uncoordinated No	Simult. Gap E/W	Off	Green Yellow		0.3	62.2 4.0	5.8	8.7 4.0	0.0		_			\mathbf{A}
Force Mode Fixed	· ·	Off	Red	0.5	0.0	1.0	1.0	1.0	0.0			♦ .	7	8
T Gree Midde	Cimul. Cup 1470	0												
Timer Results			EBI		EBT	WB	L	WBT	NBI		NBT	SBI		SBT
Assigned Phase			1	$\overline{}$	6	5		2			4		$\overline{}$	8
Case Number			1.1		3.0	1.1	\neg	3.0			11.0	_	\rightarrow	10.0
Phase Duration, s			8.2	\neg	67.5	7.9	_	67.2	-	$\overline{}$	13.7	-	_	10.8
Change Period, (Y+F	?c)s		4.0	_	5.0	4.0	$\overline{}$	5.0	_	-	5.0	_	\rightarrow	5.0
Max Allow Headway (5.2	\rightarrow	0.0	5.2	\rightarrow	0.0	_	_	5.4	_	$\overline{}$	5.4
Queue Clearance Tim			3.4	-	0.0	3.1	$\overline{}$	0.0	_	_	7.7	_		5.9
Green Extension Time			0.4	_	0.0	0.3	\rightarrow	0.0	_	_	1.0	_	$\overline{}$	0.4
Phase Call Probability			0.85	$\overline{}$	0.0	0.79	$\overline{}$	0.0	_		0.99	_		0.94
Max Out Probability			0.00	\rightarrow		0.00	-		_	\rightarrow	0.00		_	0.00
Max Out 1 Tobability			0.00			0.00					0.00	_		0.00
Movement Group Re	esults			EB			WB			NB		_	SB	
Approach Movement			L	Т	R	L	Т	R	L	T	R	L	Т	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 F	low Rate (s), veh/h/	/In	1711	1766	1598	1810	1752	1610		1830	1610	1767	1748	
Queue Service Time (1.4	20.2	8.1	1.1	2.8	0.1		5.7	3.1	1.6	3.9	
Cycle Queue Clearan	ce 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 R	Ratio (X)		0.094	0.592		0.208	0.168	_		0.683	0.275	0.288	0.676	
Back of Queue (Q),		!)	19.3	220	100.2	16	38.8	2		112.7	51.9	31.4	78.7	
Back of Queue (Q),			0.8	9.8	4.5	0.7	1.7	0.1		5.1	2.4	1.4	3.6	
Queue Storage Ratio			0.14	0.00	0.50	0.15	0.00	0.00		0.00	0.59	0.24	0.00	
Uniform Delay (d 1),		,	6.1	9.5	7.0	9.0	4.8	5.4		44.3	39.6	45.1	46.1	
Incremental Delay (d			0.1	1.1	0.8	0.5	0.2	0.0		7.2	1.0	2.2	10.5	
Initial Queue Delay (0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (d), s/			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	В	A	A	A	A		D	D	D	E	
Approach Delay, s/ve			9.8		A	5.5		A	47.8		D	53.8	_	D
Intersection Delay, s/						3.5						В		
					,									
Multimodal Results				EB			WB			NB			SB	
										_				
Pedestrian LOS Score	e / LOS		1.88	3	В	1.88	3 I	В	2.46	i	В	2.47	7	В

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.92 Jurisdiction Time Period AM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 24 1/2 Rd & Patterson Intersection File Name 2045 NoBuild AM Optimized Timings.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R Demand (v), veh/h 40 724 70 147 442 121 144 138 62 211 307 83 Signal Information Ji. Cycle, s 100.0 Reference Phase 2 15 Reference Point Offset, s Begin Green 4.4 0.3 52.6 10.0 1.0 13.2 Uncoordinated No Simult, Gap E/W On Yellow 3.5 0.0 4.0 3.5 0.0 4.0 Force Mode 0.0 1.0 Fixed Simult. Gap N/S On Red 0.5 0.0 1.5 0.5 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 4.0 5.5 4.0 5.5 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 52 52 52 Queue Clearance Time (gs), s 4.1 4.5 9.5 7.9 13.0 11.1 Green Extension Time (ge), 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 0.15 1 00 0.24 Max Out Probability 0.00 0.01 0.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 78 1405 136 100 301 82 157 111 106 229 334 90 Adjusted Flow Rate (v), veh/h 1697 1610 1810 1766 1856 1665 1767 1738 1397 Adjusted Saturation Flow Rate (s), veh/h/ln 1781 1598 1767 2.1 26.8 3.0 2.5 3.6 2.3 7.5 5.5 5.9 11.0 9.1 5.9 Queue Service Time (g s), s 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) 0.53 0.53 0.53 0.23 0.13 0.24 0.57 0.57 0.53 0.13 0.14 0.14 Capacity (c), veh/h 597 1873 847 245 1867 844 279 245 220 351 493 198 0.130 0.750 0.160 0.409 0.161 0.098 0.562 0.453 0.483 0.654 0.676 0.455 Volume-to-Capacity Ratio (X) 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 24 1.5 5.6 4.7 4.5 8.1 6.5 3.8 0.22 0.00 0.18 0.31 0.00 0.13 0.96 0.00 0.00 0.00 0.00 Queue Storage Ratio (RQ) (90 th percentile) 1.38 Uniform Delay (d 1), s/veh 93 128 8 1 15 1 97 106 32.9 40 1 40.2 334 40.7 394 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 94 15.3 8.5 16.5 99 10.8 35.4 41.9 42.5 38.3 43 0 417 Level of Service (LOS) R В В D n D D Α Α D D Α 14.5 В В 394 D 41.2 Approach Delay, s/veh / LOS 11.4 D Intersection Delay, s/veh / LOS 22.6 C Multimodal Results WB NB Pedestrian LOS Score / LOS 2.25 В 2.41 В 2.46 В 2.45 В Bicycle LOS Score / LOS 1.24 Α 1.12 A 0.80 A 1.03 A

Second Information			HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ults Si	ımma	ry				
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Jurisdiction				ates	Analys	ie Det	т .					_		- 2		V A
Urban Street			Max Rusch				_	nok		_	/pe				-1.	≒
Intersection			Detterre Dd					eak			- Davied		00	- 33		7
Project Description							_	Na Decilal	^ ^ ^				00	- 13		į į
Demand Information		4:	25 Road & Pallers	on	File Na	ime	2045	NoBulia	AIVI	Opumize	a riming	S.XUS		-	111	eld.
Approach Movement	Project Descrip	tion		_	-	-	_	-		_	_	-	_			e para
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Signal Information	Approach Move	ement			L	Т	R	L	Т	T F	L	Т	R	L	T	R
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Timer Results				_									∕ ⊐⊢	4	\ \ \ \ \	4
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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 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 5.2 Queue Clearance Time (g s), s 5.1 — 6.2 — 8.0 17.3 10.0 20.0 Green Extension Time (g s), s 0.5 0.0 0.0 0.0 0.0 0.0 1.0						_		_	-		_	\rightarrow		_	_	_
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Approach Movement L T R L T R L T R L T R L T R 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 Flow Rate (s), veh/h/n 1753 1781 1885 1795 1795 1585 1753 1811 1610 1795 1811 1585 1795 1795 1585 1795 1585 1795 1585 1795 1585 1795 1585 1795 1585 1795 1811 1585 160 1811 1585 180 211 180 21 21 21 <th< td=""><td>max out i loba</td><td>Dility</td><td></td><td></td><td>0.00</td><td></td><td></td><td>1.00</td><td></td><td></td><td>1.0</td><td></td><td>0.02</td><td>1.00</td><td></td><td>1.00</td></th<>	max out i loba	Dility			0.00			1.00			1.0		0.02	1.00		1.00
Assigned Movement 1 6 16 5 2 12 7 4 14 3 8 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) 0.22 0.806 0.129 0.816 113 113 42 182 132 132 133 133 143 144 183 1	Movement Gro	oup Res	sults			EB			W	В	т	NB			SB	
Adjusted Flow Rate (v), veh/h	Approach Move	ement			L	T	R	L	Т	R	L	T	R	L	Т	R
Adjusted Saturation Flow Rate (\$\sigma\$), veh/h/ln 1753 1781 1585 1795 1795 1585 1753 1811 1610 1795 1811 1585 Queue Service Time (\$g\$\$\sigma\$), \$\sigma\$ 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\$\$\sigma\$), \$\sigma\$ 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\$\$\cap{G}\$), \$\sigma\$ 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\$\$\cap{G}\$), \$\sigma\$ 3.1 28.7 6.2 4.2 9.1 2.8 6.0 15.3 5.8 8.0 18.0 2.3 Green Ratio (\$g\$\$\cap{G}\$), \$\sigma\$ 3.1 28.7 6.2 4.2 9.1 2.8 6.0 15.3 5.8 8.0 18.0 2.3 Green Ratio (\$g\$\$\cap{G}\$), \$\sigma\$ 3.1 28.7 6.2 4.2 9.1 2.8 6.0 15.3 5.8 8.0 18.0 2.3 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	Assigned Move	ment			1	6	16	5	2	12	7	4	14	3	8	18
Queue Service Time (gs), 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 (gc), 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 0.29 0.23 0.29 0.31 0.25 0.25 Capacity (c), veh/lh 610 1567 697 234 1113 491 226 417 467 291 45.3 396 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), th/ln (90 th percentile) 2.0 14.3 1.4 3.8 6.5 1.9 5.8 11.3	Adjusted Flow	Rate (v), veh/h		135	1262	90	113	37	6 60	144	300	121	218	351	47
Cycle Queue Clearance Time ($g c$), s	Adjusted Satura	ation Flo	ow Rate (s), veh/h/	'In	1753	1781	1585	1795	179	5 158	1753	1811	1610	1795	1811	1585
Green Ratio (g/C) 0.52 0.44 0.44 0.37 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 0.774 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 82.2 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	Queue Service	Time (g s), S		3.1	28.7	2.2	4.2	9.1	1 2.8	6.0	15.3	5.8	8.0	18.0	2.3
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), trl/in (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/in (90 th percentile) 2.0 14.3 1.4 3.8 6.5 1.9 5.8 11.3 4.2 82.2 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	Cycle Queue C	learanc	e Time (g ε), s		3.1	28.7	2.2	4.2	9.1	1 2.8	6.0	15.3	5.8	8.0	18.0	2.3
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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 </td <td>Capacity (c), v</td> <td>/eh/h</td> <td></td> <td></td> <td>610</td> <td>1567</td> <td>697</td> <td>234</td> <td>111</td> <td>3 491</td> <td>226</td> <td>417</td> <td>467</td> <td>291</td> <td>453</td> <td>396</td>	Capacity (c), v	/eh/h			610	1567	697	234	111	3 491	226	417	467	291	453	396
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 (d₁), 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 (d₂), 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 (d₃), s/veh 0.0	Volume-to-Cap	acity Ra	atio (X)		0.222	0.806	0.129	0.481	0.33	38 0.12	1 0.637	0.720	0.258	0.751	0.774	0.119
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 (d₁), 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 (d₂), 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 (d₃), s/veh 0.0			<u> </u>		45.7	320.8	30.8	84.2	144	.5 43.5	131	261.3	92.6	182.8	302.9	37.3
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.							_	_	_	_	_	_	_	_	_	_
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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 C SB SB SB SB Pedestrian LOS Score / LOS 2.12 B 2.12 B 2.45 B 2.44 B					-		_		_	_	_	_	_		_	-
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Multimodal Results EB WB NB SB Pedestrian LOS Score / LOS 2.12 B 2.12 B 2.45 B 2.44 B					21.3)	Ü	41.	4				U
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			/LOS		2.12	_	В	2.12	_		2.4		В	2.44		В
						_		_	\rightarrow		_			_	-	В

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.82 Jurisdiction Time Period AM Peak 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 R L R L R L R Demand (v), veh/h 32 934 51 137 986 90 73 89 98 212 149 118 Signal Information Ji. Cycle, s 100.0 Reference Phase 2 98 Reference Point Offset, s Begin Green 5.2 45.1 6.0 1.0 18.3 1.4 Uncoordinated No Simult, Gap E/W On Yellow 3.5 0.0 4.5 3.5 3.5 4.0 Force Mode 0.5 1.0 Fixed Simult. Gap N/S On Red 0.5 0.0 0.5 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 6.0 4.0 6.0 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 5.3 52 53 Queue Clearance Time (gs), s 3.1 3.9 6.0 8.7 13.0 19.9 Green Extension Time (ge), 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 0.01 1 00 0.03 Max Out Probability 0.00 0.00 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 38 1109 61 64 460 42 89 109 120 259 326 Adjusted Flow Rate (v), veh/h 1810 1598 1781 1781 1885 1585 1682 1719 Adjusted Saturation Flow Rate (s), veh/h/ln 1781 1572 1767 1.1 18.7 0.6 1.9 4.4 0.4 4.0 5.0 6.7 11.0 17.9 Queue Service Time (g s), s 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 0.24 0.18 0.31 0.23 0.47 0.18 Capacity (c), veh/h 532 1606 720 317 1657 732 213 344 289 402 400 0.071 0.691 0.084 0.202 0.278 0.057 0.418 0.315 0.413 0 644 0.814 Volume-to-Capacity Ratio (X) 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 27 0.3 3.7 4.2 4.7 8.8 11.6 0.13 0.00 0.07 0.23 0.00 0.04 0.74 0.00 1.19 1.55 0.00 Queue Storage Ratio (RQ) (90 th percentile) Uniform Delay (d 1), s/veh 134 11 7 38 15 1 78 34 314 354 36 1 29.036.3 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) В R В D D D Α D D Α Α 13.4 В 37.0 D 39.7 Approach Delay, s/veh / LOS 8.6 Α D Intersection Delay, s/veh / LOS 20.9 C Multimodal Results WB NB Pedestrian LOS Score / LOS 2.10 В 1.90 В 2.45 В 2.45 В Bicycle LOS Score / LOS 1.51 В 1.71 В 1.01 A 1.45 A

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF Jurisdiction Time Period AM Peak 0.77 Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 1st Street & Patterson Intersection File Name 2045 NoBuild AM Optimized Timings.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L 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 47 Reference Point Offset, s Begin Green 5.7 1.8 30.0 6.9 4.0 33.1 Uncoordinated No Simult, Gap E/W On Yellow 3.5 0.0 3.0 3.5 0.0 4.0 1.0 Force Mode Fixed Simult. Gap N/S On Red 0.5 0.0 2.5 0.5 0.0 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 5.5 4.0 5.5 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 52 52 52 Queue Clearance Time (gs), s 6.1 3.5 5.5 13.7 9.9 32.6 Green Extension Time (ge), 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 0.20 0.02 0.74 Max Out Probability 0.01 0.00 0.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 44 791 147 95 576 22 148 277 186 231 617 87 Adjusted Flow Rate (v), veh/h 1781 1810 1810 1598 1781 1743 1856 1598 1885 1610 Adjusted Saturation Flow Rate (s), veh/h/ln 1766 1572 1.5 19.7 5.4 3.5 13.4 0.9 11.7 7.8 7.9 30.6 3.3 Queue Service Time (g s), s 4.1 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 0.33 0.41 0.07 0.46 0.37 0.43 Capacity (c), veh/h 312 1061 590 266 1132 500 242 614 648 471 700 689 0.142 0.746 0.250 0.358 0.509 0.044 0.612 0.450 0.287 0.491 0.882 0.126 Volume-to-Capacity Ratio (X) 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 22 0.18 0.00 0.58 0.52 0.00 0.13 0.57 0.00 0.85 0.00 0.00 Queue Storage Ratio (RQ) (90 th percentile) 1.12 Uniform Delay (d 1), s/veh 194 292 172 222 28.5 216 452 26.3 20.0 179 29 4 17.3 0.2 Incremental Delay (d 2), s/veh 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) В C В С С D C С D В С В 30.4 C 28 4 C 30.3 C 33.2 Approach Delay, s/veh / LOS С Intersection Delay, s/veh / LOS 30.7 C Multimodal Results WB NB Pedestrian LOS Score / LOS 2.29 В 2.11 В 2.43 В 2.43 В Bicycle LOS Score / LOS 1.77 В 1.84 1.49 A 2.03 В

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0 250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.80 Jurisdiction Time Period AM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 7th Street & Patterson Intersection File Name 2045 NoBuild AM Optimized Timings.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R 106 Demand (v), veh/h 69 716 189 238 1007 80 301 147 168 654 204 Signal Information Cycle, s 100.0 Reference Phase 2 0 Reference Point Offset, s Begin Green 4.2 3.0 36.5 5.7 3.3 29.2 Uncoordinated No Simult, Gap E/W On Yellow 3.5 0.0 4.0 3.5 0.0 4.0 0.0 1.0 Force Mode Fixed Simult. Gap N/S On Red 0.5 0.0 10 0.5 Timer Results **EBL EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 5.0 4.0 5.0 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 52 52 52 Queue Clearance Time (gs), s 5.1 6.7 5.9 9.4 10.0 21.7 Green Extension Time (ge), 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 0.28 1 00 Max Out Probability 0.00 0.00 0.53 0.46 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 57 589 134 142 602 60 100 376 168 210 818 255 Adjusted Flow Rate (v), veh/h 1810 1766 1374 1810 1767 1795 1591 1795 1809 1586 Adjusted Saturation Flow Rate (s), veh/h/ln 1781 1543 3.1 7.8 4.7 6.9 0.7 3.9 7.4 6.7 8.0 19.7 12.1 Queue Service Time (g s), s 1.6 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 0.40 0.35 0.29 0.36 0.45 0.40 0.40 0.33 0.37 Capacity (c), veh/h 76 1291 592 416 1410 611 229 1049 581 423 1176 583 0.746 0.456 0.227 0.342 0.427 0.099 0.436 0.359 0.288 0.497 0.695 0.438 Volume-to-Capacity Ratio (X) 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 0.39 0.00 0.13 0.59 0.00 0.07 0.31 0.00 0.54 0.00 0.00 Queue Storage Ratio (RQ) (90 th percentile) 1.16 Uniform Delay (d 1), s/veh 492 11.5 37 176 9.5 49 24.5 23.9 192 212 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 44 18.1 102 5.1 26 4 242 196 22.5 30.7 24 6 Level of Service (LOS) Е R В R С C В C С Α Α С 14.8 В 11.2 В 23.3 C 28.2 Approach Delay, s/veh / LOS С Intersection Delay, s/veh / LOS 20.4 C Multimodal Results WB NB Pedestrian LOS Score / LOS 2.45 В 2.43 В 2.45 В 2.47 В Bicycle LOS Score / LOS 1.47 Α 1.88 В 1.02 A 1.55 В

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0 250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.80 Jurisdiction Time Period AM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 12th Street & Patterson Intersection File Name 2045 NoBuild AM Optimized Timings.xus <u>ነነተተ</u> Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R Demand (v), veh/h 135 571 179 382 1138 114 224 501 122 96 570 107 Signal Information Д, Cycle, s 100.0 Reference Phase 2 STO 45 Reference Point Begin Offset, s Green 9.0 1.0 18.5 14.0 2.0 29.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 3.5 4.0 3.5 3.5 4.0 Force Mode 0.5 1.0 Fixed Simult. Gap N/S On Red 0.5 0.5 1.5 0.5 Timer Results **EBL EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 5.5 4.0 5.5 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 52 52 52 Queue Clearance Time (gs), s 4.9 6.2 6.3 15.9 4.0 23.6 Green Extension Time (ge), 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 1.00 0.25 0.48 0.04 0.99 Max Out Probability 0.02 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 128 540 169 224 667 67 280 626 153 120 435 411 Adjusted Flow Rate (v), veh/h 1743 1870 1730 1766 1600 1743 1730 1781 1572 1764 Adjusted Saturation Flow Rate (s), veh/h/ln 1795 1598 2.9 13.9 64 4.2 17.5 3.0 13.9 5.5 2.0 21.5 21.6 Queue Service Time (g s), s 4.3 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 0.35 0.49 0.29 0.29 0.51 0.43 Capacity (c), veh/h 513 654 618 700 844 375 933 1246 771 900 542 512 0.249 0.826 0.274 0.320 0.790 0.178 0.300 0.502 0.198 0.133 0.803 0.803 Volume-to-Capacity Ratio (X) 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 0.29 0.00 0.53 0.25 0.00 0.36 0.31 0.00 0.36 0.25 0.00 0.00 Queue Storage Ratio (RQ) (90 th percentile) Uniform Delay (d 1), s/veh 304 30.8 16.3 213 36.3 26.9 166 25 6 14 4 174 32.9 329 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) С n В С n В C В В D C D 32.7 C 36.8 D 22.8 C 41.7 Approach Delay, s/veh / LOS n Intersection Delay, s/veh / LOS 33.3 С Multimodal Results WB NB Pedestrian LOS Score / LOS 2.59 С 2.45 В 2.57 С 2.58 С Bicycle LOS Score / LOS 1.40 Α 2.17 В 1.36 A 1.28 A

		HCS	7 Sig	nalize	d Int	ersec	tion R	Resu	lts Sur	nmar	у				
General Inform	ation								Intersec	tion Inf	ormatic	n.		4 444 1	되면
	iation	Stolfus and Associa	tos					-	Duration		0.250		- 1	4 4	
Agency			iles	Anaba	is Dat						_		- 2		<u>-</u>
Analyst Jurisdiction		Max Rusch		Analys		AM P	nok	-	Area Typ	е	Other 0.83				<u>^</u>
		Detteres Dd		Time F			eak	-		Desired		20	- 3 -		-
Urban Street		Patterson Rd	L 04			r 2045	NaDuild	AN 6	Analysis		1> 7:	JU	- B		- 2
Intersection	4:	Patterson Rd & 15t	n St	File Na	ame	2045	NoBulia	AM C	ptimized	rimings	s.xus			1 (eld.
Project Descrip	tion		-	_	-	_	-	-	_	-	-	-			equ.
Demand Inform	nation				EB		$\overline{}$	w	В	$\overline{}$	NB		$\overline{}$	SB	
Approach Move	ement			L	Т	R	L	T	R	L	T	R	L	Т	R
Demand (v), v	eh/h			140	623	15	51	180	00 194	12	3	20	12	3	61
Signal Informa	tion				7	- 7		2	5				_		1
Cycle, s	100.0	Reference Phase	2		- 4	TŘ .	N	. 6	512		198		€ .		4,
Offset, s	9	Reference Point	End	Green	3.2	2.8	75.4	6.6	-11	0.0			-	1	
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.0	4.0		0.0		~ '	₹		*
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.0	0.0		5	6	7	8
Timer Results				EBL	-	EBT	WB	<u> </u>	WBT	NB		NBT	SBL	-	SBT
Assigned Phase	e			5	-	2	1	-	6	⊢	_	8	_	-	4
Case Number				1.1	-	4.0	1.1	_	4.0	_	-	7.0	_	-	7.0
Phase Duration				10.0	-	82.2	7.2	_	79.4	⊢	_	10.6		-	10.6
Change Period,				4.0	-	4.0	4.0	_	4.0	_	-	4.0	_	-	4.0
Max Allow Head				3.1	_	0.0	3.1	-	0.0	_	_	3.3	\vdash	-	3.3
Queue Clearan				4.0	_		2.3	-		-	-	3.4	_	_	6.5
Green Extensio		(ge), S		0.3	-	0.0	0.0	-	0.0	_	_	0.2	\vdash	\rightarrow	0.2
Phase Call Prol				0.99	\rightarrow		0.53	\rightarrow		_	-	0.98		_	0.98
Max Out Proba	bility			0.00			0.00			_	_	0.00			0.00
Movement Gro	un Das	ulte			EB			WE			NB			SB	
Approach Move	_	suits			T	R	L	T	R		T	R	L	T	R
Assigned Move				5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow F) veh/h		179	410	407	27	536		۴	18	24		18	73
		ow Rate (s), veh/h/l	n	1781	1856	1840	1781	188		_	1515	1585		1515	1585
Queue Service				2.0	8.7	8.6	0.3	4.8	_	_	0.0	1.4		0.0	4.5
Cycle Queue C				2.0	8.7	8.6	0.3	4.8		-	1.0	1.4		1.0	4.5
Green Ratio (g		e fille (gt), s		0.82	0.78	0.78	0.79	0.75	_	_	0.07	0.07		0.07	0.07
Capacity (c), v				556	1451	1439	580	1422		-	165	105		165	105
Volume-to-Capa		atio (X)		0.322	0.283	_	0.046	0.37	_	-	0.110			0.110	0.701
		/In (90 th percentile))	13.3	103.2	_	2.9	46	39	-	17.1	23.1		17.1	75.1
		eh/ln (90 th percent		0.6	4.6	4.5	0.1	2.1		-	0.8	1.0		0.8	3.4
		RQ) (90 th percent		0.17	0.00	0.00	0.03	0.00	_		0.00	0.52		0.00	1.70
Uniform Delay (,	2.0	4.8	4.7	2.7	1.6	_	-	44.1	44.3		44.1	45.7
Incremental De				0.1	0.5	0.5	0.0	0.5	_		0.1	0.4		0.1	3.2
Initial Queue De				0.0	0.0	0.0	0.0	0.0	_	-	0.0	0.0		0.0	0.0
Control Delay (••		2.1	5.3	5.2	2.7	2.1	1.9		44.2	44.7		44.2	48.9
Level of Service				Α	Α	Α	Α	Α	A		D	D		D	D
Approach Delay				4.7	_	Α	2.0		Α	44.5		D	47.9		D
Intersection De							.9						A		
Multimodal Re	sults				EB			WE	3		NB			SB	
Pedestrian LOS	Score	/LOS		1.83		В	1.84	1	В	2.31		В	2.31		В
Bicycle LOS Sc	ore / LC	OS		1.26	j	Α	2.52	2	С	0.56	6	Α	0.64		Α

HCS7 Signalized Intersection Results Summary Intersection Information General Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other Time Period PHF 0.83 Jurisdiction AM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 27 1/2 Road & Patterson File Name Intersection 2045 NoBuild AM Optimized Timings.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L 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 Green 6.0 38.0 41.0 0.0 0.0 0.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 4.5 4.0 0.0 0.0 0.0 Force Mode Simult. Gap N/S 1.0 0.0 0.0 0.0 Fixed On Red 0.5 1.5 **Timer Results FBL EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 2 4 1 Case Number 1.0 4.0 7.3 9.0 Phase Duration, s 10.0 54.0 44.0 46.0 Change Period, (Y+Rc), 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 (gs), s 3.9 14.0 Green Extension Time (ge), s 0.0 0.0 0.0 5.2 Phase Call Probability 1.00 1.00 1.00 0.02 Max Out Probability EB WB NB SB Movement Group Results Approach Movement L R T R L R L R ı 12 Assigned Movement 1 6 2 7 14 Adjusted Flow Rate (v), veh/h 58 533 872 167 464 258 Adjusted Saturation Flow Rate (s), veh/h/ln 1753 1795 1610 1757 1522 1795 1.9 6.9 18.8 6.1 9.0 12.0 Queue Service Time (g s), s Cycle Queue Clearance Time (g c), s 1.9 6.9 18.8 6.1 9.0 12.0 0.46 0.48 0.38 0.38 0.41 Green Ratio (g/C) 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 21 0 Uniform Delay (d 1), s/veh 18.5 11 0 222 17.5 20 1 0.3 2.0 Incremental Delay (d 2), s/veh 1.2 1.9 0.9 0.6 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) В R С С В С 12.2 В 23.2 C 0.0 21.5 C Approach Delay, s/veh / LOS Intersection Delay, s/veh / LOS 19.9 В Multimodal Results WB NB Pedestrian LOS Score / LOS 0.70 Α 2.11 В 2.32 В 2.32 В Bicycle LOS Score / LOS 1.20 Α 2.37

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.83 Jurisdiction Time Period AM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 29 Road & Patterson Intersection File Name 2045 NoBuild AM Optimized Timings.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R 98 Demand (v), veh/h 129 532 231 187 1461 194 173 49 73 271 360 Signal Information Cycle, s 100.0 Reference Phase 2 50 Reference Point Begin Offset, s Green 7.5 1.5 26.5 9.5 1.0 29.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 3.5 4.5 3.5 0.0 4.0 Force Mode 2.0 0.0 1.0 Fixed Simult. Gap N/S On Red 1.0 1.0 10 Timer Results FBL **FBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 4 3 8 1 7 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 6.5 4.5 6.5 5.0 4.5 5.0 Change Period, (Y+Rc), s 4.5 4.5 Max Allow Headway (MAH), s 4.1 0.0 4.1 0.0 42 43 42 43 Queue Clearance Time (gs), s 6.4 7.0 6.5 10.9 5.2 20.9 Green Extension Time (ge), 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 1.00 0.06 0.34 0.38 Max Out Probability 0.13 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 1 6 5 2 7 4 8 18 111 457 198 133 1042 70 234 208 17 88 327 373 Adjusted Flow Rate (v), veh/h 1781 1795 1767 1870 1610 1870 1610 Adjusted Saturation Flow Rate (s), veh/h/ln 1572 1781 1585 1716 1753 4.4 10.8 9.7 5.0 26.8 4.5 8.9 0.6 3.2 14.8 18.9 Queue Service Time (g s), s 1.9 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 0.32 0.32 0.38 0.29 0.43 0.40 0.30 0.42 0.38 Capacity (c), veh/h 226 951 417 457 1157 515 665 542 684 485 561 604 0 491 0.480 0.476 0 292 0.900 0.136 0.351 0.384 0.025 0.181 0.582 0.619 Volume-to-Capacity Ratio (X) 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 0.26 0.00 0.45 0.22 0.00 0.32 0.34 0.00 0.04 0.42 0.00 1.88 Queue Storage Ratio (RQ) (90 th percentile) Uniform Delay (d 1), s/veh 25.5 312 26.3 22 0 244 14 1 218 28 4 167 197 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) С C С С С В C В С С C С 31.4 C 30.5 C 26.3 C 30.7 Approach Delay, s/veh / LOS С Intersection Delay, s/veh / LOS 30.1 C Multimodal Results WB NB Pedestrian LOS Score / LOS 2.34 В 2.18 В 2.44 В 2.44 В Bicycle LOS Score / LOS 1.37 A 2 22 В 1.25 A 1.79 В

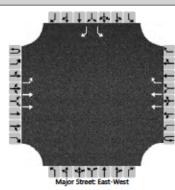
HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.83 Jurisdiction Time Period AM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 29 Road & Patterson Intersection File Name 2045 NoBuild AM Optimized Timings.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R 98 Demand (v), veh/h 129 532 231 187 1461 194 173 49 73 271 360 Signal Information Cycle, s 100.0 Reference Phase 2 50 Reference Point Begin Offset, s Green 7.5 1.5 26.5 9.5 1.0 29.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 3.5 4.5 3.5 0.0 4.0 Force Mode 2.0 0.0 1.0 Fixed Simult. Gap N/S On Red 1.0 1.0 10 Timer Results FBL **FBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 6.5 4.5 6.5 5.0 4.5 5.0 Change Period, (Y+Rc), s 4.5 4.5 Max Allow Headway (MAH), s 4.1 0.0 4.1 0.0 42 4.3 42 43 Queue Clearance Time (gs), s 6.4 7.0 11.4 10.9 5.2 20.9 Green Extension Time (ge), 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 1.00 0.06 0.34 0.38 Max Out Probability 0.13 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 1 6 5 2 7 4 8 18 111 457 198 133 1042 70 234 208 17 88 327 373 Adjusted Flow Rate (v), veh/h 1781 1795 1767 1870 1610 1870 1610 Adjusted Saturation Flow Rate (s), veh/h/ln 1572 1781 1585 1767 1753 4.4 10.8 9.7 5.0 26.8 9.4 8.9 0.6 3.2 14.8 18.9 Queue Service Time (g s), s 1.9 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 0.32 0.32 0.38 0.29 0.43 0.40 0.30 0.42 0.38 Capacity (c), veh/h 226 951 417 457 1157 515 338 542 684 485 561 604 0 491 0.480 0.476 0 292 0.900 0.136 0.692 0.384 0.025 0.181 0.582 0.619 Volume-to-Capacity Ratio (X) 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 0.26 0.00 0.45 0.22 0.00 0.32 0.77 0.00 0.04 0.42 0.00 1.88 Queue Storage Ratio (RQ) (90 th percentile) Uniform Delay (d 1), s/veh 25.5 31.2 26.3 22 0 244 14 1 236 28 4 167 197 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) С C С С С В С C В С C С 31.4 C 30.5 C 32 1 C 30.7 Approach Delay, s/veh / LOS С Intersection Delay, s/veh / LOS 31.0 C Multimodal Results WB NB Pedestrian LOS Score / LOS 2.17 В 2.18 В 2.44 В 2.44 В Bicycle LOS Score / LOS 1.37 Α 2 22 В 1.25 A 1.79 В

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.85 Jurisdiction Time Period AM Peak 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 R L R L R L R Demand (v), veh/h 13 531 96 222 1549 265 48 34 67 150 106 64 Signal Information Als. Cycle, s 100.0 Reference Phase 2 5.17 32 Reference Point Offset, s Begin Green 1.5 53.8 9.0 10.6 0.0 1.6 Uncoordinated No Simult, Gap E/W On Yellow 3.5 3.5 5.0 4.0 4.0 0.0 Force Mode 0.5 0.0 Fixed Simult. Gap N/S On Red 0.5 0.0 1.0 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 6.5 4.0 6.5 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 4.5 0.0 4.5 0.0 37 47 37 47 Queue Clearance Time (gs), s 2.3 6.4 4.7 9.1 10.8 8.5 Green Extension Time (ge), 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 0.00 0.00 1 00 0.00 Max Out Probability 0.00 0.40 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 1 6 5 2 7 4 8 18 13 511 92 186 1300 222 56 119 176 125 75 Adjusted Flow Rate (v), veh/h 1841 1810 1795 1598 1795 1795 1618 1781 1585 Adjusted Saturation Flow Rate (s), veh/h/ln 1560 1767 0.3 1.5 0.4 17.8 2.6 2.7 7.1 8.8 6.5 4.5 Queue Service Time (g s), s 4.4 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 0.59 0.59 0.20 0.11 0.20 0.63 0.11 0.11 Capacity (c), veh/h 236 1930 859 629 2133 927 256 172 252 195 168 0.053 0.265 0.107 0.296 0.610 0.240 0 221 0.693 0.701 0.639 0 448 Volume-to-Capacity Ratio (X) 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 0.04 0.00 0.07 0.42 0.00 0.13 0.66 0.00 0.00 0.00 Queue Storage Ratio (RQ) (90 th percentile) 1.24 Uniform Delay (d 1), s/veh 11.3 20 1.5 7.5 80 3 1 33.8 43 1 364 42 9 42 0 0.2 0.2 4.9 Incremental Delay (d 2), s/veh 0.1 0.2 0.9 0.4 2.0 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 22 1.6 7.7 8.9 3.5 35.7 48.1 51.4 46.3 43.8 Level of Service (LOS) В D D D Α Α Α Α Α D D 8.1 23 D 48.2 Approach Delay, s/veh / LOS Α Α 44.1 D Intersection Delay, s/veh / LOS 14.3 В Multimodal Results WB NB Pedestrian LOS Score / LOS 1.89 В 2.07 В 2.46 В 2.46 В Bicycle LOS Score / LOS 1.11 Α 2.46 В 0.78 A 1.11 A

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.83 Jurisdiction Time Period AM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 30 Road & Patterson Intersection File Name 2045 NoBuild AM Optimized Timings.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L 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 2 517 60 Reference Point Offset, s Begin Green 6.0 17.0 24.5 7.0 2.0 20.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 3.5 5.0 3.5 0.0 4.0 0.0 Force Mode Fixed Simult. Gap N/S On Red 0.5 0.5 0.5 1 0 Timer Results FBL **FBT** WBL WBT NBL NBT SBL SBT Assigned Phase 5 2 6 3 8 1 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 6.5 4.0 6.5 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 4.1 0.0 42 0.0 42 43 42 43 Queue Clearance Time (gs), s 6.7 5.4 9.0 5.1 4.0 13.9 Green Extension Time (ge), 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 1.00 0.02 0.41 0.26 Max Out Probability 0.00 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 5 12 16 18 7 Assigned Movement 2 6 3 8 4 14 1 114 506 245 146 1268 18 528 69 58 51 166 225 Adjusted Flow Rate (v), veh/h 1810 1795 1598 1795 1795 1730 1870 1810 1885 1585 Adjusted Saturation Flow Rate (s), veh/h/ln 1598 1560 4.7 10.9 12.2 3 4 23.9 7.0 3.0 3.1 2.0 7.5 11.9 Queue Service Time (g s), s 0.3 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 0.27 0.20 0.20 0.29 0.22 0.28 0.46 Capacity (c), veh/h 266 879 391 654 1633 727 633 374 312 453 415 444 0.430 0.575 0.625 0 223 0.776 0.025 0.833 0.184 0.185 0.112 0.401 0.508 Volume-to-Capacity Ratio (X) 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 27 2.3 1.7 6.2 7.8 0.93 0.00 0.52 0.52 0.00 0.08 0.68 0.00 0.29 0.28 0.00 Queue Storage Ratio (RQ) (90 th percentile) 1.31 Uniform Delay (d 1), s/veh 25.9 25 6 25.9 98 126 74 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 31.0 106 16.3 74 48.5 34.3 34.5 26.5 36.2 34.3 Level of Service (LOS) С C С R R D C С С D Α С 28.7 C 15.6 В 45.8 D 34.1 Approach Delay, s/veh / LOS С Intersection Delay, s/veh / LOS 27.2 C Multimodal Results WB NB Pedestrian LOS Score / LOS 2.29 В 2.23 В 2.45 В 2.45 В Bicycle LOS Score / LOS 1.20 Α 1.82 В 1.57 В 1.22 A

	HCS7 Two-Way Stop	o-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		

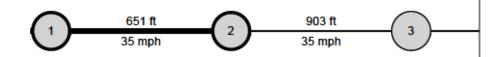
Lanes



Vehicle Volumes and Adj	ustme	nts														
Approach	Τ	Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	10	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	Т				Т	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 (%)														()	
Right Turn Channelized						N	lo							N	lo	
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
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	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	Т	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											63	0.5	
Approach LOS														ı	F	

Generated: 5/26/2020 10:47:09 AM

	HCS7 Urba	an Street Seg	ment 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/Mal	Access & Patterson	Analysis Period	1> 7:00
Project Description					



Segment	Speed	d Limit	Throug	h Lanes	Segmen	t Length	Interse	ction Wid	Length	of RM	Percer	nt 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
							14/	estbound		_		Eastbo	und	
Segment (Output Da	ta				WBL		WBT	WBF	, 	EBL	Eastbo		EBR
Segment	Movem					1	-	6	16		5	2	-	12
1	_	ne Spillba	ck Time	h		<u> </u>	_	0	10	_	0.06	neve	-	12
1		Lane Spi					_			_	0.00	Heve	-	never
1	_	ee-Flow		_			_	41.58		_	0.10	42.05	_	licvei
1	_	Time, s	opood, iii	PII				15.01		_		15.32		
1		Speed,	mph					29.57		_		28.98		
1		Delay, s						8.80		_		43.66		
1	Travel T							23.81		\rightarrow		58.97		
1		Speed, mp	oh					18.64		-		7.53		
1		ite, stops						0.35				0.92		
1		Stop Rate		ni				2.85		\neg		7.48		
1	Through	vol/cap	Ratio					0.15				0.72		
1	Percent	of Base	FFS					44.83		\neg		17.90)	
1	Level of	Service						D				F		
1	Auto Tra	aveler Pe	rception S	Score				2.59				3.44		
Multimoda	al Results	(Segmen	ıt)											
1	Pedestr	ian Segm	ent LOS	Score / L	os		2.22		В		3.66	i	[D
1	Bicycle	Segment	LOS Sco	re / LOS			2.12		В		2.68			В
1	Transit	Segment	LOS Sco	re / LOS			1.75		Α		3.26		(C
Facility O	itnut Data						W	estbound		_		Eastbo	und	
Facility Tra								801.37		_		804.7		
Facility Tra								26.83		\rightarrow		26.72		
Facility Ba			, mph					42.73		\neg		42.47		
Facility Per								62.79				62.91		
Facility Lev								С				С		
Facility Aut	to Traveler	Perception	on Score					2.32				2.29		
Multimoda	al Doculte	/Eacility\												
Pedestrian							3.23		С		3.15			<u> </u>
Bicycle Fa							2.76		C	_	2.72			<u> </u>
Transit Fac							1.16		A		1.08			A

			ш	S7 Urb	an Str	eet S	Segment	Renor	+					
				.57 OID	an Su	eet 3	egillell	Kepoi	_					
General Int	formation									Streets In	formation	_		
	iormation	Ctolfus on	nd Associate	00					_	Number of			15	
Agency				25	Analys	in Data							-	
Analyst Jurisdiction		Max Ruso	in		Time F	sis Date	AM P	n a k		Number of Number of			14 15	
File Name		2045 NoD	wild AM Or	timized Tie				ean					10	
Intersection			root/Moll A				Access/Me	o Mall Ac		System Cy		ın, s	-	7:00
Project Des		Market St	reeviviali A	ccess & ra	unome	Depot	Access/ivie	od Widii At	cess or	Allalysis F	enou		11-	7.00
		1)—	651 ft 35 mph	(2		903 ft 35 mph	—	3)—	1658 35 m		_(4)——
	ment Information	_				_						_		
Segment	Speed Limi		igh Lanes	Segment		-	section Wid		n of RM	_	nt Curb	-		Delay
	WB EE	-	EB	WB	EB	WB		WB	EB	WB	EB	W		EB
2	35 35	2	2	903	903	50	50	2	1	70	0	0.0)	0.0
							Maathaum.				Faatha	und.		
Commont C	Autout Data				WBI		Westbound WBT	WB	<u> </u>	EBL	Eastbo	_		EBR
	Output Data					-	6		K			-		
Segment 2	Movement	llhaak Tiese	. h		1	-		16	_	5	2	\rightarrow	_	12
	Bay/Lane Spi					_	never		_			\rightarrow	_	
2	Shared Lane	-			neve	r	41.72	neve	er		42.0			
	Base Free-Fle		mpn						_				_	
2	Running Time						18.29		-		18.7			
2	Running Spec						33.67		_		32.8		_	
2	Through Dela						4.93		\rightarrow		1.93			
2	Travel Time, s						23.22		_		20.6		_	
2	Travel Speed						26.51		-		29.8		_	
2	Stop Rate, sto						0.19		-		0.06			
2	Spatial Stop F		s/mi	\rightarrow			1.09		_		0.38		_	
2	Through vol/o	_					0.17		-		0.49			
2	Percent of Ba			$\overline{}$			63.55		_		70.8	9	_	
2	Level of Servi						C		-		В		_	
2	Auto Traveler		n Score				2.30		_		2.20)		
	l Results (Segr	-	0.0 //	00 1		2.00			_	2.70		_		
2	Pedestrian Se					2.88	_	С	_	3.70				
2	Bicycle Segm			$\overline{}$		2.41	_	В	_	2.80		-		
2	Transit Segm	ent LOS S	core / LOS			1.10		A	_	1.03	3		A	`
Facility Ou	tnut Data					V	Vestbound				Eastbo	und		
Facility Trav				_		v	801.37		_		804.7		_	
	vel Speed, mph						26.83		\rightarrow		26.7			
	e Free Flow Sp	and mnh					42.73		_		42.4		_	
_	cent of Base FF						62.79				62.9			
	el of Service	0					C C		_		02.9 C			
	o Traveler Perce	ntion Sec	Δ				2.32				2.29			
r acinty Auto	o Havelet Felce	puon ocol					2.32				2.23	,		
Multimoda	l Results (Faci	itv)												
	Facility LOC Co					2 22				2.45		_		

Pedestrian Facility LOS Score / LOS

Bicycle Facility LOS Score / LOS

Transit Facility LOS Score / LOS

С

С

3.23

2.76

1.16

С

С

3.15

2.72

1.08

Streets Information	HCS7 Urban Street Segment Report																		
Stortius and Associates																			
Max Rusch																			
Summer	Agency		Sto	olfus and	Associate	es						1	Number of Intersections 15						
File Name	Analyst		Ma	x Rusch			Analysis Date						lumber of	Segment	s	14			
Intersections	Jurisdiction		$\neg \vdash$				Time F	Perio	d	AM Pe	ak	I N	lumber of	Iterations		15			
Project Description	File Name		20	45 NoBui	ld AM Op	timized Ti	m Analys	sis Ye	ear	2045		5	System Cy	cle Lengt	h, s	100	0		
Basic Segment Information (Home Depot - 24 1/2 Rd) Segment Information (Home Depot - 24 1/2 Rd)	Intersections	1/24 1/2	Rd 8	k Patte	rson		A	nalysis P	eriod		1>	7:00							
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	Project Desc	cription	\neg																
Segment																			
Segment	Basic Segment Information (Home Depot - 24 1/2 Rd)																		
WB					-		t Length	Inte	ersecti	on Wid	Length	of RM	Perce	nt Curb	O	ther	Delav		
Segment Output Data	2 Symon							_	_				-						
Westbound	3								_							_			
Segment Output Data WBL WBT WBR EBL EBT EBR		00				1000	1000			-	555	550	10	100	0.1		0.0		
Segment Movement 5 2 12 1 6 16									West	bound		\top		Eastbo	und				
Bay/Lane Spillback Time, h never	Segment O	utput Data					WBI	_	V	VBT	WBF	2	EBL	EBT	\neg		EBR		
Shared Lane Spillback Time, h never never never never 3 Base Free-Flow Speed, mph 40.71 40.19 31.88 30.27 31.88 31.88 30.27 31.88 31.8	Segment	Movement				5	5		2	12		1	6		16				
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/wih 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 3.04 C 3.83 D 4 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 Percent of Base FFS 62.91 62.91 Facility Percent of Base FFS 62.91 62.91 Facility Level of Service C C C Facility	3								ne					r					
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/wih 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 3.04 C 3.83 D 4 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 Percent of Base FFS 62.91 62.91 Facility Percent of Base FFS 62.91 62.91 Facility Level of Service C C C Facility	3	Shared La	never neve					r	never never										
3 Running Time, s 30.27 31.88	3		40.71							40.19	-								
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) 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 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 3.23 C 3.15 C Bicycle Facility LOS Score / LOS 2.76 C 2.72 C C C C C C Bicycle Facility LOS Score / LOS 2.76 C 2.72 C C C C C Bicycle Facility LOS Score / LOS 2.76 C 2.72 C C C C C Bicycle Facility LOS Score / LOS 2.76 C 2.72 C C C C C Bicycle Facility LOS Score / LOS 2.76 C 2.72 C C C C C Bicycle Facility LOS Score / LOS 2.76 C 2.72 C C C C C Bicycle Facility Los Score / LOS 2.76 C 2.72 C C C C C Bicycle Facility Los Score / LOS 2.76 C 2.72 C	3			,						$\overline{}$		31.88	3						
3			mph								_								
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) C 3.83 D 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 Percent of Base FFS 62.79 62.91 Facility Percent of Service C C 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 C C C C C C C C											$\overline{}$								
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	3								40).15			42.44						
3				ph								$\overline{}$							
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 Level of Service 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 C C C C C C C C												\rightarrow	0.36						
3					ni							_							
3			_		"							_							
Second Color												_				_			
3												_			_				
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				rcention 9	Score			_				_							
3					Jeore					.23				2.51					
3			_	-	Score / L	os	3 04 C						3.83	1	D				
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			_																
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 oc	ginent	200 000	107 200			1.01					1.51				,		
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	Facility Out	put Data							West	bound		$\overline{}$	Eastbound						
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																			
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				26	5.83														
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																			
Facility Level of Service C C Facility Auto Traveler Perception Score 2.32 2.29 Multimodal Results (Facility) Score / LOS C 3.15 C Bicycle Facility LOS Score / LOS 2.76 C 2.72 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				on Score									_						
Pedestrian Facility LOS Score / LOS 3.23 C 3.15 C Bicycle Facility LOS Score / LOS 2.76 C 2.72 C																			
Bicycle Facility LOS Score / LOS 2.76 C 2.72 C	Multimodal	Results (Fa	acility))															
	Pedestrian F	acility LOS	Score	/LOS			3.23				С		3.15		С				
Transit Facility LOS Score / LOS 1.16 A 1.08 A	Bicycle Faci	lity LOS Sco	ore / LO	os				2.76	j				2.72		С				
								1.16	i		Α		1.08	3	Α				

HCS7 Urban Street Segment Report																									
General Info	ormation	_										Streets Information													
Agency		\rightarrow	Stolfus and		es							Number of Intersections 15													
Analyst			Max Rusch			Analysis Date						Number of Segments 14													
Jurisdiction		_				Time F			AM Pe	ak		Number of			15										
File Name		2	045 NoBu	ild AM O	otimized Ti	im Analys	sis Ye	еаг	2045			System Cy		•	100										
Intersections	s	2	4 1/2 Rd 8	Patterso	on	25 Roa	ad & l	Patter	son			Analysis P	eriod		1> 7:00										
Project Description																									
903 ft 3 1658 ft 4 2551 ft 5 2538 ft 6 35 mph 40 mph 6																									
Basic Segment Information (24 1/2 Rd - 25 Rd)																									
Segment		l Limit		h Lanes		nt Length	Inte	orsecti	on Wid	Length	of RM	Perce	nt Curb	Oth	er Delay										
Jeginent	WB	EB	WB	EB	WB	EB	_	/B	EB	WB	EB	WB	EB	WB	EB										
4	40	35	2	2	2551	2551	-	0	50	0	0	90	90	0.0	0.0										
-	40	33			2331	2331	,		30		U	90	30	0.0	0.0										
						Westbound					$\overline{}$		Eastbo	und											
Segment O	utput Dat	a							VBT	WBF	₹	EBL	EBT		EBR										
Segment	Moveme				5	5		2			1	6	\neg	16											
4	Bay/Lan	e Spill	oack Time,	h		ne		ever	ver		neve		r												
4		_	pillback Tir			neve	never			neve	r	never			never										
4			v Speed, m	_			-	42	2.99				40.6	4											
4	Running			-					2.62		\neg		46.4												
4	Running					40.81							37.4												
4	Through					32.67							15.3												
4	Travel T								5.30		\rightarrow	61.82													
4	Travel S	-	mph						3.10		\rightarrow	28.13													
4	Stop Ra					0.79						0.44													
4			ate, stops/r	ni		1.64							0.91												
4	Through					0.34							0.75												
4	Percent					53.73							69.2												
4	Level of					С							В	_											
4			erception	Score					.39		_		2.28												
Multimodal	_										_														
4			ment LOS	Score /	LOS	2.99 C					\neg	3.53	3	D											
4	_		nt LOS Sco			2.58				В	\neg	2.91		С											
4			nt LOS Sco				1.42			A		1.20			A										
Facility Out						Westbound						Eastbound													
Facility Trav						801.37						804.78													
Facility Trav	26.83						26.72																		
Facility Base						42.73						42.47													
Facility Perc						62.79						62.91													
Facility Level of Service C C																									
Facility Auto	Traveler	Percep	tion Score					2	.32				2.29)											
Multimodal	Results	(Facilit	v)																						
Pedestrian F							3.23		$\overline{}$	С	$\overline{}$	3.15	С												
Bicycle Faci						2.76			C		2.72		C												
Transit Facil	, 2000	301071	-50							^		1.00		Transit Facility LOS Score / LOS 1.16 A 1.08 A											

				НС	S7 Urb	an Str	eet	Segi	ment	Report									
General Info	ormation											Streets Information							
Agency		Sto	lfus and	Associate	s						1	Number of Intersections 15							
Analyst	Analysis Date						Number of Segments 14												
Jurisdiction	Time F	Perio	d	AM Pea	ak	1	Number of	Iterations		15									
File Name	n Analys	is Ye	ear	2045			System Cy	cle Lengt	h, s	10	0								
Intersections 25 Road & Patterson							Road	d & Pat	terson		A	Analysis P	eriod		1>	7:00			
Project Desc																			
1658 ft)——							
Basic Segment Information (25 Rd - 25 1/2 Rd)																			
					Segment	Longth	Inte	reaction	n Mid	Longth	of DM	Doroca	nt Curb	_	ther	Dolov			
Segment	Speed L WB	.imit EB	WB	h Lanes	WB	EB	_	ersection B	EB	Length WB	OT RM	WB	nt Curb EB	W		Delay EB			
				EB			-	_							_				
5	40	40	2	2	2538	2538	5	0	50	260	260	90	90	0.	U	0.0			
								Wast	bound		_	Eastbound							
Segment O	utnut Data								BT	WBF	,	EBL	EBT			EBR			
Segment	Movement		5			2			1	6	-		16						
5	Bay/Lane		3						neve				10						
	_	_							ver			never			_				
5	Shared La			-		never never						never never							
5	Base Free		Speed, m	ipn	43.12									_					
5	Running T	_			42.32							43.49							
5	Running S							.89		_		39.79							
5	Through D		/veh					14		_	23.34								
5	Travel Tim	_							.46			66.83							
5	Travel Spe							34	.29			25.89							
5	Stop Rate,	, stops	/veh					0.	24			0.59							
5	Spatial Sto	op Rate	e, stops/n	ni				0.	49				1.23						
5	Through v	ol/cap	Ratio					0.	28				0.81						
5	Percent of	Base	FFS					79	.52		$\neg \Box$		60.04	1					
5	Level of Se	ervice						ı	3		$\neg \neg$		С						
5	Auto Trave	eler Pe	rception	Score		2.21						2.32							
Multimodal	Results (Se	egmen	ıt)																
5	Pedestrian	1 Segm	ent LOS	Score / L	os	2.80				С	$\neg \neg$	3.62			D				
5	Bicycle Se	gment	LOS Sco	ore / LOS		2.57				В		2.91			С				
5	Transit Se					0.64 A					\neg	1.35 A							
Facility Out	put Data					Westbound						Eastbound							
Facility Travel Time, s							801.37						804.78						
Facility Travel Speed, mph							26.83						26.72						
Facility Base			42	.73		\neg	42.47												
Facility Perc				62	.79			62.91											
Facility Leve	С						С												
Facility Auto		2.32						2.29											
Multimodal																			
Pedestrian F							3.23		С			3.15		С					
Bicycle Faci							2.76			С		2.72			С				
Transit Facil	1.16				Α		1.08			-	A								

HCS7 Urban Street Segment Report																			
General Inf	ormation										9	Streets Information							
Agency		Sto	olfus and	Associate	es						1	Number of Intersections 15							
Analyst		Ma	x Rusch			Analysis Date						Number of	Segment	s	14				
Jurisdiction						Time Period AM Peak						Number of	Iterations		15				
File Name		204	45 NoBui	ld AM Op	timized Tir	n Analys	sis Ye	еаг	2045		5	System Cy	cle Lengt	h, s	10	0			
Intersections	son	1st Stre	eet &	Patte	rson			Analysis P			1>	7:00							
Project Des	cription	\neg																	
2551 ft																			
Basic Segment Information (25 1/2 Rd - 26 Rd)																			
Segment	Speed I			h Lanes	Segment	Length	Inte	ersecti	on Wid	Length	of RM	Perce	nt Curb	0	ther	Delay			
ocyment	WB	EB	WB	EB	WB	EB	_	/B	EB	WB	EB	WB	EB	w		EB			
6	35	40	2	2	2605	2605		0	50	0	0	90	90	0.	_	0.0			
_	33	40		2	2003	2003			30	, i	, i	30	30	U.		0.0			
								Wes	tbound		$\overline{}$		Eastbo	und					
Segment O	utput Data					WBL		V	VBT	WBF	₹ .	EBL	EBT	. 1		EBR			
Segment	Movemen				5			2	2 12		1	6	\neg	16					
6	Bay/Lane			ne			er			r									
6	Shared La	never nev					,	never never											
6	Base Free	40.74							43.09	9									
6	Running T	opeou, iii	.				5.86		_		44.19								
6	Running S	mnh						3.73				40.20							
6	Through E						9.53		_		13.90								
6	Travel Tim								5.39		_	58.09							
6	Travel Sp		nh						3.56		_	30.58							
6	Stop Rate								.72			0.33							
6	Spatial St			ni					.46		_	0.68							
6	Through v			"					.51		_		0.69						
6	Percent of								7.83		_		70.96						
6	Level of S		113						C		_		70.50 B	_					
6	Auto Trav		reention (2 coro					.36		_	2.24							
Multimodal				ocore					.50		_		2.24						
6	Pedestria	_	•	Score / L	OS	2.90 C						3.04	l	С					
6	Bicycle Se						2.66		_	В	_	2.80			C				
6	Transit Se	_				1.39 A					_	0.98	A						
	Transit 36	ginent	200 300	ie i LUS			1.39					0.90				`			
Facility Out	put Data							Wes	tbound		$\overline{}$	Eastbound							
Facility Trav	_					801.37						804.78							
Facility Trav		26.83						26.72											
Facility Base				2.73		_	42.47												
Facility Pero		_	,р.г						2.79			62.91							
Facility Leve									C			02.91 C							
Facility Auto				.32			2.29												
, domey rule		opin	50016										2.20						
Multimodal	Results (F	acility)																	
Pedestrian F							3.23		\top	С		3.15			С				
Bicycle Faci							2.76			C		2.72		С					
							1.16			A					A				
Transit Facility LOS Score / LOS 1.16 A 1.08																			

				НС	S7 Urb	an Str	eet	Seg	ment	Report	:				
General Info	ormation	_									\rightarrow	Streets In			
Agency		_	tolfus and	Associate	es						_	Number of			15
Analyst		N	Max Rusch			Analys					\rightarrow	Number of			14
Jurisdiction		_				Time F			AM Pea	ak		Number of			15
File Name		2	045 NoBui	ld AM Op	timized Ti	n Analys	sis Ye	аг	2045			System Cy	cle Lengt	h, s	100
Intersections	3	1	st Street &	Patterso	n	7th Str	eet &	Patte	rson			Analysis P	eriod		1> 7:00
Project Desc	cription														
2538 40 mj		6)—	2605 ft 35 mph		7			66 ft mph	<u>_</u> ()_	2570 40 m		_(!	<u>-</u>
Basic Segm	ent Infor	mation	(26 Rd - 2	06 1/2)											
Segment	_	l Limit		h Lanes	Segment	Length	Inte	reacti	on Wid	Length	of PM	Porce	nt Curb	Ot	her Delay
Segment	WB	EB	WB	EB	WB	EB	W	_	EB	WB	EB	WB	EB	WE	
7	35	40	2	2	2566	2566	5	\rightarrow	50	0	0	90	90	0.0	_
	33	40			2500	2300	3		30	U	U	90	90	U.C	0.0
								Wes	tbound		$\overline{}$		Eastbo	und	
Segment O	utput Dat	a				WBI			VBT	WBF	2	EBL	EBT	_	EBR
Segment	Moveme					5	_	_	2	12		1	6	_	16
7			ack Time,	h				n	ever	12	_		neve	,	-10
7		_	pillback Tin			neve	-		CVCI	neve		never	licve	-	never
7			v Speed, m			Heve		30	9.83	Heve		HEVEI	42.1		HEVEI
7	Running			іріі	_				6.35		_		44.10		
7	Running								7.75		_		39.6		
7	Through								0.19		_		33.2		
	Travel T		5/VEII						5.54		_				
7			nnh						0.04		-		77.42 22.60		
	Travel S										_				
7	Stop Ra			ni.					.27 .55		_		0.75		
7			te, stops/n	11	_						_		1.53		
7	Through								.43		_		0.75		
7	Percent				_				7.70		-		53.5	3	
7	Level of				_				В		-		С		
7			erception :	Score				2	.22				2.37		
Multimodal				0 /1	00		2.70		_		_	2.00		_	
7			ment LOS				2.70		-	В	-	2.96		-	С
7			nt LOS Sco				2.68		-	В	-	2.76		-	С
7	Transit	segmer	nt LOS Sco	re / LOS			0.88		_	Α	_	1.53	3	_	A
Facility Out								Wes	tbound		工		Eastbo		
Facility Trave								80	1.37				804.7	8	
Facility Trave								26	5.83				26.7	2	
Facility Base	Free Flo	w Spe	ed, mph					42	2.73				42.4	7	
Facility Perc	ent of Ba	se FFS						62	2.79				62.9	1	
Facility Leve	l of Servi	ce							С				С		
Facility Auto	Traveler	Percep	tion Score					2	.32				2.29		
Multimodal	Results	(Facilit	v)												
Pedestrian F							3.23		$\overline{}$	С	$\overline{}$	3.15	5		С
Bicycle Facil							2.76			C	_	2.72			С
Transit Facil	_						1.16		\neg	A		1.08			A
Transit Facil	.,	5016 / L					1.10					1.00			**

				НС	S7 Urb	an Str	eet	Seg	ment	Report						
General Info	ormation											Streets In	formation	1		
Agency		Sto	olfus and	Associate	es						1	Number of	Intersecti	ons	15	i
Analyst		Ma	x Rusch			Analys	is Da	ate			1	Number of	Segment	s	14	
Jurisdiction						Time F	Perio	d	AM Pe	ak	1	Number of	Iterations		15	i
File Name		204	45 NoBui	ld AM Op	timized Tir	n Analys	is Ye	ear	2045			System Cy	cle Lengt	h, s	10	0
Intersections	3	7th	Street &	Patterso	n	12th St	reet	& Patte	erson		/	Analysis P	eriod		1>	7:00
Project Desc	ription	$\neg \vdash$														
2605 35 m		7)—	2566 ft 35 mph	(<u>®</u>		257 40 n		<u>_</u> ()_	1274 40 m		-(10)——
Dania Coam	ont Inform	stion (26 4/2 D	d to 42th	64)											
Basic Segm					_	Longib	Jan A	aran eti	n Mari	l av -ti-	of DM	Danie	at Court		the	Dolor
Segment	Speed Li			h Lanes	Segment		_		on Wid	Length		_	nt Curb			Delay
		EB	WB	EB	WB	EB	_	/B	EB	WB	EB	WB	EB	W	_	EB
8	40	35	2	2	2570	2570	5	0	50	0	0	90	90	0.	U	0.0
					West	bound				Eastbo	und					
Segment O	utnut Data					WBI		_	/BT	WBF		EBL	Eastbo			EBR
Segment	Movement		5	-	-	2	12	—	1	6	-		16			
8	Bay/Lane S		3				12	_		<u> </u>			10			
		_					-	ne	ver				neve	-		
8	Shared La					neve	r	42	24	neve		never	20.00	$\overline{}$		never
8	Base Free-		Speed, m	ipn					.34		-		39.99		_	
8	Running Ti								.02		-		46.24		_	
8	Running S								.80		_		37.90			
8	Through D		/veh						.61		_		12.47			
- 8	Travel Time								.63		_		58.7	1		
8	Travel Spe							20	.23				29.8	5		
8	Stop Rate,	stops	/veh						88				0.31			
8	Spatial Sto	p Rate	e, stops/n	ni				1.	81				0.64			
8	Through vo	ol/cap	Ratio					0.	79				0.46			
8	Percent of	Base	FFS					47	.77		$\neg \Box$		74.63	3		
8	Level of Se	ervice							D				В			
8	Auto Trave	ler Pe	rception	Score				2.	42				2.24			
Multimodal	Results (Se	gmen	ıt)													
8	Pedestrian	Segm	ent LOS	Score / L	.os		2.88		\neg	С		2.72	2		E	3
8	Bicycle Se	gment	LOS Sco	ore / LOS			2.79			С		2.62			E	3
8	Transit Seg	ment	LOS Sco	re / LOS			1.73		\neg	Α		0.95	5		_	Α
Facility Out								West	bound				Eastbo	und		
Facility Trav								801	1.37				804.7	8		
Facility Trav									.83				26.72	2		
Facility Base	Free Flow	Speed	, mph					42	.73				42.47	7		
Facility Perc	ent of Base	FFS						62	.79				62.9	1		
Facility Leve	l of Service							(С				С			
Facility Auto	Traveler Pe	rceptio	on Score					2.	32				2.29			
Multimodal	Doculte (Fo	cility														
							3.23		_	С		3.15				
Pedestrian F	_															
Bicycle Faci							2.76		-	C		2.72				^
Transit Facil	ILY LUS SCO	e / LC	15				1.16	•		Α		1.08	j			Ą

				НС	S7 Urb	an Str	eet	Seg	ment	Report						
General Inf	ormation											Streets In				
Agency		Sto	olfus and	Associate	es						1	Number of	Intersecti	ons	15	i
Analyst		Ma	x Rusch			Analys	sis Da	ate			1	Number of	Segment	S	14	
Jurisdiction						Time F	Perio	d	AM Pea	ak	1	Number of	Iterations		15	
File Name		204	45 NoBui	ild AM Op	timized Ti	m Analys	sis Ye	ear	2045			System Cy	cle Lengt	h, s	10	0
Intersections	3	121	th Street	& Patters	on	Patters	on R	Rd & 15	th St		1	Analysis P	eriod		1>	7:00
Project Des	cription	\neg														
2566 35 m		8)—	2570 ft 40 mph	(9-		127 40 n		_(1	<u>) </u>	1346 40 m		-(11)——
Daeic Sogn	ont Informs	ation (12th St	27 1/4 D	d)											
Basic Segn						t I opoth	let	oroc et:	nn Mid	Longth	of DM	Doros	nt Curch		there	Dolor
Segment	Speed Li WB	EB	WB	h Lanes EB	Segment	t Length EB	_	ersection VB	on Wid	Length WB	OT RM EB	WB	nt Curb EB	W		Delay EB
															_	
9	40	35	2	2	1274	1274	5	50	50	0	0	90	90	0.	U	0.0
								Woet	bound		_		Eastbo	und		
Segment O	utnut Data	_	WBI		_	/BT	WBF	,	EBL	Eastbo			EBR			
	Movement			-				`			-					
Segment		_	5			2	12	-	1	6			16			
9	Bay/Lane S	_						-			-	never	neve			
9	Shared Lar	_									_	never				never
9	Base Free-		Speed, m	iph				42	.29				39.94	1		
9	Running Ti	ime, s						23	.65				24.85	5		
9	Running S	peed,	mph					36	.74				34.96	6		
9	Through D	elay, s	/veh					2.	01				38.03	3		
9	Travel Time	e, s						25	.65				62.88	3		
9	Travel Spe	ed, m	ph					33	.86				13.81	ı		
9	Stop Rate,	stops	/veh					0.	07		\neg		0.72			
9	Spatial Sto	p Rate	e, stops/n	ni				0.	30				2.98			
9	Through vo	_						0.	38				0.83			
9	Percent of	_							.07		\neg		34.58			
9	Level of Se								A				Е			
9	Auto Trave		rception :	Score					19		_		2.61		_	
Multimodal				-							_		2.01			
9	Pedestrian			Score / I	os		3.00)	$\overline{}$	С	$\overline{}$	3.33			_	<u> </u>
9	Bicycle Se						2.82			С		2.70				3
9	Transit Seg						0.74		_	A	_	2.36				3
9	Transit Seg	gillelit	203 300	ne / LOS			0.74					2.30				,
Facility Out	nut Data							West	bound		$\overline{}$		Eastbo	und		
Facility Trav									1.37		_		804.7			
Facility Trav		ph							.83		\rightarrow		26.72			
Facility Base			mph						.73		_		42.47		_	
Facility Pero		_	, пъ						.79				62.91			
Facility Leve									. <i>19</i> C				02.9 C			
Facility Auto			n Score						32				2.29			
racility Auto	Havelet Pe	rcepuc	AI SCOILE					2.	JZ				2.29			
Multimodal	Results (Fa	ncility))													
Pedestrian F							3.23	3	$\overline{}$	С		3.15	,		-	0
Bicycle Faci							2.76			С		2.72				0
Transit Facil							1.16			A		1.08				A
anon racii	, 200 000		_									1.00				-

				НС	S7 Urb	an Str	eet	Seg	ment	Report						
General Info	ormation											Streets Int	formation	1		
Agency		S	tolfus and	Associate	es						1	Number of	Intersecti	ons	15	
Analyst		N	lax Rusch			Analys	sis Da	ate			1	Number of	Segment	s	14	
Jurisdiction						Time F	Perio	d	AM Pea	ak	1	Number of	Iterations		15	
File Name		2	045 NoBui	ld AM Op	timized Tir	n Analys	sis Ye	ear	2045			System Cy	cle Lengt	h, s	100	,
Intersections	5	P	atterson R	d & 15th	St	27 1/2	Road	d & Pa	tterson		1	Analysis P	eriod		1> 7	7:00
Project Desc	cription	\neg														
2570 40 m		9)—	1274 ft 40 mph	<u> </u>	10			46 ft mph	_(1)_	3869 45 m		-(1	2	
Basic Segm	nent Infor	mation														
Segment	Speed			h Lanes	Segment	Length	Inte	ersecti	on Wid	Length	of RM	Percei	nt Curb	Ot	her f	Delay
Oeginent	WB	EB	WB	EB	WB	EB	_	VB	EB	WB	EB	WB	EB	WE		EB
10	40	40	2	2	1346	1346		0	50	0	0	70	70	0.0	\rightarrow	0.0
10	40	40			1340	1340			30	U		70	70	0.0		0.0
								Wes	tbound		\top		Eastbo	und		
Segment O	utput Data	a				WBI	_	V	VBT	WBR	2	EBL	EBT	$\overline{}$	E	EBR
Segment	Moveme	nt				1			6	16	\neg	5	2	\neg		12
10	Bay/Lane	e Spillb	ack Time,	h				n	ever					\neg		
10		_	pillback Tin			neve	г			neve				\neg		$\overline{}$
10			/ Speed, m					44	1.07				44.07	7		
10	Running							24	1.12		$\overline{}$		24.09	9		-
10	Running	_							3.05				38.10			
10	Through								1.13		$\overline{}$		3.87			
10	Travel Ti								3.24				27.9			
10	Travel S		nph						9.02		$\overline{}$		32.83			$\overline{}$
10	Stop Rat		•						.60		\rightarrow		0.16			
10			te, stops/n	ni					.36		_		0.62			
10	Through	_							.64				0.28			
10	Percent								3.16		_		74.49			
10	Level of								D		_		В	_		-
10			erception (Score					.74		_		2.23		_	
Multimodal				ocore					.14		_		2.20			-
10			ment LOS	Score / I	os		3.56		$\overline{}$	D	$\overline{}$	3.55			D	
10			nt LOS Sco				2.84		_	С	_	2.66			В	
10			t LOS Sco				1.85		_	A	_	0.79		_	A	_
10	Transit C	egilici	IL ECO CCC	ic / Loo			1.00					0.13				
Facility Out	put Data							Wes	tbound		\top		Eastbo	und		
Facility Trav	_							80	1.37		\neg		804.7	8		\neg
Facility Trav	el Speed,	mph						26	5.83				26.72	2		
Facility Base			d, mph						2.73		\neg		42.4			\neg
Facility Perc								62	2.79				62.9	1		
Facility Leve									С		\neg		С			\neg
Facility Auto			tion Score					2	.32				2.29	1		
Multimodal																
Pedestrian F	acility LO	S Scor	e / LOS				3.23	3		С		3.15	j		С	
Bicycle Faci							2.76	j		С		2.72	2		С	
Transit Facil	ity LOS So	core / L	OS				1.16	j		Α		1.08	3		Α	

				НС	S7 Urb	an Str	eet	Seg	ment	Report						
General Info	ormation												formation		—	
Agency		_	tolfus and	Associate	es								Intersecti		15	
Analyst		N	lax Rusch			Analys					-		Segment		14	
Jurisdiction		\rightarrow				Time F			AM Pea	ak			Iterations		15	
File Name			045 NoBui						2045				cle Lengt	h, s	100	
Intersections		2	7 1/2 Road	& Patter	son	28 1/4	Road	d & Pa	tterson		/	nalysis P	eriod		1> 7	7:00
Project Desc	cription													_		
1274 40 mj		10)—	1346 ft 40 mph	<u> </u>	11)-		386 45 r		1	<u>) </u>	3813 45 m		-(1	3	
Basic Segm	ent Infor	mation	(27 1/4 R	d _ 27 1/2	Rd)											
Seament	Speed			h Lanes	Segment	Length	Inte	ersection	on Wid	Length	of RM	Percei	nt Curb	Ot	her D)elav
Joginent	WB	EB	WB	EB	WB	EB	_	/B	EB	WB	EB	WB	EB	WE		EB
11	45	40	2	2	3869	3869	-	0	50	0	0	90	90	0.0	-	0.0
	70	70			3003	5003			30	U U	U	30	30	0.0		0.0
								West	bound		$\overline{}$		Eastbo	und		
Segment O	utput Dat	a				WBL	_	V	VBT	WBF	2	EBL	EBT	· T	E	BR
Segment	Moveme				$\overline{}$				2	12	\neg	1	6	\neg		
11	Bay/Lan	e Spillb	ack Time,	h				ne	ever				neve	r		
11	_		pillback Tin			neve	г			neve	_	never				
11			/ Speed, m					45	5.84				43.49	9		
11	Running).41		_		62.49			
11	Running								3.67				42.2			
11	Through								0.37		_		11.38			
11	Travel Ti).78		\rightarrow		73.87			
11	Travel S		nph						0.38		_		35.7			
11	Stop Ra								.73		_		0.33	_		
11			ite, stops/n	ni					.99		_		0.45			
11	Through			"					.65		_		0.43			
11	Percent								1.10		_		82.1			
11	Level of								C		_		A	<u>'</u>		
11			erception (2 coro					.39		_		2.21			
Multimodal				ocore					.33		_		2.21			
11			ment LOS	Score / I	08		3.87	,	_	D	_	2.76		_	С	
11	_		nt LOS Sco		$\overline{}$		2.90		_	C	_	2.70			В	
11			nt LOS Sco				1.06		_	A	_	0.57		\vdash	A	
	Hansics	eymer	ILLOS SCO	ie / LOS			1.00					0.57				
Facility Out	put Data							West	bound		\top		Eastbo	und		
Facility Trave	el Time, s							80	1.37				804.7	8		
Facility Trave	el Speed,	mph						26	6.83				26.72	2		
Facility Base	Free Flo	w Spee	ed, mph					42	2.73		$\neg \vdash$		42.47	7		
Facility Perc	ent of Bas	se FFS						62	2.79				62.9	1		
Facility Leve									С				С			
Facility Auto			tion Score					2	.32				2.29	1		
Multimodal									_					_		
Pedestrian F							3.23		_	С		3.15		_	С	
Bicycle Facil	_						2.76			С		2.72		_	С	
Transit Facil	ity LOS S	core / L	.os				1.16			Α		1.08	3		Α	

				НС	S7 Urb	an Str	eet	Seg	ment	Repor	t				
General Info	ormation	_	N-15								\rightarrow	Streets In			45
Agency		\rightarrow	Stolfus and		es	1			_		\rightarrow	Number of			15
Analyst			Max Rusch			Analys						Number of			14
Jurisdiction		\rightarrow				Time F			AM Pe	ak		Number of		_	15
File Name			045 NoBu						2045		$\overline{}$	System Cy		,	100
Intersections		2	28 1/4 Road	d & Patter	son	29 Roa	ad & F	Patters	son			Analysis P	eriod		1> 7:00
Project Desc	cription	_					_								
1346 40 m)—	3869 ft 45 mph		12			13 ft mph	<u>_</u> (3)—	2589 45 m		14)—
Basic Segm	nent Info	rmatio	(28 1/4 R	d - 29 Rd	,										
Segment		d Limit		h Lanes	_	t Length	Inte	rsecti	on Wid	Length	of RM	Perce	nt Curb	Oth	er Delay
ocyment	WB	EB	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	WB	EB
12	45	40	2	2	3813	3813	-	0	50	0	0	90	90	0.0	0.0
12	43	40			3013	3013	3	U	30	U	U	90	90	0.0	0.0
								West	tbound				Eastbo	und	
Segment O	utput Dat	ta				WBI			VBT	WBF	2	EBL	EBT	_	EBR
Segment	Moveme					5	_		2	12	`	1	6	-	16
12			oack Time,	h		neve	r	-	ever	12	_		neve	r	-10
12		_	pillback Tir			neve			CVCI	neve	-	never	neve	•	never
12			v Speed, m			Heve			1.90	Heve	<u> </u>	HEVE	42.5	5	HEVEI
12	Running			Прп					0.03		-		62.9		
12	Running								3.30		-		41.2		
12	Through								2.49		-		16.3		
12	Travel T	_	, S/VEII						2.52		-		79.3		
12	Travel S		mph						3.10		-		32.7		
			•								-				
12	Stop Ra			ni					.67 .93		-		0.37		
12		_	ate, stops/r	III							-				
12	Through								.90		-		0.44		
12	Percent								2.57		-		77.0	3	
12	Level of			0					C		-		B		
12			erception	Score					.28				2.22	-	
Multimodal	_		-	Coore / I	00		264		_		_	2.70	,	_	
12			ment LOS				3.64		_	D	-	2.76			С
12 12			nt LOS Sco nt LOS Sco				2.92 1.17		+	C A	-	2.60 0.74			B A
12	mansic	ocyme	IL EGG GCC	NC / LOO			1.17					0.1-			^
Facility Out	put Data							West	tbound				Eastbo	und	
Facility Trav	el Time, s							80	1.37				804.7	8	
Facility Trav	el Speed,	mph						26	6.83				26.7	2	
Facility Base	e Free Flo	w Spe	ed, mph					42	2.73		\Box		42.4	7	
Facility Perc	ent of Ba	se FFS						62	2.79				62.9	1	
Facility Leve	l of Servi	ce							С				С		
Facility Auto	Traveler	Percep	tion Score					2	.32				2.29)	
Multimodel	Doculto	/Escilit	v\												
Multimodal Podestrian F							3.23		_	С		2.40	:		C
Pedestrian F									_			3.15			С
Bicycle Faci							2.76			C	-	2.72			C
Transit Facil	ity LOS S	core /	_08				1.16			A		1.08	5		Α

				ш	CC7 Llvb	on Ctr		Con	mont	Donort					_	
		_	_		CS7 Urb	an Str	eet	Seg	ment	Report				_		
General Inf	ormation	Jan 1									-	Streets Int		_	Lin	
Agency		_		Associa	es				_		\rightarrow	Number of			15	
Analyst		Max	x Rusch	1		Analys					\rightarrow	Number of			14	
Jurisdiction		+				Time F			AM Pe	ak	\rightarrow	Number of			15	
File Name		_			ptimized Ti				2045		\rightarrow	System Cy		h, s	10	
Intersections		29 F	Road &	Patterso	n	29 1/2	Road	d & Pa	tterson			Analysis P	eriod		1>	7:00
Project Des	cription	_					_	_			_			_		
3869 45 m		12)—	3813 f 45 mpl	-	13	_	258 45 r)	2603 35 m		_(1	5)
	nent Informat						_							_		
Segment	Speed Lim	-		gh Lanes	Segmen		-		on Wid	Length			nt Curb			Delay
		В	WB	EB	WB	EB	-	/B	EB	WB	EB	WB	EB	W		EB
13	45 4	5	2	2	2589	2589	5	0	50	0	0	90	90	0.0)	0.0
											-					
Comment O	utput Data					WBI		_	bound VBT	WBR		EBL	Eastbo EBT			EBR
Segment O							_	_						\rightarrow		
Segment 13	Movement	illhaa	de Timo	ь.		5		_	2	12	-	1	6	_		16
	Bay/Lane Sp							ne	ever		+		neve		_	
13	Shared Lane					neve	r	42		never	-	never	42.0			never
13	Base Free-F		speea, r	npn					3.89		+		43.89		_	
13	Running Tim	_							.68		-		40.5			
13	Running Spe								2.35		+		43.5			
13	Through Del		veh				_		.91		-		32.4			
13	Travel Time,).59		+		73.0			
13	Travel Speed								1.90		-		24.1			
13	Stop Rate, s	_							.26		+		0.73			
13	Spatial Stop			mı					.53		-		1.48		_	
13	Through vol/								.61		-		0.48		_	
13	Percent of B		FS).50		-		55.0	8	_	
13	Level of Sen			_					В		-		С		_	
13	Auto Travele			Score				2.	.22				2.36	<u> </u>	_	
	Results (Seg		-						_		_			_	_	
13	Pedestrian S						3.48		-	С	-	3.37		_		
13	Bicycle Segr						3.02		-	С	+	2.72		<u> </u>	В	
13	Transit Segn	nent L	LOS Sc	ore / LOS			0.81		_	Α	_	1.38			Α	•
Facility Out	nut Data							Weet	bound		_		Eastbo	und		
Facility Trav									1.37		-		804.7		_	
	el Speed, mph	_							5.83		\rightarrow		26.7			
	e Free Flow Sp		mph						2.73		-		42.4		_	
	ent of Base Fl		тіріі						2.79		-		62.9			
Facility Leve		13							C.79		-		62.9 C			
	Traveler Perc	entic	n Score						.32		+		2.29			
raciiity Auto	Traveler Perc	epuo	ii acore						.32				2.29			
Multimodal	Results (Fac	ilitv)														
	Facility LOS S						3.23			С	T	3.15	i .		-	:
	lity LOS Score						2.76			C	-	2.72			-	
	lity LOS Score						1.16			A	-	1.08)
Transit raci	, 200 00016	,, 20					1.10					1.00	,			•

										_					
			НС	S7 Urk	an Str	eet	Seg	ment	Repor	t					
General Inf										\rightarrow	Streets In		•	To a	
Agency		Stolfus and		es						\rightarrow	Number of			15	
Analyst		Max Rusch			Analys					\rightarrow	Number of			14	
Jurisdiction					Time F			AM Pe	ak	\rightarrow	Number of			15	
File Name		2045 NoBui			_			2045		\rightarrow	System Cy		n, s	10	
Project Des		29 1/2 Road	1 & Patter	son	30 Roa	10 & 1	Patters	son			Analysis P	епоа		1>	> 7:00
Floject Des	сприоп														
3813 45 m	1	3	2589 ft 45 mph		14)3 ft mph	— (1	5					
	_	-		-							-				
Basic Segn	nent Informatio	n (29 1/2 R	d - 30 Rd)											
Segment	Speed Limit		h Lanes	Segmen	t Length	Inte	ersection	on Wid	Length	of RM	Percei	nt Curb	С	ther	Delay
	WB EB		EB	WB	EB	W	/B	EB	WB	EB	WB	EB	W		EB
14	35 45	2	2	2603	2603	5	0	50	0	0	90	90	0.	.0	0.0
							_	tbound		_		Eastbo	und	_	
Segment O					WBI	_	V	VBT	WBI	₹ .	EBL	EBT			EBR
Segment	Movement				5		_	2	12	_	11	6			16
14	Bay/Lane Spil									4		neve	r		
14	Shared Lane	-					oxdot			_	never			\Box	never
14	Base Free-Flo		iph).82		_		45.5			
14	Running Time							5.83		-		40.6		_	
14	Running Spee							7.90		-		43.6			
14	Through Delay							5.25		-		2.19			
14	Travel Time, s							3.09		-		42.8			
14	Travel Speed,	•						3.13		-		41.4			
14	Stop Rate, sto		ni.					.37		-		0.07			
14	Spatial Stop R							.75 .78		-		0.14			
14	Through vol/ca Percent of Bas	-						3.92		-		91.0			
14	Level of Servi							B		-		91.0 A			
14	Auto Traveler		Score					.25		_		2.16		_	
	Results (Segn		OCOIC					.20				2.10			
14	Pedestrian Se	-	Score / L	os		3.75		$\overline{}$	D	$\overline{}$	2.98	1			С
14	Bicycle Segme					2.92		_	С		2.62				В
14	Transit Segme					1.17			Α	_	0.29				A
Facility Out								tbound		\Box		Eastbo			
Facility Trav								1.37		-		804.7			
	el Speed, mph							5.83		-		26.7			
	Free Flow Spe							2.73		-		42.4			
	ent of Base FF	5						2.79				62.9	1		
Facility Leve		ntion Occasi						C				C 2.20			
racility Auto	Traveler Perce	puon Score						.32				2.29			
Multimodal	Results (Facili	itv)													
	Facility LOS Sco					3.23		$\overline{}$	С	$\overline{}$	3.15	5		(C
	lity LOS Score /					2.76			С	\neg	2.72				С
						_								-	

Transit Facility LOS Score / LOS

1.16

1.08

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.91 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 24 Road & Patterson Intersection File Name 2045 NoBuild PM Optimized Timinas.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L 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 Green 11.2 4.1 15.0 7.2 3.8 32.7 Uncoordinated No Simult, Gap E/W On Yellow 3.5 3.5 4.0 3.5 3.5 4.0 Force Mode 0.5 1.0 Fixed Simult. Gap N/S On Red 0.5 0.5 10 0.5 Timer Results **EBL EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 4.0 5.0 4.0 5.0 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 5.2 52 52 Queue Clearance Time (gs), s 11.2 20.5 4.0 22.6 16.8 26.7 Green Extension Time (ge), 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 1.00 0.84 1 00 0.77 Max Out Probability 1.00 0.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 370 568 603 641 359 395 58 814 375 513 1029 49 Adjusted Flow Rate (v), veh/h 1675 1752 1738 1810 1738 1585 1730 1518 Adjusted Saturation Flow Rate (s), veh/h/ln 1716 1752 9.2 15.0 18.5 8.9 2.0 20.6 14.9 14.8 24.7 2.0 Queue Service Time (g_s), s 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 0.23 0.33 0.52 0.15 0.19 0.40 0.40 0.40 Capacity (c), veh/h 688 526 664 803 275 1136 824 519 1418 614 0.538 1.081 0.966 0.447 0.211 0.717 0 455 0.989 0.725 0.081 Volume-to-Capacity Ratio (X) 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 0.00 0.44 2.11 Uniform Delay (d 1), s/veh 34 2 498 40 0 33 0 20.7 296 15 1 424 25 1 18.3 62.8 Incremental Delay (d 2), s/veh 1.1 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 0.0 212 31.7 15.6 79.0 27.0 18 4 Level of Service (LOS) D F С С C C В В F Α F Α 50.0 D 38.7 26.4 C 43.5 Approach Delay, s/veh / LOS D D Intersection Delay, s/veh / LOS 40.4 D Multimodal Results WB NB Pedestrian LOS Score / LOS 2.45 В 2.59 С 2.58 С 2.57 С Bicycle LOS Score / LOS 0.97 Α 1.64 1.52 В 1.80 В

Assigned Phase 5 2 1 6 8 Case Number 1.1 3.0 1.1 3.0 11.0 Phase Duration, s 15.9 45.2 5.4 34.7 20.5 Change Period, (Y+Rc), s 4.0 5.0 4.0 5.0 5.0 Max Allow Headway (MAH), s 3.1 0.0 3.1 0.0 3.3 Queue Clearance Time (gs), s 11.6 2.4 15.1 2 Green Extension Time (ge), s 0.3 0.0 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27 1.00 1	
Agency Stolfus and Associates Duration, h 0.250	T.
Analyst Max Rusch	Ď
Demand Information	<u></u>
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 EB WB NB SB Approach Movement L T R L T T R L T R L T T R L T R L T <td>- E</td>	- E
Intersection	=
Demand Information	4
Demand Information	
Approach Movement L T R L T T R L T T T L T T T T T	n
Demand (v), veh/h 159 732 141 31 905 336 124 82 34 315 28 Signal Information Cycle, s 100.0 Reference Phase 2 Offset, s 97 Reference Point Begin 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 1.0 0.0 NBT SBL Timer Results EBL EBT WBL WBT NBL NBT SBL Assigned Phase 5 2 1 6 8 Case Number 1.1 3.0 1.1 3.0 11.0 Phase Duration, s 15.9 45.2 5.4 34.7 20.5 2 Change Period, (Y+R c), s 4.0 5.0 4.0 5.0 5.0 Max Allow Headway (MAH), s 3.1 0.0 3.1 0.0 3.3 Queue Clearance Time (g e), s 0.3 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27	
Signal Information Cycle, s 100.0 Reference Phase 2 Offset, s 97 Reference Point Begin 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 0.0 0.0 Timer Results EBL EBT WBL WBT NBL NBT SBL Assigned Phase 5 2 1 6 8 Case Number 1.1 3.0 1.1 3.0 11.0 Phase Duration, s 15.9 45.2 5.4 34.7 20.5 2 Change Period, (Y+Rc), 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 0.0 0.0 0.3 Green Extension Time (ge), s 0.3 0.0 <td>R</td>	R
Cycle, s 100.0 Reference Phase 2 Offset, s 97 Reference Point Begin 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 EBL EBT WBL WBT NBL NBT SBL Assigned Phase 5 2 1 6 8 Case Number 1.1 3.0 1.1 3.0 11.0 Phase Duration, s 15.9 45.2 5.4 34.7 20.5 2 Change Period, (Y+Rc), 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 15.1 2.4 Green Extension Time (get), s 0.3 0.0 0.0 0.0 <	257
Cycle, s 100.0 Reference Phase 2 Offset, s 97 Reference Point Begin 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 EBL EBT WBL WBT NBL NBT SBL Assigned Phase 5 2 1 6 8 Case Number 1.1 3.0 1.1 3.0 11.0 Phase Duration, s 15.9 45.2 5.4 34.7 20.5 2 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 e), s 0.3 0.0 0.0 0.0 0.3	
Offset, s 97 Reference Point Uncoordinated No Simult. Gap E/W Begin 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 EBL EBT WBL WBT NBL NBT SBL Assigned Phase 5 2 1 6 8 Case Number 1.1 3.0 1.1 3.0 11.0 Phase Duration, s 15.9 45.2 5.4 34.7 20.5 2 Change Period, (Y+Rc), 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 Queue Clearance Time (ge), s 0.3 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27 1.00 1.00	A
Offset, s 97 Reference Point Uncoordinated No Simult. Gap E/W Green Yellow 3.5 1.4 6.5 29.7 24.0 15.5 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 Assigned Phase 5 2 1 6 8 Case Number 1.1 3.0 1.1 3.0 11.0 Phase Duration, s 15.9 45.2 5.4 34.7 20.5 Change Period, (Y+Rc), s 4.0 5.0 4.0 5.0 5.0 Max Allow Headway (MAH), s 3.1 0.0 3.1 0.0 3.3 Queue Clearance Time (gs), s 0.3 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27 1.00 1.00	***
Force Mode Fixed Simult. Gap N/S On Red 0.5 0.5 1.0 1.0 0.0 5 7 Timer Results EBL EBL EBT WBL WBT NBL NBT SBL	
Timer Results EBL EBT WBL WBT NBL NBT SBL Assigned Phase 5 2 1 6 8 Case Number 1.1 3.0 1.1 3.0 11.0 Phase Duration, s 15.9 45.2 5.4 34.7 20.5 2 Change Period, (Y+Rc), 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 Queue Clearance Time (gs), s 11.6 2.4 15.1 2 Green Extension Time (ge), s 0.3 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27 1.00 1.00	W
Assigned Phase 5 2 1 6 8 Case Number 1.1 3.0 1.1 3.0 11.0 Phase Duration, s 15.9 45.2 5.4 34.7 20.5 2 Change Period, (Y+Rc), 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 Queue Clearance Time (gs), s 11.6 2.4 15.1 2 Green Extension Time (ge), s 0.3 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27 1.00 1	8
Assigned Phase 5 2 1 6 8 Case Number 1.1 3.0 1.1 3.0 11.0 Phase Duration, s 15.9 45.2 5.4 34.7 20.5 2 Change Period, (Y+Rc), 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 Queue Clearance Time (gs), s 11.6 2.4 15.1 2 Green Extension Time (ge), s 0.3 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27 1.00 1	SBT
Case Number 1.1 3.0 1.1 3.0 11.0 11.0 Phase Duration, s 15.9 45.2 5.4 34.7 20.5 2 Change Period, (Y+R c), s 4.0 5.0 4.0 5.0 5.0 Max Allow Headway (MAH), s 3.1 0.0 3.1 0.0 3.3 Queue Clearance Time (g s), s 11.6 2.4 15.1 2 Green Extension Time (g e), s 0.3 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27 1.00 1.00	4
Phase Duration, s 15.9 45.2 5.4 34.7 20.5 20.5 Change Period, (Y+R c), s 4.0 5.0 4.0 5.0 5.0 Max Allow Headway (MAH), s 3.1 0.0 3.1 0.0 3.3 Queue Clearance Time (g s), s 11.6 2.4 15.1 2.4 Green Extension Time (g e), s 0.3 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27 1.00 1.00	0.0
Change Period, (Y+Rc), s 4.0 5.0 4.0 5.0 5.0 Max Allow Headway (MAH), s 3.1 0.0 3.1 0.0 3.3 Queue Clearance Time (gs), s 11.6 2.4 15.1 2 Green Extension Time (ge), s 0.3 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27 1.00 1	9.0
Max Allow Headway (MAH), s 3.1 0.0 3.1 0.0 3.3 Queue Clearance Time (g s), s 11.6 2.4 15.1 2 Green Extension Time (g e), s 0.3 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27 1.00 1.00	5.0
Queue Clearance Time ($g s$), s 11.6 2.4 15.1 2 Green Extension Time ($g e$), s 0.3 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27 1.00 1	3.4
Green Extension Time (g ∈), s 0.3 0.0 0.0 0.0 0.3 Phase Call Probability 1.00 0.27 1.00 1	2.2
Phase Call Probability 1.00 0.27 1.00 1	1.8
Max Out Probability 0.01 0.00 0.12	.00
	.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	14
Adjusted Flow Rate (v), veh/h/ln	-
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	
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 <	
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 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	
Bicycle LOS Score / LOS 1.51 B 1.75 B 0.96 A 1.68	В

		HCS	7 Sigi	nalize	d Int	ersec	tion F	Resul	ts Sun	nmar	У				
General Informati	ion								ntersect	ion Inf	ormatic	\n		4.4413	되다
		Stolfus and Associa	atoc					_	Duration,		0.250		- 1	44	
Agency	_		1165	Anabe	is Dat			_			_		- 2		L A
Analyst Jurisdiction		Max Rusch		Analys Time F		PM P	nok	_	Area Typ PHF	е	Other 0.84		- 7		
	-	Patterson Rd				_	ean	_		Dorind	_	20	- 13		
Urban Street			0/1/10			2045	NaDuild		Analysis		1> 7:0	JU	- B		
Intersection	_	Home Depot Acces	s/we	File Na	ame	2045	NoBulia	PM O	ptimized	rimings	i.xus		- 4	11	200
Project Description	n												_	A L THILL	ejiii
Demand Informat	tion				EB			WB			NB			SB	
Approach Moveme					ΙŢ	R	1	T	R	1	T	R	1	T T	R
Demand (v), veh/				85	760	227	130	-	-	279	72	249	88	45	127
Demand (V), Veni	/11			03	700	221	130	070	03	213	12	243	- 00	43	121
Signal Information	n					$\overline{}$		JIL		$\overline{}$			K.		_
	_	Reference Phase	2		- N K	-3	-2	E 10.2	154	- 27		_	7		V
	\rightarrow	Reference Point	Begin		- 1	12	-24		51			1	2	3	
	-	Simult. Gap E/W	Off	Green		1.8	32.9	14.6		0.0		_	_		\mathbf{A}
	_	Simult. Gap N/S	Off	Yellow Red	0.5	0.0	1.0	1.0	4.0 1.0	0.0			€ .	7	.+*
Torce Mode Th	ixeu	Ollifult. Cap 14/5	Oil	Itted	0.5	0.0	1.0	1.0	1.0	0.0				-	
Timer Results				EBI		EBT	WB		WBT	NBL		NBT	SBI	$\overline{}$	SBT
Assigned Phase				1		6	5	_	2	1101		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, ()) e		4.0	_	5.0	4.0	-	5.0			5.0	_	-	5.0
Max Allow Headwa			_	5.2	\rightarrow	0.0	5.2	\rightarrow	0.0		_	5.4	-	$\overline{}$	5.5
Queue Clearance				7.0	-	0.0	5.5	_	U.U			23.8	_	$\overline{}$	13.9
				0.4	_	0.0	0.3	-	0.0			2.5	_	_	0.7
Green Extension T Phase Call Probab	_	g e), S	_	0.4	_	0.0	0.93	-	U.U			1.00	_		1.00
					-		0.00	_			\rightarrow			_	
Max Out Probabilit	ιy		_	0.05	,		0.00		_			0.83	_	_	1.00
Movement Group	Resu	ılts			EB			WB			NB			SB	
Approach Moveme				L	T	R	T	T	R	L	T	R	L	T	R
Assigned Moveme				1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate		veh/h		132	1178		96	647	48		418	296	105	205	
•		w Rate (ຮ), veh/h/l	ln	1711	1766	1598	1810	1752	1610		1827	1610	1767	1677	_
Queue Service Tim				5.0	31.4	9.4	3.5	15.8	2.5		21.8	15.4	5.4	11.9	_
Cycle Queue Clear		**		5.0	31.4	9.4	3.5	15.8	2.5		21.8	15.4	5.4	11.9	
Green Ratio (g/C)		Time (gt), 3		0.40	0.35	0.35	0.38	0.33	_		0.26	0.32	0.15	0.15	_
Capacity (c), veh/	_			318	1225	_	174	1153	-		482	511	257	244	
Volume-to-Capacit		in (X)		0.415	0.961	_	0.552	0.561	_		0.867	0.580	0.407	0.839	
		n (90 th percentile))	91.7		102.5	62.2	233.8	_		345.9		99.4	203.2	
Back of Queue (Q			_	3.9	14.3	4.6	2.8	10.3	_		15.7	9.3	4.4	9.2	
		RQ) (90 th percent		0.68	0.00	0.51	0.57	0.00	0.00		0.00	2.33	0.75	0.00	
Uniform Delay (d :			uic)	22.6	18.7	8.0	25.1	30.1	28.5		35.1	28.5	38.8	41.6	
Incremental Delay				1.1	16.9	5.0	3.6	1.8	0.3		13.1	1.6	1.5	17.2	
Initial Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Control Delay (d),		••		23.7	35.6	13.0	28.7	31.9	28.8		48.3	30.1	40.3	58.8	
Level of Service (L				C C	D	13.U B	C 20.1	C C	C C		40.3 D	C C	40.3 D	50.0 E	
Approach Delay, s/	_	LOS		29.9	_	С	31.3		C	40.7		D	52.5		D
				29.8			_	,		40.7			C 52.5		U
Intersection Delay,	, sivel	17 100				34	1.4								
					EB			WB			NB			SB	
Multimodal Resul	lts													00	
Multimodal Result Pedestrian LOS So		LOS		1.92		В	1.92	, T	В	2.44		В	2.47	, 	В

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ılts Su	mmar	У				
General Inform	nation								Intersec	tion Inf	ormatio	on		4 4 4 4 1	
Agency		Stolfus and Associa	ates						Duration	, h	0.250	1	2	****	
Analyst		Max Rusch		Analys	is Dat	е			Area Typ	ре	Other		<u>-</u> -		- 2
Jurisdiction				Time F	eriod	PM P	eak		PHF		0.92		4	m]t	=
Urban Street		Patterson Rd		Analys	is Yea	r 2045			Analysis	Period	1> 7:	00			-
Intersection		24 1/2 Rd & Patters	son	File Na	ame	2045	NoBuild	PM (Optimized	Timings	s.xus			111	
Project Descrip	tion												T T	4144	Mu
Demand Inform					EB		\bot	W		_	NB		\vdash	SB	
Approach Move	ement			L	T	R	L		r R	L	T	R	L	T	R
Demand (v), v	eh/h			102	670	251	267	73	35 282	254	410	206	227	333	100
Signal Informa		la (a			1	- 5	≡		2 21	2/13	4		-		sta
Cycle, s	100.0	Reference Phase	2			8	1	20 9	5	4	7	1	2	3	Y
Offset, s	61	Reference Point	Begin	Green	8.9	1.6	40.8	6.0		22.1				_	I
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.0	3.		4.0			4	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	4
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.5	0.	5 0.0	1.0	-	5	¥ 6	7	8
·				55.	-										
Timer Results				EBL	-	EBT	WB	4	WBT	NB	-	NBT	SBI	-	SBT
Assigned Phase	e			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				12.9	_	46.3	14.5	-	48.0	10.0	_	27.1	12.0	-	29.1
Change Period				4.0	_	5.5	4.0	-	5.5	4.0	_	5.0	4.0	_	5.0
Max Allow Head				5.2	_	0.0	5.2	-	0.0	5.2	-	5.2	5.2	-	5.2
Queue Clearan				8.0	_		9.2	\rightarrow		8.0	_	20.5	10.0	_	10.8
Green Extension		(ge), S		1.0	-	0.0	1.4	-	0.0	0.0	_	1.6	0.0	-	6.1
Phase Call Pro				0.99	-		1.00	1		1.00		1.00	1.00		1.00
Max Out Proba	bility			0.00			0.00			1.00)	1.00	1.00		0.41
Manage and Con	D.				- FD			14/5	,		ND			OD	
Movement Gro	_	suits			EB	Lp		WE			NB T	В		SB T	
Approach Move				L	_	R	L	T	R	L	4	R	L	8	R
Assigned Move		\ uah/h		1	6	16	5	2	12	7	_	14	3	_	18
Adjusted Flow F			1-	182	1197	449	235	647		276	353	317	247	362	109
		ow Rate (s), veh/h/	in	1697	1781 31.1	1610 24.2	1810 7.2	176		1767 6.0	1856 18.3	1646	1767 8.0	1738 8.8	1397 6.4
Queue Service				6.0	31.1	_	7.2	-		_	_	18.5	8.0		_
Cycle Queue C Green Ratio (g		e nine (gr), s		6.0 0.50	0.41	0.41	0.51	0.4	_	6.0 0.28	18.3 0.22	18.5 0.22	0.30	8.8 0.24	6.4 0.24
	_				_	_	292	150		300	410	364	241		337
Capacity (c), v		atio (V)		393 0.464	1454 0.823	0.682	0.804	0.43		_	0.860		1.026	838 0.432	0.323
			`	101.4		_	_	_	5 181.3	_	314.7	290.1	217.7	140.7	98.6
		/In (90 th percentile eh/In (90 th percent		4.3	19.1	14.6	125.9 5.7	_		9.9	14.0	13.1	9.7	6.1	3.9
		RQ) (90 th percent	•	0.76	0.00	1.46	0.95	0.0		1.67	0.00	0.00	1.64	0.00	0.00
			uic)		31.1	28.2	22.1	17.0	_	37.4	37.5	37.6	34.4	32.1	31.2
Uniform Delay				16.0	4.8	5.0	6.6	0.8	_	32.5	16.3	19.2	64.8	0.5	0.8
Incremental De				1.1		_	_	_	_	_	_				_
Initial Queue De		••		17.0	0.0	0.0	0.0	10.0		70.0	0.0 53.7	0.0	0.0	0.0	0.0
Control Delay (17.0	36.0	33.3 C	28.7	18.4	4 27.2 C	70.0	_	56.8	99.3	32.6	32.0
Level of Service				B 22.4	D		C 22.6	B		E 60.6	D	E	F	C	C
Approach Delay				33.4		C	22.5)	С	59.5	,	Е	55.5	,	E
Intersection De	iay, S/Ve	en / LUS				39	9.5						D		
Multimodal Re	eulte				EB			WE	2		NB			SB	
Pedestrian LOS		/1.08		2.27	_	В	2.42	_	В	2.45	_	В	2.44	_	В
Bicycle LOS Sc					_		1.64	_	В	_	_		_	_	
Dicycle LOS SC	JOIE / LC	73		1.40		Α	1.04	•	D	1.27		Α	1.08		Α

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0 250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.87 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 25 Road & Patterson Intersection File Name 2045 NoBuild PM Optimized Timinas.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R Demand (v), veh/h 66 921 181 281 905 147 223 338 257 218 317 110 Signal Information Д, Cycle, s 100.0 Reference Phase 2 STO ጎተለ 38 Reference Point Offset, s Begin Green 9.0 14.0 18.0 7.0 3.0 22.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 3.5 4.5 3.5 3.5 4.0 0.5 1.0 Force Mode Fixed Simult. Gap N/S On Red 0.5 0.5 0.5 Timer Results **EBL EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 6.0 4.0 6.0 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 52 52 52 Queue Clearance Time (gs), s 5.2 11.0 12.6 21.4 9.0 21.6 Green Extension Time (ge), 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 0.80 1 00 1 00 Max Out Probability 0.00 1.00 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 108 1501 295 218 701 114 256 389 278 251 364 126 Adjusted Flow Rate (v), veh/h 1795 1585 1811 1795 1811 1585 Adjusted Saturation Flow Rate (s), veh/h/ln 1753 1781 1585 1795 1753 1610 3.2 36.0 9.0 18.0 19.4 12.9 7.0 6.8 Queue Service Time (g_s), s 94 6.8 10.6 19.6 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 0.38 0.29 0.38 0.29 0.22 0.18 0.22 Capacity (c), veh/h 545 1282 571 234 646 285 338 525 612 257 398 349 0.197 1.171 0.517 0.931 1.084 0.399 0.757 0.740 0.455 0.976 0.914 0.363 Volume-to-Capacity Ratio (X) 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 0.30 0.00 0.66 1.22 0.00 0.96 0.88 0.00 0.00 0.84 Queue Storage Ratio (RQ) (90 th percentile) 1.01 1.59 Uniform Delay (d 1), s/veh 154 22.3 120 33.3 40 2 40 2 25.3 32 1 23.2 36.3 38 1 33 1 85.0 Incremental Delay (d 2), s/veh 0.8 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) В F В F D D D С F D F 87.9 F 86.5 F 36.1 67.9 Approach Delay, s/veh / LOS D F Intersection Delay, s/veh / LOS 74.0 Е Multimodal Results WB NB Pedestrian LOS Score / LOS 2.13 В 2.13 В 2.44 В 2.45 В Bicycle LOS Score / LOS 1.60 В 1.75 В 2.01 В 1.71 В

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.82 Jurisdiction Time Period PM Peak 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 R L R L R L R Demand (v), veh/h 92 1205 144 181 1180 147 93 190 189 184 159 75 Signal Information Ji. Cycle, s 100.0 Reference Phase 2 STY 80 Reference Point Offset, s Begin Green 7.6 0.1 48.9 6.0 1.0 17.4 Uncoordinated No Simult, Gap E/W On Yellow 3.5 0.0 4.5 3.5 0.0 4.0 Force Mode 0.0 1.0 Fixed Simult. Gap N/S On Red 0.5 0.0 0.5 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 6.0 4.0 6.0 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 5.3 52 53 Queue Clearance Time (gs), s 4.9 5.3 7.3 16.1 9.0 17.9 Green Extension Time (ge), 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 1.00 1 00 1.00 Max Out Probability 0.17 0.00 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 1 6 5 2 7 4 8 18 111 1449 173 123 805 100 113 232 230 224 285 Adjusted Flow Rate (v), veh/h 1754 1810 1598 1767 1885 1585 1682 Adjusted Saturation Flow Rate (s), veh/h/ln 1781 1781 1781 1572 2.9 26.8 33 5.0 5.3 11.6 14.1 7.0 15.9 Queue Service Time (g_s), s 1.5 0.3 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 0.49 0.23 0.17 0.17 0.24 0.57 0.49 0.18 473 Capacity (c), veh/h 1740 781 279 1744 770 184 328 276 241 323 0.234 0.833 0 222 0.443 0.462 0.130 0.617 0.706 0.836 0.931 0.884 Volume-to-Capacity Ratio (X) 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 24 2.5 0.3 5.1 9.0 10.2 8.0 12.6 0.35 0.00 0.17 0.41 0.00 0.05 1.04 0.00 2.57 0.00 Queue Storage Ratio (RQ) (90 th percentile) 1.41 Uniform Delay (d 1), s/veh 11.1 9.5 29 178 37 12 329 38.9 399 38 4 39.8 0.3 Incremental Delay (d 2), s/veh 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 44 14 47 4 45.9 59.3 81.0 63.3 Level of Service (LOS) В R В D Α F F Α Α D 12.7 В 5.9 51.5 71.1 Approach Delay, s/veh / LOS Α D Е Intersection Delay, s/veh / LOS 24.4 C Multimodal Results WB NB SB Pedestrian LOS Score / LOS 2.09 В 1.90 В 2.45 В 2.45 В Bicycle LOS Score / LOS 1.94 В 2.00 В 1.44 A 1.33

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF Jurisdiction Time Period PM Peak 0.77 Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 1st Street & Patterson Intersection File Name 2045 NoBuild PM Optimized Timinas.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R Demand (v), veh/h 115 1234 197 217 1180 124 210 394 193 165 311 80 Signal Information Ji. Cycle, s 100.0 Reference Phase 2 50 Reference Point Offset, s Begin Green 7.8 36.0 7.0 3.2 27.5 0.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 3.0 3.5 0.0 4.0 0.0 0.0 Force Mode Fixed Simult. Gap N/S On Red 0.5 2.5 0.5 0.0 1.0 Timer Results **EBL EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 5.5 4.0 5.5 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 52 52 52 Queue Clearance Time (gs), s 6.4 7.0 9.6 28.4 9.0 21.8 Green Extension Time (ge), s 0.6 0.0 0.7 0.0 0.6 2.4 0.0 42 Phase Call Probability 0.97 0.98 1.00 1.00 1.00 1.00 1.00 1 00 0.87 Max Out Probability 0.00 0.00 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 129 1385 221 144 784 82 273 512 251 214 404 104 Adjusted Flow Rate (v), veh/h 1810 1766 1598 1781 1743 1856 1598 1810 1885 1610 Adjusted Saturation Flow Rate (s), veh/h/ln 1781 1572 4.4 35.9 7.6 5.0 16.1 2.4 7.6 26.4 11.4 7.0 19.8 4.5 Queue Service Time (g_s), s 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 0.36 0.36 0.31 0.39 0.35 0.28 0.35 0.44 0.10 Capacity (c), veh/h 329 1267 737 212 1280 565 357 571 617 216 519 569 0.393 1.093 0.300 0.680 0.612 0.146 0.764 0.896 0.406 0.993 0.778 0.183 Volume-to-Capacity Ratio (X) 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 0.57 0.00 0.75 0.69 0.00 0.32 0.99 0.00 0.00 0.00 Queue Storage Ratio (RQ) (90 th percentile) 1.15 1.65 Uniform Delay (d 1), s/veh 20.3 313 13.8 218 20.5 14 1 437 33 1 22.3 316 33 4 22 4 52.8 Incremental Delay (d 2), s/veh 0.9 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 2 146 25.1 21.9 14.5 49 7 49 4 23.0 90.6 40.7 22 6 Level of Service (LOS) С F В С С В D D D С С 70.6 E 21.7 C 52.9 Approach Delay, s/veh / LOS 43.1 D D Intersection Delay, s/veh / LOS 50.5 D Multimodal Results WB NB Pedestrian LOS Score / LOS 2.28 В 2.11 В 2.44 В 2.44 В Bicycle LOS Score / LOS 2.14 В 2.12 2 20 В 1.68 В

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0 250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.80 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 7th Street & Patterson Intersection File Name 2045 NoBuild PM Optimized Timinas.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L 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 10 Reference Point Offset, s Begin Green 9.3 2.1 31.9 6.0 3.7 29.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 0.0 4.0 3.5 0.0 4.0 0.0 1.0 Force Mode Fixed Simult. Gap N/S On Red 0.5 0.0 1.0 0.5 Timer Results **EBL EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 5.0 4.0 5.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 52 52 52 Queue Clearance Time (gs), s 11.3 8.5 8.0 19.2 9.0 10.8 Green Extension Time (ge), 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 0.58 0.32 Max Out Probability 1.00 0.00 1.00 0.05 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 172 1429 160 179 827 148 306 733 328 189 389 216 Adjusted Flow Rate (v), veh/h 1359 1810 1766 1810 1542 1767 1795 1591 1795 1809 1586 Adjusted Saturation Flow Rate (s), veh/h/ln 1781 9.3 34.0 6.5 19.5 7.6 6.0 17.2 15.1 7.0 8.1 8.8 Queue Service Time (g_s), s 4.3 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) 0.34 0.40 0.41 0.32 0.32 0.29 0.38 0.40 0.11 0.35 0.33 0.44 Capacity (c), veh/h 207 1203 557 240 1136 492 360 1041 610 309 1181 701 0.829 1.188 0.288 0.744 0.728 0.301 0.850 0.704 0.537 0.612 0.329 0.309 Volume-to-Capacity Ratio (X) 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 21 4.5 10.8 5.8 9.3 10.1 7.9 5.3 5.8 5.5 0.91 0.00 0.30 0.74 0.00 0.87 0.94 0.00 0.99 0.00 0.00 Queue Storage Ratio (RQ) (90 th percentile) 1.07 Uniform Delay (d 1), s/veh 42.5 20.5 88 22 0 25.7 27.3 322 27 1 20.5 227 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 99 26.8 28.8 28 4 50.0 28.7 21.5 25.4 25.6 18 4 Level of Service (LOS) Е F С С С D C С В Α С C 97.4 F 28 4 C 31.8 C 23.6 Approach Delay, s/veh / LOS С Intersection Delay, s/veh / LOS 52.5 D Multimodal Results WB NB Pedestrian LOS Score / LOS 2.45 В 2.44 В 2.45 В 2.47 В Bicycle LOS Score / LOS 2.04 В 1.83 В 1.61 В 1.14 A

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.80 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 12th Street & Patterson Intersection File Name 2045 NoBuild PM Optimized Timinas.xus <u>ነነተተ</u> Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L 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 STO 59 Reference Point Offset, s Begin Green 9.0 6.0 29.5 7.0 26.0 0.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 3.5 4.0 3.5 4.0 0.0 0.0 Force Mode Fixed Simult. Gap N/S On Red 0.5 0.5 1.5 0.5 1.0 Timer Results **EBL EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 5.5 4.0 5.5 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 52 52 52 Queue Clearance Time (gs), s 7.1 4.6 5.7 23.0 9.0 28.0 Green Extension Time (ge), 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 0.07 1.00 1 00 1 00 Max Out Probability 1.00 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 327 1715 156 136 1020 194 181 786 183 360 515 460 Adjusted Flow Rate (v), veh/h 1598 1743 1605 1743 1795 1572 1870 1670 Adjusted Saturation Flow Rate (s), veh/h/ln 1730 1766 1730 1781 5.1 39.5 2.6 27.7 7.1 3.7 21.0 8.5 7.0 26.0 26.0 Queue Service Time (g_s), s 6.3 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 0.26 0.35 0.33 0.26 0.33 0.26 Capacity (c), veh/h 818 1396 747 458 1059 471 386 926 550 424 486 434 0.400 1 229 0.208 0.297 0.963 0 411 0.469 0.849 0.332 0.850 1.059 1.059 Volume-to-Capacity Ratio (X) 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 42 3.1 14.1 5.7 6.8 25.7 23.6 0.43 0.00 0.81 0.17 0.00 0.70 0.31 0.00 0.58 0.00 Queue Storage Ratio (RQ) (90 th percentile) 1.15 0.00 Uniform Delay (d 1), s/veh 18 2 33 0 178 26.2 29 1 17.5 27 1 35 1 239 299 37 0 37 0 107.1 Incremental Delay (d 2), s/veh 0.9 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 46.9 197 31.1 44 7 25.5 48 7 94 4 96.7 Level of Service (LOS) В F В С n В С D С F D 113.5 F D 39.5 D 82.9 Approach Delay, s/veh / LOS 41.1 Intersection Delay, s/veh / LOS 76.4 Multimodal Results WB NB Pedestrian LOS Score / LOS 2.57 С 2.44 В 2.58 С 2.58 С Bicycle LOS Score / LOS 2.19 В 1.57 В 1.44 A 1.59 В

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resu	ılts S	umr	mary	/				
General Inform	otion								Intoro	ootio	n Info	ormatic	n.		4 444 1	slu
	lation	Stolfus and Associa	tos						Duratio			0.250		- 1	4 4	
Agency		Max Rusch	iles	Anaba	in Date	т .				_		_		- 12		<u>-</u>
Analyst Jurisdiction		Max Rusch		Analys		PM P	nok.		Area T	ype		Other 0.95				<u>^</u>
		Detteres Dd		Time F			eak			:- D-	:	_	20	- 3 -		-
Urban Street		Patterson Rd	L 04			2045	Na Decilal	DM	Analys			1> 7:0	00	B		7
Intersection		Patterson Rd & 15t	n St	File Na	ame	2045	NoBuild	PIMIC	Jpumi2	ea III	mings	.xus		- 4	1 (eld.
Project Descript	lon		-	_	-	_	-	-	-	-	-	-	-			e para
Demand Inform	nation				EB		$\overline{}$	W	'B	Т		NB			SB	
Approach Move	ment			L	Т	R	L	T	T F	₹ 1	L	Т	R	L	Т	R
Demand (v), v	eh/h			69	1629	30	22	10	52 2	7	14	4	36	43	2	64
Signal Informa	tion				7	7			Å.					_		1
Cycle, s	100.0	Reference Phase	2		- 4	R	H.	1	512					⊕ .		43
Offset, s	53	Reference Point	End	Green	34	2.1	76.1	6.4		0	0.0			5	1	-
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.0	4.0			0.0		> '	∀		*
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.	0	0.0		5	6	7	8
Timer Results				EBL	-	EBT	WB	4	WBT	-	NBL	-	NBT	SBI	-	SBT
Assigned Phase	•			5	_	2	1	-	6	4		_	8	<u> </u>	_	4
Case Number				1.1 9.5	_	4.0	1.1	_	4.0	4-		$\overline{}$	7.0	_	_	7.0
	hase Duration, s					82.2	7.4	\rightarrow	80.1	4		\rightarrow	10.4	\vdash	_	10.4
	hange Period, (Y+R ε), s					4.0	4.0	4	4.0	4		_	4.0		_	4.0
Max Allow Head				3.1	\perp	0.0	3.1	4	0.0	4		_	3.3			3.3
Queue Clearan	ce Time	(gs), s		3.0			2.4	_		4			4.3			6.2
Green Extension		(ge), S		0.2	$\overline{}$	0.0	0.0	\rightarrow	0.0	4		\perp	0.3			0.3
Phase Call Prob				0.92			0.56	5		4			0.99			0.99
Max Out Probat	bility			0.00			0.00			_			0.00			0.00
Movement Gro	un Doc	ulte			EB			WE	,	7		NB			SB	
Approach Move	_	ouits			Т	R		T	R	-	L	Т	R		T	R
Assigned Move				5	2	12	1	6	16	_	3	8	18	7	4	14
Adjusted Flow F		\ voh/h		90	1077	1077	30	729		_	3	19	38		47	67
		ow Rate (s), veh/h/l	ln.	-	1856	1844	1781	188	_	_		1529	1585	_	1434	1585
Queue Service			11	1781	26.7	27.3	0.4	1.7	_	_		0.0	2.3		2.1	4.2
Cycle Queue Cl				1.0	26.7	27.3	0.4	1.7	_	_	-	1.1	2.3	_	3.2	4.2
Green Ratio (g		e fille (g c), s		0.82	0.78	0.78	0.79	0.70	_	_		0.06	0.06		0.06	0.06
Capacity (c), v				442	1451	1441	222	143	_	_		163	102	_	163	102
Volume-to-Capa		tio (V)		0.203	0.742	_	0.133	0.50	_	_	_	0.117	0.371		0.291	0.659
		/In (90 th percentile)	١	6.7	178.7	177.3	6.3	12.	_	_		18	37		46.2	68.4
		eh/In (90 th percent		0.3	7.9	8.1	0.3	0.5			_	0.8	1.7		2.1	3.1
		RQ) (90 th percent		0.08	0.00	0.00	0.07	0.00	_	_		0.00	0.84		0.00	1.55
Uniform Delay (1.8	4.4	4.5	6.8	0.3	$\overline{}$	_		44.2	44.8		45.2	45.7
Incremental Del				0.1	2.2	2.3	0.0	0.2	_	_		0.1	0.8		0.4	2.7
Initial Queue De				0.0	0.0	0.0	0.0	0.0	$\overline{}$	_	-	0.0	0.0		0.0	0.0
Control Delay (••		1.8	6.6	6.7	6.8	0.5	_	_		44.3	45.7		45.6	48.4
Level of Service				A	A	A	A	A	A	_		D	D		D	D
Approach Delay				6.4	<u> </u>	A	0.6		A	+	45.2	_	D	47.2		D
Intersection Del							.0			+				A		
	,, _,,															
Multimodal Res	sults				EB			WE	3	T		NB			SB	
Pedestrian LOS	Score	/ LOS		1.83		В	1.84	1	В	T	2.31		В	2.31		В
Bicycle LOS Sc	ore / LC	OS		1.99		В	1.44	1	Α		0.58		Α	0.68	3	Α

		HCS	87 Sigi	nalize	d In	ters	ect	ion R	esul	ts Sur	nmar	y				
General Inform	nation									Intersect	ion Inf	ormati	on		d Juda	TINU
	iation	Stolfus and Associa	atos						_	Duration,		0.250			Įζ	Ç.
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Urban Street		Patterson Rd		Analys				an		Analysis	Dorind	1> 7:	00	- 3		-
Intersection		27 1/2 Road & Patt	toreon	File Na		_		JoBuild		ptimized		_	00	- 1		į.
	tion	ZI IIZ ROAU & FAU	lerson	riie iva	ame	20	J43 F	NOBUIIU	FIM U	pumizeu	rimings	.xus		- 4	N T S	Maria C
Project Descrip	uon													-		a parque
Demand Inform	nation				EB				WE	3		NB			SB	
Approach Move	ement			L	Т	т	R	L	T	R	L	Т	R	L	T	R
Demand (v), v	eh/h			217	147	В			941	362				543		135
Signal Informa	tion						. 5	2 6					- 13	_		人
Cycle, s	100.0	Reference Phase	2		Ħ							_				5350
Offset, s	19	Reference Point	Begin	Green	16.0	4	8.0	21.0	0.0	0.0	0.0			2		1
Uncoordinated	No	Simult. Gap E/W	On	Yellow			.5	4.0	0.0	0.0	0.0			a		
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	1	.5	1.0	0.0	0.0	0.0		5	6	7	8
Timer Results				EBL	-	EB.	Г	WBI	-	WBT	NBI	-	NBT	SBL	-	SBT
Assigned Phase	e			1	+	6	_	$\overline{}$	_	2		+			\rightarrow	4
Case Number				1.0	_	4.0	_		-	7.3		-		_	-	9.0
Phase Duration				20.0	\rightarrow	74.0	_		\rightarrow	54.0		\perp			\rightarrow	26.0
Change Period,				4.0	4	6.0	Ш		_	6.0		_		_	4	5.0
Max Allow Head				5.2	_	0.0			_	0.0		\perp			_	5.3
Queue Clearan	ce Time	(gs), s		7.3	_		_		_			_			_	20.1
Green Extensio		(ge), s		0.8	-	0.0	Щ		\rightarrow	0.0		\perp			\rightarrow	0.5
Phase Call Prol				1.00			_		_			_			_	1.00
Max Out Proba	bility			0.20		_	_		_						_	1.00
Mayamant Cra	un Doc	ulto			EB		-		WB			NB			SB	
Approach Move	_	suits			T	т,	R	L	T	R	L	T	R	L	T	R
Assigned Move				_	6	+-'			2	12	L	<u> </u>	K	7	<u> </u>	14
Adjusted Flow F		\ voh/h		233	1589	+	-		1082	-			-	654		163
_		ow Rate (s), veh/h/	/In	1753	1795	-	-		1795	-			-	1757		1522
Queue Service			111	5.3	17.9	-	-		19.9	-			-	18.1		9.5
Cycle Queue C				5.3	17.9	-	-		19.9	15.0			-	18.1		9.5
Green Ratio (g		e fille (gr), s		0.66	0.68	-	-		0.48	0.48			-	0.21		0.21
Capacity (c), v	_			449	2441	_	-		1723	-			-	738		320
Volume-to-Capa		tio (V)		0.519		-	-		0.628	-			_	0.887		0.509
		/In (90 th percentile)	116.9		_	\dashv		219.3	-				284.7		150.6
		eh/In (90 th percent		5.1	6.1	+			9.9	7.3				12.9		6.5
		RQ) (90 th percen	_	0.77	0.00	+	н		0.00	3.06				1.70		0.00
Uniform Delay (15.9	4.8	1	_		15.1	13.1				38.3		34.9
Incremental De				3.2	1.0		П		1.5	2.2				14.8		5.7
Initial Queue De				0.0	0.0	1	_		0.0	0.0				0.0		0.0
Control Delay (••		19.1	5.8	\dagger			16.5	15.3				53.1		40.6
Level of Service				В	A	\top	\neg		В	В				D		D
Approach Delay				7.5	_	A	H	16.2	_	В	0.0			50.6		D
Intersection De							19							В		
Multimodal Re	sults				EB				WB			NB			SB	
Pedestrian LOS	Score	/ LOS		0.67		Α		2.09		В	2.32	2	В	2.32		В
Bicycle LOS Sc	ore / LO	OS		2.17		В		1.78		В						F

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.83 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 29 Road & Patterson Intersection File Name 2045 NoBuild PM Optimized Timinas.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R Demand (v), veh/h 220 1249 310 126 809 57 245 273 267 161 95 166 Signal Information Щ Cycle, s 100.0 Reference Phase 2 69 Reference Point Offset, s Begin Green 9.5 2.0 33.5 12.5 2.0 20.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 0.0 4.5 3.5 0.0 4.0 2.0 0.0 1.0 Force Mode Fixed Simult. Gap N/S On Red 1.0 0.0 1.0 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 6.5 4.5 6.5 4.5 5.0 4.5 5.0 Change Period, (Y+Rc), s 4.5 Max Allow Headway (MAH), s 4.1 0.0 4.1 0.0 42 4.3 42 43 Queue Clearance Time (gs), s 9.7 8.4 8.4 19.1 10.1 8.3 Green Extension Time (ge), 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 1.00 1.00 0.91 Max Out Probability 1.00 1.00 0.13 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 1 6 5 2 7 4 8 18 222 1258 312 177 1134 80 295 329 280 194 114 140 Adjusted Flow Rate (v), veh/h 1753 1870 1870 1610 Adjusted Saturation Flow Rate (s), veh/h/ln 1781 1795 1572 1767 1781 1585 1716 1610 7.7 34.6 10.3 31.1 17.1 14.8 5.1 6.3 Queue Service Time (g_s), s 6.4 4.1 6.4 8.1 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) 0.36 0.36 0.34 0.34 0.32 0.20 0.30 0.34 0.22 0.45 0.43 0.34 Capacity (c), veh/h 289 1274 558 240 1193 531 906 374 475 350 411 539 0.767 0.987 0.559 0.736 0.950 0.150 0.326 0.879 0.588 0.555 0.278 0.259 Volume-to-Capacity Ratio (X) 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 4.5 0.49 0.00 0.38 0.26 0.00 0.48 0.00 0.95 1.09 0.00 0.76 Queue Storage Ratio (RQ) (90 th percentile) 1.03 Uniform Delay (d 1), s/veh 254 234 12 1 197 326 28.2 25 1 38.8 30 1 25.9 32 4 242 18.9 Incremental Delay (d 2), s/veh 13.5 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 n В С n F D C С С С С 37.1 D 42.4 D 30.5 Approach Delay, s/veh / LOS 42.6 D С Intersection Delay, s/veh / LOS 39.2 D Multimodal Results WB NB Pedestrian LOS Score / LOS 2.33 В 2.18 В 2.45 В 2.45 В Bicycle LOS Score / LOS 2.26 В 1.47 A 1.98 В 1.23 A

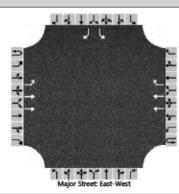
HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.83 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 29 Road & Patterson Intersection File Name 2045 NoBuild PM Optimized Timinas.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R Demand (v), veh/h 220 1249 310 126 809 57 245 273 267 161 95 166 Signal Information Щ Cycle, s 100.0 Reference Phase 2 69 Reference Point Offset, s Begin Green 9.5 2.0 33.5 12.5 2.0 20.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 0.0 4.5 3.5 0.0 4.0 2.0 0.0 1.0 Force Mode Fixed Simult. Gap N/S On Red 1.0 0.0 1.0 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 6.5 4.5 6.5 4.5 5.0 4.5 5.0 Change Period, (Y+Rc), s 4.5 Max Allow Headway (MAH), s 4.1 0.0 4.1 0.0 42 4.3 42 43 Queue Clearance Time (gs), s 9.7 8.4 14.5 19.1 10.1 8.3 Green Extension Time (ge), 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 1.00 1.00 0.91 Max Out Probability 1.00 1.00 0.13 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 1 6 5 2 7 4 8 18 222 1258 312 177 1134 80 295 329 280 194 114 140 Adjusted Flow Rate (v), veh/h 1753 1870 1870 1610 Adjusted Saturation Flow Rate (s), veh/h/ln 1781 1795 1572 1767 1781 1585 1767 1610 7.7 34.6 10.3 31.1 17.1 14.8 5.1 6.3 Queue Service Time (g s), s 6.4 4.1 12.5 8.1 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) 0.36 0.36 0.34 0.34 0.20 0.30 0.34 0.22 0.45 0.43 0.32 0.34 Capacity (c), veh/h 289 1274 558 240 1193 531 459 374 475 350 411 539 0.767 0.987 0.559 0.736 0.950 0.150 0.643 0.879 0.588 0.555 0.278 0.259 Volume-to-Capacity Ratio (X) 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 4.5 0.49 0.00 0.38 0.26 0.00 0.98 0.00 0.95 1.09 0.00 0.76 Queue Storage Ratio (RQ) (90 th percentile) 1.03 Uniform Delay (d 1), s/veh 254 234 12 1 197 326 28.2 27.9 38.8 30 1 25.9 32 4 242 18.9 Incremental Delay (d 2), s/veh 13.5 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 n В С n Е D C С С С С 37.1 D 45.2 D 30.5 Approach Delay, s/veh / LOS 42.6 D С Intersection Delay, s/veh / LOS 39.8 D Multimodal Results WB NB Pedestrian LOS Score / LOS 2.16 В 2.18 В 2.45 В 2.45 В Bicycle LOS Score / LOS 2.26 В 1.47 A 1.98 В 1.23 A

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.85 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 Intersection 29 1/2 Road & Patterson File Name 2045 NoBuild PM Optimized Timinas.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R Demand (v), veh/h 91 1484 73 99 859 129 86 98 235 155 29 32 Signal Information 11. Cycle, s 100.0 Reference Phase 2 STY 54 Reference Point Offset, s Begin Green 4.8 2.7 37.1 9.0 5.0 17.9 Uncoordinated No Simult, Gap E/W On Yellow 3.5 0.0 5.0 4.0 4.0 4.0 Force Mode 0.0 1.0 Fixed Simult. Gap N/S On Red 0.5 0.0 0.0 Timer Results FBL **FBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 6.5 4.0 6.5 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 4.0 Max Allow Headway (MAH), s 4.5 0.0 4.5 0.0 37 4.8 37 48 Queue Clearance Time (gs), s 5.0 7.0 5.8 25.6 10.3 4.0 Green Extension Time (ge), 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 0.60 1 00 0.01 Max Out Probability 0.00 0.00 0.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 88 1438 71 148 1287 193 101 392 182 34 38 Adjusted Flow Rate (v), veh/h 1810 1795 1598 1795 1607 1841 1585 Adjusted Saturation Flow Rate (s), veh/h/ln 1795 1560 1767 1781 3.0 37.1 3.2 5.0 33.3 8.8 3.8 23.6 8.3 1.6 2.0 Queue Service Time (g s), s 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) 0.37 0.37 0.40 0.40 0.38 0.27 0.27 0.18 0.42 0.45 0.18 Capacity (c), veh/h 175 1333 593 206 1430 621 605 432 245 329 283 0.503 1.078 0.119 0.719 0.900 0.311 0.167 0.907 0.744 0.104 0.133 Volume-to-Capacity Ratio (X) 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) 22 30.0 3.5 3.3 18.0 6.5 2.9 15.3 7.5 1.3 1.4 0.36 0.00 0.91 0.55 0.00 0.00 0.00 0.00 Queue Storage Ratio (RQ) (90 th percentile) 0.63 0.84 1.23 Uniform Delay (d 1), s/veh 234 327 227 206 26.5 218 20.5 354 313 34 4 34.5 44.8 Incremental Delay (d 2), s/veh 1.5 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) С F С С С С D C С D С 72.2 E 31.4 C 467 D 45.5 Approach Delay, s/veh / LOS D Intersection Delay, s/veh / LOS 50.6 D Multimodal Results WB NB Pedestrian LOS Score / LOS 1.92 В 2.10 В 2.44 В 2.45 В Bicycle LOS Score / LOS 2.09 В 1.54 В 1.30 A 0.91 A

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.83 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 30 Road & Patterson Intersection File Name 2045 NoBuild PM Optimized Timinas.xus Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R Demand (v), veh/h 227 1174 319 72 669 69 258 132 104 47 83 128 Signal Information Д. Cycle, s 100.0 Reference Phase 2 STO 53 Reference Point Offset, s Begin Green 10.0 52.5 6.0 1.0 7.0 0.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 5.0 3.5 0.0 4.0 0.0 Force Mode 0.0 Fixed Simult. Gap N/S On Red 0.5 1.5 0.0 1.0 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 5 2 6 3 8 1 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 6.5 4.0 6.5 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 Max Allow Headway (MAH), s 4.1 0.0 42 0.0 42 4.3 42 43 Queue Clearance Time (gs), s 10.0 7.6 4.9 9.0 4.8 7.2 Green Extension Time (ge), 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 0.26 1 00 1 00 1 00 Max Out Probability 0.48 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 5 12 16 18 7 Assigned Movement 2 6 3 8 4 14 1 273 1414 384 127 1178 121 311 159 124 57 100 43 Adjusted Flow Rate (v), veh/h 1810 1795 1598 1795 1795 1598 1730 1870 1560 1810 1885 1585 Adjusted Saturation Flow Rate (s), veh/h/ln 5.6 6.7 2.3 29 14.8 7.0 8.0 8.0 2.8 5.2 2.2 Queue Service Time (g s), s 1.6 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) 0.56 0.56 0.52 0.52 0.08 0.08 0.13 0.07 0.68 0.62 0.14 0.21 Capacity (c), veh/h 488 2028 903 378 1884 839 431 150 125 181 132 333 0.561 0.697 0.426 0.336 0.625 0.145 0.722 1.063 0.994 0.314 0.758 0.130 Volume-to-Capacity Ratio (X) 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 22 1.3 24 6.5 1.0 1.9 11.2 8.8 2.6 6.0 1.6 0.90 0.00 0.10 0.53 0.00 0.38 0.19 0.00 0.44 0.00 0.28 Queue Storage Ratio (RQ) (90 th percentile) 1.13 Uniform Delay (d 1), s/veh 97 1.5 13 86 74 46 417 46 0 46 0 393 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 28 23 11.0 8.9 49 51.7 137.3 125.1 43.8 78.5 32 9 Level of Service (LOS) В В D F D Е Α Α Α Α С F 88 90.0 58.8 Approach Delay, s/veh / LOS 4.1 Α Α E Intersection Delay, s/veh / LOS 20.1 C Multimodal Results WB NB Pedestrian LOS Score / LOS 2.25 В 2.22 В 2.46 В 2.46 В Bicycle LOS Score / LOS 2 20 В 1.29 A 1.47 A 0.82 A

	HCS7 Two-Way Stop	o-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		

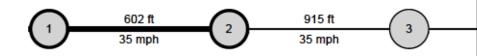
Lanes



Vehicle Volumes and Adj	ustme	nts														
Approach	Τ	Eastb	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	10	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	Т				Т	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						ı	lo							N	io	
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
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, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	Т	62												84		90
Capacity, c (veh/h)		450												21		401
v/c Ratio	1	0.14												3.92		0.22
95% Queue Length, Q ₉₅ (veh)	1	0.5												10.7		0.9
Control Delay (s/veh)		14.3												1682.2		16.6
Level of Service (LOS)		В												F		С
Approach Delay (s/veh)		0).4				5 6 7 8 9 10 11 2 1 0 0 0 0 1 0 T R L 1221 130 777 No N									
Approach LOS														ı	F	

Generated: 5/26/2020 10:48:13 AM

	HCS7 Urba	an Street Seg	ment 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/Mal	Access & Patterson	Analysis Period	1> 7:00
Project Description					



Basic Segn	nent Infor	mation (24 Rd - I	Market St)									
Segment		1 Limit		h Lanes		t Length	Interse	ction Wid	Length	of RM	Percer	nt Curb	Oth	er 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
							W	estbound				Eastbo	und	
Segment O	utput Dat	ta				WBL	.	WBT	WBF	₹	EBL	EBT		EBR
Segment	Moveme	ent				1		6	16		5	2		12
1	Bay/Lan	e Spillba	ck Time,	h							0.15	1.19		0.03
1	Shared	Lane Spi	llback Tin	ne, h							0.24			0.07
1	Base Fr	ee-Flow	Speed, m	ph				41.58				42.0	5	
1	Running	Time, s						14.47				14.8	7	
1		Speed,						28.37				27.6	1	
1		Delay, s	/veh					23.38				112.5		
1	Travel T							37.85		_		127.3		
1		peed, m						10.84		-		3.22		
1		te, stops						0.56		_		1.58		
1	_		e, stops/n	ni				4.93		-		13.84		
1		vol/cap						0.32		-		1.08		
1		of Base	FFS					26.08		_		7.66	•	
1	_	Service	t: <i>(</i>	2				F		-		F	,	
1			rception	score				2.95				4.67		
Multimodal 1			-	Score / L	00		2.26		В		3.79		_	D
1				ore / LOS	03		2.29		В	_	2.42			В
1				re / LOS			2.64	_	В	_	4.03			D
_	Hansit	Seyment	203 300	ile / LOS			2.04			_	4.03			
Facility Out	put Data						W	estbound		$\overline{}$		Eastbo	und	
Facility Trav								960.05		\neg		1381.		
Facility Trav	el Speed,	mph						22.36				15.53	3	
Facility Base	Free Flo	w Speed	, mph					42.73				42.4		
Facility Pero								52.33				36.59	9	
Facility Leve	l of Servi	ce						F				F		
Facility Auto	Traveler	Perception	on Score					2.37				2.44		
Multimodal							0.40							
Pedestrian F							3.43	_	С	_	3.75			D
Bicycle Faci	_						2.83		C	_	2.97			C
Transit Faci	ity LOS S	core / LC	18				1.47		A		1.97			Α

				НС	S7 Urb	an Str	eet S	Segment	Repor	t					
General Int	formation									19	Streets In	formation	,		
Agency		Stolfus	and /	Associate	es						Number of	Intersect	ions	15	
Analyst		Max Ru				Analys	sis Date				Number of	Seament	s	14	
Jurisdiction		- True				Time F		PM Pe	ak		Number of			15	
File Name		2045 N	loBuil	d PM On	timized Tir			2045		_	System Cy			100	
Intersection	ıs			_				Access/Mesa	Mall Ac			_	, 0	-	7:00
Project Des							- Серен				, 0.0 .				
	(1)—		602 ft 35 mph	<u> </u>	2		915 ft 35 mph	_(<u>)</u>	1680 35 m		-(4	
Dania Carr		(341	h-4 C	4. U	Danati										
	ment Informati					1	let.	andie - 100 c	1 "	-40.4		-1.0::::	-	L -	Deli
Segment	Speed Limi	_	_	Lanes	Segment	_	_	section Wid		of RM	-	nt Curb		_	Delay
	WB E		VB	EB	WB	EB	WB		WB	EB	WB	EB	WI	\rightarrow	EB
2	35 35	5 2	2	2	915	915	50	50	2	1	70	0	0.0)	0.0
								Veethound		_		Faatha	d		
Coamont C	Autout Data					WBI		WBT	WBF	,	EBL	Eastbo EBT	_		EBR
	Output Data						-			1			-		
Segment	Movement	llis a alt. Ti	: I	_		1	_	6	16	_	5	2	-		12
2	Bay/Lane Spi		_			neve	_	never		-			\rightarrow	_	
2	Shared Lane					neve	r	44.70	neve	r		42.0		_	
2	Base Free-Fl		ea, m	pn	-			41.72		-		42.0		_	
2	Running Time				_			18.64		-		19.0			
2	Running Spe				-			33.47		-		32.8		_	
2	Through Dela		1					31.92		-		15.2			
2	Travel Time,							50.56		-		34.2			
2	Travel Speed				\rightarrow			12.34		\rightarrow		18.2			
2	Stop Rate, st							0.78		-		0.34		_	
2	Spatial Stop I	_	_	ıi				4.51		_		1.97			
2	Through vol/o	_						0.56		_		0.79			
2	Percent of Ba							29.58		_		43.3	2		
2	Level of Serv							F		_		D			
2	Auto Traveler		tion S	Score				2.88				2.44			
	l Results (Segi	-			00 1		0.00				0.00		_		
2	Pedestrian S						2.98	_	C	-	3.29		_	C	
2	Bicycle Segm						2.53		В	-	2.69			В	
2	Transit Segm	ent LOS	Sco	re / LOS			2.52		В	_	2.00)		Α	l .
Facility Ou	tout Data							Vootbound		_		Faatha	und		
Facility Ou Facility Trav					_		v	960.05		-		1381.		_	
	vel Speed, mph							22.36		_		15.5			
	e Free Flow Sp		nh.					42.73				42.4			
	cent of Base FF		/11					52.33				36.5			
	el of Service	<u> </u>						52.33 F				30.5	3		
	o Traveler Perce	ntion Co	core					2.37				2.44			
r acility Auto	J Havelet Ferce	μιση δί	core					2.31				2.44			
Multimoda	l Results (Faci	lity)													
	Facility LOS Co		_				2.42		_		2.75			_	

Pedestrian Facility LOS Score / LOS

Bicycle Facility LOS Score / LOS

Transit Facility LOS Score / LOS

С

С

3.43

2.83

1.47

D

С

3.75

2.97

1.97

HCS7 Urban Street Segment Report			
lice, chair chot cognion report			
General Information Streets	Informatio	n	
Agency Stolfus and Associates Numbe	r of Intersec	tions	15
Analyst Max Rusch Analysis Date Numbe	of Segmen	its	14
	r of Iteration		15
File Name 2045 NoBuild PM Optimized Tim Analysis Year 2045 System	Cycle Leng	th, s	100
	s Period	-	1> 7:00
Project Description			
3	542 ft) mph	_(5
Basic Segment Information (Home Depot - 24 1/2 Rd)			
Segment Speed Limit Through Lanes Segment Length Intersection Wid Length of RM Per	cent Curb	0	ther Delay
WB EB WB EB WB EB WB EB WB	EB	W	в Ев
3 35 35 2 2 1680 1680 50 50 550 550 70	100	0.0	0.0
Westbound	Eastbo	ound	
Segment Output Data WBL WBT WBR EBL	EB	T	EBR
Segment Movement 5 2 12 1	6		16
3 Bay/Lane Spillback Time, h never never	neve	er	never
3 Shared Lane Spillback Time, h never never never			never
3 Base Free-Flow Speed, mph 40.72	40.2	21	
3 Running Time, s 31.22	32.1	9	
3 Running Speed, mph 36.69	35.5	i9	
3 Through Delay, s/veh 18.44	35.5	8	
3 Travel Time, s 49.66	67.7	7	
3 Travel Speed, mph 23.07	16.9	90	
3 Stop Rate, stops/veh 0.51	0.6	4	
3 Spatial Stop Rate, stops/mi 1.59	2.0	0	
3 Through vol/cap Ratio 0.43	0.9	6	
3 Percent of Base FFS 56.65	42.0)4	
3 Level of Service C	D		
3 Auto Traveler Perception Score 2.38	2.4	5	
Multimodal Results (Segment)			
	.52	Т	D
3 Bicycle Segment LOS Score / LOS 2.73 B 2	.87		С
	.16	\vdash	В
Facility Output Data Westbound	Eastb	ound	
Facility Travel Time, s 960.05	1381	.81	
Facility Travel Speed, mph 22.36	15.5	3	
Facility Base Free Flow Speed, mph 42.73	42.4	16	
Facility Percent of Base FFS 52.33	36.5	9	
Facility Level of Service F	F		
Facility Auto Traveler Perception Score 2.37	2.4	4	
Multimodal Results (Facility)		_	
	.75		D
	.97		С
Transit Facility LOS Score / LOS 1.47 A 1	.97		Α

					НС	S7 Urb	an Str	eet	Segr	nent	Report						
General Inf	ormation												Streets In	formation	1		
Agency		Sto	olfus and	d Asso	ociates	S							Number of	Intersect	ions	15	j
Analyst		Ma	x Rusch	1			Analys	is Da	ate				Number of	Segment	s	14	ļ
Jurisdiction		\neg					Time F			PM Pe	ak		Number of			15	,
File Name		20	45 NoBu	ıild Pl	M Opti	imized Tir	Analys	is Ye	аг	2045		$\overline{}$	System Cy	cle Lenat	h s	10	
Intersections			1/2 Rd 8		_		25 Roa						Analysis P		, 0	-	7:00
Project Des			172 110	u - u			20 1100		attoro	-			, analysis i	onou		<u> </u>	7.00
1 Toject Des	приоп	_															
915 35 m	$\overline{}$	3)—		80 ft mph	<u> </u>	4		2542 40 m		(5)-	2561 40 m		-(6)——
Basic Segn	nent Informa	ation ((24 1/2 F	Rd - 2													
Segment	Speed L	imit	Throug	gh La	nes	Segment	Length	Inte	ersectio	n Wid	Length	of RM	Percei	nt Curb	0	ther	Delay
	WB	EB	WB	E	В	WB	EB	W	/B	EB	WB	EB	WB	EB	W	В	EB
4	40	35	2		2	2542	2542	5	0	50	0	0	90	90	0.	0	0.0
									West	bound				Eastbo	und		
Segment O	utput Data						WBI	-	W	ВТ	WBR		EBL	EBT	ī		EBR
Segment	Movement						5			2	12	$\neg \vdash$	1	6			16
4	Bay/Lane S	Spillba	ck Time,	, h			neve	r	4.	15	never		never	neve	r		never
4	Shared La	ne Spi	Ilback Ti	ime, h	<u> </u>	$\neg \neg$	neve	г			never	\neg	never		\neg		never
4	Base Free-			_				_	42	.99				40.6	4		
4	Running Ti		ороса, і			_			43			_		46.7		_	
4	Running S		mph							.25		-		37.1			
4	Through D					_			97			-		35.9		_	
			vven									-					
4	Travel Time									.04		-		82.6		_	
4	Travel Spe								12			-		20.9			
4	Stop Rate,	_								37		-		0.87			
4	Spatial Sto	_		mı						84		\rightarrow		1.81			
4	Through vo	_								08		_		0.82			
4	Percent of	Base	FFS						28	.59		_		51.5	9		
4	Level of Se	ervice												С			
4	Auto Trave	ler Pe	rception	Scor	e				2.	59				2.42	2		
Multimodal	Results (Se	egmen	ıt)														
4	Pedestrian	Segm	nent LOS	S Sco	re / LC	os		3.11			С		3.48	3		(C
4	Bicycle Se	gment	LOS So	core /	LOS			2.79			С		2.93	3		(C
4	Transit Seg	gment	LOS Sc	ore /	LOS			2.60			В	$\neg \vdash$	1.80)	П		A
Facility Out	put Data								West	bound		т		Eastbo	und		
Facility Trav	el Time, s								960	.05				1381.	81		
Facility Trav	el Speed, m	ph							22	.36				15.5	3		
Facility Base			l. mph			$\overline{}$.73		\neg		42.4			
Facility Pero		_								.33		\rightarrow		36.5			
Facility Leve										=		\rightarrow		F			
Facility Auto			on Score	2						37		+		2.44			
1 acinty Auto	navelel re	rceput	JII SCOIE	,					2.	31				2.44			
Multimodal	Resulte (Co	cility															
Pedestrian F								3.43		_	С	T	3.75			-	D
										+		-					
Bicycle Faci								2.83		-	C	+	2.97				C
Transit Faci	IIY LOS SCO	re / LC	15					1.47			Α		1.97				A

					JC 67 II	rbe	n Ctr	oot	Coo	mont	Donor				_	_	
					ics/ c	IDa	an Su	eel	Seg	ment	Report						
	Paral Information Paral Inform												04 4 1				
	ormation	los-1	£		-1								Streets In		_	la c	
Agency		-			ates					_			Number of			15	
Analyst		мах	Rusch	1		_	Analys						Number of			14	
Jurisdiction		-					Time F			PM Pe	ak		Number of			15	
File Name		-			-	Tim				2045			System Cy		h, s	10	
Intersections		25 F	Road &	Patters	on		25 1/2	Road	d & Pa	itterson			Analysis P	eriod		1>	7:00
Project Desc	cription	_															
		4				-(5			61 ft mph	— (6)-	2582 35 m		-(7)——
Basic Segm	ent Informati	on (2	25 Rd -	25 1/2	Rd)												
Segment		_				ent l	Length	_		ion Wid	Length			nt Curb			Delay
	WB E	3	WB	EB	WB		EB	W	VΒ	EB	WB	EB	WB	EB	WI	В	EB
5	40 40)	2	2	2561	\perp	2561	5	0	50	260	260	90	90	0.0)	0.0
						4			_	tbound		_		Eastbo	_	_	
	_					4	WBI	-	<u> </u>	NBT	WBR		EBL	EBT			EBR
Segment						4	5		_	2	12	-	1	6	-	_	16
						4			n	ever		_	never	1.04			never
						4	neve	r			neve	_	never				never
			peed, r	mph		4				3.13		4		43.1			
		_				4				3.22		\rightarrow		44.5			
						4				0.40		4		39.2			
5			veh			4				.42		_		107.2			
5						4				7.64		_		151.8			
5						4			3	6.65		-		11.5)		
		-				4			C).12		4		1.31			
		_		mi		4).25		_		2.70			
5		_				_).46				1.17			
5			FS			_			8-	4.98		_		26.6	7		
5						4				Α		_		F			
				Score		_			2	2.18				2.56	<u> </u>		
						_											
5		_				4		3.20		_	С	\rightarrow	3.93				<u> </u>
5						4		2.77		_	С	_	3.01				
5	Transit Segm	ent L	OS Sc	ore / LC	S	_		0.59			Α	_	2.84	1			
Facility Out	and Date					7			10/	4b d		-		E4b-			
						+				tbound		-		Eastbo		_	
						+				0.05		-		1381.			
						+				2.36		-		15.5		_	
			mpn			+				2.73		-		42.4			
		5				+			5.	2.33		-		36.5	9		
		. m4: -	. 0			+				F		-		F			
Facility Auto	raveler Perce	eptior	Score	;					2	2.37				2.44			
Multimodal	Results (Faci	lity)															
	acility LOS Sc		LOS			T		3.43	3		С	T	3.75	5		Г)
	lity LOS Score					+		2.83			С	\rightarrow	2.97				2
	ity LOS Score					+		1.47			A	\neg	1.97				<u> </u>
Transit i acii	, 200 00016	. 200						1.41					1.31				•

					HCS	S7 Urb	an Str	eet	Seg	ment	Report						
General Inf	ormation												Streets Int	formation	1		
Agency		Sto	olfus and	d Asso	ciates	5							Number of	Intersect	ions	15	
Analyst		Ma	x Rusch	1			Analys	sis Da	ate				Number of	Segment	S	14	
Jurisdiction		\top					Time F	Perio	d	PM Pe	ak		Number of	Iterations	6	15	
File Name		20	45 NoBu	uild PN	1 Opti	mized Tir	Analys	sis Ye	еаг	2045			System Cy	cle Lengt	h, s	10	0
Intersections	3	_	1/2 Roa		_		1st Str			rson			Analysis P			1>	7:00
Project Des	cription	+														_	
2542 40 m		5)—	256 40 r		—(6	_		32 ft mph	— (7)-	2535 35 m		-(8)——
Basic Segn	nent Informa	tion ((25 1/2 F	Rd - 26	Rd)												
Segment	Speed Lir		Through		_	Segment	Length	Inte	ersecti	on Wid	Length	of RM	Percei	nt Curb	0	ther	Delay
oogmont		EB	WB	E	_	WB	EB	_	VB	EB	WB	EB	WB	EB	w		EB
6		40	2	2	-	2582	2582	-	50	50	0	0	90	90	0.		0.0
						2002	2002			30		U	30	- 50	U.		0.0
									West	tbound		$\overline{}$		Eastbo	und		
Segment O	utput Data						WBI			VBT	WBR		EBL	EBT			EBR
Segment	Movement						5	_	 '	2	12	-	1	6	\neg	_	16
6	Bay/Lane S	nillha	ck Time	h					n	ever	- '-	\rightarrow		neve	r		-10
6	Shared Lan	_		_			neve	_			never		never	neve		_	never
6	Base Free-	_		_			Heve	1	40).73	Hevel	-	Hevel	43.0	,	_	level
			Speeu, i	прп								\rightarrow				_	
6	Running Tir	_				$\overline{}$				5.93		-		44.6			
6	Running Sp									3.33		\rightarrow		39.4			
6	Through De		/veh			$\overline{}$				1.87		-		13.8			
6	Travel Time									7.80		\rightarrow		58.49			
6	Travel Spec									5.97		\rightarrow		30.10			
6	Stop Rate,	_								.54		_		0.28			
6	Spatial Stop	Rate	e, stops/	mi					1	.10				0.58			
6	Through vo	l/cap	Ratio						0	.61				0.83	3		
6	Percent of E	Base	FFS						63	3.75				69.8	7		
6	Level of Se	rvice								С		\Box		В			
6	Auto Travel	er Pe	rception	Score					2	.30		\neg		2.23			
Multimodal	Results (Se	gmen	ıt)														
6	Pedestrian	Segm	nent LOS	S Scor	e / LO	s		3.24	ļ	\neg	С	$\neg \tau$	3.40)		-	C
6	Bicycle Seg	ment	LOS So	core / L	os			2.80)		С	\neg	2.96	i		(0
6	Transit Seg	ment	LOS Sc	ore / L	os			1.26	;	\neg	Α		1.10)		7	Α
Facility Out	put Data					$\overline{}$			West	tbound		т		Eastbo	und		
Facility Trav						\neg				0.05		\neg		1381.			
	el Speed, mp	h							22	2.36		\neg		15.53	3		
	Free Flow S		l. mph			$\overline{}$				2.73		\neg		42.40			
_	ent of Base F	_	, .							2.33		\rightarrow		36.59			
Facility Leve										F		_		50.5			
_	Traveler Per	centic	on Score	2						.37		-		2.44			
acinty Auto	Havelet Fel	ceput	on ocole							.51				2.44			
Multimodal	Results (Fa	cility))														
	acility LOS S							3.43		$\overline{}$	С		3.75			Г)
	lity LOS Scor							2.83			C	-	2.97				<u> </u>
	ity LOS Scor							1.47		_	A	-	1.97				A
Transit raci	, 200 0001	- , LC						1.41			^		1.31				•

		_		шс	S7 Urb	an Str	oot	Soa.	ment	Denort					_	
				п	.37 UID	an Su	CCL	Segi	HEIIL	Keport		_	_			
General Info	ormation	04-16		A i - 4 -							-	Streets Int			lac.	
Agency		-		Associate	es	I					_	Number of			15	
Analyst		Max	Rusch			Analys					-	Number of			14	
Jurisdiction						Time F			PM Pea	ak	_	Number of			15	
File Name					timized Tir				2045		_	System Cy		h, s	10	
Intersections		1st S	treet &	Patterso	n	7th Str	eet &	Patter	rson			Analysis P	eriod		1>	7:00
Project Desc	cription		_				_	_			_			_		
2561 40 m	$\overline{}$	6		2582 ft 35 mph	—(7		253 35 n		-(8)-	2619 40 m		-(9)——
Basic Segm	ent Informatio	on (26	6 Rd - 2	26 1/2)												
Segment	Speed Limi	t 1	Throug	h Lanes	Segment	Length	Inte	rsectio	n Wid	Length	of RM	Percer	nt Curb	Ot	her	Delay
	WB EE	3	WB	EB	WB	EB	W	В	EB	WB	EB	WB	EB	W	3	EB
7	35 40		2	2	2535	2535	50	0	50	0	0	90	90	0.0)	0.0
									bound		4		Eastbo	_		
Segment O	_					WBL	-	W	/BT	WBR	_	EBL	EBT			EBR
Segment	Movement					5	_		2	12	_	1	6	_		16
7	Bay/Lane Spi	llback	Time,	h		neve	r	ne	ver			never	1.92		r	never
7	Shared Lane	Spillb	ack Tir	ne, h		neve	r			never		never		\perp	r	never
7	Base Free-Flo	ow Sp	eed, m	ıph				39	.80				42.1	5		
7	Running Time), S						46	.36				44.79	9		
7	Running Spec	ed, mp	ph					37	.28				38.59	9		
7	Through Dela	y, s/ve	eh					28	.78				83.23	3		
7	Travel Time, s	5						75	.15				128.0	2		
7	Travel Speed	, mph						23	.00				13.50)		
7	Stop Rate, sto	ops/ve	eh					0.	67				1.27	•		
7	Spatial Stop F	Rate, s	stops/n	ni				1.	40		\neg		2.64			
7	Through vol/o	ap Ra	atio					0.	73		\neg		1.09			
7	Percent of Ba	se FF	S					57	.78		\neg		32.03	3		
7	Level of Servi	ice						(С		\neg		F			
7	Auto Traveler	Perce	eption	Score				2.	35		\neg		2.55			
Multimodal	Results (Segr	nent)														
7	Pedestrian Se	egmer	nt LOS	Score / L	os		3.10		\neg	С	Т	3.42	2		C	;
7	Bicycle Segm	ent L0	OS Sc	ore / LOS			2.80			С	\neg	2.97	,		C	;
7	Transit Segm	ent LC	OS Sco	ore / LOS			1.51			Α		2.56	j		В	}
Facility Out								West	bound		_		Eastbo			
Facility Trav									0.05		_		1381.8			
	el Speed, mph								.36				15.53			
Facility Base	Free Flow Sp	eed, n	nph					42	.73		\perp		42.46	6		
	ent of Base FF	S							.33				36.59	9		
Facility Leve									F				F			
Facility Auto	Traveler Perce	ption	Score					2.	37				2.44			
Multimodel	Results (Facil	lityA														
			08				3.43			С		3.75				
	acility LOS Sc										-			-	_	
	ity LOS Score						2.83		-	C	+	2.97			C	
Transit Facil	ity LOS Score	LUS					1.47			Α		1.97				\

					1100	07 11	04		0		D 4					_	
		_			HCS	S/ Urb	an Str	eet	Seg	ment	Report					_	
General Info	ormation	I	-									_	Streets In		_	Lon	
Agency		-	fus and		ociates							_	Number of			15	
Analyst		Max	Rusch	<u> </u>			Analys			┞		$\overline{}$	Number of			14	
Jurisdiction		⇤					Time F			PM Pe	ak	_	Number of			15	
File Name		-			_	mized Tir				2045			System Cy		h, s	10	
Intersections		7th	Street	& Pat	terson		12th St	treet	& Pat	erson			Analysis P	eriod		1>	7:00
Project Desc	cription	_														_	
2582 35 mj		7			35 ft mph	—(8			19 ft mph	— (9)-	1273 40 m		_(1	0)———
Basic Segm	ent Informati	on (2	26 1/2 F	Rd to	12th S	St)											
Segment	Speed Lim	it	Throug	gh La	nes	Segment	Length	Inte	ersecti	on Wid	Length	of RM	Percei	nt Curb	Ot	her	Delay
	WB E	В	WB	E	В	WB	EB	W	/B	EB	WB	EB	WB	EB	W	3	EB
8	40 3	5	2		2	2619	2619	5	0	50	0	0	90	90	0.0)	0.0
						\rightarrow			_	tbound		\rightarrow		Eastbo	_		
Segment O							WBI	_	١ ١	VBT	WBR	_	EBL	EBT			EBR
Segment	Movement					\longrightarrow	5		_	2	12	\rightarrow	1	6	_		16
8	Bay/Lane Sp			_			neve	r	n	ever	never	_	never	1.03		1	never
8	Shared Lane				1		neve	r			never		never				never
8	Base Free-FI	ow S	peed, r	mph					42	2.37				40.0	2		
8	Running Time	e, s							4	5.32		_		48.6	В		
8	Running Spe								39	9.40		_		36.6	В		
8	Through Dela		veh						4	7.70		_		112.1	5		
8	Travel Time,									3.02		_		160.8	3		
8	Travel Speed	l, mp	h						19	9.20		_		11.10)		
8	Stop Rate, st	-							0	.90		_		1.30)		
8	Spatial Stop		•	mi_						.82		_		2.61			
8	Through vol/o	_								.96		_		1.19			
8	Percent of Ba		FS						4	5.30				27.74	4		
8	Level of Serv									D		_		F			
8	Auto Traveler		_	Scor	e				2	.42				2.55			
Multimodal	Results (Segi																
8	Pedestrian S	_				S		3.11			С	\rightarrow	3.52				
8	Bicycle Segm							2.85		_	С	4	2.97	<u>'</u>			;
8	Transit Segm	ent L	OS Sc	ore /	LOS			1.89			Α	_	2.86	5		_	;
Facility Out	nut Data								14/			7		Faatha			
Facility Out										tbound		+		Eastbo		_	
Facility Trav						\rightarrow				0.05		+		1381.6			
	el Speed, mph									2.36		-		15.5		_	
	Free Flow Sp		mpn			_				2.73		-		42.40			
	ent of Base FF	5								2.33		-		36.59	9		
Facility Leve		onti-								F		-		F			
Facility Auto	Traveler Perce	eptioi	ii Score	;					2	.37				2.44			
Multimodal	Results (Faci	lity)															
	acility LOS So		LOS			Т		3.43		\neg	С	\top	3.75	5			,
	lity LOS Score							2.83			С	\dashv	2.97			-	
	ity LOS Score							1.47			A	\neg	1.97				<u> </u>
	,											_					

HCS7 Urban Street Segment Report																			
General Inf	ormation											Streets Information							
Agency		Sto	olfus and	l Associat	es							Number of	15						
Analyst		Ma	x Rusch	1		Analysis Date						Number of	14	14					
Jurisdiction	Time F	Period	ı l	PM Pe	ak		Number of	Iterations	6	15									
File Name	n Analys	sis Yea	ar :	2045			System Cy	cle Lengt	h, s	10	0								
Intersections 12th Street & Patterson								d & 15t				Analysis P			1>	7:00			
Project Des	cription	+													_				
2535 35 m		8)—	2619 ft 40 mph	——	9	_	1273 40 m		10	<u> </u>	1345 40 m	11)——					
Basic Segment Information (12th St - 27 1/4 Rd)																			
Segment	Speed Li			gh Lanes	Segment	Length	Inter	rsectio	n Wid	Length	of RM	Percer	nt Curb	0	ther	Delay			
		EB	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	W		EB			
9	40	35	2	2	1273	1273	50		50	0	0	90	90	0.	0	0.0			
	طيتنا		مثريا	مثرين															
								Westb	ound		\top	Eastbound							
Segment O	utput Data					WBL W			/BT WBR			EBL EBT							
Segment	Movement			5		2		12		1		6		16					
9	Bay/Lane S	ck Time	h						\rightarrow	never 0.35		never							
9	Shared Lan	_		-						_	never		never						
9						_	42.	20		-	39.94								
	Base Free-Flow Speed, mph										-				_				
9	Running Tir	_						23.			-		26.20						
9	Running Sp							36.			-		33.13		_				
9	Through De		/ven					0.4			-	140.13 166.33							
9	Travel Time							24.4			-	5.22							
9	Travel Spec							35.			\rightarrow								
9	Stop Rate,	_						0.0			_	1.73							
9	Spatial Stop	Rate	e, stops/	mi				0.0)6			7.16							
9	Through vo	l/cap	Ratio					0.5	51			1.23							
9	Percent of I	Base	FFS					84.	10			13.06							
9	Level of Se	rvice						Α				F							
9	Auto Travel	er Pe	rception	Score				2.1	5		$\neg \vdash$	3.38							
Multimodal	Results (Se	gmen	ıt)																
9	Pedestrian	Segm	nent LOS	S Score / L	os		3.33		С			4.47			E				
9	Bicycle Seg	ment	LOS So	ore / LOS				С			3.05			С					
9	Transit Seg	ment	LOS Sc	ore / LOS			0.71		A			3.80)	D					
Facility Out	put Data						Westbound Eastbound												
Facility Trav						960.05						1381.81							
	el Speed, mp)h				22.36						15.53							
			mph			42.73						42.46							
Facility Base Free Flow Speed, mph Facility Percent of Base FFS								52.			_	36.59							
Facility Leve								52.			-	30.59 F							
	Traveler Per	contic	on Coore									·							
racility Auto	Travelet Per	cepuc	JII SCOIE	,				2.3	01			2.44							
Multimodal	Results (Fa	cilita																	
	acility LOS						3.43		_	С		2.75			-				
												3.75		D					
	ity LOS Scor						2.83		-	C	-	2.97		C					
Transit Facil		1.47			Α		1.97			Α									

HCS7 Urban Street Segment Report																		
HCS/ Urban Street Segment κέροπ																		
General Information Streets Information																		
	ormation	la:								-	Streets Information Number of Intersections 15							
Agency			d Associate	es	I Anatoria Data							15						
Analyst		Max Rusc	h		Analysis Date						Number of	-	14					
Jurisdiction	Time Period PM Peak						Number of			15								
File Name	n Analys			2045		-	System Cy		h, s	100								
Intersections Patterson Rd & 15th St						Road	& Pat	terson			Analysis P	eriod		1>	7:00			
Project Des	cription			_	_	_		_			_							
2619 40 m		10		134: 40 m)-	3876 45 m	2	-								
Basic Segn	nent Informatio	on																
Segment	Speed Limi	t Throu	gh Lanes	Segment	Length	Inte	rsectio	n Wid	Length	of RM	Percer	nt Curb	Ot	her	Delay			
	WB EE	3 WB	EB	WB	EB	W	В	EB	WB	EB	WB	EB	WE	3	EB			
10	40 40) 2	2	1345	1345	50	0	50	0	0	70	70	0.0)	0.0			
					Westbou					\rightarrow		Eastbo						
Segment O					WBL		WBT		WBR		EBL		EBT		EBR			
Segment	Movement				1			6	16		5	2		12				
10	Bay/Lane Spi		_	neve			ver		_									
10	Shared Lane	Spillback T	īme, h	neve	r			never				\perp						
10	Base Free-Flo	44.07							44.0	7								
10	Running Time		24.45							25.10	6							
10	Running Spee		37.50							36.4	5							
10	Through Dela	ıy, s/veh					16	.55				6.64						
10	Travel Time, s	S					41.	.00			31.80							
10	Travel Speed	, mph					22	.37			28.83							
10	Stop Rate, sto	ops/veh					0.4	46			0.19							
10	Spatial Stop F	Rate, stops	/mi				1.	79			0.74							
10	Through vol/o	ap Ratio			0.63							0.74						
10	Percent of Ba	se FFS			50.75						65.43							
10	Level of Servi	ice			С						С							
10	Auto Traveler	Perception	Score				2.	64				2.25						
Multimodal	Results (Segr	ment)																
10	Pedestrian Se	egment LO	S Score / L	os	3.97				D		4.79			E				
10	Bicycle Segm	ent LOS S	core / LOS		2.96				С		3.01			С				
10	Transit Segm	ent LOS So	core / LOS		1.63					\perp	1.25	Α						
Facility Out	and Data										Footbass d							
Facility Out					Westbound						Eastbound							
Facility Trav				_	960.05						1381.81							
	el Speed, mph				22.36						15.53							
Facility Base	42.73						42.46											
_	ent of Base FF					.33		+	36.59									
Facility Leve		ntin- C			F 2.37						F 244							
Facility Auto	Traveler Perce	PHON SCOR	е				2.	31				2.44						
Multimodal	Results (Facil	lity)																
	Facility LOS Sc			П	3.43 C					T	3.75	D						
	lity LOS Score					2.83			C		2.97		С					
	ity LOS Score					1.47			A		1.97			A				
	,				1.41						1.01							

HCS7 Urban Street Segment Report																			
ncor orban street segment Report																			
General Information Streets Information																			
	ormation	04-16	1	: . 4 .							-								
Agency		Max R		Associate	es	LAnchuin Date						Number of	15						
Analyst		Analysis Date						Number of	14 15	14									
Jurisdiction							Time Period PM Peak						Number of Iterations						
File Name 2045 NoBuild PM Optimized Ti									2045		\rightarrow	System Cy		h, s	100				
Intersections 27 1/2 Road & Patterson							Road	& Pat	terson			Analysis P	eriod		1>	7:00			
Project Des																			
1273 40 m		1345 ft 40 mph	—(11		3870 45 m)_	3816 45 m	3	-							
Basic Segn	nent Informati	on (27	1/4 Rd	l - 27 1/2	Rd)														
Segment	Speed Limi			Lanes	Segment	Length	Inte	rsectio	n Wid	Length	of RM	Percer	nt Curb	Ot	her	Delay			
	WB E	3 \	WB	EB	WB	EB	W	В	EB	WB	EB	WB	EB	WE	3	EB			
11	45 40		2	2	3876	3876	50	0	50	0	0	90	90	0.0)	0.0			
						Westbou					+		Eastbo						
Segment O						WBL			ВТ	WBR	-	EBL	EBT	_	EBR				
Segment	Movement								2 12		-	1 6		-					
11	Bay/Lane Spi		neve	r	ne	ver		_		neve	r								
11	Shared Lane		neve	r			never	\perp	never										
11	Base Free-Fl	45.84							43.49										
11	Running Time		60.70							64.97	<u> </u>								
11	Running Spe		43.53							40.68									
11	Through Dela						.63		_		5.78								
11	Travel Time,								.33		_	70.75							
11	Travel Speed							27	.43		_	37.36							
11	Stop Rate, st							0.			_	0.18							
11	Spatial Stop I	_	_	i		1.02						0.24							
11	Through vol/o	_				0.90						0.65							
11	Percent of Ba		S			59.84						85.89							
11	Level of Serv					С						A							
11	Auto Traveler		ption S	core				2.	40				2.18						
	Results (Segr										_								
11	Pedestrian Se	_				3.97				D	\rightarrow	3.87			D				
11	Bicycle Segm						2.91		С		-	3.04			С				
11	Transit Segm	ent LO	S Scor	e / LOS		1.22 A						0.68			Α	1			
Engility Out	nut Data											Faathound							
Facility Out Facility Trav						Westbound						Eastbound							
						960.05						1381.81							
Facility Travel Speed, mph							22.36						15.53						
Facility Base Free Flow Speed, mph Facility Percent of Base FFS							42.73						42.46						
Facility Leve		3				52.33						36.59							
_	Traveler Perce	antion 9	Score			F 2.37						2.44							
1 acinty Muto	Traveler Ferce	-puon c	JUILE					۷.,	JI				2.44						
Multimodal	Results (Faci	lity)																	
	acility LOS Sc		os			3.43 C					T	3.75	D						
	lity LOS Score						2.83			C		2.97		С		;			
							1.47			A	\neg	1.97	A						
Transit Facility LOS Score / LOS 1.47 A 1.97 A																			

HCS7 Urban Street Segment Report																			
General Inf	General Information Streets Information Agency Stolfus and Associates Number of Intersections 15																		
Agency		Sto	olfus and	Associate	es						1	Number of Intersections 15							
Analyst Max Rusch							Analysis Date						Number of Segments 14						
Jurisdiction							Time Period PM Peak						Iterations		15	j			
File Name 2045 NoBuild PM Optimized Ti							is Ye	ar	2045			System Cy	cle Lengt	h, s	10	10			
Intersections 28 1/4 Road & Patterson							ıd & F	Patters	on		F	Analysis P	eriod		1>	· 7:00			
Project Des	cription																		
1345 ft)——								
Dania Cam	ont Inform	otion (20 4/4 D	4 30 D4															
Basic Segn							In t		m 186-1	1	of Dir	l De	nt ()		4h -	Daler			
Segment	Speed L			h Lanes	Segmen		_		n Wid	Length		_	nt Curb			Delay			
42		EB	WB	EB	WB	EB	W	_	EB	WB	EB	WB	EB	W	_	EB			
12	45	40	2	2	3816	3816	5	0	50	0	0	90	90	0.	U	0.0			
Westbound											_		Eastbo	und					
Segment O	utnut Data				_			BT	WBF		EBL	Easibo			EBR				
Segment	Movement			_	5						1	6	_		16				
12	Bay/Lane \$	ak Tima	h				2	12		neve									
		_							ver			never				never			
12	Shared La				never never						never	42.50			never				
12	Base Free		speea, m	ipn	_								42.56		_				
12	Running Ti		60.34							65.36									
12	Running S					43.12						39.81							
12	Through D		/veh						.20		-		33.90						
12	Travel Time								5.54		_	99.26							
12	Travel Spe								.65		-	26.21							
12	Stop Rate,								92			0.85							
12	Spatial Sto			ni				1.	28			1.17							
12	Through vo	ol/cap l	Ratio					0.	95				0.87	'					
12	Percent of	Base I	FFS			54.90							61.59	9					
12	Level of Se	ervice						(2				С						
12	Auto Trave	ler Pe	rception	Score				2.	33				2.32						
Multimodal	Results (Se	egmen	ıt)																
12	Pedestrian	Segm	ent LOS	Score / L	os	3.62				D		3.76			D				
12	Bicycle Se	gment	LOS Sco	ore / LOS		2.91			С			3.02			С				
12	Transit Seg	gment	LOS Sco	re / LOS		1.45 A						1.38 A							
											-			Ų					
Facility Out					_	Westbound						Eastbound							
Facility Trav		- 1-				960.05						1381.81							
Facility Travel Speed, mph							22.36 42.73						15.53						
Facility Base		_	, mph								_	42.46							
	Facility Percent of Base FFS								.33		_	36.59							
Facility Leve						F						F							
Facility Auto	Traveler Pe	rceptio	on Score					2.	37			2.44							
Multimodal	Results (Fa	ncility)																	
Pedestrian F							3.43		T	С	$\overline{}$	3.75			Г	D			
Bicycle Faci							2.83			C		2.97		C					
Transit Facil							1.47		_	A		1.97			A				
anon racii	, 200 000			1.47						1.01			^						

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					1037 0	Dan St	100	ı əeç	Jillelit	Report		_	_			
												04 4 1				
General Inf	ormation	los-	16		-4						-	Streets Int			145	
Agency			Ifus and		ates				_		\rightarrow	Number of			15	
Analyst		Max	x Rusch	1		Analy					\rightarrow	Number of			14	
Jurisdiction		+				Time			PM Pe	ak	\rightarrow	Number of			15	
File Name		_			Optimized				2045		\rightarrow	System Cy		h, s	10	
Intersection		29 F	Road &	Patters	on	29 1/2	2 Roa	ad & Pa	atterson			Analysis P	eriod		1>	7:00
Project Des	cription	_														
3876 45 m		12)—	3816 45 m		13			23 ft mph)_	2615 35 m		<u>_</u> (5)
	nent Informati						_							_	_	
Segment	Speed Lim	-		gh Lane		ent Length	$\overline{}$		ion Wid	Length			nt Curb			Delay
	WB E	_	WB	EB		EB	-	WB	EB	WB	EB	WB	EB	WI	_	EB
13	45 4	5	2	2	2523	2523		50	50	0	0	90	90	0.0)	0.0
											-					
S	ota est Data					18/5		_	tbound	WDD		EDI	Eastbo	_	_	EDD
Segment O						WE		-	WBT	WBR		EBL	EBT	-		EBR
Segment	Movement					5		-	2	12	-	1	6	-		16
13	Bay/Lane Sp					nev	er	r	ever	never	-	never	neve	r	r	never
13	Shared Lane					nev	er			never	-	never			r	never
13	Base Free-F		Speed, r	mph		-			3.83		\rightarrow		43.83			
13	Running Tim					+			0.55		-		40.7		_	
13	Running Spe		-			+			2.43		\rightarrow		42.20			
13	Through Del		veh			+			3.55		-		42.2			
13	Travel Time,					+			4.10		\rightarrow		83.03			
13	Travel Speed					+			3.21		-		20.7			
13	Stop Rate, s					+).78		\rightarrow		0.78			
13	Spatial Stop			mi		-			1.63		-		1.63			
13	Through vol/	_				-			0.90		\rightarrow		0.99			
13	Percent of B		FS			+		5	2.97		\rightarrow		47.2	7		
13	Level of Sen					-			С		\rightarrow		D			
13	Auto Travele		_	Score					2.39				2.39		_	
	Results (Seg															
13	Pedestrian S	_				+	3.6		_	D	\rightarrow	3.62		_		
13	Bicycle Segn					+	2.93		_	С	\rightarrow	3.02		_	C	
13	Transit Segn	nent L	LOS Sc	ore / LC	S		1.60	0		A	_	1.84			A	١
Facility Out	nut Data					_		Woo	tbound				Eastbo	und		
Facility Out Facility Trav						+			60.05		-		1381.		_	
					+					-						
	el Speed, mph					+			2.36 2.73		+		15.53 42.40		_	
	e Free Flow Sp		mpn			+					-					
	ent of Base Fl	-5				+		5	2.33		+		36.59	9		
Facility Leve		ont:-	n Carr						F		\rightarrow		F			
Facility Auto	Traveler Perc	ерио	ii Score	;					2.37				2.44			
Multimodal	Results (Fac	ility)														
	Facility LOS So					$\overline{}$	3.43	3	$\overline{}$	С	T	3.75	5)
	lity LOS Score					+	2.83			C		2.97			-	
	ity LOS Score					_	1.4		\neg	A	-	1.97				<u>, </u>
Transit Faci	, 200 00016	, 20					1.7					1.01				

			ш	207 Heb	on Ctr		Com	mont	Danar	_			_	_	
_		_	п	CS7 Urb	an Su	eel	Segi	nent	Kepor	_	_	_			_
General Inf	ormation										Streets In	formation			
Agency	ormation	Stolfus and	Accoriate	00							Number of		_	15	
		Max Rusch		25	Anaha	nio Do	ato.							-	
Analyst Jurisdiction		Max Rusch			Analys Time f			PM Pe	a.k		Number of			15	
File Name		2045 NaDui	Id DM On	timizad Ti					ak					_	
Intersection	•	2045 NoBui 29 1/2 Road			30 Roa			2045			System Cy		n, s	10	> 7:00
Project Des		29 1/2 R0a0	a Paller	SON	30 R0a	iu ox r	allers	on			Analysis P	renou		12	7.00
1 Toject Des	Сприоп														
3816	oft (13	2523 ft		14		2615	5 ft		5					
45 m	ph		45 mph	'	ح		35 m	ıph		り					
Dania Carr		120 412 D	4 20 D4												
	nent Informatio					Line		- 146-1	1	- 6 DA	• December	-1.01		41	Delevi
												nt Curb	_		Delay
- 44	WB EE		EB	WB	EB	-	_	EB	WB	EB		EB	W	_	EB
14	35 45	2	2	2615	2615	5	U	50	0	0	90	90	U.	0	0.0
							West	bound				Eastbo	und		
Segment O	utnut Data				WBI			BT	WB	2	EBL	EBI			EBR
Segment	Movement				5			2	12	`	1	6			16
14	Bay/Lane Spi	Ilhack Time	h				-	۷.	12	-	never	2.24			never
14	Shared Lane					_			_	-		2.24	•		never
14	Base Free-Fk	-					40.	02		-	never	45.5	2		nevei
14	Running Time		ipii				40.			-		41.9		_	
14							37.			-		41.9			
14	Running Spec						8.9			-		77.5		_	
	Through Dela						55.			\rightarrow					
14	Travel Time, s									\rightarrow		119.4		_	
14	Travel Speed	-					31.			\rightarrow		14.9			
14	Stop Rate, stop		ni.			_	0.2			\rightarrow		1.23		_	
14	Spatial Stop F		nı					49		-		2.49			
14	Through vol/o	•					0.0			\rightarrow		1.08		_	
14								.05		-		32.7	9		
14	Level of Servi		0				E			\rightarrow		F			
14	Auto Traveler		Score				2.	21		_		2.53	\$		
	Results (Segr	•	Coore / I	00		2 55		_		_	4.00	`	_	-	n .
14	Pedestrian Se	_				3.55		+	D	-	4.09				D
14	Bicycle Segm					2.85		+-	C	\rightarrow	3.00		-		C
14	Transit Segm	ent LOS Sco	ne / LOS			0.92			A		2.39	,			В
Facility Ou								bound		_		Eastbo			
Facility Trav	el Time, s						960	1.05				1381.	81		
Facility Trav	el Speed, mph						22.	.36				15.5	3		
Facility Bas	e Free Flow Sp	eed, mph					42.	.73				42.4	6		
Facility Per	ent of Base FF	S					52.	.33				36.5	9		
Facility Leve	el of Service						F	=				F			
Facility Auto	Traveler Perce	ption Score					2.3	37				2.44			
	Results (Facil							_							
	Facility LOS Sc					3.43		+	С	_	3.75				D
	lity LOS Score					2.83		-	С	\rightarrow	2.97			(C .
Leanait Fasi															

Transit Facility LOS Score / LOS

1.47

1.97

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.91 Jurisdiction Time Period AM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 24 Road & Patterson 2045 ACP AM.xus Intersection File Name Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L 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 85 Reference Point Offset, s Begin Green 7.8 1.9 20.0 8.4 3.0 36.9 Uncoordinated No Simult, Gap E/W On Yellow 3.5 0.0 4.0 3.5 3.5 4.0 Force Mode 0.5 1.0 Fixed Simult. Gap N/S On Red 0.5 0.0 10 0.5 Timer Results **EBL EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 4.0 5.0 4.0 5.0 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 52 52 52 Queue Clearance Time (gs), s 11.7 5.8 5.1 28.4 14.7 15.9 Green Extension Time (ge), 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 1.00 0.89 1 00 0.56 Max Out Probability 0.17 0.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 539 587 180 137 238 305 96 1026 453 453 696 78 Adjusted Flow Rate (v), veh/h 1675 1716 1738 1810 1585 1730 1752 1518 Adjusted Saturation Flow Rate (s), veh/h/ln 1752 1738 9.7 15.7 3.8 5.9 3.1 26.4 22.1 12.7 13.9 3.0 Queue Service Time (g s), s 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 0.20 0.37 0.08 0.45 0.45 0.15 0.44 0.44 Capacity (c), veh/h 705 767 269 695 422 1283 709 532 1539 667 0.765 0.765 0.512 0.343 0 227 0.800 0.639 0.851 0.452 0.117 Volume-to-Capacity Ratio (X) 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 0.00 0.66 1.56 Uniform Delay (d 1), s/veh 314 36 4 443 34 4 16.3 28.2 214 412 196 166 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 n D n В C В В С D Α Α 34.8 C 21.8 C 28.5 C 31.7 Approach Delay, s/veh / LOS С Intersection Delay, s/veh / LOS 30.1 C Multimodal Results WB NB Pedestrian LOS Score / LOS 2.45 В 2.59 С 2.57 С 2.56 С Bicycle LOS Score / LOS 0.96 Α 1.05 Α 1.79 В 1.50 A

	HCS	7 Sig	nalize	d Int	ersec	tion F	Resul	ts Sur	nmar	у			_	_
General Information								Intersect	tion Inf	ormatic	nn.		4.441	되보
Agency	Stolfus and Associa	ntoe						Duration,		0.250		- 1	411	
	Max Rusch	iles	Anabe	sis Date	_		_			Other				L.
Analyst Jurisdiction	Max Ruscii		Time F		AM P	ook	_	Area Typ PHF	е	0.83			# T	-
	Detterson Dd		_		_	ean	_		Dariad	_	20	- 3-3		7
Urban Street	Patterson Rd	A 000			2045	ACD AN	_	Analysis	Period	1> 7:(00	- 6		
Intersection	Market Street/Mall /	Acce	File Na	ame	2045	ACP AN	1.XUS					- 4	1 (2010
Project Description												_	A L TOTAL	ejiii
Demand Information				EB		_	WE	2		NB		_	SB	
Approach Movement			T.	ΙT	T R	1	T	R	1	T	R	1	T T	R
Demand (v), veh/h			71	848	83	25	580	_	30	12	19	87	17	44
Demand (V), Vervii			-/-	040	03	23	300	94	30	12	19	01	117	44
Signal Information					$\overline{}$		الل			- 10				o (200
Cycle, s 100.0	Reference Phase	2	1	- X K	-3	-2		W 45 4	- 27	-		4		4
Offset, s 1	Reference Point	End			2	-		5			1	2	3	4
Uncoordinated No	Simult. Gap E/W	On	Green		3.0	65.6	6.3	4.4	0.0			→	47	
Force Mode Fixed	-	On	Yellow Red	0.5	0.0	1.0	1.0	4.0 1.0	0.0		5	6	7	Y.
Torce Mode Trixed	Simult. Oap 14/5	OII	Itteu	0.5	0.0	1.0	1.0	1.0	0.0		-			
Timer Results			EBI	$\overline{}$	EBT	WB		WBT	NBI		NBT	SBI		SBT
Assigned Phase			5	_	2	1	_	6	-1101		8		_	4
Case Number			1.1	\rightarrow	3.0	1.1	\rightarrow	3.0	_	+	11.0	_	\rightarrow	10.0
Phase Duration, s			8.7	_	73.6	5.7	_	70.6	_	_	9.4	_	_	11.3
Change Period, (Y+R) c \ e		4.0	_	5.0	4.0	-	5.0	_		5.0	_	-	5.0
Max Allow Headway (3.1	\rightarrow	0.0	3.1	\rightarrow	0.0	_	_	3.3	_	-	3.3	
Queue Clearance Tim			3.8	-	0.0	2.3	_	0.0	_	-	4.7	_	_	6.3
			0.2	_	0.0	0.0	-	0.0	_	-	0.0	_	\rightarrow	0.3
Green Extension Time Phase Call Probability			0.2	$\overline{}$	0.0	0.0	-	0.0	_		0.0	_	_	0.99
			_	\rightarrow		0.00	-		_	\rightarrow			_	
Max Out Probability			0.00			0.00	_				0.03		_	1.00
Movement Group Re	sults			EB			WB			NB			SB	
Approach Movement				T	R		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	_	Ť	51	23	105	73	
Adjusted Saturation F		ln .	1711	1766	1610	1810	1766	_		1834	1610	1702	1682	
Queue Service Time (1.8	8.1	0.9	0.3	4.4	1.4		2.7	1.4	3.0	4.3	
Cycle Queue Clearan			1.8	8.1	0.9	0.3	4.4	1.4		2.7	1.4	3.0	4.3	
Green Ratio (g/C)	(g v), 0		0.71	0.69	0.69	0.67	0.66	_		0.04	0.04	0.06	0.06	
Capacity (c), veh/h			763	2425	1105	385	2319	_		80	70	216	107	
Volume-to-Capacity R	atio (X)		0.129	0.486		0.038	0.147	_		0.634	0.327	0.486	0.690	
Back of Queue (Q), f)	20.9	79.6	10.9	3.6	62.4			52	22.7	52.4	74.5	
Back of Queue (Q),			0.9	3.5	0.5	0.2	2.8	0.8		2.4	1.0	2.3	3.4	_
Queue Storage Ratio			0.14	0.00	0.09	0.03	0.00	_		0.00	0.00	0.00	0.00	
Uniform Delay (d 1),		iiic)	4.4	2.8	1.7	5.7	8.0	6.9		47.0	46.4	45.3	45.9	
Incremental Delay (d			0.0	0.6	0.2	0.0	0.1	0.9		3.1	1.0	0.6	2.9	
					_	_	_	_				0.0		
Initial Queue Delay (d			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	_	0.0	
Control Delay (d), s/v			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	L A		A 7.0	I A	Α Α	40.2	D	D	D 47.4	D	D
Approach Delay, s/vel			3.3		A	7.9		Α	49.3)	D	47.1	,	D
Intersection Delay, s/v	en / LOS				9	.7						A		
Multimodal Results				EB			WB			NB			SB	
					_		_	-	0.47	_	n	2.46		_
Pedestrian LOS Score	e/LOS		1.86	; I	В	2.06	j I	В	2.47		В	2.46	j I	В

	HCS	7 Sig	nalize	d Int	ersec	tion F	≀esul	ts Sur	nmar	у				
General Information								Intersect	tion Inf	ormatic	nn.		4.441	ыų
	Stolfus and Associa	otos						Duration,		0.250		- 1	44	
Agency		ates	Anaha	in Date	_							- 1		<u></u>
Analyst Jurisdiction	Max Rusch		Time F	sis Date	AM P	ook	_	Area Typ PHF	е	Other 0.84		- 3		
	Patterson Rd				_	Sak			Dorind		20	- 13-		-
Urban Street		20/140			2045	ACD AN	_	Analysis	Period	1> 7:(00	- 8		
Intersection	Home Depot Acces	ss/me	File Na	ame	2045	ACP AM	1.xus					- 4	1111	2012
Project Description												_	A L TOTAL	ejii.
Demand Information	,			EB			WB	1		NB			SB	
Approach Movement			ī	ΙT	T R	1	T	R	1	T T	R	1	T T	R
Demand (v), veh/h			39	756	189	87	571	$\overline{}$	70	21	47	25	30	28
Demand (V), Venin			38	730	109	67	37	13	70	21	41	23	30	20
Signal Information					$\overline{}$		JIU		$\overline{}$			K.	-	_
Cycle, s 100.0	Reference Phase	2		- X K	-3	4.3	EWS	15.4	6.20			7		V
Offset, s 37	Reference Point	Begin		- 7	2	-	-	5			1	2	3	
Uncoordinated No	Simult. Gap E/W	Off	Green Yellow		0.3	65.3	5.6	5.9 4.0	0.0		_			\mathbf{A}
Force Mode Fixed	-	Off	Red	0.5	0.0	4.0 1.0	1.0	1.0	0.0			♦ .	7	-4-
T OF CO MICCO	oman. cap wo	OII												
Timer Results			EBI		EBT	WB	L	WBT	NBI		NBT	SBI		SBT
Assigned Phase			1	$\overline{}$	6	5	$\overline{}$	2			4		$\overline{}$	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
	2.15		4.0	_	5.0	4.0	-	5.0		-	5.0	_	-	5.0
	hange Period, (Y+R c), s lax Allow Headway (MAH), s					5.2	_	0.0	-	_	5.4	_	\rightarrow	5.4
Queue Clearance Tin			5.2 3.3	_	0.0	3.0	_	0.0		_	5.2	_	-	5.9
Green Extension Time			0.3	_	0.0	0.2	_	0.0	-	_	0.7	_	$\overline{}$	0.1
Phase Call Probability			0.85	_	0.0	0.79	_	0.0			0.99	_		0.94
Max Out Probability	,		0.00	\rightarrow		0.00	-		-	_	0.01		_	1.00
wax out i lobability			0.00			0.00					0.01	_		1.00
Movement Group Re	esults			EB			WB			NB		_	SB	
Approach Movement			L	Т	R	L	Т	R	L	T	R	L	Т	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 F	Flow Rate (s), veh/h/	'In	1711	1766	1598	1810	1752	1610	1743	1900	1610	1767	1748	
Queue Service Time			1.3	9.2	2.0	1.0	2.8	0.1	2.3	1.3	3.2	1.6	3.9	
Cycle Queue Clearan	ice 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 F	Ratio (X)		0.090	0.564	_		0.160	_	0.403	0.222	0.352	0.302	0.709	
Back of Queue (Q),)	16.9	84.5	25.6	13.7	36.8	_	42	25.3	54.6	31.6	80.6	
Back of Queue (Q),			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			0.13	0.00	0.13	0.12	0.00	_	0.24	0.00	0.25	0.24	0.00	
Uniform Delay (d 1),			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			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 (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/			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/ve			3.4		A	4.7		Α	45.9		D	55.6		E
Intersection Delay, s/						.7						A		
Multimodal Results				EB			WB			NB			SB	
				_			_	_	2.44	_	-	0.47		_
Pedestrian LOS Scor	e/LOS		2.23	3	В	1.87	7	В	2.46	j l	В	2.47	/ I	В

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resu	ılts Su	mmar	У				
General Inform	nation								Interse	ction Inf	ormatic	on		4 从中 1	ie l
Agency		Stolfus and Associa	ates						Duratio	ı, h	0.250			****	
Analyst		Max Rusch		Analys	is Date	9			Area Ty	pe	Other		<u>≅</u> _^		·
Jurisdiction				Time F	eriod	AM P	eak		PHF		0.92		÷	= 1	=
Urban Street		Patterson Rd		Analys	is Yea	r 2045			Analysi	Period	1> 7:	00			- F
Intersection		24 1/2 Rd & Patters	son	File Na	ame	2045	ACP AN	1.xus						511	
Project Descrip	tion												ħ	4144	H ri
Demand Inform					EB		+	W		+	NB	T 5	+ -	SB	
Approach Move				L	T	R	L	_	r R	L	T	R	L	T	R
Demand (v), v	eh/h			40	724	70	147	44	12 12	144	138	62	211	307	83
Signal Informa	tion					K			5 21				K.		_
Cycle, s	100.0	Reference Phase	2		- X K	- 2	4 1	₹.	2 24				7	1	V
Offset, s	11	Reference Point	Begin	_		-	-			- 6		1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow		0.4	50.9 4.0	7.0 3.5			3	_	_	K .	\mathbf{A}
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.5	0.5				s —	⇔ 。] ₇	
T Gree mede	Timed	Omnun. Gup 14.0											_		
Timer Results				EBL	. T	EBT	WB	L	WBT	NB	L	NBT	SBL	.	SBT
Assigned Phase	е			1	$\neg \vdash$	6	5	\neg	2	7	$\neg \vdash$	4	3	\neg	8
Case Number				1.1		3.0	1.1		3.0	1.1		4.0	1.1		3.0
Phase Duration	ı, s			8.4	$\neg \vdash$	56.4	8.8		56.8	11.0)	17.3	17.5	5	23.8
Change Period,	(Y+R	c), S		4.0		5.5	4.0		5.5	4.0		5.0	4.0	$\neg \vdash$	5.0
Max Allow Head	dway (/	MAH), s		5.2	$\neg \vdash$	0.0	5.2		0.0	5.2		5.2	5.2	\neg	5.2
Queue Clearan	ce Time	e (gs), s		4.1			4.6			9.0		8.0	12.8	3	10.6
Green Extensio	n Time	(ge), s		0.4	\neg	0.0	0.5		0.0	0.0		4.3	0.8	\neg	4.4
Phase Call Prol	bability			0.88			0.94	1		0.99	9	1.00	1.00		1.00
Max Out Proba	bility			0.00			0.00			1.00		0.00	0.16	5	0.00
Movement Gro	_	sults			EB	I =	.	WE			NB	_		SB	
Approach Move				L	T	R	L	T	R	<u> </u>	T	R	<u> </u>	T	R
Assigned Move				1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F				78	1404	136	100	301	_	157	111	106	229	334	90
		ow Rate (s), veh/h/	In	1697	1781	1610	1810	176	_	_	1856	1665	1767	1738	1397
Queue Service				2.1	23.7	1.7	2.6	4.3	_	7.0	5.6	6.0	10.8	8.6	5.6
Cycle Queue C		e Time (gε), s		2.1	23.7	1.7	2.6	4.3	_	7.0	5.6	6.0	10.8	8.6	5.6
Green Ratio (g	_			0.55	0.51	0.51	0.56	0.5	_	0.19	0.12	0.12	0.28	0.19	0.19
Capacity (c), v				575	1813	820	251	181	_	274	228	204	384	654	263
Volume-to-Capa			,			0.166	0.398	0.16	$\overline{}$	_	0.488		0.597	0.510	0.343
		/In (90 th percentile		33.1	187.8		41.7	67.0	_	135.1	106.9	102.8	167.9	140.1	88.1
		eh/In (90 th percent RQ) (90 th percen		1.4 0.25	8.4 0.00	1.0 0.10	1.9 0.32	0.00	_	6.0 1.02	0.00	4.6 0.00	7.4 1.26	6.1 0.00	3.5 0.00
Uniform Delay (uie)	10.8	9.3	4.3	14.2	12.3	_	36.3	40.9	41.1	30.3	36.5	35.2
Incremental De				0.1	2.9	0.4	1.3	0.2	_	3.5	2.3	2.9	2.1	0.9	1.1
Initial Queue De				0.0	0.0	0.0	0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (••		10.9	12.2	4.7	15.6	12.4	_	39.8	43.2	44.0	32.5	37.3	36.3
Level of Service				В	B	Α.	В	В.	B	D	D	D	C	D D	D D
Approach Delay				11.5		В	13.5	_	В	42.0		D	35.5		D
Intersection Del				-11.0).5			72.1			C		
	, 5, 5,					-									
Multimodal Re	sults				EB			WE	3		NB			SB	
Pedestrian LOS	Score	/LOS		2.26		В	2.41	1	В	2.40	6	В	2.45	5	В
Bicycle LOS Sc	ore / LO	OS		1.24		Α	1.12	2	Α	0.80)	Α	1.03	3	Α

		HCS	7 Sig	nalize	d Int	ersec	tion R	Resi	ults S	umr	mary	/				
General Inform	nation								Inters	ectio	n Info	ormatic	on	2	47441	3- U
Agency		Stolfus and Associa	ates						Durati	on, h		0.250		-	***	
Analyst		Max Rusch		Analys	is Date)			Area T	уре		Other		<u>-</u> -		- ₽
Jurisdiction				Time F	eriod	AM P	eak		PHF			0.87		4	m t	=
Urban Street		Patterson Rd		Analys	is Yea	2045			Analys	is Pe	eriod	1> 7:0	00			-
Intersection		25 Road & Patterso	on	File Na	ame	2045	ACP AM	l.xus							110	
Project Descrip	tion													1	4 T +Y	দাব
Demand Inform	nation				EB		_	١٨	/B	7		NB			SB	
Approach Move					T	R	+-	_		₹	_	T	R	+-	T	R
Demand (v), v				83	774	55	206	-	$\overline{}$)9	125	261	120	190	305	41
Demand (V), V	CIVII			03	114	33	200	-	07 10	15	123	201	120	190	303	41
Signal Informa	tion								y l	I.						
Cycle, s	100.0	Reference Phase	2		P .	⊺≓			K	710		_		~	7	V
Offset, s	35	Reference Point	Begin	Green	60	1.0	36.0	6.	0 2	4.0	0.0		-1	Z	3 (
Uncoordinated	No	Simult. Gap E/W	On	Yellow		3.5	4.5	3.			0.0		<u> </u>	χ	~	Љ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.5	1.5	0.			0.0		S	ያ ፣	7	8
Timer Results				EBL	-	EBT	WB		WBT	4	NBL	-	NBT	SBI	-	SBT
Assigned Phase	e			1	_	6	5	4	2	4-	7	+	4	3	_	8
Case Number				1.1	-	3.0	1.1	\rightarrow	3.0	4-	1.1	_	3.0	1.1	_	3.0
Phase Duration				15.0		47.0	10.0	\rightarrow	42.0	4-	10.0		29.0	14.0	-	33.0
Change Period				4.0	_	6.0	4.0	\rightarrow	6.0	4	4.0	_	5.0	4.0	_	5.0
Max Allow Head				5.2	\perp	0.0	5.2	\rightarrow	0.0	4-	5.2	\perp	5.2	5.2	-	5.2
Queue Clearan				6.3	_		5.9	\rightarrow		4	8.0	_	17.1	10.9	_	19.3
Green Extension		(ge), s		0.2	_	0.0	0.0	\rightarrow	0.0	4-	0.0	_	2.7	0.0	-	3.2
Phase Call Pro				1.00	_		1.00			4	1.00	_	1.00	1.00	_	1.00
Max Out Proba	bility			1.00		_	1.00		_	_	1.00		0.76	1.00		0.58
Movement Gro	un Res	ulte			EB			W	R	7		NB			SB	
Approach Move	_	uits		L	T	R	L	T		-	L	T	R	L	T	R
Assigned Move				1	6	16	5	2	\rightarrow		7	4	14	3	8	18
Adjusted Flow F) veh/h		135	1261	90	113	37	_	_	144	300	121	218	351	47
		ow Rate (s), veh/h/	'ln	1753	1781	1585	1795	179		_	1753	1811	1610	1795	1811	1585
Queue Service				4.3	29.1	1.6	3.9	9.1	_	_	6.0	15.1	5.7	8.9	17.3	2.2
Cycle Queue C				4.3	29.1	1.6	3.9	9.1	\rightarrow	_	6.0	15.1	5.7	8.9	17.3	2.2
Green Ratio (g		0 mmc (g v), 0		0.49	0.41	0.41	0.42	0.3		_	0.30	0.24	0.30	0.36	0.28	0.28
Capacity (c), v	_			517	1460	650	220	129	_	_	262	435	483	338	507	444
Volume-to-Cap		rtio (X)		0.262		_	0.512	0.29	_	_	-	0.690	0.250	0.646	0.691	0.106
		/In (90 th percentile)	71.3	284.2	-	71	14	_	_		254.4	90.9	159.9	279.4	35.4
		eh/ln (90 th percent		3.1	12.7	1.0	3.2	6.5		_	5.4	11.0	4.1	7.2	12.1	1.6
		RQ) (90 th percen	_	0.40	0.00	0.14	0.40	0.0		_	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 2	28.6	34.6	26.5	25.2	32.1	26.7
Incremental De	lay (d 2), s/veh		1.1	6.6	0.4	7.0	0.5	5 0.3	3	8.0	8.7	1.2	9.2	7.5	0.5
Initial Queue De	elay (d	з), 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/v	eh		16.0	23.6	8.1	27.0	30.	8 25.	0 3	36.6	43.3	27.7	34.4	39.7	27.2
Level of Service	e (LOS)			В	С	Α	С	С	С		D	D	С	С	D	С
Approach Delay	y, s/veh	/ LOS		22.0		С	29.4	1	С		38.3		D	36.8	3	D
Intersection De	lay, s/ve	h / LOS				28	3.9			I				С		
Market								140				115			000	
Multimodal Re				0.15	EB			W		+	0.45	NB			SB	
Pedestrian LOS				2.12		В	2.11	\rightarrow	В	-	2.45		В	2.44	_	В
Bicycle LOS Sc	ore / LC	Jo		1.35		Α	1.44	•	Α		1.42		Α	1.50		В

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resu	ılts Suı	mmar	У				
General Inform	nation								Intersec	tion Inf	ormatic	on		47941	is U
Agency		Stolfus and Associa	ates						Duration	, h	0.250		-	**	
Analyst		Max Rusch		Analys	is Date	е			Area Typ	e	Other		<u>-</u> -		- 8
Jurisdiction				Time F	eriod	AM P	eak		PHF		0.82		4		= 2
Urban Street		Patterson Rd		Analys	is Yea	r 2045			Analysis	Period	1> 7:0	00			-
Intersection		25 1/2 Road & Patt	erson	File Na	ame	2045	ACP AN	1.xus						110	
Project Descrip	tion												1	4144	Mu
Demand Inform	nation				ED			10/	<u> </u>		ND			OD.	
Approach Move				L	EB T	R	+-	T T		+-	NB T	R	+-	SB T	R
Demand (v), v				32	934	51	137	98	_	73	89	98	212	149	118
Demand (V), V	en/n			32	934	31	137	96	00 90	/3	89	96	212	149	118
Signal Informa	tion					1			717				<u> </u>		
Cycle, s	100.0	Reference Phase	2		- K	- 2	7	٠,	5	10				>	V
Offset, s	89	Reference Point	Begin	Green	5.2	1.4	45.1	6.0	9.0	10.2		1	2	3	1 4
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.5	3.5		4.0			я 📗	~	Д
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.5	0.5		1.0		5	ታ ፣	7	8
Timer Results				EBL		EBT	WB	니	WBT	NB	L	NBT	SBI	-	SBT
Assigned Phase	e			1	_	6	5	4	2	7	_	4	3	_	8
Case Number				1.1	-	3.0	1.1	$\overline{}$	3.0	1.1	-	3.0	1.1	-	4.0
Phase Duration				9.2	_	51.1	10.6	$\overline{}$	52.6	10.0	_	15.2	23.0	-	28.2
Change Period,				4.0	_	6.0	4.0	_	6.0	4.0	_	5.0	4.0	_	5.0
Max Allow Head				5.2	_	0.0	5.2	$\overline{}$	0.0	5.2	_	5.3	5.2	-	5.3
Queue Clearan				3.0	_		3.5	_		6.4	_	9.3	14.5		19.9
Green Extensio		(ge), S		0.0	$\overline{}$	0.0	0.1	$\overline{}$	0.0	0.0	_	0.9	0.5	-	1.5
Phase Call Pro				0.65	\rightarrow		0.83	-		1.00		1.00	1.00		1.00
Max Out Proba	DIIITY			0.07	_	-	0.01		_	1.00	,	1.00	1.00		1.00
Movement Gro	oup Res	sults			EB			WE	3		NB		_	SB	
Approach Move	_			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move				1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F), veh/h		38	1108	60	64	460	42	89	109	120	259	326	
Adjusted Satura	ation Flo	ow Rate (s), veh/h/	ln	1810	1781	1598	1781	178	1 1572	1767	1885	1585	1682	1719	
Queue Service	Time (g	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 C	learanc	e Time (g ε), 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	7 0.47	0.16	0.10	0.10	0.31	0.23	
Capacity (c), v	/eh/h			504	1608	721	306	1659	9 732	212	192	162	443	399	
Volume-to-Capa	acity Ra	itio (X)		0.075	0.689	0.084	0.209	0.27	8 0.057	0.420	0.564	0.739	0.584	0.816	
Back of Queue	(Q), ft	/In (90 th percentile)	15.6	217.5	20.4	20	108.	4 39.5	90.8	106.8	129.9	202.3	278.8	
		eh/In (90 th percent	-	0.7	9.7	0.9	0.9	4.8	_	4.0	4.8	5.8	8.6	12.4	ш
		RQ) (90 th percen	tile)	0.12	0.00	0.16	0.15	0.00		0.82	0.00	1.47	1.50	0.00	\square
Uniform Delay (12.3	14.9	9.9	10.2	15.2	_	37.2	42.8	43.6	28.3	36.4	ш
Incremental De				0.1	2.2	0.2	0.4	0.3	_	6.0	3.7	13.7	5.5	11.7	-
Initial Queue De				0.0	0.0	0.0	0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	\blacksquare
Control Delay (12.4	17.1	10.1	10.6	15.5	-	43.2	46.4	57.3	33.9	48.1	
Level of Service Approach Delay				B 16.6	В	B	B	B	B	D 40.6	D	E	C 41.0	D	<u> </u>
				16.6			14.9	,	В	49.6	,	D	41.8)	D
Intersection De	idy, S/VE	ai / LUS				2:	5.7						С		
Multimodal Re	sults				EB			WE	3		NB			SB	
Pedestrian LOS		/LOS		2.10	_	В	1.90	_	В	2.46	_	В	2.45	_	В
Bicycle LOS Sc				1.51	_	В	1.71	_	В	1.01	_	Α	1.45	_	Α

		HCS	7 Sig	nalize	d Int	ersec	tion R	Resu	lts Sur	nmar	y				
General Inform	nation								Intersec	tion Inf	ormatic	on	U	111 aver	s U
Agency		Stolfus and Associa	ates						Duration	, h	0.250		-	***	
Analyst		Max Rusch		Analys	is Dat	е			Area Typ	e	Other		<u>-</u>		~ ∰
Jurisdiction				Time F	Period	AM P	eak		PHF		0.77		÷	m t	===
Urban Street		Patterson Rd		Analys	is Yea	r 2045		\neg	Analysis	Period	1> 7:0	00			-
Intersection		1st Street & Patters	son	File Na	ame	2045	ACP AM	l.xus						1110	
Project Descrip	tion												ħ	4 T PY	H/II
Demand Inform					EB		+ -	W		+ -	NB		-	SB	
Approach Move				L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), v	eh/h			54	966	180	173	104	6 40	114	213	143	178	475	67
Signal Informa	ation		_		2	15				111	100				_
Cycle, s	100.0	Reference Phase	2		7 6	- 5	- 2		7 547	248		_	7	\	D
Offset, s	47	Reference Point	Begin		-1	1 -2	-	20 10			17	1	2	3	
Uncoordinated	No	Simult. Gap E/W	On	Green		2.5	29.3	6.3		34.9	9	_	_	K .	\mathbf{A}
Force Mode	Fixed	Simult. Gap N/S	On	Yellow Red	0.5	0.0	3.0 2.5	3.5 0.5		4.0 1.0			⊖ಃ⊢	າ ໂ⊣ິ	
T Orce Mode	TIXCU	Oliniait. Cap 1470	OII	1100	0.0		2.0		0.0	1.0					
Timer Results				EBL		EBT	WB	L	WBT	NBI		NBT	SBL		SBT
Assigned Phase	e			1	\neg	6	5	\neg	2	7		4	3	\neg	8
Case Number				1.1		3.0	1.1	\neg	3.0	2.0		3.0	1.1		3.0
Phase Duration	1, S			8.9		34.8	11.4	1	37.3	10.3	3	39.9	13.9		43.4
Change Period	hange Period, (Y+R c), s					5.5	4.0		5.5	4.0		5.0	4.0	\neg	5.0
Max Allow Head	dway (/	MAH), s		5.2		0.0	5.2		0.0	5.2		5.2	5.2	\neg	5.2
Queue Clearan	ce Time	e (gs), s		3.7			5.4			6.2		13.4	9.9	\neg	32.0
Green Extension	n Time	(ge), s		0.1		0.0	0.4		0.0	0.3		8.7	0.0	\neg	6.5
Phase Call Pro	bability			0.71			0.93	3		0.98	3	1.00	1.00		1.00
Max Out Proba	bility			0.00			0.00			1.00		0.11	1.00		0.43
Movement Gro	un Doc	oulte			EB			WB			NB			SB	
Approach Move		suits		L	T	R	L	T	R	T	T	R	L	T	R
Assigned Move				1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F) veh/h		44	789	147	95	576	_	148	277	186	231	617	87
		ow Rate (s), veh/h/	ln.	1810	1766	1598	1781	1781	_	1743	1856	1598	1810	1885	1610
Queue Service				1.7	18.5	3.6	3.4	12.9		4.2	11.4	7.6	7.9	30.0	3.2
Cycle Queue C				1.7	18.5	3.6	3.4	12.9		4.2	11.4	7.6	7.9	30.0	3.2
Green Ratio (g		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0.34	0.29	0.36	0.37	0.32		0.06	0.35	0.42	0.46	0.38	0.43
Capacity (c), v	/eh/h			302	1036	570	269	1132	500	221	647	676	472	724	698
Volume-to-Capa	acity Ra	atio (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
		/In (90 th percentile)	28.8	213.8	_	50.7	172.4	1 11.9	76.7	176.8	108.7	122.8	425.8	46.7
Back of Queue	(Q), ve	eh/In (90 th percent	tile)	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 percen	tile)	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 De	lay (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 De	elay (d	з), 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/v	eh		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				С	С	В	С	С	В	D	С	В	В	D	В
Approach Delay	y, s/veh	/LOS		25.6	j	С	26.4	ı	С	29.7	7	С	29.8		С
Intersection De	lay, s/ve	eh / LOS				27	7.8						С		
Multimodal Re	eulte				EB			WB			NB			SB	
Pedestrian LOS		/108		2.29	_	В	2.11		В	2.43		В	2.43	_	В
Bicycle LOS So				1.77	_	В	1.84	_	В	1.49	_	A	2.43		В
Diejoic Loo oc	JOIC / LC			1.77		U	1.04		U	1.46		/1	2.00		

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ults S	un	nmar	y				
General Inform	nation								Intore	octi	ion Info	ormatic	\n		4.441	sių
	iation	Stolfus and Associa	atos						Durati			0.250		1	1111	
Agency		Max Rusch	ales	Analys	io Dot				_			Other		- 5		U A
Analyst Jurisdiction		Max Rusch		Analys		AM P	nak		Area PHF	гурє	9	0.80		- = =		- E
		Detterre Dd		Time F			eak			-:- 5	nid		20	- 1		7
Urban Street Intersection		Patterson Rd 7th Street & Patters	200			r 2045	ACP AN	Lvivo		SIS	Period	1> 7:0	JU	- R		Ž
	tion	7th Street & Patters	SON	File Na	ame	2045	ACP AN	ı.xus						- 4		HICI.
Project Descrip	tion		_	_		_	_	-					_			e par
Demand Inform	nation				EB			٧	VΒ			NB			SB	
Approach Move	ement			L	Т	R	L	Τ.	T	R	L	Т	R	L	T	R
Demand (v), v	eh/h			69	716	189	238	10	007 1	06	80	301	147	168	654	204
Signal Informa		I			Z.	_			7 1	1	243	. 4	,	A		
Cycle, s	100.0	Reference Phase	2			. 2	₹ "	D	5		4	7		2	7	Y
Offset, s	11	Reference Point	Begin	Green	4.2	3.0	36.4	6.	0 0	.9	27.6				- 1	
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.0	3.		.5	4.0			→ -	.\ \	4
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.0	0.	5 0	.5	1.0	_	5) 6	1 7	8
Timer Results				EBL	7	EBT	WB		WBT		NBL	_	NBT	SBI		SBT
Assigned Phase				1	-	6	5	-	2	-	7	-	4	3	-	8
Case Number	E			2.0	-	3.0	1.1	-	3.0	-	1.1	-	3.0	1.1	-	3.0
				8.2	$\overline{}$		_	\rightarrow		-	10.0			14.8	_	37.4
Phase Duration		\ 0			-	41.4	11.2	\rightarrow	44.4	-		_	32.6		_	
Change Period				4.0	\rightarrow	5.0	4.0	\rightarrow	5.0	-	4.0	\rightarrow	5.0	4.0	-	5.0
Max Allow Head				5.2	-	0.0	5.2	\rightarrow	0.0	-	5.2	-	5.2	5.2	_	5.2
Queue Clearan				5.1	-	0.0	6.9	\rightarrow		-	6.0	\rightarrow	9.7	9.9	_	21.7
Green Extensio		(g e), S		0.2	-	0.0	0.4	\rightarrow	0.0	-	0.4	$\overline{}$	12.7	1.0	_	10.7
Phase Call Pro				0.79	-		0.98	\rightarrow		-	0.94	-	1.00	1.00	_	1.00
Max Out Proba	bility			0.00			0.12	2		-	0.00		0.32	0.00		0.47
Movement Gro	oup Res	sults			EB			W	В	П		NB			SB	
Approach Move	_			L	Т	R	L	Т	R		L	Т	R	L	Т	R
Assigned Move				1	6	16	5	2		_	7	4	14	3	8	18
Adjusted Flow I), veh/h		57	587	134	142	60:	_	_	100	376	168	210	818	255
	•	ow Rate (s), veh/h/	/In	1810	1766	_	1810	178		_	1767	1795	1591	1795	1809	1586
Queue Service				3.1	13.4	_	4.9	11.		_	4.0	7.7	7.0	7.9	19.7	12.1
Cycle Queue C				3.1	13.4	$\overline{}$	4.9	11.		_	4.0	7.7	7.0	7.9	19.7	12.1
Green Ratio (g		z imie (g : n :		0.04	0.36	_	0.45	0.3		_	0.34	0.28	0.35	0.40	0.32	0.37
Capacity (c), v	_			75	1287	_	373	140		_	233	989	553	439	1173	581
Volume-to-Cap		atio (X)		0.749	0.456	_	0.382	0.42	_	_	0.429	0.380	0.303	0.478	0.697	0.439
		/In (90 th percentile	:)	65.5	195.6	_	57.2	144	_	_	70.6	119.4	99	125.5	268.6	160.8
		eh/ln (90 th percent		3.0	8.7	6.7	2.6	6.5		_	3.1	5.4	4.5	5.7	12.2	7.2
		RQ) (90 th percen		0.37	0.00	0.97	0.43	0.0	_	_	0.32	0.00	0.56	1.14	0.00	0.00
Uniform Delay				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 De	lay (d 2), s/veh		15.6	0.9	0.7	0.7	0.7	7 0.:	2	1.8	0.3	0.4	1.2	1.3	0.7
Initial Queue De				0.0	0.0	0.0	0.0	0.0	_	_	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (••		61.4	27.8	26.3	14.0	19.	_	_	27.0	25.7	21.0	21.9	30.8	24.7
Level of Service				E	С	С	В	В	_	_	С	С	С	С	С	С
Approach Delay				30.0		С	18.1	ī	В	T	24.7		С	28.1		С
Intersection De						25	5.6			_				С		
Multimodal Re	sults				EB			W	В			NB			SB	
Pedestrian LOS	Score	/ LOS		2.45		В	2.43	3	В		2.45		В	2.47	,	В
Bicycle LOS Sc	ore / LC	os		1.47		Α	1.88	3	В		1.02		Α	1.55	5	В

	HCS	67 Sig	nalize	d Int	ersec	tion F	Resul	lts Sur	nmar	у				
General Information								Intersec	tion Inf	ormatio	nn.		4791	ыŲ
	Stolfus and Associa	otos						Duration		0.250		- 1	4111	
Agency		ales	Anaha	in Date	_		_			_				
Analyst Jurisdiction	Max Rusch		Time F	sis Date	AM P	nok	_	Area Typ PHF	е	Other 0.80				=
	Detternen Dd				_	ean			Dorind	_	20	- 3		=
Urban Street	Patterson Rd	raan			2045	ACD AN	_	Analysis	Period	1> 7:	00	- 1		
Intersection	12th Street & Patte	erson	File Na	ame	2045 /	ACP AN	1.xus					- 4	1111	
Project Description												_	N I TO T	ejii.
Demand Information	1			EB			WE	2		NB			SB	
Approach Movement	-		T	ΤŢ	R	+-	T	R	1	T	R	1	T	R
Demand (v), veh/h			135	571	179	382	+	_	224	501	122	96	570	107
Demand (V), Venin			133	3/1	1/9	302	113	0 114	224	301	122	90	570	107
Signal Information		_				- L	I JU		$\overline{}$			K		_
Cycle, s 100.0	Reference Phase	2		- ×	- 2 2			100				7		V
Offset, s 19	Reference Point	Begin	_	1	3	")		17			1	2	3	
Uncoordinated No	Simult. Gap E/W	On	Green		26.5	7.0	39.0		0.0		_	_	K .	\mathbf{A}
Force Mode Fixed	-	On	Yellow Red	0.5	1.5	3.5 0.5	4.0 1.0	0.0	0.0			⊢، ↔	1) ₇	*+*
Torce Mode Tixe	a Joinnait. Oap 14/0	Oil	Itteu	0.0	1.0	0.5	1.0	0.0	0.0					-
Timer Results			EBI		EBT	WB	L	WBT	NBI		NBT	SBI		SBT
Assigned Phase			1		6	5	_	2	7		4	3	$\overline{}$	8
Case Number			1.1	+	3.0	1.1	\rightarrow	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.) s		4.0	_	5.5	4.0	_	5.5	4.0		5.0	4.0	_	5.0
Max Allow Headway			5.2	_	0.0	5.2	\rightarrow	0.0	5.2	\rightarrow	5.2	5.2	\rightarrow	5.2
Queue Clearance Tin			4.4	-	0.0	6.5	-	0.0	6.8	_	15.0	3.9	_	20.5
Green Extension Tim			0.2	_	0.0	0.3	_	0.0	0.0	_	11.8	0.1	_	10.2
Phase Call Probability			1.00	-	0.0	1.00	-	0.0	1.00	_	1.00	1.00	-	1.00
Max Out Probability	у		1.00			1.00	_		1.00		0.37	1.00		0.50
Max Out Flobability			1.00			1.00			1.00		0.31	1.00		0.50
Movement Group Ro	esults			EB			WB		_	NB		_	SB	
Approach Movement			L	Т	R	L	Т	R	L	Т	R	L	Т	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 F		/In	1730	1766	1603	1743	1795	_	1730	1781	1572	1743	1870	1765
Queue Service Time			2.4	13.8	8.4	4.5	15.7	_	4.8	13.0	5.6	1.9	18.5	18.5
Cycle Queue Clearan			2.4	13.8	8.4	4.5	15.7	_	4.8	13.0	5.6	1.9	18.5	18.5
Green Ratio (g/C)	(g - n -		0.36	0.26	0.34	0.36	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 F	Ratio (X)		0.218	0.573	_	0.362	0.701	_	0.447	0.451	0.202	0.166	0.597	0.597
Back of Queue (Q),)	40.3	198.5		79.4	202.2	_	80.5	188.9	82.6	31.3	275.4	263.6
Back of Queue (Q),			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		_	0.23	0.00	1.00	0.30	0.00	_	0.36	0.00	0.37	0.24	0.00	0.00
Uniform Delay (d 1),		,	23.0	35.3	28.1	25.5	27.9	_	18.5	22.6	15.0	16.3	24.2	24.3
Incremental Delay (d /),			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 (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/			23.5	36.9	29.0	26.8	31.5	_	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	В	C	C
Approach Delay, s/ve	•		33.2		С	29.5		С	21.7		С	26.6		С
Intersection Delay, s/ve			33.2			7.4			21.7			C 20.0		
intersection Delay, S/	TOIL LOG				21	.7								
Multimodal Results				EB			WB			NB			SB	
Multimodal Results Pedestrian LOS Scor	re / LOS		2.58	EB	С	2.44	WB	В	2.57	NB	С	2.57	SB 7	С

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resul	ts Sun	nmar	у				
General Informati	ion								ntersect	ion Inf	ormatic	nn.		47441	되민
Agency		Stolfus and Associa	toe					_	Duration,		0.250		1	41	
		Max Rusch	iles	Analys	is Date	т .		_			Other		- 2		N.
Analyst Jurisdiction		Wax Ruscii		Time F		AM P	nok	_	Area Type PHF	e	0.83		^		
	-	Patterson Rd				_	ean	_		Dorind		20	- 3 -v		-
Urban Street	_		- C+			2045	ACP AN		Analysis I	Period	1> 7:(00	- B		
Intersection		Patterson Rd & 15th	1 51	File Na	ame	2045	ACP AN	1.XUS					- 4	11	sel ci
Project Description	n												-		equ.
Demand Informat	tion				EB		_	WB			NB			SB	
Approach Moveme				ī	ΙŢ	R	1	ΤT	R		T T	R	1	ΙT	R
Demand (v), veh/				140	623	15	51	1800	_	12	3	20	12	3	61
Demand (V), Veni	/11			140	023	13	31	100	134	12		20	12		01
Signal Information	n					$\overline{}$		- JIE			- 100			-	
		Reference Phase	2		- ×	-3	4	T 100	6.27		- 1		4		4
	\rightarrow	Reference Point	End			2	-	1	li'	-		1	2	3	4
	_	Simult. Gap E/W	On	Green Yellow		2.8	75.4	6.6 4.0	0.0	0.0	-		→		-+-
	\rightarrow	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.0	0.0	_	5	6	7	Y
T Order Middle	ixou	Omian. Oap 14/0													
Timer Results				EBI		EBT	WB	L	WBT	NBI		NBT	SBI		SBT
Assigned Phase				5	_	2	1	_	6	1101		8		_	4
Case Number				1.1	+	4.0	1.1	\rightarrow	4.0		-	7.0	_	\rightarrow	7.0
Phase Duration, s				10.0	_	82.2	7.2	_	79.4		_	10.6	_	-	10.6
) e		4.0		4.0	4.0	_	4.0		_	4.0	_		4.0
	hange Period, (Y+R c), s lax Allow Headway (MAH), s					0.0	3.1	\rightarrow	0.0		_	3.3	-	-	3.3
Queue Clearance				3.1 4.0	-	0.0	2.3	-	0.0		_	3.4	_	_	6.5
				0.3	_	0.0	0.0	-	0.0		-	0.3	-	\rightarrow	0.3
Green Extension T Phase Call Probab	_	g e), s		0.99	$\overline{}$	0.0	0.0	-	0.0		_	0.98	_	_	0.98
				_	\rightarrow		0.00	_	_		_			_	
Max Out Probabilit	ıy			0.00			0.00		_			0.00		_	0.00
Movement Group	Resu	ılts			EB			WB			NB			SB	
Approach Moveme				L	T	R		T	R	L	T	R	L	T	R
Assigned Moveme				5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate		veh/h		178	408	405	27	536	518		18	24	_	18	73
-		w Rate (s), veh/h/li	n	1781	1856	1840	1781	1885	1820		1514	1585		1514	1585
Queue Service Tim				2.0	3.6	3.7	0.3	3.3	2.9		0.0	1.4		0.0	4.5
Cycle Queue Clear				2.0	3.6	3.7	0.3	3.3	2.9		1.0	1.4		1.0	4.5
Green Ratio (g/C)		Time (ge), s		0.82	0.78	0.78	0.79	0.75	0.75		0.07	0.07		0.07	0.07
Capacity (c), veh/	_			564	1451	1439	616	1422	1373		165	105		165	105
Volume-to-Capacit		in (X)		0.316	0.281	_	0.044	0.377	-		0.109	0.229		0.109	0.699
		n (90 th percentile)		13.3	36.1	35.9	3	33.5	29.8		17.1	23.1		17.1	75.1
		h/ln (90 th percenti		0.6	1.6	1.6	0.1	1.5	1.4		0.8	1.0		0.8	3.4
		RQ) (90 th percent	-	0.17	0.00	0.00	0.03	0.00	0.00		0.00	0.52		0.00	1.70
Uniform Delay (d			iic)	1.9	1.6	1.6	2.4	1.0	0.00		44.0	44.3		44.0	45.7
Incremental Delay				0.1	0.5	0.5	0.0	0.6	0.6		0.1	0.4		0.1	3.1
Initial Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Control Delay (d)		••		2.0	2.0	2.1	2.5	1.6	1.5		44.1	44.7		44.1	48.8
Level of Service (L				A	A	A	A A	A	A		D D	D D		D D	40.0 D
Approach Delay, si	_	LOS		2.0		A	1.6		A	44.4		D	47.9		D
Intersection Delay,				2.0			.5		^	44.4			47.8 A		U
microection Delay,	, sivel	17 LOS				4							^		
					EB			WB			NB			SB	
Multimodal Posul	Ite														
Multimodal Resul		LOS		1.83	_	В	1.84	_	В	2.31	_	В	2.31		В

		HCS	7 Sig	nalize	d In	iter	rsect	ion R	lesu	ılts	s Sun	nmary	/				
																	- declar
General Inform	nation								_		tersect				- 1	JĮ	[] } \[\]
Agency		Stolfus and Associa	ates			_					ıration,		0.250		-		
Analyst		Max Rusch		Analys		_				_	ea Type)	Othe	Г			<u></u>
Jurisdiction				Time F		-	AM Pe	ak		PH	łF		0.83		2 →		
Urban Street		Patterson Rd		Analys	is Ye	ar i	2045			An	nalysis F	Period	1> 7:	00	×		7
Intersection		27 1/2 Road & Patt	terson	File Na	ame		2045 A	CP AM	.xus								
Project Descrip	tion														ħ	414	MEIU
Demand Inform	nation				EE	3			W	B			NB		_	SE	3
Approach Move	ment			$\overline{}$	T	Т	R		T	г	R		T	R	1	T	_
Demand (v), v				80	64	7			15	89	304			1	395		214
Zemana (v), v																	
Signal Informa	tion					П		J. L	т		$\overline{}$	т	- 1		A		11
Cycle, s	100.0	Reference Phase	2		≓.		- T	1							,		~
Offset, s	88	Reference Point	Begin		44.0	\dashv	42.0	24.0	١,,	_	100	100		1	2		3 4
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow			43.0 4.5	31.0 4.0	0.0		0.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5		1.5	1.0	0.0		0.0	0.0	-	5			7 8
T Gree mode	TINOU	Olimaia: Oup 1470	011					110			1010						
Timer Results				EBL	. T	E	ВТ	WBI	L	W	VBT	NBL		NBT	SBL		SBT
Assigned Phase	е			1	\neg	- 6	6		\neg		2					ヿ	4
Case Number						4	.0		\neg	7	7.3		\neg			\neg	9.0
Phase Duration	hase Duration, s					64	1.0		\neg	49	9.0		\neg			\neg	36.0
	hange Period, (Y+R ε), s						.0		\dashv	_	5.0		\neg			\dashv	5.0
Max Allow Head				4.0 5.2	\neg		.0		\neg		0.0		$\overline{}$			\rightarrow	5.3
Queue Clearan				3.4	\rightarrow				\dashv				\neg			\dashv	16.1
Green Extensio				0.1	\neg	0	.0		\rightarrow	0	0.0		_		_	\rightarrow	4.3
Phase Call Prol		(9-7,0		1.00			-		\rightarrow	_						_	1.00
Max Out Proba				0.12	_	_	_		-	_	_		_		_	-	0.18
max out i loba	omity			0.12													0.10
Movement Gro	up Res	sults			EB	3	\neg		WE	3	\neg		NB		$\overline{}$	SE	3
Approach Move	ment			L	Т	Т	R	L	Т	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	†			2	\top	12				7		14
Adjusted Flow F	Rate (v), veh/h		64	515	<u>, T</u>	\neg		872	7	167				476		258
Adjusted Satura	ation Flo	ow Rate (s), veh/h/	ln	1753	179	5			179	5	1610				1757		1522
Queue Service	Time (g s), S		1.4	5.1	\top	\neg		17.3	3	5.7				10.8		14.1
Cycle Queue C	learanc	e Time (g c), s		1.4	5.1	†			17.3	3	5.7				10.8		14.1
Green Ratio (g				0.56	0.58	_			0.43	_	0.43				0.31		0.31
Capacity (c), v	_			402	2082	2			154	-	692				1089		472
Volume-to-Capa		atio (X)		0.158		_			0.56	_	0.241				0.437		0.546
		/In (90 th percentile)	22.2	68.6	_			214.	_	81				161.8		199.7
		eh/ln (90 th percent		1.0	3.1	_			9.7	_	3.7				7.4		8.6
		RQ) (90 th percen	•	0.15	0.00	_			0.00	_	1.53				0.97		0.00
Uniform Delay (9.8	6.9	-	\neg		19.2	_	15.0				27.5		28.7
				0.6	0.2	_			1.2	_	0.7				1.3		4.5
	ncremental Delay (d 2), s/veh nitial Queue Delay (d 3), s/veh								0.0	-	0.0				0.0		0.0
Control Delay (••		0.0 10.5	7.1	_			20.5	_	15.7				28.8		33.2
Level of Service				В	A	+			C	+	В				C		C
Approach Delay		7.5	Ĥ		A	19.7	_		В	0.0			30.3		С		
Intersection Del		7.5			20					0.0			C				
Multimodal Re	Multimodal Results								WE	3			NB			SE	3
Pedestrian LOS	edestrian LOS Score / LOS						A	2.10			В	2.32		В	2.32		В
Bicycle LOS Sc	icycle LOS Score / LOS						A	2.37			В						F

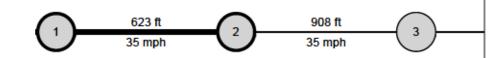
		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ults	Sun	nmar	У				
General Inform	ation								Into	react	tion Infe	ormatic	n.		a Ade I I	되다
	lation	Stolfus and Associa	otos							ation,		0.250		1	Tit	
Agency			ates	Anaba	is Dat				_					- 2		N. C.
Analyst Jurisdiction		Max Rusch		Analys		AM P	o o k		PHF	а Тур -	е	Other 0.85				二層
		Detteres Dd		Time F			еак		_		D:		20	- 1		7
Urban Street Intersection		Patterson Rd 28 1/4 Road & Patt	toroon			r 2045	ACP AN	Lvuo	_	ilysis	Period	1> 7:0	JU	- 6		i i
	4:	28 1/4 R0au & Pall	lerson	File Na	ame	2045	ACP AN	ı.xus						- 4	1 1 444	200
Project Descrip	tion		_	-	-	_	-		-	-	-	-	-			April 1
Demand Inform	nation				EB		$\overline{}$	٧	VB		$\overline{}$	NB		$\overline{}$	SB	
Approach Move	ement			L	Т	R	L	Т	T	R	L	T	R	L	T	R
Demand (v), v	eh/h			53	718	264	289	16	672	73	290	31	81	80	31	32
Signal Informa							١.:	□	4	4			_	_		
Cycle, s	100.0	Reference Phase	2						5	*1	7	_		2	>	Y
Offset, s	95	Reference Point	Begin	Green	6.0	10.0	30.0	10	0.0	17.0				-	- 1	1111111
Uncoordinated	No	Simult. Gap E/W	Off	Yellow	3.5	4.0	4.5	3.	5	4.0	0.0		<u> </u>	<u> </u>	~ •	4
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.5	0.	5	1.0	0.0		5	₹ 6	7	8
Timer Results				EBL	-	EBT	WB	4	WE		NBI	-	NBT	SBL	-	SBT
Assigned Phase	e			1	-	6	5	-	2	_	7	-	4	3	\rightarrow	8
Case Number				1.1	+	3.0	2.0	-	3.0	_	1.1	+	3.0	1.1	-	3.0
Phase Duration				10.0	_	36.0	24.0	\rightarrow	50.		18.0	_	26.0	14.0		22.0
Change Period				4.0	\rightarrow	6.0	4.0	\rightarrow	6.0		4.0	\rightarrow	5.0	4.0	-	5.0
Max Allow Head				5.2	\rightarrow	0.0	3.1	\rightarrow	0.0	0	3.2	-	5.3	5.2	-	5.3
Queue Clearan				3.2	_		9.1	_		_	16.0	_	5.7	6.0	-	4.0
Green Extensio		(ge), S		0.0	-	0.0	0.2	\rightarrow	0.0	0	0.0	-	0.9	0.1	-	0.9
Phase Call Pro				1.00	-		1.00	\rightarrow		_	1.00	-	1.00	1.00	-	1.00
Max Out Proba	bility			1.00			0.00			_	1.00		0.01	1.00		0.02
Movement Gro	un Res	ults			EB			W	R	_		NB			SB	
Approach Move	_	, uito		L	T	R	L	T		R	L	T	R	L	T	R
Assigned Move				1	6	16	5	2	_	12	7	4	14	3	8	18
Adjusted Flow F) veh/h		31	419	154	151	87	_	38	341	36	95	94	36	38
		ow Rate (ε), veh/h/	ln	1810	1795	-	1795	179	_	610	1795	1900	1610	1810	1900	1610
Queue Service				1.2	6.5	4.2	7.1	18.	_	2.0	14.0	1.5	3.7	4.0	1.6	2.0
Cycle Queue C				1.2	6.5	4.2	7.1	18.	_	2.0	14.0	1.5	3.7	4.0	1.6	2.0
Green Ratio (g		z miz (g z n z		0.36	0.30	0.30	0.20	0.4	-).44	0.33	0.21	0.41	0.27	0.17	0.17
Capacity (c), v	_			327	1077	476	359	157	_	708	529	399	660	470	323	274
Volume-to-Cap		tio (X)		0.094	0.389	-	0.419	0.5	_	.054	0.645	0.091	0.144	0.200	0.113	0.138
		In (90 th percentile)	20.5	91	55.6	111.3	229	_	54.2	241	29.7	56.6	72.2	31.9	33.6
Back of Queue	(Q), v	eh/ln (90 th percent	tile)	0.9	4.1	2.5	5.0	10.	3 2	2.5	10.9	1.4	2.6	3.3	1.4	1.5
Queue Storage	Ratio (RQ) (90 th percen	tile)	0.08	0.00	0.19	0.42	0.0	0 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 2	24.5	28.2	31.8	18.5	28.1	35.1	35.3
Incremental De	lay (d 2), s/veh		0.4	8.0	1.4	2.4	0.9	9 (0.1	6.0	0.5	0.5	1.0	0.7	1.0
Initial Queue De	elay (d	з), 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/v	eh		22.7	17.6	13.9	35.8	22.	7 2	24.6	34.2	32.3	19.0	29.1	35.8	36.3
Level of Service	e (LOS)			С	В	В	D	С		С	С	С	В	С	D	D
Approach Delay	y, s/veh	/ LOS		16.9		В	24.7	7	С	;	30.9		С	32.2	2	С
Intersection De	lay, s/ve	h/LOS				24	4.5							С		
Multimodal Re					EB	-		W		-		NB	_		SB	
Pedestrian LOS				2.12	_	В	2.10	-	В		2.45		В	2.45	-	В
Bicycle LOS Sc	ore / LC	JS		1.49		Α	2.46	j	В	3	1.27		Α	0.77		Α

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.83 Jurisdiction Time Period AM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 29 Road & Patterson 2045 ACP AM.xus Intersection File Name Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R 98 Demand (v), veh/h 129 532 231 187 1461 194 173 49 73 271 360 Signal Information Д. Cycle, s 100.0 Reference Phase 2 517 50 Reference Point Offset, s Begin Green 8.5 36.5 8.5 4.0 22.0 0.0 Uncoordinated No Simult, Gap E/W On Yellow 3.5 4.5 3.5 0.0 4.0 0.0 0.0 Force Mode Fixed Simult. Gap N/S On Red 1.0 2.0 0.0 1.0 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 6.5 4.5 6.5 4.5 5.0 4.5 5.0 Change Period, (Y+Rc), s 4.5 Max Allow Headway (MAH), s 4.1 0.0 4.1 0.0 42 43 42 43 Queue Clearance Time (gs), s 5.7 6.6 7.1 11.8 5.4 21.8 Green Extension Time (ge), 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 1.00 0.31 0.06 1 00 Max Out Probability 1.00 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 1 6 5 2 7 4 8 18 111 457 198 134 1046 70 234 208 17 88 327 373 Adjusted Flow Rate (v), veh/h 1795 1767 1870 1610 1870 1610 Adjusted Saturation Flow Rate (s), veh/h/ln 1781 1572 1781 1585 1716 1753 3.7 8.8 6.9 23.6 5.1 9.8 0.7 3.4 15.7 19.8 Queue Service Time (g s), s 4.6 1.5 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) 0.36 0.36 0.45 0.36 0.36 0.30 0.22 0.31 0.36 0.26 0.45 0.35 Capacity (c), veh/h 282 1310 574 460 1300 579 559 411 491 430 486 556 0.392 0.349 0.346 0.291 0.805 0.121 0.418 0.507 0.034 0.205 0.671 0.672 Volume-to-Capacity Ratio (X) Back of Queue (Q), ft/ln (90 th percentile) 69.4 124.2 89.3 78.4 223.2 89.4 171.5 11.6 60.6 256.2 263.9 21.1 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 0.22 0.00 0.33 0.20 0.00 0.24 0.40 0.00 0.05 0.46 0.00 Queue Storage Ratio (RQ) (90 th percentile) 2.00 Uniform Delay (d 1), s/veh 219 21.6 156 186 193 99 27.034 2 244 223 33.2 27.9 0.5 Incremental Delay (d 2), s/veh 3.0 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 0 102 29.3 38 6 24.5 23.3 40 4 34.3 Level of Service (LOS) С В R В С n С С D C C С 21.2 C 21.9 C 33 4 C 35.6 Approach Delay, s/veh / LOS D Intersection Delay, s/veh / LOS 26.7 C Multimodal Results WB NB Pedestrian LOS Score / LOS 2.33 В 2.18 В 2.45 В 2.44 В Bicycle LOS Score / LOS 1.37 Α 2 22 В 1.25 A 1.79 В

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ults	Sun	nmar	y				
General Inforn	nation										tion Inf			- 1	JII.	MU
Agency		Stolfus and Associa	ates							ration,		0.250		-		-
Analyst		Max Rusch		Analys		_			_	ea Typ	е	Other				`=
Jurisdiction				Time F		AM P	eak		PH			0.85		÷		===
Urban Street		Patterson Rd		_		r 2045			_	alysis	Period	1> 7:(00	× ×		
Intersection		29 1/2 Road & Patt	terson	File Na	ime	2045	ACP AN	l.xus							11	
Project Descrip	tion		_	_	_	_	_	_	_	_	_	_	_	1	4144	ejn.
Demand Inform	nation				EB			V	٧B			NB			SB	
Approach Move	ement			L	T	R	1	_	T	R		T	R	1	T	R
Demand (v), v				13	531	96	222	-	49	265	48	34	67	150	106	64
Zemanz (v), v				-10			1							100		
Signal Informa	ition					15	_		Į,	211	213					
Cycle, s	100.0	Reference Phase	2	1	- K	- 2	4	T .	5	1243					1	V
Offset, s	48	Reference Point	Begin	Green	1.5	2.2	50.4	7.		1.0	10.4		1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Yellow		3.5	5.0	4.		4.0	4.0		_	я	Κ .	▲Ⅰ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.5	1.5	0.		0.0	1.0		5	♦ ،	7	8
Timer Results				EBL		EBT	WB	L	W	ВТ	NBI		NBT	SBI		SBT
Assigned Phase	е			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	1, S			5.5		56.9	11.7		63	3.2	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 Hea	dway (/	MAH), s		4.5		0.0	4.5		0	.0	3.7		4.7	3.7		4.7
Queue Clearan	ce Time	e (gs), s		2.3			6.9				4.7		9.1	10.3	3	8.1
Green Extension	n Time	(ge), s		0.0		0.0	0.8		0	.0	0.0		1.3	0.1		1.4
Phase Call Pro	bability			0.29			0.99)			1.00		1.00	1.00)	1.00
Max Out Proba	bility			0.00			0.00				1.00		0.01	1.00		0.00
Movement Gro	oup Res	sults			EB			W	В			NB			SB	
Approach Move	_			L	Т	R	L	Т	_	R	L	Т	R	L	Т	R
Assigned Move				1	6	16	5	2	$^{+}$	12	7	4	14	3	8	18
Adjusted Flow), veh/h		13	511	92	187	130)4	223	56	119		176	125	75
		ow Rate (s), veh/h/	ln	1810	1795	_	1795	179	_	1560	1767	1618		1781	1841	1585
Queue Service				0.3	7.1	2.7	4.9	22.	_	6.6	2.7	7.1		8.3	6.1	4.2
Cycle Queue C				0.3	7.1	2.7	4.9	22.	_	6.6	2.7	7.1		8.3	6.1	4.2
Green Ratio (g		10-11-		0.52	0.50	0.50	0.60	0.5	_	0.57	0.17	0.10		0.24	0.15	0.15
Capacity (c), v				210	1810	-	566	203	_	884	281	168		327	283	244
Volume-to-Cap		itio (X)		0.060	0.282	_	0.330	0.64	_	0.252	0.201	0.708		0.539	0.441	0.309
		/In (90 th percentile)	4.9	93.9	73	55.3	225	_	113.6	51.9	121.9		148.5	112.7	66.8
		eh/ln (90 th percent		0.2	4.2	3.3	2.5	10.	_	5.0	2.3	5.3		6.6	5.0	3.0
Queue Storage	Ratio (RQ) (90 th percen	tile)	0.04	0.00	0.86	0.42	0.0	0	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 De				0.1	0.3	0.2	0.2	1.1	1	0.5	1.6	5.4		6.2	1.1	0.7
Initial Queue De	elay (d	з), 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
Control Delay (d), s/v	eh		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	e (LOS)			В	В	В	Α	В		В	D	D		D	D	D
Approach Delay	y, s/veh	/LOS		12.1		В	12.4	1	E	В	44.9		D	38.8	3	D
Intersection De	lay, s/ve	eh / LOS				17	7.8							В		
Multimodel De	oulte.				ED			14/	D			ND			0.0	
Multimodal Re		11.00		4.00	EB	D	2.00	W			2.42	NB	D	2.47	SB	
Pedestrian LOS				1.90	_	В	2.08	\rightarrow		В	2.46	_	В	2.45	-	B
Bicycle LOS So	ore / LC	79		1.11		Α	2.46)	t	В	0.78		Α	1.11		Α

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resu	ılts Su	mmar	У				
General Inform	nation								Intersec	tion Inf	ormatic	on		111	되다
Agency		Stolfus and Associa	ates						Duration	, h	0.250		2	***	
Analyst		Max Rusch		Analys	is Date	е			Area Typ	e	Other		S-1		- 2
Jurisdiction				Time F	eriod	AM P	eak		PHF		0.83		2	m t	==
Urban Street		Patterson Rd		Analys	is Yea	r 2045			Analysis	Period	1> 7:0	00			-
Intersection		30 Road & Patterso	on	File Na	ame	2045	ACP AN	1.xus						1110	
Project Descrip	tion												7	4144	Mu
Demand Inform	nation				EB		_	W	R		NB			SB	
Approach Move				ī	T	R	1	ΤÏ		1	T	R	1	T	R
Demand (v), v				95	420	203	137	118	_	438	57	49	42	138	279
Demand (V), V	CIVII			- 55	420	203	137		17	430	31	40	72	130	213
Signal Informa	tion				3		<u> </u>	т	ĮĮ.		- 10				1
Cycle, s	100.0	Reference Phase	2		P .		K		STO S	7	3		4	1	4
Offset, s	55	Reference Point	Begin	Green	7.0	46.5	6.0	3.0				1	2 2	1.4	4
Uncoordinated	No	Simult. Gap E/W	On	Yellow		5.0	3.5	0.0		0.0	_	<i>></i>	→		stz
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	1.5	0.5	0.0		0.0		5	6	7	Y 8
Timer Results				EBL		EBT	WB	니	WBT	NB	_	NBT	SBI	-	SBT
Assigned Phase	e			5	\perp	2	1	\rightarrow	6	3	_	8	7	\rightarrow	4
Case Number				1.1	_	3.0	1.1	4	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 Head	dway (I	ИАН), s		4.1		0.0	4.2		0.0	4.2		4.3	4.2		4.3
Queue Clearan	ce Time	(gs), s		5.1			6.1			11.0)	5.0	4.2		14.4
Green Extension		(ge), S		0.0		0.0	0.0		0.0	0.0		1.8	0.0		8.0
Phase Call Pro	bability			1.00			1.00)		1.00)	1.00	1.00)	1.00
Max Out Proba	bility			1.00			1.00)		1.00)	0.02	1.00		1.00
Movement Gro	un Doc	ulto			EB			WE	,		NB			SB	
Approach Move	_	suits			T	R		T	R	L	T	R	L	T	R
Assigned Move				5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow F		\ voh/h		114	506	245	147	127	_	528	69	58	51	166	225
		ow Rate (s), veh/h/	ln.	1810	1795	1598	1795	179		1730	1870	1560	1810	1885	1585
Queue Service				3.1	4.1	4.6	4.1	22.8		9.0	3.0	3.0	2.2	7.9	12.4
Cycle Queue C				3.1	4.1	4.6	4.1	22.8		9.0	3.0	3.0	2.2	7.9	12.4
Green Ratio (g		e fille (gt), s		0.54	0.46	0.46	0.54	0.46	_	0.28	0.21	0.21	0.24	0.18	0.25
Capacity (c), v	_			293	1669	743	487	1669		655	393	328	386	339	396
Volume-to-Capa		atio (X)		0.390		_	0.301	0.76	_	_	0.175		0.131	0.490	0.569
		/In (90 th percentile)	53.5	53.8	56.3	70	203.	_	113.6	58.2	50.6	40	147.1	184.1
		eh/ln (90 th percent		2.4	2.4	2.5	3.2	9.2		5.1	2.6	2.2	1.8	6.6	8.2
		RQ) (90 th percen	_	0.61	0.00	0.20	0.69	0.00	_	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 De	lay (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 De	elay (d	з), 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/v	eh		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)			В	Α	Α	В	В	Α	D	С	С	С	D	D
Approach Delay	y, s/veh	/LOS		8.5		Α	14.6	6	В	42.3	3	D	38.9)	D
Intersection De	lay, s/ve	eh / LOS				21	1.5						С		
Marking at 15								184			NE			0.0	
Multimodal Re					EB			WE			NB			SB	
Pedestrian LOS				2.27	_	В	2.23	_	В	2.45	-	В	2.45	_	В
Bicycle LOS Sc	ore / LC)S		1.20		Α	1.82	2	В	1.57		В	1.22	2	Α

	HCS7 L	Jrban Street Seg	ment 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/Ma	Il Access & Patterson	Analysis Period	1> 7:00
Project Description					



Basic Segn	nent Infor	mation (24 Rd - 1	Market St)											
Segment		d Limit		h Lanes		t Length	Inte	rsectio	n Wid	Length	of RM	Perce	nt Curb	Ot	her	Delay
	WB	EB	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	WE		EB
1	35	35	2	2	623	623	50		50	0	0	100	0	0.0	7	0.0
								West	bound				Eastbo	und		
Segment O	utput Dat	ta				WBI	-	W	/BT	WBF	₹	EBL	EBT			EBR
Segment	Moveme					1			6	16		5	2			12
1	Bay/Lan	e Spillba	ck Time,	h												
1	Shared	Lane Spi	llback Tin	ne, h										\perp		
1	Base Fr	ee-Flow	Speed, m	ph				41	.58				42.0	5		
1	Running	Time, s						14	.68				14.9	В		
1		Speed,							.93				28.3			
1		Delay, s	/veh						14		_		43.5	7		
1	Travel T								.83				58.50			
11	_	peed, m							.61		\rightarrow		7.25			
1		te, stops							32		_		0.89			
1			e, stops/n	ni ————					75		_		7.56			
1		vol/cap							15		-		0.77			
1		of Base	FFS						.75		\rightarrow		17.2	5		
1		Service)		-		F			
1	_		rception	Score				2.	57		_		3.46			
Multimodal	_		-	0 //			2.20		_		_	2.00		_		
1	_			Score / L	08		2.20		+	В	-	3.65			D	
1	_			re / LOS			2.10		+-	В	-	2.67		-	В	
1	Transit	segment	LOS Sco	re / LOS			1.75		-	Α		3.30)		C	
Facility Out	tput Data							West	bound		$\overline{}$		Eastbo	und		
Facility Trav	el Time, s							784	1.82				800.4	2		
Facility Trav	el Speed,	mph						27	.36				26.83	3		
Facility Base	e Free Flo	w Speed	, mph					43	.04				42.7	7		
Facility Pero	ent of Ba	se FFS						63	.57				62.72	2		
Facility Leve	el of Servi	ce					(C				С				
Facility Auto	Traveler	Perception	on Score					2.	32				2.29)		
Multimodal	Results	(Facility)														
Pedestrian I							3.20		$\overline{}$	С	$\overline{}$	3.21			C	;
Bicycle Faci							2.76			С		2.73			C	
Transit Faci							1.13		\neg	A		1.08			Ā	

				НС	S7 Url	an Str	eet S	Segmer	nt I	Report						
								ŭ								
General Int	formation										\neg	Streets In	formatio	1		
Agency		Sto	olfus and	Associate	es						_	Number of			15	
Analyst		-	x Rusch			Analys	sis Date	e			\rightarrow	Number of	Seament	s	14	
Jurisdiction		_				Time F		AM	Pea	ık	_	Number of			15	
File Name		20	45 ACP A	M xus		-	sis Year	r 204	5		\rightarrow	System C			100	
Intersection	s	_			cess & P					Mall Acc		Analysis P	_	, 0	1> 7:0	00
Project Des	cription	_										, , , , , , , , , , , , , , , , , , , ,				
		1)—	623 ft 35 mph		2		908 ft 35 mph		— (3)-	1665 35 m		4)-	
Dania Carr		4:	(14l4 C	44-11	- D4											
	nent Inform						1		, ,	1	-4.50	T 5	10 :			
Segment	Speed L			h Lanes		t Length	_	section W	\rightarrow	Length		_	nt Curb		ner De	_
	WB	EB	WB	EB	WB	EB	WB		4	WB	EB	WB	EB	WB	\rightarrow	EB
2	35	35	2	2	908	908	50	50	_	0	0	70	70	0.0	_	0.0
									Ţ				E4b-			
Commont O	utnut Data					WDI	_	Vestbour	10	WDE		EDI	Eastbo	_	ED	D.
	utput Data					WBI	-	WBT	-	WBF	•	EBL	EB1	-	EB	
Segment	Movemen		-l. Ti			1	-	6	-	16	-	5	2	-	12	
2	Bay/Lane	_					\rightarrow		-		+			\rightarrow		
2	Shared La						_	11.10	_		-					
2	Base Free			pn				41.48	_		-		41.4			
2	Running T							18.43	_		-		18.9			
2	Running S							33.59	_		-		32.6			
2	Through D		s/ven					4.46			-		3.39			
2	Travel Tim							22.89			+		22.3			
2	Travel Spe		-					27.05			-		27.6			
2	Stop Rate							0.18			-		0.12			
2	Spatial St	•		11				1.03	_		-		0.70			
2	Through v							0.16			-		0.49			
2	Percent of		FFS					65.20			-		66.7	3		_
2	Level of S							С			-		С			
2	Auto Trave			Score				2.29	_				2.24			_
	Results (S	_	•					_			_			_		
2	Pedestria						2.88	\rightarrow	_	С	-	3.75		_	D	_
2	Bicycle Se	_					2.41	-	_	В	-	2.81			С	
2	Transit Se	egment	LOS Sco	re / LOS			1.06			Α	_	1.17			Α	
Eacility Ou	tnut Data						v	Vestbour	vd.		_		Eastbo	und		
Facility Ou Facility Trav							V	784.82	ıu				800.4			
	vel Speed, m	nnh						27.36			-		26.8			
	e Free Flow	-	l mnh					43.04			-		42.7			
	cent of Base	_	, mpn					63.57					62.7			
	el of Service							C 03.57	_		-		02.7. C	2		
	Traveler Pe		on Score					2.32					2.29			
i aciiity Auto	J Havelel Pe	creepile	on Score					2.32					2.25			

Multimodal Results (Facility)
Pedestrian Facility LOS Score / LOS

Bicycle Facility LOS Score / LOS

Transit Facility LOS Score / LOS

С

С

3.20

2.76

1.13

С

С

3.21

2.73

1.08

				шс	S7 Urk	an Str	oot	Sear	nent	Danort					_	
				п	SI UIL	an Su	CCL	Segi	HEIIL	Keport		_	_			
Company												Ctoo oto loc	4:			
General Info	ormation	Ctolf	us and	Associate							-	Streets Int Number of			15	
Agency				Associate	es	Lamatas	:- D-	4- 1			-				-	
Analyst		мах	Rusch			Analys			414 D-	-1.	-	Number of			14	
Jurisdiction		00.45				Time F		\rightarrow	AM Pea	ак	_	Number of			15	
File Name			ACPA			Analys			2045		-	System Cy		n, s	10	
Intersections		Hom	е Depo	t Access/	Mesa Mal	1/24 1/2	Rd &	Patters	son			Analysis P	eriod		1>	7:00
Project Des	cription	_														
623 35 m		2		908 ft 35 mph		<u></u> 3		1665 35 m		— (4)-	2551 40 m		-(5	-
	ent Informati															
Segment	Speed Limi	_		h Lanes	Segmen		-	rsectio		Length			nt Curb			Delay
	WB E	В	WB	EB	WB	EB	W	В	EB	WB	EB	WB	EB	W	3	EB
3	35 35	5	2	2	1665	1665	50	0	50	550	550	70	100	0.0)	0.0
								Westb			-	551	Eastbo	_		500
Segment O	_					WBL	-		ВТ	WBR	-	EBL	EBT	\rightarrow		EBR
Segment	Movement	_			5	_	2	2	12	-	1	6	-	_	16	
3	Bay/Lane Sp		_				_				_			_		
3	Shared Lane										\rightarrow					
3	Base Free-FI	_	peed, m	ph				40.			_		40.32			
3	Running Time	e, s						30.	30		_		31.90)		
3	Running Spe							37.	46		_		35.59	9		
3	Through Dela		eh					12.	44		_		3.67			
3	Travel Time,							42.			_		35.57			
3	Travel Speed	l, mph	1					26.	56				31.92	2		
3	Stop Rate, st	ops/ve	eh					0.4	10				0.11			
3	Spatial Stop	Rate,	stops/n	ni				1.2	26				0.36			
3	Through vol/o	cap Ra	atio					0.1	17				0.56			
3	Percent of Ba	ase FF	S					65.	04				79.10	6		
3	Level of Serv	ice						C	;				В			
3	Auto Traveler	Perc	eption (Score				2.3	33				2.19			
Multimodal	Results (Segi	ment)														
3	Pedestrian S	egmer	nt LOS	Score / L	os		3.04			С	\perp	3.86)
3	Bicycle Segm	nent L	OS Sco	ore / LOS			2.50			В	\perp	2.91			C	;
3	Transit Segm	ent L0	OS Sco	re / LOS			1.12			Α	\perp	0.96	i		A	1
											-					
Facility Out								Westh			-		Eastbo			
Facility Trav						_	784			-		800.4				
	el Speed, mph							27.			-		26.83			
	Free Flow Sp		mph					43.			\rightarrow		42.7			
	ent of Base FF	·s						63.			_		62.72	2		
Facility Leve			_					C			_		C			
Facility Auto	Traveler Perce	eption	Score					2.3	32				2.29			
Multimodal	Results (Faci	lity)														
	acility LOS Sc		201				3.20		_	С	$\overline{}$	3.21			-	
	lity LOS Score						2.76			C	-					
	ity LOS Score								+		-	2.73			C	
Transit Facil	ny LOS SCORE	LUS	·				1.13			Α		1.08	1			1

				НС	S7 Urb	an Str	eet	Seg	ment	Report						
General Inf	ormation										9	Streets In	formation			
Agency		S	tolfus and	Associate	es						1	Number of	Intersecti	ons	15	
Analyst		М	ax Rusch			Analys	sis Da	ate			1	Number of	Segment	s	14	
Jurisdiction						Time F	Perio	d	AM Pea	ak	1	Number of	Iterations		15	
File Name		20	045 ACP A	M.xus		Analys	sis Ye	ear	2045		5	System Cy	cle Lengt	h, s	100	
Intersections	S	24	1 1/2 Rd &	Patterso	n	25 Roa	nd & F	Patters	son			Analysis P			1>7	7:00
Project Des	cription														_	
908 35 m		3)—	1665 ft 35 mph		4		255 40 r	i1 ft mph	_(5)_	2538 40 m		-("	5)-	
Basic Segn	ent Infor	mation	(24 1/2 B)	d 25 Pd	,											
Segment	Speed			h Lanes	Segmen	t I enath	Into	areacti	on Wid	Length	of RM	Parco	nt Curb	Ot	her F	Delay
Segment	WB	EB	WB	EB	WB	EB	_	/B	EB	WB	EB	WB	EB	WE		EB
4	40	35	2	2	2551	2551		0	50	0	0	90	90	0.0	-	0.0
4	40	33			2551	2551	3	0	30	U	U	90	90	0.0		0.0
								West	bound		$\overline{}$		Eastbo	und		
Segment O	utput Data	a				WBI		V	VBT	WBR		EBL	EBT		E	BR
Segment	Moveme					5			2	12	$\overline{}$	1	6	\neg		16
4			ack Time,	h					_		_		_	\rightarrow		
4		_	illback Tin								_			\rightarrow		
4			Speed, m					43	3.32		\rightarrow		40.97	7		
4	Running			ipii					2.33		_		46.11		_	-
4	Running								1.09		_		37.72			
4	Through								0.81		_		12.2		_	-
4	Travel Ti		O/ * C//						3.14		_		58.32			
4	Travel S		nh						3.78		_		29.82		_	
4	Stop Rat								.80		_		0.28			-
4			te, stops/n	ni					.65		_		0.59			-
4	Through	_							.29		-		0.59			_
4	Percent								1.90		_		72.79			
	Level of								C		-		72.73 B	,		_
4			erception (Caoro					.39		-		2.23			-
Multimodal				Score					.39				2.23			-
4			ment LOS	Score / I	OS		2.90		$\overline{}$	С	$\overline{}$	3.50	1		С	
4			t LOS Sco				2.58		_	В	_	2.90			C	
4			t LOS Sco				1.36		_	A	_	1.09			A	_
_	Transit C	egilieli	1200 000	ne / LOS			1.50					1.05				
Facility Out	but Data							West	tbound		$\overline{}$		Eastbo	und		
Facility Trav	_								4.82		\neg		800.4			$\overline{}$
Facility Trav									7.36				26.83			
Facility Base			d. mph						3.04		-		42.7			-
Facility Perc			_,						3.57		_		62.72			
Facility Leve									C				C			
Facility Auto			ion Score						.32				2.29			
r domity Auto	TIATOR I	Стосрі	J. J						.52				2.23			
Multimodal	Results (Facility	')													
Pedestrian F							3.20		$\overline{}$	С		3.21			С	
Bicycle Faci							2.76			С		2.73			С	
Transit Facil	_						1.13			A		1.08			A	_
	,															

				H	CS7 Url	oan Str	eet	Seg	ment	Report						
General Inf	ormation											Streets Int	formation	1		
Agency		Sto	lfus and	Associat	es							Number of	Intersect	ions	15	
Analyst		Max	x Rusch			Analys	sis Da	ate				Number of	Segment	s	14	
Jurisdiction						Time F	Period	i	AM Pe	ak		Number of	Iterations	6	15	
File Name		204	5 ACP	AM.xus		Analys	sis Ye	ar	2045			System Cy	cle Lengt	h, s	100	0
Intersections	s	25 I	Road &	Pattersor	1	25 1/2	Road	& Pat	tterson			Analysis P	eriod		1>	7:00
Project Des	cription	\top														
1665 35 m	-	4)——	2551 ft		5	_	253 40 n		— (6)-	2613 35 m		_(7	
Daria Carr		4: <i>1</i>	0.F. D.4	25.4/2.0												
	nent Informat						1		146.1			T 5				
Segment	Speed Lin	_		h Lanes		t Length	_		on Wid	Length			nt Curb		_	Delay
		EB	WB	EB	WB	EB	W	_	EB	WB	EB	WB	EB	WI	\rightarrow	EB
5	40 4	40	2	2	2538	2538	50	0	50	260	260	90	90	0.0)	0.0
								West	b a um d		_		Faatha	d		
Sament O	utnut Data					WBI			bound /BT	WBR	_	EBL	Eastbo EBT	_		EBR
Segment O							_	_						-		
Segment	Movement	nillhaa	uk Tima	ь.		5	-		2	12	-	1	6	-		16
5	Bay/Lane S	-									-		_	-		
5	Shared Lan						_	42	.00		-		42.0			
5	Base Free-F		speed, n	npn					.96		-		42.9			
5	Running Tin		_						.47		-		43.6			
5	Running Sp								.74		-		39.6			
5	Through De		veh						.54		-		23.5			
5	Travel Time								.01		-		67.2			
5	Travel Spee								.83		\rightarrow		25.7			
5	Stop Rate, s	_							45		_		0.51			
5	Spatial Stop			mi					.94		\rightarrow		1.07			
5	Through vol	_							28		_		0.86			
5	Percent of E		FS						.44		\rightarrow		59.9	1		
5	Level of Ser								В		_		С			
5	Auto Travele		_	Score				2.	28				2.30)		
	Results (Seg	_	-													
5	Pedestrian S						2.74			В		3.86			D)
5	Bicycle Seg	ment I	LOS Sc	ore / LOS	3		2.58			В	_	2.91			С	;
5	Transit Segr	ment L	LOS Sc	ore / LOS			0.92			Α		1.36	i		Α	k .
Facility Out	tput Data							West	bound				Eastbo	und		
Facility Trav									4.82		\neg		800.4			
	rel Speed, mp	h							.36		\rightarrow		26.83			
	e Free Flow S		mph						.04		\neg		42.7			
	ent of Base F								.57				62.7			
_	el of Service	_							C				C			
	Traveler Per	ceptio	n Score						32				2.29)		
	Results (Fac															
Pedestrian I	Facility LOS S	core /	LOS				3.20			С		3.21			С	;
	lity LOS Score						2.76			С		2.73	3		С	;
Transit Faci	lity LOS Score	e / LO	S				1.13			Α		1.08	}		Α	

				нс	S7 Urk	an Str	eet	Sear	ment	Renort					_	
				- 110	,07 011	Jan Ju	CCL	ocgi	HOTH	Keport						
Consenting												Ctoo etc. Ind	4:			
General Info	ormation	Otale	us and	Associate							-	Streets Int			45	
Agency				Associate	es	Anaba	:- D-	4-			-	Number of			15	
Analyst		мах	Rusch			Analys			414 D-	-1.	-	Number of			14	
Jurisdiction		0045	100.4			Time F		_	AM Pea	ak	_	Number of			15	
File Name		_	ACPA			Analys			2045		-	System Cy		h, s	100	
Intersections		25 1/	2 Road	1 & Patter	son	1st Stre	eet &	Patter	son			Analysis P	eriod		1>	7:00
Project Desc	cription		_				_	_			_			_		
2551 40 m	$\overline{}$	5		2538 ft 40 mph		6		2613 35 m		— (7)-	2558 35 m		_(8	-
Basic Segm	ent Informatio	on (25	5 1/2 R	d - 26 Rd)											
Segment	Speed Limi	t T	Throug	h Lanes	Segmen	t Length	Inte	rsectio	n Wid	Length	of RM	Percer	nt Curb	Ot	her	Delay
	WB EE	3	WB	EB	WB	EB	W	В	EB	WB	EB	WB	EB	W	3	EB
6	35 40)	2	2	2613	2613	50	0	50	0	0	90	90	0.0)	0.0
							_		oound		\dashv		Eastbo	_		
Segment O	_					WBL	-	-	ВТ	WBR	4	EBL	EBT			EBR
Segment	Movement				5	_		2	12	\dashv	11	6	_		16	
6	Bay/Lane Spi		_				_				_			_		
6	Shared Lane										_					
6	Base Free-Flo	ow Sp	eed, m	ıph				40.	.98				43.33	3		
6	Running Time	e, s						45.	.74				44.08	3		
6	Running Spec	ed, mp	ph					38.	.95				40.42	2		
6	Through Dela	ıy, s/ve	eh					27.	.77				17.1	1		
6	Travel Time, s	S						73.	.50				61.19	9		
6	Travel Speed	, mph						24.	24		\Box		29.12	2		
6	Stop Rate, sto	ops/ve	eh					0.0	67		т		0.43			
6	Spatial Stop F	Rate, s	stops/n	ni				1.3	36		\neg		0.87			
6	Through vol/o	ap Ra	atio					0.5	51				0.69	1		
6	Percent of Ba	se FF	S					59.	.14		\neg		67.19	9		
6	Level of Servi	ice						(:		\neg		В			
6	Auto Traveler		eption (Score				2.3	35		\neg		2.27			
Multimodal	Results (Segr	nent)	-													
6	Pedestrian Se	_		Score / L	os		2.90		\top	С	\neg	3.00			C	;
6	Bicycle Segm	_					2.66			В	\rightarrow	2.80			С	;
6	Transit Segm						1.34		\neg	Α	\neg	1.08		$\overline{}$	Α	
Facility Out	put Data							West	oound				Eastbo	und		
Facility Trav	el Time, s							784	.82				800.4	2		
Facility Trav	el Speed, mph							27.	.36		\top		26.83	3		
Facility Base	Free Flow Sp	eed, n	nph					43.	.04		Т		42.7	7		
Facility Perc	ent of Base FF	S						63.	.57				62.72	2		
Facility Leve	l of Service							C					С			
Facility Auto	Traveler Perce	eption	Score					2.3	32				2.29	1		
M/#: 1 1	Describe (E	E4 1														
	Results (Facil		000				0.00		-		_				_	
	acility LOS Sc						3.20		-	С	\dashv	3.21		_	<u>C</u>	
	lity LOS Score						2.76		-	С	4	2.73			С	
Transit Facil	ity LOS Score	LOS					1.13			A		1.08		\Box	A	1

				шс	S7 Urb	an Str	oot	San.	ment	Denort					_	
				пс	S/ UIL	an Su	CCL	Seg	HEHL	Keport		_	_			
General Inf	ormation	01.15									-	Streets Inf			les	
Agency		_		Associate	es .	1					_	Number of			15	
Analyst		Max R	usch			Analys						Number of			14	
Jurisdiction		_				Time F			AM Pea	ak		Number of			15	
File Name		2045 A				Analys			2045			System Cy		h, s	100	
Intersections		1st Str	reet & I	Patterso	n	7th Str	eet &	Patte	rson			Analysis P	eriod		1>	7:00
Project Des	cription						_				_			_		
2538 40 m		6		2613 ft 35 mph		7		255 35 n		— (:)-	2570 40 m		_(9	-
Basic Segn	ent Informatio															
Segment	Speed Limit			Lanes	Segmen		-	_	on Wid	Length			nt Curb			Delay
	WB EE	_	NΒ	EB	WB	EB	W	В	EB	WB	EB	WB	EB	WE	3	EB
7	35 40		2	2	2558	2558	5	0	50	0	0	90	90	0.0)	0.0
							_	_	bound		-	501	Eastbo			
Segment O	_					WBL	-	_	/BT	WBR	-	EBL	EBT	-		EBR
Segment	Movement				5	_	_	2	12	-	1	6	-	_	16	
7	Bay/Lane Spi		_								4			_		
7	Shared Lane							oxdot			\rightarrow					
7	Base Free-Fk		ed, mp	oh					.40		_		42.7			
7	Running Time							45	.60		4		43.48	3		
7	Running Spee	ed, mph	h					38	.24		_		40.12			
7	Through Dela		h					19	.06				28.3	5		
7	Travel Time, s							64	.67				71.83	3		
7	Travel Speed	, mph						26	.97		\perp		24.28	3		
7	Stop Rate, sto	ps/veh	1					0.	.50				0.59	1		
7	Spatial Stop F	Rate, st	tops/mi	i				1.	.04				1.22			
7	Through vol/c	ap Rati	io					0.	43				0.76			
7	Percent of Ba	se FFS	3					66	.77				56.8	1		
7	Level of Servi	ce						(С				С			
7	Auto Traveler	Percep	ption S	core				2.	30				2.32			
Multimodal	Results (Segn	nent)														
7	Pedestrian Se	egment	LOS	Score / L	os		2.68			В		3.01			С	;
7	Bicycle Segm	ent LO	S Scor	re / LOS			2.68			В		2.76			С	,
7	Transit Segm	ent LOS	S Scor	e / LOS			1.15			Α		1.39	1		A	l .
Facility Out									bound		-		Eastbo		_	
Facility Trav									4.82		-		800.4			
	el Speed, mph								.36		-		26.83			
	Free Flow Sp		ph						.04		4		42.7			
	ent of Base FF	S							.57		_		62.72	2		
Facility Leve									<u>c</u>		_		С			
Facility Auto	Traveler Perce	ption S	Score					2.	.32				2.29			
Multimodal	Results (Facil	itv\														
	acility LOS Sc		ns.				3.20		_	С	$\overline{}$	3.21			C	
	lity LOS Score		-				2.76			C	-	2.73			- 0	
	ity LOS Score						1.13		+	A	-	1.08			A	
Transit Facil	ity LOS Stole /	LUS					1.13			^		1.08			<i>P</i>	1

				шс	S7 Urk	on Ctr	oot	eoa	mont	Donort	_				_	
				п	.37 UIL	Jan Su	CCL	Seg	mem	Keport		_	_			
General Inf	ormation	01.15	-								-	Streets Inf			les	
Agency		-		Associate	es	1					_	Number of			15	
Analyst		Max	Rusch			Analys						Number of			14	
Jurisdiction		-				Time F			AM Pe	ak		Number of			15	
File Name		_	ACP A			Analys			2045			System Cy		h, s	10	
Intersections		7th S	treet &	Patterso	n	12th St	treet	& Patt	erson			Analysis P	eriod		1>	7:00
Project Des	cription						_				_			_		
2613 35 m		7)-		2558 ft 35 mph		8		257 40 r		— (9)-	1257 40 m		_(1	0)——
	ent Informati															
Segment	Speed Limi			h Lanes	Segmen		-	_	on Wid	Length			nt Curb			Delay
	WB E	3	WB	EB	WB	EB	W	/B	EB	WB	EB	WB	EB	WE	3	EB
8	40 35	5	2	2	2570	2570	5	0	50	0	0	90	90	0.0)	0.0
							_	_	bound		\rightarrow		Eastbo			
Segment O	_					WBL	L		VBT	WBR	_	EBL	EBT			EBR
Segment	Movement				5	_		2	12	_	11	6	-		16	
8	Bay/Lane Spi										4			_		
8	Shared Lane							<u> </u>			4					
8	Base Free-Fl	ow Sp	eed, m	ph				43	8.08				40.73	3		
8	Running Time	e, s						43	3.32				45.4	5		
8	Running Spe	ed, mp	ph					40	.45				38.5	5		
8	Through Dela	ıy, s/ve	eh					31	.46				27.8	1		
8	Travel Time,	S						74	.78				73.26	3		
8	Travel Speed	, mph						23	.43				23.92	2		
8	Stop Rate, st	ops/ve	eh					0.	.67				0.72			
8	Spatial Stop I	Rate, s	stops/m	ni				1.	.38				1.48			
8	Through vol/o	ap Ra	atio					0.	.70				0.46			
8	Percent of Ba	se FF	S					54	.39		\top		58.72	2		
8	Level of Serv	ice							С				С			
8	Auto Traveler	Perce	eption S	Score				2	.35		\top		2.36			
Multimodal	Results (Segi	nent)														
8	Pedestrian S	egmen	nt LOS	Score / L	os		2.90			С		2.65			В	3
8	Bicycle Segm	ent LC	OS Sco	re / LOS			2.79			С		2.64			В	}
8	Transit Segm	ent LC	OS Sco	re / LOS			1.46			Α	\perp	1.38			A	1
Facility Out	nut Data							Woet	bound		7		Eastbo	und		
Facility Trav									4.82		-		800.4		_	
	el Speed, mph							.36		-		26.83				
	Free Flow Sp		nnh				_		3.04		-		42.7		_	
	ent of Base FF		прп						3.57		-		62.72			
Facility Leve		3							C		-		02.72 C	_		
	Traveler Perce	eption	Score						.32		+		2.29)		
													2.20			
Multimodal	Results (Faci	lity)														
Pedestrian F	acility LOS Sc	ore / L	OS				3.20			С		3.21			C	;
Bicycle Faci	lity LOS Score	/LOS					2.76			С		2.73			C	;
Transit Facil	ity LOS Score	/LOS					1.13			Α		1.08			A	1

				НС	S7 Urb	oan Str	eet	Segi	ment	Report	1					
General Inf	ormation											Streets In	formation	1		
Agency		Sto	olfus and	Associate	es							Number of	Intersecti	ons	15	
Analyst		Ma	x Rusch			Analys	sis Da	ate			_	Number of			14	
Jurisdiction						Time F	Perio	d	AM Pe	ak		Number of	Iterations	<u> </u>	15	
File Name			45 ACP A			Analys	sis Ye	ar	2045			System Cy	cle Lengt	h, s	100)
Intersections	3	121	th Street	& Patters	on	Patters	on R	d & 15	th St		,	Analysis P	eriod		1>	7:00
Project Des	cription															
2558 35 m		8)—	2570 ft 40 mph		9-		125 40 n		<u></u>	<u>) </u>	1355 40 m		-(1	11)	
Basic Segn	ont Infor	mation (12th St	27 1/4 P	d)											
Segment	Speed			h Lanes	Segmen	t Length	Into	ersection	n Mid	Length	of DM	Doroca	nt Curb	01	her I	Delay
Segment	WB	EB	WB	EB	WB	EB	_	/B	EB	WB	EB	WB	EB	WE	_	EB
9	40	35	2	2	1257	1257		0	50	0	0	90	90	0.0	\rightarrow	0.0
9	40	33		2	1231	1231	,		30	U	-	30	90	U.C		0.0
								West	bound		\top		Eastbo	und		
Segment O	utput Data	a .				WBL		W	/BT	WBF	2	EBL	EBT	- 1	F	EBR
Segment	Moveme					5			2	12	_	1	6	\neg		16
9	Bay/Lane		ck Time.	h					_					\rightarrow		
9	Shared L	_									_			_		
9	Base Fre			-				42	.61		_		40.20	6		
9	Running		opood, iii	P					.36		_		24.4			
9	Running		mnh						.68		_		35.11			
9	Through								57		_		36.8			
9	Travel Ti								.93		_		61.28			
9	Travel Sp		nh						.38		_		13.98			
9	Stop Rat								05		_		0.84			
9	Spatial S	-		ni					23		_		3.55			
9	Through	_		"					38		_		0.57			
9	Percent						_		.68		_		34.73			
9	Level of		113								_		54.7.	,		
9	Auto Tra		reention (2coro					A 17		_		2.71		_	
Multimodal				ocore				2.	17		_		2.11			
9	Pedestria		-	Score / I	OS		2.79		_	С	$\overline{}$	3.33	1	_	С	
9	Bicycle S						2.82		-	C	_	2.70		-	В	
9	Transit S						0.71		_	A	_	2.34		-	В	
	Transit 6	- Janeara	200 000									2.0				
Facility Out	put Data							West	bound				Eastbo	und		
Facility Trav	el Time, s							784	1.82				800.4	2		
Facility Trav	el Speed, i	mph						27	.36				26.83	3		
Facility Base	Free Flov	w Speed	, mph					43	.04				42.7	7		
Facility Perc	ent of Bas	e FFS						63	.57				62.72	2		
Facility Leve	of Servic	e						(С				С			
Facility Auto	Traveler F	Perception	on Score					2.	32				2.29			
Multimodal	Resulte /	Facility\														
Pedestrian F							3.20		_	С		3.21			С	
							2.76			C	-	2.73			C	
Bicycle Faci Transit Facil	-								-		-					
Transit Facil	ity LUS SC	Joie / LC	<i>1</i> 3				1.13			A		1.08	•		A	

				н	S7 Urb	oan Str	eet S	Segn	nent	Report						
General Inf	ormation											Streets In	formation	1		
Agency		Stol	lfus and	Associate	es							Number of	Intersect	ions	15	
Analyst		Max	x Rusch			Analys	sis Dat	e			$\neg \neg$	Number of	Segment	s	14	
Jurisdiction						Time F	eriod		AM Pea	ak		Number of	Iterations	6	15	
File Name		204	5 ACP A	M.xus		Analys	sis Yea	ır 2	2045			System Cy	cle Lengt	h, s	100	5
Intersections	S	Patt	terson F	Rd & 15th	St	27 1/2	Road &	& Patte	erson			Analysis P	eriod		1>	7:00
Project Des	cription	\neg														
2570 40 m	-	9)——	1257 ft 40 mph		10		1355 40 mj		(1) -	3877 45 m		_(1	2	
	nent Informa															
Segment	Speed Lir	-		h Lanes	Segmen		_	section		Length		_	nt Curb		_	Delay
	WB E	EB	WB	EB	WB	EB	WB	3	EB	WB	EB	WB	EB	W	3	EB
10	40	40	2	2	1355	1355	50		50	0	0	70	70	0.0)	0.0
								Westb			\rightarrow		Eastbo		_	
Segment O	_					WBI	-	WE	ВТ	WBR		EBL	EBT		-	EBR
Segment	Movement					1	\rightarrow	6	j	16	_	5	2	_		12
10	Bay/Lane S	_												_		
10	Shared Lan	e Spill	lback Tir	ne, h										\perp		
10	Base Free-I	Flow S	Speed, n	ıph				44.0	07				44.0	7		
10	Running Tin	ne, s						24.2	25				24.2	2		
10	Running Sp	eed, n	nph					38.1	10				38.1	5		
10	Through De	elay, s/	veh					20.4	49				2.04			
10	Travel Time	e, s						44.7	74				26.2	6		
10	Travel Spee	ed, mp	h					20.6	65				35.1	В		
10	Stop Rate,	stops/\	veh					0.5	5		\neg		0.08	1		
10	Spatial Stop	Rate,	, stops/r	ni				2.1	4		$\neg \vdash$		0.31			
10	Through vol	I/cap F	Ratio					0.5	6				0.28			
10	Percent of E	Base F	FS					46.8	86				79.8	4		
10	Level of Ser	rvice						D)				В			
10	Auto Travel	er Per	ception	Score				2.7	0		$\neg \vdash$		2.19			
Multimodal	Results (Se	gment	t)													
10	Pedestrian	Segme	ent LOS	Score / L	os		3.57		\top	D		3.56	5		D	
10	Bicycle Seg	ment I	LOS Sc	ore / LOS			2.84			С		2.68	}		В	
10	Transit Seg	ment L	LOS Sco	ore / LOS			1.70			Α		0.65	5		Α	
Facility Out	tput Data						١	Westb	ound				Eastbo	und		
Facility Trav	el Time, s							784.	.82				800.4	2		
Facility Trav	el Speed, mp	h						27.3	36				26.83	3		
Facility Base	e Free Flow S	Speed,	mph					43.0	04				42.7	7		
Facility Pero	ent of Base F	FFS						63.5	57				62.7	2		
Facility Leve	el of Service							С	;				С			
Facility Auto	Traveler Per	ceptio	n Score					2.3	32				2.29)		
	Results (Fac								_							
	Facility LOS S						3.20		+	С		3.21		_	С	
	lity LOS Scor						2.76		-	С	_	2.73			С	
Transit Faci	lity LOS Score	e / LO	S				1.13			Α		1.08	1		A	ı

				ш	S7 Urk	an Str	oot	Sagr	ment	Denort					_	
		_	_		,37 OIL	Jan Su	CCL	Segi	Helit	Keport	_			_		
General Inf	ormation	lo4-16		A i - 4							_	Streets Int			45	
Agency		-		Associate	es	1						Number of			15	
Analyst		мах	Rusch			Analys					_	Number of			14	
Jurisdiction		-				Time F			AM Pea	ak		Number of			15	
File Name		-	ACP A			Analys			2045			System Cy		h, s	100	
Intersection		27 1	/2 Road	d & Patter	son	28 1/4	Road	& Pat	terson			Analysis P	eriod		1>	7:00
Project Des	cription	_														
1257 40 m		10		1355 ft 40 mph		11		387 45 m		— (12)-	3813 45 m		_(1	3	-
Basic Segn	nent Informati	on (2	7 1/2 R	D - 28 1/	4 RD)											
Segment	Speed Limi	it	_	h Lanes	Segmen	t Length	Inte	ersectio	n Wid	Length	of RM	Percer	nt Curb	Ot	her	Delay
	WB E	В	WB	EB	WB	EB	W	/B	EB	WB	EB	WB	EB	WE	3	EB
11	45 40	0	2	2	3877	3877	5	0	50	0	0	90	90	0.0)	0.0
							_		bound		\rightarrow		Eastbo			
Segment O						WBL	-	_	ВТ	WBR	_	EBL	EBT			EBR
Segment	Movement						_		2	12	\rightarrow	11	6	\rightarrow		
11	Bay/Lane Spi										_			_		
11	Shared Lane										4					
11	Base Free-Fl		peed, n	nph				45	.57				43.2	2		
11	Running Time	e, s						60	.87				63.0	4		
11	Running Spe	ed, m	ph					43	.43				41.93	3		
11	Through Dela	ay, s/v	reh					22	.73				7.12			
11	Travel Time,	s						83	.60				70.10	3		
11	Travel Speed	l, mph	1					31	.62				37.6	3		
11	Stop Rate, st	ops/v	eh					0.	62				0.24			
11	Spatial Stop I	Rate,	stops/r	ni				0.	84				0.33			
11	Through vol/o	cap R	atio					0.	55				0.25			
11	Percent of Ba	ase FF	FS					69	.38				87.10	6		
11	Level of Serv	ice						E	3				Α			
11	Auto Traveler	r Perc	eption	Score				2.	37		\neg		2.19			
Multimodal	Results (Segi	ment))													
11	Pedestrian S	egme	nt LOS	Score / L	OS		3.86			D		2.93			С	
11	Bicycle Segm	nent L	OS Sc	ore / LOS			2.90			С		2.60			В	i
11	Transit Segm	ent L	OS Sco	ore / LOS			0.91			Α		0.47	•		Α	
Facility Out									bound		4		Eastbo			
Facility Trav									.82		\rightarrow		800.4			
	el Speed, mph								.36		4		26.83			
	Free Flow Sp		mph						.04		_		42.7			
	ent of Base FF	S							.57				62.7	2		
Facility Leve													С			
Facility Auto	Traveler Perce	eption	Score					2.	32				2.29			
Multimodal	Results (Faci	litv\														
	Facility LOS Sc		108				3.20		_	С	_	3.21			C	
	lity LOS Score						2.76		+	C	-					
	lity LOS Score								-		-	2.73			C	
Transit Faci	ity LOS SCORE	LUS					1.13			Α		1.08	<u> </u>		Α	Ł.

				НС	S7 Urb	an Str	eet	Seg	ment	Report	t				
General Inf	ormation											Streets In	formation	1	
Agency		Sto	olfus and	Associate	es						1	Number of	Intersect	ions	15
Analyst		Ma	ax Rusch			Analys	sis Da	ate			1	Number of	Segment	S	14
Jurisdiction						Time F	Period	d	AM Pea	ak	1	Number of	Iterations	5	15
File Name		20	45 ACP A	M.xus		Analys	sis Ye	аг	2045			System Cy	cle Lengt	h, s	100
Intersections	S	28	1/4 Road	1 & Patter	son	29 Roa	ad & F	Patters	son			Analysis P	eriod		1> 7:00
Project Des	cription														
1355 40 m		11)—	3877 ft 45 mph		12			13 ft mph	<u>_</u> (1	<u>3</u>)—	2583 45 m		1	
Basic Segn	nent Infor	mation	(28 1/4 R	d - 20 Rd	,										
Segment	Speed			u - 29 Ku h Lanes	Segmen	t I enath	Into	reacti	on Wid	Length	of DM	Porce	nt Curb	Ott	ner Delay
Segment	WB	EB	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	WB	_
12	45	40	2	2	3813	3813	5	\rightarrow	50	0	0	90	90	0.0	
12	45	40			3013	3013	3	U	30	U	U	90	90	0.0	0.0
								West	tbound				Eastbo	und	
Segment O	utput Data	a				WBI	L	_	VBT	WBF	2	EBL	EBT	_	EBR
Segment	Moveme					5			2	12		1	6	\neg	16
12	_		ick Time,	h					_					\rightarrow	
12		_	illback Tin					_			_			_	
12			Speed, m					4!	5.78				43.43	3	
12	Running								9.75		_		61.70		
12	Running								3.51		-		42.09		
12	Through								2.99		_		17.5		
12	Travel Ti		W V CIT						2.74				79.3		
12	Travel S	-	nh						1.42		_		32.7		
12	Stop Rat								.49				0.41		
12			e, stops/n	ni					.68		_		0.57		
12	Through								.80		_		0.39		
12	Percent								3.64		_		75.4		
12	Level of								B		_		В		
12			rception	Score					.24		_		2.22	,	
Multimodal				ocoic					.24		_		2.22		
12		_	nent LOS	Score / I	os		3.56		$\overline{}$	D		2.91			С
12			LOS Sco				2.93		_	С	-	2.62			В
12		_	LOS Sco				0.95		_	A		0.75			A
12	Trainsit C	regiment	200 000	107 200			0.00					0.70			^
Facility Out	tput Data							West	tbound		\neg		Eastbo	und	
Facility Trav	el Time, s							78	4.82				800.4	2	
Facility Trav	el Speed,	mph						27	7.36				26.83	3	
Facility Base			l, mph						3.04				42.7		
Facility Perc								63	3.57				62.7	2	
Facility Leve									С				С		
Facility Auto			on Score						.32				2.29)	
Multimodal															
Pedestrian F							3.20			С		3.21			С
Bicycle Faci							2.76			С		2.73			С
Transit Facil	lity LOS S	core / LC	os				1.13			Α		1.08	3		Α

				ш	S7 Urk	an Str	eet '	Sear	ment	Penort					_	
		_	_	п	,37 OIL	Jan Su	CCL .	Segi	HEHL	Keport	_			_		
Company												Ctoo oto loc				
General Inf	ormation	Ctol	fue and	Associate							-	Streets Int Number of			15	
Agency		-			es	I Amelia	:- D-	4- 1			-				•	
Analyst		мах	Rusch	1		Analys			A14 D-	-1.	-	Number of			14	
Jurisdiction		004	5 4 O D			Time F		\rightarrow	AM Pea	ак	_	Number of			15	
File Name		-	5 ACP			Analys			2045		-	System Cy		h, s	100	
Intersection		29 F	Road &	Patterson		29 1/2	Road	& Patt	terson			Analysis P	eriod		1>	7:00
Project Des	cription	_	_				_	_	_		_			_		
3877 45 m		12		3813 ft 45 mph		13		2583 45 m)-	2582 35 m		-(1	5	l
	nent Informati						_							_		
Segment	Speed Lim	_		h Lanes	Segmen		-	rsectio		Length			nt Curb			Delay
	WB E	_	WB	EB	WB	EB	WI	_	EB	WB	EB	WB	EB	WE	\rightarrow	EB
13	45 49	5	2	2	2583	2583	50	0	50	0	0	90	90	0.0		0.0
											-					
Comment O	utnut Data					WDI			oound	WDD	-	EDI	Eastbo			EDD
Segment O						WBI	-		ВТ	WBR	-	EBL	EBT	\rightarrow		EBR
Segment	Movement					5	-	2	2	12	-	1	6	-		16
13	Bay/Lane Sp		_				-				-			\rightarrow		
13	Shared Lane										-					
13	Base Free-Fl		peed, n	nph				44.			_		44.9			
13	Running Time	_						41.			_		40.4	3		
13	Running Spe		•					42.			_		43.5			
13	Through Dela		veh					13.	.34		_		22.1	5		
13	Travel Time,							54.	93				62.63	3		
13	Travel Speed	i, mpi	h					32.	.06				28.12	2		
13	Stop Rate, st	ops/v	/eh					0.4	40				0.56			
13	Spatial Stop	Rate,	stops/r	mi				9.0	32				1.14			
13	Through vol/	cap R	Ratio					0.6	64				0.35			
13	Percent of Ba	ase F	FS					71.	34				62.5	7		
13	Level of Serv	rice						Е	3				С			
13	Auto Travele	r Perd	ception	Score				2.2	26				2.31			
Multimodal	Results (Segi	ment)													
13	Pedestrian S	egme	ent LOS	Score / L	.os		3.59			D		3.37	'		С	;
13	Bicycle Segm	nent L	OS Sc	ore / LOS			3.02			С		2.71			В	
13	Transit Segm	ent L	OS Sc	ore / LOS			0.98			Α		1.09			Α	
Facility Out									oound		4		Eastbo			
Facility Trav								784			\rightarrow		800.4			
	el Speed, mph							27.			4		26.83			
	Free Flow Sp		mph					43.			_		42.7			
	ent of Base FF	S						63.					62.7	2		
Facility Leve											_		С			
Facility Auto	Traveler Perce	eptior	n Score					2.3	32				2.29			
Multimodal	Results (Faci	lity														
			100				3.20		_	С		3.21			С	
	Facility LOS So										-			-		
	lity LOS Score						2.76		-	C	+	2.73			<u>C</u>	
Transit Faci	ity LOS Score	/ LUS					1.13			Α		1.08	1		A	

			шс	S7 Urk	an Str	oot	Soan	aent	Danor						
			п	,3/ UIL	an Su	eel	Segn	lent	Kepoi						
General Inf	ormation										Streets In	formation			
Agency		Stolfus and	Associate	26						-	Number of		_	15	
Analyst		Max Rusch	Associate		Analys	ie Da	ato				Number of			14	
Jurisdiction		WIAX INUSCII			Time F			AM Pe	ak	-	Number of			15	
File Name		2045 ACP A	M YUS		Analys		\rightarrow	2045	an	-	System Cy			10	
Intersection		29 1/2 Road		son			Patterso				Analysis P		11, 5	-	7:00
Project Des				-	001100						, many one i			-	7.50
3813 45 m	(1	3	2583 ft 45 mph	-	14		2582 35 mj		<u> </u> (5					
	nent Informatio					_								_	
Segment	Speed Limit		h Lanes	Segmen		-	rsection			of RM	_	nt Curb	_		Delay
44	WB EB	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	W		EB
14	35 45	2	2	2582	2582	5	0	50	0	0	90	90	0.	U	0.0
							Westb	ound		\neg		Eastbo	und		
Segment O	utput Data				WBI		WE	3T	WBI	₹	EBL	EB1			EBR
Segment	Movement				5		2		12	\neg	1	6	$\overline{}$		16
14	Bay/Lane Spill	back Time,	h												
14	Shared Lane S									\neg			$\overline{}$		
14	Base Free-Flo	•	_				40.8	31		\rightarrow		45.5	1		
14	Running Time,						46.4	19		\neg		40.3	1		
14	Running Spee						37.8			\rightarrow		43.6			
14	Through Delay						14.8	35		\neg		12.1	4		
14	Travel Time, s						61.3	35		\rightarrow		52.4	5		
14	Travel Speed,	mph					28.7			\neg		33.5			
14	Stop Rate, sto	•					0.3			\rightarrow		0.36	5		
14	Spatial Stop R		ni				0.7			\neg		0.74			
14	Through vol/ca						0.7			\rightarrow		0.28	3		
14	Percent of Bas	•					70.3			\neg		73.7			
14	Level of Service						В			\rightarrow		В			
14	Auto Traveler		Score				2.2			\neg		2.25	,		
Multimodal	Results (Segm									_					
14	Pedestrian Se		Score / L	os		3.63		\top	D	$\neg \tau$	2.97	,		(2
14	Bicycle Segme	ent LOS Sco	ore / LOS			2.91			С	\neg	2.62	2		E	3
14	Transit Segme	nt LOS Sco	re / LOS			1.13			Α		0.71			-	4
Facility Ou	tnut Data						Westb	ound				Eastbo	und		
Facility Trav							784.			-		800.4		_	
	el Speed, mph						27.3			_		26.8			
	e Free Flow Spe	ed mnh					43.0			-		42.7		_	
	ent of Base FFS						63.5			-		62.7			
	el of Service						C			\rightarrow		C			
	Traveler Perce	otion Score					2.3			+		2.29)		
	Results (Facili														
	Facility LOS Sco					3.20			С		3.21				
	lity LOS Score /					2.76			С		2.73			(
T 2 - 1	ib. LOC Coore /					4 42					4.00			-	

Transit Facility LOS Score / LOS

1.13

1.08

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.91 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2045 Analysis Period 1> 7:00 24 Road & Patterson 2045 ACP PM.xus Intersection File Name Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L 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 85 Reference Point Offset, s Begin Green 12.8 5.3 19.1 7.2 2.8 26.8 Uncoordinated No Simult, Gap E/W On Yellow 3.5 3.5 4.0 3.5 3.5 4.0 Force Mode 0.5 1.0 Fixed Simult. Gap N/S On Red 0.5 0.5 10 0.5 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 5.0 5.0 4.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 4.0 Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 52 52 52 52 Queue Clearance Time (gs), s 10.8 19.9 4.2 24.4 16.0 29.6 Green Extension Time (ge), s 2.0 0.0 22 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 0.06 1 00 1 00 1.00 Max Out Probability 0.78 0.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 379 582 618 641 359 395 58 814 375 513 1029 49 Adjusted Flow Rate (v), veh/h 1675 1752 1738 1810 1738 1585 1730 1517 Adjusted Saturation Flow Rate (s), veh/h/ln 1716 1752 8.8 16.1 17.9 8.3 2.2 22.4 15.8 14.0 27.6 2.2 Queue Service Time (g s), s 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) 0.19 0.22 0.28 0.27 0.14 0.34 0.32 0.34 0.49 0.34 Capacity (c), veh/h 823 670 759 988 224 931 775 484 1176 509 0.461 0.870 0.844 0.364 0.261 0.875 0.484 1.060 0.875 0.097 Volume-to-Capacity Ratio (X) 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 0.00 0.29 0.00 1.09 2.36 0.00 0.51 1.16 Uniform Delay (d 1), s/veh 29.3 39.5 37.3 286 25.4 35 0 17 1 43 0 31 2 228 0.7 Incremental Delay (d 2), s/veh 0.6 14.4 6.3 0.9 0.9 9.5 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) С n С С D D D В С Α Α 27.0 C 27.6 C 35.6 58.3 Approach Delay, s/veh / LOS D F Intersection Delay, s/veh / LOS 37.6 D Multimodal Results WB Pedestrian LOS Score / LOS 2.45 В 2.58 С 2.58 С 2.58 С Bicycle LOS Score / LOS 0.97 Α 1.64 1.52 В 1.80 В

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ılts	Sun	nmar	y				
General Inform	nation								Inte	ersect	ion Inf	ormatic	n	- 6	474	a L
Agency		Stolfus and Associa	ites						Dura	ation,	h	0.250		-		- T
Analyst		Max Rusch		Analys	is Dat	е			Area	а Туре	•	Other		<u>-</u> -^		`- E
Jurisdiction				Time F	eriod	PM P	eak		PHF	F		0.83		÷	m t	* E
Urban Street		Patterson Rd		Analys	is Yea	r 2045			Ana	alysis F	eriod	1> 7:0	00	2		
Intersection		Market Street/Mall /	Acce	File Na	ame	2045	ACP PN	1.xus							11	
Project Descrip	tion													ħ	N I PY	Mu
Demand Inform	nation				EB			W	/B			NB			SB	
Approach Move					T	R	1	_	ĒΤ	R		T	R	1	T	R
Demand (v), v				159	732		31	-	05	336	124	82	34	315	28	257
Bemana (V), V	CIBII			100	102	177				330	124	02	- 51	010	20	201
Signal Informa	tion					$\overline{}$					$\overline{}$	- 100	(A)			
Cycle, s	100.0	Reference Phase	2	1	7 6	13	1		V-04	15.6	7	- 1		4	-	4
Offset, s	14	Reference Point	End	_		27			_	5			1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow		6.6 3.5	29.4 4.0	24 4.		15.6 4.0	0.0		7	→		r4-
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.5	1.0	1.		1.0	0.0		5	6	7	Y
		5														
Timer Results				EBI	. T	EBT	WB	L	WE	вт	NBI	-	NBT	SBL	-	SBT
Assigned Phase	е			5		2	1	\neg	6	5			8		\neg	4
Case Number				1.1		3.0	1.1	\neg	3.0	0			11.0			10.0
Phase Duration	. S			15.9		45.0	5.4	\neg	34.	4			20.6		\neg	29.0
Change Period,		c). S		4.0		5.0	4.0	-	5.0	-			5.0			5.0
Max Allow Head				3.1	$\overline{}$	0.0	3.1	\rightarrow	0.0	_		$\overline{}$	3.3		$\overline{}$	3.4
Queue Clearan				11.6		0.0	2.4	\rightarrow					15.1	_		22.2
Green Extensio				0.4		0.0	0.0	_	0.0	0		_	0.5	-	$\overline{}$	1.8
Phase Call Prol		(9-7,0		1.00		0.0	0.27	\rightarrow		_			1.00		-	1.00
Max Out Proba				0.00	_		0.00	\rightarrow		_		-	0.00		_	0.00
max out i ioba	Dility			0.00			0.00						0.00			0.00
Movement Gro	up Res	sults			EB			W	В	\neg		NB			SB	
Approach Move	ement			L	Т	R	L	Т	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			5	2	12	1	6		16	3	8	18	7	4	14
Adjusted Flow F), veh/h		252	1160	223	11	332	2 1	123		248	41	380	343	
Adjusted Satura	ation Flo	ow Rate (s), veh/h/l	n	1711	1766	1610	1810	176	6 1	522		1844	1610	1702	1635	
Queue Service				9.6	24.7	3.3	0.4	3.5	_	1.3		13.1	2.2	9.5	20.2	
Cycle Queue C				9.6	24.7	3.3	0.4	3.5	_	1.3		13.1	2.2	9.5	20.2	
Green Ratio (g		(3-71-		0.43	0.40	0.40	0.31	0.2	_	0.29		0.16	0.16	0.24	0.24	
Capacity (c), v				537	1413	-	162	103	_	448		288	252	818	393	
Volume-to-Capa		ntio (X)		0.469		_	0.070	0.32	_	.276		0.861	0.163	0.464	_	
		/In (90 th percentile))	139.9		_	7.5	51.	_	22.3		206.4	34.8	147.7	263.2	_
		eh/ln (90 th percenti		6.0	8.8	1.9	0.3	2.3		1.0		9.4	1.6	6.5	12.0	
		RQ) (90 th percent	•	0.95	0.00	0.33	0.07	0.0	_	0.21		0.00	0.00	0.00	0.00	
Uniform Delay (20.7	14.9	5.4	25.8	10.	_	4.3		41.1	36.5	32.5	36.5	
Incremental De				0.1	3.0	0.8	0.1	0.8	_	1.5		3.0	0.1	0.2	2.5	
Initial Queue De				0.0	0.0	0.0	0.0	0.0	_	0.0		0.0	0.0	0.0	0.0	
Control Delay (20.8	17.9	6.1	25.9	11.	_	5.8		44.1	36.6	32.6	39.0	
Level of Service				C	В	A	C	В	_	A		D	D	C	D	
Approach Delay				16.7		В	10.3	_	В	_	43.0		D	35.6		D
Intersection De							2.6				10.0			C		
Multimodal Re					EB			W	В			NB			SB	
Pedestrian LOS	Score	/ LOS		1.91		В	2.12	2	В	3	2.47		В	2.45	5	В
Bicycle LOS Sc	ore / LO	OS		1.51		В	1.75	j [В	3	0.96	j	Α	1.68	3	В

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ılts Su	mmar	y				
General Inform	nation								Interse				- 1	4741	5- U.
Agency		Stolfus and Associa	ates						Duration		0.250		2 100		- C
Analyst		Max Rusch		Analys		_			Area Ty	pe	Other				<u>- </u>
Jurisdiction				Time F		PM P	eak		PHF		0.84				-
Urban Street		Patterson Rd		Analys	is Yea	r 2045			Analysis	Period	1> 7:	00	2		
Intersection		Home Depot Acces	s/Me	File Na	ame	2045	ACP PN	1.xus						hite	
Project Descrip	tion							_					1	4144	HI
Demand Inform	nation				EB			W	/B		NB			SB	
Approach Move				T	T	R	1	_	r R	1	T	R	1	T	R
Demand (v), v				85	760	227	130	-	76 65	279	72	249	88	45	127
20										2.0	1				121
Signal Informa	tion				T	Τ.			J	$\overline{}$				T)	-
Cycle, s	100.0	Reference Phase	2		- K		4		11/2	17	_		~		W
Offset, s	81	Reference Point	Begin	Green	5.0	2.1	41.0	15				1	2	3 (1
Uncoordinated	No	Simult. Gap E/W	Off	Yellow		0.0	4.0	4.0		0.0		<u> </u>	χ	١,	Д
Force Mode	Fixed	Simult. Gap N/S	Off	Red	0.5	0.0	1.0	1.0		0.0		5	7 €	7	8
Timer Results				EBL	-	EBT	WB	L	WBT	NB	_	NBT	SBI		SBT
Assigned Phase	e			1	\perp	6	5	4	2	_	_	4	_	_	8
Case Number				1.1	_	3.0	1.1	4	3.0	_	_	9.0	_	_	10.0
Phase Duration				11.0		48.1	9.0	_	46.0	_	_	23.0			20.0
Change Period				4.0	_	5.0	4.0	4	5.0	_	_	5.0	_		5.0
Max Allow Head	dway (I	MAH), s		5.2	\perp	0.0	5.2	_	0.0			5.4			5.5
Queue Clearan				6.6			5.0	\perp				19.4			13.8
Green Extension		(ge), S		0.6	\perp	0.0	0.3		0.0			0.0			1.2
Phase Call Pro	bability			0.98			0.93	3				1.00			1.00
Max Out Proba	bility			0.00			0.01					1.00			0.27
Movement Cre	un Doc	ulto			EB			WE	,		NB			SB	
Approach Move	_	suits		L	T	l R	L	T	R		T	R	-	T	R
				_	_	_	_	_	_	7	4		L	8	-
Assigned Move Adjusted Flow F		· \ voh/h		138	6 1234	16 369	5 96	647	12 7 48	332	86	14 296	105	205	18
		ow Rate (s), veh/h/	ln.	1711	1766	1598	1810	175		1743	1900	1610	1767	1677	\blacksquare
Queue Service				4.6	32.3	21.7	3.0	15.		8.6	3.9	17.4	5.4	11.8	-
Cycle Queue C				4.6	32.3	21.7	3.0	15.	_	8.6	3.9	17.4	5.4	11.8	-
Green Ratio (g		e fille (gr), s		0.48	0.43	0.43	0.46	0.4	_	0.18	0.18	0.23	0.15	0.15	-
Capacity (c), v	_			379	1521	688	190	143	_	626	341	369	266	252	-
Volume-to-Capa		atio (X)		0.364		0.536	0.506	0.45	_	_	0.251		0.394	0.812	
		/In (90 th percentile)	72.7	446.6	_	52.9	225	_	139.4	73.6	258.6	98.6	188.7	
		eh/ln (90 th percent		3.1	19.8	14.8	2.4	9.9		6.3	3.3	11.8	4.4	8.6	
		RQ) (90 th percen	-	0.54	0.00	1.64	0.48	0.0		0.78	0.00	1.18	0.74	0.00	
Uniform Delay				15.8	31.4	34.7	22.3	26.	_	37.2	35.2	36.4	38.4	41.1	
Incremental De				8.0	4.4	2.7	2.8	1.0	_	1.1	0.5	12.7	1.4	9.7	
Initial Queue De				0.0	0.0	0.0	0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	
Control Delay (16.5	35.8	37.4	25.0	27.	_	38.3	35.8	49.1	39.7	50.8	
Level of Service				В	D	D	С	С	С	D	D	D	D	D	
Approach Delay				34.6		С	26.6	_	С	42.5		D	47.0		D
Intersection De						35	5.5						D		
Multimodal Re	sults				EB			WE			NB			SB	
Pedestrian LOS				2.27	_	В	1.91	_	В	2.45	_	В	2.47	-	В
Bicycle LOS So	ore / LC	OS		1.54		В	1.54	1	В	1.67	7	В	1.00)	Α

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ılts Sı	ımmar	у				
General Inform	nation								Interse	ction Inf	ormatio	on		4 44 4	
Agency		Stolfus and Associa	ates						Duratio	n, h	0.250		-	****	
Analyst		Max Rusch		Analys	is Date	е			Area Ty	ре	Other		<u>-</u> -		- 2
Jurisdiction				Time F	eriod	PM P	eak		PHF		0.92		4	m t	==
Urban Street		Patterson Rd		Analys	is Yea	r 2045			Analys	s Period	1> 7:0	00			-
Intersection		24 1/2 Rd & Patters	son	File Na	ame	2045	ACP PN	1.xus						111	
Project Descrip	tion												7	4144	MU
									(B)	_	N.E.				
Demand Inform				.	EB	1 5	+	_	/B	+-	NB	T 5	+ -	SB	
Approach Move				102	T	R 254	L 267	-	T R	_	T	R	L 227	T	R
Demand (v), v	enin			102	670	251	267	1.	35 28	2 254	410	206	227	333	100
Signal Informa	ition					K			Ç.	2			K.		
Cycle, s	100.0	Reference Phase	2		7 6	- 2		T	5	77			~	1	V
Offset, s	6	Reference Point	Begin	Green	9.7	1.9	38.0	7.				1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	4.0	3.				_	я	Κ .	▲Ⅰ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.5	0.				5	₹ .	7	8
Timer Results				EBL		EBT	WB	L	WBT	NB	L	NBT	SBI	_	SBT
Assigned Phase	e			1		6	5	_	2	7		4	3		8
Case Number				1.1	_	3.0	1.1	\rightarrow	3.0	1.1	_	4.0	1.1		3.0
Phase Duration				13.7		43.5	15.7	\rightarrow	45.4	18.	-	29.9	11.0	-	22.5
Change Period				4.0	_	5.5	4.0	\rightarrow	5.5	4.0	_	5.0	4.0	_	5.0
Max Allow Head				5.2	_	0.0	5.2	\rightarrow	0.0	5.2	-	5.2	5.2	-	5.2
Queue Clearan				8.8	+		10.3	\rightarrow		14.	_	19.9	9.0	_	11.6
Green Extension		(ge), S		1.0	_	0.0	1.3	\rightarrow	0.0	0.1	$\overline{}$	5.0	0.0	-	5.3
Phase Call Pro				1.00	\rightarrow		1.00	\rightarrow		1.0		1.00	1.00		1.00
Max Out Proba	DIIITY			0.00		-	0.00		_	1.0	J	0.61	1.00		0.56
Movement Gro	oup Res	sults			EB			W	В		NB		_	SB	
Approach Move	_			L	Т	R	L	T	_	1	T	R	L	T	R
Assigned Move				1	6	16	5	2	\rightarrow	7	4	14	3	8	18
Adjusted Flow I), veh/h		195	1283	_	235	64	_	276	353	317	247	362	109
Adjusted Satura	ation Flo	ow Rate (s), veh/h/	ln	1697	1781	1610	1810	176	6 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 C	learanc	e Time (g ε), 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	0.4	0 0.40	0.34	0.25	0.25	0.25	0.18	0.18
Capacity (c), v	/eh/h			383	1352	611	294	141	0 638	398	461	409	234	609	244
Volume-to-Cap	acity Ra	ntio (X)		0.510	0.949	0.786	0.799	0.45	9 0.38	0.693	0.765	0.774	1.056	0.595	0.445
Back of Queue	(Q), ft	/In (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
		eh/In (90 th percent	_	4.7	17.7	7.5	6.9	8.3		8.6	12.2	11.3	10.8	6.7	4.4
		RQ) (90 th percen	tile)	0.82	0.00	0.75	1.16	0.0	_	_	0.00	0.00	1.83	0.00	0.00
Uniform Delay				17.1	21.6	12.5	28.2	21.		_	34.9	35.0	38.5	38.0	36.9
Incremental De				1.3	13.7	8.8	6.4	1.0	_	5.4	5.9	7.1	74.6	1.3	1.8
Initial Queue De		••		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (18.4	35.3	21.3	34.6	22.	$\overline{}$	_	40.8	42.0	113.0	39.3	38.7
Level of Service				B 20.2	D	С	C 22.4	C		C	D	D	F	D	D
Approach Delay				30.2		C	23.1		С	38.		D	64.6)	E
Intersection De	iay, s/ve	en / LOS				38	5.4			4			D		
Multimodal Re	sulte				EB			W	В		NB			SB	
Pedestrian LOS		/LOS		2.28	_	В	2.43	_	В	2.4		В	2.45	_	В
Bicycle LOS Sc				1.40	_	A	1.64	_	В	1.2	-	A	1.08	_	A

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ılts Su	mmar	У				
General Inform	nation								Interse	tion Inf	ormatic	on		111	ie l
Agency		Stolfus and Associa	ates						Duration	ı, h	0.250		-	***	
Analyst		Max Rusch		Analys	is Date	е			Area Ty	pe	Other		<u>-</u> -		- -∰
Jurisdiction				Time F	eriod	PM P	eak		PHF		0.87		4	#ļr	
Urban Street		Patterson Rd		Analys	is Yea	r 2045			Analysis	Period	1> 7:	00			-
Intersection		25 Road & Patterso	on	File Na	ame	2045	ACP PN	1.xus						110	
Project Descrip	tion												T T	4144	H]rī
									_						
Demand Inform					EB	T =	+	W		+ -	NB	1 5	+	SB	
Approach Move				L	T	R	L	_	T R	L	T	R	L	T	R
Demand (v), v	eh/h			66	921	181	281	90	05 147	223	338	257	218	317	110
Signal Informa	tion					_			L.	145			K		_
Cycle, s	100.0	Reference Phase	2		-× "		1	₹.		75 15		_	7		V
Offset, s	45	Reference Point	Begin		7	- 2					î"	1	2	3	. 1
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow		6.0 3.5	30.0 4.5	6.0 3.5		22.0 4.0		_	_	K .	\mathbf{A}
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.5	1.5	0.9		1.0			♦ 。] ₇ [
T OFCC MODE	TIXCU	Cilitate: Cap 1470	OII	1100	0.0		1.0		0.0	1.0					
Timer Results				EBL		EBT	WB	L	WBT	NBI	L	NBT	SBI		SBT
Assigned Phase	e			1		6	5	\neg	2	7		4	3	\neg	8
Case Number				1.1		3.0	1.1	\neg	3.0	1.1		3.0	1.1	\neg	3.0
Phase Duration	ı, s			20.0		46.0	10.0	7	36.0	17.0		34.0	10.0		27.0
Change Period,		ε), S		4.0		6.0	4.0		6.0	4.0		5.0	4.0		5.0
Max Allow Head	dway (/	MAH), s		5.2	\neg	0.0	5.2		0.0	5.2		5.2	5.2	\neg	5.2
Queue Clearan				4.9			8.0			12.8	3	21.4	8.0		21.6
Green Extensio				0.3	\neg	0.0	0.0	\neg	0.0	0.0		4.1	0.0	\neg	0.2
Phase Call Prol				1.00			1.00	1		1.00		1.00	1.00)	1.00
Max Out Proba	bility			0.02			1.00	7		1.00		0.80	1.00		1.00
Movement Gro	_	sults		_	EB		_	WE		_	NB		_	SB	
Approach Move				L	Т	R	L	I	R	<u> </u>	T	R	L	T	R
Assigned Move				1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F				107	1498	294	218	701	_	256	389	278	251	364	126
		ow Rate (s), veh/h/	in	1753	1781	1585	1795	179	_	1753	1811	1610	1795	1811	1585
Queue Service				2.9	40.0	10.6	6.0	17.	_	10.8	19.4	13.6	6.0	19.6	6.8
Cycle Queue C		e Time (gε), s		2.9	40.0	10.6	6.0	17.	_	10.8	19.4	13.6	6.0	19.6	6.8
Green Ratio (g	_			0.48	0.40	0.40	0.36	0.3	_	0.37	0.29	0.35	0.28	0.22	0.22
Capacity (c), v				433	1424	634	180	107	_	321	525	564	239	398	349
Volume-to-Capa			,	0.248		-	1.210	0.65	_	_	_		1.050	0.914	0.363
		/In (90 th percentile		46.9	629.5	_	298.7	256.		206.3	311.2		252.5	367.2	111.4
		eh/In (90 th percent RQ) (90 th percen	_	2.1 0.26	28.2 0.00	5.5 0.77	13.5 1.69	0.0		9.1 0.93	13.5 0.00	8.5 1.06	11.4	15.9 0.00	5.0 0.84
Uniform Delay (uie)	13.2	25.3	14.7	28.9	34.		26.0	32.1	25.5	37.8	38.1	33.1
Incremental De				1.3	37.9	2.3	129.9	2.6		18.5	9.0	3.1	71.8	28.0	2.9
Initial Queue De				0.0	0.0	0.0	0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (••		14.5	63.2	17.0	158.8	36.	_	44.5	41.1	28.6	109.6	66.1	36.0
Level of Service				B B	03.2 F	B	F	D	C 20.4	D D	D D	C C	F	E	D D
Approach Delay				53.3	_	D	61.5	_	E	38.3		D	75.6		E
Intersection Delay				33.3			5.7			50			E 75.0		_
	ay, or ve					3.									
Multimodal Re	sults				EB			WE	3		NB			SB	
Pedestrian LOS		/LOS		2.13	_	В	2.12	2	В	2.44	1	В	2.45	5	В
Bicycle LOS Sc	ore / LC	os		1.60		В	1.75	5	В	2.01	1	В	1.71		В

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resu	lts Su	mmar	У				
General Inforn	nation								Intersec	tion Inf	ormatic	on	2	4744	3- L
Agency		Stolfus and Associa	ates						Duration	, h	0.250)	-	4.4	
Analyst		Max Rusch		Analys	is Dat	е			Area Typ	e	Other	г	<u>-</u> -		·- 🚆
Jurisdiction				Time F	eriod	PM P	eak		PHF		0.82		4		=
Urban Street		Patterson Rd		Analys	is Yea	r 2045			Analysis	Period	1> 7:	00			-
Intersection		25 1/2 Road & Patt	terson	File Na	ame	2045	ACP PN	1.xus						110	
Project Descrip	tion												T	4144	MU
									_						
Demand Inform					EB	T =	+-	W		+	NB		+	SB	
Approach Move				L	T	R	L	T	_	L C	T	R	L	T	R
Demand (v), v	eh/h			92	1205	5 144	181	118	80 147	93	190	189	184	159	75
Signal Informa	ntion					K							K.		_
Cycle, s	100.0	Reference Phase	2	1	- N	- 5	-3	₫.	2 242				7	1	V
Offset, s	3	Reference Point	Begin	_		-	-	-		- 67		1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow		0.2	48.2 4.5	6.0 3.5		17.0 4.0	<u> </u>	_	_	K .	\mathbf{A}
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.5	0.5		1.0		- s	♦ 。	7	
T Orec Mode	TIACU	Oliniait. Cap 1470	OII	1100	0.0	0.0	1.0		0.0	1.0				_	
Timer Results				EBL		EBT	WB	L	WBT	NB	L	NBT	SBI		SBT
Assigned Phas	e			1		6	5		2	7		4	3		8
Case Number				1.1	\neg	3.0	1.1	\neg	3.0	1.1		3.0	1.1		4.0
Phase Duration	1, S			11.6		54.2	11.8	3	54.4	10.0		22.0	12.0		24.0
Change Period		c), S		4.0	\neg	6.0	4.0		6.0	4.0		5.0	4.0		5.0
Max Allow Hea	dway (/	MAH), s		5.2	\neg	0.0	5.2		0.0	5.2		5.3	5.2		5.3
Queue Clearan				4.9	\neg		5.5			7.3		16.1	10.0		17.7
Green Extension				0.6	\neg	0.0	0.7		0.0	0.0		0.9	0.0		1.0
Phase Call Pro				0.95			0.97	7		1.00		1.00	1.00		1.00
Max Out Proba				0.00			0.00	_		1.00	_	1.00	1.00		1.00
Movement Gro	_	sults			EB		_	WE	3		NB			SB	
Approach Move				L	T	R	L	T	R	L	T	R	L	T	R
Assigned Move				1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow				110	1445	_	130	848		113	232	230	224	285	ш
		ow Rate (s), veh/h/	'in	1810	1781	_	1781	178	_	1767	1885	1585	1682	1754	ш
Queue Service				2.9	35.8	5.8	3.5	12.0	_	5.3	11.6	14.1	8.0	15.7	ш
Cycle Queue C		e Time (gε), s		2.9	35.8	5.8	3.5	12.0	_	5.3	11.6	14.1	8.0	15.7	\blacksquare
Green Ratio (g				0.56	0.48	0.48	0.56	0.48	_	0.23	0.17	0.17	0.25	0.19	\blacksquare
Capacity (c), v				415	1717	_	249	172	_	192	320	269	254	333	\vdash
Volume-to-Cap				0.265		_	0.522	0.49		0.592	_		_	0.857	\blacksquare
		/In (90 th percentile		45.4	443.4		62.5	136.		114.2			159.2	271.1	\vdash
		eh/ln (90 th percent	-	2.1	19.8	3.8	2.8	6.1	_	5.1	9.1	10.4	6.7	12.0	\blacksquare
		RQ) (90 th percen	ule)	0.34	0.00	0.66	0.47	0.00	_	1.03	0.00	2.63	1.18	0.00	\vdash
Uniform Delay				12.1	23.7	13.5	22.0	10.9		33.1	39.3	40.3	36.9	39.2	
Incremental De				0.4	4.7	0.6	2.0	0.8	_	12.7	7.8	21.8	33.2	18.6	\vdash
Initial Queue Do				0.0	0.0	0.0	0.0	0.0	_	0.0	0.0	0.0	70.4	0.0	
Control Delay (12.6	28.4	14.1	24.0	11.7	_	45.8 D	47.1	62.1	70.1	57.8	\vdash
Level of Service				B 26.0	С	B	C 42.4	В	A P	D 52.0	D	E	E	E	-
Approach Delay				26.0		С	12.4	+	В	52.9	,	D	63.2		E
Intersection De	iay, s/ve	en / LOS				3′	1.1						С		
Multimodal Re	sulte				EB			WE			NB			SB	
Pedestrian LOS		/I OS		2.09	_	В	1.90	_	В В	2.45		В	2.45	_	В
Bicycle LOS So				1.94	_	В	2.00	_	В	1.44		A	1.33	_	A

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ılts Su	mmar	У				
General Inform	nation								Interse	tion Inf	ormatio	on		474	SIU.
Agency		Stolfus and Associa	ates						Duration	, h	0.250		2		
Analyst		Max Rusch		Analys	is Date	е			Area Ty	pe	Other		≙ -^		<u>-</u>
Jurisdiction				Time F	eriod	PM P	eak		PHF		0.77		2		===
Urban Street		Patterson Rd		Analys	is Yea	r 2045			Analysis	Period	1> 7:	00	2		- 1
Intersection		1st Street & Patters	son	File Na	ame	2045	ACP PN	1.xus						1110	
Project Descrip	tion												1	4 1 4 Y	Mu
Demand Inforr	4:				- FD				(D		ND			0.0	
Approach Move					EB T	R	+-	_	/B F R	+-	NB T	R	+-	SB T	R
Demand (v), v				115	1234	_	217	-	80 124		394	193	165	311	80
Demand (V), V	en/n			110	1234	197	217	-11	80 124	210	394	193	100	311	80
Signal Informa	tion				2	1	_		J 20		. 4		<u> </u>		
Cycle, s	100.0	Reference Phase	2	1	- x	- 2	-		5	100	12			>	V
Offset, s	72	Reference Point	Begin	Green	70	0.1	35.7	9.	0 2.4	26.6		1	2	3	-
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	3.0	3.		4.0			x	<	▲ □
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	2.5	0.		1.0			₹ .	1) 7	8
Timer Results				EBL		EBT	WB	L	WBT	NB	L	NBT	SBI	_	SBT
Assigned Phas	e			1	\perp	6	5	_	2	7	\perp	4	3	\perp	8
Case Number				1.1	_	3.0	1.1	4	3.0	1.1	_	3.0	1.1	_	3.0
Phase Duration				11.8		41.2	11.9		41.3	13.0		31.6	15.4	1	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 Hea				5.2	\perp	0.0	5.2	_	0.0	5.2	\perp	5.2	5.2	\perp	5.2
Queue Clearan				6.2	_		7.2	_		7.5	_	28.5	10.3	_	21.4
Green Extension		(ge), S		0.5	_	0.0	0.7	\rightarrow	0.0	1.5	-	0.0	1.1	-	4.4
Phase Call Pro				0.97	\rightarrow		0.98	\rightarrow		1.00		1.00	1.00	-	1.00
Max Out Proba	bility			0.00		_	0.00)	_	0.00)	1.00	0.00)	0.83
Movement Gro	oun Res	sults			EB			W	3	_	NB		_	SB	
Approach Move	_			L	T	R	┰	T	R	L	T	R	L	T	R
Assigned Move				1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow), veh/h		126	1349	_	150	817	_	273	512	251	214	404	104
		ow Rate (s), veh/h/	ln	1810	1766	1598	1781	178		1743	1856	1598	1810	1885	1610
Queue Service				4.2	35.7	7.5	5.2	20.		5.5	26.5	12.2	8.3	19.4	4.4
Cycle Queue C				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	0.3	6 0.36	0.36	0.27	0.34	0.38	0.29	0.37
Capacity (c), v	/eh/h			299	1261	714	212	127	6 563	590	492	550	279	545	590
Volume-to-Cap	acity Ra	atio (X)		0.420	1.070	0.301	0.707	0.64	0.152	0.462	1.040	0.456	0.768	0.741	0.176
Back of Queue	(Q), ft	/In (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
		eh/In (90 th percent	•	2.9	27.8	4.5	3.7	12.	_	4.0	24.7	7.4	6.4	13.4	2.9
Queue Storage	Ratio (RQ) (90 th percen	tile)	0.48	0.00	0.75	0.75	0.0	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.		24.7	36.7	25.5	25.2	32.2	21.4
Incremental De	lay (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 D				0.0	0.0	0.0	0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (19.3	73.9	15.2	26.7	31.	$\overline{}$	25.5	88.0	26.4	31.4	37.9	21.6
Level of Service				В	F	<u>B</u>	C	C	C	C	F	С	С	D	С
Approach Delay				62.4		E	30.8	3	С	56.6)	Е	33.6)	С
Intersection De	lay, s/ve	eh / LOS				49	9.0						D		
Multimodal Re	sulte				EB			W	3		NB			SB	
Pedestrian LOS		/I OS		2.28	_	В	2.11	_	В	2.44	_	В	2.44	_	В
Bicycle LOS So				2.14	_	В	2.12	-	В	2.20	_	В	1.68	_	В
										-					

Caper Signal Information Apart Analysis Date Analysis Date Analysis Date Analysis Date Analysis Date Analysis Period PM Peak PH			HCS	7 Sig	nalize	d Int	ersec	tion F	Resu	lts Su	nmar	y				
Statistics																
Agency Stofts and Associate Analysis Date Max Rush Max R	General Inform	nation								Intersec	tion Inf	ormatio	on		The second second	
Union Street	Agency		Stolfus and Associa	ates						Duration	, h	0.250		2	****	
Different Patterson Rd Analysis Year 2045 Analysis Period 15-7.00 The Street & Patterson File Name 2045 ANAlysis Period 15-7.00 The Street & Patterson File Name 2045 ANAlysis Period 15-7.00 The Street & Patterson File Name 2045 ANAlysis Period 15-7.00 The Street & Patterson File Name 2045 ANAlysis Period 15-7.00 The Street & Patterson The Street & The Street & Patterson The Street & The Stree	Analyst		Max Rusch		Analys	is Date)			Area Typ	e	Other		≙ -^		
Intersection	Jurisdiction				Time F	eriod	PM P	eak		PHF		0.80		÷		===
Project Description	Urban Street		Patterson Rd		Analys	is Yea	2045			Analysis	Period	1> 7:0	00	2		-
Demand Information	Intersection		7th Street & Patters	son	File Na	ame	2045	ACP PN	1.xus						5110	
Approach Movement	Project Descrip	tion												1	4144	MU
Approach Movement	Damand Inform	4:				ED			10/	<u> </u>		ND			OD	
Demand (v), veh/h					-	_	Тв	+-	_		+-	_	Тв	+ -		
Signal Information					_	_	-	_	_	_	_	+-	-	_	_	_
Cycle, s 100.0 Reference Phase 2 2 2 44.6 5.0 3.0 19.0	Demand (V), V	en/n			147	1222	103	202	93	4 172	245	380	215	101	311	1/3
Offset S 26	Signal Informa	tion				2	V				JJ	. 4		<u> </u>		
Office Section Control Contr	Cycle, s	100.0	Reference Phase	2		- K	1		- N. 5	200	52 5	2		~	1	V
Discontinated No Simult. Gap EW On Red 0.5 0.0 4.0 3.5 0.0 4.0 0.5 0.0 1.0 0.5 0.0 1.0 0.5 0.0 1.0 0.5 0.0 0	Offset, s	26	Reference Point	Begin	Groon	0.2	22	44.6	5.0				1	2	3	-
Timer Results	Uncoordinated	No	Simult. Gap E/W	On									_		K .	本
Assigned Phase	Force Mode	Fixed	Simult. Gap N/S	On										⋠ 。	1) 7	8
Assigned Phase																
Case Number 2.0 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 1.1 3.0 2.1 5.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 <					EBL		EBT	WB	L	WBT	NBI	_	NBT	SBI	_	SBT
Phase Duration, s 11.4.4 51.8. 12.2. 49.6. 12.0. 27.0 9.0. ≥4.0 Change Period, (Y+R c), s 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 4.0. 5.0. 5.2. 5.2. 5.2. 5.2. 5.2. 5.2. 5.2. 5.2. 5.2. 5.2. 5.2. 1.0.0. 1.0.0. 1.0.0. 4.4. 4.4. 4.0. 1.0.0. 1.0.0. 1.0.0. 4.4. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0. 1.0.0.		e			_	\perp		_	\rightarrow		_		_	_		_
Change Period, (Y+R c), s 4.0 5.0 4.0 5.0 4.0 5.0 4.0 5.0 4.0 5.0 4.0 5.0 4.0 5.0 4.0 5.0 5.2<					2.0	_	3.0	_	\rightarrow	3.0	1.1	_	3.0	1.1	_	3.0
Max Allow Headway (MAH), s 5.2 0.0 5.2 0.0 5.2 5.2 5.2 5.2 5.2 Queue Clearance Time (g ≠), s 9.8 7.2 10.0 21.8 7.0 13.2 Green Extension Time (g ≠), s 0.8 0.0 1.1 0.0 0.0 0.0 0.0 0.9 1.00 Max Out Probability 0.00 0.00 0.00 0.99 1.00 1.00 0.99 1.00 Max Out Probability 0.00 0.00 0.00 0.99 1.00 1.00 0.99 1.00 Max Out Probability 0.00 0.00 0.00 0.00 0.00 0.99 1.00 Max Out Probability 0.00 0.00 0.00 0.00 0.00 0.99 1.00 Max Out Probability 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Max Out Probability 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Movement Group Results 0.00 0					14.4		51.8	12.2	2		12.0		27.0	9.0		24.0
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 "0.99" "1.00" 1.00 0.09" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.97 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.99" 1.00 0.00 0.99" 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Change Period	, (Y+R	c), S		4.0	_	5.0	4.0		5.0	4.0		5.0	4.0		5.0
A companie					5.2	\perp	0.0	_	_	0.0	5.2		5.2	5.2		5.2
Phase Call Probability						-		_	_		_	_		_	_	
Movement Group Results Image: Results (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c			(ge), S			_	0.0	_	\rightarrow	0.0		$\overline{}$		_	-	
Movement Group Results Approach Movement L T R L T R L T R L T R L T R L T R L T R R L T R L T R R R L T R R L T R R R R						\rightarrow			\rightarrow							
Approach Movement	Max Out Proba	bility			0.00		_	0.00)	_	1.00		1.00	1.00		0.97
Approach Movement	Movement Gro	oun Res	sults			FB			WF	<u> </u>		NB		_	SB	
Assigned Movement 1 1 6 16 16 5 2 12 12 7 14 14 13 8 18 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 18∪9 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 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 Green Ratio (g/C) 0.10 0.47 0.55 0.53 0.45 0.45 0.45 0.28 0.22 0.30 0.24 0.19 0.29 Capacity (c), veh/h/h 1818 1653 789 1856 188 1653 189 189 189 189 189 189 189 189 189 189		_	, and				R	$\overline{}$					R			R
Adjusted Flow Rate (v), veh/h Adjusted Flow Rate (s), veh/h/ln Adjusted Saturation Flow Rate (s), veh/h/ln Adjusted Saturation Flow Rate (s), veh/h/ln 1810 1766 1417 1810 1781 1543 1767 1795 1589 1795 1809 1775 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) Capacity (c), veh/h 188 1655 789 345 1596 889 288 789 481 163 686 466 Volume-to-Capacity Ratio (X) Volume-to-Capacity Ratio (X) Capacity (c), veh/ln (90 th percentile) 141.4 126.5 12.3 88.0 145.6 29.6 291.8 303.5 220.2 239.2 154.6 153.3 Back of Queue (Q), veh/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h/ln (90 th percentile) Adjusted Startantion Flow Rate (s), veh/h (s) 5.0 9.8 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0						_	_	_	_	_	_	_		_	_	-
Adjusted Saturation Flow Rate (s), veh/h/ln 1810 1766 1417 1810 1781 1810 1828 180 180 180), veh/h				_	_		_		_				_
Queue Service Time (gs), 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 (gc), 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/lh 188 1653 789 345 15.89 689 288 789 481 163 686 466 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 12.65 12.3 88.9 145.6 29.6 291.8 303.5 220.2 239.2 15.46 153.3 Back of Queue (Q), pt/ln (90 th percentile) 0.80 0.00 0.08 0.67 0.00 0.19 13.7<				'In			_	_	_							
Green Ratio (g/C)							_	_	_	_					9.8	_
Green Ratio (g/C)					7.8	15.7	0.9	5.2	13.1	2.2	8.0	19.8	18.0	5.0	9.8	11.2
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 20.2 239.2 154.6 153.3 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 2), s/veh 5.0 9.1 2.2 17.2 13.3	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
Back of Queue (Q), ft/in (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/in (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 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	Capacity (c), v	/eh/h			188	1653	789	345	1589	9 689	288	789	481	163	686	466
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	Volume-to-Capa	acity Ra	atio (X)		0.756	0.716	0.168	0.534	0.53	5 0.221	1.064	0.929	0.681	1.161	0.566	0.465
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 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	Back of Queue	(Q), ft	/In (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
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				-	6.4	5.6	0.5	4.0	_	_	12.9	13.7	9.9	10.8	7.0	6.9
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	Queue Storage	Ratio (RQ) (90 th percen	tile)	0.80	0.00	_	_	-	_					_	_
Initial Queue Delay (d ₃), s/veh 0.0 <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td>_</td>					_		_	_	_	_					_	_
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 S S C C S E Multimodal Results EB B 2.42 B 2.45 B 2.49 B					7.0	2.2	0.4	_	_	_			4.3		1.4	1.0
Level of Service (LOS) D A A B <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td>							_	_	_	_						-
Approach Delay, s/veh / LOS 12.9 B 13.0 B 59.7 E 64.5 E Intersection Delay, s/veh / LOS 34.8 Multimodal Results EB WB NB SB Pedestrian LOS Score / LOS 2.43 B 2.42 B 2.45 B 2.49 B							_	_	-	_	_			_	_	_
Multimodal Results EB WB NB SB Pedestrian LOS Score / LOS 2.43 B 2.42 B 2.45 B 2.49 B	_					_		_	_		_			_		-
Multimodal Results EB WB NB SB Pedestrian LOS Score / LOS 2.43 B 2.42 B 2.45 B 2.49 B					12.9			_	J	В	59.7)	E
Pedestrian LOS Score / LOS 2.43 B 2.42 B 2.45 B 2.49 B	intersection De	iay, s/ve	en / LOS				34	8.4						C		
Pedestrian LOS Score / LOS 2.43 B 2.42 B 2.45 B 2.49 B	Multimodal Re	sults				FR			WE	3		NB			SB	
			/LOS		2 43	_	В	2 42	_		2 45		В	2 49	_	В
						_		_	_		_	-		_	_	

	HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ults 9	Sun	nmar	y				
General Information								Intor	rooot	ion Info	ormotic	n.		a Ade I I	siu
	Stolfus and Associa	otoc									0.250		1	4111	
		ates	Amaka	:- D-4				Dura	_						- E
Analyst Jurisdiction	Max Rusch		Analys		PM P	nok		Area PHF		2	Other 0.80				- J-
	Detteres Dd		Time P			eak				nid		20	- 3		=
Urban Street Intersection	Patterson Rd 12th Street & Patte				r 2045	ACP PM			ysis i	Period	1> 7:0	00	8		- 2
	12th Street & Patte	rson	File Na	ime	2045	ACP PIV	1.XUS						- 4	111	el d
Project Description		_	_	-	_	-	-	-	-	-	-	-			equ.
Demand Information				EB			W	/B			NB			SB	
Approach Movement			L	Т	R	L	Т	тТ	R	L	Т	R	L	Т	R
Demand (v), veh/h			246	1289	117	106	79	95	151	145	629	146	288	542	238
Signal Information				× .		<u> </u>	100	L.	4				-		-ta
Cycle, s 100.0	Reference Phase	2		Γ	1	45		- 1	51	7			2	2	Y
Offset, s 49	Reference Point	Begin	Green	6.0	45.5	5.0	1.	0	20.0	0.0				_ 1	1
Uncoordinated No	Simult. Gap E/W	On	Yellow		4.0	3.5	3.		4.0	0.0		\frown	& -	.\ \	4
Force Mode Fixed	Simult. Gap N/S	On	Red	0.5	1.5	0.5	0.	5	1.0	0.0	-	5	Y 6 ,	↓ 7	8
Timer Results			EBL	_	EBT	WB		WB	т	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	\rightarrow	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 a	·) s		4.0	_	5.5	4.0	-	5.5	_	4.0		5.0	4.0		5.0
Max Allow Headway (M			5.2	_	0.0	5.2	-	0.0	_	5.2	_	5.2	5.2	_	5.2
Queue Clearance Time			7.2	+	0.0	4.0	\rightarrow	0.0		6.1	_	22.0	9.8	-	27.0
Green Extension Time			0.0	_	0.0	0.1	-	0.0		0.0	_	0.0	0.0	$\overline{}$	0.0
Phase Call Probability	(9,0)		1.00	_	0.0	1.00	$\overline{}$	0.0		1.00	$\overline{}$	1.00	1.00		1.00
Max Out Probability			1.00	\rightarrow		1.00	\rightarrow		_	1.00	$\overline{}$	1.00	1.00	-	1.00
max out i rozasiii,			1.00										1.00		
Movement Group Res	ults			EB			WI	В			NB			SB	
Approach Movement			L	Т	R	L	T	F	R	L	T	R	L	Т	R
Assigned Movement			1	6	16	5	2	1	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h		333	1743	158	137	102	4 19	94	181	786	183	360	515	460
Adjusted Saturation Flo	w Rate (s), veh/h/	ln	1730	1766	1606	1743	179	5 15	598	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	e Time (gε), s		5.2	45.5	5.5	2.0	19.	6 4	1.5	4.1	20.0	9.7	7.8	25.0	25.0
Green Ratio (g/C)			0.52	0.46	0.51	0.52	0.4	6 0.	.46	0.25	0.20	0.26	0.32	0.25	0.25
Capacity (c), veh/h			570	1607	811	353	163	3 7:	27	317	712	409	493	468	417
Volume-to-Capacity Ra			0.584	1.084	_	0.387	0.62	_	_	0.572	1.104		0.731	1.102	1.102
Back of Queue (Q), ft/	· · ·		78.2	804.4		33.1	221	_	8.7	81	470.4		139.3	619.7	567.1
Back of Queue (Q), ve			3.5	35.7	4.8	1.5	10.	$\overline{}$	2.6	3.6	21.0	6.6	6.3	27.7	25.4
Queue Storage Ratio (tile)	0.44	0.00	0.73	0.13	0.0	\rightarrow	.44	0.37	0.00	0.67	1.05	0.00	0.00
Uniform Delay (d 1), s/		_	16.3	28.3	14.0	22.1	16.	_	3.9	31.7	40.0	31.0	28.2	37.5	37.5
Incremental Delay (d 2			2.7	45.3	0.3	2.6	1.5	_).7	7.3	65.8	3.5	9.2	72.2	74.4
Initial Queue Delay (d :	••		0.0	0.0	0.0	0.0	0.0	$\overline{}$	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/ve	#II		19.0	73.6	14.4	24.7	18.	$\overline{}$	0.6	39.0	105.8	34.5	37.4	109.7	111.9
Level of Service (LOS) Approach Delay, s/veh	/I 06		B 61.2	F	B	C 47.6	B	_	A	D 94.0	F	C F	D 01.0	F	F
Intersection Delay, s/ven			61.3		E 60	17.6 2.4	,	В		84.0		-	91.0 E		F
intersection Delay, S/Ve	117 LOS				02	4									
Multimodal Results				EB			W	В			NB			SB	
Pedestrian LOS Score	LOS		2.56	_	С	2.42	_	В		2.59		С	2.59	_	С
Bicycle LOS Score / LO	S		2.19	_	В	1.57	$\overline{}$	В	_	1.44		Α	1.59	-	В

Intersection Information			HCS	7 Sig	nalize	d Int	ersec	tion F	Resu	ılts Su	mmar	у				
Stoffus and Associates																
Agency Stoths and Associate Analysis	General Inform	nation								Intersec	tion Inf	ormatic	on		1.1	s U
Urban Street Patterson Rd Analysis Year 2045 Analysis Period 17 70 10 10 10 10 10 10	Agency		Stolfus and Associa	ites						Duration	, h	0.250)	2	**	T T
Unitan Street Patterson Rd & 15th St File Name 2045 Care 1245 Care 124	Analyst		Max Rusch		Analys	is Date)			Area Typ	oe .	Other	r	<u></u>		
Intersection	Jurisdiction				Time F	Period	PM P	eak		PHF		0.83		8 →		=
Project Description	Urban Street		Patterson Rd		Analys	is Yea	2045			Analysis	Period	1> 7:	00	7		-
Demand Information	Intersection		Patterson Rd & 15t	h St	File Na	ame	2045	ACP PN	1.xus						47	
Approach Movement	Project Descrip	tion												1 7	4144	MU
Approach Movement	Demand Inform	nation				FB			W	В		NB			SB	
Demand (v), veh/h						_	T R	1 -	_		1 -	_	R	1 -	_	T R
Signal Information					_	_		_			_	-	-	-	-	_
Cycle, s 000.0 Reference Phase 2 2 2 3 75.4 7.1 0.0 0.0 0.0 1 1 1 1 1 1 1 1 1	Demand (V), V	CIBII			- 00	1020	30		10	JE 21			- 50	43		
Cycle, s 000.0 Reference Phase 2 2 2 3 75.4 7.1 0.0 0.0 0.0 1 1 1 1 1 1 1 1 1	Signal Informa	ition					$\overline{}$			K.	$\overline{}$	- 10		_		1
Office S			Reference Phase	2	1	- X	1	4	-			- 39		4		4
Uncoordinated No Simult. Gap EM On Yellow 4.0 0.0		66	Reference Point	End		2.2	20		$\overline{}$		- 0.0	_	1	2	3	4
Fixed Simult Gap N/S On Red 0.0		No	Simult, Gap E/W	On									,	→		et a
Timer Results		Fixed		_									5	6	7	Y
Assigned Phase	r or oo midde	Timed	Omnanii Gap III G													
Case Number 1.1 4.0 1.1 4.0 1.1 4.0 7.0 ▼7.0 7.0 Phase Duration, s 9.5 81.8 7.2 79.4 11.1 1.1 11.0 11.0	Timer Results				EBL	. T	EBT	WB	L	WBT	NB	L	NBT	SBI	_	SBT
Phase Duration, s 9.5 81.8 7.2 79.4 11.1 11.1	Assigned Phase	е			5	$\neg \vdash$	2	1	\neg	6		$\neg \vdash$	8		$\neg \neg$	4
Change Period, (Y+R c), s 4.0 3.3 3.5 4.0 4.	Case Number				1.1		4.0	1.1	\neg	4.0			7.0			7.0
Change Period, (Y+R c), s 4.0 3.3 3.5 4.0 4.0 </td <td>Phase Duration</td> <td>1, S</td> <td></td> <td></td> <td>9.5</td> <td></td> <td>81.8</td> <td>7.2</td> <td></td> <td>79.4</td> <td></td> <td>\neg</td> <td>11.1</td> <td></td> <td></td> <td>11.1</td>	Phase Duration	1, S			9.5		81.8	7.2		79.4		\neg	11.1			11.1
Max Allow Headway (MAH), s Queue Clearance Time (g s), s Q			c), S		4.0		4.0	4.0		4.0			4.0			4.0
Queue Clearance Time (g s), s 3.0						\neg	0.0		_	0.0		\neg	3.3		\neg	3.3
Company Co						\rightarrow		_	\rightarrow						\neg	
Phase Call Probability					_	_	0.0	0.0	\neg	0.0		$\overline{}$	0.4	-	$\overline{}$	0.3
Movement Group Results Book of the processing of the processing of the process of the pr			(3-7-			\rightarrow		_	\rightarrow							
Movement Group Results					_	\rightarrow			\rightarrow		_	_			-	0.00
Approach Movement																
Assigned Movement 5 2 12 12 1 6 16 3 8 18 7 4 14 14 Adjusted Flow Rate (ν), veh/h 90 1083 1083 27 668 663 22 43 54 77 Adjusted Flow Rate (ν), veh/h 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 0.0 2.6 2.4 4.8 Cycle Queue Clearance Time (g s), 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 0.78 0.79 0.75 0.75 0.07 0.07 0.07 0.07 0.07 0.07	Movement Gro	oup Res	sults			EB			WE	3		NB			SB	
Adjusted Flow Rate (v), veh/h Adjusted Saturation Flow Rate (s), veh/h/ln 1781 1856 1844 1781 1885 1868 1526 1585 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 0.0 2.6 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 0.0 12 2.6 3.6 4.8 Green Ratio (g/C) Capacity (c), veh/h 388 1443 1433 216 1422 1409 172 112 112 172 112 Volume-to-Capacity Ratio (X) Volume-to-Capacity Ratio (X) 0.232 0.751 0.756 0.125 0.470 0.470 0.126 0.387 0.316 0.888 Back of Queue (Q), ft/ln (90 th percentile) 14.2 176.2 174.8 52 292 191.3 20.5 42.1 52.7 78.2 Back of Queue (Q), veh/ln (90 th percentile) 14.2 176.2 174.8 52 292 13.2 13.2 0.9 1.9 2.4 3.5 Queue Storage Ratio (RQ) (90 th percentile) 0.18 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Adjusted Saturation Flow Rate (s), veh/h/ln 1781 1856 1844 1781 1885 1868 1526 1585 1433 1585 Queue Service Time (gs), 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 (gc), s 1.0 27.0 27.6 0.3 22.3 22.6 0.0 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 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), styleh (Q) (90 th percentile) 0.6 7.8 7.9 0.2 13.2 </td <td>Assigned Move</td> <td>ment</td> <td></td> <td></td> <td>5</td> <td>2</td> <td>12</td> <td>1</td> <td>6</td> <td>16</td> <td>3</td> <td>8</td> <td>18</td> <td>7</td> <td>4</td> <td>14</td>	Assigned Move	ment			5	2	12	1	6	16	3	8	18	7	4	14
Queue Service Time (gs), 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 (gc), 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 0.07 Capacity (c), veh/lh 388 14.43 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), te/hin (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 0.00	Adjusted Flow I	Rate (v), veh/h		90	1083	1083	27	668	663		22	43		54	77
Cycle Queue Clearance Time (gc), 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	Adjusted Satura	ation Flo	ow Rate (s), veh/h/l	n	1781	1856	1844	1781	188	5 1868		1526	1585		1433	1585
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 0.766 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 0.00 0.00 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 Initial Queue Delay (d 2), s/veh 0.0 0.0 0.0 0.0	Queue Service	Time (g s), S		1.0	27.0	27.6	0.3	22.3	3 22.6		0.0	2.6		2.4	4.8
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 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 <td< td=""><td>Cycle Queue C</td><td>learanc</td><td>e Time (g c), s</td><td></td><td>1.0</td><td>27.0</td><td>27.6</td><td>0.3</td><td>22.3</td><td>3 22.6</td><td></td><td>1.2</td><td>2.6</td><td></td><td>3.6</td><td>4.8</td></td<>	Cycle Queue C	learanc	e Time (g c), s		1.0	27.0	27.6	0.3	22.3	3 22.6		1.2	2.6		3.6	4.8
Volume-to-Capacity Ratio (X) 0.232 0.751 0.756 0.125 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 0.00 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 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 <td< td=""><td>Green Ratio (g</td><td>/C)</td><td></td><td></td><td>0.81</td><td>0.78</td><td>0.78</td><td>0.79</td><td>0.75</td><td>5 0.75</td><td></td><td>0.07</td><td>0.07</td><td></td><td>0.07</td><td>0.07</td></td<>	Green Ratio (g	/C)			0.81	0.78	0.78	0.79	0.75	5 0.75		0.07	0.07		0.07	0.07
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 0.00 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<	Capacity (c), v	/eh/h			388	1443	1433	216	142	2 1409		172	112		172	112
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 0.00 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<	Volume-to-Cap	acity Ra	atio (X)		0.232	0.751	0.756	0.125	0.47	0 0.470		0.126	0.387		0.316	0.688
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 0.00 0.00 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 <td< td=""><td></td><td></td><td></td><td>)</td><td></td><td></td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td></td><td></td><td>_</td><td>_</td></td<>)			_	_	_	_	_	_			_	_
Queue Storage Ratio (RQ) (90 th percentile) 0.18 0.00 0.00 0.00 0.00 0.00 0.95 0.00 1.77 Uniform Delay (d₁), s/veh 5.2 4.4 4.4 6.2 11.2 11.4 43.7 44.4 44.9 45.4 Incremental Delay (d₂), 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 (d₃), s/veh 0.0							_		_			_				
Uniform Delay (d 1), s/veh							_	_	_	_		_			_	_
Incremental Delay (d 2), s/veh D.1 D.2 D.3 D.4 D.5						_	_	_	-	_		-			_	_
Initial Queue Delay (d 3), s/veh 0.0 <					_	_	_	_	_	_		_				_
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Level of Service (LOS) A A A A A A B B 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						_	_		-	-		_			_	_
Multimodal Results EB WB NB SB Pedestrian LOS Score / LOS 1.83 B 1.84 B 2.31 B 2.31 B	_				_						44 1			47 (_
Multimodal Results EB WB NB SB Pedestrian LOS Score / LOS 1.83 B 1.84 B 2.31 B 2.31 B																
Pedestrian LOS Score / LOS 1.83 B 1.84 B 2.31 B 2.31 B		,														
Pedestrian LOS Score / LOS 1.83 B 1.84 B 2.31 B 2.31 B	Multimodal Re	sults				EB			WE	3		NB			SB	
			/LOS		1.83	_	В	1.84			2.3	1	В	2.31	_	В
						_		_	$\overline{}$		_	_		_	-	

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resul	ts Sun	nmary	/				
General Inform	ation								ntersect	ion Info	rmatic	n n		d Juda	risių
	iation	Stolfus and Associa	otoc						Duration,		0.250		- 1	JL	Ļ
Agency			ates	A 1	:- D-4	_					_		- 2		<u>V</u>
Analyst		Max Rusch		Analys		_	1-		Area Typ	e	Other		- 5-		<u>-</u>
Jurisdiction		D-# D4		Time F		PM P	еак	\rightarrow	PHF	Desiral	0.83	20			
Urban Street		Patterson Rd		Analys		_	100.01		Analysis	Period	1> 7:(00	- 6		
Intersection		27 1/2 Road & Patt	erson	File Na	ame	2045	ACP PN	1.xus					- 1		******
Project Descript	tion		_			_	_		_	_			-	4 1 4*	nau
Demand Inform	nation				EB		_	WE		_	NB		_	SB	
Approach Move					Т	R	+-	T	R	+ -	T	R	+-	T	R
				_	<u> </u>	_	+-	_	_	-	 '	+	558	-	_
Demand (v), v	en/n			227	1478	•	-	941	302	_		-	336		135
Signal Informa	tion		_						_	_			K .	_	
Cycle, s	100.0	Reference Phase	2		⊒ ₹		=					/	~		
Offset, s	56	Reference Point	Begin		-	-				_		1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Green		31.0	21.0	0.0	0.0	0.0			_		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow Red	0.5	4.5 1.5	1.0	0.0	0.0	0.0		_	क़ ॗॗ	-	
1 Orce Wode	rixeu	Simult. Gap N/S	OII	Neu	0.0	1.0	1.0	0.0	0.0	0.0		-	-		-
Timer Results				EBI		EBT	WB		WBT	NBL	_	NBT	SBL	_	SBT
Assigned Phase				1	+	6		+	2	1400	+	1101	ODE	-	4
Case Number				1.0	-	4.0	_	-	7.3		-			-	9.0
Phase Duration				37.0	$\overline{}$	74.0	_	-	37.0		_		_	-	26.0
Change Period,		- \ c		4.0	_	6.0	_	-	6.0		-		_	\rightarrow	5.0
Max Allow Head				5.2	\rightarrow	0.0	_	-	0.0		-		-	-	5.3
Queue Clearan					_	0.0	_	-	0.0		-		-	-	20.7
				5.6	_	0.0	_	-	0.0		-		-	\rightarrow	
Green Extensio		(g e), S		1.4	_	0.0	-	-	0.0		-		-	\rightarrow	0.2
Phase Call Prof				1.00	\rightarrow		-	-	_		-		-	-	1.00
Max Out Probal	DIIITY			0.00			_	_	_		_		_	-	1.00
Movement Gro	un Res	eulte.			EB		_	WB	_		NB			SB	
Approach Move	_	Juito			T	R		T	R	L	T	R		T	R
Assigned Move				1	6	 '`	<u> </u>	2	12	-		- 11	7	÷	14
Adjusted Flow F) veh/h		243	1584	_	_	1005	-				672		163
		ow Rate (s), veh/h/	ln .	1753	1795	_	_	1795	1610				1757		1522
Queue Service				3.6	19.8	_	_	27.3	22.6				18.7		9.5
Cycle Queue C				3.6	19.8	-		27.3	22.6				18.7		9.5
Green Ratio (g.		e fille (gt), s		0.66	0.68	_	_	0.31	0.31				0.21		0.21
Capacity (c), v	_			665	2441	_		1113	499				738		320
Volume-to-Capa		atio (X)		0.366	_	-		0.903	_				0.911		0.509
		/In (90 th percentile)	45.7	157.7	-		_	346.4				298.7		150.6
		eh/In (90 th percent		2.0	7.1			18.2	15.7				13.6		6.5
		RQ) (90 th percen		0.30	0.00			0.00	6.56				1.79		0.00
Uniform Delay (uic)	6.6	5.7		-	38.5	35.9				38.6		34.9
Incremental De				1.2	1.0			10.1	9.4				17.4		5.7
					_			-	_				_		_
Initial Queue De				7.0	6.7			0.0	0.0				0.0		0.0
Control Delay (7.8	6.7		-	48.6	45.3				56.0		40.6
Level of Service				A	L A	Λ.	47.7	D 7	D	0.0			53.0		D
Approach Delay				6.9		Α 2			D	0.0					D
Intersection Del	ay, s/ve	en / LOS				3(0.4						С		
Multimodal Re	sulte				EB			WB			NB			SB	
Pedestrian LOS		/I OS		0.67	_	A	2.12	_	В	2.32	_	В	2.32	_	В
Bicycle LOS Sc				2.18	_	В	1.78	_	В	2.32	+		2.32	-	F
Dicycle LOS SC	JIE / LC			2.10		U	1.70		U						

HCS7 Signalized Intersection Results Summary General Information Intersection Information Stolfus and Associates Duration, h 0.250 Agency Analyst Max Rusch Analysis Date Area Type Other PHF 0.85 Jurisdiction Time Period PM Peak Urban Street Patterson Rd Analysis Year 2045 1> 7:00 Analysis Period 2045 ACP PM.xus Intersection 28 1/4 Road & Patterson File Name Project Description **Demand Information** EB WB NB SB Approach Movement L R L R L R L R Demand (v), veh/h 38 1469 329 159 965 46 288 30 259 116 37 47 Signal Information Д. Cycle, s 100.0 Reference Phase 2 STO 72 Reference Point Offset, s Begin Green 11.0 46.0 14.0 2.0 8.0 0.0 Uncoordinated No Simult, Gap E/W Off Yellow 3.5 4.5 3.5 0.0 4.0 0.0 0.0 Force Mode Fixed Simult. Gap N/S On Red 0.5 1.5 0.5 0.0 1.0 Timer Results FBL **EBT** WBL WBT NBL NBT SBL SBT Assigned Phase 6 5 2 7 4 3 8 1 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 6.0 4.0 6.0 5.0 4.0 5.0 Change Period, (Y+Rc), s 4.0 4.0 Max Allow Headway (MAH), s 5.2 0.0 3.1 0.0 32 54 52 54 Queue Clearance Time (gs), s 2.9 10.4 18.0 12.0 8.4 5.3 Green Extension Time (ge), 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 1.00 0.77 1.00 Max Out Probability 0.05 1.00 1.00 EB WB NB SB Movement Group Results Approach Movement L R L T R L R L R 16 12 14 3 Assigned Movement 6 5 2 7 4 8 18 1 38 1456 326 156 944 45 339 35 305 136 44 55 Adjusted Flow Rate (v), veh/h 1810 1795 1585 1795 1795 1795 1900 1610 1810 1900 1610 Adjusted Saturation Flow Rate (s), veh/h/ln 1610 0.9 35.0 8.4 23.7 2.4 10.0 6.4 2.2 3.3 Queue Service Time (g s), s q q 16.0 1.7 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 0.24 0.10 0.21 0.22 0.46 0.11 0.46 0.46 80.0 0.08 Capacity (c), veh/h 388 1651 729 197 1651 741 436 190 338 392 152 129 0.097 0.882 0 447 0.788 0.572 0.061 0.778 0.186 0.901 0.348 0.286 0.429 Volume-to-Capacity Ratio (X) 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 3.0 0.05 0.00 0.38 0.57 0.00 0.69 0.00 0.00 0.00 0.00 Queue Storage Ratio (RQ) (90 th percentile) 1.08 1.04 Uniform Delay (d 1), s/veh 12.1 19 0 109 427 31.0 244 35.9 413 38.5 329 43.3 438 5.5 Incremental Delay (d 2), s/veh 0.4 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) В C В Е С D Е D С D D D 22.1 C 35.7 D 57.0 42.1 Approach Delay, s/veh / LOS Е D Intersection Delay, s/veh / LOS 33.4 C Multimodal Results WB NB Pedestrian LOS Score / LOS 2.10 В 2.10 В 2.46 В 2.46 В Bicycle LOS Score / LOS 2 27 В 1.62 В 1.61 В 0.88 A

		HCS	7 Sig	nalize	d Int	ersec	tion R	Resu	lts Sur	nmar	y				
General Inform	nation								Intersec	tion Inf	ormatic	on		111	s U
Agency		Stolfus and Associa	ates						Duration	, h	0.250		-	***	
Analyst		Max Rusch		Analys	is Dat	е			Area Typ	e	Other				~ ∰
Jurisdiction				Time F	eriod	PM P	eak		PHF		0.83			#Ît	===
Urban Street		Patterson Rd		Analys	is Yea	г 2045			Analysis	Period	1> 7:0	00			-
Intersection		29 Road & Patterso	on	File Na	ame	2045	ACP PM	1.xus						1110	
Project Descrip	tion												ħ	4144	HIM
Demand Inforr	nation				EB		\bot	W		\bot	NB		_	SB	
Approach Move	ement			L	Т	R	L	I	R	L	T	R	L	T	R
Demand (v), v	eh/h			220	1249	310	126	80	9 57	245	273	267	161	95	166
Signal Informa		D . f Dt			٠.	ا فراہ			2	147	-	_	-		sta
Cycle, s	100.0	Reference Phase	2			1	F .		5 5	7 5	7	1	2	3	Y
Offset, s	8	Reference Point	Begin	Green		5.5	29.5	10		9.0				_	1
Uncoordinated	No	Simult. Gap E/W	On	Yellow		3.5	4.5	3.5		4.0			4	``	Ф
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	2.0	1.0	1.0	1.0	-	5	A 6	7	8
Timon Donaldo				EDI	_	CDT	1A/D		WDT	ND		NDT	ODI		ODT
Timer Results	_			EBI	-	EBT	WB	-	WBT	NBI	-	NBT	SBI	-	SBT
Assigned Phase	e		_	1	-	6	5	-	2	7	-	4	3	-	8
Case Number				1.1		3.0	1.1	-	3.0	1.1	$\overline{}$	3.0	1.1	-	3.0
Phase Duration	•	,		24.0	_	46.0	14.0	-	36.0	26.0	_	25.0	15.0	_	14.0
Change Period				4.5	-	6.5	4.5	_	6.5	4.5	_	5.0	4.5	_	5.0
Max Allow Hea				4.1	-	0.0	4.1	\rightarrow	0.0	4.2	_	4.3	4.2	_	4.3
Queue Clearan				8.3	_		7.8	_		8.4		19.1	12.0	_	8.8
Green Extension		(ge), S		0.6	-	0.0	0.1	$\overline{}$	0.0	1.0	$\overline{}$	0.4	0.0	-	0.1
Phase Call Pro	_			1.00	-		1.00	_		1.00	_	1.00	1.00	-	1.00
Max Out Proba	bility			0.01	_		1.00			0.00)	1.00	1.00		1.00
Movement Gro	oup Res	sults			EB			WE	3		NB			SB	
Approach Move	ement			L	T	R	L	T	R	L	T	R	L	Т	R
Assigned Move	ment			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 Satura	ation Flo	ow Rate (s), veh/h/	'in	1781	1795	1572	1767	178	1 1585	1716	1870	1610	1753	1870	1610
Queue Service	Time (g	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 C	learanc	e Time (gε), 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), v				433	1418	621	255	105	1 468	950	374	475	264	168	459
Volume-to-Cap				0.530	0.920		0.601	0.93		0.311	0.879	0.588	0.736	0.680	0.305
		/In (90 th percentile		87.3	396.6	_	107.8	382.		106.1	317.8		190.7	135.9	108.1
		eh/In (90 th percent	_	3.9	17.9	6.8	4.8	17.1		4.7	14.2	9.5	8.4	6.1	4.9
		RQ) (90 th percen	tile)	0.28	0.00	0.56	0.27	0.00		0.48	0.00	0.95	1.43	0.00	0.82
Uniform Delay				13.3	25.1	17.7	26.9	36.9		25.3	38.8	30.1	36.8	44.1	28.0
Incremental De				3.4	8.7	2.3	7.0	12.0		0.9	24.2	5.3	16.7	20.0	1.7
Initial Queue Do	elay (d	з), 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 (16.8	33.8	20.0	33.8	48.9	_	26.1	63.1	35.3	53.5	64.1	29.7
Level of Service				В	С	В	С	L D	С	С	E	D	D	E	С
Approach Delay				29.3		С	45.7	<u> </u>	D	42.4	l l	D	48.8	3	D
Intersection De	lay, s/ve	eh / LOS				38	3.4						D		
Multimodal Re	sults				EB			WE	3		NB			SB	
Pedestrian LOS		/LOS		2.32	_	В	2.19		В	2.45		В	2.46		В
Bicycle LOS So				2.26	_	В	1.47	_	A	1.98	_	В	1.23	-	A

		HCS	7 Sig	nalize	d Int	ersec	tion F	Resi	ılts Su	mmar	У				
General Inforn	nation								Intersec	tion Inf	ormatic	n		474	S-U
Agency		Stolfus and Associa	ates						Duration	, h	0.250		12	***	
Analyst		Max Rusch		Analys	is Date	е			Area Typ	e	Other		<u>-</u> -		<u>-</u>
Jurisdiction				Time F	eriod	PM P	eak		PHF		0.85		÷		===
Urban Street		Patterson Rd		Analys	is Yea	r 2045			Analysis	Period	1> 7:0	00	7		
Intersection		29 1/2 Road & Patt	terson	File Na	ame	2045	ACP PM	1.xus						11	
Project Descrip	tion												1	N I PY	Mu
Demand Inforr	nation				EB			W	/B		NB			SB	
Approach Move	ement			L	Т	R	L	Т	Γ R	L	Т	R	L	Т	R
Demand (v), v	eh/h			91	1484	73	99	85	59 129	86	98	235	155	29	32
Signal Informa					7	2	=		5	213	4	. 13	4		
Cycle, s	100.0	Reference Phase	2		- K	2	T# •	<u> </u>	7 9	7 5	12			>	Y
Offset, s	58	Reference Point	Begin	Green	4.6	1.8	44.2	9.0		8.0	-				1
Uncoordinated	No	Simult. Gap E/W	On	Yellow	3.5	0.0	5.0	4.0		4.0		<u> </u>	A	\	4
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.5	0.0	0.0	1.0	_	5	6	7	8
T: D #				EDI	-	- FRT	14/5		MOT	NID		NET	0.01		ODT.
Timer Results				EBL	-	EBT	WB	4	WBT	NB	-	NBT	SBI	-	SBT
Assigned Phase	e			1	-	6	5	-	2	7	-	4	3	-	8
Case Number				1.1	-	3.0	1.1	-	3.0	1.1	$\overline{}$	4.0	1.1		3.0
Phase Duration		١.٥		8.6	-	50.7	10.3	\rightarrow	52.4	26.0	_	26.0	13.0	-	13.0
Change Period				4.0	-	6.5	4.0	_	6.5	4.0	_	5.0	4.0	-	5.0
Max Allow Head				4.5	-	0.0	4.5	\rightarrow	0.0	3.7	_	4.8	3.7		4.8
Queue Clearan				4.6	-	0.0	6.0	_	0.0	6.1 0.2	_	0.0	11.0	_	0.9
Phase Call Pro		(g e), S		0.3	_	0.0	0.5	\rightarrow	0.0	1.00	_	1.00	1.00	-	1.00
Max Out Proba				0.00	\rightarrow		0.00	\rightarrow		0.00	_	1.00	1.00	_	1.00
Wax Out Floba	Dility			0.00			0.00			0.00		1.00	1.00		1.00
Movement Gro	oup Res	sults			EB			W	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	T	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow	Rate (v), veh/h		88	1438	71	135	116	8 175	101	392		182	34	38
Adjusted Satura	ation Flo	ow Rate (s), veh/h/	'In	1810	1795	1598	1795	179	5 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 C	learanc	e Time (g ε), 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	0.4	6 0.46	0.32	0.21		0.17	0.08	0.08
Capacity (c), v				250	1585	706	222	164	_	543	337		232	147	127
Volume-to-Cap				0.352		0.100	0.606	0.70	_		1.161		0.785	0.232	_
		/In (90 th percentile		40.3	251.3	_	67.6	184		73.2	567.9		190.6	33.2	36.6
		eh/ln (90 th percent	•	1.8	11.3	0.8	3.0	8.3	_	3.2	24.6		8.5	1.5	1.6
		RQ) (90 th percen	itile)	0.31	0.00	0.22	0.51	0.0	_	0.94	0.00		1.39	0.00	0.00
Uniform Delay				16.5	14.8	7.8	23.0	12.		24.6	39.5		39.0	43.1	43.3
Incremental De				0.6	6.3	0.2	1.9	1.9	_	0.8	100.2	_	22.9	0.8	1.3
Initial Queue De				0.0	0.0	0.0	0.0	0.0	_	0.0	0.0		0.0	0.0	0.0
Control Delay (17.1	21.1	8.0	24.9	14.	_	25.4	139.7		61.9	43.9	44.6
Level of Service				B 20.2	С	_ A	C	В	A	C 446	F		E	D	D
Approach Delay				20.3		C	14.4	+	В	116.	2	F	56.9	,	E
Intersection De	ialy, S/VE	en / LUS				34	2.9						С		
Multimodal Re	sults				EB			WE	3		NB			SB	
Pedestrian LOS		/LOS		1.91	_	В	2.10	_	В	2.45	_	В	2.46	_	В
Bicycle LOS So				2.09	_	В	1.54	_	В	1.30	-	A	0.91	_	A

		HCS	7 Sig	nalize	d In	ersec	tion F	Resu	lts Sur	nmar	У				
															e la c
General Inform	nation	In						-	Intersec		_		- 1	111	AU.
Agency		Stolfus and Associa	ates					_	Duration		0.250		- 2		
Analyst		Max Rusch		Analys		_		-	Area Typ	e	Other	·			<u>`</u> _
Jurisdiction				Time F		PM P	eak		PHF		0.83		- 4		====
Urban Street		Patterson Rd		Analys	is Yea	r 2045			Analysis	Period	1> 7:0	00	×.		7
Intersection		30 Road & Patterso	on	File Na	ame	2045	ACP PN	1.xus						1111	
Project Descrip	tion							_					h	4144	ejri.
Demand Inform	nation				EB		_	W	В		NB			SB	
Approach Move				T	T	R	1	Ti		1	T	R	1	Τ	R
Demand (v), v				227	1174	_	72	66	_	258	132	_	47	83	128
Signal Informa	tion				1	15				245				-	1
Cycle, s	100.0	Reference Phase	2		P .	T€ .			5 8	7	7		€.)	the l
Offset, s	90	Reference Point	Begin	Green	11 0	2.0	53.5	6.0		5.0			2	1	-
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	5.0	3.5		4.0		<i>></i>	₹	\	ST2
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	0.0	1.5	0.5	0.0	1.0		5	6	7	8
Timer Results				EBI	-	EBT	WB	<u> </u>	WBT	NBI	-	NBT	SBI	-	SBT
Assigned Phase	e			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				17.0	_	62.0	15.0	_	60.0	13.0	-	13.0	10.0		10.0
Change Period,				4.0	-	6.5	4.0	_	6.5	4.0	_	5.0	4.0		5.0
Max Allow Head				4.1	\rightarrow	0.0	4.2	_	0.0	4.2	$\overline{}$	4.3	4.2	-	4.3
Queue Clearan				8.0	_		4.4	4		10.4		10.0	4.9		7.0
Green Extensio		(ge), s		0.4	-	0.0	0.2	_	0.0	0.0	$\overline{}$	0.0	0.0	-	0.0
Phase Call Prol	bability			1.00			1.00			1.00		1.00	1.00		1.00
Max Out Proba	bility			0.58	3		0.12	2		1.00		1.00	1.00		1.00
Movement Gro	up Res	sults			EB			WE	3		NB			SB	
Approach Move	_			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow F	Rate (v), veh/h		273	1414	384	116	1080	111	311	159	124	57	100	43
Adjusted Satura	ation Flo	ow Rate (s), veh/h/	ln	1810	1795	1598	1795	179	5 1598	1730	1870	1560	1810	1885	1585
Queue Service				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 C	learanc	e Time (gε), 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), v	eh/h			487	1992	887	388	1920	855	455	150	125	181	94	285
Volume-to-Capa	acity Ra	ntio (X)		0.562	0.710	0.433	0.299	0.56	2 0.130	0.683	1.063	0.994	0.314	1.061	0.152
Back of Queue	(Q), ft	/In (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), ve	eh/In (90 th percent	tile)	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 percen	tile)	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 De	lay (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 De	elay (d	з), 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/v	eh		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)			В	Α	Α	Α	В	Α	D	F	F	D	F	D
Approach Delay	y, s/veh	/LOS		4.6		Α	10.9)	В	88.0		F	99.5	5	F
Intersection De	lay, s/ve	eh / LOS				23	3.0						С		
Multimadal								1877			ND			00	
Multimodal Re		11.00		2.22	EB	-	0.01	WE		2.42	NB	D	0.44	SB	
Pedestrian LOS				2.25		В	2.21	_	В	2.46		В	2.46	_	В
Bicycle LOS Sc	ore / LC	J8		2.20)	В	1.29	,	Α	1.47		Α	0.82	4	Α

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/Ma	all Access & Patterson	Analysis Period	1> 7:00								
Project Description													



Basic Segm	_														
Segment	Speed	d Limit	Throug	h Lanes	Segmen	t Length	Inter	rsection	Wid	Length	of RM	Perce	nt Curb	Ot	her Delay
	WB	EB	WB	EB	WB	EB	WE	B E	В	WB	EB	WB	EB	WE	B EB
1	35	35	2	2	625	625	50) 5	0	0	0	100	0	0.0	0.0
									ļ,						
2 10						MAN	_	Westbo		IMP.	_	EDI	Eastbo	_	EDD
Segment O	_					WBL	-	WB	_	WBF		EBL	EBT	\rightarrow	EBR
Segment	Moveme		alı Tiasa	_		1	-	6		16	-	5	2	-	12
1	_		ck Time,				\rightarrow				-			\rightarrow	
1			llback Tin				_	44.50			-		42.0		
1	_		Speed, m	pn				41.58			-		42.0		
1	_	Time, s						14.73					15.1		
1		Speed,						28.93					28.13 53.8		
		Delay, s	ven					26.24			-				
1	Travel S	peed, m	nh					16.24			_		69.0 6.17		
1	_	te, stops						0.28			_		1.01		
1			e, stops/m	ni				2.34			_		8.50		
1	_	vol/cap		<u> </u>				0.32			-		0.87		
1		of Base						39.06			-		14.6		
1	Level of	Service						Е			\rightarrow		F		
1	Auto Tra	veler Pe	rception S	Score				2.50			\neg		3.64		
Multimodal	Results	(Segmer	nt)												
1	Pedestr	ian Segn	ent LOS	Score / L	os		2.37			В	$\neg \neg$	3.85	5		D
1	Bicycle	Segment	LOS Sco	re / LOS			2.30			В		2.45	j		В
1	Transit \$	Segment	LOS Sco	re / LOS			2.00			Α	\perp	3.52	2		D
Facility Out	put Data							Westbo	und				Eastbo	und	
Facility Trav	el Time, s							964.1	5				1079.	36	
Facility Trav	el Speed,	mph						22.28	3				19.9	1	
Facility Base	e Free Flo	w Speed	l, mph					43.04	1				42.7	8	
Facility Perc	ent of Ba	se FFS						51.77	7				46.5	4	
Facility Leve	el of Servi	ce						F					F		
Facility Auto	Traveler	Perception	on Score					2.39					2.38	}	
Multimodal	Results	(Facility)													
Pedestrian F	acility LC	S Score	/LOS				3.50		П	С	\neg	3.86	5		D
Bicycle Faci	lity LOS S	Score / LO	os				2.82			С		2.98	3		С
Transit Facil	ity LOS S	core / LC	os				1.51			Α		1.63	3		Α

				НС	S7 Url	oan Str	eet S	Segm	nent	Report						
General In	formation											Streets Int	formation	1		
Agency			Stolfus and	Associate	es							Number of	Intersect	ions	15	
Analyst		N	Max Rusch			Analys	sis Dat	te			\Box	Number of	Segment	s	14	
Jurisdiction						Time F	eriod	P	M Pea	ak		Number of	Iterations	;	15	
File Name		2	2045 ACP F	M.xus		Analys	sis Yea	ar 2	045		\Box	System Cy	cle Lengt	h, s	10	0
Intersection	IS	1	Market Stre	et/Mall Ad	cess & P	at Home I	Depot	Access	s/Mesa	Mall Acc	ess &	Analysis P	eriod		1>	7:00
Project Des	cription	\Box														
		1)—	625 ft 35 mph		2		906 f 35 mp		— (3)-	1675 35 m		-(4	
Danie Com																
Segment	Segment Speed Limit Through Lanes Segment Length Intersection Wid Length of RM Percent Curb Other Delay WB EB															
2	egment Speed Limit Through Lanes Segment Length Intersection Wid Length of RM Percent Curb Other Delay WB EB															
	2 35 35 2 2 906 906 50 50 0 0 70 70 0.0 0.0															
							,	Westbo	ound				Eastbo	und		
Segment C	output Dat	a				WBI	_	WB		WBR		EBL	EBT			EBR
Segment	Moveme					1	-	6		16		5	2		_	12
2			back Time,	h			_									
2		_	pillback Tin				_									
2			w Speed, m				_	41.4	18				41.4	В		
2	Running							18.5			\neg		19.1	2	_	
2	Running							33.2	23				32.3	1		
2	Through							27.2			\neg		17.8			
2	Travel Ti							45.7	79				36.9	В		
2	Travel S		mph					13.4			\neg		16.70			
2	Stop Rat		•					0.7	5				0.40)		
2			ate, stops/n	ni				4.3			\neg		2.33			
2	Through	_						0.4	5				0.82			
2	Percent		-					32.5			\neg		40.2	7		
2	Level of	Servic	e					Е					D			
2	Auto Tra	veler F	Perception	Score				2.8	5		\neg		2.50			
Multimoda	l Results (Segm	ent)													
2	Pedestri	an Seg	gment LOS	Score / L	os		2.99		Т	С	\neg	3.54)
2	Bicycle \$	Segme	ent LOS Sco	ore / LOS			2.53			В		2.74			Е	}
2	Transit S	Segme	nt LOS Sco	re / LOS			2.38			В		2.16	i		Е	3
Facility Ou	tput Data							Westb	ound				Eastbo	und		
Facility Trav								964.	15				1079.3			
Facility Trav		_						22.2					19.9°			
Facility Bas		_						43.0					42.7			
Facility Per			3					51.7					46.5	4		
Facility Lev								F			\perp		F			
Facility Auto	Traveler I	Percep	otion Score					2.39	9				2.38	}		

Multimodal Results (Facility)
Pedestrian Facility LOS Score / LOS

Bicycle Facility LOS Score / LOS

Transit Facility LOS Score / LOS

С

С

3.50

2.82

1.51

D

С

3.86

2.98

1.63

				ш	S7 Urk	an Str	eet	Segr	ment	Panort						
		_	_	п	,37 OIL	Jan Su	CCL	Segi	Hent	Report				_		
Consending												Ctoo etc. Ind				
General Info	ormation	Ctolf	fue and	Associate								Streets Int Number of			15	
Agency		-			es	Anaba	:- D	4-							•	
Analyst		мах	Rusch			Analys			DM D-	-1.		Number of			14	
Jurisdiction		004				Time F			PM Pe	ак		Number of			15	
File Name		_		PM.xus		Analys		_	2045			System Cy		h, s	100	
Intersections		Hom	ne Depo	ot Access/	Mesa Mal	1/24 1/2	Rd &	Patter	son			Analysis P	eriod		1>	7:00
Project Desc	cription	_														
625 35 m	-	2		906 ft 35 mph		<u></u> 3		1679 35 m		— (4)-	2540 40 m		-(5	-
Basic Segm	ent Informati	on (H	lome D	epot - 24	1/2 Rd)											
Segment	Speed Lim	it	Throug	h Lanes	Segmen	t Length	Inte	ersectio	n Wid	Length	of RM	Percer	nt Curb	Ot	her	Delay
	WB E	В	WB	EB	WB	EB	W	/B	EB	WB	EB	WB	EB	WE	3	EB
3	35 3	5	2	2	1675	1675	5	0	50	550	550	70	100	0.0)	0.0
							_		oound		\rightarrow		Eastbo		_	
Segment O	_					WBL	-		ВТ	WBR		EBL	EBT			EBR
Segment	Movement					5	_		2	12	\rightarrow	1	6	_		16
3	Bay/Lane Sp										_			_		
3	Shared Lane							\bot			_					
3	Base Free-Fl	low S	peed, n	nph				40	.85				40.3	3		
3	Running Time	e, s						31.	.05				32.12	2		
3	Running Spe	ed, m	ıph					36	.78				35.5	6		
3	Through Dela	ay, s/v	/eh					22	.56				35.8	0		
3	Travel Time,	s						53	.61				67.92	2		
3	Travel Speed	d, mph	1					21	.30				16.8	1		
3	Stop Rate, st	tops/v	eh					0.	60		т		0.88			
3	Spatial Stop	Rate,	stops/r	ni				1.9	90		\neg		2.77	•		
3	Through vol/	cap R	atio					0.4	46				0.81			
3	Percent of Ba	ase Fl	FS					52	.15		\neg		41.69	9		
3	Level of Serv	/ice						(D			
3	Auto Travele	r Perc	eption	Score				2.	43				2.57	,		
Multimodal	Results (Seg	ment))													
3	Pedestrian S	egme	nt LOS	Score / L	os		3.66		\Box	D	Т	3.49)		С	,
3	Bicycle Segn	nent L	OS Sc	ore / LOS			2.75			С	\neg	2.87	,		С	;
3	Transit Segm	OS Sco			1.65			Α		2.18	3		В	3		
Facility Out	put Data							West	oound				Eastbo	und		
Facility Trav	el Time, s						964	.15		\perp		1079.3	36			
	el Speed, mph							22	28				19.9	1		
Facility Base	Free Flow Sp	eed,	mph					43	.04				42.7	В		
Facility Perc	ent of Base FF	S						51.	.77				46.5	4		
Facility Leve	l of Service							F					F			
Facility Auto	Traveler Perc	eption	Score					2.	39				2.38			
Multimodel	Doculto (Cari	litur														
	Results (Faci		1.00				2.50		_		_	0.00				
	acility LOS So						3.50		+	С	-	3.86			D	
	ity LOS Score						2.82		-	С	\rightarrow	2.98			C	
Transit Facil	ity LOS Score	/ LOS	<u> </u>				1.51			Α	\perp	1.63	3		A	L

				Н	CS7 Url	ban Str	eet	Seg	ment	Repor	t				
General Info	ormation	_										Streets In			
Agency		\rightarrow	Stolfus and		tes							Number of			15
Analyst		N	Max Rusch			Analys			<u> </u>			Number of			14
Jurisdiction		_				Time F			PM Pe	ak		Number of			15
File Name		\rightarrow	045 ACP F			Analys	sis Ye	ear	2045			System C		_	100
Intersections	s	2	4 1/2 Rd 8	k Patters	on	25 Roa	id & l	Patter	son			Analysis P	eriod		1> 7:00
Project Desc	cription														
906 35 m		3)—	1675 t 35 mp		4			40 ft mph	<u>_</u> (<u>)</u>	2549 40 m		6)—
Basic Segm	ent Infor	mation	(24 1/2 R	d - 25 R	d)										
Segment	Speed			h Lanes		nt Length	Inte	rsecti	on Wid	Length	of RM	Perce	nt Curb	Oth	er Delay
oeginent	WB	EB	WB	EB	WB	EB	_	/B	EB	WB	EB		EB	WB	EB
4	40	35	2	2	2540	2540	-	0	50	0	0	90	90	0.0	0.0
-	40	33			2340	2340			30	U	U	30	30	0.0	0.0
								Wes	tbound		-		Eastbo	und	
Segment O	utput Dat	a				WBI	_	V	VBT	WBF	2	EBL	EB1		EBR
Segment	Moveme	ent				5			2	12	\neg	1	6		16
4	Bay/Lan	e Spill	ack Time,	h											
4	Shared	Lane S	pillback Tir	me, h							\neg			\neg	
4			v Speed, m					43	3.32		\rightarrow		40.9	7	
4	Running			•				42	2.73		\neg		46.5	6	
4	Running								0.53				37.2		
4	Through								5.66		\neg		35.3		
4	Travel T								9.39		\rightarrow		81.8		
4	Travel S	-	mph						1.81		\neg		21.1		$\overline{}$
4	Stop Ra							0	.84		\rightarrow		0.75		
4	_		ate, stops/r	ni				1	.75		\neg		1.55	5	
4	Through								.65		\rightarrow		0.95		
4	Percent		_						0.36		\neg		51.6		
4	Level of	Service	e						С		\rightarrow		С		
4			erception	Score				2	.41		\neg		2.38		
Multimodal	Results ((Segm	ent)												
4			ment LOS	Score /	LOS		3.28		\top	С	\neg	3.56	6		D
4	_		nt LOS Sc				2.79			С	\neg	2.97	7		С
4	Transit 9	nt LOS Sco	3		1.61			Α		1.81	1		Α		
Facility Out									tbound		_		Eastbo		
Facility Trav								4.15		\rightarrow		1079.			
Facility Trav								2.28		-		19.9			
Facility Base									3.04		_		42.7		
Facility Perc									1.77				46.5	4	
Facility Leve									F		\rightarrow		F		
Facility Auto	Traveler	Percep	tion Score					2	.39				2.38	3	
Multimodal	Resulte	(Facilit	v)												
Pedestrian F		_					3.50			С		3.86	6		D
Bicycle Faci							2.82			C	-	2.98			С
Transit Facil							1.51			A	-	1.63			A
Transit Facili	, 200 0	3010 1 1					1.01			^		1.0			

				ш	S7 Urk	an Str	eet	Sear	nent	Panort						
		_	_	-	,37 OIL	Jan Su	CCL	Segi	HEHIL	Report				_	_	
General Info	ormation	04-16		A							-	Streets Inf		_	lar.	
Agency				Associate	es	1					_	Number of			15	
Analyst		мах	Rusch			Analys					-	Number of			14	
Jurisdiction						Time F		\rightarrow	PM Pe	ak	_	Number of			15	
File Name				PM.xus		Analys			2045		_	System Cy		h, s	100	
Intersections		25 R	load &	Patterson		25 1/2	Road	& Patt	erson			Analysis P	eriod		1> 7	7:00
Project Des	cription															
1675 35 m		4		2540 ft 40 mph		5		2549 40 m		— (6)-	2613 35 m		-(7)-	
	ent Information						_									
Segment	Speed Limi	_		h Lanes	Segmen		_	rsectio		Length			nt Curb		her D	_
	WB EE	_	WB	EB	WB	EB	W	В	EB	WB	EB	WB	EB	W	3	EB
5	40 40	2	2	2549	2549	5	0	50	260	260	90	90	0.0		0.0	
								Westh			-	501	Eastbo			
Segment O	_					WBI	-	-	ВТ	WBR	-	EBL	EBT	_		BR
Segment	Movement					5	_	2	2	12	-	1	6	-		16
5	Bay/Lane Spi										_			_		
5	Shared Lane										\rightarrow					
5	Base Free-Fle	_	peed, n	nph				42.			4		42.9			
5	Running Time	e, s						43.	26		_		44.4	B		
5	Running Spe							40.	17		_		39.0	В		
5	Through Dela		eh					11.	67		_		63.19	9		
5	Travel Time,							54.			_		107.6			
5	Travel Speed	, mph	1					31.	64				16.14	4		
5	Stop Rate, sto	ops/ve	eh					0.3	33				1.07	'		
5	Spatial Stop F	Rate,	stops/r	mi				0.6	8				2.21			
5	Through vol/o	ap R	atio					0.4	19		\perp		1.05	,		
5	Percent of Ba	se FF	FS					73.	64				37.5	7		
5	Level of Servi	ice						В	3				F			
5	Auto Traveler	Perc	eption	Score				2.2	24				2.48			
Multimodal	Results (Segr	nent))													
5	Pedestrian Se	egme	nt LOS	Score / L	os		3.23			С	\perp	3.94			D	
5	Bicycle Segm	ent L	OS Sc	ore / LOS			2.80			С	\perp	3.01			С	
5	Transit Segm	OS Sco			0.89			Α	\perp	2.29			В			
Facility Out								Westb			4		Eastbo			
	acility Travel Cased and							964			_		1079.			
	el Speed, mph							22.			_		19.9			
	Free Flow Sp		mph					43.					42.7			
	ent of Base FF	S						51.					46.5	4		
Facility Leve								F					F			
Facility Auto	Traveler Perce	eption	Score					2.3	39				2.38			
Multimodal	Results (Facil	lity)														
	acility LOS Sc		LOS				3.50		_	С	$\overline{}$	3.86			D	
	lity LOS Score						2.82			C	-	2.98			C	
	ity LOS Score								-		-					
Transit Facil	ity LOS Score	LUS					1.51			Α		1.63			A	

					HCS7	' Urb	an Str	eet	Segn	nent	Report						
General Inf	ormation												Streets In	formation	1		
Agency		Sto	olfus and	1 Assoc	iates								Number of	Intersect	ions	15	
Analyst		Ma	x Rusch	1			Analys	sis Da	ate				Number of	Segment	s	14	
Jurisdiction		\top					Time F		-	PM Pe	ak		Number of			15	
File Name		204	45 ACP	PM xu	s		Analys	sis Ye	ar	2045			System Cy	cle I engl	h s	10	
Intersections		_	1/2 Roa						Patters				Analysis P		, 0	_	7:00
Project Des		-	172 1100		ttoroon		100 000	001 0	T ditore	-			7 trialy old 1	onou		÷	7.00
				25.4			$\overline{}$						0555			_	
2540 40 m		5)—	40 n		— (6		2613 35 m		— (7)-	2557 35 m		-(8)——
Rasic Segn	nent Informa	tion (25 1/2 F	2d - 26	Rd)												
Segment	Speed Lir		Throug		_	amon	t Length	Into	ersection	n Wid	Length	of DM	Porce	nt Curb		ther	Delay
Segment		TIIL EB	WB	gn Lan EE	_	NB	EB	W		EB	WB	EB		EB	W		EB
				-	\rightarrow	$\overline{}$			_						_		
6	35	40	2	2	2	613	2613	5	U	50	0	0	90	90	0.	U	0.0
									101 - 41					F			
2 40						_	14/DI		Westb		14/00		EBI	Eastbo	_	_	EDD
Segment O	_						WBI	_		ВТ	WBR	-	EBL	EB1			EBR
Segment	Movement					$\overline{}$	5	_	2	2	12	\rightarrow	1	6	\dashv		16
6	Bay/Lane S	_						_				_			_		
6	Shared Lan	e Spi	llback Ti	me, h								_					
6	Base Free-I	Flow	Speed, r	mph					40.	98				43.3	3		
6	Running Tir	ne, s							46.	23				44.8	4		
6	Running Sp	eed,	mph						38.	54		\neg		39.7	3		
6	Through De					\neg			31.	92		\neg		28.4	2		
6	Travel Time								78.	15		\neg		73.2	6		
6	Travel Spee		oh			\neg			22.			\neg		24.3			
6	Stop Rate,								0.8			\rightarrow		0.75			
6	Spatial Stop	_		mi					1.6			_		1.52		_	
6									0.6			-		0.84			
	Through vo	_				-						\rightarrow				_	
6	Percent of E		FFS			_			55.			-		56.1		_	
6	Level of Se								С			-		С		_	
6	Auto Travel			Score					2.3	88		_		2.37		_	
	Results (Se	_	-							_		_			_		
6	Pedestrian							3.26		+	С	_	3.52		<u> </u>)
6	Bicycle Seg							2.82		_	С	_	2.97	<u>'</u>			<u> </u>
6	Transit Seg	ment	LOS Sc	ore / L	os			1.52			Α		1.51				4
Facility Out	put Data							Westb	ound		7		Eastbo	und			
	Facility Output Data Facility Travel Time, s								964					1079.			
	Facility Travel Speed, mph								22.			-		19.9			
			mph						43.			-		42.7		_	
_	Free Flow S	_	, mpn									-					
_	ent of Base F	-12							51.			-		46.5	4		
Facility Leve			-						F			_		F			
Facility Auto	Traveler Per	ceptio	on Score	9					2.3	9				2.38	3		
Multimodal	Results (Fac	cility))														
	acility LOS S							3.50		\top	С	\top	3.86	5		-)
	lity LOS Scor							2.82			С	\neg	2.98			(C
	ity LOS Scor							1.51			A		1.63				Α
						_										_	

				НС	S7 Urb	an Str	eet	Segn	nent	Report						
General Inf	ormation											Streets Inf	ormation	1		
Agency		Stol	lfus and	Associate	es							Number of	Intersect	ions	15	
Analyst		Max	x Rusch			Analys	sis Da	ate				Number of	Segment	s	14	,
Jurisdiction		\top				Time F		_	PM Pe	ak	\neg	Number of			15	
File Name		204	5 ACP	PM xus		Analys	sis Ye	ar 2	2045		\neg	System Cy	cle Lenat	h s	10	
Intersection	<u> </u>	_		& Patterso	n			Patters				Analysis P		, 0	-	7:00
Project Des		130	Oucore	x i attoroo		raroa	cora	T dittoro				/ ulaiyolo i	Cilou		-	7.00
1 Toject Des	сприоп	_														
2549 40 m	-	6)——	2613 ft 35 mph	(7)-		2557 35 mg		-(8)_	2571 40 m		-(9)——
	`		_		_	_	_			_	_			_		_
Basic Segn	nent Informat	ion (2	26 Rd -	26 1/2)												
Segment	Speed Lin	_		h Lanes	Segmen	t Lenath	Inte	rsection	ı Wid	Length	of RM	Percer	nt Curb	O	ther	Delay
		В	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	W		EB
7		10	2	2	2557	2557	50		50	0	0	90	90	0.0	_	0.0
	90 4			_	2001	2001					ŭ			0.0		0.0
								Westb	ound		$\overline{}$		Eastbo	und		
Segment O	utnut Data					WBI		WE		WBR		EBL	EBT	_		EBR
Segment	Movement					5		2		12	-	1	6	-	_	16
7	Bay/Lane Sp	aillhac	k Timo	h						12	-	'	-	\rightarrow		10
											-			\rightarrow	_	
7	Shared Lane						_	40.0			-		40.7		_	
7	Base Free-F		Speed, n	nph				40.3			\rightarrow		42.7			
7	Running Tim	_						46.1			\rightarrow		44.4			
7	Running Spe	_	_					37.7			_		39.2	0		
7	Through Del	lay, s/	veh					13.3	33				73.9	1		
7	Travel Time,	S						59.4	17				118.3	8		
7	Travel Spee	d, mp	h					29.3	31				14.7	3		
7	Stop Rate, s	tops/\	veh					0.3	6				1.18	}		
7	Spatial Stop	Rate	, stops/	mi				0.7	4		\neg		2.44			
7	Through vol/	/cap R	Ratio					0.5	4				1.07	,		
7	Percent of B	_						72.5			\neg		34.4	5		
7	Level of Sen							В			\rightarrow		F			
7	Auto Travele		ception	Score				2.2			_		2.52	,		
	Results (Seg			000.0							_		2.02			
7	Pedestrian S			Score / I	os		3.10		$\overline{}$	С	\neg	3.61)
7	Bicycle Segr						2.82		+	C	-	2.99			_	<u>, </u>
									+-		-					
7	Transit Segn	nent L	-05 50	ore / LOS			1.05			A		2.41			E	3
Facility Out	nut Data							Month	ound		_		Faatha	und		
Facility Out							Westb			-		Eastbo				
Facility Trav	·						964.			-		1079.				
	el Speed, mpl							22.2			+		19.9		_	
_	Free Flow S		mph					43.0			-		42.7		_	
_	ent of Base F	FS						51.7			\perp		46.5	4		
Facility Leve								F					F			
Facility Auto	Traveler Pero	eptio	n Score					2.3	9				2.38	}		
Multimodal	Results (Fac	ilityA														
	Facility LOS S		1100				3.50			С		3.86)
							2.82									
	lity LOS Score								-	C	-	2.98				<u> </u>
Transit Faci	ity LOS Score	/ LO	5				1.51			Α		1.63				4

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		_	_		537 UII	Jan Su	CCL	Seg	mem	Report				_		
												04 4 1				
General Info	ormation	los-1	£									Streets Inf		_	lar.	
Agency		-		Associat	es	1			_			Number of			15	
Analyst		Мах	Rusch	1		Analys						Number of			14	
Jurisdiction		-				Time F			PM Pe	ak		Number of			15	
File Name		-		PM.xus		Analys			2045			System Cy		h, s	100	
Intersections		7th	Street 8	& Patterso	on	12th St	treet	& Patt	erson			Analysis P	eriod		1>	7:00
Project Des	cription	_	_				_	_			_			_		
2613 35 m		7		2557 ff 35 mph		8			'1 ft nph	— (9)-	1272 40 m		_(1	0	
Basic Segn	ent Informati	on (2	6 1/2 R	ld to 12th	st)											
Segment	Speed Limi	_		h Lanes		t Length	-		on Wid	Length		_	nt Curb			Delay
	WB E	В	WB	EB	WB	EB	W	/B	EB	WB	EB	WB	EB	W	3	EB
8	40 35	5	2	2	2571	2571	5	0	50	0	0	90	90	0.0)	0.0
									bound		\rightarrow		Eastbo			
Segment O	utput Data					WBI	_	V	VBT	WBR		EBL	EBT			EBR
Segment	Movement					5			2	12		1	6			16
8	Bay/Lane Spi	illbac	k Time,	h												
8	Shared Lane	Spill	back Ti	me, h							\perp			\Box		
8	Base Free-Fl	ow S	peed, n	nph				43	8.08				40.7	3		
8	Running Time	e, s						43	3.87		\neg		46.49	9		
8	Running Spe	ed, m	ıph					39	9.96		\neg		37.70	0		
8	Through Dela	ay, s/v	veh					30).19				9.06	,		
8	Travel Time,	s						74	.06		\neg		55.5	5		
8	Travel Speed	l, mpł	h					23	3.67				31.5	5		
8	Stop Rate, st	ops/v	/eh					0	.74				0.21			
8	Spatial Stop I	Rate,	stops/i	mi				1	.51		\neg		0.43			
8	Through vol/o	_							.72		\rightarrow		0.72			
8	Percent of Ba	_							.95		\neg		77.4			
8	Level of Serv								С		\rightarrow		В			
8	Auto Traveler		ception	Score					.37		\neg		2.20)	_	
	Results (Segi		_								_					
8	Pedestrian S			Score /	LOS		3.48		$\overline{}$	С	\neg	3.38	1		C	:
8	Bicycle Segm	_					2.92			С	\rightarrow	2.90			C	
8	Transit Segm				1.50		\neg	A	\neg	0.95			Ā			
Facility Out	put Data							West	bound				Eastbo	und		
Facility Trav	el Time, s						96	4.15				1079.	36			
Facility Trav	el Speed, mph							22	2.28		\Box		19.9	1		
Facility Base	Free Flow Sp	eed,	mph					43	3.04		\neg		42.7	В		
Facility Perc	ent of Base FF	S						51	.77		\neg		46.5	4		
Facility Leve	of Service								F				F			
	Traveler Perce	eptior	n Score					2	.39		寸		2.38			
Multimadal	Doculto /Fa-:	litur														
	Results (Faci		1.00				2.50				_	0.00				
	acility LOS Sc						3.50		-	С	-	3.86				
	lity LOS Score						2.82		_	С	\rightarrow	2.98			C	
Transit Facil	ity LOS Score	/ LOS	5				1.51			Α	\perp	1.63	3		A	

				н	S7 Urk	oan Str	eet	Segr	nent	Report	:					
General Inf	ormation											Streets Inf	formation	1		
Agency		Sto	olfus and	Associate	es							Number of	Intersecti	ons	15	i
Analyst		Ma	x Rusch			Analys	sis Da	ate				Number of	Segment	s	14	
Jurisdiction						Time F	Period	d	PM Pea	ak		Number of	Iterations		15	i
File Name		204	45 ACP F	PM.xus		Analys	sis Ye	ar	2045			System Cy	cle Lengt	h, s	10	0
Intersections	3	121	th Street	& Patters	on	Patters	on R	d & 15	th St			Analysis P	eriod		1>	7:00
Project Des	cription															
2557 35 m		8)—	2571 ft 40 mph	$\overline{}$	9-	_	1272 40 m		<u></u>	<u>) </u>	1325 40 m		-(11)——
Dania Cam	ant Inform	-tion (4245 64	27.4/4.0	4)											
Basic Segn						t Lar-th	le t		n Mad	Lazzt	of DIA	Descri	at Our		th -	Deleti
Segment	Speed Li			h Lanes		t Length	_	ersectio		Length			nt Curb			Delay
		EB	WB	EB	WB	EB	W	_	EB	WB	EB	WB	EB	W		EB
9	40	35	2	2	1272	1272	5	0	50	0	0	90	90	0.	U	0.0
								Monti	oound		_		Eastbo	und		
Segment O	utnut Data					WBI			BT	WBF	,	EBL	Eastbo			EBR
Segment	Movement					5	-		2	12	`	1	6	_		16
9	Bay/Lane S		ak Tima	h		3		-	2	12	_		-	-		10
_		_						-			-			-		
9	Shared La			-				42	00		-		40.00	$\overline{}$		
9	Base Free-		Speed, m	ıpn				42.			-		40.28			
9	Running Ti	_						23.			-		26.02		_	
9	Running S							36.			_		33.34			
9	Through D		/veh					11.			_		117.3			
9	Travel Time							35.			_		143.3	9		
9	Travel Spe	ed, mp	ph					24.	23				6.05			
9	Stop Rate,	stops	/veh					0.					1.55			
9	Spatial Sto	p Rate	e, stops/n	ni				2.2	24				6.42			
9	Through vo	ol/cap	Ratio					0.4	47				1.18			
9	Percent of	Base	FFS					56.	.83				15.02	2		
9	Level of Se	ervice						(;		$\neg \vdash$		F			
9	Auto Trave	ler Pe	rception	Score				2.4	49		$\neg \vdash$		3.23			
Multimodal	Results (Se	egmen	ıt)													
9	Pedestrian	Segm	ent LOS	Score / L	.os		3.17		\top	С	\neg	4.47	•		E	E
9	Bicycle Se	gment	LOS Sco	ore / LOS			2.75			В	$\neg \vdash$	3.04			(C
9	Transit Seg	gment	LOS Sco	re / LOS			1.44		\neg	Α	$\neg \vdash$	3.67	•		- [)
Facility Out									bound		_		Eastbo			
Facility Trav								.15				1079.3				
Facility Trav								.28				19.9				
Facility Base		_	, mph						.04				42.78			
Facility Perc									.77				46.54	4		
Facility Leve								F					F			
Facility Auto	Traveler Pe	rceptio	on Score					2.3	39				2.38			
Multimodal	Regulte /Ea	cility\														
Pedestrian F							3.50		T	С		3.86			-)
Bicycle Faci							2.82			C	-	2.98				C
Transit Facil							1.51		-	A	-	1.63				
Transit Facil	ity LOS SCO	ie / LC	<i>,</i> 3				1.51			А		1.03	•			A

			шс	°C7	on Ctr	oot C	'oam	ont l	Donort	_			_	_	
			н	S7 Urb	an Str	eet 5	egm	ent	Report	_			_		
General Inf	ormation	la								-	Streets Inf			Lon	
Agency		Stolfus and		es			_			-	Number of			15	
Analyst		Max Rusch	h			sis Date				_	Number of			14	
Jurisdiction					Time F		_	M Pea	ak	-	Number of			15	
File Name		2045 ACP				sis Year	_)45		-	System Cy		h, s	100	
Intersection		Patterson	Rd & 15th	St	27 1/2	Road 8	& Patter	son			Analysis P	eriod		1>	7:00
Project Des	cription					_	_	_		_			_		
2571 40 m	-	9	1272 ft 40 mph	(10		1325 fi 40 mph)-	3892 45 m		_(1	2	
Basic Segn	nent Informati	on													
Segment	Speed Limi		gh Lanes	Segmen		_	ection		Length			nt Curb		_	Delay
	WB E	3 WB	EB	WB	EB	WB	E	В	WB	EB	WB	EB	WE	3	EB
10	40 40) 2	2	1325	1325	50	5	0	0	0	70	70	0.0)	0.0
							Vestbo	_		-		Eastbo		_	
Segment O					WBL	-	WB		WBR	_	EBL	EBT	\rightarrow		EBR
Segment	Movement				1	-	6	_	16	-	5	2	-	_	12
10	Bay/Lane Spi		_			_				_			_		
10	Shared Lane									\rightarrow					
10	Base Free-Fl		mph				44.07			_		44.07			
10	Running Time						24.07			\rightarrow		24.87			
10	Running Spe						37.53			_		36.32			
10	Through Dela						48.58			\rightarrow		6.69			
10	Travel Time,						72.66			_		31.56			
10	Travel Speed						12.43			\rightarrow		28.62	2		
10	Stop Rate, st	•					0.99			_		0.18			
10	Spatial Stop I		/mi				3.96			_		0.73			
10	Through vol/o	ap Ratio					0.90					0.75			
10	Percent of Ba						28.21	1				64.9	5		
10	Level of Serv						F			_		С			
10	Auto Traveler		Score				3.02					2.25			
Multimodal	Results (Segr	-													
10	Pedestrian Se	_				3.86		_	D	_	4.80		L	E	
10	Bicycle Segm	ent LOS So	core / LOS			2.93			С	_	2.98			С	;
10	Transit Segm			2.63			В	_	1.27			Α	k.		
Encility O	tout Data					,,	Vestbo	und				Eastbo	und		
Facility Out				_		v	964.1			-		1079.3		_	
					22.28			-							
	el Speed, mph			_			43.04			-		19.9°		_	
	e Free Flow Sp			_						-					
_	cent of Base FF el of Service	3					51.77 F			-		46.54 F	+		
_	Traveler Perce	antion Score	2				2.39			+		2.38			
raciiity Auto	, maveler Ferce	epuon acore					2.39					2.38			
Multimodal	Results (Faci	lity)													
	Facility LOS Sc					3.50			С	T	3.86			D	,
	ility LOS Score					2.82			С	\neg	2.98			C	
	lity LOS Score			1.51			A	\neg	1.63			Ā			
	,										1.00	-		,	-

				НС	S7 Urk	an Str	eet	Seg	ment	Report	t				
General Inf	ormation											Streets In	formation	1	
Agency		Sto	olfus and	Associate	es						1	Number of	Intersect	ions	15
Analyst		Ma	ax Rusch			Analys	sis Da	ate			1	Number of	Segment	S	14
Jurisdiction						Time F	erio	i	PM Pea	ak	1	Number of	Iterations	5	15
File Name		20	45 ACP F	M.xus		Analys	sis Ye	ar	2045			System Cy	cle Lengt	h, s	100
Intersections	6	28	1/4 Road	1 & Patter	son	29 Roa	ad & F	Patters	son			Analysis P	eriod		1> 7:00
Project Desc	cription														
1325 40 m		11)—	3892 ft 45 mph		12		381 45 r	3 ft mph	<u>_</u> (1	3)—	2579 45 m		1	
Basic Segm	ont Infor	mation	(28 1/4 B)	4 20 P4	`										
	Speed			u - 29 Ku h Lanes	Segmen	t Longth	Into	reasti	on Wid	Length	of DM	Doroca	nt Curb	O#	ner Delay
Segment	WB	EB	WB	EB	WB	EB	W		EB	WB	EB	WB	EB	WB	
42							-	\rightarrow				_		_	
12	45	40	2	2	3813	3813	5	U	50	0	0	90	90	0.0	0.0
								West	tbound				Eastbo	und	
Segment O	utput Dat	а				WBI			VBT	WBF	2	EBL	EBT	_	EBR
Segment	Moveme					5		_	2	12	`	1	6	_	16
12			ick Time,	h						12	-		- ŭ	\rightarrow	-10
12			illback Tin				_				_			\rightarrow	
12			Speed, m					AF	5.78		_		43.43	2	
12	Running			ipii					9.68		_		64.10		
12									3.56		_		40.5		
12	Running Through								3.95		_		18.7		
	Travel Ti		vveii						8.62		_		82.83		
12	Travel S	-	nh						8.93		_		31.3		
									.97		_		0.49		
12 12	Stop Rat		e, stops/n	ni					.34		_		0.49		
	_			III							_				
12	Through								.94		_		0.83		
12	Percent		FFS						2.28		-		72.2		
12	Level of		ti (0					C		_		B		
12			rception	Score					.34		_		2.24		
Multimodal 12			nent LOS	Score / I	08		3.61		_	D	_	3.80	`	_	D
12			LOS Sco				2.85		-	С	-	3.04			С
									_		_				
12	Transit	segment	LOS Sco	ne / LOS			1.48			A	-	1.03	,		Α
Facility Out	put Data							West	tbound		$\overline{}$		Eastbo	und	
Facility Trav									4.15		\neg		1079.3		
Facility Trav								22	2.28		\neg		19.9	1	
Facility Base		-	i, mph					3.04		\neg		42.7			
Facility Perc			,						1.77		_		46.5		
Facility Leve									F				F		
Facility Auto			on Score						.39				2.38	}	
Multimodal	Results ((Facility))												
Pedestrian F	acility LO	S Score	/LOS				3.50			С		3.86	6		D
Bicycle Faci	lity LOS S	core / Lo	os				2.82			С		2.98	3		С
T 25 2	ity LOS S	core / LC	os				1.51			Α		1.63	3		Α

				ш	CS7 Url	nan Str	eet '	Sean	nent	Penort						
		_			237 011	Jan Su	CCL .	Segii	HEHIL	Keport	_			_	_	
General Inf	ormation	lot-	16								-	Streets Int			lac.	
Agency				Associat	es	T					-	Number of			15	
Analyst		Ma	x Rusch	1		Analys					-	Number of			14	
Jurisdiction		+-				Time F		\rightarrow	PM Pe	ak	-	Number of			15	
File Name		$\overline{}$	15 ACP			Analys		_	2045		_	System Cy		h, s	100	
Intersections		29	Road &	Pattersor	1	29 1/2	Road	& Patt	erson			Analysis P	eriod		1> 7	:00
Project Des	cription															
3892 45 m		12)—	3813 ft 45 mph		13		2579 45 m)-	2595 35 m		-(1	5	
	nent Informat											1 -				
Segment	Speed Lim			gh Lanes		t Length	-	rsectio		Length			nt Curb		her D	
		В	WB	EB	WB	EB	WI	_	EB	WB	EB	WB	EB	WE	-	EB
13	45 4	5	2	2	2579	2579	50	0	50	0	0	90	90	0.0		0.0
Comment O	utnut Data					WDI		Westb		WDD	-	CDI	Eastbo			'DD
Segment O	_					WBI	-	WI		WBR	+	EBL	EBT	\rightarrow		BR
Segment	Movement					5	-	2	2	12	-	1	6	-	1	16
13	Bay/Lane Sp						-				+			-		
13	Shared Lane										-					
13	Base Free-F		Speed, r	nph				44.			_		44.9			
13	Running Tim	_						41.			\rightarrow		41.7			
13	Running Spe		•					42.			_		42.14	-		
13	Through Del	ay, s/	/veh					14.	59				33.80	0		
13	Travel Time,							55.					75.5			
13	Travel Speed	d, mp	h					31.	50				23.2	В		
13	Stop Rate, s	tops/	veh					0.3	35				0.76	j		
13	Spatial Stop	Rate	, stops/	mi				0.7	72				1.56	j		
13	Through vol/	cap F	Ratio					0.7	71				0.92	2		
13	Percent of B	ase F	FFS					70.	09				51.80	0		
13	Level of Sen	vice						В	}				С			
13	Auto Travele	r Per	rception	Score				2.2	25				2.38			
Multimodal	Results (Seg	men	t)													
13	Pedestrian S	Segm	ent LOS	Score / I	OS		3.96			D		3.85	5		D	
13	Bicycle Segr	ment	LOS Sc	ore / LOS			2.89			С		3.05	,		С	
13	Transit Segn	LOS Sc	ore / LOS			0.98			Α		1.63	1		Α		
Facility Out	put Data							Westb	ound				Eastbo	und		
Facility Trav	el Time, s						964	.15				1079.3	36			
Facility Trav	el Speed, mph						22.	28				19.9	1			
Facility Base	Free Flow S	peed,	, mph					43.	04				42.7	В		
Facility Pero	ent of Base F	FS						51.	77				46.5	4		
Facility Leve	el of Service							F	:				F			
Facility Auto	Traveler Perc	eptio	n Score					2.3	39				2.38			
Multimodal	Doculto /Fac	ilitaa														
	Results (Fac						2 50		_	-		2.00				
	acility LOS S						3.50			С	+	3.86			D	
	lity LOS Score						2.82		-	C	-	2.98			C	
Transit Faci	ity LOS Score	LO	5				1.51			Α		1.63	5		A	

			ш	S7 Urk	an Str	oot	Sean	nent	Denor						
			п	.S/ UIL	an Su	eel	Segn	nent	Kepoi				-		
General Inf	ormation										Streets In	formation			
Agency		Stolfus and	Associate	26							Number of		_	15	
Analyst		Max Rusch			Analys	eie Da	ate				Number of			14	
Jurisdiction		WIAX INUSCII			Time F		_	PM Pe	ak	\neg	Number of			15	
File Name		2045 ACP F	PM xus		Analys		\rightarrow	2045	an.	\neg	System Cy			10	
Intersection		29 1/2 Road		rson			Patterso			\neg	Analysis P		, 0	_	7:00
Project Des	cription										, , , , , , , , , , , , , , , , , , , ,			_	
3813 45 m	(1	3	2579 ft 45 mph	$\overline{}$	14		2595 35 m		<u> </u> (5					
Basic Segn	nent Informatio	n (29 1/2 R	d - 30 Rd												
Segment	Speed Limit		h Lanes	Segmen		-	ersection	n Wid		of RM	Percei	nt Curb	_		Delay
	WB EB	WB	EB	WB	EB	W	_	EB	WB	EB	WB	EB	W		EB
14	35 45	2	2	2595	2595	5	0	50	0	0	90	90	0.	0	0.0
							Westb	ound				Eastbo	und		
Segment O	utput Data				WBI			BT	WBI	2	EBL	EBT			EBR
Segment	Movement				5	_	2		12	`	1	6			16
14	Bay/Lane Spill	back Time.	h		Ť			-		\rightarrow					
14	Shared Lane S														
14	Base Free-Flo	•					40.8	82		\rightarrow		45.5	2		
14	Running Time,					_	46.			_		41.6			
14	Running Spee						38.0			\rightarrow		42.5			
14	Through Delay						11.4	46		\neg		21.1	5		
14	Travel Time, s						57.9			\rightarrow		62.7			
14	Travel Speed,	mph					30.					28.1			
14	Stop Rate, sto	•					0.3			\rightarrow		0.42	2		
14	Spatial Stop R		ni				0.6	69		\neg		0.85			
14	Through vol/ca						0.5	56		\rightarrow		0.91			
14	Percent of Bas	e FFS					74.	79				61.9	2		
14	Level of Service	e					В	3				С			
14	Auto Traveler	Perception	Score				2.2	24				2.27	,		
Multimodal	Results (Segm	ent)													
14	Pedestrian Se	gment LOS	Score / L	.os		3.75			D		4.08	3		- [)
14	Bicycle Segme	ent LOS Sco	ore / LOS			2.84			С		3.00)		(C
14	Transit Segme			0.99			Α		1.22	2		-	4		
Facility Ou	tnut Data						Westb	ound		_		Eastbo	und		
Facility Trav						_	964.			_		1079.			
	el Speed, mph						22.			\rightarrow		19.9			
	e Free Flow Spe	ed. mph					43.0			\neg		42.7		_	
	ent of Base FFS						51.7	77		\rightarrow		46.5	4		
	el of Service						F			\neg		F			
	Traveler Perce	otion Score					2.3	39				2.38	}		
	Results (Facili														
	Facility LOS Sco					3.50		_	С		3.86)
	lity LOS Score /					2.82		-	С		2.98			(C
T								-							

Transit Facility LOS Score / LOS

1.51

1.63

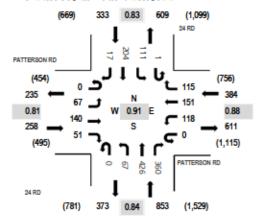


Location: 1 24 RD & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

 airio ooaiico																						
	PA	TTER	SON R	D	PA	TTERS	ON RD			24 F	RD			24 F	RD							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	lestrian	Crossin	igs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South 1	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	7 1,828	}	0	0	0	0

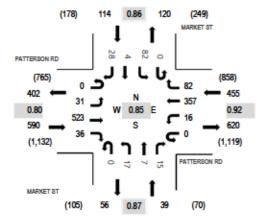


Location: 2 MARKET ST & PATTERSON RD AM

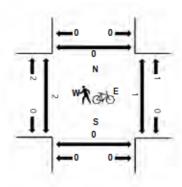
Date: Tuesday, March 3, 2020 Peak Hour: 07:45 AM - 08:45 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

i dillo oodiilo																						
	PA	TTER	SON R	D	PA	TTERS	ON RD			MARKE	T ST			MARK	ET ST							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	oound			Rolling	Ped	lestriar	n Crossin	ngs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South I	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	2 4	4 2	3 1,198	3	0	1	0	0



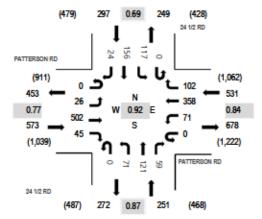
Location: 3 24 1/2 RD & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

manno ocume																						
	PA	TTER	SON R	D	PA	TTERS	ON RD			24 1/2	RD.			24 1/2	2 RD							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	lestriar	n Crossir	ngs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	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	2	1	0	0	1

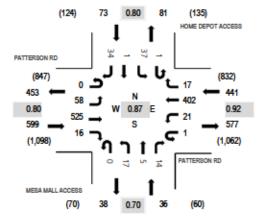


Location: 4 MESA MALL ACCESS & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

manno ocume																						
	PA	TTER	SON R	D	PA	TTERS	ON RD		MES	A MALI	ACCE	SS	HOME	E DEP	OT ACC	ESS						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	estriar	n Crossir	ngs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	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	7	1 34	1,149)	0	2	2 0	0

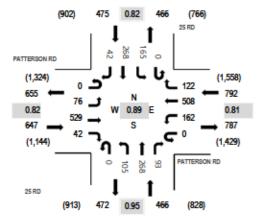


Location: 5 25 RD & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

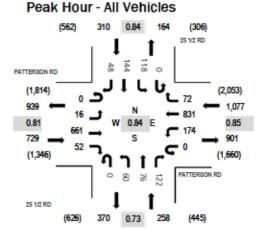
	PA	TTER	SON R	D	PA	TTERS	ON RD			25 R	D.			25 F	RD							
Interval		Eastb	ound			Westb	ound			Northbo	ound			Southb	ound			Rolling	Ped	lestrian	Crossin	igs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru f	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South 1	North
7:00 AM	0	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 2,380)	1	0	1	0

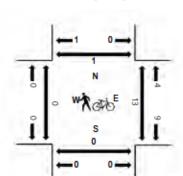


Location: 6 25 1/2 RD & PATTERSON RD AM

Date: Tuesday, March 3, 2020 Peak Hour: 07:45 AM - 08:45 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM





Peak Hour - Pedestrians/Bicycles on Crosswalk

Note: Total study counts contained in parentheses.

	PA	TTER	SON R	D	PA	TTERS	ON RD			25 1/2	RD			25 1/2	RD							
Interval		Eastb	ound			Westb	ound			Northb	ound			Southb	ound			Rolling	Ped	estrian	Crossin	igs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South N	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	1	0	13	0	0

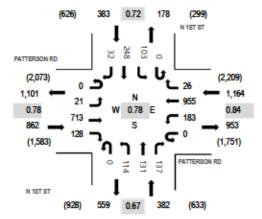


Location: 7 N 1ST ST & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

manno ocume																						
	P#	TTER	SON R	D	PA	TTERS	ON RD			N 1ST	ST			N 1S	T ST							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	lestriar	n Crossir	ngs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	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

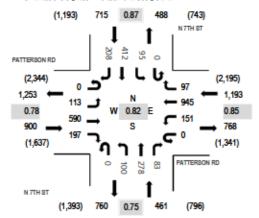


Location: 8 N 7TH ST & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

manno oddino																						
	PA	TTER	SON R	D	PA	TTERS	ON RD			N 7TH	ST			N7T	H ST							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	oound			Rolling	Ped	lestriar	n Crossir	ngs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	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	2 20	3,269)	2	2	2 8	1

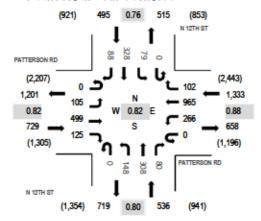


Location: 9 N 12TH ST & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

manno ocume																						
	PA	TTER	SON R	D	PA	TTERS	ON RD			N 12TI	HST			N 12T	H ST							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	lestriar	n Crossir	ngs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	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



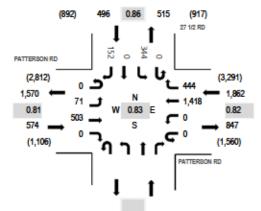
Location: 10 27 1/2 RD & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

114	ino ooung																				
		PA	TTER	SON R	D	PA	TTERS	SON RD						27 1/2	2 RD						
	Interval		Eastb	ound			Westb	ound			Northb	ound		South	oound			Rolling	Ped	lestriar	Crossings
	Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru Right	U-Tum	Left	Thru	Right	Total	Hour	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
C	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	(15	2 2,932	2	1	0	1

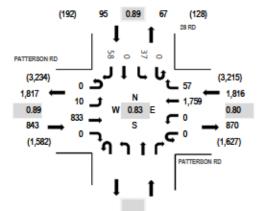


Location: 11 28 RD & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

• •	anno oounto																				
		PA	TTER	SON R	D	PA	TTERS	ON RD						281	RD						
	Interval		Eastb	ound			Westb	ound			Northb	ound		Southi	oound			Rolling	Ped	lestriar	n Crossings
	Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru Right	U-Tum	Left	Thru	Right	Total	Hour	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	(5 5	3 2,754	1	0	0	0

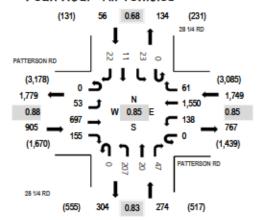


Location: 12 28 1/4 RD & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

	PA	TTER	SON R	D	PA [*]	TTERS	SON RD)		28 1/4	RD			28 1/4	4 RD							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	estrian	Crossin	igs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South I	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	1	0	0	0	0

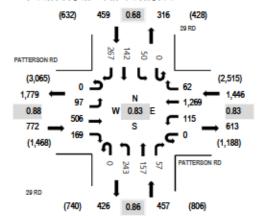


Location: 13 29 RD & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

	PA	TTER	SON R	D	PA	TTERS	ON RD			29 R	RD.			29 F	RD							
Interval		Eastbo	ound			Westb	ound			Northbo	ound			Southb	ound			Rolling	Ped	estrian	Crossir	gs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru f	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	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
	7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:15 AM 8:30 AM 8:45 AM Count Total	Interval Start Time U-Tum 7:00 AM	Interval Start Time	Interval Start Time Eastbound 7:00 AM 0 10 66 7:15 AM 0 18 106 7:30 AM 0 29 138 7:45 AM 0 33 141 8:00 AM 0 17 121 8:15 AM 0 7 125 8:30 AM 0 15 125 8:45 AM 0 18 162 Count Total 0 147 984	Start Time U-Turn Left Thru Right 7:00 AM 0 10 66 33 7:15 AM 0 18 106 46 7:30 AM 0 29 138 39 7:45 AM 0 33 141 47 8:00 AM 0 17 121 37 8:15 AM 0 7 125 43 8:30 AM 0 15 125 39 8:45 AM 0 18 162 53 Count Total 0 147 984 337	Start Time U-Turn Left Thru Right U-Turn	Interval Start Time Eastbound Westbound Northbound 7:00 AM 0 10 66 33 0 19 229 6 0 31 9 7:15 AM 0 18 106 46 0 23 297 13 0 68 30 7:30 AM 0 29 138 39 0 29 357 26 0 62 56 7:45 AM 0 33 141 47 0 41 377 19 0 53 50 8:00 AM 0 17 121 37 0 22 238 4 0 60 21 8:15 AM 0 7 125 43 0 25 206 2 0 55 9 8:30 AM 0 15 125 39 0 31 268 2 0 62 8 8:45 AM 0 18	Interval Start Time	Interval Start Time	Interval Start Time	Northburst Southburst Southburst Start Time U-Turn Left Thru Right Left Thru Right Right	Northbound Southbound Southbound Start Time Thru Left Thru Right U-Turn Left Thru Left Thru Right U-Turn Left Thru Right U-Turn Left Thru Thru Left Thru Thru Thru Thru Thru Thr	Northburne	Interval Start Time Horizont U-Turn Left Thru Right Left Thru Right Left Right U-Turn Left Thru Right Left Right Right Left Right Righ	Interval Start Time Horizont Horizont	Interval Start Time Hour Left Thru Right U-Turn Left Thru Right Left Thru Right Left Thru Right Left Left Thru Right Left Right Left Right Left Right Left Right Left Right Right Left Right Right Right Left Right Ri	Interval Start Time Hour Left Thru Right U-Tum Left Thru Right Total Hour West East South U-Tum Left Thru Right Total U-Tum Left Thru Right Total U-Tum Left Thru Right Total Total U-Tum Left Thru Right U-Tum Left Thru Right U-Tum Left Thru Right U-Tum Left Thru Right Total U-Tum Left Total U-Tum Le					

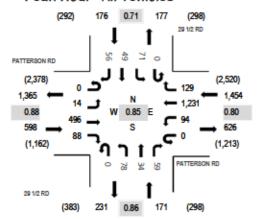


Location: 14 29 1/2 RD & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

		PA	TTER	SON R	D	PA	TTERS	ON RD)		29 1/2	RD			29 1/2	2 RD							
	Interval		Eastb	ound			Westb	ound			Northb	ound			Southi	oound			Rolling	Ped	estrian	Crossin	igs
	Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South 1	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

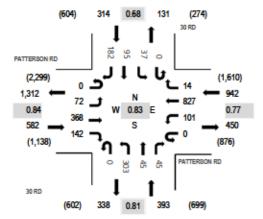


Location: 15 30 RD & PATTERSON RD AM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

manno ocume																						
	PA	TTER	SON R	D	PA	TTERS	SON RD			30 F	RD			30 F	RD							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	estriar	n Crossir	ngs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	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	ı	0	0	0	0

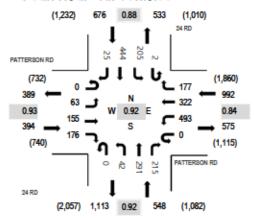


Location: 1 24 RD & PATTERSON RD PM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

 anno oounto																						
	PA	TTER	SON R	D	PA	TTERS	ON RD			24 F	RD			24 F	RD							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	lestriar	n Crossin	1gs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South I	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

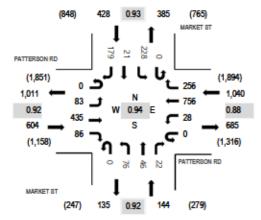


Location: 2 MARKET ST & PATTERSON RD PM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

	PA	TTER	SON R	D	PA	TTERS	ON RD			MARKE	T ST			MARK	ET ST							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	lestriar	n Crossin	igs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South 1	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

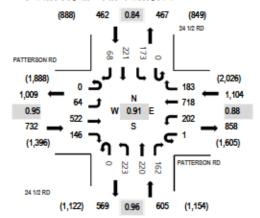


Location: 3 24 1/2 RD & PATTERSON RD PM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

	PA	TTER	SON R	D	PA	TTERS	SON RD			24 1/2	RD			24 1/2	RD							
Interval		Eastb	ound			Westb	ound			Northb	ound			Southb	ound			Rolling	Ped	estrian	Crossin	igs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South 1	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	3	1	1	2	0

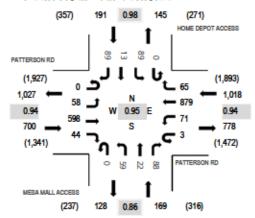


Location: 4 MESA MALL ACCESS & PATTERSON RD PM

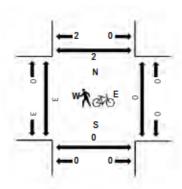
Date: Tuesday, March 3, 2020
Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

manno ocumo																						
	PA	TTER	SON R	D	PA	TTERS	ON RD		MES	A MALL	ACCE	SS	HOME	DEP(OT ACC	ESS						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	lestriar	Crossi	ngs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	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	8 8	2,078	3	3	0	0	2

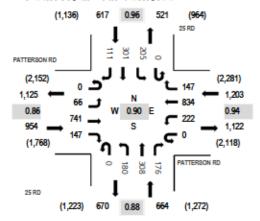


Location: 5 25 RD & PATTERSON RD PM

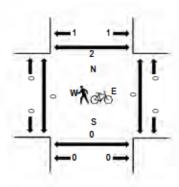
Date: Tuesday, March 3, 2020 Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

	PA	TTER	SON R	D	PA	TTERS	ON RD			25 F	RD			25 F	RD							
Interval		Eastb	ound			Westb	ound			Northb	ound			Southb	ound		-	Rolling	Ped	estrian	Crossin	gs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South N	lorth
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

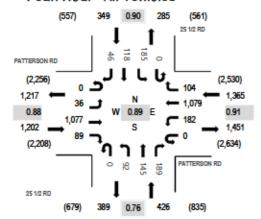


Location: 6 25 1/2 RD & PATTERSON RD PM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

manno ocume																						
	PA	TTER	SON R	D	PA	TTERS	ON RD			25 1/2	RD			25 1/2	2 RD							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	estriar	n Crossin	igs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South 1	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	6 0	4

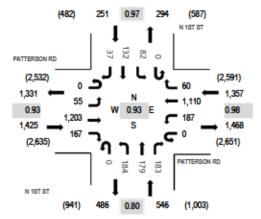


Location: 7 N 1ST ST & PATTERSON RD PM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

		PA	TTER	SON R	D	PA	TTERS	SON RD			N 1ST	ST			N 1ST	ST							
Inter	val		Eastb	ound			Westb	ound			Northb	ound			Southb	ound			Rolling	Ped	estrian	Crossin	gs
Start T	ime	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South N	orth
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 To	tal	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 Ho	our	0	55	1,203	167	0	187	1,110	60	0	184	179	183	0	82	132	37	3,579)	0	7	2	6

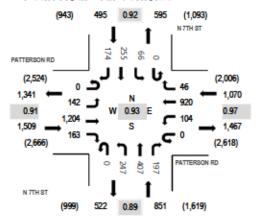


Location: 8 N 7TH ST & PATTERSON RD PM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

	PA	TTER	SON R	D	PA	TTERS	ON RD)		N 7TH	ST			N 7TH	ST							
Interval		Eastb	ound			Westb	ound			Northbo	ound			Southb	ound		-	Rolling	Ped	estrian	Crossin	gs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South N	lorth
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
	Interval Start Time 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM Count Total	Interval Start Time U-Tum 4:00 PM 0 4:15 PM 0 4:30 PM 0 4:35 PM 0 5:00 PM 0 5:15 PM 0 5:30 PM 0 5:45 PM 0 Count Total 0	PATTER Eastb Start Time U-Turn Left 4:00 PM	PATTERSON R Eastbound Start Time	PATTERSON RD Eastbound E	PATTERSON RD PATTERSON RD Eastbound Eastbound U-Turn Left Thru Right U-Turn	PATTERS PATTERS PATTERS	PATTERSON RD PATTERSON RD Start Time U-Turn Left Thru Right Ri	PATTERSON RD PATTERSON RD Westbound	PATTERSON RD PATTERSON RD Westbound Westbound	PATTERSON RD PATTERSON RD Northbut	PATTERSON RD PATTERSON RD Northburd	PATTERSON RD PATTERSON RD Northbound Northbound	PATTERSON RD PATTERSON RD N 7TH ST Northburnd Northburnd	PATTERSON RD PATTERSON RD N 7TH ST N 7TH Start Time Left Thru Right U-Tum Right Right Right Right Right Right Right Right	PATTERSON RD PATTERSON RD North South South	PATTERSON RD PATTERSON RD PATTERSON RD Northbound Southbound Northbound Northboun	PATTERSON RD PATTERSON RD PATTERSON RD Northbound Northbound Southbound Southbound Northbound Southbound Southbound Northbound Northbound	Patterson RD Patterson RD Patterson RD Northbord Southbord Southbord Rolling Start Time U-Turn Left Thru Right U-Turn Left Thru	Patterson RD Patterson RD Patterson RD Northbound Southbound Southbound Rolling Peditor	Patterson RD Patterson RD Patterson RD Northborn Northbo	PATTERSON RD PATTERSON RD Westburd Northburd Southburd Southburd Southburd Right Ordan Hour West East South Northburd Southburd Right Ordan Hour West East South Northburd Right Ordan Ord

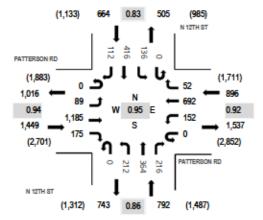


Location: 9 N 12TH ST & PATTERSON RD PM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

manno ocumo																						
	PA	TTER	SON R	D	PA	TTERS	ON RD			N 12TH	H ST			N 12T	H ST							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	lestriar	Crossi	ngs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	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	2 3,801	l	5	5	2	8

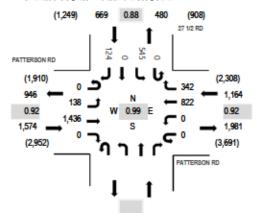


Location: 10 27 1/2 RD & PATTERSON RD PM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

manno ocumo																				
	PA	TTER	SON R	D	PA	TTERS	ON RD						27 1/2	2 RD						
Interval		Eastb	ound			Westb	ound			Northb	ound		South	oound			Rolling	Ped	lestriar	Crossings
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru Right	U-Tum	Left	Thru	Right	Total	Hour	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	5 (124	1 3,407	7	0	0	1



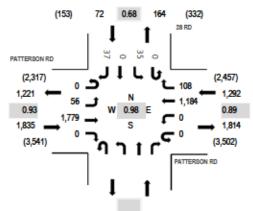
Location: 11 28 RD & PATTERSON RD PM

Date: Tuesday, March 3, 2020

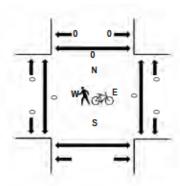
Peak Hour: 04:15 PM - 05:15 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Hun	no oounts																				
		PA	TTER	SON R	D	PA	TTERS	ON RD						28	RD						
	Interval		Eastb	ound			Westb	ound			Northb	ound		South	bound			Rolling	Ped	lestriar	Crossings
	Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru Right	U-Tum	Left	Thru	Right	Total	Hour	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
Cou	unt Total	0	106	3,435	0	0	0	2,231	226				0	67	0	86	6,151		0	0	0
Pe	eak Hour	0	56	1,779	0	0	0	1,184	108				0	35	5 (3	7 3,199)	0	0	0

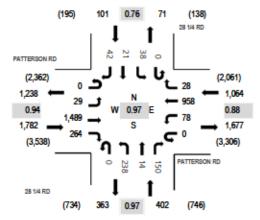


Location: 12 28 1/4 RD & PATTERSON RD PM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

manno ocume																						
	PA	TTER	SON R	D	PA	TTERS	ON RD			28 1/4	RD			28 1/4	4 RD							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	lestriar	n Crossir	ngs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	light	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	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

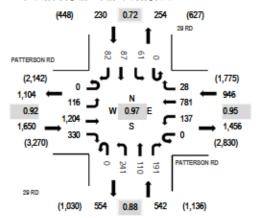


Location: 13 29 RD & PATTERSON RD PM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

	PA	TTER	SON R	D	PA	TTERS	ON RD			29 R	D			29 F	RD							
Interval		Eastb	ound			Westb	ound			Northbo	ound			South	ound			Rolling	Ped	estrian	Crossin	igs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South 1	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

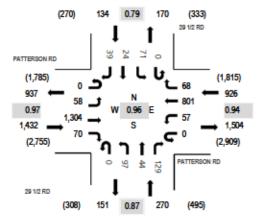


Location: 14 29 1/2 RD & PATTERSON RD PM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

	no obanico																						
		PA	TTER	SON R	D	PA	TTERS	ON RD			29 1/2	RD			29 1/2	2 RD							
	Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	lestriar	n Crossir	igs
	Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	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
Co	unt 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
Pe	eak Hour	0	58	1,304	70	0	57	801	68	0	97	44	129	0	71	24	3	9 2,762	2	2	3	0	2

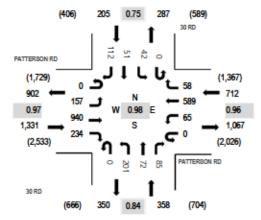


Location: 15 30 RD & PATTERSON RD PM

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



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

	PA	TTER	SON R	D	PA	TTERS	SON RD			30 F	RD			30 F	RD							
Interval		Eastb	ound			Westb	ound			Northb	ound			Southb	ound			Rolling	Ped	estrian	Crossin	igs
Start Time	U-Tum	Left	Thru	Right	U-Tum	Left	Thru F	Right	U-Tum	Left	Thru	Right	U-Tum	Left	Thru	Right	Total	Hour	West	East	South 1	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

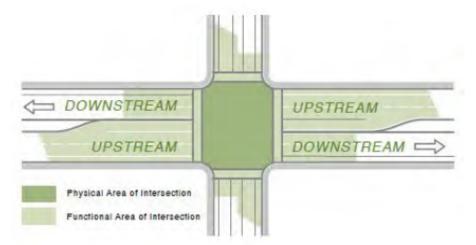
A minor arterial is a 4-lane roadway with a right-of-way of 80 feet, a center median or turn lane, and attached sidewalks. The posted speed limit is 35 mph. Direct access is subordinate to through traffic movements. Full movement intersections are spaced 1/4 mile apart. Exceptions to 1/4 mile spacing 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.

- 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-ACP 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 Control Plan (ACP). Upon redevelopment, the City may require property owners to provide legally defined cross-access easements for shared access points, as defined by the ACP. If a property does not redevelop, the property owner will not be required to construct access modifications. (Private Funding).

- The City may obtain funding to complete improvements to a segment of the Patterson Road corridor. (Public Funding)
- A safety or operational issue develops that can be mitigated through the implementation of
 access management techniques consistent with the ACP. 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 control 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 control 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 control 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 ACP 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 ACP 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 (-)
	Corridor Travel Speeds/Time	Increases/improves from No-Build scenario	Little or no change from No-Build scenario	Decreases/degrades from No-Build scenario
Provide effective and efficient through travel for traffic on Patterson Road	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.
utilizing the existing right-of-way and identify if additional right-of-way is	Number of Conflict Points	Fewer conflict points per mile	Number of conflict points maintained	More conflict points per mile
needed.	Right-of-way	Proposed ACP improvements can be implemented within the existing right-of-way	Proposed ACP improvements will require minimal right-of- way typical to a public project which may include minor ROW or easements on a few properties.	Proposed ACP improvements will require significant right-of- way purchase which may include full takes and/or impacts to numerous properties.
	Intersection Sight Distance	More intersections have adequate sight distance	Same number of intersections have adequate sight distance	Fewer intersections have adequate sight distance
Provide safe, effective, and efficient access to and from Patterson Road for	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
businesses, residents, and guests to support the economic viability of the	Conformance with Grand Junction TEDS manual	More locations meet auxiliary lane standards	Some locations meet auxiliary lane standards	Fewer locations meet auxiliary lane standards
City of Grand Junction and Mesa County.	Out of Direction Travel Distance	Less out-of-direction travel distance is required	No change	More out-of-direction travel distance is required
city of Grand Junction and Wesa County.	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	Local Route Circulation	Improve circulation via local routes	Maintain circulation via local routes	Reduce circulation via local routes
connections that provide local circulation to support the transportation system.	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
	Pedestrian/Bicycle Parallel Access	Number of access points reduced	Number of access points maintained	Number of access points increased
Support alternative modal choices, including transit, pedestrian, and bicycle routes.	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 ful 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
	Public Support	Has positive public support	Has balanced public support	Does not have public support
Provide a plan that can be implemented in phases.	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
	Corridor Travel Speeds/Time	Favorable	The segment PFFS is approximately 1% better with the ACP. Generally the travel speed and corridor travel time are better than the No-Build.
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	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.
needed.	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.
	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.
Provide safe, effective, and efficient access to and	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.
from Patterson Road for businesses, residents, and guests to support the economic viability of the City	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.
of Grand Junction and Mesa County.	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	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.
street network connections that provide local circulation to support the transportation system.	Serviceability of Local Routes to Developments and Properties within the Study Area	Favoranie	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 model shaless including	Pedestrian/Bicycle Parallel Access	Favorable	The number of access points is reduced along the corridor thereby reducing conflicts for parallel ped/bike routes.
Support alternative modal choices, including transit, pedestrian, and bicycle 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.
	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.
Provide a plan that can be implemented in phases.	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).
The state of the s	Physical Constraints		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		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	Favoranie	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 ACP has expanded upon the GJCP Plan to identify additional circulation routes.

Functional Intersection Area References

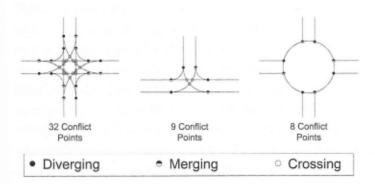
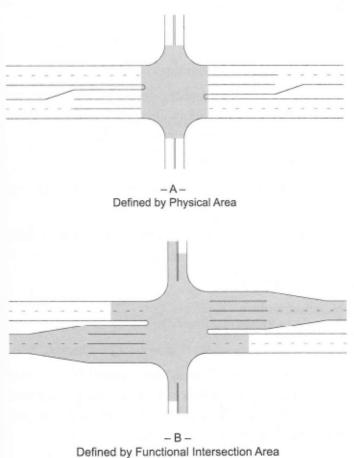


Figure 9-1. Conflict Points at Various Intersection Types

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.



Defined by Functional Intersection Area

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.

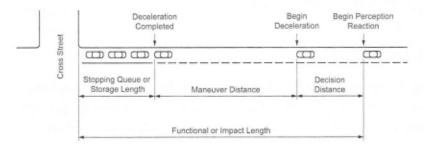


Figure 9-3. Elements of the Functional Area of an Intersection

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.

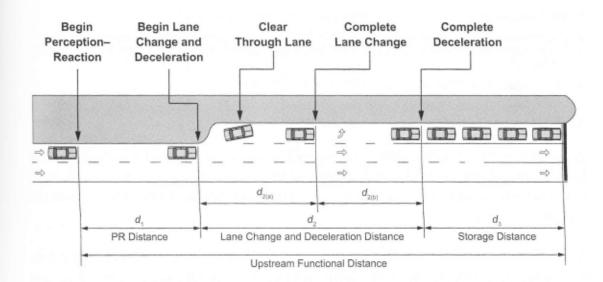
9.7.2.1 Perception-Reaction Distance

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/s² [2.0 m/s²] 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/s² [2.0 m/s²]. 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, = 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
- d₂₀₀₁ = distance traveled during deceleration after lane change
- d₃ = 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
Speed (mph)	Lane Change and Deceleration Distance (ft)
20	70
25	105
30	150
35	205
40	265
45	340
50	415
55	505
60	600
65	700
70	815

Metric Speed (km/h) Lane Change and Deceleration Distance (m) 30 25 40 35 50 50 55 65 65 85 70 105 80 130 90 155 95 185					
Speed (km/h)	and Deceleration				
30	25				
40	35				
50	50				
55	65				
65	85				
70	105				
80	130				
90	155				
95	185				
105	215				
110	250				

Notes:

- The lane change and deceleration lengths are shown as d, in Figure 9-32.
- 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):



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,

Avoid Access Avoid Access Avoid Access Avoid Access

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 perceptionreaction time (d₁);

- Deceleration distance while the driver maneuvers to a stop (d2); and
- Queue storage (d₃).

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 14-2a demonstrates the upstream functional intersection area for locations without a turn lane; Exhibit 14-2b 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.

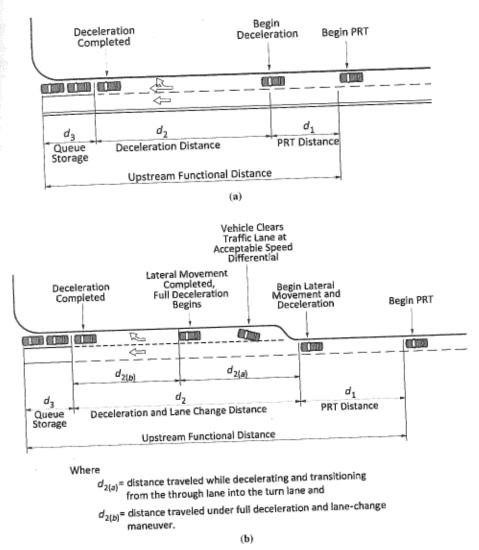


EXHIBIT 14-2 Upstream functional intersection area: (a) without a turn bay and (b) with a turn bay (1, 2). (Note: PRT = perception-reaction time.)

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 charac-

teristics of the vehicles and their drivers determine the length of the deceleration-maneuver distance (d2). 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		tion–Rea ception–F		- 10	(ft),		
(mph)	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
- 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 14-2b)] begins at a lower speed than the initial intersection

EXHIBIT 14-4 Deceleration–Maneuver Distance Based on Average Deceleration Rate

	Deceleration–Maneuver Distance (d_2) (ft)				
Speed (mph)	Most Drivers ^a	Limiting Conditions			
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.

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.

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 14-5 Distance Traveled During Lane Change and Deceleration to a Stop

	Distance Traveled (ft)					
Speed (mph)	Deceleration ^{σ} and Lateral Movement $[d_{2(\sigma)}]$	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.

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

67.2 ft/s2.

EXHIBIT 14-6 Alternative Values for d₂ 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.

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).

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 14-7 Suggested Percentage of Through Vehicles That Will Sustain an Impact, by Functional Roadway Category

Functional Roadway Category	Through Vehicles Sustaining Impact ^o (%)		
Principal arterial	2–4		
Minor arterial	4-10		
Major collector	5-20		
Minor collector	10-30		
Local	na		

Note: na = not applicable.

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 d₂ 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.:

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 .

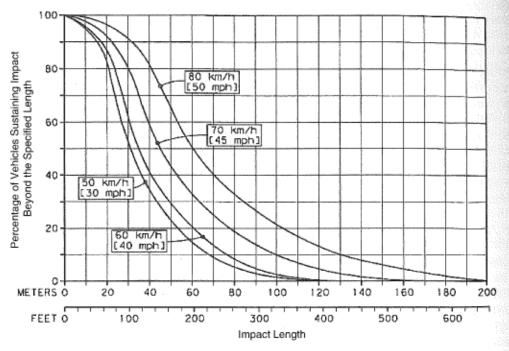


EXHIBIT 14-8 Cumulative frequency distribution of impact lengths.

[Source: Research conducted in association with NCHRP Report 420 (3).]

May also be stated as "the probability that a through vehicle must decelerate because of a preceding turning vehicle."

14.2.3 Queue Storage

In rural areas, turn volumes are typically low and speeds are high. Although queue storage (d₃) 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 d₁ 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 $d_1 + d_2$ + d₃ is calculated for both the peak and offpeak 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 Base	d on Acceleration	

Speed (mph)	Acceleration Distance (ft)	Typical Taper Distance ⁶ (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

Based on AASHTO (7, Figure 2-24).

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

Based on AASHTO (7, Figure 9-49 and p. 9-127).

^{&#}x27;Acceleration lane length.

EXHIBIT 14-12 Ideal Downstream Functional Distance Based on Decision Sight Distance to Stop and for Change in Speed, Path, or Direction

	Decision to Stop (Sight Distance	e	Decision Sight Distance (ft) for Change in Speed, Path, or Direction		
Speed (mph)	Rural	Suburban ^b	Urban	Rural	Suburban	Urban/
20	130	215	305	305	340	430
25 25	180	280	400	375	400	525
30	220	350	490	450	535	620
35	275	425	590	525	625	720
	330	505	690	600	715	825
40 45	395	590	800	675	800	930
	465	680	910	750	890	1,030
50	535	775	1,030	865	980	1,13
55	610	875	1,150	990	1,125	1,28
60		980	1,275	1,050	1,220	1,36
65	695	1,090	1,410	1,105	1,275	1,44
70 75	780 875	1,200	1,545	1,180	1,365	1,54

"Stop on a rural road with perception-reaction time (PRT) = 3.0 s.

Stop on a suburban road with PRT = 6.0 s.

Stop on an urban road with PRT = 9.1 s.

Change in speed, path, or direction on a rural road, PRT = 10.2 to 11.2 s.

Change in speed, path, or direction on a suburban road, PRT = 12.1 to 12.9 s.

/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).
- Arrange these intersections in descending order of importance; for example, arterialto-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.
- 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?

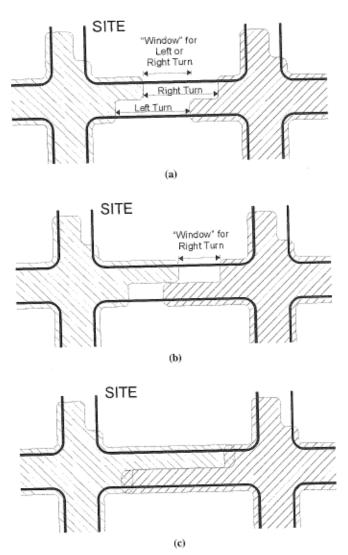


EXHIBIT 14-13 Window of opportunity for direct access drive: (a) left or right turn, (b) right turn only, and (c) no window (1).

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 condi-

tions in the access permit can minimize the adverse impacts of the connection:

- Require that the access connection be located as far as possible from the intersection.
- 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).
- Specify the maximum volume entering and leaving the driveway in the 1-h peak and in a 24-h period.
- 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 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



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.)



EXHIBIT 14-16 Problem resulting from an access connection located within the left-turn queue length.

(Photograph by V.G. Stover.)

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.

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



- * 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
- Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
 Unless otherwise specified, conditions listed refer to proposed configuration.
- Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
 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	Mile Post	Side	Description	Existing Configuration	Proposed Configuration ^{2,3,8}	Conditions for Implementation ^{2,4,5,6,7,9}
No.			·			When property redevelops, safety or
1	0.060	LT	2384 Patterson Rd	Unsignalized Full Movement	Close - Access via Access 3	operational issues occur, or when a public project is funded.
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	Right-In/Right-Out	Movements may be restricted when property redevelops, safety or operational issues occur, or when a public project is funded.
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 Mail	Signalized Full Movement	Signalized Full Movement	
11	0.421	LT	Market St 2412 Patterson Rd	Signalized Full Movement Unsignalized Full Movement	Signalized 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.
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.

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
- Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
 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}
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 Mail	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 - alternale 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. 2945-044-1002 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.
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.

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- 2. MUTCD Manual on Uniform Traffic Control Devices
- Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
 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}
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. 2945-044-00-068 and 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 596 25 Rd	Signalized Full Movement Unsignalized Full Movement	Signalized 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.
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.

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- 2. MUTCD Manual on Uniform Traffic Control Devices
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 Unless otherwise specified, conditions listed refer to proposed configuration.
- Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
 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.
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Access ID No.	Mile Post	Side	Description	Existing Configuration	Proposed Configuration ^{2,3,8}	Conditions for Implementation ^{2,4,5,5,7,9}
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	Conditional Unsignalized 3/4 Movement	Either Access 53 or 61 may be unsignalized 3/4 movement. The other access will be RIRO. 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 properly 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.
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.

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- 2. MUTCD Manual on Uniform Traffic Control Devices
- Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
 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.

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Access ID No.	Mile Post	Side	Description	Existing Configuration	Proposed Configuration ^{2,3,8}	Conditions for Implementation ^{2,4,5,6,7,9}
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	Either Access 53 or 61 may be unsignalized 3/4 movement. The other access will be RIRO. 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.
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 bublic 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 3¼ movement may be implemented at both locations. A design variance or speed reduction must be justified and approved by the City to allow 3¼ 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 lissues 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		2594, 2596 Patterson Rd	Shared 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.
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 access 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.

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- 2. MUTCD Manual on Uniform Traffic Control Devices
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 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}
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 parcei no. 2945- 112-11-018, parcei 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 access 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 access to Access 83 is available. Cross access agreements required between parcel no. 2945- 023-00-038, parcel no 2945-023-00-039, and and 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.

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- 2. MUTCD Manual on Uniform Traffic Control Devices
- Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
 Unless otherwise specified, conditions listed refer to proposed configuration.
- Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
 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	Mile Post	Side	Description			Conditions for Implementation 2,4,5,6,7,9
No.		510e	Description	Existing Configuration	Proposed Configuration 2,3,8	Conditions for Implementation
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 access to Access 87 or 83 is available. Cross access agreements required between parcel no. 2945-023-00-040, 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 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 86a is available.
86a	2.819	RT	2624 Mira Vista Rd	None	Conditional 3/4 Movement	Installation of the a new 3/4 movement access at 86a may be implemented when the property redevelops. Access 93 must be restricted or closed and Access 86 must be closed, when implemented.
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 Right-In/Right-Out	Movements may be restricted when safety or operational issues occur, when a public project is funded, or when Access 86a is implemented. Access will be restricted to Right-in Only if Access 86a is implemented, but trucks cannot be accomodated there. Access will close when the property redevelops or when on-site truck movments can be accomodated at Access 86a.
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.

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- 2. MUTCD Manual on Uniform Traffic Control Devices
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 Unless otherwise specified, conditions listed refer to proposed configuration.
- Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
 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}
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.
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.
99 100	3.000	RT	26 1/2 Rd (N 7th St) N 7th St (26 1/2 Rd)	Signalized Full Movement Signalized Full Movement	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	Unsignalized 3/4 Movement	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
107	3.308	LT	2416 26 3/4 Rd, 935, 959 Northem Way	Unsignalized Full Movement	Close - Access via Northern Way	When property redevelops, safety or operational issues occur, or when a public project is funded. Movements may be restricted when adjacent
108	3.333	LT	Northern Way	Unsignalized Full Movement	Right-In/Right-Out	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 atternate 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.

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 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}
114	3.391	RT	2687 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 alternative access to Access 116 is available. Cross access agreements required between parcel no. 2945- 111-27-005 and parcel no. 2945-111-00-009 and any adjacent properties with same ownership upon redevelopment.
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	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. 2945-111-27-005 and parcel no. 2945-111- 00-009 and any adjacent properties with same ownership upon redevelopment.
117	3.447	RT	2691, 2695, 2699 Patterson Rd, 2531 N 12th St	Unsignalized Full Movement	Close - Access via Access 116	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.
119 120	3.515	LT RT	N 12th St N 12th St	Signalized Full Movement	Signalized Full Movement Signalized Full Movement	
121	3.515	LT	2702 Patterson Rd	Signalized Full Movement 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	Ciose- Access via Access 126 or 127	When property redevelops, safety or operational issues occur, or when a public prolect is funded.
129	3.664	RT	2721 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.

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 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 2726 Patterson Rd	Signalized Full Movement Unsignalized Full Movement	Signalized 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	LΤ	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 properly 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	LΤ	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 133 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.

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- 2. MUTCD Manual on Uniform Traffic Control Devices
- Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
 Unless otherwise specified, conditions listed refer to proposed configuration.
- Access closures are conditional upon alternative access to the highway or local street system. Refer to alternative access listed in proposed configuration.
 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.
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Access ID No.	Mile Post	Side	Description	Existing Configuration	Proposed Configuration ^{2,3,6}	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-inright-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-inright-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	L			Not	used	

I-70B(MP 0.000) to Lodgepole St (MP 7.349)

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- 1. Oriented from direction of reference point (W-E)
- 2. MUTCD Manual on Uniform Traffic Control Devices
- Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
 Unless otherwise specified, conditions listed refer to proposed configuration.
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 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.

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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	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
157	4.457	RT	Mantey 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	Close - Access via E Park Ave	When adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
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	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.
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		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.
167 168	4.828 4.828	RT LT	28 1/4 Rd 28 1/4 Rd	Signalized Full Movement Signalized Full Movement	Signalized Full Movement Signalized Full Movement	
169	4.866		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.

I-70B(MP 0.000) to Lodgepole St (MP 7.349)

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 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.

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Access ID No.	Mile Post	Side	Description	Existing Configuration	Proposed Configuration ^{2,3,8}	Conditions for Implementation 2,4,5,6,7,9
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.
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 afternate 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 Belia 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 Belia 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.

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 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.

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Access ID No.	Mile Post	Side	Description	Existing Configuration	Proposed Configuration ^{2,3,8}	Conditions for Implementation ^{2,4,5,6,7,9}
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.
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 tunded. 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 2902, 2904, 2906 Patterson Rd, 606, 608 29 Rd	Signalized Full Movement Right In-Right Out	Signalized 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 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 a 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 205 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	Unsignalized 3/4 Movement	Unsignalized 3/4 Movement	
			Patterson Rd			<u> </u>

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- 2. MUTCD Manual on Uniform Traffic Control Devices
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 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}
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.
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	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.
212	5.795	RT	Redwing Ln	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.
213	5.829	LT	Parcel Number: 2943-053-40-000	Unsignalized Full Movement	Galed 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.

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 Unless otherwise specified, conditions listed refer to proposed configuration.
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- 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
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.
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	Mayomania may be resident in a salicana
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	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.

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 Unless otherwise specified, conditions listed refer to proposed configuration.
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 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}
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.
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. Access will be closed when property redevelops - access via 30 Rd.
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.
248 249	6.600 6.600	RT	30 Rd	Signalized Full Movement	Signalized Full Movement	
250	6.667		30 Rd Ronlin Dr	Signalized Full Movement Unsignalized Full Movement	Signalized 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.

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- 2. MUTCD Manual on Uniform Traffic Control Devices
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 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.

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Access ID No.	Mile Post	Side	Description	Existing Configuration	Proposed Configuration ^{2,3,8}	Conditions for Implementation 2.4.5.6.7.9
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.
257	6.863	LΤ	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	LΤ	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	LΤ	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 28s. 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	McMulin 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	Unsignalized 3/4 Movement	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	Right-In/Right-Out	Movements may be restricted when adjacent properties redevelop, safety or operational issues occur, or when a public project is funded.

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 Implement with land development, redevelopment or use change
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Access ID No.	Mile Post	Side	Description	Existing Configuration	Proposed Configuration ^{2,3,8}	Conditions for Implementation ^{2,4,5,6,7,9}
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 Weilington Ave or Kitty 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.
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 Weilington 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 Weilington 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.

- * 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
- Full movement intersections and 3/4 movements shall accommodate U-turns for passenger vehicles.
 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 No.	ID MII	lle Post	Side	Description	Existing Configuration	Proposed Configuration ^{2,3,8}	Conditions for Implementation 2.4.5.6.7.9
285	7	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	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.	7.349	LT	Lodgepole St	Unsignalized Full Movement	Unsignalized Full Movement	





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL

TRAIL

PROPOSED CITY STREET OR PRIVATE CONNECTION



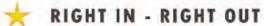
PLANNED CITY STREET

ACCESS POINT INFORMATION











SIGNALIZED INTERSECTION



RIGHT IN ONLY





CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3A





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING

CROSS ACCESS - PROPOSED



PARCEL

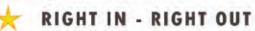
TRAIL

PROPOSED CITY STREET OR PRIVATE CONNECTION PLANNED CITY STREET









CLOSE

SIGNALIZED INTERSECTION



RIGHT IN ONLY



GATED ACCESS POINT

CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3B





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



TRAIL

PARCEL

IVATE CONNECTION

PLANNED CITY STREET

PROPOSED CITY STREET OR

3/4 MOVEMENT



RIGHT IN - RIGHT OUT

SIGNALIZED FULL MOVEMENT

UNSIGNALIZED FULL MOVEMENT



CLOSE

SIGNALIZED INTERSECTION



RIGHT IN ONLY



RIGHT OUT ONLY



GATED ACCESS POINT



CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3C





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL TRAIL

PROPOSED CITY STREET OR PRIVATE CONNECTION

PLANNED CITY STREET

UNSIGNALIZED FULL MOVEMENT



3/4 MOVEMENT



RIGHT IN - RIGHT OUT

SIGNALIZED FULL MOVEMENT



CLOSE

- SIGNALIZED INTERSECTION



RIGHT IN ONLY



RIGHT OUT ONLY



GATED ACCESS POINT

CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

- - CONDITIONAL SAFETY ACCESS POINT

FIGURE 3D





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING

CROSS ACCESS - PROPOSED



PARCEL

TRAIL

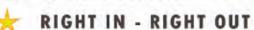
PROPOSED CITY STREET OR PRIVATE CONNECTION PLANNED CITY STREET

ACCESS POINT INFORMATION





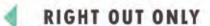






SIGNALIZED INTERSECTION



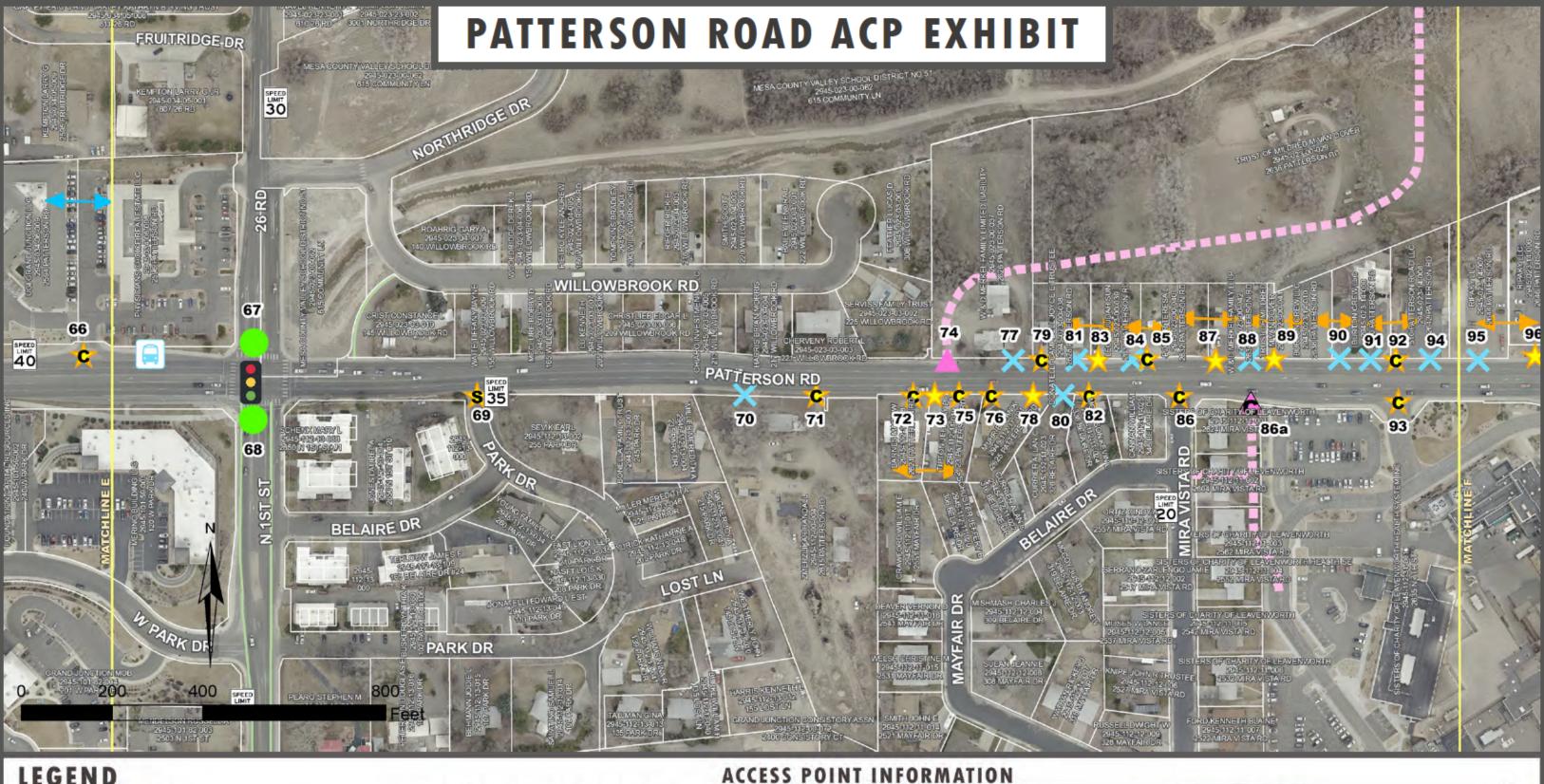




C CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

S CONDITIONAL SAFETY ACCESS POINT

FIGURE 3E





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL

TRAIL

PROPOSED CITY STREET OR IVATE CONNECTION

PLANNED CITY STREET



3/4 MOVEMENT

CLOSE



RIGHT IN - RIGHT OUT

SIGNALIZED FULL MOVEMENT

UNSIGNALIZED FULL MOVEMENT



SIGNALIZED INTERSECTION

- RIGHT IN ONLY
- RIGHT OUT ONLY
- **GATED ACCESS POINT**
- CONDITIONAL ACCESS POINT
 SEE ACCESS TABLE FOR CONDITIONS.
 TYPICALLY CLOSES WITH REDEVELOPMENT.
- CONDITIONAL SAFETY ACCESS POINT

FIGURE 3F





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED PARCEL



TRAIL

PROPOSED CITY STREET OR PRIVATE CONNECTION

PLANNED CITY STREET











SIGNALIZED INTERSECTION







CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3G







BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



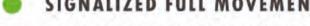
PARCEL TRAIL



PROPOSED CITY STREET OR IVATE CONNECTION

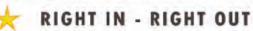
PLANNED CITY STREET

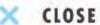












SIGNALIZED INTERSECTION



RIGHT IN ONLY



GATED ACCESS POINT

CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3H



BUS STOP - PULL OFF

CROSS ACCESS - EXISTING

CROSS ACCESS - PROPOSED

PARCEL TRAIL

PLANNED CITY STREET

UNSIGNALIZED FULL MOVEMENT

3/4 MOVEMENT

RIGHT IN - RIGHT OUT

CLOSE

SIGNALIZED INTERSECTION

RIGHT OUT ONLY

GATED ACCESS POINT

CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 31





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







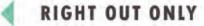




SIGNALIZED INTERSECTION



RIGHT IN ONLY

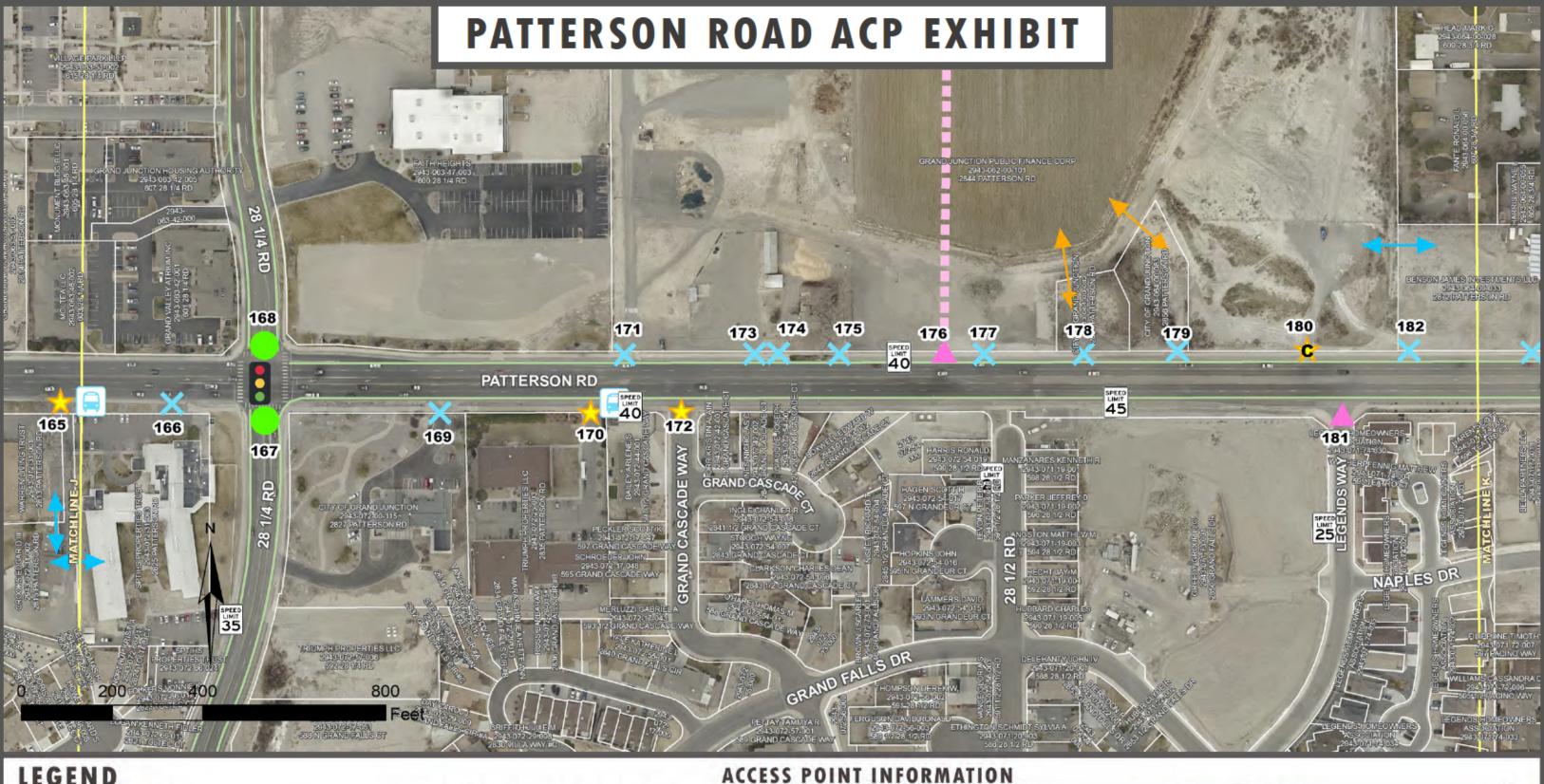




CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3J





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL

TRAIL

PROPOSED CITY STREET OR PRIVATE CONNECTION

PLANNED CITY STREET

3/4 MOVEMENT



RIGHT IN - RIGHT OUT

SIGNALIZED FULL MOVEMENT

UNSIGNALIZED FULL MOVEMENT



SIGNALIZED INTERSECTION

RIGHT IN ONLY



RIGHT OUT ONLY



GATED ACCESS POINT



CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3K





BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED PARCEL



TRAIL

IVATE CONNECTION

PLANNED CITY STREET

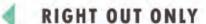






CLOSE

SIGNALIZED INTERSECTION

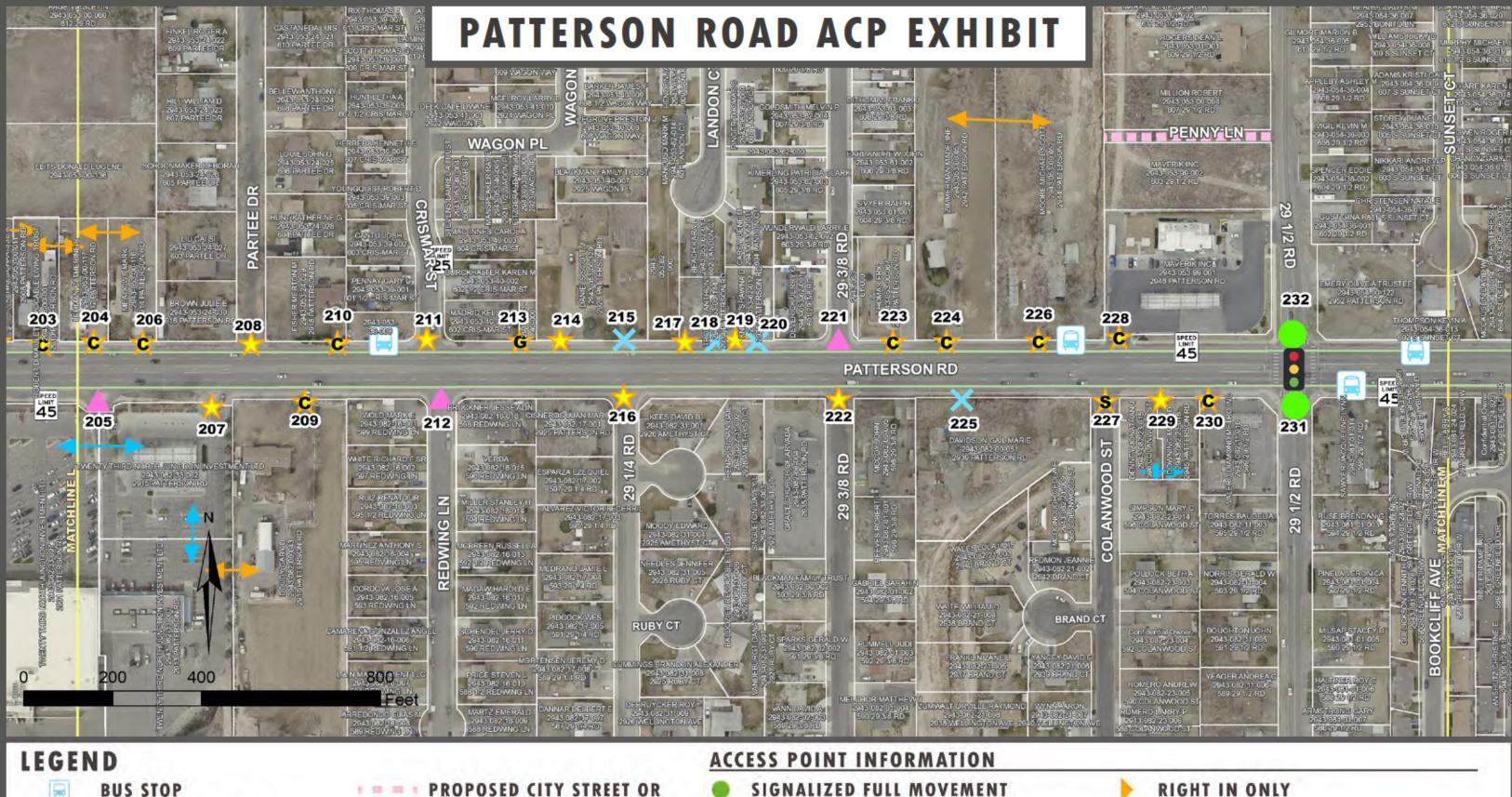




CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3L





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL TRAIL



PROPOSED CITY STREET OR VATE CONNECTION

PLANNED CITY STREET

3/4 MOVEMENT

CLOSE



RIGHT IN - RIGHT OUT

UNSIGNALIZED FULL MOVEMENT



SIGNALIZED INTERSECTION



RIGHT IN ONLY



RIGHT OUT ONLY



GATED ACCESS POINT



CONDITIONAL ACCESS POINT SEE ACCESS TABLE FOR CONDITIONS. TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3M





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL

TRAIL

PROPOSED CITY STREET OR IVATE CONNECTION

PLANNED CITY STREET



3/4 MOVEMENT

CLOSE



RIGHT IN - RIGHT OUT

SIGNALIZED FULL MOVEMENT

UNSIGNALIZED FULL MOVEMENT



SIGNALIZED INTERSECTION



RIGHT IN ONLY



RIGHT OUT ONLY



GATED ACCESS POINT



CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3N





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL TRAIL

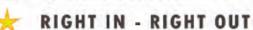
PROPOSED CITY STREET OR PRIVATE CONNECTION

PLANNED CITY STREET











SIGNALIZED INTERSECTION

CLOSE

- RIGHT IN ONLY
- RIGHT OUT ONLY
- **GATED ACCESS POINT**
- CONDITIONAL ACCESS POINT
 SEE ACCESS TABLE FOR CONDITIONS.
 TYPICALLY CLOSES WITH REDEVELOPMENT.
- CONDITIONAL SAFETY ACCESS POINT

FIGURE 30





BUS STOP



BUS STOP - PULL OFF



CROSS ACCESS - EXISTING



CROSS ACCESS - PROPOSED



PARCEL TRAIL



PROPOSED CITY STREET OR PRIVATE CONNECTION



PLANNED CITY STREET

3/4 MOVEMENT



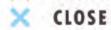
RIGHT IN - RIGHT OUT

ACCESS POINT INFORMATION

SIGNALIZED FULL MOVEMENT

UNSIGNALIZED FULL MOVEMENT

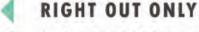


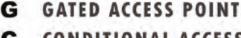


SIGNALIZED INTERSECTION



RIGHT IN ONLY





CONDITIONAL ACCESS POINT
SEE ACCESS TABLE FOR CONDITIONS.
TYPICALLY CLOSES WITH REDEVELOPMENT.

CONDITIONAL SAFETY ACCESS POINT

FIGURE 3P

CITY OF GRAND JUNCTION, COLORADO ORDINANCE NO.

AN ORDINANCE ADOPTING THE PATTERSON ROAD ACCESS CONTROL PLAN AS VOLUME III. TITLE 38 OF THE MUNICIPAL CODE

THE ACCESS CONTROL PLAN IS FOR APPROXIMATELY SEVEN MILES OF PATTERSON ROAD BETWEEN I-70 B (23.75 RD) AND LODGE POLE STREET (30.75 RD)

Recitals

The City of Grand Junction staff and Stolfus and Associates as a planning team have diligently worked jointly to prepare an Access Control Plan (ACP) Study for the Patterson Road corridor within the city limits of Grand Junction. This action follows public meetings and virtual and in-person open houses during the planning process where members of the public attended and participated.

After twelve months of public outreach and deliberation by the planning team, public notice and a public hearing, by the City Planning Commission, the Planning Commission forwards its recommendation of adoption of the Access Control Plan for the future of the Patterson Road corridor.

The City Council finds that the proposed Patterson Road Access Control Plan is consistent with the City's overall vision, implements the 2020 One Grand Junction Comprehensive Plan, and overall manages the Patterson Road corridor to not only preserve the transportation functions of the corridor, but also helps to 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 that would have a much greater impact to the corridor and adjacent properties.

Further, the City Council finds that the ACP will afford maximum opportunity, consistent with the sound need and plans of the municipality as a whole, for the development or redevelopment of the corridor.

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

The Patterson Road Access Control Plan (ACP), City of Grand Junction, Colorado, in the form of the document attached hereto, and as recommended for adoption by the City Planning Commission is hereby adopted.

The full text of this Ordinance, including the text of the Patterson Road Access Control Plan, in accordance with paragraph 51 of the Charter of the city of Grand Junction, shall be published in pamphlet form with notice published in accordance with the Charter.

INTRODUCED on first reading the 17 pamphlet form.	th day of February, 2021 and ordered published in					
ADOPTED on second reading the day of, 2021 and ordered published in pamphlet form.						
ATTEST:						
	C.E. "Duke" Wortmann President of the Council					
Wanda Winkelmann City Clerk						