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**CITY COUNCIL AGENDA
WEDNESDAY, AUGUST 20, 2025
250 NORTH 5TH STREET - AUDITORIUM
5:30 PM – REGULAR MEETING**

Call to Order, Pledge of Allegiance, Moment of Silence

Presentations

Presentation Regarding the River Corridor Initiative Master Plan

Public Comments

Individuals may comment during this time on any item except those listed under Public Hearings on this agenda.

The public has four options to provide Public Comments: 1) in person during the meeting, 2) virtually during the meeting (registration required), 3) via phone by leaving a message at 970-244-1504 until noon on Wednesday, August 20, 2025 or 4) submitting comments [online](#) until noon on Wednesday, August 20, 2025 by completing this form. Please reference the agenda item and all comments will be forwarded to City Council.

City Manager Report

Boards and Commission Liaison Reports

CONSENT AGENDA

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

1. Approval of Minutes

- a. Summary of the August 4, 2025, Workshop
- b. Minutes of the August 6, 2025, Regular Meeting

2. Set Public Hearings

- a. Legislative
 - i. Introduction of an Ordinance to Repeal and Replace a Land Exchange Between the City of Grand Junction and Robert M. Stubbs and Upland Homes, Inc., and Setting a Public Hearing for September 3, 2025

3. Procurements

- a. Authorize the Contract to Complete Fabrication and Installation of the Community Recreation Center Indoor Climbing Wall

4. Resolutions

- a. A Resolution to Repeal Resolution 44-24 and Replace with a Production Incentive for Affordable and Attainable Housing Units in the City of Grand Junction, CO
- b. A Resolution Authorizing Lease of Click Ranch Property to Dennis, Lora and Brienna Wynn
- c. A Resolution Authorizing the City Manager to Submit a Grant Application for the Accessory Dwelling Unit (ADU) Grant Program
- d. A Resolution Authorizing the City to Approve a Grant Offer in the Amount of \$11,593,096 as a Co-sponsor with the Grand Junction Regional Airport Authority for the Runway 12/30 Construction Pavement Subbase Project
- e. A Resolution Authorizing the City to Approve a Grant Offer in the Amount of \$675,458 as a Co-sponsor with the Grand Junction Regional Airport Authority for the Runway 12/30 95% Runway Design Grant Offer
- f. A Resolution Authorizing the City to Approve a Grant Offer in the Amount of \$187,920 as a Co-sponsor with the Grand Junction Regional Airport Authority for the Runway 12/30 NAVAID Design RA project
- g. A Resolution Authorizing the GJRAA to Accept FAA AIP Grants Consistent with the Language in the AIP 85, 86, and 87 Grant Agreements as Co-sponsor with the Grand Junction Regional Airport Authority and to Execute the Co-Sponsorship Agreement when Received

5. Other Action Items

- a. Authorize the Mayor to Sign a Letter of Support for Inclusion of Shoshone Water Rights into the State's Instream Flow Program

REGULAR AGENDA

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

6. Public Hearings

- a. Legislative
 - i. An Ordinance Amending Grand Junction Municipal Code Pertaining to Liquor License Occupational Tax
 - ii. An Ordinance Leasing 4.42 acres of City-Owned Property to Brikwell, LLC located at 450 28 Rd Grand Junction, Colorado Pursuant to Voter Approval

7. Resolutions (not a public hearing)

- a. A Resolution Authorizing the City Manager to Sign a Letter of Intent to Enter into a Partnership with Brikwell LLC for the Ascent Project located at 450 28 Road
- b. A Resolution Authorizing the City Manager to Sign a Letter of Intent for Brikwell, LLC to Purchase Lot TBD of Approximately 4.42 acres of property at 450 28 Road for Affordable Housing Development
- c. A Resolution Directing Certain Actions Regarding the Design and Construction of Improvements to 4th and 5th Streets and Ratifying Actions in Connection Therewith

8. Non-Scheduled Comments

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

9. Other Business**10. Adjournment**



Grand Junction City Council

Regular Session

Item #

Meeting Date: August 20, 2025
Presented By: Joel Sholtes, RCI Representative
Department: Community Development
Submitted By: Niki Galehouse, Planning Manager

Information

SUBJECT:

Presentation Regarding the River Corridor Initiative Master Plan

RECOMMENDATION:

Informational Only.

EXECUTIVE SUMMARY:

The River Corridor Initiative is embarking on the development of a River Corridor Master Plan for the Grand Valley in partnership with local jurisdictions and the broader community. RiversEdge West, the fiscal sponsor, was awarded a Colorado Water Conservation Board grant to support this project. The City of Grand Junction and the two other Grand Valley municipalities have all pledged cash and in-kind support for the project, including the involvement of their planning and natural resources staff to help steer the plan. RCI will present the project schedule, discuss potential outcomes of the project, and the role of the City of Grand Junction in the project.

BACKGROUND OR DETAILED INFORMATION:

The River Corridor Initiative is excited to embark on developing a River Corridor Master Plan for the Grand Valley in partnership with local jurisdictions and the broader community. RiversEdge West, the fiscal sponsor, was awarded a Colorado Water Conservation Board grant to support this project. The City of Grand Junction and the two other Grand Valley municipalities have all pledged cash and in-kind support for the project, including the involvement of their planning and natural resources staff to help steer the plan. RCI will present the project schedule, discuss potential outcomes of the project, and the role of the City of Grand Junction in the project.

On November 6, 2024, the City adopted Resolution 77-24 (attached), which committed a pledge of \$36,500 for a grant through the Colorado Water Conservation Board

(CWCB) Water Plan grant program to accomplish the next phase of the River Corridor initiative (RCI) master planning process.

FISCAL IMPACT:

N/A

SUGGESTED MOTION:

N/A

Attachments

1. Resolution No. 77-24 - 2024 - A Resolution Supporting the Next Phase of the River Corridor Initiative (RCI) Master Planning Process with a CWCB Water

CITY OF GRAND JUNCTION, COLORADO

RESOLUTION NO. 77-24

**A RESOLUTION EXPRESSING CITY SUPPORT FOR THE COLORADO RIVER
CORRIDOR INITIATIVE (RCI) MASTER PLANNING PROCESS AND COMMITTING
CITY GRANT MATCH FOR AND IN SUPPORT OF THE COLORADO WATER
CONSERVATION BOARD WATER PLAN GRANT**

RECITALS.

The Grand Valley River Corridor Initiative (RCI) is a community-driven initiative focused on supporting and maintaining a healthy river corridor and the associated needs, uses, and values for generations to come.

The RCI was formed in 2020 to address the acute need for enhanced coordination, planning, and collaboration on river corridor-related activities.

A Core Team leads it with representatives from RiversEdge West, Colorado Mesa University, and American Rivers. Representatives from all four local jurisdictions (Grand Junction, Fruita, Palisade and Mesa County) agreed that a letter of support from each to serve as an agreement to plan collaboratively along the Grand Valley River Corridor and to move forward with a multi-jurisdictional River Master Plan. The City Council approved this letter of support July 3, 2024.

The RCI is requesting a Letter of Support supporting the Grand Valley River Corridor Initiative (RCI) in applying for a grant to accomplish the next phase of the River Corridor Initiative (RCI) master planning process.

The grant is through the Colorado Water Conservation Board (CWCB) Water Plan grant program, and a local match is required and is being requested.

The grant application is due December 1, 2024. If awarded, these funds will be used to accomplish a master plan of the Colorado River and Gunnison River corridors running through the Grand Valley.

The local matching funds requested from the City of Grand Junction for the grant is 40% with the remainder split among Mesa County, the City of Fruita and the Town of Palisade. The City of Grand Junction match requested includes a cash match of \$36,500.

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

- By and with this Resolution the City Council expresses its support for the Grand Valley River Corridor Initiative (RCI) in applying for a grant to accomplish the next phase of the River Corridor Initiative (RCI) master planning process.

- The City will provide the cash match of \$36,500 representing 40% of the overall match required for the project.

Passed and adopted this 6th day of November 2024.



Abram Herman
President of the City Council

ATTEST:



Selestina Sandoval
City Clerk



GRAND JUNCTION CITY COUNCIL WORKSHOP SUMMARY

August 4, 2025

Meeting Convened: 5:30 p.m. The meeting was in-person at the Fire Department Training Room, 625 Ute Avenue, and live-streamed via GoTo Webinar.

City Councilmembers Present: Councilmembers Robert Ballard, Scott Beilfuss (virtual), Laurel Cole, Jason Nguyen, Ben Van Dyke, and Mayor Cody Kennedy. Councilmember Anna Stout was absent.

Staff present: City Manager Mike Bennett, City Attorney John Shaver, Assistant to the City Manager Johnny McFarland, Engineering and Transportation Director Trent Prall, Deputy City Clerk Misty Williams, and City Clerk Selestina Sandoval.

1. Discussion Topics

a. 4th and 5th Streets

On May 29, 2025, Council voted 7-0 to move forward with a two-lane plus bike-lane option for the continuation of the 4th-5th Street Pilot project. In order to provide the additional asphalt width required for improvements into the existing infrastructure, concrete/landscape revisions are necessary at 4th Street & Main Street as well as at 5th Street & Main Street. The design is complete and staff is ready to issue a contract amendment to an existing concrete replacement contract to complete the work. Work could commence as soon as late August and be completed within a few weeks. City traffic staff will complete the striping revisions along the rest of both corridors between Grand Ave and Ute Ave in October. Parking meters would be restored as well as soon as the parking spaces are available.

This updated City Council on the extent of the necessary concrete/landscaping revisions, project costs, and schedule.

Key points included:

- **Project Update:**
Staff presented final design and cost details for the 4th and 5th Street pilot reconfiguration, focusing on lane adjustments, bike lanes, and pinch-point modifications at Main Street. Estimated total cost: \$250,000 (approx. \$160K for concrete and traffic control, \$70K for striping/landscaping, \$20K for contingency).
- **Key Design Features:**
 - Two driving lanes and one buffered bike lane south of Grand; one lane north of Grand.
 - Adjustments at pinch points to minimize concrete and landscape work.

OpenAI. (2025). *ChatGPT* [Large language model]. <https://chatgpt.com>

- Completion goal: mid-September for concrete work, followed by restriping; parking meters to be installed in October.
- **Council Concerns & Alternatives Discussed:**
 - Some councilmembers opposed spending on curb cuts, citing budget constraints, tree removal, and pedestrian safety.
 - Alternatives considered included reverting to the pre-pilot configuration south of Grand, using “sharrows” instead of full bike lanes, and restoring parking lot entrances on 4th/5th off Colorado.
 - Concerns raised about business impacts, traffic flow at key intersections, parking visibility hazards, and project timing.
 - Some councilmembers were in support of a full reversion south of Grand, keep compromise north of Grand, avoid costly curb cuts; decision to be finalized at a future regular council meeting for transparency.
- **Next Steps:**
Staff to pre-order needed materials to avoid delays; public vote planned for August 20, 2025.

2. Council Communication

- **Homelessness Strategy:**
Proposal to revise the Grand Junction unhoused strategy to focus on “treatment-first” approaches, clarify definitions, emphasize public safety, and align with new federal guidance to maintain funding eligibility. Workshop discussion to be scheduled.
- **Municipal Court Practices:**
Councilmember stated someone had raised concerns about potential lack of legal representation at initial court appearances and courtroom accessibility. Proposal to form a small council subcommittee to meet with the municipal judge and city attorney before any formal agenda item.
- **Downtown Employee Parking:**
Idea for a low-cost parking pass program for retail employees to encourage use of paid parking closer to workplaces and improve downtown parking turnover.
- **Urban Trails Committee Scope:**
Discussion on keeping committee activities aligned with its bylaws and avoiding overreach into broader environmental policy without council direction.
- **Comprehensive Plan Review:**
Five-year review due; short-term change needed to ensure federal grant eligibility for airport projects. Discussion to include whether the review is done in-house or with a consultant.

3. Next Workshop Topics

- Scheduling adjustments needed due to conflicts; topics to include parks and recreation updates, outdoor facility progress, and follow-ups from this meeting's discussions.
- Strategic Plan presentation scheduled for August 12, 2025.

4. Other Business

- September 1 workshop falls on a holiday; alternate dates to be identified.
- Watershed tour scheduled for August 5, 8 a.m., departing from City Hall.

5. Adjournment

There being no further business, the workshop adjourned at 6:59 p.m.

Grand Junction City Council
Minutes of the Regular Meeting
August 6, 2025

Call to Order, Pledge of Allegiance, Moment of Silence

The City Council of the City of Grand Junction convened into regular session on the 6th day of August, at 5:30 p.m. Those present were Councilmembers Laurel Cole, Jason Nguyen, Ben Van Dyke, Robert Ballard, and Council President Cody Kennedy. Councilmember Scott Beilfuss was present virtually. Councilmember Anna Stout was absent.

Also present were City Manager Mike Bennett, City Attorney John Shaver, Principal Planner Daniella Acosta Stine, Senior Planner Thomas Lloyd, City Clerk Selestina Sandoval, and Deputy City Clerk Misty Williams.

Council President Kennedy called the meeting to order. Councilmember Cole led the audience in the Pledge of Allegiance, followed by a moment of silence.

Appointments

Councilmember Van Dyke moved, and Councilmember Ballard seconded to appoint Tom Freimann to the One Riverfront Committee for a partial term ending July 30, 2027. Motion carried by unanimous voice vote.

Public Comments

Public comments were heard from Dennis Simpson, Karthik Vishwamita, Sheila Yeager, Tom Keenan, Julia Wildman, Pete Hosburg, Julia Surkis, Patricia Eddy, Donald Hunger, David Lehmann, Lisa Fry, Ruth Kinnett, Tina Peterson, Carol Ruthbun, Thomas Copp, Steve Voytilla, Dan Jones, and Greg Huhn.

City Manager Report

City Manager Mike Bennett reported on the ice cream social community engagement event that was held at the Mesa County Library.

Boards and Commission Liaison Reports

Councilmember Beilfuss reported on the Black Citizens and Friends Group, One Riverfront Committee concert, Mesa County Collaborative for the Unhoused (MCCUH),

and the transportation group.

Councilmember Van Dyke reported on the Downtown Development Authority (DDA) Business Improvement District (BID) meeting and the business incubator.

Councilmember Cole reported on the Commission on Arts and Culture, the community engagement forum, and the tour of the Grand Junction watershed.

Councilmember Nguyen reported on the new Grand Valley Transit (GVT) facility. He also invited council to join in the upcoming Urban Trails Committee walk audit on August 27th.

Mayor Kennedy reported on ARC meeting, the Grand Junction watershed tour, and Grand Valley Transit.

CONSENT AGENDA

1. Approval of Minutes

- a. Summary of July 14, 2025, Workshop
- b. Minutes of July 16, 2025, Regular Meeting

2. Set Public Hearings

- a. Legislative
 - i. Introduction of an Ordinance Amending Grand Junction Municipal Code Pertaining to Liquor License Occupational Tax and Setting a Public Hearing for August 20, 2025
 - ii. Introduction of an Ordinance to Lease approximately 4.38 acres of City-Owned Property to Brikwell for Affordable Housing and Authorizing the City Manager to Sign and Setting a Public Hearing for August 20, 2025

3. Resolutions

- a. A Resolution Authorizing an Application to Colorado Parks and Wildlife (CPW) State Trails Program for Completing the Riverfront Trail

4. Other Action Items

- a. Authorize the Mayor to sign a Letter of Support for Liberty Apartments

Councilmember Nguyen moved to adopt Consent Agenda Items 1 through 4, seconded by Councilmember Cole. Motion carried by a unanimous voice vote.

REGULAR AGENDA

5.a.i. An Ordinance Rezoning a 4.33 Acre Property Located at 2426 G Road to RM-12 (Residential Medium 12)

The applicant requested that this matter be continued until the September 17, 2025, City Council meeting.

Councilmember Cole moved, and Councilmember Nguyen seconded to continue an ordinance rezoning a 4.33-acre property located at 2426 G Road to RM-12 (Residential Medium 12) until September 17, 2025. The motion carried by a unanimous voice vote.

5.a.ii. An Ordinance Vacating Approximately 0.09 Acres of an Alley Right-of-way, Located Between Riverside Parkway and West Main Street

The City initiated a request to vacate a 20-foot-wide public alley right-of-way totaling approximately 4,000 square feet (0.09 acres) located directly east of the Dual Immersion Academy between Riverside Parkway and West Main Street while reserving the majority of the area as a public utility easement and a lesser area for a multipurpose easement. The alley vacation is part of the land exchange agreement between the City and Mesa County Valley School District 51 (D51), including the land exchange at Pomona Elementary for the City's Fire Station No. 3. D51 will provide multipurpose easements along the east boundary of the Dual Immersion Academy, and the City will transfer a parcel it owns near the subject alley to D51. Vacating the alley in the area adjacent to the Dual Immersion Academy will support D51's long-term facility planning.

Principal Planner Daniella Acosta Stine presented the item and was available to answer questions from Council.

The public hearing was opened at 6:42 pm.

Comment was heard from Jim Hargas.

The public hearing was closed at 6:43 pm.

Principal Planner Acosta Stine clarified for Council the question of access for the school district.

Councilmember Ballard moved, and Councilmember Nguyen seconded to adopt Ordinance No. 5271, an ordinance vacating 0.09 acres of a 20-foot-wide alley right-of-way located between Riverside Parkway and West Main Street on final passage and order final publication in pamphlet form. The motion carried 6-0 by roll call vote.

5.a.iii. An Ordinance Rezoning Approximately 3 Acres from RM-8 (Residential Medium 8) to P-2 (Public, Civic, and Institutional Campus) Zone District Located at 830 Gunnison Avenue

Mesa County Valley School District 51, as the property owner, is requesting a rezone of a total of 3 acres from RM-8 (Residential Medium 8) to P-2 (Public, Civic, and Institutional Campus), located at 830 Gunnison Avenue. The requested P-2 zone district would be consistent with the Comprehensive Plan Land Use Map designation of Residential Medium, if approved.

Senior Planner Thomas Lloyd presented the item and was available to answer questions from Council.

Comment was heard from Councilmember Beilfuss.

A representative for the applicant, Mark Austin of Austin Civil Group, introduced himself and was available to answer any questions from Council.

The public hearing was opened at 7:06 p.m.

Comment was heard Sheila Yeager.

The public hearing was closed at 7:08 p.m.

Mr. Austin clarified the rezoning area details for Council.

Councilmember Nguyen moved, and Councilmember Cole seconded to adopt Ordinance No. 5272, an ordinance rezoning 3 acres of land from RM-8 (Residential Medium 8) to P-2 (Public, Civic, and Institutional Campus), located at 830 Gunnison Avenue, on final passage and ordered final publication in pamphlet form. The motion carried 6-0 by roll call vote.

Council took a short break at 7:10 p.m.

The meeting resumed at 7:20 p.m.

5.a.iv. An Ordinance Vacating Approximately 7,772 Square Feet of a 20-foot-wide Alley Right-of-Way Located at 830 Gunnison Avenue Between N. 8th Street and the Vacated N. 9th Street Right-of-Way Adjacent to Washington Park

Mesa County Valley District 51 (District 51) is initiating a request to vacate a 20-foot-wide public alley right-of-way totaling approximately 7,772 square feet located at 830 Gunnison Avenue. The former East Middle School building is constructed above the 20-foot alley, with the alley running through the middle of the school building and gym. It is unclear why District 51, or a former version of the school district, built the school in the City's alley. Vacating the alley will give District 51 ownership of the area and support long-term facility planning.

Senior Planner Thomas Lloyd presented the item and was available to answer questions from Council.

Mark Austin from Austin Civil Group was available to answer any questions from Council.

The public hearing was opened at 7:25 p.m.

There were no public comments.

The public hearing was closed at 7:26 p.m.

Councilmember Nguyen moved, and Councilmember Ballard seconded to adopt Ordinance No. 5273, an ordinance vacating approximately 7,772 square feet of a 20-foot-wide alley right-of-way located at 830 Gunnison Avenue between N. 8th Street and the vacated N. 9th Street right-of-way adjacent to Washington Park on final passage and ordered final publication in pamphlet form. The motion carried 6-0 by roll call vote.

6.a. A Resolution Appointing Members to a Housing Affordability Code Task Force

The City has received several recent inquiries from members of the Housing and Building Association of Western Colorado to convene a task force focused on "meaningful" reforms within the City's policies and procedures to make housing more attainable. In response, staff developed a recommendation to establish a committee focused on reducing regulatory barriers to increase housing affordability, which was presented to City Council at the June 30, 2025, Council Workshop.

This item was to consider the adoption of a resolution appointing members to a Housing Affordability Code Task Force. Based on City Council direction at the June 30, 2025, Workshop, staff collected individual rankings of all 42 applicants and ranked them using a combined average of scores. The Council expressed interest in appointing 15 members to the HAC, including at least one Planning Commissioner. Accordingly, of the 42 applicants, the top 15 applicants were recommended for appointment.

City Manager Mike Bennett presented this item and was available to answer questions from Council.

Comment was heard from Mayor Kennedy and Councilmember Beilfuss.

Councilmember Cole moved, and Councilmember Nguyen seconded to adopt Resolution No. 47-25, a resolution appointing members to a Housing Affordability Code Task Force, and appoint the following members: Kevin Bray, Ron Abeloe, Jane Quimby, Emilee Powell, Keith Ehlers, Mark Austin, Sandra Weckerly (Planning Commissioner), Kim Kerk, Kelly Maves, Ivan Geer, John Gargas, Christi Reece, Michael Foster, Dillon Foster, and Charlie Gechter. The motion carried by a unanimous voice vote.

7. Non-Scheduled Comments

Comment was heard from one individual (name not given).

8. Other Business

There was none.

9. Adjournment

The meeting adjourned at 7:36 p.m.

Selestina Sandoval, MMC

City Clerk





Grand Junction City Council

Regular Session

Item #2.a.i.

Meeting Date: August 20, 2025
Presented By: Daniella Acosta, Principal Planner
Department: Community Development
Submitted By: Daniella Acosta Stine, Principal Planner

Information

SUBJECT:

Introduction of an Ordinance to Repeal and Replace a Land Exchange Between the City of Grand Junction and Robert M. Stubbs and Upland Homes, Inc., and Setting a Public Hearing for September 3, 2025

RECOMMENDATION:

Staff recommends approval of the ordinance.

EXECUTIVE SUMMARY:

The Camelback Gardens Planned Development is a proposed residential development in the Ridges to be located at 381 and 409 High Desert Road. The development site is surrounded by approximately 14 acres of City Open Space.

A land exchange ordinance for this project was previously approved by City Council on March 15, 2023. This repeal and replace ordinance is necessary for two primary reasons:

1. **Updated Ownership Disclosure:** When the exchange was first considered, it was not disclosed that 381 High Desert Road was under the ownership of Upland Homes, Inc. As such, the transaction was not solely between Mike M. Stubbs and the City, but also included Upland Homes, Inc. as a party to the exchange.
2. **Correction to Exchange Acreage:** The land exchange involves a greater square footage than was presented at the first hearing. This updated ordinance reflects the correct amounts and corresponding exhibits provided by the applicant.

Under the revised exchange, the City will convey a total of approximately 12,782

square feet of existing City-owned Ridges Open Space in two locations (Parcels T58/T59 and E14) to the applicant. In return, the applicant will dedicate and improve approximately 15,079 square feet of public park and trail corridor land (Tracts MM, NN, and Tract 1) within the Camelback Gardens subdivision. The new park will be landscaped and maintained by the Camelback Gardens Homeowners Association, and the trail corridors will provide improved public connectivity to the Ridges open space system.

The updated proposal continues to meet the City’s 1976 Resolution policy for disposal of City-owned real estate, ensuring that the land received is of equal or greater value—both actual and potential—to the public and the City.

BACKGROUND OR DETAILED INFORMATION:

Original Action: On March 15, 2023, City Council approved an ordinance authorizing a land swap between the City and Robert M. Stubbs. The transaction was presented as involving only Mr. Stubbs’ ownership.

Ownership Update: It has since come to the City’s attention that Upland Homes, Inc. owned 381 High Desert Road at the time of the hearing, making them an additional party to the exchange.

Square Footage Revision: The original ordinance understated the square footage of the land to be conveyed and received. The updated figures, based on the applicant’s petition and exhibits, are:

- **City Conveyance:** ~ Total 12,782 SF – Tract 1 Exhibit B (Future Lots T58/T59) – 5,211 SF; Tract 4 Exhibit B (Future Lot E14) – 7,125 SF; plus two minor segments (Tracts 3 and 2) totaling 446 SF for future right-of-way dedication.
- **City Acquisition:** ~Total 15,079 SF – Tract MM – 9,482 SF park; Tract NN – 4,047 SF trail connection; Tract 1 Exhibit A – 1,550 SF trail connection)

Benefits:

- Creates improved and more predictable open space boundaries
- Formalizes and expands public trail connections
- Provides a new landscaped public park without additional maintenance burden on the City
- Maintains compliance with City land disposal policy and furthers Comprehensive Plan goals for open space access and connectivity

Parks and Recreation staff have reviewed the updated petition and concluded that the proposed exchange will have no negative impact on the City’s open space system. The Parks and Recreation Advisory Board (PRAB) previously recommended approval.

FISCAL IMPACT:

There is no direct fiscal impact from this action. Future costs associated with maintenance of the park and trail connections will be budgeted accordingly.

SUGGESTED MOTION:

I move to introduce and pass for publication in pamphlet form an ordinance repealing and replacing Ordinance No. 5134 to approve the land exchange between the City of Grand Junction, Robert M. Stubbs, and Upland Homes, Inc., and to set a public hearing for September 3, 2025.

Attachments

1. Exhibit 1. Transfer to City
2. Exhibit 2. Transfer from City
3. Exhibit 3. PRAB Minutes 2023 - February 2
4. Exhibit 4. 1976 Resolution - City Council Policy on Disposal of City-Owned Real Estate
5. Exhibit 5. Parks and Recreation Staff Opinion
6. ORD-Ridges Exchange Camelback 20250805

Exhibit A

TRANSFER PROPERTY TO CITY

CAMELBACK GARDENS BOUNDARY LINE ADJUSTMENT

409 HIGH DESERT ROAD

PARCEL No. 2945-174-53-002

PARCEL No. 2945-202-06-041

PARCEL No. 2945-174-30-079

CAMELBACK GARDENS SUBDIVISION RECEPTION No. 2978317

RIDGES FILING No. SIX RECEPTION No. 1259706

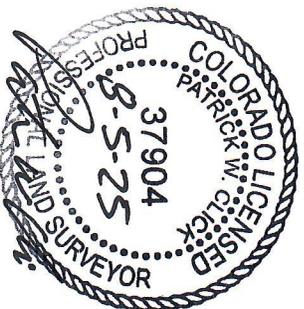
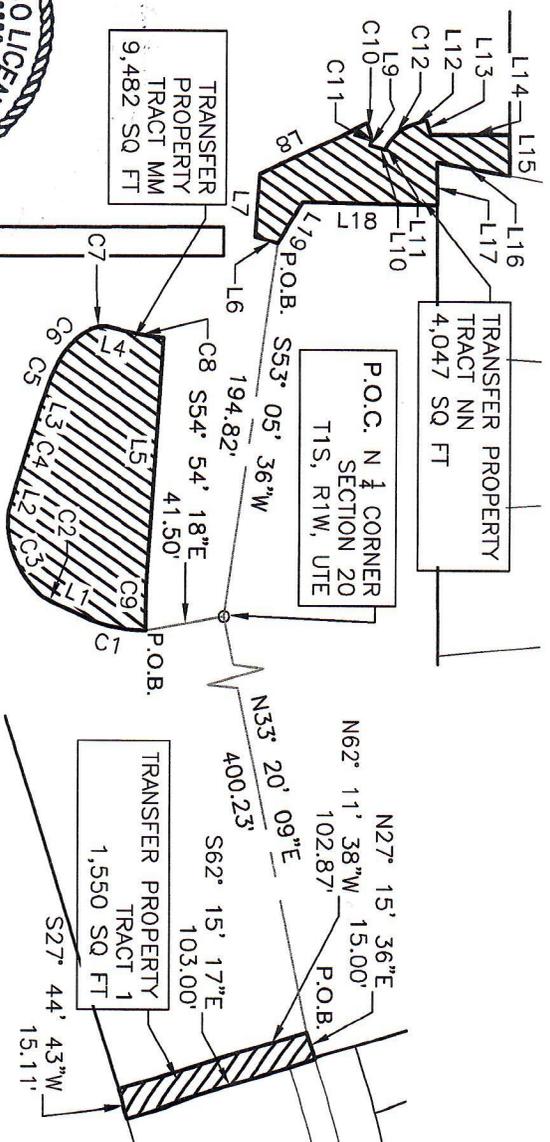
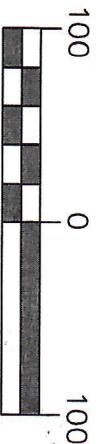
DATE: 8/5/25

JOB #: 2022-045



GRAPHIC SCALE:

1" = 100'



BEARINGS ARE BASED ON THE NORTH LINE OF THE NW $\frac{1}{4}$ NE $\frac{1}{4}$ OF SECTION 20, T1S, R1W OF THE UTE MERIDIAN. THE VALUE USED 889'46.16"E, WAS CALCULATED USING THE MESA COUNTY LOCAL COORDINATE SYSTEM. SURVEY MARKERS WERE FOUND AT THE EAST AND WEST ENDS OF SAID LINE.

Curve Table					
Curve #	Radius	Length	Delta	Chord Length	Chord Bearing
C1	80.00'	33.97'	024° 19' 49"	33.72'	S33° 20' 13"E
C2	80.00'	7.72'	005° 31' 54"	7.72'	S18° 24' 21"E
C3	50.00'	50.95'	058° 23' 10"	48.78'	S23° 12' 29"W
C4	1100.00'	34.21'	001° 46' 55"	34.21'	S61° 57' 41"W
C5	150.00'	18.14'	006° 55' 40"	18.13'	S66° 18' 59"W
C6	40.00'	26.47'	037° 54' 34"	25.99'	S88° 44' 06"W
C7	15.00'	10.81'	041° 18' 07"	10.58'	N51° 39' 33"W
C8	136.00'	21.07'	008° 52' 43"	21.05'	N35° 27' 52"W
C9	372.00'	33.28'	005° 07' 32"	33.27'	N46° 18' 34"E
C10	30.00'	5.91'	011° 17' 15"	5.90'	N24° 59' 02"E
C11	10.00'	5.62'	032° 10' 59"	5.54'	N46° 43' 09"E
C12	20.00'	15.09'	043° 13' 04"	14.73'	N86° 14' 42"W

POLARIS SURVEYING

PATRICK W. CLICK P.L.S.

3194 MESA AVE

GRAND JUNCTION, CO 81504

PHONE (970)434-7038

Line Table		
Line #	Direction	Length
L1	S21° 10' 18"E	15.26'
L2	S61° 04' 13"W	13.31'
L3	S62° 51' 09"W	12.71'
L4	N31° 00' 30"W	7.55'
L5	N48° 52' 20"E	117.93'
L6	S28° 13' 34"E	12.44'
L7	S48° 52' 20"W	32.71'
L8	N70° 39' 35"W	62.12'
L9	N62° 48' 38"E	0.38'
L10	N28° 28' 11"W	8.05'

Line Table		
Line #	Direction	Length
L11	S72° 08' 46"W	2.85'
L12	N64° 38' 10"W	9.93'
L13	N27° 39' 59"E	7.66'
L14	N45° 19' 07"W	41.46'
L15	N44° 40' 53"E	22.22'
L16	S34° 29' 17"E	38.70'
L17	N44° 40' 53"E	22.48'
L18	S43° 58' 50"E	70.47'
L19	N76° 04' 24"E	25.10'

Tract NN:

A tract of land situated in Section 20, Township 1 South, Range 1 West of the Ute Meridian, City of Grand Junction, County of Mesa, State of Colorado, said tract of land being a part of Camelback Gardens Subdivision as shown at Reception No. 2978317 of the Mesa County Records, being more particularly described as follows:

Commencing at the North Quarter Corner of said Section 20 from whence the East Sixteenth Corner on the North Line of said Section 20 bears S89°46'16"E a distance of 1318.50 feet for a basis of bearings all bearings hereon related thereto, thence S53°05'36"W a distance of 194.82 feet to the Point of Beginning; thence S28°13'34"E a distance of 12.44 feet; thence S48°52'20"W a distance of 32.71 feet; thence N70°39'35"W a distance of 62.12 feet to the start of a non-tangent curve to the right; thence 5.91 feet along said curve to the right with a radius of 30.00 feet and a central angle of 11°17'15" whose chord bears N24°59'02"E a distance of 5.90 feet to the start a compound curve; thence 5.62 feet along said compound curve with a radius of 10.00 feet and a central angle of 32°10'59" whose chord bears N46°43'09"E a distance of 5.54 feet; thence N62°48'38"E a distance of 0.38 feet; thence N28°28'11"W a distance of 8.05 feet; thence S72°08'46"W a distance of 2.85 feet to the start of a curve to the right; thence 15.09 feet along said curve to the right with a radius of 20.00 feet and a central angle of 43°13'04" whose chord bears N86°14'42"W a distance of 14.73 feet; thence N64°38'10"W a distance of 9.93 feet; thence N27°39'59"E a distance of 7.66 feet; thence N45°19'07"W a distance of 41.46 feet to the Westerly Line of said Camelback Gardens Subdivision; thence along said Westerly Line the following three (3) courses and distances;

1. N44°40'53"E a distance of 22.22 feet;
2. S34°29'17"E a distance of 38.70 feet;
3. N44°40'53"E a distance of 22.48 feet;

Thence S43°58'50"E a distance of 70.47 feet; thence N76°04'24"E a distance of 25.10 feet to the Point of Beginning.

Said Tract NN contains 4,047 square feet as described.

Tract MM:

A tract of land situated in Section 20, Township 1 South, Range 1 West of the Ute Meridian, City of Grand Junction, County of Mesa, State of Colorado, said tract of land being a part of Camelback Gardens Subdivision as shown at Reception No. 2978317 of the Mesa County Records, being more particularly described as follows:

Commencing at the North Quarter Corner of said Section 20 from whence the East Sixteenth Corner on the North Line of said Section 20 bears S89°46'16"E a distance of 1318.50 feet for a basis of bearings all bearings hereon related thereto, thence S54°54'18"E a distance of 41.50 feet to the start of a non-tangent curve to the right and the Point of Beginning; thence 33.97 feet along said curve to the right with a radius of 80.00 feet and a central angle of 24°19'49" whose chord bears S33°20'13"E a distance of 33.72 feet; thence S21°10'18"E a distance of 15.26 feet to the start of a curve to the right; thence 7.72 feet along said curve to the right with a radius of 80.00 feet and a central angle of 5°31'54" whose chord bears S18°24'21"E a distance of 7.72 feet to the start of a compound curve; thence 50.95 feet along said compound curve with a radius of 50.00 and a central angle of 58°23'10" whose chord bears S23°12'29"W a distance of 48.78 feet; thence S61°04'13"W a distance of 13.31 feet to the start of a curve to the right; thence 34.21 feet along said curve to the right with a radius of 1100.00 feet and a central angle of 1°46'55" whose chord bears S61°57'41"W a distance of 34.21 feet; thence S62°51'09"W a distance of 12.71 feet to the start of a curve to the right; thence 18.14 feet along said curve to the right with a radius of 150.00 feet and a central angle of 6°55'40" whose chord bears S66°18'59"W a distance of 18.13 feet to the start of a compound curve; thence 26.47 feet along said compound curve with a radius of 40.00 feet and a central angle of 37°54'34" whose chord bears S88°44'06"W a distance of 25.99 feet to the start of a compound curve; thence 10.81 feet along said compound curve with a radius of 15.00 feet and a central angle of 41°18'07" whose chord bears N51°39'33"W a distance of 10.58 feet; thence N31°00'30"W a distance of 7.55 feet to the start of a curve to the left; thence 21.07 feet along said curve to the left with a radius of 136.00 feet and a central angle of 8°52'43" whose chord bears N35°27'52"W a distance of 21.05 feet; thence N48°52'20"E a distance of 117.93 feet to the start of a curve to the left; thence 33.28 feet along said curve to the left with a radius of 372.00 feet and a central angle of 5°07'32" whose chord bears N46°18'34"E a distance of 33.27 feet to the Point of Beginning.

Said Tract MM contains 9,482 feet as described.

Tract 1:

A tract of land situated in Section 17, Township 1 South, Range 1 West of the Ute Meridian, City of Grand Junction, County of Mesa, State of Colorado, said tract of land being a part of Camelback Gardens Subdivision as shown at Reception No. 2978317 of the Mesa County Records, being more particularly described as follows:

Commencing at the North Quarter Corner of said Section 20 from whence the East Sixteenth Corner on the North Line of said Section 20 bears S89°46'16"E a distance of 1318.50 feet for a

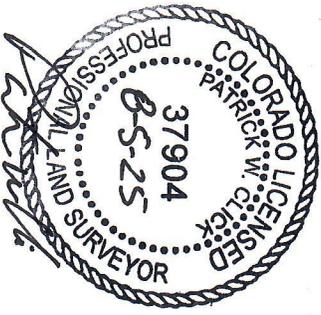
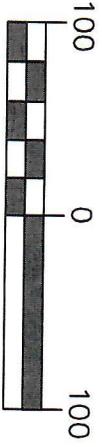
basis of bearings all bearings hereon related thereto, thence N33°20'09"E a distance of 400.23 feet to the Point of Beginning; thence N27°15'36"E a distance of 15.00 feet to the Northerly Line of said Camelback Gardens Subdivision; thence S62°15'17"E along said Northerly Line a distance of 103.00 feet; thence S27°44'43"W along the Easterly Line of said Camelback Gardens Subdivision a distance of 15.11 feet; thence N62°11'38"W a distance of 102.87 feet to the Point of Beginning.

Said Tract 1 contains 1,550 feet as described.

EXHIBIT B

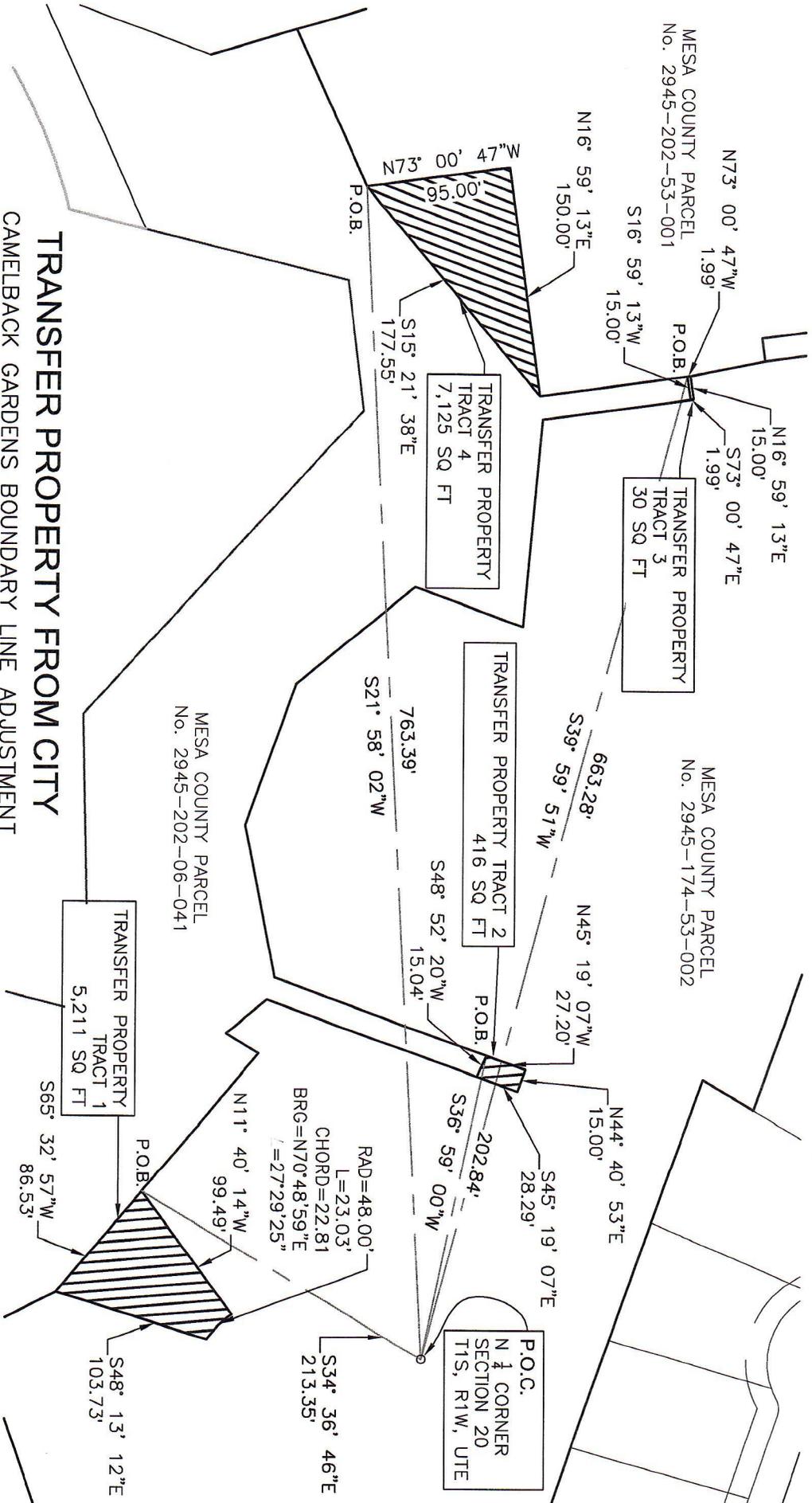


GRAPHIC SCALE:
1"=100'



DATE: 8/5/25
JOB #: 2022-045

POLARIS SURVEYING
PATRICK W. CLICK P.L.S.
3194 MESA AVE
GRAND JUNCTION, CO 81504
PHONE (970)434-7038



TRANSFER PROPERTY FROM CITY

CAMELBACK GARDENS BOUNDARY LINE ADJUSTMENT

381 & 409 HIGH DESERT ROAD

PARCEL No. 2945-202-53-001
PARCEL No. 2945-174-53-002
PARCEL No. 2945-202-06-041

CAMELBACK GARDENS SUBDIVISION RECEPTION No. 2978317
RIDGES FILING No. SIX RECEPTION No. 1259706

BEARINGS ARE BASED ON THE NORTH LINE OF THE NW 1/4 NE 1/4 OF SECTION 20, T1S, R1W OF THE UTE MERIDIAN. THE VALUE USED 889°46'16"E, WAS CALCULATED USING THE MESA COUNTY LOCAL COORDINATE SYSTEM. SURVEY MARKERS WERE FOUND AT THE EAST AND WEST ENDS OF SAID LINE.

Tract 1:

A tract of land situated in Section 20, Township 1 South, Range 1 West of the Ute Meridian, City of Grand Junction, County of Mesa, State of Colorado, said tract of land being a part of District Open Space, The Ridges Filing NO. Six as shown at Reception No. 1259706 of the Mesa County Records, being more particularly described as follows:

Commencing at the North Quarter Corner of said Section 20 from whence the East Sixteenth Corner on the North Line of said Section 20 bears S89°46'16"E a distance of 1318.50 feet for a basis of bearings all bearings hereon related thereto, thence S34°36'46"E a distance of 213.35 feet to a point on the Westerly Line of said District Open Space and the Point of Beginning; thence along said Westerly Line the following three (3) courses and distances;

1. N11°40'14"W a distance 99.49 feet to the start of a non-tangent curve to the left;
2. 23.03 feet along said curve to the left with a radius of 48.00 feet and a central angle of 27°29'25" whose chord bears N70°48'59"E a distance of 22.81 feet;
3. S48°13'12"E a distance of 103.73 feet;

thence S65°32'57"W a distance of 86.53 feet to the Point of Beginning.

Said Tract 1 contains 5,211 square feet as described.

Tract 2:

A tract of land situated in Section 20, Township 1 South, Range 1 West of the Ute Meridian, City of Grand Junction, County of Mesa, State of Colorado, said tract of land being a part of District Open Space, The Ridges Filing NO. Six as shown at Reception No. 1259706 of the Mesa County Records, being more particularly described as follows:

Commencing at the North Quarter Corner of said Section 20 from whence the East Sixteenth Corner on the North Line of said Section 20 bears S89°46'16"E a distance of 1318.50 feet for a basis of bearings all bearings hereon related thereto, thence S36°59'00"W a distance of 202.84 feet to a point on the Westerly Line of said District Open Space and the Point of Beginning; thence along said Westerly Line the following three (3) courses and distances;

1. thence N45°19'07"W a distance of 27.20 feet;
2. thence N44°40'53"E a distance of 15.00 feet;
3. thence S45°19'07"E a distance of 28.29 feet;

thence S48°52'20"W a distance of 15.04 feet to the Point of Beginning.

Said Tract 2 contains 416 square feet as described.

Tract 3:

A tract of land situated in Section 20, Township 1 South, Range 1 West of the Ute Meridian, City of Grand Junction, County of Mesa, State of Colorado, said tract of land being a part of District Open Space, The Ridges Filing NO. Six as shown at Reception No. 1259706 of the Mesa County Records, being more particularly described as follows:

Commencing at the North Quarter Corner of said Section 20 from whence the East Sixteenth Corner on the North Line of said Section 20 bears S89°46'16"E a distance of 1318.50 feet for a basis of bearings all bearings hereon related thereto, thence S39°59'51"W a distance of 663.28 feet to a point on the Westerly Line of said District Open Space and the Point of Beginning; thence along said Westerly Line the following three (3) courses and distances;

1. N73°00'47"W a distance of 1.99 feet;
2. N16°59'13"E a distance of 15.00 feet;
3. S73°00'47"E a distance of 1.99 feet;

Thence S16°59'13"W a distance of 15.00 feet to the Point of Beginning.

Said Tract 3 contains 30 square feet as described.

Tract 4:

A tract of land situated in Section 20, Township 1 South, Range 1 West of the Ute Meridian, City of Grand Junction, County of Mesa, State of Colorado, said tract of land being a part of District Open Space, The Ridges Filing NO. Six as shown at Reception No. 1259706 of the Mesa County Records, being more particularly described as follows:

Commencing at the North Quarter Corner of said Section 20 from whence the East Sixteenth Corner on the North Line of said Section 20 bears S89°46'16"E a distance of 1318.50 feet for a basis of bearings all bearings hereon related thereto, thence S21°58'02"W a distance of 763.39 feet to a point on the Westerly Line of said District Open Space and the Point of Beginning; thence along said Westerly Line the following two (2) courses and distances;

1. N73°00'47"W a distance of 95.00 feet;
2. N16°59'13"E a distance of 150.00 feet;

Thence S15°21'38"E a distance of 177.55 feet to the Point of Beginning.

Said Tract 4 contains 7,125 square feet as described.

Parks and Recreation Advisory Board Minutes Regular Meeting – February 2, 2023

Meeting Location: Hospitality Suite – Lincoln Park Stadium

Roll Call

Board Members Present: William Findlay
Kyle Gardner
Lilly Grisafi
Gary Schroen
Nancy Strippel
Lisa Whalin
Byron Wiehe

Board Members Absent: Cindy Enos-Martinez
Austin Solko
Phil Pe'a
Abe Herman

City Staff Present: Ken Sherbenou, Director of Parks and Recreation
Daniella Acosta, Senior Planner
Lance Gloss, Senior Planner
Rob Davis, City Forester, Supervisor - Open Space
Emily Krause, Recreation Superintendent
Allison Little, Administrative Specialist

Guests Present: Jeffrey Fleming – Colorado Land Advisor
Scott Preisendorf – Upland Homes

Meeting called to order by Lisa Whalin at 12:02 p.m.

The Board noted that Lilly Grisafi's name was misspelled throughout the January minutes. Lilly made a motion to approve the minutes with the correction. The motion was seconded by Byron Wiehe and carried unanimously.

Motion by the Parks and Recreation Advisory Board: Yes 6 No 0

Camelback Gardens

Jeffrey Fleming of Colorado Land Advisor talked with the board about the history of the project and the dedications that have preceded this discussion, some of which was deeded to the county and makes up some of what is known as the Ridges Open Space. This development will be marketed towards folks looking for smaller homes with less maintenance requirements freeing up time for hobbies or other activities. Because the dwellings will have limited yard space, the developer wants to ensure open space and common areas are a high quality amenity for the residents.

The proposal is to swap previously dedicated land for new dedications to accommodate the new development since the plan has changed since the previous design. Daniella Acosta shared with the board that the City Charter prohibits disposing of land, but allows exchanging of land as long as what is received is of higher value than what is given away. The developer would be giving 10,100 sq feet of developed parkland with trees grass and irrigation, a trail corridor in either a tract or easement 1650 and 4182 trail corridor as well as improve the trails around the project. City Staff have met with the developer and walked the property. The swap would ensure access and appropriately diverts traffic from private land to public open space areas. This would allow for formalization of trail connections and would include a neighborhood playground for immediate and surrounding residents. As well as residents of the development, folks in the Ridges would benefit as well as others who drive in to use the social trails. Ken Sherbenou shared with the Board that the pedestrian bicycle plan will help make sure all the trails flow and have connectivity as segments are added.

Board members wondered about the soil supporting a developed park. Developers have found some bentonite soil but not an overwhelming amount. Board members also wondered what would happen if the swap was not approved. The developers do have alternative designs that could still meet density and provide trail access (though it would be less access). Board members asked who would maintain the park. Option 1 would be HOA maintain with City Easement. Option 2 would be to dedicate to the City for maintenance. Option 3 would be to dedicate to the City for maintenance with a payment from the HOA to help with costs.

Gary Schroen made a motion to support the land swap as presented for Camelback Gardens with an eye to full trail connectivity, and recommends the HOA undertake the maintenance of the park. The motion was seconded by Kyle and carried unanimously.

Motion by the Parks and Recreation Advisory Board: Yes 7 No 0

Urban Forestry Management Plan

Ken introduced Lance Gloss, who is currently in North Carolina completing his Masters Degree, and is working on the Urban Forestry Management Plan. Lance shared that he has been working on this plan with Rob Davis and the Forestry Board. Lance has surveyed a wide range of plans from comparable communities, in terms of population, climate, size scale, etc. A public meeting is scheduled for February 23 to continue to gather community input. The plan aims to understand the resource as it exists, threats and limitations, understanding public input and stakeholders, canopy goals, and implementation items for those goals.

The survey was open through the month of January in English and Spanish. 529 responses. More than 5x the responses from Boulder's survey, and almost the same as Austin's response, even though their population is far greater. Though this is not statistically valid its still important response. Lance shared breakdowns on demographic data noting there was a good spread on

geography, but fewer responses from the northwest and Pear Park areas. Additionally, there were few renter responses, though a number of landlord responses. Shade was the most tangible benefit response, and priorities for management were identified as pests and disease, drought, and losing trees from lack of care. There was also support for sustaining trees during construction. Half respondents felt that tree canopy had declined in their neighborhoods over the last decade. Trees are being taken care of by individuals (not professional companies) and about half the respondents were unaware of any tree care regulations.

Lance shared with the board that American Forest sets tree canopy goals at 30% canopy cover, A 20% goal would require a doubling of existing trees (230,000 new trees). The Forestry board would like to implement an 18% canopy coverage average that takes into account a lower coverage goal where appropriate (airport, commercial/industrial areas, rural agricultural areas) and a higher goal in residential, parks and open space areas.

The Board thanked Lance for the presentation. Lance will forward a draft of the plan to the board at the end of March for their review and support as it moves forward for Council Adoption.

Painted Bowl

This item was tabled to a future meeting.

JUCO Food Vendor Selection Meeting Representation

Emily Krause advised the board that historically PRAB has had a representative on the JUCO Food Vendor Selection Committee. Lilly Grisafi will check her schedule and let Emily know.

For the Good of the Community

Board members wondered about the election timeline. Ken Sherbenou advised the board that Election day is April 4. The ballot includes eight city council candidates, the Community Recreation Center question, and extending the lease for CDA on the public land to 99 years.

Board members wondered about the Orchard Mesa Pool. Ken Sherbenou shared with the Board that City Council discussed the pool last night and gave direction for staff to resume work with the consultant working on a renovation plan for the pool. There is an operational agreement in place to 2026, which should give the community a lot more confidence in the continued operation and highlights the City's dedication to the OM Pool.

Adjourn

The board adjourned by acclamation at 1:39 p.m.

Next Meeting

The next regular meeting will be March 2, 2023.

Respectfully submitted,
Allison Little
Administrative Specialist

The following Resolution was presented and read:

RESOLUTION CONCERNING DISPOSITION OF CITY-OWNED REAL ESTATE

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

That it is the policy of the City Council to dispose of City-owned real estate in exchange for real estate that better suits the City's needs whenever possible.

PASSED AND ADOPTED this 21st day of July, 1976.

From: [Randy Coleman](#)
To: [Daniella Acosta](#)
Subject: Re: Camelback Gardens
Date: Thursday, February 16, 2023 12:04:35 PM
Attachments: [image001.png](#)
[Outlook-5r2mvusl.png](#)

Good Afternoon Dani,

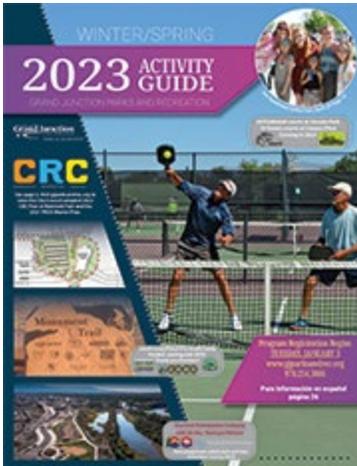
I have visited the site and compared it to the site plan on many occasions, with and without the developer. After many questions and evaluation, we support the proposed land swap and believe there will be no impact on the City's Open Space. There is a perceived benefit to the development, our park users, and the citizens of Grand Junction.

If I can answer any other questions, please reach out.

Regards,
Randy Coleman

Randy Coleman

City of Grand Junction Parks and Recreation
Parks Superintendent
Phone: 970-254-3821 | randyc@gjcity.org
2529 High Country Court
Grand Junction, CO 81501



1 CITY OF GRAND JUNCTION, COLORADO

2 ORDINANCE NO. ____

3 AN ORDINANCE REPEALING AND REPLACING ORDINANCE 5134 AN ORDINANCE
4 AUTHORIZING AND CONFIRMING THE EXCHANGE OF REAL PROPERTY LOCATED AT 381
5 HIGH DESERT ROAD AND FOR PROPERTY LOCATED AT 409 HIGH DESERT ROAD IN THE CITY
6 OF GRAND JUNCTION, COLORADO

7 RECITALS:

8 On December 15, 2023, the City received a Petition for Land Exchange ("Petition") from
9 Robert M. Stubbs ("Petitioner") for an exchange of two parcels totaling 12,336 square
10 feet of unimproved open space for 10,149 square feet of improved open space
11 together with 5,795 square feet of constructed trail connections all located in the
12 Ridges (collectively "Exchange" or "the Exchange"). That Petition failed to identify that
13 the parcel located at 381 High Desert Road was being sold to Upland Homes LLC.
14 Because the Petition was defective this Ordinance repeals and replaces Ordinance
15 5134. A corrected petition ("2025 Petition") which properly accounts for the ownership
16 and descriptions of the parcels of land involved in this action is attached and
17 incorporated as if fully set forth. In addition to the change in ownership, the revised
18 exchange adjusts the amounts of land to be conveyed: the City will convey
19 approximately 12,782 square feet to the applicant, and the applicant will dedicate
20 approximately 15,079 square feet to the City.

21 The Exchange proposed by the 2025 Petition would facilitate the construction of a
22 residential subdivision known as Camelback Gardens ("Development"), which is
23 pending City review and approval. The Petitioner asserts that the Exchange and the
24 Development which would be facilitated by and with the City Council approving the
25 Exchange will result in more beneficial public access and use of the Ridges open space
26 together with the Development having more utility. The 2025 Petition and the
27 Petitioner's testimony in support thereof is the principal evidence adduced in this
28 matter.

29 While the Petitioner bears both the burden of going forward and the burden of
30 persuasion with respect to the 2025 Petition, certain City Community Development and
31 Parks and Recreation Staff on December 9, 2022, inspected the property contemplated
32 for the Exchange and otherwise considered the proposed Exchange. Based on that
33 review the City Staff has determined the Exchange will have no impact on the City's
34 Open Space and accordingly formed an opinion that the Exchange has perceived
35 benefits to open space park users and citizens of Grand Junction and the City Staff has
36 recommended that the City Council favorably consider the 2025 Petition/the
37 Exchange.

38 The City as the successor to the Ridges Metropolitan District owns the Ridges Open
39 Space. While the Ridges Open Space has neither been used for governmental
40 purposes, or is a developed park, it is used for recreational purposes. The City Charter

41 provides that the City Council has the power to sell certain real estate by ordinance or
42 resolution; however, if the real estate is used or held for park purposes before any sale
43 thereof shall be made a question shall be submitted to and ratified by voters. While the
44 Ridges Open Space is not a park *per se* it is the City Attorney's opinion that if the
45 property proposed to be exchanged were being sold that the Charter restriction would
46 apply and prior voter approval for a sale or permanent disposal of the property would
47 be necessary; however, given that the 2025 Petition seeks a trade not a sale of the real
48 estate and the Exchange may reasonably be found to be equivalent or better based
49 on the City Staff review, the City Attorney has opined that it is within its discretion for the
50 City Council to entertain the Exchange without submitting a question to the electorate.

51 Since adoption in 1976 of a City Council Resolution it has been City policy to "to dispose
52 of City owned real estate in exchange for real estate that better suits the City's needs
53 whenever possible". The Proposed Exchange is consistent with long-established City
54 policy.

55 With this Ordinance the City Council repeals and replaces Ordinance 5134 and as with
56 that Ordinance and but for the defect in the Petition, the City Council does determine
57 that the real estate to be acquired in the Exchange, as described in the 2025 Petition
58 and the exhibit attached hereto, will better serve the needs of the City in general and
59 the users of the Ridges Open Space in particular.

60 Furthermore, with this Ordinance the City Council confirms the Exchange and settles
61 certain matters related to the history of the property and ratifies that the Exchange as
62 stated in the 2025 Petition, is approved with this Ordinance, and is found to be
63 consistent with the City Charter.

64 With this Ordinance the City Council deems the Exchange proper as stated herein and
65 additionally allows that the form of conveyance be executed, approved, and
66 acknowledged by the proper process and officers of the City for the property shall be
67 held as *prima facie* evidence of compliance with the Charter, the laws of the City and
68 State and the acts hereby and herewith ordained.

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

71 1. The foregoing Recitals are incorporated and adopted, and in accordance with and
72 pursuant to this Ordinance, the City Council of the City of Grand Junction hereby
73 authorizes, confirms and ratifies the deeded exchange of 7,125 square feet from Lot 3
74 to Lot 1 and 5,657 square feet from Lot 3 to Lot 2 as identified on Exhibits A & B and on
75 the terms stated in the 2025 Petition attached hereto, which terms include but are not
76 limited to dedication and construction of public open space and public improvements
77 and on-going HOA maintenance of said public open space and as fully provided in the
78 2025 Petition, together with any terms, understandings and conditions that are or may
79 be applicable by, with and through the City review and approval of the Development.

80 2. All actions taken by the officers, employees and agents of the City relating to the
81 Exchange described or referred to herein and which actions are consistent with the
82 provisions hereof are hereby ratified, approved, and confirmed.

83 3. The officers, employees and agents of the City are hereby authorized and directed
84 to take all actions necessary or appropriate to effectuate the provisions hereof,
85 including, without limitation, the execution and delivery of such deed(s) and other
86 document(s) as may be necessary or required to affect the intent and purposes hereof.

87 INTRODUCED ON FIRST READING, PASSED for publication in pamphlet form on this 20th
88 day of August 2025 and setting a hearing for the 3rd day of September 2025.

89 _____
90 Cody Kennedy
91 President of the City Council

92 _____
93 _____
94 Selestina Sandoval
95 City Clerk

96
97 HEARD, PASSED and ADOPTED ON SECOND READING and ordered published in
98 pamphlet form this ___ day of ___ 2025.

99
100 _____
101 Cody Kennedy
102 President of the City Council

103 _____
104 _____
105 Selestina Sandoval
106 City Clerk



Grand Junction City Council

Regular Session

Item #3.a.

Meeting Date: August 20, 2025
Presented By: Ken Sherbenou, Parks and Recreation Director
Department: Parks and Recreation
Submitted By: Ken Sherbenou

Information

SUBJECT:

Authorize the Contract to Complete Fabrication and Installation of the Community Recreation Center Indoor Climbing Wall

RECOMMENDATION:

Staff recommends the City Council authorize the Purchasing Division to enter into a Professional Services Contract with Eldorado Climbing for the fabrication and installation of the Indoor Climbing Wall at the Community Recreation Center (CRC) at Matchett Park for the not-to-exceed amount of \$359,000.

EXECUTIVE SUMMARY:

The City issued a Request for Proposals (RFP) to select the contractor to complete the fabrication and installation of the climbing wall in the spring of 2026. The selected contractor is responsible for ensuring a professional, complete, and timely design, fabrication, and installation that meets the City's operational and safety standards. After evaluation of proposals, the evaluation committee selected Eldorado Climbing to complete this exciting element of the Community Recreation Center (CRC). The left side of the wall is rock realistic, mimicking the Colorado National Monument, and the right side of the wall is a birchwood, panelized system.

BACKGROUND OR DETAILED INFORMATION:

The City issued an RFP to qualified contractors to furnish, deliver, and install a commercial-grade climbing wall for the new Community Recreation Center. This ensured competitive pricing. Contracting directly with the City also avoided any contract mark-ups. As presented to City Council at the discussion and approval of the Guaranteed Maximum Price on November 6, 2024, this is one of the final remaining elements to be approved. Additional items planned to be brought forth to the City Council at a later date include the fitness contract, the furniture package, and the

outdoor facilities contract amendment.

The City completed the Parks, Recreation, and Open Space (PROS) Master Plan in January 2021. This led to an election on April 6, 2021, where dedicated funding was secured through taxation on sales of cannabis. The number one item on the PROS Plan was the Community Recreation Center (CRC). Through the summer and fall of 2022, a CRC feasibility study planning process proceeded, which was led by the Council-appointed Parks and Recreation Advisory Board (PRAB). This robust community input process was conducted to develop recommendations about the new CRC to include the location, funding sources, and the size of the facility, as well as the amenities.

On April 4, 2023, the citizens of Grand Junction voted to approve the ballot question to build a new Community Recreation Center. Design by lead architect Barker-Rinker-Seacat is complete, and construction is about 30% complete. Construction is being led by FCI Constructors, working with 35 subcontractors. The final design is for a 107,000 square foot comprehensive Community Recreation Center with five pools, a three-court gym, party rooms, community rooms, fitness rooms, a full-service fitness/weights center, an indoor walk/job track, child watch, space for St. Mary's hospital physical therapy clinic, a family game area, and an indoor climbing wall. About 1/3 of the climbing wall (left side) is shot rock or rock realistic, and the other 2/3 (right side) is a panelized wall. The climbing wall fabrication and installation will be contracted directly with the City, but in coordination with FCI as the Construction Manager.

The formal Request for Proposal (RFP) for the City of Grand Junction Community Recreation Center Climbing Wall (RFP-5675-25-KF) was publicly released via BidNet Direct, reaching 1,723 suppliers. The solicitation attracted approximately 17 plan holders, including outreach to the Grand Junction Chamber of Commerce, the Western Colorado Contractors Association, and a targeted list of eight (8) climbing wall manufacturers. The opportunity was also advertised in *The Daily Sentinel* and published on the City's official Purchasing webpage to ensure broad visibility and competition.

In response, the City received three (3) proposals from the following firms:

- **Bonsai Design, LLC** – Grand Junction, CO
- **Eldorado Climbing** – Louisville, CO
- **Entre-Prises USA, Inc.** – Bend, OR

An evaluation committee consisting of staff members from parks and recreation, engineering/transportation, and purchasing evaluated proposals and decided to interview the top two firms: Eldorado Climbing and Entre-Prises USA, Inc. After interviews, Eldorado Climbing was selected as the preferred vendor. Negotiation then ensued with the goal of reducing the price without compromising the scope. This included the climbing wall as designed, as well as all the gear required to operate the wall, such as six auto-belays. As a result of successful negotiations, Eldorado Climbing

reduced its price to a not-to-exceed price of \$359,000 (plus the \$30,000 for design for the total project cost of \$389,000). \$391,000 was budgeted in the soft cost budget for the CRC climbing wall, so this negotiated price is under budget. Fabrication and installation of the wall is scheduled to occur over the winter, with installation happening in the spring of 2026.

Per Section 1.1.3 of the Purchasing Manual, confidential information obtained during procurement activities will be respected and protected as provided by law.

FISCAL IMPACT:

The \$359,000 cost of the climbing wall is included in the \$82.1 million CRC budget.

SUGGESTED MOTION:

I move to (authorize/not authorize) the City Purchasing Division to enter into a Professional Services Contract with Eldorado Climbing for fabrication and installation services for the Community Recreation Center (CRC) at Matchett Park Indoor Climbing Wall for the not-to-exceed amount of \$359,000.

Attachments

None



Grand Junction City Council

Regular Session

Item #4.a.

Meeting Date: August 20, 2025

Presented By: Tamra Allen, Community Development Director

Department: Community Development

Submitted By: Ashley Chambers, Housing Manager

Information

SUBJECT:

A Resolution to Repeal Resolution 44-24 and Replace with a Production Incentive for Affordable and Attainable Housing Units in the City of Grand Junction, CO

RECOMMENDATION:

Staff Recommends approval of these Items.

EXECUTIVE SUMMARY:

At the July 14, 2025 City Council Workshop, an update to the Affordable Housing Incentive was presented and discussed. With the direction provided at that workshop, Staff prepared a Resolution to Repeal the previous Affordable Housing Incentive and Replace with a new fee waiver/incentive to encourage the development, both by non-profit and for-profit developers, of affordable and attainable housing units anywhere within the City.

BACKGROUND OR DETAILED INFORMATION:

At the July 14, 2025, City Council Workshop, an update to the Affordable Housing Incentive was presented and discussed. With the direction provided at that workshop, Staff prepared a resolution for consideration that Repeals Resolution 44-24 and replaces it with an updated fee waiver/incentive to encourage the development, both by non-profit and for-profit developers, of affordable and attainable housing units anywhere within the City of Grand Junction.

Impact Fee Exemptions. The Colorado Revised Statutes (CRS. 29-4-227(1) explicitly exempt housing authorities from paying any development-related fee due to a local government; Further state law provides that a jurisdiction may “waive impact fees for low- and moderate-income housing” as enabled by CRS 29-20-104.5.

GJ Municipal Code. The City’s impact fees are codified in Section 21.02.070 Development Fees.

The city's Municipal Code (excerpted below) speaks to other exemptions that also include the federal, state, city, county and school district from paying impact fees (fire, police, parks and transportation); this municipal code exemption does not apply to plant investment fees (sewer and water). These government/district projects are explicitly exempt and fees for projects completed by these entities have not been otherwise paid.

21.02.070(a)(5)(ii)(F) Exemptions. The following types of development shall be exempt from payment of impact fees. Any claim for exemption shall be made no later than the time when the applicant applies for the first Planning Clearance.... "A Development by the federal government, the state, school district, county or the City."

Fee Exemptions in recent projects. The issue of impact fee exemptions and impact fee waivers was the subject of inquiry at a special meeting in 2024 related to a request by Grand Junction Housing Authority (GJHA) for funding for The Current, a proposed 54-unit affordable (60% AMI or less) project. As presented, GJHA was exempt by state law from paying \$757,184 in development-related fees. The question arose about whether the city should or should not "backfill" the exempted fees with general fund revenue. The City Council at that time did not support the "exemption" and instead took action to "backfill" these development-related fees in the amount of \$757,184, which included both sewer tap fees, impact fees and open space in lieu fees.

Fee Waivers for Affordable Housing. The City has historically taken the position that fees that are not exempted per law, need to be paid in full – even if the purpose is for Affordable Housing. However, CRS. 29-20-104.5(c)(5) expressly allows local government to not require payment of an "impact fee or other similar development charge on the development of low- or moderate-income housing or affordable employee housing as defined by the local government."

In recent low- and moderate-income housing projects, such as Grand Valley Catholic Outreach's Mother Theresa's place, that are not exempted from fee payment either by local code or State statute, the city has been approached to pay the fees on behalf of the project. Most recently, the city has recently made this commitment, budgeted for, and with the exception of The Current paid the development-related fees for projects such as the Meridian Park Townhomes (HRWC) (\$85,962.00), Habitat for Humanity (\$123,386), Mother Theresa's Place (\$296,747) Liberty Apartments (\$625,248) (pending Prop. 123 funding), The Current (\$757,184). This City has paid these fees using CDBG and/or General Fund dollars. Since 2019, the city has committed and/or spent approximately \$1,591,780 in backfilling development-related fees for affordable housing projects.

Affordable Housing Production Incentive. On July 3, 2024, the City adopted Resolution 44-24 establishing the Affordable Housing Production Incentive. The adopted policy provides an incentive for the production of Affordable units as well as mixed-income projects. As an incentive, the city pays the fees that would otherwise be due. The incentive applies to units that meet a 100% AMI (for sale) or 60% AMI (for rent) household income with a requirement to maintain affordability for 30 years. It can also be utilized by projects that are mixed-income but provide at least a percentage of Affordable units as follows:

1. *Affordable For Sale Units*
 - For sale units at 100% AMI or below shall receive up to 100% of Fee waivers.
2. *Affordable For Rent Units*
 - For rent units at 60% AMI or below shall receive up to 100% Fee waivers.

- A Project providing at least one *Affordable For Rent Unit* that comprises at least 10% of the overall number of rental units at 60% AMI or below shall receive up to a 25% Fee waiver for the Project, limited to that part of a mixed-use Project that is residential.
- A Project providing at least two Affordable For Rent Units that comprise at least 20% of rental units at 60% AMI or below shall receive up to a 40% Fee waiver for the Project, limited to that part of a mixed-use Project that is residential.

Consistent with the adopted policy and in preparation for the 2025 budget, the City solicited requests for the incentive and received **\$2,102,174** in requests. Through review of the projects and the budget process, the city set aside **\$200,578** in general fund dollars to fund the production incentive – with \$114,616 earmarked for Habitat for Humanity (10 units) and \$85,962 for Housing Resources of Western Colorado’s Meridian Park townhomes (6 units).

Fee Waivers and Exemptions. Paying development-related fees for the Housing Authority that are *exempt* from paying these fees is expensive. Paying these fees is a discretionary of city council and “backfilling’ exempt fees – and paying fees for Affordable Housing Projects could be utilized in other ways to leverage private/non-profit investment to building *additional* new Affordable housing units.

The proposed resolution would:

1. Repeal existing Affordable Housing Incentive Policy Resolution 44-24 and;
2. Replace with the following outlined incentive program:
 - A. Recognize that the Grand Junction Housing Authority, and a Special Limited Partner of the Housing Authority, is exempt from paying development-related fees, and eliminate the requirement to backfill those fees from the City budget.
 - B. For projects not completed by the GJHA, waive and/or reduce impact fees (excluding water and sewer)for rental units up to 90% AMI, in the percentages shown below. For units at 60% or below, and establishes a process for the city to pay sewer and water (if city) fees on behalf of the project, subject to annual appropriations.

AMI	Impact Fee % Reduction	City Water/Sewer Fee Payment
60% AMI and below	100%	Consider request in annual budget
61% to 70% AMI	100%	Developer paid
71% to 80% AMI	75%	Developer paid
81% to 90%	50%	Developer paid

C. Waive or reduce impact fees (not sewer/water) for for-sale units up to 120% AMI, in the percentages shown below. For units at 100% or below, and establishes a process for the city to pay sewer and water (if city) fees on behalf of the project, subject to annual appropriations.

AMI	Impact Fee % Reduction	City Water/Sewer Fee Payment
100% AMI and below	100%	Consider request in annual budget
101% to 110% AMI	100%	Developer paid
111% to 120% AMI	50%	Developer paid

D. Waive from paying impact fees (excluding water and sewer), any project any multi-unit project that utilizes income-averaging at or below 60% AMI and establishes a process for the City to pay sewer and water (if city) fees on behalf of the project, subject to annual appropriations.

E. Waive from paying impact fees (excluding water and sewer), any project that counts towards the city's Proposition 123 unit count commitment, including those utilizing the Prop. 123 Equity or Concessionary debt tools and/or Prop 123 down payment assistance programs. Establish a process for the City to pay sewer and water (if city) fees on behalf of the project, subject to annual appropriations.

Impact fees, plant investment fees for sewer and water for a new dwelling unit in 2026 costs approximately the following:

City of Grand Junction Fees 2026		
Impact Fee	Sq ft of Unit	Total Per Unit
	<850 sq ft	\$4,611.00
	851-1000 sq ft	\$5,485.00
	1001-1250 ft	\$5,772.00
	1251-1500 ft	\$8,386.00
	1501-2000 ft	\$8,810.00
Impact Fee TOTAL		
Enterprise Fee		Fee
	3/4" Water Tap/PIF	\$6,015.00
	2" Water Tap/ PIF*	\$33,262
	3" Water Tap/PIF*	\$60,009
	City Sewer PIF**	\$5,877
	Water/Sewer TOTAL	
*assumes a 6% increase in 2026		
**Multi-family discount (rate x .72 x per unit)		

Current Estimated Production for 2026. The City has received six Letters of Request for the Affordable Housing Incentive, representing a total of 450 units. Staff believe these projects are either already in the entitlement process or are viable and expected to proceed. Under the current structure of the Affordable Housing Incentive, the estimated cost to the City for these projects is \$4,190,335.90. One of the developers, utilizing income averaging at 60% AMI (which allows for some units to be priced at 70–90% AMI to cross-subsidize deeper affordability at 30–50% AMI), would be required to contribute \$1,105,777.30 in development costs. This requirement may ultimately push the developer to reduce AMIs further to meet affordability targets. If Council opts to approve the proposed changes to the incentive, the total cost to the City would decrease to \$1,871,405.56, and the developer referenced above would no longer be required to contribute funds. This would result in a cost savings of \$2,318,930.34 to the City and \$1,105,777.30 to the developer. In the 2025/2026 CDBG Program year, the City's Annual Action Plan includes \$218,410 to assist in paying water and sewer tap fees. Should council move forward with the Resolution - the additional budget needed to support the 450 units anticipated for 2026 would be approximately \$1,652,994.74 in sewer and tap fees.

	# of units	Impact Fees	W/S Fees
VOA/GJHA	62	\$285,882.00	\$355,620.28
9th Path	149	\$770,304.00	\$723,755.56
Brikwell/GJHA	144	\$755,502.00	\$702,598.36
Rural Homes	48	\$277,056.00	\$570,816.00
Habitat for Humanity	6	\$50,316.00	\$89,262.00
New Beginnings	41	\$227,429.00	\$487,572.00
TOTAL	450	\$2,366,489.00	\$2,929,624.20

	Current Affordable Housing Incentive	Proposed Affordable Housing Incentive	Savings
City TOTAL	\$4,190,335.90	\$1,871,405.56	\$2,318,930.34
Developer TOTAL	\$1,105,777.30	\$0.00	\$1,105,777.30

25/26 CDBG Allocation	\$ 218,410.82	\$218,410.82
Additional Budget Needed	\$3,971,925.08	\$1,652,994.74

Alignment with Proposition 123 Commitment. This item addresses the community's shortage of affordable housing units and advance implementation of the City's Housing Strategy 2: Explore New Incentives for Affordable and/or Attainable Housing Development. The City has committed to meeting Proposition 123 goals, which require an average of 374 new affordable units over three years—or approximately 125 units annually. It is important to note that unit production may fluctuate each year, as Proposition 123 measures progress cumulatively over the full three-year period.

FISCAL IMPACT:

The fiscal impact of this incentive or waiver policy will depend on the level of utilization and the availability of funds allocated to it through the annual budget process.

SUGGESTED MOTION:

I (adopt/deny) to adopt Resolution No. 45-25, a resolution to repeal resolution 44-24 and replace with a production incentive for affordable and attainable housing units in the City of Grand Junction, CO

Attachments

1. Resolution 44-24 Affordable Housing Incentive
2. Support letter - City of GJ Fee waiver changes
3. RES-Affordable and Attainable Housing Production Incentive 08.12.25

**CITY OF GRAND JUNCTION, COLORADO
RESOLUTION NO. 44-24**

**A RESOLUTION ADOPTING A FEE WAIVER OR REDUCTION FOR A
PRODUCTION INCENTIVE FOR AFFORDABLE FOR SALE AND AFFORDABLE
FOR RENT UNITS IN THE CITY OF GRAND JUNCTION, COLORADO**

RECITALS:

In May 2021 the City, in conjunction with several housing agencies, completed a Grand Valley Housing Needs Assessment (HNA). The HNA showed a poverty rate in Grand Junction of 16%, that is well above the state average, a rental housing gap of 2,168 units for households earning less than \$25,000 (roughly 30% to 50% Area Median Income [AMI]), a need for accessible housing units for the 15% of the City's population that are disabled, and a generalized substandard condition of housing units within the community.

In response to and informed by the HNA, on October 6, 2021, the City Council approved Resolution 82-21 adopting a Housing Strategy outlining twelve strategies tailored to address certain needs identified in the HNA with two of the top needs being production and availability gaps including needs for additional affordable rentals and affordable homeownership opportunities. Strategy 5 calls for the City to "formalize existing incentives and consider additional incentives for affordable housing development." On December 21, 2022, the city approved Resolution 96-22, which added a thirteenth housing strategy to promote community engagement and education around housing.

In August 2023, the City Council approved Resolution 65-23 and adopted a definition of *Affordable Housing* as rental housing units affordable to households earning 60 percent AMI or below, or for-sale housing units that are affordable to households earning 100 percent AMI or below. Additionally, attainable housing rental housing units are affordable to households earning 80 percent to 100 percent AMI and for-sale housing that is affordable to households earning 100 percent to 140 percent. The Resolution included a goal to increase affordable housing stock by 124 annually (or 372 over three years). By and with the adoption of this Resolution, the City Council provides an incentive to produce Affordable Housing consistent with its previously established policy.

For the reasons expressed, among others, in these Recitals, the Grand Junction City Council hereby approves a fee waiver or reduction in fees to incentivize the production of for sale and affordable for rent Affordable Housing units in the City of Grand Junction to become effective immediately, and to continue, unless amended or repealed by further action of the City Council, to subject to annual appropriation through December 31, 2027.

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

The 2024 Affordable Housing Production Incentive Program, is hereby adopted and made effective immediately (Effective Date) as follows:

1. The foregoing Recitals are incorporated herein and in consideration of the same the City Council finds, determines, and resolves that as follows:
 - a. Upon application and a determination by the Director of the Community Development Department that an Affordable Housing project (Project) has, or will when developed conform to the Grand Junction Municipal Code (GJMC), the City Manager is authorized to pay from the General Fund, in an amount not to exceed the appropriated budget for such expenditure, all applicable Development Impact Fees (Transportation Capacity Payment [TCP], police, fire, parks, and other impact fees as may be adopted)) and Plant Investment Fees (water, sewer), and Open Space in lieu of dedication fees collectively referred to as "Fees" for Affordable Housing Units that: i) have an affordability term of at least 30 years enforced by a mechanism such as a recapture agreement, land use restriction agreement, deed restriction, use covenant, or other comparable document commonly utilized in affordable housing models and are determined by the City to be *affordable* as defined and described herein.
 - b. *Affordable For Sale Units*
 - For sale units at 100% AMI or below for income-qualified households shall receive up to 100% of Fee waivers.
 - c. *Affordable For Rent Units*
 - For rent units at 60% AMI or below for income-qualified households shall receive up to 100% Fee waivers.
 - A Project providing at least one *Affordable For Rent Unit* (at 60% AMI or below) that comprises at least 10% of the overall residential rental units shall receive up to 100% fee waivers for the income qualified affordable for rent units and up to a 25% Fee waiver for the project's non-affordable rental units, limited to that part of a mixed-use Project that is residential.
 - A Project providing at least two *Affordable For Rent Units* (at 60% AMI or below) that comprise at least 20% of the overall residential rental units shall receive up to 100% fee waivers for the income

qualified affordable for rent units and up to a 40% Fee waiver for the project's non-affordable rental units, limited to that part of a mixed-use Project that is residential.

2. Without further action by the City Council this Resolution and subject to annual appropriation of funds the Affordable Housing Production Incentive Program is adopted and approved hereby and herewith the Program shall expire on the earlier of non-appropriation or December 31, 2027.

ADOPTED AND APPROVED THIS 3rd day of July 2024.



Abram Herman
President of the City Council

ATTEST:



Selestina Sandoval
City Clerk





August 11, 2025

Ashley Chambers, MPA
Housing Manager
City of Grand Junction
250 N. 5th Street
Grand Junction, CO 81501

Dear Ashley,

Housing Resources supports the proposed changes to the City of Grand Junction’s affordable housing incentive program. These changes provide a workable process for local housing providers to request and receive support from the City. As you know, these projects almost always involve stacking multiple sources of funding to fill the affordability gap. In addition, almost every state, federal or private funder looks to the local government’s contribution as a key scoring factor. The direct contribution from the City, in the form of fee waivers, helps make our other funding requests more competitive. Removing the requirement that the City backfill these waived fees will also allow the City to support a higher number of units each year. I also feel that the changes make it more likely for the traditional development community to participate in our housing affordability efforts.

We are particularly pleased to hear that we can piggyback on the long-term affordability provisions imposed by our other funding sources to satisfy the requirements of the City’s fee waiver program. This will make it much more workable for providers to manage the overlapping requirements of multiple funding sources and better aligns the trade-off of long-term compliance with the benefit of the fee waiver.

Housing Resources deeply appreciates the City of Grand Junction’s ongoing commitment to housing affordability and its willingness to hear input from community members.

With appreciation,

Emilee Powell
Executive Director

524 30 Road, Suite 3, Grand Junction, CO 81504 • Tel 970.241.2871 • Fax 970.245.4853 • www.hrwco.org

Hearing Impaired call 711

If you require accommodation for impairment, disability, language barrier, etc., please contact Housing Resources at 970.241.2871 or email: frontdesk@hrwco.org



**CITY OF GRAND JUNCTION, COLORADO
RESOLUTION NO. XX-25**

**A RESOLUTION REPEALING RESOLUTION 44-24 AND REPLACING WITH A
PRODUCTION INCENTIVE FOR AFFORDABLE AND ATTAINABLE HOUSING UNITS IN
THE CITY OF GRAND JUNCTION, COLORADO**

RECITALS:

The Colorado Revised Statutes (CRS. 29-4-227(1) explicitly exempt housing authorities from paying any development-related fee due to a local government; Further state law provides that a jurisdiction may “waive impact fees for low- and moderate-income housing” as enabled by CRS 29-20-104.5. The City’s Municipal Code (21.02.070(a)(5)(ii)(F) includes exemptions of government/districts for impact fees (fire, police, parks and transportation); but does not apply to plant investment fees (sewer and water). These government/district projects are explicitly exempt and fees for the projects completed by these entities.

On July 3, 2024, the City adopted Resolution 44-24 which established the Affordable Housing Production Incentive which provided an incentive for the production of affordable for-sale and for-rent units, as well as, mixed-income projects. As an incentive, the city would commit through the annual budget process, to the extent practicable, to back-fill the fees that would otherwise be due for affordable housing projects. The incentive applied to units that met a 100% AMI (for sale) or 60% AMI (for rent) household income with a requirement to maintain affordability for 30 years. Under Resolution 44-22 Affordable Housing Incentive and the 2025 budget, the City funded \$114,616 for Habitat for Humanity (10 units) and \$85,962 for Housing Resources of Western Colorado’s Meridian Park townhomes (6 units).

Additionally, in September 2024, the City completed a data and Housing Strategy Update to the Grand Valley Needs Assessment (HNA) and Housing Strategy that was originally completed in May 2021. The refreshed data showed a poverty rate in Grand Junction of 13%, a rental housing gap of 1211 units for households earning less than \$25,000 (roughly 30% to 50% Average Monthly Income [AMI]), a need for accessible housing units for the 15% of the City's population that are disabled, a generalized substandard condition of housing units within the community, and the need for affordable homeownership for households under 100% AMI (with an acute need for households earning less than 90% AMI) .

The City’s adopted Housing Strategy outlines eleven strategies tailored to address these needs. Strategy 2 calls for the City to “explore new incentives for affordable and/or attainable housing development”

Paying development-related fees for entities that are exempt from paying fees is expensive, and given the state law exemptions for development-relate fees and the enabling legislation for the council to waive fees for low- and moderate- income housing, this revised Production Incentive seeks to increase the production of affordable and attainable units by modifying and expanding the city’s incentive: By and through this resolution, the City Council:

1. Repeals existing Affordable Housing Incentive Policy Resolution 44-24 and;
2. Replaces it with the following outlined 2025 Affordable and Attainable Housing Incentive Program:
 - A. Recognize that the Grand Junction Housing Authority (GJHA), and a Special Limited Partner of the Housing Authority, is exempt from paying development-related fees, and will not backfill those fees from the City budget.
 - B. For projects not completed by the GJHA, waive and/or reduce impact fees (excluding water and sewer) for rental units up to 90% AMI, in the percentages shown below. For units at 60% or below, and establishes a process for the city to pay sewer and water (if city) fees on behalf of the project, subject to annual appropriations.

AMI	Impact Fee % Reduction	City Water/Sewer Fee Payment
60% AMI and below	100%	Consider request in annual budget
61% to 70% AMI	100%	Developer paid
71% to 80% AMI	75%	Developer paid
81% to 90%	50%	Developer paid

C. Waives or reduce impact fees (not sewer/water) for for-sale units up to 120% AMI, in the percentages shown below. For units at 100% or below, and establishes a process for the city to pay sewer and water (if city) fees on behalf of the project, subject to annual appropriations.

AMI	Impact Fee % Reduction	City Water/Sewer Fee Payment
100% AMI and below	100%	Consider request in annual budget
101% to 110% AMI	100%	Developer paid
111% to 120% AMI	50%	Developer paid

D. Waives from paying impact fees (excluding water and sewer), any multi-unit project that utilizes income-averaging at or below 60% AMI and establishes a process for the City to pay sewer and water (if city) fees on behalf of the project, subject to annual appropriations.

E. Waives from paying impact fees (excluding water and sewer), any project that counts towards the city's Proposition 123 unit count commitment, including those utilizing the Prop. 123 Equity or Concessionary debt tools and/or Prop 123 downpayment assistance programs. Establish a process for the City to pay sewer and water (if city) fees on behalf of the project, subject to annual appropriations.

For the reasons stated in the Recitals, the City Council of the City of Grand Junction does hereby adopt the 2025 Affordable and Attainable Housing Production Incentive for Affordable and Attainable For Sale and For Rent units to become effective immediately and without further

action by the City Council, the terms and provisions of this resolution shall expire on December 31, 2028.

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

The 2025 Affordable and Attainable Housing Production Incentive together with the Administrative Procedures, Attachment A hereto, are hereby adopted and made effective immediately (also known as the “Effective Date” for purposes of Attachment A, Administrative Procedures) as follows:

1. Upon application and a determination by the City that an Affordable Housing project has or will be able to conform to the Grand Junction Municipal Code, the City Manager is authorized to waive applicable Development Impact Fees (Transportation Capacity Payment [TCP], police, fire, parks) and Plant Investment Fees (water, sewer) collectively referred to as “Fees” for the Affordable Housing units that have an affordability term of at least 30 years and are determined by the City to be “affordable” or “attainable” as defined and described above (1. and 2A.-2E.)
2. Without further action by the City Council, the Affordable Housing Production Incentive shall expire on December 31, 2028.

ADOPTED AND APPROVED THIS 20th day of August 2025.

ATTEST:

Cody Kennedy
President of the Council

Selestina Sandoval
City Clerk

ATTACHMENT A
AFFORDABLE AND ATTAINABLE HOUSING PRODUCTION INCENTIVE
ADMINISTRATIVE PROCEDURES

Application.

1. No later than July 1 of a given year, letters of intent (LOI) may be submitted to the City for an Affordable and Housing Production Incentive.
2. At a minimum, the LOI for an Affordable and Attainable Housing Production Incentive (AHI) Project (Project) shall include the following:
 - a. Project Name, property ownership, developer's, or entity(s) information;
 - b. Description of how the Project will address the City's housing needs and whether the units in the Project will be "for sale" or "for rent." The Project description shall include but not be limited to an explanation of how many people the Project will serve, the level of need served as determined by AMI and/or if there are other considerations made for population served;
 - c. Description of the Project timeline, whether the Project is dependent on other grant funding or entitlements, whether the Project will be phased, and if there any known uncertainties for the Project;
 - d. Description of the developer's experience with and capacity to implement the Project;
 - e. Amount of incentive as determined by the Unit count and/or portion of project that is residential.
 - f. A preliminary financing plan and letter from a State or Federally chartered commercial bank or lender expressing the ability, expertise, and financial capability of the developer's ability to complete the Project.

Application Review and Funding Reservation.

3. An application found by the City in its sole discretion to be consistent with the Affordable and Attainable Housing Production Incentive and that demonstrates ability and capacity to perform will be recommended by the City Manager (or designee) for funding.
4. During the City's annual budget process, City Council will review the recommendations and consider suitable Project(s) for funding during the following fiscal year(s). If an AHI request is for more than one year each year shall be subject to annual appropriation. The City Council may utilize the General Fund or other special revenue funds such as dedicated revenue for affordable housing for the repayment of the fees to appropriate Enterprise Fund(s) and/or Development Impact Fees in the amount of fees waived for a Project(s) pursuant to this incentive policy.

Incentive Agreement.

5. Should an Incentive be approved by City Council, the City and the developer and Project entity(ies) shall execute an AHI Agreement, which agreement shall at minimum provide:
 - a. The value of the Fee exemption and/or waiver as a not to exceed amount
 - b. Terms for the commencement and completion of the Project
 - c. Payment schedule whereby the Fees waived upon the completion of the Project will be credited or paid by the City pursuant to the AHI

- d. Remedy for default
- e. Recording memorandum
- f. A Land Use Restriction Agreement, Deed Restriction or other equal affordability mechanism requiring affordability of the units for a 30-year term.
- g. AMI levels served and the description/source/methods of tenant/buyer income verification process.
- h. Other provisions, as deemed appropriate by the City Attorney.

Maintenance of Agreement

- 6. The City and/or Projects shall either directly or through a contractor:
 - a. Confirm income verification process
 - b. Review and approve lease agreements verifying maximum rent (plus utilities and other expenses related to the rental of the unit) do not exceed AMI requirements for the tenant/homeowner. Ensure that no unit or portion of a unit shall be sublet; and
 - c. Conduct periodic audits at intervals determined necessary or appropriate of the Projects compliance with the AHI agreements. Audits shall include but not limited to compliance with affordability mechanisms, lease terms and income qualifications of buyers and tenants.

Definitions.

- I. "Area Median Income - AMI" means the area median income as regularly determined and published by the United States Department of Housing and Urban Development (HUD).
- II. "Fees" means
 - a) "Sewer Plant Investment Fee" means a plant investment fee (PIF) collected on behalf of Persigo Wastewater Treatment Facility. Does not include any fee collected by any other wastewater provider.
 - b) "Water Plant Investment Fee" means a plant investment fee (PIF) collected on behalf of the City of Grand Junction. Does not include any fee collected by any other water provider.
 - c) "Development Impact Fees or Impact Fee" means certain fees now collected or as may be later applied and collected, also known as Development Impact Fee(s), for the purposes of police, fire, parks and recreation, transportation capacity and/or other governmental functions and services.



Grand Junction City Council

Regular Session

Item #4.b.

Meeting Date: August 20, 2025
Presented By: Randi Kim, Utilities Director
Department: Utilities
Submitted By: Randi Kim

Information

SUBJECT:

A Resolution Authorizing Lease of Click Ranch Property to Dennis, Lora and Brienna Wynn

RECOMMENDATION:

Adopt Resolution authorizing the City Manager to execute a Lease Agreement with Dennis, Lora and Brienna Wynn for the Click Ranch property for five years commencing May 1, 2025 and terminating on April 30, 2030.

EXECUTIVE SUMMARY:

The Click Ranch property is 113 acres in size and is located in the Kannah Creek area southeast of Grand Junction. The City acquired this property primarily for its water and water rights. While the City owns the Click Ranch for its water, the purpose of leasing it is to ensure the continued responsible management and agricultural production of the land.

The City executed successive 5-year leases with Dennis and Lora Wynn for the Click Ranch property in 2010, 2015, and 2020. The current lease expires April 30, 2025. The Wynns provided adequate prior notice to the City of their intent to extend the lease as described in the lease.

BACKGROUND OR DETAILED INFORMATION:

The City is the owner of certain real property commonly known as the Click Ranch, located on Purdy Mesa in Mesa County. The City acquired the property for its water and water rights. The City owns the property for the primary purposes of protecting the City's water rights; the decrees allow multiple uses of the water including municipal, agricultural and livestock watering. During most irrigation seasons, portions of the City's water rights are not necessary for municipal use. The City therefore retains ownership

of the property so that water not necessary for municipal purposes may be beneficially used and applied upon the property for agricultural and livestock watering purposes. Leasing the property achieves two goals: using the water right to the full and maximum extent possible, and maintaining the property in productive agricultural use. A new lease agreement has been prepared by Staff for a period of five (5) years with an option to extend the lease. The annual rental amount is \$8,629 for the 2025 lease year with annual 3% escalation factor.

FISCAL IMPACT:

Revenue to the Water Enterprise Fund over the five (5) year lease period is \$45,815 payable as follows:

Lease Year	Total Due	May 1st Payment	December 1st Payment
2025	\$8,629	\$4,315	\$4,314
2026	\$8,888	\$4,444	\$4,444
2027	\$9,155	\$4,578	\$4,577
2028	\$9,430	\$4,715	\$4,715
2029	\$9,713	\$4,857	\$4,856

The 2025 May 1st payment shall be paid in full with the signing of this Agreement.

SUGGESTED MOTION:

I move to (adopt/deny) Resolution No. 48-25, a resolution authorizing the City Manager to execute a lease agreement with Dennis, Lora and Brienna Wynn for the Click Ranch for five years, commencing May 1, 2025, and terminating on April 30, 2030.

Attachments

1. Draft Click Lease 08132025
2. Resolution No. -25 Click Ranch
3. Exhibit B- 2025 - Property - Click Ranch - Dennis,Lora, and Brienna Wynn

CLICK RANCH LEASE AGREEMENT

THIS LEASE AGREEMENT (“Agreement”) is made and entered into to be effective as of the 1st day of May 2025, by and between The City of Grand Junction, a Colorado home rule municipality, hereinafter referred to as “the City,” and Dennis, Lora, and Brienna Wynn, hereinafter referred to as “Lessees,” whose address for the purpose of this lease is 5881 Purdy Mesa Road, Whitewater, CO 81527.

Recitals

A. The City is the owner of certain real property commonly known as the Click Ranch, located on Purdy Mesa in the County of Mesa, State of Colorado, as more particularly described in **Exhibit “A”** attached hereto and incorporated herein by reference, hereinafter referred to as “the Property.” The City acquired the Property for its water and water rights and ditches and ditch rights (“water rights”). The City owns the Property for the primary purposes of protecting the City’s water rights, the decrees for which allow multiple purposes to include municipal, agricultural and livestock watering. During most irrigating seasons, portions of the City’s water rights are not necessary for municipal use. The City therefore retains ownership of the Property so that water not necessary for municipal purposes may be beneficially used and applied upon the Property for agricultural and livestock watering purposes. It is the express intent and desire of the City that the Property remain as productive as is practicable for farming and ranching purposes so that the City’s water rights may be used to their full and maximum extent, that all aspects of the Property may be maintained to the highest practicable standard, and that expenses be kept to a minimum without waste.

B. Lessees, Dennis and Lora Wynn have submitted to the City, with adequate prior notice their intent to extend this lease for a second 5-year term as described in the lease signed by them on 04/03/2021. Lessees agree to lease, use, occupy, maintain and improve the Property and to judiciously use and apply the City’s water rights thereon in accordance with the desires and express intent of the City, all at no cost or expense to the City.

C. The City has agreed to lease the Property to Lessees based on Lessees’ verbal and written representations that Lessees possess the knowledge, experience, equipment, personnel and financial resources to maintain the Property and its structures, to the highest practicable standard and to use and apply the City’s water rights upon the Property to their full and maximum extent, all in accordance with the desires and express intent of City.

NOW, THEREFORE, for and in consideration of the recitals above and the mutual promises, terms, covenants, conditions, duties and obligations to be kept by the City and Lessees as more fully hereafter set forth, the parties hereto agree as follows:

SECTION ONE
GRANT AND ACCEPTANCE OF LEASE

1.1 The City hereby leases the Property to Lessees, and Lessees hereby accept and lease the Property from the City, for the term set forth in Section 2 below and for the specific purposes and duties of maintaining all aspects of the Property and the water and water rights, ditches and ditch rights appurtenant thereto, all in accordance with the provisions of this Agreement.

SECTION TWO
BASIC TERM

2.1 The basic term of this Lease shall commence on May 1, 2025, and, subject to the review of the Lessees' annual property management report, shall continue through April 30, 2030, at which time this Lease shall expire. For the purposes of this Ranch Lease, a "lease year" shall mean the period commencing on May 1 of each year during the term of this Lease and terminating on April 30 of the succeeding year.

2.2 If Lessees perform as required pursuant to this Agreement and as outlined in Appendix A, Performance Objectives, and if the City chooses, at its sole option and discretion, to again lease the Property at the expiration of the term. If this Lease is so extended for additional terms, the lease terms shall be upon terms and conditions which may hereafter be negotiated between the parties. In order to exercise Lessees' option for an additional term, Lessees shall give written notice to the City of Lessees' desire and intention to exercise Lessees' option to extend not less than 365 days prior to the expiration of the basic term.

SECTION THREE
RESERVATIONS FROM LEASE

3.1 The City retains and reserves from this Lease and unto itself:

- a. all oil, gas coal and other minerals and mineral rights underlying and/or appurtenant to the Property;
- b. all hunting rights concerning the Property, which includes antiquities, artifacts and game;
- c. all rights to grant, sell, bargain, convey and dedicate any ownership interest(s) in and to the Property, or any division thereof, to any other party, including the conveyance of easements, so long as such action will not interfere with Lessees' use and quiet enjoyment of the Property for the purposes set forth in this Agreement;
- d. the proceeds of any award or claim for damages, direct or consequential, in connection with any condemnation or other taking of any part of the Property, in whole or in part, even if such taking is made by and/or for the purposes of the City,

or for the conveyance in lieu of condemnation. Lessees hereby assign and transfer to the City any claim Lessees may have to compensation, including claims for damages, as a result of any condemnation; and

e. all water and water rights, ditches and ditch rights which are appurtenant to and/or connected with the Property, except those which the City makes available and authorizes Lessees to use and apply to the Property pursuant to this Lease.

SECTION FOUR RENTAL

4.1 Lessees agree to pay City, as rental for the Property, improvements and appurtenances, the sum of \$45,815. Payable as follows:

Lease Year	Total Due	May 1st Payment	December 1st Payment
2025	\$ 8,629	\$ 4,315*	\$ 4,314
2026	\$ 8,888	\$ 4,444	\$ 4,444
2027	\$ 9,155	\$ 4,578	\$ 4,577
2028	\$ 9,430	\$ 4,715	\$ 4,715
2029	\$ 9,713	\$ 4,857	\$ 4,856

*The 2025 May 1st payment shall be paid in full with Lessees' signing of this Agreement.

4.2 In the event Lessees fail to pay the specified rental payments on or before specified due dates, this Agreement and the lease of the Property to Lessees shall automatically terminate and neither party shall have any further rights, duties or obligations under this Agreement, except all payments due and owing to the City upon termination shall still be remain the responsibility of the Lessees to be paid to the City.

4.3 Lessees agree to timely pay any and all possessory real estate taxes and improvement assessments which may be levied against Property, and any taxes or assessments levied against the crops, livestock and other personal property of the Lessees or any other leasehold interest acquired by Lessees under this Lease. Lessees further agree to pay any and all utilities, charges, and other expenses incurred in connection with Lessees' use and operation of the Property, including but not limited to, all charges for natural gas, electricity, telephone and other utilities used on or in connection with the Property. Any payments not made timely are a basis for termination of this Lease by the City. All payments due upon termination remain the responsibility and obligations of the Lessees.

4.4 All rental payments paid by Lessees to the City shall be delivered either by mail or

by personal delivery to:

City of Grand Junction Finance Department
Accounts Receivable
250 North 5th Street
Grand Junction, CO 81501-2668

All rental payments deposited by Lessees shall be clearly marked "Click Ranch Lease Payment".

SECTION FIVE SPECIFIC DUTIES AND OBLIGATIONS OF LESSEES

5.1 As consideration for the lease of the Property, Lessees shall, at no cost or expense to the City:

a. Thoroughly plow, irrigate, cultivate, fertilize and farm all farmable lands upon the Property in a responsible and prudent husband-like manner; to plant, grow and harvest upon and from the Property crops of hay, grass and/or alfalfa and no other plants or crops without the prior written consent of the City. The small orchard and area farmed for personal use is excluded from this requirement.

b. Use the Property for farming, ranching and livestock grazing purposes only and for no other purpose whatsoever; Lessees agree that Lessees will not use the Property nor allow any other person to use the Property for any purpose prohibited by this Agreement or by the applicable laws of the United States of America, the State of Colorado, the County of Mesa or any other governmental authority or any jurisdiction having authority over uses and activities conducted upon the Property.

c. Maintain, clean out and keep in good order and repair, free from litter and debris and, as is practicable, free from weeds, all aspects of the Property, including, but not limited to, roads, perimeter boundaries, ditches, diversion structures, flumes, head-gates and other structures necessary to fully irrigate the Property and to not allow any water running through, used and applied upon the Property to overrun any furrows or otherwise cause damage to the Property or the property of any other person or entity.

d. Waive and forego any claim, cause of action or demand Lessees may have against the City, its officers, employees and agents, for injury to or destruction of any property of Lessees or any other party that may be lost, injured, destroyed or devalued as a result of the act, or failure to act, of Lessees or any third person; and to indemnify and hold the City and the City's officers, employees and agents, harmless from any and all claims, damages, actions, costs and expenses of every kind in any manner arising out of or resulting from Lessees' use, occupancy, maintenance and improvement of the Property.

e. Not violate nor permit to be violated any code, rule, regulation or order pertaining to the use, application, transportation and storage of any hazardous, toxic or regulated substance or material, including, but not limited to, herbicides, pesticides and petroleum products. Lessees agree that any spill, excessive accumulation or violation of any code, rule, regulation or order pertaining to the use, application, transportation and storage of any such material or substance shall be reported immediately to the City. Lessees further agrees that all costs and responsibilities for cleaning, removing and abating any violation pursuant to this paragraph shall be borne solely by Lessees.

f. At all times maintain all fences and gates presently located upon the Property in good working order and repair in a manner sufficient to securely confine all livestock. Lessees agree to timely retrieve livestock when they get out onto neighboring properties, roads, and rights-of-way. The livestock shall be retrieved in no less than 48 hours after notification. Any damage caused by Lessees' livestock shall be the sole responsibility of the Lessees with indemnification and holding harmless the City, the City's officers, employees and agents as set forth in Section 5.1.d above. Lessees may install locks on all gates, provided, however, that Lessees shall provide the City with lock combinations and/or copies of keys to all locks installed by Lessees.

g. Purchase and at all times during the term of this lease maintain in effect suitable comprehensive general liability and hazard insurance from a company approved by the City which will protect the City and the City's officer, employees, agents and assets from liability in the event of loss of life, personal injury or property damage suffered by any person or persons on, about or using the Property, including Lessees. Such insurance policy(ies) shall have terms and amounts approved by the City's Risk Manager. Such insurance shall not be cancelable without thirty (30) days prior written notice to the City and shall be written for at least a minimum of ONE MILLION DOLLARS (\$1,000,000.00), per occurrence for bodily injury, personal injury, and property damage, and \$1,000,000.00 in the aggregate. The certificate of insurance must be deposited each year on or before May 1 with the City and must designate "The City of Grand Junction, its officers, employees, agents and assets" as additional insureds. If a policy approved by the City's Risk Manager is not at all times in full force and effect during the term of this Lease and a certificate of insurance with current coverage deposited with the City, this Lease shall automatically terminate.

h. Lessees shall comply with all Workers Compensation laws and provide proof of Workers Compensation insurance to the City. Said Workers Compensation insurance shall cover obligations imposed by applicable laws for any employee or person engaged in the performance of work on the Property.

5.2 Lessee shall schedule a meeting on or before December 20th of each lease year with the City. The purpose of the meeting shall be to allow for an additional venue for both parties to discuss any issues or concerns as well as to review the Animal Unit Month

("AUM") usage for that year. (The AUM is a standard unit of measurement used to quantify the amount of forage needed to sustain a 1,000-pound cow (with or without a calf) for one month. The meeting shall be held at the City's Water Services Office, unless agreed upon otherwise. Other meeting place options include the Kannah Creek Water Treatment Plant, the Click Ranch, or any other agreed upon location.

SECTION SIX IRRIGATION OF PROPERTY

6.1 The irrigation of the Property is an essential duty and obligation to be undertaken by Lessees on behalf of the City. The City intends to permit Lessees to use water and water rights owned by the City, without additional remuneration by Lessees, for purposes specifically limited to irrigating the Property and as stock water for livestock kept and maintained on the Property. Water and water rights the City may make available to Lessees, if the City in its sole and absolute discretion determines that such water is to be made available to Lessees, may include up to:

a. In an average water year, approximately 300-acre feet of water from the Highline Ditch. This water is usually available from May 1 through June 28 of each year. Available flow rate ranges between 0.1 cubic feet per second ("cfs") and 5.0 cfs, and/or

b. In an average water year, approximately 100-acre feet of reservoir water from the City's reservoirs. This water is usually available from July 1 through October 15 of each year.

6.2 The City may provide written or verbal notice to Lessees at any time during the term of this Lease stating the amount(s) of water, if any, expressed in terms of cfs or acre feet, which may be available for Lessees' use and application upon the Property. Notwithstanding the foregoing, the City retains the right, without any liability or obligations to Lessees, to possess, control, sell, exchange, divert and convert water and water rights owned by the City for any purpose which the City deems, in its sole and absolute discretion, to be appropriate, even if such action by the City is adverse to the needs and uses of Lessees. In the event the City exercises its rights as hereinbefore described, the parties may renegotiate the rent paid or to be paid by Lessees; no other terms or conditions of this Lease may be renegotiated. The City is not obligated to renegotiate.

6.3 Lessees shall utilize all water made available pursuant to this Agreement in a prudent and careful manner to obtain the most efficient use of said water for purposes strictly limited to irrigating the Property described in this Lease and as stock water for livestock kept and maintained on the Property. Lessees shall comply with all rules, regulations and valid administrative orders applicable to any and all water and water rights which may be provided to Lessees under this Agreement.

6.4 Lessees shall represent the City's water and water rights interests by actively participating in meetings with all appropriate ditch and reservoir companies. All

statements and representations of Lessees under the capacity of representing the City shall serve to promote the interests of the City with the utmost good faith, loyalty and fidelity.

6.5 Lessees shall be solely responsible for diverting and transporting any water made available to Lessees from its point of release to its point of use. Lessees shall exercise proper diligence to ensure that any and all water made available to Lessees is properly diverted and utilized to its fullest extent on and solely for the benefit of the Property and Lessees' operations thereon. Lessees shall be responsible for ensuring that any and all water made available to Lessees is transported through clean irrigation ditches of adequate size and capacity from the point of release to the point of use.

6.6 Any failure by Lessees to irrigate the Property as set forth above, or any of the following acts or omissions on the part of Lessees with respect to the water rights appurtenant to the Property, shall be grounds for immediate termination of this Lease:

- a. failure or refusal to make appropriate use of available water to the Property without the prior written consent of the City; or
- b. failure to maintain and preserve the irrigation structures, ditches, pipes and other irrigation facilities and appurtenances on the Property in such a manner as to allow the full application of available water to the Property.

SECTION SEVEN CULTIVATION

7.1 Lessees agree that Lessees shall, at no cost or expense to the City, provide the labor, capital, machinery, seed and fertilizer necessary to improve crop production on the Property through the rehabilitation of existing fields and the cultivation of additional fields to bring the Property up to its historic level of cultivation, or better. Lessees' cultivation practices shall be carried out in a good and husband like manner in accordance with the best methods of cultivation practiced in Mesa County, Colorado. Lessees further agree to cooperate, comply with and participate in all farm crop programs promulgated by the United States Department of Agriculture, the National Resource Conservation Service and the State of Colorado Farm Bureau. Lessees shall be entitled to and responsible for all proceeds, debts and losses incurred and associated with crops grown on the Property.

SECTION EIGHT LIVESTOCK MANAGEMENT

8.1 Lessees have represented to the City that Lessees intend to raise and care for Lessees' livestock on the Property. Prior to letting livestock upon the Property, Lessees shall, at Lessees' sole cost and expense, implement whatever measures are necessary to ensure that all fences around the perimeter of the fields to be grazed are sufficient to confine Lessees' livestock to the Property. The use of electric fences is permitted, provided that (a) electric power shall be provided from batteries and/or photovoltaic

systems and not public electric services, and (b) Lessees install conspicuous signs sufficient to warn the general public against touching such electric fences.

8.2 Lessees agree that Lessees' operations and conduct relating to raising and caring for Lessees' livestock shall be carried out in the highest standard of care and in a manner that will not over graze the Property or otherwise cause deterioration of or destruction to the Property. The maximum stocking rate for the Property is 40 AUMs. Lessees further agree to comply with the regulations of the United States Department of Agriculture, livestock laws and regulations of the State of Colorado, and any and all federal, state and county laws, ordinances and regulations which are applicable to the area in which the Property is located.

8.3 Lessees represent that Lessees' livestock carry the Bar 2, Open A, or CX brand ("Lessees' Brand"). Lessees agree that livestock not carrying Lessees' Brand shall not be permitted on the Property without the prior written approval of the City.

8.4 Lessees agree that Lessees shall indemnify the City, its officers, employees, agents and assets and hold the City, its officers, employees, agents and assets harmless from liability in the event of loss of life, personal injury or property damage suffered by any person or persons which may be caused by Lessees' livestock on the Property and/or escaping the Property.

SECTION NINE USE OF CHEMICALS ON PROPERTY

9.1 Lessees shall not apply any chemicals on the Property, including, but not limited to, fertilizers, herbicides and pesticides, without the prior written consent of the City. Lessees shall at all times keep the City advised of chemicals used and/or stored on the Property, and shall further comply with all applicable rules, laws, regulations and orders, either now in force or hereinafter enacted, regulating the storage, use, application, transportation and disposal of any such chemicals.

SECTION TEN HAZARDOUS SUBSTANCES

10.1 Lessees shall not use, store, generate, treat, transport or dispose of any hazardous substances on the Property except for the use and storage of pesticides, fertilizers and materials such as petroleum-based products used in normal farming and ranching operations. The terms "hazardous substances" shall mean any substance defined, regulated, or banned by federal, state, or local laws or regulations which might result in liabilities or responsibilities under CERCLA, RCRA, the Clean Water Act, the Federal Water Pollution Control Act, or any other federal or state environmental protection statutes, laws or regulations. Lessees' use and storage of pesticides, fertilizers, and materials such as petroleum-based products used in normal farming and ranching operations shall be in conformance with all manufacturer's instructions and all applicable federal, state and local laws and regulations. Lessees shall not dispose of such

pesticides, fertilizers, and materials such as petroleum-based products used in normal farming and ranching operations on the Property.

SECTION ELEVEN ENVIRONMENTAL CLEAN-UP

11.1 The following provisions shall be applicable to Lessees and to Lessees' agents, guests, invitees, contractors, licensees and employees:

- a. Lessees shall, at Lessees' sole cost and expense, comply with all Environmental Laws and laws regulating the use, generation, storage, transportation or disposal of Hazardous Substances;
- b. Lessees shall, at Lessees' sole cost and expense, make all submissions to provide all information required by and/or to comply with all requirements of all governmental authorities ("the Authorities") under Environmental Laws and other applicable laws.
- c. Should any Authority or the City demand that a clean-up plan be prepared and that a clean-up plan be undertaken because of any deposit, spill, discharge or other release of Hazardous Substances on, under or about the Property, Lessees shall, at Lessees' sole cost and expense, prepare and submit the required plan(s) and all related bonds and other financial assurances, and Lessees shall carry out all such clean-up plan(s) in compliance with the Authorities and all Environmental Laws and other applicable laws.
- d. Lessees shall promptly provide all information regarding the use, generation, storage, transportation or disposal of Hazardous Substances requested by any Authority. If Lessees fail to fulfill any duty imposed hereunder within a reasonable time, the City may do so on Lessees' behalf and, in such case, Lessees shall cooperate with the City in the preparation of all documents the City or any Authority deems necessary or appropriate to determine the applicability of Environmental Laws to the Property and Lessee's use thereof, and for compliance therewith, and Lessees shall execute all documents promptly upon the City's request. No such action by the City and no attempt made by the City to mitigate damages under any Environmental Law or other applicable law shall constitute a waiver of any of Lessees' obligations hereunder.
- e. Lessees' obligations and liabilities hereunder shall survive the expiration or termination of this Lease Agreement.

11.2 Lessees shall indemnify, defend and hold the City, its officers, employees and agents harmless from all fines, suits, procedures, claims and actions of every kind, and all costs associated therewith (including the costs and fees of attorneys, consultants and experts) arising out of or in any way connected with any deposit, spill, discharge or other release of Hazardous Substances and the violation of any Environmental Law and other

applicable law by Lessees and/or Lessees' agents, guests, invitees, contractors, licensees and employees that occur during the term of this Lease or any extension thereof, or from Lessees' failure to provide all information, make all submissions, and take all actions required by all Authorities under the Environmental Laws and other applicable laws. Lessees' obligations and liabilities hereunder shall survive the expiration or termination of this Lease Agreement.

SECTION TWELVE CONDITION OF THE PROPERTY

12.1 Lessees affirm that Lessees have inspected the Property and have received the Property premises in reasonably good order and condition. Lessees further affirm that the condition of the Property is sufficient for the purposes of Lessees. The City makes no warranties nor promises, either express or implied, that the Property is sufficient for the purposes of Lessees.

12.2 There are buildings on the Property, including a residence built in 1909, the City makes no warranties nor promises, either express or implied, that the buildings are useable, safe, lawful, or inhabitable/occupiable. Any use of a building including the residence is at Lessees' risk. The consideration for this Lease shall not change simply because a building or other improvement is not useable as anticipated by the Lessees. At Lessees' sole cost and expense, Lessees shall maintain and keep the Property and all improvements and buildings upon the Property, including, but not limited to residence(s), dwelling(s), barn(s), shed(s), fixtures, roofing, plumbing, heating and ventilation systems, wiring, glass, fences, gates, wells and well systems, pumps and pump systems, septic systems, cattle guards and all other improvements on the Property, in the same or better condition as they were at the commencement of this Lease or, if improvements have been made, to the condition after improvement, all at Lessees' expense, and at the expiration of this Lease, surrender the Property and improvements thereon to City in as good a condition as when Lessee entered the Property, reasonable use and wear excepted.

12.3 In the event the Property, including any improvements on the Property, is damaged due to fire, flood or any other act of nature or casualty, or if the canals, ditches or ditch laterals which provide irrigation water to the Property are damaged to the extent where they are no longer functional for the purposes of Lessees, the City shall have no obligation to repair the Property nor to otherwise make the Property usable or occupiable; damages shall be at Lessees' sole and absolute risk.

12.4 The City, its officers, agents, and employees retain the right to be on the Property during emergencies and may inspect the Property at any time without notice. The City, at its option, shall have the right to enter the Property to construct such facilities, as it deems necessary for the City to utilize water and water rights associated with and appurtenant to the Property for municipal or other use. Following such construction, the City shall have the right to use said water rights or make them available to the Lessees, as the City deems appropriate.

12.5 Lessees agree to waive and forego any claim, cause of action or demand Lessees may have against the City, its officers, agents and employees for injury to or destruction of any property of Lessees or any third person that may be lost, injured, destroyed or devalued as a result of the act, or failure to act, of Lessee(s) or any third person; and to indemnify the City, its officers, employees and agents and to hold the City, its officers employees and agents harmless from all claims, damages, actions, costs and expenses of every kind in any manner arising out of, or resulting from Lessees' use of the Property and/or the improvements or buildings thereon, not arising from the willful misconduct of the City.

SECTION THIRTEEN DEFAULT

13.1 If Lessees are in default in the performance of any term or condition of this Lease, the City, may, at its option, terminate this Lease upon 30 days written notice. If Lessees fail within any such 30-day period to remedy any default specified in the City's notice, this Lease shall automatically terminate. If Lessees remedy such default, Lessee shall not thereafter have the right of 30 days (to remedy) with respect to a subsequent similar default, instead the Lease shall terminate upon the giving of notice by the City

13.2 Unless agreed in writing signed by the City, the City's failure at any time to require performance by Lessees of any provision of this Lease shall not waive the City's right subsequently to enforce the same or any other provision or any other preceding or succeeding breach of any term or provision of this Lease. No extension of time for the performance of any obligation or act shall be deemed to be an extension of time for the performance of any other obligation or act under this Lease.

13.3 This Lease shall automatically terminate in the event Lessees or any Lessee: becomes insolvent; is subject to a bankruptcy filing whether or not voluntary or involuntary; is subject to an assignment for the benefit of creditors or if a receiver is appointed; if Lessees fail in any manner to comply with any of the terms, covenants, or conditions of this Lease to be kept and performed by Lessees; or should Lessees or a Lessee, by any act of negligence or carelessness, or through any act of commission or omission permit, or suffer to be permitted, damage to the Property or the demised premises in any substantial manner.

13.4 If this Lease is terminated by the City, except termination due to expiration of the lease term, Lessees shall have reasonable access to the Property for a reasonable time, not to exceed 30 days, to remove Lessees' personal property.

13.5 Upon termination of this Lease, Lessees shall remove all personal property and livestock from the property and demised premises within 30 days from the date of termination. If Lessees fail to remove Lessees' personal property and livestock within the time prescribed, the City shall not be responsible for the care and safekeeping thereof and may remove the same and store the same in a reasonable manner, the cost, expense and risk of which shall be Lessees'. Lessees hereby agree that items not timely removed

may be sold by the City to cover expenses with net proceeds after expenses paid to Lessees. The City may also set off amounts owed under this Lease against proceeds of said sale.

13.6 Lessees shall not assign or sublease this Lease or any right or privilege connected therewith, or allow any other person, except as provided herein and except the employees of Lessees, to occupy the Property or any part thereof. Any attempted assignment, sublease, or permission to occupy the Property conveyed by Lessees shall be void and shall, at the option of the City, provide reasonable cause for the City to terminate this Lease. The interest of Lessees in this Lease is not assignable by operation of law without the formal approval of the City.

13.7 Lessees are jointly and severally liable for all terms of this Agreement.

SECTION FOURTEEN MISCELLANEOUS PROVISIONS

14.1 The City, by entering into this Lease Agreement, does not part with its entire possession of the Property, but only so far as is necessary to enable Lessees to use, occupy and irrigate the Property and to carry out the duties, obligations, terms and provisions of this Agreement. The City reserves the right to at reasonable times have its officers, employees and agents enter into and upon the Property and every part thereof and to do such acts and things as may be deemed necessary for the protection of the City's interests therein.

14.2 It is expressly agreed that this Lease is one of lease and not of partnership. The City shall not be or become responsible for lost profits, lost opportunities or any debts contracted by Lessees. Lessees shall keep the Property free from any and all liens whatsoever, including, but not limited to, liens arising out of any work performed, materials furnished or obligations incurred by Lessees. Lessees shall save, indemnify and hold the City and the City's officers, employees, agents and assets harmless against all liability and loss, and against all claims or actions based upon or arising out of any claim, lien, damage or injury (including death), to persons or property caused by Lessees or sustained in connection with Lessees' performance of the duties, obligations, terms and conditions of this Agreement or the conditions created thereby, or based upon any violation of any statute, ordinance, code, rule or regulation, either now in force or hereinafter enacted, and the defense of any such claims or actions, including the costs and fees of attorneys, consultants and experts. Lessees shall also save, indemnify and hold the City and the City's officers, employees, agents and assets harmless from and against all liability and loss in connection with, and shall assume full responsibility for the payment of, all federal, state and local taxes, fees or contributions imposed or required under unemployment insurance, social security and income tax laws with respect to employees engaged by Lessees.

14.3 The parties to this Lease Agreement warrant that no person or selling agency has been employed or retained to solicit or secure this Lease upon an agreement or

understanding for a commission, percentage, brokerage or contingent fee. Lessees agree to defend, indemnify and hold the City harmless from any claim for real estate brokerage commissions or finder's fees asserted by any other party claiming to be entitled to brokerage commissions or finder's fees arising out of or in connection with this Lease.

14.4 Lessees shall not pledge or attempt to pledge or grant or attempt to grant as collateral or security any of Lessees' interest in any portion of the Property.

14.5 Unless otherwise agreed to by the parties in writing, all improvements placed upon, under or about the Property or attached to the Property by Lessees shall be and become part of the Property and shall be the sole and separate property of the City upon the expiration or termination of this Lease.

SECTION FIFTEEN SURRENDER, HOLDING OVER

15.1 Lessees shall, upon the expiration or termination of this Lease, peaceably surrender the Property to City in good order, condition and state of repair. In the event Lessees fail, for whatever reason, to vacate and peaceably surrender the Property upon the expiration or termination of this Lease, Lessees agree that Lessees shall pay to the City the sum of \$100.00 per day for each and every day thereafter until Lessees have effectively vacated and surrendered the Property. The parties agree that it would be difficult to establish the actual damage to the City in the event Lessees fail to vacate and surrender the Property upon the expiration or termination of this Lease, and that said \$100.00 daily fee is an appropriate liquidated damages amount.

SECTION SIXTEEN ENFORCEMENT, PARTIAL INVALIDITY, GOVERNING LAW

16.1 In the event the City uses its Attorney or engages an attorney to enforce the City's rights hereunder, Lessees agree to pay any and all attorney fees, plus costs, including the costs of any experts.

16.2 The invalidity of any portion of this Lease Agreement shall not affect the validity of any other provision contained herein. In the event any provision of this Agreement is held to be invalid, the remaining provisions shall be deemed to be in full force and effect as if they had been executed by both parties subsequent to the expungement of the invalid provision(s).

16.3 This Lease Agreement shall be governed by and construed in accordance with the laws of the State of Colorado. Venue for any action to enforce any covenant or agreement contained herein shall be in Mesa County, Colorado.

SECTION SEVENTEEN
CITY'S RIGHT TO BUYOUT

17.1 In the event the City determines to sell the property or to utilize it for other municipal purposes, other than to lease it for another agricultural operation, the City may, upon expiration of the first lease year April 30, 2026 and thereafter anytime during the remaining term of the Lease, have the right to terminate this lease by giving six month advanced written notice. In such event, Lessees shall be compensated in an amount equal to one-half the annual rent for the lease year in which the Lease is terminated. In the event this Lease is terminated pursuant to this Section, Lessees shall have reasonable access to the Property for a reasonable time, not to exceed 30 days, to remove Lessees' personal property.

SECTION EIGHTEEN
MISCELLANEOUS

18.1 All notices to be given with respect to this Agreement shall be in writing delivered either by United States mail or Express mail, postage prepaid, or personally by hand or by courier service, as follows:

To the City:
City of Grand Junction
Attn: Water Services Manager
333 West Avenue Bldg. E
Grand Junction, CO 81501-2668

With Copy to:
City of Grand Junction
Attn: City Attorney
250 North 5th Street
Grand Junction, CO 81501-2668

To Lessees:
Dennis, Lora, and Brienna Wynn
5881 Purdy Mesa Road
Whitewater, CO 81527

And

With Copy to:
Dennis, Lora, and Brienna Wynn
5975 Purdy Mesa Road
Whitewater, CO 81527

All notices shall be deemed given: (a) if sent by mail, when deposited in the mail, or (b) if delivered by hand or courier service, when delivered. The parties may, by notice as provided above, designate a different address to which notice shall be given.

18.2 Legal Counsel / Ambiguities. The City and Lessees have each obtained the advice of its/their own legal and tax counsel regarding this Agreement or has knowingly declined to do so. Therefore, the parties agree that the rule of construing ambiguities against the drafter shall have no application to this Agreement.

18.3 Total Agreement; Applicable to Successors. This Lease Agreement contains the entire agreement between the parties. All representations made by any officer, agent or employee of either party, unless included herein, are null and void and of no effect. Except for automatic expiration or termination, this Agreement may not be changed, altered or modified except by a written instrument subsequently executed by both parties. This Lease Agreement and the duties, obligations, terms and conditions hereof apply to and shall be binding upon the respective heirs, successors and authorized assigns of both parties.

Attest:

City of Grand Junction,
a Colorado home rule municipality

date
City Clerk

date
Mike Bennett
City Manager

Lessees:

date
Lora Wynn

date
Dennis Wynn

date
Brienna Wynn

EXHIBIT "A"

**LEGAL DESCRIPTION OF THE CLICK RANCH LEASE
An outline of the Property is included with Exhibit "B"**

PARCEL NO. 1:

Lots 6, 9 and 15 in Section 32, Township 12 South, Range 97 West of the 6th Principal Meridian, County of Mesa, State of Colorado, and Lot 2 of Section 5, Township 13 South, Range 97 West of the 6th Principal Meridian, County of Mesa, State of Colorado.

PARCEL NO. 2:

Beginning at a point on the West line of Tract 46 in Section 32, Township 12 South, Range 97 West of the 6th Principal Meridian, which is South 1052.40 feet from the Northwest Corner (Corner No. 2) of said Tract 46; thence along the centerline of the County Road (Purdy Mesa Road) S 81°16'30" E a distance of 132.74 feet; thence continuing along the centerline of said County Road, S 58°09'47" E a distance of 22.12 feet; thence South a distance of 1454.20 feet; thence S 89°51'55" W a distance of 150.00 feet; thence North a distance of 1486.36 feet along the West line of said Tract 46 to the Point of Beginning,

EXCEPT a parcel of land situated in Lots 9 and 15 of said Section 32 described as follows:

Beginning at the Southwest Corner of said Lot 15 (said point also being the North 1/4 Corner of Section 5, Township 13 South, Range 97 West), being S 89°45'26" E a distance of 66.00 feet from a 1908 witness corner brass cap in place; thence S 00°00'00" E a distance of 666.00 feet along the West line of Lot 2 in Section 5; thence S 89°45'26" E a distance of 659.26 feet; thence N 00°00'00" E a distance of 866.00 feet; thence N 73°20'46" E a distance of 688.13 feet to the East line of said Lot 15; thence S 64°51'00" W along a fence line a distance of 1101.69 feet; thence S 62°21'00" W along a fence line a distance of 362.43 feet to the West line of said Lot 15; thence S 00°01'00" W along the West line of said Lot 15 a distance of 766.30 feet to the Point of Beginning of said Exception,

AND INCLUDING a parcel of land situated in Lot 15 of said Section 32 described as follows:

Beginning at the Southeast Corner of said Lot 15; thence S 00°00'00" E a distance of 666.00 feet; thence N 89°45'26" W a distance of 659.26 feet; thence N 00°00'00" E a distance of 866.00 feet; thence N 73°20'46" E a distance of 688.13 feet to the East line of said Lot 15; thence S 00°00'00" E a distance of 400.00 feet along the East line of said Lot 15 to the Point of Beginning of said Inclusion.

Appendix A

Click Ranch lease:

Performance Objectives:

1. Lessees will utilize the land for grazing as appropriate. Cattle/horses or any other form of livestock trespass situations on neighboring public and private lands shall be dealt with promptly. Failure to respond within a 48-hour period after receiving notification of a trespass situation may result in notice to the Lessees of forfeiture of the lease as outlined in Section 13 of this Lease.
2. Water available to City lands, either by *direct* flow or *stored* water, will be utilized by the Lessees to the fullest extent possible, not wasted. Return flows from City lands will be minimized to the extent possible. Flows will be measured where weirs are installed and recorded by the Lessees as flows change at the head-gates to ditches feeding City lands and in the laterals feeding various irrigated pastures. This usage will be recorded in a manner directed by the City when requested. Water conservation practices and improvements are important for the Lessees to undertake as, from time to time, water will be removed from ranch lands for other decreed purposes.
3. The Lessees are responsible for improvements to leased properties as stated in the Lease. Work of a permanent nature either to buildings or land is subject to City approval. This includes but is not limited to new roads, new fences, new ditches, woodcutting and drainage improvements. These can be discussed at meetings or at other times arranged between the City and the Lessees.
4. Subleases to or use of City buildings by individual(s), other than the Lessees, must be approved in advance by the City Utility Department. Reimbursements for a sublease, either monetarily or in exchange for services, must be approved by the City.
5. Relationships with neighboring landowners and water users are important to the City of Grand Junction. Cordial relationships with other private and public landowners is material to continued use of City lands for water development purposes. Lessees will take special care to work with neighboring landowners and users on all grazing, water, weed, and fencing issues.

_____ City

_____ Lessees

RESOLUTION NO. __-25

**A RESOLUTION AUTHORIZING A FIVE-YEAR LEASE OF
THE CITY'S CLICK RANCH PROPERTY IN THE KANNAH CREEK AREA
TO DENNIS, LORA, AND BRIENNA WYNN**

WHEREAS, the City of Grand Junction is the owner of the following described real property in the County of Mesa, State of Colorado, to wit:

PARCEL NO. 1:

Lots 6, 9 and 15 in Section 32, Township 12 South, Range 97 West of the 6th Principal Meridian, County of Mesa, State of Colorado, and Lot 2 of Section 5, Township 13 South, Range 97 West of the 6th Principal Meridian, County of Mesa, State of Colorado.

PARCEL NO. 2:

Beginning at a point on the West line of Tract 46 in Section 32, Township 12 South, Range 97 West of the 6th Principal Meridian, which is South 1052.40 feet from the Northwest Corner (Corner No. 2) of said Tract 46; thence along the centerline of the County Road (Purdy Mesa Road) S 81°16'30" E a distance of 132.74 feet; thence continuing along the centerline of said County Road, S 58°09'47" E a distance of 22.12 feet; thence South a distance of 1454.20 feet; thence S 89°51'55" W a distance of 150.00 feet; thence North a distance of 1486.36 feet along the West line of said Tract 46 to the Point of Beginning,

EXCEPT a parcel of land situated in Lots 9 and 15 of said Section 32 described as follows:

Beginning at the Southwest Corner of said Lot 15 (said point also being the North 1/4 Corner of Section 5, Township 13 South, Range 97 West), being S 89°45'26" E a distance of 66.00 feet from a 1908 witness corner brass cap in place; thence S 00°00'00" E a distance of 666.00 feet along the West line of Lot 2 in Section 5; thence S 89°45'26" E a distance of 659.26 feet; thence N 00°00'00" E a distance of 866.00 feet; thence N 73°20'46" E a distance of 688.13 feet to the East line of said Lot 15; thence S 64°51'00" W along a fence line a distance of 1101.69 feet; thence S 62°21'00" W along a fence line a distance of 362.43 feet to the West line of said Lot 15; thence S 00°01'00" W along the West line of said Lot 15 a distance of 766.30 feet to the Point of Beginning of said Exception,

AND INCLUDING a parcel of land situated in Lot 15 of said Section 32 described as follows:

Beginning at the Southeast Corner of said Lot 15; thence S 00°00'00" E a distance of 666.00 feet; thence N 89°45'26" W a distance of 659.26 feet; thence N 00°00'00" E a distance of 866.00 feet; thence N 73°20'46" E a distance of 688.13 feet to the East line of said Lot 15; thence S 00°00'00" E a distance of 400.00 feet along the East line of said Lot 15 to the Point of Beginning of said Inclusion.

The City Council deems it appropriate to lease the Click Ranch Property to Dennis and Lora Wynn for a period of one (5) year period, commencing on May 1, 2020, and expiring on April 30, 2025.

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

That the City Manager be authorized, on behalf of the City and as the act of the City, to execute the attached Click Ranch Property lease with Dennis, Lora and Brienna Wynn for a term of five years, commencing on May 1, 2025 and expiring on April 30, 2030; provided, however, that in the event the Wynns perform all of the required duties and obligations pursuant to the attached Agreement to the satisfaction of the City and if the City chooses, at its sole option and discretion, to again lease the rights associated with the Property at the expiration of said five year term, the City may extend the term of the lease with the Wynns, subject to each and every term contained in the attached Click Ranch Property lease and as negotiated at that time.

PASSED and ADOPTED this _____ day of _____ 2025.

Attest:

Cody Kennedy
President of the Council

Selestina Sandoval
City Clerk



EXHIBIT
"8"

-  Click Ranch Lease 113 acres
-  Click Ranch Irrigated Area 45 acres



Grand Junction City Council

Regular Session

Item #4.c.

Meeting Date: August 20, 2025
Presented By: Tamra Allen, Community Development Director
Department: Community Development
Submitted By: Ashley Chambers, Housing Manager

Information

SUBJECT:

A Resolution Authorizing the City Manager to Submit a Grant Application for the Accessory Dwelling Unit (ADU) Grant Program

RECOMMENDATION:

Staff recommends approval of this request.

EXECUTIVE SUMMARY:

This request seeks authorization to submit a grant application to the Department of Local Affairs (DOLA) for the HB24-1152 Accessory Dwelling Unit Grant Program. The grant provides grants to certified accessory dwelling unit (ADU) supportive jurisdictions for activities that support the construction of ADUs. The grant, if awarded, would provide additional funds to continue the City's Accessory Dwelling Unit Production Program and provide opportunities to expand the program to include additional incentives. The City's ADU Production program has been recognized across the state and has been used as a model for effective developments of programs. The total project cost is \$450,000. The City of Grand Junction is requesting \$320,000 (75%) in grant funds and will contribute a local cash match of \$125,000 (25%) using 2025 budgeted funds.

BACKGROUND OR DETAILED INFORMATION:

House Bill 24-1152, enacted by the Colorado General Assembly in 2024, established the Accessory Dwelling Unit (ADU) Grant Program to increase the supply of diverse and attainable housing options throughout the state. The legislation recognizes ADUs—self-contained residential units located on the same lot as a primary dwelling—as an important strategy for addressing housing shortages, supporting multigenerational living, and creating rental opportunities within existing neighborhoods.

The bill's intent is to provide financial resources to ADU Supportive Jurisdictions, municipalities or counties that have adopted policies, streamlined processes, and zoning regulations that remove barriers to ADU development. Funding through this program can be used to reduce costs, provide incentives, or otherwise facilitate the construction of ADUs, helping local governments accelerate production while maintaining quality design and neighborhood compatibility.

The City of Grand Junction formally applied for certification as an ADU Supportive Jurisdiction on June 30, 2025. Over the past three years, staff have advanced the City's original 2021 Housing Strategy 4: *Encourage development of accessory dwelling units (ADUs)* — now incorporated into Housing Strategy 11: *Monitor goal progress and housing program outcomes*. Efforts have focused on expanding housing options through significant code changes to encourage ADU construction, including zoning updates, streamlined permitting, and the creation of the City's ADU Production Program. This program provides incentives such as permit fee reimbursements, design resources, and technical assistance to homeowners interested in building an ADU.

Funding from the HB24-1152 ADU Grant Program will allow the City to continue operating the existing ADU Production Program and expand it to include additional incentives that directly reduce the cost burden for property owners and can help to increase the overall supply of rental and ownership housing in established neighborhoods that are naturally occurring affordable units (NOAH), and provide flexible housing options for multigenerational families, caregivers and residents aging in place.

FISCAL IMPACT:

The total project cost is \$450,000. The City of Grand Junction is requesting \$320,000 (75%) in grant funds and will contribute a local cash match of \$125,000 (25%) using 2025 budgeted funds.

SUGGESTED MOTION:

I move to (adopt/deny) Resolution No.49-25, a resolution authorizing the City Manager to submit a grant request to the Colorado Department of Local Affairs under the HB 24-1152 Accessory Dwelling Unit (ADU) Grant Program.

Attachments

1. RES-DOLA ADU Grant

CITY OF GRAND JUNCTION, COLORADO

RESOLUTION NO. xx-25

A RESOLUTION AUTHORIZING THE CITY MANAGER TO SUBMIT A GRANT REQUEST TO THE COLORADO DEPARTMENT OF LOCAL AFFAIRS UNDER THE HB 24-1152 ACCESSORY DWELLING UNIT (ADU) GRANT PROGRAM

RECITALS.

House Bill 24-1152, enacted by the Colorado General Assembly in 2024, established the Accessory Dwelling Unit (ADU) Grant Program to increase the supply of diverse and attainable housing options throughout the state. The legislation recognizes ADUs—self-contained residential units located on the same lot as a primary dwelling—as an important strategy for addressing housing shortages, supporting multigenerational living, and creating rental opportunities within existing neighborhoods.

The bill's intent is to provide financial resources to ADU Supportive Jurisdictions, municipalities or counties that have adopted policies, streamlined processes, and zoning regulations that remove barriers to ADU development. Funding through this program can be used to reduce costs, provide incentives, or otherwise facilitate the construction of ADUs, helping local governments accelerate production while maintaining quality design and neighborhood compatibility.

The City of Grand Junction formally applied for certification as an ADU Supportive Jurisdiction on June 30, 2025. Over the past three years, staff have advanced the City's original 2021 Housing Strategy 4: *Encourage development of accessory dwelling units (ADUs)* — now incorporated into Housing Strategy 11: *Monitor goal progress and housing program outcomes*. Efforts have focused on expanding housing options through significant code changes to encourage ADU construction, including zoning updates, streamlined permitting, and the creation of the City's ADU Production Program. This program provides incentives such as permit fee reimbursements, design resources, and technical assistance to homeowners interested in building an ADU.

Funding from the HB24-1152 ADU Grant Program will allow the City to continue operating the existing ADU Production Program and expand it to include additional incentives that directly reduce the cost burden for property owners and can help to increase the overall supply of rental and ownership housing in established neighborhoods that are naturally occurring affordable units (NOAH), and provide flexible housing options for multigenerational families, caregivers and residents aging in place.

The total project cost is \$450,000. The City of Grand Junction is requesting \$320,000 (75%) in grant funds and will contribute a local cash match of \$125,000 (25%) using 2025 budgeted funds.

NOW, THEREFORE, BE IT RESOLVED THAT the City Council of the City of Grand Junction does hereby authorize the City Manager to submit an application to the Colorado Department of Local Affairs for the HB24-1152 ADU Grant Program in the amount of \$320,000, with a local match of \$125,000, for a total project cost of \$450,000, all in accordance with the foregoing Recitals.

Dated this xx day of August 2025.

Cody Kennedy
President of the City Council

ATTEST:

Selestina Sandoval
City Clerk

DRAFT



Grand Junction City Council

Regular Session

Item #4.d.

Meeting Date: August 20, 2025
Presented By: Angela Padalecki
Department: City Manager's Office
Submitted By: Johnny McFarland, Asst. to the City Manager

Information

SUBJECT:

A Resolution Authorizing the City to Approve a Grant Offer in the Amount of \$11,593,096 as a Co-sponsor with the Grand Junction Regional Airport Authority for the Runway 12/30 Construction Pavement Subbase Project

RECOMMENDATION:

Staff recommends approval of this item.

EXECUTIVE SUMMARY:

This item is to approve AIP Grant offer No. 3-08-0027-085-2025 in the amount of \$11,593,096 for the Shift Runway 11/29 (Subbase Schedule 2 - Phase II) project and authorize the City Manager to execute the Co-Sponsorship Agreement.

BACKGROUND OR DETAILED INFORMATION:

The Runway 12/30 Construction pavement Subbase grant offer from the FAA is to fund a portion of the construction of Pavement Subbase Schedule 2 Construction work for the ongoing runway replacement program. As creators and co-sponsors of the Airport Authority, both the County Commissioners and the City Council must also approve grant awards from the FAA to the Airport Authority. A meeting is scheduled to be reviewed by the County Board of Commissioners at the August 19, 2025, meeting.

FISCAL IMPACT:

There is no fiscal impact on the City if this item is approved.

SUGGESTED MOTION:

I move to (adopt/not adopt) Resolution 50-25, A Resolution Authorizing the City to Approve a Grant Offer for the Runway 12/30 Construction Pavement Subbase Grant

offer in the amount of \$11,593,096 and authorize the City Manager to execute the Co-Sponsorship Agreement as Co-sponsor with the Grand Junction Regional Airport Authority

Attachments

1. 2. GJT-NMG-3-08-0027-085-2025-Grant Agreement - unsigned
2. 3. Co-Sponsorship Agreement-city AIP 85
3. RES-AIP Grant 3-08-0027-085-2025 20250814



U.S. Department
of Transportation
Federal Aviation
Administration

Airports Division
Northwest Mountain Region
Colorado, Utah, Wyoming

Denver Airports District Office:
26805 E 68th Ave, Ste 224
Denver, CO 80249-6339

Ms. Linde Marshall, Chair
Grand Junction Regional Airport Authority
800 Eagle Drive
Grand Junction, CO 81506

Mr. Mike Bennett, City Manager
City of Grand Junction
250 North Fifth Street
Grand Junction, CO 81501

Mr. Cody Davis, Chair
Mesa County Board of Commissioners
544 Rood Avenue
Grand Junction, CO 81501

Dear Ms. Marshall, Mr. Bennett, and Commissioner Davis:

The Grant Offer for Airport Improvement Program (AIP) Project No. 3-08-0027-085-2025 at Grand Junction Regional Airport is attached for execution. This letter outlines the steps you must take to properly enter into this agreement and provides other useful information. Please read the conditions, special conditions, and assurances that comprise the grant offer carefully.

You may not make any modification to the text, terms or conditions of the grant offer.

Steps You Must Take to Enter Into Agreement.

To properly enter into this agreement, you must do the following:

1. The governing body must give authority to execute the grant to the individual(s) signing the grant, i.e., the person signing the document must be the sponsor's authorized representative(s) (hereinafter "authorized representative").
2. The authorized representative must execute the grant by adding their electronic signature to the appropriate certificate at the end of the agreement.
3. Once the authorized representative has electronically signed the grant, the sponsor's attorney(s) will automatically receive an email notification.
4. On the **same day or after** the authorized representative has signed the grant, the sponsor's attorney(s) will add their electronic signature to the appropriate certificate at the end of the agreement.

5. If there are co-sponsors, the authorized representative(s) and sponsor's attorney(s) must follow the above procedures to fully execute the grant and finalize the process. Signatures must be obtained and finalized no later than **August 31, 2025**.
6. The fully executed grant will then be automatically sent to all parties as an email attachment.

Payment. Subject to the requirements in 2 CFR § 200.305 (Federal Payment), each payment request for reimbursement under this grant must be made electronically via the Delphi eInvoicing System. Please see the attached Grant Agreement for more information regarding the use of this System.

Project Timing. The terms and conditions of this agreement require you to complete the project without undue delay and no later than the Period of Performance end date (1,460 days from the grant execution date). We will be monitoring your progress to ensure proper stewardship of these Federal funds. We expect you to submit payment requests for reimbursement of allowable incurred project expenses consistent with project progress. Your grant may be placed in "inactive" status if you do not make draws on a regular basis, which will affect your ability to receive future grant offers. Costs incurred after the Period of Performance ends are generally not allowable and will be rejected unless authorized by the FAA in advance.

Reporting. Until the grant is completed and closed, you are responsible for submitting formal reports as follows:

- For all grants, you must submit by December 31st of each year this grant is open:
 1. A signed/dated SF-270 (Request for Advance or Reimbursement for non-construction projects) or SF-271 or equivalent (Outlay Report and Request for Reimbursement for Construction Programs), and
 2. An SF-425 (Federal Financial Report).
- For non-construction projects, you must submit [FAA Form 5100-140, Performance Report](#) within 30 days of the end of the Federal fiscal year.
- For construction projects, you must submit [FAA Form 5370-1, Construction Progress and Inspection Report](#), within 30 days of the end of each Federal fiscal quarter.

Audit Requirements. As a condition of receiving Federal assistance under this award, you must comply with audit requirements as established under 2 CFR Part 200. Subpart F requires non-Federal entities that expend \$1,000,000 or more in Federal awards to conduct a single or program specific audit for that year. Note that this includes Federal expenditures made under other Federal-assistance programs. Please take appropriate and necessary action to ensure your organization will comply with applicable audit requirements and standards.

Closeout. Once the project(s) is completed and all costs are determined, we ask that you work with your FAA contact indicated below to close the project without delay and submit the necessary final closeout documentation as required by your Region/Airports District Office.

FAA Contact Information. Todd Minnich, (303) 342-1279, todd.e.minnich@faa.gov is the assigned program manager for this grant and is readily available to assist you and your designated representative with the requirements stated herein.

We sincerely value your cooperation in these efforts and look forward to working with you to complete this important project.

Sincerely,

Jesse A. Lyman
Manager, Denver Airports District Office



U.S. Department
of Transportation
Federal Aviation
Administration

FEDERAL AVIATION ADMINISTRATION AIRPORT IMPROVEMENT PROGRAM (AIP)

FY 2025 AIP

GRANT AGREEMENT

Part I - Offer

Federal Award Offer Date

Airport/Planning Area

Grand Junction Regional Airport

Airport Infrastructure Grant
Number

3-08-0027-085-2025 [Contract Number: DOT-FA25NM-1112]

Unique Entity Identifier

P2MUNC6N7YM6

TO: Grand Junction Regional Airport Authority, City of Grand Junction, Colorado, and County of Mesa, Colorado

(herein called the "Sponsor") (For Co-Sponsors, list all Co-Sponsor names. The word "Sponsor" in this Grant Agreement also applies to a Co-Sponsor.)

FROM: **The United States of America** (acting through the Federal Aviation Administration, herein called the "FAA")

WHEREAS, the Sponsor has submitted to the FAA a Project Application dated December 10, 2024, for a grant of Federal funds for a project at or associated with the Grand Junction Regional Airport, which is included as part of this Grant Agreement; and

WHEREAS, the FAA has approved a project for the Grand Junction Regional Airport (herein called the "Project") consisting of the following:

Shift Runway 11/29 (Subbase Schedule 2 - Phase II)

which is more fully described in the Project Application.

NOW THEREFORE, Pursuant to and for the purpose of carrying out the Title 49, United States Code (U.S.C.), Chapters 471 and 475; 49 U.S.C. §§ 40101 et seq., and 48103; FAA Reauthorization Act of 2018 (Public Law Number (P.L.) 115-254); the Department of Transportation Appropriations Act, 2021 (P.L.

116-260, Division L); the Consolidated Appropriations Act, 2022 (P.L. 117-103); Consolidated Appropriations Act, 2023 (P.L. 117-328); Consolidated Appropriations Act, 2024 (P.L. 118-42); FAA Reauthorization Act of 2024 (P.L. 118-63); and the representations contained in the Project Application; and in consideration of: (a) the Sponsor’s adoption and ratification of the Grant Assurances dated April 2025, interpreted and applied consistent with the FAA Reauthorization Act of 2024; (b) the Sponsor’s acceptance of this Offer; and (c) the benefits to accrue to the United States and the public from the accomplishment of the Project and compliance with the Grant Assurance and conditions as herein provided;

THE FEDERAL AVIATION ADMINISTRATION, FOR AND ON BEHALF OF THE UNITED STATES, HEREBY OFFERS AND AGREES to pay (95) % of the allowable costs incurred accomplishing the Project as the United States share of the Project.

Assistance Listings Number (Formerly CFDA Number): 20.106

This Offer is made on and SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

CONDITIONS

1. **Maximum Obligation.** The maximum obligation of the United States payable under this Offer is \$11,593,096.

The following amounts represent a breakdown of the maximum obligation for the purpose of establishing allowable amounts for any future grant amendment, which may increase the foregoing maximum obligation of the United States under the provisions of 49 U.S.C. § 47108(b):

\$0 for planning

\$11,593,096 for airport development or noise program implementation; and,

\$0 for land acquisition.

The source of this Grant includes funding from the Small Airport Fund, in accordance with 49 U.S.C. § 47116.

2. **Grant Performance.** This Grant Agreement is subject to the following Federal award requirements:

a. **Period of Performance:**

1. Shall start on the date the Sponsor formally accepts this Agreement and is the date signed by the last Sponsor signatory to the Agreement. The end date of the Period of Performance is 4 years (1,460 calendar days) from the date of acceptance. The Period of Performance end date shall not affect, relieve, or reduce Sponsor obligations and assurances that extend beyond the closeout of this Grant Agreement.
2. Means the total estimated time interval between the start of an initial Federal award and the planned end date, which may include one or more funded portions or budget periods (2 Code of Federal Regulations (CFR) § 200.1) except as noted in 49 U.S.C § 47142(b).

b. **Budget Period:**

1. For this Grant is 4 years (1,460 calendar days) and follows the same start and end date as the Period of Performance provided in paragraph 2(a)(1). Pursuant to 2 CFR § 200.403(h), the Sponsor may charge to the Grant only allowable costs incurred during the Budget Period except as noted in 49 U.S.C § 47142(b).
2. Means the time interval from the start date of a funded portion of an award to the end date of that funded portion during which the Sponsor is authorized to expend the funds awarded, including any funds carried forward or other revisions pursuant to 2 CFR § 200.308.

c. Close Out and Termination

Unless the FAA authorizes a written extension, the Sponsor must submit all Grant closeout documentation and liquidate (pay-off) all obligations incurred under this award no later than 120 calendar days after the end date of the Period of Performance. If the Sponsor does not submit all required closeout documentation within this time period, the FAA will proceed to close out the grant within one year of the Period of Performance end date with the information available at the end of 120 days (2 CFR § 200.344). The FAA may terminate this agreement and all of its obligations under this agreement if any of the following occurs:

- (a) (1) The Sponsor fails to obtain or provide any Sponsor grant contribution as required by the agreement;
 - (2) A completion date for the Project or a component of the Project is listed in the agreement and the Recipient fails to meet that milestone by six months after the date listed in the agreement;
 - (3) The Sponsor fails to comply with the terms and conditions of this agreement, including a material failure to comply with the Project Schedule even if it is beyond the reasonable control of the Sponsor;
 - (4) Circumstances cause changes to the Project that the FAA determines are inconsistent with the FAA's basis for selecting the Project to receive a grant; or
 - (5) The FAA determines that termination of this agreement is in the public interest.
- (b) In terminating this agreement under this section, the FAA may elect to consider only the interests of the FAA.
- (c) The Sponsor may request that the FAA terminate the agreement under this section.

3. **Ineligible or Unallowable Costs.** In accordance with 49 U.S.C. § 47110, the Sponsor is prohibited from including any costs in the grant funded portions of the project that the FAA has determined to be ineligible or unallowable, including costs incurred to carry out airport development implementing policies and initiatives repealed by Executive Order 14148, provided such costs are not otherwise permitted by statute.
4. **Indirect Costs - Sponsor.** The Sponsor may charge indirect costs under this award by applying the indirect cost rate identified in the project application as accepted by the FAA, to allowable costs for Sponsor direct salaries and wages.
5. **Determining the Final Federal Share of Costs.** The United States' share of allowable project costs will be made in accordance with 49 U.S.C. § 47109, the regulations, policies, and procedures of the Secretary of Transportation ("Secretary"), and any superseding legislation. Final determination of the United States' share will be based upon the final audit of the total amount of allowable project costs and settlement will be made for any upward or downward adjustments to the Federal share of costs.
6. **Completing the Project Without Delay and in Conformance with Requirements.** The Sponsor must carry out and complete the project without undue delays and in accordance with this Agreement, 49

U.S.C. Chapters 471 and 475, the regulations, policies, and procedures of the Secretary. Per 2 CFR § 200.308, the Sponsor agrees to report and request prior FAA approval for any disengagement from performing the project that exceeds three months or a 25 percent reduction in time devoted to the project. The report must include a reason for the project stoppage. The Sponsor also agrees to comply with the grant assurances, which are part of this Agreement.

7. **Amendments or Withdrawals before Grant Acceptance.** The FAA reserves the right to amend or withdraw this offer at any time prior to its acceptance by the Sponsor.
8. **Offer Expiration Date.** This offer will expire and the United States will not be obligated to pay any part of the costs of the project unless this offer has been accepted by the Sponsor on or before August 31, 2025, or such subsequent date as may be prescribed in writing by the FAA.
9. **Improper Use of Federal Funds and Mandatory Disclosure.**
 - a. The Sponsor must take all steps, including litigation if necessary, to recover Federal funds spent fraudulently, wastefully, or in violation of Federal antitrust statutes, or misused in any other manner for any project upon which Federal funds have been expended. For the purposes of this Grant Agreement, the term “Federal funds” means funds however used or dispersed by the Sponsor, that were originally paid pursuant to this or any other Federal grant agreement. The Sponsor must obtain the approval of the Secretary as to any determination of the amount of the Federal share of such funds. The Sponsor must return the recovered Federal share, including funds recovered by settlement, order, or judgment, to the Secretary. The Sponsor must furnish to the Secretary, upon request, all documents and records pertaining to the determination of the amount of the Federal share or to any settlement, litigation, negotiation, or other efforts taken to recover such funds. All settlements or other final positions of the Sponsor, in court or otherwise, involving the recovery of such Federal share require advance approval by the Secretary.
 - b. The Sponsor, a recipient, and a subrecipient under this Federal grant must promptly comply with the mandatory disclosure requirements as established under 2 CFR § 200.113, including reporting requirements related to recipient integrity and performance in accordance with Appendix XII to 2 CFR Part 200.
10. **United States Not Liable for Damage or Injury.** The United States is not responsible or liable for damage to property or injury to persons which may arise from, or be incident to, compliance with this Grant Agreement.
11. **System for Award Management (SAM) Registration and Unique Entity Identifier (UEI).**
 - a. Requirement for System for Award Management (SAM): Unless the Sponsor is exempted from this requirement under 2 CFR § 25.110, the Sponsor must maintain the currency of its information in the SAM until the Sponsor submits the final financial report required under this Grant, or receives the final payment, whichever is later. This requires that the Sponsor review and update the information at least annually after the initial registration and more frequently if required by changes in information or another award term. Additional information about registration procedures may be found at the SAM website (currently at <http://www.sam.gov>).
 - b. Unique entity identifier (UEI) means a 12-character alpha-numeric value used to identify a specific commercial, nonprofit or governmental entity. A UEI may be obtained from SAM.gov at <https://sam.gov/content/entity-registration>.

12. **Electronic Grant Payment(s).** Unless otherwise directed by the FAA, the Sponsor must make each payment request under this Agreement electronically via the Delphi eInvoicing System for Department of Transportation (DOT) Financial Assistance Awardees.
13. **Informal Letter Amendment of AIP Projects.** If, during the life of the project, the FAA determines that the maximum grant obligation of the United States exceeds the expected needs of the Sponsor by \$25,000 or five percent (5%), whichever is greater, the FAA can issue a letter amendment to the Sponsor unilaterally reducing the maximum obligation.

The FAA can also issue a letter to the Sponsor increasing the maximum obligation if there is an overrun in the total actual eligible and allowable project costs to cover the amount of the overrun provided it will not exceed the statutory limitations for grant amendments. The FAA's authority to increase the maximum obligation does not apply to the "planning" component of Condition No. 1, Maximum Obligation.

The FAA can also issue an informal letter amendment that modifies the grant description to correct administrative errors or to delete work items if the FAA finds it advantageous and in the best interests of the United States.

An informal letter amendment has the same force and effect as a formal grant amendment.

14. **Environmental Standards.** The Sponsor is required to comply with all applicable environmental standards, as further defined in the Grant Assurances, for all projects in this grant. If the Sponsor fails to comply with this requirement, the FAA may suspend, cancel, or terminate this Grant Agreement.
15. **Financial Reporting and Payment Requirements.** The Sponsor will comply with all Federal financial reporting requirements and payment requirements, including submittal of timely and accurate reports.
16. **Buy American.** Unless otherwise approved in advance by the FAA, in accordance with 49 U.S.C. § 50101, the Sponsor will not acquire or permit any contractor or subcontractor to acquire any steel or manufactured goods produced outside the United States to be used for any project for which funds are provided under this Grant. The Sponsor will include a provision implementing Buy American in every contract and subcontract awarded under this Grant.
17. **Build America, Buy America.** The Sponsor must comply with the requirements under the Build America, Buy America Act (P.L. 117-58).
18. **Maximum Obligation Increase.** In accordance with 49 U.S.C. § 47108(b)(3), as amended, the maximum obligation of the United States, as stated in Condition No. 1, Maximum Obligation, of this Grant:
- a. May not be increased for a planning project;
 - b. May be increased by not more than 15 percent for development projects, if funds are available;
 - c. May be increased by not more than the greater of the following for a land project, if funds are available:
 1. 15 percent; or
 2. 25 percent of the total increase in allowable project costs attributable to acquiring an interest in the land.

If the Sponsor requests an increase, any eligible increase in funding will be subject to the United States Government share as provided in 49 U.S.C. § 47110, or other superseding legislation if applicable, for the fiscal year appropriation with which the increase is funded. The FAA is not responsible for the same Federal share provided herein for any amount increased over the initial grant amount. The FAA may adjust the Federal share as applicable through an informal letter of amendment.

19. Audits for Sponsors.

PUBLIC SPONSORS. The Sponsor must provide for a Single Audit or program-specific audit in accordance with 2 CFR Part 200. The Sponsor must submit the audit reporting package to the Federal Audit Clearinghouse on the Federal Audit Clearinghouse's Internet Data Entry System at <http://harvester.census.gov/facweb/>. Upon request of the FAA, the Sponsor shall provide one copy of the completed audit to the FAA. Sponsors that expend less than \$1,000,000 in Federal awards and are exempt from Federal audit requirements must make records available for review or audit by the appropriate Federal agency officials, State, and Government Accountability Office. The FAA and other appropriate Federal agencies may request additional information to meet all Federal audit requirements.

20. Suspension or Debarment. When entering into a "covered transaction" as defined by 2 CFR § 180.200, the Sponsor must:

- a. Verify the non-Federal entity is eligible to participate in this Federal program by:
 1. Checking the System for Award Management (SAM.gov) exclusions to determine if the non-Federal entity is excluded or disqualified; or
 2. Collecting a certification statement from the non-Federal entity attesting they are not excluded or disqualified from participating; or
 3. Adding a clause or condition to covered transactions attesting the individual or firm are not excluded or disqualified from participating.
- b. Require prime contractors to comply with 2 CFR § 180.330 when entering into lower-tier transactions with their contractors and sub-contractors.
- c. Immediately disclose in writing to the FAA whenever (1) the Sponsor learns they have entered into a covered transaction with an ineligible entity or (2) the Public Sponsor suspends or debar a contractor, person, or entity.

21. Ban on Texting While Driving.

- a. In accordance with Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving, October 1, 2009, and DOT Order 3902.10, Text Messaging While Driving, December 30, 2009, the Sponsor is encouraged to:
 1. Adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers including policies to ban text messaging while driving when performing any work for, or on behalf of, the Federal government, including work relating to a grant or subgrant.
 2. Conduct workplace safety initiatives in a manner commensurate with the size of the business, such as:
 - i. Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and

- ii. Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.
- b. The Sponsor must insert the substance of this clause on banning texting while driving in all subgrants, contracts, and subcontracts funded with this Grant.

22. **Trafficking in Persons.**

1. *Posting of contact information.*
 - a. The Sponsor must post the contact information of the national human trafficking hotline (including options to reach out to the hotline such as through phone, text, or TTY) in all public airport restrooms.
2. *Provisions applicable to a recipient that is a private entity.*
 - a. Under this Grant, the recipient, its employees, subrecipients under this Grant, and subrecipient's employees must not engage in:
 - i. Severe forms of trafficking in persons;
 - ii. The procurement of a commercial sex act during the period of time that the grant or cooperative agreement is in effect;
 - iii. The use of forced labor in the performance of this grant; or any subaward; or
 - iv. Acts that directly support or advance trafficking in persons, including the following acts:
 - a) Destroying, concealing, removing, confiscating, or otherwise denying an employee access to that employee's identity or immigration documents;
 - b) Failing to provide return transportation of pay for return transportation costs to an employee from a country outside the United States to the country from which the employee was recruited upon the end of employment if requested by the employee, unless:
 1. Exempted from the requirement to provide or pay for such return transportation by the federal department or agency providing or entering into the grant; or
 2. The employee is a victim of human trafficking seeking victim services or legal redress in the country of employment or witness in a human trafficking enforcement action;
 - c) Soliciting a person for the purpose of employment, or offering employment, by means of materially false or fraudulent pretenses, representations, or promises regarding that employment;
 - d) Charging recruited employees a placement or recruitment fee; or
 - e) Providing or arranging housing that fails to meet the host country's housing and safety standards.
 - b. The FAA may unilaterally terminate this Grant or take any remedial actions authorized by 22 U.S.C. § 7104b(c), without penalty, if any private entity under this Grant:
 - i. Is determined to have violated a prohibition in paragraph (2)(a) of this Grant; or
 - ii. Has an employee that is determined to have violated a prohibition in paragraph(2)(a) of this Grant through conduct that is either:
 - a) Associated with the performance under this Grant; or

- b) Imputed to the recipient or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR Part 180, "OMB Guidelines to Agencies on Government-wide Debarment and Suspension (Nonprocurement)," as implemented by the FAA at 2 CFR Part 1200.
- 3. *Provisions applicable to a recipient other than a private entity.*
 - a. The FAA may unilaterally terminate this award or take any remedial actions authorized by 22 U.S.C. § 7104b(c), without penalty, if subrecipient than is a private entity under this award:
 - i. Is determined to have violated a prohibition in paragraph (2)(a) of this Grant or
 - ii. Has an employee that is determined to have violated a prohibition in paragraph (2)(a) of this Grant through conduct that is either:
 - a) Associated with the performance under this Grant; or
 - b) Imputed to the recipient or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR Part 180, "OMB Guidelines to Agencies on Government-wide Debarment and Suspension (Nonprocurement)," as implemented by the FAA at 2 CFR Part 1200.
- 4. *Provisions applicable to any recipient.*
 - a. The recipient must inform the FAA and the DOT Inspector General immediately of any information you receive from any source alleging a violation of a prohibition in paragraph (2)(a) of this Grant.
 - b. The FAA's right to unilaterally terminate this Grant as described in paragraphs (2)(b) or (3)(a) of this Grant, implements the requirements of 22 U.S.C. chapter 78, and is in addition to all other remedies for noncompliance that are available to the FAA under this Grant.
 - c. The recipient must include the requirements of paragraph (2)(a) of this Grant award term in any subaward it makes to a private entity.
 - d. If applicable, the recipient must also comply with the compliance plan and certification requirements in 2 CFR 175.105(b).
- 5. *Definitions. For purposes of this Grant award, term:*
 - a. "Employee" means either:
 - i. An individual employed by the recipient or a subrecipient who is engaged in the performance of the project or program under this Grant; or
 - ii. Another person engaged in the performance of the project or program under this Grant and not compensated by the recipient including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing requirements.

- b. "Private Entity" means:
- i. Any entity, including for-profit organizations, nonprofit organizations, institutions of higher education, and hospitals. The term does not include foreign public entities, Indian Tribes, local governments, or states as defined in 2 CFR 200.1.
 - ii. The terms "severe forms of trafficking in persons," "commercial sex act," "sex trafficking," "Abuse or threatened abuse of law or legal process," "coercion," "debt bondage," and "involuntary servitude" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. § 7102).
23. **AIP Funded Work Included in a PFC Application.** Within 120 days of acceptance of this Grant Agreement, the Sponsor must submit to the FAA an amendment to any approved Passenger Facility Charge (PFC) application that contains an approved PFC project also covered under this Grant Agreement as described in the project application. The airport sponsor may not make any expenditure under this Grant Agreement until project work addressed under this Grant Agreement is removed from an approved PFC application by amendment.
24. **Exhibit "A" Property Map.** The Exhibit "A" Property Map dated February 2019, is incorporated herein by reference or is submitted with the project application and made part of this Grant Agreement.
25. **Employee Protection from Reprisal.** In accordance with 2 CFR § 200.217 and 41 U.S.C. § 4701, an employee of a grantee, subgrantee contractor, recipient or subrecipient must not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing to a person or body described in paragraph (a)(2) of 41 U.S.C. 4712 information that the employee reasonably believes is evidence of gross mismanagement of a Federal contract or grant, a gross waste of Federal funds, an abuse of authority relating to a Federal contract or grant, a substantial and specific danger to public health or safety, or a violation of law, rule, or regulation related to a Federal contract (including the competition for or negotiation of a contract) or grant. The grantee, subgrantee, contractor, recipient, or subrecipient must inform their employees in writing of employee whistleblower rights and protections under 41 U.S.C. § 4712. See statutory requirements for whistleblower protections at 10 U.S.C. § 4701, 41 U.S.C. § 4712, 41 U.S.C. § 4304, and 10 U.S.C. § 4310.
26. **Co-Sponsor.** The Co-Sponsors understand and agree that they jointly and severally adopt and ratify the representations and assurances contained therein and that the word "Sponsor" as used in the application and other assurances is deemed to include all Co-Sponsors.
27. **Prohibited Telecommunications and Video Surveillance Services and Equipment.** The Sponsor agrees to comply with mandatory standards and policies relating to use and procurement of certain telecommunications and video surveillance services or equipment in compliance with the National Defense Authorization Act [P.L. 115-232 § 889(f)(1)] and 2 CFR § 200.216.
28. **Critical Infrastructure Security and Resilience.** The Sponsor acknowledges that it has considered and addressed physical and cybersecurity and resilience in its project planning, design, and oversight, as determined by the DOT and the Department of Homeland Security (DHS). For airports that do not have specific DOT or DHS cybersecurity requirements, the FAA encourages the voluntary adoption of the cybersecurity requirements from the Transportation Security Administration and Federal Security Director identified for security risk Category X airports.
29. **Title VI of the Civil Rights Act.** As a condition of a grant award, the Sponsor shall demonstrate that it complies with the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq) and

implementing regulations (49 CFR part 21), the Airport and Airway Improvement Act of 1982 (49 U.S.C. § 47123), the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.), Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794 et seq.), the Americans with Disabilities Act of 1990 (42 U.S.C. § 12101, et seq.), U.S. Department of Transportation and Federal Aviation Administration (FAA) Assurances, and other relevant civil rights statutes, regulations, or authorities, including any amendments or updates thereto. This may include, as applicable, providing a current Title VI Program Plan to the FAA for approval, in the format and according to the timeline required by the FAA, and other information about the communities that will be benefited and impacted by the project. A completed FAA Title VI Pre-Grant Award Checklist is required for every grant application, unless excused by the FAA. The Sponsor shall affirmatively ensure that when carrying out any project supported by this grant that it complies with all federal nondiscrimination and civil rights laws based on race, color, national origin, sex, creed, age, disability, genetic information, in consideration for federal financial assistance. The Department's and FAA's Office of Civil Rights may provide resources and technical assistance to recipients to ensure full and sustainable compliance with Federal civil rights requirements. Failure to comply with civil rights requirements will be considered a violation of the agreement or contract and be subject to any enforcement action as authorized by law.

30. **FAA Reauthorization Act of 2024.** This grant agreement is subject to the terms and conditions contained herein including the terms known as the Grant Assurances as they were published in the Federal Register on April 2025. On May 16, 2024, the FAA Reauthorization Act of 2024 made certain amendments to 49 U.S.C. chapter 471. The Reauthorization Act will require FAA to make certain amendments to the assurances in order to best achieve consistency with the statute. Federal law requires that FAA publish any amendments to the assurances in the Federal Register along with an opportunity to comment. In order not to delay the offer of this grant, the existing assurances are attached herein; however, FAA shall interpret and apply these assurances consistent with the Reauthorization Act. To the extent there is a conflict between the assurances and Federal statutes, the statutes shall apply. The full text of the FAA Reauthorization Act of 2024 is at <https://www.congress.gov/bill/118th-congress/house-bill/3935/text>.
31. **Applicable Federal Anti-Discrimination Laws.** The sponsor agrees:
- a. that its compliance in all respects with all applicable Federal anti-discrimination laws is material to the government's payment decisions for purposes of section 3729(b)(4) of title 31, United States Code; and
 - b. to certify that it does not operate any programs promoting diversity, equity, and inclusion (DEI) that violate any applicable Federal anti-discrimination laws.
32. **Federal Law and Public Policy Requirements.** The Sponsor shall ensure that Federal funding is expended in full accordance with the United States Constitution, Federal law, and statutory and public policy requirements: including but not limited to, those protecting free speech, religious liberty, public welfare, the environment, and prohibiting discrimination; and the Sponsor will cooperate with Federal officials in the enforcement of Federal law, including cooperating with and not impeding U.S. Immigration and Customs Enforcement (ICE) and other Federal offices and components of the Department of Homeland Security in and the enforcement of Federal immigration law.

33. **National Airspace System Requirements**

- a. The Sponsor shall cooperate with FAA activities installing, maintaining, replacing, improving, or operating equipment and facilities in or supporting the National Airspace System, including waiving permitting requirements and other restrictions affecting those activities to the maximum extent possible, and assisting the FAA in securing waivers of permitting or other restrictions from other authorities. The Sponsor shall not take actions that frustrate or prevent the FAA from installing, maintaining, replacing, improving, or operating equipment and facilities in or supporting the National Airspace System.
- b. If FAA determines that the Sponsor has violated subsection (a), the FAA may impose a remedy, including:
 - (1) additional conditions on the award;
 - (2) consistent with 49 U.S.C chapter 471, any remedy permitted under 2 C.F.R. 200.339–200.340, including withholding of payments; disallowance of previously reimbursed costs, requiring refunds from the Recipient to the DOT; suspension or termination of the award; or suspension and debarment under 2 C.F.R. part 180; or
 - (3) any other remedy legally available.
- c. (In imposing a remedy under this condition, the FAA may elect to consider the interests of only the FAA.
- d. The Sponsor acknowledges that amounts that the FAA requires the Sponsor to refund to the FAA due to a remedy under this condition constitute a debt to the Federal Government that the FAA may collect under 2 C.F.R. 200.346 and the Federal Claims Collection Standards (31 C.F.R. parts 900–904).

34. **Signage Costs for Construction Projects.** The Sponsor agrees that it will require the prime contractor of a Federally- assisted airport improvement project to post signs consistent with a DOT/FAA-prescribed format, as may be requested by the DOT/FAA, and further agrees to remove any signs posted in response to requests received prior to February 1, 2025.

35. **Title 8 - U.S.C., Chapter 12, Subchapter II - Immigration.** The sponsor will follow applicable federal laws pertaining to Subchapter 12, and be subject to the penalties set forth in 8 U.S.C. § 1324, Bringing in and harboring certain aliens, and 8 U.S.C. § 1327, Aiding or assisting certain aliens to enter

SPECIAL CONDITIONS

36. **Solid Waste Recycling Plan**. The Sponsor certifies that it has a solid waste recycling plan as part of an existing Airport Master Plan, as prescribed by 49 U.S.C. § 47106(a)(6).
37. **Buy American Executive Orders**. The Sponsor agrees to abide by applicable Executive Orders in effect at the time this Grant Agreement is executed, including Executive Order 14005, Ensuring the Future Is Made in All of America by All of America's Workers.
38. **Duffy Plaintiff Special Term**. Pursuant to the court's preliminary injunction order in State of California v. Duffy, 1:25-cv-00208-JJM-PAS (D.R.I.) (June 19, 2025), DOT will not impose or enforce the challenged immigration enforcement condition* or any materially similar terms and conditions, to any grant funds awarded, directly or indirectly, to Plaintiff States or local government entities within those States (collectively referred to as "Plaintiff State Entities"), or otherwise rescind, withhold, terminate, or take other adverse action, absent specific statutory authority, based on the challenged immigration enforcement condition while DOT is subject to an injunction. DOT will not require Plaintiff State Entities to make any certification or other representation related to compliance with the challenged immigration enforcement condition nor will DOT construe acceptance of funding from DOT as certification as to the challenged immigration enforcement condition.

*The challenged immigration enforcement condition:

"[T]he Recipient will cooperate with Federal officials in the enforcement of Federal law, including cooperating with and not impeding U.S. Immigration and Customs Enforcement (ICE) and other Federal offices and components of the Department of Homeland Security in the enforcement of Federal immigration law."

The Sponsor's acceptance of this Offer and ratification and adoption of the Project Application incorporated herein shall be evidenced by execution of this instrument by the Sponsor, as hereinafter provided, and this Offer and Acceptance shall comprise a Grant Agreement, constituting the contractual obligations and rights of the United States and the Sponsor with respect to the accomplishment of the Project and compliance with the Grant Assurances, terms, and conditions as provided herein. Such Grant Agreement shall become effective upon the Sponsor's acceptance of this Offer.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.¹

**UNITED STATES OF AMERICA
FEDERAL AVIATION ADMINISTRATION**

(Signature)

(Typed Name)

(Title of FAA Official)

¹ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

Part II - Acceptance

The Sponsor does hereby ratify and adopt all assurances, statements, representations, warranties, covenants, and agreements contained in the Project Application and incorporated materials referred to in the foregoing Offer, and does hereby accept this Offer and by such acceptance agrees to comply with all of the Grant Assurances, terms, and conditions in this Offer and in the Project Application.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.²

Dated _____

**GRAND JUNCTION REGIONAL AIRPORT
AUTHORITY**

(Name of Sponsor)

(Signature of Sponsor's Authorized Official)

By: _____

(Typed Name of Sponsor's Authorized Official)

Title: _____

(Title of Sponsor's Authorized Official)

² Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

CERTIFICATE OF SPONSOR’S ATTORNEY

I, _____, acting as Attorney for the Sponsor do hereby certify:

That in my opinion the Sponsor is empowered to enter into the foregoing Grant Agreement under the laws of the State of Colorado. Further, I have examined the foregoing Grant Agreement and the actions taken by said Sponsor and Sponsor’s official representative, who has been duly authorized to execute this Grant Agreement, which is in all respects due and proper and in accordance with the laws of the said State; and Title 49, United States Code (U.S.C.), Chapters 471 and 475; 49 U.S.C. §§ 40101 et seq., and 48103; FAA Reauthorization Act of 2018 (P.L. 115-254); the Department of Transportation Appropriations Act, 2021 (P.L. 116-260, Division L); the Consolidated Appropriations Act, 2022 (P.L. 117-103); Consolidated Appropriations Act, 2023 (P.L. 117-328); Consolidated Appropriations Act, 2024 (P.L. 118-42); FAA Reauthorization Act of 2024 (P.L. 118-63); and the representations contained in the Project Application. In addition, for grants involving projects to be carried out on property not owned by the Sponsor, there are no legal impediments that will prevent full performance by the Sponsor. Further, it is my opinion that the said Grant Agreement constitutes a legal and binding obligation of the Sponsor in accordance with the terms thereof.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.³

Dated at _____

By: _____
(Signature of Sponsor’s Attorney)

³ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

The Sponsor does hereby ratify and adopt all assurances, statements, representations, warranties, covenants, and agreements contained in the Project Application and incorporated materials referred to in the foregoing Offer, and does hereby accept this Offer and by such acceptance agrees to comply with all of the Grant Assurances, terms, and conditions in this Offer and in the Project Application.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.⁴

Dated _____

CITY OF GRAND JUNCTION, COLORADO

(Name of Sponsor)

(Signature of Sponsor's Authorized Official)

By: _____
(Typed Name of Sponsor's Authorized Official)

Title: _____
(Title of Sponsor's Authorized Official)

⁴ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

CERTIFICATE OF SPONSOR’S ATTORNEY

I, _____, acting as Attorney for the Sponsor do hereby certify:

That in my opinion the Sponsor is empowered to enter into the foregoing Grant Agreement under the laws of the State of Colorado. Further, I have examined the foregoing Grant Agreement and the actions taken by said Sponsor and Sponsor’s official representative, who has been duly authorized to execute this Grant Agreement, which is in all respects due and proper and in accordance with the laws of the said State; and Title 49, United States Code (U.S.C.), Chapters 471 and 475; 49 U.S.C. §§ 40101 et seq., and 48103; FAA Reauthorization Act of 2018 (P.L. 115-254); the Department of Transportation Appropriations Act, 2021 (P.L. 116-260, Division L); the Consolidated Appropriations Act, 2022 (P.L. 117-103); Consolidated Appropriations Act, 2023 (P.L. 117-328); Consolidated Appropriations Act, 2024 (P.L. 118-42); FAA Reauthorization Act of 2024 (P.L. 118-63); and the representations contained in the Project Application. In addition, for grants involving projects to be carried out on property not owned by the Sponsor, there are no legal impediments that will prevent full performance by the Sponsor. Further, it is my opinion that the said Grant Agreement constitutes a legal and binding obligation of the Sponsor in accordance with the terms thereof.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.⁵

Dated at _____

By: _____
(Signature of Sponsor’s Attorney)

⁵ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

The Sponsor does hereby ratify and adopt all assurances, statements, representations, warranties, covenants, and agreements contained in the Project Application and incorporated materials referred to in the foregoing Offer, and does hereby accept this Offer and by such acceptance agrees to comply with all of the Grant Assurances, terms, and conditions in this Offer and in the Project Application.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.⁶

Dated _____

COUNTY OF MESA, COLORADO

(Name of Sponsor)

(Signature of Sponsor's Authorized Official)

By: _____

(Typed Name of Sponsor's Authorized Official)

Title: _____

(Title of Sponsor's Authorized Official)

⁶ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

CERTIFICATE OF SPONSOR’S ATTORNEY

I, _____, acting as Attorney for the Sponsor do hereby certify:

That in my opinion the Sponsor is empowered to enter into the foregoing Grant Agreement under the laws of the State of Colorado. Further, I have examined the foregoing Grant Agreement and the actions taken by said Sponsor and Sponsor’s official representative, who has been duly authorized to execute this Grant Agreement, which is in all respects due and proper and in accordance with the laws of the said State; and Title 49, United States Code (U.S.C.), Chapters 471 and 475; 49 U.S.C. §§ 40101 et seq., and 48103; FAA Reauthorization Act of 2018 (P.L. 115-254); the Department of Transportation Appropriations Act, 2021 (P.L. 116-260, Division L); the Consolidated Appropriations Act, 2022 (P.L. 117-103); Consolidated Appropriations Act, 2023 (P.L. 117-328); Consolidated Appropriations Act, 2024 (P.L. 118-42); FAA Reauthorization Act of 2024 (P.L. 118-63); and the representations contained in the Project Application. In addition, for grants involving projects to be carried out on property not owned by the Sponsor, there are no legal impediments that will prevent full performance by the Sponsor. Further, it is my opinion that the said Grant Agreement constitutes a legal and binding obligation of the Sponsor in accordance with the terms thereof.

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I declare under penalty of perjury that the foregoing is true and correct.⁷

Dated at _____

By: _____
(Signature of Sponsor’s Attorney)

⁷ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

ASSURANCES

AIRPORT SPONSORS

A. General.

1. These assurances shall be complied with in the performance of grant agreements for airport development, airport planning, and noise compatibility program grants for airport sponsors.
2. These assurances are required to be submitted as part of the project application by sponsors requesting funds under the provisions of Title 49, U.S.C., subtitle VII, as amended. As used herein, the term "public agency sponsor" means a public agency with control of a public-use airport; the term "private sponsor" means a private owner of a public-use airport; and the term "sponsor" includes both public agency sponsors and private sponsors.
3. Upon acceptance of this grant offer by the sponsor, these assurances are incorporated in and become part of this Grant Agreement.

B. Duration and Applicability.

1. Airport Development or Noise Compatibility Program Projects Undertaken by a Public Agency Sponsor.

The terms, conditions and assurances of this Grant Agreement shall remain in full force and effect throughout the useful life of the facilities developed or equipment acquired for an airport development or noise compatibility program project, or throughout the useful life of the project items installed within a facility under a noise compatibility program project, but in any event not to exceed twenty (20) years from the date of acceptance of a grant offer of Federal funds for the project. However, there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport. There shall be no limit on the duration of the terms, conditions, and assurances with respect to real property acquired with federal funds. Furthermore, the duration of the Civil Rights assurance shall be specified in the assurances.

2. Airport Development or Noise Compatibility Projects Undertaken by a Private Sponsor.

The preceding paragraph (1) also applies to a private sponsor except that the useful life of project items installed within a facility or the useful life of the facilities developed or equipment acquired under an airport development or noise compatibility program project shall be no less than ten (10) years from the date of acceptance of Federal aid for the project.

3. Airport Planning Undertaken by a Sponsor.

Unless otherwise specified in this Grant Agreement, only Assurances 1, 2, 3, 5, 6, 13, 18, 23, 25, 30, 32, 33, 34, 37, and 40 in Section C apply to planning projects. The terms, conditions, and assurances of this Grant Agreement shall remain in full force and effect during the life of the project; there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport.

C. Sponsor Certification.

The sponsor hereby assures and certifies, with respect to this grant that:

1. General Federal Requirements

It will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance, and use of Federal funds for this Grant. Performance under this agreement shall be governed by and in compliance with the following requirements, as applicable, to the type of organization of the Sponsor and any applicable sub-recipients. The applicable provisions to this agreement include, but are not limited to, the following:

FEDERAL LEGISLATION

- a. 49 U.S.C. subtitle VII, as amended.
- b. Davis-Bacon Act, as amended — 40 U.S.C. §§ 3141-3144, 3146, and 3147, et seq.¹
- c. Federal Fair Labor Standards Act – 29 U.S.C. § 201, et seq.
- d. Hatch Act – 5 U.S.C. § 1501, et seq.²
- e. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, 42 U.S.C. § 4601, et seq.^{1, 2}
- f. National Historic Preservation Act of 1966 – Section 106 – 54 U.S.C. § 306108.¹
- g. Archeological and Historic Preservation Act of 1974 – 54 U.S.C. § 312501, et seq.¹
- h. Native Americans Grave Repatriation Act – 25 U.S.C. § 3001, et seq.
- i. Clean Air Act, P.L. 90-148, as amended – 42 U.S.C. § 7401, et seq.
- j. Coastal Zone Management Act, P.L. 92-583, as amended – 16 U.S.C. § 1451, et seq.
- k. Flood Disaster Protection Act of 1973 – Section 102(a) - 42 U.S.C. § 4012a.¹
- l. 49 U.S.C. § 303, (formerly known as Section 4(f)).
- m. Rehabilitation Act of 1973 – 29 U.S.C. § 794.
- n. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq.) (prohibits discrimination on the basis of race, color, national origin).
- o. Americans with Disabilities Act of 1990, as amended, (42 U.S.C. § 12101 et seq.) (prohibits discrimination on the basis of disability).
- p. Age Discrimination Act of 1975 – 42 U.S.C. § 6101, et seq.
- q. American Indian Religious Freedom Act, P.L. 95-341, as amended.
- r. Architectural Barriers Act of 1968, as amended – 42 U.S.C. § 4151, et seq.¹
- s. Powerplant and Industrial Fuel Use Act of 1978 – Section 403 – 42 U.S.C. § 8373.¹
- t. Contract Work Hours and Safety Standards Act – 40 U.S.C. § 3701, et seq.¹
- u. Copeland Anti-kickback Act – 18 U.S.C. § 874.¹

- v. National Environmental Policy Act of 1969 – 42 U.S.C. § 4321, et seq.¹
- w. Wild and Scenic Rivers Act, P.L. 90-542, as amended – 16 U.S.C. § 1271, et seq.
- x. Single Audit Act of 1984 – 31 U.S.C. § 7501, et seq.²
- y. Drug-Free Workplace Act of 1988 – 41 U.S.C. §§ 8101 through 8105.
- z. The Federal Funding Accountability and Transparency Act of 2006, as amended (P.L. 109-282, as amended by section 6202 of P.L. 110-252).
- aa. Civil Rights Restoration Act of 1987, P.L. 100-259.
- bb. Infrastructure Investment and Jobs Act, P.L. 117-58, Title VIII.
- cc. Build America, Buy America Act, P.L. 117-58, Title IX.
- dd. Endangered Species Act – 16 U.S.C. 1531, et seq.
- ee. Title IX of the Education Amendments of 1972, as amended – 20 U.S.C. 1681–1683 and 1685–1687.
- ff. Drug Abuse Office and Treatment Act of 1972, as amended – 21 U.S.C. 1101, et seq.
- gg. Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, P.L. 91-616, as amended – 42 U.S.C. § 4541, et seq.
- hh. Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, P.L. 91-616, as amended – 42 U.S.C. § 4541, et seq.
- ii. Appropriated Funds to Influence Certain Federal Contracting and Financial Transactions – 31 U.S.C. § 1352.

EXECUTIVE ORDERS

- a. Executive Order 11990 – Protection of Wetlands
- b. Executive Order 11988 – Floodplain Management
- c. Executive Order 12372 – Intergovernmental Review of Federal Programs
- d. Executive Order 12699 – Seismic Safety of Federal and Federally Assisted New Building Construction¹
- e. Executive Order 14005 – Ensuring the Future is Made in all of America by All of America’s Workers
- f. Executive Order 14149 – Restoring Freedom of Speech and Ending Federal Censorship
- g. Executive Order 14151 – Ending Radical and Wasteful Government DEI Programs and Preferencing
- h. Executive Order 14154 – Unleashing American Energy
- i. Executive Order 14168 – Defending Women from Gender Ideology Extremism and Restoring Biological Truth to the Federal Government
- j. Executive Order 14173 – Ending Illegal Discrimination and Restoring Merit-Based Opportunity

FEDERAL REGULATIONS

- a. 2 CFR Part 180 – OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement).
- b. 2 CFR Part 200 and 1201 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.^{3, 4, 5}
- c. 2 CFR Part 1200 – Nonprocurement Suspension and Debarment.
- d. 14 CFR Part 13 – Investigative and Enforcement Procedures.
- e. 14 CFR Part 16 – Rules of Practice for Federally-Assisted Airport Enforcement Proceedings.
- f. 14 CFR Part 150 – Airport Noise Compatibility Planning.
- g. 28 CFR Part 35 – Nondiscrimination on the Basis of Disability in State and Local Government Services.
- h. 28 CFR § 50.3 – U.S. Department of Justice Guidelines for the Enforcement of Title VI of the Civil Rights Act of 1964.
- i. 29 CFR Part 1 – Procedures for Predetermination of Wage Rates.¹
- j. 29 CFR Part 3 – Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States.¹
- k. 29 CFR Part 5 – Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction (Also Labor Standards Provisions Applicable to Nonconstruction Contracts Subject to the Contract Work Hours and Safety Standards Act).¹
- l. 41 CFR Part 60 – Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and Federally-assisted contracting requirements).¹
- m. 49 CFR Part 20 – New Restrictions on Lobbying.
- n. 49 CFR Part 21 – Nondiscrimination in Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964.
- o. 49 CFR Part 23 – Participation by Disadvantage Business Enterprise in Airport Concessions.
- p. 49 CFR Part 24 – Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs.^{1, 2}
- q. 49 CFR Part 26 – Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.
- r. 49 CFR Part 27 – Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance.¹
- s. 49 CFR Part 28 – Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Transportation.
- t. 49 CFR Part 30 – Denial of Public Works Contracts to Suppliers of Goods and Services of Countries That Deny Procurement Market Access to U.S. Contractors.
- u. 49 CFR Part 32 – Governmentwide Requirements for Drug-Free Workplace (Financial Assistance).

- v. 49 CFR Part 37 – Transportation Services for Individuals with Disabilities (ADA).
- w. 49 CFR Part 38 – Americans with Disabilities Act (ADA) Accessibility Specifications for Transportation Vehicles.
- x. 49 CFR Part 41 – Seismic Safety.

FOOTNOTES TO ASSURANCE (C)(1)

- ¹ These laws do not apply to airport planning sponsors.
- ² These laws do not apply to private sponsors.
- ³ 2 CFR Part 200 contains requirements for State and Local Governments receiving Federal assistance. Any requirement levied upon State and Local Governments by this regulation shall apply where applicable to private sponsors receiving Federal assistance under Title 49, United States Code.
- ⁴ Cost principles established in 2 CFR Part 200 subpart E must be used as guidelines for determining the eligibility of specific types of expenses.
- ⁵ Audit requirements established in 2 CFR Part 200 subpart F are the guidelines for audits.

SPECIFIC ASSURANCES

Specific assurances required to be included in grant agreements by any of the above laws, regulations or circulars are incorporated by reference in this Grant Agreement.

2. Responsibility and Authority of the Sponsor.

a. Public Agency Sponsor:

It has legal authority to apply for this Grant, and to finance and carry out the proposed project; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

b. Private Sponsor:

It has legal authority to apply for this Grant and to finance and carry out the proposed project and comply with all terms, conditions, and assurances of this Grant Agreement. It shall designate an official representative and shall in writing direct and authorize that person to file this application, including all understandings and assurances contained therein; to act in connection with this application; and to provide such additional information as may be required.

3. Sponsor Fund Availability.

It has sufficient funds available for that portion of the project costs which are not to be paid by the United States. It has sufficient funds available to assure operation and maintenance of items funded under this Grant Agreement which it will own or control.

4. Good Title.

- a. It, a public agency or the Federal government, holds good title, satisfactory to the Secretary, to the landing area of the airport or site thereof, or will give assurance satisfactory to the Secretary that good title will be acquired.

- b. For noise compatibility program projects to be carried out on the property of the sponsor, it holds good title satisfactory to the Secretary to that portion of the property upon which Federal funds will be expended or will give assurance to the Secretary that good title will be obtained.

5. Preserving Rights and Powers.

- a. It will not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in this Grant Agreement without the written approval of the Secretary, and will act promptly to acquire, extinguish or modify any outstanding rights or claims of right of others which would interfere with such performance by the sponsor. This shall be done in a manner acceptable to the Secretary.
- b. Subject to 49 U.S.C. § 47107(a)(16) and (x), it will not sell, lease, encumber, or otherwise transfer or dispose of any part of its title or other interests in the property shown on Exhibit A to this application or, for a noise compatibility program project, that portion of the property upon which Federal funds have been expended, for the duration of the terms, conditions, and assurances in this Grant Agreement without approval by the Secretary. If the transferee is found by the Secretary to be eligible under Title 49, United States Code, to assume the obligations of this Grant Agreement and to have the power, authority, and financial resources to carry out all such obligations, the sponsor shall insert in the contract or document transferring or disposing of the sponsor's interest, and make binding upon the transferee all of the terms, conditions, and assurances contained in this Grant Agreement.
- c. For all noise compatibility program projects which are to be carried out by another unit of local government or are on property owned by a unit of local government other than the sponsor, it will enter into an agreement with that government. Except as otherwise specified by the Secretary, that agreement shall obligate that government to the same terms, conditions, and assurances that would be applicable to it if it applied directly to the FAA for a grant to undertake the noise compatibility program project. That agreement and changes thereto must be satisfactory to the Secretary. It will take steps to enforce this agreement against the local government if there is substantial non-compliance with the terms of the agreement.
- d. For noise compatibility program projects to be carried out on privately owned property, it will enter into an agreement with the owner of that property which includes provisions specified by the Secretary. It will take steps to enforce this agreement against the property owner whenever there is substantial non-compliance with the terms of the agreement.
- e. If the sponsor is a private sponsor, it will take steps satisfactory to the Secretary to ensure that the airport will continue to function as a public-use airport in accordance with these assurances for the duration of these assurances.
- f. If an arrangement is made for management and operation of the airport by any agency or person other than the sponsor or an employee of the sponsor, the sponsor will reserve sufficient rights and authority to ensure that the airport will be operated and maintained in accordance with Title 49, United States Code, the regulations and the terms, conditions and assurances in this Grant Agreement and shall ensure that such arrangement also requires compliance therewith.
- g. Sponsors of commercial service airports will not permit or enter into any arrangement that results in permission for the owner or tenant of a property used as a residence, or zoned for residential use, to taxi an aircraft between that property and any location on airport. Sponsors

of general aviation airports entering into any arrangement that results in permission for the owner of residential real property adjacent to or near the airport must comply with the requirements of Sec. 136 of Public Law 112-95 and the sponsor assurances.

6. Consistency with Local Plans.

The project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport.

7. Consideration of Local Interest.

It has given fair consideration to the interest of communities in or near where the project may be located.

8. Consultation with Users.

In making a decision to undertake any airport development project under Title 49, United States Code, it has undertaken reasonable consultations with affected parties using the airport at which project is proposed.

9. Public Hearings.

In projects involving the location of an airport, an airport runway, or a major runway extension, it has afforded the opportunity for public hearings for the purpose of considering the economic, social, and environmental effects of the airport or runway location and its consistency with goals and objectives of such planning as has been carried out by the community and it shall, when requested by the Secretary, submit a copy of the transcript of such hearings to the Secretary. Further, for such projects, it has on its management board either voting representation from the communities where the project is located or has advised the communities that they have the right to petition the Secretary concerning a proposed project.

10. Metropolitan Planning Organization.

In projects involving the location of an airport, an airport runway, or a major runway extension at a medium or large hub airport, the sponsor has made available to and has provided upon request to the metropolitan planning organization in the area in which the airport is located, if any, a copy of the proposed amendment to the airport layout plan to depict the project and a copy of any airport master plan in which the project is described or depicted.

11. Pavement Preventive Maintenance-Management.

With respect to a project approved after January 1, 1995, for the replacement or reconstruction of pavement at the airport, it assures or certifies that it has implemented an effective airport pavement maintenance-management program and it assures that it will use such program for the useful life of any pavement constructed, reconstructed or repaired with Federal financial assistance at the airport. It will provide such reports on pavement condition and pavement management programs as the Secretary determines may be useful.

12. Terminal Development Prerequisites.

For projects which include terminal development at a public use airport, as defined in Title 49, it has, on the date of submittal of the project grant application, all the safety equipment required for certification of such airport under 49 U.S.C. § 44706, and all the security equipment required by rule or regulation, and has provided for access to the passenger enplaning and deplaning area of such airport to passengers enplaning and deplaning from aircraft other than air carrier aircraft.

13. Accounting System, Audit, and Record Keeping Requirements.

- a. It shall keep all project accounts and records which fully disclose the amount and disposition by the recipient of the proceeds of this Grant, the total cost of the project in connection with which this Grant is given or used, and the amount or nature of that portion of the cost of the project supplied by other sources, and such other financial records pertinent to the project. The accounts and records shall be kept in accordance with an accounting system that will facilitate an effective audit in accordance with the Single Audit Act of 1984.
- b. It shall make available to the Secretary and the Comptroller General of the United States, or any of their duly authorized representatives, for the purpose of audit and examination, any books, documents, papers, and records of the recipient that are pertinent to this Grant. The Secretary may require that an appropriate audit be conducted by a recipient. In any case in which an independent audit is made of the accounts of a sponsor relating to the disposition of the proceeds of a grant or relating to the project in connection with which this Grant was given or used, it shall file a certified copy of such audit with the Comptroller General of the United States not later than six (6) months following the close of the fiscal year for which the audit was made.

14. Minimum Wage Rates.

It shall include, in all contracts in excess of \$2,000 for work on any projects funded under this Grant Agreement which involve labor, provisions establishing minimum rates of wages, to be predetermined by the Secretary of Labor under 40 U.S.C. §§ 3141-3144, 3146, and 3147, Public Building, Property, and Works), which contractors shall pay to skilled and unskilled labor, and such minimum rates shall be stated in the invitation for bids and shall be included in proposals or bids for the work.

15. Veteran's Preference.

It shall include in all contracts for work on any project funded under this Grant Agreement which involve labor, such provisions as are necessary to insure that, in the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Vietnam era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns owned and controlled by disabled veterans as defined in 49 U.S.C. § 47112. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

16. Conformity to Plans and Specifications.

It will execute the project subject to plans, specifications, and schedules approved by the Secretary. Such plans, specifications, and schedules shall be submitted to the Secretary prior to commencement of site preparation, construction, or other performance under this Grant Agreement, and, upon approval of the Secretary, shall be incorporated into this Grant Agreement. Any modification to the approved plans, specifications, and schedules shall also be subject to approval of the Secretary, and incorporated into this Grant Agreement.

17. Construction Inspection and Approval.

It will provide and maintain competent technical supervision at the construction site throughout the project to assure that the work conforms to the plans, specifications, and schedules approved by the Secretary for the project. It shall subject the construction work on any project contained in an approved project application to inspection and approval by the Secretary and such work shall be in

accordance with regulations and procedures prescribed by the Secretary. Such regulations and procedures shall require such cost and progress reporting by the sponsor or sponsors of such project as the Secretary shall deem necessary.

18. Planning Projects.

In carrying out planning projects:

- a. It will execute the project in accordance with the approved program narrative contained in the project application or with the modifications similarly approved.
- b. It will furnish the Secretary with such periodic reports as required pertaining to the planning project and planning work activities.
- c. It will include in all published material prepared in connection with the planning project a notice that the material was prepared under a grant provided by the United States.
- d. It will make such material available for examination by the public, and agrees that no material prepared with funds under this project shall be subject to copyright in the United States or any other country.
- e. It will give the Secretary unrestricted authority to publish, disclose, distribute, and otherwise use any of the material prepared in connection with this grant.
- f. It will grant the Secretary the right to disapprove the sponsor's employment of specific consultants and their subcontractors to do all or any part of this project as well as the right to disapprove the proposed scope and cost of professional services.
- g. It will grant the Secretary the right to disapprove the use of the sponsor's employees to do all or any part of the project.
- h. It understands and agrees that the Secretary's approval of this project grant or the Secretary's approval of any planning material developed as part of this grant does not constitute or imply any assurance or commitment on the part of the Secretary to approve any pending or future application for a Federal airport grant.

19. Operation and Maintenance.

- a. The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state, and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes. It will suitably operate and maintain the airport and all facilities thereon or connected therewith, with due regard to climatic and flood conditions. Any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the Secretary. In furtherance of this assurance, the sponsor will have in effect arrangements for:
 1. Operating the airport's aeronautical facilities whenever required;
 2. Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and
 3. Promptly notifying pilots of any condition affecting aeronautical use of the airport. Nothing contained herein shall be construed to require that the airport be operated for aeronautical use during temporary periods when snow, flood, or other climatic conditions

interfere with such operation and maintenance. Further, nothing herein shall be construed as requiring the maintenance, repair, restoration, or replacement of any structure or facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the sponsor.

- b. It will suitably operate and maintain noise compatibility program items that it owns or controls upon which Federal funds have been expended.

20. Hazard Removal and Mitigation.

It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

21. Compatible Land Use.

It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which Federal funds have been expended.

22. Economic Nondiscrimination.

- a. It will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.
- b. In any agreement, contract, lease, or other arrangement under which a right or privilege at the airport is granted to any person, firm, or corporation to conduct or to engage in any aeronautical activity for furnishing services to the public at the airport, the sponsor will insert and enforce provisions requiring the contractor to:
 - 1. Furnish said services on a reasonable, and not unjustly discriminatory, basis to all users thereof, and
 - 2. Charge reasonable, and not unjustly discriminatory, prices for each unit or service, provided that the contractor may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.
- c. Each fixed-based operator at the airport shall be subject to the same rates, fees, rentals, and other charges as are uniformly applicable to all other fixed-based operators making the same or similar uses of such airport and utilizing the same or similar facilities.
- d. Each air carrier using such airport shall have the right to service itself or to use any fixed-based operator that is authorized or permitted by the airport to serve any air carrier at such airport.
- e. Each air carrier using such airport (whether as a tenant, non-tenant, or subtenant of another air carrier tenant) shall be subject to such nondiscriminatory and substantially comparable rules, regulations, conditions, rates, fees, rentals, and other charges with respect to facilities directly and substantially related to providing air transportation as are applicable to all such air carriers

which make similar use of such airport and utilize similar facilities, subject to reasonable classifications such as tenants or non-tenants and signatory carriers and non-signatory carriers. Classification or status as tenant or signatory shall not be unreasonably withheld by any airport provided an air carrier assumes obligations substantially similar to those already imposed on air carriers in such classification or status.

- f. It will not exercise or grant any right or privilege which operates to prevent any person, firm, or corporation operating aircraft on the airport from performing any services on its own aircraft with its own employees (including, but not limited to maintenance, repair, and fueling) that it may choose to perform.
- g. In the event the sponsor itself exercises any of the rights and privileges referred to in this assurance, the services involved will be provided on the same conditions as would apply to the furnishing of such services by commercial aeronautical service providers authorized by the sponsor under these provisions.
- h. The sponsor may establish such reasonable, and not unjustly discriminatory, conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the airport.
- i. The sponsor may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve the civil aviation needs of the public.

23. Exclusive Rights.

It will permit no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public. For purposes of this paragraph, the providing of the services at an airport by a single fixed-based operator shall not be construed as an exclusive right if both of the following apply:

- a. It would be unreasonably costly, burdensome, or impractical for more than one fixed-based operator to provide such services, and
- b. If allowing more than one fixed-based operator to provide such services would require the reduction of space leased pursuant to an existing agreement between such single fixed-based operator and such airport. It further agrees that it will not, either directly or indirectly, grant or permit any person, firm, or corporation, the exclusive right at the airport to conduct any aeronautical activities, including, but not limited to charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity, and that it will terminate any exclusive right to conduct an aeronautical activity now existing at such an airport before the grant of any assistance under Title 49, United States Code.

24. Fee and Rental Structure.

It will maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport, taking into account such factors as the volume of traffic and economy of collection. No part of the Federal share of an airport development, airport planning or noise compatibility project for

which a Grant is made under Title 49, United States Code, the Airport and Airway Improvement Act of 1982, the Federal Airport Act or the Airport and Airway Development Act of 1970 shall be included in the rate basis in establishing fees, rates, and charges for users of that airport.

25. Airport Revenues.

- a. All revenues generated by the airport and any local taxes on aviation fuel established after December 30, 1987, will be expended by it for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the actual air transportation of passengers or property; or for noise mitigation purposes on or off the airport. The following exceptions apply to this paragraph:
 1. If covenants or assurances in debt obligations issued before September 3, 1982, by the owner or operator of the airport, or provisions enacted before September 3, 1982, in governing statutes controlling the owner or operator's financing, provide for the use of the revenues from any of the airport owner or operator's facilities, including the airport, to support not only the airport but also the airport owner or operator's general debt obligations or other facilities, then this limitation on the use of all revenues generated by the airport (and, in the case of a public airport, local taxes on aviation fuel) shall not apply.
 2. If the Secretary approves the sale of a privately owned airport to a public sponsor and provides funding for any portion of the public sponsor's acquisition of land, this limitation on the use of all revenues generated by the sale shall not apply to certain proceeds from the sale. This is conditioned on repayment to the Secretary by the private owner of an amount equal to the remaining unamortized portion (amortized over a 20-year period) of any airport improvement grant made to the private owner for any purpose other than land acquisition on or after October 1, 1996, plus an amount equal to the federal share of the current fair market value of any land acquired with an airport improvement grant made to that airport on or after October 1, 1996.
 3. Certain revenue derived from or generated by mineral extraction, production, lease, or other means at a general aviation airport (as defined at 49 U.S.C. § 47102), if the FAA determines the airport sponsor meets the requirements set forth in Section 813 of Public Law 112-95.
- b. As part of the annual audit required under the Single Audit Act of 1984, the sponsor will direct that the audit will review, and the resulting audit report will provide an opinion concerning, the use of airport revenue and taxes in paragraph (a), and indicating whether funds paid or transferred to the owner or operator are paid or transferred in a manner consistent with Title 49, United States Code and any other applicable provision of law, including any regulation promulgated by the Secretary or Administrator.
- c. Any civil penalties or other sanctions will be imposed for violation of this assurance in accordance with the provisions of 49 U.S.C. § 47107.

26. Reports and Inspections.

It will:

- a. submit to the Secretary such annual or special financial and operations reports as the Secretary may reasonably request and make such reports available to the public; make available to the

public at reasonable times and places a report of the airport budget in a format prescribed by the Secretary;

- b. for airport development projects, make the airport and all airport records and documents affecting the airport, including deeds, leases, operation and use agreements, regulations and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request;
- c. for noise compatibility program projects, make records and documents relating to the project and continued compliance with the terms, conditions, and assurances of this Grant Agreement including deeds, leases, agreements, regulations, and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request; and
- d. in a format and time prescribed by the Secretary, provide to the Secretary and make available to the public following each of its fiscal years, an annual report listing in detail:
 1. all amounts paid by the airport to any other unit of government and the purposes for which each such payment was made; and
 2. all services and property provided by the airport to other units of government and the amount of compensation received for provision of each such service and property.

27. Use by Government Aircraft.

It will make available all of the facilities of the airport developed with Federal financial assistance and all those usable for landing and takeoff of aircraft to the United States for use by Government aircraft in common with other aircraft at all times without charge, except, if the use by Government aircraft is substantial, charge may be made for a reasonable share, proportional to such use, for the cost of operating and maintaining the facilities used. Unless otherwise determined by the Secretary, or otherwise agreed to by the sponsor and the using agency, substantial use of an airport by Government aircraft will be considered to exist when operations of such aircraft are in excess of those which, in the opinion of the Secretary, would unduly interfere with use of the landing areas by other authorized aircraft, or during any calendar month that:

- a. Five (5) or more Government aircraft are regularly based at the airport or on land adjacent thereto; or
- b. The total number of movements (counting each landing as a movement) of Government aircraft is 300 or more, or the gross accumulative weight of Government aircraft using the airport (the total movement of Government aircraft multiplied by gross weights of such aircraft) is in excess of five million pounds.

28. Land for Federal Facilities.

It will furnish without cost to the Federal Government for use in connection with any air traffic control or air navigation activities, or weather-reporting and communication activities related to air traffic control, any areas of land or water, or estate therein as the Secretary considers necessary or desirable for construction, operation, and maintenance at Federal expense of space or facilities for such purposes. Such areas or any portion thereof will be made available as provided herein within four months after receipt of a written request from the Secretary.

29. Airport Layout Plan.

- a. The airport owner or operator will maintain a current airport layout plan of the airport showing:
 - 1. boundaries of the airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the sponsor for airport purposes and proposed additions thereto;
 - 2. the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and roads), including all proposed extensions and reductions of existing airport facilities;
 - 3. the location of all existing and proposed non-aviation areas and of all existing improvements thereon; and
 - 4. all proposed and existing access points used to taxi aircraft across the airport's property boundary.

- b. Subject to subsection 49 U.S.C. § 47107(x), the Secretary will review and approve or disapprove the plan and any revision or modification of the plan before the plan, revision, or modification takes effect.

- c. The owner or operator will not make or allow any alteration in the airport or any of its facilities unless the alteration—
 - 1. is outside the scope of the Secretary's review and approval authority as set forth in subsection (x); or
 - 2. complies with the portions of the plan approved by the Secretary.

- d. When the airport owner or operator makes a change or alteration in the airport or the facilities which the Secretary determines adversely affects the safety, utility, or efficiency of any federally owned, leased, or funded property on or off the airport and which is not in conformity with the airport layout plan as approved by the Secretary, the owner or operator will, if requested, by the Secretary:
 - 1. eliminate such adverse effect in a manner approved by the Secretary; or
 - 2. bear all costs of relocating such property or its replacement to a site acceptable to the Secretary and of restoring the property or its replacement to the level of safety, utility, efficiency, and cost of operation that existed before the alteration was made, except in the case of a relocation or replacement of an existing airport facility due to a change in the Secretary's design standards beyond the control of the airport sponsor.

30. Civil Rights.

It will promptly take any measures necessary to ensure that no person in the United States shall, on the grounds of race, color, and national origin (including limited English proficiency) in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d to 2000d-4); creed and sex per 49 U.S.C. § 47123 and related requirements; age per the Age Discrimination Act of 1975 and related requirements; or disability per the Americans with Disabilities Act of 1990 and related requirements, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in any program and activity conducted with, or benefiting from, funds received from this Grant.

- a. Using the definitions of activity, facility, and program as found and defined in 49 CFR §§ 21.23(b) and 21.23(e), the sponsor will facilitate all programs, operate all facilities, or conduct all programs in compliance with all non-discrimination requirements imposed by or pursuant to these assurances.
- b. Applicability
 - 1. Programs and Activities. If the sponsor has received a grant (or other federal assistance) for any of the sponsor's program or activities, these requirements extend to all of the sponsor's programs and activities.
 - 2. Facilities. Where it receives a grant or other federal financial assistance to construct, expand, renovate, remodel, alter, or acquire a facility, or part of a facility, the assurance extends to the entire facility and facilities operated in connection therewith.
 - 3. Real Property. Where the sponsor receives a grant or other Federal financial assistance in the form of, or for the acquisition of real property or an interest in real property, the assurance will extend to rights to space on, over, or under such property.

c. Duration.

The sponsor agrees that it is obligated to this assurance for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the assurance obligates the sponsor, or any transferee for the longer of the following periods:

- 1. So long as the airport is used as an airport, or for another purpose involving the provision of similar services or benefits; or
- 2. So long as the sponsor retains ownership or possession of the property.

- d. Required Solicitation Language. It will include the following notification in all solicitations for bids, Requests For Proposals for work, or material under this Grant Agreement and in all proposals for agreements, including airport concessions, regardless of funding source:

"The (Grand Junction Regional Airport Authority; City of Grand Junction, Colorado; and County of Mesa, Colorado), in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, all businesses will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex , age, or disability in consideration for an award."

e. Required Contract Provisions.

- 1. It will insert the non-discrimination contract clauses requiring compliance with the acts and regulations relative to non-discrimination in Federally-assisted programs of the Department of Transportation (DOT), and incorporating the acts and regulations into the contracts by reference in every contract or agreement subject to the non-discrimination in Federally-assisted programs of the DOT acts and regulations.
- 2. It will include a list of the pertinent non-discrimination authorities in every contract that is subject to the non-discrimination acts and regulations.

3. It will insert non-discrimination contract clauses as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor.
4. It will insert non-discrimination contract clauses prohibiting discrimination on the basis of race, color, national origin (including limited English proficiency), creed, sex, age, or disability as a covenant running with the land, in any future deeds, leases, license, permits, or similar instruments entered into by the sponsor with other parties:
 - a. For the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
 - b. For the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
- f. It will provide for such methods of administration for the program as are found by the Secretary to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the acts, the regulations, and this assurance.
- g. It agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the acts, the regulations, and this assurance.

31. Disposal of Land.

- a. For land purchased under a grant for airport noise compatibility purposes, including land serving as a noise buffer, it will dispose of the land, when the land is no longer needed for such purposes, at fair market value, at the earliest practicable time. That portion of the proceeds of such disposition which is proportionate to the United States' share of acquisition of such land will be, at the discretion of the Secretary, (1) reinvested in another project at the airport, or (2) transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order:
 1. Reinvestment in an approved noise compatibility project;
 2. Reinvestment in an approved project that is eligible for grant funding under 49 U.S.C. § 47117(e);
 3. Reinvestment in an approved airport development project that is eligible for grant funding under 49 U.S.C. §§ 47114, 47115, or 47117;
 4. Transfer to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport; or
 5. Payment to the Secretary for deposit in the Airport and Airway Trust Fund.

If land acquired under a grant for noise compatibility purposes is leased at fair market value and consistent with noise buffering purposes, the lease will not be considered a disposal of the land. Revenues derived from such a lease may be used for an approved airport development project that would otherwise be eligible for grant funding or any permitted use of airport revenue.

- b. For land purchased under a grant for airport development purposes (other than noise compatibility), it will, when the land is no longer needed for airport purposes, dispose of such land at fair market value or make available to the Secretary an amount equal to the United

States' proportionate share of the fair market value of the land. That portion of the proceeds of such disposition which is proportionate to the United States' share of the cost of acquisition of such land will, upon application to the Secretary, be reinvested or transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order:

1. Reinvestment in an approved noise compatibility project;
 2. Reinvestment in an approved project that is eligible for grant funding under 49 U.S.C. § 47117(e);
 3. Reinvestment in an approved airport development project that is eligible for grant funding under 49 U.S.C. §§ 47114, 47115, or 47117;
 4. Transfer to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport; or
 5. Payment to the Secretary for deposit in the Airport and Airway Trust Fund.
- c. Land shall be considered to be needed for airport purposes under this assurance if (1) it may be needed for aeronautical purposes (including runway protection zones) or serve as noise buffer land, and (2) the revenue from interim uses of such land contributes to the financial self-sufficiency of the airport. Further, land purchased with a grant received by an airport operator or owner before December 31, 1987, will be considered to be needed for airport purposes if the Secretary or Federal agency making such grant before December 31, 1987, was notified by the operator or owner of the uses of such land, did not object to such use, and the land continues to be used for that purpose, such use having commenced no later than December 15, 1989.
- d. Disposition of such land under (a), (b), or (c) will be subject to the retention or reservation of any interest or right therein necessary to ensure that such land will only be used for purposes which are compatible with noise levels associated with operation of the airport.

32. Engineering and Design Services.

If any phase of such project has received Federal funds under Chapter 471 subchapter 1 of Title 49 U.S.C., it will award each contract, or sub-contract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping or related services in the same manner as a contract for architectural and engineering services is negotiated under Chapter 11 of Title 40 U.S.C., or an equivalent qualifications-based requirement prescribed for or by the sponsor of the airport.

33. Foreign Market Restrictions.

It will not allow funds provided under this Grant to be used to fund any project which uses any product or service of a foreign country during the period in which such foreign country is listed by the United States Trade Representative as denying fair and equitable market opportunities for products and suppliers of the United States in procurement and construction.

34. Policies, Standards, and Specifications.

It will carry out any project funded under an Airport Improvement Program Grant in accordance with policies, standards, and specifications approved by the Secretary including, but not limited to, current FAA Advisory Circulars (https://www.faa.gov/sites/faa.gov/files/aip-pfc-checklist_0.pdf) for AIP projects as of December 10, 2024.

35. Relocation and Real Property Acquisition.

- a. It will be guided in acquiring real property, to the greatest extent practicable under State law, by the land acquisition policies in Subpart B of 49 CFR Part 24 and will pay or reimburse property owners for necessary expenses as specified in Subpart B.
- b. It will provide a relocation assistance program offering the services described in Subpart C of 49 CFR Part 24 and fair and reasonable relocation payments and assistance to displaced persons as required in Subpart D and E of 49 CFR Part 24.
- c. It will make available within a reasonable period of time prior to displacement, comparable replacement dwellings to displaced persons in accordance with Subpart E of 49 CFR Part 24.

36. Access By Intercity Buses.

The airport owner or operator will permit, to the maximum extent practicable, intercity buses or other modes of transportation to have access to the airport; however, it has no obligation to fund special facilities for intercity buses or for other modes of transportation.

37. Disadvantaged Business Enterprises.

The sponsor shall not discriminate on the basis of race, color, national origin, or sex, in the award and performance of any DOT-assisted contract covered by 49 CFR Part 26, or in the award and performance of any concession activity contract covered by 49 CFR Part 23. In addition, the sponsor shall not discriminate on the basis of race, color, national origin or sex in the administration of its Disadvantaged Business Enterprise (DBE) and Airport Concessions Disadvantaged Business Enterprise (ACDBE) programs or the requirements of 49 CFR Parts 23 and 26. The sponsor shall take all necessary and reasonable steps under 49 CFR Parts 23 and 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts, and/or concession contracts. The sponsor's DBE and ACDBE programs, as required by 49 CFR Parts 26 and 23, and as approved by DOT, are incorporated by reference in this agreement. Implementation of these programs is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the sponsor of its failure to carry out its approved program, the Department may impose sanctions as provided for under Parts 26 and 23 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. § 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. §§ 3801-3809, 3812).

38. Hangar Construction.

If the airport owner or operator and a person who owns an aircraft agree that a hangar is to be constructed at the airport for the aircraft at the aircraft owner's expense, the airport owner or operator will grant to the aircraft owner for the hangar a long term lease that is subject to such terms and conditions on the hangar as the airport owner or operator may impose.

39. Competitive Access.

- a. If the airport owner or operator of a medium or large hub airport (as defined in 49 U.S.C. § 47102) has been unable to accommodate one or more requests by an air carrier for access to gates or other facilities at that airport in order to allow the air carrier to provide service to the airport or to expand service at the airport, the airport owner or operator shall transmit a report to the Secretary that:
 1. Describes the requests;
 2. Provides an explanation as to why the requests could not be accommodated; and

3. Provides a time frame within which, if any, the airport will be able to accommodate the requests.
- b. Such report shall be due on either February 1 or August 1 of each year if the airport has been unable to accommodate the request(s) in the six month period prior to the applicable due date.

40. Access to Leaded Aviation Gasoline

- a. If 100-octane low lead aviation gasoline (100LL) was made available at an airport, at any time during calendar year 2022, an airport owner or operator may not restrict or prohibit the sale of, or self-fueling with, 100-octane low lead aviation gasoline.
- b. This requirement remains until the earlier of December 31, 2030, or the date on which the airport or any retail fuel seller at the airport makes available an unleaded aviation gasoline that has been authorized for use by the FAA as a replacement for 100-octane low lead aviation gasoline for use in nearly all piston-engine aircraft and engine models; and meets either an industry consensus standard or other standard that facilitates the safe use, production, and distribution of such unleaded aviation gasoline, as determined appropriate by the FAA.
- c. An airport owner or operator understands and agrees, that any violation of this grant assurance is subject to civil penalties as provided for in 49 U.S.C. § 46301(a)(8).

SUPPLEMENTAL CO-SPONSORSHIP AGREEMENT

This Supplemental Co-Sponsorship Agreement is entered into and effective this _____ day of _____, 2025, by and between the Grand Junction Regional Airport Authority (“Airport Authority”), and the City of Grand Junction (City).

RECITALS

- A. The Airport Authority is a political subdivision of the State of Colorado, organized pursuant to Section 41-3-101 et seq., C.R.S. The Airport Authority is a separate and distinct entity from the City.
- B. The Airport Authority is the owner and operator of the Grand Junction Regional Airport, located in Grand Junction, Colorado (“Airport”).
- C. Pursuant to the Title 49, U.S.C., Subtitle VII, Part B, as amended, the Airport Authority has applied for monies from the Federal Aviation Administration (“FAA”), for the construction of certain improvements upon the Airport, pursuant to the terms, plans and specifications set forth in AIP Grant No. 3-08-0027-085-2025 (“Project”).
- D. The FAA is willing to provide up to \$11,593,096 toward the estimated costs of the Projects, provided the City of Grand Junction and Mesa County execute the Grant Agreement as co-sponsors with the Airport Authority. The FAA is insisting that the City and County execute the Grant Agreement as co-sponsors for two primary reasons. First, the City and County have taxing authority, whereas the Airport Authority does not; accordingly, the FAA is insisting that the City and County execute the Grant Agreement so that public entities with taxing authority are liable for the financial commitments required of the Sponsor under the Grant Agreements, should the Airport Authority not be able to satisfy said financial commitments out of the net revenues generated by the operation of the Airport. In addition, the City and County have jurisdiction over the zoning and land use regulations of the real property surrounding the Airport, whereas the Airport Authority does not enjoy such zoning and land use regulatory authority. By their execution of the Grant Agreement, the City and County would be warranting to the FAA that the proposed improvements are consistent with their respective plans for the development of the area surrounding the Airport, and that they will take appropriate actions, including the adoption of zoning laws, to restrict the use of land surrounding the Airport to activities and purposes compatible with normal Airport operations.
- E. The City is willing to execute the Grant Agreement, as a co-sponsor, pursuant to the FAA’s request, subject to the terms and conditions of this Supplemental Co-Sponsorship Agreement between the City and Airport Authority.

Therefore, in consideration of the above Recitals and the mutual promises and representations set forth below, the City and Airport Authority hereby agree as follows:

AGREEMENT

1. By its execution of this Agreement, the City hereby agrees to execute the Grant Agreement, as a co-sponsor, pursuant to the FAA's request.
2. In consideration of the City's execution of the Grant Agreement, as co-sponsor, the Airport Authority hereby agrees to hold the City, its officers, employees, and agents, harmless from, and to indemnify the City, its officers, employees, and agents for:
 - (a) Any and all claims, lawsuits, damages, or liabilities, including reasonable attorney's fees and court costs, which at any time may be or are stated, asserted, or made against the City, its officers, employees, or agents, by the FAA or any other third party whomsoever, in any way arising out of, or related under the Grant Agreement, or the prosecution of the Projects contemplated by the Grant Agreement, regardless of whether said claims are frivolous or groundless, other than claims related to the City's covenant to take appropriate action, including the adoption of zoning laws, to restrict the use of land surrounding the Airport, over which the City has regulatory jurisdiction, to activities and purposes compatible with normal Airport operations, set forth in paragraph 21 of the Assurances incorporated by reference into the Grant Agreement ("Assurances"); and
 - (b) The failure of the Airport Authority, or any of the Airport Authority's officers, agents, employees, or contractors, to comply in any respect with any of the requirements, obligations or duties imposed on the Sponsor by the Grant Agreements, or reasonably related to or inferred there from, other than the Sponsor's zoning and land use obligations under Paragraph 21 of the Assurances, which are the City's responsibility for lands surrounding the Airport over which it has regulatory jurisdiction.
3. By its execution of this Agreement, the Airport Authority hereby agrees to comply with each and every requirement of the Sponsor, set forth in the Grant Agreement, or reasonably required in connection therewith, other than the zoning and land use requirements set forth in paragraph 21 of the Assurances, in recognition of the fact that the Airport Authority does not have the power to effect the zoning and land use regulations required by said paragraph.
4. By its execution of this Agreement and the Grant Agreement, the City agrees to comply with the zoning and land use requirements of paragraph 21 of the Assurances, with respect to all lands surrounding the Airport that are subject to the City's regulatory jurisdiction. The City also hereby warrants and represents that, in accordance with paragraph 6 of the Special Assurances; the Projects contemplated by the Grant Agreements are consistent with present plans of the City for the development of the area surrounding the Airport.
5. The parties hereby warrant and represent that, by the City's execution of the Grant Agreement, as a co-sponsor, pursuant to the FAA's request, the City is not a co-owner, agent, partner, joint venture, or representative of the Airport Authority in the ownership, management or administration of the Airport, and the Airport Authority is, and remains, the sole owner of the Airport, and solely responsible for the operation and management of the Airport.

Done and entered into on the date first set forth above.

GRAND JUNCTION REGIONAL AIRPORT AUTHORITY

By _____
Chief Executive Officer, Angela Padalecki
Grand Junction Regional Airport

CITY OF GRAND JUNCTION

By _____
Mike Bennett, City Manager
City of Grand Junction

RESOLUTION ___-25

AUTHORIZING THE INTERIM CITY MANAGER TO SIGN AND SUBMIT A GRANT AGREEMENT AND SUPPLEMENTAL CO-SPONSORSHIP AGREEMENT IN SUPPORT OF THE GRAND JUNCTION REGIONAL AIRPORT

RECITALS:

The Grand Junction Regional Airport Authority (GJRAA or Airport) has requested that the City Council consider and approve grant offer 3-08-0027-088-2025 ("Grant") for the Runway 12/30 construction pavement subbase schedule 2 construction work for the ongoing Runway Replacement Program. As creators and co-sponsors of the Airport Authority, both the County Commissioners and the City Council must also approve grant awards from the FAA to the Airport Authority. The Board of County Commissioners is scheduled to review the Grant on August 19, 2025.

The Grant is for \$11,593,096 which will provide funding for the construction of runway 12/30 as part of the on-going Runway replacement Program.

Having been fully advised in the premises, the City Council by and with this Resolution affirms and directs the execution of the Grant Agreement(s) from the Federal Aviation Administration in the amount of \$11,593,096 in support of the GJRAA as described generally herein and in more detail in Airport Infrastructure Grant Agreement Number 3-08-0027-088-2025.

NOW THEREFORE, the City Council of the City of Grand Junction authorizes the execution of the Grant Agreements(s) Number 3-08-0027-088-2025 in the amount of \$11,593,096 between the Federal Aviation Administration, Mesa County, the City of Grand Junction, and the Grand Junction Regional Airport Authority and the Co-Sponsorship Agreement between the City of Grand Junction and the Grand Junction Regional Airport Authority and authorize the City Manager and City Attorney to sign.

Cody Kennedy
President of the City Council

ATTEST:

Selestina Sandoval
City Clerk



Grand Junction City Council

Regular Session

Item #4.e.

Meeting Date: August 20, 2025
Presented By: Angela Padalecki
Department: City Manager's Office
Submitted By: Johnny McFarland, Asst. to the City Manager

Information

SUBJECT:

A Resolution Authorizing the City to Approve a Grant Offer in the Amount of \$675,458 as a Co-sponsor with the Grand Junction Regional Airport Authority for the Runway 12/30 95% Runway Design Grant Offer

RECOMMENDATION:

Staff recommends approval of this item.

EXECUTIVE SUMMARY:

This item is to approve AIP Grant offer No. 3-08-0027-086-2025 in the amount of \$675,458 for the Runway 12/30 Runway Design project and authorize the City Manager to execute the Co-Sponsorship Agreement.

BACKGROUND OR DETAILED INFORMATION:

Grant offer No.3-08-0027-086-2025 is for a Reimbursable Agreement for the FAA to fund the engineering design of the subbase pavement construction work as part of the ongoing runway replacement program. As creators and co-sponsors of the Airport Authority, both the County Commissioners and the City Council must also approve grant awards from the FAA to the Airport Authority. A meeting is scheduled to be reviewed by the County Board of Commissioners at the August 19, 2025, meeting.

FISCAL IMPACT:

There is no fiscal impact on the City if this item is approved.

SUGGESTED MOTION:

I move to (adopt/not adopt) Resolution 54-25, A Resolution Authorizing the City to Approve a Grant Offer for the Runway 12/30 95% Runway Design Grant offer in the

amount of \$675,458 and authorize the City Manager to execute the Co-Sponsorship Agreement as Co-sponsor with the Grand Junction Regional Airport Authority

Attachments

1. 2. GJT-NMG-3-08-0027-086-2025-Grant Agreement - unsigned
2. 3. Co-Sponsorship Agreement-city AIP 86
3. RES-AIP Grant 3-08-0027-086-2025 20250814



U.S. Department
of Transportation
Federal Aviation
Administration

Airports Division
Northwest Mountain Region
Colorado, Utah, Wyoming

Denver Airports District Office:
26805 E 68th Ave, Ste 224
Denver, CO 80249-6339

Ms. Linde Marshall, Chair
Grand Junction Regional Airport Authority
800 Eagle Drive
Grand Junction, CO 81506

Mr. Mike Bennett, City Manager
City of Grand Junction
250 North Fifth Street
Grand Junction, CO 81501

Mr. Cody Davis, Chair
Mesa County Board of Commissioners
544 Rood Avenue
Grand Junction, CO 81501

Dear Ms. Marshall, Mr. Bennett, and Commissioner Davis:

The Grant Offer for Airport Improvement Program (AIP) Project No. 3-08-0027-086-2025 at Grand Junction Regional Airport is attached for execution. This letter outlines the steps you must take to properly enter into this agreement and provides other useful information. Please read the conditions, special conditions, and assurances that comprise the grant offer carefully.

You may not make any modification to the text, terms or conditions of the grant offer.

Steps You Must Take to Enter Into Agreement.

To properly enter into this agreement, you must do the following:

1. The governing body must give authority to execute the grant to the individual(s) signing the grant, i.e., the person signing the document must be the sponsor's authorized representative(s) (hereinafter "authorized representative").
2. The authorized representative must execute the grant by adding their electronic signature to the appropriate certificate at the end of the agreement.
3. Once the authorized representative has electronically signed the grant, the sponsor's attorney(s) will automatically receive an email notification.
4. On the **same day or after** the authorized representative has signed the grant, the sponsor's attorney(s) will add their electronic signature to the appropriate certificate at the end of the agreement.

5. If there are co-sponsors, the authorized representative(s) and sponsor's attorney(s) must follow the above procedures to fully execute the grant and finalize the process. Signatures must be obtained and finalized no later than **August 31, 2025**.
6. The fully executed grant will then be automatically sent to all parties as an email attachment.

Payment. Subject to the requirements in 2 CFR § 200.305 (Federal Payment), each payment request for reimbursement under this grant must be made electronically via the Delphi eInvoicing System. Please see the attached Grant Agreement for more information regarding the use of this System.

Project Timing. The terms and conditions of this agreement require you to complete the project without undue delay and no later than the Period of Performance end date (1,460 days from the grant execution date). We will be monitoring your progress to ensure proper stewardship of these Federal funds. We expect you to submit payment requests for reimbursement of allowable incurred project expenses consistent with project progress. Your grant may be placed in "inactive" status if you do not make draws on a regular basis, which will affect your ability to receive future grant offers. Costs incurred after the Period of Performance ends are generally not allowable and will be rejected unless authorized by the FAA in advance.

Reporting. Until the grant is completed and closed, you are responsible for submitting formal reports as follows:

- For all grants, you must submit by December 31st of each year this grant is open:
 1. A signed/dated SF-270 (Request for Advance or Reimbursement for non-construction projects) or SF-271 or equivalent (Outlay Report and Request for Reimbursement for Construction Programs), and
 2. An SF-425 (Federal Financial Report).
- For non-construction projects, you must submit [FAA Form 5100-140, Performance Report](#) within 30 days of the end of the Federal fiscal year.
- For construction projects, you must submit [FAA Form 5370-1, Construction Progress and Inspection Report](#), within 30 days of the end of each Federal fiscal quarter.

Audit Requirements. As a condition of receiving Federal assistance under this award, you must comply with audit requirements as established under 2 CFR Part 200. Subpart F requires non-Federal entities that expend \$1,000,000 or more in Federal awards to conduct a single or program specific audit for that year. Note that this includes Federal expenditures made under other Federal-assistance programs. Please take appropriate and necessary action to ensure your organization will comply with applicable audit requirements and standards.

Closeout. Once the project(s) is completed and all costs are determined, we ask that you work with your FAA contact indicated below to close the project without delay and submit the necessary final closeout documentation as required by your Region/Airports District Office.

FAA Contact Information. Todd Minnich, (303) 342-1279, todd.e.minnich@faa.gov is the assigned program manager for this grant and is readily available to assist you and your designated representative with the requirements stated herein.

We sincerely value your cooperation in these efforts and look forward to working with you to complete this important project.

Sincerely,

Jesse A. Lyman
Manager, Denver Airports District Office



U.S. Department
of Transportation
Federal Aviation
Administration

FEDERAL AVIATION ADMINISTRATION AIRPORT IMPROVEMENT PROGRAM (AIP)

FY 2025 AIP

GRANT AGREEMENT

Part I - Offer

Federal Award Offer Date

Airport/Planning Area

Grand Junction Regional Airport

Airport Infrastructure Grant
Number

3-08-0027-086-2025 [Contract Number: DOT-FA25NM-1113]

Unique Entity Identifier

P2MUNC6N7YM6

TO: Grand Junction Regional Airport Authority, City of Grand Junction, Colorado, and County of Mesa, Colorado

(herein called the "Sponsor") (For Co-Sponsors, list all Co-Sponsor names. The word "Sponsor" in this Grant Agreement also applies to a Co-Sponsor.)

FROM: **The United States of America** (acting through the Federal Aviation Administration, herein called the "FAA")

WHEREAS, the Sponsor has submitted to the FAA a Project Application dated December 10, 2024, for a grant of Federal funds for a project at or associated with the Grand Junction Regional Airport, which is included as part of this Grant Agreement; and

WHEREAS, the FAA has approved a project for the Grand Junction Regional Airport (herein called the "Project") consisting of the following:

Shift Runway 11/29 (95% Runway Design - Phase 2)

which is more fully described in the Project Application.

NOW THEREFORE, Pursuant to and for the purpose of carrying out the Title 49, United States Code (U.S.C.), Chapters 471 and 475; 49 U.S.C. §§ 40101 et seq., and 48103; FAA Reauthorization Act of 2018 (Public Law Number (P.L.) 115-254); the Department of Transportation Appropriations Act, 2021 (P.L.

116-260, Division L); the Consolidated Appropriations Act, 2022 (P.L. 117-103); Consolidated Appropriations Act, 2023 (P.L. 117-328); Consolidated Appropriations Act, 2024 (P.L. 118-42); FAA Reauthorization Act of 2024 (P.L. 118-63); and the representations contained in the Project Application; and in consideration of: (a) the Sponsor’s adoption and ratification of the Grant Assurances dated April 2025, interpreted and applied consistent with the FAA Reauthorization Act of 2024; (b) the Sponsor’s acceptance of this Offer; and (c) the benefits to accrue to the United States and the public from the accomplishment of the Project and compliance with the Grant Assurance and conditions as herein provided;

THE FEDERAL AVIATION ADMINISTRATION, FOR AND ON BEHALF OF THE UNITED STATES, HEREBY OFFERS AND AGREES to pay (95) % of the allowable costs incurred accomplishing the Project as the United States share of the Project.

Assistance Listings Number (Formerly CFDA Number): 20.106

This Offer is made on and SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

CONDITIONS

1. **Maximum Obligation.** The maximum obligation of the United States payable under this Offer is \$675,458.

The following amounts represent a breakdown of the maximum obligation for the purpose of establishing allowable amounts for any future grant amendment, which may increase the foregoing maximum obligation of the United States under the provisions of 49 U.S.C. § 47108(b):

\$0 for planning

\$675,458 for airport development or noise program implementation; and,

\$0 for land acquisition.

2. **Grant Performance.** This Grant Agreement is subject to the following Federal award requirements:

- a. Period of Performance:

1. Shall start on the date the Sponsor formally accepts this Agreement and is the date signed by the last Sponsor signatory to the Agreement. The end date of the Period of Performance is 4 years (1,460 calendar days) from the date of acceptance. The Period of Performance end date shall not affect, relieve, or reduce Sponsor obligations and assurances that extend beyond the closeout of this Grant Agreement.
2. Means the total estimated time interval between the start of an initial Federal award and the planned end date, which may include one or more funded portions or budget periods (2 Code of Federal Regulations (CFR) § 200.1) except as noted in 49 U.S.C § 47142(b).

- b. Budget Period:

1. For this Grant is 4 years (1,460 calendar days) and follows the same start and end date as the Period of Performance provided in paragraph 2(a)(1). Pursuant to 2 CFR § 200.403(h), the Sponsor may charge to the Grant only allowable costs incurred during the Budget Period except as noted in 49 U.S.C § 47142(b).
2. Means the time interval from the start date of a funded portion of an award to the end date of that funded portion during which the Sponsor is authorized to expend the funds awarded, including any funds carried forward or other revisions pursuant to 2 CFR § 200.308.

c. Close Out and Termination

Unless the FAA authorizes a written extension, the Sponsor must submit all Grant closeout documentation and liquidate (pay-off) all obligations incurred under this award no later than 120 calendar days after the end date of the Period of Performance. If the Sponsor does not submit all required closeout documentation within this time period, the FAA will proceed to close out the grant within one year of the Period of Performance end date with the information available at the end of 120 days (2 CFR § 200.344). The FAA may terminate this agreement and all of its obligations under this agreement if any of the following occurs:

- (a) (1) The Sponsor fails to obtain or provide any Sponsor grant contribution as required by the agreement;
- (2) A completion date for the Project or a component of the Project is listed in the agreement and the Recipient fails to meet that milestone by six months after the date listed in the agreement;
- (3) The Sponsor fails to comply with the terms and conditions of this agreement, including a material failure to comply with the Project Schedule even if it is beyond the reasonable control of the Sponsor;
- (4) Circumstances cause changes to the Project that the FAA determines are inconsistent with the FAA's basis for selecting the Project to receive a grant; or
- (5) The FAA determines that termination of this agreement is in the public interest.
- (b) In terminating this agreement under this section, the FAA may elect to consider only the interests of the FAA.
- (c) The Sponsor may request that the FAA terminate the agreement under this section.

3. **Ineligible or Unallowable Costs.** In accordance with 49 U.S.C. § 47110, the Sponsor is prohibited from including any costs in the grant funded portions of the project that the FAA has determined to be ineligible or unallowable, including costs incurred to carry out airport development implementing policies and initiatives repealed by Executive Order 14148, provided such costs are not otherwise permitted by statute.
4. **Indirect Costs - Sponsor.** The Sponsor may charge indirect costs under this award by applying the indirect cost rate identified in the project application as accepted by the FAA, to allowable costs for Sponsor direct salaries and wages.
5. **Determining the Final Federal Share of Costs.** The United States' share of allowable project costs will be made in accordance with 49 U.S.C. § 47109, the regulations, policies, and procedures of the Secretary of Transportation ("Secretary"), and any superseding legislation. Final determination of the United States' share will be based upon the final audit of the total amount of allowable project costs and settlement will be made for any upward or downward adjustments to the Federal share of costs.
6. **Completing the Project Without Delay and in Conformance with Requirements.** The Sponsor must carry out and complete the project without undue delays and in accordance with this Agreement, 49

U.S.C. Chapters 471 and 475, the regulations, policies, and procedures of the Secretary. Per 2 CFR § 200.308, the Sponsor agrees to report and request prior FAA approval for any disengagement from performing the project that exceeds three months or a 25 percent reduction in time devoted to the project. The report must include a reason for the project stoppage. The Sponsor also agrees to comply with the grant assurances, which are part of this Agreement.

7. **Amendments or Withdrawals before Grant Acceptance.** The FAA reserves the right to amend or withdraw this offer at any time prior to its acceptance by the Sponsor.
8. **Offer Expiration Date.** This offer will expire and the United States will not be obligated to pay any part of the costs of the project unless this offer has been accepted by the Sponsor on or before August 31, 2025, or such subsequent date as may be prescribed in writing by the FAA.
9. **Improper Use of Federal Funds and Mandatory Disclosure.**
 - a. The Sponsor must take all steps, including litigation if necessary, to recover Federal funds spent fraudulently, wastefully, or in violation of Federal antitrust statutes, or misused in any other manner for any project upon which Federal funds have been expended. For the purposes of this Grant Agreement, the term “Federal funds” means funds however used or dispersed by the Sponsor, that were originally paid pursuant to this or any other Federal grant agreement. The Sponsor must obtain the approval of the Secretary as to any determination of the amount of the Federal share of such funds. The Sponsor must return the recovered Federal share, including funds recovered by settlement, order, or judgment, to the Secretary. The Sponsor must furnish to the Secretary, upon request, all documents and records pertaining to the determination of the amount of the Federal share or to any settlement, litigation, negotiation, or other efforts taken to recover such funds. All settlements or other final positions of the Sponsor, in court or otherwise, involving the recovery of such Federal share require advance approval by the Secretary.
 - b. The Sponsor, a recipient, and a subrecipient under this Federal grant must promptly comply with the mandatory disclosure requirements as established under 2 CFR § 200.113, including reporting requirements related to recipient integrity and performance in accordance with Appendix XII to 2 CFR Part 200.
10. **United States Not Liable for Damage or Injury.** The United States is not responsible or liable for damage to property or injury to persons which may arise from, or be incident to, compliance with this Grant Agreement.
11. **System for Award Management (SAM) Registration and Unique Entity Identifier (UEI).**
 - a. Requirement for System for Award Management (SAM): Unless the Sponsor is exempted from this requirement under 2 CFR § 25.110, the Sponsor must maintain the currency of its information in the SAM until the Sponsor submits the final financial report required under this Grant, or receives the final payment, whichever is later. This requires that the Sponsor review and update the information at least annually after the initial registration and more frequently if required by changes in information or another award term. Additional information about registration procedures may be found at the SAM website (currently at <http://www.sam.gov>).
 - b. Unique entity identifier (UEI) means a 12-character alpha-numeric value used to identify a specific commercial, nonprofit or governmental entity. A UEI may be obtained from SAM.gov at <https://sam.gov/content/entity-registration>.

12. **Electronic Grant Payment(s).** Unless otherwise directed by the FAA, the Sponsor must make each payment request under this Agreement electronically via the Delphi eInvoicing System for Department of Transportation (DOT) Financial Assistance Awardees.
13. **Informal Letter Amendment of AIP Projects.** If, during the life of the project, the FAA determines that the maximum grant obligation of the United States exceeds the expected needs of the Sponsor by \$25,000 or five percent (5%), whichever is greater, the FAA can issue a letter amendment to the Sponsor unilaterally reducing the maximum obligation.

The FAA can also issue a letter to the Sponsor increasing the maximum obligation if there is an overrun in the total actual eligible and allowable project costs to cover the amount of the overrun provided it will not exceed the statutory limitations for grant amendments. The FAA's authority to increase the maximum obligation does not apply to the "planning" component of Condition No. 1, Maximum Obligation.

The FAA can also issue an informal letter amendment that modifies the grant description to correct administrative errors or to delete work items if the FAA finds it advantageous and in the best interests of the United States.

An informal letter amendment has the same force and effect as a formal grant amendment.

14. **Environmental Standards.** The Sponsor is required to comply with all applicable environmental standards, as further defined in the Grant Assurances, for all projects in this grant. If the Sponsor fails to comply with this requirement, the FAA may suspend, cancel, or terminate this Grant Agreement.
15. **Financial Reporting and Payment Requirements.** The Sponsor will comply with all Federal financial reporting requirements and payment requirements, including submittal of timely and accurate reports.
16. **Buy American.** Unless otherwise approved in advance by the FAA, in accordance with 49 U.S.C. § 50101, the Sponsor will not acquire or permit any contractor or subcontractor to acquire any steel or manufactured goods produced outside the United States to be used for any project for which funds are provided under this Grant. The Sponsor will include a provision implementing Buy American in every contract and subcontract awarded under this Grant.
17. **Build America, Buy America.** The Sponsor must comply with the requirements under the Build America, Buy America Act (P.L. 117-58).
18. **Maximum Obligation Increase.** In accordance with 49 U.S.C. § 47108(b)(3), as amended, the maximum obligation of the United States, as stated in Condition No. 1, Maximum Obligation, of this Grant:
- a. May not be increased for a planning project;
 - b. May be increased by not more than 15 percent for development projects, if funds are available;
 - c. May be increased by not more than the greater of the following for a land project, if funds are available:
 1. 15 percent; or
 2. 25 percent of the total increase in allowable project costs attributable to acquiring an interest in the land.

If the Sponsor requests an increase, any eligible increase in funding will be subject to the United States Government share as provided in 49 U.S.C. § 47110, or other superseding legislation if applicable, for the fiscal year appropriation with which the increase is funded. The FAA is not responsible for the same Federal share provided herein for any amount increased over the initial grant amount. The FAA may adjust the Federal share as applicable through an informal letter of amendment.

19. Audits for Sponsors.

PUBLIC SPONSORS. The Sponsor must provide for a Single Audit or program-specific audit in accordance with 2 CFR Part 200. The Sponsor must submit the audit reporting package to the Federal Audit Clearinghouse on the Federal Audit Clearinghouse's Internet Data Entry System at <http://harvester.census.gov/facweb/>. Upon request of the FAA, the Sponsor shall provide one copy of the completed audit to the FAA. Sponsors that expend less than \$1,000,000 in Federal awards and are exempt from Federal audit requirements must make records available for review or audit by the appropriate Federal agency officials, State, and Government Accountability Office. The FAA and other appropriate Federal agencies may request additional information to meet all Federal audit requirements.

20. Suspension or Debarment. When entering into a "covered transaction" as defined by 2 CFR § 180.200, the Sponsor must:

- a. Verify the non-Federal entity is eligible to participate in this Federal program by:
 1. Checking the System for Award Management (SAM.gov) exclusions to determine if the non-Federal entity is excluded or disqualified; or
 2. Collecting a certification statement from the non-Federal entity attesting they are not excluded or disqualified from participating; or
 3. Adding a clause or condition to covered transactions attesting the individual or firm are not excluded or disqualified from participating.
- b. Require prime contractors to comply with 2 CFR § 180.330 when entering into lower-tier transactions with their contractors and sub-contractors.
- c. Immediately disclose in writing to the FAA whenever (1) the Sponsor learns they have entered into a covered transaction with an ineligible entity or (2) the Public Sponsor suspends or debars a contractor, person, or entity.

21. Ban on Texting While Driving.

- a. In accordance with Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving, October 1, 2009, and DOT Order 3902.10, Text Messaging While Driving, December 30, 2009, the Sponsor is encouraged to:
 1. Adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers including policies to ban text messaging while driving when performing any work for, or on behalf of, the Federal government, including work relating to a grant or subgrant.
 2. Conduct workplace safety initiatives in a manner commensurate with the size of the business, such as:
 - i. Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and

- ii. Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.
- b. The Sponsor must insert the substance of this clause on banning texting while driving in all subgrants, contracts, and subcontracts funded with this Grant.

22. **Trafficking in Persons.**

1. *Posting of contact information.*
 - a. The Sponsor must post the contact information of the national human trafficking hotline (including options to reach out to the hotline such as through phone, text, or TTY) in all public airport restrooms.
2. *Provisions applicable to a recipient that is a private entity.*
 - a. Under this Grant, the recipient, its employees, subrecipients under this Grant, and subrecipient's employees must not engage in:
 - i. Severe forms of trafficking in persons;
 - ii. The procurement of a commercial sex act during the period of time that the grant or cooperative agreement is in effect;
 - iii. The use of forced labor in the performance of this grant; or any subaward; or
 - iv. Acts that directly support or advance trafficking in persons, including the following acts:
 - a) Destroying, concealing, removing, confiscating, or otherwise denying an employee access to that employee's identity or immigration documents;
 - b) Failing to provide return transportation of pay for return transportation costs to an employee from a country outside the United States to the country from which the employee was recruited upon the end of employment if requested by the employee, unless:
 1. Exempted from the requirement to provide or pay for such return transportation by the federal department or agency providing or entering into the grant; or
 2. The employee is a victim of human trafficking seeking victim services or legal redress in the country of employment or witness in a human trafficking enforcement action;
 - c) Soliciting a person for the purpose of employment, or offering employment, by means of materially false or fraudulent pretenses, representations, or promises regarding that employment;
 - d) Charging recruited employees a placement or recruitment fee; or
 - e) Providing or arranging housing that fails to meet the host country's housing and safety standards.
 - b. The FAA may unilaterally terminate this Grant or take any remedial actions authorized by 22 U.S.C. § 7104b(c), without penalty, if any private entity under this Grant:
 - i. Is determined to have violated a prohibition in paragraph (2)(a) of this Grant; or
 - ii. Has an employee that is determined to have violated a prohibition in paragraph(2)(a) of this Grant through conduct that is either:
 - a) Associated with the performance under this Grant; or

- b) Imputed to the recipient or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR Part 180, "OMB Guidelines to Agencies on Government-wide Debarment and Suspension (Nonprocurement)," as implemented by the FAA at 2 CFR Part 1200.
3. *Provisions applicable to a recipient other than a private entity.*
- a. The FAA may unilaterally terminate this award or take any remedial actions authorized by 22 U.S.C. § 7104b(c), without penalty, if subrecipient than is a private entity under this award:
 - i. Is determined to have violated a prohibition in paragraph (2)(a) of this Grant or
 - ii. Has an employee that is determined to have violated a prohibition in paragraph (2)(a) of this Grant through conduct that is either:
 - a) Associated with the performance under this Grant; or
 - b) Imputed to the recipient or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR Part 180, "OMB Guidelines to Agencies on Government-wide Debarment and Suspension (Nonprocurement)," as implemented by the FAA at 2 CFR Part 1200.
4. *Provisions applicable to any recipient.*
- a. The recipient must inform the FAA and the DOT Inspector General immediately of any information you receive from any source alleging a violation of a prohibition in paragraph (2)(a) of this Grant.
 - b. The FAA's right to unilaterally terminate this Grant as described in paragraphs (2)(b) or (3)(a) of this Grant, implements the requirements of 22 U.S.C. chapter 78, and is in addition to all other remedies for noncompliance that are available to the FAA under this Grant.
 - c. The recipient must include the requirements of paragraph (2)(a) of this Grant award term in any subaward it makes to a private entity.
 - d. If applicable, the recipient must also comply with the compliance plan and certification requirements in 2 CFR 175.105(b).
5. *Definitions. For purposes of this Grant award, term:*
- a. "Employee" means either:
 - i. An individual employed by the recipient or a subrecipient who is engaged in the performance of the project or program under this Grant; or
 - ii. Another person engaged in the performance of the project or program under this Grant and not compensated by the recipient including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing requirements.

- b. "Private Entity" means:
- i. Any entity, including for-profit organizations, nonprofit organizations, institutions of higher education, and hospitals. The term does not include foreign public entities, Indian Tribes, local governments, or states as defined in 2 CFR 200.1.
 - ii. The terms "severe forms of trafficking in persons," "commercial sex act," "sex trafficking," "Abuse or threatened abuse of law or legal process," "coercion," "debt bondage," and "involuntary servitude" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. § 7102).
23. **AIP Funded Work Included in a PFC Application.** Within 120 days of acceptance of this Grant Agreement, the Sponsor must submit to the FAA an amendment to any approved Passenger Facility Charge (PFC) application that contains an approved PFC project also covered under this Grant Agreement as described in the project application. The airport sponsor may not make any expenditure under this Grant Agreement until project work addressed under this Grant Agreement is removed from an approved PFC application by amendment.
24. **Exhibit "A" Property Map.** The Exhibit "A" Property Map dated February 2019, is incorporated herein by reference or is submitted with the project application and made part of this Grant Agreement.
25. **Employee Protection from Reprisal.** In accordance with 2 CFR § 200.217 and 41 U.S.C. § 4701, an employee of a grantee, subgrantee contractor, recipient or subrecipient must not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing to a person or body described in paragraph (a)(2) of 41 U.S.C. 4712 information that the employee reasonably believes is evidence of gross mismanagement of a Federal contract or grant, a gross waste of Federal funds, an abuse of authority relating to a Federal contract or grant, a substantial and specific danger to public health or safety, or a violation of law, rule, or regulation related to a Federal contract (including the competition for or negotiation of a contract) or grant. The grantee, subgrantee, contractor, recipient, or subrecipient must inform their employees in writing of employee whistleblower rights and protections under 41 U.S.C. § 4712. See statutory requirements for whistleblower protections at 10 U.S.C. § 4701, 41 U.S.C. § 4712, 41 U.S.C. § 4304, and 10 U.S.C. § 4310.
26. **Co-Sponsor.** The Co-Sponsors understand and agree that they jointly and severally adopt and ratify the representations and assurances contained therein and that the word "Sponsor" as used in the application and other assurances is deemed to include all Co-Sponsors.
27. **Prohibited Telecommunications and Video Surveillance Services and Equipment.** The Sponsor agrees to comply with mandatory standards and policies relating to use and procurement of certain telecommunications and video surveillance services or equipment in compliance with the National Defense Authorization Act [P.L. 115-232 § 889(f)(1)] and 2 CFR § 200.216.
28. **Critical Infrastructure Security and Resilience.** The Sponsor acknowledges that it has considered and addressed physical and cybersecurity and resilience in its project planning, design, and oversight, as determined by the DOT and the Department of Homeland Security (DHS). For airports that do not have specific DOT or DHS cybersecurity requirements, the FAA encourages the voluntary adoption of the cybersecurity requirements from the Transportation Security Administration and Federal Security Director identified for security risk Category X airports.
29. **Title VI of the Civil Rights Act.** As a condition of a grant award, the Sponsor shall demonstrate that it complies with the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq) and

implementing regulations (49 CFR part 21), the Airport and Airway Improvement Act of 1982 (49 U.S.C. § 47123), the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.), Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794 et seq.), the Americans with Disabilities Act of 1990 (42 U.S.C. § 12101, et seq.), U.S. Department of Transportation and Federal Aviation Administration (FAA) Assurances, and other relevant civil rights statutes, regulations, or authorities, including any amendments or updates thereto. This may include, as applicable, providing a current Title VI Program Plan to the FAA for approval, in the format and according to the timeline required by the FAA, and other information about the communities that will be benefited and impacted by the project. A completed FAA Title VI Pre-Grant Award Checklist is required for every grant application, unless excused by the FAA. The Sponsor shall affirmatively ensure that when carrying out any project supported by this grant that it complies with all federal nondiscrimination and civil rights laws based on race, color, national origin, sex, creed, age, disability, genetic information, in consideration for federal financial assistance. The Department's and FAA's Office of Civil Rights may provide resources and technical assistance to recipients to ensure full and sustainable compliance with Federal civil rights requirements. Failure to comply with civil rights requirements will be considered a violation of the agreement or contract and be subject to any enforcement action as authorized by law.

30. **FAA Reauthorization Act of 2024.** This grant agreement is subject to the terms and conditions contained herein including the terms known as the Grant Assurances as they were published in the Federal Register on April 2025. On May 16, 2024, the FAA Reauthorization Act of 2024 made certain amendments to 49 U.S.C. chapter 471. The Reauthorization Act will require FAA to make certain amendments to the assurances in order to best achieve consistency with the statute. Federal law requires that FAA publish any amendments to the assurances in the Federal Register along with an opportunity to comment. In order not to delay the offer of this grant, the existing assurances are attached herein; however, FAA shall interpret and apply these assurances consistent with the Reauthorization Act. To the extent there is a conflict between the assurances and Federal statutes, the statutes shall apply. The full text of the FAA Reauthorization Act of 2024 is at <https://www.congress.gov/bill/118th-congress/house-bill/3935/text>.
31. **Applicable Federal Anti-Discrimination Laws.** The sponsor agrees:
- a. that its compliance in all respects with all applicable Federal anti-discrimination laws is material to the government's payment decisions for purposes of section 3729(b)(4) of title 31, United States Code; and
 - b. to certify that it does not operate any programs promoting diversity, equity, and inclusion (DEI) that violate any applicable Federal anti-discrimination laws.
32. **Federal Law and Public Policy Requirements.** The Sponsor shall ensure that Federal funding is expended in full accordance with the United States Constitution, Federal law, and statutory and public policy requirements: including but not limited to, those protecting free speech, religious liberty, public welfare, the environment, and prohibiting discrimination; and the Sponsor will cooperate with Federal officials in the enforcement of Federal law, including cooperating with and not impeding U.S. Immigration and Customs Enforcement (ICE) and other Federal offices and components of the Department of Homeland Security in and the enforcement of Federal immigration law.

33. **National Airspace System Requirements**

- a. The Sponsor shall cooperate with FAA activities installing, maintaining, replacing, improving, or operating equipment and facilities in or supporting the National Airspace System, including waiving permitting requirements and other restrictions affecting those activities to the maximum extent possible, and assisting the FAA in securing waivers of permitting or other restrictions from other authorities. The Sponsor shall not take actions that frustrate or prevent the FAA from installing, maintaining, replacing, improving, or operating equipment and facilities in or supporting the National Airspace System.
- b. If FAA determines that the Sponsor has violated subsection (a), the FAA may impose a remedy, including:
 - (1) additional conditions on the award;
 - (2) consistent with 49 U.S.C chapter 471, any remedy permitted under 2 C.F.R. 200.339–200.340, including withholding of payments; disallowance of previously reimbursed costs, requiring refunds from the Recipient to the DOT; suspension or termination of the award; or suspension and debarment under 2 C.F.R. part 180; or
 - (3) any other remedy legally available.
- c. (In imposing a remedy under this condition, the FAA may elect to consider the interests of only the FAA.
- d. The Sponsor acknowledges that amounts that the FAA requires the Sponsor to refund to the FAA due to a remedy under this condition constitute a debt to the Federal Government that the FAA may collect under 2 C.F.R. 200.346 and the Federal Claims Collection Standards (31 C.F.R. parts 900–904).

34. **Signage Costs for Construction Projects.** The Sponsor agrees that it will require the prime contractor of a Federally- assisted airport improvement project to post signs consistent with a DOT/FAA-prescribed format, as may be requested by the DOT/FAA, and further agrees to remove any signs posted in response to requests received prior to February 1, 2025.

35. **Title 8 - U.S.C., Chapter 12, Subchapter II - Immigration.** The sponsor will follow applicable federal laws pertaining to Subchapter 12, and be subject to the penalties set forth in 8 U.S.C. § 1324, Bringing in and harboring certain aliens, and 8 U.S.C. § 1327, Aiding or assisting certain aliens to enter

SPECIAL CONDITIONS

36. **Plans and Specifications Prior to Bidding.** The Sponsor agrees that it will submit plans and specifications for FAA review prior to advertising for bids.
37. **Design Grant.** This Grant Agreement is being issued in order to complete the design of the project. The Sponsor understands and agrees that within two (2) years after the design is completed that the

Sponsor will accept, subject to the availability of the amount of Federal funding identified in the Airport Capital Improvement Plan (ACIP), a grant to complete the construction of the project in order to provide a useful and usable unit of work. The Sponsor also understands that if the FAA has provided Federal funding to complete the design for the project, and the Sponsor has not completed the design within four (4) years from the execution of this Grant Agreement, the FAA may suspend or terminate grants related to the design.

38. **Buy American Executive Orders.** The Sponsor agrees to abide by applicable Executive Orders in effect at the time this Grant Agreement is executed, including Executive Order 14005, Ensuring the Future Is Made in All of America by All of America's Workers.
39. **Duffy Plaintiff Special Term.** Pursuant to the court's preliminary injunction order in State of California v. Duffy, 1:25-cv-00208-JJM-PAS (D.R.I.) (June 19, 2025), DOT will not impose or enforce the challenged immigration enforcement condition* or any materially similar terms and conditions, to any grant funds awarded, directly or indirectly, to Plaintiff States or local government entities within those States (collectively referred to as "Plaintiff State Entities"), or otherwise rescind, withhold, terminate, or take other adverse action, absent specific statutory authority, based on the challenged immigration enforcement condition while DOT is subject to an injunction. DOT will not require Plaintiff State Entities to make any certification or other representation related to compliance with the challenged immigration enforcement condition nor will DOT construe acceptance of funding from DOT as certification as to the challenged immigration enforcement condition.

*The challenged immigration enforcement condition:

"[T]he Recipient will cooperate with Federal officials in the enforcement of Federal law, including cooperating with and not impeding U.S. Immigration and Customs Enforcement (ICE) and other Federal offices and components of the Department of Homeland Security in the enforcement of Federal immigration law."

The Sponsor's acceptance of this Offer and ratification and adoption of the Project Application incorporated herein shall be evidenced by execution of this instrument by the Sponsor, as hereinafter provided, and this Offer and Acceptance shall comprise a Grant Agreement, constituting the contractual obligations and rights of the United States and the Sponsor with respect to the accomplishment of the Project and compliance with the Grant Assurances, terms, and conditions as provided herein. Such Grant Agreement shall become effective upon the Sponsor's acceptance of this Offer.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.¹

**UNITED STATES OF AMERICA
FEDERAL AVIATION ADMINISTRATION**

(Signature)

(Typed Name)

(Title of FAA Official)

¹ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

Part II - Acceptance

The Sponsor does hereby ratify and adopt all assurances, statements, representations, warranties, covenants, and agreements contained in the Project Application and incorporated materials referred to in the foregoing Offer, and does hereby accept this Offer and by such acceptance agrees to comply with all of the Grant Assurances, terms, and conditions in this Offer and in the Project Application.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.²

Dated _____

**GRAND JUNCTION REGIONAL AIRPORT
AUTHORITY**

(Name of Sponsor)

(Signature of Sponsor's Authorized Official)

By: _____

(Typed Name of Sponsor's Authorized Official)

Title: _____

(Title of Sponsor's Authorized Official)

² Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

CERTIFICATE OF SPONSOR’S ATTORNEY

I, _____, acting as Attorney for the Sponsor do hereby certify:

That in my opinion the Sponsor is empowered to enter into the foregoing Grant Agreement under the laws of the State of Colorado. Further, I have examined the foregoing Grant Agreement and the actions taken by said Sponsor and Sponsor’s official representative, who has been duly authorized to execute this Grant Agreement, which is in all respects due and proper and in accordance with the laws of the said State; and Title 49, United States Code (U.S.C.), Chapters 471 and 475; 49 U.S.C. §§ 40101 et seq., and 48103; FAA Reauthorization Act of 2018 (P.L. 115-254); the Department of Transportation Appropriations Act, 2021 (P.L. 116-260, Division L); the Consolidated Appropriations Act, 2022 (P.L. 117-103); Consolidated Appropriations Act, 2023 (P.L. 117-328); Consolidated Appropriations Act, 2024 (P.L. 118-42); FAA Reauthorization Act of 2024 (P.L. 118-63); and the representations contained in the Project Application. In addition, for grants involving projects to be carried out on property not owned by the Sponsor, there are no legal impediments that will prevent full performance by the Sponsor. Further, it is my opinion that the said Grant Agreement constitutes a legal and binding obligation of the Sponsor in accordance with the terms thereof.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.³

Dated at _____

By: _____
(Signature of Sponsor’s Attorney)

³ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

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I declare under penalty of perjury that the foregoing is true and correct.⁴

Dated _____

CITY OF GRAND JUNCTION, COLORADO

(Name of Sponsor)

(Signature of Sponsor's Authorized Official)

By: _____

(Typed Name of Sponsor's Authorized Official)

Title: _____

(Title of Sponsor's Authorized Official)

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I declare under penalty of perjury that the foregoing is true and correct.⁵

Dated at _____

By: _____
(Signature of Sponsor’s Attorney)

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The Sponsor does hereby ratify and adopt all assurances, statements, representations, warranties, covenants, and agreements contained in the Project Application and incorporated materials referred to in the foregoing Offer, and does hereby accept this Offer and by such acceptance agrees to comply with all of the Grant Assurances, terms, and conditions in this Offer and in the Project Application.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.⁶

Dated _____

COUNTY OF MESA, COLORADO

(Name of Sponsor)

(Signature of Sponsor's Authorized Official)

By: _____

(Typed Name of Sponsor's Authorized Official)

Title: _____

(Title of Sponsor's Authorized Official)

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CERTIFICATE OF SPONSOR’S ATTORNEY

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That in my opinion the Sponsor is empowered to enter into the foregoing Grant Agreement under the laws of the State of Colorado. Further, I have examined the foregoing Grant Agreement and the actions taken by said Sponsor and Sponsor’s official representative, who has been duly authorized to execute this Grant Agreement, which is in all respects due and proper and in accordance with the laws of the said State; and Title 49, United States Code (U.S.C.), Chapters 471 and 475; 49 U.S.C. §§ 40101 et seq., and 48103; FAA Reauthorization Act of 2018 (P.L. 115-254); the Department of Transportation Appropriations Act, 2021 (P.L. 116-260, Division L); the Consolidated Appropriations Act, 2022 (P.L. 117-103); Consolidated Appropriations Act, 2023 (P.L. 117-328); Consolidated Appropriations Act, 2024 (P.L. 118-42); FAA Reauthorization Act of 2024 (P.L. 118-63); and the representations contained in the Project Application. In addition, for grants involving projects to be carried out on property not owned by the Sponsor, there are no legal impediments that will prevent full performance by the Sponsor. Further, it is my opinion that the said Grant Agreement constitutes a legal and binding obligation of the Sponsor in accordance with the terms thereof.

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I declare under penalty of perjury that the foregoing is true and correct.⁷

Dated at _____

By: _____
(Signature of Sponsor’s Attorney)

⁷ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

ASSURANCES

AIRPORT SPONSORS

A. General.

1. These assurances shall be complied with in the performance of grant agreements for airport development, airport planning, and noise compatibility program grants for airport sponsors.
2. These assurances are required to be submitted as part of the project application by sponsors requesting funds under the provisions of Title 49, U.S.C., subtitle VII, as amended. As used herein, the term "public agency sponsor" means a public agency with control of a public-use airport; the term "private sponsor" means a private owner of a public-use airport; and the term "sponsor" includes both public agency sponsors and private sponsors.
3. Upon acceptance of this grant offer by the sponsor, these assurances are incorporated in and become part of this Grant Agreement.

B. Duration and Applicability.

1. Airport Development or Noise Compatibility Program Projects Undertaken by a Public Agency Sponsor.

The terms, conditions and assurances of this Grant Agreement shall remain in full force and effect throughout the useful life of the facilities developed or equipment acquired for an airport development or noise compatibility program project, or throughout the useful life of the project items installed within a facility under a noise compatibility program project, but in any event not to exceed twenty (20) years from the date of acceptance of a grant offer of Federal funds for the project. However, there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport. There shall be no limit on the duration of the terms, conditions, and assurances with respect to real property acquired with federal funds. Furthermore, the duration of the Civil Rights assurance shall be specified in the assurances.

2. Airport Development or Noise Compatibility Projects Undertaken by a Private Sponsor.

The preceding paragraph (1) also applies to a private sponsor except that the useful life of project items installed within a facility or the useful life of the facilities developed or equipment acquired under an airport development or noise compatibility program project shall be no less than ten (10) years from the date of acceptance of Federal aid for the project.

3. Airport Planning Undertaken by a Sponsor.

Unless otherwise specified in this Grant Agreement, only Assurances 1, 2, 3, 5, 6, 13, 18, 23, 25, 30, 32, 33, 34, 37, and 40 in Section C apply to planning projects. The terms, conditions, and assurances of this Grant Agreement shall remain in full force and effect during the life of the project; there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport.

C. Sponsor Certification.

The sponsor hereby assures and certifies, with respect to this grant that:

1. General Federal Requirements

It will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance, and use of Federal funds for this Grant. Performance under this agreement shall be governed by and in compliance with the following requirements, as applicable, to the type of organization of the Sponsor and any applicable sub-recipients. The applicable provisions to this agreement include, but are not limited to, the following:

FEDERAL LEGISLATION

- a. 49 U.S.C. subtitle VII, as amended.
- b. Davis-Bacon Act, as amended — 40 U.S.C. §§ 3141-3144, 3146, and 3147, et seq.¹
- c. Federal Fair Labor Standards Act – 29 U.S.C. § 201, et seq.
- d. Hatch Act – 5 U.S.C. § 1501, et seq.²
- e. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, 42 U.S.C. § 4601, et seq.^{1, 2}
- f. National Historic Preservation Act of 1966 – Section 106 – 54 U.S.C. § 306108.¹
- g. Archeological and Historic Preservation Act of 1974 – 54 U.S.C. § 312501, et seq.¹
- h. Native Americans Grave Repatriation Act – 25 U.S.C. § 3001, et seq.
- i. Clean Air Act, P.L. 90-148, as amended – 42 U.S.C. § 7401, et seq.
- j. Coastal Zone Management Act, P.L. 92-583, as amended – 16 U.S.C. § 1451, et seq.
- k. Flood Disaster Protection Act of 1973 – Section 102(a) - 42 U.S.C. § 4012a.¹
- l. 49 U.S.C. § 303, (formerly known as Section 4(f)).
- m. Rehabilitation Act of 1973 – 29 U.S.C. § 794.
- n. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq.) (prohibits discrimination on the basis of race, color, national origin).
- o. Americans with Disabilities Act of 1990, as amended, (42 U.S.C. § 12101 et seq.) (prohibits discrimination on the basis of disability).
- p. Age Discrimination Act of 1975 – 42 U.S.C. § 6101, et seq.
- q. American Indian Religious Freedom Act, P.L. 95-341, as amended.
- r. Architectural Barriers Act of 1968, as amended – 42 U.S.C. § 4151, et seq.¹
- s. Powerplant and Industrial Fuel Use Act of 1978 – Section 403 – 42 U.S.C. § 8373.¹
- t. Contract Work Hours and Safety Standards Act – 40 U.S.C. § 3701, et seq.¹
- u. Copeland Anti-kickback Act – 18 U.S.C. § 874.¹

- v. National Environmental Policy Act of 1969 – 42 U.S.C. § 4321, et seq.¹
- w. Wild and Scenic Rivers Act, P.L. 90-542, as amended – 16 U.S.C. § 1271, et seq.
- x. Single Audit Act of 1984 – 31 U.S.C. § 7501, et seq.²
- y. Drug-Free Workplace Act of 1988 – 41 U.S.C. §§ 8101 through 8105.
- z. The Federal Funding Accountability and Transparency Act of 2006, as amended (P.L. 109-282, as amended by section 6202 of P.L. 110-252).
- aa. Civil Rights Restoration Act of 1987, P.L. 100-259.
- bb. Infrastructure Investment and Jobs Act, P.L. 117-58, Title VIII.
- cc. Build America, Buy America Act, P.L. 117-58, Title IX.
- dd. Endangered Species Act – 16 U.S.C. 1531, et seq.
- ee. Title IX of the Education Amendments of 1972, as amended – 20 U.S.C. 1681–1683 and 1685–1687.
- ff. Drug Abuse Office and Treatment Act of 1972, as amended – 21 U.S.C. 1101, et seq.
- gg. Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, P.L. 91-616, as amended – 42 U.S.C. § 4541, et seq.
- hh. Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, P.L. 91-616, as amended – 42 U.S.C. § 4541, et seq.
- ii. Appropriated Funds to Influence Certain Federal Contracting and Financial Transactions – 31 U.S.C. § 1352.

EXECUTIVE ORDERS

- a. Executive Order 11990 – Protection of Wetlands
- b. Executive Order 11988 – Floodplain Management
- c. Executive Order 12372 – Intergovernmental Review of Federal Programs
- d. Executive Order 12699 – Seismic Safety of Federal and Federally Assisted New Building Construction¹
- e. Executive Order 14005 – Ensuring the Future is Made in all of America by All of America’s Workers
- f. Executive Order 14149 – Restoring Freedom of Speech and Ending Federal Censorship
- g. Executive Order 14151 – Ending Radical and Wasteful Government DEI Programs and Preferencing
- h. Executive Order 14154 – Unleashing American Energy
- i. Executive Order 14168 – Defending Women from Gender Ideology Extremism and Restoring Biological Truth to the Federal Government
- j. Executive Order 14173 – Ending Illegal Discrimination and Restoring Merit-Based Opportunity

FEDERAL REGULATIONS

- a. 2 CFR Part 180 – OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement).
- b. 2 CFR Part 200 and 1201 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.^{3, 4, 5}
- c. 2 CFR Part 1200 – Nonprocurement Suspension and Debarment.
- d. 14 CFR Part 13 – Investigative and Enforcement Procedures.
- e. 14 CFR Part 16 – Rules of Practice for Federally-Assisted Airport Enforcement Proceedings.
- f. 14 CFR Part 150 – Airport Noise Compatibility Planning.
- g. 28 CFR Part 35 – Nondiscrimination on the Basis of Disability in State and Local Government Services.
- h. 28 CFR § 50.3 – U.S. Department of Justice Guidelines for the Enforcement of Title VI of the Civil Rights Act of 1964.
- i. 29 CFR Part 1 – Procedures for Predetermination of Wage Rates.¹
- j. 29 CFR Part 3 – Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States.¹
- k. 29 CFR Part 5 – Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction (Also Labor Standards Provisions Applicable to Nonconstruction Contracts Subject to the Contract Work Hours and Safety Standards Act).¹
- l. 41 CFR Part 60 – Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and Federally-assisted contracting requirements).¹
- m. 49 CFR Part 20 – New Restrictions on Lobbying.
- n. 49 CFR Part 21 – Nondiscrimination in Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964.
- o. 49 CFR Part 23 – Participation by Disadvantage Business Enterprise in Airport Concessions.
- p. 49 CFR Part 24 – Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs.^{1, 2}
- q. 49 CFR Part 26 – Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.
- r. 49 CFR Part 27 – Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance.¹
- s. 49 CFR Part 28 – Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Transportation.
- t. 49 CFR Part 30 – Denial of Public Works Contracts to Suppliers of Goods and Services of Countries That Deny Procurement Market Access to U.S. Contractors.
- u. 49 CFR Part 32 – Governmentwide Requirements for Drug-Free Workplace (Financial Assistance).

- v. 49 CFR Part 37 – Transportation Services for Individuals with Disabilities (ADA).
- w. 49 CFR Part 38 – Americans with Disabilities Act (ADA) Accessibility Specifications for Transportation Vehicles.
- x. 49 CFR Part 41 – Seismic Safety.

FOOTNOTES TO ASSURANCE (C)(1)

- ¹ These laws do not apply to airport planning sponsors.
- ² These laws do not apply to private sponsors.
- ³ 2 CFR Part 200 contains requirements for State and Local Governments receiving Federal assistance. Any requirement levied upon State and Local Governments by this regulation shall apply where applicable to private sponsors receiving Federal assistance under Title 49, United States Code.
- ⁴ Cost principles established in 2 CFR Part 200 subpart E must be used as guidelines for determining the eligibility of specific types of expenses.
- ⁵ Audit requirements established in 2 CFR Part 200 subpart F are the guidelines for audits.

SPECIFIC ASSURANCES

Specific assurances required to be included in grant agreements by any of the above laws, regulations or circulars are incorporated by reference in this Grant Agreement.

2. Responsibility and Authority of the Sponsor.

a. Public Agency Sponsor:

It has legal authority to apply for this Grant, and to finance and carry out the proposed project; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

b. Private Sponsor:

It has legal authority to apply for this Grant and to finance and carry out the proposed project and comply with all terms, conditions, and assurances of this Grant Agreement. It shall designate an official representative and shall in writing direct and authorize that person to file this application, including all understandings and assurances contained therein; to act in connection with this application; and to provide such additional information as may be required.

3. Sponsor Fund Availability.

It has sufficient funds available for that portion of the project costs which are not to be paid by the United States. It has sufficient funds available to assure operation and maintenance of items funded under this Grant Agreement which it will own or control.

4. Good Title.

- a. It, a public agency or the Federal government, holds good title, satisfactory to the Secretary, to the landing area of the airport or site thereof, or will give assurance satisfactory to the Secretary that good title will be acquired.

- b. For noise compatibility program projects to be carried out on the property of the sponsor, it holds good title satisfactory to the Secretary to that portion of the property upon which Federal funds will be expended or will give assurance to the Secretary that good title will be obtained.

5. Preserving Rights and Powers.

- a. It will not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in this Grant Agreement without the written approval of the Secretary, and will act promptly to acquire, extinguish or modify any outstanding rights or claims of right of others which would interfere with such performance by the sponsor. This shall be done in a manner acceptable to the Secretary.
- b. Subject to 49 U.S.C. § 47107(a)(16) and (x), it will not sell, lease, encumber, or otherwise transfer or dispose of any part of its title or other interests in the property shown on Exhibit A to this application or, for a noise compatibility program project, that portion of the property upon which Federal funds have been expended, for the duration of the terms, conditions, and assurances in this Grant Agreement without approval by the Secretary. If the transferee is found by the Secretary to be eligible under Title 49, United States Code, to assume the obligations of this Grant Agreement and to have the power, authority, and financial resources to carry out all such obligations, the sponsor shall insert in the contract or document transferring or disposing of the sponsor's interest, and make binding upon the transferee all of the terms, conditions, and assurances contained in this Grant Agreement.
- c. For all noise compatibility program projects which are to be carried out by another unit of local government or are on property owned by a unit of local government other than the sponsor, it will enter into an agreement with that government. Except as otherwise specified by the Secretary, that agreement shall obligate that government to the same terms, conditions, and assurances that would be applicable to it if it applied directly to the FAA for a grant to undertake the noise compatibility program project. That agreement and changes thereto must be satisfactory to the Secretary. It will take steps to enforce this agreement against the local government if there is substantial non-compliance with the terms of the agreement.
- d. For noise compatibility program projects to be carried out on privately owned property, it will enter into an agreement with the owner of that property which includes provisions specified by the Secretary. It will take steps to enforce this agreement against the property owner whenever there is substantial non-compliance with the terms of the agreement.
- e. If the sponsor is a private sponsor, it will take steps satisfactory to the Secretary to ensure that the airport will continue to function as a public-use airport in accordance with these assurances for the duration of these assurances.
- f. If an arrangement is made for management and operation of the airport by any agency or person other than the sponsor or an employee of the sponsor, the sponsor will reserve sufficient rights and authority to ensure that the airport will be operated and maintained in accordance with Title 49, United States Code, the regulations and the terms, conditions and assurances in this Grant Agreement and shall ensure that such arrangement also requires compliance therewith.
- g. Sponsors of commercial service airports will not permit or enter into any arrangement that results in permission for the owner or tenant of a property used as a residence, or zoned for residential use, to taxi an aircraft between that property and any location on airport. Sponsors

of general aviation airports entering into any arrangement that results in permission for the owner of residential real property adjacent to or near the airport must comply with the requirements of Sec. 136 of Public Law 112-95 and the sponsor assurances.

6. Consistency with Local Plans.

The project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport.

7. Consideration of Local Interest.

It has given fair consideration to the interest of communities in or near where the project may be located.

8. Consultation with Users.

In making a decision to undertake any airport development project under Title 49, United States Code, it has undertaken reasonable consultations with affected parties using the airport at which project is proposed.

9. Public Hearings.

In projects involving the location of an airport, an airport runway, or a major runway extension, it has afforded the opportunity for public hearings for the purpose of considering the economic, social, and environmental effects of the airport or runway location and its consistency with goals and objectives of such planning as has been carried out by the community and it shall, when requested by the Secretary, submit a copy of the transcript of such hearings to the Secretary. Further, for such projects, it has on its management board either voting representation from the communities where the project is located or has advised the communities that they have the right to petition the Secretary concerning a proposed project.

10. Metropolitan Planning Organization.

In projects involving the location of an airport, an airport runway, or a major runway extension at a medium or large hub airport, the sponsor has made available to and has provided upon request to the metropolitan planning organization in the area in which the airport is located, if any, a copy of the proposed amendment to the airport layout plan to depict the project and a copy of any airport master plan in which the project is described or depicted.

11. Pavement Preventive Maintenance-Management.

With respect to a project approved after January 1, 1995, for the replacement or reconstruction of pavement at the airport, it assures or certifies that it has implemented an effective airport pavement maintenance-management program and it assures that it will use such program for the useful life of any pavement constructed, reconstructed or repaired with Federal financial assistance at the airport. It will provide such reports on pavement condition and pavement management programs as the Secretary determines may be useful.

12. Terminal Development Prerequisites.

For projects which include terminal development at a public use airport, as defined in Title 49, it has, on the date of submittal of the project grant application, all the safety equipment required for certification of such airport under 49 U.S.C. § 44706, and all the security equipment required by rule or regulation, and has provided for access to the passenger enplaning and deplaning area of such airport to passengers enplaning and deplaning from aircraft other than air carrier aircraft.

13. Accounting System, Audit, and Record Keeping Requirements.

- a. It shall keep all project accounts and records which fully disclose the amount and disposition by the recipient of the proceeds of this Grant, the total cost of the project in connection with which this Grant is given or used, and the amount or nature of that portion of the cost of the project supplied by other sources, and such other financial records pertinent to the project. The accounts and records shall be kept in accordance with an accounting system that will facilitate an effective audit in accordance with the Single Audit Act of 1984.
- b. It shall make available to the Secretary and the Comptroller General of the United States, or any of their duly authorized representatives, for the purpose of audit and examination, any books, documents, papers, and records of the recipient that are pertinent to this Grant. The Secretary may require that an appropriate audit be conducted by a recipient. In any case in which an independent audit is made of the accounts of a sponsor relating to the disposition of the proceeds of a grant or relating to the project in connection with which this Grant was given or used, it shall file a certified copy of such audit with the Comptroller General of the United States not later than six (6) months following the close of the fiscal year for which the audit was made.

14. Minimum Wage Rates.

It shall include, in all contracts in excess of \$2,000 for work on any projects funded under this Grant Agreement which involve labor, provisions establishing minimum rates of wages, to be predetermined by the Secretary of Labor under 40 U.S.C. §§ 3141-3144, 3146, and 3147, Public Building, Property, and Works), which contractors shall pay to skilled and unskilled labor, and such minimum rates shall be stated in the invitation for bids and shall be included in proposals or bids for the work.

15. Veteran's Preference.

It shall include in all contracts for work on any project funded under this Grant Agreement which involve labor, such provisions as are necessary to insure that, in the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Vietnam era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns owned and controlled by disabled veterans as defined in 49 U.S.C. § 47112. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

16. Conformity to Plans and Specifications.

It will execute the project subject to plans, specifications, and schedules approved by the Secretary. Such plans, specifications, and schedules shall be submitted to the Secretary prior to commencement of site preparation, construction, or other performance under this Grant Agreement, and, upon approval of the Secretary, shall be incorporated into this Grant Agreement. Any modification to the approved plans, specifications, and schedules shall also be subject to approval of the Secretary, and incorporated into this Grant Agreement.

17. Construction Inspection and Approval.

It will provide and maintain competent technical supervision at the construction site throughout the project to assure that the work conforms to the plans, specifications, and schedules approved by the Secretary for the project. It shall subject the construction work on any project contained in an approved project application to inspection and approval by the Secretary and such work shall be in

accordance with regulations and procedures prescribed by the Secretary. Such regulations and procedures shall require such cost and progress reporting by the sponsor or sponsors of such project as the Secretary shall deem necessary.

18. Planning Projects.

In carrying out planning projects:

- a. It will execute the project in accordance with the approved program narrative contained in the project application or with the modifications similarly approved.
- b. It will furnish the Secretary with such periodic reports as required pertaining to the planning project and planning work activities.
- c. It will include in all published material prepared in connection with the planning project a notice that the material was prepared under a grant provided by the United States.
- d. It will make such material available for examination by the public, and agrees that no material prepared with funds under this project shall be subject to copyright in the United States or any other country.
- e. It will give the Secretary unrestricted authority to publish, disclose, distribute, and otherwise use any of the material prepared in connection with this grant.
- f. It will grant the Secretary the right to disapprove the sponsor's employment of specific consultants and their subcontractors to do all or any part of this project as well as the right to disapprove the proposed scope and cost of professional services.
- g. It will grant the Secretary the right to disapprove the use of the sponsor's employees to do all or any part of the project.
- h. It understands and agrees that the Secretary's approval of this project grant or the Secretary's approval of any planning material developed as part of this grant does not constitute or imply any assurance or commitment on the part of the Secretary to approve any pending or future application for a Federal airport grant.

19. Operation and Maintenance.

- a. The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state, and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes. It will suitably operate and maintain the airport and all facilities thereon or connected therewith, with due regard to climatic and flood conditions. Any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the Secretary. In furtherance of this assurance, the sponsor will have in effect arrangements for:
 1. Operating the airport's aeronautical facilities whenever required;
 2. Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and
 3. Promptly notifying pilots of any condition affecting aeronautical use of the airport. Nothing contained herein shall be construed to require that the airport be operated for aeronautical use during temporary periods when snow, flood, or other climatic conditions

interfere with such operation and maintenance. Further, nothing herein shall be construed as requiring the maintenance, repair, restoration, or replacement of any structure or facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the sponsor.

- b. It will suitably operate and maintain noise compatibility program items that it owns or controls upon which Federal funds have been expended.

20. Hazard Removal and Mitigation.

It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

21. Compatible Land Use.

It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which Federal funds have been expended.

22. Economic Nondiscrimination.

- a. It will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.
- b. In any agreement, contract, lease, or other arrangement under which a right or privilege at the airport is granted to any person, firm, or corporation to conduct or to engage in any aeronautical activity for furnishing services to the public at the airport, the sponsor will insert and enforce provisions requiring the contractor to:
 - 1. Furnish said services on a reasonable, and not unjustly discriminatory, basis to all users thereof, and
 - 2. Charge reasonable, and not unjustly discriminatory, prices for each unit or service, provided that the contractor may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.
- c. Each fixed-based operator at the airport shall be subject to the same rates, fees, rentals, and other charges as are uniformly applicable to all other fixed-based operators making the same or similar uses of such airport and utilizing the same or similar facilities.
- d. Each air carrier using such airport shall have the right to service itself or to use any fixed-based operator that is authorized or permitted by the airport to serve any air carrier at such airport.
- e. Each air carrier using such airport (whether as a tenant, non-tenant, or subtenant of another air carrier tenant) shall be subject to such nondiscriminatory and substantially comparable rules, regulations, conditions, rates, fees, rentals, and other charges with respect to facilities directly and substantially related to providing air transportation as are applicable to all such air carriers

which make similar use of such airport and utilize similar facilities, subject to reasonable classifications such as tenants or non-tenants and signatory carriers and non-signatory carriers. Classification or status as tenant or signatory shall not be unreasonably withheld by any airport provided an air carrier assumes obligations substantially similar to those already imposed on air carriers in such classification or status.

- f. It will not exercise or grant any right or privilege which operates to prevent any person, firm, or corporation operating aircraft on the airport from performing any services on its own aircraft with its own employees (including, but not limited to maintenance, repair, and fueling) that it may choose to perform.
- g. In the event the sponsor itself exercises any of the rights and privileges referred to in this assurance, the services involved will be provided on the same conditions as would apply to the furnishing of such services by commercial aeronautical service providers authorized by the sponsor under these provisions.
- h. The sponsor may establish such reasonable, and not unjustly discriminatory, conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the airport.
- i. The sponsor may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve the civil aviation needs of the public.

23. Exclusive Rights.

It will permit no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public. For purposes of this paragraph, the providing of the services at an airport by a single fixed-based operator shall not be construed as an exclusive right if both of the following apply:

- a. It would be unreasonably costly, burdensome, or impractical for more than one fixed-based operator to provide such services, and
- b. If allowing more than one fixed-based operator to provide such services would require the reduction of space leased pursuant to an existing agreement between such single fixed-based operator and such airport. It further agrees that it will not, either directly or indirectly, grant or permit any person, firm, or corporation, the exclusive right at the airport to conduct any aeronautical activities, including, but not limited to charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity, and that it will terminate any exclusive right to conduct an aeronautical activity now existing at such an airport before the grant of any assistance under Title 49, United States Code.

24. Fee and Rental Structure.

It will maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport, taking into account such factors as the volume of traffic and economy of collection. No part of the Federal share of an airport development, airport planning or noise compatibility project for

which a Grant is made under Title 49, United States Code, the Airport and Airway Improvement Act of 1982, the Federal Airport Act or the Airport and Airway Development Act of 1970 shall be included in the rate basis in establishing fees, rates, and charges for users of that airport.

25. Airport Revenues.

- a. All revenues generated by the airport and any local taxes on aviation fuel established after December 30, 1987, will be expended by it for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the actual air transportation of passengers or property; or for noise mitigation purposes on or off the airport. The following exceptions apply to this paragraph:
 1. If covenants or assurances in debt obligations issued before September 3, 1982, by the owner or operator of the airport, or provisions enacted before September 3, 1982, in governing statutes controlling the owner or operator's financing, provide for the use of the revenues from any of the airport owner or operator's facilities, including the airport, to support not only the airport but also the airport owner or operator's general debt obligations or other facilities, then this limitation on the use of all revenues generated by the airport (and, in the case of a public airport, local taxes on aviation fuel) shall not apply.
 2. If the Secretary approves the sale of a privately owned airport to a public sponsor and provides funding for any portion of the public sponsor's acquisition of land, this limitation on the use of all revenues generated by the sale shall not apply to certain proceeds from the sale. This is conditioned on repayment to the Secretary by the private owner of an amount equal to the remaining unamortized portion (amortized over a 20-year period) of any airport improvement grant made to the private owner for any purpose other than land acquisition on or after October 1, 1996, plus an amount equal to the federal share of the current fair market value of any land acquired with an airport improvement grant made to that airport on or after October 1, 1996.
 3. Certain revenue derived from or generated by mineral extraction, production, lease, or other means at a general aviation airport (as defined at 49 U.S.C. § 47102), if the FAA determines the airport sponsor meets the requirements set forth in Section 813 of Public Law 112-95.
- b. As part of the annual audit required under the Single Audit Act of 1984, the sponsor will direct that the audit will review, and the resulting audit report will provide an opinion concerning, the use of airport revenue and taxes in paragraph (a), and indicating whether funds paid or transferred to the owner or operator are paid or transferred in a manner consistent with Title 49, United States Code and any other applicable provision of law, including any regulation promulgated by the Secretary or Administrator.
- c. Any civil penalties or other sanctions will be imposed for violation of this assurance in accordance with the provisions of 49 U.S.C. § 47107.

26. Reports and Inspections.

It will:

- a. submit to the Secretary such annual or special financial and operations reports as the Secretary may reasonably request and make such reports available to the public; make available to the

public at reasonable times and places a report of the airport budget in a format prescribed by the Secretary;

- b. for airport development projects, make the airport and all airport records and documents affecting the airport, including deeds, leases, operation and use agreements, regulations and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request;
- c. for noise compatibility program projects, make records and documents relating to the project and continued compliance with the terms, conditions, and assurances of this Grant Agreement including deeds, leases, agreements, regulations, and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request; and
- d. in a format and time prescribed by the Secretary, provide to the Secretary and make available to the public following each of its fiscal years, an annual report listing in detail:
 1. all amounts paid by the airport to any other unit of government and the purposes for which each such payment was made; and
 2. all services and property provided by the airport to other units of government and the amount of compensation received for provision of each such service and property.

27. Use by Government Aircraft.

It will make available all of the facilities of the airport developed with Federal financial assistance and all those usable for landing and takeoff of aircraft to the United States for use by Government aircraft in common with other aircraft at all times without charge, except, if the use by Government aircraft is substantial, charge may be made for a reasonable share, proportional to such use, for the cost of operating and maintaining the facilities used. Unless otherwise determined by the Secretary, or otherwise agreed to by the sponsor and the using agency, substantial use of an airport by Government aircraft will be considered to exist when operations of such aircraft are in excess of those which, in the opinion of the Secretary, would unduly interfere with use of the landing areas by other authorized aircraft, or during any calendar month that:

- a. Five (5) or more Government aircraft are regularly based at the airport or on land adjacent thereto; or
- b. The total number of movements (counting each landing as a movement) of Government aircraft is 300 or more, or the gross accumulative weight of Government aircraft using the airport (the total movement of Government aircraft multiplied by gross weights of such aircraft) is in excess of five million pounds.

28. Land for Federal Facilities.

It will furnish without cost to the Federal Government for use in connection with any air traffic control or air navigation activities, or weather-reporting and communication activities related to air traffic control, any areas of land or water, or estate therein as the Secretary considers necessary or desirable for construction, operation, and maintenance at Federal expense of space or facilities for such purposes. Such areas or any portion thereof will be made available as provided herein within four months after receipt of a written request from the Secretary.

29. Airport Layout Plan.

- a. The airport owner or operator will maintain a current airport layout plan of the airport showing:
 - 1. boundaries of the airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the sponsor for airport purposes and proposed additions thereto;
 - 2. the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and roads), including all proposed extensions and reductions of existing airport facilities;
 - 3. the location of all existing and proposed non-aviation areas and of all existing improvements thereon; and
 - 4. all proposed and existing access points used to taxi aircraft across the airport's property boundary.

- b. Subject to subsection 49 U.S.C. § 47107(x), the Secretary will review and approve or disapprove the plan and any revision or modification of the plan before the plan, revision, or modification takes effect.

- c. The owner or operator will not make or allow any alteration in the airport or any of its facilities unless the alteration—
 - 1. is outside the scope of the Secretary's review and approval authority as set forth in subsection (x); or
 - 2. complies with the portions of the plan approved by the Secretary.

- d. When the airport owner or operator makes a change or alteration in the airport or the facilities which the Secretary determines adversely affects the safety, utility, or efficiency of any federally owned, leased, or funded property on or off the airport and which is not in conformity with the airport layout plan as approved by the Secretary, the owner or operator will, if requested, by the Secretary:
 - 1. eliminate such adverse effect in a manner approved by the Secretary; or
 - 2. bear all costs of relocating such property or its replacement to a site acceptable to the Secretary and of restoring the property or its replacement to the level of safety, utility, efficiency, and cost of operation that existed before the alteration was made, except in the case of a relocation or replacement of an existing airport facility due to a change in the Secretary's design standards beyond the control of the airport sponsor.

30. Civil Rights.

It will promptly take any measures necessary to ensure that no person in the United States shall, on the grounds of race, color, and national origin (including limited English proficiency) in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d to 2000d-4); creed and sex per 49 U.S.C. § 47123 and related requirements; age per the Age Discrimination Act of 1975 and related requirements; or disability per the Americans with Disabilities Act of 1990 and related requirements, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in any program and activity conducted with, or benefiting from, funds received from this Grant.

- a. Using the definitions of activity, facility, and program as found and defined in 49 CFR §§ 21.23(b) and 21.23(e), the sponsor will facilitate all programs, operate all facilities, or conduct all programs in compliance with all non-discrimination requirements imposed by or pursuant to these assurances.
- b. Applicability
 1. Programs and Activities. If the sponsor has received a grant (or other federal assistance) for any of the sponsor's program or activities, these requirements extend to all of the sponsor's programs and activities.
 2. Facilities. Where it receives a grant or other federal financial assistance to construct, expand, renovate, remodel, alter, or acquire a facility, or part of a facility, the assurance extends to the entire facility and facilities operated in connection therewith.
 3. Real Property. Where the sponsor receives a grant or other Federal financial assistance in the form of, or for the acquisition of real property or an interest in real property, the assurance will extend to rights to space on, over, or under such property.

c. Duration.

The sponsor agrees that it is obligated to this assurance for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the assurance obligates the sponsor, or any transferee for the longer of the following periods:

1. So long as the airport is used as an airport, or for another purpose involving the provision of similar services or benefits; or
2. So long as the sponsor retains ownership or possession of the property.

- d. Required Solicitation Language. It will include the following notification in all solicitations for bids, Requests For Proposals for work, or material under this Grant Agreement and in all proposals for agreements, including airport concessions, regardless of funding source:

"The (Grand Junction Regional Airport Authority; City of Grand Junction, Colorado; and County of Mesa, Colorado), in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, all businesses will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex , age, or disability in consideration for an award."

e. Required Contract Provisions.

1. It will insert the non-discrimination contract clauses requiring compliance with the acts and regulations relative to non-discrimination in Federally-assisted programs of the Department of Transportation (DOT), and incorporating the acts and regulations into the contracts by reference in every contract or agreement subject to the non-discrimination in Federally-assisted programs of the DOT acts and regulations.
2. It will include a list of the pertinent non-discrimination authorities in every contract that is subject to the non-discrimination acts and regulations.

3. It will insert non-discrimination contract clauses as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor.
4. It will insert non-discrimination contract clauses prohibiting discrimination on the basis of race, color, national origin (including limited English proficiency), creed, sex, age, or disability as a covenant running with the land, in any future deeds, leases, license, permits, or similar instruments entered into by the sponsor with other parties:
 - a. For the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
 - b. For the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
- f. It will provide for such methods of administration for the program as are found by the Secretary to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the acts, the regulations, and this assurance.
- g. It agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the acts, the regulations, and this assurance.

31. Disposal of Land.

- a. For land purchased under a grant for airport noise compatibility purposes, including land serving as a noise buffer, it will dispose of the land, when the land is no longer needed for such purposes, at fair market value, at the earliest practicable time. That portion of the proceeds of such disposition which is proportionate to the United States' share of acquisition of such land will be, at the discretion of the Secretary, (1) reinvested in another project at the airport, or (2) transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order:
 1. Reinvestment in an approved noise compatibility project;
 2. Reinvestment in an approved project that is eligible for grant funding under 49 U.S.C. § 47117(e);
 3. Reinvestment in an approved airport development project that is eligible for grant funding under 49 U.S.C. §§ 47114, 47115, or 47117;
 4. Transfer to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport; or
 5. Payment to the Secretary for deposit in the Airport and Airway Trust Fund.

If land acquired under a grant for noise compatibility purposes is leased at fair market value and consistent with noise buffering purposes, the lease will not be considered a disposal of the land. Revenues derived from such a lease may be used for an approved airport development project that would otherwise be eligible for grant funding or any permitted use of airport revenue.

- b. For land purchased under a grant for airport development purposes (other than noise compatibility), it will, when the land is no longer needed for airport purposes, dispose of such land at fair market value or make available to the Secretary an amount equal to the United

States' proportionate share of the fair market value of the land. That portion of the proceeds of such disposition which is proportionate to the United States' share of the cost of acquisition of such land will, upon application to the Secretary, be reinvested or transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order:

1. Reinvestment in an approved noise compatibility project;
 2. Reinvestment in an approved project that is eligible for grant funding under 49 U.S.C. § 47117(e);
 3. Reinvestment in an approved airport development project that is eligible for grant funding under 49 U.S.C. §§ 47114, 47115, or 47117;
 4. Transfer to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport; or
 5. Payment to the Secretary for deposit in the Airport and Airway Trust Fund.
- c. Land shall be considered to be needed for airport purposes under this assurance if (1) it may be needed for aeronautical purposes (including runway protection zones) or serve as noise buffer land, and (2) the revenue from interim uses of such land contributes to the financial self-sufficiency of the airport. Further, land purchased with a grant received by an airport operator or owner before December 31, 1987, will be considered to be needed for airport purposes if the Secretary or Federal agency making such grant before December 31, 1987, was notified by the operator or owner of the uses of such land, did not object to such use, and the land continues to be used for that purpose, such use having commenced no later than December 15, 1989.
- d. Disposition of such land under (a), (b), or (c) will be subject to the retention or reservation of any interest or right therein necessary to ensure that such land will only be used for purposes which are compatible with noise levels associated with operation of the airport.

32. Engineering and Design Services.

If any phase of such project has received Federal funds under Chapter 471 subchapter 1 of Title 49 U.S.C., it will award each contract, or sub-contract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping or related services in the same manner as a contract for architectural and engineering services is negotiated under Chapter 11 of Title 40 U.S.C., or an equivalent qualifications-based requirement prescribed for or by the sponsor of the airport.

33. Foreign Market Restrictions.

It will not allow funds provided under this Grant to be used to fund any project which uses any product or service of a foreign country during the period in which such foreign country is listed by the United States Trade Representative as denying fair and equitable market opportunities for products and suppliers of the United States in procurement and construction.

34. Policies, Standards, and Specifications.

It will carry out any project funded under an Airport Improvement Program Grant in accordance with policies, standards, and specifications approved by the Secretary including, but not limited to, current FAA Advisory Circulars (https://www.faa.gov/sites/faa.gov/files/aip-pfc-checklist_0.pdf) for AIP projects as of December 10, 2024.

35. Relocation and Real Property Acquisition.

- a. It will be guided in acquiring real property, to the greatest extent practicable under State law, by the land acquisition policies in Subpart B of 49 CFR Part 24 and will pay or reimburse property owners for necessary expenses as specified in Subpart B.
- b. It will provide a relocation assistance program offering the services described in Subpart C of 49 CFR Part 24 and fair and reasonable relocation payments and assistance to displaced persons as required in Subpart D and E of 49 CFR Part 24.
- c. It will make available within a reasonable period of time prior to displacement, comparable replacement dwellings to displaced persons in accordance with Subpart E of 49 CFR Part 24.

36. Access By Intercity Buses.

The airport owner or operator will permit, to the maximum extent practicable, intercity buses or other modes of transportation to have access to the airport; however, it has no obligation to fund special facilities for intercity buses or for other modes of transportation.

37. Disadvantaged Business Enterprises.

The sponsor shall not discriminate on the basis of race, color, national origin, or sex, in the award and performance of any DOT-assisted contract covered by 49 CFR Part 26, or in the award and performance of any concession activity contract covered by 49 CFR Part 23. In addition, the sponsor shall not discriminate on the basis of race, color, national origin or sex in the administration of its Disadvantaged Business Enterprise (DBE) and Airport Concessions Disadvantaged Business Enterprise (ACDBE) programs or the requirements of 49 CFR Parts 23 and 26. The sponsor shall take all necessary and reasonable steps under 49 CFR Parts 23 and 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts, and/or concession contracts. The sponsor's DBE and ACDBE programs, as required by 49 CFR Parts 26 and 23, and as approved by DOT, are incorporated by reference in this agreement. Implementation of these programs is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the sponsor of its failure to carry out its approved program, the Department may impose sanctions as provided for under Parts 26 and 23 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. § 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. §§ 3801-3809, 3812).

38. Hangar Construction.

If the airport owner or operator and a person who owns an aircraft agree that a hangar is to be constructed at the airport for the aircraft at the aircraft owner's expense, the airport owner or operator will grant to the aircraft owner for the hangar a long term lease that is subject to such terms and conditions on the hangar as the airport owner or operator may impose.

39. Competitive Access.

- a. If the airport owner or operator of a medium or large hub airport (as defined in 49 U.S.C. § 47102) has been unable to accommodate one or more requests by an air carrier for access to gates or other facilities at that airport in order to allow the air carrier to provide service to the airport or to expand service at the airport, the airport owner or operator shall transmit a report to the Secretary that:
 1. Describes the requests;
 2. Provides an explanation as to why the requests could not be accommodated; and

3. Provides a time frame within which, if any, the airport will be able to accommodate the requests.
- b. Such report shall be due on either February 1 or August 1 of each year if the airport has been unable to accommodate the request(s) in the six month period prior to the applicable due date.

40. Access to Leaded Aviation Gasoline

- a. If 100-octane low lead aviation gasoline (100LL) was made available at an airport, at any time during calendar year 2022, an airport owner or operator may not restrict or prohibit the sale of, or self-fueling with, 100-octane low lead aviation gasoline.
- b. This requirement remains until the earlier of December 31, 2030, or the date on which the airport or any retail fuel seller at the airport makes available an unleaded aviation gasoline that has been authorized for use by the FAA as a replacement for 100-octane low lead aviation gasoline for use in nearly all piston-engine aircraft and engine models; and meets either an industry consensus standard or other standard that facilitates the safe use, production, and distribution of such unleaded aviation gasoline, as determined appropriate by the FAA.
- c. An airport owner or operator understands and agrees, that any violation of this grant assurance is subject to civil penalties as provided for in 49 U.S.C. § 46301(a)(8).

SUPPLEMENTAL CO-SPONSORSHIP AGREEMENT

This Supplemental Co-Sponsorship Agreement is entered into and effective this _____ day of _____, 2025, by and between the Grand Junction Regional Airport Authority (“Airport Authority”), and the City of Grand Junction (City).

RECITALS

- A. The Airport Authority is a political subdivision of the State of Colorado, organized pursuant to Section 41-3-101 et seq., C.R.S. The Airport Authority is a separate and distinct entity from the City.
- B. The Airport Authority is the owner and operator of the Grand Junction Regional Airport, located in Grand Junction, Colorado (“Airport”).
- C. Pursuant to the Title 49, U.S.C., Subtitle VII, Part B, as amended, the Airport Authority has applied for monies from the Federal Aviation Administration (“FAA”), for the construction of certain improvements upon the Airport, pursuant to the terms, plans and specifications set forth in AIP Grant No. 3-08-0027-086-2025 (“Project”).
- D. The FAA is willing to provide up to \$675,458 toward the estimated costs of the Projects, provided the City of Grand Junction and Mesa County execute the Grant Agreement as co-sponsors with the Airport Authority. The FAA is insisting that the City and County execute the Grant Agreement as co-sponsors for two primary reasons. First, the City and County have taxing authority, whereas the Airport Authority does not; accordingly, the FAA is insisting that the City and County execute the Grant Agreement so that public entities with taxing authority are liable for the financial commitments required of the Sponsor under the Grant Agreements, should the Airport Authority not be able to satisfy said financial commitments out of the net revenues generated by the operation of the Airport. In addition, the City and County have jurisdiction over the zoning and land use regulations of the real property surrounding the Airport, whereas the Airport Authority does not enjoy such zoning and land use regulatory authority. By their execution of the Grant Agreement, the City and County would be warranting to the FAA that the proposed improvements are consistent with their respective plans for the development of the area surrounding the Airport, and that they will take appropriate actions, including the adoption of zoning laws, to restrict the use of land surrounding the Airport to activities and purposes compatible with normal Airport operations.
- E. The City is willing to execute the Grant Agreement, as a co-sponsor, pursuant to the FAA’s request, subject to the terms and conditions of this Supplemental Co-Sponsorship Agreement between the City and Airport Authority.

Therefore, in consideration of the above Recitals and the mutual promises and representations set forth below, the City and Airport Authority hereby agree as follows:

AGREEMENT

1. By its execution of this Agreement, the City hereby agrees to execute the Grant Agreement, as a co-sponsor, pursuant to the FAA's request.
2. In consideration of the City's execution of the Grant Agreement, as co-sponsor, the Airport Authority hereby agrees to hold the City, its officers, employees, and agents, harmless from, and to indemnify the City, its officers, employees, and agents for:
 - (a) Any and all claims, lawsuits, damages, or liabilities, including reasonable attorney's fees and court costs, which at any time may be or are stated, asserted, or made against the City, its officers, employees, or agents, by the FAA or any other third party whomsoever, in any way arising out of, or related under the Grant Agreement, or the prosecution of the Projects contemplated by the Grant Agreement, regardless of whether said claims are frivolous or groundless, other than claims related to the City's covenant to take appropriate action, including the adoption of zoning laws, to restrict the use of land surrounding the Airport, over which the City has regulatory jurisdiction, to activities and purposes compatible with normal Airport operations, set forth in paragraph 21 of the Assurances incorporated by reference into the Grant Agreement ("Assurances"); and
 - (b) The failure of the Airport Authority, or any of the Airport Authority's officers, agents, employees, or contractors, to comply in any respect with any of the requirements, obligations or duties imposed on the Sponsor by the Grant Agreements, or reasonably related to or inferred there from, other than the Sponsor's zoning and land use obligations under Paragraph 21 of the Assurances, which are the City's responsibility for lands surrounding the Airport over which it has regulatory jurisdiction.
3. By its execution of this Agreement, the Airport Authority hereby agrees to comply with each and every requirement of the Sponsor, set forth in the Grant Agreement, or reasonably required in connection therewith, other than the zoning and land use requirements set forth in paragraph 21 of the Assurances, in recognition of the fact that the Airport Authority does not have the power to effect the zoning and land use regulations required by said paragraph.
4. By its execution of this Agreement and the Grant Agreement, the City agrees to comply with the zoning and land use requirements of paragraph 21 of the Assurances, with respect to all lands surrounding the Airport that are subject to the City's regulatory jurisdiction. The City also hereby warrants and represents that, in accordance with paragraph 6 of the Special Assurances; the Projects contemplated by the Grant Agreements are consistent with present plans of the City for the development of the area surrounding the Airport.
5. The parties hereby warrant and represent that, by the City's execution of the Grant Agreement, as a co-sponsor, pursuant to the FAA's request, the City is not a co-owner, agent, partner, joint venture, or representative of the Airport Authority in the ownership, management or administration of the Airport, and the Airport Authority is, and remains, the sole owner of the Airport, and solely responsible for the operation and management of the Airport.

Done and entered into on the date first set forth above.

GRAND JUNCTION REGIONAL AIRPORT AUTHORITY

By _____
Chief Executive Officer, Angela Padalecki
Grand Junction Regional Airport

CITY OF GRAND JUNCTION

By _____
Mike Bennett, City Manager
City of Grand Junction

RESOLUTION ___-25

AUTHORIZING THE INTERIM CITY MANAGER TO SIGN AND SUBMIT A GRANT AGREEMENT AND SUPPLEMENTAL CO-SPONSORSHIP AGREEMENT IN SUPPORT OF THE GRAND JUNCTION REGIONAL AIRPORT

RECITALS:

The Grand Junction Regional Airport Authority (GJRAA or Airport) has requested that the City Council consider and approve grant offer 3-08-0027-086-2025, in the form of a Reimbursable Agreement ("Grant") for the FAA to fund the engineering design of the subbase pavement construction work as part of the ongoing Runway Replacement Program at the Airport. As creators and co-sponsors of the Airport Authority, both the County Commissioners and the City Council must approve grant awards from the FAA to GJRAA. The Board of County Commissioners is scheduled to review the Grant on August 19, 2025.

The Grant is for \$675,458 00 which will provide funding for the Runway Replacement Program.

Having been fully advised in the premises, the City Council by and with this Resolution affirms and directs the execution of the Grant Agreement(s) from the Federal Aviation Administration in the amount of \$675,458 in support of the GJRAA as described generally herein and in more detail in Airport Infrastructure Grant Agreement Number 3-08-0027-086-2025.

NOW THEREFORE, the City Council of the City of Grand Junction authorizes the execution of the Grant Agreements(s) Number 3-08-0027-086-2025 in the amount of \$675,458 between the Federal Aviation Administration, Mesa County, the City of Grand Junction, and the Grand Junction Regional Airport Authority and the Co-Sponsorship Agreement between the City of Grand Junction and the Grand Junction Regional Airport Authority and authorize the City Manager and City Attorney to sign.

Cody Kennedy
President of the City Council

ATTEST:

Selestina Sandoval
City Clerk



Grand Junction City Council

Regular Session

Item #4.f.

Meeting Date: August 20, 2025
Presented By: Angela Padalecki
Department: City Manager's Office
Submitted By: Johnny McFarland, Asst. to the City Manager

Information

SUBJECT:

A Resolution Authorizing the City to Approve a Grant Offer in the Amount of \$187,920 as a Co-sponsor with the Grand Junction Regional Airport Authority for the Runway 12/30 NAVAID Design RA project

RECOMMENDATION:

Staff recommends approval of this item.

EXECUTIVE SUMMARY:

This item is to approve AIP Grant offer No. 3-08-0027-087-2025 in the amount of \$187,920 for the Runway 12/30 NAVAID Design RA project and authorize the City Manager to execute the Co-Sponsorship Agreement.

BACKGROUND OR DETAILED INFORMATION:

Grant offer No.3-08-0027-087-2025 is for a Reimbursable Agreement for the FAA to fund the engineering design for the permanent location of the navigational aids for the runway as part of the ongoing runway replacement program. As creators and co-sponsors of the Airport Authority, both the County Commissioners and the City Council must also approve grant awards from the FAA to the Airport Authority. A meeting and is scheduled to be reviewed by the County Board of Commissioners at the August 19, 2025, meeting.

FISCAL IMPACT:

There is no fiscal impact on the City if this item is approved.

SUGGESTED MOTION:

I move to (adopt/not adopt) Resolution 55-25, A Resolution Authorizing the City to Approve a Grant Offer for the Runway 12/30 NAVAID Design RA Grant offer in the amount of \$187,920 and authorize the City Manager to execute the Co-Sponsorship Agreement as Co-sponsor with the Grand Junction Regional Airport Authority

Attachments

- 1. 2. GJT-NMG-3-08-0027-087-2025-Grant Agreement_encrypted_
- 2. 3. Co-Sponsorship Agreement-city AIP 87
- 3. RES-AIP Grant 3-08-0027-087-2025 20250814



U.S. Department
of Transportation
Federal Aviation
Administration

Airports Division
Northwest Mountain Region
Colorado, Utah, Wyoming

Denver Airports District Office:
26805 E 68th Ave, Ste 224
Denver, CO 80249-6339

July 30, 2025

Ms. Linde Marshall, Chair
Grand Junction Regional Airport Authority
800 Eagle Drive
Grand Junction, CO 81506

Mr. Mike Bennett, City Manager
City of Grand Junction
250 North Fifth Street
Grand Junction, CO 81501

Mr. Cody Davis, Chair
Mesa County Board of Commissioners
544 Rood Avenue
Grand Junction, CO 81501

Dear Ms. Marshall, Mr. Bennett, and Commissioner Davis:

The Grant Offer for Airport Improvement Program (AIP) Project No. 3-08-0027-087-2025 at Grand Junction Regional Airport is attached for execution. This letter outlines the steps you must take to properly enter into this agreement and provides other useful information. Please read the conditions, special conditions, and assurances that comprise the grant offer carefully.

You may not make any modification to the text, terms or conditions of the grant offer.

Steps You Must Take to Enter Into Agreement.

To properly enter into this agreement, you must do the following:

1. The governing body must give authority to execute the grant to the individual(s) signing the grant, i.e., the person signing the document must be the sponsor's authorized representative(s) (hereinafter "authorized representative").
2. The authorized representative must execute the grant by adding their electronic signature to the appropriate certificate at the end of the agreement.
3. Once the authorized representative has electronically signed the grant, the sponsor's attorney(s) will automatically receive an email notification.
4. On the **same day or after** the authorized representative has signed the grant, the sponsor's attorney(s) will add their electronic signature to the appropriate certificate at the end of the agreement.

5. If there are co-sponsors, the authorized representative(s) and sponsor's attorney(s) must follow the above procedures to fully execute the grant and finalize the process. Signatures must be obtained and finalized no later than **August 31, 2025**.
6. The fully executed grant will then be automatically sent to all parties as an email attachment.

Payment. Subject to the requirements in 2 CFR § 200.305 (Federal Payment), each payment request for reimbursement under this grant must be made electronically via the Delphi eInvoicing System. Please see the attached Grant Agreement for more information regarding the use of this System.

Project Timing. The terms and conditions of this agreement require you to complete the project without undue delay and no later than the Period of Performance end date (1,460 days from the grant execution date). We will be monitoring your progress to ensure proper stewardship of these Federal funds. We expect you to submit payment requests for reimbursement of allowable incurred project expenses consistent with project progress. Your grant may be placed in "inactive" status if you do not make draws on a regular basis, which will affect your ability to receive future grant offers. Costs incurred after the Period of Performance ends are generally not allowable and will be rejected unless authorized by the FAA in advance.

Reporting. Until the grant is completed and closed, you are responsible for submitting formal reports as follows:

- For all grants, you must submit by December 31st of each year this grant is open:
 1. A signed/dated SF-270 (Request for Advance or Reimbursement for non-construction projects) or SF-271 or equivalent (Outlay Report and Request for Reimbursement for Construction Programs), and
 2. An SF-425 (Federal Financial Report).
- For non-construction projects, you must submit [FAA Form 5100-140, Performance Report](#) within 30 days of the end of the Federal fiscal year.
- For construction projects, you must submit [FAA Form 5370-1, Construction Progress and Inspection Report](#), within 30 days of the end of each Federal fiscal quarter.

Audit Requirements. As a condition of receiving Federal assistance under this award, you must comply with audit requirements as established under 2 CFR Part 200. Subpart F requires non-Federal entities that expend \$1,000,000 or more in Federal awards to conduct a single or program specific audit for that year. Note that this includes Federal expenditures made under other Federal-assistance programs. Please take appropriate and necessary action to ensure your organization will comply with applicable audit requirements and standards.

Closeout. Once the project(s) is completed and all costs are determined, we ask that you work with your FAA contact indicated below to close the project without delay and submit the necessary final closeout documentation as required by your Region/Airports District Office.

FAA Contact Information. Todd Minnich, (303) 342-1279, todd.e.minnich@faa.gov is the assigned program manager for this grant and is readily available to assist you and your designated representative with the requirements stated herein.

We sincerely value your cooperation in these efforts and look forward to working with you to complete this important project.

Sincerely,

A handwritten signature in cursive script that reads "Jesse A. Lyman".

Jesse A. Lyman
Manager, Denver Airports District Office



U.S. Department of Transportation
Federal Aviation Administration

FEDERAL AVIATION ADMINISTRATION AIRPORT IMPROVEMENT PROGRAM (AIP)

FY 2025 AIP

GRANT AGREEMENT

Part I - Offer

Federal Award Offer Date July 30, 2025

Airport/Planning Area Grand Junction Regional Airport

Airport Infrastructure Grant Number 3-08-0027-087-2025 [Contract Number: DOT-FA25NM-1114]

Unique Entity Identifier P2MUNC6N7YM6

TO: Grand Junction Regional Airport Authority, City of Grand Junction, Colorado, and County of Mesa, Colorado

(herein called the "Sponsor") (For Co-Sponsors, list all Co-Sponsor names. The word "Sponsor" in this Grant Agreement also applies to a Co-Sponsor.)

FROM: **The United States of America** (acting through the Federal Aviation Administration, herein called the "FAA")

WHEREAS, the Sponsor has submitted to the FAA a Project Application dated December 10, 2024, for a grant of Federal funds for a project at or associated with the Grand Junction Regional Airport, which is included as part of this Grant Agreement; and

WHEREAS, the FAA has approved a project for the Grand Junction Regional Airport (herein called the "Project") consisting of the following:

Shift Runway 11/29 (NAVAID Design RA)

which is more fully described in the Project Application.

NOW THEREFORE, Pursuant to and for the purpose of carrying out the Title 49, United States Code (U.S.C.), Chapters 471 and 475; 49 U.S.C. §§ 40101 et seq., and 48103; FAA Reauthorization Act of 2018 (Public Law Number (P.L.) 115-254); the Department of Transportation Appropriations Act, 2021 (P.L.

116-260, Division L); the Consolidated Appropriations Act, 2022 (P.L. 117-103); Consolidated Appropriations Act, 2023 (P.L. 117-328); Consolidated Appropriations Act, 2024 (P.L. 118-42); FAA Reauthorization Act of 2024 (P.L. 118-63); and the representations contained in the Project Application; and in consideration of: (a) the Sponsor’s adoption and ratification of the Grant Assurances dated April 2025, interpreted and applied consistent with the FAA Reauthorization Act of 2024; (b) the Sponsor’s acceptance of this Offer; and (c) the benefits to accrue to the United States and the public from the accomplishment of the Project and compliance with the Grant Assurance and conditions as herein provided;

THE FEDERAL AVIATION ADMINISTRATION, FOR AND ON BEHALF OF THE UNITED STATES, HEREBY OFFERS AND AGREES to pay (95) % of the allowable costs incurred accomplishing the Project as the United States share of the Project.

Assistance Listings Number (Formerly CFDA Number): 20.106

This Offer is made on and SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

CONDITIONS

1. **Maximum Obligation.** The maximum obligation of the United States payable under this Offer is \$187,920.

The following amounts represent a breakdown of the maximum obligation for the purpose of establishing allowable amounts for any future grant amendment, which may increase the foregoing maximum obligation of the United States under the provisions of 49 U.S.C. § 47108(b):

\$0 for planning

\$187,920 for airport development or noise program implementation; and,

\$0 for land acquisition.

2. **Grant Performance.** This Grant Agreement is subject to the following Federal award requirements:

- a. Period of Performance:

1. Shall start on the date the Sponsor formally accepts this Agreement and is the date signed by the last Sponsor signatory to the Agreement. The end date of the Period of Performance is 4 years (1,460 calendar days) from the date of acceptance. The Period of Performance end date shall not affect, relieve, or reduce Sponsor obligations and assurances that extend beyond the closeout of this Grant Agreement.
2. Means the total estimated time interval between the start of an initial Federal award and the planned end date, which may include one or more funded portions or budget periods (2 Code of Federal Regulations (CFR) § 200.1) except as noted in 49 U.S.C § 47142(b).

- b. Budget Period:

1. For this Grant is 4 years (1,460 calendar days) and follows the same start and end date as the Period of Performance provided in paragraph 2(a)(1). Pursuant to 2 CFR § 200.403(h), the Sponsor may charge to the Grant only allowable costs incurred during the Budget Period except as noted in 49 U.S.C § 47142(b).
2. Means the time interval from the start date of a funded portion of an award to the end date of that funded portion during which the Sponsor is authorized to expend the funds awarded, including any funds carried forward or other revisions pursuant to 2 CFR § 200.308.

c. Close Out and Termination

Unless the FAA authorizes a written extension, the Sponsor must submit all Grant closeout documentation and liquidate (pay-off) all obligations incurred under this award no later than 120 calendar days after the end date of the Period of Performance. If the Sponsor does not submit all required closeout documentation within this time period, the FAA will proceed to close out the grant within one year of the Period of Performance end date with the information available at the end of 120 days (2 CFR § 200.344). The FAA may terminate this agreement and all of its obligations under this agreement if any of the following occurs:

- (a) (1) The Sponsor fails to obtain or provide any Sponsor grant contribution as required by the agreement;
 - (2) A completion date for the Project or a component of the Project is listed in the agreement and the Recipient fails to meet that milestone by six months after the date listed in the agreement;
 - (3) The Sponsor fails to comply with the terms and conditions of this agreement, including a material failure to comply with the Project Schedule even if it is beyond the reasonable control of the Sponsor;
 - (4) Circumstances cause changes to the Project that the FAA determines are inconsistent with the FAA's basis for selecting the Project to receive a grant; or
 - (5) The FAA determines that termination of this agreement is in the public interest.
- (b) In terminating this agreement under this section, the FAA may elect to consider only the interests of the FAA.
- (c) The Sponsor may request that the FAA terminate the agreement under this section.

3. **Ineligible or Unallowable Costs.** In accordance with 49 U.S.C. § 47110, the Sponsor is prohibited from including any costs in the grant funded portions of the project that the FAA has determined to be ineligible or unallowable, including costs incurred to carry out airport development implementing policies and initiatives repealed by Executive Order 14148, provided such costs are not otherwise permitted by statute.
4. **Indirect Costs - Sponsor.** The Sponsor may charge indirect costs under this award by applying the indirect cost rate identified in the project application as accepted by the FAA, to allowable costs for Sponsor direct salaries and wages.
5. **Determining the Final Federal Share of Costs.** The United States' share of allowable project costs will be made in accordance with 49 U.S.C. § 47109, the regulations, policies, and procedures of the Secretary of Transportation ("Secretary"), and any superseding legislation. Final determination of the United States' share will be based upon the final audit of the total amount of allowable project costs and settlement will be made for any upward or downward adjustments to the Federal share of costs.
6. **Completing the Project Without Delay and in Conformance with Requirements.** The Sponsor must carry out and complete the project without undue delays and in accordance with this Agreement, 49

U.S.C. Chapters 471 and 475, the regulations, policies, and procedures of the Secretary. Per 2 CFR § 200.308, the Sponsor agrees to report and request prior FAA approval for any disengagement from performing the project that exceeds three months or a 25 percent reduction in time devoted to the project. The report must include a reason for the project stoppage. The Sponsor also agrees to comply with the grant assurances, which are part of this Agreement.

7. **Amendments or Withdrawals before Grant Acceptance.** The FAA reserves the right to amend or withdraw this offer at any time prior to its acceptance by the Sponsor.
8. **Offer Expiration Date.** This offer will expire and the United States will not be obligated to pay any part of the costs of the project unless this offer has been accepted by the Sponsor on or before August 31, 2025, or such subsequent date as may be prescribed in writing by the FAA.
9. **Improper Use of Federal Funds and Mandatory Disclosure.**
 - a. The Sponsor must take all steps, including litigation if necessary, to recover Federal funds spent fraudulently, wastefully, or in violation of Federal antitrust statutes, or misused in any other manner for any project upon which Federal funds have been expended. For the purposes of this Grant Agreement, the term “Federal funds” means funds however used or dispersed by the Sponsor, that were originally paid pursuant to this or any other Federal grant agreement. The Sponsor must obtain the approval of the Secretary as to any determination of the amount of the Federal share of such funds. The Sponsor must return the recovered Federal share, including funds recovered by settlement, order, or judgment, to the Secretary. The Sponsor must furnish to the Secretary, upon request, all documents and records pertaining to the determination of the amount of the Federal share or to any settlement, litigation, negotiation, or other efforts taken to recover such funds. All settlements or other final positions of the Sponsor, in court or otherwise, involving the recovery of such Federal share require advance approval by the Secretary.
 - b. The Sponsor, a recipient, and a subrecipient under this Federal grant must promptly comply with the mandatory disclosure requirements as established under 2 CFR § 200.113, including reporting requirements related to recipient integrity and performance in accordance with Appendix XII to 2 CFR Part 200.
10. **United States Not Liable for Damage or Injury.** The United States is not responsible or liable for damage to property or injury to persons which may arise from, or be incident to, compliance with this Grant Agreement.
11. **System for Award Management (SAM) Registration and Unique Entity Identifier (UEI).**
 - a. Requirement for System for Award Management (SAM): Unless the Sponsor is exempted from this requirement under 2 CFR § 25.110, the Sponsor must maintain the currency of its information in the SAM until the Sponsor submits the final financial report required under this Grant, or receives the final payment, whichever is later. This requires that the Sponsor review and update the information at least annually after the initial registration and more frequently if required by changes in information or another award term. Additional information about registration procedures may be found at the SAM website (currently at <http://www.sam.gov>).
 - b. Unique entity identifier (UEI) means a 12-character alpha-numeric value used to identify a specific commercial, nonprofit or governmental entity. A UEI may be obtained from SAM.gov at <https://sam.gov/content/entity-registration>.

12. **Electronic Grant Payment(s).** Unless otherwise directed by the FAA, the Sponsor must make each payment request under this Agreement electronically via the Delphi eInvoicing System for Department of Transportation (DOT) Financial Assistance Awardees.
13. **Informal Letter Amendment of AIP Projects.** If, during the life of the project, the FAA determines that the maximum grant obligation of the United States exceeds the expected needs of the Sponsor by \$25,000 or five percent (5%), whichever is greater, the FAA can issue a letter amendment to the Sponsor unilaterally reducing the maximum obligation.

The FAA can also issue a letter to the Sponsor increasing the maximum obligation if there is an overrun in the total actual eligible and allowable project costs to cover the amount of the overrun provided it will not exceed the statutory limitations for grant amendments. The FAA's authority to increase the maximum obligation does not apply to the "planning" component of Condition No. 1, Maximum Obligation.

The FAA can also issue an informal letter amendment that modifies the grant description to correct administrative errors or to delete work items if the FAA finds it advantageous and in the best interests of the United States.

An informal letter amendment has the same force and effect as a formal grant amendment.

14. **Environmental Standards.** The Sponsor is required to comply with all applicable environmental standards, as further defined in the Grant Assurances, for all projects in this grant. If the Sponsor fails to comply with this requirement, the FAA may suspend, cancel, or terminate this Grant Agreement.
15. **Financial Reporting and Payment Requirements.** The Sponsor will comply with all Federal financial reporting requirements and payment requirements, including submittal of timely and accurate reports.
16. **Buy American.** Unless otherwise approved in advance by the FAA, in accordance with 49 U.S.C. § 50101, the Sponsor will not acquire or permit any contractor or subcontractor to acquire any steel or manufactured goods produced outside the United States to be used for any project for which funds are provided under this Grant. The Sponsor will include a provision implementing Buy American in every contract and subcontract awarded under this Grant.
17. **Build America, Buy America.** The Sponsor must comply with the requirements under the Build America, Buy America Act (P.L. 117-58).
18. **Maximum Obligation Increase.** In accordance with 49 U.S.C. § 47108(b)(3), as amended, the maximum obligation of the United States, as stated in Condition No. 1, Maximum Obligation, of this Grant:
- a. May not be increased for a planning project;
 - b. May be increased by not more than 15 percent for development projects, if funds are available;
 - c. May be increased by not more than the greater of the following for a land project, if funds are available:
 1. 15 percent; or
 2. 25 percent of the total increase in allowable project costs attributable to acquiring an interest in the land.

If the Sponsor requests an increase, any eligible increase in funding will be subject to the United States Government share as provided in 49 U.S.C. § 47110, or other superseding legislation if applicable, for the fiscal year appropriation with which the increase is funded. The FAA is not responsible for the same Federal share provided herein for any amount increased over the initial grant amount. The FAA may adjust the Federal share as applicable through an informal letter of amendment.

19. Audits for Sponsors.

PUBLIC SPONSORS. The Sponsor must provide for a Single Audit or program-specific audit in accordance with 2 CFR Part 200. The Sponsor must submit the audit reporting package to the Federal Audit Clearinghouse on the Federal Audit Clearinghouse's Internet Data Entry System at <http://harvester.census.gov/facweb/>. Upon request of the FAA, the Sponsor shall provide one copy of the completed audit to the FAA. Sponsors that expend less than \$1,000,000 in Federal awards and are exempt from Federal audit requirements must make records available for review or audit by the appropriate Federal agency officials, State, and Government Accountability Office. The FAA and other appropriate Federal agencies may request additional information to meet all Federal audit requirements.

20. Suspension or Debarment. When entering into a "covered transaction" as defined by 2 CFR § 180.200, the Sponsor must:

- a. Verify the non-Federal entity is eligible to participate in this Federal program by:
 1. Checking the System for Award Management (SAM.gov) exclusions to determine if the non-Federal entity is excluded or disqualified; or
 2. Collecting a certification statement from the non-Federal entity attesting they are not excluded or disqualified from participating; or
 3. Adding a clause or condition to covered transactions attesting the individual or firm are not excluded or disqualified from participating.
- b. Require prime contractors to comply with 2 CFR § 180.330 when entering into lower-tier transactions with their contractors and sub-contractors.
- c. Immediately disclose in writing to the FAA whenever (1) the Sponsor learns they have entered into a covered transaction with an ineligible entity or (2) the Public Sponsor suspends or debars a contractor, person, or entity.

21. Ban on Texting While Driving.

- a. In accordance with Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving, October 1, 2009, and DOT Order 3902.10, Text Messaging While Driving, December 30, 2009, the Sponsor is encouraged to:
 1. Adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers including policies to ban text messaging while driving when performing any work for, or on behalf of, the Federal government, including work relating to a grant or subgrant.
 2. Conduct workplace safety initiatives in a manner commensurate with the size of the business, such as:
 - i. Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and

- ii. Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.
- b. The Sponsor must insert the substance of this clause on banning texting while driving in all subgrants, contracts, and subcontracts funded with this Grant.

22. **Trafficking in Persons.**

1. *Posting of contact information.*
 - a. The Sponsor must post the contact information of the national human trafficking hotline (including options to reach out to the hotline such as through phone, text, or TTY) in all public airport restrooms.
2. *Provisions applicable to a recipient that is a private entity.*
 - a. Under this Grant, the recipient, its employees, subrecipients under this Grant, and subrecipient's employees must not engage in:
 - i. Severe forms of trafficking in persons;
 - ii. The procurement of a commercial sex act during the period of time that the grant or cooperative agreement is in effect;
 - iii. The use of forced labor in the performance of this grant; or any subaward; or
 - iv. Acts that directly support or advance trafficking in persons, including the following acts:
 - a) Destroying, concealing, removing, confiscating, or otherwise denying an employee access to that employee's identity or immigration documents;
 - b) Failing to provide return transportation of pay for return transportation costs to an employee from a country outside the United States to the country from which the employee was recruited upon the end of employment if requested by the employee, unless:
 1. Exempted from the requirement to provide or pay for such return transportation by the federal department or agency providing or entering into the grant; or
 2. The employee is a victim of human trafficking seeking victim services or legal redress in the country of employment or witness in a human trafficking enforcement action;
 - c) Soliciting a person for the purpose of employment, or offering employment, by means of materially false or fraudulent pretenses, representations, or promises regarding that employment;
 - d) Charging recruited employees a placement or recruitment fee; or
 - e) Providing or arranging housing that fails to meet the host country's housing and safety standards.
 - b. The FAA may unilaterally terminate this Grant or take any remedial actions authorized by 22 U.S.C. § 7104b(c), without penalty, if any private entity under this Grant:
 - i. Is determined to have violated a prohibition in paragraph (2)(a) of this Grant; or
 - ii. Has an employee that is determined to have violated a prohibition in paragraph(2)(a) of this Grant through conduct that is either:
 - a) Associated with the performance under this Grant; or

- b) Imputed to the recipient or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR Part 180, "OMB Guidelines to Agencies on Government-wide Debarment and Suspension (Nonprocurement)," as implemented by the FAA at 2 CFR Part 1200.
- 3. *Provisions applicable to a recipient other than a private entity.*
 - a. The FAA may unilaterally terminate this award or take any remedial actions authorized by 22 U.S.C. § 7104b(c), without penalty, if subrecipient than is a private entity under this award:
 - i. Is determined to have violated a prohibition in paragraph (2)(a) of this Grant or
 - ii. Has an employee that is determined to have violated a prohibition in paragraph (2)(a) of this Grant through conduct that is either:
 - a) Associated with the performance under this Grant; or
 - b) Imputed to the recipient or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR Part 180, "OMB Guidelines to Agencies on Government-wide Debarment and Suspension (Nonprocurement)," as implemented by the FAA at 2 CFR Part 1200.
- 4. *Provisions applicable to any recipient.*
 - a. The recipient must inform the FAA and the DOT Inspector General immediately of any information you receive from any source alleging a violation of a prohibition in paragraph (2)(a) of this Grant.
 - b. The FAA's right to unilaterally terminate this Grant as described in paragraphs (2)(b) or (3)(a) of this Grant, implements the requirements of 22 U.S.C. chapter 78, and is in addition to all other remedies for noncompliance that are available to the FAA under this Grant.
 - c. The recipient must include the requirements of paragraph (2)(a) of this Grant award term in any subaward it makes to a private entity.
 - d. If applicable, the recipient must also comply with the compliance plan and certification requirements in 2 CFR 175.105(b).
- 5. *Definitions. For purposes of this Grant award, term:*
 - a. "Employee" means either:
 - i. An individual employed by the recipient or a subrecipient who is engaged in the performance of the project or program under this Grant; or
 - ii. Another person engaged in the performance of the project or program under this Grant and not compensated by the recipient including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing requirements.

- b. "Private Entity" means:
- i. Any entity, including for-profit organizations, nonprofit organizations, institutions of higher education, and hospitals. The term does not include foreign public entities, Indian Tribes, local governments, or states as defined in 2 CFR 200.1.
 - ii. The terms "severe forms of trafficking in persons," "commercial sex act," "sex trafficking," "Abuse or threatened abuse of law or legal process," "coercion," "debt bondage," and "involuntary servitude" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. § 7102).
23. **AIP Funded Work Included in a PFC Application.** Within 120 days of acceptance of this Grant Agreement, the Sponsor must submit to the FAA an amendment to any approved Passenger Facility Charge (PFC) application that contains an approved PFC project also covered under this Grant Agreement as described in the project application. The airport sponsor may not make any expenditure under this Grant Agreement until project work addressed under this Grant Agreement is removed from an approved PFC application by amendment.
24. **Exhibit "A" Property Map.** The Exhibit "A" Property Map dated February 2019, is incorporated herein by reference or is submitted with the project application and made part of this Grant Agreement.
25. **Employee Protection from Retaliation.** In accordance with 2 CFR § 200.217 and 41 U.S.C. § 4701, an employee of a grantee, subgrantee contractor, recipient or subrecipient must not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing to a person or body described in paragraph (a)(2) of 41 U.S.C. 4712 information that the employee reasonably believes is evidence of gross mismanagement of a Federal contract or grant, a gross waste of Federal funds, an abuse of authority relating to a Federal contract or grant, a substantial and specific danger to public health or safety, or a violation of law, rule, or regulation related to a Federal contract (including the competition for or negotiation of a contract) or grant. The grantee, subgrantee, contractor, recipient, or subrecipient must inform their employees in writing of employee whistleblower rights and protections under 41 U.S.C. § 4712. See statutory requirements for whistleblower protections at 10 U.S.C. § 4701, 41 U.S.C. § 4712, 41 U.S.C. § 4304, and 10 U.S.C. § 4310.
26. **Co-Sponsor.** The Co-Sponsors understand and agree that they jointly and severally adopt and ratify the representations and assurances contained therein and that the word "Sponsor" as used in the application and other assurances is deemed to include all Co-Sponsors.
27. **Prohibited Telecommunications and Video Surveillance Services and Equipment.** The Sponsor agrees to comply with mandatory standards and policies relating to use and procurement of certain telecommunications and video surveillance services or equipment in compliance with the National Defense Authorization Act [P.L. 115-232 § 889(f)(1)] and 2 CFR § 200.216.
28. **Critical Infrastructure Security and Resilience.** The Sponsor acknowledges that it has considered and addressed physical and cybersecurity and resilience in its project planning, design, and oversight, as determined by the DOT and the Department of Homeland Security (DHS). For airports that do not have specific DOT or DHS cybersecurity requirements, the FAA encourages the voluntary adoption of the cybersecurity requirements from the Transportation Security Administration and Federal Security Director identified for security risk Category X airports.
29. **Title VI of the Civil Rights Act.** As a condition of a grant award, the Sponsor shall demonstrate that it complies with the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq) and implementing regulations (49 CFR part 21), the Airport and Airway Improvement Act of 1982 (49

U.S.C. § 47123), the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.), Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794 et seq.), the Americans with Disabilities Act of 1990 (42 U.S.C. § 12101, et seq.), U.S. Department of Transportation and Federal Aviation Administration (FAA) Assurances, and other relevant civil rights statutes, regulations, or authorities, including any amendments or updates thereto. This may include, as applicable, providing a current Title VI Program Plan to the FAA for approval, in the format and according to the timeline required by the FAA, and other information about the communities that will be benefited and impacted by the project. A completed FAA Title VI Pre-Grant Award Checklist is required for every grant application, unless excused by the FAA. The Sponsor shall affirmatively ensure that when carrying out any project supported by this grant that it complies with all federal nondiscrimination and civil rights laws based on race, color, national origin, sex, creed, age, disability, genetic information, in consideration for federal financial assistance. The Department's and FAA's Office of Civil Rights may provide resources and technical assistance to recipients to ensure full and sustainable compliance with Federal civil rights requirements. Failure to comply with civil rights requirements will be considered a violation of the agreement or contract and be subject to any enforcement action as authorized by law.

30. **FAA Reauthorization Act of 2024.** This grant agreement is subject to the terms and conditions contained herein including the terms known as the Grant Assurances as they were published in the Federal Register on April 2025. On May 16, 2024, the FAA Reauthorization Act of 2024 made certain amendments to 49 U.S.C. chapter 471. The Reauthorization Act will require FAA to make certain amendments to the assurances in order to best achieve consistency with the statute. Federal law requires that FAA publish any amendments to the assurances in the Federal Register along with an opportunity to comment. In order not to delay the offer of this grant, the existing assurances are attached herein; however, FAA shall interpret and apply these assurances consistent with the Reauthorization Act. To the extent there is a conflict between the assurances and Federal statutes, the statutes shall apply. The full text of the FAA Reauthorization Act of 2024 is at <https://www.congress.gov/bill/118th-congress/house-bill/3935/text>.

31. **Applicable Federal Anti-Discrimination Laws.** The sponsor agrees:

- a. that its compliance in all respects with all applicable Federal anti-discrimination laws is material to the government's payment decisions for purposes of section 3729(b)(4) of title 31, United States Code; and
- b. to certify that it does not operate any programs promoting diversity, equity, and inclusion (DEI) that violate any applicable Federal anti-discrimination laws.

32. **Federal Law and Public Policy Requirements.** The Sponsor shall ensure that Federal funding is expended in full accordance with the United States Constitution, Federal law, and statutory and public policy requirements: including but not limited to, those protecting free speech, religious liberty, public welfare, the environment, and prohibiting discrimination; and the Sponsor will cooperate with Federal officials in the enforcement of Federal law, including cooperating with and not impeding U.S. Immigration and Customs Enforcement (ICE) and other Federal offices and components of the Department of Homeland Security in and the enforcement of Federal immigration law.

33. **National Airspace System Requirements**

- a. The Sponsor shall cooperate with FAA activities installing, maintaining, replacing, improving, or operating equipment and facilities in or supporting the National Airspace System, including waiving permitting requirements and other restrictions affecting those activities to the maximum extent possible, and assisting the FAA in securing waivers of permitting or other restrictions from other authorities. The Sponsor shall not take actions that frustrate or prevent the FAA from installing, maintaining, replacing, improving, or operating equipment and facilities in or supporting the National Airspace System.
- b. If FAA determines that the Sponsor has violated subsection (a), the FAA may impose a remedy, including:
 - (1) additional conditions on the award;
 - (2) consistent with 49 U.S.C. chapter 471, any remedy permitted under 2 C.F.R. 200.339–200.340, including withholding of payments; disallowance of previously reimbursed costs, requiring refunds from the Recipient to the DOT; suspension or termination of the award; or suspension and debarment under 2 C.F.R. part 180; or
 - (3) any other remedy legally available.
- c. (In imposing a remedy under this condition, the FAA may elect to consider the interests of only the FAA.
- d. The Sponsor acknowledges that amounts that the FAA requires the Sponsor to refund to the FAA due to a remedy under this condition constitute a debt to the Federal Government that the FAA may collect under 2 C.F.R. 200.346 and the Federal Claims Collection Standards (31 C.F.R. parts 900–904).

34. **Signage Costs for Construction Projects.** The Sponsor agrees that it will require the prime contractor of a Federally- assisted airport improvement project to post signs consistent with a DOT/FAA-prescribed format, as may be requested by the DOT/FAA, and further agrees to remove any signs posted in response to requests received prior to February 1, 2025.

35. **Title 8 - U.S.C., Chapter 12, Subchapter II - Immigration.** The sponsor will follow applicable federal laws pertaining to Subchapter 12, and be subject to the penalties set forth in 8 U.S.C. § 1324, Bringing in and harboring certain aliens, and 8 U.S.C. § 1327, Aiding or assisting certain aliens to enter

SPECIAL CONDITIONS

36. **Buy American Executive Orders.** The Sponsor agrees to abide by applicable Executive Orders in effect at the time this Grant Agreement is executed, including Executive Order 14005, Ensuring the Future Is Made in All of America by All of America’s Workers.

37. **Duffy Plaintiff Special Term.** Pursuant to the court’s preliminary injunction order in State of California v. Duffy, 1:25-cv-00208-JJM-PAS (D.R.I.) (June 19, 2025), DOT will not impose or enforce

the challenged immigration enforcement condition* or any materially similar terms and conditions, to any grant funds awarded, directly or indirectly, to Plaintiff States or local government entities within those States (collectively referred to as "Plaintiff State Entities"), or otherwise rescind, withhold, terminate, or take other adverse action, absent specific statutory authority, based on the challenged immigration enforcement condition while DOT is subject to an injunction. DOT will not require Plaintiff State Entities to make any certification or other representation related to compliance with the challenged immigration enforcement condition nor will DOT construe acceptance of funding from DOT as certification as to the challenged immigration enforcement condition.

*The challenged immigration enforcement condition:

"[T]he Recipient will cooperate with Federal officials in the enforcement of Federal law, including cooperating with and not impeding U.S. Immigration and Customs Enforcement (ICE) and other Federal offices and components of the Department of Homeland Security in the enforcement of Federal immigration law."

38. **Plans and Specifications Prior to Bidding.** The Sponsor agrees that it will submit plans and specifications for FAA review prior to advertising for bids.
39. **Design Grant.** This Grant Agreement is being issued in order to complete the design of the project. The Sponsor understands and agrees that within two (2) years after the design is completed that the Sponsor will accept, subject to the availability of the amount of Federal funding identified in the Airport Capital Improvement Plan (ACIP), a grant to complete the construction of the project in order to provide a useful and usable unit of work. The Sponsor also understands that if the FAA has provided Federal funding to complete the design for the project, and the Sponsor has not completed the design within four (4) years from the execution of this Grant Agreement, the FAA may suspend or terminate grants related to the design.

The Sponsor's acceptance of this Offer and ratification and adoption of the Project Application incorporated herein shall be evidenced by execution of this instrument by the Sponsor, as hereinafter provided, and this Offer and Acceptance shall comprise a Grant Agreement, constituting the contractual obligations and rights of the United States and the Sponsor with respect to the accomplishment of the Project and compliance with the Grant Assurances, terms, and conditions as provided herein. Such Grant Agreement shall become effective upon the Sponsor's acceptance of this Offer.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.¹

**UNITED STATES OF AMERICA
FEDERAL AVIATION ADMINISTRATION**



(Signature)

Jesse A Lyman

(Typed Name)

Manager, Denver Airports District Office

(Title of FAA Official)

¹ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

Part II - Acceptance

The Sponsor does hereby ratify and adopt all assurances, statements, representations, warranties, covenants, and agreements contained in the Project Application and incorporated materials referred to in the foregoing Offer, and does hereby accept this Offer and by such acceptance agrees to comply with all of the Grant Assurances, terms, and conditions in this Offer and in the Project Application.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.²

Dated _____

**GRAND JUNCTION REGIONAL AIRPORT
AUTHORITY**

(Name of Sponsor)

(Signature of Sponsor's Authorized Official)

By: _____

(Typed Name of Sponsor's Authorized Official)

Title: _____

(Title of Sponsor's Authorized Official)

² Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

CERTIFICATE OF SPONSOR’S ATTORNEY

I, _____, acting as Attorney for the Sponsor do hereby certify:

That in my opinion the Sponsor is empowered to enter into the foregoing Grant Agreement under the laws of the State of Colorado. Further, I have examined the foregoing Grant Agreement and the actions taken by said Sponsor and Sponsor’s official representative, who has been duly authorized to execute this Grant Agreement, which is in all respects due and proper and in accordance with the laws of the said State; and Title 49, United States Code (U.S.C.), Chapters 471 and 475; 49 U.S.C. §§ 40101 et seq., and 48103; FAA Reauthorization Act of 2018 (P.L. 115-254); the Department of Transportation Appropriations Act, 2021 (P.L. 116-260, Division L); the Consolidated Appropriations Act, 2022 (P.L. 117-103); Consolidated Appropriations Act, 2023 (P.L. 117-328); Consolidated Appropriations Act, 2024 (P.L. 118-42); FAA Reauthorization Act of 2024 (P.L. 118-63); and the representations contained in the Project Application. In addition, for grants involving projects to be carried out on property not owned by the Sponsor, there are no legal impediments that will prevent full performance by the Sponsor. Further, it is my opinion that the said Grant Agreement constitutes a legal and binding obligation of the Sponsor in accordance with the terms thereof.

Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.³

Dated at _____

By: _____
(Signature of Sponsor’s Attorney)

³ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

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I declare under penalty of perjury that the foregoing is true and correct.⁴

Dated _____

CITY OF GRAND JUNCTION, COLORADO

(Name of Sponsor)

(Signature of Sponsor's Authorized Official)

By: _____
(Typed Name of Sponsor's Authorized Official)

Title: _____
(Title of Sponsor's Authorized Official)

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I declare under penalty of perjury that the foregoing is true and correct.⁵

Dated at _____

By: _____
(Signature of Sponsor’s Attorney)

⁵ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

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Please read the following information: By signing this document, you are agreeing that you have reviewed the following consumer disclosure information and consent to transact business using electronic communications, to receive notices and disclosures electronically, and to utilize electronic signatures in lieu of using paper documents. You are not required to receive notices and disclosures or sign documents electronically. If you prefer not to do so, you may request to receive paper copies and withdraw your consent at any time.

I declare under penalty of perjury that the foregoing is true and correct.⁶

Dated _____

COUNTY OF MESA, COLORADO

(Name of Sponsor)

(Signature of Sponsor's Authorized Official)

By: _____

(Typed Name of Sponsor's Authorized Official)

Title: _____

(Title of Sponsor's Authorized Official)

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That in my opinion the Sponsor is empowered to enter into the foregoing Grant Agreement under the laws of the State of Colorado. Further, I have examined the foregoing Grant Agreement and the actions taken by said Sponsor and Sponsor’s official representative, who has been duly authorized to execute this Grant Agreement, which is in all respects due and proper and in accordance with the laws of the said State; and Title 49, United States Code (U.S.C.), Chapters 471 and 475; 49 U.S.C. §§ 40101 et seq., and 48103; FAA Reauthorization Act of 2018 (P.L. 115-254); the Department of Transportation Appropriations Act, 2021 (P.L. 116-260, Division L); the Consolidated Appropriations Act, 2022 (P.L. 117-103); Consolidated Appropriations Act, 2023 (P.L. 117-328); Consolidated Appropriations Act, 2024 (P.L. 118-42); FAA Reauthorization Act of 2024 (P.L. 118-63); and the representations contained in the Project Application. In addition, for grants involving projects to be carried out on property not owned by the Sponsor, there are no legal impediments that will prevent full performance by the Sponsor. Further, it is my opinion that the said Grant Agreement constitutes a legal and binding obligation of the Sponsor in accordance with the terms thereof.

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I declare under penalty of perjury that the foregoing is true and correct.⁷

Dated at _____

By: _____
(Signature of Sponsor’s Attorney)

⁷ Knowingly and willfully providing false information to the Federal government is a violation of 18 U.S.C. § 1001 (False Statements) and could subject you to fines, imprisonment, or both.

ASSURANCES

AIRPORT SPONSORS

A. General.

1. These assurances shall be complied with in the performance of grant agreements for airport development, airport planning, and noise compatibility program grants for airport sponsors.
2. These assurances are required to be submitted as part of the project application by sponsors requesting funds under the provisions of Title 49, U.S.C., subtitle VII, as amended. As used herein, the term "public agency sponsor" means a public agency with control of a public-use airport; the term "private sponsor" means a private owner of a public-use airport; and the term "sponsor" includes both public agency sponsors and private sponsors.
3. Upon acceptance of this grant offer by the sponsor, these assurances are incorporated in and become part of this Grant Agreement.

B. Duration and Applicability.

1. Airport Development or Noise Compatibility Program Projects Undertaken by a Public Agency Sponsor.

The terms, conditions and assurances of this Grant Agreement shall remain in full force and effect throughout the useful life of the facilities developed or equipment acquired for an airport development or noise compatibility program project, or throughout the useful life of the project items installed within a facility under a noise compatibility program project, but in any event not to exceed twenty (20) years from the date of acceptance of a grant offer of Federal funds for the project. However, there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport. There shall be no limit on the duration of the terms, conditions, and assurances with respect to real property acquired with federal funds. Furthermore, the duration of the Civil Rights assurance shall be specified in the assurances.

2. Airport Development or Noise Compatibility Projects Undertaken by a Private Sponsor.

The preceding paragraph (1) also applies to a private sponsor except that the useful life of project items installed within a facility or the useful life of the facilities developed or equipment acquired under an airport development or noise compatibility program project shall be no less than ten (10) years from the date of acceptance of Federal aid for the project.

3. Airport Planning Undertaken by a Sponsor.

Unless otherwise specified in this Grant Agreement, only Assurances 1, 2, 3, 5, 6, 13, 18, 23, 25, 30, 32, 33, 34, 37, and 40 in Section C apply to planning projects. The terms, conditions, and assurances of this Grant Agreement shall remain in full force and effect during the life of the project; there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport.

C. Sponsor Certification.

The sponsor hereby assures and certifies, with respect to this grant that:

1. General Federal Requirements

It will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance, and use of Federal funds for this Grant. Performance under this agreement shall be governed by and in compliance with the following requirements, as applicable, to the type of organization of the Sponsor and any applicable sub-recipients. The applicable provisions to this agreement include, but are not limited to, the following:

FEDERAL LEGISLATION

- a. 49 U.S.C. subtitle VII, as amended.
- b. Davis-Bacon Act, as amended — 40 U.S.C. §§ 3141-3144, 3146, and 3147, et seq.¹
- c. Federal Fair Labor Standards Act – 29 U.S.C. § 201, et seq.
- d. Hatch Act – 5 U.S.C. § 1501, et seq.²
- e. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, 42 U.S.C. § 4601, et seq.^{1, 2}
- f. National Historic Preservation Act of 1966 – Section 106 – 54 U.S.C. § 306108.¹
- g. Archeological and Historic Preservation Act of 1974 – 54 U.S.C. § 312501, et seq.¹
- h. Native Americans Grave Repatriation Act – 25 U.S.C. § 3001, et seq.
- i. Clean Air Act, P.L. 90-148, as amended – 42 U.S.C. § 7401, et seq.
- j. Coastal Zone Management Act, P.L. 92-583, as amended – 16 U.S.C. § 1451, et seq.
- k. Flood Disaster Protection Act of 1973 – Section 102(a) - 42 U.S.C. § 4012a.¹
- l. 49 U.S.C. § 303, (formerly known as Section 4(f)).
- m. Rehabilitation Act of 1973 – 29 U.S.C. § 794.
- n. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq.) (prohibits discrimination on the basis of race, color, national origin).
- o. Americans with Disabilities Act of 1990, as amended, (42 U.S.C. § 12101 et seq.) (prohibits discrimination on the basis of disability).
- p. Age Discrimination Act of 1975 – 42 U.S.C. § 6101, et seq.
- q. American Indian Religious Freedom Act, P.L. 95-341, as amended.
- r. Architectural Barriers Act of 1968, as amended – 42 U.S.C. § 4151, et seq.¹
- s. Powerplant and Industrial Fuel Use Act of 1978 – Section 403 – 42 U.S.C. § 8373.¹
- t. Contract Work Hours and Safety Standards Act – 40 U.S.C. § 3701, et seq.¹
- u. Copeland Anti-kickback Act – 18 U.S.C. § 874.¹

- v. National Environmental Policy Act of 1969 – 42 U.S.C. § 4321, et seq.¹
- w. Wild and Scenic Rivers Act, P.L. 90-542, as amended – 16 U.S.C. § 1271, et seq.
- x. Single Audit Act of 1984 – 31 U.S.C. § 7501, et seq.²
- y. Drug-Free Workplace Act of 1988 – 41 U.S.C. §§ 8101 through 8105.
- z. The Federal Funding Accountability and Transparency Act of 2006, as amended (P.L. 109-282, as amended by section 6202 of P.L. 110-252).
- aa. Civil Rights Restoration Act of 1987, P.L. 100-259.
- bb. Infrastructure Investment and Jobs Act, P.L. 117-58, Title VIII.
- cc. Build America, Buy America Act, P.L. 117-58, Title IX.
- dd. Endangered Species Act – 16 U.S.C. 1531, et seq.
- ee. Title IX of the Education Amendments of 1972, as amended – 20 U.S.C. 1681–1683 and 1685–1687.
- ff. Drug Abuse Office and Treatment Act of 1972, as amended – 21 U.S.C. 1101, et seq.
- gg. Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, P.L. 91-616, as amended – 42 U.S.C. § 4541, et seq.
- hh. Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, P.L. 91-616, as amended – 42 U.S.C. § 4541, et seq.
- ii. Appropriated Funds to Influence Certain Federal Contracting and Financial Transactions – 31 U.S.C. § 1352.

EXECUTIVE ORDERS

- a. Executive Order 11990 – Protection of Wetlands
- b. Executive Order 11988 – Floodplain Management
- c. Executive Order 12372 – Intergovernmental Review of Federal Programs
- d. Executive Order 12699 – Seismic Safety of Federal and Federally Assisted New Building Construction¹
- e. Executive Order 14005 – Ensuring the Future is Made in all of America by All of America’s Workers
- f. Executive Order 14149 – Restoring Freedom of Speech and Ending Federal Censorship
- g. Executive Order 14151 – Ending Radical and Wasteful Government DEI Programs and Preferencing
- h. Executive Order 14154 – Unleashing American Energy
- i. Executive Order 14168 – Defending Women from Gender Ideology Extremism and Restoring Biological Truth to the Federal Government
- j. Executive Order 14173 – Ending Illegal Discrimination and Restoring Merit-Based Opportunity

FEDERAL REGULATIONS

- a. 2 CFR Part 180 – OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement).
- b. 2 CFR Part 200 and 1201 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.^{3, 4, 5}
- c. 2 CFR Part 1200 – Nonprocurement Suspension and Debarment.
- d. 14 CFR Part 13 – Investigative and Enforcement Procedures.
- e. 14 CFR Part 16 – Rules of Practice for Federally-Assisted Airport Enforcement Proceedings.
- f. 14 CFR Part 150 – Airport Noise Compatibility Planning.
- g. 28 CFR Part 35 – Nondiscrimination on the Basis of Disability in State and Local Government Services.
- h. 28 CFR § 50.3 – U.S. Department of Justice Guidelines for the Enforcement of Title VI of the Civil Rights Act of 1964.
- i. 29 CFR Part 1 – Procedures for Predetermination of Wage Rates.¹
- j. 29 CFR Part 3 – Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States.¹
- k. 29 CFR Part 5 – Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction (Also Labor Standards Provisions Applicable to Nonconstruction Contracts Subject to the Contract Work Hours and Safety Standards Act).¹
- l. 41 CFR Part 60 – Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and Federally-assisted contracting requirements).¹
- m. 49 CFR Part 20 – New Restrictions on Lobbying.
- n. 49 CFR Part 21 – Nondiscrimination in Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964.
- o. 49 CFR Part 23 – Participation by Disadvantage Business Enterprise in Airport Concessions.
- p. 49 CFR Part 24 – Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs.^{1, 2}
- q. 49 CFR Part 26 – Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.
- r. 49 CFR Part 27 – Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance.¹
- s. 49 CFR Part 28 – Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Transportation.
- t. 49 CFR Part 30 – Denial of Public Works Contracts to Suppliers of Goods and Services of Countries That Deny Procurement Market Access to U.S. Contractors.
- u. 49 CFR Part 32 – Governmentwide Requirements for Drug-Free Workplace (Financial Assistance).

- v. 49 CFR Part 37 – Transportation Services for Individuals with Disabilities (ADA).
- w. 49 CFR Part 38 – Americans with Disabilities Act (ADA) Accessibility Specifications for Transportation Vehicles.
- x. 49 CFR Part 41 – Seismic Safety.

FOOTNOTES TO ASSURANCE (C)(1)

- ¹ These laws do not apply to airport planning sponsors.
- ² These laws do not apply to private sponsors.
- ³ 2 CFR Part 200 contains requirements for State and Local Governments receiving Federal assistance. Any requirement levied upon State and Local Governments by this regulation shall apply where applicable to private sponsors receiving Federal assistance under Title 49, United States Code.
- ⁴ Cost principles established in 2 CFR Part 200 subpart E must be used as guidelines for determining the eligibility of specific types of expenses.
- ⁵ Audit requirements established in 2 CFR Part 200 subpart F are the guidelines for audits.

SPECIFIC ASSURANCES

Specific assurances required to be included in grant agreements by any of the above laws, regulations or circulars are incorporated by reference in this Grant Agreement.

2. Responsibility and Authority of the Sponsor.

a. Public Agency Sponsor:

It has legal authority to apply for this Grant, and to finance and carry out the proposed project; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

b. Private Sponsor:

It has legal authority to apply for this Grant and to finance and carry out the proposed project and comply with all terms, conditions, and assurances of this Grant Agreement. It shall designate an official representative and shall in writing direct and authorize that person to file this application, including all understandings and assurances contained therein; to act in connection with this application; and to provide such additional information as may be required.

3. Sponsor Fund Availability.

It has sufficient funds available for that portion of the project costs which are not to be paid by the United States. It has sufficient funds available to assure operation and maintenance of items funded under this Grant Agreement which it will own or control.

4. Good Title.

- a. It, a public agency or the Federal government, holds good title, satisfactory to the Secretary, to the landing area of the airport or site thereof, or will give assurance satisfactory to the Secretary that good title will be acquired.

- b. For noise compatibility program projects to be carried out on the property of the sponsor, it holds good title satisfactory to the Secretary to that portion of the property upon which Federal funds will be expended or will give assurance to the Secretary that good title will be obtained.

5. Preserving Rights and Powers.

- a. It will not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in this Grant Agreement without the written approval of the Secretary, and will act promptly to acquire, extinguish or modify any outstanding rights or claims of right of others which would interfere with such performance by the sponsor. This shall be done in a manner acceptable to the Secretary.
- b. Subject to 49 U.S.C. § 47107(a)(16) and (x), it will not sell, lease, encumber, or otherwise transfer or dispose of any part of its title or other interests in the property shown on Exhibit A to this application or, for a noise compatibility program project, that portion of the property upon which Federal funds have been expended, for the duration of the terms, conditions, and assurances in this Grant Agreement without approval by the Secretary. If the transferee is found by the Secretary to be eligible under Title 49, United States Code, to assume the obligations of this Grant Agreement and to have the power, authority, and financial resources to carry out all such obligations, the sponsor shall insert in the contract or document transferring or disposing of the sponsor's interest, and make binding upon the transferee all of the terms, conditions, and assurances contained in this Grant Agreement.
- c. For all noise compatibility program projects which are to be carried out by another unit of local government or are on property owned by a unit of local government other than the sponsor, it will enter into an agreement with that government. Except as otherwise specified by the Secretary, that agreement shall obligate that government to the same terms, conditions, and assurances that would be applicable to it if it applied directly to the FAA for a grant to undertake the noise compatibility program project. That agreement and changes thereto must be satisfactory to the Secretary. It will take steps to enforce this agreement against the local government if there is substantial non-compliance with the terms of the agreement.
- d. For noise compatibility program projects to be carried out on privately owned property, it will enter into an agreement with the owner of that property which includes provisions specified by the Secretary. It will take steps to enforce this agreement against the property owner whenever there is substantial non-compliance with the terms of the agreement.
- e. If the sponsor is a private sponsor, it will take steps satisfactory to the Secretary to ensure that the airport will continue to function as a public-use airport in accordance with these assurances for the duration of these assurances.
- f. If an arrangement is made for management and operation of the airport by any agency or person other than the sponsor or an employee of the sponsor, the sponsor will reserve sufficient rights and authority to ensure that the airport will be operated and maintained in accordance with Title 49, United States Code, the regulations and the terms, conditions and assurances in this Grant Agreement and shall ensure that such arrangement also requires compliance therewith.
- g. Sponsors of commercial service airports will not permit or enter into any arrangement that results in permission for the owner or tenant of a property used as a residence, or zoned for residential use, to taxi an aircraft between that property and any location on airport. Sponsors

of general aviation airports entering into any arrangement that results in permission for the owner of residential real property adjacent to or near the airport must comply with the requirements of Sec. 136 of Public Law 112-95 and the sponsor assurances.

6. Consistency with Local Plans.

The project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport.

7. Consideration of Local Interest.

It has given fair consideration to the interest of communities in or near where the project may be located.

8. Consultation with Users.

In making a decision to undertake any airport development project under Title 49, United States Code, it has undertaken reasonable consultations with affected parties using the airport at which project is proposed.

9. Public Hearings.

In projects involving the location of an airport, an airport runway, or a major runway extension, it has afforded the opportunity for public hearings for the purpose of considering the economic, social, and environmental effects of the airport or runway location and its consistency with goals and objectives of such planning as has been carried out by the community and it shall, when requested by the Secretary, submit a copy of the transcript of such hearings to the Secretary. Further, for such projects, it has on its management board either voting representation from the communities where the project is located or has advised the communities that they have the right to petition the Secretary concerning a proposed project.

10. Metropolitan Planning Organization.

In projects involving the location of an airport, an airport runway, or a major runway extension at a medium or large hub airport, the sponsor has made available to and has provided upon request to the metropolitan planning organization in the area in which the airport is located, if any, a copy of the proposed amendment to the airport layout plan to depict the project and a copy of any airport master plan in which the project is described or depicted.

11. Pavement Preventive Maintenance-Management.

With respect to a project approved after January 1, 1995, for the replacement or reconstruction of pavement at the airport, it assures or certifies that it has implemented an effective airport pavement maintenance-management program and it assures that it will use such program for the useful life of any pavement constructed, reconstructed or repaired with Federal financial assistance at the airport. It will provide such reports on pavement condition and pavement management programs as the Secretary determines may be useful.

12. Terminal Development Prerequisites.

For projects which include terminal development at a public use airport, as defined in Title 49, it has, on the date of submittal of the project grant application, all the safety equipment required for certification of such airport under 49 U.S.C. § 44706, and all the security equipment required by rule or regulation, and has provided for access to the passenger enplaning and deplaning area of such airport to passengers enplaning and deplaning from aircraft other than air carrier aircraft.

13. Accounting System, Audit, and Record Keeping Requirements.

- a. It shall keep all project accounts and records which fully disclose the amount and disposition by the recipient of the proceeds of this Grant, the total cost of the project in connection with which this Grant is given or used, and the amount or nature of that portion of the cost of the project supplied by other sources, and such other financial records pertinent to the project. The accounts and records shall be kept in accordance with an accounting system that will facilitate an effective audit in accordance with the Single Audit Act of 1984.
- b. It shall make available to the Secretary and the Comptroller General of the United States, or any of their duly authorized representatives, for the purpose of audit and examination, any books, documents, papers, and records of the recipient that are pertinent to this Grant. The Secretary may require that an appropriate audit be conducted by a recipient. In any case in which an independent audit is made of the accounts of a sponsor relating to the disposition of the proceeds of a grant or relating to the project in connection with which this Grant was given or used, it shall file a certified copy of such audit with the Comptroller General of the United States not later than six (6) months following the close of the fiscal year for which the audit was made.

14. Minimum Wage Rates.

It shall include, in all contracts in excess of \$2,000 for work on any projects funded under this Grant Agreement which involve labor, provisions establishing minimum rates of wages, to be predetermined by the Secretary of Labor under 40 U.S.C. §§ 3141-3144, 3146, and 3147, Public Building, Property, and Works), which contractors shall pay to skilled and unskilled labor, and such minimum rates shall be stated in the invitation for bids and shall be included in proposals or bids for the work.

15. Veteran's Preference.

It shall include in all contracts for work on any project funded under this Grant Agreement which involve labor, such provisions as are necessary to insure that, in the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Vietnam era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns owned and controlled by disabled veterans as defined in 49 U.S.C. § 47112. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

16. Conformity to Plans and Specifications.

It will execute the project subject to plans, specifications, and schedules approved by the Secretary. Such plans, specifications, and schedules shall be submitted to the Secretary prior to commencement of site preparation, construction, or other performance under this Grant Agreement, and, upon approval of the Secretary, shall be incorporated into this Grant Agreement. Any modification to the approved plans, specifications, and schedules shall also be subject to approval of the Secretary, and incorporated into this Grant Agreement.

17. Construction Inspection and Approval.

It will provide and maintain competent technical supervision at the construction site throughout the project to assure that the work conforms to the plans, specifications, and schedules approved by the Secretary for the project. It shall subject the construction work on any project contained in an approved project application to inspection and approval by the Secretary and such work shall be in

accordance with regulations and procedures prescribed by the Secretary. Such regulations and procedures shall require such cost and progress reporting by the sponsor or sponsors of such project as the Secretary shall deem necessary.

18. Planning Projects.

In carrying out planning projects:

- a. It will execute the project in accordance with the approved program narrative contained in the project application or with the modifications similarly approved.
- b. It will furnish the Secretary with such periodic reports as required pertaining to the planning project and planning work activities.
- c. It will include in all published material prepared in connection with the planning project a notice that the material was prepared under a grant provided by the United States.
- d. It will make such material available for examination by the public, and agrees that no material prepared with funds under this project shall be subject to copyright in the United States or any other country.
- e. It will give the Secretary unrestricted authority to publish, disclose, distribute, and otherwise use any of the material prepared in connection with this grant.
- f. It will grant the Secretary the right to disapprove the sponsor's employment of specific consultants and their subcontractors to do all or any part of this project as well as the right to disapprove the proposed scope and cost of professional services.
- g. It will grant the Secretary the right to disapprove the use of the sponsor's employees to do all or any part of the project.
- h. It understands and agrees that the Secretary's approval of this project grant or the Secretary's approval of any planning material developed as part of this grant does not constitute or imply any assurance or commitment on the part of the Secretary to approve any pending or future application for a Federal airport grant.

19. Operation and Maintenance.

- a. The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state, and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes. It will suitably operate and maintain the airport and all facilities thereon or connected therewith, with due regard to climatic and flood conditions. Any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the Secretary. In furtherance of this assurance, the sponsor will have in effect arrangements for:
 1. Operating the airport's aeronautical facilities whenever required;
 2. Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and
 3. Promptly notifying pilots of any condition affecting aeronautical use of the airport. Nothing contained herein shall be construed to require that the airport be operated for aeronautical use during temporary periods when snow, flood, or other climatic conditions

interfere with such operation and maintenance. Further, nothing herein shall be construed as requiring the maintenance, repair, restoration, or replacement of any structure or facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the sponsor.

- b. It will suitably operate and maintain noise compatibility program items that it owns or controls upon which Federal funds have been expended.

20. Hazard Removal and Mitigation.

It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

21. Compatible Land Use.

It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which Federal funds have been expended.

22. Economic Nondiscrimination.

- a. It will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.
- b. In any agreement, contract, lease, or other arrangement under which a right or privilege at the airport is granted to any person, firm, or corporation to conduct or to engage in any aeronautical activity for furnishing services to the public at the airport, the sponsor will insert and enforce provisions requiring the contractor to:
 - 1. Furnish said services on a reasonable, and not unjustly discriminatory, basis to all users thereof, and
 - 2. Charge reasonable, and not unjustly discriminatory, prices for each unit or service, provided that the contractor may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.
- c. Each fixed-based operator at the airport shall be subject to the same rates, fees, rentals, and other charges as are uniformly applicable to all other fixed-based operators making the same or similar uses of such airport and utilizing the same or similar facilities.
- d. Each air carrier using such airport shall have the right to service itself or to use any fixed-based operator that is authorized or permitted by the airport to serve any air carrier at such airport.
- e. Each air carrier using such airport (whether as a tenant, non-tenant, or subtenant of another air carrier tenant) shall be subject to such nondiscriminatory and substantially comparable rules, regulations, conditions, rates, fees, rentals, and other charges with respect to facilities directly and substantially related to providing air transportation as are applicable to all such air carriers

which make similar use of such airport and utilize similar facilities, subject to reasonable classifications such as tenants or non-tenants and signatory carriers and non-signatory carriers. Classification or status as tenant or signatory shall not be unreasonably withheld by any airport provided an air carrier assumes obligations substantially similar to those already imposed on air carriers in such classification or status.

- f. It will not exercise or grant any right or privilege which operates to prevent any person, firm, or corporation operating aircraft on the airport from performing any services on its own aircraft with its own employees (including, but not limited to maintenance, repair, and fueling) that it may choose to perform.
- g. In the event the sponsor itself exercises any of the rights and privileges referred to in this assurance, the services involved will be provided on the same conditions as would apply to the furnishing of such services by commercial aeronautical service providers authorized by the sponsor under these provisions.
- h. The sponsor may establish such reasonable, and not unjustly discriminatory, conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the airport.
- i. The sponsor may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve the civil aviation needs of the public.

23. Exclusive Rights.

It will permit no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public. For purposes of this paragraph, the providing of the services at an airport by a single fixed-based operator shall not be construed as an exclusive right if both of the following apply:

- a. It would be unreasonably costly, burdensome, or impractical for more than one fixed-based operator to provide such services, and
- b. If allowing more than one fixed-based operator to provide such services would require the reduction of space leased pursuant to an existing agreement between such single fixed-based operator and such airport. It further agrees that it will not, either directly or indirectly, grant or permit any person, firm, or corporation, the exclusive right at the airport to conduct any aeronautical activities, including, but not limited to charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity, and that it will terminate any exclusive right to conduct an aeronautical activity now existing at such an airport before the grant of any assistance under Title 49, United States Code.

24. Fee and Rental Structure.

It will maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport, taking into account such factors as the volume of traffic and economy of collection. No part of the Federal share of an airport development, airport planning or noise compatibility project for

which a Grant is made under Title 49, United States Code, the Airport and Airway Improvement Act of 1982, the Federal Airport Act or the Airport and Airway Development Act of 1970 shall be included in the rate basis in establishing fees, rates, and charges for users of that airport.

25. Airport Revenues.

- a. All revenues generated by the airport and any local taxes on aviation fuel established after December 30, 1987, will be expended by it for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the actual air transportation of passengers or property; or for noise mitigation purposes on or off the airport. The following exceptions apply to this paragraph:
 1. If covenants or assurances in debt obligations issued before September 3, 1982, by the owner or operator of the airport, or provisions enacted before September 3, 1982, in governing statutes controlling the owner or operator's financing, provide for the use of the revenues from any of the airport owner or operator's facilities, including the airport, to support not only the airport but also the airport owner or operator's general debt obligations or other facilities, then this limitation on the use of all revenues generated by the airport (and, in the case of a public airport, local taxes on aviation fuel) shall not apply.
 2. If the Secretary approves the sale of a privately owned airport to a public sponsor and provides funding for any portion of the public sponsor's acquisition of land, this limitation on the use of all revenues generated by the sale shall not apply to certain proceeds from the sale. This is conditioned on repayment to the Secretary by the private owner of an amount equal to the remaining unamortized portion (amortized over a 20-year period) of any airport improvement grant made to the private owner for any purpose other than land acquisition on or after October 1, 1996, plus an amount equal to the federal share of the current fair market value of any land acquired with an airport improvement grant made to that airport on or after October 1, 1996.
 3. Certain revenue derived from or generated by mineral extraction, production, lease, or other means at a general aviation airport (as defined at 49 U.S.C. § 47102), if the FAA determines the airport sponsor meets the requirements set forth in Section 813 of Public Law 112-95.
- b. As part of the annual audit required under the Single Audit Act of 1984, the sponsor will direct that the audit will review, and the resulting audit report will provide an opinion concerning, the use of airport revenue and taxes in paragraph (a), and indicating whether funds paid or transferred to the owner or operator are paid or transferred in a manner consistent with Title 49, United States Code and any other applicable provision of law, including any regulation promulgated by the Secretary or Administrator.
- c. Any civil penalties or other sanctions will be imposed for violation of this assurance in accordance with the provisions of 49 U.S.C. § 47107.

26. Reports and Inspections.

It will:

- a. submit to the Secretary such annual or special financial and operations reports as the Secretary may reasonably request and make such reports available to the public; make available to the

public at reasonable times and places a report of the airport budget in a format prescribed by the Secretary;

- b. for airport development projects, make the airport and all airport records and documents affecting the airport, including deeds, leases, operation and use agreements, regulations and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request;
- c. for noise compatibility program projects, make records and documents relating to the project and continued compliance with the terms, conditions, and assurances of this Grant Agreement including deeds, leases, agreements, regulations, and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request; and
- d. in a format and time prescribed by the Secretary, provide to the Secretary and make available to the public following each of its fiscal years, an annual report listing in detail:
 1. all amounts paid by the airport to any other unit of government and the purposes for which each such payment was made; and
 2. all services and property provided by the airport to other units of government and the amount of compensation received for provision of each such service and property.

27. Use by Government Aircraft.

It will make available all of the facilities of the airport developed with Federal financial assistance and all those usable for landing and takeoff of aircraft to the United States for use by Government aircraft in common with other aircraft at all times without charge, except, if the use by Government aircraft is substantial, charge may be made for a reasonable share, proportional to such use, for the cost of operating and maintaining the facilities used. Unless otherwise determined by the Secretary, or otherwise agreed to by the sponsor and the using agency, substantial use of an airport by Government aircraft will be considered to exist when operations of such aircraft are in excess of those which, in the opinion of the Secretary, would unduly interfere with use of the landing areas by other authorized aircraft, or during any calendar month that:

- a. Five (5) or more Government aircraft are regularly based at the airport or on land adjacent thereto; or
- b. The total number of movements (counting each landing as a movement) of Government aircraft is 300 or more, or the gross accumulative weight of Government aircraft using the airport (the total movement of Government aircraft multiplied by gross weights of such aircraft) is in excess of five million pounds.

28. Land for Federal Facilities.

It will furnish without cost to the Federal Government for use in connection with any air traffic control or air navigation activities, or weather-reporting and communication activities related to air traffic control, any areas of land or water, or estate therein as the Secretary considers necessary or desirable for construction, operation, and maintenance at Federal expense of space or facilities for such purposes. Such areas or any portion thereof will be made available as provided herein within four months after receipt of a written request from the Secretary.

29. Airport Layout Plan.

- a. The airport owner or operator will maintain a current airport layout plan of the airport showing:
 1. boundaries of the airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the sponsor for airport purposes and proposed additions thereto;
 2. the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and roads), including all proposed extensions and reductions of existing airport facilities;
 3. the location of all existing and proposed non-aviation areas and of all existing improvements thereon; and
 4. all proposed and existing access points used to taxi aircraft across the airport's property boundary.

- b. Subject to subsection 49 U.S.C. § 47107(x), the Secretary will review and approve or disapprove the plan and any revision or modification of the plan before the plan, revision, or modification takes effect.

- c. The owner or operator will not make or allow any alteration in the airport or any of its facilities unless the alteration—
 1. is outside the scope of the Secretary's review and approval authority as set forth in subsection (x); or
 2. complies with the portions of the plan approved by the Secretary.

- d. When the airport owner or operator makes a change or alteration in the airport or the facilities which the Secretary determines adversely affects the safety, utility, or efficiency of any federally owned, leased, or funded property on or off the airport and which is not in conformity with the airport layout plan as approved by the Secretary, the owner or operator will, if requested, by the Secretary:
 1. eliminate such adverse effect in a manner approved by the Secretary; or
 2. bear all costs of relocating such property or its replacement to a site acceptable to the Secretary and of restoring the property or its replacement to the level of safety, utility, efficiency, and cost of operation that existed before the alteration was made, except in the case of a relocation or replacement of an existing airport facility due to a change in the Secretary's design standards beyond the control of the airport sponsor.

30. Civil Rights.

It will promptly take any measures necessary to ensure that no person in the United States shall, on the grounds of race, color, and national origin (including limited English proficiency) in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d to 2000d-4); creed and sex per 49 U.S.C. § 47123 and related requirements; age per the Age Discrimination Act of 1975 and related requirements; or disability per the Americans with Disabilities Act of 1990 and related requirements, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in any program and activity conducted with, or benefiting from, funds received from this Grant.

- a. Using the definitions of activity, facility, and program as found and defined in 49 CFR §§ 21.23(b) and 21.23(e), the sponsor will facilitate all programs, operate all facilities, or conduct all programs in compliance with all non-discrimination requirements imposed by or pursuant to these assurances.
- b. Applicability
 - 1. Programs and Activities. If the sponsor has received a grant (or other federal assistance) for any of the sponsor's program or activities, these requirements extend to all of the sponsor's programs and activities.
 - 2. Facilities. Where it receives a grant or other federal financial assistance to construct, expand, renovate, remodel, alter, or acquire a facility, or part of a facility, the assurance extends to the entire facility and facilities operated in connection therewith.
 - 3. Real Property. Where the sponsor receives a grant or other Federal financial assistance in the form of, or for the acquisition of real property or an interest in real property, the assurance will extend to rights to space on, over, or under such property.

c. Duration.

The sponsor agrees that it is obligated to this assurance for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the assurance obligates the sponsor, or any transferee for the longer of the following periods:

- 1. So long as the airport is used as an airport, or for another purpose involving the provision of similar services or benefits; or
- 2. So long as the sponsor retains ownership or possession of the property.

- d. Required Solicitation Language. It will include the following notification in all solicitations for bids, Requests For Proposals for work, or material under this Grant Agreement and in all proposals for agreements, including airport concessions, regardless of funding source:

"The (Grand Junction Regional Airport Authority; City of Grand Junction, Colorado; and County of Mesa, Colorado), in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, all businesses will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex , age, or disability in consideration for an award."

e. Required Contract Provisions.

- 1. It will insert the non-discrimination contract clauses requiring compliance with the acts and regulations relative to non-discrimination in Federally-assisted programs of the Department of Transportation (DOT), and incorporating the acts and regulations into the contracts by reference in every contract or agreement subject to the non-discrimination in Federally-assisted programs of the DOT acts and regulations.
- 2. It will include a list of the pertinent non-discrimination authorities in every contract that is subject to the non-discrimination acts and regulations.

3. It will insert non-discrimination contract clauses as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor.
4. It will insert non-discrimination contract clauses prohibiting discrimination on the basis of race, color, national origin (including limited English proficiency), creed, sex, age, or disability as a covenant running with the land, in any future deeds, leases, license, permits, or similar instruments entered into by the sponsor with other parties:
 - a. For the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
 - b. For the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
- f. It will provide for such methods of administration for the program as are found by the Secretary to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the acts, the regulations, and this assurance.
- g. It agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the acts, the regulations, and this assurance.

31. Disposal of Land.

- a. For land purchased under a grant for airport noise compatibility purposes, including land serving as a noise buffer, it will dispose of the land, when the land is no longer needed for such purposes, at fair market value, at the earliest practicable time. That portion of the proceeds of such disposition which is proportionate to the United States' share of acquisition of such land will be, at the discretion of the Secretary, (1) reinvested in another project at the airport, or (2) transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order:
 1. Reinvestment in an approved noise compatibility project;
 2. Reinvestment in an approved project that is eligible for grant funding under 49 U.S.C. § 47117(e);
 3. Reinvestment in an approved airport development project that is eligible for grant funding under 49 U.S.C. §§ 47114, 47115, or 47117;
 4. Transfer to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport; or
 5. Payment to the Secretary for deposit in the Airport and Airway Trust Fund.

If land acquired under a grant for noise compatibility purposes is leased at fair market value and consistent with noise buffering purposes, the lease will not be considered a disposal of the land. Revenues derived from such a lease may be used for an approved airport development project that would otherwise be eligible for grant funding or any permitted use of airport revenue.

- b. For land purchased under a grant for airport development purposes (other than noise compatibility), it will, when the land is no longer needed for airport purposes, dispose of such land at fair market value or make available to the Secretary an amount equal to the United

States' proportionate share of the fair market value of the land. That portion of the proceeds of such disposition which is proportionate to the United States' share of the cost of acquisition of such land will, upon application to the Secretary, be reinvested or transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order:

1. Reinvestment in an approved noise compatibility project;
 2. Reinvestment in an approved project that is eligible for grant funding under 49 U.S.C. § 47117(e);
 3. Reinvestment in an approved airport development project that is eligible for grant funding under 49 U.S.C. §§ 47114, 47115, or 47117;
 4. Transfer to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport; or
 5. Payment to the Secretary for deposit in the Airport and Airway Trust Fund.
- c. Land shall be considered to be needed for airport purposes under this assurance if (1) it may be needed for aeronautical purposes (including runway protection zones) or serve as noise buffer land, and (2) the revenue from interim uses of such land contributes to the financial self-sufficiency of the airport. Further, land purchased with a grant received by an airport operator or owner before December 31, 1987, will be considered to be needed for airport purposes if the Secretary or Federal agency making such grant before December 31, 1987, was notified by the operator or owner of the uses of such land, did not object to such use, and the land continues to be used for that purpose, such use having commenced no later than December 15, 1989.
- d. Disposition of such land under (a), (b), or (c) will be subject to the retention or reservation of any interest or right therein necessary to ensure that such land will only be used for purposes which are compatible with noise levels associated with operation of the airport.

32. Engineering and Design Services.

If any phase of such project has received Federal funds under Chapter 471 subchapter 1 of Title 49 U.S.C., it will award each contract, or sub-contract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping or related services in the same manner as a contract for architectural and engineering services is negotiated under Chapter 11 of Title 40 U.S.C., or an equivalent qualifications-based requirement prescribed for or by the sponsor of the airport.

33. Foreign Market Restrictions.

It will not allow funds provided under this Grant to be used to fund any project which uses any product or service of a foreign country during the period in which such foreign country is listed by the United States Trade Representative as denying fair and equitable market opportunities for products and suppliers of the United States in procurement and construction.

34. Policies, Standards, and Specifications.

It will carry out any project funded under an Airport Improvement Program Grant in accordance with policies, standards, and specifications approved by the Secretary including, but not limited to, current FAA Advisory Circulars (https://www.faa.gov/sites/faa.gov/files/aip-pfc-checklist_0.pdf) for AIP projects as of December 10, 2024.

35. Relocation and Real Property Acquisition.

- a. It will be guided in acquiring real property, to the greatest extent practicable under State law, by the land acquisition policies in Subpart B of 49 CFR Part 24 and will pay or reimburse property owners for necessary expenses as specified in Subpart B.
- b. It will provide a relocation assistance program offering the services described in Subpart C of 49 CFR Part 24 and fair and reasonable relocation payments and assistance to displaced persons as required in Subpart D and E of 49 CFR Part 24.
- c. It will make available within a reasonable period of time prior to displacement, comparable replacement dwellings to displaced persons in accordance with Subpart E of 49 CFR Part 24.

36. Access By Intercity Buses.

The airport owner or operator will permit, to the maximum extent practicable, intercity buses or other modes of transportation to have access to the airport; however, it has no obligation to fund special facilities for intercity buses or for other modes of transportation.

37. Disadvantaged Business Enterprises.

The sponsor shall not discriminate on the basis of race, color, national origin, or sex, in the award and performance of any DOT-assisted contract covered by 49 CFR Part 26, or in the award and performance of any concession activity contract covered by 49 CFR Part 23. In addition, the sponsor shall not discriminate on the basis of race, color, national origin or sex in the administration of its Disadvantaged Business Enterprise (DBE) and Airport Concessions Disadvantaged Business Enterprise (ACDBE) programs or the requirements of 49 CFR Parts 23 and 26. The sponsor shall take all necessary and reasonable steps under 49 CFR Parts 23 and 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts, and/or concession contracts. The sponsor's DBE and ACDBE programs, as required by 49 CFR Parts 26 and 23, and as approved by DOT, are incorporated by reference in this agreement. Implementation of these programs is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the sponsor of its failure to carry out its approved program, the Department may impose sanctions as provided for under Parts 26 and 23 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. § 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. §§ 3801-3809, 3812).

38. Hangar Construction.

If the airport owner or operator and a person who owns an aircraft agree that a hangar is to be constructed at the airport for the aircraft at the aircraft owner's expense, the airport owner or operator will grant to the aircraft owner for the hangar a long term lease that is subject to such terms and conditions on the hangar as the airport owner or operator may impose.

39. Competitive Access.

- a. If the airport owner or operator of a medium or large hub airport (as defined in 49 U.S.C. § 47102) has been unable to accommodate one or more requests by an air carrier for access to gates or other facilities at that airport in order to allow the air carrier to provide service to the airport or to expand service at the airport, the airport owner or operator shall transmit a report to the Secretary that:
 1. Describes the requests;
 2. Provides an explanation as to why the requests could not be accommodated; and

3. Provides a time frame within which, if any, the airport will be able to accommodate the requests.
- b. Such report shall be due on either February 1 or August 1 of each year if the airport has been unable to accommodate the request(s) in the six month period prior to the applicable due date.

40. Access to Leaded Aviation Gasoline

- a. If 100-octane low lead aviation gasoline (100LL) was made available at an airport, at any time during calendar year 2022, an airport owner or operator may not restrict or prohibit the sale of, or self-fueling with, 100-octane low lead aviation gasoline.
- b. This requirement remains until the earlier of December 31, 2030, or the date on which the airport or any retail fuel seller at the airport makes available an unleaded aviation gasoline that has been authorized for use by the FAA as a replacement for 100-octane low lead aviation gasoline for use in nearly all piston-engine aircraft and engine models; and meets either an industry consensus standard or other standard that facilitates the safe use, production, and distribution of such unleaded aviation gasoline, as determined appropriate by the FAA.
- c. An airport owner or operator understands and agrees, that any violation of this grant assurance is subject to civil penalties as provided for in 49 U.S.C. § 46301(a)(8).

SUPPLEMENTAL CO-SPONSORSHIP AGREEMENT

This Supplemental Co-Sponsorship Agreement is entered into and effective this _____ day of _____, 2025, by and between the Grand Junction Regional Airport Authority (“Airport Authority”), and the City of Grand Junction (City).

RECITALS

- A. The Airport Authority is a political subdivision of the State of Colorado, organized pursuant to Section 41-3-101 et seq., C.R.S. The Airport Authority is a separate and distinct entity from the City.
- B. The Airport Authority is the owner and operator of the Grand Junction Regional Airport, located in Grand Junction, Colorado (“Airport”).
- C. Pursuant to the Title 49, U.S.C., Subtitle VII, Part B, as amended, the Airport Authority has applied for monies from the Federal Aviation Administration (“FAA”), for the construction of certain improvements upon the Airport, pursuant to the terms, plans and specifications set forth in AIP Grant No. 3-08-0027-087-2025 (“Project”).
- D. The FAA is willing to provide up to \$187,920 toward the estimated costs of the Projects, provided the City of Grand Junction and Mesa County execute the Grant Agreement as co-sponsors with the Airport Authority. The FAA is insisting that the City and County execute the Grant Agreement as co-sponsors for two primary reasons. First, the City and County have taxing authority, whereas the Airport Authority does not; accordingly, the FAA is insisting that the City and County execute the Grant Agreement so that public entities with taxing authority are liable for the financial commitments required of the Sponsor under the Grant Agreements, should the Airport Authority not be able to satisfy said financial commitments out of the net revenues generated by the operation of the Airport. In addition, the City and County have jurisdiction over the zoning and land use regulations of the real property surrounding the Airport, whereas the Airport Authority does not enjoy such zoning and land use regulatory authority. By their execution of the Grant Agreement, the City and County would be warranting to the FAA that the proposed improvements are consistent with their respective plans for the development of the area surrounding the Airport, and that they will take appropriate actions, including the adoption of zoning laws, to restrict the use of land surrounding the Airport to activities and purposes compatible with normal Airport operations.
- E. The City is willing to execute the Grant Agreement, as a co-sponsor, pursuant to the FAA’s request, subject to the terms and conditions of this Supplemental Co-Sponsorship Agreement between the City and Airport Authority.

Therefore, in consideration of the above Recitals and the mutual promises and representations set forth below, the City and Airport Authority hereby agree as follows:

AGREEMENT

1. By its execution of this Agreement, the City hereby agrees to execute the Grant Agreement, as a co-sponsor, pursuant to the FAA's request.
2. In consideration of the City's execution of the Grant Agreement, as co-sponsor, the Airport Authority hereby agrees to hold the City, its officers, employees, and agents, harmless from, and to indemnify the City, its officers, employees, and agents for:
 - (a) Any and all claims, lawsuits, damages, or liabilities, including reasonable attorney's fees and court costs, which at any time may be or are stated, asserted, or made against the City, its officers, employees, or agents, by the FAA or any other third party whomsoever, in any way arising out of, or related under the Grant Agreement, or the prosecution of the Projects contemplated by the Grant Agreement, regardless of whether said claims are frivolous or groundless, other than claims related to the City's covenant to take appropriate action, including the adoption of zoning laws, to restrict the use of land surrounding the Airport, over which the City has regulatory jurisdiction, to activities and purposes compatible with normal Airport operations, set forth in paragraph 21 of the Assurances incorporated by reference into the Grant Agreement ("Assurances"); and
 - (b) The failure of the Airport Authority, or any of the Airport Authority's officers, agents, employees, or contractors, to comply in any respect with any of the requirements, obligations or duties imposed on the Sponsor by the Grant Agreements, or reasonably related to or inferred there from, other than the Sponsor's zoning and land use obligations under Paragraph 21 of the Assurances, which are the City's responsibility for lands surrounding the Airport over which it has regulatory jurisdiction.
3. By its execution of this Agreement, the Airport Authority hereby agrees to comply with each and every requirement of the Sponsor, set forth in the Grant Agreement, or reasonably required in connection therewith, other than the zoning and land use requirements set forth in paragraph 21 of the Assurances, in recognition of the fact that the Airport Authority does not have the power to effect the zoning and land use regulations required by said paragraph.
4. By its execution of this Agreement and the Grant Agreement, the City agrees to comply with the zoning and land use requirements of paragraph 21 of the Assurances, with respect to all lands surrounding the Airport that are subject to the City's regulatory jurisdiction. The City also hereby warrants and represents that, in accordance with paragraph 6 of the Special Assurances; the Projects contemplated by the Grant Agreements are consistent with present plans of the City for the development of the area surrounding the Airport.
5. The parties hereby warrant and represent that, by the City's execution of the Grant Agreement, as a co-sponsor, pursuant to the FAA's request, the City is not a co-owner, agent, partner, joint venture, or representative of the Airport Authority in the ownership, management or administration of the Airport, and the Airport Authority is, and remains, the sole owner of the Airport, and solely responsible for the operation and management of the Airport.

Done and entered into on the date first set forth above.

GRAND JUNCTION REGIONAL AIRPORT AUTHORITY

By _____
Chief Executive Officer, Angela Padalecki
Grand Junction Regional Airport

CITY OF GRAND JUNCTION

By _____
Mike Bennett, City Manager
City of Grand Junction

RESOLUTION ___-25

AUTHORIZING THE INTERIM CITY MANAGER TO SIGN AND SUBMIT A GRANT AGREEMENT AND SUPPLEMENTAL CO-SPONSORSHIP AGREEMENT IN SUPPORT OF THE GRAND JUNCTION REGIONAL AIRPORT

RECITALS:

The Grand Junction Regional Airport Authority (GJRAA or Airport) has requested that the City Council consider and approve grant offer 3-08-0027-087-2025, in the form of a Reimbursable Agreement ("Grant") for the FAA to fund the engineering design for the permanent location of the navigational aids for the runway as part of the ongoing Runway Replacement Program. As creators and co-sponsors of the Airport Authority, both the County Commissioners and the City Council must approve grant awards from the FAA to GJRAA. The Board of County Commissioners is scheduled to review the Grant on August 19, 2025.

The Grant is for \$187,920 which will provide funding for the engineering design for the permanent location of the navigational aids for the runway.

Having been fully advised in the premises, the City Council by and with this Resolution affirms and directs the execution of the Grant Agreement(s) from the Federal Aviation Administration in the amount of \$187,920 in support of the GJRAA as described generally herein and in more detail in Airport Infrastructure Grant Agreement Number 3-08-0027-087-2025.

NOW THEREFORE, the City Council of the City of Grand Junction authorizes the execution of the Grant Agreements(s) Number 3-08-0027-087-2025 in the amount of \$187,920 between the Federal Aviation Administration, Mesa County, the City of Grand Junction, and the Grand Junction Regional Airport Authority and the Co-Sponsorship Agreement between the City of Grand Junction and the Grand Junction Regional Airport Authority and authorize the City Manager and City Attorney to sign.

Cody Kennedy
President of the City Council

ATTEST:

Selestina Sandoval
City Clerk



Grand Junction City Council

Regular Session

Item #4.g.

Meeting Date: August 20, 2025
Presented By: Angela Padalecki
Department: City Manager's Office
Submitted By: Johnny McFarland, Asst. to the City Manager

Information

SUBJECT:

A Resolution Authorizing the GJRAA to Accept FAA AIP Grants Consistent with the Language in the AIP 85, 86, and 87 Grant Agreements as Co-sponsor with the Grand Junction Regional Airport Authority and to Execute the Co-Sponsorship Agreement when Received

RECOMMENDATION:

Staff recommends approval of this item.

EXECUTIVE SUMMARY:

This item would authorize the GJRAA to accept FAA AIP Grants approved by the Airport Authority Board consistent with the language in AIP 85, 86, and 87 Grant Agreements and consistent with Airport Authority Council-approved grant applications between the Federal Aviation Administration, Mesa County, the City of Grand Junction, and the Grand Junction Regional Airport Authority and execute the Co-Sponsorship Agreement between the City of Grand Junction and the Grand Junction Regional Airport Authority when received.

BACKGROUND OR DETAILED INFORMATION:

The Grand Junction Regional Airport Authority (GJRAA) board applied for four FAA AIP grants to fund Air Traffic Control Tower Improvements, Runway 12/30 Replacement Program Design for Conversion, Interior Holdroom Refresh Improvements, and funding for Construction of the Runway 12/30 Relocation program. The FAA has indicated that if the Airport is awarded a grant in this fiscal year, it will be in mid-September, and the turnaround time for signatures will be extremely short. The funding amounts, if awarded, are unknown at this time.

To ensure the GJRAA remains positioned to capture any grant funding the FAA has

available in this fiscal year, GJRAA is requesting the County and City to pre-authorize the acceptance of AIP grant awards, should they be offered and consistent with the terms of the grant applications and the grant agreements presented for approval. This authorization will enable all parties to execute the required documentation within the date range specified in the grant documents. As creators and co-sponsors of the GJRAA, both the County Commissioners and the City Council must also approve grant awards from the FAA and sign a corresponding co-sponsorship agreement. Action on this item is expected at the August 19, 2025, Grand Junction Regional Airport Authority board of commissioners meeting and is scheduled to be reviewed by the Mesa County Board of County Commissioners at the August 19, 2025, meeting. If the FAA awards the grants to the GJRAA, the Grant Agreement and Co-Sponsorship Agreement will still be added to a future City Council agenda for ratification.

FISCAL IMPACT:

There is no fiscal impact as a result of approval of this item.

SUGGESTED MOTION:

I move to (adopt/not adopt) Resolution 56-25, a resolution authorizing the GJRAA to accept FAA AIP Grants consistent with the language in AIP 85, 86, and 87 Grant Agreements and execute the Co-Sponsorship Agreement between the City of Grand Junction and the Grand Junction Regional Airport Authority when received.

Attachments

- 1. RES-AIP-2025 Prauth 20250814

RESOLUTION ___-25

AUTHORIZING THE CITY MANAGER TO SIGN AND SUBMIT A GRANT AGREEMENT AND SUPPLEMENTAL CO-SPONSORSHIP AGREEMENT IN SUPPORT OF THE GRAND JUNCTION REGIONAL AIRPORT

RECITALS:

The Grand Junction Regional Airport Authority (GJRAA or Airport) has a multi-year program to improve the Airport. The Airport Improvement Program (AIP) is continually coordinated with the Federal Aviation Administration (FAA) and Colorado Department of Transportation (CDOT) Aeronautics. The subject of this Resolution is four FAA AIP grants to fund Air Traffic Control Tower Improvements, Runway 12/30 Replacement Program Design for Conversion, Interior Holdroom Refresh Improvements, and funding for Construction of the Runway 12/30 Relocation program. The FAA has indicated that if the Airport is awarded a grant in this fiscal year, it will be in mid-September, and the turnaround time for signatures will be extremely short. The funding amounts, if awarded, are unknown at this time.

To ensure the GJRAA remains positioned to capture any grant funding the FAA has available this fiscal year, GJRAA is requesting the City Council and the Board of County Commissioners to pre-authorize the acceptance of AIP grant awards, should they be offered and consistent with the terms of the grant applications and the grant agreements approved by the City and County. This authorization will enable all parties to execute the required documentation within the date range specified in the grant documents.

As creators and co-sponsors of the GJRAA, both the County Commissioners and the City Council must also approve grant awards from the FAA and sign a corresponding co-sponsorship agreement. Action on this item is expected at the August 19, 2025, Grand Junction Regional Airport Authority Board of Commissioners meeting and is scheduled to be reviewed by the Mesa County Board of County Commissioners at the August 19, 2025, meeting. If the FAA awards the grants to the GJRAA, the Grant Agreement and Co-Sponsorship Agreement will be added to a future City Council agenda for ratification.

By and with approval of this Resolution the City Council authorizes the City Manager to execute the required grant documentation as soon as the grant award(s) is(are) made.

NOW THEREFORE, the City Council of the City of Grand Junction having been fully advised in the premises authorizes, affirms and directs the approval of the Grant Offers and Agreement(s) from the Federal Aviation Administration in an amount to be

determined, in support of the GJRAA as described generally herein and in more detail in the Grant Application and the Grant Offer and Agreement(s) and the Co-Sponsorship Agreement(s) and authorizes the City Manager and City Attorney to sign in accordance with this Resolution and other applicable Resolutions.

Cody Kennedy
President of the City Council

ATTEST:

Selestina Sandoval
City Clerk



Grand Junction City Council

Regular Session

Item #5.a.

Meeting Date: August 20, 2025
Presented By: Randi Kim, Utilities Director
Department: Utilities
Submitted By: Randi Kim

Information

SUBJECT:

Authorize the Mayor to Sign a Letter of Support for Inclusion of Shoshone Water Rights into the State's Instream Flow Program

RECOMMENDATION:

Staff recommends approving correspondence supporting inclusion of the Shoshone Water Rights into the State's Instream Flow Program

EXECUTIVE SUMMARY:

To support the permanent protection of the Shoshone Water Rights, the Colorado River District has requested that the Colorado Water Conservation Board include the Shoshone Water Rights in the State's Instream Flow Program. As part of the State's Instream Flow process, the Colorado Water Conservation Board is accepting public comments regarding consideration of the Shoshone Water Rights into the program. The Council is being asked to consider issuing a resolution expressing its support for the inclusion of the Shoshone Water Rights into the State's Instream Flow Program and authorizing the President of the City Council to sign a letter of support.

BACKGROUND OR DETAILED INFORMATION:

The Shoshone Water Right Preservation Coalition & Campaign represents a diverse group of stakeholders working toward permanent protection of the historic Shoshone Water Right – the largest and most senior non-consumptive water right on the Colorado River. Preserving Shoshone flows in perpetuity is a generational investment in Colorado's water security with myriad benefits upstream and downstream for Colorado's environment, economy, communities, and water users across the state.

The Colorado River has been a critical resource for the City of Grand Junction since its founding in 1881. Early settlers relied upon the Grand River, as it was named then, for

drinking water. While today the city of Grand Junction's water utility sources its primary water supply from the Kannah Creek watershed on the Grand Mesa, our partner utilities that serve portions of the City and neighboring communities (Clifton Water District and Ute Water Conservancy District) utilize the Colorado River water as either their primary or secondary source of water. Therefore, our city continues to rely upon the Colorado River for potable water.

In addition to serving as a municipal water supply, the Colorado River supports the economic vitality of the city of Grand Junction. The City has transformed the river corridor with the development of several projects, including Las Colonias Park, Dos Rios, and the Riverfront Trail system. The 130-acre Las Colonias Park includes an amphitheater, a river park, pond features, and a business park. The Las Colonias Business Park was supported by an investment of \$30 million through a public/private partnership. The Riverfront at Dos Rios is a 58-acre mixed-use development that includes 15.8 acres of parks and open space, 9.5 acres of light industrial/commercial, and 10.2 acres for mixed-use development. With unparalleled access to the river, trail systems, green space, and downtown, the City envisions this area as a vibrant neighborhood serving as a home, workplace, and play place for residents. The Grand Junction Riverfront Trail is a 28-mile paved path that runs along the Colorado River. The Colorado River is the focal point for each of these important projects that serve Grand Junction residents and visitors and bolster the recreational and business economies. Maintaining Shoshone historical return flows via the State's Instream Flow Program, thereby securing the protection for the Colorado River, is imperative for communities like Grand Junction that rely on it.

By Resolution 24-24, the City Council expressed its support for the city's financial commitment of \$1,000,000 for the acquisition and permanent protection of the Shoshone Water Rights.

To support the permanent protection of the Shoshone Water Rights, the Colorado River District has requested that the Colorado Water Conservation Board include the Shoshone Water Rights in the State's Instream Flow Program.

As part of the State's Instream Flow process, the Colorado Water Conservation Board is accepting public comments regarding consideration of the Shoshone Water Rights into the program.

FISCAL IMPACT:

No fiscal impact

SUGGESTED MOTION:

I move to (approve/deny) authorizing the Mayor to sign a letter of support to the Colorado Water Conservation Board for inclusion of the Shoshone Water Rights into the State's Instream Flow Program

Attachments

1. GJ City Council Letter of Support Shoshone



September 11, 2024

Board of Directors
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, CO 80203

Dear Honorable Board Members,

On behalf of the city of Grand Junction, I am writing to express our strong support of the inclusion of Shoshone Water Rights into the State's Instream Flow Program and urge the CWCB to accept the proposed acquisition.

The Colorado River has been a critical resource for the City of Grand Junction since its founding in 1881. Early settlers relied upon the Grand River, as it was named then, for drinking water. While today the city of Grand Junction's water utility sources its primary water supply from the Kannah Creek watershed on the Grand Mesa, our partner utilities that serve portions of the City and neighboring communities (Clifton Water District and Ute Water Conservancy District) utilize the Colorado River water as either their primary or secondary source of water. Therefore, our city continues to rely upon the Colorado River for potable water.

In addition to serving as a municipal water supply, the Colorado River supports the economic vitality of the city of Grand Junction. The city has transformed the river corridor with the development of several projects including Las Colonias Park, Dos Rios, and the Riverfront Trail system. The 130-acre Las Colonias Park includes an amphitheater, a river park, pond features, and a business park. The Las Colonias Business Park was supported by an investment of \$30 million through a public/private partnership. The Riverfront at Dos Rios is a 58-acre mixed-use development which includes 15.8 acres of parks and open space, 9.5 acres of light industrial/commercial, and 10.2 acres for mixed-use development. With unparalleled access to the river, trail systems, green space and downtown, the City envisions this area as a vibrant neighborhood serving as a home, workplace, and play place for residents. The Grand Junction Riverfront Trail is a 28-mile paved path that runs along the Colorado River.

The Colorado River is the focal point for each of these important projects that serve Grand Junction residents and visitors and bolster the recreational and business economies. Maintaining Shoshone historical return flows via the State's Instream Flow Program thereby securing the protection for the Colorado River is imperative for communities like Grand Junction that rely on it. For these reasons, we implore CWCB to accept the Shoshone flows into the State's Instream Flow Program.

In April 2024, the city of Grand Junction adopted a resolution supporting the contribution of \$1,000,000 for the acquisition and permanent protection of the Shoshone Water Rights. This



letter of support for inclusion of the Shoshone flows into the State's Instream Flow Program complements our financial commitment to this important.

Thank you for considering this request.

Sincerely,

Cody Kennedy
President of the City Council



Grand Junction City Council

Regular Session

Item #6.a.i.

Meeting Date: August 20, 2025
Presented By: Selestina Sandoval, City Clerk
Department: City Clerk
Submitted By: Selestina Sandoval

Information

SUBJECT:

An Ordinance Amending Grand Junction Municipal Code Pertaining to Liquor License Occupational Tax

RECOMMENDATION:

Staff recommends approval of the ordinance.

EXECUTIVE SUMMARY:

Any establishment that holds a liquor license in the City pays Occupational Tax annually on January 1st and is valid for the calendar year. The purpose of this ordinance is to streamline the collection of the annual liquor license occupational tax by aligning its payment due date with the liquor license renewal date, rather than a fixed calendar date of January 1. This change is intended to minimize confusion among licensees and reduce staff time previously spent issuing separate occupational tax notices and managing off-cycle payments.

BACKGROUND OR DETAILED INFORMATION:

Since the adoption of Ordinance 750 in 1947, the City has charged an occupational tax on businesses engaged in the sale of fermented malt beverages or malt, vinous, or spirituous liquors. This tax is codified in Chapter 4, Title 3 of the Grand Junction Municipal Code. The amount of the tax remains unchanged, ranging from \$150 to \$500, based on license type. Historically, the tax has been due annually on January 1st, regardless of a licensee's individual renewal schedule.

This ordinance amends Section 3.04.040 of the GJMC to:

- Require that the occupational tax be paid at the time of license renewal instead of January 1st.

- Introduce proration for licenses renewing on or after October 1, 2025, ensuring licensees pay only for the remaining portion of the year.
- Continue to require full payment at the time of the subsequent renewal, returning to the regular annual cycle.

The benefits of adopting this ordinance include:

- Licensee Clarity: Reduces confusion by eliminating a separate due date for tax payment, simplifying the renewal process.
- Operational Efficiency: Saves significant staff time previously devoted to creating, mailing, and processing separate occupational tax notices.
- Improved Compliance: By combining the tax with the renewal process, licensees are less likely to miss or delay payment.

FISCAL IMPACT:

There is no change in revenue as the tax amounts remain consistent. The proration process will ensure fairness without reducing annual totals.

SUGGESTED MOTION:

I move to adopt and approve Ordinance No. 5274, an ordinance amending the Grand Junction Municipal Code pertaining to Liquor License Occupational Tax on final passage and order final publication in pamphlet form.

Attachments

1. ORD-Occupational Tax 20250701

ORDINANCE NO. _____

An Ordinance Amending the Grand Junction Municipal Code Pertaining To Liquor License Occupational Tax

RECITALS:

In 1947 with Ordinance 750 the City Council imposed an occupational tax on liquor licenses in the City. That tax is been codified in Chapter 4 of Title 3 of the Grand Junction Municipal Code (“GJMC” or “Code”) and has been imposed and collected annually since then with the Code being amended in 2020 to reflect certain license definition/classification changes made in State law.

The occupational tax is payable annually on January 1st; however, because of the number of licenses in the City and that each licensee must separately renew its license often at times other than January 1st, the City Council does by and with this Ordinance amend the Code to provide that the annual occupational tax shall be paid annually at the time the license renewal is filed rather than January 1st. There is no change in the amount of the occupational tax assessed against any licensee; the tax ranges from \$150 - \$500 depending on the classification of the license.

The City Council finds that by and with the adoption of the Ordinance the administrative burden on licensees and the City will be reduced.

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

Chapter 4 of Title 3 Section 040 shall be revised as follows (additions are shown in **bold print** and deletions marked with ~~strike-through~~ notations):

3.04.040 Tax levied.

There is hereby levied and assessed for the year 1977 and for each year thereafter an annual occupation tax **payable with the liquor license renewal application. For licenses renewing on or after October 1, 2025, the tax required shall be prorated on a monthly basis for the remaining portion of the year until the next renewal, at which time the full tax shall be paid concurrent with the renewal. All prorated taxes provided for in this section shall be due and payable as a condition of license renewal. The occupational tax is levied and assessed** upon the business selling fermented malt beverages or malt, vinous or spirituous liquors, except medicinal liquors, in the City, as such occupation has been classified in this chapter (...)

ALL OTHER PROVISIONS OF TITLE 3 CHAPTER 4 SHALL REMAIN IN FULL FORCE AND EFFECT. THIS ORDINANCE SHALL AMEND PRIOR ORDINANCES AND AS NECESSARY REPEAL ANY PART INCONSISTENT THEREWITH.

Introduced on first reading the _____ day of _____, 2025 and ordered published in pamphlet form.

Adopted on second reading this _____ day of _____ 2025 and ordered published in pamphlet form.

ATTEST:

Cody Kennedy
President of the City Council

Selestina Sandoval
City Clerk

DRAFT



Grand Junction City Council

Regular Session

Item #6.a.ii.

Meeting Date: August 20, 2025
Presented By: Tamra Allen, Community Development Director, Tyler Elick, Ashley Chambers, Housing Manager
Department: Community Development
Submitted By: Ashley Chambers, Housing Manager

Information

SUBJECT:

An Ordinance Leasing 4.42 acres of City-Owned Property to Brikwell, LLC located at 450 28 Rd Grand Junction, Colorado Pursuant to Voter Approval

RECOMMENDATION:

Staff recommends approval of this request.

EXECUTIVE SUMMARY:

Brikwell (Developer) seeks to lease approximately 4.42 acres of the 21.48- acre property known as "The Salt Flats" for the development of approximately 144 rental housing units. The Ascent at Salt Flats, a 144-unit affordable housing project, will serve households between 30%–70% AMI, with an anticipated average income of 58% AMI. If approved, following a successful application for non-competitive 4% Low Income Housing Tax Credits (LIHTC) funding, completion of this project is anticipated by Winter 2027. This project aligns with the City’s housing strategies and Prop 123 goals.

BACKGROUND OR DETAILED INFORMATION:

Brikwell, an affordable and market-rate multifamily housing developer, has proposed to develop “The Ascent at Salt Flats,” a 144-unit affordable housing development on 4.42 acres within the 21.78-acre Salt Flats Master Plan. The project will be developed under a 99-year ground lease from the City and submitted to the Colorado Housing and Finance Authority (CHFA) for Low-Income Housing Tax Credit (LIHTC) financing.

Ascent at the Salt Flats is a family-oriented, mixed-income housing development that will offer a broad range of unit types (studio to four-bedroom), serving households earning between 30% and 70% of Area Median Income (AMI), with a project-wide average of 58% AMI. The project will include an on-site Early Childhood Education

Center and a range of amenities designed to support resident stability, economic mobility, and long-term community integration. The project is expected to break ground in the spring of 2026, with anticipated completion in the winter of 2027. The City's 2023, 2024, and 2025 Private Activity Bond allocations were approved for the project on July 18, 2025.

This ordinance supports the execution of the long-term lease necessary to demonstrate site control for the LIHTC application. To meet the shortened timeline for the application, a draft lease and site sketch are included for the first reading; a full legal description will be finalized for the inclusion of the second reading at the August 20, 2025, City Council meeting.

Salt Flats Project

The Ascent is proposed to be the second site in the development of the full 21.48-acre Salt Flats site located at 450 28 Rd. The Salts Flats property was acquired by the City in January 2025 for \$3.2 million, with a \$2.2 million Proposition 123 Land Banking Grant from CHFA (awarded in January 2024) and a \$1 million city match. Additionally, the City was awarded a \$2 million More Housing Now grant (November 2024) through the Colorado Department of Local Affairs (DOLA), with an \$800,000 city match, to fund infrastructure improvements for the development.

The City, utilizing a landbank model, issued an RFP for development proposals for the 21.48-acre Salt Flats site in January 2025. In addition to Brikwell, the City selected Volunteers of America (in partnership with MGL Partners and the Grand Junction Housing Authority), Vertikal, and Rural Homes to develop the Salt Flats property, with Brikwell serving as the Master Planner. Together, the selected partners are expected to deliver between 324 and 475 units of mixed-income housing. These developments will include a range of housing types: affordable rental units for seniors, veterans, and families at or below 60% of the Area Median Income (AMI); for-sale homeownership opportunities for households at or below 100% AMI; attainable for-sale housing at or below 120% AMI (including some market-rate units); and additional affordable rental units serving incomes between 60–120% AMI, with an average income target of 90% AMI. The site will ensure that 70% of all units developed on the site meet the City and State of Colorado affordability definitions. Future development, lease, and sale agreements for these partners are anticipated to come forward in the coming months.

The Salt Flats acquisition and planned development align with the City's 2024 Updated Housing Strategy, which builds on the City's accomplishments and investments over the past 3 years, and is tailored to address identified needs to reflect eleven other key strategies. More specifically, the project aligns with Housing Strategy 3: Leverage City-Owned Land (And/Or Strategically Acquire Properties) for Affordable and Mixed-Income Housing, recognizing the critical role public land and infrastructure play in reducing affordable housing development barriers. Additionally, with the passing of the referred

ballot question 2B in November 2023, the City can now lease City-owned property for 99 years for affordable and attainable housing.

The property’s central location along the 28 Road corridor places it near major employers, retail services, parks, healthcare, and Colorado Mesa University, making it well-suited for a range of income-qualified residents.

This ordinance represents a key step in implementing the first phase of development at Salt Flats and reflects the City’s commitment to increasing the supply of affordable housing through strategic public-private partnerships and state-supported financing tools.

FISCAL IMPACT:

In accordance with the minimum lease amount provisions established by CHFA, the annual lease amount for this 4.48 acres will be \$100 per year.

SUGGESTED MOTION:

I move to approve Ordinance 5275, an ordinance authorizing the City Manager to Sign a Lease Agreement for 4.42 acres of City-Owned Property to Brikwell for the development of affordable housing and direct publication in pamphlet form.

Attachments

- 1. Ascent at Salt Flats Narrative
- 2. Brikwell Lease
- 3. ORD-Salt Flats Brikwell



DEVELOPMENT NARRATIVE



INTRODUCTION

The City of Grand Junction (COGJ) and Brikwell (BW) are pleased to present Ascent at Salt Flats, a proposed 144-unit affordable housing development for individuals and families in Grand Junction. The project will offer a mix of studio, one-, two-, three-, and four-bedroom units to accommodate a variety of household sizes and income levels, with a community average AMI of 58%.

Ascent at Salt Flats (ASF) will be a groundbreaking affordable housing development, distinguished by its focus on family-oriented units for households earning below 60% of AMI and inclusion of an Early Childhood Education (ECE) center. It will also serve an unmet need in a high-growth area on the East side of downtown Grand Junction.

Situated on 4.42 acres, the development will feature a thoughtfully designed three-story, garden-style community and a range of onsite community amenities and services to enhance residents' quality of life.



LOCATION

Ascent at Salt Flats is located on a 4.42 acre site on the East side of the Salt Flats Master Plan a 21acre master planned affordable and attainable housing community, which spans 28 Road to 28 ¼ Road and Gunnison Avenue to Grand Avenue in Grand Junction, CO 81501. The site is currently vacant and zoned RH-24, allowing for multifamily use with no rezoning necessary. The surrounding area is a diverse mix of residential, commercial, and recreational uses, providing residents with convenient access to a variety of walkable and proximate amenities and services.

The Salt Flats master plan is a unique vision for broad spectrum affordable and attainable housing. In total, the master plan comprises 477 housing units that include: affordable studio to four-bedroom rental apartments for individuals, families, seniors and veterans; complemented by two- and three-bedroom attached and detached for-sale housing. The vision for the Salt Flats is driven by shared values of: Inclusivity, Livability, Community, Stability, Viability and Sustainability.

Salt Flats is the first Affordable and attainable master plan of this scale in Grand Junction and presents an immense opportunity to better serve Grand Junction residents through its diverse and inclusive offering. It has been awarded OEDIT/CHFA Prop 123 land banking funds and a DOLA EIAF "More Housing Now" grant exhibiting the support for a broad-spectrum, master plan that promotes access and equity for the community.

Salt Flats is the ideal suburban-infill location with exceptional access to transportation, employment, services, recreation, healthcare, schools, and civic facilities making it ideal for families and individuals seeking convenience and connectivity.

TRANSPORTATION

Residents will find public transportation at the East edge of the site on 28 Rd, as COGJ and Brikwell are working closely with Grand Valley Transit (GVT) on the creation of two new bus stop that ties into the Route 9 network and provides residents easy access to the adjacent Veterans Administration (VA) hospital, employment, parks and the vibrant downtown (8 min bus ride).

EMPLOYMENT

Ascent at Salt Flats' proximity to major job and retail centers, diverse healthcare facilities, and Colorado Mesa University provide a spectrum of roles from customer service and medical support to educational and administrative positions. The area's robust Grand Valley Transit system further extends access to numerous other employers across the city, making it an ideal location for those seeking convenient access to work. ensuring that residents have ample employment opportunities that support the economic mobility of residents.



SERVICES

Within a mile of Ascent at Salt Flats, residents benefit from convenient access to a wide array of neighborhood services and retail. The prominent North Avenue corridor, a short walk away, hosts major retailers like Walmart and City Market for groceries, alongside various restaurants, gas stations, and smaller service businesses. This prime location also offers easy access to local clinics, financial institutions, and community resources, ensuring daily needs are readily met without extensive travel.

RECREATION

As part of the Salt Flats master plan, onsite parks are planned to promote recreation and social activity for Salt Flats residents and the greater Grand Junction community. Ascent at Salt Flats is also located a short walk (1/4 mi) from Lincoln Park, which features a golf course, public pool, lake, playground, walking trails, sports fields, and pickleball / tennis courts. Lincoln Park provides residents with convenient access to recreational, social and healthy activities with ample green space. Also worth noting, Colorado Mesa University's Hamilton Recreation Center (~2mi) providing a comprehensive array of facilities, including gyms, pools, and group fitness classes open to the community.

HEALTHCARE

Within a two-mile radius of Ascent at Salt Flats, residents have access to a comprehensive array of healthcare facilities. This includes major acute care hospitals such as Community Hospital and the Grand Junction VA Medical Center, offering emergency services, various specialties, and inpatient care. Beyond hospitals, the area is rich with specialized clinics providing services like primary care, women's health, behavioral health (e.g., Mind Springs Health, Community Hospital Behavioral Health), and physical therapy, ensuring a wide range of medical needs can be met conveniently.

SCHOOLS / EARLY CHILDHOOD EDUCATION

Families residing at Ascent at Salt Flats benefit from an educational landscape, offering diverse options for students of all ages. For elementary students, Nisley Elementary School is remarkably close, practically in the neighborhood, while Orchard Avenue Elementary School also provides a convenient option for younger learners. Older students have access to comprehensive K-12 education at Grand River Academy and Caprock Academy, a tuition-free public charter school, alongside R-5 High School for secondary education, ensuring a variety of learning environments close to home.

CIVIC FACILITIES

For intellectual and community engagement, the Mesa County Libraries Central Library is conveniently located around 1.9 miles from the address, providing a vast collection of books, media, and community programs. Furthermore, the Tomlinson Library at Colorado Mesa University, also within 2 miles, offers extensive academic resources and services accessible to students and often to the public.

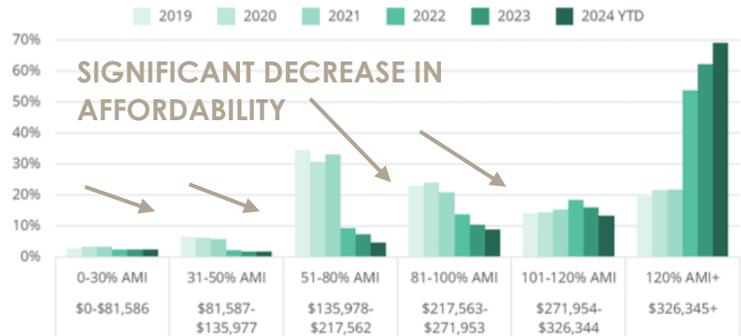


NEIGHBORHOOD PROFILE & TRENDS

Grand Junction is a rapidly growing community with a diverse population and a lack of affordable housing options. The neighborhood is experiencing a shortage of affordable housing, with a 5,700+ residents being cost burdened (paying 30%+ of their income), making this project a timely and necessary addition to the community.

Home Price Increases and Growing Rental Cost Burden

The median home sales price in Mesa County increased by 53% from \$256,450 in 2019 to \$391,500 in 2024 YTD. Forty-two percent of homes sold in 2021 were affordable to households earning 0-80% AMI; this decreased to 14% in 2022, 11% in 2023, and 9% in 2024 YTD.



Cost burden among renters in the Grand Valley has increased since 2010. In Grand Junction and Mesa County overall, **the share of cost burdened renters increased by 5 percentage points—going from 48% to 53% in Grand.** In Grand Junction **more than 5,700 renter households, are cost burdened**, spending 30% or more of their income on housing costs. Of these, **over 2,800 households are severely cost burdened**, paying more than 50% of their income on housing costs.

Population Growth, Change and In-Migration

According to population estimates from the Colorado State Demography Office, Mesa County's population as of 2019 was 154,933, representing an increase of 5% (7,778 new residents) since 2010. **Grand Junction's population was 64,941, representing an increase of 8% (4,695 new residents) since 2010.**

Jurisdiction	2010	2019	Change		Share of County	
			Number	Percent	2010	2019
Grand Junction	60,246	64,941	4,695	8%	41%	42%
Clifton	19,499	20,748	1,249	6%	13%	13%
Fruita	12,695	13,567	872	7%	9%	9%
Palisade	2,726	2,787	61	2%	2%	2%
Mesa County	147,155	154,933	7,778	5%	100%	100%

Source: DOLA, Colorado State Demography Office, and Root Policy Research. ACS 2019 5-year estimates used for Clifton.



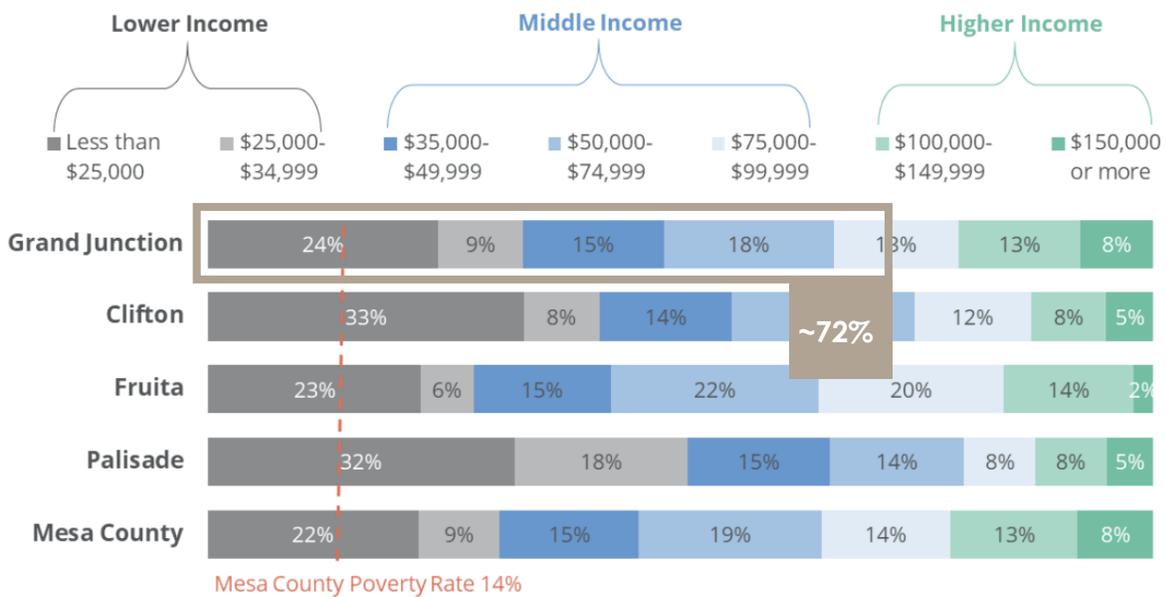
The Colorado State Demography Office provides population projections for Mesa County over the next 30 years. As shown in Figure I-8, in 2050, the county is projected to have over 238,000 people, which represents **an increase in population of 50% compared to 2020. The number of households is expected to increase from around 61,000 to over 96,000.**

Mesa County has experienced positive net migration of around 1,500 residents per year since 2015. In migrants tend to be younger than current residents. Partly driven by the Colorado Mesa University student population, **persons moving to the Grand Valley are around twice as likely to be college aged adults (20 to 24). In migrants are also around one and a half times more likely to be between 25 to 34 years old and around 1.3 times more likely to be between 5 and 19 years old. 89% of in-migrant population will be served by Ascent at Salt Flats.**

Age Cohort	Current Distribution	In-migrant Distribution
Under 5 years	6%	3%
5 to 19 years	19%	25%
20 to 24 years	6%	14%
25 to 34 years	13%	20%
35 to 44 years	12%	6%
45 to 64 years	25%	21%
65 years and older	19%	11%

89%

Ascent at Salt Flats will provide a broad spectrum of affordable housing options ranging from 30% AMI Studios (\$21,420 1 Person 2025 Income Limit) to 70% AMI four-bedroom units (\$82,880 for 6 Person Income Limit). With a wide range of unit types and income levels served, **Ascent will serve approximately 72% of household incomes in Grand Junction.**



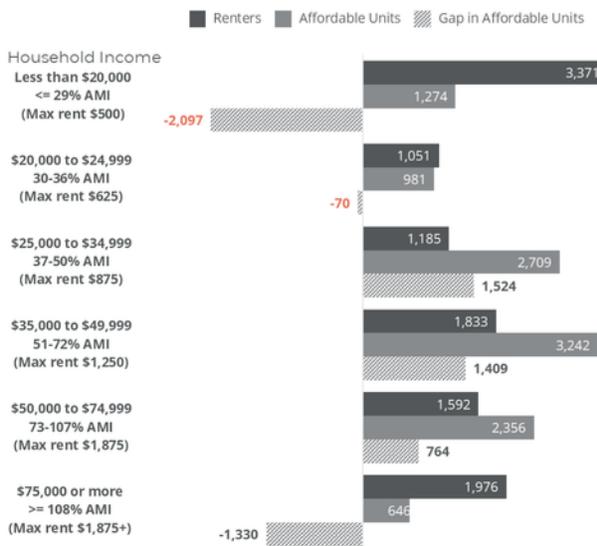
Source: 2019 5-year ACS, and Root Policy Research.



According to GJHA, there are currently 2,973 households (5,999 individuals) on the waitlist to receive a housing voucher—clearly demonstrating that need for affordable housing far exceeds the available supports. Of the households on the waitlist, **39% are households with children, 71% are female headed households, and 37% have a household member with some type of disability.**

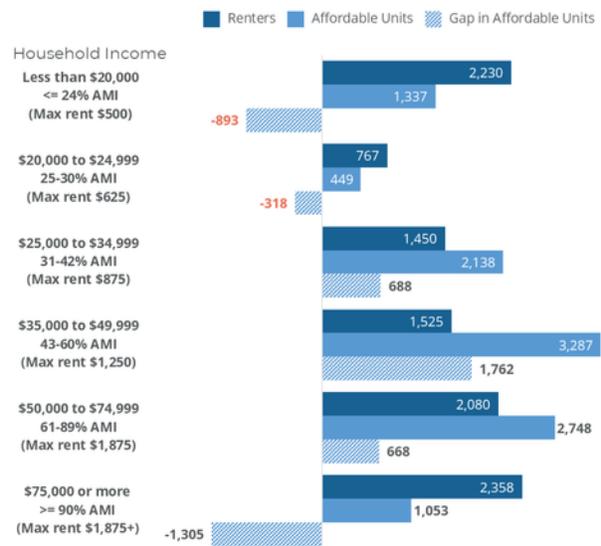
Rental affordability gaps remain high in Grand Junction with the greatest gap in affordable rental units between ~40% and ~80% of AMI.

Rental Affordability Gaps, 2019



Note: AMI ranges presented are based on 4-person 2019 HUD AMI limits.
Source: 5-year ACS and Root Policy Research.

Rental Affordability Gaps, 2022



Note: AMI ranges presented are based on 4-person 2022 HUD AMI limits.
Source: 5-year ACS and Root Policy Research.

SERVING COMMUNITY NEED

Salt Flats is strategically located on the east side of downtown Grand Junction adjacent to major thoroughfares (I-70 Business Loop, North Ave (Hwy 6), and 28 Rd), which makes it attractive to employers, commuters and those seeking convenient local and regional connectivity.

As Grand Junction housing prices rise, people are pushed further out of the urban core, seeking more affordable options in surrounding areas and cities. This increased demand and continued new development has driven up property values and rents, as home prices have increased 55%+ in the past decade in Grand Junction. Grand Junction has experienced immense growth creating vulnerability to gentrification, making it difficult for existing residents, particularly those with lower incomes, to remain in the downtown area.



Altogether, there are 1,838 designated affordable units in Mesa County, most of which are deeply subsidized units wherein tenants pay 30% of their income in rent. **The vast majority of affordable units in Mesa County (82%) have one or two bedrooms;** 17% have three bedrooms; and 1% have four bedrooms. **Larger families likely struggle to find affordable units large enough to accommodate them.**

Designated Affordable Units by Type and Bedrooms, Mesa County, 2024

	Total Units	0 Studios		18% 3BR/4BR		% Other
		% 1 BR	% 2 BR	% 3 BR	% 4 BR	
Deeply Subsidized Units Tenants pay 30% of their income for rent	1,162	50%	35%	14%	1%	0%
Tax Credit Units Tenants pay a fixed rent based on a percentage of AMI from 30% to 60%	607	40%	36%	24%	0%	0%
Other Affordable Units Generally below market rent	69	19%	58%	10%	0%	13%
Total Affordable Units	1,838	45%	36%	17%	1%	1%

Ascent at Salt Flats will help to address this need by providing high-quality, affordable housing for families in the community. The development will offer a vast range of unit sizes **from studios to four-bedroom units** and rental rates to accommodate a variety of household incomes, with a focus on serving families at or below 60% of the Area Median Income (AMI). The above table outlines the unit mix highlighting our goals below.

UNIT TYPE	30% AMI	40% AMI	50% AMI	60% AMI	70% AMI	80% AMI	TOTAL	%
Studio	2	2	9	20	11	0	44	30.6%
1BR / 1 BA	2	2	9	20	11	0	44	30.6%
2 BR / 2 BA	1	2	5	8	4	0	20	13.9%
3 BR / 2 BA	1	1	4	10	8	0	24	16.7%
4 BR / 2 BA	1	1	2	5	3	0	12	8.3%
TOTAL	7	8	29	63	37	0	144	100.0%

36 units (25%) are three- and four-bedroom to accommodate larger families, addressing a growing, unmet need in affordable housing.

44 units (31%) studio units to provide an entry point for individuals and small families looking to establish their household, as historically affordable LIHTC housing in Grand Junction has been offered as only one- and two-bedroom units.

80 units (55%+) are studio, 3br, and 4br which have been historically undersupplied as affordable housing in Grand Junction.

107 units (74%) units serve income levels **at or below 60% AMI** to serve all income levels with a focus on those most in need.



DESIGN

Ascent at Salt Flats will be a three-story garden-style apartment community with interior corridors for improved resident experience. The four buildings are distributed throughout the site to create a neighborhood community feel for residents and are situated at the perimeter to provide ease of access to the adjacent walkable amenities (parks, rec center, services). The design team has thoughtfully considered construction, amenities, units and sustainability, prioritizing equity, economic mobility and resident quality of life.

CONSTRUCTION

Ascent at Salt Flats will be constructed with wood framing (type V-A) over an on-grade spread-footing foundation, with surface parking. This construction type is the most cost-effective per unit, to maximize the units per resource and maintain quality in finishes and amenities. Buildings will feature pitched asphalt shingle roofs as well as secured access points. Buildings are separated throughout the site maximizing daylighting and providing opportunity for pocket parks and onsite exterior amenities. Exterior skin comprises fields of exterior windows, stucco, louvered panels and siding, creating a modern, high-desert color palette similar to current design trends in hospitality and multifamily.

AMENITIES

The primary entrance from 28th Road will greet residents with an amenity building featuring a community room with a kitchen and games, a reception welcome desk, on-site management offices, fitness center, mail/package room, and resident business center / co-working / computer lab. The 3,000 SF Early Childhood Education center with adjacent 2,800 SF adjacent playground will provide onsite services to residents with children.

Exterior amenities will include a dog run, playground, community garden and picnic area with BBQ grills. Its security features will include electronic access entries, security cameras, and courtesy patrol. Indoor and outdoor amenities are intended to be both convenient



and healthy (fitness, bike storage) as well as foster personal growth, friendship, and community growth through social interaction (BBQ/social gathering area, community room, business center).

UNITS

Unit finishes at Ascent at Salt Flats are envisioned to have a modern level of quality that give residents a sense of home and dignity. Units will have central heat & air-conditioning, Energy Star rated stainless-steel appliances (refrigerator, stove/oven, dishwasher, microwave) garbage disposal, luxury-vinyl-plank flooring, granite countertops, blinds, high-speed internet connection, and in-unit washer & dryer. All units in the development will meet or exceed applicable accessibility standards. Units will be all-electric, utilizing with temperature control in living rooms and bedrooms. Conditioned air will be supplied by per unit VTAC units, utilizing energy efficient VRP heat pumps.

ENVIRONMENTAL SUSTAINABILITY

Ascent at Salt Flats will be designed and constructed to meet high standards of environmental sustainability and certification (NGBS). In addition to the all-electric building systems, appliances will be Energy Star rated, lighting will be LED, and fixtures will be water efficient. At a site level, landscaping will utilize water-wise best practices with EV-ready parking stalls.

The development team will also work to minimize the project's environmental impact during construction and operation, utilizing panelized construction and minimizing waste. The Ascent at Salt Flats team is well-experienced and enthusiastic in prioritizing environmental sustainability by weaving resource stewardship, sustainability and green development practices at every level.

TIMELINE & READINESS TO PROCEED

The site is currently vacant and zoned RH-24, allowing for multifamily use with no rezoning necessary. Site planning will be administrative per City of Grand Junction regulations, which could be expedited with the support of the Community Housing department.

Ascent at Salt Flats will require \$23M in Private Activity Bonds (PAB) to support an issuance of non-competitive 4% LIHTC credits. The City of Grand Junction and Brikwell are in the process of finalizing PAB commitments/resolutions, and in combining Grand Junctions 2023-2025 PAB with Gunnison County 2025 PAB and Mesa County 2025 PAB, Ascent at Salt Flats will have ~\$19.8M (\$86%) of \$23M in PAB committed, leaving \$3.2M in additional PAB requests from CHFA and DOLA.

With a PAB top-off and allocation of state LIHTC in 2025, construction of **Ascent at Salt Flats is expected to begin in Q2 of 2026 and be completed in the Q4 of 2027.**



PROJECT FINANCING

Ascent at Salt Flats will use tax-exempt Private Activity Bonds, as well as equity from the sale of tax credits including Federal Low Income Housing Tax Credits (LIHTCs), energy tax credits (Solar ITC, 45L), Transit-Oriented Community Credits (TOCs) and Colorado Affordable Housing Tax Credits (AHTCs). The development can be viably financed non-competitively by utilizing \$23M in PAB and \$700k/yr in State non-competitive LIHTC funds (2025 QAP). Additional soft funds will fill the gap through the City of Grand Junction's investment through Land Value Contribution (proposed), Colorado Division of Housing (CDOH) Rental Gap Financing, deferred development fee, and grants/soft funds from impact capital and state sources (CHFA/DOLA).

Due to the efficient construction type and location in a designated DDA, the total development cost maximizes financing resources and is estimated to be \$45.8 million.

SOURCES & USES

USES	TOTAL	\$ / UNIT	\$ / SF	%
Land & Acquisition Costs	\$ 2.6 M	\$ 17.8K	\$ 21	5.6%
Hard Costs	32.0 M	222.2K	256	69.8%
Development Fee	4.5 M	31.5K	36	9.9%
Soft Costs	2.5 M	17.5K	20	5.5%
Financing Costs	4.2 M	29.1K	34	9.1%
Operating Shortfall / Reserve	0.0 M	0.1K	0	0.0%
TOTAL	\$ 45.8 M	\$ 318.3K	\$ 367	100.0%

CONSTRUCTION SOURCES	TOTAL	\$ / UNIT	\$ / SF	%
Construction Loan	\$ 31.9 M	\$ 221.7K	\$ 256	69.6%
Tax Credit Equity	3.4 M	23.9K	28	7.5%
State Tax Credit	0.6 M	4.2K	5	1.3%
Soft Funds	8.1 M	56.6K	65	17.8%
Deferred Development Fees	1.7 M	11.9K	14	3.7%
Gap Equity (Cash Need)	-	-	-	0.0%
TOTAL	\$ 45.8 M	\$ 318.3K	\$ 367	100.0%

PERMANENT SOURCES	TOTAL	\$ / UNIT	\$ / SF	%
Permanent Tax Exempt Debt	\$ 15.7 M	\$ 109.1K	\$ 126	34.3%
Tax Credit Equity	\$0.82 17.2 M	119.7K	138	37.6%
State Tax Credit	\$0.72 3.0 M	21.0K	24	6.6%
Soft Funding	8.1 M	56.6K	65	17.8%
Deferred Development Fees	1.7 M	11.9K	14	3.7%
Gap Equity (Cash Need)	-	-	-	0.0%
TOTAL	\$ 45.8 M	\$ 318.3K	\$ 367	100.0%

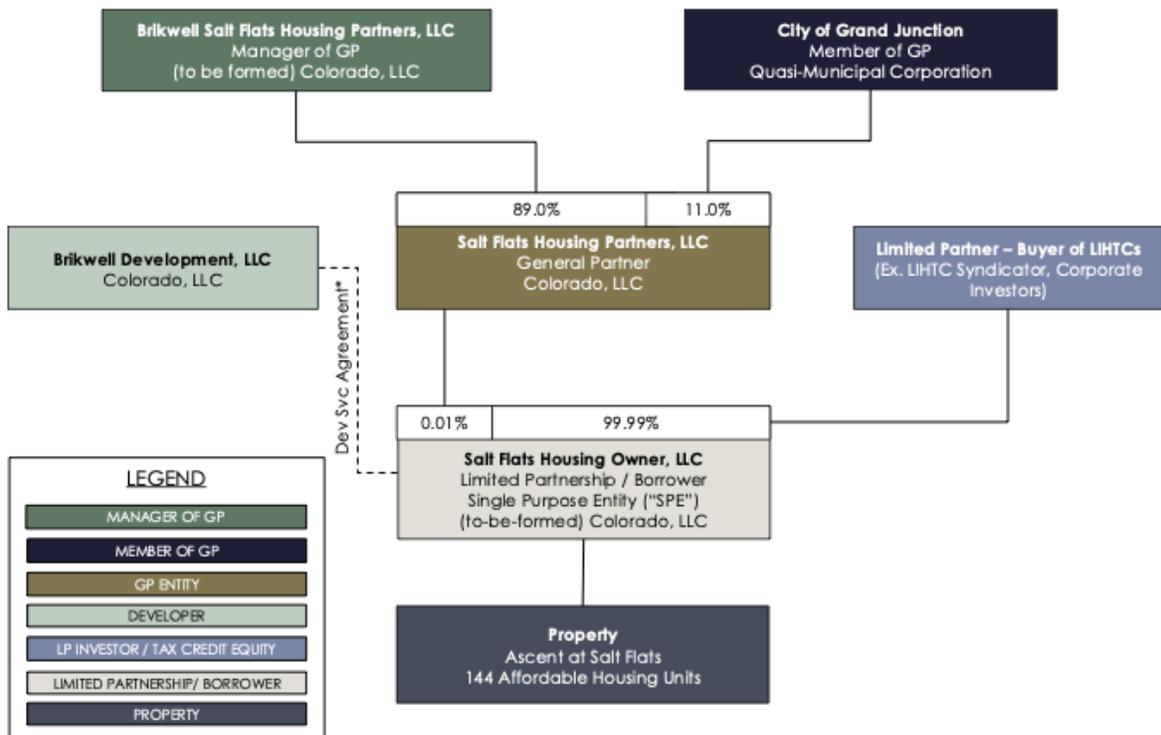
SOFT FUNDING DETAIL	TOTAL	\$ / UNIT	\$ / SF	%
City of Grand Junction Equity Investment	\$ 2.5 M	\$ 17.5K	\$ 20	30.9%
CDOH Soft Funds	4.0 M	28.0K	32	49.5%
Other Soft Funding (Impact, Grant, CHFA CMF)	1.4 M	10.0K	12	17.7%
Solar Tax Credit	\$0.82 0.1 M	0.7K	1	1.2%
45L	\$0.82 0.1 M	0.4K	0	0.7%
TOTAL	\$ 8.1 M	\$ 56.6K	\$ 65	100.0%



TEAM

Ascent at Salt Flats is being developed by Brikwell. Brikwell, a mission-driven real estate development firm with a proven track record of success in developing, owning and operating affordable housing. Brikwell is proposing a Tax Exemption partnership with the City of Grand Junction, as a CO-GP well beyond the typical SLP structure. The City currently owns the property. As part of the partnership contemplated, the City would contribute the land value to the Project at an appraised market value estimated to be \$2,520,000 as a land contribution for an eleven percent (11%) equity interest in the Project, such that the Project can be developed. In this partnership as currently proposed, Brikwell takes on all guarantees, predevelopment expenses, expenses, development, guarantors and risks. The COGJ is proposed to provide input, tax exemption, and would receive operating cash flow, profits & losses, and capital event process distribution of 11%. Should this structure be approved, it would foster strong alignment between COGJ and BW, allowing both partners to leverage their complementary strengths, resources, and capabilities in pursuit of shared values and development goals.

ORGANIZATIONAL CHART – ASCENT AT SALT FLATS W/





CONCLUSION

Ascent at Salt Flats is poised to be a transformative development, directly addressing several key priorities of the public stewards for the residents of Grand Junction, including the City of Grand Junction's holistic departments (Housing, Planning, Engineering, Transportation, Parks & Rec).

The focus on scarce unit types (S, 3BR, 4BR) and those at or below 60% AMI ensures that the project caters to a diverse range of families, with an emphasis on those most in need and housing options lacking in this community.

Furthermore, Ascent at Salt Flats' commitment to resident well-being extends beyond housing. The thoughtful design, incorporating amenities and a greater master plan that foster community interaction and personal growth, coupled with convenient access to essential services, will contribute to an enhanced quality of life and resiliency for residents.

In conclusion, Ascent at Salt Flats represents a significant step towards creating a more equitable and vibrant community in Grand Junction, as part of an even greater Salt Flats community master plan. By providing high-quality, affordable housing and prioritizing the needs of its residents, this development embodies the shared vision of the City of Grand Junction for a community where everyone has a place to proudly call home.



LEASE AGREEMENT

THIS LEASE AGREEMENT (“Agreement” or “Lease”) is hereby made and entered into this 20th day of August 2025, by and between the City of Grand Junction, a Colorado home rule municipality (“City”), and Brikwell (“Lessee”) or any successor to Lessee, whose legal address is 3892 S Grape Street, Denver, CO 80237 (hereinafter collectively referred to as the “Parties”).

RECITALS

A. The City is the owner of that certain real property located in the City of Grand Junction, County of Mesa, State of Colorado, described as follows:

Ascent Lease Area 1 (Exhibit A-1) and Ascent Lease 2 (Exhibit B-1) (“Property”)

The Property consists of a 4.42-acre portion of a larger parcel of property (“the Larger Parcel”). The Larger Parcel is described as follows:

LOT 4, GRAND VIEW COMMONS SUBDIVISION, AS PER PLAT RECORDED SEPTEMBER 24, 2024 UNDER RECEPTION NO. 3105054, COUNTY OF MESA, STATE OF COLORADO.

The City acquired the Larger Parcel by warranty deed dated January 9, 2025, Mesa County reception no. 3114329. The City intends to use the Larger Parcel, including the Property, to facilitate the development of affordable housing.

B. Lessee desires to lease the Property from the City with the intention of developing affordable rental housing on the Property (the “Project”). To facilitate development of the Project, Lessee will be applying for tax credits administered through the Colorado Housing and Finance Authority (“CHFA”). CHFA imposes certain requirements (“Ground Lease Requirements”) upon any ground lease in which it will have a security interest.

C. By and through that Declaration of Restrictive Covenants recorded January 9, 2025 under reception no. 3114330, County of Mesa, State of Colorado (the “Declaration”), the City as Declarant subjected the Larger Parcel to certain restrictive covenants for the benefit of CHFA.

D. The City applied for a grant (the “Program Grant”) from CHFA in its capacity as the Program Administrator for the Affordable Housing Financing Fund (the “Fund”), managed by the Colorado Office of Economic Development and International Trade (“OEDIT”) through the Fund’s Land Banking Program (the “Program”) to fund acquisition and development of the Larger Parcel. Accordingly, the City has certain commitments relevant to the Project, as articulated in the Amended and Restated Grant Commitment between the City and CHFA, dated November 24, 2024.

E. The City agrees to lease, as allowed by voter approval for a term of 99 years, the Property to the Lessee and any authorized successor(s) as specified in this Agreement.

F. Following execution of the lease, the lessee could seek to purchase the Property, and make the request through a formal Letter of Interest (“LOI”) and proceed with the platting of the property/completion of the Subdivision Process, the legal description of which will be determined by and with a future, lawful subdivision in accordance with the laws, rules and regulations of the City. The lessee would proceed to negotiate a mutually acceptable Purchase and Sale (“PSA”) related to the Property. Upon

completion of the platting of the Property/the Subdivision Process, the Parties may enter into the PSA subject to agreement by the Parties as to all terms and conditions. In addition, to the terms and conditions set forth in the LOI, the PSA shall contain other terms and conditions customarily included in Colorado commercial, vacant land real estate contracts. The PSA once drafted to the satisfaction of the Parties to the LOI will be subject to review and ratification, if accepted at a regular noticed meeting of the City Council. Ratification shall be in the form of a City Council resolution.

NOW, THEREFORE, for and in consideration of the payment of rent and the performance of the promises, covenants, conditions, restrictions, duties, and obligations set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Grant and Acceptance of Lease. The City hereby leases the Property to the Lessee, as more particularly described in **Exhibit A-1, B-1 and depicted in Exhibit A-2, B -2**, which are attached to this Lease and incorporated by this reference. Lessee hereby accepts and leases the Property from the City, for the Term (defined in Section 2 below).

2. Term. The term of this Lease shall commence upon its execution by the Parties (“Term Commencement Date”) and shall continue for ninety-nine (99) years (“Term”), at which time this Lease shall expire, if not extended by voter approval. In the event that Lessee fails to secure an award of tax credits from CHFA, site plan approval, or sufficient funding for the construction of the Project prior to the 5th anniversary of the date of this Lease, Lessee may terminate this Lease by notice to the City, and thereafter all obligations of Lessee will cease except those specifically stated to survive the expiration of this Lease.

3. Rent. Rent for the Property specified in **Exhibit A-1 and Exhibit B-1** during the Term shall be paid in accordance with the following schedule:

\$100 per annum

Rent shall be due and payable, without the City’s demand, on or before each anniversary of the Term Commencement Date, until the termination of the Term without proration for the number of days and/or months remaining in such calendar year during which the Lease becomes effective. Should payment of Rent not be received by the City on or before such date, Lessee hereby agrees to pay the City a late charge of **\$75.00**, the amount of Rent(s) due.

4. Use and Condition of the Property.

4.1 Lessee agrees that its use and occupancy of the Property and development of the Project shall be subject to all applicable laws, rules, regulations, codes, rulings, and ordinances of any governmental authority, either now in effect or hereafter enacted, having jurisdiction over the Property and Lessee’s use, occupancy, and operations thereon. Lessee agrees that it shall not use nor permit the Property to be used for any other purpose or in any other fashion or manner contrary to the provisions of this Lease or the laws, ordinances, codes, or regulations of any governmental unit or agency exercising jurisdiction over the Property or any use thereon.

4.2 Lessee agrees to construct the Project and maintain, clean, and repair all aspects of the Property at Lessee’s sole cost and expense, including, but not limited to, driveways, fences, parking spaces, lights, or gates located or hereafter constructed by Lessee on the Property, and to not cause damage to the Property. Lessee agrees that the City shall not be obligated or required to repair damages to any portion or aspect of the Property.

4.3 Lessee has inspected the Property, the rights, and privileges appurtenant thereto, and the laws, rules, regulations, codes, and ordinances governing Lessee's use, occupancy and operations thereon. Lessee agrees that the condition of the Property and such rights, privileges, rules, regulations, codes, and ordinances are sufficient for Lessee's purposes. The City makes no warranties, promises, or representations, express or implied, oral, or written, that the Property is sufficient for the purposes of the Lessee. If the Property is damaged due to fire, flood, or other casualty, or if the Property or any aspect thereof is damaged or deteriorates to the extent that it is no longer functional for the purposes of the Lessee, the City shall have no obligation to repair the Property or to otherwise make the Property usable or occupiable, and damages shall be at Lessee's own risk.

4.4 Lessee agrees to make a reasonable effort to keep the Property free from noxious weeds. Lessee further agrees that it shall not commit waste nor permit waste, damage, or injury to the Property.

4.5 The Property, as a portion of the Larger Parcel, is subject to all terms, conditions, restrictions, and covenants of the Declaration. To the extent that any provision of this Lease Agreement is more restrictive than the terms of the Declaration, the more restrictive terms of this Lease Agreement shall govern the Property.

4.6 All improvements currently existing on the Property or constructed on the Property by Lessee as permitted by this Lease shall be owned by Lessee for income tax purposes until expiration of the Term or sooner termination of this Lease. Lessee alone will be entitled to all of the tax attributes of such ownership including, without limitation, the right to claim depreciation or cost recovery deductions, and the right to claim Federal low income housing tax credits, and Lessee shall have the right to amortize capital costs and to claim any other Federal or state tax benefits attributable to the ownership of all improvements and renovations constructed on the Property.

4.7 All improvements on or to the Property (other than signs and personal property of Lessee located on the Property) shall become the City's property, free and clear of all encumbrances placed by or through Lessee, at the expiration of the Term or sooner termination of this Lease. No additional compensation shall be due Lessee from the City, with any value for such having been included in the Lease consideration.

4.8 The City will cooperate with Lessee to the extent that City's consent or signature is required to join in applications or agreements required by any governmental authority or the utilities serving the Project, and all documents, agreements, applications, and related documents required for the platting, construction, development, and operation of the Project, including any land use restriction agreements, provided that such actions by the City shall be at no cost or liability to the City.

5. Non-Liability of the City for Damage. The City shall not be liable for damage claims for injury to persons or property, from any cause relating to the occupancy and use of the Property by Lessee or any person or interest claiming by or through the Lessee or any successor(s) thereto, including those arising out of damages or losses occurring on areas adjacent to the Property or easements used for the benefit of the Property during the Lease Term or any extension thereof, nor for any injury or damage to any property of the Lessee or any other party, from any cause whatsoever. Lessee and any successor(s) thereto agree to indemnify the City, its officers, employees, and agents, and hold the same harmless from all liability, loss, or other damage claims or obligations resulting from any injuries, including death, or losses of any nature except as results from the gross negligence or willful misconduct of the City.

Furthermore, the City shall not be liable to Lessee for any damages, or any loss of profits or loss of opportunities claimed by Lessee or any successor(s) thereto or for interruption of Lessee's or any successor's(s') business or operations resulting from the environmental condition of the Property, fire, the elements, or casualty, of any kind.

6. Hazardous Substances.

6.1 The term "Hazardous Substances" as used in this Agreement, shall mean any substance which is defined as a hazardous substance, hazardous material, hazardous waste, pollutant or contaminant under any Environmental Law enacted by any federal, state and local governmental agency or other governmental authority; a petroleum hydrocarbon, including, but not limited to, crude oil or any fraction thereof; hazardous, toxic or reproductive toxicant; regulated pursuant to any law; any pesticide or herbicide regulated under state or federal law, but excluding any substance in quantities consistent with residential household usage.

The term "Environmental Law", as used in this Lease Agreement, shall mean each and every federal, state and local law, statute, ordinance, regulation, rule, judicial or administrative order or decree, permit, license, approval, authorization or similar requirement of each and every federal, state and local governmental agency or other governmental authority, pertaining to the protection of human health and safety of the environment, either now in force or hereafter enacted.

6.2 Lessee shall not cause or permit to occur by Lessee or Lessee's agents, guests, invitees, contractors, licensees, or employees the following:

(a) Any violation of any Environmental Law on, under or about the Property or arising from Lessee's use and occupancy of the Property, including, but not limited to, air, soil and groundwater conditions; or

(b) the use, generation, accidental or uncontrolled release, manufacture, refining, production, processing, storage, or disposal of any Hazardous Substance on, under or about the Property, or the transportation to or from the Property of any Hazardous Substance in any case in violation of any federal state or local law, ordinance or regulation either now in force or hereafter enacted.

7. Environmental Clean-Up.

7.1 The following provisions shall be applicable to Lessee and to Lessee's agents, guests, invitees, contractors, licensees, and employees:

(a) Lessee shall, at Lessee's sole cost and expense, comply with all Environmental Laws and laws regulating the use, generation, storage, transportation, or disposal of Hazardous Substances;

(b) Lessee shall, at Lessee's sole cost and expense, make all submissions and provide all information required by and/or to comply with all requirements of all governmental authorities (the "Authorities") under Environmental Laws and other applicable laws,

(c) Should any Authority or the City demand that a clean-up plan be prepared and that a clean-up plan be undertaken because of any deposit, spill, discharge or other release of Hazardous Substances on, under or about the Property occurring during the Term and arising from Lessee's, its agents', guests', invitees', contractors', licensees' or employees' use of the Property, Lessee shall, at Lessee's sole cost and expense, prepare and submit the required plan(s) and all related bonds and other financial

assurances, and Lessee shall carry out all such clean-up plan(s) in compliance with the Authorities and all Environmental Laws and other applicable laws.

(d) Lessee shall promptly provide all information regarding the use, generation, storage, transportation, or disposal of Hazardous Substances requested by any Authority. If Lessee falls to fulfill any duty imposed hereunder within a reasonable time, the City may do so on Lessee's behalf and, in such case, Lessee shall cooperate with the City in the preparation of all documents the City or any Authority deems necessary or appropriate to determine the applicability of Environmental Laws to the Property and Lessee's use thereof, and for compliance therewith. Lessee shall execute all of the aforementioned documents promptly upon the City's request. No such action by the City and no attempt made by the City to mitigate damages under any Environmental Law or other applicable law shall constitute a waiver of any of Lessee's obligations hereunder.

(e) Lessee's obligations and liabilities hereunder shall survive the expiration or termination of this Lease Agreement.

7.2 Lessee shall indemnify, defend and hold the City, its officers, employees and agents harmless from all fines, suits, procedures, claims and actions of every kind, and all costs associated therewith (including the costs and fees of attorneys, consultants and experts) arising out of or in any way connected with any deposit, spill, discharge or other release of Hazardous Substances and the violation of any Environmental Law and other applicable law by Lessee and/or Lessee's agents, guests, invitees, contractors, licensees and employees that occur during the term of this Lease or any extension thereof, or from Lessee's failure to provide all information, make all submissions, and take all actions required by all Authorities under the Environmental Laws and other applicable laws. Lessee's obligations and liabilities hereunder shall survive the expiration or termination of this Lease Agreement.

8. Lessee's Obligation to Produce Affordable Housing Units

8.1 As a condition of the Program Grant, the City is subject to certain milestones that must be met for development of 324 affordable-housing units on the Larger Parcel. To enable the City to meet those milestones, Lessee's development of the Property shall be subject to certain conditions.

8.2 Lessee shall produce on the Property rental housing units, are restricted to households with annual incomes between thirty (30)-eight (80) percent AMI, At least 107 of the total 144 units (approximately seventy-four percent (74%) must meet affordability requirements, defined at 60% AMI or below, with a project-wide income average at or below sixty percent (60%) of Area Median Income ("AMI), under the following timetable: 144 units shall be developed within 5 years of January 9, 2025, the day the City purchased the Larger Parcel. Development of the 144 units shall be considered complete under this Lease Agreement if and only if the Project has been fully funded, and fully permitted by the City.

8.3 AMI, as well as the maximum rental rates that can be charged to tenants of the Project, shall be determined periodically as set by the United States Department of Housing and Urban Development (HUD) and/or CHFA.

8.4 Failure by the Lessee to adhere to the timetable of section 8.2 shall be deemed a default under the terms of this Lease Agreement entitling the City to terminate this Lease as to any undeveloped portion of the Property and reversion of that portion of the Property to the City, at the City's sole discretion and as its sole remedy.

8.5 Lessee may request in writing, and the City may grant in its commercially reasonable discretion, a single, one-year extension on the timetable identified in section 8.1 above.

9. Reporting Obligations

9.1 As a condition of the Program Grant, the City is obligated to adhere to certain quarterly reporting requirements. In order for the City to meet those requirements, Lessee is obligated to report the necessary information to the City.

9.2 Reports from Lessee to the City shall be due on the 15th day of the month immediately following the conclusion of each quarter, with the first report being due on or before October 15, 2025. Reporting requirements are enumerated in the attached **Exhibit C**, which is incorporated into this Lease by this reference.

9.3 The City may also request additional reporting to ensure compliance with Proposition 123 and may conduct periodic audits in its discretion and as deemed necessary to ensure compliance with the terms of this Lease. Agreement.

10. CHFA Ground Lease Requirements

10.1 The requirements imposed by CHFA upon Lessee and City referenced in Recital B above are enumerated in the attached **Exhibit D**, which is incorporated into this Lease Agreement by this reference. Such provisions will be binding on Lessee and the City and the rights of CHFA included therein will run to the benefit of CHFA or any other construction or permanent lender selected by Lessee. To the extent there is a conflict between the terms of Exhibit D and this Lease, the terms of Exhibit D will control.

11. Environmental Sustainability Standards

11.1 Pursuant to the terms of the Program Grant, the City must ensure that the Project meets certain Environmental Sustainability Standards (the "Standards"). Accordingly, Lessee is required under the terms of this Lease to meet these Standards.

11.2 To meet these Standards, the Project must achieve certification from one of the following:

- 2020 Enterprise Green Communities (EGC)
- Leadership in Energy and Environmental Design LEED v.4.1 (LEED)
- National Green Building Standards NGBS ICC-700-2020 (NGBS)
- Zero Energy Ready Homes standard (US DOE)

11.3 Additionally, buildings in the Project must be all-electric, using high efficiency electric appliances such as heat pumps and heat pump water heaters, or a mixed-fuel building that includes pre-wiring for efficient electric heating and appliances and includes pre-wiring to enable future installation of EV charging station(s) of at least 10% of parking spots.

11.4 Finally, buildings in the Project must utilize water-efficient design inside and outside. Full guidance can be found at coloradowaterwise.org.

12. Default; Sublet; Termination; Assignment.

12.1 Should Lessee: (a) default in the performance of its agreements or obligations herein and any such default continue for a period of ninety (90) days after written notice thereof is given

by the City to Lessee; or (b) abandon or vacate the Property; or (c) be declared bankrupt, insolvent, make an assignment for the benefit of creditors, or if a receiver is appointed; the City, at the City's option, may cancel and annul this Lease at once and immediately enter and take possession of the Property without any previous notice of intention to reenter, and such reentry shall not operate as a waiver or satisfaction in whole or in part of any claim or demand arising out of or connected with any breach or violation by Lessee of any covenant or agreement to be performed by Lessee. Upon reentry the City may remove the personal property and personnel of Lessee and store Lessee's personal property in a warehouse or at a place selected by the City, at the expense of Lessee and without liability to the City. Any such reentry shall not work a forfeiture of nor shall it terminate the rent(s) to be paid or the covenants and agreements to be performed by Lessee for the full term of this Lease; and, upon such reentry, the City may thereafter lease or sublease the Property for such rent as the City may reasonably obtain, crediting Lessee with the rent so obtained after deducting the cost reasonably incurred in such reentry, leasing or subleasing, including the costs of necessary repairs, alterations and modifications to the Property. Nothing herein shall prejudice or be to the exclusion of any other rights or remedies which the City may have against Lessee, including, but not limited to, the right of the City to obtain injunctive relief based on the irreparable harm caused to the City's reversionary rights.

12.2 If Lessee is in default in the performance of any term or condition of this Lease Agreement, the City may, at its option, terminate this Lease upon giving thirty (30) days written notice. If Lessee fails within any such thirty (30) day period to remedy each and every default specified in the City's notice, this Lease shall terminate. Notwithstanding the foregoing, City agrees not to exercise this right as to any portion of the Property that has been awarded tax credits during any "compliance period" (as defined under Section 42 of the Internal Revenue Code of 1986, as amended).

12.3 Lessee shall not assign or sublease the Property, or any right or privilege connected therewith, or allow any other person, except officers, employees, agents, and clientele of Lessee, to occupy the Property or any part thereof without first obtaining the written consent of the City, which consent must be approved and ratified by the City Council of the City, and the written consent of CHFA. Any attempt to sublet, assign or transfer without the prior written consent of the City and CHFA shall be void *ab initio*. In the event an assignment of this Lease or a sublease is authorized by the City and CHFA, Lessee shall not be released from Lessee's obligations and duties under this Lease and this Lease shall remain in full force and effect. Any consent by the City and CHFA shall not be a consent to a subsequent assignment, sublease, or occupation by any other party. Any unauthorized assignment, sublease, or permission to occupy by Lessee shall be void and shall, at the option of the City and CHFA, provide reasonable cause for the City to terminate this Lease. The interest of Lessee in this Lease is not assignable by operation of law without the formal approval and ratification by the City Council of the City and written approval by CHFA.

12.4 Notwithstanding Section 12.3, Lessee may at any time, and from time to time, enter into dwelling leases with residential tenants and subject the leasehold estate, and any or all of Lessee's improvements situated on the Property, to one or more mortgages, deeds of trust, security agreements, or financing statements as security for a loan or loans or other obligation of Lessee (each a "Leasehold Mortgage"), provided that Lessee shall give Landlord notice of such Leasehold Mortgage. Notwithstanding anything to the contrary, the parties hereto agree that the City's consent shall not be required for (a) the removal and replacement of Lessee's general partner by any Lessee investor limited partner, or (b) the transfer by Lessee's investor limited partner of its interest in Lessee.

12.5 Lessee shall not engage or allow any contractor, material man or supplier to perform any work or supply any materials or other goods or services on any portion of the Property which could be the subject of a mechanic's lien.

13. Lessee hereby authorizes CHFA, OEDIT, and the City to use information regarding or relating to the Project to publicize and/or report on their financing activities in any manner of

communication or media including, but not limited to, in press releases, websites, social media, flyers, advertisement, community reports, etc., without further authorization or the consent of Lessee, provided that confidential or other proprietary information is not shared. Lessee agrees to obtain prior written approval from CHFA, OEDIT and/or the City prior to using the name or logo of CHFA, OEDIT and/or the City in any press release, media events, website, social media or any other public communication.

14. Fees or Commissions. The parties to this Lease warrant that no person or selling agency has been employed or retained to solicit or secure this Lease upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee. The City and Lessee agree to defend, indemnify and hold the other harmless from any claim for real estate brokerage commissions or finder's fees asserted by any other party claiming to be entitled to brokerage commissions or finder's fees arising out of this Lease.

- Notices. All notices to be given with respect to this Lease shall be in writing delivered either by United States mail or Express mail, postage prepaid, by email, or by hand or courier service as follows:

To the City:
City of Grand Junction
Attn: City Manager
250 N. 5th Street
Grand Junction, CO 81501
Email: citymanager@gjcity.org

With Copies to:
City of Grand Junction
Attn: City Attorney
250 North 5th Street
Grand Junction, CO 81501
Email: cityattorney@gjcity.org

To the Lessee:
c/o: Brikwell, LLC
Address: 3892 S Grape
Street, Denver, CO 80237
Attn: Tyler Elick
Email: tyler.elick@brikwell.com

With Copies to:

All notices shall be deemed given: (1) if sent by mail, when deposited in the mail; (2) if delivered by hand or courier service, when delivered or attempted delivery is made; or (3) if sent via email, when transmitted. The parties may, by notice as provided above, designate a different address to which notice shall be given.

14. Not a Partnership.

14.1 The City, by entering into this Lease Agreement, does not part with its entire possession of the Property, but only so far as it is necessary to enable Lessee to use the Property and carry out the terms and provisions of this Lease. It is expressly agreed between the Parties that this Agreement is one of lease and not of partnership and that the City shall not be or become responsible for any debts contracted or incurred by Lessee. Lessee shall save, indemnify and hold the City, its officers, employees and agents harmless against all liability and loss, and against all claims or actions based upon or arising out of any claim, lien, damage or injury (including death), to persons or property caused by Lessee or sustained in connection with Lessee's performance of the terms and conditions of this Agreement or the conditions created thereby, or based upon any violation of any statute, ordinance, code or regulation, either now in force or hereinafter enacted, and the defense of any such claims or actions, including the costs and fees of attorneys, consultants and experts. Lessee shall also save, indemnify, and hold the City, its officers, employees and agents harmless from and against all liability and loss in connection with, and shall assume full responsibility for the payment of, all federal, state and local taxes, fees or contributions imposed or

required under unemployment insurance, social security and income tax laws with respect to employees engaged by Lessee.

14.2 The City hereby reserves the right to at all times have its officers, employees and agents enter into and upon the Property and to do such acts and things as may be deemed necessary for protection of the City's interests therein, provided that City may not enter into any residential unit in the Project without prior notice to the tenant of such unit (except in the event of emergency).

15. Enforcement; Partial Invalidity; Governing Law.

15.1 If the Parties are required to commence or prosecute any legal action to determine the rights, duties, and obligations hereunder or to otherwise enforce this Agreement, then the prevailing party shall be entitled to the payment of their reasonable attorneys' fees and court costs, including those incurred for any successful appeal.

15.2 In case any one or more of the terms or provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other term or provision of this Agreement, and this Agreement shall be construed and given effect as if such invalid or illegal or unenforceable term or provision had never been contained herein. Upon such determination that any term or provision is invalid, illegal or unenforceable, the court or other tribunal making such determination is authorized and instructed to sever the invalid, illegal or unenforceable term or provision and modify this Agreement so as to give effect to the original intent of the Parties as closely as possible so that the transactions, agreements, covenants and obligations contemplated herein are consummated as originally intended to the fullest extent possible.

15.3 This Agreement shall be governed by and construed in accordance with the laws of the State of Colorado. Venue for any action to enforce any covenant or agreement contained in this Agreement shall be in Mesa County, Colorado.

16. Surrender; Holding Over. Lessee shall, upon the expiration or termination of this Lease, surrender the Property to the City in good order, condition and state of repair, reasonable wear and use excepted. In the event Lessee fails, for whatever reason, to vacate and surrender the Property upon the expiration or termination of this Lease and the parties have not reached an agreement which would allow Lessee to continue to occupy any portion of the Property, Lessee agrees that Lessee shall pay to the City the sum of **\$100.00** per day for each and every day thereafter until Lessee has effectively vacated and surrendered the Property. The parties agree that it would be difficult to establish the actual damages to the City in the event Lessee fails to vacate and surrender the Property upon the expiration or termination of this Lease, and that said **\$100.00** daily fee is an appropriate liquidated damages amount.

17. Total Agreement; Applicable to Successors. This Lease contains the entire agreement between the parties and, except for automatic expiration or termination, cannot be changed or modified except by a written instrument subsequently executed by the parties hereto. This Lease and the terms and conditions hereof apply to and are binding upon the successors and authorized assigns of both parties. The parties hereto have each executed and entered into this Lease Agreement as of the day and year first above written.

18. Execution in Counterparts. This Agreement may be executed in one or more counterparts including scanned and emailed counterparts each counterpart to be considered an original portion of this Agreement, and all of which together shall constitute a single instrument. A photocopy of this Agreement may be used in lieu of an original in any action or proceeding brought to enforce or construe this Agreement.

19. Headings Not Part of Agreement. The headings contained in this Agreement are for convenience only, do not constitute part of this Agreement, and shall not limit, affect the interpretation of, or otherwise affect in any way the provisions of this Agreement.

20. Interpretation of the Agreement. This Agreement was drafted jointly by the Parties and shall not construed against any party hereto.

21. Further Assurances. The Parties shall execute such further documents and do any and all such further things as may be necessary to implement and carry out the intent of this Agreement.

22. Short Form. The City and Lessee will record a Short Form of this Lease in the public records of Mesa County.

IN WITNESS WHEREOF, the Parties have caused for the execution and made this Lease effective as of the date first set forth above.

**THE CITY OF GRAND JUNCTION,
a Colorado Home Rule Municipality:**

Attest:

By: _____
Mike Bennett, City Manager

By: _____
Selestina Sandoval, City Clerk

LESSEE:
[_____]

By: Tyler Elick
Its: Partner

EXHIBIT A-1

Salt Flat Development – Ascent Lease Area 1

A parcel of land located in Lot 4 of the Grand View Commons Subdivision as recorded at Reception No. 3105054 in the Mesa County Clerk and Recorders office, situated in the SW1/4NW1/4 of Section 18, Township 1 South, Range 1 East, of the Ute Meridian, Grand Junction, Mesa County, Colorado, described as:

Commencing at the NW corner of said Lot 4, whence the SW corner of Lot 4 bears $S00^{\circ}00'17''E$ as a basis of bearing; running thence along the west line of said Lot 4 $S00^{\circ}00'17''E$ 465.37 feet, thence $N89^{\circ}49'04''E$ 306.34 feet to the Point of Beginning. Running thence $N89^{\circ}59'43''E$ 124.45 feet, thence along a curve to the right 89.46 feet (Radius = 100.00 feet, Delta = $51^{\circ}15'32''$, Chord Bearing = $S64^{\circ}22'31''E$, Chord Distance = 86.51 feet), thence $S38^{\circ}44'45''E$ 108.74 feet to the northwesterly right-of-way of Grand Avenue, thence along said right-of-way along a curve to the left 247.92 feet (Radius = 370.00 feet, Delta = $38^{\circ}23'31''$, Chord Bearing = $S39^{\circ}30'12''W$, Chord Distance = 243.31 feet), thence $N77^{\circ}33'23''W$ 94.80 feet, thence along a curve to the right 39.93 feet (Radius = 29.50 feet, Delta = $77^{\circ}33'06''$, Chord Bearing = $N38^{\circ}46'50''W$, Chord Distance = 36.95 feet), thence $N00^{\circ}00'17''W$ 260.72 feet to the Point of Beginning.

Parcel contains 1.33 acres.

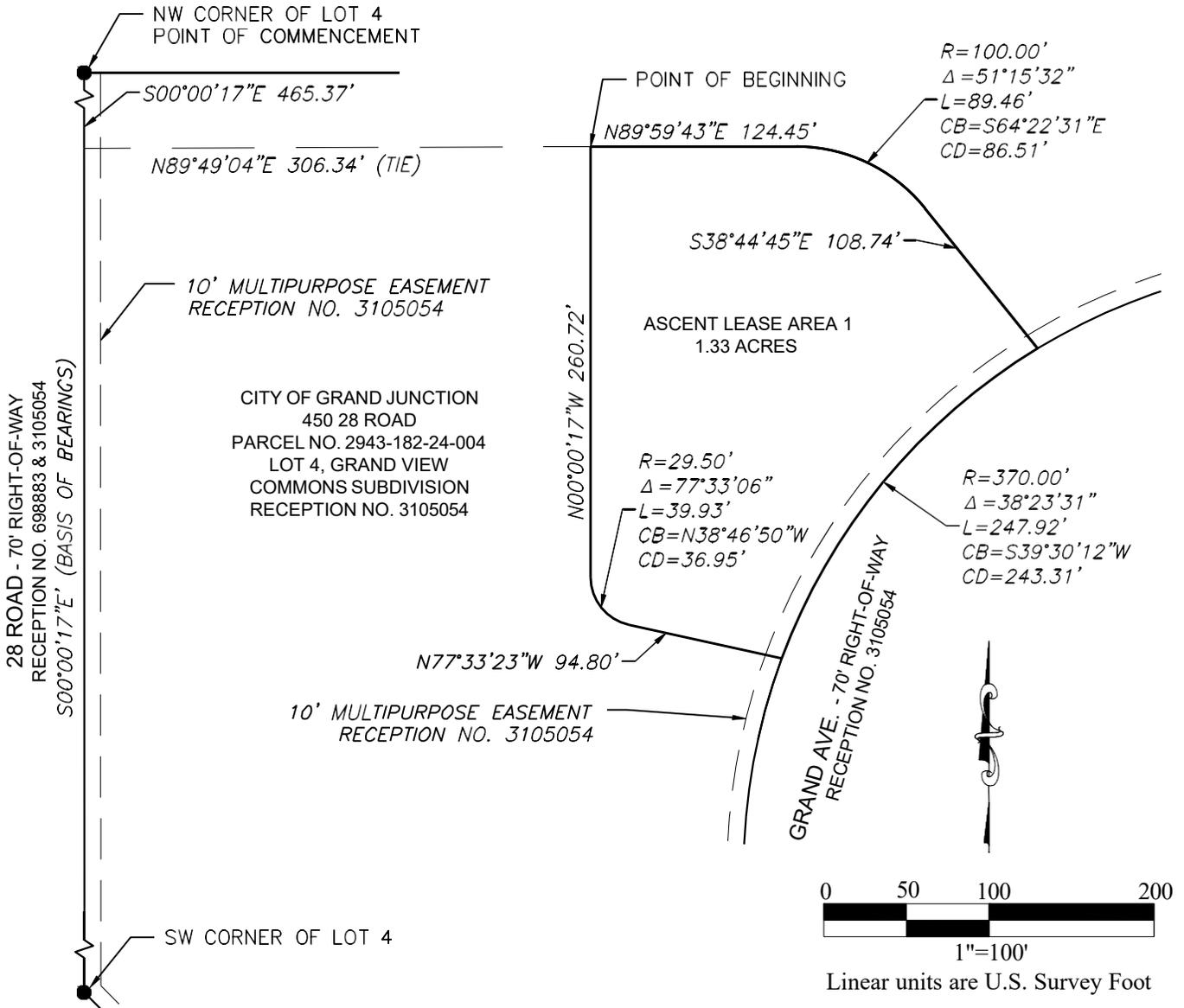
Description prepared by:
Alexandre B. Lheritier, PLS 38464
City of Grand Junction
244 N. 7th St.
Grand Junction, CO 81051



EXHIBIT A-2

SALT FLATS DEVELOPMENT - ASCENT LEASE AREA 1 EXHIBIT

450 28 Rd, Grand Junction, CO 81501



Alexandre B. Lheritier
Colorado PLS 38464

THIS EXHIBIT IS FOR THE PURPOSE OF GRAPHICALLY REPRESENTING A WRITTEN DESCRIPTION - IT DOES NOT REPRESENT A MONUMENTED BOUNDARY SURVEY

LEGEND:

- | | | | |
|----|----------------|-------|-------------------|
| R | RADIUS | ————— | LEASE BOUNDARY |
| Δ | DELTA | ————— | LOT LINE |
| L | ARC LENGTH | ————— | EXISTING EASEMENT |
| CB | CHORD BEARING | | |
| CD | CHORD DISTANCE | | |

PROJECT NO.

DATE: 07/31/2025

CITY OF
Grand Junction
COLORADO

ENGINEERING AND
TRANSPORTATION DEPARTMENT

EXHIBIT B-1

Salt Flat Development – Ascent Lease Area 2

A parcel of land located in Lot 4 of the Grand View Commons Subdivision as recorded at Reception No. 3105054 in the Mesa County Clerk and Recorders office, situated in the SW1/4NW1/4 of Section 18, Township 1 South, Range 1 East, of the Ute Meridian, Grand Junction, Mesa County, Colorado, described as:

Commencing at the NW corner of said Lot 4, whence the SW corner of Lot 4 bears S00°00'17"E as a basis of bearing; running thence along the west line of said Lot 4 S00°00'17"E 465.37 feet to the Point of Beginning. Running thence N89°59'43"E 255.34 feet, thence S00°00'17"E 259.77 feet, thence along a curve to the left 108.96 feet (Radius = 80.50 feet, Delta = 77°33'06", Chord Bears = S38°46'50"E, Chord Distance = 100.83 feet), thence S77°33'23"E 91.32 feet to the westerly right-of-way of Grand Avenue, thence along said right-of-way the following two (2) courses: (1) along a curve to the left 79.46 feet (Radius = 370.00 feet, Delta = 12°18'15", Chord Bears = S06°13'59"W, Chord Distance = 79.30 feet), (2) thence S00°04'52"W 47.31 feet, thence N76°27'20"W 171.61 feet, thence S89°59'43"W 136.91 feet, thence S00°00'17"E 18.00 feet, thence S89°59'43"W 95.22 feet to the west line of said Lot 4, thence along said west line N00°00'17"W 462.00 feet to the Point of Beginning.

Parcel contains 3.09 acres.

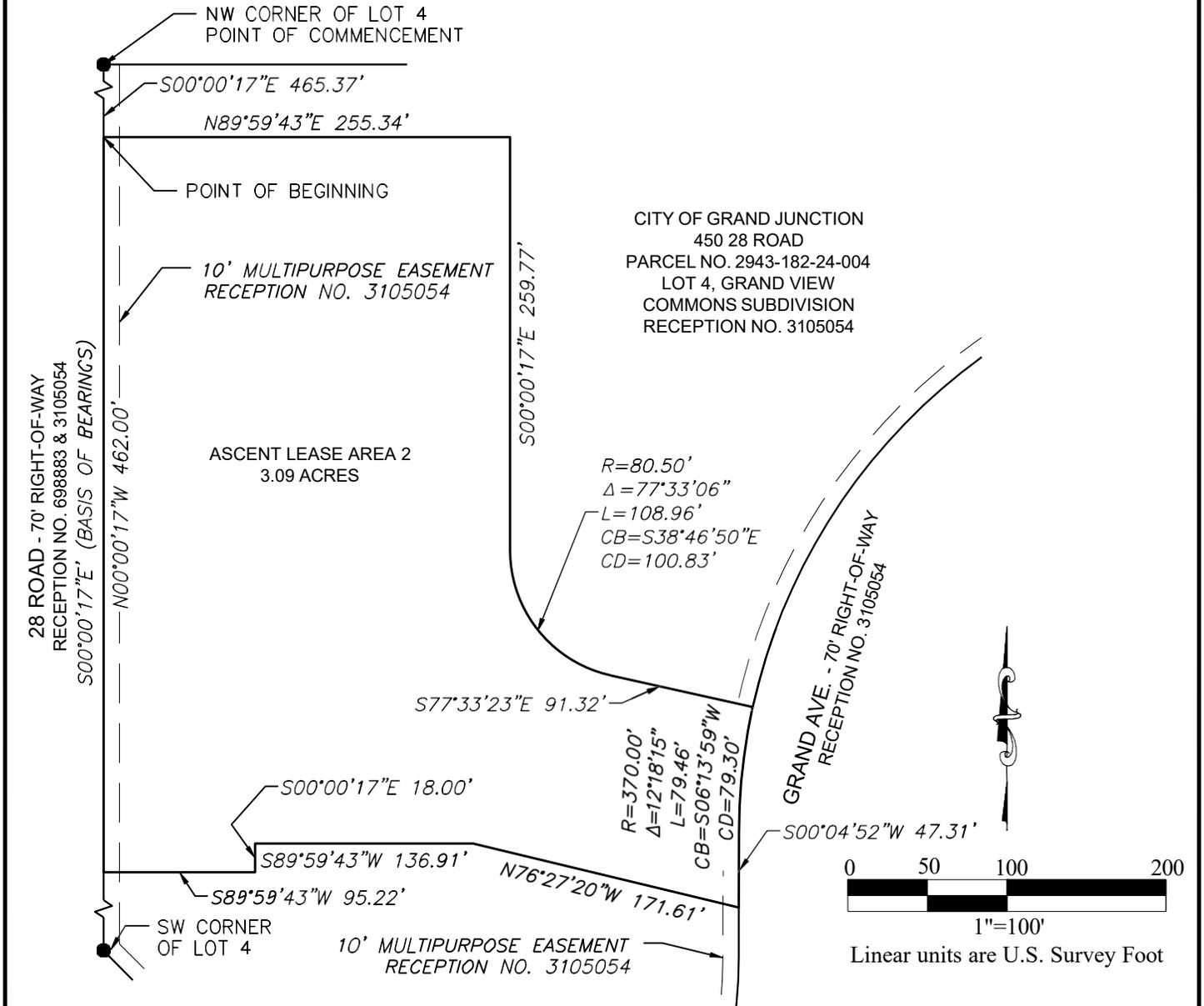
Description prepared by:
Alexandre B. Lheritier, PLS 38464
City of Grand Junction
244 N. 7th St.
Grand Junction, CO 81051



EXHIBIT B-2

SALT FLATS DEVELOPMENT - ASCENT LEASE AREA 2 EXHIBIT

450 28 Rd, Grand Junction, CO 81501



Alexandre B. Lheritier
Colorado PLS 38464

THIS EXHIBIT IS FOR THE PURPOSE OF GRAPHICALLY REPRESENTING A WRITTEN DESCRIPTION - IT DOES NOT REPRESENT A MONUMENTED BOUNDARY SURVEY

LEGEND:

- | | | | |
|----|----------------|-------|-------------------|
| R | RADIUS | ————— | LEASE BOUNDARY |
| Δ | DELTA | ————— | LOT LINE |
| L | ARC LENGTH | ————— | EXISTING EASEMENT |
| CB | CHORD BEARING | | |
| CD | CHORD DISTANCE | | |

PROJECT NO.

DATE: 07/31/2025

CITY OF
Grand Junction
COLORADO

ENGINEERING AND
TRANSPORTATION DEPARTMENT

EXHIBIT C
CHFA Agreement



denver

1981 Blake Street
 Denver, CO 80202
 303.297.chfa (2432)
 800.877.chfa (2432)

PO Box 60
 Denver, CO 80201
 800.659.2656 tdd
 www.chfainfo.com

western slope

348 Main Street
 Grand Junction, CO 81501
 970.241.2341
 800.877.8450

**AFFORDABLE HOUSING FINANCING FUND
 LAND BANKING PROGRAM**

AMENDED AND RESTATED GRANT COMMITMENT

November 26, 2024

Via Email Only

City of Grand Junction
 250 North 5th Street
 Grand Junction, CO 81501
 Attention: Ashley Chambers
 Email: ashleyc@gjcity.org

Re: Grant in the amount of \$2,200,000

Dear Ms. Chambers:

Colorado Housing and Finance Authority (“**Authority**”) has been retained by the Colorado Office of Economic Development and International Trade (“**OEDIT**”) as the administrator of the Affordable Housing Financing Fund (“**Fund**”). The Fund was created by the Affordable Housing Statute (CRS 29-32-101 et seq) (“**Statute**”) which was voted on and approved by Colorado voters in a November 2022 ballot measure commonly known as Proposition 123. The Land Banking Program (“**Program**”), as part of Proposition 123, provides funding for the acquisition and preservation of land for the development of affordable rental housing, affordable homeownership, and/or mixed commercial use (if the predominate use is affordable housing).

The Authority hereby notifies you of its approval of your request for a grant (“**Grant**”) for the Project (as hereinafter defined) under the Program. As used herein, the “**Project**” shall refer to the acquisition of land for, and the development of at least three hundred twenty-four (324) units as part of, the Salt Flats Project, which is Grand View Commons Subdivision, Lot 4, an approximate 21.45 acres of the SW4NW4 SEC 18 1S 1E EXC E 25FT FOR RD EXC PORTION ON S END LYING IN HWY 6 + 24, Common address: 450 28 RD. The Project must comply with the terms and conditions provided herein, the Program Guidelines (as defined below), and the Statute, as applicable.

This grant commitment (“**Commitment**”) is subject to the terms and conditions of the Land Banking Program Guidelines issued September 18, 2023 (“**Program Guidelines**”), and to the terms and conditions contained herein.

1. Grantee. City of Grand Junction, Colorado.

Amended and Restated Grant Commitment
City of Grand Junction
December 2, 2024

2. Grant. The grant shall be in an amount not to exceed Two Million Two Hundred Thousand and no/100 Dollars (\$2,200,000), provided that the final grant amount shall be determined after the Authority reviews a satisfactory appraisal of the land being acquired in connection with the Project (21.45 acres) (in accordance with the Authority’s appraisal guidelines, to be ordered by the Grantee at Grantee’s expense). The final grant amount may be lower than the amount set forth above based on the Authority’s review of such appraisal.
3. Milestones. As a condition of the Grant, Grantee must meet the following milestones:
 - a. Initial Milestones. Within five (5) years of the Grant closing (“**Initial Deadline**”), the Project must be properly zoned for the proposed Project use, and a development plan (per the Development Plan Appendix published in the Land Banking Program Guidelines August 21, 2024) contemplating the construction of at least three hundred twenty-four (324) units in connection with the Project must be submitted to and approved by the Authority (collectively, “**Initial Milestones**”); and
 - b. Final Milestones. Within ten (10) years of the Grant closing (“**Final Deadline**”), the Project must obtain all necessary permits, and the Grantee must close and receive funding for one or more construction loans, grants or other financing sources in an amount needed to complete at least three hundred twenty-four (324) units in connection with the Project on or before the expiration of ten (10) years from the Grant closing date (collectively, the “**Final Milestones**”). The Initial Milestones and Final Milestones are collectively referred to herein as the “**Milestones**”.

Failure to meet the Initial Milestones or Final Milestones could impact future award(s) under the Program.
4. Grant Repayment. Grantee must repay the Grant in full if the Authority determines that Grantee failed to timely and properly meet each of the Milestones. If the Initial Milestones are not timely or properly met, then repayment is due within six (6) months of the Initial Deadline. If the Final Milestones are not timely or properly met, then repayment is due within six (6) months of the Final Deadline. If the Grant is repaid in full prior to the Final Deadline, the Restrictive Covenant (defined below) will be released and the Program’s restrictions on the Project’s use will terminate.
5. Grant Fees. The Grantee shall pay any and all of the Authority’s and OEDIT’s third-party costs, including but not limited to, attorneys fees and costs, title company premiums and closing fees, environmental search charges, recording costs, and UCC search charges, as applicable (“**Closing Costs**”).
6. Commitment Expiration. May 31, 2025.

Amended and Restated Grant Commitment
City of Grand Junction
December 2, 2024

7. Program Requirements. Grantee must meet all Program requirements including, but not limited to the following:
 - a. Reporting. Grantee must comply with the Program reporting requirements described on Exhibit B.
 - b. Grantee Eligibility. Grantee must be either a local or tribal government.
 - c. Project Eligibility. The Project must be developed as affordable rental housing, affordable for sale housing, or commercial mixed use with a residential component. The Predominate Use (as hereinafter defined) of the total site must be affordable housing consistent with the income requirements set forth in paragraph 8.b. of this Commitment, though commercial uses, market rate or non-restricted housing or rent restricted housing above 60% area median income (“**AMI**”) may be included in the remaining space. “**Predominate Use**” as used herein means at least 70% of the improved square footage or units on the 21.45 acres comprising the Project, unless otherwise agreed to in writing by the Authority. The commercial use of a mixed-use project must be compatible with the affordable housing use and must be approved by the Authority in advance in the Authority’s sole discretion.
 - d. Environmental Sustainability Requirements. The Project must meet environmental sustainability requirements as more fully set forth in Paragraph 10.b.
 - e. Restrictive Covenant. A restrictive covenant as set forth in Paragraph 8 (“**Restrictive Covenant**”) shall be recorded against the Project at the closing of the Grant.

8. Restrictive Covenant. A Restrictive Covenant shall be recorded against the Project in the official records of the county where the Project is located at the closing of the Grant. All covenants and payment liens shall be subordinate to the Authority’s Restrictive Covenant. The Restrictive Covenant shall include, but not be limited to, the following provisions:
 - a. Affordability Term.
 - (i) The Restrictive Covenant will be required to remain of record so long as the Grant remains outstanding. The Restrictive Covenant may be released if the Grant is repaid.
 - (ii) If the Project as developed includes rental units, the Restrictive Covenant shall restrict the affordability of such rental housing units as set forth in paragraph 8.b below for at least 40 years after the final improvements are constructed and have received a permanent certificate of occupancy, unless otherwise agreed to by the Authority.

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- (iii) If the Project as developed includes homeowner units, the Restrictive Covenant will restrict the homeowner units to remain affordable as set forth in paragraph 8.b below for at least 40 years after the final improvements are constructed and have received a permanent certificate of occupancy, through a ground lease or similar structure each as approved by the Authority, unless otherwise agreed to by the Authority.
 - (iv) The Project may request a reduction to the term of the Covenant as stated in 8.a.(ii) and/or 8.a.(iii) to twenty (20) years by providing a market analysis that supports such reduction. The Authority may grant or deny this request in the Authority's sole discretion.
 - b. AMI. If the Project includes rental units, then the annual income of such households to meet the Affordability requirements may not exceed 60% AMI. If the Project includes homeowner units, then the annual income of such households to meet the Affordability requirements may not exceed 100% AMI.
 - c. Other Conditions. The Restrictive Covenant shall include the requirements set forth in paragraph 7.c. of this Commitment.
- 9. Documents. The Authority will prepare the closing documents and coordinate the closing with Grantee as set forth herein. Exhibit A to this commitment lists certain documents that: (i) must be provided by the Grantee to the Authority prior to closing ("**Pre-closing Documents**"); and (ii) must be signed and delivered by the Grantee to the Authority at closing ("**Closing Documents**"). The Pre-Closing Documents must be delivered to the Authority by the Grantee in form satisfactory to the Authority.

When the Pre-Closing Documents have been received and approved by the Authority, the Authority will prepare the Closing Documents for review by the Grantee and schedule a closing date, which will be no sooner than ten (10) business days after receipt of complete and satisfactory Pre-Closing Documents and satisfaction of all closing conditions to be completed prior to Closing.

- 10. Closing; Source of Funds and Condition of Funding. As a condition precedent to the closing of the Grant, all conditions hereunder shall have been met, each of the Pre-Closing Documents shall be received, reviewed and approved by the Authority, and each of the Closing Documents listed in Exhibit A, in form and substance satisfactory to the Authority, in its sole discretion, shall be executed and delivered to the Authority. In addition, at the Closing, the Grantee shall pay Closing Costs by wire transfer. The Authority reserves the right at all times to decline to close the Grant if the Authority determines, in its sole judgment, that the Grantee or the Grant does not strictly conform to the requirements of this Commitment, the Program, the Program Guidelines, any related requirements of OEDIT or the Authority and any and all other applicable legal and regulatory requirements

Amended and Restated Grant Commitment
City of Grand Junction
December 2, 2024

relating to Proposition 123 or otherwise (“Regulations”). Further, the Grant will be funded with Program funds. If all or a portion of the Program funds allocated for the Grant (“Funds”) are withheld or revoked prior to Closing, the Authority would not be willing to provide the Grant to the Grantee at the terms set forth herein; therefore, the Authority reserves the right, at all times, to decline to close and fund the Grant if the Authority has not received all or a portion of the Funds, or if all or a portion of the Funds have been revoked.

The Closing Documents may include, without limitation the following provisions:

- a. The following uses and activities shall not be conducted in or on the Project: (i) activities which are illegal under federal, state or local laws; (ii) selling, producing, or displaying sexually oriented material (e.g., adult book stores, adult video stores, adult theaters, etc.); (iii) non-medical massage services; (iv) a business generating greater than twenty-five percent (25%) of its revenues from the sale of alcoholic beverages not manufactured on-site or from selling alcoholic beverages for consumption off premises; (v) a business or organization that discriminates in its membership or facility usage on the basis of race, color, national origin, religion, gender, age, disability, citizenship status, marital status, sexual orientation, or any other status protected by law; (vi) gambling activities (not including sale of state sanctioned lottery tickets); (vii) selling or dispensing products illegal under federal, state or local laws; (ix) religious services, instruction or overtly sectarian activities; (x) pawn brokering; (xi) making “payday” or short term loans by an entity that is not a bank, credit union, savings and loan or other banking institution; and (xii) escort services.
- b. Each of the following is required to meet the Environmental Sustainability Standards for the Project and the Project shall be designed to meet the requirements as follows:
 - (i) Certification from one of the following*:
 1. 2020 Enterprise Green Communities (EGC)
 2. Leadership in Energy and Environmental Design LEED v.4.1 (LEED)
 3. National Green Building Standards NGBS ICC-700-2020 (NGBS)
 4. Zero Energy Ready Homes standard (US DOE)
 - (ii) All-electric building using high efficiency electric appliances such as heat pumps and heat pump water heaters, or a mixed-fuel building that includes pre-wiring for efficient electric heating and appliances and includes pre-

Amended and Restated Grant Commitment
City of Grand Junction
December 2, 2024

wiring to enable future installation of EV charging station(s) for at least 10% of parking spots or greater if required under local codes.

*Developments that achieve all-electric construction with high-efficiency electric appliances may opt-out of a formal green building certification.

- (iii) Utilize water-efficient design inside and outside. Full guidance can be found at coloradowaterwise.org.
- (iv) Developments must be located within a half-mile of existing or planned transit corridors. The Authority acknowledges and agrees that the location of the Project satisfies this requirement.

11. Conditions. This Commitment and closing of the Grant shall be subject to the provisions of the Guidelines, the Regulations, the Statute and to the following conditions:

- a. A satisfactory appraisal of the Project (in accordance with the Authority's appraisal guidelines, to be ordered by the Grantee at Grantee's expense).
- b. Evidence satisfactory to the Authority that the Grantee and the Project are and will be in compliance with applicable environmental laws, regulations, permits, orders or other environmental requirements and that the real and personal property, if any, comprising the Project do not contain hazardous waste(s) or other adverse environmental conditions. Such evidence shall include a Phase 1 ordered by the Grantee to assist the Authority in making a determination of environmental risks in connection with this Project. The Phase 1 will combine information compiled internally by the Authority and information obtained from Grantee and other independent sources.
- c. All representations made by or on behalf of Grantee to the Authority in connection with its application for the Grant and in connection with the closing shall be true and correct as of the date of funding of the Grant.
- d. No litigation shall be pending or threatened calling into question or which, if adversely determined, would affect (i) the creation, organization or existence of the Grantee; (ii) the validity of the Grant documents; or (iii) the authority of the Grantee to enter into the Restrictive Covenant against the Project's real property or to otherwise make or perform the Grant documents. No proceedings shall be pending or threatened against or affecting the Grantee which involve the possibility of materially and adversely affecting the properties, business, prospects, or financial condition of the Grantee, nor shall the Grantee be in default with respect to any

Amended and Restated Grant Commitment
City of Grand Junction
December 2, 2024

order of any court, governmental authority or arbitration board or tribunal or any prior grant or loan made to it by the Authority.

- e. Such other conditions as the Authority may deem necessary or prudent to assure repayment of the Grant or compliance with the Statute, the Regulations or the Guidelines.

12. Grantee Representations, Warranties and Covenants. This Commitment is issued on the basis of certain information and materials provided to the Authority by Grantee, including, without limitation, the Grant application, financial information, all representations, information, exhibits, data and other materials. Any intentional misinformation or withholding of material information incident thereto shall, at the option of the Authority and without limitation to any other right or remedy of the Authority, void all of the Authority's obligations hereunder. Furthermore, Grantee represents, warrants and covenants that:

- a. Grantee is a local government located in Colorado and has the necessary power, authority and licenses to operate its properties and transact business including in Colorado.
- b. Grantee has the full power and authority to accept the Grant and to undertake the obligations as contemplated by this Commitment, to execute and deliver the Grant Documents, and to perform Grantee's obligations under this Commitment and the Grant Documents. The execution and delivery of the Grant Documents will be duly authorized by all necessary action on the part of Grantee, its officers, and/or directors, as applicable, and the Grant Documents will be valid, binding and enforceable obligations of Grantee.
- c. There is no action, suit or proceeding at law or in equity, or by or before any governmental instrumentality or agency, or to the knowledge of Grantee, threatened against or affecting it, which, if adversely determined, would materially impair its right or ability to carry on business substantially as now conducted, or as contemplated to be conducted under this Commitment, or that would materially adversely affect Grantee's financial condition.
- d. To the best of Grantee's current knowledge, the transactions contemplated herein will not cause a default under any other agreement and will not conflict with or violate any organizational document or agreement to which Grantee is a party or by which Grantee is bound.
- e. To the best of Grantee's current knowledge, Grantee has not executed and will not execute any agreement(s) with provisions contradictory or in opposition to, the provisions of this Commitment.

Amended and Restated Grant Commitment
City of Grand Junction
December 2, 2024

- f. All information given to the Authority is accurate and Grantee has not omitted any material facts.
 - g. Grantee will comply with the provisions of any federal, state, or local law prohibiting discrimination on the grounds of race, color, religion or creed, sex, marital status, national origin, familial status or disability, sexual or gender preference, political opinion or affiliation, in all Grantee operations and shall provide prompt written notice to the Authority of the filing of any complaints of discrimination with respect to any Grantee operations.
 - h. Grantee will certify at closing of the Grant that the Project is located in a jurisdiction that has filed a commitment to increase affordable housing and opted into Proposition 123 funding. Failure of the Project to be in a jurisdiction that has filed a commitment to increase affordable housing and opted into Proposition 123 will be considered an immediate event of default. In addition to a certification, the Authority may require, in the Authority's sole discretion, an attorney opinion that the Project is located in jurisdiction that has opted into Proposition 123 funding.
13. Assignment. This Commitment shall not be assignable or transferable without the prior written consent of the Authority.
14. Reliance by Grantee and Third Parties. This Commitment is not intended to benefit any person or entity other than the Grantee and no other person or entity may rely on the terms hereof. Further, the Grantee acknowledges and agrees that (a) any report, inspection, review, acceptance or other due diligence activity regarding the Project, Grantee or other matters performed by or at the direction of the Authority, its legal counsel or consultants shall be solely for the purpose of satisfying the Authority's investment criteria and may not be relied on by the Grantee or any other party in making decisions regarding the Project or for any other reason; and (b) the Authority, its legal counsel and consultants shall have no responsibility or liability for the sufficiency, accuracy completeness of the items or information so inspected, reviewed or accepted or for the environmental condition or structural soundness of the Project.
15. Advice to Seek Legal Counsel. The Authority has advised the Grantee to obtain legal counsel in connection with the Grant.
16. Governing Law. This Commitment and all matters of performance relating thereto shall be governed by and construed and interpreted in accordance with the laws of the State of Colorado. All suits or actions related to this Commitment shall be filed and proceedings held in the State of Colorado and exclusive venue shall be in the City and County of Denver.

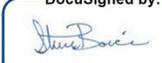
Amended and Restated Grant Commitment
City of Grand Junction
December 2, 2024

17. Time is of the Essence. Time is of the essence hereof. Grantee shall provide requested documentation and information in a timely manner. To the extent that documentation and information is not provided by the Grantee in a timely manner, the Authority is not obligated to extend the initial term of the Commitment if Closing has not occurred.
18. Modification. Modification or amendment of this Commitment is effective only if made in writing and signed by the parties hereto.
19. Publications. Grantee hereby authorizes OEDIT and the Authority to use information regarding or relating to the Project to publicize and/or report on their financing activities in any manner of communication or media including, but not limited to, in press releases, websites, social media, flyers, advertisements, community reports, etc. without further authorization or the consent of the Grantee, *provided* that confidential or other proprietary information is not shared. Grantee agrees to obtain prior written approval from OEDIT and the Authority before using the name or logo of OEDIT or the Authority in any press release, media events, website, social media or any other public communication.
20. Counterparts. This Commitment may be executed in counterpart and all signatures when taken together shall constitute one and the same instrument.
21. Entire Agreement. This Agreement constitutes the entire agreement of the parties concerning the subject matter hereof and all prior or contemporaneous understandings, oral representations or agreements among the parties with respect to the subject matter hereof, including that certain Grant Commitment dated May 31, 2024, are superseded by this Agreement.
22. Electronic Signatures. The electronic signatures of the parties included in this Commitment, in any form, are intended to authenticate this writing, bind the parties hereto, and to otherwise have the same force and effect as manual signatures. Delivery of a copy of this Commitment bearing an original or electronic signature by electronic mail in portable document format (.pdf) form, or by any other electronic means intended to preserve the original form of the document, will have the same effect as physical delivery of the paper document bearing an original or electronic signature.
23. Effectiveness of Commitment. This Commitment shall not become effective unless a duplicate copy hereof is returned to the Authority within ten (10) business days of the date hereof with acceptance endorsed on said copy by the signature of an authorized representative of the Grantee.

**COLORADO HOUSING AND FINANCE AUTHORITY, a
body corporate and political subdivision of the State of
Colorado, solely in its capacity as the Program Administrator
for the AFFORDABLE HOUSING FINANCING FUND,**

Amended and Restated Grant Commitment
City of Grand Junction
December 2, 2024

**managed by the Colorado Office of Economic Development and
International Trade, a Colorado state agency**

DocuSigned by:

By: _____
646C2D83B82C4BA
Steve Boice, Manager of Business Finance
Colorado Housing and Finance Authority

Amended and Restated Grant Commitment
City of Grand Junction
December 2, 2024

ACCEPTED:

CITY OF GRAND JUNCTION, COLORADO

By: 
Andrea Phillips, Interim City Manager

Date: 11/26/2024

Amended and Restated Grant Commitment
City of Grand Junction
December 2, 2024

EXHIBIT D

Program Reporting Requirements

Quarterly Reports are due the end of the first month after the end of each quarter, with the first report due on or before April 30, 2025.

The quarterly report will include:

1. Project-level details for each funding award:

a. Grantee/Recipient Name

b. The following Property Information, to the extent applicable:

- i. Project name (At the time of application & upon completion, if changed)
- ii. Project Street Address
- iii. City and county location
- iv. Housing type (homeownership and/or rental)
- v. Unit count and bedroom count for deed-restricted units. Unit count will be used to determine anticipated or actual households served.
- vi. Unit count and bedroom count for market-rate units.
- vii. Proposed units in each AMI Level and average AMI of the project.
Land Banking projects - indicate the proposed percentage of mixed-use.
- viii. Mixed-use properties provide a category of non-residential uses.
- ix. Environmental Sustainability Certification
- x. Electrification Level
- xi. Meets the transit-oriented development (TOD) definition (0.5 miles from public transit).
- xii. Meets the walkable neighborhood definition (0.5 miles from public transit).

2. Additional Project Details:

Confirm the following statutory priorities are satisfied by the Project: high density, mixed-income, and environmentally sustainable.

- high-density-informed by local density definitions and maximum allowable density based on local conditions
- mixed-income-commitment to serving a broad range of income levels within the development (70% of units must be affordable housing)
- environmental sustainability-environmental sustainability standard met

3. Project Status Details:

Confirm status of Project development and construction and inform the Authority of any update to number of planned affordable units. Once available, submit copy of complete development plan.

1 CITY OF GRAND JUNCTION, COLORADO

2
3 ORDINANCE NO. ____
4

5 AN ORDINANCE LEASING 4.48 ACRES OF CITY PROPERTY TO BRIKWELL
6 LOCATED AT 450 28 RD GRAND JUNCTION, COLORADO PURSUANT TO VOTER
7 APPROVAL

8 RECITALS:

9 In 2024, the City acquired property known as the Salt Flats (Property) for the
10 development of affordable housing. Pursuant to this Ordinance and the lease approved
11 hereby and herewith a portion of the Property, 4.42 acres is leased (“Property Lease 1”)
12 to Brikwell for the development of 144 units of affordable rental units to households
13 earning between 30-70% AMI, with an anticipated average income of 58% AMI.

14 In November 2023, City voters approved an amendment to the City Charter which
15 allowed the City to lease property by and with adoption of an ordinance for affordable
16 housing and/or workforce housing, as those terms are defined by the City Council for a
17 term not to exceed ninety-nine years. The City Council having been duly advised in the
18 premises does find that that development that will be facilitated with Property Lease 1 is
19 for affordable and/or workforce housing as defined by the Council.

20 The City Council, by and with approval of this Ordinance does confirm and ratify the
21 actions heretofore taken and more particularly described in Property Lease 1, and
22 specifically finds, determines, and affirms that the lease is for and advances public
23 purposes and advances community interests, all of which are in furtherance of the
24 development/redevelopment of the Property for the purposes for which it was acquired,
25 the purposes authorized by the voters, and in turn for the general community well-being.

26 BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION,
27 COLORADO:

28 Incorporating the foregoing Recitals, the City Council does confirm and ratify the actions
29 heretofore taken and more particularly described in the lease agreement by and
30 between Brikwell and the City of Grand Junction (Property Lease 1), a copy of which is
31 attached and incorporated by this reference as if fully set forth, leasing the property
32 therein described.

33 AND FURTHERMORE, BE IT ORDAINED, that this Ordinance, together with Property
34 Lease 1, is deemed by the City Council to discharge the City Charter, as amended, and
35 the laws and ordinances of the City of Grand Junction, Colorado and overall support
36 and advance the public health, safety, and welfare.

37 Introduced on first reading this 6th day of August 2025 and ordered to be published in
38 pamphlet form.

39 Adopted on second reading the 20th day of August 2025 and ordered published in
40 pamphlet form.

41

42

43 Cody Kennedy
44 President of the City Council

45

46

47 ATTEST:

48

49 Selestina Sandoval
50 City Clerk

DRAFT



Grand Junction City Council

Regular Session

Item #7.a.

Meeting Date: August 20, 2025

Presented By: Ashley Chambers, Housing Manager, Tamra Allen, Community Development Director, Tyler Elick

Department: Community Development

Submitted By: Ashley Chambers, Housing Manager

Information

SUBJECT:

A Resolution Authorizing the City Manager to Sign a Letter of Intent to Enter into a Partnership with Brikwell LLC for the Ascent Project located at 450 28 Road

RECOMMENDATION:

Staff recommends City Council authorize the City Manager to execute the Letter of Intent with Brikwell for The Ascent at Salt Flats, outlining the terms and conditions for the City to enter into a partnership for affordable and attainable housing at The Salt Flats.

EXECUTIVE SUMMARY:

A Letter of Intent (LOI) has been prepared with Brikwell for the development of *The Ascent at Salt Flats*, a 144-unit mixed-income housing project on 4.42 acres within the City-owned 21.78-acre Salt Flats property. The LOI outlines that the City's equity contribution will be the value of the land based on a per-unit basis of—\$2.52 million—provided as an in-kind asset rather than a cash outlay. In exchange, the City may hold an ownership interest in the project.

Brikwell will be responsible for all aspects of the project developing, such as securing all project financing, including Low-Income Housing Tax Credits (LIHTC), private debt, and other funding sources, and will assume responsibility for construction and operational risks.

BACKGROUND OR DETAILED INFORMATION:

In January 2025, the City acquired the 21.78-acre Salt Flats property for future affordable and attainable housing development. Shortly after, the City issued a competitive Request for Proposals (RFP) to select private development partners. Brikwell—an experienced affordable and market-rate multifamily housing developer—was chosen to serve as the Master Planner for the full site and as the developer for two phases of the project. The City awarded the project its 2023, 2024, and 2025 PAB allocation for the financing of the project.

Brikwell has proposed a partnership in which the City would contribute the land value—\$2.52 million—calculated as the maximum on a per-unit basis as an equity investment. This contribution would be in the form of land value, not cash. In exchange, the City may hold an ownership interest in the project.

The Ascent at Salt Flats will provide a mix of housing options for working households, with rents targeted to those earning between 30% and 70% of Area Median Income (AMI), at an overall project income average at approximately 58% AMI.

This project if constructed will contribute toward meeting the City's Proposition 123 commitments, both in the current three-year period and the following one, ensuring continued eligibility for state housing resources for both the City and its development partners. Leveraging this landbanking assets will assist in private development of affordable housing.

Approval of this LOI is part of a multi-step process:

Step 1 – Partnership LOI

Authorize a Letter of Intent with Brikwell establishing the public-private partnership framework and City equity role for *The Ascent at Salt Flats*. Approval enables Brikwell to show City partnership in its LIHTC application to CHFA.

Step 2 – Land Contribution LOI

LOI to formally commit the \$2.52M land value as the City's in-kind equity via a purchase and sale of the property.

Step 3 – Subdivision of Property & LIHTC Award - Application due September 1, 2025.

CHFA reviews Brikwell's application and determines whether to award LIHTC funding. If Brikwell does not receive the award, the project does not move forward and no land purchase contribution is made. The parcel would need to go through the subdivision process before a formalized agreement for purchase could be made.

Step 4 – Final Contracts

Only if LIHTC is awarded will final purchase and sale agreements and partnership agreements come to Council for approval, formalizing the City's role and allowing the project to proceed to closing and construction.

Approval of this LOI will allow Brikwell to demonstrate the City's equity partnership in its LIHTC application to CHFA—an essential step in securing project financing. Should either Step 1 or Step 2 not be approved, Brikwell's LIHTC application will not be able to proceed in this cycle. Each CHFA cycle is currently open once annual.

FISCAL IMPACT:

If approved, this LOI would authorize the partnership portion only of the agreement to Brikwell, LLC. Should it move forward, the City would contribute a \$2.52 million in-kind equity contribution. No cash outlay is required. This action would occur only if property were subdivided and Brikwell is awarded Low-Income Housing Tax Credit (LIHTC) financing and would be formalized through a future agreement.

SUGGESTED MOTION:

I move to (adopt/deny) Resolution 51-25 a resolution authorizing the City Manager to sign a Letter of Intent to enter into a joint venture relationship with Brikwell LLC contingent upon Brikwell's receipt of Low-Income Housing Tax Credit (LIHTC) financing, and to take further action consistent with the terms of the Letter of Intent.

Attachments

- 1. Ascent at Salt Flats Narrative (1)
- 2. Ascent at Salt Flats Brikwell COGJ LOI 08.18.2025
- 3. RES_Ascent_at_Salt_Flats_Brikwell_Partnership 8.19



DEVELOPMENT NARRATIVE



INTRODUCTION

The City of Grand Junction (COGJ) and Brikwell (BW) are pleased to present Ascent at Salt Flats, a proposed 144-unit affordable housing development for individuals and families in Grand Junction. The project will offer a mix of studio, one-, two-, three-, and four-bedroom units to accommodate a variety of household sizes and income levels, with a community average AMI of 58%.

Ascent at Salt Flats (ASF) will be a groundbreaking affordable housing development, distinguished by its focus on family-oriented units for households earning below 60% of AMI and inclusion of an Early Childhood Education (ECE) center. It will also serve an unmet need in a high-growth area on the East side of downtown Grand Junction.

Situated on 4.42 acres, the development will feature a thoughtfully designed three-story, garden-style community and a range of onsite community amenities and services to enhance residents' quality of life.



LOCATION

Ascent at Salt Flats is located on a 4.42 acre site on the East side of the Salt Flats Master Plan a 21acre master planned affordable and attainable housing community, which spans 28 Road to 28 ¼ Road and Gunnison Avenue to Grand Avenue in Grand Junction, CO 81501. The site is currently vacant and zoned RH-24, allowing for multifamily use with no rezoning necessary. The surrounding area is a diverse mix of residential, commercial, and recreational uses, providing residents with convenient access to a variety of walkable and proximate amenities and services.

The Salt Flats master plan is a unique vision for broad spectrum affordable and attainable housing. In total, the master plan comprises 477 housing units that include: affordable studio to four-bedroom rental apartments for individuals, families, seniors and veterans; complemented by two- and three-bedroom attached and detached for-sale housing. The vision for the Salt Flats is driven by shared values of: Inclusivity, Livability, Community, Stability, Viability and Sustainability.

Salt Flats is the first Affordable and attainable master plan of this scale in Grand Junction and presents an immense opportunity to better serve Grand Junction residents through its diverse and inclusive offering. It has been awarded OEDIT/CHFA Prop 123 land banking funds and a DOLA EIAF "More Housing Now" grant exhibiting the support for a broad-spectrum, master plan that promotes access and equity for the community.

Salt Flats is the ideal suburban-infill location with exceptional access to transportation, employment, services, recreation, healthcare, schools, and civic facilities making it ideal for families and individuals seeking convenience and connectivity.

TRANSPORTATION

Residents will find public transportation at the East edge of the site on 28 Rd, as COGJ and Brikwell are working closely with Grand Valley Transit (GVT) on the creation of two new bus stop that ties into the Route 9 network and provides residents easy access to the adjacent Veterans Administration (VA) hospital, employment, parks and the vibrant downtown (8 min bus ride).

EMPLOYMENT

Ascent at Salt Flats' proximity to major job and retail centers, diverse healthcare facilities, and Colorado Mesa University provide a spectrum of roles from customer service and medical support to educational and administrative positions. The area's robust Grand Valley Transit system further extends access to numerous other employers across the city, making it an ideal location for those seeking convenient access to work. ensuring that residents have ample employment opportunities that support the economic mobility of residents.



SERVICES

Within a mile of Ascent at Salt Flats, residents benefit from convenient access to a wide array of neighborhood services and retail. The prominent North Avenue corridor, a short walk away, hosts major retailers like Walmart and City Market for groceries, alongside various restaurants, gas stations, and smaller service businesses. This prime location also offers easy access to local clinics, financial institutions, and community resources, ensuring daily needs are readily met without extensive travel.

RECREATION

As part of the Salt Flats master plan, onsite parks are planned to promote recreation and social activity for Salt Flats residents and the greater Grand Junction community. Ascent at Salt Flats is also located a short walk (1/4 mi) from Lincoln Park, which features a golf course, public pool, lake, playground, walking trails, sports fields, and pickleball / tennis courts. Lincoln Park provides residents with convenient access to recreational, social and healthy activities with ample green space. Also worth noting, Colorado Mesa University's Hamilton Recreation Center (~2mi) providing a comprehensive array of facilities, including gyms, pools, and group fitness classes open to the community.

HEALTHCARE

Within a two-mile radius of Ascent at Salt Flats, residents have access to a comprehensive array of healthcare facilities. This includes major acute care hospitals such as Community Hospital and the Grand Junction VA Medical Center, offering emergency services, various specialties, and inpatient care. Beyond hospitals, the area is rich with specialized clinics providing services like primary care, women's health, behavioral health (e.g., Mind Springs Health, Community Hospital Behavioral Health), and physical therapy, ensuring a wide range of medical needs can be met conveniently.

SCHOOLS / EARLY CHILDHOOD EDUCATION

Families residing at Ascent at Salt Flats benefit from an educational landscape, offering diverse options for students of all ages. For elementary students, Nisley Elementary School is remarkably close, practically in the neighborhood, while Orchard Avenue Elementary School also provides a convenient option for younger learners. Older students have access to comprehensive K-12 education at Grand River Academy and Caprock Academy, a tuition-free public charter school, alongside R-5 High School for secondary education, ensuring a variety of learning environments close to home.

CIVIC FACILITIES

For intellectual and community engagement, the Mesa County Libraries Central Library is conveniently located around 1.9 miles from the address, providing a vast collection of books, media, and community programs. Furthermore, the Tomlinson Library at Colorado Mesa University, also within 2 miles, offers extensive academic resources and services accessible to students and often to the public.

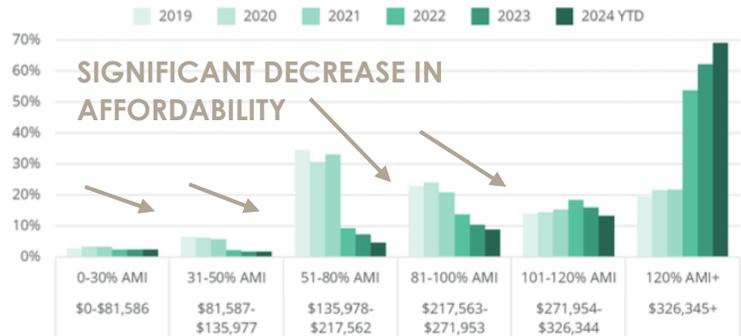


NEIGHBORHOOD PROFILE & TRENDS

Grand Junction is a rapidly growing community with a diverse population and a lack of affordable housing options. The neighborhood is experiencing a shortage of affordable housing, with a 5,700+ residents being cost burdened (paying 30%+ of their income), making this project a timely and necessary addition to the community.

Home Price Increases and Growing Rental Cost Burden

The median home sales price in Mesa County increased by 53% from \$256,450 in 2019 to \$391,500 in 2024 YTD. Forty-two percent of homes sold in 2021 were affordable to households earning 0-80% AMI; this decreased to 14% in 2022, 11% in 2023, and 9% in 2024 YTD.



Cost burden among renters in the Grand Valley has increased since 2010. In Grand Junction and Mesa County overall, **the share of cost burdened renters increased by 5 percentage points—going from 48% to 53% in Grand.** In Grand Junction **more than 5,700 renter households, are cost burdened**, spending 30% or more of their income on housing costs. Of these, **over 2,800 households are severely cost burdened**, paying more than 50% of their income on housing costs.

Population Growth, Change and In-Migration

According to population estimates from the Colorado State Demography Office, Mesa County's population as of 2019 was 154,933, representing an increase of 5% (7,778 new residents) since 2010. **Grand Junction's population was 64,941, representing an increase of 8% (4,695 new residents) since 2010.**

Jurisdiction	2010	2019	Change		Share of County	
			Number	Percent	2010	2019
Grand Junction	60,246	64,941	4,695	8%	41%	42%
Clifton	19,499	20,748	1,249	6%	13%	13%
Fruita	12,695	13,567	872	7%	9%	9%
Palisade	2,726	2,787	61	2%	2%	2%
Mesa County	147,155	154,933	7,778	5%	100%	100%

Source: DOLA, Colorado State Demography Office, and Root Policy Research. ACS 2019 5-year estimates used for Clifton.



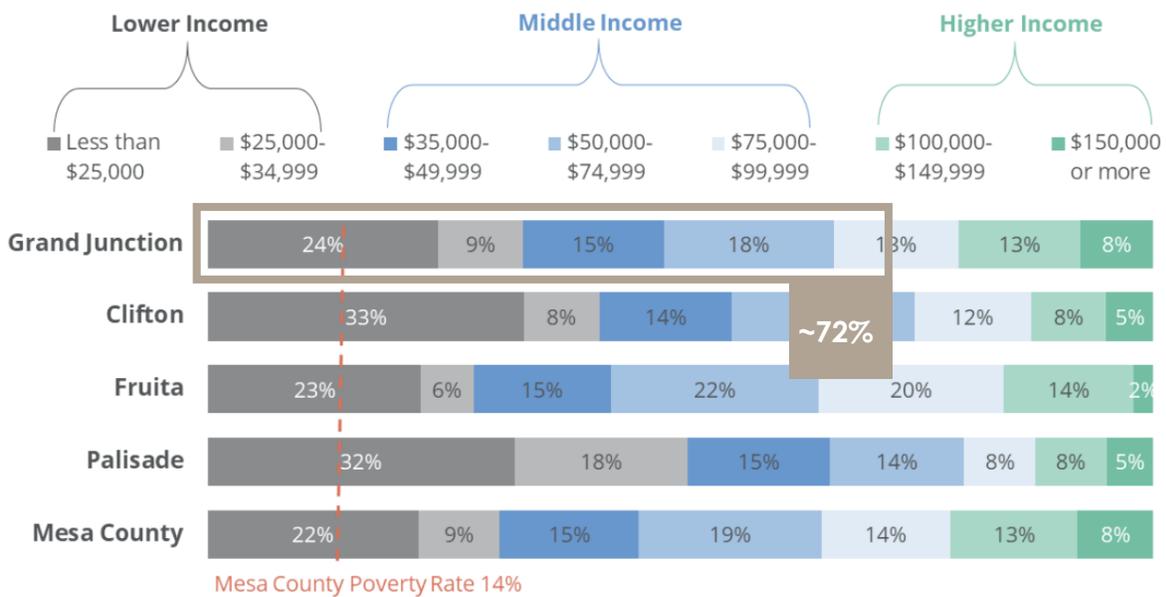
The Colorado State Demography Office provides population projections for Mesa County over the next 30 years. As shown in Figure I-8, in 2050, the county is projected to have over 238,000 people, which represents **an increase in population of 50% compared to 2020. The number of households is expected to increase from around 61,000 to over 96,000.**

Mesa County has experienced positive net migration of around 1,500 residents per year since 2015. In migrants tend to be younger than current residents. Partly driven by the Colorado Mesa University student population, **persons moving to the Grand Valley are around twice as likely to be college aged adults (20 to 24). In migrants are also around one and a half times more likely to be between 25 to 34 years old and around 1.3 times more likely to be between 5 and 19 years old. 89% of in-migrant population will be served by Ascent at Salt Flats.**

Age Cohort	Current Distribution	In-migrant Distribution
Under 5 years	6%	3%
5 to 19 years	19%	25%
20 to 24 years	6%	14%
25 to 34 years	13%	20%
35 to 44 years	12%	6%
45 to 64 years	25%	21%
65 years and older	19%	11%

89%

Ascent at Salt Flats will provide a broad spectrum of affordable housing options ranging from 30% AMI Studios (\$21,420 1 Person 2025 Income Limit) to 70% AMI four-bedroom units (\$82,880 for 6 Person Income Limit). With a wide range of unit types and income levels served, **Ascent will serve approximately 72% of household incomes in Grand Junction.**



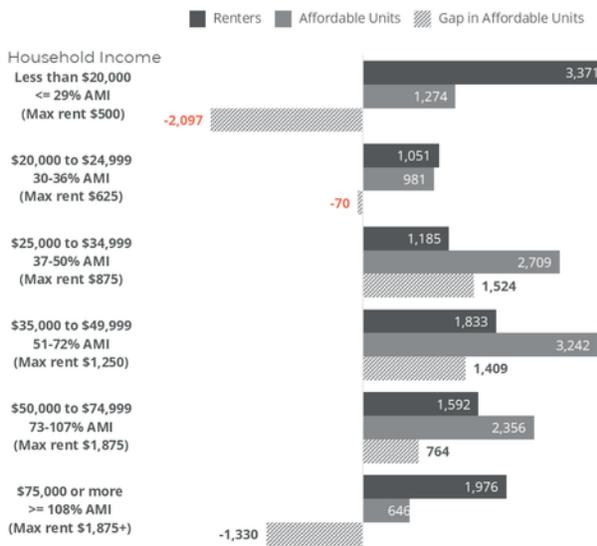
Source: 2019 5-year ACS, and Root Policy Research.



According to GJHA, there are currently 2,973 households (5,999 individuals) on the waitlist to receive a housing voucher—clearly demonstrating that need for affordable housing far exceeds the available supports. Of the households on the waitlist, **39% are households with children, 71% are female headed households, and 37% have a household member with some type of disability.**

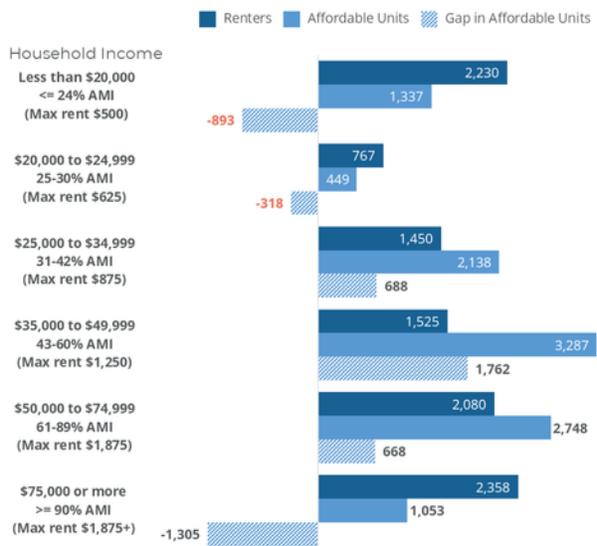
Rental affordability gaps remain high in Grand Junction with the greatest gap in affordable rental units **between ~40% and ~80% of AMI.**

Rental Affordability Gaps, 2019



Note: AMI ranges presented are based on 4-person 2019 HUD AMI limits.
Source: 5-year ACS and Root Policy Research.

Rental Affordability Gaps, 2022



Note: AMI ranges presented are based on 4-person 2022 HUD AMI limits.
Source: 5-year ACS and Root Policy Research.

SERVING COMMUNITY NEED

Salt Flats is strategically located on the east side of downtown Grand Junction adjacent to major thoroughfares (I-70 Business Loop, North Ave (Hwy 6), and 28 Rd), which makes it attractive to employers, commuters and those seeking convenient local and regional connectivity.

As Grand Junction housing prices rise, people are pushed further out of the urban core, seeking more affordable options in surrounding areas and cities. This increased demand and continued new development has driven up property values and rents, as home prices have increased 55%+ in the past decade in Grand Junction. Grand Junction has experienced immense growth creating vulnerability to gentrification, making it difficult for existing residents, particularly those with lower incomes, to remain in the downtown area.



Altogether, there are 1,838 designated affordable units in Mesa County, most of which are deeply subsidized units wherein tenants pay 30% of their income in rent. **The vast majority of affordable units in Mesa County (82%) have one or two bedrooms;** 17% have three bedrooms; and 1% have four bedrooms. **Larger families likely struggle to find affordable units large enough to accommodate them.**

Designated Affordable Units by Type and Bedrooms, Mesa County, 2024

	Total Units	0 Studios		18% 3BR/4BR		% Other
		% 1 BR	% 2 BR	% 3 BR	% 4 BR	
Deeply Subsidized Units Tenants pay 30% of their income for rent	1,162	50%	35%	14%	1%	0%
Tax Credit Units Tenants pay a fixed rent based on a percentage of AMI from 30% to 60%	607	40%	36%	24%	0%	0%
Other Affordable Units Generally below market rent	69	19%	58%	10%	0%	13%
Total Affordable Units	1,838	45%	36%	17%	1%	1%

Ascent at Salt Flats will help to address this need by providing high-quality, affordable housing for families in the community. The development will offer a vast range of unit sizes **from studios to four-bedroom units** and rental rates to accommodate a variety of household incomes, with a focus on serving families at or below 60% of the Area Median Income (AMI). The above table outlines the unit mix highlighting our goals below.

UNIT TYPE	30% AMI	40% AMI	50% AMI	60% AMI	70% AMI	80% AMI	TOTAL	%
Studio	2	2	9	20	11	0	44	30.6%
1BR / 1 BA	2	2	9	20	11	0	44	30.6%
2 BR / 2 BA	1	2	5	8	4	0	20	13.9%
3 BR / 2 BA	1	1	4	10	8	0	24	16.7%
4 BR / 2 BA	1	1	2	5	3	0	12	8.3%
TOTAL	7	8	29	63	37	0	144	100.0%

36 units (25%) are three- and four-bedroom to accommodate larger families, addressing a growing, unmet need in affordable housing.

44 units (31%) studio units to provide an entry point for individuals and small families looking to establish their household, as historically affordable LIHTC housing in Grand Junction has been offered as only one- and two-bedroom units.

80 units (55%+) are studio, 3br, and 4br which have been historically undersupplied as affordable housing in Grand Junction.

107 units (74%) units serve income levels **at or below 60% AMI** to serve all income levels with a focus on those most in need.



DESIGN

Ascent at Salt Flats will be a three-story garden-style apartment community with interior corridors for improved resident experience. The four buildings are distributed throughout the site to create a neighborhood community feel for residents and are situated at the perimeter to provide ease of access to the adjacent walkable amenities (parks, rec center, services). The design team has thoughtfully considered construction, amenities, units and sustainability, prioritizing equity, economic mobility and resident quality of life.

CONSTRUCTION

Ascent at Salt Flats will be constructed with wood framing (type V-A) over an on-grade spread-footing foundation, with surface parking. This construction type is the most cost-effective per unit, to maximize the units per resource and maintain quality in finishes and amenities. Buildings will feature pitched asphalt shingle roofs as well as secured access points. Buildings are separated throughout the site maximizing daylighting and providing opportunity for pocket parks and onsite exterior amenities. Exterior skin comprises fields of exterior windows, stucco, louvered panels and siding, creating a modern, high-desert color palette similar to current design trends in hospitality and multifamily.

AMENITIES

The primary entrance from 28th Road will greet residents with an amenity building featuring a community room with a kitchen and games, a reception welcome desk, on-site management offices, fitness center, mail/package room, and resident business center / co-working / computer lab. The 3,000 SF Early Childhood Education center with adjacent 2,800 SF adjacent playground will provide onsite services to residents with children.

Exterior amenities will include a dog run, playground, community garden and picnic area with BBQ grills. Its security features will include electronic access entries, security cameras, and courtesy patrol. Indoor and outdoor amenities are intended to be both convenient



and healthy (fitness, bike storage) as well as foster personal growth, friendship, and community growth through social interaction (BBQ/social gathering area, community room, business center).

UNITS

Unit finishes at Ascent at Salt Flats are envisioned to have a modern level of quality that give residents a sense of home and dignity. Units will have central heat & air-conditioning, Energy Star rated stainless-steel appliances (refrigerator, stove/oven, dishwasher, microwave) garbage disposal, luxury-vinyl-plank flooring, granite countertops, blinds, high-speed internet connection, and in-unit washer & dryer. All units in the development will meet or exceed applicable accessibility standards. Units will be all-electric, utilizing with temperature control in living rooms and bedrooms. Conditioned air will be supplied by per unit VTAC units, utilizing energy efficient VRP heat pumps.

ENVIRONMENTAL SUSTAINABILITY

Ascent at Salt Flats will be designed and constructed to meet high standards of environmental sustainability and certification (NGBS). In addition to the all-electric building systems, appliances will be Energy Star rated, lighting will be LED, and fixtures will be water efficient. At a site level, landscaping will utilize water-wise best practices with EV-ready parking stalls.

The development team will also work to minimize the project's environmental impact during construction and operation, utilizing panelized construction and minimizing waste. The Ascent at Salt Flats team is well-experienced and enthusiastic in prioritizing environmental sustainability by weaving resource stewardship, sustainability and green development practices at every level.

TIMELINE & READINESS TO PROCEED

The site is currently vacant and zoned RH-24, allowing for multifamily use with no rezoning necessary. Site planning will be administrative per City of Grand Junction regulations, which could be expedited with the support of the Community Housing department.

Ascent at Salt Flats will require \$23M in Private Activity Bonds (PAB) to support an issuance of non-competitive 4% LIHTC credits. The City of Grand Junction and Brikwell are in the process of finalizing PAB commitments/resolutions, and in combining Grand Junctions 2023-2025 PAB with Gunnison County 2025 PAB and Mesa County 2025 PAB, Ascent at Salt Flats will have ~\$19.8M (\$86%) of \$23M in PAB committed, leaving \$3.2M in additional PAB requests from CHFA and DOLA.

With a PAB top-off and allocation of state LIHTC in 2025, construction of **Ascent at Salt Flats is expected to begin in Q2 of 2026 and be completed in the Q4 of 2027.**



PROJECT FINANCING

Ascent at Salt Flats will use tax-exempt Private Activity Bonds, as well as equity from the sale of tax credits including Federal Low Income Housing Tax Credits (LIHTCs), energy tax credits (Solar ITC, 45L), Transit-Oriented Community Credits (TOCs) and Colorado Affordable Housing Tax Credits (AHTCs). The development can be viably financed non-competitively by utilizing \$23M in PAB and \$700k/yr in State non-competitive LIHTC funds (2025 QAP). Additional soft funds will fill the gap through the City of Grand Junction's investment through Land Value Contribution (proposed), Colorado Division of Housing (CDOH) Rental Gap Financing, deferred development fee, and grants/soft funds from impact capital and state sources (CHFA/DOLA).

Due to the efficient construction type and location in a designated DDA, the total development cost maximizes financing resources and is estimated to be \$45.8 million.

SOURCES & USES

USES	TOTAL	\$ / UNIT	\$ / SF	%
Land & Acquisition Costs	\$ 2.6 M	\$ 17.8K	\$ 21	5.6%
Hard Costs	32.0 M	222.2K	256	69.8%
Development Fee	4.5 M	31.5K	36	9.9%
Soft Costs	2.5 M	17.5K	20	5.5%
Financing Costs	4.2 M	29.1K	34	9.1%
Operating Shortfall / Reserve	0.0 M	0.1K	0	0.0%
TOTAL	\$ 45.8 M	\$ 318.3K	\$ 367	100.0%

CONSTRUCTION SOURCES	TOTAL	\$ / UNIT	\$ / SF	%
Construction Loan	\$ 31.9 M	\$ 221.7K	\$ 256	69.6%
Tax Credit Equity	3.4 M	23.9K	28	7.5%
State Tax Credit	0.6 M	4.2K	5	1.3%
Soft Funds	8.1 M	56.6K	65	17.8%
Deferred Development Fees	1.7 M	11.9K	14	3.7%
Gap Equity (Cash Need)	-	-	-	0.0%
TOTAL	\$ 45.8 M	\$ 318.3K	\$ 367	100.0%

PERMANENT SOURCES	TOTAL	\$ / UNIT	\$ / SF	%
Permanent Tax Exempt Debt	\$ 15.7 M	\$ 109.1K	\$ 126	34.3%
Tax Credit Equity	\$0.82 17.2 M	119.7K	138	37.6%
State Tax Credit	\$0.72 3.0 M	21.0K	24	6.6%
Soft Funding	8.1 M	56.6K	65	17.8%
Deferred Development Fees	1.7 M	11.9K	14	3.7%
Gap Equity (Cash Need)	-	-	-	0.0%
TOTAL	\$ 45.8 M	\$ 318.3K	\$ 367	100.0%

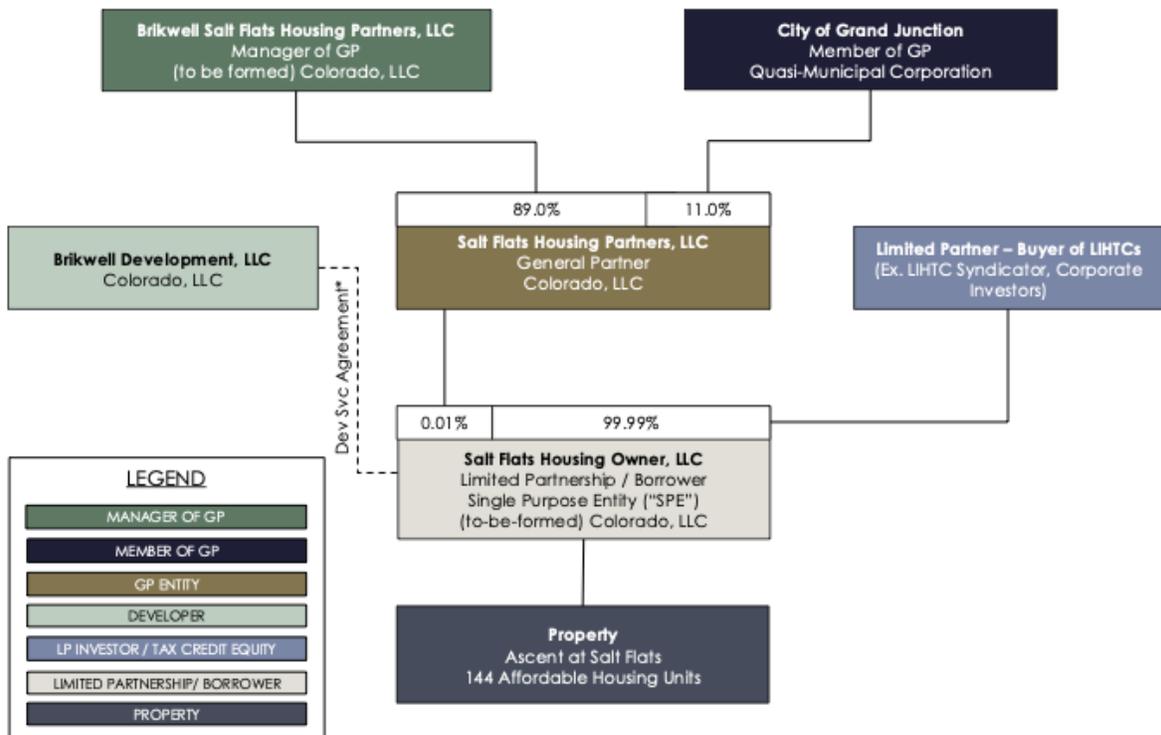
SOFT FUNDING DETAIL	TOTAL	\$ / UNIT	\$ / SF	%
City of Grand Junction Equity Investment	\$ 2.5 M	\$ 17.5K	\$ 20	30.9%
CDOH Soft Funds	4.0 M	28.0K	32	49.5%
Other Soft Funding (Impact, Grant, CHFA CMF)	1.4 M	10.0K	12	17.7%
Solar Tax Credit	\$0.82 0.1 M	0.7K	1	1.2%
45L	\$0.82 0.1 M	0.4K	0	0.7%
TOTAL	\$ 8.1 M	\$ 56.6K	\$ 65	100.0%



TEAM

Ascent at Salt Flats is being developed by Brikwell. Brikwell, a mission-driven real estate development firm with a proven track record of success in developing, owning and operating affordable housing. Brikwell is proposing a Tax Exemption partnership with the City of Grand Junction, as a CO-GP well beyond the typical SLP structure. The City currently owns the property. As part of the partnership contemplated, the City would contribute the land value to the Project at an appraised market value estimated to be \$2,520,000 as a land contribution for an eleven percent (11%) equity interest in the Project, such that the Project can be developed. In this partnership as currently proposed, Brikwell takes on all guarantees, predevelopment expenses, expenses, development, guarantors and risks. The COGJ is proposed to provide input, tax exemption, and would receive operating cash flow, profits & losses, and capital event process distribution of 11%. Should this structure be approved, it would foster strong alignment between COGJ and BW, allowing both partners to leverage their complementary strengths, resources, and capabilities in pursuit of shared values and development goals.

ORGANIZATIONAL CHART – ASCENT AT SALT FLATS | W |





CONCLUSION

Ascent at Salt Flats is poised to be a transformative development, directly addressing several key priorities of the public stewards for the residents of Grand Junction, including the City of Grand Junction's holistic departments (Housing, Planning, Engineering, Transportation, Parks & Rec).

The focus on scarce unit types (S, 3BR, 4BR) and those at or below 60% AMI ensures that the project caters to a diverse range of families, with an emphasis on those most in need and housing options lacking in this community.

Furthermore, Ascent at Salt Flats' commitment to resident well-being extends beyond housing. The thoughtful design, incorporating amenities and a greater master plan that foster community interaction and personal growth, coupled with convenient access to essential services, will contribute to an enhanced quality of life and resiliency for residents.

In conclusion, Ascent at Salt Flats represents a significant step towards creating a more equitable and vibrant community in Grand Junction, as part of an even greater Salt Flats community master plan. By providing high-quality, affordable housing and prioritizing the needs of its residents, this development embodies the shared vision of the City of Grand Junction for a community where everyone has a place to proudly call home.





August 20, 2025

City of Grand Junction
C/O Mike Bennett – City Manager
250 N. 5th Street
Grand Junction, CO 81501
mike.bennett@gjcity.org

RE: Letter of Intent between Brikwell & the City of Grand Junction for a possible partnership for the Ascent at the Salt Flats, an affordable housing project

Dear Mike:

As you know, Brikwell ("BW") intends to form a limited liability company or partnership ("Owner") to own and construct a 144-unit affordable housing community to serve an average income at or below 60% AMI ("Project.") The Project is located in Grand Junction at the location shown on **Exhibit A** to this letter. The Project is to be known as Ascent at Salt Flats. The areas designated in green on Exhibit A may be referred to as the Land or the Property.

The purpose of this letter is to outline the general business terms relating to possible involvement of the City in the development and financing of the Project. Such business arrangement, if any, will be negotiated and memorialized by and with such documentation required for the closing of the financing for the Project on terms mutually agreeable to BW and the City, with such terms to be finally approved by a majority of the City Council. Those terms may include, but are not necessarily limited to the following:

1. **Rent and Income:** All rents and income qualification for units in the Project will be from 30% to 70% AMI with income averaging at or below 60% AMI. Owner and its members/partners (other than City member or partner) shall fund all development-related costs *predevelopment and development* costs for the Project and BW, or an entity managed by BW, shall serve as the sole guarantor(s) with respect to any guarantees required by any lender or investor. The City will provide no guarantees.
2. **Salt Flats Housing Owner, LLC ("Owner"):** A to-be-formed single-purpose Colorado limited liability company, which will develop, own and operate the Project. Attached Exhibit A is a draft organizational chart.
3. **Salt Flats Housing Partners, LLC ("Owner GP"):** A to-be-formed single-purpose Colorado limited liability company, which will own an interest in and be the Managing Member of Owner.
4. **Developer:** BW will be the project developer, and Owner GP will cause Owner to enter into a *Development Agreement*, reviewed and approved by the City, with BW providing the terms, conditions, services and compensation of the Developer.
5. **Roles & Responsibilities:** The following roles and responsibilities are anticipated:

- a. **Land Acquisition:** The City currently owns the Property. As part of the contemplated business relationship the City will contribute the Land to the Project at a market value estimated to be \$2,520,000. That contribution will provide the City an eleven percent (11%) equity interest in the Project. BW, Owner, Owner GP and the Developer intend for the City's equity interest to result in the Project being exempt from property tax and sales and use tax. The City has not determined that an equity interest as contemplated will result in the Project being tax exempt and the City expressly reserves the right to consult with tax and/or public finance counsel to render an opinion on which the City may rely prior to any possible business relationship being formed.
- b. **Funding Sources:** BW will pursue funding sources, including Federal and State Low Income Housing Tax Credits ("LIHTC"), Private Activity Bonds, Colorado Housing Finance Agency (CHFA), or Colorado Department of Local Affairs (DOLA), and other Soft Funding Grants and Loans to ensure project financial viability. BW will utilize its experience, history and relationships to endeavor to secure funding sources.

Development Costs: BW will solely fund all development-related costs for the project. BW will manage all aspects of the project, including but not limited to managing it through due diligence process. BW will pursue and process the project through the City's required review and approval through the City development review process. BW will manage the design team and contracting on behalf of Owner. BW will lead in community engagement efforts, soliciting the public and community stakeholders for support as well as input and feedback to improve project design/services/operations.

- c. **Finance:** BW will continue to manage the Project proforma with input from outside consultants. BW will manage the debt and equity RFP process, strategy, term sheet negotiation, and closing. This information will be shared with the City, if requested. BW will guarantee any project debt. BW and City will guarantee equity per lender, investor and City tax counsel requirements.

Construction: BW will manage all work related to the construction of the Project including activities such as General Contractor ("GC") selection, pre-development pricing, pre-construction, proposals, scope of work, and design review/value engineering. BW will manage the construction contract with GC and all contract exhibits including budget, schedule, qualifications, specifications, and insurance. All significant budget and schedule adjustments must be reviewed and approved by City. BW will manage the construction process, including weekly Owner/Architect/Contractor ("OAC") meetings, Architect's Supplemental Instructions ("ASI") and Request for Information ("RFI") processes, lien waiver process w/GC, and monthly construction draws. BW will coordinate inspections, punch-out, turnover and final Certificate of Occupancy. BW will guarantee construction completion. Progress reports related to construction will be made available to the City upon request.

- d. **Operations:** BW will engage a third-party property manager to manage the day-to-day

operations of the Project including staffing, maintenance, leasing and accounting; BW will manage the asset and support marketing, lease-up, and identifying operational efficiencies. BW will manage the asset budgeting and reporting and provide quarterly reports to the City. BW will manage Project and tenant compliance and provide a compliance guarantee to the City and other equity investor(s). Any findings on non-compliance must be reported to the City promptly. All reporting to CHFA, DOLA, and other funders will also be sent to the City.

- 6. **Fees, Profits and Distributions:** The Project is anticipated to generate the following fees, profits, and distributions, which are to be shared as described below
 - A. **Developer Fees:** The developer fee shall be calculated according to CHFA's Qualified Allocation Plan ("CHFA QAP") which is equivalent to 12% of total project cost less the cost of land, developer fee, and project reserves ("Developer Fee Proceeds"). Developer Fee Proceeds paid to the Developer shall be distributed directly to BW.
 - B. **Operating Cash Flow Distributions; Profits & Losses; Capital Event Distributions:** The Project Operating Cash Flow, Profits & Losses and Capital Event Proceeds shall be distributed to the Parties in percentages to be determined.
- 7. **Binding Provisions:** This LOI sets forth the preliminary intentions of BW and the City for the proposed Project but is not intended to be and is not a legally binding agreement.
- 8. **No Assignment:** Neither BW or the City may assign this LOI or any right or obligation hereunder to any other person or entity, without the prior written consent of the other party (in its sole discretion); provided, either may assign this LOI and its rights and obligations hereunder to a related, managed entity, but such assignment shall not relieve the assigning party of any of its obligations or liabilities hereunder.
- 9. **Governing Law:** This LOI shall be governed in accordance with the laws of the State of Colorado (without regard to conflicts of laws principles).
- 10. **Entire Agreement:** This LOI constitutes the entire understanding and agreement of BW and the City and all of their respective affiliates with respect to the subject matter hereof and supersedes all other prior agreements and understandings, written or oral, between BW and the City with respect to the subject matter hereof; provided, upon execution and delivery of the Definitive Agreements, the terms and provisions of this Agreement shall terminate and be of no further force and effect.

City of Grand Junction

Brikwell Partners, LLC

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

EXHIBIT A – Property

Salt Flat Development – Ascent Land Area 1 – 1.33 acres

A parcel of land located in Lot 4 of the Grand View Commons Subdivision as recorded at Reception No. 3105054 in the Mesa County Clerk and Recorders office, situated in the SW1/4NW1/4 of Section 18, Township 1 South, Range 1 East, of the Ute Meridian, Grand Junction, Mesa County, Colorado, described as:

Commencing at the NW corner of said Lot 4, whence the SW corner of Lot 4 bears S00°00'17"E as a basis of bearing; running thence along the west line of said Lot 4 S00°00'17"E 465.37 feet, thence N89°49'04"E 306.34 feet to the Point of Beginning. Running thence N89°59'43"E 124.45 feet, thence along a curve to the right 89.46 feet (Radius = 100.00 feet, Delta = 51°15'32", Chord Bearing = S64°22'31"E, Chord Distance = 86.51 feet), thence S38°44'45"E 108.74 feet to the northwesterly right-of-way of Grand Avenue, thence along said right-of-way along a curve to the left 247.92 feet (Radius = 370.00 feet, Delta = 38°23'31", Chord Bearing = S39°30'12"W, Chord Distance = 243.31 feet), thence N77°33'23"W 94.80 feet, thence along a curve to the right 39.93 feet (Radius = 29.50 feet, Delta = 77°33'06", Chord Bearing = N38°46'50"W, Chord Distance = 36.95 feet), thence N00°00'17"W 260.72 feet to the Point of Beginning.

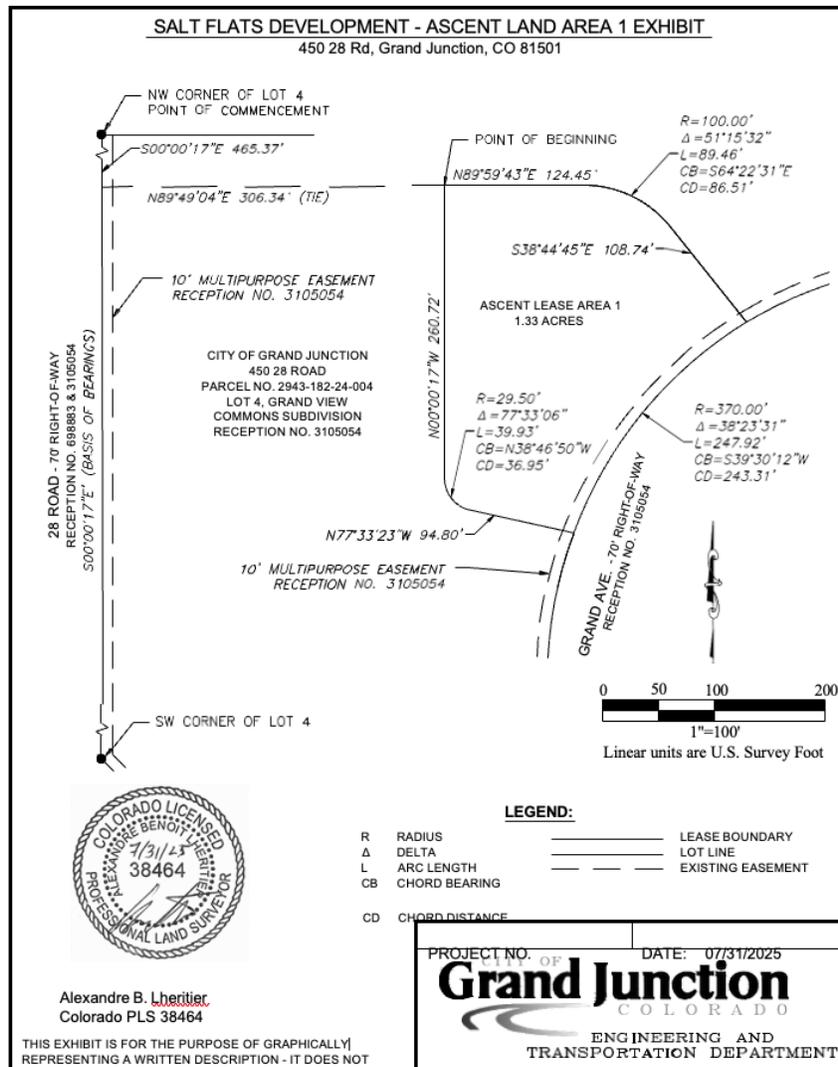
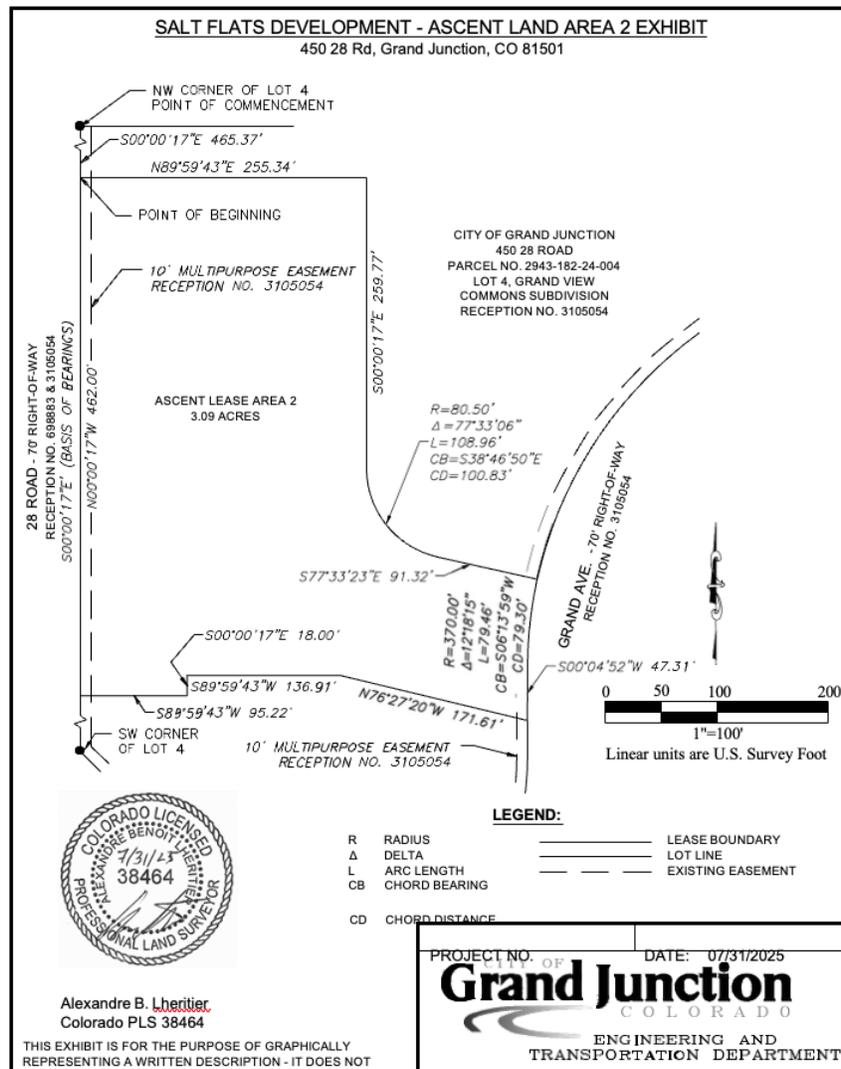


EXHIBIT A (Continued) Salt Flat Development – Ascent Land Area 2 – 3.09 acres

A parcel of land located in Lot 4 of the Grand View Commons Subdivision as recorded at Reception No. 3105054 in the Mesa County Clerk and Recorders office, situated in the SW1/4NW1/4 of Section 18, Township 1 South, Range 1 East, of the Ute Meridian, Grand Junction, Mesa County, Colorado, described as:

Commencing at the NW corner of said Lot 4, whence the SW corner of Lot 4 bears S00°00'17"E as a basis of bearing; running thence along the west line of said Lot 4 S00°00'17"E 465.37 feet to the Point of Beginning. Running thence N89°59'43"E 255.34 feet, thence S00°00'17"E 259.77 feet, thence along a curve to the left 108.96 feet (Radius = 80.50 feet, Delta = 77°33'06", Chord Bears = S38°46'50"E, Chord Distance = 100.83 feet), thence S77°33'23"E 91.32 feet to the westerly right-of-way of Grand Avenue, thence along said right-of-way the following two (2) courses: (1) along a curve to the left 79.46 feet (Radius = 370.00 feet, Delta = 12°18'15", Chord Bears = S06°13'59"W, Chord Distance = 79.30 feet), (2) thence S00°04'52"W 47.31 feet, thence N76°27'20"W 171.61 feet, thence S89°59'43"W 136.91 feet, thence S00°00'17"E 18.00 feet, thence S89°59'43"W 95.22 feet to the west line of said Lot 4, thence along said west line N00°00'17"W 462.00 feet to the Point of Beginning.



RESOLUTION NO. __-25

A RESOLUTION AUTHORIZING THE CITY MANAGER TO SIGN A LETTER OF INTENT TO ENTER INTO A PARTNERSHIP WITH BRIKWELL LLC FOR THE ASCENT PROJECT LOCATED AT 450 28 ROAD

Recitals.

In January 2025, the City of Grand Junction acquired the 21.78-acre Salt Flats property for the purpose of future affordable and attainable housing development. Shortly thereafter, the City issued a competitive Request for Proposals (RFP) to select private development partners. Brikwell—an experienced affordable and market-rate multifamily housing developer—was selected to serve as Master Planner for the full site and as the developer for two phases of the project.

Brikwell intends to form a limited liability company (“Owner”) to develop, own, and operate a 144-unit affordable housing community known as Ascent at Salt Flats. The project will serve households earning between 30% and 70% of Area Median Income (AMI), with income averaging at or below 60% AMI.

Under the terms of the Letter of Intent, Brikwell has proposed that the City will contribute the land—valued at approximately \$2.52 million—as an equity investment. This contribution is entirely in the form of land value, not cash, and provides the City with an equity interest in the project.

Brikwell proposes that they would fund all development-related predevelopment and construction costs, manage financing strategies, and serve as guarantor for project debt. Brikwell proposes to lead community engagement, manage the design team, oversee construction, and engage a professional property management company for operations.

The City’s equity interest is anticipated to enable exemption from property tax, sales tax, and use tax, significantly reducing project costs, if available. The City expressly reserves the right to seek tax and public finance counsel opinions before finalizing agreements.

Approval of this Resolution authorizes the City Manager to execute the Letter of Intent with Brikwell for the Ascent at Salt Flats project, with all relevant subsequent steps subject to further City Council approval.

RECITALS:

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

That the City Council hereby approves and authorizes the execution of the Letter of Intent with Brikwell for The Ascent at Salt Flats, consistent with the terms described herein, and

directs the City Manager to take all necessary actions to carry out the intent of this Resolution.

PASSED and ADOPTED this __ day of _____, 2025.

Cody Kennedy
President of the City Council

Selestina Sandoval
City Clerk

DRAFT



Grand Junction City Council

Regular Session

Item #7.b.

Meeting Date: August 20, 2025
Presented By: Ashley Chambers, Housing Manager, Tamra Allen, Community Development Director
Department: Community Development
Submitted By: Ashley Chambers, Housing Manager

Information

SUBJECT:

A Resolution Authorizing the City Manager to Sign a Letter of Intent for Brikwell, LLC to Purchase Lot TBD of Approximately 4.42 acres of property at 450 28 Road for Affordable Housing Development

RECOMMENDATION:

Staff recommends City Council authorize the City Manager to execute the Letter of Intent with Brikwell for The Ascent at Salt Flats, outlining the terms and conditions for the City to enter into a Purchase and Sale Agreement for Lot TBD of approximately 4.42 acres for the purposes of constructing affordable and attainable housing.

EXECUTIVE SUMMARY:

A Letter of Intent (LOI) has been prepared with Brikwell for the conveyance of approximately 4.42 acres within the City-owned 21.78-acre Salt Flats property for the development of *The Ascent at Salt Flats*, a 144-unit mixed-income housing project. This LOI represents Step 2 in the process and outlines the City's commitment—contingent on the subdivision of the lot and Brikwell receiving Low-Income Housing Tax Credit (LIHTC) financing—to contribute the land value, estimated at \$2.52 million on a per-unit basis, as an in-kind equity investment rather than a cash contribution. In return, the City may receive an ownership interest in the development.

BACKGROUND OR DETAILED INFORMATION:

In January 2025, the City of Grand Junction acquired the 21.78-acre Salt Flats property to support future affordable and attainable housing development. Following a competitive Request for Proposals, Brikwell, LLC—an experienced affordable and

market-rate multifamily housing developer—was selected as the Master Planner for the site and the developer for two phases of the project. Brikwell, with support of the city, is progressing through the subdivision process to create transferable lots.

The City has already awarded Brikwell its 2023, 2024, and 2025 Private Activity Bond allocations to support project financing. Brikwell now proposes a public-private partnership in which the City contributes the value of 4.42 acres of the property, estimated at \$2.52 million. This contribution is in land value only—no cash will be provided—and would be conveyed through a purchase and sale agreement if the project is awarded Low-Income Housing Tax Credit (LIHTC) financing. In exchange, the City may receive an ownership interest in the development.

The Ascent at Salt Flats will provide 144 affordable rental units serving households earning between 30% and 70% of Area Median Income, with the project income - averaged at 58% AMI, directly supporting local housing needs and contributing toward the City's Proposition 123 housing commitments.

This action represents **Step 2** in a four-step process:

- Step 1: Tax Exempt Partnership LOI (previous agenda item)
- **Step 2: Land Contribution LOI via purchase and sale agreement.** LOI to formally commit the \$2.52M land value as the City's in-kind equity via a purchase and sale of the property.
- Step 3: Subdivision and LIHTC award decision (application due Sept. 1, 2025 and award anticipated late 2025) CHFA reviews Brikwell's application, including their pro-forma and capital stack, and determines whether to award LIHTC funding. If Brikwell does not receive the award, the project does not move forward and no land transaction occurs at this time.
- Step 4: Final contracts brought to Council for purchase and sale and after subdivision, for approval before closing and construction

Approval of this resolution will allow the City to formalize its intent to provide the land as equity if LIHTC is awarded, ensuring the project remains competitive and on schedule.

Draft Resolution and LOI will be uploaded following Monday's Workshop Discussion.

FISCAL IMPACT:

If approved, this LOI would authorize the partnership portion only of the agreement to Brikwell, LLC. Should it move forward, the City would contribute a \$2.52 million in-kind

equity contribution. No cash outlay is required. This action would occur only if Brikwell is awarded Low-Income Housing Tax Credit (LIHTC) financing.

SUGGESTED MOTION:

I move to (adopt/deny) Resolution 52-25, a resolution authorizing the City Manager to sign a Letter of Intent with Brikwell, LLC for a purchase and sale agreement for the conveyance of Lot TBD of approximately 4.42 acres within the Salt Flats property as an in-kind equity contribution, contingent upon Brikwell's receipt of Low-Income Housing Tax Credit (LIHTC) financing, and to take further action consistent with the terms of the Letter of Intent.

Attachments

- 1. Ascent at Salt Flats Narrative (1) (1)
- 2. LOI PSA Brikwell Ascent at Salt Flats 08.18.2025
- 3. RES_Ascent_at_Salt_Flats_Brikwell_LOI 8.19



DEVELOPMENT NARRATIVE



INTRODUCTION

The City of Grand Junction (COGJ) and Brikwell (BW) are pleased to present Ascent at Salt Flats, a proposed 144-unit affordable housing development for individuals and families in Grand Junction. The project will offer a mix of studio, one-, two-, three-, and four-bedroom units to accommodate a variety of household sizes and income levels, with a community average AMI of 58%.

Ascent at Salt Flats (ASF) will be a groundbreaking affordable housing development, distinguished by its focus on family-oriented units for households earning below 60% of AMI and inclusion of an Early Childhood Education (ECE) center. It will also serve an unmet need in a high-growth area on the East side of downtown Grand Junction.

Situated on 4.42 acres, the development will feature a thoughtfully designed three-story, garden-style community and a range of onsite community amenities and services to enhance residents' quality of life.



LOCATION

Ascent at Salt Flats is located on a 4.42 acre site on the East side of the Salt Flats Master Plan a 21acre master planned affordable and attainable housing community, which spans 28 Road to 28 ¼ Road and Gunnison Avenue to Grand Avenue in Grand Junction, CO 81501. The site is currently vacant and zoned RH-24, allowing for multifamily use with no rezoning necessary. The surrounding area is a diverse mix of residential, commercial, and recreational uses, providing residents with convenient access to a variety of walkable and proximate amenities and services.

The Salt Flats master plan is a unique vision for broad spectrum affordable and attainable housing. In total, the master plan comprises 477 housing units that include: affordable studio to four-bedroom rental apartments for individuals, families, seniors and veterans; complemented by two- and three-bedroom attached and detached for-sale housing. The vision for the Salt Flats is driven by shared values of: Inclusivity, Livability, Community, Stability, Viability and Sustainability.

Salt Flats is the first Affordable and attainable master plan of this scale in Grand Junction and presents an immense opportunity to better serve Grand Junction residents through its diverse and inclusive offering. It has been awarded OEDIT/CHFA Prop 123 land banking funds and a DOLA EIAF "More Housing Now" grant exhibiting the support for a broad-spectrum, master plan that promotes access and equity for the community.

Salt Flats is the ideal suburban-infill location with exceptional access to transportation, employment, services, recreation, healthcare, schools, and civic facilities making it ideal for families and individuals seeking convenience and connectivity.

TRANSPORTATION

Residents will find public transportation at the East edge of the site on 28 Rd, as COGJ and Brikwell are working closely with Grand Valley Transit (GVT) on the creation of two new bus stop that ties into the Route 9 network and provides residents easy access to the adjacent Veterans Administration (VA) hospital, employment, parks and the vibrant downtown (8 min bus ride).

EMPLOYMENT

Ascent at Salt Flats' proximity to major job and retail centers, diverse healthcare facilities, and Colorado Mesa University provide a spectrum of roles from customer service and medical support to educational and administrative positions. The area's robust Grand Valley Transit system further extends access to numerous other employers across the city, making it an ideal location for those seeking convenient access to work. ensuring that residents have ample employment opportunities that support the economic mobility of residents.



SERVICES

Within a mile of Ascent at Salt Flats, residents benefit from convenient access to a wide array of neighborhood services and retail. The prominent North Avenue corridor, a short walk away, hosts major retailers like Walmart and City Market for groceries, alongside various restaurants, gas stations, and smaller service businesses. This prime location also offers easy access to local clinics, financial institutions, and community resources, ensuring daily needs are readily met without extensive travel.

RECREATION

As part of the Salt Flats master plan, onsite parks are planned to promote recreation and social activity for Salt Flats residents and the greater Grand Junction community. Ascent at Salt Flats is also located a short walk (1/4 mi) from Lincoln Park, which features a golf course, public pool, lake, playground, walking trails, sports fields, and pickleball / tennis courts. Lincoln Park provides residents with convenient access to recreational, social and healthy activities with ample green space. Also worth noting, Colorado Mesa University's Hamilton Recreation Center (~2mi) providing a comprehensive array of facilities, including gyms, pools, and group fitness classes open to the community.

HEALTHCARE

Within a two-mile radius of Ascent at Salt Flats, residents have access to a comprehensive array of healthcare facilities. This includes major acute care hospitals such as Community Hospital and the Grand Junction VA Medical Center, offering emergency services, various specialties, and inpatient care. Beyond hospitals, the area is rich with specialized clinics providing services like primary care, women's health, behavioral health (e.g., Mind Springs Health, Community Hospital Behavioral Health), and physical therapy, ensuring a wide range of medical needs can be met conveniently.

SCHOOLS / EARLY CHILDHOOD EDUCATION

Families residing at Ascent at Salt Flats benefit from an educational landscape, offering diverse options for students of all ages. For elementary students, Nisley Elementary School is remarkably close, practically in the neighborhood, while Orchard Avenue Elementary School also provides a convenient option for younger learners. Older students have access to comprehensive K-12 education at Grand River Academy and Caprock Academy, a tuition-free public charter school, alongside R-5 High School for secondary education, ensuring a variety of learning environments close to home.

CIVIC FACILITIES

For intellectual and community engagement, the Mesa County Libraries Central Library is conveniently located around 1.9 miles from the address, providing a vast collection of books, media, and community programs. Furthermore, the Tomlinson Library at Colorado Mesa University, also within 2 miles, offers extensive academic resources and services accessible to students and often to the public.

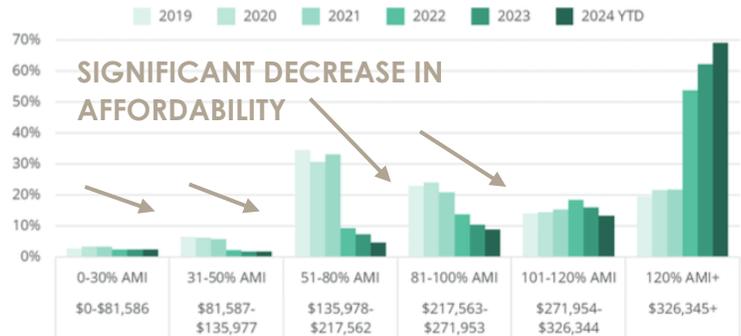


NEIGHBORHOOD PROFILE & TRENDS

Grand Junction is a rapidly growing community with a diverse population and a lack of affordable housing options. The neighborhood is experiencing a shortage of affordable housing, with a 5,700+ residents being cost burdened (paying 30%+ of their income), making this project a timely and necessary addition to the community.

Home Price Increases and Growing Rental Cost Burden

The median home sales price in Mesa County increased by 53% from \$256,450 in 2019 to \$391,500 in 2024 YTD. Forty-two percent of homes sold in 2021 were affordable to households earning 0-80% AMI; this decreased to 14% in 2022, 11% in 2023, and 9% in 2024 YTD.



Cost burden among renters in the Grand Valley has increased since 2010. In Grand Junction and Mesa County overall, **the share of cost burdened renters increased by 5 percentage points—going from 48% to 53% in Grand.** In Grand Junction **more than 5,700 renter households, are cost burdened**, spending 30% or more of their income on housing costs. Of these, **over 2,800 households are severely cost burdened**, paying more than 50% of their income on housing costs.

Population Growth, Change and In-Migration

According to population estimates from the Colorado State Demography Office, Mesa County's population as of 2019 was 154,933, representing an increase of 5% (7,778 new residents) since 2010. **Grand Junction's population was 64,941, representing an increase of 8% (4,695 new residents) since 2010.**

Jurisdiction	2010	2019	Change		Share of County	
			Number	Percent	2010	2019
Grand Junction	60,246	64,941	4,695	8%	41%	42%
Clifton	19,499	20,748	1,249	6%	13%	13%
Fruita	12,695	13,567	872	7%	9%	9%
Palisade	2,726	2,787	61	2%	2%	2%
Mesa County	147,155	154,933	7,778	5%	100%	100%

Source: DOLA, Colorado State Demography Office, and Root Policy Research. ACS 2019 5-year estimates used for Clifton.



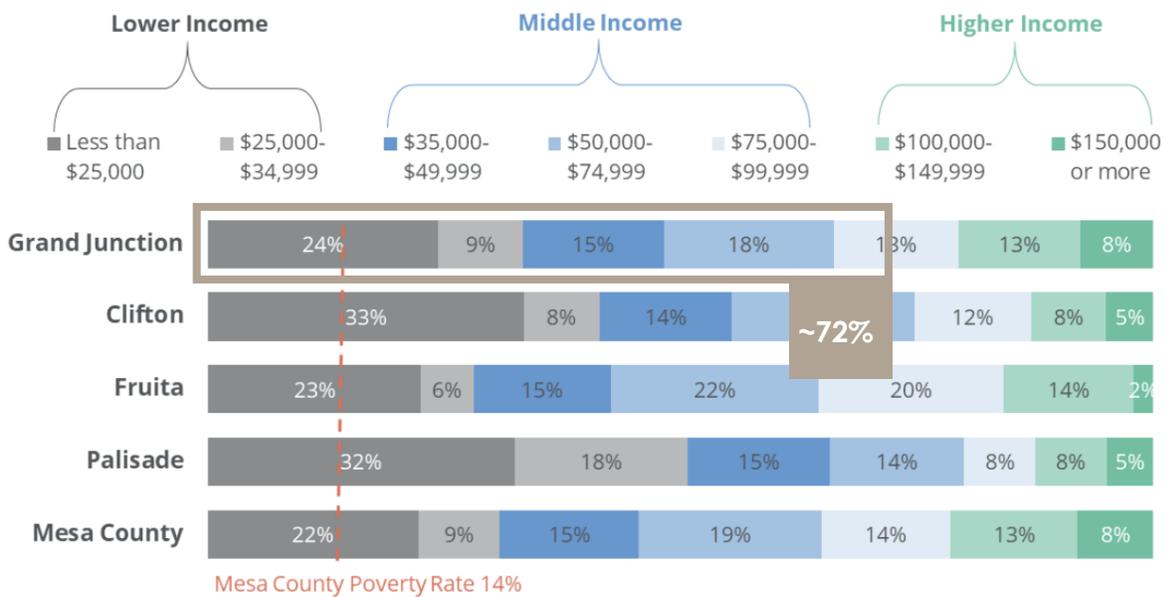
The Colorado State Demography Office provides population projections for Mesa County over the next 30 years. As shown in Figure I-8, in 2050, the county is projected to have over 238,000 people, which represents **an increase in population of 50% compared to 2020. The number of households is expected to increase from around 61,000 to over 96,000.**

Mesa County has experienced positive net migration of around 1,500 residents per year since 2015. In migrants tend to be younger than current residents. Partly driven by the Colorado Mesa University student population, **persons moving to the Grand Valley are around twice as likely to be college aged adults (20 to 24). In migrants are also around one and a half times more likely to be between 25 to 34 years old and around 1.3 times more likely to be between 5 and 19 years old. 89% of in-migrant population will be served by Ascent at Salt Flats.**

Age Cohort	Current Distribution	In-migrant Distribution
Under 5 years	6%	3%
5 to 19 years	19%	25%
20 to 24 years	6%	14%
25 to 34 years	13%	20%
35 to 44 years	12%	6%
45 to 64 years	25%	21%
65 years and older	19%	11%

89%

Ascent at Salt Flats will provide a broad spectrum of affordable housing options ranging from 30% AMI Studios (\$21,420 1 Person 2025 Income Limit) to 70% AMI four-bedroom units (\$82,880 for 6 Person Income Limit). With a wide range of unit types and income levels served, **Ascent will serve approximately 72% of household incomes in Grand Junction.**



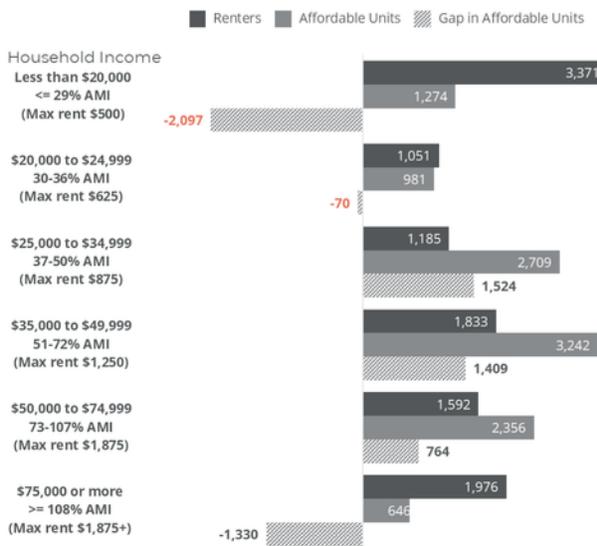
Source: 2019 5-year ACS, and Root Policy Research.



According to GJHA, there are currently 2,973 households (5,999 individuals) on the waitlist to receive a housing voucher—clearly demonstrating that need for affordable housing far exceeds the available supports. Of the households on the waitlist, **39% are households with children, 71% are female headed households, and 37% have a household member with some type of disability.**

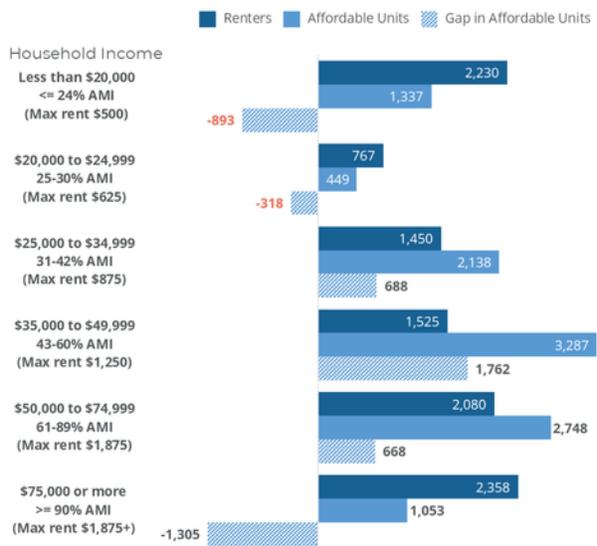
Rental affordability gaps remain high in Grand Junction with the greatest gap in affordable rental units between ~40% and ~80% of AMI.

Rental Affordability Gaps, 2019



Note: AMI ranges presented are based on 4-person 2019 HUD AMI limits.
Source: 5-year ACS and Root Policy Research.

Rental Affordability Gaps, 2022



Note: AMI ranges presented are based on 4-person 2022 HUD AMI limits.
Source: 5-year ACS and Root Policy Research.

SERVING COMMUNITY NEED

Salt Flats is strategically located on the east side of downtown Grand Junction adjacent to major thoroughfares (I-70 Business Loop, North Ave (Hwy 6), and 28 Rd), which makes it attractive to employers, commuters and those seeking convenient local and regional connectivity.

As Grand Junction housing prices rise, people are pushed further out of the urban core, seeking more affordable options in surrounding areas and cities. This increased demand and continued new development has driven up property values and rents, as home prices have increased 55%+ in the past decade in Grand Junction. Grand Junction has experienced immense growth creating vulnerability to gentrification, making it difficult for existing residents, particularly those with lower incomes, to remain in the downtown area.



Altogether, there are 1,838 designated affordable units in Mesa County, most of which are deeply subsidized units wherein tenants pay 30% of their income in rent. **The vast majority of affordable units in Mesa County (82%) have one or two bedrooms;** 17% have three bedrooms; and 1% have four bedrooms. **Larger families likely struggle to find affordable units large enough to accommodate them.**

Designated Affordable Units by Type and Bedrooms, Mesa County, 2024

	Total Units	0 Studios		18% 3BR/4BR		% Other
		% 1 BR	% 2 BR	% 3 BR	% 4 BR	
Deeply Subsidized Units Tenants pay 30% of their income for rent	1,162	50%	35%	14%	1%	0%
Tax Credit Units Tenants pay a fixed rent based on a percentage of AMI from 30% to 60%	607	40%	36%	24%	0%	0%
Other Affordable Units Generally below market rent	69	19%	58%	10%	0%	13%
Total Affordable Units	1,838	45%	36%	17%	1%	1%

Ascent at Salt Flats will help to address this need by providing high-quality, affordable housing for families in the community. The development will offer a vast range of unit sizes **from studios to four-bedroom units** and rental rates to accommodate a variety of household incomes, with a focus on serving families at or below 60% of the Area Median Income (AMI). The above table outlines the unit mix highlighting our goals below.

UNIT TYPE	30% AMI	40% AMI	50% AMI	60% AMI	70% AMI	80% AMI	TOTAL	%
Studio	2	2	9	20	11	0	44	30.6%
1BR / 1 BA	2	2	9	20	11	0	44	30.6%
2 BR / 2 BA	1	2	5	8	4	0	20	13.9%
3 BR / 2 BA	1	1	4	10	8	0	24	16.7%
4 BR / 2 BA	1	1	2	5	3	0	12	8.3%
TOTAL	7	8	29	63	37	0	144	100.0%

36 units (25%) are three- and four-bedroom to accommodate larger families, addressing a growing, unmet need in affordable housing.

44 units (31%) studio units to provide an entry point for individuals and small families looking to establish their household, as historically affordable LIHTC housing in Grand Junction has been offered as only one- and two-bedroom units.

80 units (55%+) are studio, 3br, and 4br which have been historically undersupplied as affordable housing in Grand Junction.

107 units (74%) units serve income levels **at or below 60% AMI** to serve all income levels with a focus on those most in need.



DESIGN

Ascent at Salt Flats will be a three-story garden-style apartment community with interior corridors for improved resident experience. The four buildings are distributed throughout the site to create a neighborhood community feel for residents and are situated at the perimeter to provide ease of access to the adjacent walkable amenities (parks, rec center, services). The design team has thoughtfully considered construction, amenities, units and sustainability, prioritizing equity, economic mobility and resident quality of life.

CONSTRUCTION

Ascent at Salt Flats will be constructed with wood framing (type V-A) over an on-grade spread-footing foundation, with surface parking. This construction type is the most cost-effective per unit, to maximize the units per resource and maintain quality in finishes and amenities. Buildings will feature pitched asphalt shingle roofs as well as secured access points. Buildings are separated throughout the site maximizing daylighting and providing opportunity for pocket parks and onsite exterior amenities. Exterior skin comprises fields of exterior windows, stucco, louvered panels and siding, creating a modern, high-desert color palette similar to current design trends in hospitality and multifamily.

AMENITIES

The primary entrance from 28th Road will greet residents with an amenity building featuring a community room with a kitchen and games, a reception welcome desk, on-site management offices, fitness center, mail/package room, and resident business center / co-working / computer lab. The 3,000 SF Early Childhood Education center with adjacent 2,800 SF adjacent playground will provide onsite services to residents with children.

Exterior amenities will include a dog run, playground, community garden and picnic area with BBQ grills. Its security features will include electronic access entries, security cameras, and courtesy patrol. Indoor and outdoor amenities are intended to be both convenient



and healthy (fitness, bike storage) as well as foster personal growth, friendship, and community growth through social interaction (BBQ/social gathering area, community room, business center).

UNITS

Unit finishes at Ascent at Salt Flats are envisioned to have a modern level of quality that give residents a sense of home and dignity. Units will have central heat & air-conditioning, Energy Star rated stainless-steel appliances (refrigerator, stove/oven, dishwasher, microwave) garbage disposal, luxury-vinyl-plank flooring, granite countertops, blinds, high-speed internet connection, and in-unit washer & dryer. All units in the development will meet or exceed applicable accessibility standards. Units will be all-electric, utilizing with temperature control in living rooms and bedrooms. Conditioned air will be supplied by per unit VTAC units, utilizing energy efficient VRP heat pumps.

ENVIRONMENTAL SUSTAINABILITY

Ascent at Salt Flats will be designed and constructed to meet high standards of environmental sustainability and certification (NGBS). In addition to the all-electric building systems, appliances will be Energy Star rated, lighting will be LED, and fixtures will be water efficient. At a site level, landscaping will utilize water-wise best practices with EV-ready parking stalls.

The development team will also work to minimize the project's environmental impact during construction and operation, utilizing panelized construction and minimizing waste. The Ascent at Salt Flats team is well-experienced and enthusiastic in prioritizing environmental sustainability by weaving resource stewardship, sustainability and green development practices at every level.

TIMELINE & READINESS TO PROCEED

The site is currently vacant and zoned RH-24, allowing for multifamily use with no rezoning necessary. Site planning will be administrative per City of Grand Junction regulations, which could be expedited with the support of the Community Housing department.

Ascent at Salt Flats will require \$23M in Private Activity Bonds (PAB) to support an issuance of non-competitive 4% LIHTC credits. The City of Grand Junction and Brikwell are in the process of finalizing PAB commitments/resolutions, and in combining Grand Junctions 2023-2025 PAB with Gunnison County 2025 PAB and Mesa County 2025 PAB, Ascent at Salt Flats will have ~\$19.8M (\$86%) of \$23M in PAB committed, leaving \$3.2M in additional PAB requests from CHFA and DOLA.

With a PAB top-off and allocation of state LIHTC in 2025, construction of **Ascent at Salt Flats is expected to begin in Q2 of 2026 and be completed in the Q4 of 2027.**



PROJECT FINANCING

Ascent at Salt Flats will use tax-exempt Private Activity Bonds, as well as equity from the sale of tax credits including Federal Low Income Housing Tax Credits (LIHTCs), energy tax credits (Solar ITC, 45L), Transit-Oriented Community Credits (TOCs) and Colorado Affordable Housing Tax Credits (AHTCs). The development can be viably financed non-competitively by utilizing \$23M in PAB and \$700k/yr in State non-competitive LIHTC funds (2025 QAP). Additional soft funds will fill the gap through the City of Grand Junction's investment through Land Value Contribution (proposed), Colorado Division of Housing (CDOH) Rental Gap Financing, deferred development fee, and grants/soft funds from impact capital and state sources (CHFA/DOLA).

Due to the efficient construction type and location in a designated DDA, the total development cost maximizes financing resources and is estimated to be \$45.8 million.

SOURCES & USES

USES	TOTAL	\$ / UNIT	\$ / SF	%
Land & Acquisition Costs	\$ 2.6 M	\$ 17.8K	\$ 21	5.6%
Hard Costs	32.0 M	222.2K	256	69.8%
Development Fee	4.5 M	31.5K	36	9.9%
Soft Costs	2.5 M	17.5K	20	5.5%
Financing Costs	4.2 M	29.1K	34	9.1%
Operating Shortfall / Reserve	0.0 M	0.1K	0	0.0%
TOTAL	\$ 45.8 M	\$ 318.3K	\$ 367	100.0%

CONSTRUCTION SOURCES	TOTAL	\$ / UNIT	\$ / SF	%
Construction Loan	\$ 31.9 M	\$ 221.7K	\$ 256	69.6%
Tax Credit Equity	3.4 M	23.9K	28	7.5%
State Tax Credit	0.6 M	4.2K	5	1.3%
Soft Funds	8.1 M	56.6K	65	17.8%
Deferred Development Fees	1.7 M	11.9K	14	3.7%
Gap Equity (Cash Need)	-	-	-	0.0%
TOTAL	\$ 45.8 M	\$ 318.3K	\$ 367	100.0%

PERMANENT SOURCES	TOTAL	\$ / UNIT	\$ / SF	%
Permanent Tax Exempt Debt	\$ 15.7 M	\$ 109.1K	\$ 126	34.3%
Tax Credit Equity	\$0.82 17.2 M	119.7K	138	37.6%
State Tax Credit	\$0.72 3.0 M	21.0K	24	6.6%
Soft Funding	8.1 M	56.6K	65	17.8%
Deferred Development Fees	1.7 M	11.9K	14	3.7%
Gap Equity (Cash Need)	-	-	-	0.0%
TOTAL	\$ 45.8 M	\$ 318.3K	\$ 367	100.0%

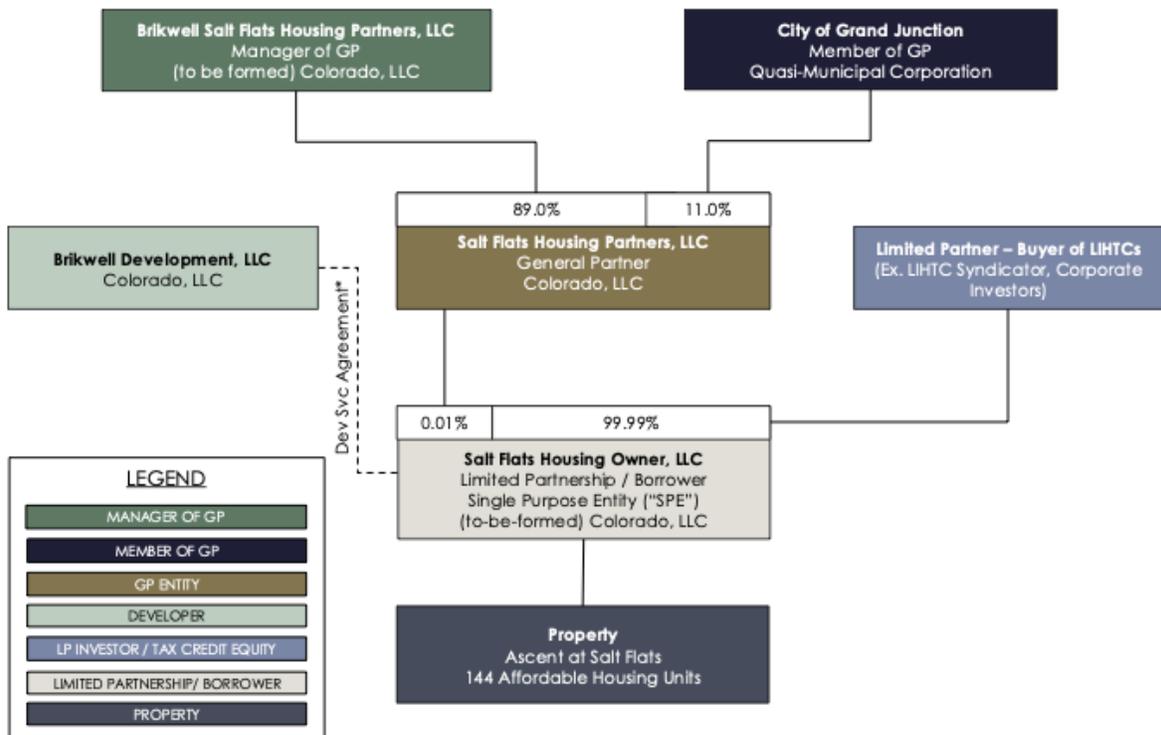
SOFT FUNDING DETAIL	TOTAL	\$ / UNIT	\$ / SF	%
City of Grand Junction Equity Investment	\$ 2.5 M	\$ 17.5K	\$ 20	30.9%
CDOH Soft Funds	4.0 M	28.0K	32	49.5%
Other Soft Funding (Impact, Grant, CHFA CMF)	1.4 M	10.0K	12	17.7%
Solar Tax Credit	\$0.82 0.1 M	0.7K	1	1.2%
45L	\$0.82 0.1 M	0.4K	0	0.7%
TOTAL	\$ 8.1 M	\$ 56.6K	\$ 65	100.0%



TEAM

Ascent at Salt Flats is being developed by Brikwell. Brikwell, a mission-driven real estate development firm with a proven track record of success in developing, owning and operating affordable housing. Brikwell is proposing a Tax Exemption partnership with the City of Grand Junction, as a CO-GP well beyond the typical SLP structure. The City currently owns the property. As part of the partnership contemplated, the City would contribute the land value to the Project at an appraised market value estimated to be \$2,520,000 as a land contribution for an eleven percent (11%) equity interest in the Project, such that the Project can be developed. In this partnership as currently proposed, Brikwell takes on all guarantees, predevelopment expenses, expenses, development, guarantors and risks. The COGJ is proposed to provide input, tax exemption, and would receive operating cash flow, profits & losses, and capital event process distribution of 11%. Should this structure be approved, it would foster strong alignment between COGJ and BW, allowing both partners to leverage their complementary strengths, resources, and capabilities in pursuit of shared values and development goals.

ORGANIZATIONAL CHART – ASCENT AT SALT FLATS \W\





CONCLUSION

Ascent at Salt Flats is poised to be a transformative development, directly addressing several key priorities of the public stewards for the residents of Grand Junction, including the City of Grand Junction's holistic departments (Housing, Planning, Engineering, Transportation, Parks & Rec).

The focus on scarce unit types (S, 3BR, 4BR) and those at or below 60% AMI ensures that the project caters to a diverse range of families, with an emphasis on those most in need and housing options lacking in this community.

Furthermore, Ascent at Salt Flats' commitment to resident well-being extends beyond housing. The thoughtful design, incorporating amenities and a greater master plan that foster community interaction and personal growth, coupled with convenient access to essential services, will contribute to an enhanced quality of life and resiliency for residents.

In conclusion, Ascent at Salt Flats represents a significant step towards creating a more equitable and vibrant community in Grand Junction, as part of an even greater Salt Flats community master plan. By providing high-quality, affordable housing and prioritizing the needs of its residents, this development embodies the shared vision of the City of Grand Junction for a community where everyone has a place to proudly call home.





August 20, 2025

City of Grand Junction
C/O Mike Bennett – City Manager
250 N. 5th Street
Grand Junction, CO 81501
mike.bennett@gjcity.org
Direct 970.256.4023

Letter of Intent to Purchase Lot(s) TBD of approximately 4.42 acres located East of 28 Road, North of Grand Avenue and South of Gunnison Avenue.

This letter represents a preliminary understanding between Brikwell ("BW") and the City of Grand Junction ("City" or "Seller"). This Letter of Intent ("LOI") outlines terms by which BW or any of its affiliates, joint venture partnerships, and/or assigns ("Buyer"), may acquire from the City Lot(s) TBD of approximately 4.42 acres of land in the Grand View Commons subdivision aka Salt Flats ("Property") for development of approximately 144 affordable homes ("Project").

1. **Property:** The Property also known as Lot(s) TBD of approximately 4.42 acres consists of a portion of parcel #2943-182-24-004, highlighted in the attached Exhibit A.
2. **Intended Use:** Brikwell intends to develop a three-story affordable apartment product for lease at a target density of 33 dwelling units/developable acre to serve a population with an average income at or below 60% AMI ("Intended Use"). The estimated net developable acreage of ~4.42 acres at a target density of 33 dwelling units/developable acre equates to 144 residential units. The Intended Use will additionally provide a leasing center/clubhouse, parking, and other site amenities.
3. **Purchase Price:** The purchase price for the Property will be **\$2,520,000.00** (~\$579,849/acre) ("Purchase Price").
4. **Open of Escrow:** Escrow will be deemed open on the date when a fully executed Purchase and Sale Agreement and the Earnest Money Deposit has been delivered to the title company ("Escrow Agent") ("Escrow Opening Date"). Escrow Agent will advise Buyer and Seller in writing of the Escrow Opening Date, expiration of Buyer's Property Review Period date, Escrow Close Date and any other pertinent dates within Purchase Contract ("Critical Dates").
5. **Property Review Period:** Buyer shall have the right for a one-hundred twenty (120) day Property Review Period commencing upon the later of Escrow Opening Date or Buyer's receipt of the Survey, legible Schedule B title report, and Seller Delivery Items. During the Property Review period Buyer will work to satisfy Conditions Precedent attached in Exhibit B, and may perform all necessary feasibility studies, reviews, investigations, and analysis, including invasive testing. Access to site shall be granted within 24 hours of request by Buyer. As part of the contemplated sale the City may contribute the Property for the Intended Use in accordance with a possible joint venture agreement(s) by which the contribution will provide the City with an equity interest in the project. The Buyer intends for the City's equity interest to result in the

project being exempt from property tax and sales and use tax. The City has not determined that an equity interest as contemplated will result in tax exemption and the City expressly reserves the right to consult with tax and/or public finance counsel to render an opinion on which the City may rely prior to any sale/contribution being made.

6. **Entitlement Period:** Buyer shall have Fifteen (15) months from the later of: 1) the successful allocation of Low Income Housing Tax Credits ("LIHTC") or 2) the expiration of the Property Review Period to pursue and achieve municipal approval of Buyer's multifamily site plan/entitlements, multifamily development building permits, site development plan, stormwater and grading permits, water and sanitary district multifamily approvals ("Municipal Approvals") for the Intended Use.
7. **Close of Escrow:** Close of Escrow shall occur thirty (30) days after the earlier of; 1) receipt of the Municipal Approvals, or 2) the end of the Entitlement Period. Buyer at Close of Escrow will accept the City's contribution of land value as equity in the ownership of the Project for the Intended Use. Buyer may elect to extend closing for two additional periods of ninety (90) days for \$20,000 for each extended period or portion thereof ("Extension Payment(s)"). Any Extension Payment(s) made by the Buyer is non-refundable and will not be applied to the Purchase Price. Buyer shall provide ten (10) days of notice to Seller prior to extending closing. All earnest money deposit(s) shall be applied to the Purchase Price.
8. **Escrow Agent and Title Company:** Land Title Guarantee Company, 3033 East First Avenue, Suite 600, Denver, Colorado 80206, c/o Ryan Melchior, 303-503-7402, rmelchior@ltgc.com
9. **Title Commitment, Deed and Title Policy:** Promptly after Escrow Opening Date, Seller will provide to Buyer a title insurance commitment declaring the condition of title to the Property along with readable copies of all recorded documents including all exceptions to title that are described in Schedule B of the title commitment. Buyer will have until the expiration of the Property Review Period to disapprove said commitment in writing to Escrow Agent and Seller. Seller will also provide to Buyer at or prior to Escrow Close Date a Special Warranty Deed and a Standard Owners Title Insurance Policy in the amount of the full Purchase Price on the Property, subject only to matters of record approved by Buyer. Buyer will pay the cost of extended coverage.
10. **Plans, Other Documents:** The Seller will provide copies of all existing documents, reports, filings, CCR's, surveys, engineering assessments in Seller's possession or created before Close of Escrow and reasonably available to the Seller related to the Property within seven (7) days of the Escrow Opening Date ("Seller Delivery Items").
11. **Assessments/Pro-rations/Closing fees:** Buyer and Seller agree, at Close of Escrow, the Buyer will pay any closing costs and escrow fees. Seller will pay the cost for a Standard Owners' Title Insurance Policy and Buyer will pay the additional cost associated with the Extended Owners' Title Insurance Policy and any endorsements thereto.
12. **Commission/Representation:** Buyer represents that it has engaged not engaged as a buyer's representative broker in connection with this transaction.

- 13. **Broker Disclosure:** Certain principals and employees of Buyer or its affiliates may be licensed Colorado real estate brokers and salespersons. Buyer represents that it has not engaged a buyer's representative broker.

- 14. **Definitive Agreement:** This Letter of Intent and provisions set forth herein are not to be considered, by either the Buyer or the City , as comprising binding agreements, obligations or responsibilities. After execution of this Letter of Intent by Seller, the City and Buyer agree to negotiate in good faith to execute a Purchase and Sale Agreement which will set out the final terms and binding agreements of Buyer and the City, which will include, without limitation, provisions relating to closing documents, representations and warranties as provided herein and subject to final approval by the Buyer and a majority of the Grand Junction City Council.

If the foregoing accurately reflects a satisfactory arrangement upon which to negotiate a Purchase and Sale Agreement, please indicate your approval by your signature below.

Sincerely,



Tyler Elick
Chief Development Officer

AGREED AND ACCEPTED

Seller:

By: _____

Name: _____

Date: _____

EXHIBIT A – Property

Salt Flat Development – Ascent Land Area 1 – 1.33 acres

A parcel of land located in Lot 4 of the Grand View Commons Subdivision as recorded at Reception No. 3105054 in the Mesa County Clerk and Recorders office, situated in the SW1/4NW1/4 of Section 18, Township 1 South, Range 1 East, of the Ute Meridian, Grand Junction, Mesa County, Colorado, described as:

Commencing at the NW corner of said Lot 4, whence the SW corner of Lot 4 bears S00°00'17"E as a basis of bearing; running thence along the west line of said Lot 4 S00°00'17"E 465.37 feet, thence N89°49'04"E 306.34 feet to the Point of Beginning. Running thence N89°59'43"E 124.45 feet, thence along a curve to the right 89.46 feet (Radius = 100.00 feet, Delta = 51°15'32", Chord Bearing = S64°22'31"E, Chord Distance = 86.51 feet), thence S38°44'45"E 108.74 feet to the northwesterly right-of-way of Grand Avenue, thence along said right-of-way along a curve to the left 247.92 feet (Radius = 370.00 feet, Delta = 38°23'31", Chord Bearing = S39°30'12"W, Chord Distance = 243.31 feet), thence N77°33'23"W 94.80 feet, thence along a curve to the right 39.93 feet (Radius = 29.50 feet, Delta = 77°33'06", Chord Bearing = N38°46'50"W, Chord Distance = 36.95 feet), thence N00°00'17"W 260.72 feet to the Point of Beginning.

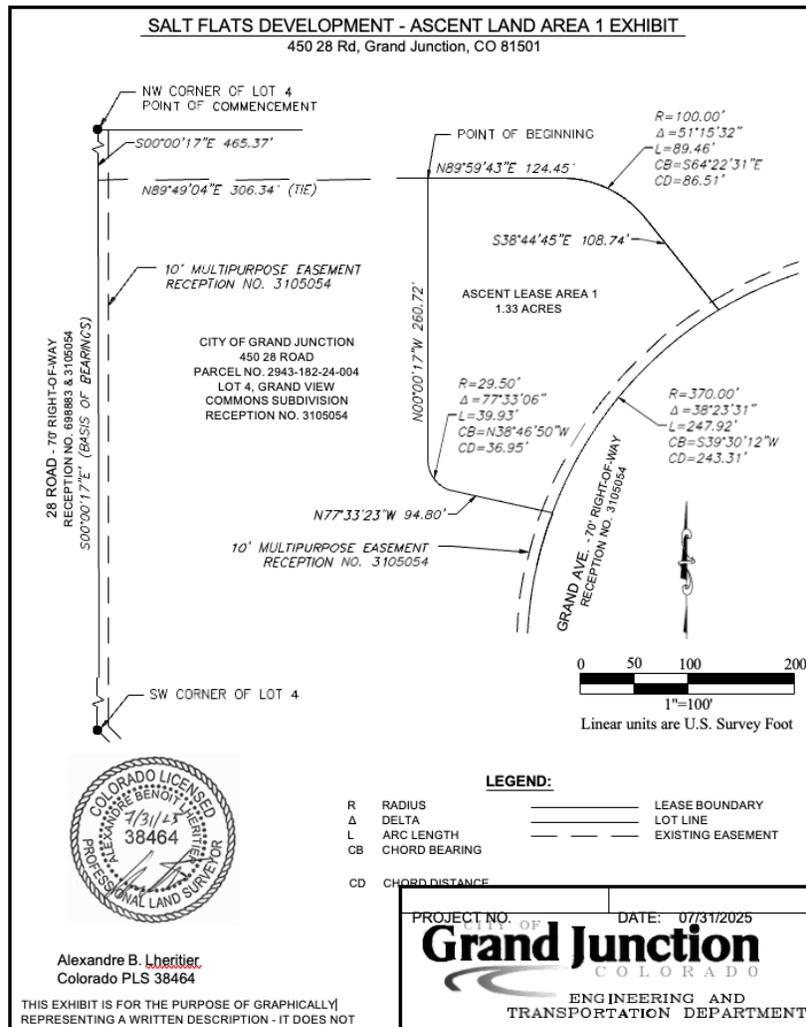


EXHIBIT A (continued) Salt Flat Development – Ascent Land Area 2 – 3.09 acres

A parcel of land located in Lot 4 of the Grand View Commons Subdivision as recorded at Reception No. 3105054 in the Mesa County Clerk and Records office, situated in the SW1/4NW1/4 of Section 18, Township 1 South, Range 1 East, of the Ute Meridian, Grand Junction, Mesa County, Colorado, described as:

Commencing at the NW corner of said Lot 4, whence the SW corner of Lot 4 bears S00°00'17"E as a basis of bearing; running thence along the west line of said Lot 4 S00°00'17"E 465.37 feet to the Point of Beginning. Running thence N89°59'43"E 255.34 feet, thence S00°00'17"E 259.77 feet, thence along a curve to the left 108.96 feet (Radius = 80.50 feet, Delta = 77°33'06", Chord Bears = S38°46'50"E, Chord Distance = 100.83 feet), thence S77°33'23"E 91.32 feet to the westerly right-of-way of Grand Avenue, thence along said right-of-way the following two (2) courses: (1) along a curve to the left 79.46 feet (Radius = 370.00 feet, Delta = 12°18'15", Chord Bears = S06°13'59"W, Chord Distance = 79.30 feet), (2) thence S00°04'52"W 47.31 feet, thence N76°27'20"W 171.61 feet, thence S89°59'43"W 136.91 feet, thence S00°00'17"E 18.00 feet, thence S89°59'43"W 95.22 feet to the west line of said Lot 4, thence along said west line N00°00'17"W 462.00 feet to the Point of Beginning.

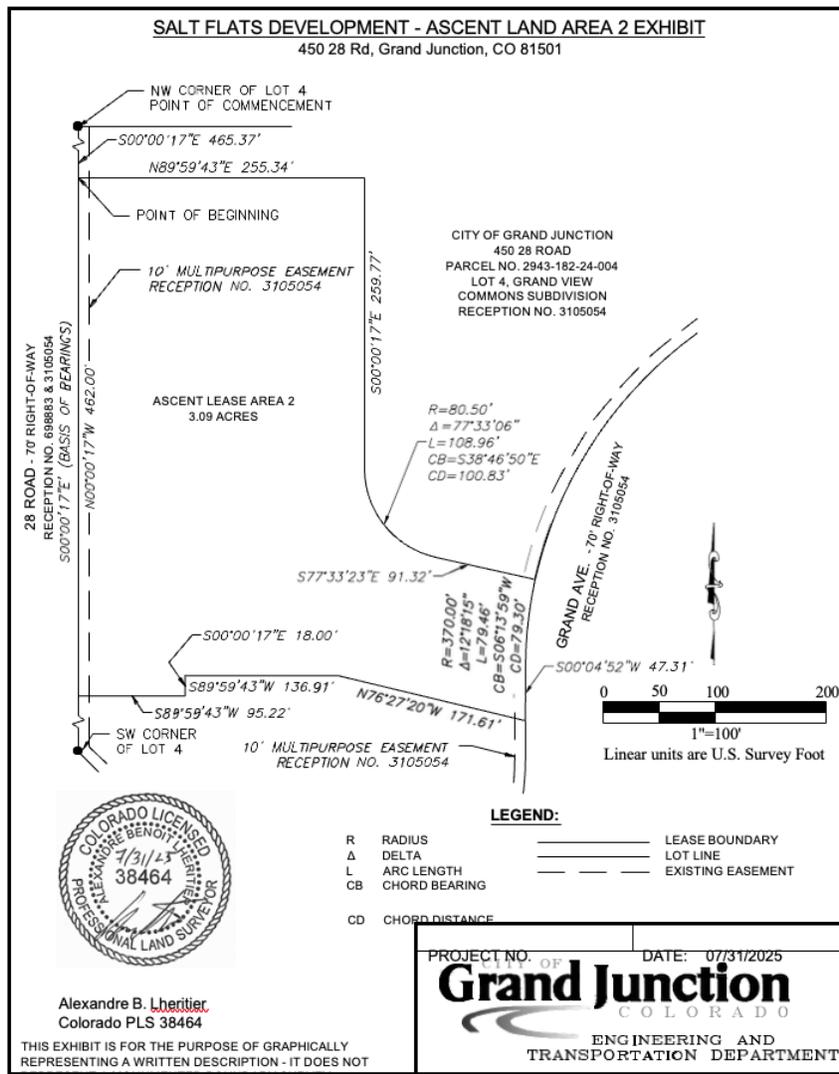




EXHIBIT B – Conditions Precedent

Buyer's obligation to purchase the Property will be contingent upon Buyer's determining (at its sole discretion) during the Property Review Period that:

1. **Due Diligence:** It is satisfied with its review of all documents provided to Buyer by Seller.
2. **Title:** It is satisfied with its review of the status of title to the Property.
3. **Environmental:** It is satisfied with the results of all environmental investigations, reports, studies, and tests.
4. **Easements:** It is satisfied with its review of all easement agreements, or any other agreements relating to the Property.
5. **Geotechnical:** It is satisfied with the results of all soil and other site engineering investigations, studies, and tests.
6. **Zoning:** It is satisfied that the Property is zoned RH-2, and acknowledges the use allows and limitations of such zoning district.
7. **Property Tax Rate:** It is satisfied with confirmation that the Property is assessed at the total millage rate of 70.702 mills.

RESOLUTION NO. XX-25

A RESOLUTION AUTHORIZING THE CITY MANAGER TO SIGN A LETTER OF INTENT FOR BRIKWELL, LLC TO PURCHASE LOT TBD OF APPROXIMATELY 4.42 ACRES OF PROPERTY AT 450 28 ROAD FOR AFFORDABLE HOUSING DEVELOPMENT

Recitals:

In January 2025, the City of Grand Junction acquired the 21.78-acre Salt Flats property for the purpose of future affordable and attainable housing development. Shortly thereafter, the City issued a competitive Request for Proposals (RFP) to select private development partners. Brikwell—an experienced affordable and market-rate multifamily housing developer—was selected to serve as Master Developer for the full site and as the developer for two phases of the project.

Brikwell has submitted a Letter of Intent proposing to develop “The Ascent at Salt Flats,” a 144-unit mixed-income housing project on approximately 4.42 acres of the Salt Flats property.

The proposed project will provide a range of affordable and attainable housing options and aligns with the City’s Housing Strategy and Proposition 123 commitments.

Brikwell’s proposal identifies that the City’s contribution would be approximately \$2.52 million in the form of in-kind equity, calculated on a per-unit basis, through conveyance of land rather than cash contribution. In exchange, the City will hold ownership interest in the project.

Providing land as an equity asset reduces up-front development costs, strengthens the capital stack, and increases competitiveness for Low-Income Housing Tax Credit (LIHTC) awards, while ensuring the private sector retains responsibility for design, financing, construction, and operations.

The City’s equity position also enables property, sales, and use tax exemptions that reduce project costs and ensure long-term affordability. A future Land Contribution agreement would only proceed if Brikwell secures LIHTC funding from the Colorado Housing and Finance Authority, the property is subdivided, and City Council grants approval. If these contingencies are not met, the agreement will not proceed, and no land transfer will occur. Final agreements will return to City Council for approval following a successful LIHTC award.

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

That the City Manager is hereby authorized to sign a Letter of Intent with Brikwell, LLC for the conveyance of approximately 4.42 acres at 450 28 Road as the City's in-kind equity contribution for "The Ascent at Salt Flats," contingent upon Brikwell's receipt of LIHTC funding, and to carry out actions consistent with the terms described herein. The City Manager is directed to take all necessary actions to carry out the intent of this Resolution.

PASSED and ADOPTED this ___ day of _____, 2025.

Cody Kennedy
President of the City Council

Selestina Sandoval
City Clerk



Grand Junction City Council

Regular Session

Item #7.c.

Meeting Date: August 20, 2025
Presented By: Mike Bennett, City Manager
Department: City Manager's Office
Submitted By: Mike Bennett and John Shaver

Information

SUBJECT:

A Resolution Directing Certain Actions Regarding the Design and Construction of Improvements to 4th and 5th Streets and Ratifying Actions in Connection Therewith

RECOMMENDATION:

Staff recommends City Council discuss and provide direction to the City Manager by motion approved by a majority of the City Council regarding the configuration and implementation of changes to 4th and 5th Streets.

EXECUTIVE SUMMARY:

On May 29, 2025, Council voted 7-0 to move forward with a two-lane plus bike-lane option for the continuation of the 4th-5th Street Pilot project. In order to provide the additional asphalt width required for improvements into the existing infrastructure, concrete/landscape revisions were necessary at 4th Street & Main Street as well as at 5th Street & Main Street. At the August 4th City Council work session, Council reviewed the necessary concrete/landscaping revisions, project costs, and schedule and requested staff bring back for formal council authorization to revert both corridors between Grand and Ute Ave to the pre-pilot conditions.

City traffic staff will complete the striping revisions along both corridors between Grand Ave and Ute Ave in September. Parking meters will be restored as well as soon as the parking spaces are available.

BACKGROUND OR DETAILED INFORMATION:

On May 29, 2025, City Council unanimously voted (7-0) to proceed with a two-lane plus bike lane configuration for the next phase of the 4th-5th Street Pilot Project. To accommodate the additional asphalt width needed for these improvements, concrete

and landscaping modifications were required at the intersections of 4th Street & Main Street and 5th Street & Main Street.

During the August 4th work session, Council reviewed the proposed concrete and landscaping changes, project costs, and schedule. With estimated cost of \$250,000 a primary concern, council directed staff to return with a formal request to authorize reverting both corridors—from Grand Avenue to Ute Avenue—to their pre-pilot design.

FISCAL IMPACT:

Implementation of 4th-5th Pilot revision to pre-pilot configuration is estimated at \$70,000 for striping and markings materials for City crew installation and contracted traffic control. The project is included in the 2025 capital improvement budget.

SUGGESTED MOTION:

For City Council discussion and direction regarding the action(s) to be taken.

I move to (direct/not direct) the City Manager to take certain actions regarding the design and construction of improvements to 4th and 5th Streets and ratifying actions in connection therewith.

Attachments

1. 4th & 5th Feasibility Study March 2022
2. GJ 4th 5th Feasibility - Council Resolution 36-22 20220504
3. RES-4th and 5th 20250807



GRAND JUNCTION

4TH & 5TH ST

FEASIBILITY STUDY



March 2022



ACKNOWLEDGEMENTS

The following individuals and organizations contributed to the development of the *Grand Junction 4th & 5th St Feasibility Study*: Thank you to all for your continued input and support.

Study Leads

Brandon Stam	Director, Downtown Development Authority (DDA)
Trenton Prall	Public Works Director, City of Grand Junction

Technical Team

Kaitly Clark	Region 3 - Grand Junction Resident Engineer, CDOT
Zane Znamenacek	Traffic and Safety Program Manager, CDOT
Mark Bunnell	Traffic Engineer, CDOT
David Goe	Community Engagement Manager, DDA
Eric Mocko	Transportation Engineer, City of Grand Junction
Greg Scott	Traffic, City of Grand Junction
Tamra Allen	Planning, City of Grand Junction
Greg LeBlanc	Senior Assistant to City Manager, City of Grand Junction
Dean Bressler	Senior Engineer, Mesa County RTPO
Andrew Gingrich	Transit Coordinator, Mesa County RTPO

Project Advisory Committee

Jason Smith	Region 3 Program Manager, CDOT
Andrea Haitz	Planning Commission, City of Grand Junction
Josh Niernberg	DDA Board
Cole Hanson	DDA Board
Eli Gerson	Local Business Owner
Nina Parentice	Local Resident
Diana Rooney	Urban Trails Committee, City of Grand Junction
Heath Hillman	Local Neighborhood
Colin St. Clair	Local Neighborhood

Downtown Development Authority Board of Directors

Doug Simons Jr.	Maria Rainsdon
Josh Niernberg	Libby Olson
Dan Meyer	Cole Hanson
Garrett Portra	Randall Reitz
Vance Wagner	

City of Grand Junction City Council

Abe Herman	Dennis Simpson
Chuck McDaniel	Anna Stout
Phillip Pe'a	Rick Taggart -
Randall Reitz	

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GRAND JUNCTION

4TH & 5TH ST

FEASIBILITY STUDY



Chapter 1 – Setting the Stage

OVERVIEW

Purpose

The **4th and 5th Street Feasibility Study** is being led by the Grand Junction Downtown Development Authority (DDA), in conjunction with the City of Grand Junction (City). The purpose of the feasibility study is to evaluate potential improvements along both corridors with the primary task being to evaluate whether to maintain the one-way traffic operations or transition to two-way travel along the parallel corridors.

Ensuring a comprehensive look at any proposed modifications, the following key elements were considered for any and all alternatives:

- **Safety**
- **Traffic Circulation**
- **Walkability**
- **Bicycle Facilities**
- **Parking**
- **Transit**
- **Land Use**
- **Economic Development**

Study Area

The study area (Figure 1) includes both 4th Street and 5th Street from North Avenue (US Hwy 6) to the north and Pitkin Avenue (I-70B Eastbound) to the south. The 4th Street corridor is a one-way roadway that travels south, and 5th Street is a one-way roadway that travels north. The northern portion of the study area has a residential character, while the southern portion includes the downtown core that supports both local businesses and city and community services such as the library and chamber of commerce. There are also two parks within the area – Hawthorne Park located between Hill Avenue and Gunnison Avenue, and Whitman Park located between the one-way couplet I-70B business loop corridors (Westbound - Ute Avenue and Eastbound - Pitkin Avenue).

Although 4th and 5th Streets are owned and maintained by the City of Grand Junction, the northern and southern termini of the study area, North Avenue (US Hwy 6) and the Ute Avenue and Pitkin Avenue one-way couplet, are Colorado Department of Transportation (CDOT)-owned roadways.

Currently, there are limited transit facilities and bicycle facilities within the study area. The only bike lane is along 5th Street between Ouray Avenue and Belford Avenue.

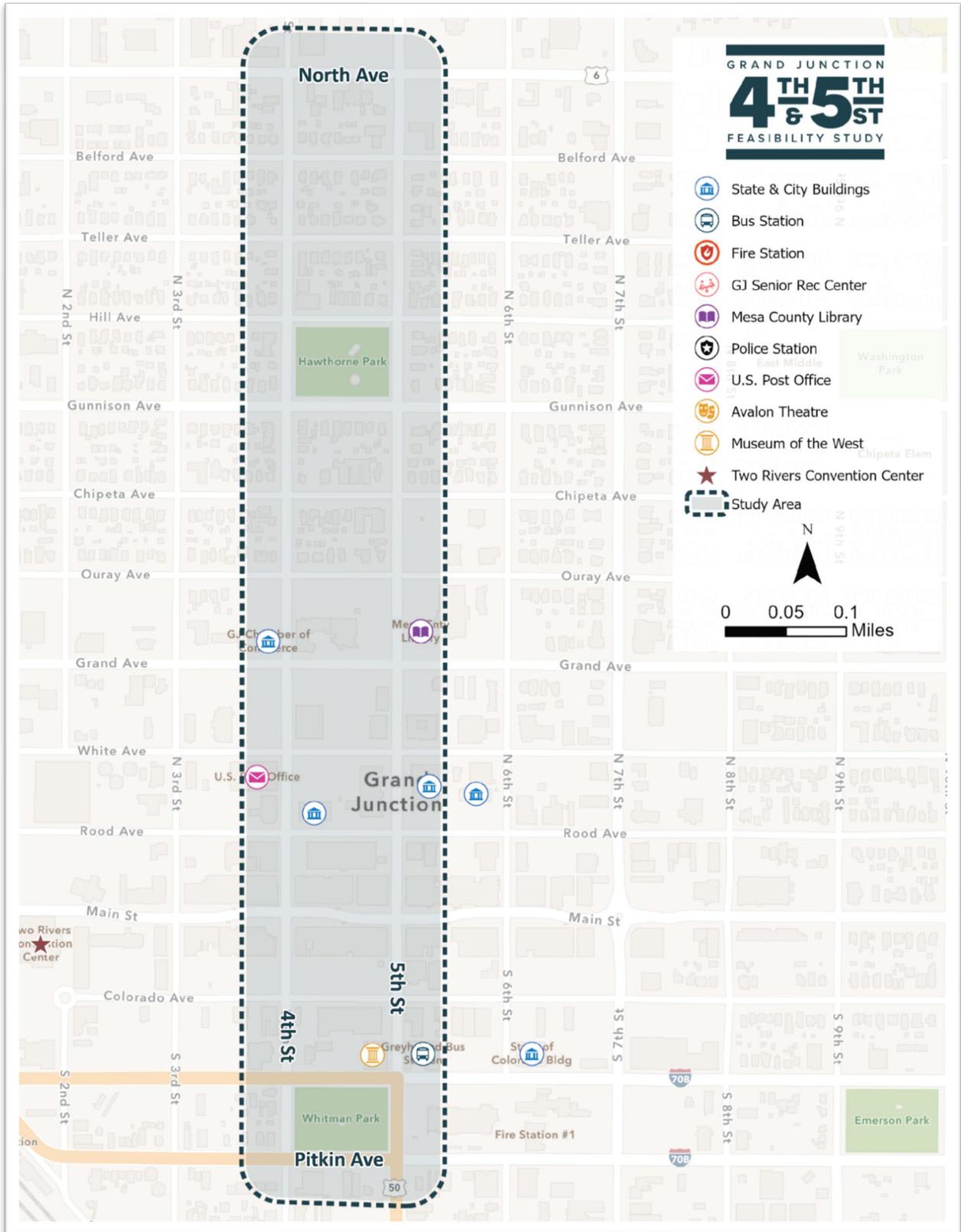


Figure 1: Study Area Map



Figure 2: 4th St and Rood Ave - Looking North

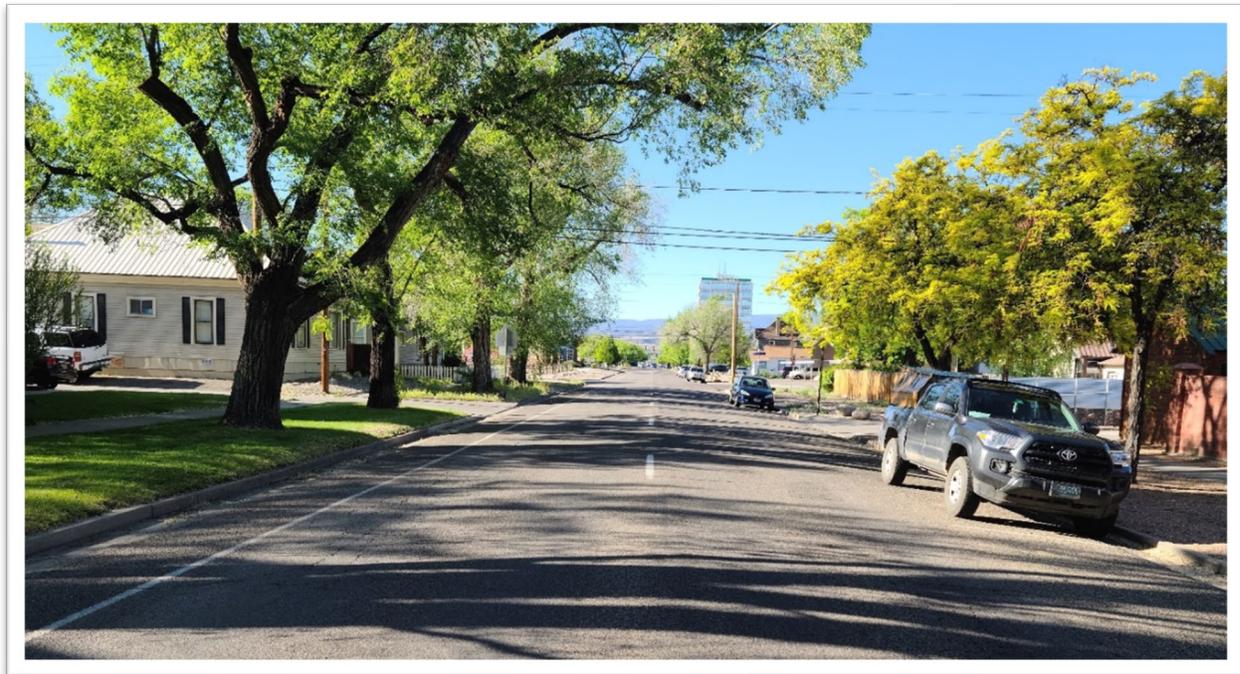


Figure 3: 5th St Between North Ave and Belford Ave

Early in the planning process, the study team leveraged best practice expertise to articulate a **Summary of Benefits** for both one-way and two-way roadway configurations. This summary (Figure 4) was utilized as a way of framing the conversation around the feasibility and tolerance for specific tradeoffs for each potential operational configuration of 4th Street and 5th Street.

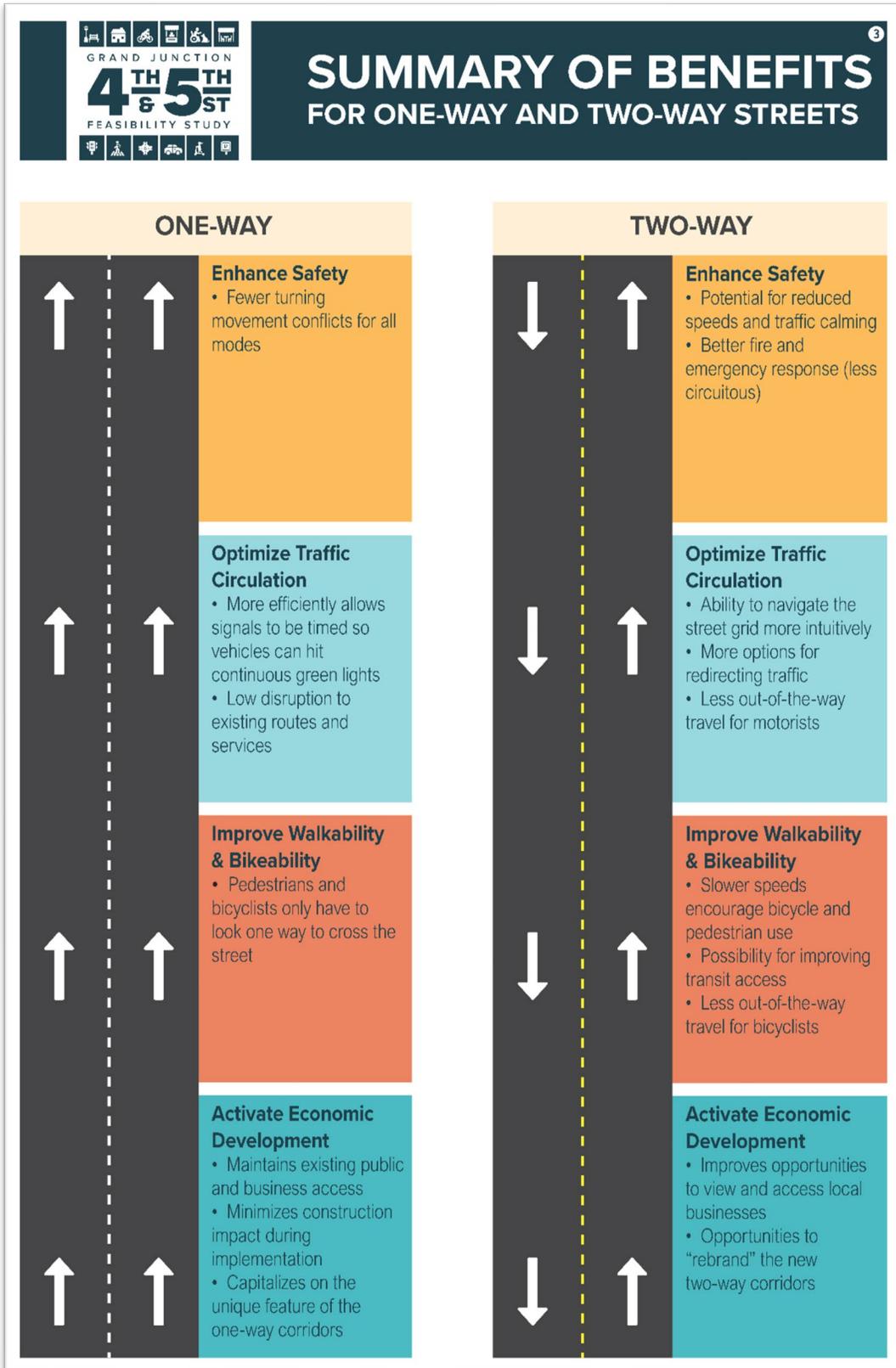


Figure 4: One-Way and Two-Way Benefits Summary

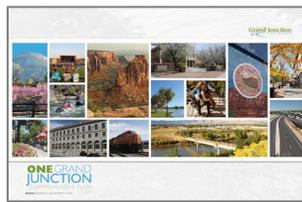


PREVIOUS PLANNING EFFORTS

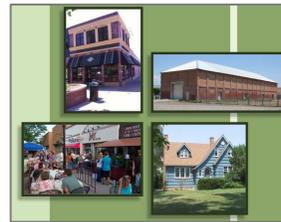
This study builds upon multiple previous planning efforts. In 1981, the Downtown Development Authority (DDA) identified the conversion of 4th and 5th Street from one-way to two-way as a goal in its original Plan of Development. In 2013, the City of Grand Junction's Greater Downtown Plan also called for looking at the configuration of 4th and 5th Street. This was again confirmed as a focus area in the 2019 DDA Plan of Development, and the City's updated Comprehensive Plan due to continued concerns around safety issues related to this corridor. Two of the plans with the most influence on this study are further highlighted below.



"Convert 4th and 5th to two-way Streets" is listed as a priority strategy for connectivity.



The conversion of 4th and 5th Street from one-way to two-way was confirmed as a focus area due to continued concerns around safety issues.



The City's municipal code includes a policy within the Downtown District goals and policies to "Study alternatives for 4th and 5th Streets including returning these streets to the two-way grid system between Ute Avenue and North Avenue."



The City's Complete Streets Policy and the 2018 Circulation Plan provide additional guidance that will inform this study.

Vibrant Together – A Downtown Initiative (2019)

This Plan provides a unified vision for downtown, identifies projects to advance that vision, and brings local leaders together in pursuit of the vision. Goals outlined in the Plan focus on downtown development, connectivity, safety and comfort, and vibrancy. Specific to 4th Street and 5th Street, it identifies a wide variety of opportunities and challenges for the study area as a whole and the individual corridors respectively.

The following were recommended for the **study area** as a whole:

- Recommended **bump outs** at Colorado Ave, Main St, Rood Ave, White Ave, and Grand Ave.
 - Proposes a neighborhood bikeway on Ouray Ave, crossing through the two corridors
 - Proposes improved bike intersections along at Grand Ave, Ute Ave, and Pitkin Ave

Recommendations for **4th Street** include:

- Identifies that a crosswalk is needed at Grand Ave
- Proposes a bike lane

- Proposes a future event space at Colorado Ave

Recommendations for **5th Street** include:

- Identifies Pitkin Ave as a dangerous intersection
- Identifies a new bump out at Grand Ave

One Grand Junction Comprehensive Plan (2020)

The One Grand Junction Comprehensive Plan envisions an efficient and connected transportation system that enhances mobility for all modes. Several opportunities outlined to achieve this include narrowing travel lanes as much as possible; **encouraging the use of transit, biking, walking; and implementing complete streets approaches.**

The recommendation to work with CDOT to ensure the I-70B business loop, an important roadway that provides access to downtown, is a multi-modal facility and provides for comfortable connectivity was identified as a high priority in the near-term.

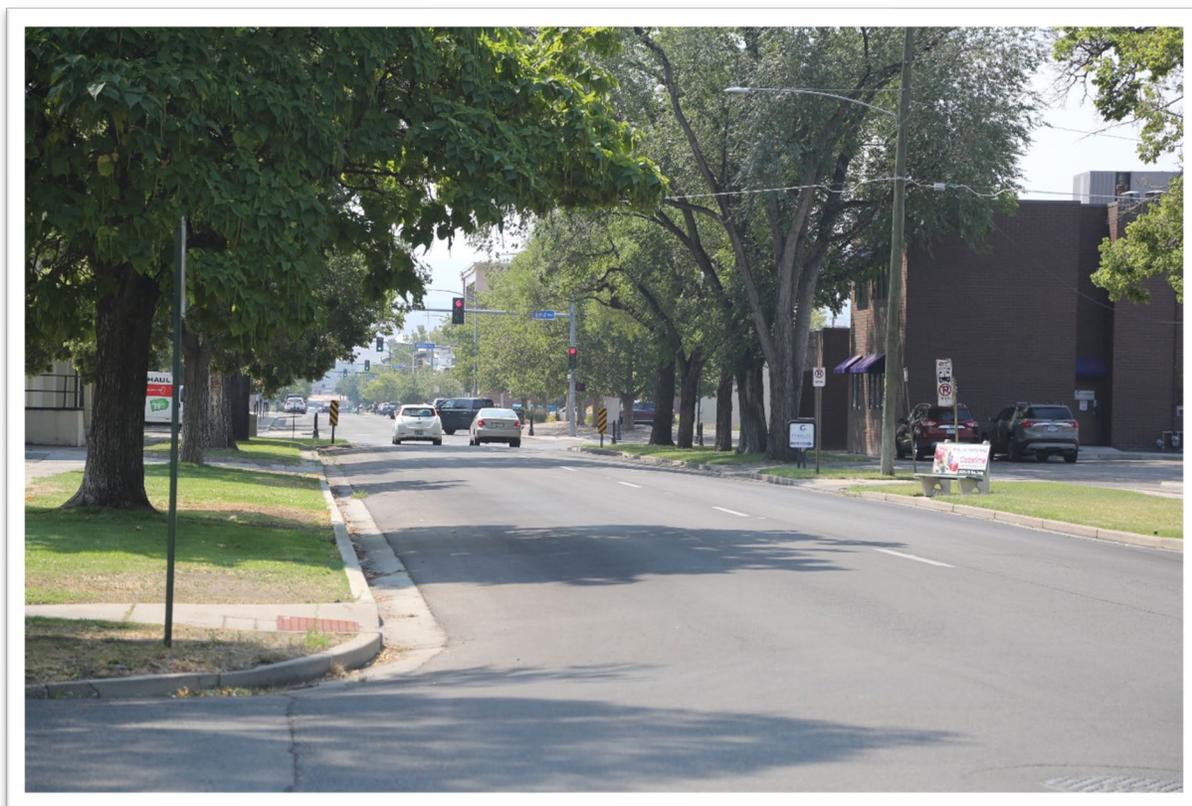


Figure 5: 4th St and Ouray Ave – Looking South



PUBLIC & STAKEHOLDER INVOLVEMENT

Engaging the Public

Public involvement was an essential component of this feasibility study. Given the pandemic conditions during the entire timeframe of this study process, a combination of both in-person and online virtual engagement methods were used to provide ample opportunities for the public to share their input throughout the full duration of the study.

Key methods of communication included a public meeting, project website, project email, online surveys, online interactive map, social media posts, and more.

Cumulatively, there were almost 500 public comments collected as a result of these engagement activities. A matrix of the comments is provided in the Appendix, while the contents of the comments were used to develop the overall recommendations.

Below is a summary of how the team engaged with the public throughout the study:

- **Public Open House** was held in-person on *May 4, 2021* at the Avalon Theatre in downtown Grand Junction.
- **Project Website** was developed and maintained throughout the study providing updates and input opportunities (<https://project.bhinc.com/4th5thStudy>).
- **Project email** was created allowing for ongoing input (4th5thStudy@bhinc.com).
- **Online Survey** was made available to the public following the open house in *May of 2021* to collect feedback from those who may have been unable to attend or who may have felt more comfortable sharing their feedback through other means.
- **Interactive Map** was developed for the study area and made available on the project website inviting comments from the public and key stakeholders.



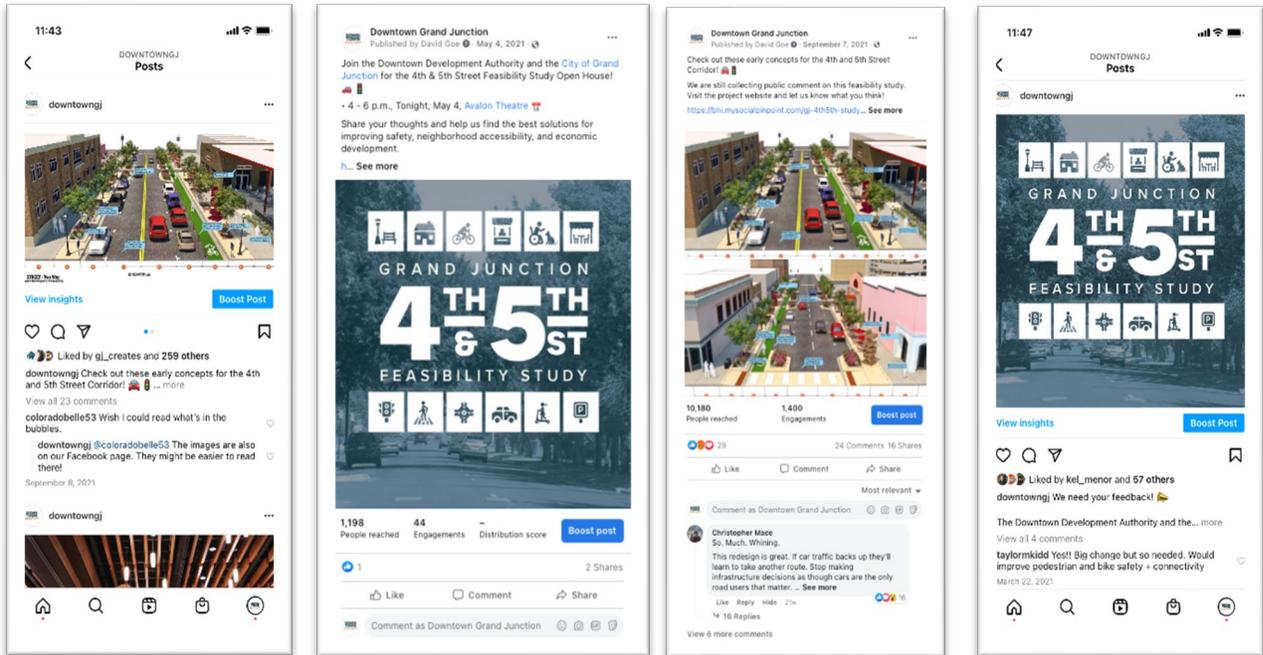


Figure 6: Social Media Posts

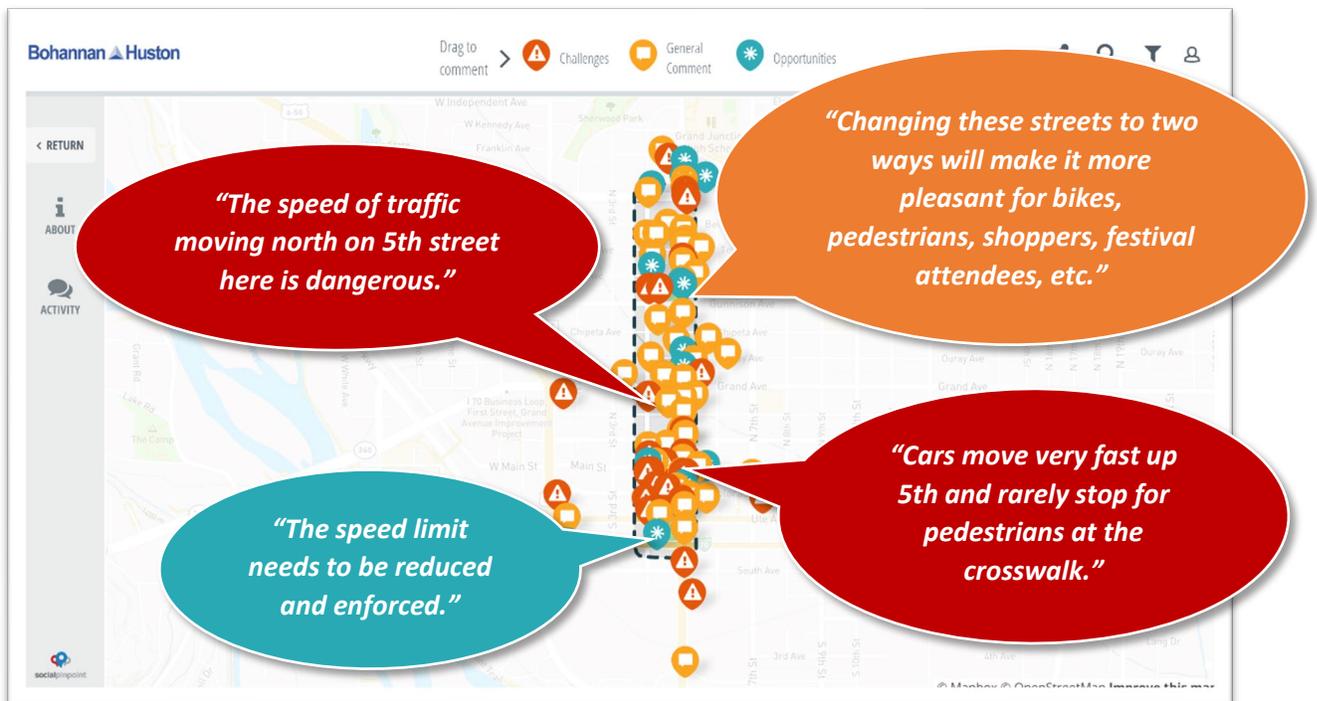


Figure 7: Online Interactive Map Screenshot and Example Comments from Users

- **Online Outreach Effort** was conducted through the month of *September 2021*, which included posting and distribution of resources such as the vision and goals, alternatives illustrated, a traffic analysis summary, and an additional online survey collecting more input.
- **Social Media** posts were ongoing throughout the study process encouraging engagement through the website, email, meeting attendance, and the online activities.

Figure 8 Public Involvement Flyer

How Stakeholders Participated

The study team also held meetings with various stakeholder groups since the onset of the planning process to identify the vision and goals and overall preferences and priorities for the study area. These entities were also asked to help inform design elements for the proposed alternatives for 4th Street and 5th Street. There were three major stakeholder groups that supported this effort: Technical Team (TT), Project Advisory Committee (PAC), and Colorado Department of Transportation (CDOT). Key members are noted and appreciated on the acknowledgement page.

- The **Technical Team (TT)** met approximately five times throughout the duration of the study to help collect and review data, review alternatives, provide feedback based on technical expertise, and support recommendations from the study team. This team was comprised of City and County Staff representatives, intergovernmental partners from CDOT, and subject matter experts in the fields of traffic, transportation, mobility, and engineering.
- The **Project Advisory Committee (PAC)** attended three workshops during the study and were integral to supporting the development of vision and goals, providing input throughout the planning process, sharing resources, informing the alternatives and associated pros and cons for each, and disseminating important study information. This committee was comprised of local business owners and residents, community leaders, Downtown Development Authority Board and Planning Commission Members, and a representative from CDOT.
- Several additional meetings were held with CDOT representatives to address concerns along the northern and southern portions of the study area and to meaningfully incorporate CDOT improvements within the study area that are planned for the near future. Coordination with CDOT was ongoing and CDOT staff were members of the TT and PAC, as well.

GRAND JUNCTION
4TH & 5TH ST
FEASIBILITY STUDY

ONLINE SURVEY

ABOUT THE PROJECT: The 4th Street and 5th Street Feasibility Study is being led by the Grand Junction Downtown Development Authority, in conjunction with the City of Grand Junction.

Why? The purpose of the feasibility study is to evaluate potential improvements along both corridors and within the Study Area, focused on the following:

- Safety
- Traffic Circulation
- Walkability
- Bicycle Facilities
- Parking
- Transit
- Land Use
- Economic Development

Proposed alternatives will include maintaining the one-way traffic operations as well as the potential of transitioning to two-way travel corridors.

Take the Online Survey!
Visit the project website to take the online survey. Navigate to the link below or scan the QR code to the right with your phone.
<http://project.bhinc.com/4th5thStudy>

On the website, you can also use the interactive map to share your ideas for the 4th/5th Street corridors.

Your participation is very valuable to the planning process! **Those who take the online survey will be entered to win a Downtown GJ gift card. Please complete the survey by Tuesday, May 11 for a chance to win.**

rediscover **POWERTOWN** GRAND JUNCTION
CITY OF **Grand Junction** COLORADO

Bohannon & Huston
M I C

Figure 9: Public Flyer for Online Survey



Figure 10: PAC Meeting Vision and Goals Workshop, March 3, 2021

DDA Board and City Council

Throughout the study process, the team provided updates and received direction from the DDA Board and the City Council. With seven presentations total throughout 2021, there was complete transparency as alternatives were developed and recommendations were finalized. This ongoing support from the DDA Board and City Council was very helpful and appreciated, and these leadership presentations provided additional opportunities for the public to learn and ask questions about the study.

Members of the study team presented at the following meetings:

- City Council: June 28 and Nov 15, 2021
- DDA Board: March 25, May 13, Sept 23, and Nov 11, 2021
- DDA Board and City Council: August 12, 2021



Figure 11: Project Website Welcome Page

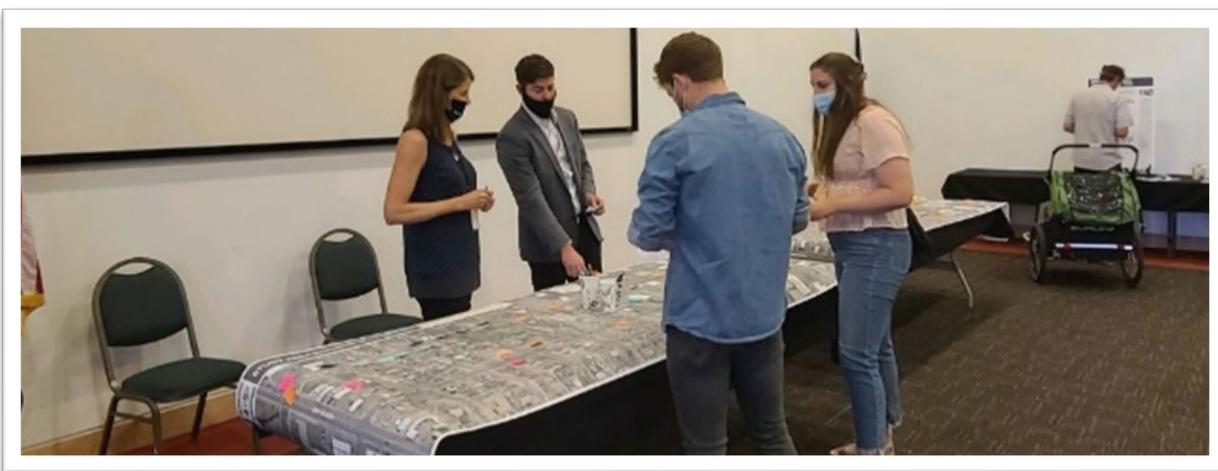


Figure 12: Public Meeting, May 4, 2021

VISION & GOALS

The Vision & Goals for the study were developed through partnership with the PAC and based on a wealth of public engagement and input from previous planning efforts. A proposed set of Vision & Goals were then reinforced by input received from the public at the public open house.

All of the input on Vision and Goals was ultimately finalized to include four Vision Elements with a pair of Goals for each. The Goals established and shared below were then used to develop and evaluate all proposed alternatives throughout the remainder of the feasibility study process. They were readily available for the public and stakeholders to refer to when evaluating options and providing input, ensuring that the decisions made throughout the study aligned with the overall vision and overall goals for the study area.



Figure 13: PAC members on Vision and Goals



Figure 14: Final Vision and Goals Established for the Feasibility Study

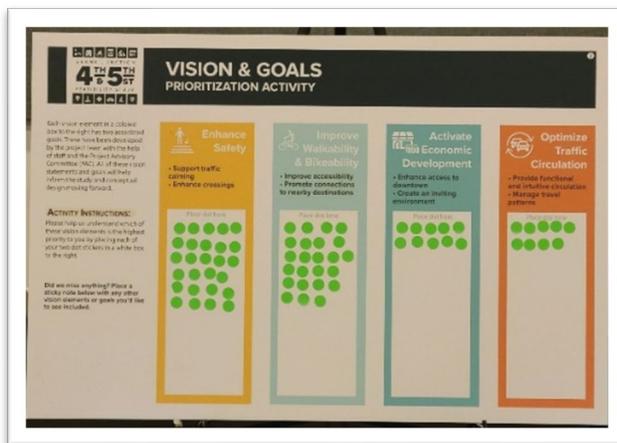


Figure 15: Vision and Goals Activity – Public Meeting May 2021

Study Area Priorities

Study Area Priorities were also developed with the community to directly align with the Vision Elements. Working in tandem with the Vision and Goals, the Study Area Priorities were used throughout the process to evaluate the various design alternatives being tested for their feasibility. The Study Area Priorities, in particular, were based on feedback received during the Public Open House in May of 2021 and through an associated online survey.

STUDY AREA
PRIORITIES

ENHANCE SAFETY

- Speeding
- Driver Inattention
- Crashes
- Wrong-Way Drivers
- Backing Out of Parking

IMPROVE WALKABILITY & BIKEABILITY

- Needs More and Safer Pedestrian Crossings
- Issues with Noncontinuous Bike Lane on 5th St
- More Bike Lanes are Desired
- Improve Access to Parks

ACTIVATE ECONOMIC DEVELOPMENT

- Improve Access to Businesses
- Expand Sidewalk for Seating Areas
- Draw More People into the Area
- Create Pedestrian-Friendly Places
- Incorporate Art and Landscaping into the Corridor
- Signage During Construction

OPTIMIZE TRAFFIC CIRCULATION

- Reduce Driver Confusion
- Increase the Amount of Signage
- Reduce Traffic Congestion
- Opportunities Exist to Re-Route Through Traffic

WHAT WE **HEARD**

Over 300 total comments were collected using a combination of an interactive map, project e-mail, public open house, and an online survey.



“Enhance Safety” and “Improve Walkability and Bikeability” were the highest-ranked Vision Elements

Corridor users typically drive or walk when utilizing 4th and 5th Street

walkable
longevity
multimodal
connective

slow
bike friendly
pedestrian

accessible
bikeable
safe

efficient
friendly
vibrant
pedestrian friendly
energetic

What are the top three elements that would make 4th & 5th Street more enjoyable?

- 1. SLOWER SPEEDS**
- 2. IMPROVED CROSSINGS**
- 3. MORE CROSSING LOCATIONS**

Enhance Safety and **Improve Walkability and Bikeability** were the two most prioritized Vision Elements by the community. The top three recommended strategies that would make 4th Street and 5th Street more enjoyable included slower speeds, improved crossings, and more crossing locations.

Examples of major themes that emerged within each of the Study Area Priorities included speeding, improved access to parks, a desire for more bike lanes, expansion of the sidewalk for seating areas, and reduced driver confusion. A more detailed list of these themes is presented to the far left.



Opportunities and Challenges

The study team, along with the PAC and TT, also brainstormed and shared ideas on opportunities and challenges for the two corridors. This information helped highlight traffic, land use, economic development, and safety considerations for this study. Results are summarized below and shared in Figure X.

The following was mentioned:

- Consider signal at 3rd Street for safe bicycle crossing
- Connect to existing bike routes
- Consider existing transit routes and connections
- Anticipate transit needs of future growth
- Respect the residential character on north end
- Improve safety at the alleyways
- Explore signage, striping, and signal modifications
- Improve connections to I-70B
- Enhance/Establish a gateway al to downtown along I-70B

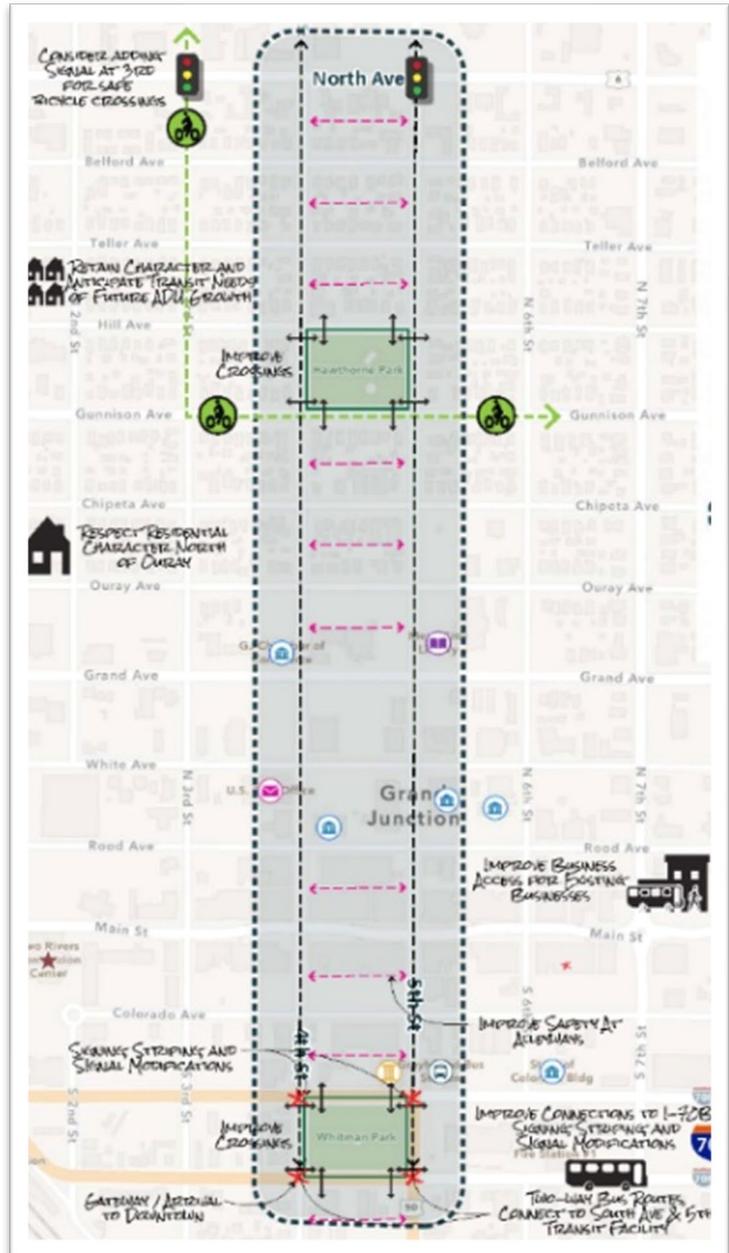


Figure 16: A Map of Opportunities/Challenges

EXISTING CONDITIONS

The 4th Street and 5th Street corridors are one-way couplets located in downtown Grand Junction. Existing roadway cross-sections are presented following the narrative existing conditions assessment for each individual corridor below. Today, the environment on the 4th Street corridor is more pedestrian-friendly compared to 5th Street, where the design and overall landscape lends itself more to prioritizing vehicles over pedestrian comfort. In addition to the existing cross-sections, narrative and existing conditions photos, the Appendix of this study contains a set of existing conditions reference maps – including detailed data on existing and future Land Use, existing and proposed bike facilities, existing transit, and parking within the Study Area – that were used as a basis for developing the concept alternatives in the feasibility analysis component of this project.

The following maps are available in the Appendix of this document:

- *Project Area Overview*
- *Current Land Use*
- *Future Land Use*
- *Downtown District*
- *Historic Assets*
- *Parking Facilities*
- *Pedestrian and Bicycle Facilities*
- *Transit Facilities*



Figure 17: 5th St and Hill Ave – Looking North



4th Street Corridor

Between Ute Avenue and Colorado Avenue along 4th Street, there are two travel lanes that vary in width, parallel and angled parking on each side, and generous sidewalks (ranging from approximately 11-15'). The section between Colorado Avenue and Rood Avenue includes two travel lanes that also vary in width with parallel parking located immediately adjacent to the travel lanes, and 10-foot sidewalks. The travel lanes in this area vary based on the parking angle. The inconsistent lane widths create a less predictable environment for users while the consistently generous sidewalk supports walkability.

Between Rood Avenue and White Avenue, the corridor has consistent travel lane widths, parking that varies in width (8.5-17.5'), and sidewalks that vary in width (6-15'). From Grand Avenue to Belford Avenue, there are two travel lanes, sidewalks with large buffers/tree lawns (14.5'), and no delineated parking. In these sections of 4th Street, the travel lanes are wider than necessary, and there are missed opportunities for bike accommodations and additional parking capacity.



Figure 18: 4th St and Belford Ave – Looking South

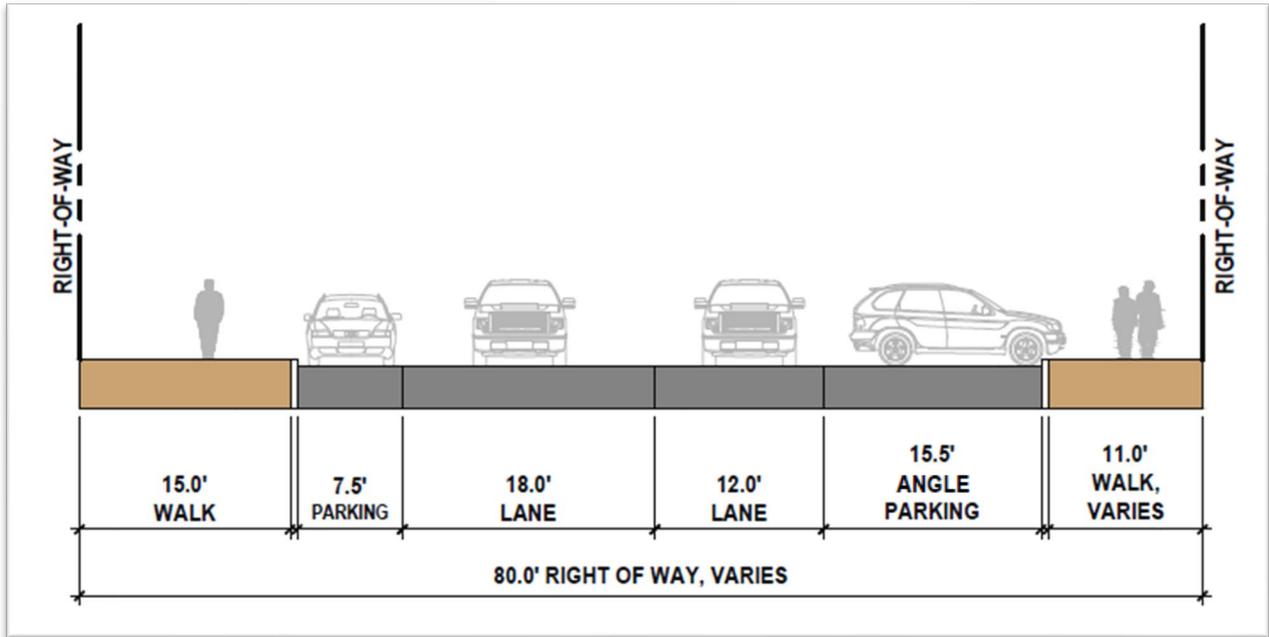


Figure 19: 4th St - Existing Cross-Sections Between Ute Ave & Colorado Ave

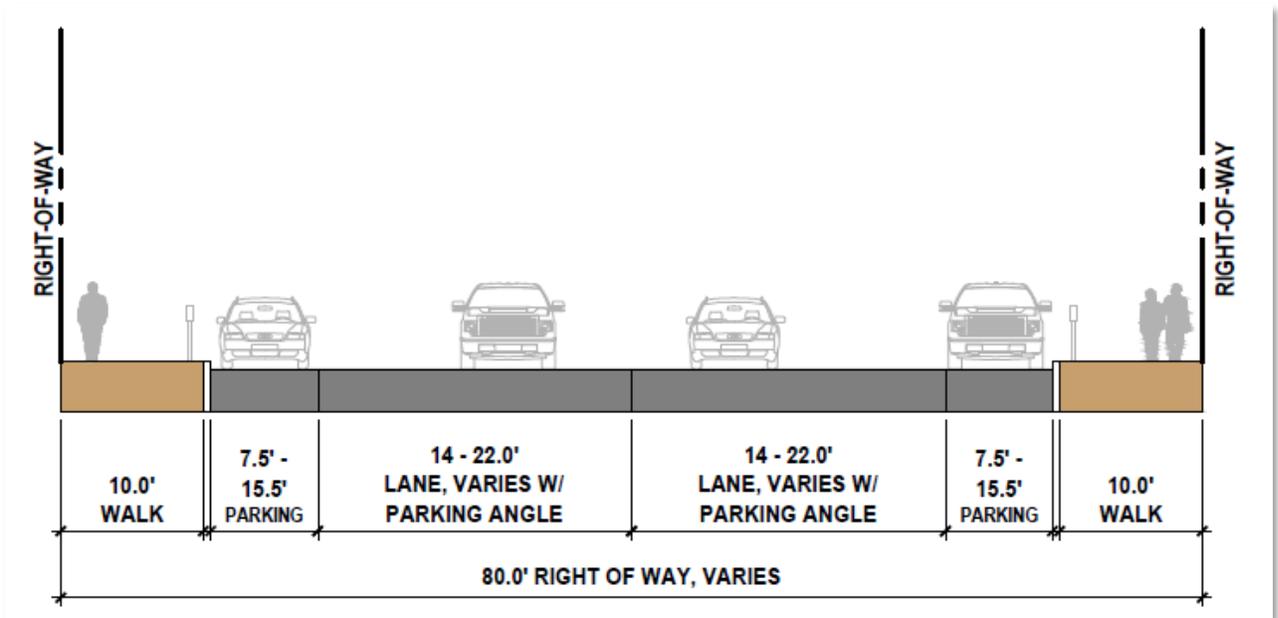


Figure 20: 4th St - Existing Cross-Sections Between Colorado Ave & Rood Ave



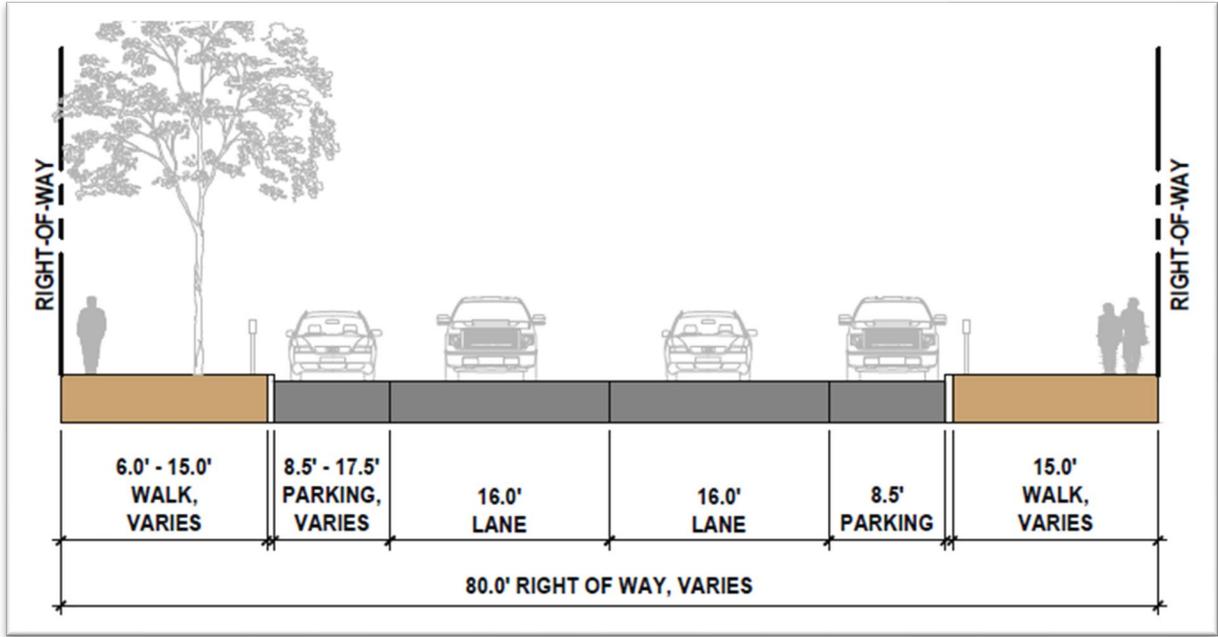


Figure 21: 4th St - Existing Cross-Sections Between Rood Ave & White Ave

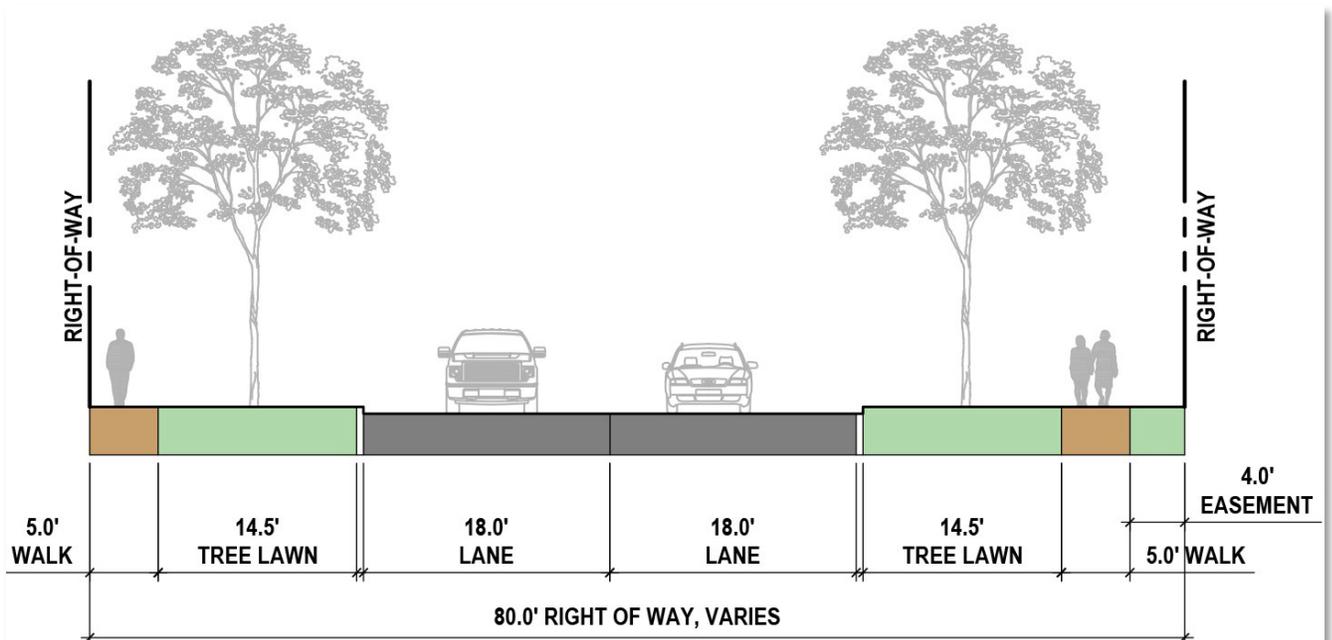


Figure 22: 4th St - Existing Cross-Sections Between Grand Ave & Belford Ave



5th Street Corridor

Between Ute Avenue and Colorado Avenue along 5th Street, there are two wide travel lanes, a combination of parallel and angled parking, and sidewalks. The sections between Colorado Avenue and Main Street and Main Street to Rood Avenue include two travel lanes, angled parking, and sidewalks. The sidewalk varies throughout this area. The wider lanes in this area create an environment that is more conducive to speeding. The inconsistency in the right-of-way allocation leads to a less predictable environment. Overall, the design throughout this area communicates a diminished priority for pedestrians, which creates a challenge for activating the sidewalk area. This challenge of activation inhibits the economic development potential of the downtown environment.

Between Rood Avenue and Grand Avenue, the corridor has two travel lanes, angled parking, and sidewalks that vary in width. The section from Grand Avenue to Belford Avenue includes two travel lanes, a bike lane (5.5') on the east side, parallel parking on the west side, and sidewalks with large buffers/tree lawns (14.5'). Similar to the southern end of the corridor, the northern end has the same right-of-way allocation inconsistency issues. The transition to the 'neighborhood' section north of Grand Avenue signals a shift of prioritization to other modes and users such as bicyclists. However, because this bike lane is not present throughout the entirety of the corridor, it creates connectivity issues for those traveling by bike.



Figure 23: 5th St and Grand Ave – Looking North

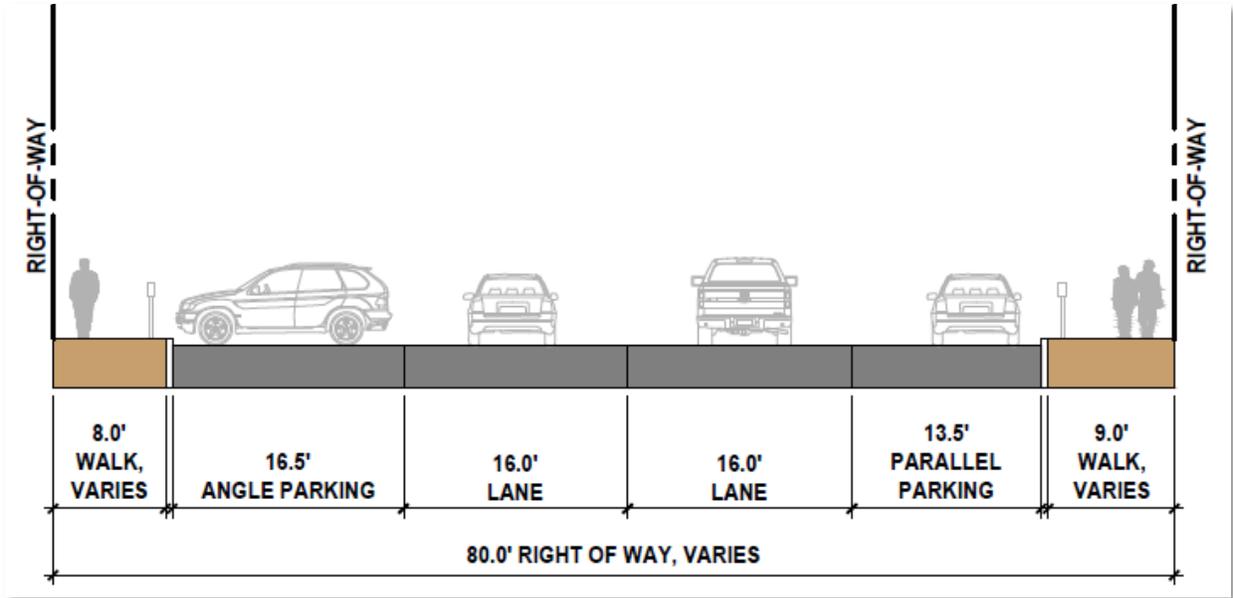


Figure 24: 5th St - Existing Cross-Sections Between Ute Ave & Colorado Ave

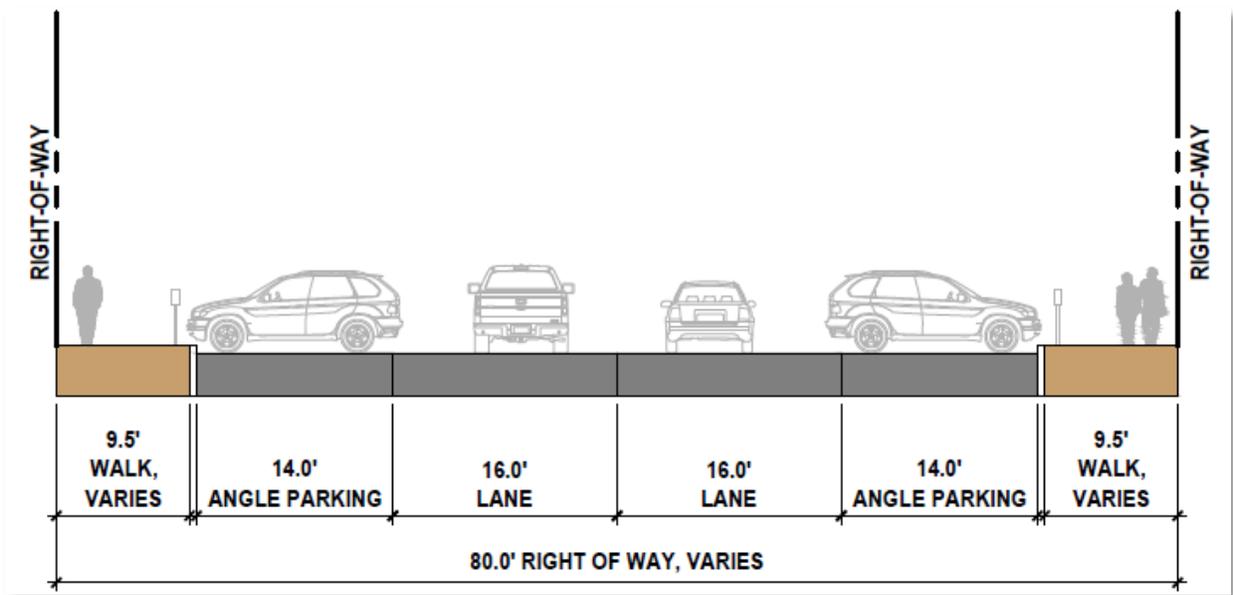


Figure 25: 5th St - Existing Cross-Sections Between Colorado Ave & Main St & Main St to Rood Ave

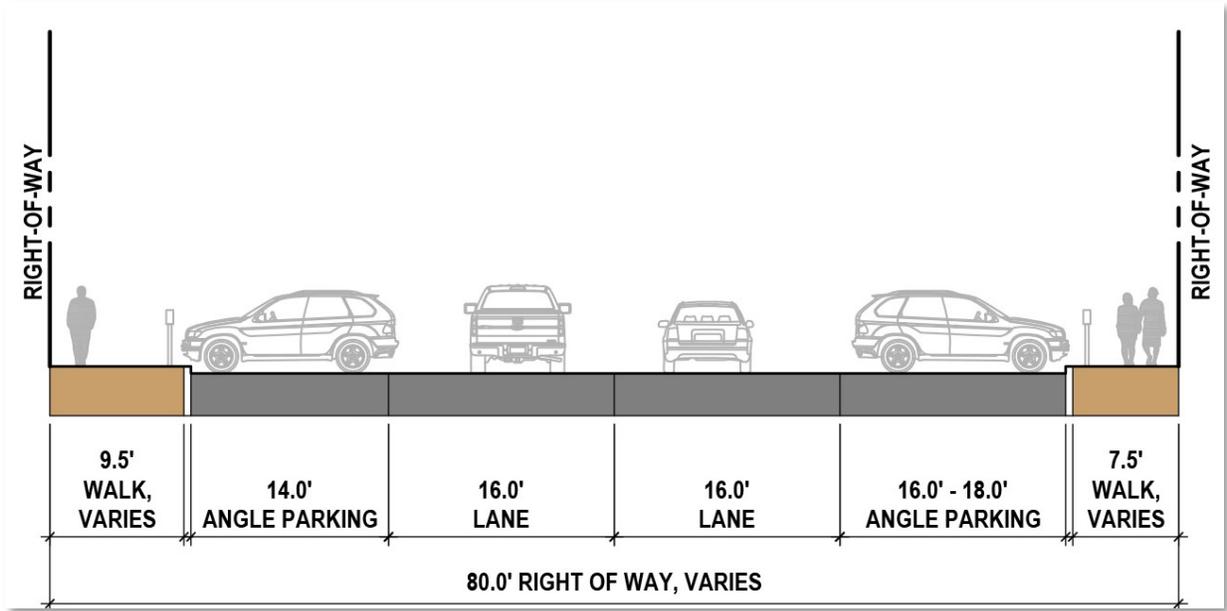


Figure 26: 5th St - Existing Cross-Sections Between Road Ave & Grand Ave

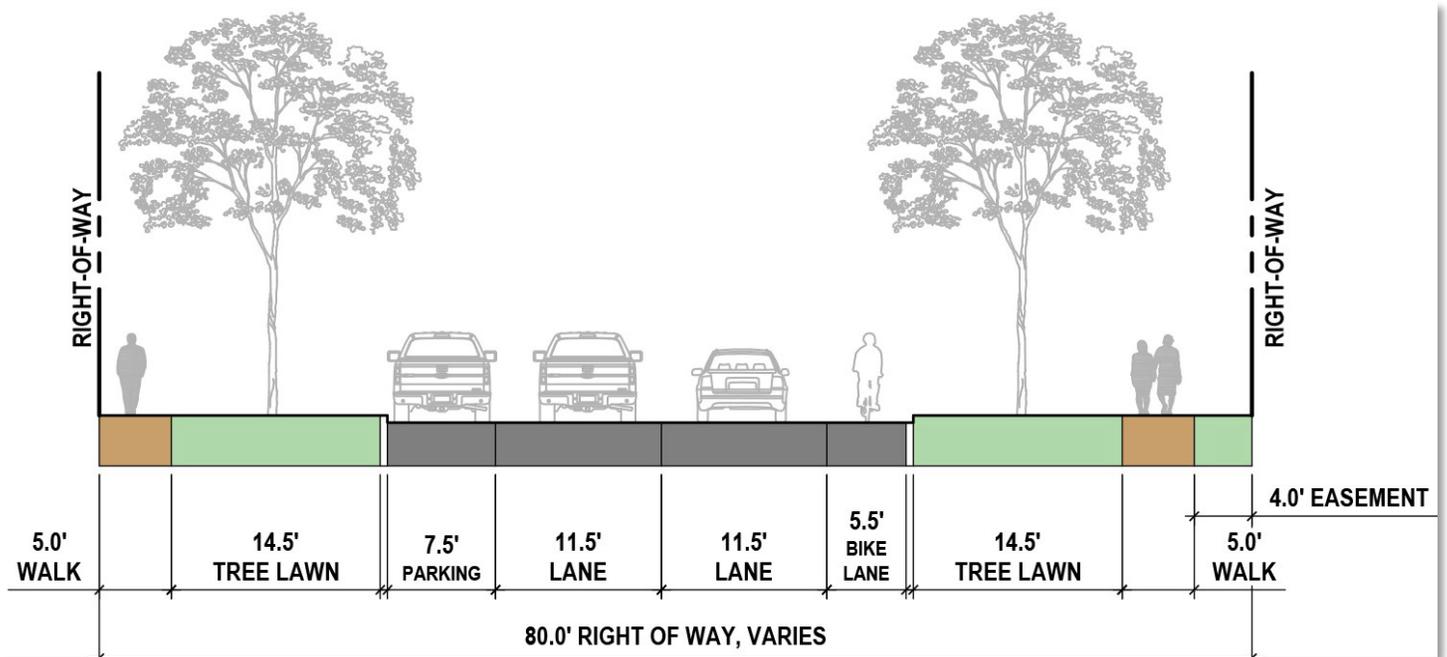


Figure 27: 5th St - Existing Cross-Sections Between Grand Ave & Belford Ave



GRAND JUNCTION

4TH & 5TH ST

FEASIBILITY STUDY



Chapter 2 – Feasibility

PRIORITIES & PREFERENCES

In addition to the broader reach of public engagement that is outlined in Chapter 1 of this document, this study leveraged the expertise of its Technical Team (TT) and Project Advisory Committee (PAC) in developing the nuances of concept design alternatives in the Feasibility Assessment phase of the project.

As a foundation for developing concept alternatives, the TT and PAC were asked to rank various design elements based on whether they felt those elements achieved the study area priorities. These key stakeholders and subject matter experts had the opportunity to respond to questions using interactive polling activities about bicycle facility types and treatments, parking treatments, pedestrian realm treatments, and pedestrian amenities. A snapshot of these interactive activities are presented below, and while not used as absolute directives, they were used as key inputs to assessing the feasibility and tradeoffs associated with each of the proposed concept alternatives.



Figure 28: 5th St and Gunnison Ave - Looking North



Figure 29: 5th St and Main - Looking Northeast



Bicycle Facilities



Figure 30: Polling results – PAC meeting on June 16, 2021

For bicycling, stakeholders reported protected bike lanes, parking protected bike lanes, and separated bike lanes as facilities that would achieve the study area priorities. A variety of parking facilities were then studied, with the proposed alternatives recommending parking protected bike lanes on both 4th Street and 5th Street.

Parking Treatments



Figure 31: Polling results - PAC meeting on June 16, 2021

For parking treatments, stakeholders reported parallel parking as the preferred parking design that would achieve the study area priorities. While the existing conditions along 4th Street and 5th Street contain a variety of parallel and angled parking treatments, based upon the results of this study – including the input from the public and key stakeholders, the proposed alternatives recommend a consistent approach to parallel parking along both corridors.

Pedestrian Realm/Public Space Treatments



Figure 32: Polling results - PAC meeting on June 16, 2021

For pedestrian realm treatments, stakeholders reported tree-lined sidewalks, café/patio seating, and multi-purpose art/play installations as elements that would achieve the study area priorities. A variety of configurations were explored for pedestrian realm and public space treatments along both corridors, with the proposed alternatives recommending a continuous 8’ amenity zone (in addition to a 9-foot sidewalk) along the downtown portions of 4th Street and 5th Street within the study area, which can be flexibly programmed with any of the priority treatments identified through this process.

Pedestrian Amenities

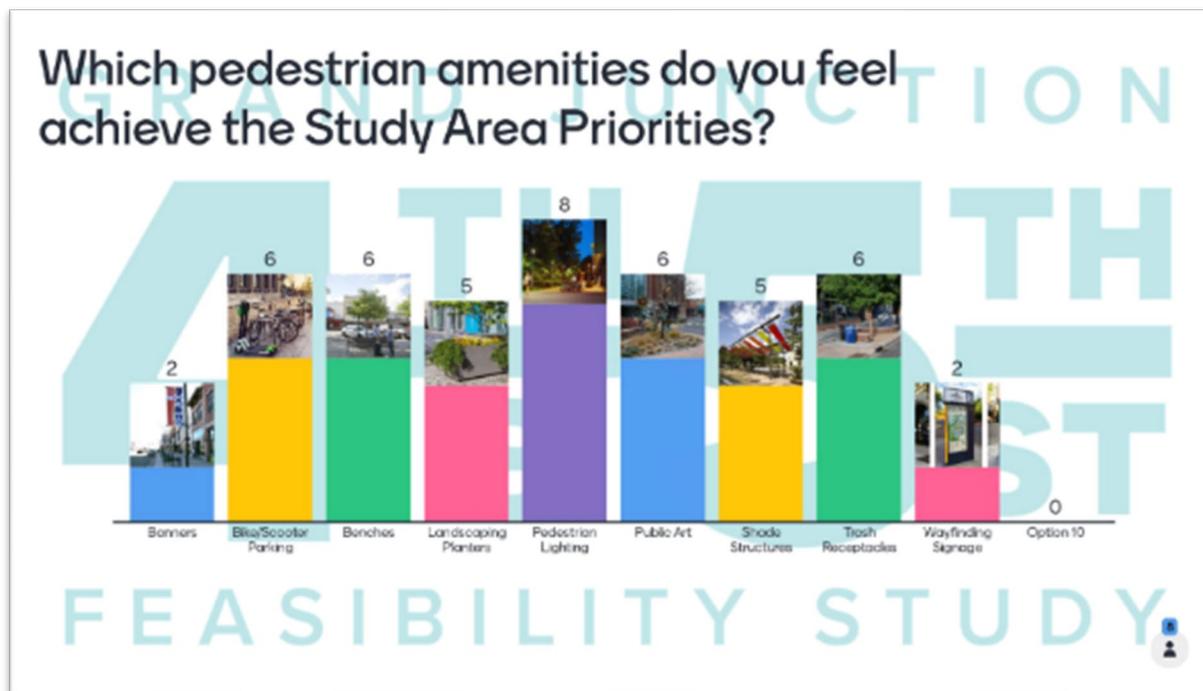


Figure 33: Polling results - PAC meeting on June 16, 2021

For pedestrian amenities, stakeholders reported pedestrian lighting, trash receptacles, benches, landscaping planters, and public art as elements that would achieve the study area priorities. Similar to the approach for public realm treatments, within the proposed alternatives, many of these elements can be located within the flexible 8' amenity zone and/or can be included as a component of features such as bulb-outs.

What is most important?

Reiterating what we heard from the public via the project website, polling results are shared below. Corridor users reported walking or driving as the most common use when traveling along the corridor and also indicated that slower speeds and improved crosswalks were most important along both 4th and 5th Street. These inputs were strongly considered when creating the proposed alternatives to ensure that both existing and future needs are being met.

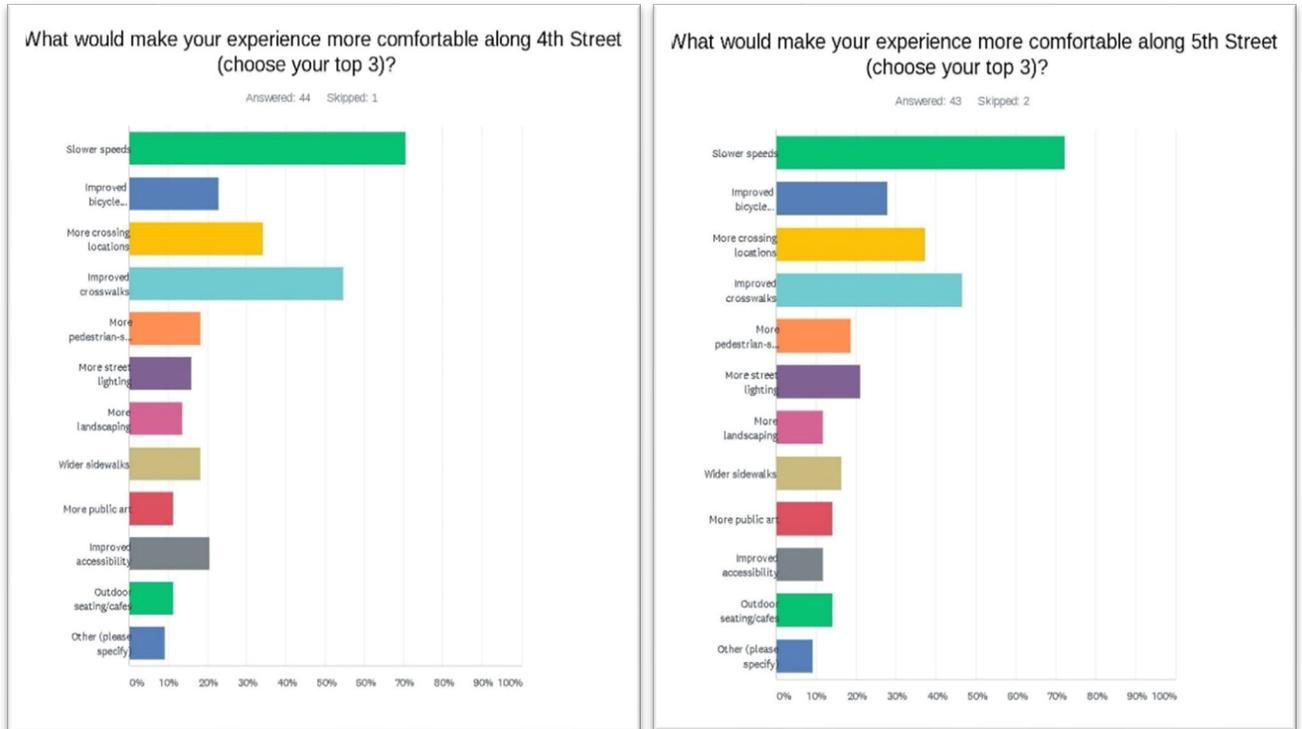


Figure 34: Polling Results via the Project Website

PROPOSED ALTERNATIVES

Development of Proposed Alternatives

Based on the collection of input received from the City Council, DDA Board, PAC, TT, and the public a set of proposed alternatives were created for 4th Street and 5th Street. The proposed alternatives seek to achieve both the vision and the goals set forth for this study - **enhance safety, improve walkability and bikeability, activate economic development, and optimize traffic circulation.**

Proposed alternatives for both 4th and 5th Street include the **Enhanced One-Way Alternative** and **Enhanced Two-Way Alternative**, with descriptions and associated visuals shown on the following pages. Details on existing conditions, for comparison purposes, are in Chapter 1.

The **Enhanced One-Way Alternative** represents the proposed future concept for 4th & 5th Street remaining as a one-way configuration with additional enhancements, including two travel lanes, consistent parallel parking, a parking-protected bike lane on one side of the street, and expanded sidewalks and amenity zones on both sides of the street.

Key Takeaways for Enhanced One-Way Alternative on 4 th and 5 th Street			
One-Way Vehicle Travel	Parallel Parking	Expanded Sidewalks	Bulbouts at Corners and Alleys
Narrowed Travel Lanes	Separated Bike Lanes	Amenity Zone (Landscaping, Art, Outdoor Seating, Other Amenities)	

The **Enhanced Two-Way Alternative** represents the proposed future concept for 4th & 5th Street converted to a two-way configuration with additional enhancements, including two travel lanes, consistent parallel parking, a parking-protected bike lane on one side of the street, and expanded sidewalks and amenity zones on both sides of the street.

Key Takeaways for Enhanced Two-Way Alternative on 4 th and 5 th Street			
Two-Way Vehicle Travel	Parallel Parking	Expanded Sidewalks	Bulbouts at Corners and Alleys
Narrowed Travel Lanes	Separated Bike Lanes	Amenity Zone (Landscaping, Art, Outdoor Seating, Other Amenities)	



While the portion of 4th Street and 5th Street south of Grand has a downtown character, the portion north of Grand Ave serves a more residential user base, and therefore a separate, yet congruous, alternative was developed for the northern portion of the corridors. Accordingly, each alternative is separated into two sections, presented north to south: North to Grand and Grand to Ute.

Proposed Alternative: North to Grand (Residential)

Given the similar conditions for 4th and 5th Street between North and Grand, the following visuals represent the proposed alternatives for both corridors. During design there will be refinements to adequately address any unique features along each corridor.



Figure 35: 4th Street at Belford – Looking South

4th and 5th Street – Enhanced One-Way and Two-Way Alternatives

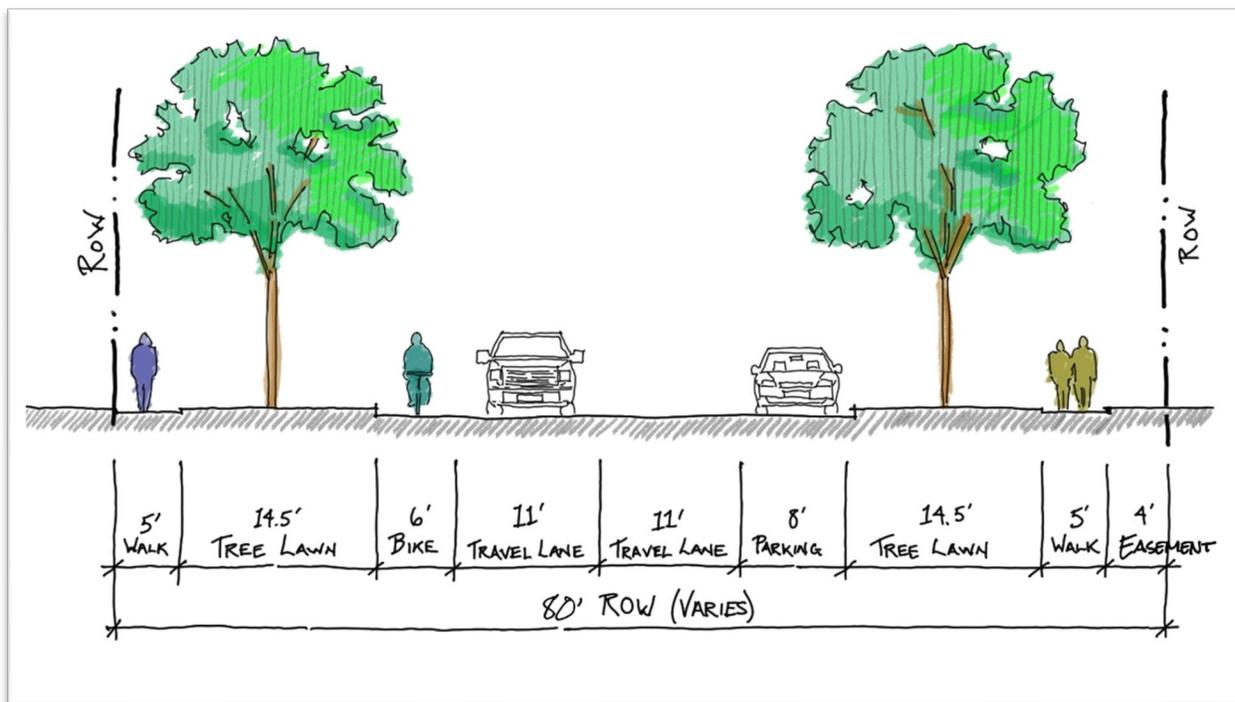


Figure 36: Enhanced One-Way/Two-Way Alternative - 4th St - North of Grand

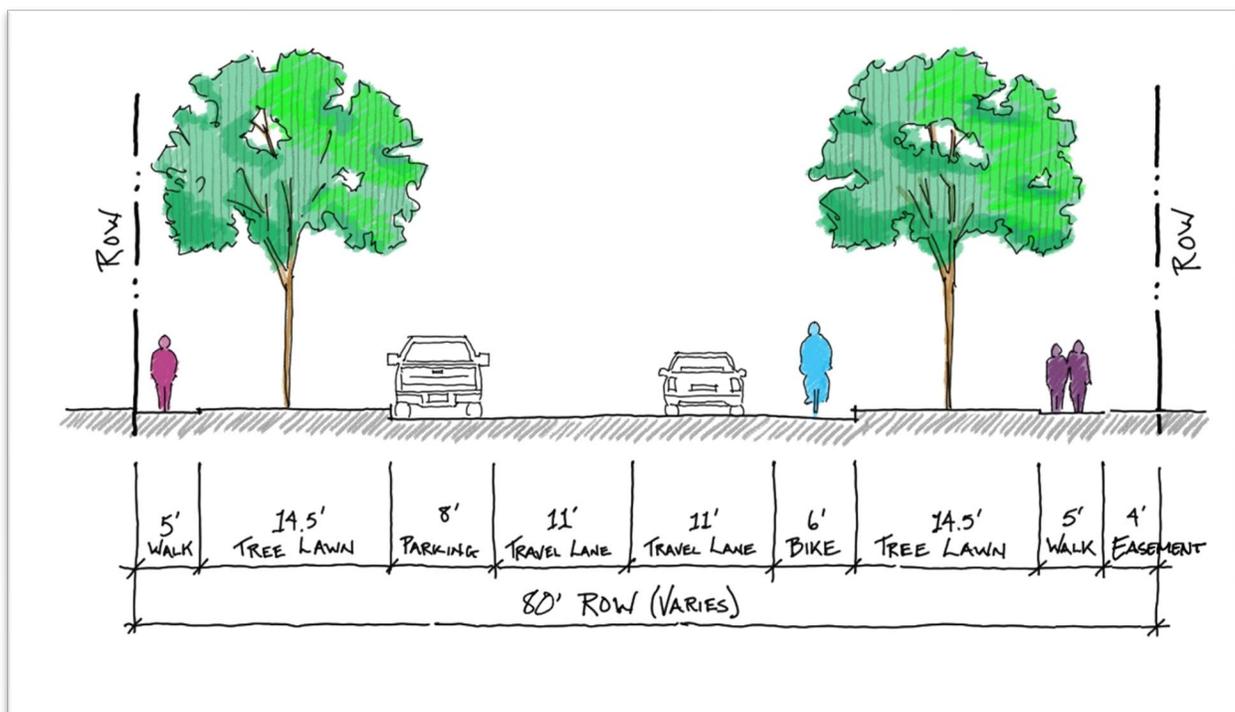


Figure 37: Enhanced One-Way/Two-Way Alternative - 5th St - North of Grand



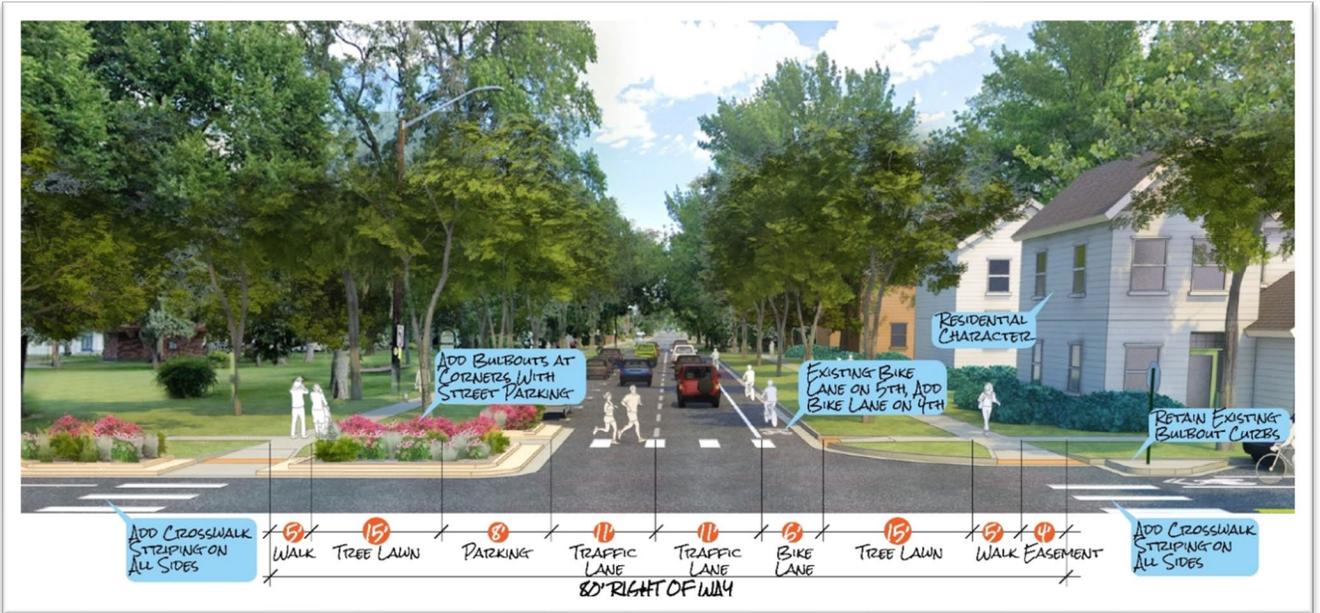


Figure 38: One-Way Residential Section - North of Grand Ave

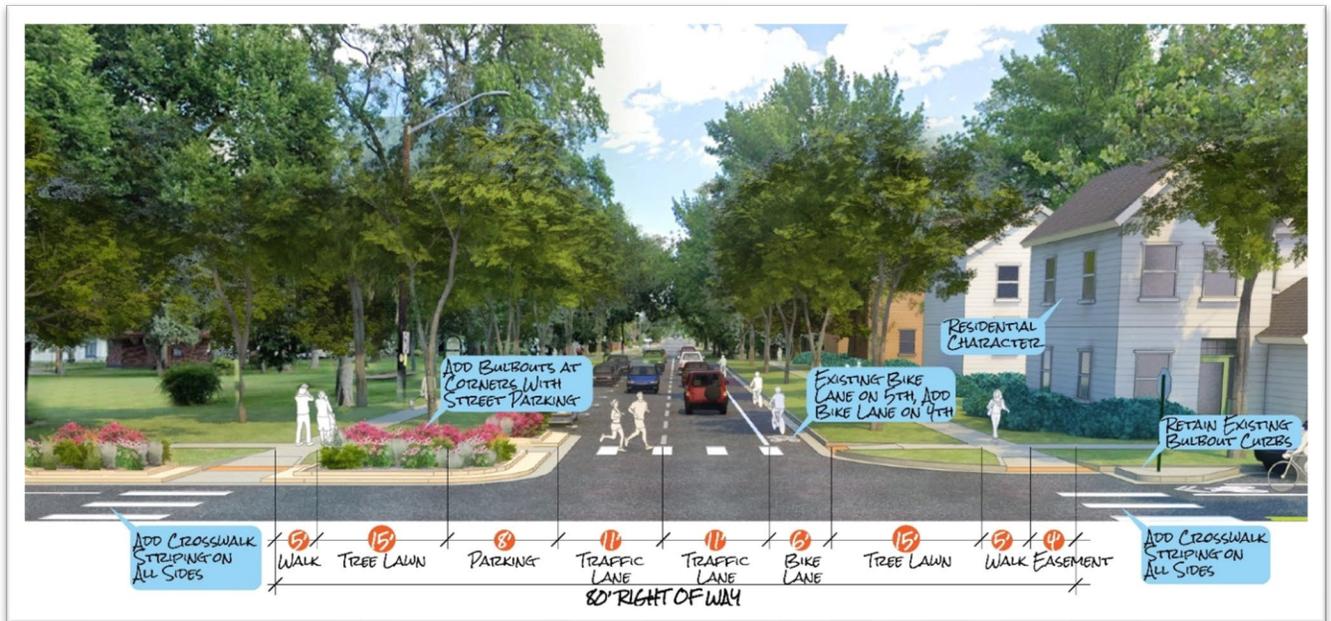


Figure 39: Two-Way Residential Section - North of Grand Ave

Proposed Alternatives: Grand to Ute (Commercial)

The following graphics represent the proposed alternatives for the southern portion of both corridors from Grand to Ute. Since the directional traffic is the primary delineator, visually they look very similar, providing many of the same enhancements. At this time, they are conceptual and will be further refined during the design phase.

4th Street

Along 4th Street, both the Enhanced One-Way and the Enhanced Two-Way Alternative provide two travel lanes, parallel parking on both sides where space permits, a southbound directional bike lane, and additional space for pedestrian activities and public placemaking. The bike lane is painted entirely green in the following visuals but would potentially only be painted green at the conflict points with implementation.



Figure 40: 4th St and Road Ave - Looking West

4th Street – Enhanced One-Way Alternative

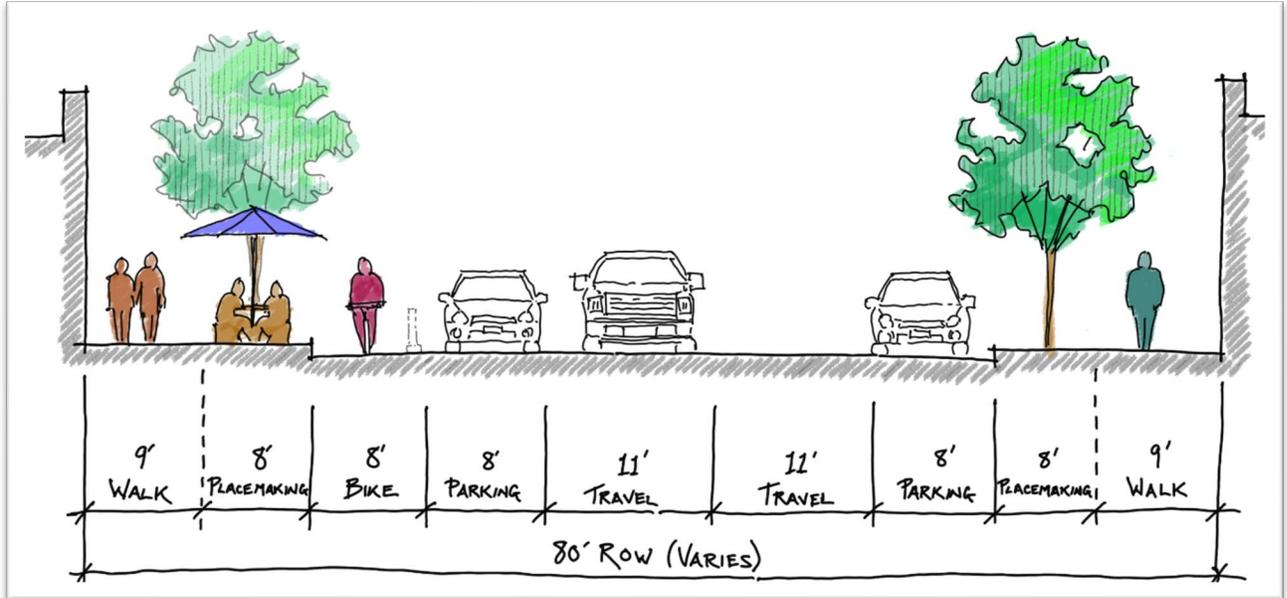


Figure 41: Enhanced One-Way Alternative - 4th St – Grand to Ute

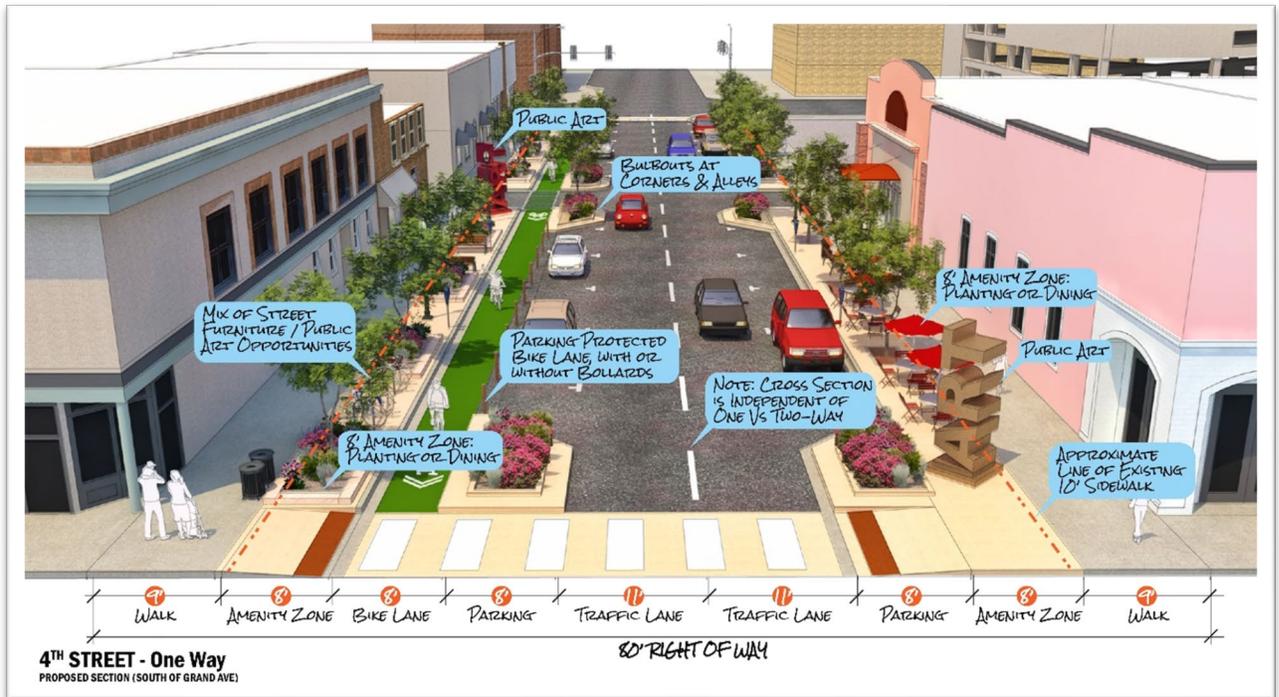


Figure 42: Proposed Section - One-Way - 4th St South of Grand Ave

4th Street – Enhanced Two-Way Alternative

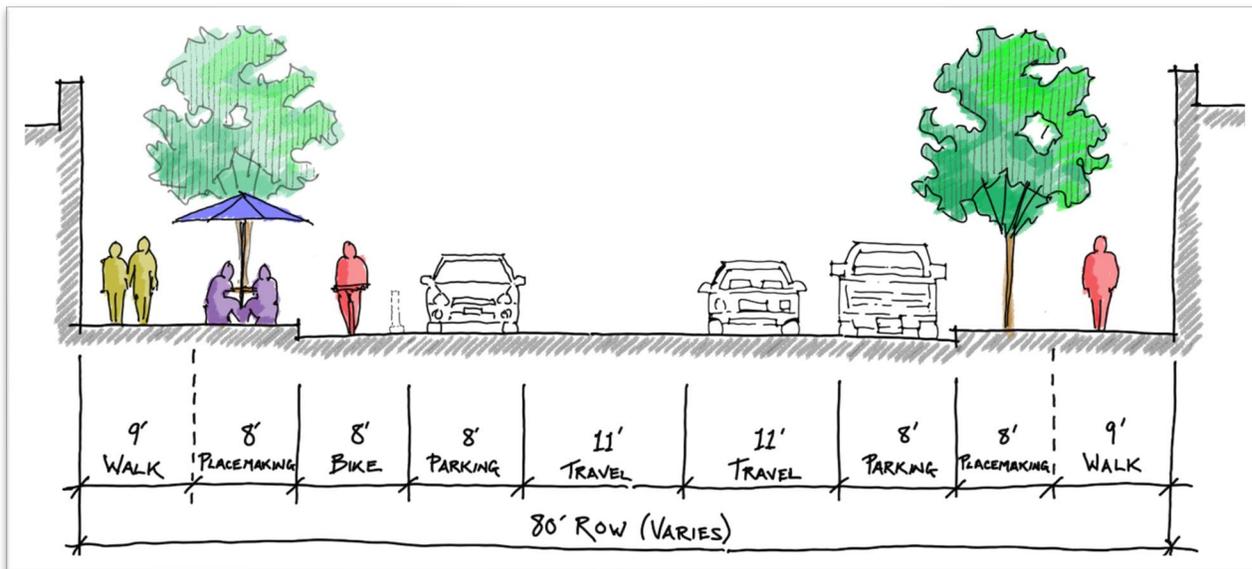


Figure 43: Enhanced Two-Way Alternative - 4th St – Grand to Ute

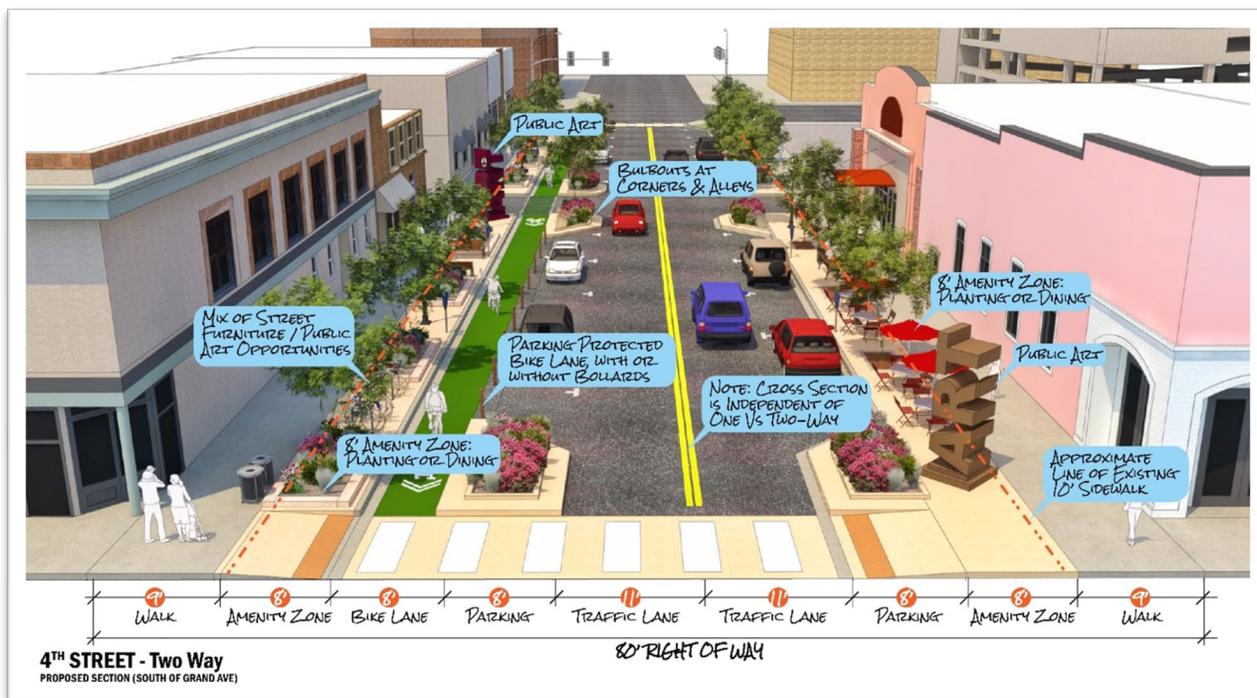


Figure 44: Proposed Section – Two-Way - 4th St - South of Grand Ave

5th Street

Along 5th Street, both the Enhanced One-Way and the Enhanced Two-Way Alternative provide two travel lanes, parallel parking on both sides where space permits, a northbound directional bike lane, and additional space for pedestrian activities and public placemaking. The bike lane is painted entirely green in the following visuals but would potentially only be painted green at the conflict points with implementation.



Figure 45: 5th Street and Main St – Looking Northwest

5th Street – Enhanced One-Way Alternative

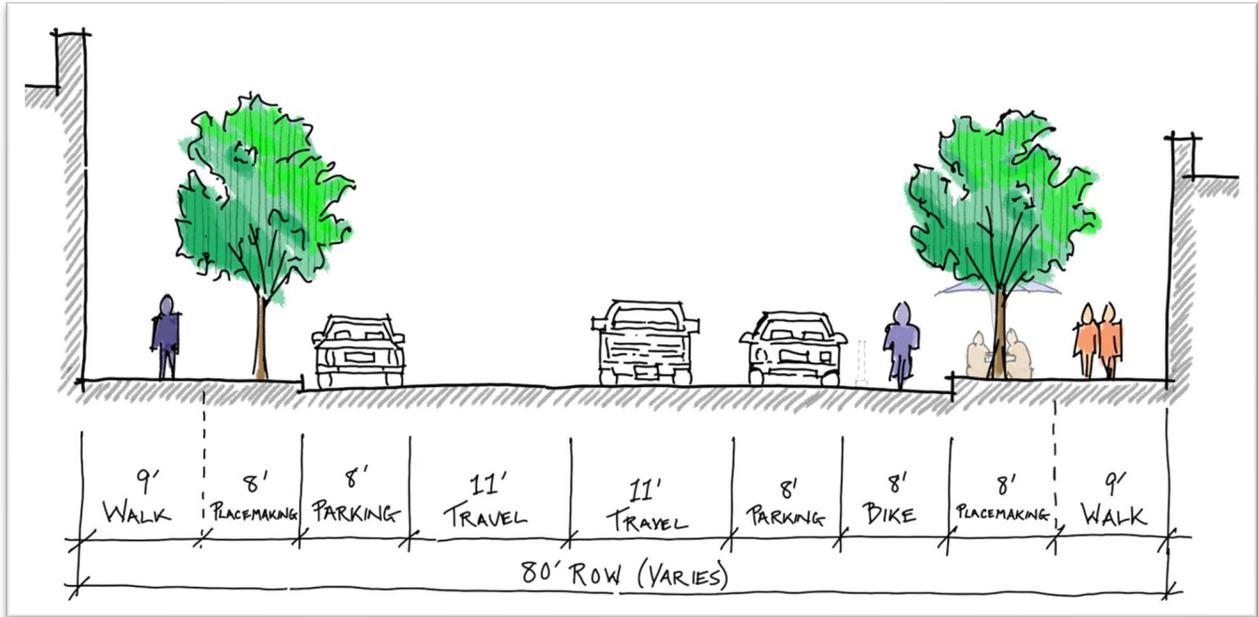


Figure 46: Enhanced One-Way Alternative - 5th St - Ute to Grand

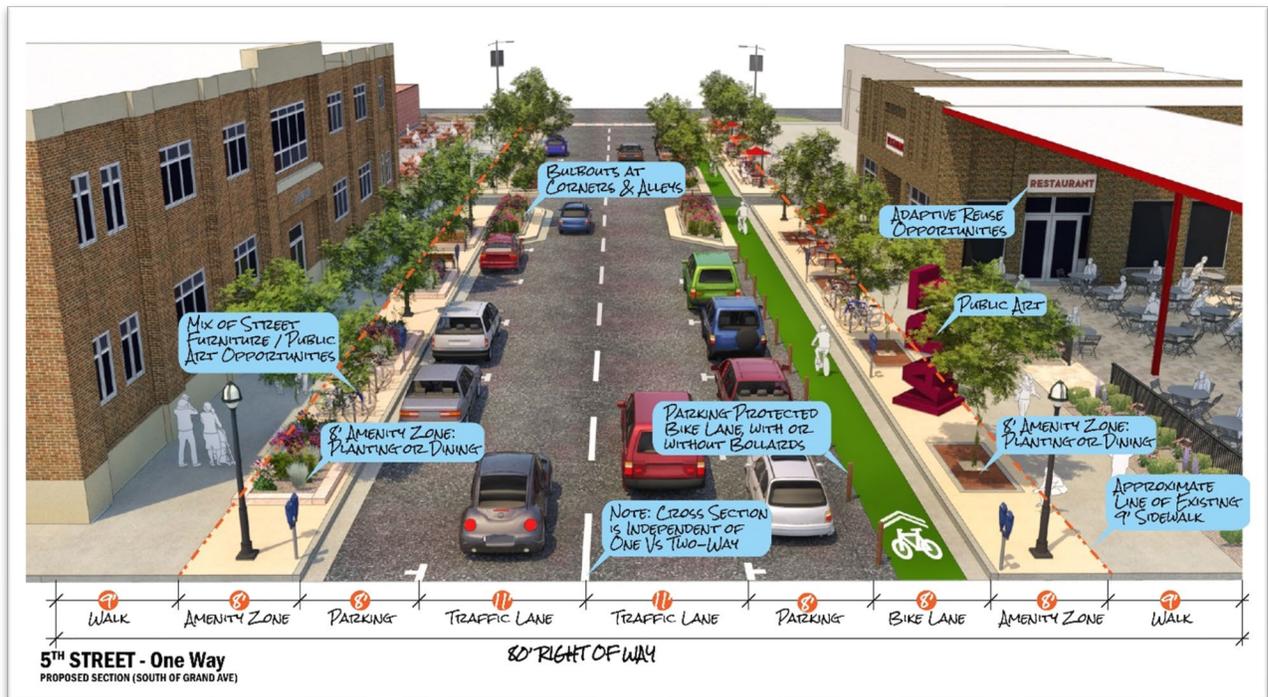


Figure 47: Enhanced One-Way Alternative - 5th St – Ute to Grand

5th Street – Enhanced Two-Way Alternative

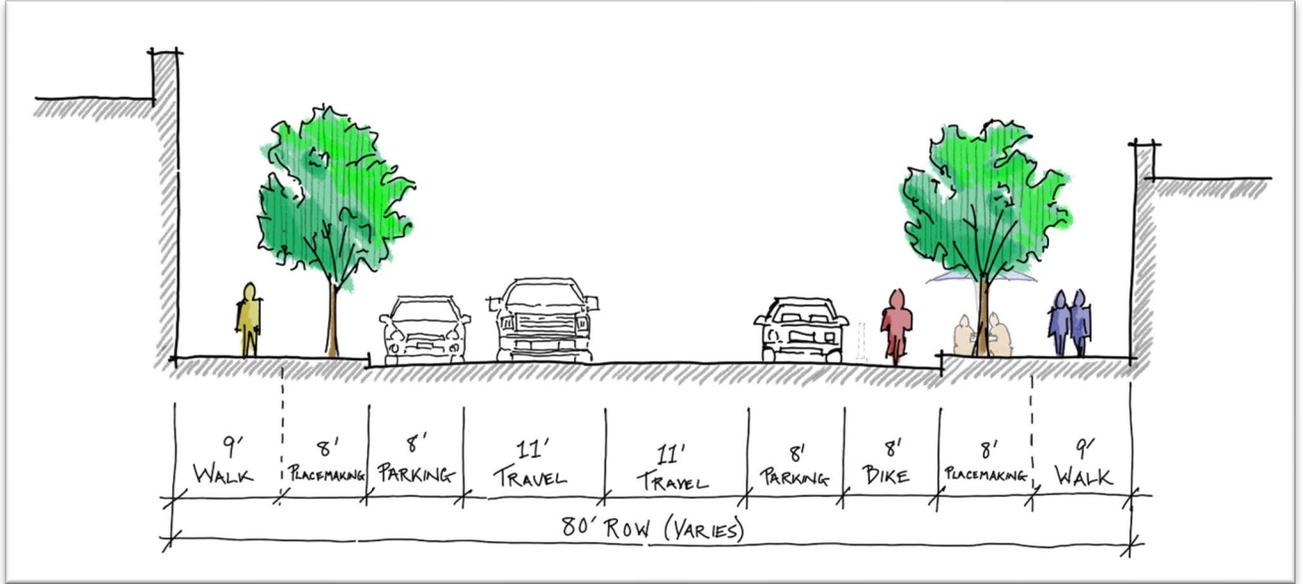


Figure 48: Enhanced Two-Way Alternative - 5th St - Ute to Grand

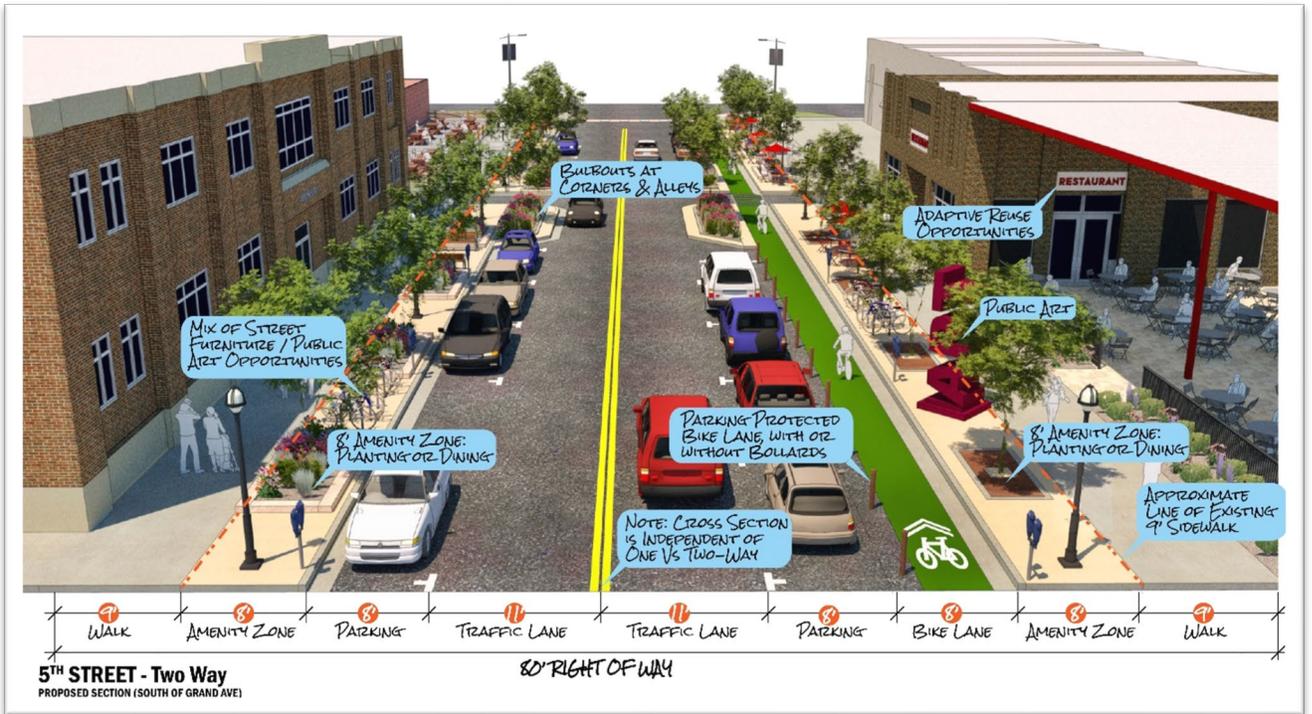


Figure 49: Enhanced Two-Way Alternative - 5th St – Ute to Grand

Feedback on Proposed Alternatives

As part of the online outreach component of the project during the month of September in 2021, an online survey was made available to the public and key stakeholders. The survey asked about preferences for the alternatives and provided an opportunity to gather additional feedback. There were a total of 164 respondents and an overwhelming majority of participants reported being a corridor user or visitor. Most importantly, more than half of respondents reported that they agreed or strongly agreed that the Enhanced One-Way Alternative aligns with the Vision Elements and preferred this option over the Enhanced Two-Way Alternative. The input received is summarized below and helped to inform the overall recommendations for this study.

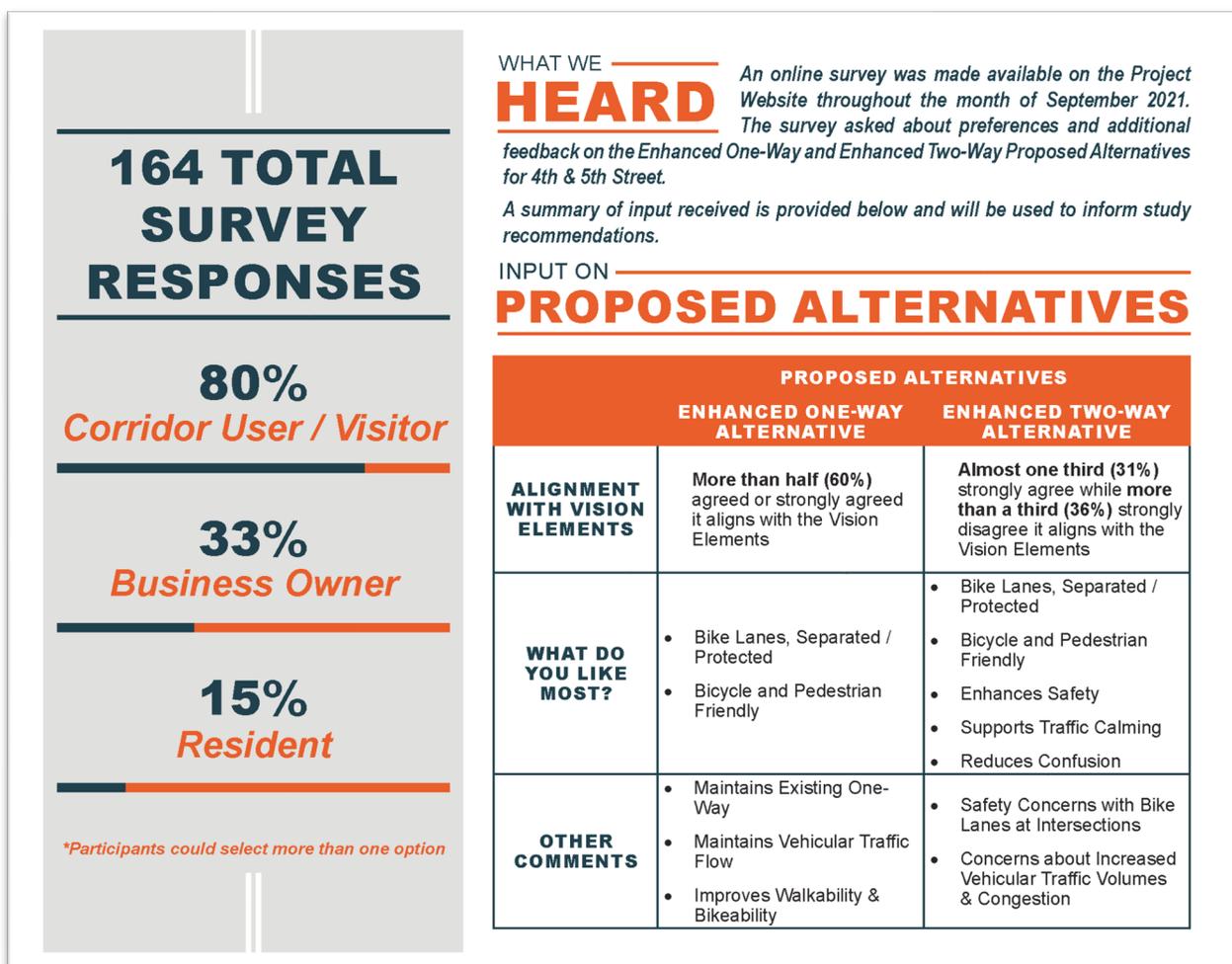


Figure 50: Online Survey Summary Shared with City Council and DDA Board

Analysis of Proposed Alternatives

Following the public input on the proposed alternatives, members of the TT and PAC, as well as City staff and the consultant team, completed their own individual analysis of the Enhanced One-Way Alternative and Enhanced Two-Way Alternative, as compared to the Existing One-Way condition. Largely qualitative in nature yet based on both best practice design and expertise within the team, the analysis focused on a set of Vision-based Criteria (using the Vision Elements and Goals) and includes an evaluation score with associated notes for each. Average scores and combined evaluation notes are presented in the matrix below, with a full-sized view available in the Appendix.

GRAND JUNCTION 4 TH & 5 TH ST FEASIBILITY STUDY					
PROPOSED ALTERNATIVES ANALYSIS MATRIX					
	EXISTING ONE-WAY PAIR	ENHANCED ONE-WAY ALTERNATIVE		ENHANCED TWO-WAY ALTERNATIVE	
	EVALUATION SCORE	EVALUATION SCORE	EVALUATION NOTES	EVALUATION SCORE	EVALUATION NOTES
VISION-BASED CRITERIA					
Enhance Safety					
Reduce Speeds	*	***	Infrastructure modifications reduce speeds	****	Infrastructure modifications reduce speeds Increase in potential conflicts could further reduce speeds
Reduce Crashes	*	****	Lower speeds reduce crashes	****	Lower speeds reduce crashes Increase in potential conflicts could result in more crashes
Optimize Traffic Circulation					
Reduce Driver Confusion	*	***	Maintains current travel patterns for locals	****	Less long-term confusion for all travelers
Encourage Traffic Calming	*	***	Slower speeds and roadway design encourage traffic calming	****	Slower speeds, roadway design, and more potential conflicts encourage traffic calming
Promote Direct Local Connections	**	**	Requires some out of direction travel for local connections, although minimal Decrease in through traffic	***	Provides more direct local connections Decrease in through traffic
Support Corridor Truck Deliveries	***	***	May need designated loading zone and encourage use of alleys	**	May need designated loading zone and encourage use of alley May impact directional travel
Support Transit	***	****	Opportunity for improved bus stops	****	Opportunity for improved bus stops
Improve Walkability & Bikeability					
Improve Crossings	*	****	Shorter crossing distances plus bulbouts Need to consider double threat from two one-way vehicles	****	Shorter crossing distances plus bulbouts, except at left-turn locations (2-3 intersections)
Provide/Improve Bicycle Facilities	*	****	Provides consistent bicycle facilities	****	Provides consistent bicycle facilities
Improve Sidewalks	**	****	Widens and enhances sidewalk area	****	Widens and enhances sidewalk area
Activate Economic Development					
Improve Business Access	**	***	Slower speeds improves business access	****	Slower speeds and more direct connections improve business access
Provide Opportunities For Amenities	**	****	Widened sidewalks allow for placemaking/landscaping opportunities	****	Widened sidewalks allow for placemaking/landscaping opportunities
Enhance Parking	**	****	Consistent, parallel parking with lower speeds will enhance parking and reduce quantity of spots	***	Consistent, parallel parking with lower speeds will enhance parking and reduce quantity of spots (even more with left-turns)
Preferency Costs		(\$)	-	(\$)	Higher cost due to modification to signals and signage

Figure 51: Alternatives Evaluation Matrix

Overall, the Enhanced One-Way Alternative and Enhanced Two-Way Alternative were determined to result in greater benefits than the Existing One-Way Pair, indicating that either would be better than the current conditions roadways. When comparing the level of benefits for the Enhanced One-Way Alternative to the Enhanced Two-Way Alternative, they generally level out.

The notable differences between the two directional scenarios are the improved opportunities for loading/unloading with the Enhanced One-Way Alternative and the greater level of opportunity for traffic calming with the Enhanced Two-Way Alternative.

Therefore, based upon community and stakeholder feedback, a set of concept design alternatives that achieved Vision Elements and Goals that were community driven, and a corresponding analysis of the proposed alternatives through the criteria of the same Vision and Goals, the study team can confirm the feasibility of either proposed alternative, with both achieving a comparable level of adherence to the community's stated vision.

Traffic Analysis for Proposed Alternatives

In addition to the analysis performed against the Vision-based Criteria, several traffic analyses were completed throughout the study to determine how motor vehicle traffic might be affected by future growth while either maintaining the existing one-way configuration or making changes to the roadway configuration allowing for two-way travel along both 4th and 5th Street. This analysis also reveals potential impacts to motor vehicle travel for nearby and adjacent roadways. A summary of results is provided below, while the full traffic memo can be found in the Appendix.



Figure 52: 4th St and North Ave

With support from the Mesa County Regional Transportation Planning Office, both the one-way and two-way scenarios were evaluated using the 2045 Regional Travel Demand Model. Through this analysis, it was determined that both 4th and 5th Streets would operate at acceptable levels under either condition, resulting in a general level of delay on both streets with the reduction in travel lanes and addition of other bicycle and pedestrian elements. Although still acceptable in this urban setting, the Enhanced Two-Way Alternative has the potential to cause a greater delay at the intersections due to the increase in vehicular conflicts.

As a regional model, the results were also used to consider the potential impacts on nearby corridors. The proposed improvements would encourage some travelers to move to 1st and 7th Streets; however, the impact would be minimal and both 1st and 7th Streets have been shown to have the capacity to handle the slight increase in traffic.



Figure 53: Traffic Analysis Summary Shared on Project Website

As the alternatives were refined and the proposed Enhanced One-Way and Enhanced Two-Way Alternatives were developed, a more **detailed traffic analysis** was conducted on 4th and 5th Streets and the associated intersections. Results indicate acceptable Levels of Service under both scenarios, with both 2021 and 2045 traffic volumes.

Under the **Enhanced One-Way Alternative** similar operations are maintained, traffic speeds are reduced. Under the **Enhanced Two-Way Alternative** travel is transitioned to two-way on both streets, traffic speeds are reduced, no additional left-turn lanes are expected, and one additional signal may be needed at 4th Street / North Avenue. Under both alternatives, due to speed reduction, there is potential for signal removal at the following locations:

- 4th Street / White Avenue
- 4th and 5th Street / Rood Avenue
- 4th and 5th Street / Main Street

The overall traffic analysis results indicate that the addition of the corridor enhancements under either the one-way or two-way scenario, would ultimately slow down speeds, allow for bicycle facilities, and improve the crossing distance along both corridors. The preliminary results will be further considered by City traffic engineers as design and implementation move forward.

Cost Considerations

Cost considerations for the proposed alternatives are dependent upon many things: materials, temporary or permanent infrastructure, reconstruction or overlay, signal modifications, landscaping, and more. Under the feasibility study, a range of preliminary cost estimates were developed allowing for a more phased implementation of improvements, as funds become available. All costs here were developed in 2021 and would need to be escalated for inflation at the time of implementation.

Cost estimates associated with the full build-out of the Enhanced One-Way and the Enhanced Two-Way Alternatives include complete roadway reconstruction, improved public spaces, and landscaping for the entire corridor. The primary cost increase for the Enhanced Two-Way Alternative is the expense associated with modifying appropriate traffic signals, signage and striping, and median islands totaling approximately \$1 Million.

- Full-Build Out and Roadway Reconstruction of Enhanced One-Way Alternative
 - \$16 Million
- Full Build Out and Roadway Reconstruction of Enhanced Two-Way Alternative
 - \$17 Million

Given this high price tag, a secondary cost estimate for the Enhanced One-Way Alternative, allowing for a phased implementation of the proposed improvements, was created. The initial phase includes fewer overall improvements such as only chip seal and patching, striping instead of curb relocation, and implementation of temporary pedestrian and public space elements.

- Phased Implementation of Enhanced One-Way Alternative
 - \$2.2 Million

The phased implementation cost estimate allows for options based on the available funds. The City can choose to make changes by the block or apply striping along the full corridor. The application of temporary infrastructure at the intersections provides opportunities to test out modifications and examine travel patterns before investing more funds in permanent features. Expensive elements like pavers and landscaping can also be added over time. Costs would need to be refined prior to design and construction but the preliminary costs established as part of the feasibility study provide guidelines for budgeting and decision-making for the proposed future improvements.





GRAND JUNCTION

4TH & 5TH ST

FEASIBILITY STUDY



Chapter 3 – Looking to the Future



RECOMMENDATIONS

This Study asserts the feasibility of both proposed configurations and acknowledges that either the Enhanced One-Way or the Enhanced Two-Way Alternative can successfully achieve the Vision, Goals and Study Area Priorities established at the outset of this project.

That said, and considering budgetary constraints, the lower cost **Enhanced One-Way Alternative is recommended**, at least as a “Phase 1”. Being confident and candid, the one-way scenario may serve the City of Grand Junction and its residents well for many years and not necessitate the evolution to a “Phase 2,” two-way configuration, but our alternative development process allows for that very transition should it be desired in the future. Proceeding with the one-way transition and integration of enhanced improvements at the initial phase allows for the downtown to benefit from a lower cost implementation in the short-term –demonstrating tangible progress toward several years of engagement by the community through other Plans – and sets the city up to evaluate the effects of these improvements and assess the need for others at a future date.

The 4th and 5th Street Feasibility Study resulted in two recommended alternatives: Enhanced One-Way and Enhanced Two-Way.

Both the one-way and the two-way alternatives align with the Vision and Goals established by the public, they maintain acceptable traffic operations due to the overall speed reduction, and they provide more opportunities for bicycle and pedestrian access as well as economic development.

ENHANCED ONE-WAY ALTERNATIVE

4TH ST - UTE TO GRAND (CONCEPT SKETCH)

5TH ST - UTE TO GRAND (CONCEPT SKETCH)

ENHANCED TWO-WAY ALTERNATIVE

4TH ST - UTE TO GRAND (CONCEPT SKETCH)

5TH ST - UTE TO GRAND (CONCEPT SKETCH)

NEXT STEPS

A phased approach to the Enhanced One-Way would produce more immediate results with available funds, provide an opportunity for pilot projects supporting future infrastructure modifications, and allow for assessment of traffic operations under the lower traffic speeds.

The implementation of the Enhanced One-Way alternative does not preclude future consideration of the Enhanced Two-Way alternative.

VISION & GOALS

- ENHANCE SAFETY**
- IMPROVE WALKABILITY & BIKEABILITY**
- ACTIVATE ECONOMIC DEVELOPMENT**
- OPTIMIZE TRAFFIC CIRCULATION**

*Full sets of renderings and other visuals available on the project website:
<https://bhi.mysocialpinpoint.com/gj-4th5th-study>*

Figure 54: Summary of Recommendations

As the City of Grand Junction moves into the next steps of implementing changes to the 4th and 5th Street corridors, one of the distinctive benefits of the recommended design alternative for the one-way scenario is that the right-of-way allocation and roadway geometry has been designed in a manner that allows for implementation of the vision, while not precluding an evolution to the two-way scenario without significant investment. Importantly, all of the design alternatives considered how lower cost, short-term investment could be improved upon, rather than proving to ultimately be a redundant expense. Specifically, a transition from the one-way configuration to the two-way configuration could be achieved without replacement of curb and gutter infrastructure, and rather would be an investment in restriping, additional signage and potentially signalization.

Implementation

Expounding on the recommendation to move forward the Enhanced One-Way Alternative for design and construction, refinements to the typical section were completed. The following layout figures provide a more detailed visual plan for the future of both corridors. You will note the elements previously shared in the proposed alternatives of Chapter 2, including wider sidewalks, directional bike lanes on each roadway, enhanced crosswalks including bulb-outs to improve pedestrian comfort, and parallel parking. However, in the layout figures, it becomes more tangible as tweaks are made to fit within right-of-way, access, and natural elements. All the while ensuring alignment with the goals established by the community – safety, walkability and bikeability, economic development, traffic operations – is maintained.

As refinements to the conceptual Enhanced One-Way Alternative were being considered, it was determined that the existing two-way travel would remain at the north end of both 4th and 5th Streets. This decision allowed a safer transition with North Avenue under the current operational conditions. Connectivity of the bicycle facilities were considered within the study area and to the north. Improved signage for the various travel modes will be integrated as part of the design, including green paint for conflict areas with bicycles and enhanced crosswalk elements where appropriate.

The preliminary traffic analysis suggested that some of the signalized intersections could be transitioned to stop control intersections. Instead of making this modification immediately, the City intends to analyze this recommendation and potentially do a pilot project to evaluate how well traffic flows under the various options.

Layout of Enhanced One-Way Alternative

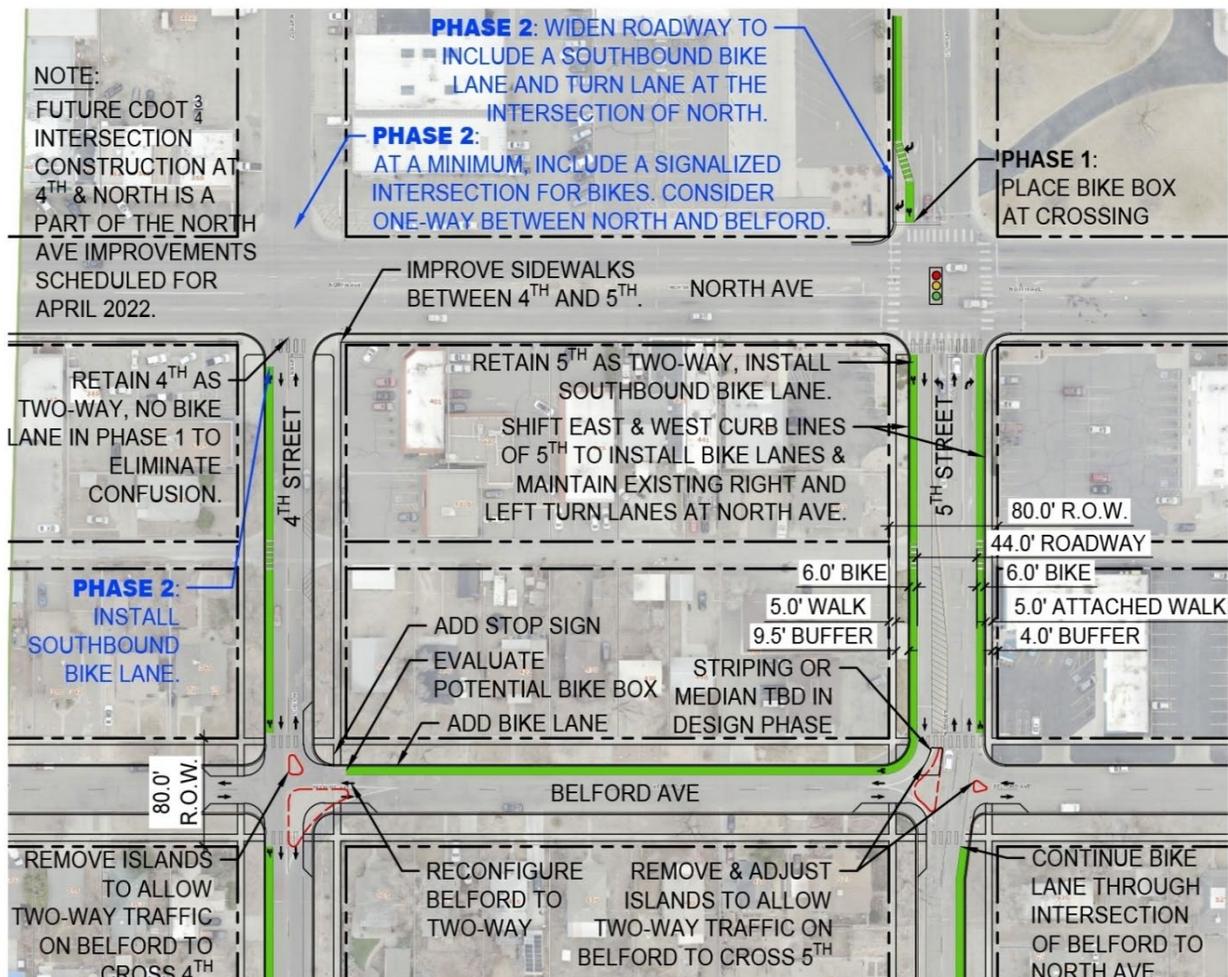
The layout figures below are just the beginning of an exciting step forward for the City of Grand Junction and the Downtown Development Authority. The implementation of the Enhanced One-Way Alternative creates a myriad of opportunities to change the experience for all users along 4th and 5th Street and truly activate economic development for years to come.

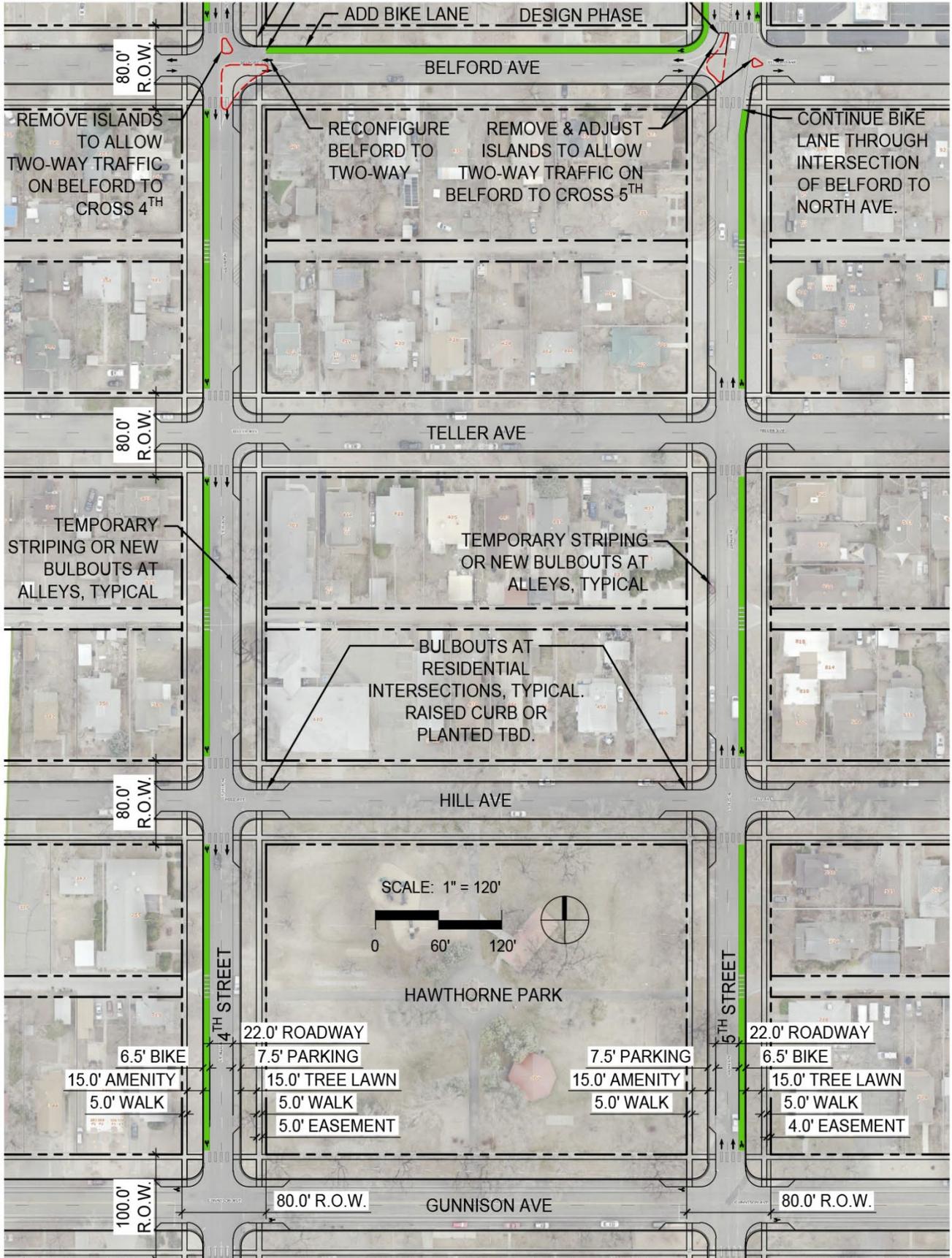
LEGEND

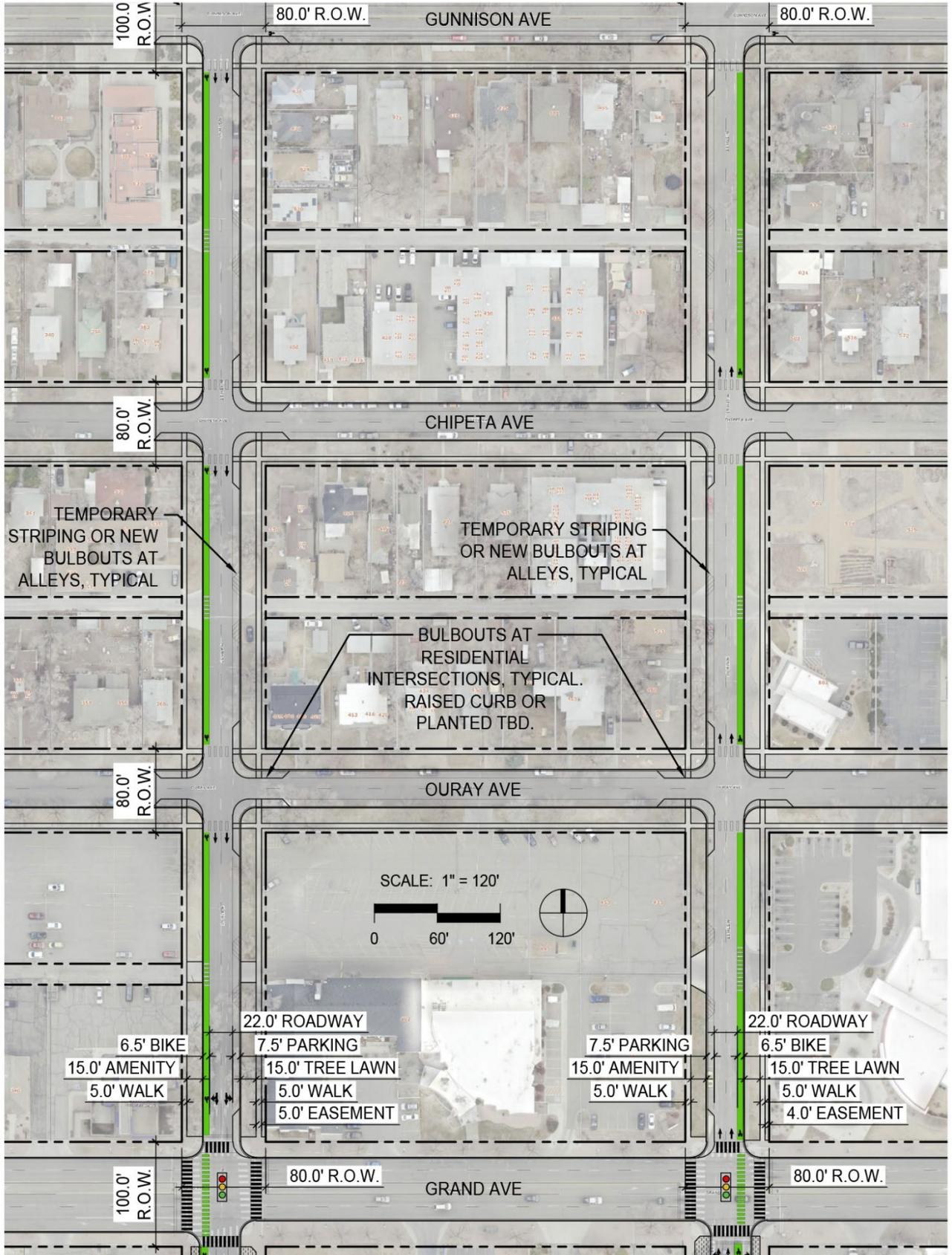
-  RIGHT-OF-WAY LINE
-  PROTECTED BICYCLE LANE
-  AMENITY ZONE (FURNITURE, LANDSCAPING, TREES, ETC.)
-  ROADWAY STRIPING
-  RAISED CURB AT INTERSECTIONS FOR PROTECTED BIKE LANE
-  EXISTING SIGNAL LOCATIONS

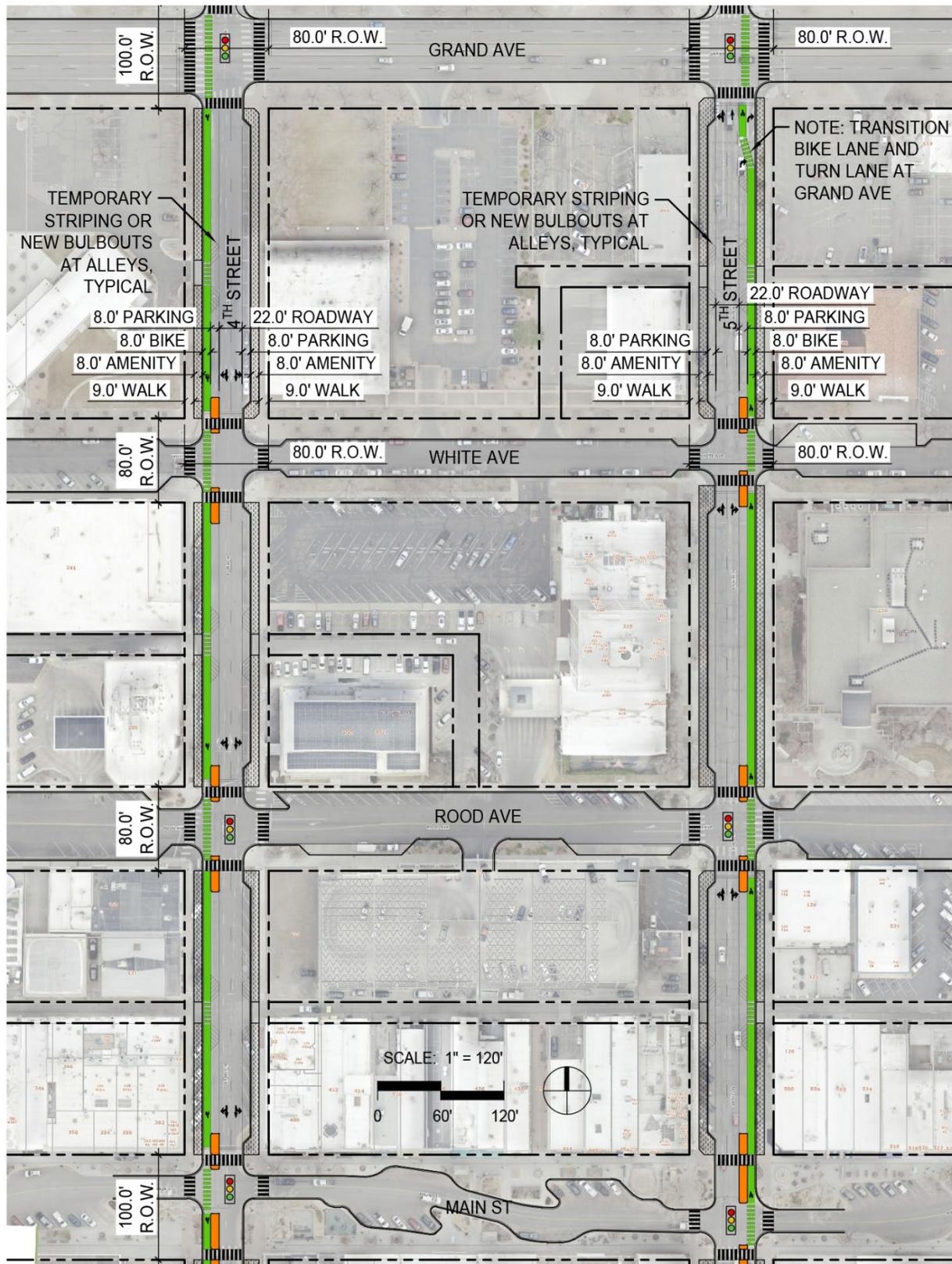
NOTES:

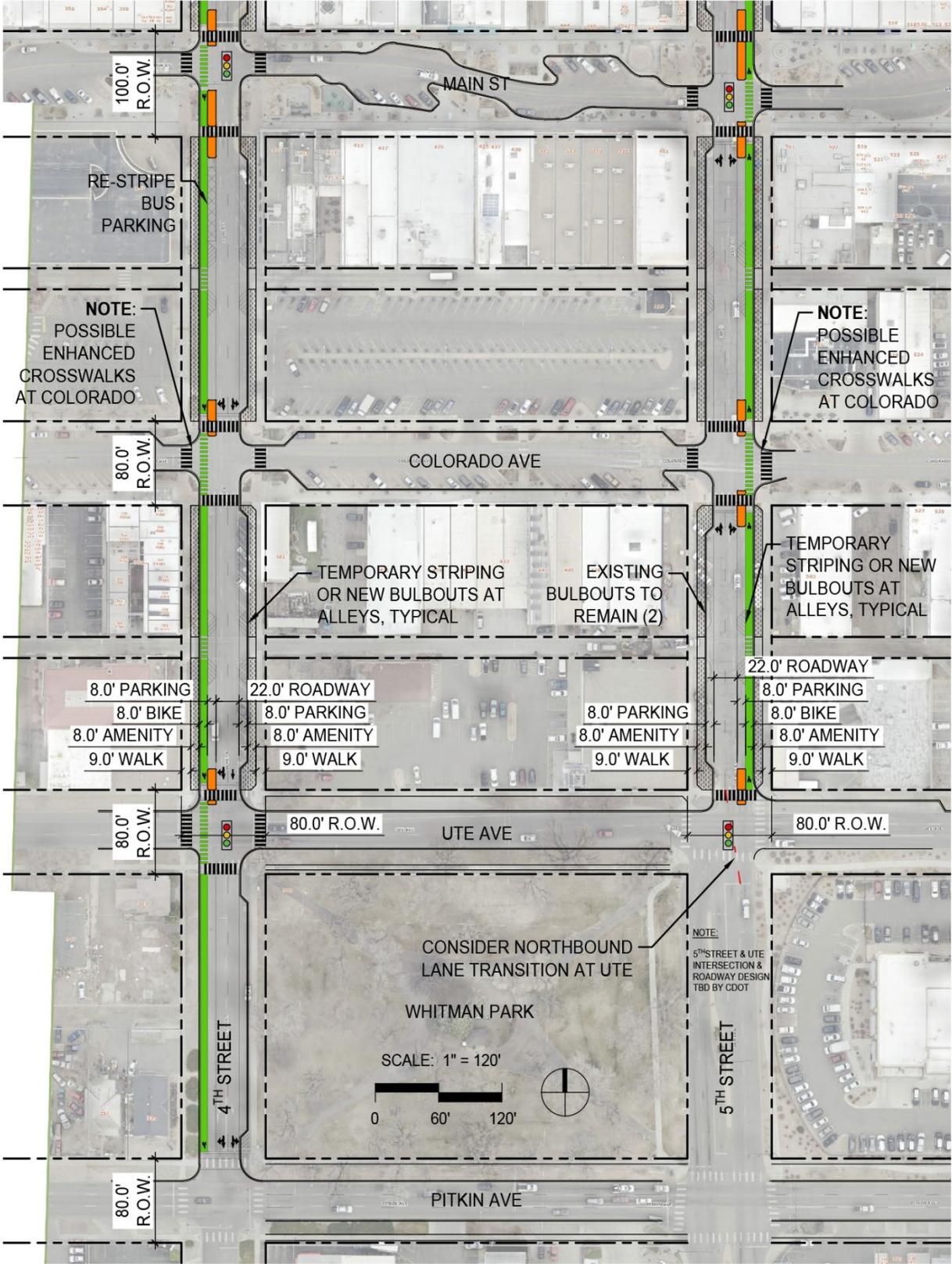
1. PRELIMINARY LAYOUT FOR STUDY PURPOSES ONLY.
2. ASSUMES EXISTING CURBLINE TO REMAIN FROM GRAND AVE TO BELFORD AVE.
3. ASSUMES CROSS STREET CONDITIONS TO REMAIN EXCEPT AT CORNER & BULBOUT TRANSITIONS AND AT BELFORD.
4. GREEN STRIPING FOR BICYCLE LANES IS SHOWN FOR GRAPHIC PURPOSES ONLY. INSTALLED APPLICATION WILL VARY.













GRAND JUNCTION

4TH & 5TH ST

FEASIBILITY STUDY

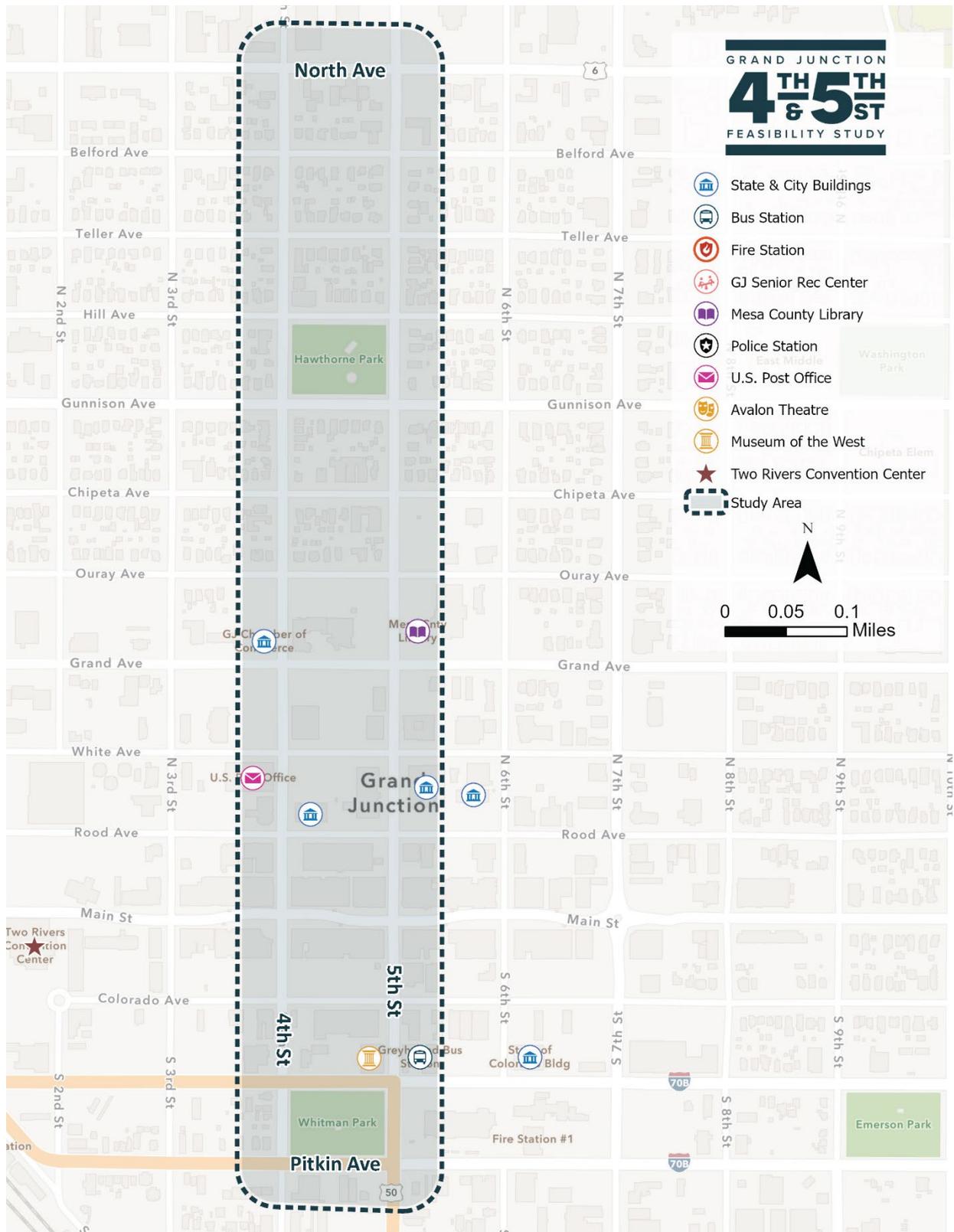


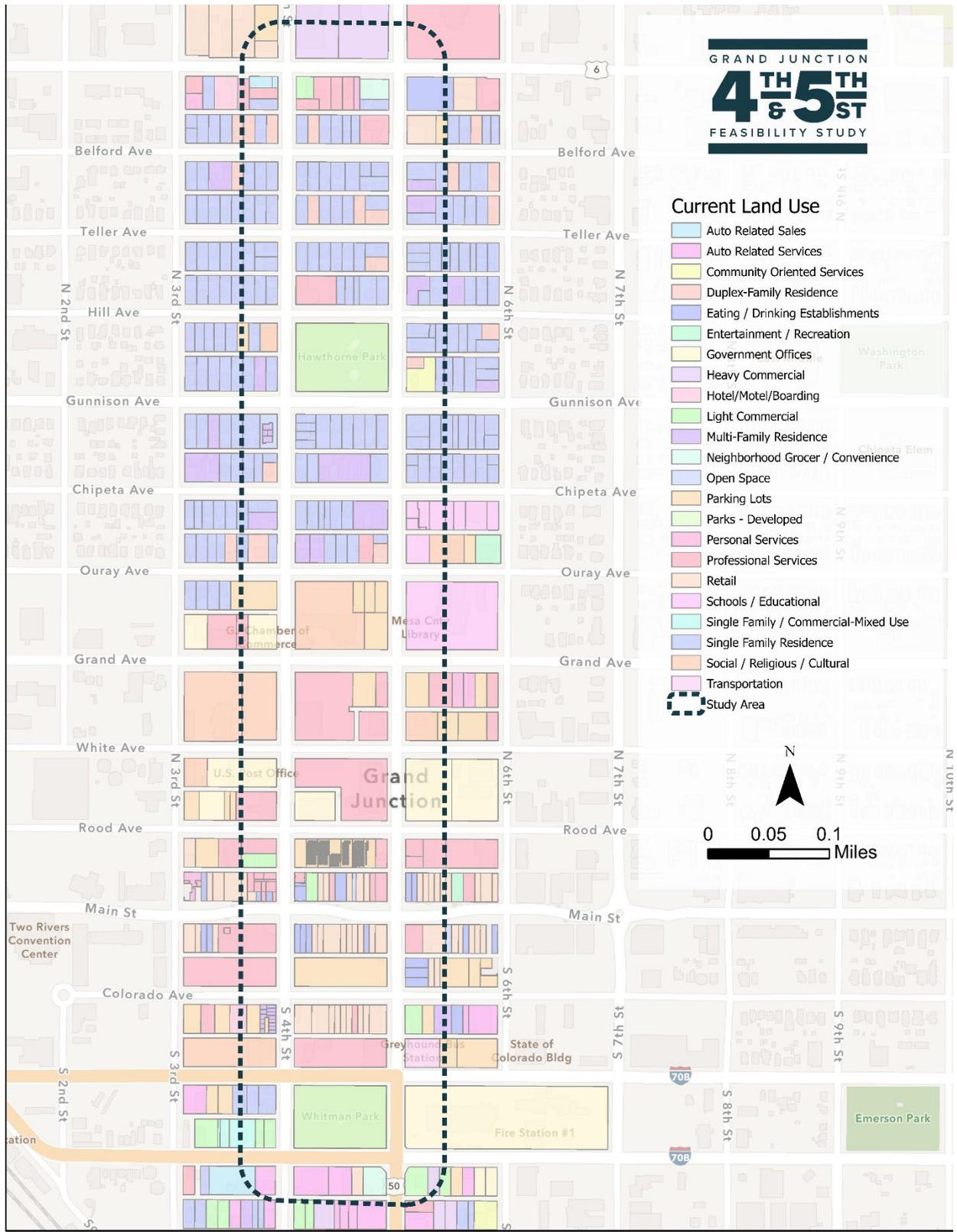
Appendix 1 – Maps & Outreach

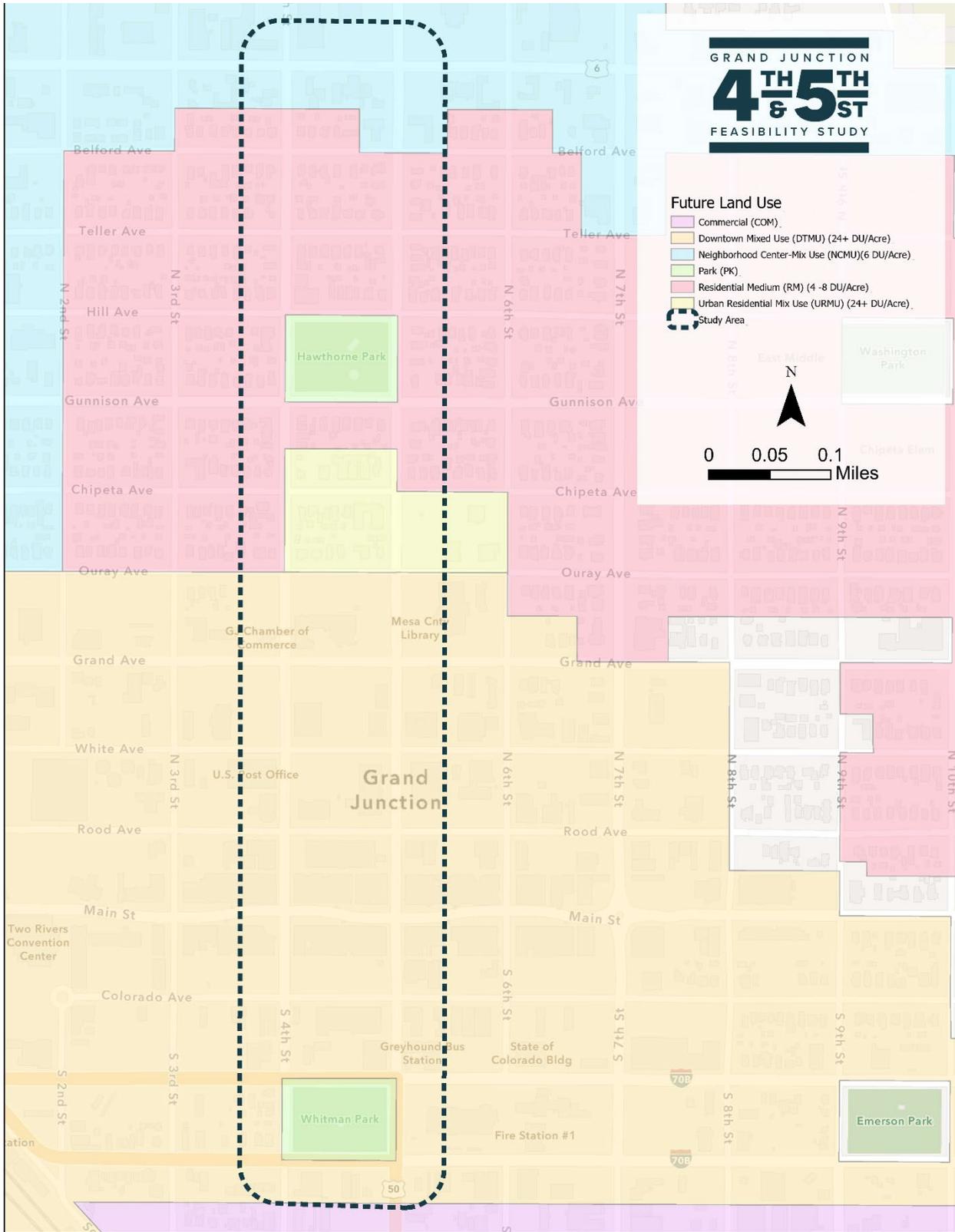
STUDY MAPS

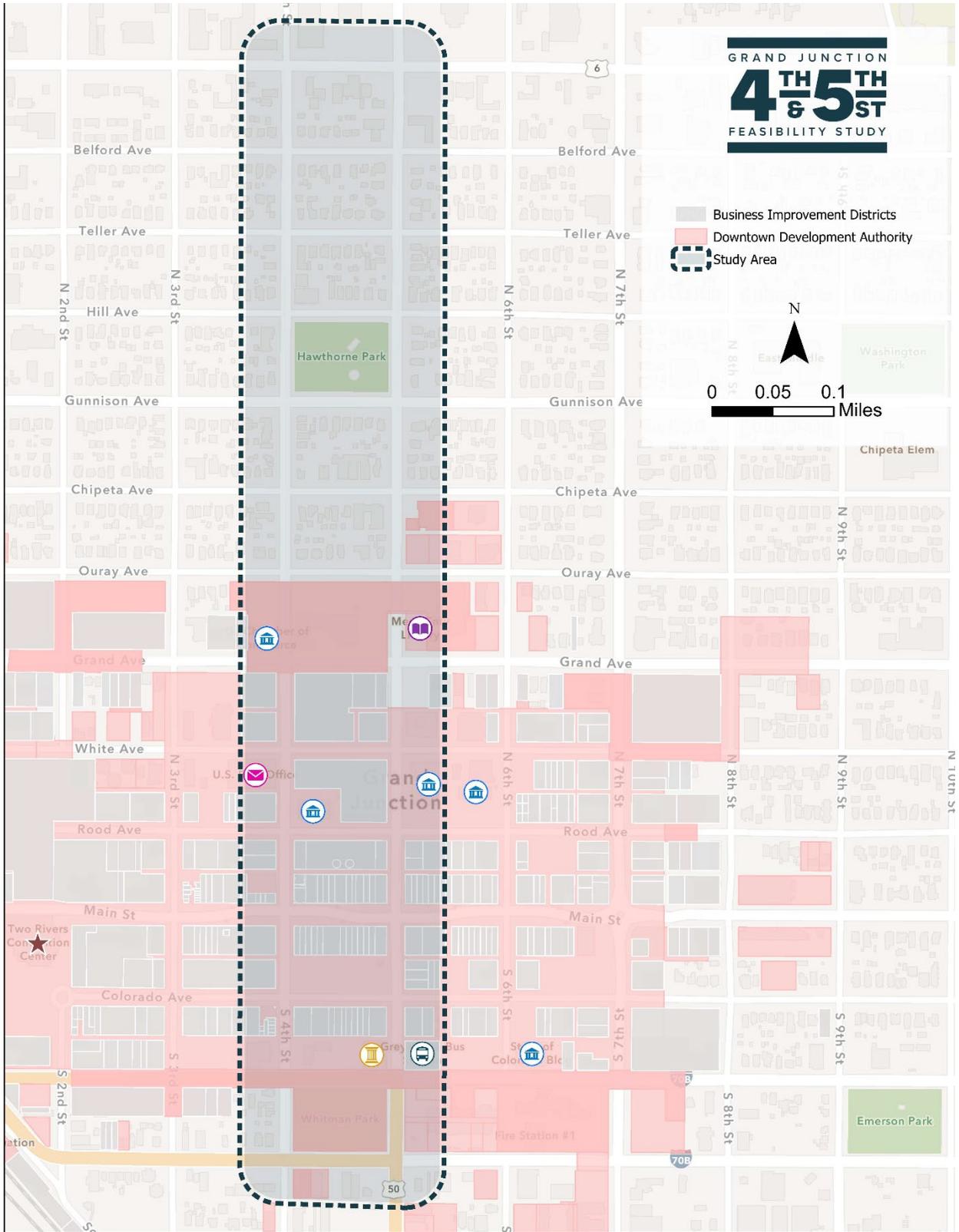
- Project Area Overview
- Current Land Use
- Future Land Use
- Downtown District
- Historic Assets
- Parking Facilities
- Pedestrian and Bicycle Facilities
- Transit Facilities

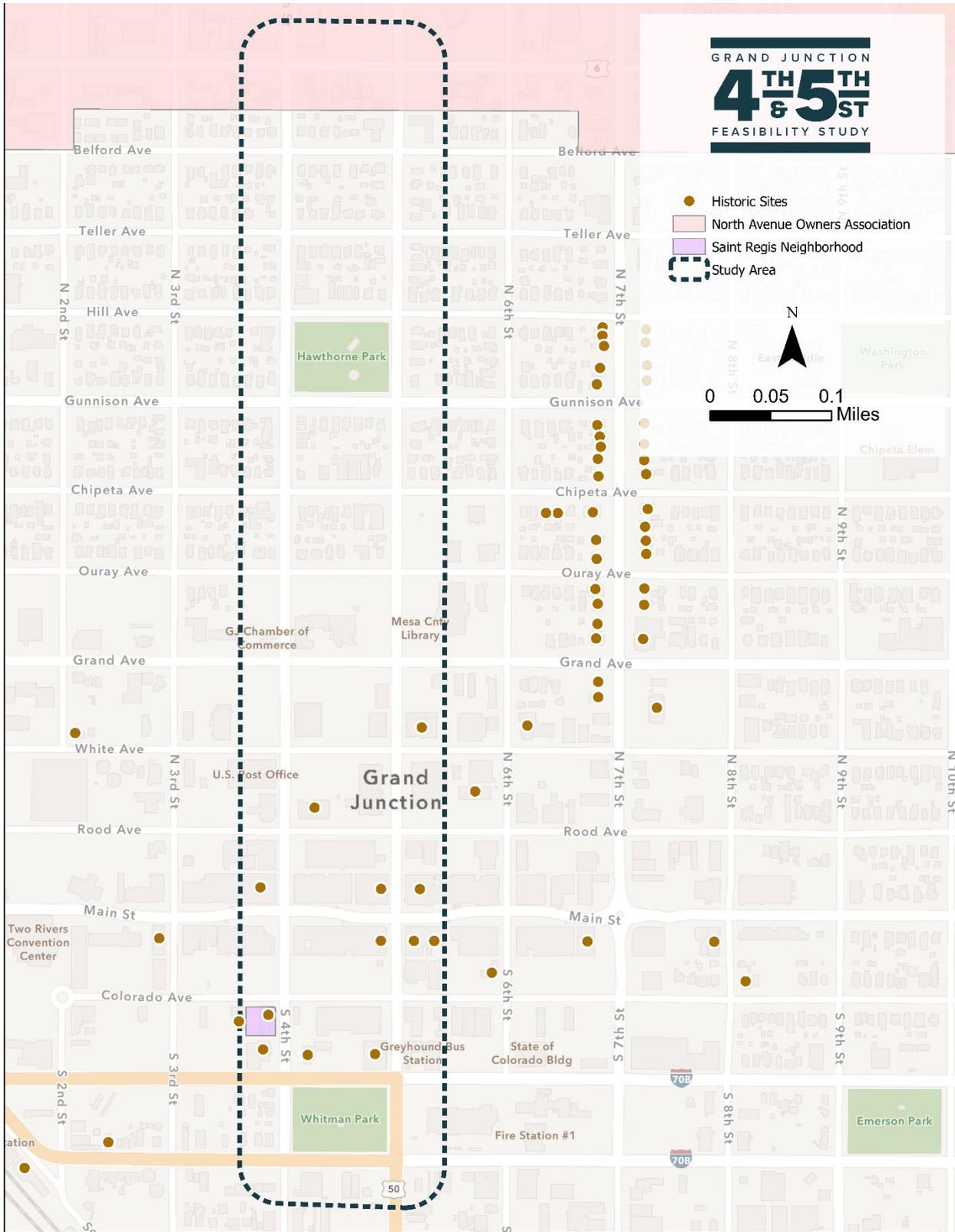


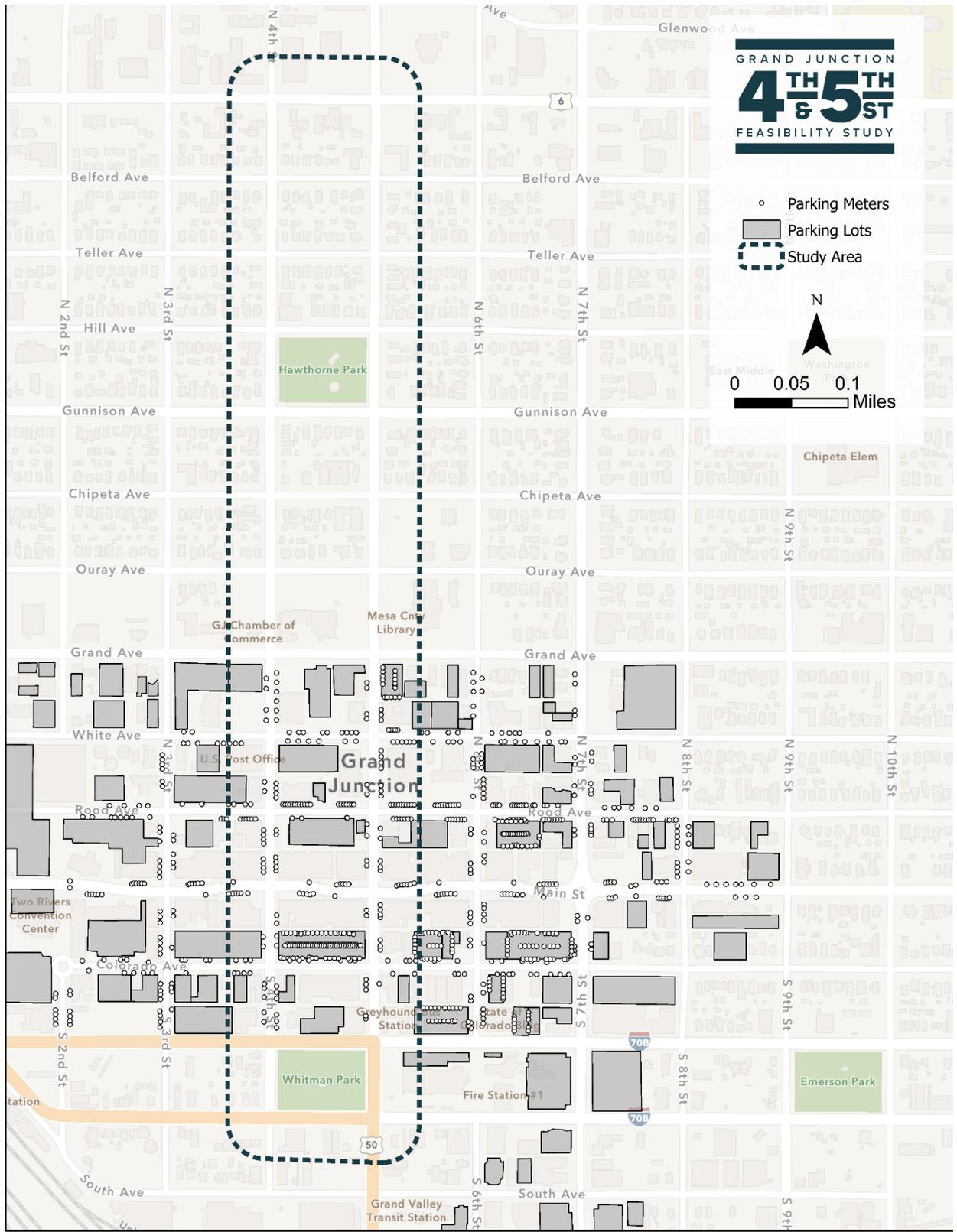


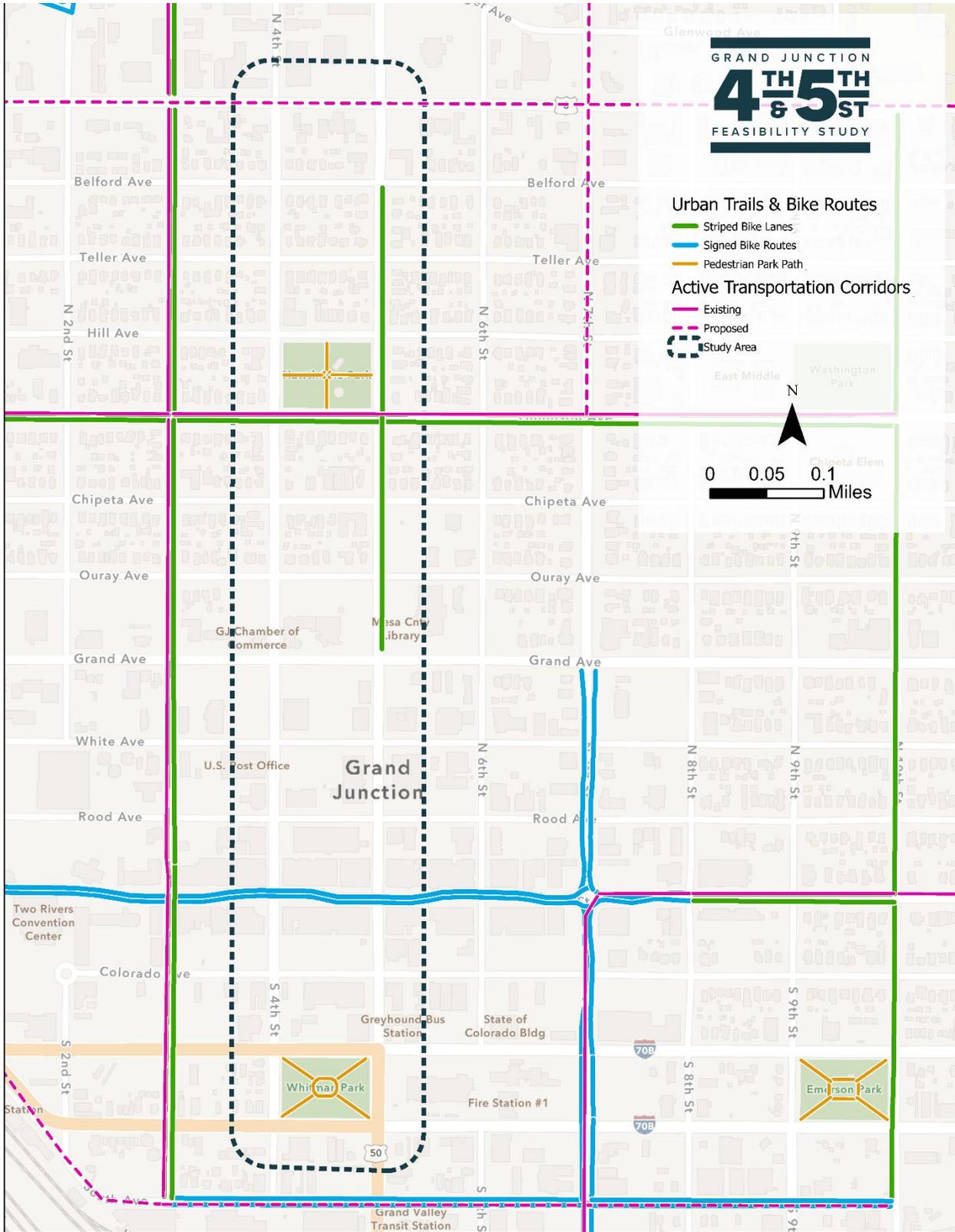


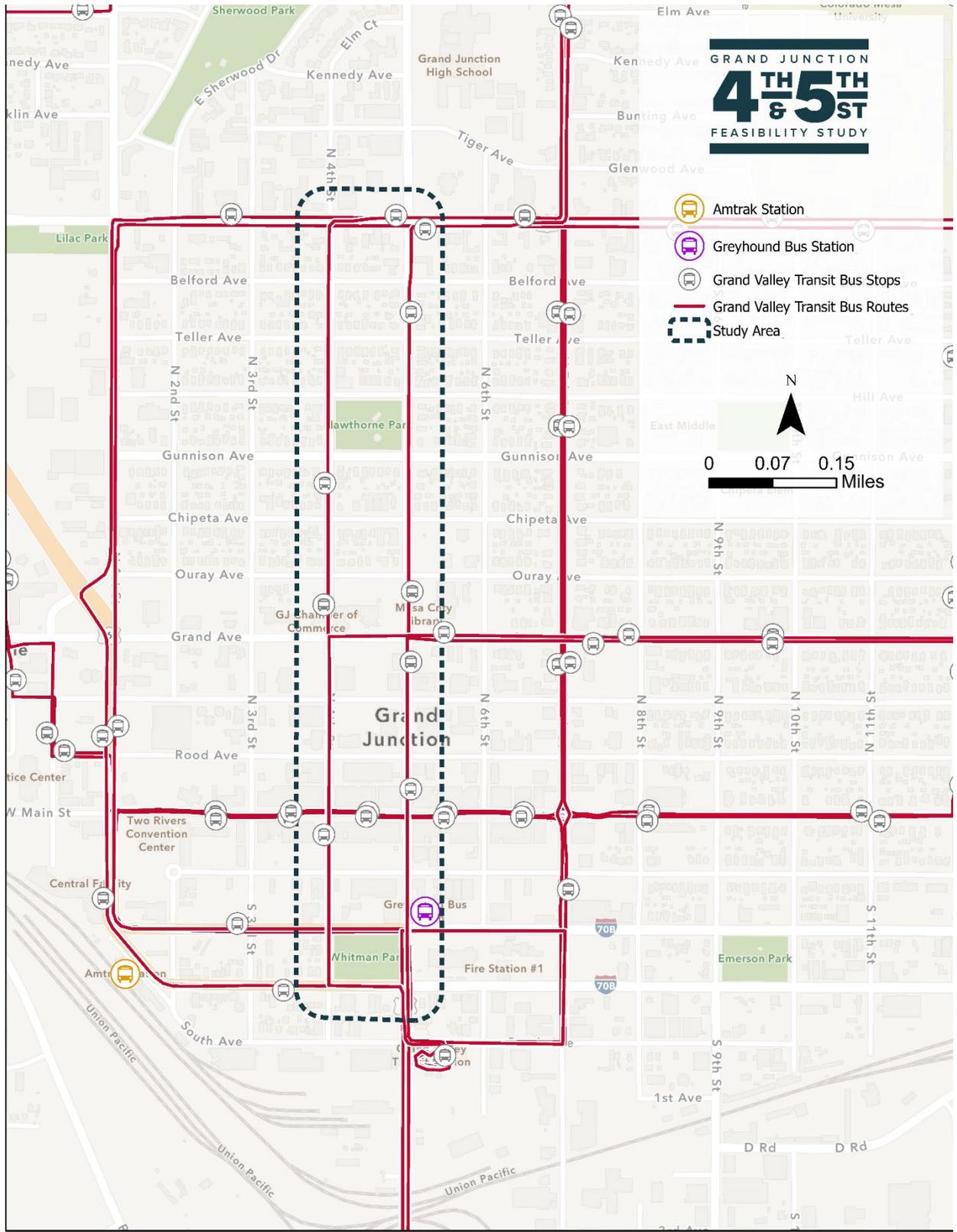












OUTREACH MATERIALS

- Public Open House Materials
- Visuals from the Project Website





Welcome!
PUBLIC OPEN HOUSE FOR 4TH AND 5TH STREET FEASIBILITY STUDY
 Tuesday May 4, 2021 | 4:00 - 6:00pm

Welcome! Thank you for joining us at the Public Open House for the 4th and 5th Street Feasibility Study. We appreciate your input and will use the information you share to help inform study recommendations.

We want to hear from you!

While you are here, please visit the five stations to learn more about the study and participate in a variety of interactive activities:

- Station 1. Study Overview & Study Area**
- Station 2. Vision & Goals**
- Station 3. Summary of Benefits for One-Way and Two-Way Streets**
- Station 4. Study Area Interaction & Priorities**
- Station 5. Mapping Activity**

Enter to Win!

When you're done at today's open house, you can enter to win a gift card to Downtown GJ!

DON'T FORGET TO CHECK OUT THE COMMENT SHEET ON THE BACK!



GRAND JUNCTION
4TH & 5TH ST
FEASIBILITY STUDY

STUDY OVERVIEW

1

ABOUT THE STUDY: The **4th Street and 5th Street Feasibility Study** is being led by the Grand Junction Downtown Development Authority, in conjunction with the City of Grand Junction.

Why? The purpose of the feasibility study is to evaluate potential improvements along both corridors and within the Study Area, focused on the following:

- Safety
- Traffic Circulation
- Walkability
- Bicycle Facilities
- Parking
- Transit
- Land Use
- Economic Development

Proposed alternatives will include maintaining the one-way traffic operations as well as the potential of transitioning to two-way travel corridors.

WAYS TO PARTICIPATE:

Project Website:
<http://project.bhinc.com/4th5thStudy>

Use the interactive map on the project website to share your ideas for the 4th/5th Street corridors. Check out the website for information about upcoming community engagement opportunities.

Questions and Comments:

Share questions or comments at any time by emailing 4th5thStudy@bhinc.com or calling (720) 587-2653.



TIMELINE:



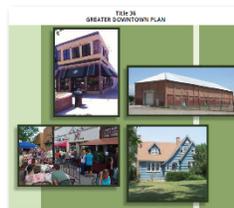
PREVIOUS PLANNING WORK: This study builds upon multiple previous planning efforts. In 1981, the Downtown Development Authority identified the conversion of 4th and 5th Street from one-way to two-way as a goal in its original Plan of Development. In 2013, the City of Grand Junction’s Greater Downtown Plan also called for looking at the configuration of 4th and 5th Street. This was again confirmed as a focus area in the 2019 DDA Plan of Development, and the City’s updated Comprehensive Plan due to continued concerns around safety issues related to this corridor.



“Convert 4th and 5th to Two-way Streets” is listed as a priority strategy for connectivity.



The conversion of 4th and 5th Street from one-way to two-way was confirmed as a focus area due to continued concerns around safety issues related to this corridor.



The City’s municipal code includes a policy within the Downtown District goals and policies to “Study alternatives for 4th and 5th Streets including returning these streets to the two-way grid system between Ute Avenue and North Avenue.”



The City’s Complete Streets Policy and the 2018 Circulation Plan provide additional guidance that will inform this study.



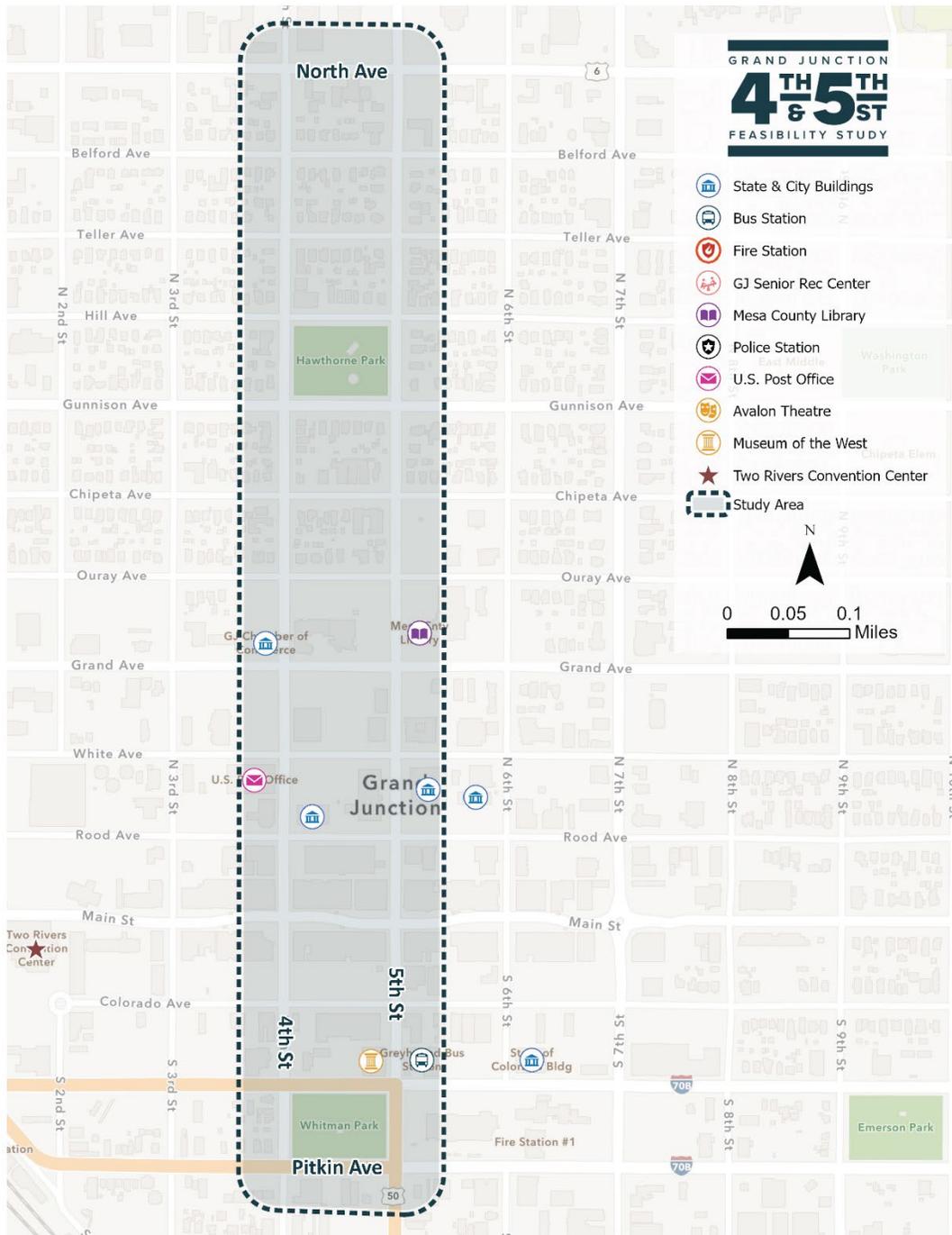


GRAND JUNCTION
4TH & 5TH ST
FEASIBILITY STUDY

STUDY AREA MAP

1

The study area limits are from North Ave (US Hwy 6) to the north and Pitkin Ave (I-70B EB) to the south.



VISION & GOALS PRIORITIZATION ACTIVITY

2

Each vision element in a colored box to the right has two associated goals. These have been developed by the project team with the help of staff and the Project Advisory Committee (PAC). All of these vision statements and goals will help inform the study and conceptual design moving forward.

ACTIVITY INSTRUCTIONS:

Please help us understand which of these vision elements is the highest priority to you by placing each of your two dot stickers in a white box to the right.

Did we miss anything? Place a sticky note below with any other vision elements or goals you'd like to see included.

Enhance Safety

- Support traffic calming
- Enhance crossings

Place dot here

Improve Walkability & Bikeability

- Improve accessibility
- Promote connections to nearby destinations

Place dot here

Activate Economic Development

- Enhance access to downtown
- Create an inviting environment

Place dot here

Optimize Traffic Circulation

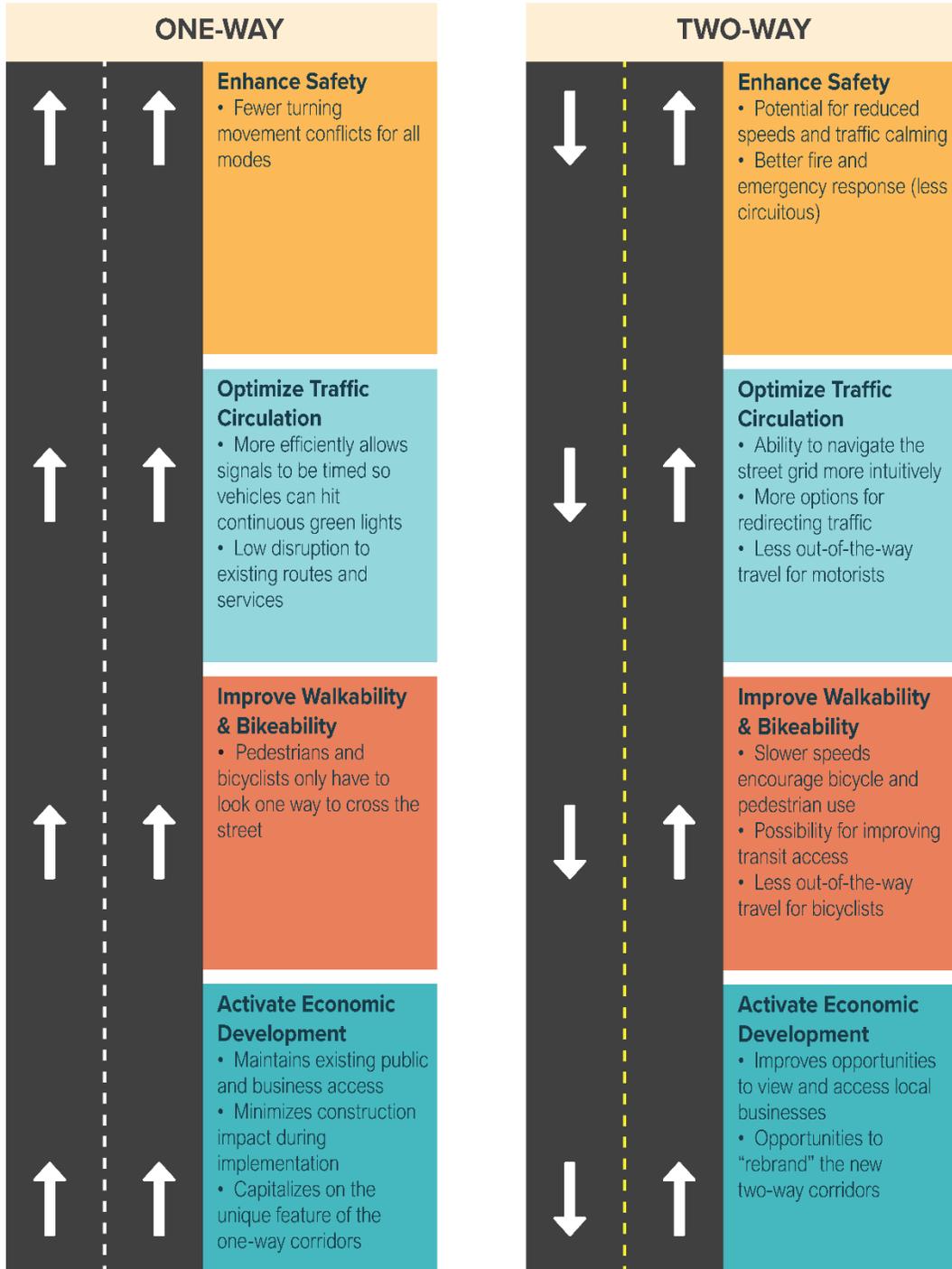
- Provide functional and intuitive circulation
- Manage travel patterns

Place dot here





SUMMARY OF BENEFITS FOR ONE-WAY AND TWO-WAY STREETS





GRAND JUNCTION
4TH & 5TH ST
FEASIBILITY STUDY

STUDY AREA INTERACTION

4

How do you interact with 4th Street and 5th Street?
ACTIVITY INSTRUCTIONS: Place a dot or dots in the correct box below.



<p>Resident in/near the Study Area</p>	<p>Business Owner in/near the Study Area</p>
<p>Transit Rider in/near the Study Area</p>	<p>Bicyclist in/near the Study Area</p>
<p>Driver in/near the Study Area</p>	<p>Pedestrian in/near the Study Area</p>



Did we miss anything? Place a sticky note below to describe any other ways you interact with the study area.



GRAND JUNCTION
4TH & 5TH ST
FEASIBILITY STUDY



ONLINE SURVEY

ABOUT THE PROJECT: The 4th Street and 5th Street Feasibility Study is being led by the Grand Junction Downtown Development Authority, in conjunction with the City of Grand Junction.

Why? The purpose of the feasibility study is to evaluate potential improvements along both corridors and within the Study Area, focused on the following:

- Safety
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- Walkability
- Bicycle Facilities
- Parking
- Transit
- Land Use
- Economic Development

Proposed alternatives will include maintaining the one-way traffic operations as well as the potential of transitioning to two-way travel corridors.



Take the Online Survey!

Visit the project website to take the online survey. Navigate to the link below or scan the QR code to the right with your phone.

<http://project.bhinc.com/4th5thStudy>



On the website, you can also use the interactive map to share your ideas for the 4th/5th Street corridors.

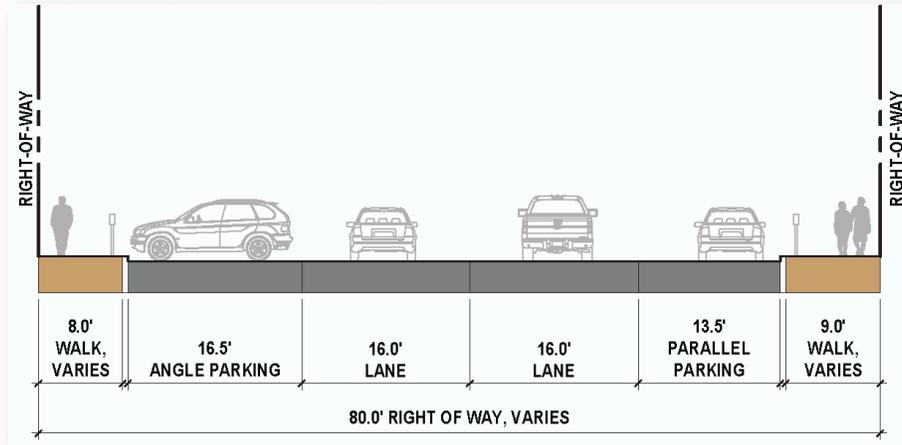
Your participation is very valuable to the planning process! **Those who take the online survey will be entered to win a Downtown GJ gift card. Please complete the survey by Tuesday, May 11 for a chance to win.**



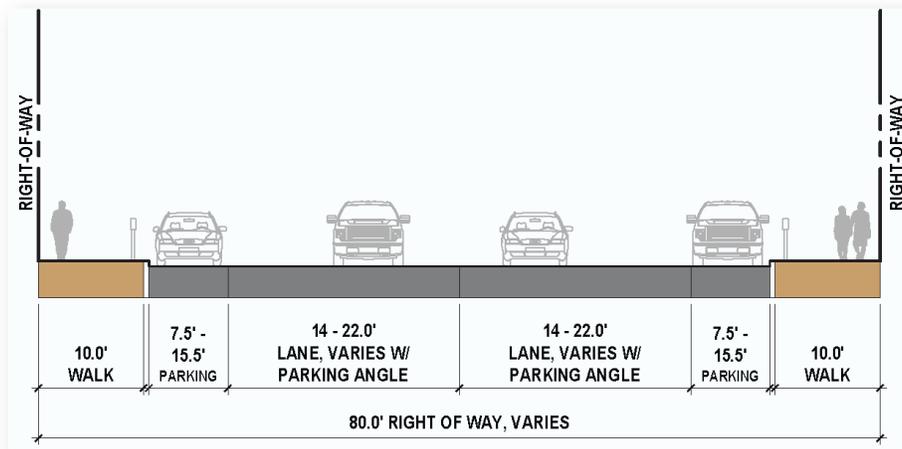
GRAND JUNCTION
4TH & 5TH ST
 FEASIBILITY STUDY

**EXISTING ONE-WAY PAIR
 (LOOKING NORTH)**

5th Street - Between Ute & Colorado



4th Street - Between Colorado & Rood



KEY ELEMENTS FOR 4TH & 5TH

- One-Way Vehicle Travel
- Wide Travel Lanes
- Sidewalks with Landscaping
- Parallel & Diagonal Parking
- No Bike Facilities



Bohannon & Huston

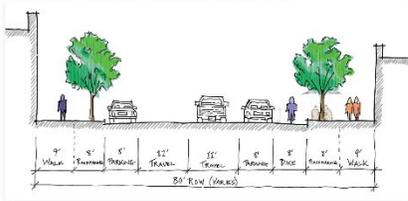


GRAND JUNCTION
4TH & 5TH ST
 FEASIBILITY STUDY

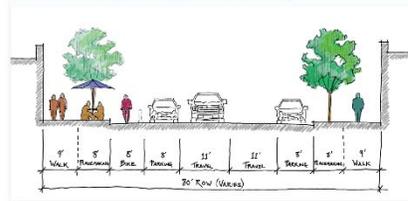


ENHANCED ONE-WAY ALTERNATIVE
 (LOOKING NORTH)

5th Street - Ute to Grand (Concept Sketch)



4th Street - Ute to Grand (Concept Sketch)



5th Street - South of Grand (Concept Rendering)



4th Street - South of Grand (Concept Rendering)



KEY ELEMENTS FOR 4TH & 5TH



- One-Way Vehicle Travel
- Narrowed Travel Lanes

- Parallel Parking
- Separated Bike Lane

- Expanded Sidewalks
- Amenity Zone for Landscaping, Art, Outdoor Seating, & Other Amenities

- Bulbouts at Corners & Alleys

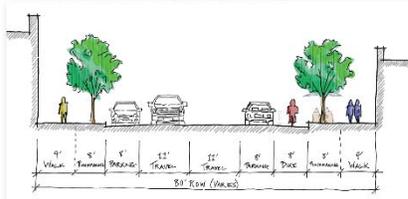


GRAND JUNCTION
4TH & 5TH ST
 FEASIBILITY STUDY

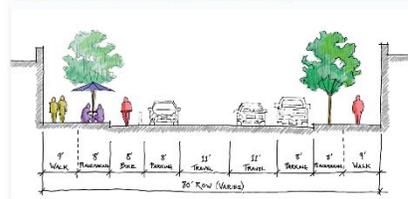


ENHANCED TWO-WAY ALTERNATIVE
 (LOOKING NORTH)

5th Street - Ute to Grand (Concept Sketch)



4th Street - Ute to Grand (Concept Sketch)



5th Street - South of Grand (Concept Rendering)



4th Street - South of Grand (Concept Rendering)



KEY ELEMENTS FOR 4TH & 5TH



- Two-Way Vehicle Travel
- Narrowed Travel Lanes

- Parallel Parking
- Separated Bike Lane

- Expanded Sidewalks
- Amenity Zone for Landscaping, Art, Outdoor Seating, & Other Amenities

- Bulbouts at Corners & Alleys



ALTERNATIVES EVALUATION MATRIX

- Proposed Alternatives Analysis Matrix Used to Evaluate the Two Directional Scenarios





GRAND JUNCTION
4TH & 5TH ST
FEASIBILITY STUDY

PROPOSED ALTERNATIVES ANALYSIS MATRIX

EXISTING ONE-WAY PAIR	EVALUATION SCORE	ENHANCED ONE-WAY ALTERNATIVE		ENHANCED TWO-WAY ALTERNATIVE	
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Enhance Safety					
Reduce Speeds	*	***	Infrastructure modifications reduce speeds	****	Infrastructure modifications reduce speeds
Reduce Crashes	*	****	Lower speeds reduce crashes	***	Lower speeds reduce crashes Increase in potential conflicts could result in more crashes
Optimize Traffic Circulation					
Reduce Driver Confusion	*	***	Maintains current travel patterns for locals	****	Less longterm confusion for all travelers
Encourage Traffic Calming	*	***	Slower speeds and roadway design encourage traffic calming	****	Slower speeds, roadway design, and more potential conflicts encourage traffic calming
Promote Direct Local Connections	**	**	Requires some out of direction travel for local connections, although minimal Decrease in through traffic	***	Provides more direct local connections Decrease in through traffic
Support Corridor Truck Deliveries	***	***	May need designated loading zone and encourage use of alleys	**	May need designated loading zone and encourage use of alleys May impact directional travel
Support Transit	***	***	Opportunity for improved bus stops	****	Opportunity for improved bus stops
Improve Walkability & Bikeability					
Improve Crossings	*	****	Shorter crossing distances plus bulbouts Need to consider double threat from two one-way vehicles	****	Shorter crossing (distances plus bulbouts, except at left-turn locations (2-3 intersections)
Provide/Improve Bicycle Facilities	*	****	Provides consistent bicycle facilities	****	Provides consistent bicycle facilities
Improve Sidewalks	**	****	Widens and enhances sidewalk area	****	Widens and enhances sidewalk area
Activate Economic Development					
Improve Business Access	**	***	Slower speeds improves business access	****	Slower speeds and more direct connections improve business access
Provide Opportunities For Amenities	**	****	Widened sidewalks allow for placemaking/landscaping opportunities	****	Widened sidewalks allow for placemaking/landscaping opportunities
Enhance Parking	**	****	Consistent, parallel parking with lower speeds will enhance parking and reduce quantity of spots	***	Consistent, parallel parking with lower speeds will enhance parking and reduce quantity of spots (even more with left-turns)
Preliminary Costs					Higher cost due to modification to signals and signage

NOTE: "Evaluation Score" represents a combined scoring from inputs by the Project Advisory Committee and Technical team 8/5 of August 12, 2021.

Lowest * Highest *****

It is a relational score representing how well each of the alternatives, as compared to the existing one-way pair, responds to the Vision-Based Criteria with * indicating little to no benefit and ***** indicating the most benefit.





GRAND JUNCTION

4TH & 5TH ST

FEASIBILITY STUDY



Appendix 2 – Traffic Memo



MEMORANDUM

DATE: October 20, 2021
TO: Denise Aten, Consultant Project Manager, BHI
FROM: Karen Aspelin, PE, PTOE
SUBJECT: Grand Junction 4th and 5th Street Conversion Study Traffic Analysis

The Grand Junction Downtown Development Authority is considering modifications to 4th Street and 5th Street between Pitkin Avenue and North Avenue that would make both streets two-way streets rather than the current one-way pair. This memo documents the existing traffic conditions and summarizes an analysis of how the proposed modifications would be expected to affect traffic now and in the future.

Existing Traffic Conditions (One-Way Operations on 4th and 5th)

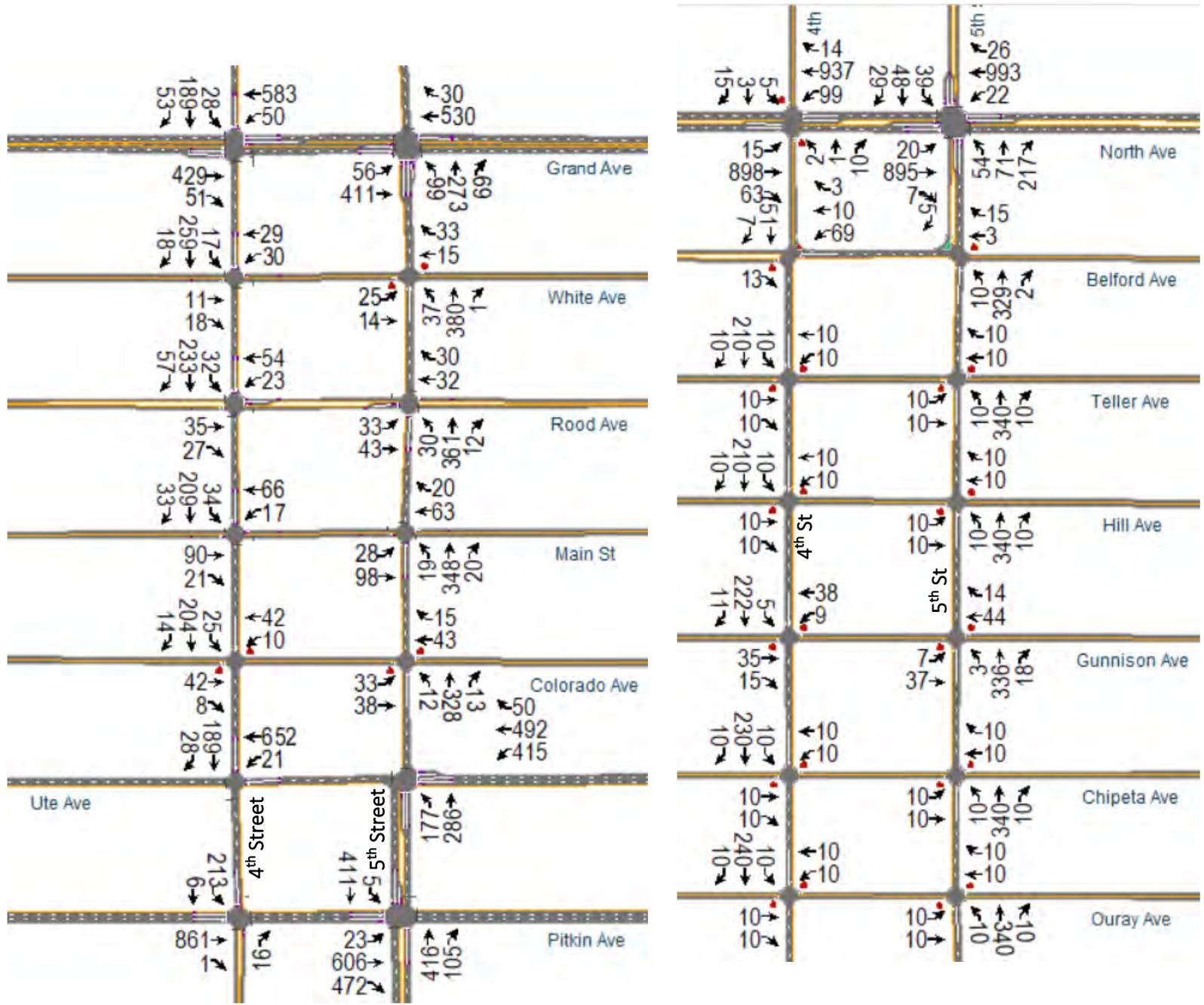
Traffic volumes were counted in the study area, which is shown in Figure 1, in February of 2021. It should be noted that turning movements were not counted at the minor intersections north of Grand Avenue, and for these a turning movement volume of 10 vehicles per hour (vph) per movement was assumed. The raw data are included as Appendix A and the PM peak hour turning movements, used for this analysis, are summarized in Figure 2.



Figure 1 – Study Area



Figure 2 – Existing PM Peak Hour Turning Movement Counts (February 2021)





Fourth and 5th streets currently operate as a one-way pair, with only northbound travel on 5th Street and only southbound travel on 4th Street between Ute Avenue and Belford Avenue. South of Ute Avenue 5th Street is two-way but 4th Street is one-way only southbound. North of Belford Avenue both streets are two-way. The existing traffic control is summarized here:

Control	4 th Street Intersection	5 th Street Intersection
Signalized	Pitkin, Ute, Main, Rood, White, Grand	Pitkin, Ute, Main, Rood, Grand, North
Stop on East-West Street Only	Colorado, Ouray, Chipeta, Gunnison, Hill, Teller, Belford	Colorado, White, Ouray, Chipeta, Gunnison, Hill, Teller, Belford
Stop on North-South Street Only	North	(none)

Existing traffic signal timing plans for the study intersections were provided by the City. An existing level of service analysis for the PM peak was performed for the study area intersections. The analysis used the *Highway Capacity Manual* module of the Synchro 10 software for level of service analysis. The results are summarized in Table 1, and all analysis worksheets are in Appendix B.

Table 1. Existing PM Peak Hour Levels of Service¹ at the Study Intersections

Cross Street	4 th Street		5 th Street	
	Overall LOS	Worst Approach LOS	Overall LOS	Worst Approach LOS
North Ave	(unsignalized)	E (SB approach)	B	C (NB and SB approaches)
Belford Ave	(unsignalized)	B	(unsignalized)	A
Teller Ave	(unsignalized)	B	(unsignalized)	B
Hill Ave	(unsignalized)	B	(unsignalized)	B
Gunnison Ave	(unsignalized)	B	(unsignalized)	B
Chipeta Ave	(unsignalized)	B	(unsignalized)	B
Ouray Ave	(unsignalized)	B	(unsignalized)	B
Grand Ave	B	C (EB and SB approaches)	C	C (WB and NB approaches)
White Ave	B	C (EB and WB approaches)	(unsignalized)	B
Rood Ave	C	C (EB and WB approaches)	C	C (EB and WB approaches)
Main St	B	C (SB approach)	B	C (WB approach)
Colorado Ave	(unsignalized)	B	(unsignalized)	B
Ute Ave	C	C (WB and SB approach)	B	C (WB approach)
Pitkin Ave	A	A	C	D (EB approach)

¹Level of service shown for signalized intersection is overall level of service and worst approach level of service. Level of service shown for two-way stop control intersection is worst approach level of service (approach identified where LOS is C or worse).

The analysis showed that all movements in the PM peak hour are currently operating at acceptable levels of service (considered in this memo as a LOS D or better), with the exception of the southbound approach of the 4th Street/North Avenue intersection, which is unsignalized and operates at a LOS E.



A queueing analysis was done by using the SimTraffic 10 software to perform ten simulations of the peak hour. The queueing worksheets are included in Appendix C. The analysis looked for the following potential queueing issues:

- Queues extending back into the upstream intersection
- Queues spilling out of a turn lane and blocking the adjacent through lane
- Queues in a through lane blocking access to the adjacent turn lane in more than 10% of cycles
- Cycle failure – when a waiting queue is not completely dispersed during the cycle and continues to build over the peak period

These queueing issues were observed in the existing condition simulations:

- At 5th Street/Ute Avenue, the outside through lane westbound blocked entry to the westbound right-turn lane 8 of 36 cycles in the peak hour.
- At 5th Street/Pitkin Avenue, the inside through lane southbound blocked entry to the southbound left-turn lane 6 of 36 cycles in the peak hour.

Existing Year Traffic Conditions with Two-Way Operations on 4th and 5th

The regional model output provided by the Grand Valley Metropolitan Planning Organization/Mesa County Regional Transportation Planning Office (MPO) shows that when 4th Street and 5th Street are both open to two-way traffic that of the total traffic volume those two streets carry, in general 4th Street carries about 40% of it, and 5th Street carries about 60% of it.

The regional model output also shows that when 4th Street and 5th Street are both open to two-way traffic, that some traffic from other streets (including 1st Street and 7th Street) gets diverted to them. Total traffic volumes on 4th Street and 5th Street grows by about 30% in the model when those streets were both made two-way.

Using this information, the total existing traffic counts on 4th Street and 5th Street were added up and then distributed: 40% to the intersections on 4th Street and 60% to the intersections on 5th Street. To account for the added traffic drawn from other streets in the PM peak, a factor of 1.3 was applied to the north-south through volumes on 4th Street and 5th Street. Figure 3 shows the estimated turning movement volumes for the study intersections for the two-way operations scenario in the current year.

A level of service analysis was again run for today's PM peak under two-way conditions. The same cycle length that is used now, 100 seconds, was assumed to be used. The results are summarized in Table 2, and all analysis worksheets are in Appendix B.



Table 2. PM Peak Hour Levels of Service¹ at the Study Intersections – Existing Year, Two-Way Operations

Cross Street	4 th Street		5 th Street	
	Overall LOS	Worst Approach LOS	Overall LOS	Worst Approach LOS
North Ave	(unsignalized)	F (NB and SB approaches)	B	D (NB approach)
Belford Ave	(unsignalized)	B	(unsignalized)	B
Teller Ave	(unsignalized)	B	(unsignalized)	B
Hill Ave	(unsignalized)	B	(unsignalized)	B
Gunnison Ave	(unsignalized)	B	(unsignalized)	B
Chipeta Ave	(unsignalized)	B	(unsignalized)	B
Ouray Ave	(unsignalized)	B	(unsignalized)	B
Grand Ave	B	C (NB and SB approaches)	B	C (NB and SB approaches)
White Ave ²	(unsignalized)	B	(unsignalized)	B
Rood Ave ²	(unsignalized)	B	(unsignalized)	B
Main St	C	D (EB and WB approaches)	B	D (EB and WB approaches)
Colorado Ave	(unsignalized)	B	(unsignalized)	B
Ute Ave	D	D (WB approach)	C	D (WB approach)
Pitkin Ave	C	D (EB approach)	C	D (EB approach)

¹Level of service shown for signalized intersection is overall level of service and worst approach level of service. Level of service shown for two-way stop control intersection is worst approach level of service (approach identified where LOS is C or worse).

²The 4th Street/White Avenue and 4th Street/Rood Avenue intersections were assumed to be stop-controlled in the two-way scenario.

The analysis showed that all movements in the PM peak hour would be expected to operate at acceptable levels of service in the existing year under the two-way conditions with the exception of the northbound and southbound approaches of the 4th Street/North Avenue intersection, which is unsignalized and has side street movements operating at a LOS F.

The northern two blocks of the study area warrant further consideration if 4th and 5th streets are made two-way. Discussions with CDOT have revealed that they do not want to signalize the 4th Street/North Avenue intersection because of its proximity to the existing signal at 5th Street/North Avenue (North Avenue is US Highway 6). However, the travel demand model loads 4th Street and the unsignalized 4th Street/North Avenue intersection without regard to its type of control and shows, as was mentioned before, about 40% of the traffic in the 4th Street-5th Street corridor being carried by 4th Street. As demonstrated above, this volume would cause the side street movements of the 4th Street/North Avenue intersection to fail if it is not signalized. What would be more likely to happen is that northbound 4th Street traffic would find its way to the 5th Street/North Avenue intersection to use the signal there. This pattern could be encouraged by having northbound drivers on 4th Street take a right onto eastbound Belford Avenue, and then take a left onto northbound 5th Street to reach the signal. The configuration and traffic control at the 5th Street/Belford Avenue intersection would need to be modified to accommodate this new pattern.

These queuing issues were observed in the simulations of the existing year scenario with two-way operations:

- At 5th Street/Grand Avenue, the northbound through lane blocked entry to the northbound right-turn lane 9 of 36 cycles in the peak hour.
- At 5th Street/Ute Avenue, the outside through lane westbound blocked entry to the westbound right-turn lane 10 of 36 cycles in the peak hour.



- At 5th Street/Pitkin Avenue, the inside through lane southbound blocked entry to the southbound left-turn lane 6 of 36 cycles in the peak hour.

Year 2045 Traffic Conditions with One-Way Operations on 4th and 5th

This study used a simplified method of determining the overall growth factor expected between the year 2021 and the forecast year 2045. Traffic model projections were provided by the MPO. A screenline was placed just south of Rood Avenue, and the daily traffic volumes on 1st, 4th, 5th, and 7th streets were summed at that location for the existing year and year 2045 scenario with the existing one-way pair and existing speed limits.

	Base Year ADTs	Year 2045 One-Way Pair, Existing Speed Limits ADTs
1 st Street	18,629	28,083
4 th Street	3,508	5,140
5 th Street	7,002	8,544
7 th Street	8,556	13,496
Totals	37,695	55,263

The growth observed between these two screenline ADTs is approximately 1.5. This factor was applied to all of the existing year 2021 turning movement counts to estimate future year conditions, which are shown in Figure 4.

A level of service analysis was again run for the projected year 2045 PM peak under the current one-way conditions. The same cycle length that is used now, 100 seconds, was assumed to be used. The results are summarized in Table 3, and all analysis worksheets are in Appendix B.

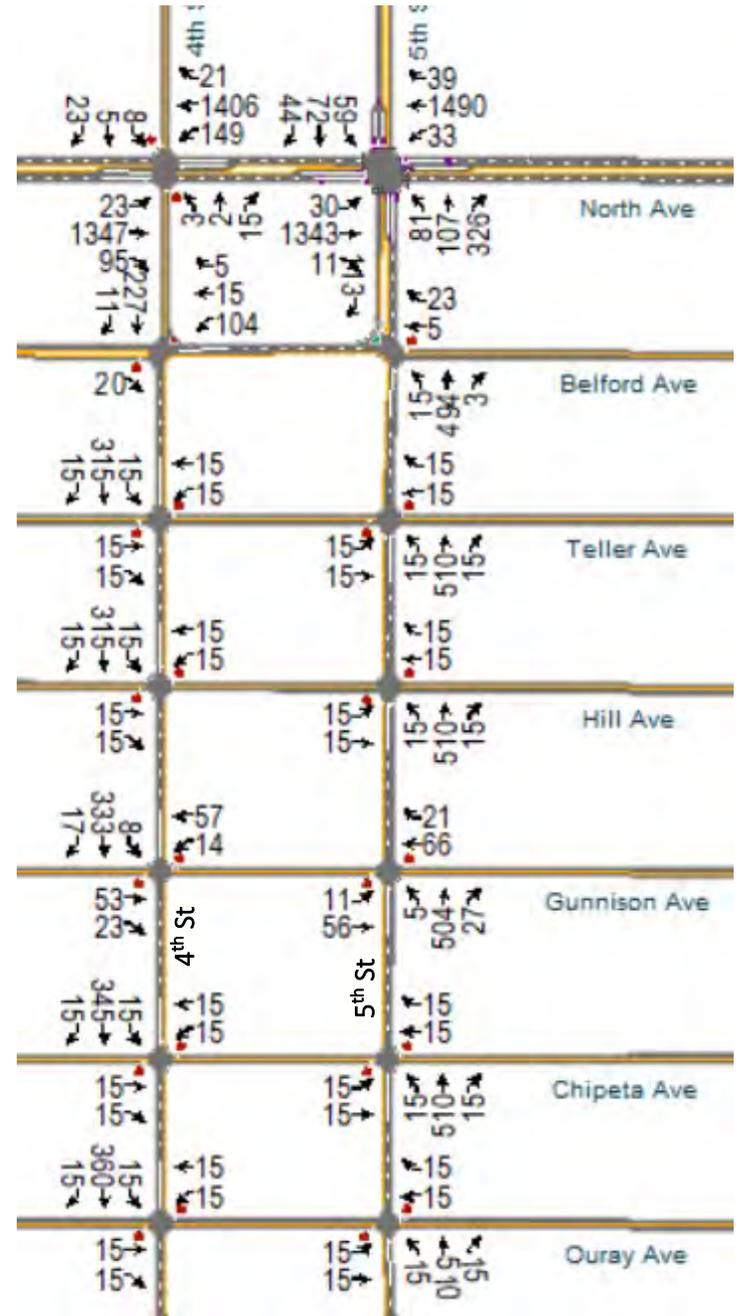
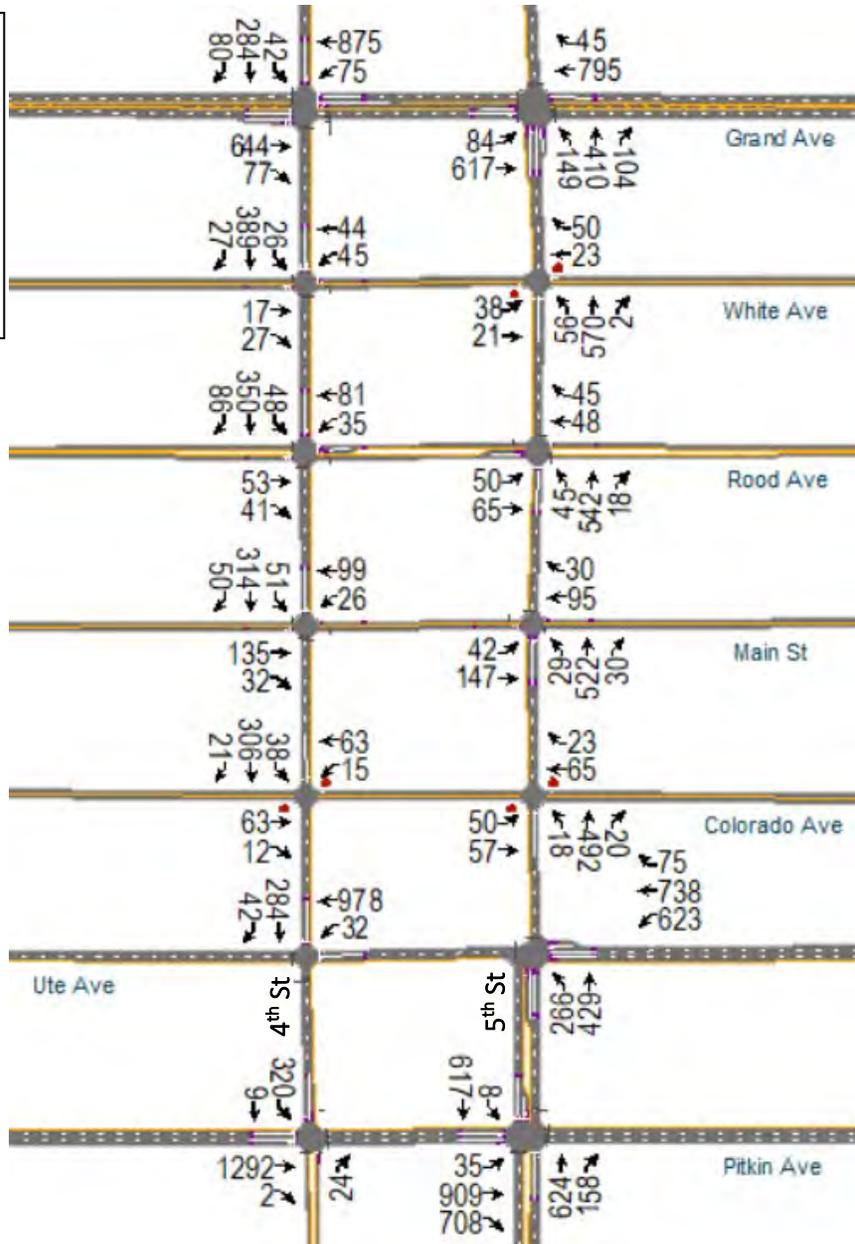
Table 3. Forecast Year 2045 PM Peak Hour Levels of Service¹ with One-Way Operations

Cross Street	4 th Street		5 th Street	
	Overall LOS	Worst Approach LOS	Overall LOS	Worst Approach LOS
North Ave	(unsignalized)	F (NB and SB approaches)	C	D (NB approach)
Belford Ave	(unsignalized)	B	(unsignalized)	B
Teller Ave	(unsignalized)	B	(unsignalized)	B
Hill Ave	(unsignalized)	B	(unsignalized)	B
Gunnison Ave	(unsignalized)	B	(unsignalized)	B
Chipeta Ave	(unsignalized)	B	(unsignalized)	B
Ouray Ave	(unsignalized)	B	(unsignalized)	B
Grand Ave	B	C (EB and SB approaches)	C	C (WB and NB approaches)
White Ave	B	C (EB and WB approaches)	(unsignalized)	B
Rood Ave	C	C (all approaches)	C	C (all approaches)
Main St	C	C (SB approach)	C	C (WB and NB approaches)
Colorado Ave	(unsignalized)	B	(unsignalized)	B
Ute Ave	C	C (WB and SB approaches)	B	B
Pitkin Ave	A	A	C	D (EB approach)

¹Level of service shown for signalized intersection is overall level of service and worst approach level of service. Level of service shown for two-way stop control intersection is worst approach level of service (approach identified where LOS is C or worse).



Figure 4 –
Estimated
Year 2045 PM
Peak Hour
Volumes
(One-Way)





The analysis showed that all movements in the forecast year 2045 PM peak hour, with the one-way pair, are expected to operate at acceptable levels of service with the exception of the northbound and southbound approaches of the 4th Street/North Avenue intersection, which is unsignalized and operates at a LOS F.

These queuing issues were observed in the simulations of the forecast year 2045 with the one-way pair:

- At 5th Street/North Avenue, the eastbound through lane blocked entry to the eastbound left-turn lane 5 of 36 cycles in the peak hour and the westbound through lane blocked entry to the westbound left-turn lane 7 of 36 cycles in the peak hour.
- At 5th Street/Grand Avenue, the northbound through lane blocked entry to the northbound right-turn lane 4 of 36 cycles in the peak hour.
- At 5th Street/Ute Avenue, the outside through lane westbound blocked entry to the westbound right-turn lane 7 of 36 cycles in the peak hour.
- At 5th Street/Pitkin Avenue, the inside through lane southbound blocked entry to the southbound left-turn lane 12 of 36 cycles in the peak hour.

Year 2045 Traffic Conditions with Two-Way Operations on 4th and 5th

To estimate year 2045 traffic conditions under a scenario with two-way operations on 4th and 5th streets, the turning movements shown in Figure 3 were escalated by the future year growth factor of 1.5. These volumes are shown in Figure 5.

A level of service analysis was again run for the projected year 2045 PM peak under the proposed two-way conditions. The same cycle length that is used now, 100 seconds, was assumed to be used. The results are summarized in Table 4, and all analysis worksheets are in Appendix B.

Table 4. Forecast Year 2045 PM Peak Hour Levels of Service¹ with Two-Way Operations

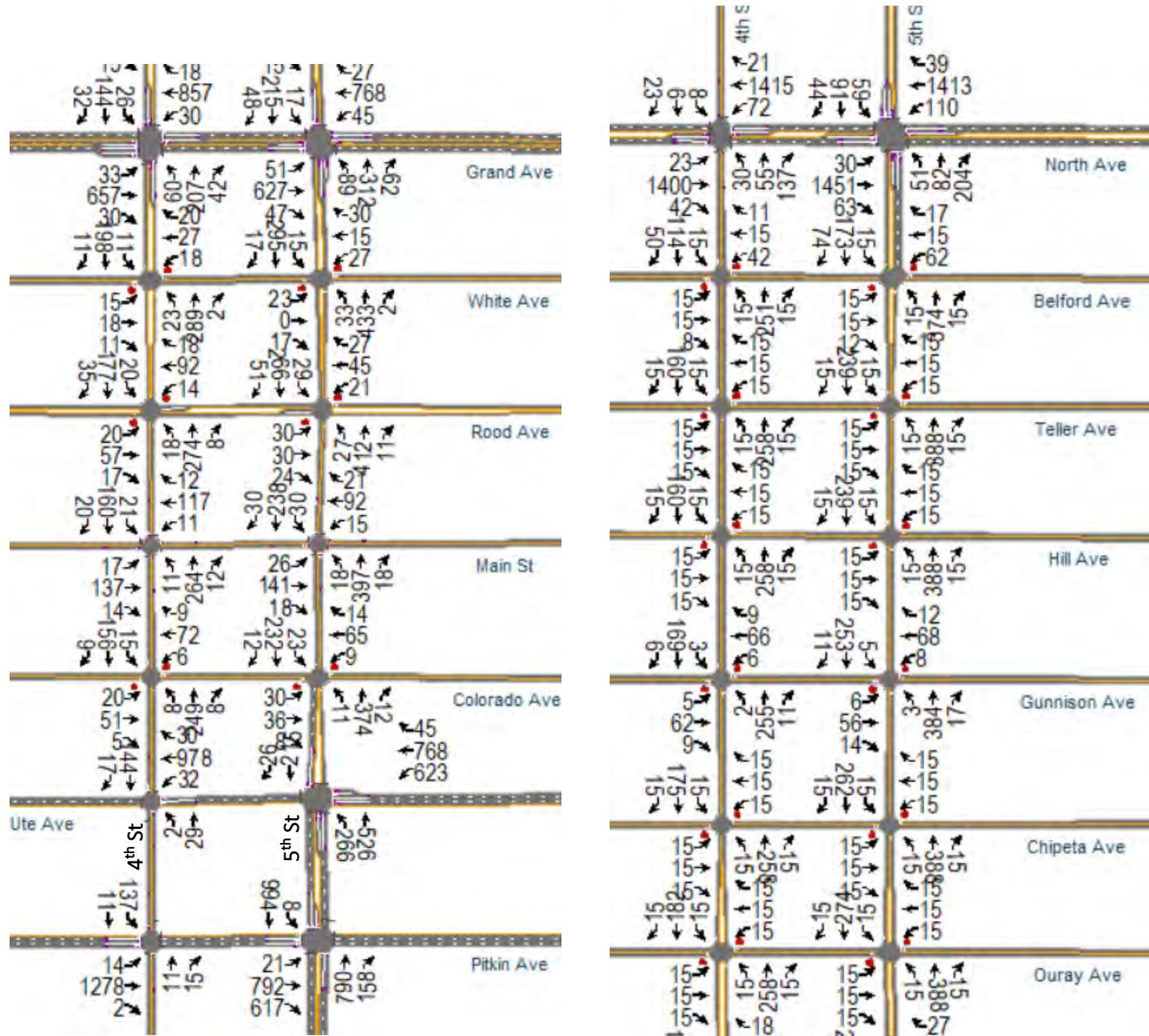
Cross Street	4 th Street		5 th Street	
	Overall LOS	Worst Approach LOS	Overall LOS	Worst Approach LOS
North Ave	(unsignalized)	F (NB and SB approaches)	C	D (NB approach)
Belford Ave	(unsignalized)	B	(unsignalized)	C
Teller Ave	(unsignalized)	B	(unsignalized)	C
Hill Ave	(unsignalized)	B	(unsignalized)	C
Gunnison Ave	(unsignalized)	B	(unsignalized)	C
Chipeta Ave	(unsignalized)	B	(unsignalized)	C
Ouray Ave	(unsignalized)	B	(unsignalized)	C
Grand Ave	B	D (NB approach)	B	C
White Ave ²	(unsignalized)	B	(unsignalized)	C
Rood Ave ²	(unsignalized)	C	(unsignalized)	C
Main St	C	D (EB and WB approaches)	B	D (EB and WB approaches)
Colorado Ave	(unsignalized)	B	(unsignalized)	C
Ute Ave	C	D (WB approach)	C	C
Pitkin Ave	C	C	C	D (EB approach)

¹Level of service shown for signalized intersection is overall level of service and worst approach level of service. Level of service shown for two-way stop control intersection is worst approach level of service (approach identified where LOS is D or worse).

²The 4th Street/White Avenue and 4th Street/Rood Avenue intersections were assumed to be stop-controlled in the two-way scenario.



Figure 5 –
Estimated Year
2045 PM Peak
Hour Volumes
(Two-Way)





The analysis showed that all movements in the forecast year 2045 PM peak hour, in the two-way scenario, are expected to operate at acceptable levels of service with the exception of the northbound and southbound approaches of the 4th Street/North Avenue intersection, which is unsignalized and operates at a LOS F. As discussed earlier, the northern blocks of the study area would need to be examined more closely if the streets are both made two-way without signaling the intersection of 4th Street/North Avenue.

For the queueing analysis, the 2045 two-way scenario was simulated to show northbound 4th Street traffic that would have turned left or gone straight through at North Avenue diverting to 5th Street at Belford, to use the traffic signal at 5th Street/North Avenue. These queueing issues were observed in the simulations of the forecast year 2045 with two-way operations:

- At 5th Street/North Avenue, the eastbound through lane blocked entry to the eastbound left-turn lane 8 of 36 cycles in the peak hour and the westbound through lane blocked entry to the westbound left-turn lane 5 of 36 cycles in the peak hour.
- At 5th Street/Grand Avenue, the northbound through lane blocked entry to the northbound right-turn lane 11 of 36 cycles, and the southbound through/right turn lane blocked entry to the southbound left-turn lane in 4 of 36 cycles in the peak hour.
- At 4th Street/Grand Avenue, the northbound through lane blocked entry to the northbound right-turn lane 4 of 36 cycles in the peak hour.
- At 5th Street/Ute Avenue, the outside through lane westbound blocked entry to the westbound right-turn lane 14 of 36 cycles in the peak hour and the right-side northbound left turn lane blocked entrance into the left-side northbound left turn lane 8 of 36 cycles.
- At 5th Street/Pitkin Avenue, the inside through lane southbound blocked entry to the southbound left-turn lane 11 of 36 cycles in the peak hour.

CDOT Facilities and Coordination

Several of the streets in the study area are CDOT facilities: North Avenue (US 6), and the segments of 5th Street (US 50), Ute Avenue (I-70B), and Pitkin Avenue (I-70B) around Whitman Park. Accordingly, coordination meetings were held to keep CDOT traffic engineering staff apprised of the study.

Meetings were held on February 8, 2021, and June 14, 2021. The purpose of the February meeting was to find out what CDOT's concerns would be regarding making any changes to the lane configurations on 4th Street and 5th Street. The June meeting was to discuss the output of the travel demand forecast models with staff from the MPO.

CDOT's concern was that the two-way alternative would significantly increase the delay and queueing at the signalized intersections. The existing one-way scenario allows the traffic signals to be coordinated to provide good progression on both 4th Street and 5th Street (i.e., a platoon of one-way traffic can arrive at the traffic signals as they turn green and not have to make many stops). The two-way scenario would not be able to provide the same progression and would increase the number of stops. City of Grand Junction staff voiced the same concern that two-way traffic would defeat the effort of traffic progression.

Need for Left-turn Lanes

No changes in lane configuration were assumed with the one-way pair scenarios.

In the two-way scenario, the northbound approach geometry at 5th Street/Ute Avenue was assumed to be two left-turn lanes and a single through lane.



In the two-way scenario, the maximum left-turn volumes off of 4th or 5th Street at any of the unsignalized intersections is estimated to be 33 vph (northbound left from 5th Street onto White Avenue in the year 2045), or approximately one vehicle turning left every two minutes. This magnitude of left-turn volumes does not cause delay or queueing issues at the unsignalized intersections. Therefore, no left-turn lanes are recommended to be added to allow acceptable traffic operations.

Signalization Changes

In the two-way scenarios, the signals were assumed to be removed at the 4th Street/White Avenue, 4th Street/Rood Avenue, and 5th Street/Rood Avenue intersections. This is because signal modifications (additional poles, mastarms, and heads) would be required to make these intersections work for two-way traffic operations, it is unlikely that these intersections meet any signal warrants, and the intersections operate acceptably without a signal.

Other intersections that may not warrant the signals they have now are 4th Street/Main Street and 5th Street/Main Street, regardless of whether the one-way or two-way scenario is in place.

CDOT has stated that they do not want to signalize the 4th Street/North Avenue intersection because of its proximity to the existing signal at 5th Street/North Avenue. However, if travel demand under the two-way scenario does put 40% of the 4th Street-5th Street corridor traffic on 4th Street, there will be a greater desire to travel through the 4th Street/North Avenue intersection. Rather than signalizing the 4th Street/North Avenue intersection, modifications should be considered to the configuration of the 4th Street – Belford Avenue – 5th Street path to allow 4th Street users to access the signal at 5th Street/North Avenue.

Summary

- A traffic analysis was performed for four scenarios: 2021/One-Way, 2021/Two-Way, 2045/One-Way, 2045/Two-Way. The purpose of the traffic analysis was to estimate vehicle levels of service and queueing.
- The PM peak turning movement counts were developed by these methodologies:
 - 2021/One-Way – existing turning movement counts collected in February 2021
 - 2021/Two-Way – existing turning movement counts in the corridor were distributed 40% to 4th Street and 60% to 5th Street. A factor of 1.3 was then applied to account for traffic expected to divert from other streets (1st and 7th streets) due to the change in configuration.
 - 2045/One-Way – a growth factor of 1.5 was applied to the 2021/One-Way counts. This was based on a comparison of ADTs between the model output (“Year 2045 One-Way Pair, Existing Speed Limits”) and Base Year ADTs provided by Mesa County MPO.
 - 2045/Two-Way – a growth factor of 1.5 was applied to the 2021/Two-Way Volumes
- Levels of service were acceptable for all movements under all of the above scenarios with the exception of the unsignalized side street movements at 4th Street/North Avenue, which operate at LOS E or F due to lack of gaps.
- There were only minor queueing issues observed – in some locations there is blockage of the turn lanes by the adjacent through lane for a handful of cycles in the peak. No queue backup into the upstream intersection was ever observed.
- Turn lanes
 - No changes in lane configuration were assumed with the one-way pair scenarios.
 - In the two-way scenario, the northbound approach geometry at 5th Street/Ute Avenue was assumed to be two left-turn lanes and a single through lane.



- In the two-way scenario left-turn volumes off the north-south streets are low and they do not cause delay or queueing issues, so no additional left-turn lanes are recommended from a traffic operations standpoint.
- Signalization changes
 - In the two-way scenarios, the signals were assumed to be removed at the 4th Street/White Avenue, 4th Street/Rood Avenue, and 5th Street/Rood Avenue intersections. This is because signal modifications (additional poles, mastarms, and heads) would be required to make these intersections two-way, it is unlikely that these intersections meet any signal warrants, and the intersections operate acceptably without a signal.
 - Other intersections that may not warrant the signals they have now are 4th Street/Main Street and 5th Street/Main Street.
 - If 4th Street and 5th Street are converted to two-way facilities, modifications should be made in the north part of the study area to allow northbound 4th Street drivers to better access the traffic signal at 5th Street/North Avenue, because CDOT does not plan to signalize the 4th Street/North Avenue intersection.
- CDOT and City concerns
 - Both CDOT and City traffic signal staff have voiced concern that a conversion from one-way to two-way operations on 4th Street and 5th Street would defeat traffic progression on both streets.

Appendix A – Turning Movement Count Data



(303) 216-2439
www.alltrafficdata.net

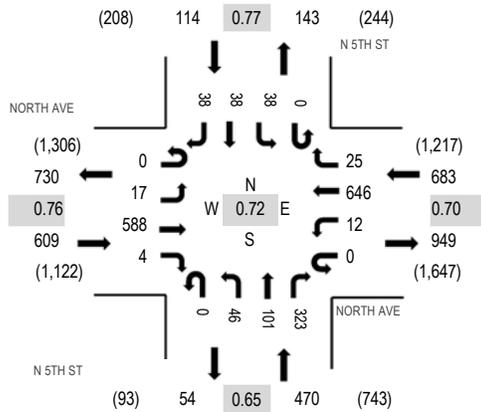
Location: 1 N 5TH ST & NORTH AVE AM

Date: Tuesday, February 16, 2021

Peak Hour: 07:15 AM - 08:15 AM

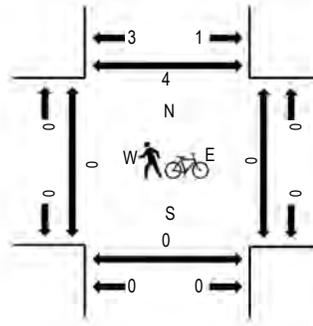
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	NORTH AVE Eastbound				NORTH AVE Westbound				N 5TH ST Northbound			N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
7:00 AM	0	3	78	1	0	4	79	10	0	2	11	38	0	17	2	12	257	1,765	0	0	0	0
7:15 AM	0	6	121	0	0	3	132	5	0	7	23	52	0	8	6	8	371	1,876	0	0	0	3
7:30 AM	0	5	150	0	0	2	161	5	0	12	32	89	0	11	8	13	488	1,836	0	0	0	1
7:45 AM	0	3	195	3	0	3	235	5	0	15	27	140	0	2	16	5	649	1,727	0	0	0	0
8:00 AM	0	3	122	1	0	4	118	10	0	12	19	42	0	17	8	12	368	1,525	0	0	0	0
8:15 AM	0	6	114	0	0	2	116	5	0	13	16	37	0	8	6	8	331		7	0	1	0
8:30 AM	0	5	130	0	0	2	136	5	0	14	15	43	0	11	5	13	379		2	0	0	2
8:45 AM	0	3	170	3	0	9	161	5	0	17	17	50	0	2	5	5	447		1	0	0	3
Count Total	0	34	1,080	8	0	29	1,138	50	0	92	160	491	0	76	56	76	3,290		10	0	1	9
Peak Hour	0	17	588	4	0	12	646	25	0	46	101	323	0	38	38	38	1,876		0	0	0	4



(303) 216-2439
www.alltrafficdata.net

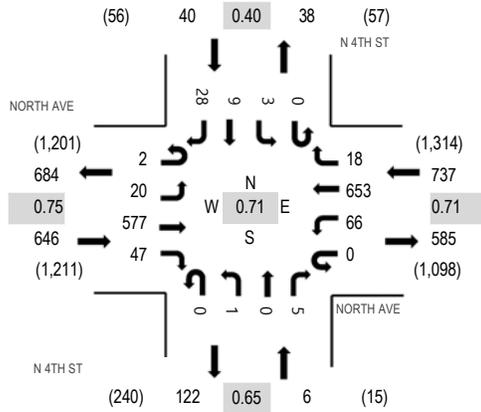
Location: 2 N 4TH ST & NORTH AVE AM

Date: Tuesday, February 16, 2021

Peak Hour: 07:15 AM - 08:15 AM

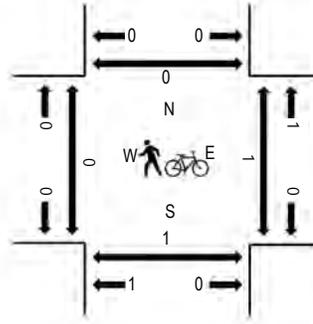
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	NORTH AVE Eastbound				NORTH AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	3	75	7	0	11	81	2	0	0	0	1	0	1	1	0	182	1,334	0	0	0	0
7:15 AM	1	7	119	7	0	16	136	3	0	0	0	1	0	2	2	0	294	1,429	0	0	1	0
7:30 AM	0	7	150	14	0	13	162	6	0	0	0	0	0	0	0	5	357	1,420	0	0	0	0
7:45 AM	1	5	193	17	0	17	236	7	0	0	0	0	0	1	6	18	501	1,379	0	0	0	0
8:00 AM	0	1	115	9	0	20	119	2	0	1	0	4	0	0	1	5	277	1,262	0	0	0	0
8:15 AM	0	0	119	18	0	14	124	3	0	2	1	1	0	0	0	3	285		0	2	0	0
8:30 AM	0	1	134	14	0	17	139	2	0	1	0	2	0	1	3	2	316		0	2	0	1
8:45 AM	0	5	178	11	0	22	160	2	0	0	0	1	0	0	0	5	384		0	0	0	0
Count Total	2	29	1,083	97	0	130	1,157	27	0	4	1	10	0	5	13	38	2,596		0	4	1	1
Peak Hour	2	20	577	47	0	66	653	18	0	1	0	5	0	3	9	28	1,429		0	0	1	0



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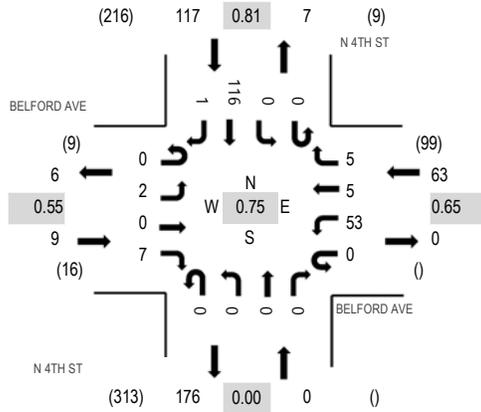
Location: 3 N 4TH ST & BELFORD AVE AM

Date: Tuesday, February 16, 2021

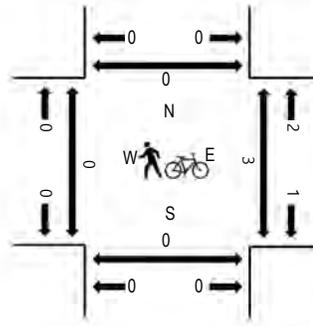
Peak Hour: 07:30 AM - 08:30 AM

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.

Traffic Counts

Interval Start Time	BELFORD AVE Eastbound				BELFORD AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North	
7:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	19	0	22	160	0	0	0	0
7:15 AM	0	0	0	2	0	5	2	1	0	0	0	0	0	0	0	23	0	33	185	0	0	0	0
7:30 AM	0	0	0	1	0	13	1	0	0	0	0	0	0	0	0	27	0	42	189	0	0	0	0
7:45 AM	0	0	0	2	0	22	1	2	0	0	0	0	0	0	0	36	0	63	185	0	1	0	0
8:00 AM	0	2	0	3	0	12	3	3	0	0	0	0	0	0	0	24	0	47	171	0	0	0	0
8:15 AM	0	0	0	1	0	6	0	0	0	0	0	0	0	0	0	29	1	37	0	2	0	0	0
8:30 AM	0	0	0	2	0	8	1	0	0	0	0	0	0	0	0	27	0	38	0	2	0	0	0
8:45 AM	0	0	0	3	0	15	0	1	0	0	0	0	0	0	0	30	0	49	0	0	0	0	0
Count Total	0	2	0	14	0	84	8	7	0	0	0	0	0	0	0	215	1	331	0	5	0	0	0
Peak Hour	0	2	0	7	0	53	5	5	0	0	0	0	0	0	0	116	1	189	0	3	0	0	0



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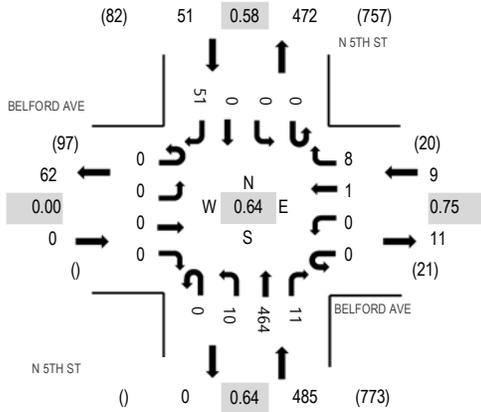
Location: 4 N 5TH ST & BELFORD AVE AM

Date: Tuesday, February 16, 2021

Peak Hour: 07:15 AM - 08:15 AM

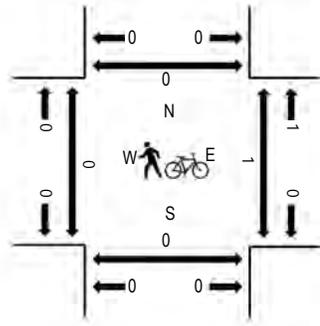
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

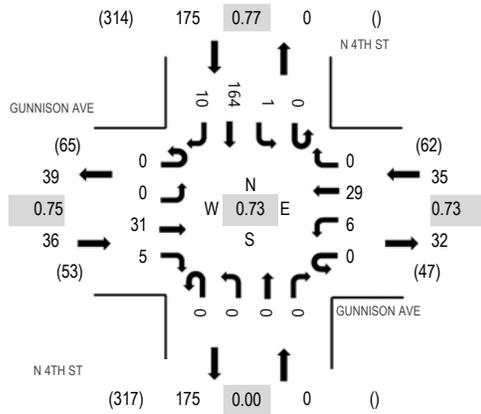
Interval Start Time	BELFORD AVE Eastbound				BELFORD AVE Westbound				N 5TH ST Northbound			N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	51	2	0	0	0	2	56	508	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	2	0	1	78	2	0	0	0	7	90	545	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	1	0	1	132	3	0	0	0	12	149	533	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	2	0	4	181	4	0	0	0	22	213	465	0	1	0	0
8:00 AM	0	0	0	0	0	0	1	3	0	4	73	2	0	0	0	10	93	367	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	5	0	0	65	3	0	0	0	5	78		0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	2	0	2	69	0	0	0	0	8	81		0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	4	0	1	89	5	0	0	0	16	115		0	0	0	0	
Count Total	0	0	0	0	0	0	1	19	0	14	738	21	0	0	0	82	875		0	1	0	0	
Peak Hour	0	0	0	0	0	0	1	8	0	10	464	11	0	0	0	51	545		0	1	0	0	



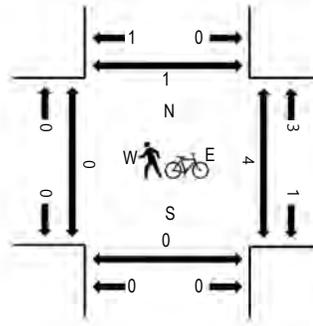
(303) 216-2439
www.alltrafficdata.net

Location: 5 N 4TH ST & GUNNISON AVE AM
Date: Tuesday, February 16, 2021
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.

Traffic Counts

Interval Start Time	GUNNISON AVE Eastbound				GUNNISON AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	1	0	0	1	2	0	0	0	0	0	0	0	22	0	26	202	0	2	1	0
7:15 AM	0	0	1	0	0	1	6	0	0	0	0	0	0	0	28	0	36	236	0	0	0	0
7:30 AM	0	0	4	1	0	1	8	0	0	0	0	0	0	1	41	0	56	244	0	0	0	0
7:45 AM	0	0	11	1	0	1	12	0	0	0	0	0	0	1	55	3	84	246	0	1	0	0
8:00 AM	0	0	5	2	0	2	7	0	0	0	0	0	0	0	43	1	60	227	0	0	0	0
8:15 AM	0	0	5	0	0	1	2	0	0	0	0	0	0	0	32	4	44		0	0	0	1
8:30 AM	0	0	10	2	0	2	8	0	0	0	0	0	0	0	34	2	58		0	1	0	0
8:45 AM	0	0	8	2	0	0	8	0	0	0	0	0	0	0	45	2	65		0	2	0	1
Count Total	0	0	45	8	0	9	53	0	0	0	0	0	0	2	300	12	429		0	6	1	2
Peak Hour	0	0	31	5	0	6	29	0	0	0	0	0	0	1	164	10	246		0	2	0	1



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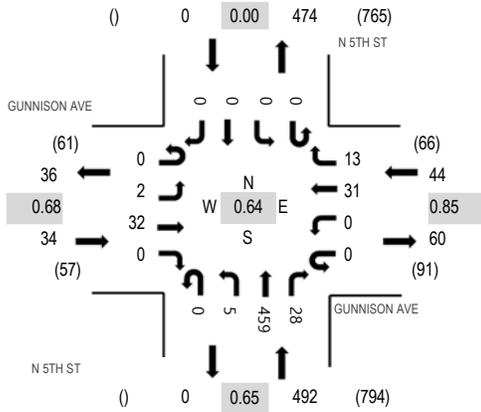
Location: 6 N 5TH ST & GUNNISON AVE AM

Date: Tuesday, February 16, 2021

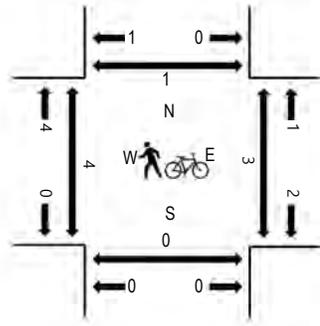
Peak Hour: 07:30 AM - 08:30 AM

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.

Traffic Counts

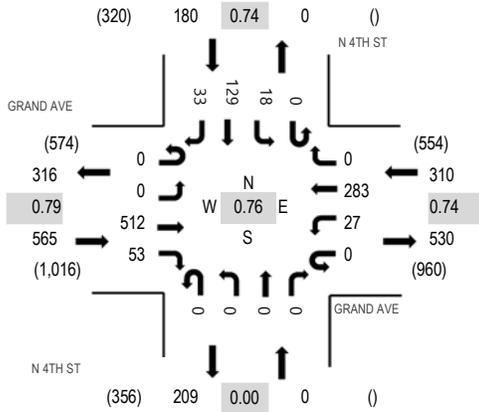
Interval Start Time	GUNNISON AVE Eastbound				GUNNISON AVE Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	1	0	0	0	2	1	0	1	54	0	0	0	0	0	59	536	1	0	0	0
7:15 AM	0	1	0	0	0	0	2	0	0	3	78	5	0	0	0	0	89	569	0	0	0	0
7:30 AM	0	0	4	0	0	0	11	2	0	1	135	14	0	0	0	0	167	570	3	2	0	1
7:45 AM	0	1	14	0	0	0	8	5	0	4	182	7	0	0	0	0	221	492	1	0	0	0
8:00 AM	0	0	6	0	0	0	9	4	0	0	72	1	0	0	0	0	92	381	0	1	0	0
8:15 AM	0	1	8	0	0	0	3	2	0	0	70	6	0	0	0	0	90		0	0	0	0
8:30 AM	0	2	9	0	0	0	8	3	0	1	64	2	0	0	0	0	89		1	0	0	0
8:45 AM	0	1	9	0	0	0	6	0	0	2	87	5	0	0	0	0	110		0	0	0	1
Count Total	0	6	51	0	0	0	49	17	0	12	742	40	0	0	0	0	917		6	3	0	2
Peak Hour	0	2	32	0	0	0	31	13	0	5	459	28	0	0	0	0	570		4	3	0	1



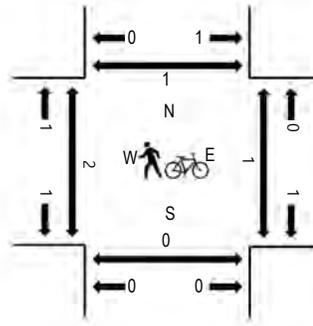
(303) 216-2439
www.alltrafficdata.net

Location: 7 N 4TH ST & GRAND AVE AM
Date: Tuesday, February 16, 2021
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.

Traffic Counts

Interval Start Time	GRAND AVE Eastbound				GRAND AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right			West	East	South	North												
7:00 AM	0	0	98	1	0	4	40	0	0	0	0	0	0	0	12	15	170	962	0	0	0	1
7:15 AM	0	0	98	6	0	5	48	0	0	0	0	0	0	0	20	7	184	1,015	0	0	0	1
7:30 AM	0	0	146	11	0	2	60	0	0	0	0	0	0	6	26	9	260	1,055	0	0	0	0
7:45 AM	0	0	162	17	0	12	96	0	0	0	0	0	0	3	46	12	348	1,010	2	1	0	0
8:00 AM	0	0	94	12	0	7	64	0	0	0	0	0	0	5	33	8	223	928	0	0	0	0
8:15 AM	0	0	110	13	0	6	63	0	0	0	0	0	0	4	24	4	224		0	0	0	1
8:30 AM	0	0	97	6	0	6	66	0	0	0	0	0	0	5	27	8	215		0	0	0	0
8:45 AM	0	0	129	16	0	9	66	0	0	0	0	0	0	3	35	8	266		1	2	1	0
Count Total	0	0	934	82	0	51	503	0	0	0	0	0	0	26	223	71	1,890		3	3	1	3
Peak Hour	0	0	512	53	0	27	283	0	0	0	0	0	0	18	129	33	1,055		2	1	0	1



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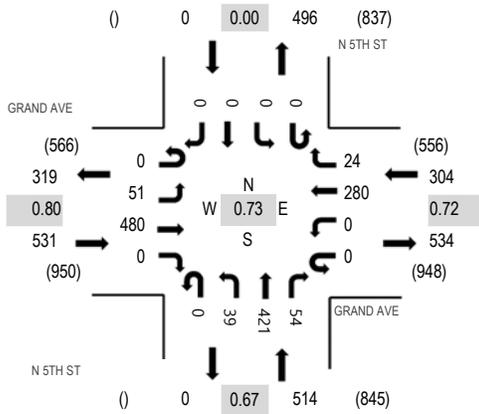
Location: 8 N 5TH ST & GRAND AVE AM

Date: Tuesday, February 16, 2021

Peak Hour: 07:30 AM - 08:30 AM

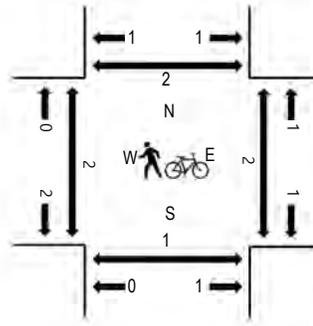
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

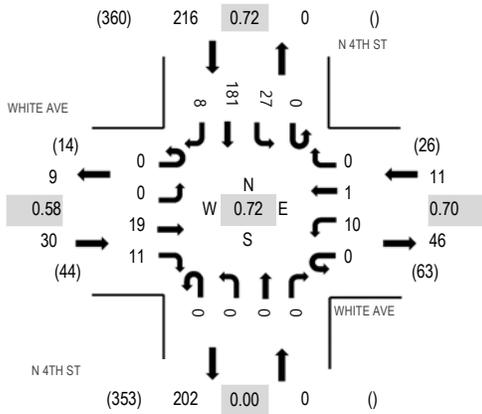
Interval Start Time	GRAND AVE Eastbound				GRAND AVE Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right			West	East	South	North												
7:00 AM	0	30	66	0	0	0	45	2	0	0	47	11	0	0	0	0	201	1,265	0	0	0	1
7:15 AM	0	10	89	0	0	0	49	3	0	4	70	10	0	0	0	0	235	1,318	1	0	0	0
7:30 AM	0	18	134	0	0	0	59	5	0	7	129	12	0	0	0	0	364	1,349	0	1	0	1
7:45 AM	0	21	144	0	0	0	96	11	0	14	161	18	0	0	0	0	465	1,234	1	1	0	0
8:00 AM	0	5	96	0	0	0	62	4	0	9	69	9	0	0	0	0	254	1,086	0	0	1	0
8:15 AM	0	7	106	0	0	0	63	4	0	9	62	15	0	0	0	0	266		0	0	0	1
8:30 AM	0	6	91	0	0	0	65	5	0	8	61	13	0	0	0	0	249		0	0	0	0
8:45 AM	0	9	118	0	0	0	70	13	0	6	85	16	0	0	0	0	317		0	1	0	0
Count Total	0	106	844	0	0	0	509	47	0	57	684	104	0	0	0	0	2,351		2	3	1	3
Peak Hour	0	51	480	0	0	0	280	24	0	39	421	54	0	0	0	0	1,349		1	2	1	2



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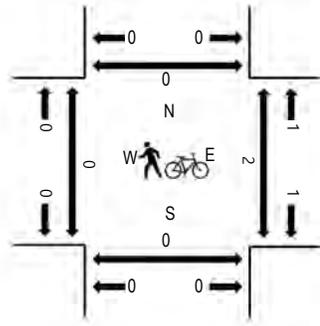
Location: 9 N 4TH ST & WHITE AVE
Date: Tuesday, February 16, 2021
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

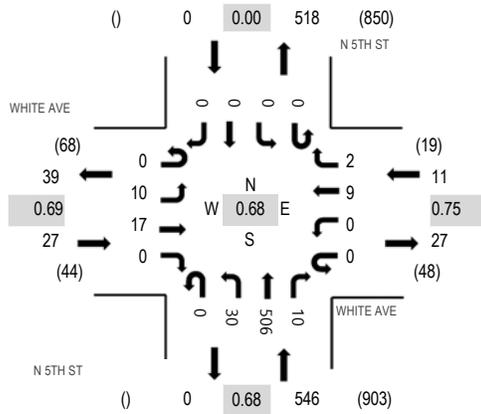
Interval Start Time	WHITE AVE Eastbound				WHITE AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right			West	East	South	North													
7:00 AM	0	0	2	2	0	3	1	0	0	0	0	0	0	0	1	16	1	26	194	0	1	0	0
7:15 AM	0	0	0	1	0	5	0	0	0	0	0	0	0	3	26	0	35	237	0	1	1	0	
7:30 AM	0	0	1	1	0	1	1	0	0	0	0	0	0	3	36	1	44	256	0	0	1	0	
7:45 AM	0	0	8	5	0	1	0	0	0	0	0	0	0	11	63	1	89	257	0	1	0	0	
8:00 AM	0	0	7	3	0	2	1	0	0	0	0	0	0	10	43	3	69	236	0	0	0	0	
8:15 AM	0	0	2	2	0	5	0	0	0	0	0	0	0	3	41	1	54		0	1	0	0	
8:30 AM	0	0	2	1	0	2	0	0	0	0	0	0	0	3	34	3	45		0	0	0	0	
8:45 AM	0	0	2	5	0	3	1	0	0	0	0	0	0	5	52	0	68		0	2	4	1	
Count Total	0	0	24	20	0	22	4	0	0	0	0	0	0	39	311	10	430		0	6	6	1	
Peak Hour	0	0	19	11	0	10	1	0	0	0	0	0	0	27	181	8	257		0	2	0	0	



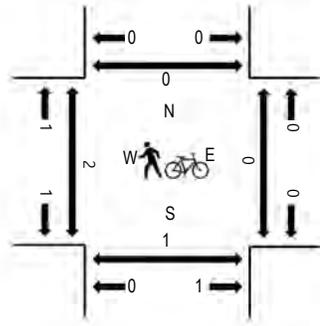
(303) 216-2439
www.alltrafficdata.net

Location: 10 N 5TH ST & WHITE AVE AM
Date: Tuesday, February 16, 2021
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.

Traffic Counts

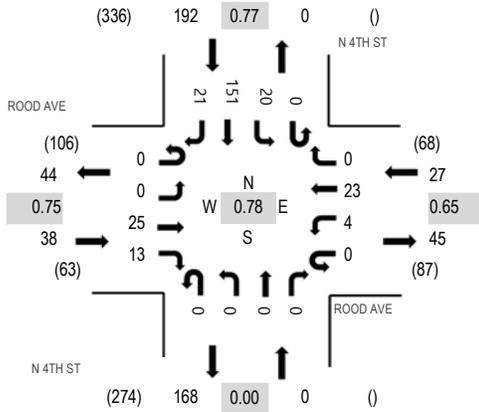
Interval Start Time	WHITE AVE Eastbound				WHITE AVE Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right			West	East	South	North												
7:00 AM	0	0	3	0	0	0	0	1	0	8	56	0	0	0	0	0	68	542	0	0	0	0
7:15 AM	0	0	1	0	0	0	2	0	0	6	86	3	0	0	0	0	98	577	0	0	0	0
7:30 AM	0	0	2	0	0	0	4	0	0	3	151	2	0	0	0	0	162	584	0	0	0	0
7:45 AM	0	5	6	0	0	0	2	0	0	7	190	4	0	0	0	0	214	518	0	0	0	0
8:00 AM	0	4	8	0	0	0	3	1	0	5	79	3	0	0	0	0	103	424	1	0	1	0
8:15 AM	0	1	1	0	0	0	0	1	0	15	86	1	0	0	0	0	105		0	0	0	0
8:30 AM	0	4	4	0	0	0	3	1	0	2	78	4	0	0	0	0	96		0	0	0	0
8:45 AM	0	2	3	0	0	0	1	0	0	7	104	3	0	0	0	0	120		1	0	0	0
Count Total	0	16	28	0	0	0	15	4	0	53	830	20	0	0	0	0	966		2	0	1	0
Peak Hour	0	10	17	0	0	0	9	2	0	30	506	10	0	0	0	0	584		1	0	1	0



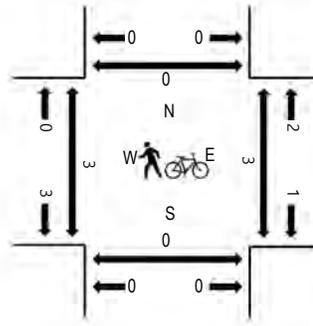
(303) 216-2439
www.alltrafficdata.net

Location: 11 N 4TH ST & ROOD AVE AM
Date: Tuesday, February 16, 2021
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.

Traffic Counts

Interval Start Time	ROOD AVE Eastbound				ROOD AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	3	0	0	0	10	0	0	0	0	0	0	3	13	2	31	213	0	0	1	0
7:15 AM	0	0	5	0	0	1	14	0	0	0	0	0	0	3	21	5	49	245	2	1	0	0
7:30 AM	0	0	4	1	0	1	7	0	0	0	0	0	0	4	31	3	51	257	1	1	0	0
7:45 AM	0	0	8	6	0	1	5	0	0	0	0	0	0	6	53	3	82	257	2	2	0	0
8:00 AM	0	0	9	3	0	1	3	0	0	0	0	0	0	8	31	8	63	254	0	0	0	0
8:15 AM	0	0	4	3	0	1	8	0	0	0	0	0	0	2	36	7	61		0	0	0	0
8:30 AM	0	0	7	2	0	3	4	0	0	0	0	0	0	5	27	3	51		0	1	2	1
8:45 AM	0	0	7	1	0	2	7	0	0	0	0	0	0	9	36	17	79		1	2	0	0
Count Total	0	0	47	16	0	10	58	0	0	0	0	0	0	40	248	48	467		6	7	3	1
Peak Hour	0	0	25	13	0	4	23	0	0	0	0	0	0	20	151	21	257		3	3	0	0



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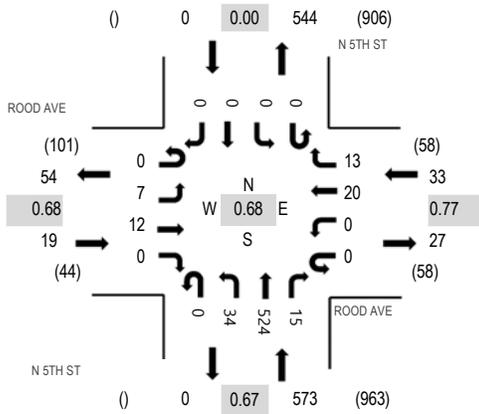
Location: 12 N 5TH ST & ROOD AVE AM

Date: Tuesday, February 16, 2021

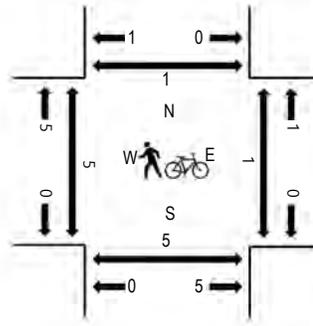
Peak Hour: 07:30 AM - 08:30 AM

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.

Traffic Counts

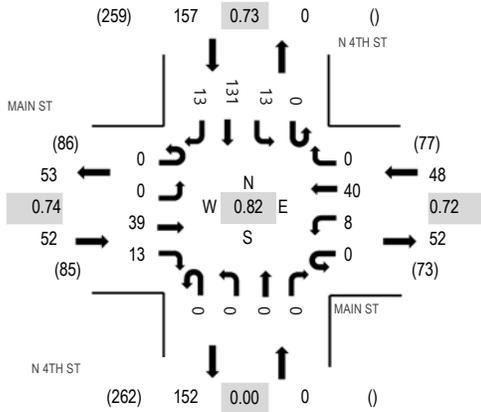
Interval Start Time	ROOD AVE Eastbound				ROOD AVE Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	1	4	0	0	0	2	2	0	9	61	2	0	0	0	0	81	594	0	0	1	0
7:15 AM	0	1	0	0	0	0	2	2	0	9	94	4	0	0	0	0	112	619	1	1	0	0
7:30 AM	0	1	2	0	0	0	3	4	0	8	153	1	0	0	0	0	172	625	0	1	0	0
7:45 AM	0	3	2	0	0	0	6	5	0	11	193	9	0	0	0	0	229	557	3	0	2	0
8:00 AM	0	2	8	0	0	0	6	2	0	8	78	2	0	0	0	0	106	471	2	0	2	0
8:15 AM	0	1	0	0	0	0	5	2	0	7	100	3	0	0	0	0	118		0	0	1	0
8:30 AM	0	2	6	0	0	0	6	2	0	4	81	3	0	0	0	0	104		0	0	1	0
8:45 AM	0	5	6	0	0	0	5	4	0	10	107	6	0	0	0	0	143		1	3	2	0
Count Total	0	16	28	0	0	0	35	23	0	66	867	30	0	0	0	0	1,065		7	5	9	0
Peak Hour	0	7	12	0	0	0	20	13	0	34	524	15	0	0	0	0	625		5	1	5	0



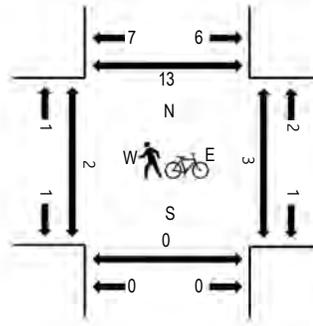
(303) 216-2439
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Location: 13 N 4TH ST & MAIN ST AM
Date: Tuesday, February 16, 2021
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

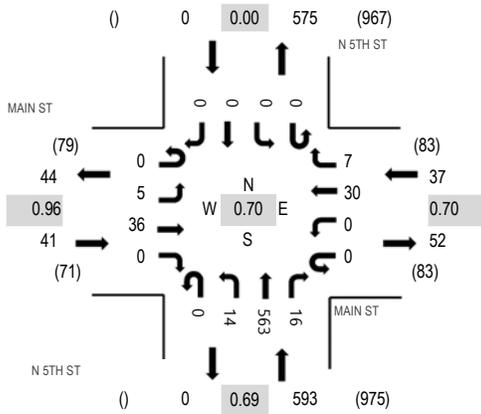
Interval Start Time	MAIN ST Eastbound				MAIN ST Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	5	0	0	0	1	4	0	0	0	0	0	0	12	3	25	175	2	0	0	0
7:15 AM	0	0	3	0	0	0	2	3	0	0	0	0	0	0	18	2	28	204	0	0	0	0
7:30 AM	0	0	2	3	0	0	2	5	0	0	0	0	0	0	31	1	44	242	0	1	0	3
7:45 AM	0	0	13	0	0	0	1	10	0	0	0	0	0	0	3	47	78	257	1	1	0	2
8:00 AM	0	0	10	4	0	0	2	8	0	0	0	0	0	1	28	1	54	246	0	0	0	7
8:15 AM	0	0	8	6	0	0	1	9	0	0	0	0	0	7	32	3	66		0	1	0	1
8:30 AM	0	0	8	3	0	0	4	13	0	0	0	0	0	2	24	5	59		1	1	0	3
8:45 AM	0	0	10	10	0	0	2	10	0	0	0	0	0	1	29	5	67		0	1	0	7
Count Total	0	0	59	26	0	0	15	62	0	0	0	0	0	14	221	24	421		4	5	0	23
Peak Hour	0	0	39	13	0	0	8	40	0	0	0	0	0	13	131	13	257		2	3	0	13



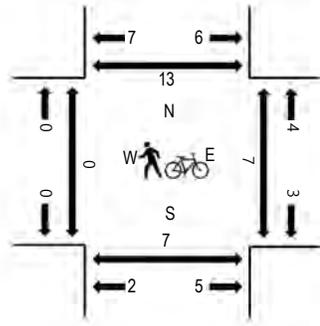
(303) 216-2439
www.alltrafficdata.net

Location: 14 N 5TH ST & MAIN ST AM
Date: Tuesday, February 16, 2021
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.

Traffic Counts

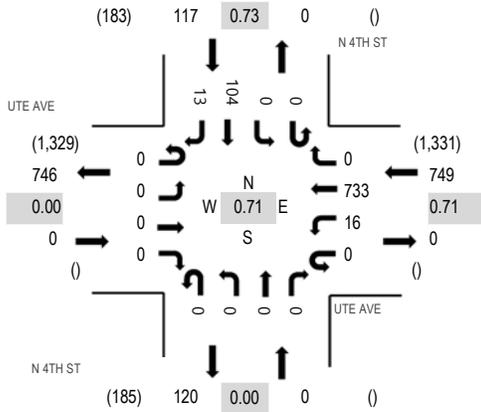
Interval Start Time	MAIN ST Eastbound				MAIN ST Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North	
7:00 AM	0	1	3	0	0	0	2	0	0	0	3	71	2	0	0	0	0	82	617	0	0	1	0
7:15 AM	0	0	2	0	0	0	4	3	0	1	106	2	0	0	0	0	0	118	653	0	2	0	1
7:30 AM	0	0	2	0	0	0	5	1	0	3	162	5	0	0	0	0	0	178	671	0	1	2	1
7:45 AM	0	1	12	0	0	0	10	2	0	3	208	3	0	0	0	0	0	239	604	0	4	0	1
8:00 AM	0	1	12	0	0	0	7	3	0	2	87	6	0	0	0	0	0	118	512	0	1	2	7
8:15 AM	0	3	10	0	0	0	8	1	0	6	106	2	0	0	0	0	0	136		0	0	3	4
8:30 AM	0	1	10	0	0	0	13	4	0	1	81	1	0	0	0	0	0	111		0	1	1	5
8:45 AM	0	4	9	0	0	0	10	10	0	1	111	2	0	0	0	0	0	147		0	2	1	5
Count Total	0	11	60	0	0	0	59	24	0	20	932	23	0	0	0	0	0	1,129		0	11	10	24
Peak Hour	0	5	36	0	0	0	30	7	0	14	563	16	0	0	0	0	0	671		0	6	7	13



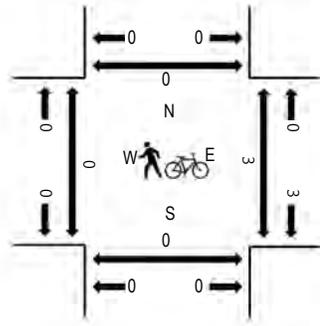
(303) 216-2439
www.alltrafficdata.net

Location: 15 N 4TH ST & UTE AVE AM
Date: Tuesday, February 16, 2021
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.

Traffic Counts

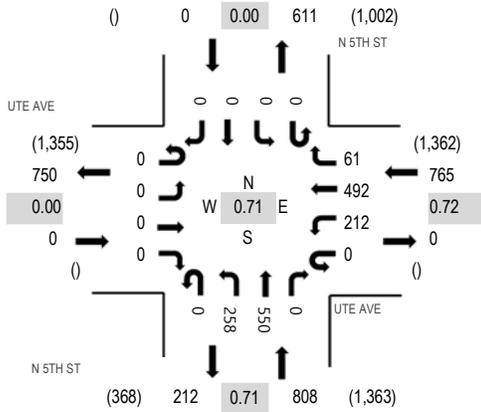
Interval Start Time	UTE AVE Eastbound				UTE AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	0	105	0	0	0	0	0	0	0	8	1	114	757	0	0	0	0
7:15 AM	0	0	0	0	0	0	138	0	0	0	0	0	0	0	13	0	151	845	0	0	0	1
7:30 AM	0	0	0	0	0	2	157	0	0	0	0	0	0	0	25	4	188	866	0	0	0	0
7:45 AM	0	0	0	0	0	7	257	0	0	0	0	0	0	0	37	3	304	853	0	1	0	0
8:00 AM	0	0	0	0	0	5	176	0	0	0	0	0	0	0	19	2	202	757	0	0	0	0
8:15 AM	0	0	0	0	0	2	143	0	0	0	0	0	0	0	23	4	172		0	0	0	0
8:30 AM	0	0	0	0	0	3	151	0	0	0	0	0	0	0	18	3	175		0	0	0	0
8:45 AM	0	0	0	0	0	3	182	0	0	0	0	0	0	0	20	3	208		0	0	0	0
Count Total	0	0	0	0	0	22	1,309	0	0	0	0	0	0	0	163	20	1,514		0	1	0	1
Peak Hour	0	0	0	0	0	16	733	0	0	0	0	0	0	0	104	13	866		0	1	0	0



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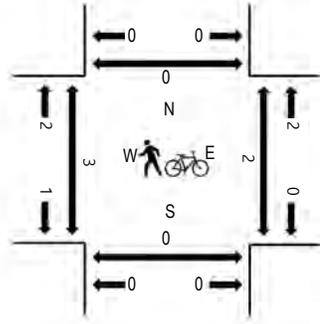
Location: 16 N 5TH ST & UTE AVE AM
Date: Tuesday, February 16, 2021
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	UTE AVE Eastbound				UTE AVE Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	19	80	11	0	26	67	0	0	0	0	0	203	1,435	0	0	0	0
7:15 AM	0	0	0	0	0	38	95	1	0	50	105	0	0	0	0	0	289	1,559	0	0	0	0
7:30 AM	0	0	0	0	0	47	100	10	0	62	168	0	0	0	0	0	387	1,573	2	1	0	0
7:45 AM	0	0	0	0	0	69	178	21	0	88	200	0	0	0	0	0	556	1,476	0	0	0	0
8:00 AM	0	0	0	0	0	54	115	11	0	66	81	0	0	0	0	0	327	1,290	0	1	0	0
8:15 AM	0	0	0	0	0	42	99	19	0	42	101	0	0	0	0	0	303		1	0	0	0
8:30 AM	0	0	0	0	0	46	115	5	0	47	77	0	0	0	0	0	290		1	1	0	0
8:45 AM	0	0	0	0	0	52	126	9	1	66	116	0	0	0	0	0	370		0	0	0	0
Count Total	0	0	0	0	0	367	908	87	1	447	915	0	0	0	0	0	2,725		4	3	0	0
Peak Hour	0	0	0	0	0	212	492	61	0	258	550	0	0	0	0	0	1,573		3	2	0	0



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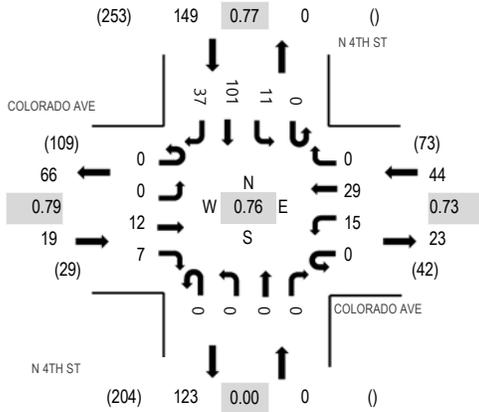
Location: 17 N 4TH ST & COLORADO AVE AM

Date: Tuesday, February 16, 2021

Peak Hour: 07:45 AM - 08:45 AM

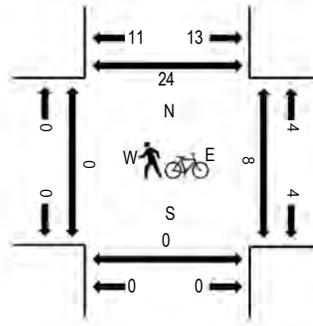
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	COLORADO AVE Eastbound				COLORADO AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	1	0	0	0	5	0	0	0	0	0	0	2	10	1	19	156	0	0	0	0
7:15 AM	0	0	3	0	0	0	2	0	0	0	0	0	0	2	15	2	24	177	0	0	0	8
7:30 AM	0	0	0	0	0	0	8	0	0	0	0	0	0	2	30	3	43	210	3	0	0	6
7:45 AM	0	0	3	3	0	4	10	0	0	0	0	0	0	3	40	7	70	212	0	2	0	6
8:00 AM	0	0	2	1	0	1	6	0	0	0	0	0	0	2	22	6	40	199	0	2	0	3
8:15 AM	0	0	3	1	0	8	7	0	0	0	0	0	0	4	24	10	57		0	3	0	10
8:30 AM	0	0	4	2	0	2	6	0	0	0	0	0	0	2	15	14	45		0	1	0	5
8:45 AM	0	0	2	4	0	2	12	0	0	0	0	0	0	7	20	10	57		0	1	0	3
Count Total	0	0	18	11	0	17	56	0	0	0	0	0	0	24	176	53	355		3	9	0	41
Peak Hour	0	0	12	7	0	15	29	0	0	0	0	0	0	11	101	37	212		0	8	0	24



(303) 216-2439
www.alltrafficdata.net

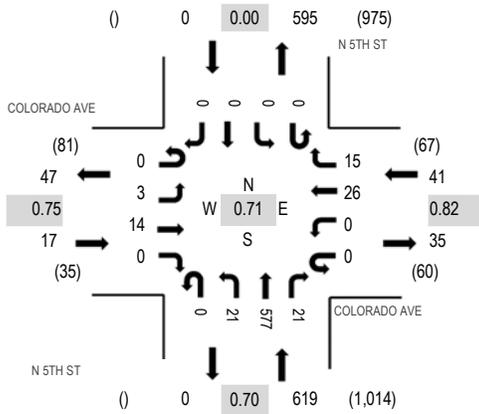
Location: 18 N 5TH ST & COLORADO AVE AM

Date: Tuesday, February 16, 2021

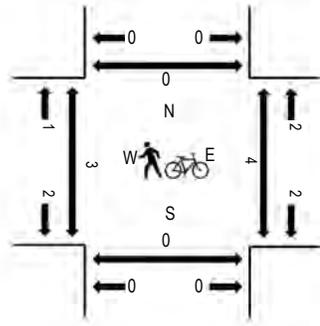
Peak Hour: 07:30 AM - 08:30 AM

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.

Traffic Counts

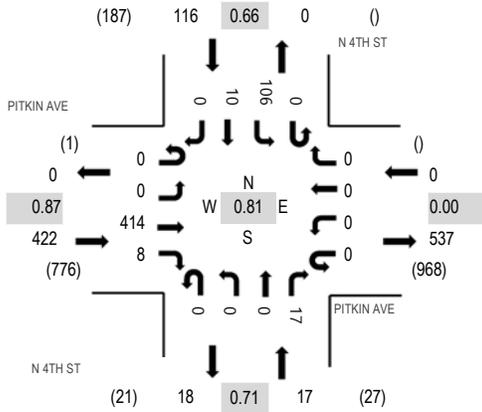
Interval Start Time	COLORADO AVE Eastbound				COLORADO AVE Westbound				N 5TH ST Northbound			N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
7:00 AM	0	2	1	0	0	0	4	0	0	2	75	2	0	0	0	0	86	623	0	1	0	1
7:15 AM	0	2	2	0	0	0	2	0	0	0	103	3	0	0	0	0	112	646	0	0	0	0
7:30 AM	0	0	1	0	0	0	3	1	0	5	171	5	0	0	0	0	186	677	0	2	0	0
7:45 AM	0	1	6	0	0	0	9	2	0	7	207	7	0	0	0	0	239	591	0	1	0	0
8:00 AM	0	1	2	0	0	0	4	10	0	2	86	4	0	0	0	0	109	493	0	1	0	0
8:15 AM	0	1	5	0	0	0	10	2	0	7	113	5	0	0	0	0	143		1	0	0	0
8:30 AM	0	0	5	0	0	0	9	0	0	3	80	3	0	0	0	0	100		0	2	0	2
8:45 AM	0	3	3	0	0	0	9	2	0	5	113	6	0	0	0	0	141		2	0	0	1
Count Total	0	10	25	0	0	0	50	17	0	31	948	35	0	0	0	0	1,116		3	7	0	4
Peak Hour	0	3	14	0	0	0	26	15	0	21	577	21	0	0	0	0	677		1	4	0	0



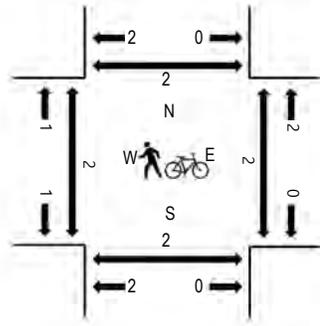
(303) 216-2439
www.alltrafficdata.net

Location: 19 N 4TH ST & PITKIN AVE AM
Date: Tuesday, February 16, 2021
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.

Traffic Counts

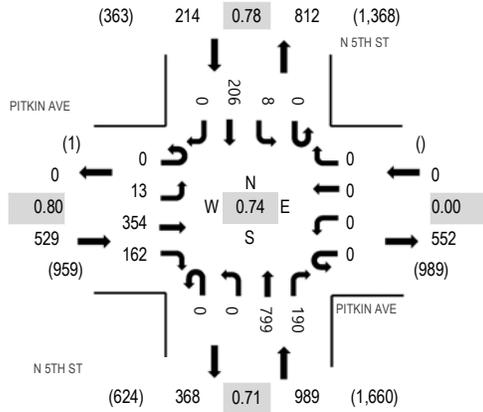
Interval Start Time	PITKIN AVE Eastbound				PITKIN AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings						
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North			
7:00 AM	0	0	64	0	0	0	0	0	0	0	0	0	1	0	8	0	0	0	0	73	466	0	0	0	2
7:15 AM	0	0	74	0	0	0	0	0	0	0	0	0	4	0	13	0	0	0	0	91	521	0	0	0	0
7:30 AM	0	0	103	0	0	0	0	0	0	0	0	0	2	0	25	1	0	0	0	131	553	0	1	1	1
7:45 AM	0	0	120	1	0	0	0	0	0	0	0	0	4	0	43	3	0	0	0	171	555	0	1	0	1
8:00 AM	0	0	96	0	0	0	0	0	0	0	0	0	6	0	23	3	0	0	0	128	524	0	0	2	0
8:15 AM	0	0	94	2	0	0	0	0	0	0	0	0	3	0	22	2	0	0	0	123		1	1	0	1
8:30 AM	0	0	104	5	0	0	0	0	0	0	0	0	4	0	18	2	0	0	0	133		1	0	0	0
8:45 AM	0	0	113	0	0	0	0	0	0	0	0	0	3	0	21	2	1	0	0	140		2	0	2	1
Count Total	0	0	768	8	0	0	0	0	0	0	0	0	27	0	173	13	1	0	0	990		4	3	5	6
Peak Hour	0	0	414	8	0	0	0	0	0	0	0	0	17	0	106	10	0	0	0	555		2	2	2	2



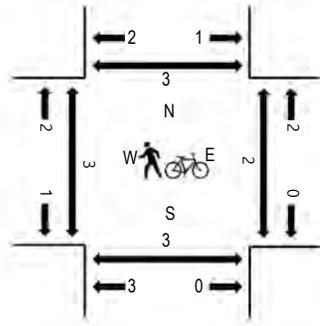
(303) 216-2439
www.alltrafficdata.net

Location: 20 N 5TH ST & PITKIN AVE AM
Date: Tuesday, February 16, 2021
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.

Traffic Counts

Interval Start Time	PITKIN AVE Eastbound				PITKIN AVE Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	2	49	27	0	0	0	0	0	0	93	19	0	0	17	0	207	1,553	0	1	0	0
7:15 AM	0	2	71	17	0	0	0	0	0	0	153	33	0	2	35	1	314	1,711	0	0	0	0
7:30 AM	0	2	83	35	0	0	0	0	0	0	231	46	0	3	44	0	444	1,732	0	0	0	0
7:45 AM	0	4	119	45	0	0	0	0	0	0	286	65	0	0	69	0	588	1,614	1	0	0	2
8:00 AM	0	3	78	46	0	0	0	0	0	0	144	43	0	1	50	0	365	1,429	1	1	3	0
8:15 AM	0	4	74	36	0	0	0	0	0	0	138	36	0	4	43	0	335		0	1	0	1
8:30 AM	0	5	85	36	0	0	0	0	0	0	118	37	0	1	44	0	326		0	0	0	0
8:45 AM	0	7	97	32	0	0	0	0	0	0	176	42	0	1	48	0	403		0	1	0	1
Count Total	0	29	656	274	0	0	0	0	0	0	1,339	321	0	12	350	1	2,982		2	4	3	4
Peak Hour	0	13	354	162	0	0	0	0	0	0	799	190	0	8	206	0	1,732		2	2	3	3



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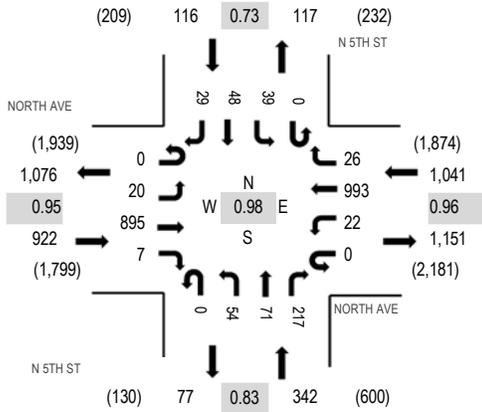
Location: 1 N 5TH ST & NORTH AVE PM

Date: Tuesday, February 16, 2021

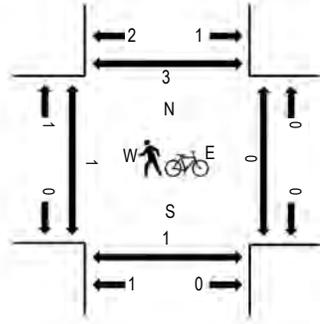
Peak Hour: 04:15 PM - 05:15 PM

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.

Traffic Counts

Interval Start Time	NORTH AVE Eastbound				NORTH AVE Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	5	235	6	0	2	238	11	0	13	24	42	0	17	8	10	611	2,414	0	0	0	0
4:15 PM	0	7	225	1	0	8	238	5	0	12	17	62	0	8	7	6	596	2,421	0	0	0	2
4:30 PM	0	4	221	0	0	3	264	5	0	10	16	38	0	12	19	9	601	2,372	0	0	1	1
4:45 PM	0	4	231	0	0	6	260	5	0	10	12	62	0	2	9	5	606	2,262	0	0	0	0
5:00 PM	0	5	218	6	0	5	231	11	0	22	26	55	0	17	13	9	618	2,068	1	0	0	0
5:15 PM	0	7	236	1	0	8	208	5	0	12	17	33	0	8	5	7	547		0	0	0	0
5:30 PM	0	4	205	0	0	3	181	5	0	14	16	34	0	12	10	7	491		1	0	1	2
5:45 PM	0	4	174	0	0	6	161	5	0	9	12	32	0	2	4	3	412		0	0	1	3
Count Total	0	40	1,745	14	0	41	1,781	52	0	102	140	358	0	78	75	56	4,482		2	0	3	8
Peak Hour	0	20	895	7	0	22	993	26	0	54	71	217	0	39	48	29	2,421		1	0	1	3



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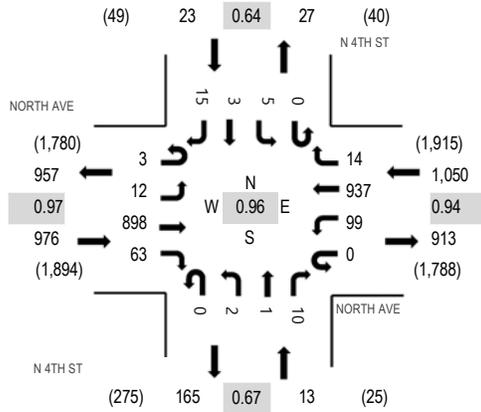
Location: 2 N 4TH ST & NORTH AVE PM

Date: Tuesday, February 16, 2021

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

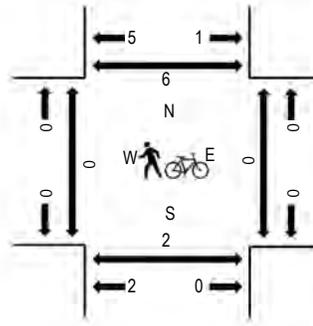
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	NORTH AVE Eastbound				NORTH AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	2	2	233	15	0	15	226	1	0	0	0	3	0	2	0	4	503	2,026	0	0	0	1
4:15 PM	0	7	225	16	0	28	212	3	0	2	0	1	0	2	1	3	500	2,062	0	0	2	2
4:30 PM	0	2	216	9	0	21	242	1	0	0	1	3	0	3	1	2	501	2,062	0	0	0	1
4:45 PM	3	2	229	16	0	17	241	5	0	0	0	5	0	0	0	4	522	1,993	0	0	0	1
5:00 PM	0	1	228	22	0	33	242	5	0	0	0	1	0	0	1	6	539	1,857	0	0	0	0
5:15 PM	0	1	240	12	0	16	213	1	0	2	0	4	0	1	1	9	500		0	0	0	3
5:30 PM	0	2	206	9	0	17	189	3	0	0	0	1	0	0	1	4	432		0	0	0	0
5:45 PM	0	3	182	11	0	12	172	0	0	1	0	1	0	2	1	1	386		0	1	0	0
Count Total	5	20	1,759	110	0	159	1,737	19	0	5	1	19	0	10	6	33	3,883		0	1	2	8
Peak Hour	3	12	898	63	0	99	937	14	0	2	1	10	0	5	3	15	2,062		0	0	2	4



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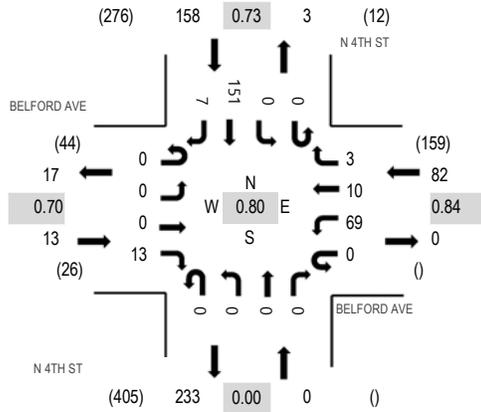
Location: 3 N 4TH ST & BELFORD AVE PM

Date: Tuesday, February 16, 2021

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

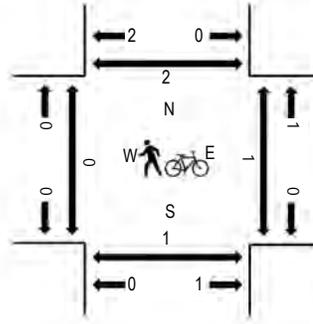
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

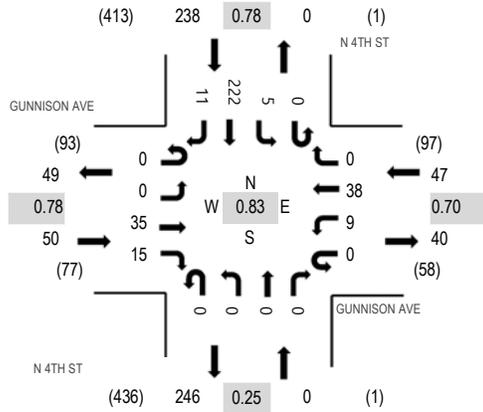
Interval Start Time	BELFORD AVE Eastbound				BELFORD AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North	
4:00 PM	0	0	0	4	0	17	3	1	0	0	0	0	0	0	0	31	1	57	231	0	1	0	0
4:15 PM	0	0	0	4	0	14	2	2	0	0	0	0	0	0	43	4	69	253	0	0	0	0	
4:30 PM	0	0	0	2	0	21	4	1	0	0	0	0	0	0	25	0	53	239	0	0	0	2	
4:45 PM	0	0	0	2	0	16	2	0	0	0	0	0	0	0	31	1	52	239	0	1	0	0	
5:00 PM	0	0	0	5	0	18	2	0	0	0	0	0	0	0	52	2	79	230	0	0	0	0	
5:15 PM	0	1	0	2	0	15	5	3	0	0	0	0	0	0	25	4	55		0	0	0	0	
5:30 PM	0	0	0	4	0	14	3	1	0	0	0	0	0	0	26	5	53		0	1	0	0	
5:45 PM	0	0	0	2	0	8	4	3	0	0	0	0	0	0	24	2	43		0	1	0	0	
Count Total	0	1	0	25	0	123	25	11	0	0	0	0	0	0	257	19	461		0	4	0	2	
Peak Hour	0	0	0	13	0	69	10	3	0	0	0	0	0	0	151	7	253		0	1	0	2	



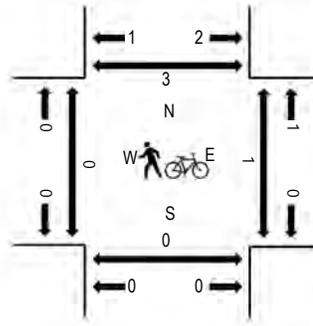
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Location: 5 N 4TH ST & GUNNISON AVE PM
Date: Tuesday, February 16, 2021
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

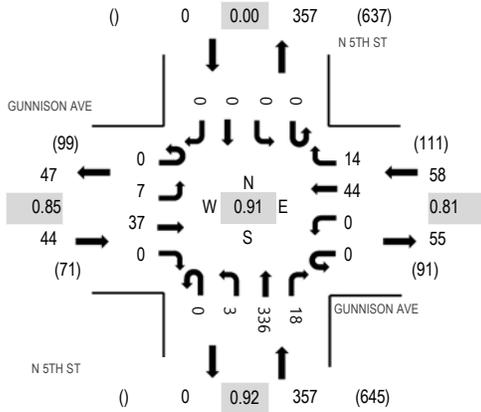
Interval Start Time	GUNNISON AVE Eastbound				GUNNISON AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	2	7	0	5	16	0	0	0	0	0	0	1	53	1	85	319	0	3	0	0
4:15 PM	0	0	5	4	0	3	11	0	0	0	0	0	0	2	53	4	82	335	0	0	0	0
4:30 PM	0	0	7	7	0	2	12	0	0	0	0	0	0	1	48	1	78	309	0	1	0	0
4:45 PM	0	0	10	1	0	2	8	0	0	0	0	0	0	0	49	4	74	294	0	0	0	2
5:00 PM	0	0	13	3	0	2	7	0	0	0	0	0	0	2	72	2	101	269	0	0	0	1
5:15 PM	0	0	3	0	0	3	7	0	0	0	1	0	0	0	40	2	56		0	0	0	3
5:30 PM	0	0	7	3	0	1	8	0	0	0	0	0	0	0	41	3	63		0	0	0	3
5:45 PM	0	0	3	2	0	4	6	0	0	0	0	0	0	2	31	1	49		0	3	0	0
Count Total	0	0	50	27	0	22	75	0	0	0	1	0	0	8	387	18	588		0	7	0	9
Peak Hour	0	0	35	15	0	9	38	0	0	0	0	0	0	5	222	11	335		0	1	0	3



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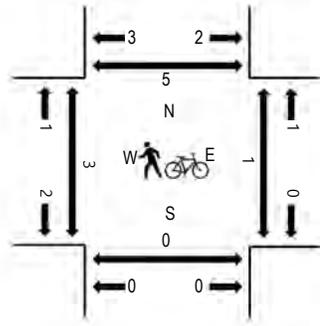
Location: 6 N 5TH ST & GUNNISON AVE PM
Date: Tuesday, February 16, 2021
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	GUNNISON AVE Eastbound				GUNNISON AVE Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North	
4:00 PM	0	1	3	0	0	0	0	17	4	0	3	78	4	0	0	0	0	110	449	0	1	0	1
4:15 PM	0	2	7	0	0	0	15	5	0	0	89	8	0	0	0	0	126	459	0	0	0	0	
4:30 PM	0	0	9	0	0	0	11	4	0	2	74	4	0	0	0	0	104	425	0	1	0	0	
4:45 PM	0	2	11	0	0	0	9	3	0	0	82	2	0	0	0	0	109	412	0	0	0	2	
5:00 PM	0	3	10	0	0	0	9	2	0	1	91	4	0	0	0	0	120	378	0	0	0	2	
5:15 PM	0	2	5	0	0	0	11	1	0	1	69	3	0	0	0	0	92		0	0	0	3	
5:30 PM	0	0	11	0	0	0	8	1	0	1	67	3	0	0	0	0	91		0	0	0	1	
5:45 PM	0	0	5	0	0	0	11	0	0	0	57	2	0	0	0	0	75		0	0	0	1	
Count Total	0	10	61	0	0	0	91	20	0	8	607	30	0	0	0	0	827		0	2	0	10	
Peak Hour	0	7	37	0	0	0	44	14	0	3	336	18	0	0	0	0	459		0	1	0	4	



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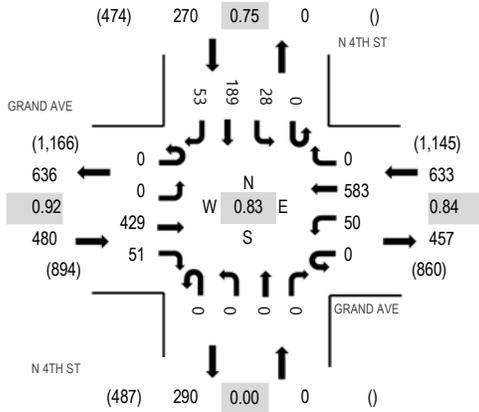
Location: 7 N 4TH ST & GRAND AVE PM

Date: Tuesday, February 16, 2021

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

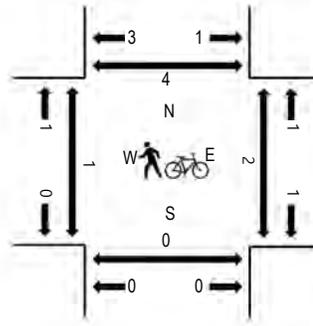
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	GRAND AVE Eastbound				GRAND AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	122	8	0	15	141	0	0	0	0	0	0	4	53	14	357	1,325	0	1	0	0
4:15 PM	0	0	111	10	0	14	113	0	0	0	0	0	0	4	44	14	310	1,383	0	0	0	2
4:30 PM	0	0	107	16	0	13	139	0	0	0	0	0	0	5	40	11	331	1,360	0	0	0	0
4:45 PM	0	0	91	14	0	12	148	0	0	0	0	0	0	6	41	15	327	1,297	0	0	0	1
5:00 PM	0	0	120	11	0	11	183	0	0	0	0	0	0	13	64	13	415	1,188	1	1	0	0
5:15 PM	0	0	93	4	0	6	136	0	0	0	0	0	0	4	26	18	287		0	0	1	1
5:30 PM	0	0	101	5	0	4	110	0	0	0	0	0	0	4	31	13	268		0	3	0	0
5:45 PM	0	0	74	7	0	8	92	0	0	0	0	0	0	1	30	6	218		0	0	0	0
Count Total	0	0	819	75	0	83	1,062	0	0	0	0	0	0	41	329	104	2,513		1	5	1	4
Peak Hour	0	0	429	51	0	50	583	0	0	0	0	0	0	28	189	53	1,383		1	1	0	3



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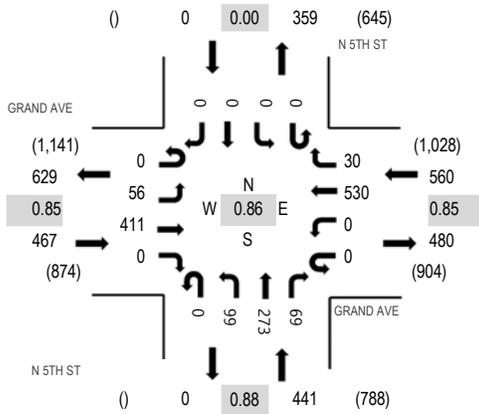
Location: 8 N 5TH ST & GRAND AVE PM

Date: Tuesday, February 16, 2021

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

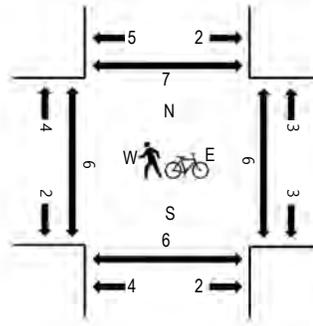
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	GRAND AVE Eastbound				GRAND AVE Westbound				N 5TH ST Northbound			N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
4:00 PM	0	22	106	0	0	0	138	8	0	15	58	23	0	0	0	0	370	1,411	0	0	0	0
4:15 PM	0	16	105	0	0	0	110	11	0	20	79	17	0	0	0	0	358	1,468	0	0	0	2
4:30 PM	0	14	94	0	0	0	130	5	0	21	57	15	0	0	0	0	336	1,429	1	2	0	2
4:45 PM	0	13	88	0	0	0	135	4	0	22	66	19	0	0	0	0	347	1,381	3	1	2	1
5:00 PM	0	13	124	0	0	0	155	10	0	36	71	18	0	0	0	0	427	1,279	2	3	3	1
5:15 PM	0	11	88	0	0	0	117	5	0	28	50	20	0	0	0	0	319		0	2	0	1
5:30 PM	0	12	97	0	0	0	93	7	0	19	46	14	0	0	0	0	288		0	1	0	0
5:45 PM	0	6	65	0	0	0	97	3	0	5	58	11	0	0	0	0	245		2	0	0	0
Count Total	0	107	767	0	0	0	975	53	0	166	485	137	0	0	0	0	2,690		8	9	5	7
Peak Hour	0	56	411	0	0	0	530	30	0	99	273	69	0	0	0	0	1,468		6	6	5	6



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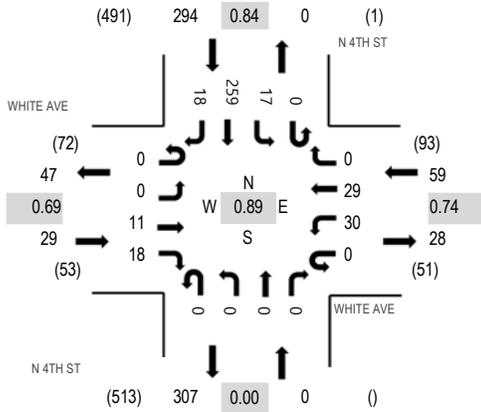
Location: 9 N 4TH ST & WHITE AVE

Date: Tuesday, February 16, 2021

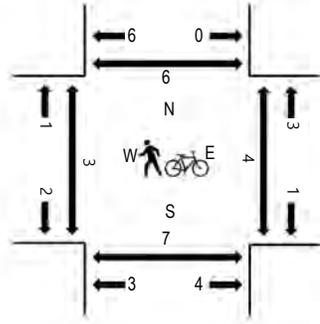
Peak Hour: 04:15 PM - 05:15 PM

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.

Traffic Counts

Interval Start Time	WHITE AVE Eastbound				WHITE AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right			West	East	South	North												
4:00 PM	0	0	5	3	0	7	7	1	0	0	0	0	0	5	64	4	96	371	4	4	3	1
4:15 PM	0	0	1	3	0	7	5	0	0	0	0	0	0	2	62	8	88	382	0	2	2	1
4:30 PM	0	0	3	5	0	8	4	0	0	0	0	0	0	6	57	2	85	347	2	0	2	0
4:45 PM	0	0	5	7	0	7	13	0	0	0	0	0	0	5	61	4	102	315	1	1	2	2
5:00 PM	0	0	2	3	0	8	7	0	0	0	0	0	0	4	79	4	107	266	0	1	1	3
5:15 PM	0	0	6	2	0	3	6	0	0	0	0	0	0	1	34	1	53		0	1	0	0
5:30 PM	0	0	3	3	0	4	2	0	0	0	0	0	0	0	40	1	53		0	3	2	0
5:45 PM	0	0	1	1	0	4	0	0	0	0	0	0	0	2	41	4	53		0	0	0	2
Count Total	0	0	26	27	0	48	44	1	0	0	0	0	0	25	438	28	637		7	12	12	9
Peak Hour	0	0	11	18	0	30	29	0	0	0	0	0	0	17	259	18	382		3	4	7	6



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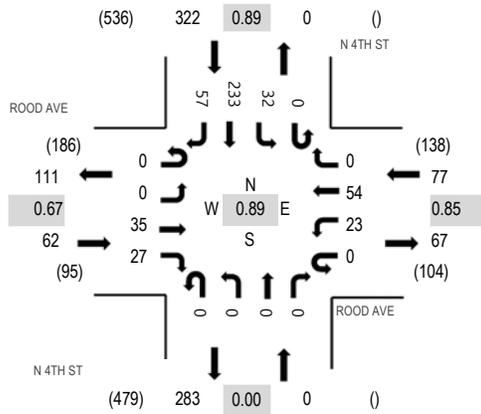
Location: 11 N 4TH ST & ROOD AVE PM

Date: Tuesday, February 16, 2021

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

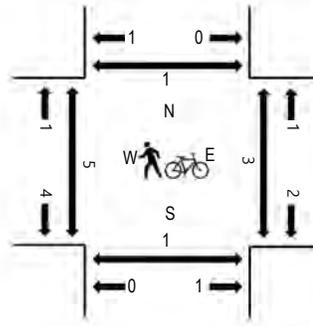
Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	ROOD AVE Eastbound				ROOD AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North	
4:00 PM	0	0	6	7	0	1	10	0	0	0	0	0	0	0	10	58	10	102	441	0	1	0	0
4:15 PM	0	0	7	5	0	6	14	0	0	0	0	0	0	0	13	53	13	111	461	2	1	0	1
4:30 PM	0	0	12	5	0	3	7	0	0	0	0	0	0	0	5	51	15	98	417	0	1	1	0
4:45 PM	0	0	13	12	0	6	17	0	0	0	0	0	0	0	6	60	16	130	389	2	0	0	0
5:00 PM	0	0	3	5	0	8	16	0	0	0	0	0	0	0	8	69	13	122	328	1	1	0	0
5:15 PM	0	0	5	3	0	5	14	0	0	0	0	0	0	0	2	29	9	67		2	1	1	1
5:30 PM	0	0	3	2	0	4	12	0	0	0	0	0	0	0	3	43	3	70		1	5	1	0
5:45 PM	0	0	5	2	0	1	14	0	0	0	0	0	0	0	3	41	3	69		1	0	1	2
Count Total	0	0	54	41	0	34	104	0	0	0	0	0	0	0	50	404	82	769		9	10	4	4
Peak Hour	0	0	35	27	0	23	54	0	0	0	0	0	0	0	32	233	57	461		5	3	1	1



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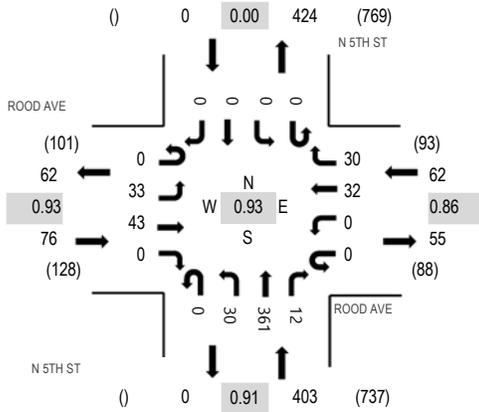
Location: 12 N 5TH ST & ROOD AVE PM

Date: Tuesday, February 16, 2021

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

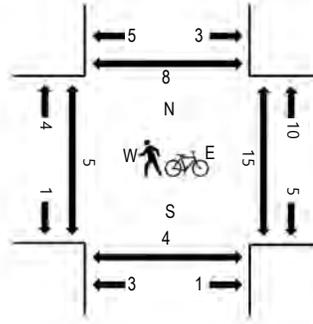
Peak 15-Minutes: 04:15 PM - 04:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	ROOD AVE Eastbound				ROOD AVE Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	7	11	0	0	0	5	3	0	4	79	4	0	0	0	0	113	514	3	2	1	1
4:15 PM	0	9	10	0	0	0	11	7	0	7	96	5	0	0	0	0	145	541	2	2	0	0
4:30 PM	0	7	14	0	0	0	4	10	0	10	74	2	0	0	0	0	121	520	2	2	1	0
4:45 PM	0	11	9	0	0	0	10	7	0	7	91	0	0	0	0	0	135	491	0	7	0	3
5:00 PM	0	6	10	0	0	0	7	6	0	6	100	5	0	0	0	0	140	444	1	4	2	5
5:15 PM	0	8	6	0	0	0	3	3	0	7	94	3	0	0	0	0	124		0	2	2	0
5:30 PM	0	6	1	0	0	0	6	4	0	4	67	4	0	0	0	0	92		0	1	2	0
5:45 PM	0	10	3	0	0	0	6	1	0	4	63	1	0	0	0	0	88		2	3	0	1
Count Total	0	64	64	0	0	0	52	41	0	49	664	24	0	0	0	0	958		10	23	8	10
Peak Hour	0	33	43	0	0	0	32	30	0	30	361	12	0	0	0	0	541		5	15	3	8



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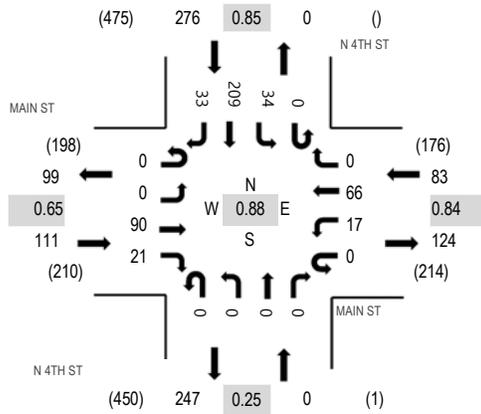
Location: 13 N 4TH ST & MAIN ST PM

Date: Tuesday, February 16, 2021

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

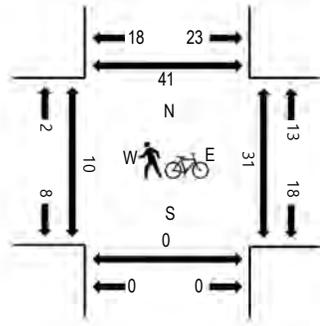
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	MAIN ST Eastbound				MAIN ST Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	22	7	0	5	24	0	0	0	0	0	0	5	55	6	124	461	7	6	0	6
4:15 PM	0	0	38	6	0	3	13	0	0	0	0	0	0	5	50	6	121	470	5	8	0	16
4:30 PM	0	0	12	9	0	1	19	0	0	0	0	0	0	9	44	3	97	430	3	7	0	7
4:45 PM	0	0	18	3	0	5	15	0	0	0	0	0	0	9	55	14	119	437	0	7	0	12
5:00 PM	0	0	22	3	0	8	19	0	0	0	0	0	0	11	60	10	133	401	2	8	0	6
5:15 PM	0	0	17	9	0	0	19	0	0	0	0	0	0	5	30	1	81		1	5	0	6
5:30 PM	0	0	22	7	0	5	17	0	0	1	0	0	0	3	41	8	104		3	4	0	1
5:45 PM	0	0	10	5	0	3	20	0	0	0	0	0	0	6	36	3	83		0	4	0	5
Count Total	0	0	161	49	0	30	146	0	0	1	0	0	0	53	371	51	862		21	49	0	59
Peak Hour	0	0	90	21	0	17	66	0	0	0	0	0	0	34	209	33	470		10	30	0	41



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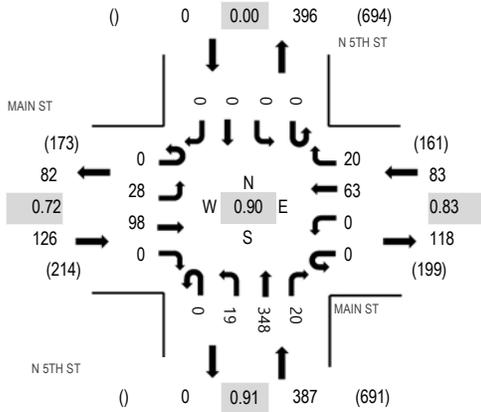
Location: 14 N 5TH ST & MAIN ST PM

Date: Tuesday, February 16, 2021

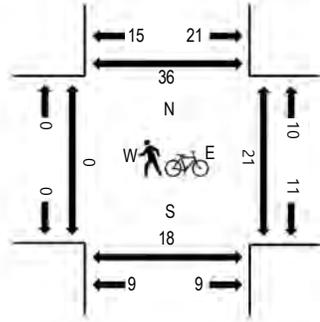
Peak Hour: 04:15 PM - 05:15 PM

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.

Traffic Counts

Interval Start Time	MAIN ST Eastbound				MAIN ST Westbound				N 5TH ST Northbound			N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru			Right	West	East	South	North
4:00 PM	0	0	24	0	0	0	21	1	0	6	84	1	0	0	0	0	137	567	0	12	7	9
4:15 PM	0	7	37	0	0	0	13	4	0	3	89	3	0	0	0	0	156	596	0	2	7	8
4:30 PM	0	7	16	0	0	0	17	6	0	2	78	1	0	0	0	0	127	553	0	9	9	10
4:45 PM	0	7	17	0	0	0	15	3	0	5	89	11	0	0	0	0	147	542	0	6	1	17
5:00 PM	0	7	28	0	0	0	18	7	0	9	92	5	0	0	0	0	166	499	0	4	1	1
5:15 PM	0	5	17	0	0	0	10	2	0	8	70	1	0	0	0	0	113		0	4	3	4
5:30 PM	0	7	18	0	0	0	18	5	0	7	58	3	0	0	0	0	116		0	5	2	4
5:45 PM	0	4	13	0	0	0	20	1	0	1	61	4	0	0	0	0	104		0	6	1	4
Count Total	0	44	170	0	0	0	132	29	0	41	621	29	0	0	0	0	1,066		0	48	31	57
Peak Hour	0	28	98	0	0	0	63	20	0	19	348	20	0	0	0	0	596		0	21	18	36



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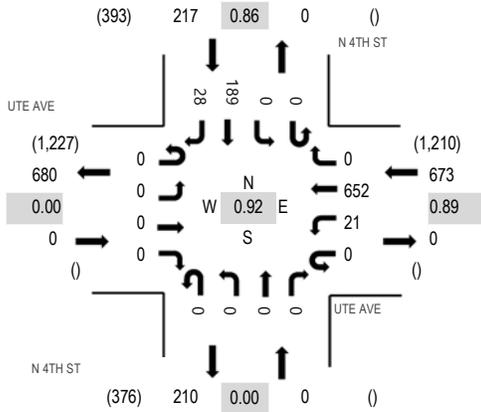
Location: 15 N 4TH ST & UTE AVE PM

Date: Tuesday, February 16, 2021

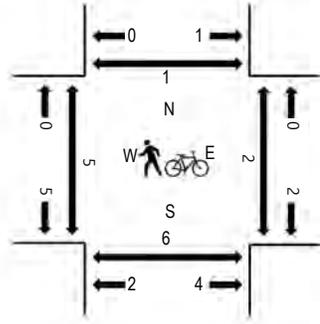
Peak Hour: 04:00 PM - 05:00 PM

Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	UTE AVE Eastbound				UTE AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	5	167	0	0	0	0	0	0	0	50	10	232	890	0	1	2	0
4:15 PM	0	0	0	0	0	7	140	0	0	0	0	0	0	0	45	5	197	877	1	0	0	0
4:30 PM	0	0	0	0	0	2	163	0	0	0	0	0	0	0	45	9	219	855	2	1	2	1
4:45 PM	0	0	0	0	0	7	182	0	0	0	0	0	0	0	49	4	242	819	2	0	2	0
5:00 PM	0	0	0	0	0	0	155	0	0	0	0	0	0	0	58	6	219	713	0	0	0	0
5:15 PM	0	0	0	0	0	3	138	0	0	0	0	0	0	0	29	5	175		0	0	0	0
5:30 PM	0	0	0	0	0	6	133	0	0	0	0	0	0	0	38	6	183		0	0	0	0
5:45 PM	0	0	0	0	0	3	99	0	0	0	0	0	0	0	29	5	136		1	0	1	0
Count Total	0	0	0	0	0	33	1,177	0	0	0	0	0	0	0	343	50	1,603		6	2	7	1
Peak Hour	0	0	0	0	0	21	652	0	0	0	0	0	0	0	189	28	890		5	2	6	1



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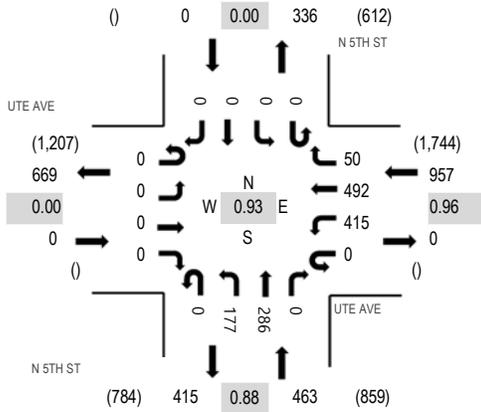
Location: 16 N 5TH ST & UTE AVE PM

Date: Tuesday, February 16, 2021

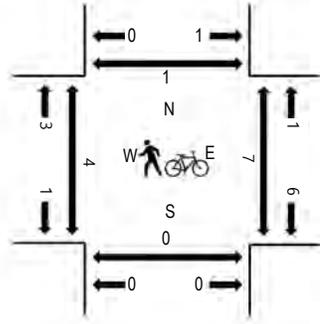
Peak Hour: 04:00 PM - 05:00 PM

Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	UTE AVE Eastbound				UTE AVE Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	113	114	10	0	54	77	0	0	0	0	0	368	1,420	0	4	0	0
4:15 PM	0	0	0	0	0	98	107	11	0	38	78	0	0	0	0	0	332	1,410	0	1	0	0
4:30 PM	0	0	0	0	0	100	134	17	0	33	56	0	0	0	0	0	340	1,405	1	0	0	1
4:45 PM	0	0	0	0	0	104	137	12	0	52	75	0	0	0	0	0	380	1,332	1	1	0	0
5:00 PM	0	0	0	0	0	113	126	9	0	34	76	0	0	0	0	0	358	1,183	2	0	1	0
5:15 PM	0	0	0	0	0	118	92	9	0	47	61	0	0	0	0	0	327		0	1	0	0
5:30 PM	0	0	0	0	0	73	93	8	0	47	46	0	0	0	0	0	267		0	0	0	0
5:45 PM	0	0	0	0	0	65	72	9	0	27	58	0	0	0	0	0	231		0	0	1	1
Count Total	0	0	0	0	0	784	875	85	0	332	527	0	0	0	0	0	2,603		4	7	2	2
Peak Hour	0	0	0	0	0	415	492	50	0	177	286	0	0	0	0	0	1,420		2	6	0	1



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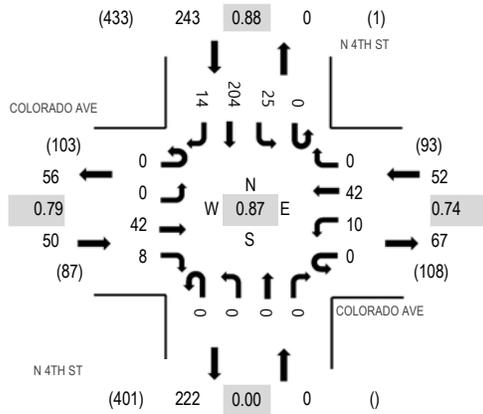
Location: 17 N 4TH ST & COLORADO AVE PM

Date: Tuesday, February 16, 2021

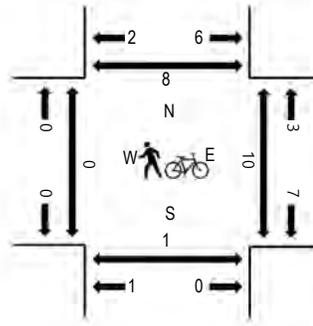
Peak Hour: 04:15 PM - 05:15 PM

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.

Traffic Counts

Interval Start Time	COLORADO AVE Eastbound				COLORADO AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North	
4:00 PM	0	0	6	7	0	2	11	0	0	0	0	0	0	0	4	54	4	88	334	0	2	0	5
4:15 PM	0	0	8	2	0	4	14	0	0	0	0	0	0	10	47	3	88	345	0	2	0	1	
4:30 PM	0	0	9	2	0	0	10	0	0	0	0	0	0	2	50	1	74	322	0	2	0	2	
4:45 PM	0	0	9	2	0	2	10	0	0	0	0	0	0	7	50	4	84	311	0	1	0	5	
5:00 PM	0	0	16	2	0	4	8	0	0	0	0	0	0	6	57	6	99	279	0	4	1	0	
5:15 PM	0	0	13	4	0	3	7	0	0	0	0	0	0	3	29	6	65		0	3	0	0	
5:30 PM	0	0	4	0	0	3	5	0	0	0	0	0	0	5	43	3	63		1	1	0	1	
5:45 PM	0	0	3	0	0	3	6	1	0	0	0	0	0	3	31	5	52		0	2	0	2	
Count Total	0	0	68	19	0	21	71	1	0	0	0	0	0	40	361	32	613		1	17	1	16	
Peak Hour	0	0	42	8	0	10	42	0	0	0	0	0	0	25	204	14	345		0	9	1	8	



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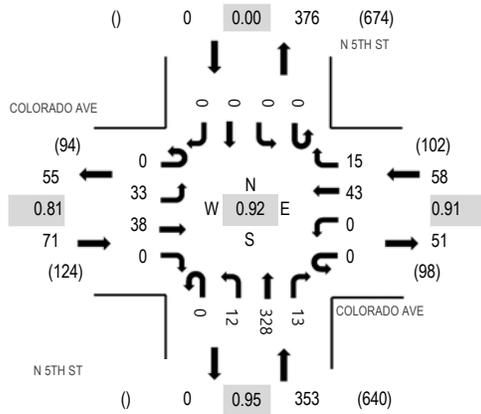
Location: 18 N 5TH ST & COLORADO AVE PM

Date: Tuesday, February 16, 2021

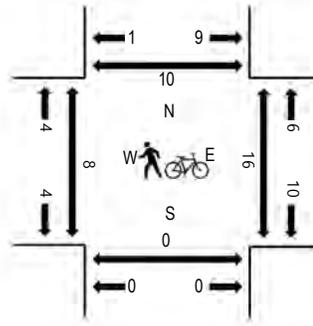
Peak Hour: 04:15 PM - 05:15 PM

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.

Traffic Counts

Interval Start Time	COLORADO AVE Eastbound				COLORADO AVE Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North		
4:00 PM	0	6	13	0	0	0	10	4	4	0	3	84	4	0	0	0	0	0	124	475	0	5	0	0
4:15 PM	0	10	10	0	0	0	12	2	0	4	83	2	0	0	0	0	0	123	482	0	0	0	1	
4:30 PM	0	5	7	0	0	0	10	2	0	4	71	3	0	0	0	0	0	102	458	1	6	0	2	
4:45 PM	0	8	9	0	0	0	11	5	0	3	88	2	0	0	0	0	0	126	433	3	5	0	3	
5:00 PM	0	10	12	0	0	0	10	6	0	1	86	6	0	0	0	0	0	131	391	3	5	0	3	
5:15 PM	0	3	14	0	0	0	3	7	0	5	67	0	0	0	0	0	0	99		0	2	0	1	
5:30 PM	0	5	4	0	0	0	5	5	0	1	56	1	0	0	0	0	0	77		0	2	0	2	
5:45 PM	0	0	8	0	0	0	7	3	0	5	58	3	0	0	0	0	0	84		0	1	0	1	
Count Total	0	47	77	0	0	0	68	34	0	26	593	21	0	0	0	0	0	866		7	26	0	13	
Peak Hour	0	33	38	0	0	0	43	15	0	12	328	13	0	0	0	0	0	482		7	16	0	9	



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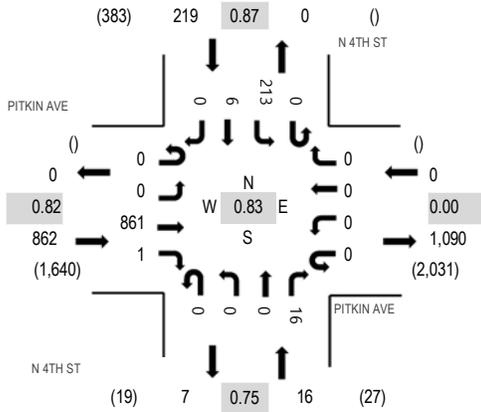
Location: 19 N 4TH ST & PITKIN AVE PM

Date: Tuesday, February 16, 2021

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

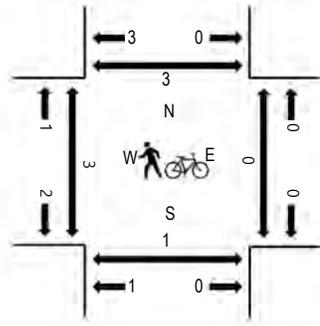
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	PITKIN AVE Eastbound				PITKIN AVE Westbound				N 4TH ST Northbound				N 4TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North	
4:00 PM	0	0	238	4	0	0	0	0	0	0	0	0	3	0	51	2	0	298	1,063	0	0	0	0
4:15 PM	0	0	210	0	0	0	0	0	0	0	0	0	1	0	55	3	0	269	1,097	0	0	0	0
4:30 PM	0	0	189	0	0	0	0	0	0	0	0	0	3	0	45	0	0	237	1,077	0	0	1	0
4:45 PM	0	0	200	0	0	0	0	0	0	0	0	0	6	0	50	3	0	259	1,060	2	0	0	1
5:00 PM	0	0	262	1	0	0	0	0	0	0	0	0	6	0	63	0	0	332	987	0	0	0	0
5:15 PM	0	0	212	1	0	0	0	0	0	0	0	0	3	0	32	1	0	249		0	0	1	0
5:30 PM	0	0	171	1	0	0	0	0	0	0	0	0	3	0	44	1	0	220		0	0	0	0
5:45 PM	0	0	150	1	0	0	0	0	0	0	0	0	2	0	32	1	0	186		0	0	0	0
Count Total	0	0	1,632	8	0	0	0	0	0	0	0	0	27	0	372	11	0	2,050		2	0	2	1
Peak Hour	0	0	861	1	0	0	0	0	0	0	0	0	16	0	213	6	0	1,097		2	0	1	1



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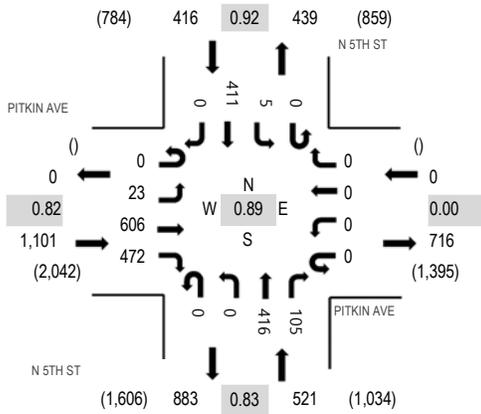
Location: 20 N 5TH ST & PITKIN AVE PM

Date: Tuesday, February 16, 2021

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

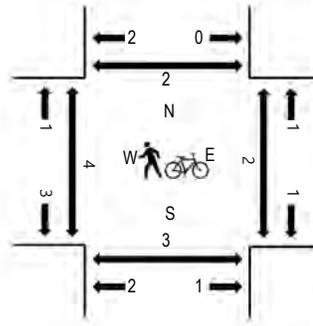
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	PITKIN AVE Eastbound				PITKIN AVE Westbound				N 5TH ST Northbound				N 5TH ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	4	170	113	0	0	0	0	0	0	130	39	0	3	106	0	565	2,029	0	4	0	0
4:15 PM	0	4	158	111	0	0	0	0	0	0	110	39	0	2	97	0	521	2,038	1	1	1	0
4:30 PM	0	6	129	103	0	0	0	0	0	0	83	25	0	0	102	0	448	2,018	1	1	2	0
4:45 PM	0	7	134	113	0	0	0	0	0	0	120	18	0	1	102	0	495	1,981	0	0	0	0
5:00 PM	0	6	185	145	0	0	0	0	0	0	103	23	0	2	110	0	574	1,831	1	0	0	0
5:15 PM	0	8	159	88	0	0	0	0	0	0	100	27	0	4	115	0	501		0	1	0	0
5:30 PM	0	3	129	88	0	0	0	0	0	0	91	26	0	1	73	0	411		0	0	0	0
5:45 PM	0	5	99	75	0	0	0	0	0	0	79	21	0	1	65	0	345		2	2	0	0
Count Total	0	43	1,163	836	0	0	0	0	0	0	816	218	0	14	770	0	3,860		5	9	3	0
Peak Hour	0	23	606	472	0	0	0	0	0	0	416	105	0	5	411	0	2,038		3	2	3	0

Appendix B – Capacity Analysis Worksheets

HCM 6th Signalized Intersection Summary
5: 5th Street & North Ave

Existing Conditions 2021
10/09/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	895	7	22	993	26	54	71	217	39	48	29
Future Volume (veh/h)	20	895	7	22	993	26	54	71	217	39	48	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	20	895	7	22	993	26	54	71	217	39	48	29
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	329	1900	15	371	1867	49	366	319	270	316	303	257
Arrive On Green	0.02	0.52	0.52	0.02	0.52	0.52	0.05	0.17	0.17	0.04	0.16	0.16
Sat Flow, veh/h	1795	3642	28	1795	3566	93	1795	1885	1598	1795	1885	1598
Grp Volume(v), veh/h	20	440	462	22	499	520	54	71	217	39	48	29
Grp Sat Flow(s),veh/h/ln	1795	1791	1880	1795	1791	1868	1795	1885	1598	1795	1885	1598
Q Serve(g_s), s	0.4	11.3	11.3	0.4	13.4	13.4	1.8	2.4	9.5	1.3	1.6	1.1
Cycle Q Clear(g_c), s	0.4	11.3	11.3	0.4	13.4	13.4	1.8	2.4	9.5	1.3	1.6	1.1
Prop In Lane	1.00		0.02	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	329	934	981	371	938	978	366	319	270	316	303	257
V/C Ratio(X)	0.06	0.47	0.47	0.06	0.53	0.53	0.15	0.22	0.80	0.12	0.16	0.11
Avail Cap(c_a), veh/h	535	934	981	573	938	978	580	569	483	545	569	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.9	11.0	11.0	8.5	11.5	11.5	23.7	26.1	29.1	23.9	26.3	26.1
Incr Delay (d2), s/veh	0.1	1.7	1.6	0.1	2.2	2.1	0.2	0.3	5.5	0.2	0.2	0.2
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.1	4.4	4.6	0.1	5.2	5.4	0.7	1.1	3.9	0.5	0.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.0	12.7	12.7	8.6	13.6	13.5	23.8	26.5	34.6	24.1	26.6	26.3
LnGrp LOS	A	B	B	A	B	B	C	C	C	C	C	C
Approach Vol, veh/h		922			1041			342			116	
Approach Delay, s/veh		12.6			13.5			31.2			25.7	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	16.7	5.7	43.1	6.7	17.3	5.8	43.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	12.0	22.0	10.0	38.0	12.0	22.0	10.0	38.0				
Max Q Clear Time (g_c+I1), s	3.8	3.6	2.4	15.4	3.3	11.5	2.4	13.3				
Green Ext Time (p_c), s	0.0	0.2	0.0	7.1	0.0	0.8	0.0	6.3				
Intersection Summary												
HCM 6th Ctrl Delay			16.2									
HCM 6th LOS			B									

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↕↗		↵	↕↗			↕↗			↕↗	
Traffic Vol, veh/h	15	898	63	99	937	14	2	1	10	5	3	15
Future Vol, veh/h	15	898	63	99	937	14	2	1	10	5	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	898	63	99	937	14	2	1	10	5	3	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	951	0	0	961	0	0	1628	2109	481	1622	2133	476
Stage 1	-	-	-	-	-	-	960	960	-	1142	1142	-
Stage 2	-	-	-	-	-	-	668	1149	-	480	991	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	724	-	-	718	-	-	68	51	534	69	49	538
Stage 1	-	-	-	-	-	-	278	335	-	215	275	-
Stage 2	-	-	-	-	-	-	416	273	-	538	324	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	724	-	-	718	-	-	55	43	534	59	41	538
Mov Cap-2 Maneuver	-	-	-	-	-	-	55	43	-	59	41	-
Stage 1	-	-	-	-	-	-	272	328	-	210	237	-
Stage 2	-	-	-	-	-	-	344	235	-	515	317	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1	28.5	40.5
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	166	724	-	-	718	-	-	124
HCM Lane V/C Ratio	0.078	0.021	-	-	0.138	-	-	0.185
HCM Control Delay (s)	28.5	10.1	-	-	10.8	-	-	40.5
HCM Lane LOS	D	B	-	-	B	-	-	E
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.5	-	-	0.7

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↶			↷				↶
Traffic Vol, veh/h	0	0	0	0	3	15	10	329	2	0	0	75
Future Vol, veh/h	0	0	0	0	3	15	10	329	2	0	0	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	0	0	3	15	10	329	2	0	0	75

Major/Minor	Minor1			Major1		
Conflicting Flow All	-	350	166	0	0	0
Stage 1	-	350	-	-	-	-
Stage 2	-	0	-	-	-	-
Critical Hdwy	-	6.52	6.92	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	2.21	-	-
Pot Cap-1 Maneuver	0	575	852	-	-	-
Stage 1	0	634	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	-	0	852	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-
Stage 1	-	0	-	-	-	-
Stage 2	-	0	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	9.3	
HCM LOS	A	

Minor Lane/Major Mvmt	NBL	NBT	NBRWBLn1
Capacity (veh/h)	-	-	852
HCM Lane V/C Ratio	-	-	0.021
HCM Control Delay (s)	-	-	9.3
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.1

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗	↖	↗						↖	
Traffic Vol, veh/h	0	0	13	69	10	3	0	0	0	0	151	7
Future Vol, veh/h	0	0	13	69	10	3	0	0	0	0	151	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	None
Storage Length	-	-	0	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	13	69	10	3	0	0	0	0	151	7

Major/Minor	Minor2		Minor1			Major2		
Conflicting Flow All	-	-	155	161	158	-	-	0
Stage 1	-	-	-	0	0	-	-	-
Stage 2	-	-	-	161	158	-	-	-
Critical Hdwy	-	-	6.21	7.11	6.51	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.11	5.51	-	-	-
Follow-up Hdwy	-	-	3.309	3.509	4.009	-	-	-
Pot Cap-1 Maneuver	0	0	893	807	736	0	0	-
Stage 1	0	0	-	-	-	0	0	-
Stage 2	0	0	-	843	769	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	893	795	736	-	-	-
Mov Cap-2 Maneuver	-	-	-	795	736	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	831	769	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	9.1	-	0
HCM LOS	A	-	-

Minor Lane/Major Mvmt	EBLn1WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	893	795	-	-
HCM Lane V/C Ratio	0.015	0.087	-	-
HCM Control Delay (s)	9.1	10	-	-
HCM Lane LOS	A	B	-	-
HCM 95th %tile Q(veh)	0	0.3	-	-

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Future Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	0	0	10	10	10	340	10	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	195	370	-	-	365	175	0	0	0		
Stage 1	0	0	-	-	365	-	-	-	-		
Stage 2	195	370	-	-	0	-	-	-	-		
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-		
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-		
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-		
Pot Cap-1 Maneuver	749	560	0	0	564	841	-	-	-		
Stage 1	-	-	0	0	624	-	-	-	-		
Stage 2	791	621	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	730	560	-	-	564	841	-	-	-		
Mov Cap-2 Maneuver	730	560	-	-	564	-	-	-	-		
Stage 1	-	-	-	-	624	-	-	-	-		
Stage 2	769	621	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	10.9		10.5				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	
Capacity (veh/h)	-	-	-	634	675
HCM Lane V/C Ratio	-	-	-	0.032	0.03
HCM Control Delay (s)	-	-	-	10.9	10.5
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.1	0.1

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻						↻↻	
Traffic Vol, veh/h	0	10	10	10	10	0	0	0	0	10	210	10
Future Vol, veh/h	0	10	10	10	10	0	0	0	0	10	210	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	10	10	10	10	0	0	0	0	10	210	10

Major/Minor	Minor2		Minor1				Major2			
Conflicting Flow All	-	235	110	130	240	-	-	0	0	0
Stage 1	-	235	-	0	0	-	-	-	-	-
Stage 2	-	0	-	130	240	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.52	6.52	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.52	5.52	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.51	4.01	-	-	2.21	-	-
Pot Cap-1 Maneuver	0	667	926	832	662	0	-	-	-	-
Stage 1	0	712	-	-	-	0	-	-	-	-
Stage 2	0	-	-	863	708	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	667	926	814	662	-	-	-	-	-
Mov Cap-2 Maneuver	-	667	-	814	662	-	-	-	-	-
Stage 1	-	712	-	-	-	-	-	-	-	-
Stage 2	-	-	-	842	708	-	-	-	-	-

Approach	EB		WB				SB		
HCM Control Delay, s	9.8		10.1						
HCM LOS	A		B						

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	775	730	-	-	-
HCM Lane V/C Ratio	0.026	0.027	-	-	-
HCM Control Delay (s)	9.8	10.1	-	-	-
HCM Lane LOS	A	B	-	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Future Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	0	0	10	10	10	340	10	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	195	370	-	-	365	175	0	0	0		
Stage 1	0	0	-	-	365	-	-	-	-		
Stage 2	195	370	-	-	0	-	-	-	-		
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-		
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-		
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-		
Pot Cap-1 Maneuver	749	560	0	0	564	841	-	-	-		
Stage 1	-	-	0	0	624	-	-	-	-		
Stage 2	791	621	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	730	560	-	-	564	841	-	-	-		
Mov Cap-2 Maneuver	730	560	-	-	564	-	-	-	-		
Stage 1	-	-	-	-	624	-	-	-	-		
Stage 2	769	621	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	10.9		10.5				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	
Capacity (veh/h)	-	-	-	634	675
HCM Lane V/C Ratio	-	-	-	0.032	0.03
HCM Control Delay (s)	-	-	-	10.9	10.5
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.1	0.1

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	10	10	10	10	0	0	0	0	10	210	10
Future Vol, veh/h	0	10	10	10	10	0	0	0	0	10	210	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	10	10	10	10	0	0	0	0	10	210	10

Major/Minor	Minor2		Minor1				Major2			
Conflicting Flow All	-	235	110	130	240	-	-	0	0	0
Stage 1	-	235	-	0	0	-	-	-	-	-
Stage 2	-	0	-	130	240	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.52	6.52	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.52	5.52	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.51	4.01	-	-	2.21	-	-
Pot Cap-1 Maneuver	0	667	926	832	662	0	-	-	-	-
Stage 1	0	712	-	-	-	0	-	-	-	-
Stage 2	0	-	-	863	708	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	667	926	814	662	-	-	-	-	-
Mov Cap-2 Maneuver	-	667	-	814	662	-	-	-	-	-
Stage 1	-	712	-	-	-	-	-	-	-	-
Stage 2	-	-	-	842	708	-	-	-	-	-

Approach	EB		WB				SB		
HCM Control Delay, s	9.8		10.1						
HCM LOS	A		B						

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	775	730	-	-	-
HCM Lane V/C Ratio	0.026	0.027	-	-	-
HCM Control Delay (s)	9.8	10.1	-	-	-
HCM Lane LOS	A	B	-	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	7	37	0	0	44	14	3	336	18	0	0	0
Future Vol, veh/h	7	37	0	0	44	14	3	336	18	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	7	37	0	0	44	14	3	336	18	0	0	0

Major/Minor	Minor2		Minor1		Major1					
Conflicting Flow All	196	360	-	-	351	177	0	0	0	
Stage 1	0	0	-	-	351	-	-	-	-	
Stage 2	196	360	-	-	0	-	-	-	-	
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-	
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-	
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-	
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-	
Pot Cap-1 Maneuver	748	568	0	0	574	839	-	-	-	
Stage 1	-	-	0	0	633	-	-	-	-	
Stage 2	790	627	0	0	-	-	-	-	-	
Platoon blocked, %								-	-	
Mov Cap-1 Maneuver	693	568	-	-	574	839	-	-	-	
Mov Cap-2 Maneuver	693	568	-	-	574	-	-	-	-	
Stage 1	-	-	-	-	633	-	-	-	-	
Stage 2	723	627	-	-	-	-	-	-	-	

Approach	EB		WB		NB	
HCM Control Delay, s	11.7		11.4			
HCM LOS	B		B			

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	
Capacity (veh/h)	-	-	-	585	621
HCM Lane V/C Ratio	-	-	-	0.075	0.093
HCM Control Delay (s)	-	-	-	11.7	11.4
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.2	0.3

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	35	15	9	38	0	0	0	0	5	222	11
Future Vol, veh/h	0	35	15	9	38	0	0	0	0	5	222	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	35	15	9	38	0	0	0	0	5	222	11

Major/Minor	Minor2		Minor1			Major2				
Conflicting Flow All	-	238	117	139	243	-	-	0	0	0
Stage 1	-	238	-	0	0	-	-	-	-	-
Stage 2	-	0	-	139	243	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.52	6.52	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.52	5.52	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.51	4.01	-	-	2.21	-	-
Pot Cap-1 Maneuver	0	664	916	820	660	0	-	-	-	-
Stage 1	0	710	-	-	-	0	-	-	-	-
Stage 2	0	-	-	853	706	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	664	916	774	660	-	-	-	-	-
Mov Cap-2 Maneuver	-	664	-	774	660	-	-	-	-	-
Stage 1	-	710	-	-	-	-	-	-	-	-
Stage 2	-	-	-	798	706	-	-	-	-	-

Approach	EB		WB			SB		
HCM Control Delay, s	10.3		10.7					
HCM LOS	B		B					

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	724	679	-	-	-
HCM Lane V/C Ratio	0.069	0.069	-	-	-
HCM Control Delay (s)	10.3	10.7	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.2	0.2	-	-	-

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Future Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	0	0	10	10	10	340	10	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	195	370	-	-	365	175	0	0	0		
Stage 1	0	0	-	-	365	-	-	-	-		
Stage 2	195	370	-	-	0	-	-	-	-		
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-		
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-		
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-		
Pot Cap-1 Maneuver	749	560	0	0	564	841	-	-	-		
Stage 1	-	-	0	0	624	-	-	-	-		
Stage 2	791	621	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	730	560	-	-	564	841	-	-	-		
Mov Cap-2 Maneuver	730	560	-	-	564	-	-	-	-		
Stage 1	-	-	-	-	624	-	-	-	-		
Stage 2	769	621	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	10.9		10.5				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	
Capacity (veh/h)	-	-	-	634	675
HCM Lane V/C Ratio	-	-	-	0.032	0.03
HCM Control Delay (s)	-	-	-	10.9	10.5
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.1	0.1

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	10	10	10	10	0	0	0	0	10	230	10
Future Vol, veh/h	0	10	10	10	10	0	0	0	0	10	230	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	10	10	10	10	0	0	0	0	10	230	10

Major/Minor	Minor2			Minor1			Major2			
Conflicting Flow All	-	255	120	140	260	-	-	0	0	0
Stage 1	-	255	-	0	0	-	-	-	-	-
Stage 2	-	0	-	140	260	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.52	6.52	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.52	5.52	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.51	4.01	-	-	2.21	-	-
Pot Cap-1 Maneuver	0	650	912	819	646	0	-	-	-	-
Stage 1	0	698	-	-	-	0	-	-	-	-
Stage 2	0	-	-	851	694	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	650	912	800	646	-	-	-	-	-
Mov Cap-2 Maneuver	-	650	-	800	646	-	-	-	-	-
Stage 1	-	698	-	-	-	-	-	-	-	-
Stage 2	-	-	-	830	694	-	-	-	-	-

Approach	EB		WB		SB	
HCM Control Delay, s	9.9		10.2			
HCM LOS	A		B			

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	759	715	-	-	-
HCM Lane V/C Ratio	0.026	0.028	-	-	-
HCM Control Delay (s)	9.9	10.2	-	-	-
HCM Lane LOS	A	B	-	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Future Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	0	0	10	10	10	340	10	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	195	370	-	-	365	175	0	0	0		
Stage 1	0	0	-	-	365	-	-	-	-		
Stage 2	195	370	-	-	0	-	-	-	-		
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-		
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-		
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-		
Pot Cap-1 Maneuver	749	560	0	0	564	841	-	-	-		
Stage 1	-	-	0	0	624	-	-	-	-		
Stage 2	791	621	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	730	560	-	-	564	841	-	-	-		
Mov Cap-2 Maneuver	730	560	-	-	564	-	-	-	-		
Stage 1	-	-	-	-	624	-	-	-	-		
Stage 2	769	621	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	10.9		10.5				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	
Capacity (veh/h)	-	-	-	634	675
HCM Lane V/C Ratio	-	-	-	0.032	0.03
HCM Control Delay (s)	-	-	-	10.9	10.5
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.1	0.1

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	10	10	10	10	0	0	0	0	10	240	10
Future Vol, veh/h	0	10	10	10	10	0	0	0	0	10	240	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	10	10	10	10	0	0	0	0	10	240	10

Major/Minor	Minor2		Minor1			Major2				
Conflicting Flow All	-	265	125	145	270	-	-	0	0	0
Stage 1	-	265	-	0	0	-	-	-	-	-
Stage 2	-	0	-	145	270	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.52	6.52	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.52	5.52	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.51	4.01	-	-	2.21	-	-
Pot Cap-1 Maneuver	0	642	905	812	637	0	-	-	-	-
Stage 1	0	691	-	-	-	0	-	-	-	-
Stage 2	0	-	-	846	687	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	642	905	793	637	-	-	-	-	-
Mov Cap-2 Maneuver	-	642	-	793	637	-	-	-	-	-
Stage 1	-	691	-	-	-	-	-	-	-	-
Stage 2	-	-	-	825	687	-	-	-	-	-

Approach	EB		WB			SB		
HCM Control Delay, s	9.9		10.2					
HCM LOS	A		B					

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	751	706	-	-	-
HCM Lane V/C Ratio	0.027	0.028	-	-	-
HCM Control Delay (s)	9.9	10.2	-	-	-
HCM Lane LOS	A	B	-	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-

HCM 6th Signalized Intersection Summary
 33: 5th Street & Grand Ave

Existing Conditions 2021

10/09/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	411	0	0	530	30	99	273	69	0	0	0
Future Volume (veh/h)	56	411	0	0	530	30	99	273	69	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1885	1885	0	0	1885	1885	1885	1885	1885			
Adj Flow Rate, veh/h	56	411	0	0	530	30	99	273	69			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1			
Cap, veh/h	413	1791	0	0	1449	82	718	1433	639			
Arrive On Green	0.04	0.50	0.00	0.00	0.42	0.42	0.13	0.13	0.13			
Sat Flow, veh/h	1795	3676	0	0	3541	195	1795	3582	1598			
Grp Volume(v), veh/h	56	411	0	0	275	285	99	273	69			
Grp Sat Flow(s),veh/h/ln	1795	1791	0	0	1791	1850	1795	1791	1598			
Q Serve(g_s), s	1.7	6.5	0.0	0.0	10.5	10.6	4.9	6.8	3.8			
Cycle Q Clear(g_c), s	1.7	6.5	0.0	0.0	10.5	10.6	4.9	6.8	3.8			
Prop In Lane	1.00		0.00	0.00		0.11	1.00		1.00			
Lane Grp Cap(c), veh/h	413	1791	0	0	753	778	718	1433	639			
V/C Ratio(X)	0.14	0.23	0.00	0.00	0.37	0.37	0.14	0.19	0.11			
Avail Cap(c_a), veh/h	530	1791	0	0	753	778	718	1433	639			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.97	0.97	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	14.8	14.1	0.0	0.0	19.8	19.8	28.2	29.0	27.7			
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.0	1.4	1.3	0.4	0.3	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.7	2.6	0.0	0.0	4.6	4.7	2.2	3.1	1.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.0	14.4	0.0	0.0	21.2	21.2	28.6	29.3	28.0			
LnGrp LOS	B	B	A	A	C	C	C	C	C			
Approach Vol, veh/h		467			560			441				
Approach Delay, s/veh		14.5			21.2			28.9				
Approach LOS		B			C			C				
Timer - Assigned Phs			3	4		6		8				
Phs Duration (G+Y+Rc), s			7.9	47.1		45.0		55.0				
Change Period (Y+Rc), s			4.0	5.0		5.0		5.0				
Max Green Setting (Gmax), s			10.5	35.5		40.0		50.0				
Max Q Clear Time (g_c+I1), s			3.7	12.6		8.8		8.5				
Green Ext Time (p_c), s			0.1	3.5		2.3		3.0				
Intersection Summary												
HCM 6th Ctrl Delay			21.4									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
 34: 4th Street & Grand Ave

Existing Conditions 2021

10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑						↔	
Traffic Volume (veh/h)	0	429	51	50	583	0	0	0	0	28	189	53
Future Volume (veh/h)	0	429	51	50	583	0	0	0	0	28	189	53
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	429	51	50	583	0				28	189	53
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1397	623	588	2077	0				117	807	235
Arrive On Green	0.00	0.39	0.39	0.14	0.58	0.00				0.32	0.32	0.32
Sat Flow, veh/h	0	3676	1598	1795	3676	0				364	2521	734
Grp Volume(v), veh/h	0	429	51	50	583	0				143	0	127
Grp Sat Flow(s),veh/h/ln	0	1791	1598	1795	1791	0				1867	0	1753
Q Serve(g_s), s	0.0	8.3	2.0	0.0	8.2	0.0				5.7	0.0	5.3
Cycle Q Clear(g_c), s	0.0	8.3	2.0	0.0	8.2	0.0				5.7	0.0	5.3
Prop In Lane	0.00		1.00	1.00		0.00				0.20		0.42
Lane Grp Cap(c), veh/h	0	1397	623	588	2077	0				597	0	561
V/C Ratio(X)	0.00	0.31	0.08	0.09	0.28	0.00				0.24	0.00	0.23
Avail Cap(c_a), veh/h	0	1397	623	606	2077	0				597	0	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	21.1	19.2	17.4	10.5	0.0				25.0	0.0	24.9
Incr Delay (d2), s/veh	0.0	0.6	0.3	0.1	0.3	0.0				0.9	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.5	0.8	0.7	3.2	0.0				2.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	21.7	19.5	17.4	10.9	0.0				26.0	0.0	25.9
LnGrp LOS		A	C	B	B	A				C	A	C
Approach Vol, veh/h		480			633					270		
Approach Delay, s/veh		21.5			11.4					25.9		
Approach LOS		C			B					C		
Timer - Assigned Phs		2		4		7		8				
Phs Duration (G+Y+Rc), s		37.0		63.0		19.0		44.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		* 5				
Max Green Setting (Gmax), s		32.0		58.0		15.0		* 39				
Max Q Clear Time (g_c+I1), s		7.7		10.2		2.0		10.3				
Green Ext Time (p_c), s		1.6		6.7		0.1		3.2				

Intersection Summary

HCM 6th Ctrl Delay	17.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	25	14	0	0	15	33	37	380	1	0	0	0
Future Vol, veh/h	25	14	0	0	15	33	37	380	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	25	14	0	0	15	33	37	380	1	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	272	455	-	-	455	191	0	0	0		
Stage 1	0	0	-	-	455	-	-	-	-		
Stage 2	272	455	-	-	0	-	-	-	-		
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-		
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-		
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-		
Pot Cap-1 Maneuver	662	502	0	0	502	821	-	-	-		
Stage 1	-	-	0	0	570	-	-	-	-		
Stage 2	713	570	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	621	502	-	-	502	821	-	-	-		
Mov Cap-2 Maneuver	621	502	-	-	502	-	-	-	-		
Stage 1	-	-	-	-	570	-	-	-	-		
Stage 2	666	570	-	-	-	-	-	-	-		

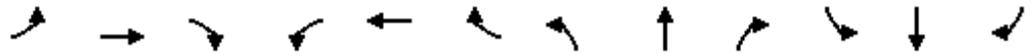
Approach	EB		WB		NB		
HCM Control Delay, s	11.8		10.7				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	
Capacity (veh/h)	-	-	-	572	685
HCM Lane V/C Ratio	-	-	-	0.068	0.07
HCM Control Delay (s)	-	-	-	11.8	10.7
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.2	0.2

HCM 6th Signalized Intersection Summary
38: 4th Street & White Ave

Existing Conditions 2021

10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Volume (veh/h)	0	11	18	30	29	0	0	0	0	17	259	18
Future Volume (veh/h)	0	11	18	30	29	0	0	0	0	17	259	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	11	18	30	29	0				17	259	18
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	193	316	282	257	0				124	1964	143
Arrive On Green	0.00	0.30	0.30	0.30	0.30	0.00				0.60	0.60	0.60
Sat Flow, veh/h	0	643	1053	760	856	0				206	3273	238
Grp Volume(v), veh/h	0	0	29	59	0	0				155	0	139
Grp Sat Flow(s),veh/h/ln	0	0	1696	1616	0	0				1875	0	1842
Q Serve(g_s), s	0.0	0.0	1.2	0.4	0.0	0.0				3.6	0.0	3.3
Cycle Q Clear(g_c), s	0.0	0.0	1.2	2.3	0.0	0.0				3.6	0.0	3.3
Prop In Lane	0.00		0.62	0.51		0.00				0.11		0.13
Lane Grp Cap(c), veh/h	0	0	509	539	0	0				1125	0	1105
V/C Ratio(X)	0.00	0.00	0.06	0.11	0.00	0.00				0.14	0.00	0.13
Avail Cap(c_a), veh/h	0	0	509	539	0	0				1125	0	1105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	24.9	25.3	0.0	0.0				8.7	0.0	8.7
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.4	0.0	0.0				0.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.5	1.1	0.0	0.0				1.5	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	25.1	25.7	0.0	0.0				9.0	0.0	8.9
LnGrp LOS	A	A	C	C	A	A				A	A	A
Approach Vol, veh/h		29			59						294	
Approach Delay, s/veh		25.1			25.7						8.9	
Approach LOS		C			C						A	
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		65.0		35.0				35.0				
Change Period (Y+Rc), s		5.0		5.0				5.0				
Max Green Setting (Gmax), s		60.0		30.0				30.0				
Max Q Clear Time (g_c+I1), s		5.6		4.3				3.2				
Green Ext Time (p_c), s		1.9		0.2				0.1				
Intersection Summary												
HCM 6th Ctrl Delay				12.8								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
41: 5th Street & Rood Ave

Existing Conditions 2021

10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	43	0	0	32	30	30	361	12	0	0	0
Future Volume (veh/h)	33	43	0	0	32	30	30	361	12	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1885	1885	0	0	1885	1885	1885	1885	1885			
Adj Flow Rate, veh/h	33	43	0	0	32	30	30	361	12			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1			
Cap, veh/h	442	566	0	0	269	252	159	2012	70			
Arrive On Green	0.30	0.30	0.00	0.00	0.30	0.30	0.20	0.20	0.20			
Sat Flow, veh/h	1351	1885	0	0	895	839	266	3354	117			
Grp Volume(v), veh/h	33	43	0	0	0	62	211	0	192			
Grp Sat Flow(s),veh/h/ln	1351	1885	0	0	0	1734	1872	0	1864			
Q Serve(g_s), s	1.8	1.6	0.0	0.0	0.0	2.6	9.4	0.0	8.5			
Cycle Q Clear(g_c), s	4.4	1.6	0.0	0.0	0.0	2.6	9.4	0.0	8.5			
Prop In Lane	1.00		0.00	0.00		0.48	0.14		0.06			
Lane Grp Cap(c), veh/h	442	566	0	0	0	520	1123	0	1119			
V/C Ratio(X)	0.07	0.08	0.00	0.00	0.00	0.12	0.19	0.00	0.17			
Avail Cap(c_a), veh/h	442	566	0	0	0	520	1123	0	1119			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(l)	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	27.0	25.1	0.0	0.0	0.0	25.4	19.8	0.0	19.5			
Incr Delay (d2), s/veh	0.3	0.3	0.0	0.0	0.0	0.5	0.4	0.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.6	0.8	0.0	0.0	0.0	1.1	4.5	0.0	4.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	25.3	0.0	0.0	0.0	25.9	20.2	0.0	19.8			
LnGrp LOS	C	C	A	A	A	C	C	A	B			
Approach Vol, veh/h		76			62			403				
Approach Delay, s/veh		26.2			25.9			20.0				
Approach LOS		C			C			B				
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				35.0		65.0		35.0				
Change Period (Y+Rc), s				5.0		5.0		5.0				
Max Green Setting (Gmax), s				30.0		60.0		30.0				
Max Q Clear Time (g_c+I1), s				4.6		11.4		6.4				
Green Ext Time (p_c), s				0.3		2.5		0.2				
Intersection Summary												
HCM 6th Ctrl Delay				21.5								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
42: 4th Street & Rood Ave

Existing Conditions 2021

10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔						↕↕	
Traffic Volume (veh/h)	0	35	27	23	54	0	0	0	0	32	233	57
Future Volume (veh/h)	0	35	27	23	54	0	0	0	0	32	233	57
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	35	27	23	54	0				32	233	57
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	296	228	442	566	0				210	1570	400
Arrive On Green	0.00	0.30	0.30	0.10	0.10	0.00				0.20	0.20	0.20
Sat Flow, veh/h	0	987	761	1351	1885	0				349	2617	667
Grp Volume(v), veh/h	0	0	62	23	54	0				171	0	151
Grp Sat Flow(s),veh/h/ln	0	0	1748	1351	1885	0				1868	0	1765
Q Serve(g_s), s	0.0	0.0	2.6	1.6	2.6	0.0				7.6	0.0	7.1
Cycle Q Clear(g_c), s	0.0	0.0	2.6	4.1	2.6	0.0				7.6	0.0	7.1
Prop In Lane	0.00		0.44	1.00		0.00				0.19		0.38
Lane Grp Cap(c), veh/h	0	0	524	442	566	0				1121	0	1059
V/C Ratio(X)	0.00	0.00	0.12	0.05	0.10	0.00				0.15	0.00	0.14
Avail Cap(c_a), veh/h	0	0	524	442	566	0				1121	0	1059
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	25.4	34.6	32.7	0.0				19.1	0.0	18.9
Incr Delay (d2), s/veh	0.0	0.0	0.5	0.2	0.3	0.0				0.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.1	0.5	1.2	0.0				3.5	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	25.9	34.8	33.0	0.0				19.4	0.0	19.2
LnGrp LOS	A	A	C	C	C	A				B	A	B
Approach Vol, veh/h		62			77						322	
Approach Delay, s/veh		25.9			33.6						19.3	
Approach LOS		C			C						B	
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		65.0		35.0				35.0				
Change Period (Y+Rc), s		5.0		5.0				5.0				
Max Green Setting (Gmax), s		60.0		30.0				30.0				
Max Q Clear Time (g_c+I1), s		9.6		6.1				4.6				
Green Ext Time (p_c), s		2.1		0.3				0.3				
Intersection Summary												
HCM 6th Ctrl Delay											22.5	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary
45: 5th Street & Main St

Existing Conditions 2021
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖			↗			↖↗				
Traffic Volume (veh/h)	28	98	0	0	63	20	19	348	20	0	0	0
Future Volume (veh/h)	28	98	0	0	63	20	19	348	20	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1885	1885	0	0	1885	1885	1885	1885	1885			
Adj Flow Rate, veh/h	28	98	0	0	63	20	19	348	20			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1			
Cap, veh/h	133	439	0	0	411	131	105	2009	121			
Arrive On Green	0.60	0.60	0.00	0.00	0.30	0.30	0.20	0.20	0.20			
Sat Flow, veh/h	296	1465	0	0	1371	435	175	3349	202			
Grp Volume(v), veh/h	126	0	0	0	0	83	204	0	183			
Grp Sat Flow(s),veh/h/ln	1760	0	0	0	0	1807	1876	0	1849			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	3.4	9.0	0.0	8.2			
Cycle Q Clear(g_c), s	3.1	0.0	0.0	0.0	0.0	3.4	9.0	0.0	8.2			
Prop In Lane	0.22		0.00	0.00		0.24	0.09		0.11			
Lane Grp Cap(c), veh/h	572	0	0	0	0	542	1126	0	1109			
V/C Ratio(X)	0.22	0.00	0.00	0.00	0.00	0.15	0.18	0.00	0.17			
Avail Cap(c_a), veh/h	572	0	0	0	0	542	1126	0	1109			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	14.6	0.0	0.0	0.0	0.0	25.7	19.7	0.0	19.3			
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.0	0.0	0.6	0.4	0.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4	0.0	0.0	0.0	0.0	1.5	4.3	0.0	3.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.5	0.0	0.0	0.0	0.0	26.3	20.0	0.0	19.7			
LnGrp LOS	B	A	A	A	A	C	C	A	B			
Approach Vol, veh/h		126			83			387				
Approach Delay, s/veh		15.5			26.3			19.8				
Approach LOS		B			C			B				
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				35.0		65.0		35.0				
Change Period (Y+Rc), s				5.0		5.0		5.0				
Max Green Setting (Gmax), s				30.0		60.0		30.0				
Max Q Clear Time (g_c+I1), s				5.4		11.0		5.1				
Green Ext Time (p_c), s				0.4		2.4		0.6				
Intersection Summary												
HCM 6th Ctrl Delay				19.8								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
46: 4th Street & Main St

Existing Conditions 2021

10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↕↕	
Traffic Volume (veh/h)	0	90	21	17	66	0	0	0	0	34	209	33
Future Volume (veh/h)	0	90	21	17	66	0	0	0	0	34	209	33
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	90	21	17	66	0				34	209	33
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	643	150	170	636	0				207	1318	217
Arrive On Green	0.00	0.44	0.44	0.87	0.87	0.00				0.16	0.16	0.16
Sat Flow, veh/h	0	1478	345	290	1462	0				435	2775	456
Grp Volume(v), veh/h	0	0	111	83	0	0				146	0	130
Grp Sat Flow(s),veh/h/ln	0	0	1823	1752	0	0				1863	0	1803
Q Serve(g_s), s	0.0	0.0	3.7	0.0	0.0	0.0				6.8	0.0	6.2
Cycle Q Clear(g_c), s	0.0	0.0	3.7	0.6	0.0	0.0				6.8	0.0	6.2
Prop In Lane	0.00		0.19	0.20		0.00				0.23		0.25
Lane Grp Cap(c), veh/h	0	0	793	805	0	0				885	0	856
V/C Ratio(X)	0.00	0.00	0.14	0.10	0.00	0.00				0.16	0.00	0.15
Avail Cap(c_a), veh/h	0	0	793	805	0	0				885	0	856
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	17.0	3.7	0.0	0.0				25.0	0.0	24.8
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.3	0.0	0.0				0.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.6	0.3	0.0	0.0				3.2	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	17.4	4.0	0.0	0.0				25.4	0.0	25.1
LnGrp LOS	A	A	B	A	A	A				C	A	C
Approach Vol, veh/h		111			83						276	
Approach Delay, s/veh		17.4			4.0						25.3	
Approach LOS		B			A						C	
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		52.0		48.0				48.0				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		47.5		43.5				43.5				
Max Q Clear Time (g_c+I1), s		8.8		2.6				5.7				
Green Ext Time (p_c), s		1.7		0.5				0.6				
Intersection Summary												
HCM 6th Ctrl Delay											19.6	
HCM 6th LOS											B	

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	33	38	0	0	43	15	12	328	13	0	0	0
Future Vol, veh/h	33	38	0	0	43	15	12	328	13	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	33	38	0	0	43	15	12	328	13	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	210	365	-	-	359	171	0	0	0		
Stage 1	0	0	-	-	359	-	-	-	-		
Stage 2	210	365	-	-	0	-	-	-	-		
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-		
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-		
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-		
Pot Cap-1 Maneuver	731	564	0	0	568	846	-	-	-		
Stage 1	-	-	0	0	628	-	-	-	-		
Stage 2	775	624	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	676	564	-	-	568	846	-	-	-		
Mov Cap-2 Maneuver	676	564	-	-	568	-	-	-	-		
Stage 1	-	-	-	-	628	-	-	-	-		
Stage 2	709	624	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	11.7		11.4				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	
Capacity (veh/h)	-	-	-	611	621
HCM Lane V/C Ratio	-	-	-	0.116	0.093
HCM Control Delay (s)	-	-	-	11.7	11.4
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.4	0.3

Intersection												
Int Delay, s/veh	3.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻						↻↻	
Traffic Vol, veh/h	0	42	8	10	42	0	0	0	0	25	204	14
Future Vol, veh/h	0	42	8	10	42	0	0	0	0	25	204	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	42	8	10	42	0	0	0	0	25	204	14

Major/Minor	Minor2		Minor1			Major2				
Conflicting Flow All	-	261	109	173	268	-	-	0	0	0
Stage 1	-	261	-	0	0	-	-	-	-	-
Stage 2	-	0	-	173	268	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.52	6.52	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.52	5.52	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.51	4.01	-	-	2.21	-	-
Pot Cap-1 Maneuver	0	645	927	777	639	0	-	-	-	-
Stage 1	0	693	-	-	-	0	-	-	-	-
Stage 2	0	-	-	815	688	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	645	927	732	639	-	-	-	-	-
Mov Cap-2 Maneuver	-	645	-	732	639	-	-	-	-	-
Stage 1	-	693	-	-	-	-	-	-	-	-
Stage 2	-	-	-	759	688	-	-	-	-	-

Approach	EB		WB			SB		
HCM Control Delay, s	10.7		11					
HCM LOS	B		B					

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	678	655	-	-	-
HCM Lane V/C Ratio	0.074	0.079	-	-	-
HCM Control Delay (s)	10.7	11	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.2	0.3	-	-	-

HCM 6th Signalized Intersection Summary
53: 5th Street & Ute Ave

Existing Conditions 2021
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↕	↗	↙	↕				
Traffic Volume (veh/h)	0	0	0	415	492	50	177	286	0	0	0	0
Future Volume (veh/h)	0	0	0	415	492	50	177	286	0	0	0	0
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach				No			No					
Adj Sat Flow, veh/h/ln				1885	1885	1885	1885	1885	0			
Adj Flow Rate, veh/h				302	650	50	177	286	0			
Peak Hour Factor				1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %				1	1	1	1	1	0			
Cap, veh/h				790	1508	639	970	1791	0			
Arrive On Green				0.40	0.40	0.40	1.00	1.00	0.00			
Sat Flow, veh/h				1795	3770	1598	1795	3676	0			
Grp Volume(v), veh/h				302	650	50	177	286	0			
Grp Sat Flow(s),veh/h/ln				1795	1885	1598	1795	1791	0			
Q Serve(g_s), s				12.1	12.5	1.9	0.0	0.0	0.0			
Cycle Q Clear(g_c), s				12.1	12.5	1.9	0.0	0.0	0.0			
Prop In Lane				1.00		1.00	1.00		0.00			
Lane Grp Cap(c), veh/h				790	1508	639	970	1791	0			
V/C Ratio(X)				0.38	0.43	0.08	0.18	0.16	0.00			
Avail Cap(c_a), veh/h				790	1508	639	970	1791	0			
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00			
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh				21.6	21.7	18.6	0.0	0.0	0.0			
Incr Delay (d2), s/veh				1.4	0.9	0.2	0.4	0.2	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln				5.3	5.6	0.8	0.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				23.0	22.7	18.8	0.4	0.2	0.0			
LnGrp LOS				C	C	B	A	A	A			
Approach Vol, veh/h					1002			463				
Approach Delay, s/veh					22.6			0.3				
Approach LOS					C			A				
Timer - Assigned Phs				4		6						
Phs Duration (G+Y+Rc), s				45.0		55.0						
Change Period (Y+Rc), s				5.0		5.0						
Max Green Setting (Gmax), s				40.0		50.0						
Max Q Clear Time (g_c+I1), s				14.5		2.0						
Green Ext Time (p_c), s				5.9		2.4						
Intersection Summary												
HCM 6th Ctrl Delay				15.5								
HCM 6th LOS				B								

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
54: 4th Street & Ute Ave

Existing Conditions 2021

10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔↔						↔↔	
Traffic Volume (veh/h)	0	0	0	21	652	0	0	0	0	0	189	28
Future Volume (veh/h)	0	0	0	21	652	0	0	0	0	0	189	28
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach				No						No		
Adj Sat Flow, veh/h/ln				1885	1885	0				0	1885	1885
Adj Flow Rate, veh/h				21	652	0				0	189	28
Peak Hour Factor				1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %				1	1	0				0	1	1
Cap, veh/h				65	1722	0				0	1207	176
Arrive On Green				0.17	0.17	0.00				0.00	0.13	0.13
Sat Flow, veh/h				54	3530	0				0	3230	458
Grp Volume(v), veh/h				360	313	0				0	107	110
Grp Sat Flow(s),veh/h/ln				1868	1630	0				0	1791	1803
Q Serve(g_s), s				0.0	17.1	0.0				0.0	5.3	5.5
Cycle Q Clear(g_c), s				17.0	17.1	0.0				0.0	5.3	5.5
Prop In Lane				0.06		0.00				0.00		0.25
Lane Grp Cap(c), veh/h				972	815	0				0	690	694
V/C Ratio(X)				0.37	0.38	0.00				0.00	0.15	0.16
Avail Cap(c_a), veh/h				972	815	0				0	690	694
HCM Platoon Ratio				0.33	0.33	1.00				1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	0.00				0.00	1.00	1.00
Uniform Delay (d), s/veh				28.0	28.0	0.0				0.0	29.2	29.2
Incr Delay (d2), s/veh				1.1	1.4	0.0				0.0	0.5	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.8	7.7	0.0				0.0	2.4	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				29.1	29.4	0.0				0.0	29.6	29.7
LnGrp LOS				C	C	A				A	C	C
Approach Vol, veh/h					673						217	
Approach Delay, s/veh					29.2						29.7	
Approach LOS					C						C	
Timer - Assigned Phs		2		4								
Phs Duration (G+Y+Rc), s		44.0		56.0								
Change Period (Y+Rc), s		5.5		6.0								
Max Green Setting (Gmax), s		38.5		50.0								
Max Q Clear Time (g_c+I1), s		7.5		19.1								
Green Ext Time (p_c), s		1.3		4.6								
Intersection Summary												
HCM 6th Ctrl Delay					29.3							
HCM 6th LOS					C							

HCM 6th Signalized Intersection Summary
57: 5th Street & Pitkin Ave

Existing Conditions 2021
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔	↔					↔↔		↔	↔↔	
Traffic Volume (veh/h)	23	606	472	0	0	0	0	416	105	5	411	0
Future Volume (veh/h)	23	606	472	0	0	0	0	416	105	5	411	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No					No		No			
Adj Sat Flow, veh/h/ln	1885	1885	1885				0	1885	1885	1885	1885	0
Adj Flow Rate, veh/h	23	724	394				0	416	105	5	411	0
Peak Hour Factor	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1				0	1	1	1	1	0
Cap, veh/h	34	1115	487				0	1571	393	12	2167	0
Arrive On Green	0.10	0.10	0.10				0.00	0.55	0.55	0.01	0.61	0.00
Sat Flow, veh/h	111	3654	1598				0	2933	710	1795	3676	0
Grp Volume(v), veh/h	391	356	394				0	261	260	5	411	0
Grp Sat Flow(s),veh/h/ln	1880	1885	1598				0	1791	1757	1795	1791	0
Q Serve(g_s), s	20.1	18.1	24.1				0.0	7.6	7.8	0.3	5.1	0.0
Cycle Q Clear(g_c), s	20.1	18.1	24.1				0.0	7.6	7.8	0.3	5.1	0.0
Prop In Lane	0.06		1.00				0.00		0.40	1.00		0.00
Lane Grp Cap(c), veh/h	573	575	487				0	991	973	12	2167	0
V/C Ratio(X)	0.68	0.62	0.81				0.00	0.26	0.27	0.43	0.19	0.00
Avail Cap(c_a), veh/h	573	575	487				0	991	973	117	2167	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94				0.00	1.00	1.00	0.89	0.89	0.00
Uniform Delay (d), s/veh	40.3	39.4	42.1				0.0	11.7	11.7	49.5	8.8	0.0
Incr Delay (d2), s/veh	6.1	4.7	12.8				0.0	0.6	0.7	20.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	9.9	12.0				0.0	3.0	3.0	0.2	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.3	44.1	54.9				0.0	12.3	12.4	70.2	9.0	0.0
LnGrp LOS	D	D	D				A	B	B	E	A	A
Approach Vol, veh/h		1141						521			416	
Approach Delay, s/veh		48.6						12.3			9.7	
Approach LOS		D						B			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		65.0			5.1	59.9		35.0				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		60.5			6.5	49.5		30.5				
Max Q Clear Time (g_c+I1), s		7.1			2.3	9.8		26.1				
Green Ext Time (p_c), s		2.9			0.0	3.4		2.4				

Intersection Summary

HCM 6th Ctrl Delay	31.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
58: 4th Street & Pitkin Ave

Existing Conditions 2021
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑						↑		↑	↑	
Traffic Volume (veh/h)	0	861	1	0	0	0	0	0	16	213	6	0
Future Volume (veh/h)	0	861	1	0	0	0	0	0	16	213	6	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No					No		No			
Adj Sat Flow, veh/h/ln	0	1885	1885				0	1885	1885	1885	1885	0
Adj Flow Rate, veh/h	0	861	1				0	0	16	217	0	0
Peak Hour Factor	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	1	1				0	1	1	1	1	0
Cap, veh/h	0	0	0				0	0	1438	2820	1697	0
Arrive On Green	0.00	0.00	0.00				0.00	0.00	0.90	0.90	0.00	0.00
Sat Flow, veh/h		0					0	0	1598	2817	1885	0
Grp Volume(v), veh/h		0.0					0	0	16	217	0	0
Grp Sat Flow(s),veh/h/ln							0	0	1598	1408	1885	0
Q Serve(g_s), s							0.0	0.0	0.1	0.4	0.0	0.0
Cycle Q Clear(g_c), s							0.0	0.0	0.1	0.5	0.0	0.0
Prop In Lane							0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h							0	0	1438	2820	1697	0
V/C Ratio(X)							0.00	0.00	0.01	0.08	0.00	0.00
Avail Cap(c_a), veh/h							0	0	1438	2820	1697	0
HCM Platoon Ratio							1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)							0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh							0.0	0.0	0.3	0.3	0.0	0.0
Incr Delay (d2), s/veh							0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh							0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln							0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh							0.0	0.0	0.3	0.3	0.0	0.0
LnGrp LOS							A	A	A	A	A	A
Approach Vol, veh/h								16			217	
Approach Delay, s/veh								0.3			0.3	
Approach LOS								A			A	
Timer - Assigned Phs		2						6				
Phs Duration (G+Y+Rc), s		50.0						50.0				
Change Period (Y+Rc), s		5.0						5.0				
Max Green Setting (Gmax), s		45.0						45.0				
Max Q Clear Time (g_c+I1), s		2.5						2.1				
Green Ext Time (p_c), s		0.8						0.1				
Intersection Summary												
HCM 6th Ctrl Delay			0.3									
HCM 6th LOS			A									
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 6th Signalized Intersection Summary
5: 5th Street & North Ave

2021 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	967	42	73	942	26	34	43	136	39	48	29
Future Volume (veh/h)	20	967	42	73	942	26	34	43	136	39	48	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	20	967	42	73	942	26	34	56	136	39	62	29
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	397	1993	87	410	2129	59	267	217	184	262	223	189
Arrive On Green	0.02	0.57	0.57	0.05	0.60	0.60	0.03	0.12	0.12	0.04	0.12	0.12
Sat Flow, veh/h	1795	3497	152	1795	3560	98	1795	1885	1598	1795	1885	1598
Grp Volume(v), veh/h	20	495	514	73	474	494	34	56	136	39	62	29
Grp Sat Flow(s),veh/h/ln	1795	1791	1858	1795	1791	1867	1795	1885	1598	1795	1885	1598
Q Serve(g_s), s	0.4	13.0	13.0	1.3	11.4	11.4	1.3	2.1	6.5	1.5	2.4	1.3
Cycle Q Clear(g_c), s	0.4	13.0	13.0	1.3	11.4	11.4	1.3	2.1	6.5	1.5	2.4	1.3
Prop In Lane	1.00		0.08	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	397	1021	1059	410	1071	1117	267	217	184	262	223	189
V/C Ratio(X)	0.05	0.49	0.49	0.18	0.44	0.44	0.13	0.26	0.74	0.15	0.28	0.15
Avail Cap(c_a), veh/h	493	1021	1059	502	1071	1117	344	549	465	333	549	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.2	10.1	10.1	7.1	8.7	8.7	29.2	31.9	33.8	29.1	31.7	31.3
Incr Delay (d2), s/veh	0.1	1.6	1.6	0.2	1.3	1.3	0.2	0.6	5.7	0.3	0.7	0.4
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.1	5.0	5.1	0.4	4.2	4.4	0.6	1.0	2.7	0.6	1.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.2	11.7	11.7	7.3	10.0	9.9	29.4	32.5	39.5	29.3	32.4	31.6
LnGrp LOS	A	B	B	A	A	A	C	C	D	C	C	C
Approach Vol, veh/h		1029			1041			226			130	
Approach Delay, s/veh		11.6			9.8			36.3			31.3	
Approach LOS		B			A			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	14.3	5.8	52.2	6.9	14.1	8.0	50.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	6.0	23.0	6.0	47.0	6.0	23.0	8.0	45.0				
Max Q Clear Time (g_c+I1), s	3.3	4.4	2.4	13.4	3.5	8.5	3.3	15.0				
Green Ext Time (p_c), s	0.0	0.3	0.0	7.5	0.0	0.6	0.0	7.7				
Intersection Summary												
HCM 6th Ctrl Delay			14.2									
HCM 6th LOS			B									

Intersection												
Int Delay, s/veh	15.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕			↕			↕	
Traffic Vol, veh/h	15	933	28	48	943	14	20	29	91	5	3	15
Future Vol, veh/h	15	933	28	48	943	14	20	29	91	5	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	933	28	48	943	14	20	38	91	5	4	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	957	0	0	961	0	0	1547	2030	481	1562	2037	479
Stage 1	-	-	-	-	-	-	977	977	-	1046	1046	-
Stage 2	-	-	-	-	-	-	570	1053	-	516	991	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	720	-	-	718	-	-	78	57	534	76	57	535
Stage 1	-	-	-	-	-	-	271	329	-	246	306	-
Stage 2	-	-	-	-	-	-	476	303	-	513	324	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	720	-	-	718	-	-	67	52	534	24	52	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	67	52	-	24	52	-
Stage 1	-	-	-	-	-	-	265	322	-	241	285	-
Stage 2	-	-	-	-	-	-	426	283	-	368	317	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.5			207.8			71.5		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	125	720	-	-	718	-	-	77
HCM Lane V/C Ratio	1.19	0.021	-	-	0.067	-	-	0.31
HCM Control Delay (s)	207.8	10.1	-	-	10.4	-	-	71.5
HCM Lane LOS	F	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	9.1	0.1	-	-	0.2	-	-	1.2

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	8	41	10	11	10	197	10	10	91	49
Future Vol, veh/h	10	10	8	41	10	11	10	197	10	10	91	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	8	41	10	11	10	256	10	10	118	49

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	455	449	143	453	468	261	167	0	0	266	0	0
Stage 1	163	163	-	281	281	-	-	-	-	-	-	-
Stage 2	292	286	-	172	187	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	517	507	907	519	494	780	1417	-	-	1304	-	-
Stage 1	841	765	-	728	680	-	-	-	-	-	-	-
Stage 2	718	677	-	832	747	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	495	498	907	500	486	780	1417	-	-	1304	-	-
Mov Cap-2 Maneuver	495	498	-	500	486	-	-	-	-	-	-	-
Stage 1	834	758	-	722	675	-	-	-	-	-	-	-
Stage 2	692	672	-	806	740	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.6		12.7		0.3		0.4	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1417	-	-	570	531	1304	-
HCM Lane V/C Ratio	0.007	-	-	0.049	0.117	0.008	-
HCM Control Delay (s)	7.6	0	-	11.6	12.7	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	0.4	0	-

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	5	28	10	7	10	132	10	10	60	33
Future Vol, veh/h	10	10	5	28	10	7	10	132	10	10	60	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	5	28	10	7	10	172	10	10	78	33

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	321	317	95	319	328	177	111	0	0	182	0	0
Stage 1	115	115	-	197	197	-	-	-	-	-	-	-
Stage 2	206	202	-	122	131	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	634	601	964	636	592	869	1485	-	-	1399	-	-
Stage 1	892	802	-	807	740	-	-	-	-	-	-	-
Stage 2	798	736	-	885	790	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	614	592	964	618	583	869	1485	-	-	1399	-	-
Mov Cap-2 Maneuver	614	592	-	618	583	-	-	-	-	-	-	-
Stage 1	886	796	-	801	735	-	-	-	-	-	-	-
Stage 2	775	731	-	862	784	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.7		11.1		0.4		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1485	-	-	652	638	1399	-
HCM Lane V/C Ratio	0.007	-	-	0.038	0.071	0.007	-
HCM Control Delay (s)	7.4	0	-	10.7	11.1	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	204	10	10	126	10
Future Vol, veh/h	10	10	10	10	10	10	10	204	10	10	126	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	10	10	10	10	10	265	10	10	164	10

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	489	484	169	489	484	270	174	0	0	275	0	0
Stage 1	189	189	-	290	290	-	-	-	-	-	-	-
Stage 2	300	295	-	199	194	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	491	484	878	491	484	771	1409	-	-	1294	-	-
Stage 1	815	746	-	720	674	-	-	-	-	-	-	-
Stage 2	711	671	-	805	742	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	471	476	878	471	476	771	1409	-	-	1294	-	-
Mov Cap-2 Maneuver	471	476	-	471	476	-	-	-	-	-	-	-
Stage 1	808	739	-	714	669	-	-	-	-	-	-	-
Stage 2	686	666	-	778	735	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.8		12		0.3		0.4	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1409	-	-	559	543	1294	-
HCM Lane V/C Ratio	0.007	-	-	0.054	0.055	0.008	-
HCM Control Delay (s)	7.6	0	-	11.8	12	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	136	10	10	84	10
Future Vol, veh/h	10	10	10	10	10	10	10	136	10	10	84	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	10	10	10	10	10	177	10	10	109	10

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	346	341	114	346	341	182	119	0	0	187	0	0
Stage 1	134	134	-	202	202	-	-	-	-	-	-	-
Stage 2	212	207	-	144	139	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	610	583	941	610	583	863	1475	-	-	1393	-	-
Stage 1	872	787	-	802	736	-	-	-	-	-	-	-
Stage 2	792	732	-	861	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	587	574	941	588	574	863	1475	-	-	1393	-	-
Mov Cap-2 Maneuver	587	574	-	588	574	-	-	-	-	-	-	-
Stage 1	865	781	-	796	730	-	-	-	-	-	-	-
Stage 2	766	726	-	834	778	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.7		10.8		0.4		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1475	-	-	665	652	1393	-
HCM Lane V/C Ratio	0.007	-	-	0.045	0.046	0.007	-
HCM Control Delay (s)	7.5	0	-	10.7	10.8	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	204	10	10	126	10
Future Vol, veh/h	10	10	10	10	10	10	10	204	10	10	126	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	10	10	10	10	10	265	10	10	164	10

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	489	484	169	489	484	270	174	0	0	275	0	0
Stage 1	189	189	-	290	290	-	-	-	-	-	-	-
Stage 2	300	295	-	199	194	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	491	484	878	491	484	771	1409	-	-	1294	-	-
Stage 1	815	746	-	720	674	-	-	-	-	-	-	-
Stage 2	711	671	-	805	742	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	471	476	878	471	476	771	1409	-	-	1294	-	-
Mov Cap-2 Maneuver	471	476	-	471	476	-	-	-	-	-	-	-
Stage 1	808	739	-	714	669	-	-	-	-	-	-	-
Stage 2	686	666	-	778	735	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.8		12		0.3		0.4	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1409	-	-	559	543	1294	-
HCM Lane V/C Ratio	0.007	-	-	0.054	0.055	0.008	-
HCM Control Delay (s)	7.6	0	-	11.8	12	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	136	10	10	84	10
Future Vol, veh/h	10	10	10	10	10	10	10	136	10	10	84	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	10	10	10	10	10	177	10	10	109	10

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	346	341	114	346	341	182	119	0	0	187	0	0
Stage 1	134	134	-	202	202	-	-	-	-	-	-	-
Stage 2	212	207	-	144	139	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	610	583	941	610	583	863	1475	-	-	1393	-	-
Stage 1	872	787	-	802	736	-	-	-	-	-	-	-
Stage 2	792	732	-	861	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	587	574	941	588	574	863	1475	-	-	1393	-	-
Mov Cap-2 Maneuver	587	574	-	588	574	-	-	-	-	-	-	-
Stage 1	865	781	-	796	730	-	-	-	-	-	-	-
Stage 2	766	726	-	834	778	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.7		10.8		0.4		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1475	-	-	665	652	1393	-
HCM Lane V/C Ratio	0.007	-	-	0.045	0.046	0.007	-
HCM Control Delay (s)	7.5	0	-	10.7	10.8	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	37	9	5	45	8	2	202	11	3	133	7
Future Vol, veh/h	4	37	9	5	45	8	2	202	11	3	133	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	4	37	9	5	45	8	2	263	11	3	173	7

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	482	461	177	479	459	269	180	0	0	274	0	0
Stage 1	183	183	-	273	273	-	-	-	-	-	-	-
Stage 2	299	278	-	206	186	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	496	499	869	499	500	772	1402	-	-	1295	-	-
Stage 1	821	750	-	735	686	-	-	-	-	-	-	-
Stage 2	712	682	-	798	748	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	455	497	869	464	498	772	1402	-	-	1295	-	-
Mov Cap-2 Maneuver	455	497	-	464	498	-	-	-	-	-	-	-
Stage 1	819	748	-	734	685	-	-	-	-	-	-	-
Stage 2	657	681	-	748	746	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.4		12.8		0.1		0.1	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1402	-	-	534	520	1295	-
HCM Lane V/C Ratio	0.001	-	-	0.094	0.112	0.002	-
HCM Control Delay (s)	7.6	0	-	12.4	12.8	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.3	0.4	0	-

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	41	6	4	44	6	1	134	7	2	89	4
Future Vol, veh/h	3	41	6	4	44	6	1	134	7	2	89	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	3	41	6	4	44	6	1	174	7	2	116	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	327	305	118	326	304	178	120	0	0	181	0	0
Stage 1	122	122	-	180	180	-	-	-	-	-	-	-
Stage 2	205	183	-	146	124	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	628	610	937	629	611	868	1474	-	-	1400	-	-
Stage 1	885	797	-	824	752	-	-	-	-	-	-	-
Stage 2	799	750	-	859	795	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	588	608	937	591	609	868	1474	-	-	1400	-	-
Mov Cap-2 Maneuver	588	608	-	591	609	-	-	-	-	-	-	-
Stage 1	884	795	-	823	751	-	-	-	-	-	-	-
Stage 2	746	749	-	808	793	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.2		11.3		0		0.1	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1474	-	-	633	628	1400	-
HCM Lane V/C Ratio	0.001	-	-	0.079	0.086	0.001	-
HCM Control Delay (s)	7.4	0	-	11.2	11.3	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	204	10	10	138	10
Future Vol, veh/h	10	10	10	10	10	10	10	204	10	10	138	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	10	10	10	10	10	265	10	10	179	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	504	499	184	504	499	270	189	0	0	275	0	0
Stage 1	204	204	-	290	290	-	-	-	-	-	-	-
Stage 2	300	295	-	214	209	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	480	475	861	480	475	771	1391	-	-	1294	-	-
Stage 1	800	735	-	720	674	-	-	-	-	-	-	-
Stage 2	711	671	-	790	731	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	460	467	861	461	467	771	1391	-	-	1294	-	-
Mov Cap-2 Maneuver	460	467	-	461	467	-	-	-	-	-	-	-
Stage 1	794	728	-	714	669	-	-	-	-	-	-	-
Stage 2	686	666	-	763	724	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	11.9			12.1			0.3			0.4		
HCM LOS	B			B								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1391	-	-	548	535	1294	-
HCM Lane V/C Ratio	0.007	-	-	0.055	0.056	0.008	-
HCM Control Delay (s)	7.6	0	-	11.9	12.1	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	136	10	10	92	10
Future Vol, veh/h	10	10	10	10	10	10	10	136	10	10	92	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	10	10	10	10	10	177	10	10	120	10

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	357	352	125	357	352	182	130	0	0	187	0	0
Stage 1	145	145	-	202	202	-	-	-	-	-	-	-
Stage 2	212	207	-	155	150	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	600	574	928	600	574	863	1462	-	-	1393	-	-
Stage 1	860	779	-	802	736	-	-	-	-	-	-	-
Stage 2	792	732	-	850	775	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	578	565	928	578	565	863	1462	-	-	1393	-	-
Mov Cap-2 Maneuver	578	565	-	578	565	-	-	-	-	-	-	-
Stage 1	853	773	-	796	730	-	-	-	-	-	-	-
Stage 2	766	726	-	823	769	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	10.9	0.4	0.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1462	-	-	655	644	1393	-
HCM Lane V/C Ratio	0.007	-	-	0.046	0.047	0.007	-
HCM Control Delay (s)	7.5	0	-	10.8	10.9	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	204	10	10	144	10
Future Vol, veh/h	10	10	10	10	10	10	10	204	10	10	144	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	10	10	10	10	10	265	10	10	187	10

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	512	507	192	512	507	270	197	0	0	275	0	0
Stage 1	212	212	-	290	290	-	-	-	-	-	-	-
Stage 2	300	295	-	222	217	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	474	470	852	474	470	771	1382	-	-	1294	-	-
Stage 1	792	729	-	720	674	-	-	-	-	-	-	-
Stage 2	711	671	-	783	725	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	454	462	852	455	462	771	1382	-	-	1294	-	-
Mov Cap-2 Maneuver	454	462	-	455	462	-	-	-	-	-	-	-
Stage 1	785	722	-	714	668	-	-	-	-	-	-	-
Stage 2	685	665	-	756	718	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12		12.2		0.3		0.4	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1382	-	-	541	530	1294	-
HCM Lane V/C Ratio	0.007	-	-	0.055	0.057	0.008	-
HCM Control Delay (s)	7.6	0	-	12	12.2	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	136	10	10	96	10
Future Vol, veh/h	10	10	10	10	10	10	10	136	10	10	96	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	10	10	10	10	10	10	177	10	10	125	10

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	362	357	130	362	357	182	135	0	0	187	0	0
Stage 1	150	150	-	202	202	-	-	-	-	-	-	-
Stage 2	212	207	-	160	155	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	596	571	922	596	571	863	1456	-	-	1393	-	-
Stage 1	855	775	-	802	736	-	-	-	-	-	-	-
Stage 2	792	732	-	845	771	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	574	562	922	575	562	863	1456	-	-	1393	-	-
Mov Cap-2 Maneuver	574	562	-	575	562	-	-	-	-	-	-	-
Stage 1	848	769	-	796	730	-	-	-	-	-	-	-
Stage 2	766	726	-	818	765	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.8		10.9		0.4		0.5	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1456	-	-	651	641	1393	-
HCM Lane V/C Ratio	0.007	-	-	0.046	0.047	0.007	-
HCM Control Delay (s)	7.5	0	-	10.8	10.9	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-

HCM 6th Signalized Intersection Summary
 33: 5th Street & Grand Ave

2021 Two-Way
 10/09/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	418	31	30	512	18	59	164	41	11	113	32
Future Volume (veh/h)	34	418	31	30	512	18	59	164	41	11	113	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	34	418	31	30	512	18	59	213	41	11	147	32
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	448	1724	127	556	1800	63	465	735	623	398	585	127
Arrive On Green	1.00	1.00	1.00	0.51	0.51	0.51	0.13	0.13	0.13	0.39	0.39	0.39
Sat Flow, veh/h	880	3381	250	949	3530	124	1215	1885	1598	1135	1500	327
Grp Volume(v), veh/h	34	221	228	30	259	271	59	213	41	11	0	179
Grp Sat Flow(s),veh/h/ln	880	1791	1840	949	1791	1863	1215	1885	1598	1135	0	1826
Q Serve(g_s), s	0.7	0.0	0.0	1.6	8.3	8.3	4.4	10.2	2.3	0.7	0.0	6.6
Cycle Q Clear(g_c), s	9.0	0.0	0.0	1.6	8.3	8.3	11.0	10.2	2.3	10.9	0.0	6.6
Prop In Lane	1.00		0.14	1.00		0.07	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	448	913	939	556	913	950	465	735	623	398	0	712
V/C Ratio(X)	0.08	0.24	0.24	0.05	0.28	0.28	0.13	0.29	0.07	0.03	0.00	0.25
Avail Cap(c_a), veh/h	448	913	939	556	913	950	465	735	623	398	0	712
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.7	0.0	0.0	12.4	14.0	14.0	34.4	31.0	27.6	25.6	0.0	20.6
Incr Delay (d2), s/veh	0.3	0.6	0.6	0.0	0.2	0.2	0.6	1.0	0.2	0.1	0.0	0.8
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.3	3.3	3.4	1.5	5.3	0.9	0.2	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1.1	0.6	0.6	12.4	14.2	14.2	35.0	32.0	27.8	25.7	0.0	21.5
LnGrp LOS	A	A	A	B	B	B	C	C	C	C	A	C
Approach Vol, veh/h		483			560			313			190	
Approach Delay, s/veh		0.6			14.1			32.0			21.7	
Approach LOS		A			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		44.0		56.0		44.0		56.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		39.0		51.0		39.0		51.0				
Max Q Clear Time (g_c+I1), s		12.9		10.3		13.0		11.0				
Green Ext Time (p_c), s		1.1		3.7		1.6		3.2				
Intersection Summary												
HCM 6th Ctrl Delay				14.5								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
 34: 4th Street & Grand Ave

2021 Two-Way
 10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑	↗	↙	↑↑		↙	↗		↙	↗	
Traffic Volume (veh/h)	22	438	20	20	571	12	40	109	28	17	76	21
Future Volume (veh/h)	22	438	20	20	571	12	40	109	28	17	76	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	22	438	20	20	571	12	40	142	28	17	99	21
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	462	1970	879	531	1973	41	462	535	106	397	528	112
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.12	0.12	0.12	0.35	0.35	0.35
Sat Flow, veh/h	838	3582	1598	941	3587	75	1282	1529	302	1225	1508	320
Grp Volume(v), veh/h	22	438	20	20	285	298	40	0	170	17	0	120
Grp Sat Flow(s),veh/h/ln	838	1791	1598	941	1791	1872	1282	0	1831	1225	0	1828
Q Serve(g_s), s	1.4	6.3	0.6	1.1	8.5	8.5	2.8	0.0	8.5	1.0	0.0	4.6
Cycle Q Clear(g_c), s	10.0	6.3	0.6	7.4	8.5	8.5	7.4	0.0	8.5	9.5	0.0	4.6
Prop In Lane	1.00		1.00	1.00		0.04	1.00		0.16	1.00		0.17
Lane Grp Cap(c), veh/h	462	1970	879	531	985	1029	462	0	641	397	0	640
V/C Ratio(X)	0.05	0.22	0.02	0.04	0.29	0.29	0.09	0.00	0.27	0.04	0.00	0.19
Avail Cap(c_a), veh/h	462	1970	879	531	985	1029	462	0	641	397	0	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	11.5	10.3	13.4	12.0	12.0	34.1	0.0	32.5	27.4	0.0	22.6
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.1	0.7	0.7	0.4	0.0	1.0	0.2	0.0	0.6
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.3	2.5	0.2	0.3	3.4	3.6	1.0	0.0	4.2	0.3	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	11.8	10.3	13.6	12.8	12.7	34.5	0.0	33.5	27.6	0.0	23.3
LnGrp LOS	B	B	B	B	B	B	C	A	C	C	A	C
Approach Vol, veh/h		480			603			210			137	
Approach Delay, s/veh		11.9			12.8			33.7			23.8	
Approach LOS		B			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		40.0		60.0		40.0		60.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		35.0		55.0		35.0		55.0				
Max Q Clear Time (g_c+I1), s		11.5		10.5		10.5		12.0				
Green Ext Time (p_c), s		0.7		4.1		1.1		3.5				

Intersection Summary

HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	0	11	18	10	20	22	228	1	10	155	11
Future Vol, veh/h	15	0	11	18	10	20	22	228	1	10	155	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	0	11	18	10	20	22	296	1	10	202	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	584	569	208	574	574	297	213	0	0	297	0	0
Stage 1	228	228	-	341	341	-	-	-	-	-	-	-
Stage 2	356	341	-	233	233	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	425	433	835	431	430	745	1363	-	-	1270	-	-
Stage 1	777	717	-	676	640	-	-	-	-	-	-	-
Stage 2	664	640	-	772	714	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	397	421	835	416	418	745	1363	-	-	1270	-	-
Mov Cap-2 Maneuver	397	421	-	416	418	-	-	-	-	-	-	-
Stage 1	762	711	-	663	628	-	-	-	-	-	-	-
Stage 2	624	628	-	755	708	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.4		12.8		0.5		0.4	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1363	-	-	510	510	1270	-
HCM Lane V/C Ratio	0.016	-	-	0.051	0.094	0.008	-
HCM Control Delay (s)	7.7	0	-	12.4	12.8	7.9	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	0.3	0	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	12	7	12	18	13	15	152	1	7	104	7
Future Vol, veh/h	10	12	7	12	18	13	15	152	1	7	104	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	10	12	7	12	18	13	15	198	1	7	135	7

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	397	382	139	391	385	199	142	0	0	199	0	0
Stage 1	153	153	-	229	229	-	-	-	-	-	-	-
Stage 2	244	229	-	162	156	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	565	553	912	570	550	845	1447	-	-	1379	-	-
Stage 1	852	773	-	776	717	-	-	-	-	-	-	-
Stage 2	762	717	-	842	770	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	535	543	912	548	540	845	1447	-	-	1379	-	-
Mov Cap-2 Maneuver	535	543	-	548	540	-	-	-	-	-	-	-
Stage 1	842	768	-	767	708	-	-	-	-	-	-	-
Stage 2	722	708	-	818	765	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.3		11.4		0.5		0.4	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1447	-	-	598	609	1379	-
HCM Lane V/C Ratio	0.01	-	-	0.048	0.071	0.005	-
HCM Control Delay (s)	7.5	0	-	11.3	11.4	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	20	16	14	30	18	18	217	7	19	140	34
Future Vol, veh/h	20	20	16	14	30	18	18	217	7	19	140	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	70	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	20	20	16	14	30	18	18	282	7	19	182	34

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	583	562	199	577	576	286	216	0	0	289	0	0
Stage 1	237	237	-	322	322	-	-	-	-	-	-	-
Stage 2	346	325	-	255	254	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	425	437	845	429	429	755	1360	-	-	1279	-	-
Stage 1	768	711	-	692	653	-	-	-	-	-	-	-
Stage 2	672	651	-	752	699	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	382	423	845	396	415	755	1360	-	-	1279	-	-
Mov Cap-2 Maneuver	382	423	-	396	415	-	-	-	-	-	-	-
Stage 1	756	699	-	681	643	-	-	-	-	-	-	-
Stage 2	615	641	-	704	687	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13.1		13.8		0.5		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1360	-	-	382	544	472	1279	-	-
HCM Lane V/C Ratio	0.013	-	-	0.052	0.066	0.131	0.015	-	-
HCM Control Delay (s)	7.7	0	-	14.9	12.1	13.8	7.9	0	-
HCM Lane LOS	A	A	-	B	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0.5	0	-	-

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	
Traffic Vol, veh/h	13	38	11	9	61	12	12	144	5	13	93	23
Future Vol, veh/h	13	38	11	9	61	12	12	144	5	13	93	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	65	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	13	38	11	9	61	12	12	187	5	13	121	23

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	409	375	133	397	384	190	144	0	0	192	0	0
Stage 1	159	159	-	214	214	-	-	-	-	-	-	-
Stage 2	250	216	-	183	170	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	555	558	919	565	551	854	1445	-	-	1388	-	-
Stage 1	846	768	-	790	727	-	-	-	-	-	-	-
Stage 2	756	726	-	821	760	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	493	547	919	521	541	854	1445	-	-	1388	-	-
Mov Cap-2 Maneuver	493	547	-	521	541	-	-	-	-	-	-	-
Stage 1	838	760	-	783	720	-	-	-	-	-	-	-
Stage 2	676	719	-	763	752	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12		12.2		0.4		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1445	-	-	575	521	576	1388	-	-
HCM Lane V/C Ratio	0.008	-	-	0.108	0.017	0.127	0.009	-	-
HCM Control Delay (s)	7.5	0	-	12	12	12.2	7.6	0	-
HCM Lane LOS	A	A	-	B	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.1	0.4	0	-	-

HCM 6th Signalized Intersection Summary
45: 5th Street & Main St

2021 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	17	94	12	10	61	14	12	209	12	20	125	20
Future Volume (veh/h)	17	94	12	10	61	14	12	209	12	20	125	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	17	94	12	10	61	14	12	272	12	20	162	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	55	133	16	51	126	27	70	1423	61	149	1189	143
Arrive On Green	0.18	0.18	0.18	0.09	0.09	0.09	1.00	1.00	1.00	0.82	0.82	0.82
Sat Flow, veh/h	157	1472	176	115	1402	299	39	1736	75	134	1451	174
Grp Volume(v), veh/h	123	0	0	85	0	0	296	0	0	202	0	0
Grp Sat Flow(s),veh/h/ln	1805	0	0	1815	0	0	1850	0	0	1759	0	0
Q Serve(g_s), s	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.4	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.14		0.10	0.12		0.16	0.04		0.04	0.10		0.10
Lane Grp Cap(c), veh/h	204	0	0	204	0	0	1554	0	0	1482	0	0
V/C Ratio(X)	0.60	0.00	0.00	0.42	0.00	0.00	0.19	0.00	0.00	0.14	0.00	0.00
Avail Cap(c_a), veh/h	703	0	0	700	0	0	1554	0	0	1482	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	39.9	0.0	0.0	43.4	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.0	1.4	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.0	2.1	0.0	0.0	0.1	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	0.0	0.0	44.8	0.0	0.0	0.3	0.0	0.0	2.0	0.0	0.0
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		123			85			296			202	
Approach Delay, s/veh		42.3			44.8			0.3			2.0	
Approach LOS		D			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		86.5		13.5		86.5		13.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		37.5		53.5		37.5				
Max Q Clear Time (g_c+I1), s		4.2		6.4		2.0		8.4				
Green Ext Time (p_c), s		1.3		0.4		2.0		0.7				
Intersection Summary												
HCM 6th Ctrl Delay				13.4								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
46: 4th Street & Main St

2021 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	11	91	9	7	78	8	7	139	8	14	84	13
Future Volume (veh/h)	11	91	9	7	78	8	7	139	8	14	84	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	11	91	9	7	78	8	7	181	8	14	109	13
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	48	133	13	45	136	13	64	1444	63	158	1207	140
Arrive On Green	0.08	0.08	0.08	0.03	0.03	0.03	1.00	1.00	1.00	0.27	0.27	0.27
Sat Flow, veh/h	103	1579	148	69	1615	158	32	1748	76	143	1461	170
Grp Volume(v), veh/h	111	0	0	93	0	0	196	0	0	136	0	0
Grp Sat Flow(s),veh/h/ln	1830	0	0	1843	0	0	1856	0	0	1774	0	0
Q Serve(g_s), s	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.8	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	5.5	0.0	0.0
Prop In Lane	0.10		0.08	0.08		0.09	0.04		0.04	0.10		0.10
Lane Grp Cap(c), veh/h	194	0	0	194	0	0	1570	0	0	1504	0	0
V/C Ratio(X)	0.57	0.00	0.00	0.48	0.00	0.00	0.12	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	784	0	0	788	0	0	1570	0	0	1504	0	0
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	0.93	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.6	0.0	0.0	46.9	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.0	1.7	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.0	2.4	0.0	0.0	0.1	0.0	0.0	1.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.2	0.0	0.0	48.6	0.0	0.0	0.2	0.0	0.0	8.4	0.0	0.0
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		111			93			196			136	
Approach Delay, s/veh		47.2			48.6			0.2			8.4	
Approach LOS		D			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		87.1		12.9		87.1		12.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		49.5		41.5		49.5		41.5				
Max Q Clear Time (g_c+I1), s		7.5		6.9		2.0		7.8				
Green Ext Time (p_c), s		0.8		0.5		1.2		0.6				
Intersection Summary												
HCM 6th Ctrl Delay					20.4							
HCM 6th LOS					C							

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	24	5	6	43	9	7	197	8	15	122	8
Future Vol, veh/h	20	24	5	6	43	9	7	197	8	15	122	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	20	24	5	6	43	9	7	256	8	15	159	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	493	471	163	482	471	260	167	0	0	264	0	0
Stage 1	193	193	-	274	274	-	-	-	-	-	-	-
Stage 2	300	278	-	208	197	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	488	492	884	496	492	781	1417	-	-	1306	-	-
Stage 1	811	743	-	734	685	-	-	-	-	-	-	-
Stage 2	711	682	-	796	740	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	443	483	884	468	483	781	1417	-	-	1306	-	-
Mov Cap-2 Maneuver	443	483	-	468	483	-	-	-	-	-	-	-
Stage 1	806	733	-	730	681	-	-	-	-	-	-	-
Stage 2	654	678	-	756	730	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13.2		12.9		0.2		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1417	-	-	488	512	1306	-
HCM Lane V/C Ratio	0.005	-	-	0.1	0.113	0.011	-
HCM Control Delay (s)	7.6	0	-	13.2	12.9	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.3	0.4	0	-

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	34	3	4	48	6	5	131	5	10	82	6
Future Vol, veh/h	13	34	3	4	48	6	5	131	5	10	82	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	13	34	3	4	48	6	5	170	5	10	107	6

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	340	315	110	332	316	173	113	0	0	175	0	0
Stage 1	130	130	-	183	183	-	-	-	-	-	-	-
Stage 2	210	185	-	149	133	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	616	602	946	623	602	873	1483	-	-	1407	-	-
Stage 1	876	791	-	821	750	-	-	-	-	-	-	-
Stage 2	794	749	-	856	788	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	569	595	946	589	595	873	1483	-	-	1407	-	-
Mov Cap-2 Maneuver	569	595	-	589	595	-	-	-	-	-	-	-
Stage 1	872	785	-	818	747	-	-	-	-	-	-	-
Stage 2	735	746	-	810	782	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.5		11.5		0.2		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1483	-	-	601	615	1407	-
HCM Lane V/C Ratio	0.003	-	-	0.083	0.094	0.007	-
HCM Control Delay (s)	7.4	0	-	11.5	11.5	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-

HCM 6th Signalized Intersection Summary
53: 5th Street & Ute Ave

2021 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↕	↗	↙	↕			↕	↗
Traffic Volume (veh/h)	0	0	0	415	512	30	177	277	0	0	113	17
Future Volume (veh/h)	0	0	0	415	512	30	177	277	0	0	113	17
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1885	1885	1885	1885	1885	0	0	1885	1885
Adj Flow Rate, veh/h				309	660	30	177	360	0	0	147	17
Peak Hour Factor				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				434	911	386	1214	1241	0	0	490	415
Arrive On Green				0.24	0.24	0.24	0.70	1.00	0.00	0.00	0.52	0.52
Sat Flow, veh/h				1795	3770	1598	3483	1885	0	0	1885	1598
Grp Volume(v), veh/h				309	660	30	177	360	0	0	147	17
Grp Sat Flow(s),veh/h/ln				1795	1885	1598	1742	1885	0	0	1885	1598
Q Serve(g_s), s				15.8	16.1	1.5	1.7	0.0	0.0	0.0	4.4	0.5
Cycle Q Clear(g_c), s				15.8	16.1	1.5	1.7	0.0	0.0	0.0	4.4	0.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				434	911	386	1214	1241	0	0	490	415
V/C Ratio(X)				0.71	0.72	0.08	0.15	0.29	0.00	0.00	0.30	0.04
Avail Cap(c_a), veh/h				790	1659	703	1214	1241	0	0	490	415
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	1.00	1.00	0.97	0.97	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.7	34.9	29.3	10.1	0.0	0.0	0.0	18.8	17.9
Incr Delay (d2), s/veh				2.2	1.1	0.1	0.1	0.6	0.0	0.0	1.6	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.1	7.4	0.6	0.7	0.2	0.0	0.0	2.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				36.9	36.0	29.4	10.2	0.6	0.0	0.0	20.4	18.1
LnGrp LOS				D	D	C	B	A	A	A	C	B
Approach Vol, veh/h					999			537			164	
Approach Delay, s/veh					36.1			3.7			20.1	
Approach LOS					D			A			C	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	39.8	31.0		29.2		70.8						
Change Period (Y+Rc), s	5.0	* 5		5.0		5.0						
Max Green Setting (Gmax), s	15.5	* 26		44.0		46.0						
Max Q Clear Time (g_c+I1), s	3.7	6.4		18.1		2.0						
Green Ext Time (p_c), s	0.4	0.7		6.1		2.4						

Intersection Summary

HCM 6th Ctrl Delay	24.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
54: 4th Street & Ute Ave

2021 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔			↔			↔	
Traffic Volume (veh/h)	0	0	0	21	652	20	1	15	0	0	76	11
Future Volume (veh/h)	0	0	0	21	652	20	1	15	0	0	76	11
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		
Adj Sat Flow, veh/h/ln				1885	1885	1885	1885	1885	0	0	1885	1885
Adj Flow Rate, veh/h				21	652	20	1	20	0	0	99	11
Peak Hour Factor				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				28	908	29	65	1134	0	0	1037	115
Arrive On Green				0.09	0.09	0.09	0.62	0.62	0.00	0.00	1.00	1.00
Sat Flow, veh/h				108	3523	113	44	1821	0	0	1667	185
Grp Volume(v), veh/h				364	0	329	21	0	0	0	0	110
Grp Sat Flow(s),veh/h/ln				1880	0	1865	1865	0	0	0	0	1852
Q Serve(g_s), s				18.9	0.0	17.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				18.9	0.0	17.1	0.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane				0.06		0.06	0.05		0.00	0.00		0.10
Lane Grp Cap(c), veh/h				484	0	480	1198	0	0	0	0	1152
V/C Ratio(X)				0.75	0.00	0.68	0.02	0.00	0.00	0.00	0.00	0.10
Avail Cap(c_a), veh/h				1053	0	1044	1198	0	0	0	0	1152
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				0.80	0.00	0.80	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				42.6	0.0	41.8	7.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				1.9	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.8	0.0	8.7	0.2	0.0	0.0	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				44.5	0.0	43.2	7.2	0.0	0.0	0.0	0.0	0.2
LnGrp LOS				D	A	D	A	A	A	A	A	A
Approach Vol, veh/h					693			21			110	
Approach Delay, s/veh					43.9			7.2			0.2	
Approach LOS					D			A			A	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		68.2		31.8		68.2						
Change Period (Y+Rc), s		6.0		6.0		6.0						
Max Green Setting (Gmax), s		32.0		56.0		32.0						
Max Q Clear Time (g_c+I1), s		2.0		20.9		2.4						
Green Ext Time (p_c), s		0.6		4.8		0.1						
Intersection Summary												
HCM 6th Ctrl Delay											37.1	
HCM 6th LOS											D	

HCM 6th Signalized Intersection Summary
57: 5th Street & Pitkin Ave

2021 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔	↗					↕↕		↖	↕↕	
Traffic Volume (veh/h)	14	528	411	0	0	0	0	416	105	5	523	0
Future Volume (veh/h)	14	528	411	0	0	0	0	416	105	5	523	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885				0	1885	1885	1885	1885	0
Adj Flow Rate, veh/h	14	626	346				0	541	105	5	680	0
Peak Hour Factor	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1				0	1	1	1	1	0
Cap, veh/h	23	1060	459				0	1864	360	498	2230	0
Arrive On Green	0.09	0.09	0.09				0.00	0.62	0.62	1.00	1.00	0.00
Sat Flow, veh/h	79	3688	1598				0	3087	579	791	3676	0
Grp Volume(v), veh/h	335	305	346				0	323	323	5	680	0
Grp Sat Flow(s),veh/h/ln	1881	1885	1598				0	1791	1781	791	1791	0
Q Serve(g_s), s	17.1	15.5	21.1				0.0	8.3	8.4	0.1	0.0	0.0
Cycle Q Clear(g_c), s	17.1	15.5	21.1				0.0	8.3	8.4	8.5	0.0	0.0
Prop In Lane	0.04		1.00				0.00		0.32	1.00		0.00
Lane Grp Cap(c), veh/h	541	542	459				0	1115	1109	498	2230	0
V/C Ratio(X)	0.62	0.56	0.75				0.00	0.29	0.29	0.01	0.30	0.00
Avail Cap(c_a), veh/h	931	933	791				0	1115	1109	498	2230	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.70	0.70	0.70				0.00	1.00	1.00	0.86	0.86	0.00
Uniform Delay (d), s/veh	40.0	39.3	41.8				0.0	8.7	8.7	0.6	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.6	1.8				0.0	0.7	0.7	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	7.9	9.2				0.0	3.2	3.2	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.8	39.9	43.6				0.0	9.3	9.4	0.6	0.3	0.0
LnGrp LOS	D	D	D				A	A	A	A	A	A
Approach Vol, veh/h		986						646			685	
Approach Delay, s/veh		41.5						9.4			0.3	
Approach LOS		D						A			A	
Timer - Assigned Phs		2					6	8				
Phs Duration (G+Y+Rc), s		66.8					66.8	33.2				
Change Period (Y+Rc), s		4.5					4.5	4.5				
Max Green Setting (Gmax), s		41.5					41.5	49.5				
Max Q Clear Time (g_c+I1), s		10.5					10.4	23.1				
Green Ext Time (p_c), s		5.3					4.4	5.6				
Intersection Summary												
HCM 6th Ctrl Delay			20.4									
HCM 6th LOS			C									
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 6th Signalized Intersection Summary
58: 4th Street & Pitkin Ave

2021 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↕↕↕							↕		↕			
Traffic Volume (veh/h)	9	852	1	0	0	0	0	6	10	91	6	0	
Future Volume (veh/h)	9	852	1	0	0	0	0	6	10	91	6	0	
Initial Q (Qb), veh	0	0	0					0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00		1.00						1.00	1.00	1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00					1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach	No							No		No			
Adj Sat Flow, veh/h/ln	1885	1885	1885					0	1885	1885	1885	1885	
Adj Flow Rate, veh/h	9	852	1					0	8	10	91	8	
Peak Hour Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	1.00	
Percent Heavy Veh, %	1	1	1					0	1	1	1	0	
Cap, veh/h	13	1270	2					0	507	634	943	80	
Arrive On Green	0.23	0.23	0.23					0.00	0.67	0.67	0.67	0.67	
Sat Flow, veh/h	54	5422	7					0	762	952	1312	120	
Grp Volume(v), veh/h	315	261	287					0	0	18	99	0	
Grp Sat Flow(s),veh/h/ln	1882	1716	1884					0	0	1714	1433	0	
Q Serve(g_s), s	15.4	13.7	13.7					0.0	0.0	0.4	2.3	0.0	
Cycle Q Clear(g_c), s	15.4	13.7	13.7					0.0	0.0	0.4	2.6	0.0	
Prop In Lane	0.03		0.00						0.00		0.56	0.92	0.00
Lane Grp Cap(c), veh/h	441	402	441					0	0	1141	1023	0	
V/C Ratio(X)	0.71	0.65	0.65					0.00	0.00	0.02	0.10	0.00	
Avail Cap(c_a), veh/h	998	909	999					0	0	1141	1023	0	
HCM Platoon Ratio	1.00	1.00	1.00					1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00					0.00	0.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh	35.2	34.6	34.6					0.0	0.0	5.6	6.0	0.0	
Incr Delay (d2), s/veh	2.2	1.8	1.6					0.0	0.0	0.0	0.2	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	7.2	5.8	6.4					0.0	0.0	0.1	0.7	0.0	
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	37.4	36.4	36.2					0.0	0.0	5.7	6.2	0.0	
LnGrp LOS	D	D	D					A	A	A	A	A	
Approach Vol, veh/h	862							18		99			
Approach Delay, s/veh	36.7							5.7		6.2			
Approach LOS	D							A		A			
Timer - Assigned Phs	2							6		8			
Phs Duration (G+Y+Rc), s	71.6							71.6		28.4			
Change Period (Y+Rc), s	5.0							5.0		5.0			
Max Green Setting (Gmax), s	37.0							37.0		53.0			
Max Q Clear Time (g_c+I1), s	4.6							2.4		17.4			
Green Ext Time (p_c), s	0.5							0.1		6.0			
Intersection Summary													
HCM 6th Ctrl Delay	33.0												
HCM 6th LOS	C												

HCM 6th Signalized Intersection Summary
5: 5th Street & North Ave

Forecast Year 2045
(Existing Volumes x 1.5)

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	895	7	22	993	26	54	71	217	39	48	29
Future Volume (veh/h)	20	895	7	22	993	26	54	71	217	39	48	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	30	1342	10	33	1490	39	81	106	326	58	72	44
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	187	1883	14	226	1849	48	399	418	354	319	403	341
Arrive On Green	0.03	0.52	0.52	0.03	0.52	0.52	0.05	0.22	0.22	0.04	0.21	0.21
Sat Flow, veh/h	1795	3644	27	1795	3566	93	1795	1885	1598	1795	1885	1598
Grp Volume(v), veh/h	30	659	693	33	747	782	81	106	326	58	72	44
Grp Sat Flow(s),veh/h/ln	1795	1791	1880	1795	1791	1868	1795	1885	1598	1795	1885	1598
Q Serve(g_s), s	0.7	26.7	26.7	0.8	32.7	32.9	3.3	4.4	18.9	2.4	3.0	2.1
Cycle Q Clear(g_c), s	0.7	26.7	26.7	0.8	32.7	32.9	3.3	4.4	18.9	2.4	3.0	2.1
Prop In Lane	1.00		0.01	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	925	971	226	929	969	399	418	354	319	403	341
V/C Ratio(X)	0.16	0.71	0.71	0.15	0.80	0.81	0.20	0.25	0.92	0.18	0.18	0.13
Avail Cap(c_a), veh/h	248	925	971	285	929	969	424	425	360	351	417	354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.1	17.5	17.5	14.0	18.9	18.9	27.0	30.4	36.1	27.3	30.5	30.2
Incr Delay (d2), s/veh	0.4	4.7	4.4	0.3	7.4	7.2	0.2	0.3	28.0	0.3	0.2	0.2
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.3	11.5	12.0	0.3	14.5	15.1	1.4	2.0	10.0	1.0	1.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.5	22.2	22.0	14.3	26.2	26.1	27.3	30.8	64.1	27.6	30.7	30.3
LnGrp LOS	B	C	C	B	C	C	C	C	E	C	C	C
Approach Vol, veh/h		1382			1562			513			174	
Approach Delay, s/veh		22.0			25.9			51.4			29.6	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.7	25.3	6.7	54.2	7.9	26.0	6.9	54.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	6.0	21.0	6.0	49.0	5.6	21.4	6.0	49.0				
Max Q Clear Time (g_c+I1), s	5.3	5.0	2.7	34.9	4.4	20.9	2.8	28.7				
Green Ext Time (p_c), s	0.0	0.4	0.0	9.0	0.0	0.1	0.0	9.8				
Intersection Summary												
HCM 6th Ctrl Delay				28.2								
HCM 6th LOS				C								

Intersection												
Int Delay, s/veh	9.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	15	898	63	99	937	14	2	1	10	5	3	15
Future Vol, veh/h	15	898	63	99	937	14	2	1	10	5	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	23	1347	95	149	1406	21	3	2	15	8	5	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1427	0	0	1442	0	0	2445	3166	721	2436	3203	714
Stage 1	-	-	-	-	-	-	1441	1441	-	1715	1715	-
Stage 2	-	-	-	-	-	-	1004	1725	-	721	1488	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	478	-	-	471	-	-	16	11	372	17	10	376
Stage 1	-	-	-	-	-	-	140	198	-	95	145	-
Stage 2	-	-	-	-	-	-	261	143	-	387	188	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	478	-	-	471	-	-	6	7	372	10	7	376
Mov Cap-2 Maneuver	-	-	-	-	-	-	6	7	-	10	7	-
Stage 1	-	-	-	-	-	-	133	188	-	90	99	-
Stage 2	-	-	-	-	-	-	160	98	-	351	179	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			1.5			\$ 310.6			\$ 580.1		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	26	478	-	-	471	-	-	24
HCM Lane V/C Ratio	0.75	0.047	-	-	0.315	-	-	1.438
HCM Control Delay (s)	\$ 310.6	12.9	-	-	16.1	-	-	\$ 580.1
HCM Lane LOS	F	B	-	-	C	-	-	F
HCM 95th %tile Q(veh)	2.3	0.1	-	-	1.3	-	-	4.3

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↶		↷				↶
Traffic Vol, veh/h	0	0	0	0	3	15	10	329	2	0	0	75
Future Vol, veh/h	0	0	0	0	3	15	10	329	2	0	0	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	0	0	5	23	15	494	3	0	0	113

Major/Minor	Minor1	Major1			
Conflicting Flow All	-	526	249	0	0
Stage 1	-	526	-	-	-
Stage 2	-	0	-	-	-
Critical Hdwy	-	6.52	6.92	4.12	-
Critical Hdwy Stg 1	-	5.52	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	2.21	-
Pot Cap-1 Maneuver	0	458	754	-	-
Stage 1	0	530	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	0	754	-	-
Mov Cap-2 Maneuver	-	0	-	-	-
Stage 1	-	0	-	-	-
Stage 2	-	0	-	-	-

Approach	WB	NB
HCM Control Delay, s	10	
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	NBRWBLn1
Capacity (veh/h)	-	-	754
HCM Lane V/C Ratio	-	-	0.036
HCM Control Delay (s)	-	-	10
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.1

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗	↖	↗						↖	
Traffic Vol, veh/h	0	0	13	69	10	3	0	0	0	0	151	7
Future Vol, veh/h	0	0	13	69	10	3	0	0	0	0	151	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	None
Storage Length	-	-	0	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	20	104	15	5	0	0	0	0	227	11

Major/Minor	Minor2		Minor1			Major2		
Conflicting Flow All	-	-	233	243	238	-	-	0
Stage 1	-	-	-	0	0	-	-	-
Stage 2	-	-	-	243	238	-	-	-
Critical Hdwy	-	-	6.21	7.11	6.51	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.11	5.51	-	-	-
Follow-up Hdwy	-	-	3.309	3.509	4.009	-	-	-
Pot Cap-1 Maneuver	0	0	809	713	665	0	0	-
Stage 1	0	0	-	-	0	0	-	-
Stage 2	0	0	-	763	710	0	0	-
Platoon blocked, %								-
Mov Cap-1 Maneuver	-	-	809	696	665	-	-	-
Mov Cap-2 Maneuver	-	-	-	696	665	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	745	710	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	9.6		0
HCM LOS	A	-	

Minor Lane/Major Mvmt	EBLn1WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	809	696	-	-
HCM Lane V/C Ratio	0.024	0.149	-	-
HCM Control Delay (s)	9.6	11.1	-	-
HCM Lane LOS	A	B	-	-
HCM 95th %tile Q(veh)	0.1	0.5	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Future Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	0	0	15	15	15	510	15	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	293	555	-	-	548	263	0	0	0		
Stage 1	0	0	-	-	548	-	-	-	-		
Stage 2	293	555	-	-	0	-	-	-	-		
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-		
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-		
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-		
Pot Cap-1 Maneuver	639	441	0	0	445	739	-	-	-		
Stage 1	-	-	0	0	518	-	-	-	-		
Stage 2	694	514	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	610	441	-	-	445	739	-	-	-		
Mov Cap-2 Maneuver	610	441	-	-	445	-	-	-	-		
Stage 1	-	-	-	-	518	-	-	-	-		
Stage 2	660	514	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	12.5		11.9				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	512	555
HCM Lane V/C Ratio	-	-	-	0.059	0.054
HCM Control Delay (s)	-	-	-	12.5	11.9
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.2	0.2

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	10	10	10	10	0	0	0	0	10	210	10
Future Vol, veh/h	0	10	10	10	10	0	0	0	0	10	210	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	15	15	15	15	0	0	0	0	15	315	15

Major/Minor	Minor2		Minor1			Major2				
Conflicting Flow All	-	353	165	195	360	-	-	0	0	0
Stage 1	-	353	-	0	0	-	-	-	-	-
Stage 2	-	0	-	195	360	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.52	6.52	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.52	5.52	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.51	4.01	-	-	2.21	-	-
Pot Cap-1 Maneuver	0	573	854	749	568	0	-	-	-	-
Stage 1	0	632	-	-	-	0	-	-	-	-
Stage 2	0	-	-	791	627	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	573	854	721	568	-	-	-	-	-
Mov Cap-2 Maneuver	-	573	-	721	568	-	-	-	-	-
Stage 1	-	632	-	-	-	-	-	-	-	-
Stage 2	-	-	-	759	627	-	-	-	-	-

Approach	EB		WB			SB		
HCM Control Delay, s	10.5		11					
HCM LOS	B		B					

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	686	635	-	-	-
HCM Lane V/C Ratio	0.044	0.047	-	-	-
HCM Control Delay (s)	10.5	11	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Future Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	0	0	15	15	15	510	15	0	0	0

Major/Minor	Minor2		Minor1		Major1					
Conflicting Flow All	293	555	-	-	548	263	0	0	0	
Stage 1	0	0	-	-	548	-	-	-	-	
Stage 2	293	555	-	-	0	-	-	-	-	
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-	
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-	
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-	
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-	
Pot Cap-1 Maneuver	639	441	0	0	445	739	-	-	-	
Stage 1	-	-	0	0	518	-	-	-	-	
Stage 2	694	514	0	0	-	-	-	-	-	
Platoon blocked, %								-	-	
Mov Cap-1 Maneuver	610	441	-	-	445	739	-	-	-	
Mov Cap-2 Maneuver	610	441	-	-	445	-	-	-	-	
Stage 1	-	-	-	-	518	-	-	-	-	
Stage 2	660	514	-	-	-	-	-	-	-	

Approach	EB		WB		NB	
HCM Control Delay, s	12.5		11.9			
HCM LOS	B		B			

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	
Capacity (veh/h)	-	-	-	512	555
HCM Lane V/C Ratio	-	-	-	0.059	0.054
HCM Control Delay (s)	-	-	-	12.5	11.9
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.2	0.2

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	10	10	10	10	0	0	0	0	10	210	10
Future Vol, veh/h	0	10	10	10	10	0	0	0	0	10	210	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	15	15	15	15	0	0	0	0	15	315	15

Major/Minor	Minor2		Minor1			Major2				
Conflicting Flow All	-	353	165	195	360	-	-	0	0	0
Stage 1	-	353	-	0	0	-	-	-	-	-
Stage 2	-	0	-	195	360	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.52	6.52	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.52	5.52	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.51	4.01	-	-	2.21	-	-
Pot Cap-1 Maneuver	0	573	854	749	568	0	-	-	-	-
Stage 1	0	632	-	-	-	0	-	-	-	-
Stage 2	0	-	-	791	627	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	573	854	721	568	-	-	-	-	-
Mov Cap-2 Maneuver	-	573	-	721	568	-	-	-	-	-
Stage 1	-	632	-	-	-	-	-	-	-	-
Stage 2	-	-	-	759	627	-	-	-	-	-

Approach	EB		WB			SB		
HCM Control Delay, s	10.5		11					
HCM LOS	B		B					

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	686	635	-	-	-
HCM Lane V/C Ratio	0.044	0.047	-	-	-
HCM Control Delay (s)	10.5	11	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	7	37	0	0	44	14	3	336	18	0	0	0
Future Vol, veh/h	7	37	0	0	44	14	3	336	18	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	11	56	0	0	66	21	5	504	27	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	295	541	-	-	528	266	0	0	0		
Stage 1	0	0	-	-	528	-	-	-	-		
Stage 2	295	541	-	-	0	-	-	-	-		
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-		
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-		
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-		
Pot Cap-1 Maneuver	637	449	0	0	456	735	-	-	-		
Stage 1	-	-	0	0	528	-	-	-	-		
Stage 2	692	521	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	550	449	-	-	456	735	-	-	-		
Mov Cap-2 Maneuver	550	449	-	-	456	-	-	-	-		
Stage 1	-	-	-	-	528	-	-	-	-		
Stage 2	588	521	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	14.1		13.7				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	
Capacity (veh/h)	-	-	-	463	502
HCM Lane V/C Ratio	-	-	-	0.143	0.173
HCM Control Delay (s)	-	-	-	14.1	13.7
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.5	0.6

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	35	15	9	38	0	0	0	0	5	222	11
Future Vol, veh/h	0	35	15	9	38	0	0	0	0	5	222	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	53	23	14	57	0	0	0	0	8	333	17

Major/Minor	Minor2			Minor1			Major2			
Conflicting Flow All	-	358	175	209	366	-	-	0	0	0
Stage 1	-	358	-	0	0	-	-	-	-	-
Stage 2	-	0	-	209	366	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.52	6.52	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.52	5.52	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.51	4.01	-	-	2.21	-	-
Pot Cap-1 Maneuver	0	569	841	733	563	0	-	-	-	-
Stage 1	0	629	-	-	-	0	-	-	-	-
Stage 2	0	-	-	776	624	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	569	841	663	563	-	-	-	-	-
Mov Cap-2 Maneuver	-	569	-	663	563	-	-	-	-	-
Stage 1	-	629	-	-	-	-	-	-	-	-
Stage 2	-	-	-	692	624	-	-	-	-	-

Approach	EB		WB		SB	
HCM Control Delay, s	11.5		12.1			
HCM LOS	B		B			

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	630	580	-	-	-
HCM Lane V/C Ratio	0.119	0.122	-	-	-
HCM Control Delay (s)	11.5	12.1	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.4	0.4	-	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Future Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	0	0	15	15	15	510	15	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	293	555	-	-	548	263	0	0	0		
Stage 1	0	0	-	-	548	-	-	-	-		
Stage 2	293	555	-	-	0	-	-	-	-		
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-		
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-		
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-		
Pot Cap-1 Maneuver	639	441	0	0	445	739	-	-	-		
Stage 1	-	-	0	0	518	-	-	-	-		
Stage 2	694	514	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	610	441	-	-	445	739	-	-	-		
Mov Cap-2 Maneuver	610	441	-	-	445	-	-	-	-		
Stage 1	-	-	-	-	518	-	-	-	-		
Stage 2	660	514	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	12.5		11.9				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	512	555
HCM Lane V/C Ratio	-	-	-	0.059	0.054
HCM Control Delay (s)	-	-	-	12.5	11.9
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.2	0.2

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	10	10	10	10	0	0	0	0	10	230	10
Future Vol, veh/h	0	10	10	10	10	0	0	0	0	10	230	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	15	15	15	15	0	0	0	0	15	345	15

Major/Minor	Minor2		Minor1				Major2			
Conflicting Flow All	-	383	180	210	390	-	-	0	0	0
Stage 1	-	383	-	0	0	-	-	-	-	-
Stage 2	-	0	-	210	390	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.52	6.52	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.52	5.52	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.51	4.01	-	-	2.21	-	-
Pot Cap-1 Maneuver	0	551	835	731	546	0	-	-	-	-
Stage 1	0	613	-	-	-	0	-	-	-	-
Stage 2	0	-	-	775	609	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	551	835	703	546	-	-	-	-	-
Mov Cap-2 Maneuver	-	551	-	703	546	-	-	-	-	-
Stage 1	-	613	-	-	-	-	-	-	-	-
Stage 2	-	-	-	742	609	-	-	-	-	-

Approach	EB		WB				SB		
HCM Control Delay, s	10.7		11.2						
HCM LOS	B		B						

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	664	615	-	-	-
HCM Lane V/C Ratio	0.045	0.049	-	-	-
HCM Control Delay (s)	10.7	11.2	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.1	0.2	-	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Future Vol, veh/h	10	10	0	0	10	10	10	340	10	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	0	0	15	15	15	510	15	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	293	555	-	-	548	263	0	0	0		
Stage 1	0	0	-	-	548	-	-	-	-		
Stage 2	293	555	-	-	0	-	-	-	-		
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-		
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-		
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-		
Pot Cap-1 Maneuver	639	441	0	0	445	739	-	-	-		
Stage 1	-	-	0	0	518	-	-	-	-		
Stage 2	694	514	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	610	441	-	-	445	739	-	-	-		
Mov Cap-2 Maneuver	610	441	-	-	445	-	-	-	-		
Stage 1	-	-	-	-	518	-	-	-	-		
Stage 2	660	514	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	12.5		11.9				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	512	555
HCM Lane V/C Ratio	-	-	-	0.059	0.054
HCM Control Delay (s)	-	-	-	12.5	11.9
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.2	0.2

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	10	10	10	10	0	0	0	0	10	240	10
Future Vol, veh/h	0	10	10	10	10	0	0	0	0	10	240	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	15	15	15	15	0	0	0	0	15	360	15

Major/Minor	Minor2		Minor1			Major2				
Conflicting Flow All	-	398	188	218	405	-	-	0	0	0
Stage 1	-	398	-	0	0	-	-	-	-	-
Stage 2	-	0	-	218	405	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.52	6.52	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.52	5.52	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.51	4.01	-	-	2.21	-	-
Pot Cap-1 Maneuver	0	541	825	722	536	0	-	-	-	-
Stage 1	0	604	-	-	-	0	-	-	-	-
Stage 2	0	-	-	767	599	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	541	825	694	536	-	-	-	-	-
Mov Cap-2 Maneuver	-	541	-	694	536	-	-	-	-	-
Stage 1	-	604	-	-	-	-	-	-	-	-
Stage 2	-	-	-	734	599	-	-	-	-	-

Approach	EB		WB			SB		
HCM Control Delay, s	10.8		11.3					
HCM LOS	B		B					

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	653	605	-	-	-
HCM Lane V/C Ratio	0.046	0.05	-	-	-
HCM Control Delay (s)	10.8	11.3	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.1	0.2	-	-	-

HCM 6th Signalized Intersection Summary
 33: 5th Street & Grand Ave

Forecast Year 2045
 (Existing Volumes x 1.5)

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	411	0	0	530	30	99	273	69	0	0	0
Future Volume (veh/h)	56	411	0	0	530	30	99	273	69	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1885	1885	0	0	1885	1885	1885	1885	1885			
Adj Flow Rate, veh/h	84	616	0	0	795	45	148	410	104			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1			
Cap, veh/h	311	1791	0	0	1430	81	718	1433	639			
Arrive On Green	0.05	0.50	0.00	0.00	0.41	0.41	0.13	0.13	0.13			
Sat Flow, veh/h	1795	3676	0	0	3540	195	1795	3582	1598			
Grp Volume(v), veh/h	84	616	0	0	413	427	148	410	104			
Grp Sat Flow(s),veh/h/ln	1795	1791	0	0	1791	1850	1795	1791	1598			
Q Serve(g_s), s	2.6	10.4	0.0	0.0	17.5	17.6	7.4	10.3	5.8			
Cycle Q Clear(g_c), s	2.6	10.4	0.0	0.0	17.5	17.6	7.4	10.3	5.8			
Prop In Lane	1.00		0.00	0.00		0.11	1.00		1.00			
Lane Grp Cap(c), veh/h	311	1791	0	0	743	768	718	1433	639			
V/C Ratio(X)	0.27	0.34	0.00	0.00	0.56	0.56	0.21	0.29	0.16			
Avail Cap(c_a), veh/h	418	1791	0	0	743	768	718	1433	639			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.91	0.91	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	16.4	15.1	0.0	0.0	22.3	22.3	29.2	30.5	28.5			
Incr Delay (d2), s/veh	0.6	0.5	0.0	0.0	3.0	2.9	0.6	0.5	0.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.1	4.2	0.0	0.0	7.8	8.0	3.4	4.9	2.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.0	15.6	0.0	0.0	25.2	25.2	29.9	31.0	29.1			
LnGrp LOS	B	B	A	A	C	C	C	C	C			
Approach Vol, veh/h		700			840			662				
Approach Delay, s/veh		15.7			25.2			30.5				
Approach LOS		B			C			C				
Timer - Assigned Phs			3	4		6		8				
Phs Duration (G+Y+Rc), s			8.5	46.5		45.0		55.0				
Change Period (Y+Rc), s			4.0	5.0		5.0		5.0				
Max Green Setting (Gmax), s			10.5	35.5		40.0		50.0				
Max Q Clear Time (g_c+I1), s			4.6	19.6		12.3		12.4				
Green Ext Time (p_c), s			0.1	4.9		3.5		4.8				
Intersection Summary												
HCM 6th Ctrl Delay			23.8									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
 34: 4th Street & Grand Ave

Forecast Year 2045
 (Existing Volumes x 1.5)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↘	↑↑						↔	
Traffic Volume (veh/h)	0	429	51	50	583	0	0	0	0	28	189	53
Future Volume (veh/h)	0	429	51	50	583	0	0	0	0	28	189	53
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	644	76	75	874	0				42	284	80
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1397	623	498	2077	0				116	805	237
Arrive On Green	0.00	0.39	0.39	0.14	0.58	0.00				0.32	0.32	0.32
Sat Flow, veh/h	0	3676	1598	1795	3676	0				362	2516	741
Grp Volume(v), veh/h	0	644	76	75	874	0				217	0	189
Grp Sat Flow(s),veh/h/ln	0	1791	1598	1795	1791	0				1867	0	1752
Q Serve(g_s), s	0.0	13.4	3.0	0.0	13.6	0.0				8.9	0.0	8.2
Cycle Q Clear(g_c), s	0.0	13.4	3.0	0.0	13.6	0.0				8.9	0.0	8.2
Prop In Lane	0.00		1.00	1.00		0.00				0.19		0.42
Lane Grp Cap(c), veh/h	0	1397	623	498	2077	0				597	0	561
V/C Ratio(X)	0.00	0.46	0.12	0.15	0.42	0.00				0.36	0.00	0.34
Avail Cap(c_a), veh/h	0	1397	623	516	2077	0				597	0	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.7	19.5	21.7	11.7	0.0				26.2	0.0	25.9
Incr Delay (d2), s/veh	0.0	1.1	0.4	0.1	0.6	0.0				1.7	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.7	1.2	1.2	5.2	0.0				4.2	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	23.8	19.9	21.8	12.3	0.0				27.9	0.0	27.5
LnGrp LOS		A	C	B	C	B	A			C	A	C
Approach Vol, veh/h		720			949					406		
Approach Delay, s/veh		23.4			13.0					27.7		
Approach LOS		C			B					C		
Timer - Assigned Phs		2		4			7		8			
Phs Duration (G+Y+Rc), s		37.0		63.0			19.0		44.0			
Change Period (Y+Rc), s		5.0		5.0			5.0		* 5			
Max Green Setting (Gmax), s		32.0		58.0			15.0		* 39			
Max Q Clear Time (g_c+I1), s		10.9		15.6			2.0		15.4			
Green Ext Time (p_c), s		2.4		11.0			0.1		4.9			

Intersection Summary

HCM 6th Ctrl Delay	19.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	25	14	0	0	15	33	37	380	1	0	0	0
Future Vol, veh/h	25	14	0	0	15	33	37	380	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	38	21	0	0	23	50	56	570	2	0	0	0

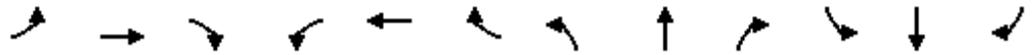
Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	409	684	-	-	683	286	0	0	0		
Stage 1	0	0	-	-	683	-	-	-	-		
Stage 2	409	684	-	-	0	-	-	-	-		
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-		
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-		
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-		
Pot Cap-1 Maneuver	529	372	0	0	372	714	-	-	-		
Stage 1	-	-	0	0	450	-	-	-	-		
Stage 2	593	449	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	470	372	-	-	372	714	-	-	-		
Mov Cap-2 Maneuver	470	372	-	-	372	-	-	-	-		
Stage 1	-	-	-	-	450	-	-	-	-		
Stage 2	524	449	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	14.7		12.5				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	429	555
HCM Lane V/C Ratio	-	-	-	0.136	0.13
HCM Control Delay (s)	-	-	-	14.7	12.5
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.5	0.4

HCM 6th Signalized Intersection Summary
 38: 4th Street & White Ave

Forecast Year 2045
 (Existing Volumes x 1.5)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻						↻↻	
Traffic Volume (veh/h)	0	11	18	30	29	0	0	0	0	17	259	18
Future Volume (veh/h)	0	11	18	30	29	0	0	0	0	17	259	18
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	16	27	45	44	0				26	388	27
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	189	319	279	257	0				126	1961	143
Arrive On Green	0.00	0.30	0.30	0.30	0.30	0.00				0.60	0.60	0.60
Sat Flow, veh/h	0	630	1064	750	856	0				210	3269	238
Grp Volume(v), veh/h	0	0	43	89	0	0				232	0	209
Grp Sat Flow(s),veh/h/ln	0	0	1694	1606	0	0				1875	0	1842
Q Serve(g_s), s	0.0	0.0	1.8	1.8	0.0	0.0				5.7	0.0	5.1
Cycle Q Clear(g_c), s	0.0	0.0	1.8	3.8	0.0	0.0				5.7	0.0	5.1
Prop In Lane	0.00		0.63	0.51		0.00				0.11		0.13
Lane Grp Cap(c), veh/h	0	0	508	536	0	0				1125	0	1105
V/C Ratio(X)	0.00	0.00	0.08	0.17	0.00	0.00				0.21	0.00	0.19
Avail Cap(c_a), veh/h	0	0	508	536	0	0				1125	0	1105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	25.1	25.8	0.0	0.0				9.1	0.0	9.0
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.7	0.0	0.0				0.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.8	1.6	0.0	0.0				2.3	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	25.5	26.4	0.0	0.0				9.5	0.0	9.4
LnGrp LOS	A	A	C	C	A	A				A	A	A
Approach Vol, veh/h		43			89							441
Approach Delay, s/veh		25.5			26.4							9.5
Approach LOS		C			C							A
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		65.0		35.0				35.0				
Change Period (Y+Rc), s		5.0		5.0				5.0				
Max Green Setting (Gmax), s		60.0		30.0				30.0				
Max Q Clear Time (g_c+I1), s		7.7		5.8				3.8				
Green Ext Time (p_c), s		2.9		0.4				0.2				
Intersection Summary												
HCM 6th Ctrl Delay				13.3								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
 41: 5th Street & Rood Ave

Forecast Year 2045
 (Existing Volumes x 1.5)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	43	0	0	32	30	30	361	12	0	0	0
Future Volume (veh/h)	33	43	0	0	32	30	30	361	12	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1885	1885	0	0	1885	1885	1885	1885	1885			
Adj Flow Rate, veh/h	50	64	0	0	48	45	45	542	18			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1			
Cap, veh/h	414	566	0	0	269	252	159	2012	70			
Arrive On Green	0.30	0.30	0.00	0.00	0.30	0.30	0.20	0.20	0.20			
Sat Flow, veh/h	1313	1885	0	0	895	839	265	3354	117			
Grp Volume(v), veh/h	50	64	0	0	0	93	317	0	288			
Grp Sat Flow(s),veh/h/ln	1313	1885	0	0	0	1734	1872	0	1864			
Q Serve(g_s), s	2.9	2.5	0.0	0.0	0.0	4.0	14.4	0.0	13.0			
Cycle Q Clear(g_c), s	6.9	2.5	0.0	0.0	0.0	4.0	14.4	0.0	13.0			
Prop In Lane	1.00		0.00	0.00		0.48	0.14		0.06			
Lane Grp Cap(c), veh/h	414	566	0	0	0	520	1123	0	1119			
V/C Ratio(X)	0.12	0.11	0.00	0.00	0.00	0.18	0.28	0.00	0.26			
Avail Cap(c_a), veh/h	414	566	0	0	0	520	1123	0	1119			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	28.4	25.4	0.0	0.0	0.0	25.9	21.8	0.0	21.3			
Incr Delay (d2), s/veh	0.6	0.4	0.0	0.0	0.0	0.8	0.6	0.0	0.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0	1.2	0.0	0.0	0.0	1.7	7.3	0.0	6.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	25.8	0.0	0.0	0.0	26.6	22.4	0.0	21.8			
LnGrp LOS	C	C	A	A	A	C	C	A	C			
Approach Vol, veh/h		114			93			605				
Approach Delay, s/veh		27.2			26.6			22.2				
Approach LOS		C			C			C				
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				35.0		65.0		35.0				
Change Period (Y+Rc), s				5.0		5.0		5.0				
Max Green Setting (Gmax), s				30.0		60.0		30.0				
Max Q Clear Time (g_c+I1), s				6.0		16.4		8.9				
Green Ext Time (p_c), s				0.4		3.9		0.4				
Intersection Summary												
HCM 6th Ctrl Delay				23.4								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
42: 4th Street & Rood Ave

Forecast Year 2045
(Existing Volumes x 1.5)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔						↕↕	
Traffic Volume (veh/h)	0	35	27	23	54	0	0	0	0	32	233	57
Future Volume (veh/h)	0	35	27	23	54	0	0	0	0	32	233	57
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	52	40	34	81	0				48	350	86
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	296	228	415	566	0				208	1567	404
Arrive On Green	0.00	0.30	0.30	0.10	0.10	0.00				0.20	0.20	0.20
Sat Flow, veh/h	0	988	760	1315	1885	0				347	2612	673
Grp Volume(v), veh/h	0	0	92	34	81	0				259	0	225
Grp Sat Flow(s),veh/h/ln	0	0	1748	1315	1885	0				1868	0	1764
Q Serve(g_s), s	0.0	0.0	3.9	2.4	3.9	0.0				11.6	0.0	10.7
Cycle Q Clear(g_c), s	0.0	0.0	3.9	6.3	3.9	0.0				11.6	0.0	10.7
Prop In Lane	0.00		0.43	1.00		0.00				0.19		0.38
Lane Grp Cap(c), veh/h	0	0	525	415	566	0				1121	0	1058
V/C Ratio(X)	0.00	0.00	0.18	0.08	0.14	0.00				0.23	0.00	0.21
Avail Cap(c_a), veh/h	0	0	525	415	566	0				1121	0	1058
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	25.9	36.2	33.3	0.0				20.7	0.0	20.3
Incr Delay (d2), s/veh	0.0	0.0	0.7	0.4	0.5	0.0				0.5	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.7	0.8	1.9	0.0				5.9	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	26.6	36.5	33.8	0.0				21.2	0.0	20.8
LnGrp LOS	A	A	C	D	C	A				C	A	C
Approach Vol, veh/h		92			115						484	
Approach Delay, s/veh		26.6			34.6						21.0	
Approach LOS		C			C						C	
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		65.0		35.0				35.0				
Change Period (Y+Rc), s		5.0		5.0				5.0				
Max Green Setting (Gmax), s		60.0		30.0				30.0				
Max Q Clear Time (g_c+I1), s		13.6		8.3				5.9				
Green Ext Time (p_c), s		3.3		0.4				0.4				
Intersection Summary												
HCM 6th Ctrl Delay				24.0								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
45: 5th Street & Main St

Forecast Year 2045
(Existing Volumes x 1.5)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Volume (veh/h)	28	98	0	0	63	20	19	348	20	0	0	0
Future Volume (veh/h)	28	98	0	0	63	20	19	348	20	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1885	1885	0	0	1885	1885	1885	1885	1885			
Adj Flow Rate, veh/h	42	147	0	0	94	30	28	522	30			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1			
Cap, veh/h	132	436	0	0	411	131	103	2011	121			
Arrive On Green	0.60	0.60	0.00	0.00	0.30	0.30	0.20	0.20	0.20			
Sat Flow, veh/h	292	1453	0	0	1369	437	172	3351	202			
Grp Volume(v), veh/h	189	0	0	0	0	124	305	0	275			
Grp Sat Flow(s),veh/h/ln	1746	0	0	0	0	1807	1877	0	1849			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	5.2	13.8	0.0	12.5			
Cycle Q Clear(g_c), s	5.0	0.0	0.0	0.0	0.0	5.2	13.8	0.0	12.5			
Prop In Lane	0.22		0.00	0.00		0.24	0.09		0.11			
Lane Grp Cap(c), veh/h	568	0	0	0	0	542	1126	0	1109			
V/C Ratio(X)	0.33	0.00	0.00	0.00	0.00	0.23	0.27	0.00	0.25			
Avail Cap(c_a), veh/h	568	0	0	0	0	542	1126	0	1109			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	15.0	0.0	0.0	0.0	0.0	26.3	21.6	0.0	21.1			
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.0	0.0	1.0	0.6	0.0	0.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	0.0	0.0	2.3	7.0	0.0	6.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.6	0.0	0.0	0.0	0.0	27.3	22.2	0.0	21.6			
LnGrp LOS	B	A	A	A	A	C	C	A	C			
Approach Vol, veh/h		189			124			580				
Approach Delay, s/veh		16.6			27.3			21.9				
Approach LOS		B			C			C				
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				35.0		65.0		35.0				
Change Period (Y+Rc), s				5.0		5.0		5.0				
Max Green Setting (Gmax), s				30.0		60.0		30.0				
Max Q Clear Time (g_c+11), s				7.2		15.8		7.0				
Green Ext Time (p_c), s				0.6		3.8		1.0				
Intersection Summary												
HCM 6th Ctrl Delay				21.5								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 46: 4th Street & Main St

Forecast Year 2045
 (Existing Volumes x 1.5)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↕↕	
Traffic Volume (veh/h)	0	90	21	17	66	0	0	0	0	34	209	33
Future Volume (veh/h)	0	90	21	17	66	0	0	0	0	34	209	33
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	135	32	26	99	0				51	314	50
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	641	152	170	625	0				206	1317	219
Arrive On Green	0.00	0.44	0.44	0.87	0.87	0.00				0.16	0.16	0.16
Sat Flow, veh/h	0	1473	349	291	1438	0				433	2772	461
Grp Volume(v), veh/h	0	0	167	125	0	0				220	0	195
Grp Sat Flow(s),veh/h/ln	0	0	1822	1729	0	0				1864	0	1802
Q Serve(g_s), s	0.0	0.0	5.7	0.0	0.0	0.0				10.3	0.0	9.5
Cycle Q Clear(g_c), s	0.0	0.0	5.7	1.0	0.0	0.0				10.3	0.0	9.5
Prop In Lane	0.00		0.19	0.21		0.00				0.23		0.26
Lane Grp Cap(c), veh/h	0	0	793	796	0	0				885	0	856
V/C Ratio(X)	0.00	0.00	0.21	0.16	0.00	0.00				0.25	0.00	0.23
Avail Cap(c_a), veh/h	0	0	793	796	0	0				885	0	856
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				0.33	0.33	0.33
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	17.6	3.7	0.0	0.0				26.5	0.0	26.1
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.4	0.0	0.0				0.7	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.5	0.5	0.0	0.0				5.3	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	18.2	4.2	0.0	0.0				27.2	0.0	26.8
LnGrp LOS	A	A	B	A	A	A				C	A	C
Approach Vol, veh/h		167			125						415	
Approach Delay, s/veh		18.2			4.2						27.0	
Approach LOS		B			A						C	
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		52.0		48.0				48.0				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		47.5		43.5				43.5				
Max Q Clear Time (g_c+I1), s		12.3		3.0				7.7				
Green Ext Time (p_c), s		2.7		0.7				1.0				
Intersection Summary												
HCM 6th Ctrl Delay											20.9	
HCM 6th LOS											C	

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	33	38	0	0	43	15	12	328	13	0	0	0
Future Vol, veh/h	33	38	0	0	43	15	12	328	13	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	50	57	0	0	65	23	18	492	20	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	315	548	-	-	538	256	0	0	0		
Stage 1	0	0	-	-	538	-	-	-	-		
Stage 2	315	548	-	-	0	-	-	-	-		
Critical Hdwy	7.52	6.52	-	-	6.52	6.92	4.12	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-		
Critical Hdwy Stg 2	6.52	5.52	-	-	-	-	-	-	-		
Follow-up Hdwy	3.51	4.01	-	-	4.01	3.31	2.21	-	-		
Pot Cap-1 Maneuver	617	445	0	0	450	746	-	-	-		
Stage 1	-	-	0	0	523	-	-	-	-		
Stage 2	673	518	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	532	445	-	-	450	746	-	-	-		
Mov Cap-2 Maneuver	532	445	-	-	450	-	-	-	-		
Stage 1	-	-	-	-	523	-	-	-	-		
Stage 2	572	518	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	14.6		13.7				
HCM LOS	B		B				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	
Capacity (veh/h)	-	-	-	482	501
HCM Lane V/C Ratio	-	-	-	0.221	0.174
HCM Control Delay (s)	-	-	-	14.6	13.7
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.8	0.6

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔						↔↔	
Traffic Vol, veh/h	0	42	8	10	42	0	0	0	0	25	204	14
Future Vol, veh/h	0	42	8	10	42	0	0	0	0	25	204	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	63	12	15	63	0	0	0	0	38	306	21

Major/Minor	Minor2		Minor1			Major2				
Conflicting Flow All	-	393	164	261	403	-	-	0	0	0
Stage 1	-	393	-	0	0	-	-	-	-	-
Stage 2	-	0	-	261	403	-	-	-	-	-
Critical Hdwy	-	6.52	6.92	7.52	6.52	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.52	5.52	-	-	-	-	-
Follow-up Hdwy	-	4.01	3.31	3.51	4.01	-	-	2.21	-	-
Pot Cap-1 Maneuver	0	544	855	673	537	0	-	-	-	-
Stage 1	0	607	-	-	-	0	-	-	-	-
Stage 2	0	-	-	724	601	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	544	855	604	537	-	-	-	-	-
Mov Cap-2 Maneuver	-	544	-	604	537	-	-	-	-	-
Stage 1	-	607	-	-	-	-	-	-	-	-
Stage 2	-	-	-	640	601	-	-	-	-	-

Approach	EB		WB			SB		
HCM Control Delay, s	12.2		12.6					
HCM LOS	B		B					

Minor Lane/Major Mvmt	EBLn1WBLn1		SBL	SBT	SBR
Capacity (veh/h)	578	549	-	-	-
HCM Lane V/C Ratio	0.13	0.142	-	-	-
HCM Control Delay (s)	12.2	12.6	-	-	-
HCM Lane LOS	B	B	-	-	-
HCM 95th %tile Q(veh)	0.4	0.5	-	-	-

HCM 6th Signalized Intersection Summary
53: 5th Street & Ute Ave

Forecast Year 2045
(Existing Volumes x 1.5)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↕	↗	↙	↕				
Traffic Volume (veh/h)	0	0	0	415	492	50	177	286	0	0	0	0
Future Volume (veh/h)	0	0	0	415	492	50	177	286	0	0	0	0
Initial Q (Qb), veh				0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00			
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach				No			No					
Adj Sat Flow, veh/h/ln				1885	1885	1885	1885	1885	0			
Adj Flow Rate, veh/h				453	974	75	266	429	0			
Peak Hour Factor				1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %				1	1	1	1	1	0			
Cap, veh/h				1059	2074	879	700	1254	0			
Arrive On Green				0.55	0.55	0.55	0.70	0.70	0.00			
Sat Flow, veh/h				1795	3770	1598	1795	3676	0			
Grp Volume(v), veh/h				453	974	75	266	429	0			
Grp Sat Flow(s),veh/h/ln				1795	1885	1598	1795	1791	0			
Q Serve(g_s), s				15.2	15.7	2.2	6.3	4.7	0.0			
Cycle Q Clear(g_c), s				15.2	15.7	2.2	6.3	4.7	0.0			
Prop In Lane				1.00		1.00	1.00		0.00			
Lane Grp Cap(c), veh/h				1059	2074	879	700	1254	0			
V/C Ratio(X)				0.43	0.47	0.09	0.38	0.34	0.00			
Avail Cap(c_a), veh/h				1059	2074	879	700	1254	0			
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00			
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh				13.5	13.7	10.6	10.7	10.5	0.0			
Incr Delay (d2), s/veh				1.3	0.8	0.2	1.6	0.7	0.0			
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln				6.2	6.5	0.8	2.3	1.7	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				14.8	14.4	10.8	12.3	11.2	0.0			
LnGrp LOS				B	B	B	B	B	A			
Approach Vol, veh/h					1502			695				
Approach Delay, s/veh					14.4			11.6				
Approach LOS					B			B				
Timer - Assigned Phs				4		6						
Phs Duration (G+Y+Rc), s				60.0		40.0						
Change Period (Y+Rc), s				5.0		5.0						
Max Green Setting (Gmax), s				55.0		35.0						
Max Q Clear Time (g_c+I1), s				17.7		8.3						
Green Ext Time (p_c), s				11.2		3.6						
Intersection Summary												
HCM 6th Ctrl Delay				13.5								
HCM 6th LOS				B								
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 6th Signalized Intersection Summary
 54: 4th Street & Ute Ave

Forecast Year 2045
 (Existing Volumes x 1.5)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔↔						↔↔	
Traffic Volume (veh/h)	0	0	0	21	652	0	0	0	0	0	189	28
Future Volume (veh/h)	0	0	0	21	652	0	0	0	0	0	189	28
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach				No						No		
Adj Sat Flow, veh/h/ln				1885	1885	0				0	1885	1885
Adj Flow Rate, veh/h				32	978	0				0	284	42
Peak Hour Factor				1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %				1	1	0				0	1	1
Cap, veh/h				71	1714	0				0	1207	177
Arrive On Green				0.17	0.17	0.00				0.00	0.13	0.13
Sat Flow, veh/h				65	3514	0				0	3229	459
Grp Volume(v), veh/h				540	470	0				0	161	165
Grp Sat Flow(s),veh/h/ln				1864	1630	0				0	1791	1803
Q Serve(g_s), s				6.3	26.6	0.0				0.0	8.1	8.2
Cycle Q Clear(g_c), s				26.5	26.6	0.0				0.0	8.1	8.2
Prop In Lane				0.06		0.00				0.00		0.25
Lane Grp Cap(c), veh/h				970	815	0				0	690	694
V/C Ratio(X)				0.56	0.58	0.00				0.00	0.23	0.24
Avail Cap(c_a), veh/h				970	815	0				0	690	694
HCM Platoon Ratio				0.33	0.33	1.00				1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	0.00				0.00	1.00	1.00
Uniform Delay (d), s/veh				31.9	32.0	0.0				0.0	30.4	30.4
Incr Delay (d2), s/veh				2.3	3.0	0.0				0.0	0.8	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				13.9	12.2	0.0				0.0	3.9	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				34.2	35.0	0.0				0.0	31.2	31.3
LnGrp LOS				C	C	A				A	C	C
Approach Vol, veh/h					1010						326	
Approach Delay, s/veh					34.6						31.2	
Approach LOS					C						C	
Timer - Assigned Phs		2		4								
Phs Duration (G+Y+Rc), s		44.0		56.0								
Change Period (Y+Rc), s		5.5		6.0								
Max Green Setting (Gmax), s		38.5		50.0								
Max Q Clear Time (g_c+I1), s		10.2		28.6								
Green Ext Time (p_c), s		2.0		6.9								
Intersection Summary												
HCM 6th Ctrl Delay											33.7	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary
57: 5th Street & Pitkin Ave

Forecast Year 2045
(Existing Volumes x 1.5)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔	↗					↕↕		↖	↕↕	
Traffic Volume (veh/h)	23	606	472	0	0	0	0	416	105	5	411	0
Future Volume (veh/h)	23	606	472	0	0	0	0	416	105	5	411	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885				0	1885	1885	1885	1885	0
Adj Flow Rate, veh/h	34	1085	590				0	624	158	8	616	0
Peak Hour Factor	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1				0	1	1	1	1	0
Cap, veh/h	51	1700	743				0	1104	279	18	1594	0
Arrive On Green	0.15	0.15	0.15				0.00	0.39	0.39	0.01	0.44	0.00
Sat Flow, veh/h	109	3656	1598				0	2926	716	1795	3676	0
Grp Volume(v), veh/h	586	533	590				0	394	388	8	616	0
Grp Sat Flow(s),veh/h/ln	1880	1885	1598				0	1791	1756	1795	1791	0
Q Serve(g_s), s	29.4	26.4	35.6				0.0	17.2	17.3	0.4	11.5	0.0
Cycle Q Clear(g_c), s	29.4	26.4	35.6				0.0	17.2	17.3	0.4	11.5	0.0
Prop In Lane	0.06		1.00				0.00		0.41	1.00		0.00
Lane Grp Cap(c), veh/h	874	877	743				0	699	685	18	1594	0
V/C Ratio(X)	0.67	0.61	0.79				0.00	0.56	0.57	0.45	0.39	0.00
Avail Cap(c_a), veh/h	874	877	743				0	699	685	95	1594	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84				0.00	1.00	1.00	0.86	0.86	0.00
Uniform Delay (d), s/veh	35.1	33.8	37.7				0.0	23.9	23.9	49.2	18.6	0.0
Incr Delay (d2), s/veh	3.4	2.6	7.3				0.0	3.3	3.4	14.3	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.6	13.9	16.7				0.0	7.6	7.5	0.3	4.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.5	36.5	45.0				0.0	27.1	27.2	63.5	19.2	0.0
LnGrp LOS	D	D	D				A	C	C	E	B	A
Approach Vol, veh/h		1709						782			624	
Approach Delay, s/veh		40.1						27.2			19.8	
Approach LOS		D						C			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		49.0			5.5	43.5		51.0				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		44.5			5.3	34.7		46.5				
Max Q Clear Time (g_c+I1), s		13.5			2.4	19.3		37.6				
Green Ext Time (p_c), s		4.4			0.0	4.3		5.9				
Intersection Summary												
HCM 6th Ctrl Delay			32.8									
HCM 6th LOS			C									
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 6th Signalized Intersection Summary
58: 4th Street & Pitkin Ave

Forecast Year 2045
(Existing Volumes x 1.5)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑						↑		↑	↑	
Traffic Volume (veh/h)	0	861	1	0	0	0	0	0	16	213	6	0
Future Volume (veh/h)	0	861	1	0	0	0	0	0	16	213	6	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	0	1885	1885				0	1885	1885	1885	1885	0
Adj Flow Rate, veh/h	0	1292	2				0	0	24	326	0	0
Peak Hour Factor	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	1	1				0	1	1	1	1	0
Cap, veh/h	0	0	0				0	0	1438	2800	1697	0
Arrive On Green	0.00	0.00	0.00				0.00	0.00	0.90	0.90	0.00	0.00
Sat Flow, veh/h		0					0	0	1598	2796	1885	0
Grp Volume(v), veh/h		0.0					0	0	24	326	0	0
Grp Sat Flow(s),veh/h/ln							0	0	1598	1398	1885	0
Q Serve(g_s), s							0.0	0.0	0.1	0.7	0.0	0.0
Cycle Q Clear(g_c), s							0.0	0.0	0.1	0.7	0.0	0.0
Prop In Lane							0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h							0	0	1438	2800	1697	0
V/C Ratio(X)							0.00	0.00	0.02	0.12	0.00	0.00
Avail Cap(c_a), veh/h							0	0	1438	2800	1697	0
HCM Platoon Ratio							1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)							0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh							0.0	0.0	0.3	0.3	0.0	0.0
Incr Delay (d2), s/veh							0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh							0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln							0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh							0.0	0.0	0.3	0.4	0.0	0.0
LnGrp LOS							A	A	A	A	A	A
Approach Vol, veh/h								24			326	
Approach Delay, s/veh								0.3			0.4	
Approach LOS								A			A	
Timer - Assigned Phs		2						6				
Phs Duration (G+Y+Rc), s		50.0						50.0				
Change Period (Y+Rc), s		5.0						5.0				
Max Green Setting (Gmax), s		45.0						45.0				
Max Q Clear Time (g_c+I1), s		2.7						2.1				
Green Ext Time (p_c), s		1.2						0.1				
Intersection Summary												
HCM 6th Ctrl Delay			0.4									
HCM 6th LOS			A									
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 6th Signalized Intersection Summary
5: 5th Street & North Ave

2045 Two-Way
10/09/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	967	42	73	942	26	34	43	136	39	48	29
Future Volume (veh/h)	20	967	42	73	942	26	34	43	136	39	48	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	30	1450	63	110	1413	39	51	82	204	58	91	44
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	242	1937	84	255	2052	57	293	288	244	282	292	248
Arrive On Green	0.03	0.55	0.55	0.05	0.58	0.58	0.04	0.15	0.15	0.04	0.16	0.16
Sat Flow, veh/h	1795	3497	152	1795	3560	98	1795	1885	1598	1795	1885	1598
Grp Volume(v), veh/h	30	741	772	110	710	742	51	82	204	58	91	44
Grp Sat Flow(s),veh/h/ln	1795	1791	1858	1795	1791	1868	1795	1885	1598	1795	1885	1598
Q Serve(g_s), s	0.6	28.4	28.7	2.3	25.1	25.2	2.1	3.5	11.2	2.4	3.9	2.2
Cycle Q Clear(g_c), s	0.6	28.4	28.7	2.3	25.1	25.2	2.1	3.5	11.2	2.4	3.9	2.2
Prop In Lane	1.00		0.08	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	992	1029	255	1032	1076	293	288	244	282	292	248
V/C Ratio(X)	0.12	0.75	0.75	0.43	0.69	0.69	0.17	0.29	0.84	0.21	0.31	0.18
Avail Cap(c_a), veh/h	309	992	1029	301	1032	1076	333	405	343	317	405	343
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.2	15.3	15.4	14.1	13.4	13.4	30.4	33.9	37.2	30.3	33.9	33.1
Incr Delay (d2), s/veh	0.2	5.1	5.0	1.1	3.7	3.6	0.3	0.5	11.9	0.4	0.6	0.3
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.2	11.9	12.4	0.9	10.2	10.6	0.9	1.6	5.1	1.1	1.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.4	20.5	20.4	15.3	17.2	17.1	30.7	34.4	49.0	30.7	34.5	33.5
LnGrp LOS	B	C	C	B	B	B	C	C	D	C	C	C
Approach Vol, veh/h		1543			1562			337			193	
Approach Delay, s/veh		20.3			17.0			42.7			33.1	
Approach LOS		C			B			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	19.0	6.6	57.0	7.8	18.8	8.7	55.0				
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	5.6	19.4	6.0	51.0	5.6	19.4	7.0	50.0				
Max Q Clear Time (g_c+I1), s	4.1	5.9	2.6	27.2	4.4	13.2	4.3	30.7				
Green Ext Time (p_c), s	0.0	0.4	0.0	11.7	0.0	0.6	0.1	11.0				
Intersection Summary												
HCM 6th Ctrl Delay			21.6									
HCM 6th LOS			C									

Intersection												
Int Delay, s/veh	276.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	15	933	28	48	943	14	20	29	91	5	3	15
Future Vol, veh/h	15	933	28	48	943	14	20	29	91	5	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	23	1400	42	72	1415	21	30	55	137	8	6	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1436	0	0	1442	0	0	2322	3047	721	2344	3058	718
Stage 1	-	-	-	-	-	-	1467	1467	-	1570	1570	-
Stage 2	-	-	-	-	-	-	855	1580	-	774	1488	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	474	-	-	471	-	-	~ 20	~ 13	372	20	12	374
Stage 1	-	-	-	-	-	-	135	192	-	117	171	-
Stage 2	-	-	-	-	-	-	321	169	-	360	188	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	474	-	-	471	-	-	~ 9	~ 10	372	-	10	374
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 9	~ 10	-	-	10	-
Stage 1	-	-	-	-	-	-	128	183	-	111	145	-
Stage 2	-	-	-	-	-	-	246	143	-	152	179	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.7	\$ 4021.2	
HCM LOS			F	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	24	474	-	-	471	-	-	-
HCM Lane V/C Ratio	9.233	0.047	-	-	0.153	-	-	-
HCM Control Delay (s)	\$ 4021.2	13	-	-	14	-	-	-
HCM Lane LOS	F	B	-	-	B	-	-	-
HCM 95th %tile Q(veh)	27.7	0.1	-	-	0.5	-	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	8	41	10	11	10	197	10	10	91	49
Future Vol, veh/h	10	10	8	41	10	11	10	197	10	10	91	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	12	62	15	17	15	374	15	15	173	74

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	668	659	210	666	689	382	247	0	0	389	0	0
Stage 1	240	240	-	412	412	-	-	-	-	-	-	-
Stage 2	428	419	-	254	277	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	373	385	833	374	370	667	1325	-	-	1175	-	-
Stage 1	766	709	-	619	596	-	-	-	-	-	-	-
Stage 2	607	592	-	753	683	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	345	374	833	350	359	667	1325	-	-	1175	-	-
Mov Cap-2 Maneuver	345	374	-	350	359	-	-	-	-	-	-	-
Stage 1	755	698	-	610	588	-	-	-	-	-	-	-
Stage 2	569	584	-	715	673	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.3		17.3		0.3		0.5	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1325	-	-	429	384	1175	-
HCM Lane V/C Ratio	0.011	-	-	0.098	0.242	0.013	-
HCM Control Delay (s)	7.7	0	-	14.3	17.3	8.1	0
HCM Lane LOS	A	A	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.3	0.9	0	-

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	5	28	10	7	10	132	10	10	60	33
Future Vol, veh/h	10	10	5	28	10	7	10	132	10	10	60	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	8	42	15	11	15	251	15	15	114	50

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	471	465	139	470	483	259	164	0	0	266	0	0
Stage 1	169	169	-	289	289	-	-	-	-	-	-	-
Stage 2	302	296	-	181	194	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	505	496	912	505	485	782	1421	-	-	1304	-	-
Stage 1	835	761	-	721	675	-	-	-	-	-	-	-
Stage 2	709	670	-	823	742	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	477	484	912	480	473	782	1421	-	-	1304	-	-
Mov Cap-2 Maneuver	477	484	-	480	473	-	-	-	-	-	-	-
Stage 1	825	751	-	712	667	-	-	-	-	-	-	-
Stage 2	676	662	-	790	732	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.3		13.2		0.4		0.7	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1421	-	-	531	509	1304	-
HCM Lane V/C Ratio	0.011	-	-	0.071	0.133	0.012	-
HCM Control Delay (s)	7.6	0	-	12.3	13.2	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	0.5	0	-

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	204	10	10	126	10
Future Vol, veh/h	10	10	10	10	10	10	10	204	10	10	126	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	15	15	15	15	15	388	15	15	239	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	718	710	247	718	710	396	254	0	0	403	0	0
Stage 1	277	277	-	426	426	-	-	-	-	-	-	-
Stage 2	441	433	-	292	284	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	345	360	794	345	360	656	1317	-	-	1161	-	-
Stage 1	732	683	-	608	588	-	-	-	-	-	-	-
Stage 2	597	583	-	718	678	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	319	349	794	320	349	656	1317	-	-	1161	-	-
Mov Cap-2 Maneuver	319	349	-	320	349	-	-	-	-	-	-	-
Stage 1	721	673	-	599	579	-	-	-	-	-	-	-
Stage 2	560	574	-	678	668	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.8		15.2		0.3		0.5	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1317	-	-	413	399	1161	-
HCM Lane V/C Ratio	0.011	-	-	0.109	0.113	0.013	-
HCM Control Delay (s)	7.8	0	-	14.8	15.2	8.1	0
HCM Lane LOS	A	A	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.4	0.4	0	-

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	136	10	10	84	10
Future Vol, veh/h	10	10	10	10	10	10	10	136	10	10	84	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	15	15	15	15	15	258	15	15	160	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	509	501	168	509	501	266	175	0	0	273	0	0
Stage 1	198	198	-	296	296	-	-	-	-	-	-	-
Stage 2	311	303	-	213	205	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	476	474	879	476	474	775	1407	-	-	1296	-	-
Stage 1	806	739	-	715	670	-	-	-	-	-	-	-
Stage 2	702	665	-	791	734	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	446	462	879	447	462	775	1407	-	-	1296	-	-
Mov Cap-2 Maneuver	446	462	-	447	462	-	-	-	-	-	-	-
Stage 1	796	729	-	706	661	-	-	-	-	-	-	-
Stage 2	664	656	-	752	724	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.3		12.5		0.4		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1407	-	-	541	527	1296	-
HCM Lane V/C Ratio	0.011	-	-	0.083	0.085	0.012	-
HCM Control Delay (s)	7.6	0	-	12.3	12.5	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	204	10	10	126	10
Future Vol, veh/h	10	10	10	10	10	10	10	204	10	10	126	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	15	15	15	15	15	388	15	15	239	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	718	710	247	718	710	396	254	0	0	403	0	0
Stage 1	277	277	-	426	426	-	-	-	-	-	-	-
Stage 2	441	433	-	292	284	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	345	360	794	345	360	656	1317	-	-	1161	-	-
Stage 1	732	683	-	608	588	-	-	-	-	-	-	-
Stage 2	597	583	-	718	678	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	319	349	794	320	349	656	1317	-	-	1161	-	-
Mov Cap-2 Maneuver	319	349	-	320	349	-	-	-	-	-	-	-
Stage 1	721	673	-	599	579	-	-	-	-	-	-	-
Stage 2	560	574	-	678	668	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.8		15.2		0.3		0.5	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1317	-	-	413	399	1161	-
HCM Lane V/C Ratio	0.011	-	-	0.109	0.113	0.013	-
HCM Control Delay (s)	7.8	0	-	14.8	15.2	8.1	0
HCM Lane LOS	A	A	-	B	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.4	0.4	0	-

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	136	10	10	84	10
Future Vol, veh/h	10	10	10	10	10	10	10	136	10	10	84	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	15	15	15	15	15	258	15	15	160	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	509	501	168	509	501	266	175	0	0	273	0	0
Stage 1	198	198	-	296	296	-	-	-	-	-	-	-
Stage 2	311	303	-	213	205	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	476	474	879	476	474	775	1407	-	-	1296	-	-
Stage 1	806	739	-	715	670	-	-	-	-	-	-	-
Stage 2	702	665	-	791	734	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	446	462	879	447	462	775	1407	-	-	1296	-	-
Mov Cap-2 Maneuver	446	462	-	447	462	-	-	-	-	-	-	-
Stage 1	796	729	-	706	661	-	-	-	-	-	-	-
Stage 2	664	656	-	752	724	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.3		12.5		0.4		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1407	-	-	541	527	1296	-
HCM Lane V/C Ratio	0.011	-	-	0.083	0.085	0.012	-
HCM Control Delay (s)	7.6	0	-	12.3	12.5	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	37	9	5	45	8	2	202	11	3	133	7
Future Vol, veh/h	4	37	9	5	45	8	2	202	11	3	133	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	6	56	14	8	68	12	3	384	17	5	253	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	708	676	259	703	673	393	264	0	0	401	0	0
Stage 1	269	269	-	399	399	-	-	-	-	-	-	-
Stage 2	439	407	-	304	274	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	351	376	782	354	378	658	1306	-	-	1163	-	-
Stage 1	739	688	-	629	604	-	-	-	-	-	-	-
Stage 2	599	599	-	708	685	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	295	373	782	306	375	658	1306	-	-	1163	-	-
Mov Cap-2 Maneuver	295	373	-	306	375	-	-	-	-	-	-	-
Stage 1	737	685	-	627	602	-	-	-	-	-	-	-
Stage 2	521	597	-	636	682	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16	16.8	0.1	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1306	-	-	402	391	1163	-
HCM Lane V/C Ratio	0.002	-	-	0.187	0.223	0.004	-
HCM Control Delay (s)	7.8	0	-	16	16.8	8.1	0
HCM Lane LOS	A	A	-	C	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.7	0.8	0	-

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	41	6	4	44	6	1	134	7	2	89	4
Future Vol, veh/h	3	41	6	4	44	6	1	134	7	2	89	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	5	62	9	6	66	9	2	255	11	3	169	6

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	480	448	172	479	446	261	175	0	0	266	0	0
Stage 1	178	178	-	265	265	-	-	-	-	-	-	-
Stage 2	302	270	-	214	181	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	498	507	874	499	509	780	1407	-	-	1304	-	-
Stage 1	826	754	-	742	691	-	-	-	-	-	-	-
Stage 2	709	688	-	790	752	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	441	504	874	446	506	780	1407	-	-	1304	-	-
Mov Cap-2 Maneuver	441	504	-	446	506	-	-	-	-	-	-	-
Stage 1	824	752	-	741	690	-	-	-	-	-	-	-
Stage 2	633	687	-	716	750	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13		13.2		0		0.1	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1407	-	-	526	521	1304	-
HCM Lane V/C Ratio	0.001	-	-	0.143	0.155	0.002	-
HCM Control Delay (s)	7.6	0	-	13	13.2	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.5	0.5	0	-

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	204	10	10	138	10
Future Vol, veh/h	10	10	10	10	10	10	10	204	10	10	138	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	15	15	15	15	15	388	15	15	262	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	741	733	270	741	733	396	277	0	0	403	0	0
Stage 1	300	300	-	426	426	-	-	-	-	-	-	-
Stage 2	441	433	-	315	307	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	333	349	771	333	349	656	1292	-	-	1161	-	-
Stage 1	711	667	-	608	588	-	-	-	-	-	-	-
Stage 2	597	583	-	698	663	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	307	339	771	308	339	656	1292	-	-	1161	-	-
Mov Cap-2 Maneuver	307	339	-	308	339	-	-	-	-	-	-	-
Stage 1	700	657	-	599	579	-	-	-	-	-	-	-
Stage 2	560	574	-	659	653	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15.1		15.5		0.3		0.4	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1292	-	-	400	389	1161	-
HCM Lane V/C Ratio	0.012	-	-	0.113	0.116	0.013	-
HCM Control Delay (s)	7.8	0	-	15.1	15.5	8.1	0
HCM Lane LOS	A	A	-	C	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.4	0.4	0	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	136	10	10	92	10
Future Vol, veh/h	10	10	10	10	10	10	10	136	10	10	92	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	15	15	15	15	15	258	15	15	175	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	524	516	183	524	516	266	190	0	0	273	0	0
Stage 1	213	213	-	296	296	-	-	-	-	-	-	-
Stage 2	311	303	-	228	220	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	465	464	862	465	464	775	1390	-	-	1296	-	-
Stage 1	791	728	-	715	670	-	-	-	-	-	-	-
Stage 2	702	665	-	777	723	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	436	452	862	437	452	775	1390	-	-	1296	-	-
Mov Cap-2 Maneuver	436	452	-	437	452	-	-	-	-	-	-	-
Stage 1	781	719	-	706	661	-	-	-	-	-	-	-
Stage 2	664	656	-	738	714	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.4		12.6		0.4		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1390	-	-	529	518	1296	-
HCM Lane V/C Ratio	0.011	-	-	0.085	0.087	0.012	-
HCM Control Delay (s)	7.6	0	-	12.4	12.6	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	204	10	10	144	10
Future Vol, veh/h	10	10	10	10	10	10	10	204	10	10	144	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	15	15	15	15	15	388	15	15	274	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	753	745	282	753	745	396	289	0	0	403	0	0
Stage 1	312	312	-	426	426	-	-	-	-	-	-	-
Stage 2	441	433	-	327	319	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	327	344	759	327	344	656	1279	-	-	1161	-	-
Stage 1	701	659	-	608	588	-	-	-	-	-	-	-
Stage 2	597	583	-	688	655	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	301	334	759	302	334	656	1279	-	-	1161	-	-
Mov Cap-2 Maneuver	301	334	-	302	334	-	-	-	-	-	-	-
Stage 1	690	649	-	599	579	-	-	-	-	-	-	-
Stage 2	560	574	-	649	645	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15.3		15.6		0.3		0.4	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1279	-	-	393	383	1161	-
HCM Lane V/C Ratio	0.012	-	-	0.115	0.117	0.013	-
HCM Control Delay (s)	7.8	0	-	15.3	15.6	8.1	0
HCM Lane LOS	A	A	-	C	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.4	0.4	0	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	10	10	10	10	10	10	136	10	10	96	10
Future Vol, veh/h	10	10	10	10	10	10	10	136	10	10	96	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	15	15	15	15	15	15	258	15	15	182	15

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	531	523	190	531	523	266	197	0	0	273	0	0
Stage 1	220	220	-	296	296	-	-	-	-	-	-	-
Stage 2	311	303	-	235	227	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	460	460	854	460	460	775	1382	-	-	1296	-	-
Stage 1	785	723	-	715	670	-	-	-	-	-	-	-
Stage 2	702	665	-	770	718	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	431	448	854	432	448	775	1382	-	-	1296	-	-
Mov Cap-2 Maneuver	431	448	-	432	448	-	-	-	-	-	-	-
Stage 1	775	714	-	706	661	-	-	-	-	-	-	-
Stage 2	664	656	-	731	709	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.5		12.7		0.4		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1382	-	-	524	514	1296	-
HCM Lane V/C Ratio	0.011	-	-	0.086	0.088	0.012	-
HCM Control Delay (s)	7.6	0	-	12.5	12.7	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-

HCM 6th Signalized Intersection Summary
 33: 5th Street & Grand Ave

2045 Two-Way
 10/09/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	418	31	30	512	18	59	164	41	11	113	32
Future Volume (veh/h)	34	418	31	30	512	18	59	164	41	11	113	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	51	627	46	45	768	27	88	312	62	16	215	48
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	312	1658	121	445	1730	61	422	773	655	335	612	137
Arrive On Green	0.98	0.98	0.98	0.49	0.49	0.49	0.14	0.14	0.14	0.41	0.41	0.41
Sat Flow, veh/h	688	3384	248	771	3530	124	1125	1885	1598	1016	1492	333
Grp Volume(v), veh/h	51	332	341	45	390	405	88	312	62	16	0	263
Grp Sat Flow(s),veh/h/ln	688	1791	1841	771	1791	1863	1125	1885	1598	1016	0	1825
Q Serve(g_s), s	2.6	0.6	0.6	3.2	14.2	14.2	7.2	15.1	3.4	1.2	0.0	9.9
Cycle Q Clear(g_c), s	16.8	0.6	0.6	3.8	14.2	14.2	17.1	15.1	3.4	16.3	0.0	9.9
Prop In Lane	1.00		0.13	1.00		0.07	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	312	878	902	445	878	913	422	773	655	335	0	748
V/C Ratio(X)	0.16	0.38	0.38	0.10	0.44	0.44	0.21	0.40	0.09	0.05	0.00	0.35
Avail Cap(c_a), veh/h	312	878	902	445	878	913	422	773	655	335	0	748
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.2	0.5	0.5	14.1	16.6	16.6	37.5	32.1	27.0	27.9	0.0	20.3
Incr Delay (d2), s/veh	1.1	1.2	1.2	0.1	0.4	0.3	1.1	1.6	0.3	0.3	0.0	1.3
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.4	0.6	5.7	5.9	2.3	7.9	1.4	0.3	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.3	1.7	1.7	14.2	17.0	17.0	38.6	33.6	27.3	28.2	0.0	21.6
LnGrp LOS	A	A	A	B	B	B	D	C	C	C	A	C
Approach Vol, veh/h		724			840			462			279	
Approach Delay, s/veh		1.9			16.8			33.7			22.0	
Approach LOS		A			B			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		54.0		46.0		54.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		41.0		49.0		41.0		49.0				
Max Q Clear Time (g_c+I1), s		18.3		16.2		19.1		18.8				
Green Ext Time (p_c), s		1.6		6.1		2.4		5.1				
Intersection Summary												
HCM 6th Ctrl Delay				16.1								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
 34: 4th Street & Grand Ave

2045 Two-Way
 10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑		↘	↗		↘	↗	
Traffic Volume (veh/h)	22	438	20	20	571	12	40	109	28	17	76	21
Future Volume (veh/h)	22	438	20	20	571	12	40	109	28	17	76	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	33	657	30	30	856	18	60	207	42	26	144	32
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	333	1970	879	414	1973	41	455	532	108	327	523	116
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.12	0.12	0.12	0.70	0.70	0.70
Sat Flow, veh/h	639	3582	1598	761	3587	75	1218	1521	309	1140	1494	332
Grp Volume(v), veh/h	33	657	30	30	427	447	60	0	249	26	0	176
Grp Sat Flow(s),veh/h/ln	639	1791	1598	761	1791	1872	1218	0	1830	1140	0	1825
Q Serve(g_s), s	3.2	10.1	0.9	2.3	14.1	14.1	4.5	0.0	12.6	1.3	0.0	3.6
Cycle Q Clear(g_c), s	17.3	10.1	0.9	12.4	14.1	14.1	8.1	0.0	12.6	13.9	0.0	3.6
Prop In Lane	1.00		1.00	1.00		0.04	1.00		0.17	1.00		0.18
Lane Grp Cap(c), veh/h	333	1970	879	414	985	1029	455	0	640	327	0	639
V/C Ratio(X)	0.10	0.33	0.03	0.07	0.43	0.43	0.13	0.00	0.39	0.08	0.00	0.28
Avail Cap(c_a), veh/h	333	1970	879	414	985	1029	455	0	640	327	0	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.90	0.90	0.90	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	12.4	10.3	15.8	13.3	13.3	33.9	0.0	34.3	15.5	0.0	10.3
Incr Delay (d2), s/veh	0.6	0.5	0.1	0.3	1.3	1.2	0.6	0.0	1.8	0.5	0.0	1.1
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	0.5	4.0	0.3	0.4	5.7	6.0	1.5	0.0	6.5	0.3	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	12.9	10.4	16.1	14.6	14.5	34.5	0.0	36.1	16.0	0.0	11.4
LnGrp LOS	B	B	B	B	B	B	C	A	D	B	A	B
Approach Vol, veh/h		720			904			309			202	
Approach Delay, s/veh		13.0			14.6			35.8			11.9	
Approach LOS		B			B			D			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		40.0		60.0		40.0		60.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		35.0		55.0		35.0		55.0				
Max Q Clear Time (g_c+I1), s		15.9		16.1		14.6		19.3				
Green Ext Time (p_c), s		1.0		6.9		1.6		5.7				

Intersection Summary

HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	0	11	18	10	20	22	228	1	10	155	11
Future Vol, veh/h	15	0	11	18	10	20	22	228	1	10	155	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	23	0	17	27	15	30	33	433	2	15	295	17

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	857	835	304	842	842	434	312	0	0	435	0	0
Stage 1	334	334	-	500	500	-	-	-	-	-	-	-
Stage 2	523	501	-	342	342	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	279	305	738	285	302	624	1254	-	-	1130	-	-
Stage 1	682	645	-	555	545	-	-	-	-	-	-	-
Stage 2	539	544	-	675	640	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	245	290	738	268	287	624	1254	-	-	1130	-	-
Mov Cap-2 Maneuver	245	290	-	268	287	-	-	-	-	-	-	-
Stage 1	658	635	-	536	526	-	-	-	-	-	-	-
Stage 2	481	525	-	649	630	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	16.9		17.6		0.6		0.4	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1254	-	-	342	358	1130	-
HCM Lane V/C Ratio	0.026	-	-	0.114	0.201	0.013	-
HCM Control Delay (s)	7.9	0	-	16.9	17.6	8.2	0
HCM Lane LOS	A	A	-	C	C	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.7	0	-

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	12	7	12	18	13	15	152	1	7	104	7
Future Vol, veh/h	10	12	7	12	18	13	15	152	1	7	104	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	18	11	18	27	20	23	289	2	11	198	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	586	563	204	576	567	290	209	0	0	291	0	0
Stage 1	226	226	-	336	336	-	-	-	-	-	-	-
Stage 2	360	337	-	240	231	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	423	437	839	430	434	752	1368	-	-	1276	-	-
Stage 1	779	719	-	680	644	-	-	-	-	-	-	-
Stage 2	660	643	-	766	715	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	383	424	839	402	421	752	1368	-	-	1276	-	-
Mov Cap-2 Maneuver	383	424	-	402	421	-	-	-	-	-	-	-
Stage 1	763	712	-	666	631	-	-	-	-	-	-	-
Stage 2	603	630	-	730	708	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	13.6			13.7			0.6			0.4		
HCM LOS	B			B								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1368	-	-	462	478	1276	-
HCM Lane V/C Ratio	0.016	-	-	0.094	0.135	0.008	-
HCM Control Delay (s)	7.7	0	-	13.6	13.7	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.5	0	-

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	20	16	14	30	18	18	217	7	19	140	34
Future Vol, veh/h	20	20	16	14	30	18	18	217	7	19	140	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	70	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	30	30	24	21	45	27	27	412	11	29	266	51

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	858	827	292	849	847	418	317	0	0	423	0	0
Stage 1	350	350	-	472	472	-	-	-	-	-	-	-
Stage 2	508	477	-	377	375	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	278	308	750	282	300	637	1249	-	-	1142	-	-
Stage 1	669	635	-	574	561	-	-	-	-	-	-	-
Stage 2	549	558	-	647	619	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	224	290	750	240	283	637	1249	-	-	1142	-	-
Mov Cap-2 Maneuver	224	290	-	240	283	-	-	-	-	-	-	-
Stage 1	650	615	-	558	545	-	-	-	-	-	-	-
Stage 2	469	542	-	577	600	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	18.3		20.7		0.5		0.7	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1249	-	-	224	399	322	1142	-	-
HCM Lane V/C Ratio	0.022	-	-	0.134	0.135	0.289	0.025	-	-
HCM Control Delay (s)	7.9	0	-	23.5	15.4	20.7	8.2	0	-
HCM Lane LOS	A	A	-	C	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.5	1.2	0.1	-	-

Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	
Traffic Vol, veh/h	13	38	11	9	61	12	12	144	5	13	93	23
Future Vol, veh/h	13	38	11	9	61	12	12	144	5	13	93	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	65	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	20	57	17	14	92	18	18	274	8	20	177	35

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	604	553	195	586	566	278	212	0	0	282	0	0
Stage 1	235	235	-	314	314	-	-	-	-	-	-	-
Stage 2	369	318	-	272	252	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	412	442	849	423	435	763	1364	-	-	1286	-	-
Stage 1	770	712	-	699	658	-	-	-	-	-	-	-
Stage 2	653	655	-	736	700	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	326	427	849	363	420	763	1364	-	-	1286	-	-
Mov Cap-2 Maneuver	326	427	-	363	420	-	-	-	-	-	-	-
Stage 1	758	699	-	688	647	-	-	-	-	-	-	-
Stage 2	539	645	-	651	687	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15.5		15.4		0.5		0.7	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1364	-	-	437	363	454	1286	-	-
HCM Lane V/C Ratio	0.013	-	-	0.213	0.037	0.241	0.015	-	-
HCM Control Delay (s)	7.7	0	-	15.5	15.3	15.4	7.8	0	-
HCM Lane LOS	A	A	-	C	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.1	0.9	0	-	-

HCM 6th Signalized Intersection Summary
45: 5th Street & Main St

2045 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	17	94	12	10	61	14	12	209	12	20	125	20
Future Volume (veh/h)	17	94	12	10	61	14	12	209	12	20	125	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	26	141	18	15	92	21	18	397	18	30	238	30
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	62	183	22	55	175	37	69	1356	60	144	1118	137
Arrive On Green	0.25	0.25	0.25	0.13	0.13	0.13	1.00	1.00	1.00	0.78	0.78	0.78
Sat Flow, veh/h	166	1462	175	117	1403	298	40	1728	77	133	1424	174
Grp Volume(v), veh/h	185	0	0	128	0	0	433	0	0	298	0	0
Grp Sat Flow(s),veh/h/ln	1804	0	0	1818	0	0	1844	0	0	1731	0	0
Q Serve(g_s), s	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.6	0.0	0.0	6.6	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0
Prop In Lane	0.14		0.10	0.12		0.16	0.04		0.04	0.10		0.10
Lane Grp Cap(c), veh/h	267	0	0	267	0	0	1485	0	0	1399	0	0
V/C Ratio(X)	0.69	0.00	0.00	0.48	0.00	0.00	0.29	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	597	0	0	596	0	0	1485	0	0	1399	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.3	0.0	0.0	41.2	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0
Incr Delay (d2), s/veh	2.3	0.0	0.0	1.3	0.0	0.0	0.5	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	3.9	0.0	0.0	3.0	0.0	0.0	0.2	0.0	0.0	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	0.0	0.0	42.5	0.0	0.0	0.5	0.0	0.0	3.1	0.0	0.0
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		185			128			433				298
Approach Delay, s/veh		38.7			42.5			0.5				3.1
Approach LOS		D			D			A				A
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		83.0		17.0		83.0		17.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		59.5		31.5		59.5		31.5				
Max Q Clear Time (g_c+I1), s		6.1		8.6		2.0		11.6				
Green Ext Time (p_c), s		2.1		0.6		3.1		1.0				
Intersection Summary												
HCM 6th Ctrl Delay				13.2								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
46: 4th Street & Main St

2045 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	11	91	9	7	78	8	7	139	8	14	84	13
Future Volume (veh/h)	11	91	9	7	78	8	7	139	8	14	84	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	16	136	14	10	117	12	10	264	12	21	160	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	51	183	18	46	189	19	61	1386	62	153	1141	139
Arrive On Green	0.12	0.12	0.12	0.08	0.08	0.08	1.00	1.00	1.00	0.26	0.26	0.26
Sat Flow, veh/h	100	1575	154	65	1621	159	30	1746	78	142	1438	175
Grp Volume(v), veh/h	166	0	0	139	0	0	286	0	0	201	0	0
Grp Sat Flow(s),veh/h/ln	1830	0	0	1845	0	0	1854	0	0	1755	0	0
Q Serve(g_s), s	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.7	0.0	0.0	7.3	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0
Prop In Lane	0.10		0.08	0.07		0.09	0.03		0.04	0.10		0.10
Lane Grp Cap(c), veh/h	253	0	0	253	0	0	1509	0	0	1432	0	0
V/C Ratio(X)	0.66	0.00	0.00	0.55	0.00	0.00	0.19	0.00	0.00	0.14	0.00	0.00
Avail Cap(c_a), veh/h	712	0	0	717	0	0	1509	0	0	1432	0	0
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	0.88	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.9	0.0	0.0	44.1	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.0	1.6	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),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
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.0	3.5	0.0	0.0	0.1	0.0	0.0	3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.8	0.0	0.0	45.7	0.0	0.0	0.3	0.0	0.0	10.9	0.0	0.0
LnGrp LOS	D	A	A	D	A	A	A	A	A	B	A	A
Approach Vol, veh/h		166			139			286			201	
Approach Delay, s/veh		45.8			45.7			0.3			10.9	
Approach LOS		D			D			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		83.9		16.1		83.9		16.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		53.5		37.5		53.5		37.5				
Max Q Clear Time (g_c+I1), s		10.3		9.3		2.0		10.7				
Green Ext Time (p_c), s		1.3		0.8		1.9		0.9				
Intersection Summary												
HCM 6th Ctrl Delay											20.5	
HCM 6th LOS											C	

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	24	5	6	43	9	7	197	8	15	122	8
Future Vol, veh/h	20	24	5	6	43	9	7	197	8	15	122	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	30	36	8	9	65	14	11	374	12	23	232	12

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	726	692	238	708	692	380	244	0	0	386	0	0
Stage 1	284	284	-	402	402	-	-	-	-	-	-	-
Stage 2	442	408	-	306	290	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	341	369	803	351	369	669	1328	-	-	1178	-	-
Stage 1	725	678	-	627	602	-	-	-	-	-	-	-
Stage 2	596	598	-	706	674	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	280	356	803	313	356	669	1328	-	-	1178	-	-
Mov Cap-2 Maneuver	280	356	-	313	356	-	-	-	-	-	-	-
Stage 1	717	662	-	620	595	-	-	-	-	-	-	-
Stage 2	515	591	-	646	658	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	18.6		17.3		0.2		0.7	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1328	-	-	338	378	1178	-
HCM Lane V/C Ratio	0.008	-	-	0.217	0.23	0.019	-
HCM Control Delay (s)	7.7	0	-	18.6	17.3	8.1	0
HCM Lane LOS	A	A	-	C	C	A	A
HCM 95th %tile Q(veh)	0	-	-	0.8	0.9	0.1	-

Intersection												
Int Delay, s/veh	3.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	34	3	4	48	6	5	131	5	10	82	6
Future Vol, veh/h	13	34	3	4	48	6	5	131	5	10	82	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	20	51	5	6	72	9	8	249	8	15	156	9

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	501	464	161	488	464	253	165	0	0	257	0	0
Stage 1	191	191	-	269	269	-	-	-	-	-	-	-
Stage 2	310	273	-	219	195	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	6.21	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	3.309	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	482	497	887	492	497	788	1419	-	-	1314	-	-
Stage 1	813	744	-	739	688	-	-	-	-	-	-	-
Stage 2	702	686	-	786	741	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	416	487	887	443	487	788	1419	-	-	1314	-	-
Mov Cap-2 Maneuver	416	487	-	443	487	-	-	-	-	-	-	-
Stage 1	807	734	-	734	683	-	-	-	-	-	-	-
Stage 2	616	681	-	718	731	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	13.9		13.6		0.2		0.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1419	-	-	479	503	1314	-
HCM Lane V/C Ratio	0.005	-	-	0.157	0.173	0.011	-
HCM Control Delay (s)	7.5	0	-	13.9	13.6	7.8	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.6	0.6	0	-

HCM 6th Signalized Intersection Summary
53: 5th Street & Ute Ave

2045 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↕	↗	↙	↕			↕	↗
Traffic Volume (veh/h)	0	0	0	415	512	30	177	277	0	0	113	17
Future Volume (veh/h)	0	0	0	415	512	30	177	277	0	0	113	17
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1885	1885	1885	1885	1885	0	0	1885	1885
Adj Flow Rate, veh/h				463	990	45	266	526	0	0	215	26
Peak Hour Factor				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				617	1295	549	824	1049	0	0	509	431
Arrive On Green				0.34	0.34	0.34	0.47	1.00	0.00	0.00	0.54	0.54
Sat Flow, veh/h				1795	3770	1598	3483	1885	0	0	1885	1598
Grp Volume(v), veh/h				463	990	45	266	526	0	0	215	26
Grp Sat Flow(s),veh/h/ln				1795	1885	1598	1742	1885	0	0	1885	1598
Q Serve(g_s), s				22.8	23.4	1.9	4.8	0.0	0.0	0.0	6.8	0.8
Cycle Q Clear(g_c), s				22.8	23.4	1.9	4.8	0.0	0.0	0.0	6.8	0.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				617	1295	549	824	1049	0	0	509	431
V/C Ratio(X)				0.75	0.76	0.08	0.32	0.50	0.00	0.00	0.42	0.06
Avail Cap(c_a), veh/h				808	1697	719	824	1049	0	0	509	431
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	1.00	1.00	0.82	0.82	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				29.0	29.2	22.2	21.4	0.0	0.0	0.0	18.4	17.0
Incr Delay (d2), s/veh				2.8	1.5	0.1	0.2	1.4	0.0	0.0	2.6	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.1	10.6	0.7	1.8	0.4	0.0	0.0	2.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				31.9	30.8	22.2	21.6	1.4	0.0	0.0	20.9	17.2
LnGrp LOS				C	C	C	C	A	A	A	C	B
Approach Vol, veh/h					1498			792			241	
Approach Delay, s/veh					30.8			8.2			20.5	
Approach LOS					C			A			C	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	28.6	32.0		39.4		60.6						
Change Period (Y+Rc), s	5.0	* 5		5.0		5.0						
Max Green Setting (Gmax), s	13.5	* 27		45.0		45.0						
Max Q Clear Time (g_c+I1), s	6.8	8.8		25.4		2.0						
Green Ext Time (p_c), s	0.5	1.2		9.0		3.9						

Intersection Summary

HCM 6th Ctrl Delay	22.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
54: 4th Street & Ute Ave

2045 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕↕			↕			↕	
Traffic Volume (veh/h)	0	0	0	21	652	20	1	15	0	0	76	11
Future Volume (veh/h)	0	0	0	21	652	20	1	15	0	0	76	11
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		
Adj Sat Flow, veh/h/ln				1885	1885	1885	1885	1885	0	0	1885	1885
Adj Flow Rate, veh/h				32	978	30	2	28	0	0	144	16
Peak Hour Factor				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				42	1338	43	71	892	0	0	833	93
Arrive On Green				0.13	0.13	0.13	0.50	0.50	0.00	0.00	1.00	1.00
Sat Flow, veh/h				110	3521	113	66	1785	0	0	1667	185
Grp Volume(v), veh/h				547	0	493	30	0	0	0	0	160
Grp Sat Flow(s),veh/h/ln				1880	0	1865	1851	0	0	0	0	1852
Q Serve(g_s), s				28.1	0.0	25.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				28.1	0.0	25.4	0.8	0.0	0.0	0.0	0.0	0.0
Prop In Lane				0.06		0.06	0.07		0.00	0.00		0.10
Lane Grp Cap(c), veh/h				715	0	709	964	0	0	0	0	926
V/C Ratio(X)				0.76	0.00	0.70	0.03	0.00	0.00	0.00	0.00	0.17
Avail Cap(c_a), veh/h				1090	0	1082	964	0	0	0	0	926
HCM Platoon Ratio				0.33	0.33	0.33	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				0.70	0.00	0.70	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				39.4	0.0	38.2	12.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				1.2	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.4	0.0	12.8	0.4	0.0	0.0	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				40.6	0.0	39.1	12.8	0.0	0.0	0.0	0.0	0.4
LnGrp LOS				D	A	D	B	A	A	A	A	A
Approach Vol, veh/h					1040			30				160
Approach Delay, s/veh					39.9			12.8				0.4
Approach LOS					D			B				A
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		56.0		44.0		56.0						
Change Period (Y+Rc), s		6.0		6.0		6.0						
Max Green Setting (Gmax), s		30.0		58.0		30.0						
Max Q Clear Time (g_c+I1), s		2.0		30.1		2.8						
Green Ext Time (p_c), s		0.9		7.9		0.1						
Intersection Summary												
HCM 6th Ctrl Delay												34.1
HCM 6th LOS												C

HCM 6th Signalized Intersection Summary
57: 5th Street & Pitkin Ave

2045 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔	↔					↔↔		↔	↔↔	
Traffic Volume (veh/h)	14	528	411	0	0	0	0	416	105	5	523	0
Future Volume (veh/h)	14	528	411	0	0	0	0	416	105	5	523	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885				0	1885	1885	1885	1885	0
Adj Flow Rate, veh/h	21	940	518				0	790	158	8	994	0
Peak Hour Factor	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1				0	1	1	1	1	0
Cap, veh/h	32	1495	648				0	1501	300	266	1807	0
Arrive On Green	0.13	0.13	0.13				0.00	0.50	0.50	1.00	1.00	0.00
Sat Flow, veh/h	79	3688	1598				0	3068	595	596	3676	0
Grp Volume(v), veh/h	503	458	518				0	476	472	8	994	0
Grp Sat Flow(s),veh/h/ln	1881	1885	1598				0	1791	1778	596	1791	0
Q Serve(g_s), s	25.4	22.9	31.5				0.0	17.9	17.9	0.5	0.0	0.0
Cycle Q Clear(g_c), s	25.4	22.9	31.5				0.0	17.9	17.9	18.4	0.0	0.0
Prop In Lane	0.04		1.00				0.00		0.33	1.00		0.00
Lane Grp Cap(c), veh/h	763	764	648				0	904	897	266	1807	0
V/C Ratio(X)	0.66	0.60	0.80				0.00	0.53	0.53	0.03	0.55	0.00
Avail Cap(c_a), veh/h	894	895	759				0	904	897	266	1807	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	0.70	0.70	0.70				0.00	1.00	1.00	0.78	0.78	0.00
Uniform Delay (d), s/veh	36.7	35.7	39.4				0.0	16.7	16.7	3.3	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.6	3.7				0.0	2.2	2.2	0.2	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	11.6	14.1				0.0	7.6	7.5	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.7	36.2	43.1				0.0	18.9	18.9	3.4	0.9	0.0
LnGrp LOS	D	D	D				A	B	B	A	A	A
Approach Vol, veh/h		1479						948			1002	
Approach Delay, s/veh		39.2						18.9			1.0	
Approach LOS		D						B			A	
Timer - Assigned Phs		2					6	8				
Phs Duration (G+Y+Rc), s		55.0					55.0	45.0				
Change Period (Y+Rc), s		4.5					4.5	4.5				
Max Green Setting (Gmax), s		43.5					43.5	47.5				
Max Q Clear Time (g_c+I1), s		20.4					19.9	33.5				
Green Ext Time (p_c), s		7.8					6.7	7.1				

Intersection Summary

HCM 6th Ctrl Delay		22.4	
HCM 6th LOS		C	

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
58: 4th Street & Pitkin Ave

2045 Two-Way
10/09/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations	↕↕↕							↕			↕			
Traffic Volume (veh/h)	9	852	1	0	0	0	0	6	10	91	6	0		
Future Volume (veh/h)	9	852	1	0	0	0	0	6	10	91	6	0		
Initial Q (Qb), veh	0	0	0					0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00		1.00						1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00					1.00	1.00	1.00	1.00	1.00		
Work Zone On Approach	No							No			No			
Adj Sat Flow, veh/h/ln	1885	1885	1885					0	1885	1885	1885	1885	0	
Adj Flow Rate, veh/h	14	1278	2					0	11	15	136	11	0	
Peak Hour Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	1.00	1.00	
Percent Heavy Veh, %	1	1	1					0	1	1	1	1	0	
Cap, veh/h	19	1850	3					0	403	550	796	62	0	
Arrive On Green	0.34	0.34	0.34					0.00	0.56	0.56	0.56	0.56	0.00	
Sat Flow, veh/h	56	5417	9					0	723	985	1301	111	0	
Grp Volume(v), veh/h	472	392	430					0	0	26	147	0	0	
Grp Sat Flow(s),veh/h/ln	1882	1716	1884					0	0	1708	1411	0	0	
Q Serve(g_s), s	22.1	19.5	19.5					0.0	0.0	0.7	4.9	0.0	0.0	
Cycle Q Clear(g_c), s	22.1	19.5	19.5					0.0	0.0	0.7	5.6	0.0	0.0	
Prop In Lane	0.03		0.00						0.00		0.58		0.93	
Lane Grp Cap(c), veh/h	643	586	643					0	0	954	857	0	0	
V/C Ratio(X)	0.73	0.67	0.67					0.00	0.00	0.03	0.17	0.00	0.00	
Avail Cap(c_a), veh/h	1035	944	1036					0	0	954	857	0	0	
HCM Platoon Ratio	1.00	1.00	1.00					1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00					0.00	0.00	1.00	0.99	0.00	0.00	
Uniform Delay (d), s/veh	28.9	28.1	28.1					0.0	0.0	9.9	11.1	0.0	0.0	
Incr Delay (d2), s/veh	1.7	1.3	1.2					0.0	0.0	0.1	0.4	0.0	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.0	8.0	8.8					0.0	0.0	0.3	1.7	0.0	0.0	
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh	30.6	29.4	29.3					0.0	0.0	10.0	11.5	0.0	0.0	
LnGrp LOS	C	C	C					A	A	A	B	A	A	
Approach Vol, veh/h	1294							26			147			
Approach Delay, s/veh	29.8							10.0			11.5			
Approach LOS	C							A			B			
Timer - Assigned Phs	2							6			8			
Phs Duration (G+Y+Rc), s	60.8							60.8			39.2			
Change Period (Y+Rc), s	5.0							5.0			5.0			
Max Green Setting (Gmax), s	35.0							35.0			55.0			
Max Q Clear Time (g_c+I1), s	7.6							2.7			24.1			
Green Ext Time (p_c), s	0.8							0.1			10.1			
Intersection Summary														
HCM 6th Ctrl Delay	27.6													
HCM 6th LOS	C													

Appendix C – Queueing Analysis Worksheets

Intersection: 4: 4th St/4th Street & South Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	24	9	35	38
Average Queue (ft)	2	0	18	20
95th Queue (ft)	13	6	43	45
Link Distance (ft)	752	387	207	273
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: 5th Street & North Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	83	191	173	69	236	207	85	104	136	60	76	58
Average Queue (ft)	14	99	86	15	125	91	32	44	64	25	30	19
95th Queue (ft)	51	164	154	48	202	180	69	85	110	55	65	48
Link Distance (ft)		386	386		972	972		299	299		607	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	125			125			85			75		75
Storage Blk Time (%)		3			5		0	1		0	1	0
Queuing Penalty (veh)		1			1		0	1		0	1	0

Intersection: 6: 4th Street & North Ave

Movement	EB	EB	EB	WB	NB	SB
Directions Served	L	T	TR	L	LTR	LTR
Maximum Queue (ft)	35	5	13	81	42	51
Average Queue (ft)	8	0	1	37	12	16
95th Queue (ft)	30	5	8	69	38	44
Link Distance (ft)		973	973		305	613
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100			100		
Storage Blk Time (%)				0		
Queuing Penalty (veh)				0		

Intersection: 9: 5th Street & Belford Ave

Movement	WB
Directions Served	TR
Maximum Queue (ft)	38
Average Queue (ft)	14
95th Queue (ft)	39
Link Distance (ft)	939
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: 4th Street & Belford Ave

Movement	EB	WB	WB
Directions Served	R	L	TR
Maximum Queue (ft)	31	57	33
Average Queue (ft)	8	23	7
95th Queue (ft)	30	42	28
Link Distance (ft)	940	407	407
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 13: 5th Street & Teller Ave

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	34	35
Average Queue (ft)	14	16
95th Queue (ft)	40	42
Link Distance (ft)	426	942
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: 4th Street & Teller Ave

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	38	33
Average Queue (ft)	15	16
95th Queue (ft)	41	42
Link Distance (ft)	941	426
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: 5th Street & Hill Ave

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	38	40
Average Queue (ft)	14	17
95th Queue (ft)	40	43
Link Distance (ft)	425	954
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: 4th Street & Hill Ave

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	36	31
Average Queue (ft)	14	15
95th Queue (ft)	40	40
Link Distance (ft)	934	425
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: 5th Street & Gunnison Ave

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	51	52
Average Queue (ft)	25	27
95th Queue (ft)	49	50
Link Distance (ft)	423	955
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 22: 4th Street & Gunnison Ave

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	50	40
Average Queue (ft)	26	24
95th Queue (ft)	48	46
Link Distance (ft)	946	423
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 25: 5th Street & Chipeta Ave

Movement	EB	WB	NB
Directions Served	LT	TR	LT
Maximum Queue (ft)	31	43	5
Average Queue (ft)	15	16	0
95th Queue (ft)	40	42	5
Link Distance (ft)	421	946	289
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 26: 4th Street & Chipeta Ave

Movement	EB	WB	SB
Directions Served	TR	LT	LT
Maximum Queue (ft)	36	34	3
Average Queue (ft)	15	15	0
95th Queue (ft)	41	41	3
Link Distance (ft)	947	421	338
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 29: 5th Street & Ouray Ave

Movement	EB	WB	NB
Directions Served	LT	TR	LT
Maximum Queue (ft)	38	39	3
Average Queue (ft)	16	16	0
95th Queue (ft)	42	41	3
Link Distance (ft)	420	953	314
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 30: 4th Street & Ouray Ave

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	36	33
Average Queue (ft)	15	14
95th Queue (ft)	41	40
Link Distance (ft)	961	420
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: 5th Street & Grand Ave

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	T	TR	L	T	T	R
Maximum Queue (ft)	76	98	88	211	185	78	70	71	65
Average Queue (ft)	27	48	37	120	81	25	27	30	18
95th Queue (ft)	59	86	82	189	164	62	61	64	53
Link Distance (ft)		424	424	956	956		301	301	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	75	NA-TWLTL				100			50
Storage Blk Time (%)	0	5				0	0	5	0
Queuing Penalty (veh)	1	3				0	0	4	0

Intersection: 34: 4th Street & Grand Ave

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	TR
Maximum Queue (ft)	181	144	67	64	72	75	130	152
Average Queue (ft)	92	43	16	23	35	30	59	69
95th Queue (ft)	153	105	46	54	64	68	106	124
Link Distance (ft)	962	962			424	424	319	319
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100	150				
Storage Blk Time (%)		0	0					
Queuing Penalty (veh)		0	0					

Intersection: 37: 5th Street & White Ave

Movement	EB	WB	NB	NB
Directions Served	LT	TR	LT	TR
Maximum Queue (ft)	51	48	3	6
Average Queue (ft)	24	25	0	0
95th Queue (ft)	48	48	3	5
Link Distance (ft)	437	960	300	300
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 38: 4th Street & White Ave

Movement	EB	WB	SB	SB
Directions Served	TR	LT	LT	TR
Maximum Queue (ft)	47	90	117	140
Average Queue (ft)	18	32	58	74
95th Queue (ft)	46	73	102	125
Link Distance (ft)	944	437	293	293
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 41: 5th Street & Rood Ave

Movement	EB	EB	WB	NB	NB
Directions Served	L	T	TR	LT	TR
Maximum Queue (ft)	72	76	72	66	69
Average Queue (ft)	21	22	30	25	19
95th Queue (ft)	55	59	63	60	54
Link Distance (ft)		440	971	305	305
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	70				
Storage Blk Time (%)	1	1			
Queuing Penalty (veh)	0	0			

Intersection: 42: 4th Street & Rood Ave

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	TR
Maximum Queue (ft)	89	55	82	59	64
Average Queue (ft)	33	14	26	20	19
95th Queue (ft)	74	43	66	52	51
Link Distance (ft)	1007		440	297	297
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		65			
Storage Blk Time (%)		0	1		
Queuing Penalty (veh)		0	0		

Intersection: 45: 5th Street & Main St

Movement	EB	WB	NB	NB
Directions Served	LT	TR	LT	TR
Maximum Queue (ft)	134	115	158	144
Average Queue (ft)	59	48	85	77
95th Queue (ft)	110	96	140	131
Link Distance (ft)	429	967	311	311
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 46: 4th Street & Main St

Movement	EB	WB	SB	SB
Directions Served	TR	LT	LT	TR
Maximum Queue (ft)	118	59	119	143
Average Queue (ft)	48	14	50	71
95th Queue (ft)	99	45	98	126
Link Distance (ft)	900	429	309	309
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 49: 5th Street & Colorado Ave

Movement	EB	WB	NB	NB
Directions Served	LT	TR	LT	TR
Maximum Queue (ft)	57	52	3	4
Average Queue (ft)	30	29	0	0
95th Queue (ft)	51	49	3	3
Link Distance (ft)	430	972	263	263
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 50: 4th Street & Colorado Ave

Movement	EB	WB	SB
Directions Served	TR	LT	LT
Maximum Queue (ft)	54	46	10
Average Queue (ft)	27	27	0
95th Queue (ft)	49	47	6
Link Distance (ft)	940	430	306
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 53: 5th Street & Ute Ave

Movement	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	LT	T	R	L	T	T
Maximum Queue (ft)	236	263	237	74	78	74	54
Average Queue (ft)	144	171	122	28	29	24	13
95th Queue (ft)	213	235	211	73	67	58	41
Link Distance (ft)	971	971	971			320	320
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)				50	100		
Storage Blk Time (%)			22	0	0	0	
Queuing Penalty (veh)			11	1	0	0	

Intersection: 54: 4th Street & Ute Ave

Movement	WB	WB	SB	SB
Directions Served	LT	T	T	TR
Maximum Queue (ft)	116	125	101	146
Average Queue (ft)	63	62	35	72
95th Queue (ft)	101	107	80	127
Link Distance (ft)	387	387	287	287
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 57: 5th Street & Pitkin Ave

Movement	EB	EB	EB	NB	NB	SB	SB	SB
Directions Served	LT	TR	R	T	TR	L	T	T
Maximum Queue (ft)	281	286	211	168	146	61	201	198
Average Queue (ft)	185	190	131	83	53	8	120	117
95th Queue (ft)	252	257	194	145	108	36	183	177
Link Distance (ft)	379	379	379	279	279		320	320
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)						50		
Storage Blk Time (%)						0	16	
Queuing Penalty (veh)						0	1	

Intersection: 58: 4th Street & Pitkin Ave

Movement	EB	EB	EB	NB	SB	SB
Directions Served	T	T	TR	R	L	LT
Maximum Queue (ft)	230	236	206	31	33	53
Average Queue (ft)	144	146	86	7	7	15
95th Queue (ft)	214	215	187	28	28	43
Link Distance (ft)	943	943	943	273	323	323
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 61: 5th Street & South Ave

Movement	EB	WB	SB
Directions Served	R	R	L
Maximum Queue (ft)	35	33	35
Average Queue (ft)	8	7	6
95th Queue (ft)	30	29	27
Link Distance (ft)	387	965	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			75
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 25

Intersection: 5: 5th Street & North Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	55	192	187	118	190	165	63	99	118	73	98	66
Average Queue (ft)	13	108	102	35	103	75	25	37	51	29	39	17
95th Queue (ft)	39	178	174	77	168	141	56	78	93	63	83	49
Link Distance (ft)		386	386		972	972		312	312		607	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	125			125			85			75		75
Storage Blk Time (%)		4		0	3		0	1		1	3	0
Queuing Penalty (veh)		1		0	2		0	0		1	2	0

Intersection: 6: 4th Street & North Ave

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	39	2	50	6	4	220	49
Average Queue (ft)	9	0	24	0	0	82	18
95th Queue (ft)	32	2	50	4	3	170	46
Link Distance (ft)		973		386	386	311	613
Upstream Blk Time (%)							0
Queuing Penalty (veh)							0
Storage Bay Dist (ft)	100		100				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 9: 5th Street & Belford Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	41	59	39	35
Average Queue (ft)	18	28	3	2
95th Queue (ft)	44	50	21	17
Link Distance (ft)	397	937	290	312
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: 4th Street & Belford Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	47	44	26	38
Average Queue (ft)	17	25	1	3
95th Queue (ft)	44	47	13	18
Link Distance (ft)	953	397	294	311
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 13: 5th Street & Teller Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	40	42	49	34
Average Queue (ft)	19	20	3	2
95th Queue (ft)	44	45	22	15
Link Distance (ft)	402	954	295	290
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: 4th Street & Teller Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	47	42	34	25
Average Queue (ft)	21	20	2	2
95th Queue (ft)	47	45	15	14
Link Distance (ft)	953	402	293	294
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 17: 5th Street & Hill Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	44	42	35	33
Average Queue (ft)	20	20	2	2
95th Queue (ft)	45	45	18	16
Link Distance (ft)	401	966	332	295
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: 4th Street & Hill Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	46	40	24	24
Average Queue (ft)	20	20	1	1
95th Queue (ft)	45	45	11	11
Link Distance (ft)	946	401	333	293
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 21: 5th Street & Gunnison Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	54	58	12	22
Average Queue (ft)	26	29	0	1
95th Queue (ft)	48	50	6	12
Link Distance (ft)	399	967	337	332
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 22: 4th Street & Gunnison Ave

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	52	40	19
Average Queue (ft)	26	26	1
95th Queue (ft)	48	46	8
Link Distance (ft)	958	399	333
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 25: 5th Street & Chipeta Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	42	44	25	38
Average Queue (ft)	20	20	2	4
95th Queue (ft)	45	46	18	21
Link Distance (ft)	396	958	288	337
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 26: 4th Street & Chipeta Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	40	35	12	24
Average Queue (ft)	19	18	1	1
95th Queue (ft)	45	43	7	12
Link Distance (ft)	958	396	287	338
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 29: 5th Street & Ouray Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	48	44	30	45
Average Queue (ft)	20	21	2	3
95th Queue (ft)	47	45	14	24
Link Distance (ft)	384	959	314	288
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 30: 4th Street & Ouray Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	38	36	27	34
Average Queue (ft)	20	17	2	2
95th Queue (ft)	45	43	13	15
Link Distance (ft)	967	384	319	287
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 33: 5th Street & Grand Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	R	L	TR
Maximum Queue (ft)	58	59	69	124	185	154	124	240	75	74	174
Average Queue (ft)	20	21	23	24	99	58	46	115	28	10	80
95th Queue (ft)	51	51	58	75	162	125	109	208	77	42	145
Link Distance (ft)		393	393		969	969		300			314
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	75			100			100		50	100	
Storage Blk Time (%)	0	0			7		1	25	0		7
Queuing Penalty (veh)	0	0			2		1	25	1		1

Intersection: 34: 4th Street & Grand Ave

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	84	165	135	63	42	112	116	102	162	66	142
Average Queue (ft)	17	92	52	8	10	60	61	24	63	14	57
95th Queue (ft)	56	149	108	36	34	99	106	64	125	47	111
Link Distance (ft)		968	968			393	393		294		319
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	100			100	100			100		100	
Storage Blk Time (%)		6	1	0		1		0	3		2
Queuing Penalty (veh)		1	0	0		0		0	1		0

Intersection: 37: 5th Street & White Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	40	63	49	46
Average Queue (ft)	20	26	4	3
95th Queue (ft)	45	52	23	22
Link Distance (ft)	401	972	299	300
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 38: 4th Street & White Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	49	42	31	26
Average Queue (ft)	21	24	2	2
95th Queue (ft)	46	47	16	13
Link Distance (ft)	950	401	296	294
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 41: 5th Street & Rood Ave

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	38	46	62	49	39
Average Queue (ft)	16	23	30	4	5
95th Queue (ft)	41	47	53	26	24
Link Distance (ft)		416	983	305	299
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	70				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 42: 4th Street & Rood Ave

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	L	TR	LTR	LTR
Maximum Queue (ft)	55	30	55	37	36
Average Queue (ft)	28	6	31	2	3
95th Queue (ft)	49	26	48	17	21
Link Distance (ft)	1018		416	309	296
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		65			
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 45: 5th Street & Main St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	171	149	97	86
Average Queue (ft)	86	58	28	24
95th Queue (ft)	151	111	75	63
Link Distance (ft)	405	979	311	305
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 46: 4th Street & Main St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	145	146	85	64
Average Queue (ft)	55	63	32	20
95th Queue (ft)	108	118	71	54
Link Distance (ft)	912	405	306	309
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 49: 5th Street & Colorado Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	52	59	55	45
Average Queue (ft)	24	29	4	5
95th Queue (ft)	44	51	27	28
Link Distance (ft)	391	983	263	311
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 50: 4th Street & Colorado Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	52	50	9	29
Average Queue (ft)	27	28	0	2
95th Queue (ft)	50	48	6	14
Link Distance (ft)	952	391	286	306
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 53: 5th Street & Ute Ave

Movement	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	LT	T	R	L	L	T	T	R
Maximum Queue (ft)	278	283	240	75	123	161	202	137	24
Average Queue (ft)	164	184	137	21	40	80	57	52	5
95th Queue (ft)	249	258	228	66	102	138	143	108	19
Link Distance (ft)	977	977	977			318	318	263	263
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)				50	100				
Storage Blk Time (%)			29	0	0	4			
Queuing Penalty (veh)			9	1	0	4			

Intersection: 54: 4th Street & Ute Ave

Movement	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR
Maximum Queue (ft)	378	379	42	84
Average Queue (ft)	176	194	7	26
95th Queue (ft)	344	357	29	70
Link Distance (ft)	379	379	324	286
Upstream Blk Time (%)	0	1		
Queuing Penalty (veh)	2	3		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 57: 5th Street & Pitkin Ave

Movement	EB	EB	EB	NB	NB	SB	SB	SB
Directions Served	LT	TR	R	T	TR	L	T	T
Maximum Queue (ft)	382	394	362	206	287	54	274	269
Average Queue (ft)	144	146	102	55	119	4	130	129
95th Queue (ft)	342	349	280	140	240	25	243	240
Link Distance (ft)	385	385	385	441	441		318	318
Upstream Blk Time (%)	0	0	0		0		0	0
Queuing Penalty (veh)	1	1	0		0		0	0
Storage Bay Dist (ft)						50		
Storage Blk Time (%)						0	18	
Queuing Penalty (veh)						1	1	

Intersection: 58: 4th Street & Pitkin Ave

Movement	EB	EB	EB	NB	SB
Directions Served	LT	T	TR	TR	LT
Maximum Queue (ft)	313	301	248	32	89
Average Queue (ft)	184	177	119	5	29
95th Queue (ft)	273	259	226	25	70
Link Distance (ft)	948	948	948	442	324
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 62

Intersection: 5: 5th Street & North Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	139	304	309	149	371	348	108	158	241	92	146	90
Average Queue (ft)	26	173	169	30	216	186	51	61	119	40	49	30
95th Queue (ft)	84	270	273	99	332	309	98	122	205	78	105	69
Link Distance (ft)		386	386		972	972		299	299		607	
Upstream Blk Time (%)		0	0						0			
Queuing Penalty (veh)		0	0						0			
Storage Bay Dist (ft)	125			125			85			75		75
Storage Blk Time (%)		13			19		2	4		2	5	0
Queuing Penalty (veh)		4			6		2	3		2	5	1

Intersection: 6: 4th Street & North Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	53	5	34	123	220	166	77	138
Average Queue (ft)	14	0	5	68	19	12	21	47
95th Queue (ft)	44	4	22	117	122	104	63	110
Link Distance (ft)		973	973		386	386	305	613
Upstream Blk Time (%)						0		
Queuing Penalty (veh)						0		
Storage Bay Dist (ft)	100			100				
Storage Blk Time (%)	0			7				
Queuing Penalty (veh)	0			49				

Intersection: 9: 5th Street & Belford Ave

Movement	WB	NB
Directions Served	TR	TR
Maximum Queue (ft)	38	8
Average Queue (ft)	19	0
95th Queue (ft)	43	7
Link Distance (ft)	939	289
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: 4th Street & Belford Ave

Movement	EB	WB	WB
Directions Served	R	L	TR
Maximum Queue (ft)	32	70	30
Average Queue (ft)	14	29	11
95th Queue (ft)	36	53	33
Link Distance (ft)	940	407	407
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 13: 5th Street & Teller Ave

Movement	EB	WB	NB
Directions Served	LT	TR	TR
Maximum Queue (ft)	40	42	2
Average Queue (ft)	19	20	0
95th Queue (ft)	45	45	2
Link Distance (ft)	426	942	295
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 14: 4th Street & Teller Ave

Movement	EB	WB	SB
Directions Served	TR	LT	LT
Maximum Queue (ft)	45	38	3
Average Queue (ft)	18	18	0
95th Queue (ft)	44	44	3
Link Distance (ft)	941	426	286
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 17: 5th Street & Hill Ave

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	44	43
Average Queue (ft)	20	21
95th Queue (ft)	46	45
Link Distance (ft)	425	954
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: 4th Street & Hill Ave

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	50	40
Average Queue (ft)	21	19
95th Queue (ft)	48	45
Link Distance (ft)	934	425
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: 5th Street & Gunnison Ave

Movement	EB	WB	NB	NB
Directions Served	LT	TR	LT	TR
Maximum Queue (ft)	66	70	7	6
Average Queue (ft)	31	35	0	0
95th Queue (ft)	54	59	6	3
Link Distance (ft)	423	955	337	337
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 22: 4th Street & Gunnison Ave

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	63	54
Average Queue (ft)	32	30
95th Queue (ft)	54	51
Link Distance (ft)	946	423
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 25: 5th Street & Chipeta Ave

Movement	EB	WB
Directions Served	LT	TR
Maximum Queue (ft)	42	44
Average Queue (ft)	19	20
95th Queue (ft)	45	45
Link Distance (ft)	421	946
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 26: 4th Street & Chipeta Ave

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	38	42
Average Queue (ft)	19	19
95th Queue (ft)	44	45
Link Distance (ft)	947	421
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 29: 5th Street & Ouray Ave

Movement	EB	WB	NB
Directions Served	LT	TR	LT
Maximum Queue (ft)	41	44	3
Average Queue (ft)	19	19	0
95th Queue (ft)	44	44	3
Link Distance (ft)	420	953	314
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 30: 4th Street & Ouray Ave

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (ft)	42	48
Average Queue (ft)	19	20
95th Queue (ft)	44	46
Link Distance (ft)	961	420
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: 5th Street & Grand Ave

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	T	TR	L	T	T	R
Maximum Queue (ft)	91	132	122	293	264	110	108	116	74
Average Queue (ft)	41	62	54	181	147	45	43	49	27
95th Queue (ft)	79	111	110	262	240	91	85	92	68
Link Distance (ft)		424	424	956	956		301	301	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	75					100			50
Storage Blk Time (%)	2	9				2	0	12	1
Queuing Penalty (veh)	6	8				3	0	13	1

Intersection: 34: 4th Street & Grand Ave

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	TR
Maximum Queue (ft)	232	196	122	83	97	110	169	198
Average Queue (ft)	138	89	33	31	47	48	90	107
95th Queue (ft)	210	174	88	67	82	93	149	173
Link Distance (ft)	962	962			424	424	319	319
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			100	150				
Storage Blk Time (%)		4	0					
Queuing Penalty (veh)		3	0					

Intersection: 37: 5th Street & White Ave

Movement	EB	WB	NB
Directions Served	LT	TR	LT
Maximum Queue (ft)	67	66	3
Average Queue (ft)	30	32	0
95th Queue (ft)	57	56	5
Link Distance (ft)	437	960	300
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 38: 4th Street & White Ave

Movement	EB	WB	SB	SB
Directions Served	TR	LT	LT	TR
Maximum Queue (ft)	65	108	174	185
Average Queue (ft)	24	46	92	108
95th Queue (ft)	58	93	150	167
Link Distance (ft)	944	437	293	293
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 41: 5th Street & Rood Ave

Movement	EB	EB	WB	NB	NB
Directions Served	L	T	TR	LT	TR
Maximum Queue (ft)	81	110	112	83	78
Average Queue (ft)	31	39	43	35	28
95th Queue (ft)	72	88	88	72	65
Link Distance (ft)		440	971	305	305
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	70				
Storage Blk Time (%)	2	3			
Queuing Penalty (veh)	1	2			

Intersection: 42: 4th Street & Rood Ave

Movement	EB	WB	WB	SB	SB
Directions Served	TR	L	T	LT	TR
Maximum Queue (ft)	115	83	111	65	75
Average Queue (ft)	46	25	43	23	27
95th Queue (ft)	93	67	91	57	63
Link Distance (ft)	1007		440	297	297
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		65			
Storage Blk Time (%)		1	4		
Queuing Penalty (veh)		1	1		

Intersection: 45: 5th Street & Main St

Movement	EB	WB	NB	NB
Directions Served	LT	TR	LT	TR
Maximum Queue (ft)	191	143	218	216
Average Queue (ft)	86	66	125	124
95th Queue (ft)	152	121	195	194
Link Distance (ft)	429	967	311	311
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 46: 4th Street & Main St

Movement	EB	WB	SB	SB
Directions Served	TR	LT	LT	TR
Maximum Queue (ft)	146	91	170	202
Average Queue (ft)	68	27	84	109
95th Queue (ft)	125	67	152	176
Link Distance (ft)	900	429	309	309
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 49: 5th Street & Colorado Ave

Movement	EB	WB	NB	NB
Directions Served	LT	TR	LT	TR
Maximum Queue (ft)	78	82	8	5
Average Queue (ft)	39	37	0	0
95th Queue (ft)	65	64	6	3
Link Distance (ft)	430	972	263	263
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 50: 4th Street & Colorado Ave

Movement	EB	WB	SB
Directions Served	TR	LT	LT
Maximum Queue (ft)	63	68	6
Average Queue (ft)	34	33	0
95th Queue (ft)	56	53	5
Link Distance (ft)	940	430	306
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 53: 5th Street & Ute Ave

Movement	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	LT	T	R	L	T	T
Maximum Queue (ft)	270	278	246	75	117	112	74
Average Queue (ft)	165	185	142	31	53	38	24
95th Queue (ft)	238	258	231	80	103	80	60
Link Distance (ft)	971	971	971			320	320
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)				50	100		
Storage Blk Time (%)			20	0	2	0	
Queuing Penalty (veh)			15	2	5	1	

Intersection: 54: 4th Street & Ute Ave

Movement	WB	WB	SB	SB
Directions Served	LT	T	T	TR
Maximum Queue (ft)	239	240	144	192
Average Queue (ft)	131	141	60	102
95th Queue (ft)	211	222	117	162
Link Distance (ft)	387	387	287	287
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 57: 5th Street & Pitkin Ave

Movement	EB	EB	EB	NB	NB	SB	SB	SB
Directions Served	LT	TR	R	T	TR	L	T	T
Maximum Queue (ft)	381	386	360	299	244	70	294	287
Average Queue (ft)	268	277	221	178	129	11	189	180
95th Queue (ft)	358	366	308	268	224	42	267	260
Link Distance (ft)	378	378	378	513	513		320	320
Upstream Blk Time (%)	0	0	0				0	0
Queuing Penalty (veh)	2	2	0				0	0
Storage Bay Dist (ft)						50		
Storage Blk Time (%)						1	34	
Queuing Penalty (veh)						4	3	

Intersection: 58: 4th Street & Pitkin Ave

Movement	EB	EB	EB	NB	SB	SB
Directions Served	T	T	TR	R	L	LT
Maximum Queue (ft)	315	338	272	42	46	75
Average Queue (ft)	211	213	160	12	12	26
95th Queue (ft)	291	293	257	37	39	60
Link Distance (ft)	943	943	943	490	323	323
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 144

Intersection: 5: 5th Street & North Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	R	L	T	R
Maximum Queue (ft)	141	370	366	149	350	327	109	202	166	92	150	88
Average Queue (ft)	28	227	227	71	196	174	61	89	83	40	60	27
95th Queue (ft)	96	344	345	146	311	285	114	161	140	80	118	65
Link Distance (ft)		386	386		972	972		312	312		607	
Upstream Blk Time (%)		0	0									
Queuing Penalty (veh)		0	1									
Storage Bay Dist (ft)	125			125			85			75		75
Storage Blk Time (%)		21		0	15		3	9		2	7	0
Queuing Penalty (veh)		6		3	16		4	7		3	8	0

Intersection: 6: 4th Street & North Ave

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	47	20	37	78	10	4	110	92
Average Queue (ft)	14	1	2	36	0	0	51	34
95th Queue (ft)	41	15	18	69	6	3	87	79
Link Distance (ft)		973	973		386	386	311	613
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100			100				
Storage Blk Time (%)		0		0				
Queuing Penalty (veh)		0		2				

Intersection: 9: 5th Street & Belford Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	96	84	57	71
Average Queue (ft)	44	37	6	7
95th Queue (ft)	77	65	33	38
Link Distance (ft)	397	937	290	312
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: 4th Street & Belford Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	42	57	39	44
Average Queue (ft)	22	30	3	5
95th Queue (ft)	47	49	20	26
Link Distance (ft)	953	397	294	311
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 13: 5th Street & Teller Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	52	59	52	63
Average Queue (ft)	24	29	5	7
95th Queue (ft)	49	53	27	35
Link Distance (ft)	402	954	295	290
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: 4th Street & Teller Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	54	42	42	38
Average Queue (ft)	25	25	3	3
95th Queue (ft)	49	46	20	20
Link Distance (ft)	953	402	293	294
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 17: 5th Street & Hill Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	50	50	51	63
Average Queue (ft)	25	25	5	6
95th Queue (ft)	49	48	27	33
Link Distance (ft)	401	966	332	295
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: 4th Street & Hill Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	51	44	51	38
Average Queue (ft)	23	25	3	4
95th Queue (ft)	48	47	20	22
Link Distance (ft)	946	401	333	293
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 21: 5th Street & Gunnison Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	62	69	5	42
Average Queue (ft)	32	36	0	2
95th Queue (ft)	55	60	4	18
Link Distance (ft)	399	967	337	332
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 22: 4th Street & Gunnison Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	64	58	7	8
Average Queue (ft)	32	32	0	0
95th Queue (ft)	54	51	4	5
Link Distance (ft)	958	399	338	333
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 25: 5th Street & Chipeta Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	60	58	66	55
Average Queue (ft)	26	27	7	6
95th Queue (ft)	52	52	39	32
Link Distance (ft)	396	958	288	337
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 26: 4th Street & Chipeta Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	53	50	46	44
Average Queue (ft)	27	24	3	4
95th Queue (ft)	49	47	24	23
Link Distance (ft)	958	396	287	338
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 29: 5th Street & Ouray Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	57	56	55	53
Average Queue (ft)	26	26	6	6
95th Queue (ft)	51	50	33	31
Link Distance (ft)	384	959	314	288
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 30: 4th Street & Ouray Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	53	48	57	41
Average Queue (ft)	26	24	5	4
95th Queue (ft)	48	48	30	22
Link Distance (ft)	967	384	319	287
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 33: 5th Street & Grand Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	R	L	TR
Maximum Queue (ft)	80	82	100	124	255	224	125	303	75	116	242
Average Queue (ft)	34	35	41	41	156	121	62	152	30	19	109
95th Queue (ft)	72	68	82	111	232	202	127	273	81	64	196
Link Distance (ft)		393	393		969	969		300			314
Upstream Blk Time (%)								0			0
Queuing Penalty (veh)								2			0
Storage Bay Dist (ft)	75			100			100		50	100	
Storage Blk Time (%)	2	1		0	20		1	30	0	0	12
Queuing Penalty (veh)	5	1		1	9		3	45	1	0	2

NA-TWLTTL

Intersection: 34: 4th Street & Grand Ave

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	102	207	194	90	61	136	150	124	221	107	181
Average Queue (ft)	24	124	87	16	18	74	82	43	103	24	84
95th Queue (ft)	72	191	162	58	49	119	133	105	186	67	153
Link Distance (ft)		968	968			393	393		294		319
Upstream Blk Time (%)									0		
Queuing Penalty (veh)									0		
Storage Bay Dist (ft)	100			100	100			100		100	
Storage Blk Time (%)	0	13	4	0		3		0	10	0	7
Queuing Penalty (veh)	0	4	1	0		1		0	6	0	2

NA-TWLTL

Intersection: 37: 5th Street & White Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	57	72	97	68
Average Queue (ft)	25	33	15	7
95th Queue (ft)	51	59	59	35
Link Distance (ft)	401	972	299	300
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 38: 4th Street & White Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	60	63	57	54
Average Queue (ft)	26	30	6	4
95th Queue (ft)	55	55	33	27
Link Distance (ft)	950	401	296	294
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 41: 5th Street & Rood Ave

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	41	55	81	67	76
Average Queue (ft)	21	29	40	8	11
95th Queue (ft)	46	49	66	38	45
Link Distance (ft)		416	983	305	299
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	70				
Storage Blk Time (%)	0	0			
Queuing Penalty (veh)	0	0			

Intersection: 42: 4th Street & Rood Ave

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	L	TR	LTR	LTR
Maximum Queue (ft)	71	31	79	72	68
Average Queue (ft)	38	11	39	7	7
95th Queue (ft)	64	34	63	39	36
Link Distance (ft)	1018		416	309	296
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		65			
Storage Blk Time (%)			1		
Queuing Penalty (veh)			0		

Intersection: 45: 5th Street & Main St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	232	155	116	102
Average Queue (ft)	120	75	37	42
95th Queue (ft)	201	134	86	87
Link Distance (ft)	405	979	311	305
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 46: 4th Street & Main St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	157	172	134	113
Average Queue (ft)	78	82	56	36
95th Queue (ft)	135	148	113	82
Link Distance (ft)	912	405	306	309
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 49: 5th Street & Colorado Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	64	80	59	96
Average Queue (ft)	30	37	5	14
95th Queue (ft)	55	65	33	55
Link Distance (ft)	391	983	263	311
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 50: 4th Street & Colorado Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	58	58	31	36
Average Queue (ft)	31	32	2	3
95th Queue (ft)	54	51	15	21
Link Distance (ft)	952	391	286	306
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 53: 5th Street & Ute Ave

Movement	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	LT	T	R	L	L	T	T	R
Maximum Queue (ft)	320	431	341	75	125	306	273	178	41
Average Queue (ft)	210	253	210	28	90	149	102	82	8
95th Queue (ft)	295	358	305	80	155	267	201	149	27
Link Distance (ft)	977	977	977			318	318	263	263
Upstream Blk Time (%)						1	0		
Queuing Penalty (veh)						3	1		
Storage Bay Dist (ft)				50	100				
Storage Blk Time (%)			40	1	5	23			
Queuing Penalty (veh)			18	3	6	31			

Intersection: 54: 4th Street & Ute Ave

Movement	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR
Maximum Queue (ft)	404	402	74	147
Average Queue (ft)	242	250	16	55
95th Queue (ft)	475	476	53	119
Link Distance (ft)	379	379	324	286
Upstream Blk Time (%)	7	8		
Queuing Penalty (veh)	38	41		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 57: 5th Street & Pitkin Ave

Movement	EB	EB	EB	NB	NB	SB	SB	SB
Directions Served	LT	TR	R	T	TR	L	T	T
Maximum Queue (ft)	329	351	319	428	452	61	332	332
Average Queue (ft)	100	112	88	183	283	9	221	217
95th Queue (ft)	215	229	197	384	462	37	321	318
Link Distance (ft)	385	385	385	441	441		318	318
Upstream Blk Time (%)	0	0	0	1	2		1	1
Queuing Penalty (veh)	1	1	0	0	0		2	2
Storage Bay Dist (ft)						50		
Storage Blk Time (%)						0	30	
Queuing Penalty (veh)						1	2	

Intersection: 58: 4th Street & Pitkin Ave

Movement	EB	EB	EB	NB	SB
Directions Served	LT	T	TR	TR	LT
Maximum Queue (ft)	336	339	293	52	170
Average Queue (ft)	216	216	159	12	67
95th Queue (ft)	314	309	271	39	136
Link Distance (ft)	948	948	948	442	324
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 285

CITY OF GRAND JUNCTION, COLORADO

RESOLUTION NO. 36-22

A RESOLUTION ADOPTING THE 4TH-5TH STREET FEASIBILITY STUDY

Recitals

In 1981, the Downtown Development Authority (DDA) identified the conversion of 4th and 5th Street from one-way to two-way as a goal in its original Plan of Development. In 2013, the City's Greater Downtown Plan also called for looking at the configuration of 4th and 5th Street. This was also confirmed again in the 2019 DDA Plan of Development and the City's updated Comprehensive Plan also identifies utilization of Complete Streets within the Downtown core.

In late 2020, the DDA hired the consulting engineering firm of Bohannon Huston of Englewood, Colorado to conduct a Feasibility Study on the One-Way to Two-Way Conversion of 4th and 5th Streets in coordination with City Staff.

Goals developed for the project included Enhancing Safety, Improving Walkability and Bikeability, Activating Economic Development, Optimizing Traffic Circulation

Traffic modeling indicates that 4th Street and 5th Street would operate at acceptable levels under either the one-way or two-way configurations. Additional traffic analysis will be completed to ensure the appropriate infrastructure, signals, and signs are integrated at the intersections during the design phase.

The study concluded that full build-out of the enhanced one-way OR the enhanced two-way will work. As the infrastructure is very similar for both alternatives, there is the opportunity for phased implementation of improvements, remaining in the one-way configuration until such time as the conversion to two way, if desired, is within reach from a budget standpoint. There is also an opportunity to pilot modifications with the one-way configuration to confirm changes of traffic patterns if the signals on both 4th Street and 5th Street between Grand and Ute Ave were removed and replaced with stop signs.

City staff will continue to work with the Downtown Development Authority and other key stakeholders on the development of the final design and implementation of the study recommendations.

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

The 4TH and 5th Street Feasibility Study, in the form of the document attached hereto, is hereby adopted as the policy of the City and shall be implemented as provided herein.

PASSED AND APPROVED this 4th day of May, 2022.



Anna Stout
President of the City Council

ATTEST:



Laura Bauer
Interim City Clerk



1 RESOLUTION NO. __-25

2 A RESOLUTION DIRECTING CERTAIN ACTIONS REGARDING THE DESIGN AND
3 CONSTRUCTION OF IMPROVEMENTS TO 4TH AND 5TH STREETS AND RATIFYING ACTIONS IN
4 CONNECTION THEREWITH

5 RECITALS:

6 In 2021-2022, the City and the Downtown Development Authority (DDA), pursuant to a
7 number of previously considered and adopted plans, retained Bohannon Huston, a
8 national transportation engineering design firm (Consultant) to evaluate and
9 recommend improvements to 4th and 5th streets (Study) in the central part of the City.

10 The Study proposed eliminating the one-way street configurations in favor of a two-way
11 plus bike lane configuration as the preferred alternative. When constructed the
12 preferred design would create a safer, more pedestrian/bicycle friendly environment
13 while maintaining circulation and providing sufficient traffic capacity based on the
14 modeling until at least 2045. The City Council adopted the Study on May 4, 2022.

15 Implementation of the recommendations made by the Study was proposed for Spring
16 2023; however, some Downtown business owners expressed concern about the design's
17 impact on parking and requested the City Staff consider a one-way, one-lane plus bike
18 lane configuration.

19 On September 10, 2023, a second engineering consulting firm Olsson completed a
20 traffic capacity analysis for the one-lane/one-way configuration. That analysis
21 concluded that all streets/intersections would operate at the level of service (LOS) D or
22 better in 2045 with the one-lane configuration.

23 The one-lane configuration was adopted by DDA board on November 2, 2023, and City
24 Staff discussed the same with City Council at the October 28, 2023, workshop. The City
25 Council directed that configuration of project to be included in the 2024 budget.

26 Initial implementation was part of a \$1.2 million project funded out of the Sales Tax
27 Capital Improvement Fund. \$1.0 million was invested in planned chipseal and minor
28 street reconstructions/asphalt maintenance, while \$200,000 was for painting,
29 delineators and street widening on 5th Street between Belford and North Ave. The cost
30 of the work was partially reimbursed by a \$150,000 CDOT Revitalizing Main Streets grant.

31 On August 5, 2024, City traffic crews began implementing improvements on 4th Street
32 at Belford Ave with the original 11-foot-wide lane layout. Subsequently the
33 improvements have been adjusted to increase the lane width to 18 feet on 4th Street
34 from Grand to Ute.

35 On September 9, 2024, the initial implementation of 18-foot-wide lanes on 5th Streets
36 from Ute to Grand and a 14-foot-wide lane from Grand to Hill occurred.

37 During the week of September 16, 2024, the initial implementation of a 14-foot-wide
38 lane on 5th Street between Hill to North, and conversion of Belford between 4th and 5th
39 Streets from one-way to two-way occurred.

40 Other modifications have also been made, including but not limited to changing
41 turning radius at various corners is softened by relocating delineators; confirming sight
42 distance(s); adding diagonal parking along the west side of 5th Street south of Grand
43 Avenue; making accommodations for the wider travel lane with the restoration of "no
44 parking" on the East side of 5th Street, North of Grand Avenue which change created
45 an improved cycle lane buffer.

46 In January 2024, over 90 delineators were removed from the corridors and 4th Street
47 between North Avenue and Grand Avenue was widened to 14 feet

48 All of the modifications were in response to concerns expressed by the community.

49 In addition to making the modifications the Staff conducted two speed and volume
50 studies, which showed a reduction in vehicular speed in the corridors while maintaining
51 traffic volumes.

52 On January 13, 2025, the City Staff recommended that the City Council approve further
53 modifications between Ute and Grand Avenues, which would support the reduction in
54 speeds while further addressing some of the concerns that the community continued to
55 express with the one-lane configurations. Staff received general support and direction
56 from the City Council to move the bike lane adjacent to the vehicular travel lane and
57 restoring most pre-pilot parking configurations. Because those changes would be
58 principally implemented by painting the streets they could not be made until Spring
59 when warmer temperatures would allow paint to adhere. Collectively those changes
60 were referred to as "Version 2.0."

61 On May 5, 2025, the City Council again considered Version 2.0 which will restripe both
62 corridors to create the bike lane adjacent to the vehicle travel lane and will restore
63 most of the prior parking configurations. Both the Grand Junction Fire and Police
64 Departments support Version 2.0. The City Staff estimated the cost to construct Version
65 2.0 is \$40,000.00

66 On May 29, 2025, the City Council confirmed that 5th Street north of Grand Ave would
67 remain as originally installed while 4th Street north of Grand would transition to reflect
68 the same geometrics as 5th Street. South of Grand Ave Council developed an
69 alternative for two vehicular travel lanes with a bike lane adjacent buffered where
70 possible. This alternative would require physical infrastructure improvements at Main
71 Street and for staff to followup once costs were developed.

72 On August 4, 2025 Council reviewed the cost of the project, estimated at \$250,000, and
73 directed staff to move forward with reverting both corridors south of Grand Ave to pre-
74 pilot configuration at an estimated cost of \$70,000.

75 By and with this Resolution the City Council conditionally supports and directs the City
76 Manager to take certain actions regarding the design and construction of
77 improvements to 4th and 5th Streets as follows:

- 78 1) The Version 2.0 improvements north of Grand Ave have been completed in
79 accordance with May 29, 2025 Council direction; and,
80
81 2) Revert both corridors south of Grand Ave to pre-pilot conditions with the
82 exception of where bus stops were added. Bus stops will be relocated to be curb
83 adjacent.
84

85 NOW, THEREFORE, IN CONSIDERATION AND ADOPTION OF THE FOREGOING RECITALS BE
86 IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION, COLORADO:

87 That the City Council the City Council conditionally adopts, supports and directs the
88 City Manager to take those certain actions regarding the design and construction of
89 improvements to 4th and 5th Streets as described in this Resolution with the City council
90 further ratifying, confirming and approving the officers, employees and agents of the
91 City taking action as may be necessary or required by the City to implement the City
92 Council action.

93

94 PASSED and ADOPTED this 20th day of August 2025.

95 _____
96 Cody Kennedy
97 President of the City Council
98

99 ATTEST:

100 _____
101 Selestina Sandoval
102 City Clerk
103
104