

**NOTICE OF MEETING OF THE  
CARSON CITY REGIONAL TRANSPORTATION  
COMMISSION (RTC)**

**Day:** Wednesday  
**Date:** March 8, 2023  
**Time:** Begins immediately after the adjournment of the Carson Area Metropolitan Planning Organization meeting that begins at 4:30 p.m.  
**Location:** Community Center, Robert “Bob” Crowell Board Room  
851 East William Street  
Carson City, Nevada

**REVISED\* AGENDA**

**NOTICE TO PUBLIC:**

Members of the public who wish to view the meeting may watch the livestream of the RTC meeting at [www.carson.org/granicus](http://www.carson.org/granicus) and by clicking on “In progress” next to the meeting date, or by tuning in to cable channel 191. Livestream of the meeting is provided solely as a courtesy and convenience to the public. Carson City does not give any assurance or guarantee that the livestream or cable channel access will be reliable. Although all reasonable efforts will be made to provide livestream, unanticipated technical difficulties beyond the control of City staff may delay, interrupt, or render unavailable continuous livestream capability.

The public may provide public comment in advance of a meeting by written submission to the following email address: [cmartinovich@carson.org](mailto:cmartinovich@carson.org). For inclusion or reference in the minutes of the meeting, your public comment must include your full name and be submitted via email by not later than 3:00 p.m. the day before the meeting. Public comment during a meeting is limited to three minutes for each speaker.

**1. Call to Order – Regional Transportation Commission**

**2. Roll Call**

**3. Public Comment:\*\***

The public is invited at this time to comment on and discuss any topic that is relevant to, or within the authority of this public body.

**4. For Possible Action: Approval of Minutes – February 8, 2023**

**5. Public Meeting Item(s):**

5-A For Discussion Only – Discussion and presentation regarding 60% design concepts for the East William Street Complete Streets Project (“Project”).

Staff Summary: This Project includes complete street improvements along East William Street between North Carson Street and the I-580/U.S. Highway 50 interchange, including pavement reconstruction and preservation, utility replacement, safety enhancements, and multi-modal

transportation infrastructure. Staff will present the 60% level of design concepts that have been developed for the corridor based on the previous input and direction from the public, Regional Transportation Commission (“RTC”), and Board of Supervisors (“BOS”). Staff will also discuss the overall status of the design improvements planned for the corridor.

**5-B For Possible Action** – Discussion and possible action regarding the Carson City Transit Center Feasibility Study (“Study”) for Jump Around Carson’s (“JAC”) bus service and the identification of a recommended location allowing for design of the JAC Transit Center (“Project”).

**Staff Summary:** The JAC bus system currently uses a centralized transfer hub on N. Plaza Street between Washington Street and Robinson Street in Downtown Carson City. The transfer hub allows riders to transfer between JAC routes and other regional and statewide bus transit providers. The Study evaluates several potential transit center locations, identifies long-term cost and funding needs, and provides additional planning background to assist with future grant applications to fund the Project. The Study also identifies a recommended location for the Project, allowing it to advance to design. Staff will present the Study results.

**5-C For Possible Action** – Discussion and possible action regarding the submission of a 2023 Transportation Alternatives Program (“TAP”) grant application to the Nevada Department of Transportation (“NDOT”) for \$766,000, subject to a 5% local match totaling \$38,300, to complete North Lompa Multi-Use Path (“Project”).

**Staff Summary:** NDOT is requesting TAP grant applications for community-based transportation projects that improve safety, expand travel choices, and enhance the transportation user experience. Staff is seeking approval to submit a grant application for the Project in the amount of \$766,000. TAP is a federally funded program through the Federal Highway Administration and requires a minimum of a 5% local match. TAP grant applications will be accepted through April 14, 2023.

**5-D For Possible Action** – Discussion and possible action regarding the submission of a 2023 Transportation Alternatives Program (“TAP”) grant application to the Nevada Department of Transportation (“NDOT”) for \$1,312,321.50, subject to a 5% local match totaling \$62,491.50, to fund the Western Nevada Safe Routes to School Program (“WN-SRTS Program”) through federal fiscal year (“FFY”) 2027.

**Staff Summary:** NDOT is requesting TAP grant applications for community-based transportation projects that improve safety, expand travel choices, and enhance the transportation user experience. Staff is seeking approval to submit a grant application for the WN-SRTS Program in the amount of \$1,312,321.50. TAP is a federally funded program through the Federal Highway Administration and requires a minimum of a 5% local match. TAP grant applications will be accepted through April 14, 2023.

**5-E For Possible Action** – Discussion and possible action regarding a proposed resolution authorizing the submission of a Federal Transit Administration (“FTA”) Section 5310 grant application to the Carson Area Metropolitan Planning Organization (“CAMPO”) for \$477,499, subject to a 20% local match estimated to be \$95,500, to fund capitalized operating expenses for Jump Around Carson’s (“JAC”) JAC Assist paratransit service.

**Staff Summary:** CAMPO is requesting grant applications for FTA Section 5310 funding for Federal Fiscal Year (“FFY”) 2022 and 2023. FTA Section 5310 grants provide funding to enhance the mobility of seniors and individuals with disabilities. The proposed application to CAMPO seeks

\$381,999 in federal funding for JAC Assist capitalized operating expenses with a minimum of a 20% local match, estimated to total \$95,500, for a total expense of \$477,499. Grant applications will be accepted through March 17, 2023.

5-F For Possible Action - Discussion and possible action regarding the submission of a Letter of Intent (“LOI”) and Traffic Safety Grant (“Grant”) application to the Nevada Department of Public Safety’s Office of Traffic Safety (“OTS”) for \$200,000, subject to a 25% local match totaling \$50,000, for the Carson City School Crosswalk Striping and Education Project (“Project”).

Staff Summary: The OTS is requesting applications for the Grant to fund projects that reduce fatal and serious injury crashes in our communities and on Nevada’s roads. Staff is seeking approval to submit an LOI and Grant application for the Project in the amount of \$200,000. This Grant is a federally funded program through the National Highway Traffic Safety Administration (“NHTSA”) and requires a minimum of a 25% local match. Grant applications will be accepted through March 17, 2023.

5-G For Possible Action - Discussion and possible action regarding the submission of a request to Carson City’s Congressional delegation seeking \$2.6 million in federal Community Project Funding (“CPF”) for Federal Fiscal Year (“FFY”) 2024 for the Curry Street Complete Streets Improvement Project (“Project”), with an estimated \$1.3 million in local funds contributed to cover the Project’s preliminary estimated cost of \$3.9 million.

Staff Summary: The House and Senate Appropriations Committee have issued guidance to members of Congress for FFY 2024 CPF requests. The proposed multi-modal Project will provide improved traffic and pedestrian circulation, enhanced access to south Carson City, and a more resilient storm drainage system. The Project’s preliminary estimated cost is \$3.9 million. Staff is seeking approval to submit a CPF request for \$2.6 million. The remaining estimated cost of \$1.3 million for the Project will utilize local funds.

## **6. Non-Action Items:**

6-A Transportation Manager’s Report

6-B Other comments and reports, which could include:

- Future agenda items
- Status review of additional projects
- Internal communications and administrative matters
- Correspondence to the RTC
- Additional status reports and comments from the RTC
- Additional staff comments and status reports

## **7. Public Comment:\*\***

The public is invited at this time to comment on any matter that is not specifically included on the agenda as an action item. No action may be taken on a matter raised under this item of the agenda.

## **8. For Possible Action: To Adjourn**

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\*\*PUBLIC COMMENT LIMITATIONS – The RTC will provide at least two public comment periods in compliance with the minimum requirements of the Open Meeting Law prior to adjournment. No action may be taken on a matter raised under public comment unless the item has been specifically included on the

agenda as an item upon which action may be taken. **Public comment will be limited to three minutes per speaker to facilitate the efficient conduct of a meeting and to provide reasonable opportunity for comment from all members of the public who wish to speak.** Testimony from a person who is directly involved with an item, such as City staff, an applicant or a party to an administrative hearing or appeal, is not considered public comment and would not be subject to a three-minute time limitation.

Agenda Management Notice - Items on the agenda may be taken out of order; the public body may combine two or more agenda items for consideration; and the public body may remove an item from the agenda or delay discussion relating to an item on the agenda at any time.

Titles of agenda items are intended to identify specific matters. If you desire detailed information concerning any subject matter itemized within this agenda, including copies of the supporting material regarding any of the items listed on the agenda, please contact Christopher Martinovich, Transportation Manager, in writing at 3505 Butti Way, Carson City, Nevada, 89701 or at [cmartinovich@carson.org](mailto:cmartinovich@carson.org), or by phone at (775) 887-2355 at least 24 hours in advance.

Notice to persons with disabilities: Members of the public who are disabled and require special assistance or accommodations at the meeting are requested to notify RTC staff in writing at 3505 Butti Way, Carson City, Nevada, 89701 or at [cmartinovich@carson.org](mailto:cmartinovich@carson.org), or by calling Christopher Martinovich at (775) 887-2355 at least 24 hours in advance of the meeting.

This agenda and backup information are available on the City's website at [www.carson.org/agendas](http://www.carson.org/agendas) and at the office for Carson City Public Works - 3505 Butti Way, Carson City, Nevada, 89701 (775) 887-2355.

This notice has been posted at the following locations:

Carson City Public Works, 3505 Butti Way  
[www.carson.org/agendas](http://www.carson.org/agendas)  
<http://notice.nv.gov>

**\*Agenda revised to add Item 5-G. No other modifications to the agenda have been made.**

**CARSON CITY REGIONAL TRANSPORTATION COMMISSION****Minutes of the February 8, 2023 Meeting****Page 1****DRAFT**

A regular meeting of the Carson City Regional Transportation Commission (RTC) was scheduled to begin following the adjournment of the Carson Area Metropolitan Planning Organization (CAMPO) meeting (starting at 4:30 p.m.) on Wednesday, February 8, 2023, in the Community Center Robert "Bob" Crowell Boardroom, 851 East William Street, Carson City, Nevada.

**PRESENT:** Chairperson Lori Bagwell  
Vice Chair Lisa Schuette  
Commissioner Robert "Jim" Dodson  
Commissioner Lucia Maloney  
Commissioner Gregory Novak

**STAFF:** Dan Stucky, Deputy Public Works Director  
Chris Martinovich, Transportation Manager  
Adam Tully, Deputy District Attorney  
Bryan Byrne, Traffic Engineer  
Kelly Norman, Transportation Planner/Analyst  
Scott Bohemier, Transportation Planner  
Rebecca Bustos, Grant Analyst  
Tamar Warren, Senior Deputy Clerk

**NOTE:** A recording of these proceedings, the commission's agenda materials, and any written comments or documentation provided to the Clerk, during the meeting, are part of the public record. These materials are available for review, in the Clerk's Office, during regular business hours. All approved meeting minutes are available on [carson.org/minutes](http://carson.org/minutes).

**1. CALL TO ORDER – REGIONAL TRANSPORTATION COMMISSION (RTC)**

(5:31:32) – Chairperson Bagwell called the meeting to order at 5:31 p.m.

**2. ROLL CALL**

(5:31:38) – Roll was called, and a quorum was present.

**3. PUBLIC COMMENT**

(5:31:49) – Chairperson Bagwell entertained public comments. Dee Dee Foremaster explained that she had addressed this issue with Mr. Martinovich during the break. She wished to be ensured that the seniors and the disabled members of the community can receive their free Jump Around Carson (JAC) bus passes and urged Staff to pursue a grant to accomplish it. Ms. Foremaster expressed concern that the JAC office is not on the bus route and offered to have the passes in her office to distribute. She also reminded the Commission that the snow has prohibited accessibility and requested a bus stop near "the Food Mart" near her office. Ms. Foremaster expressed concern that bicycle riders such as her client who was hit by a car on his way to Mound House need a green line to ensure their safety in bicycle lanes.

# CARSON CITY REGIONAL TRANSPORTATION COMMISSION

## Minutes of the February 8, 2023 Meeting

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**DRAFT**

(5:39:10) – Deni French urged the District Attorney’s Office to use the “Plain Language Act” [which requires federal agencies to write clear government communication that the public can understand and use]. He also wished to ensure that sidewalks and ramps are accessible to disabled persons. Mr. French wished to see a tax on electric cars and suggested using slurry for potholes.

### **4. FOR POSSIBLE ACTION: APPROVAL OF MINUTES – JANUARY 11, 2023**

(5:42:12) – Chairperson Bagwell introduced the item and entertained corrections or a motion. Commissioner Novak noted a date error which has been corrected.

**(5:43:25) – Commissioner Maloney moved to approve the minutes of the January 11, 2023 RTC meeting as corrected. The motion was seconded by Vice Chair Schuette and carried 5-0-0.**

### **5. PUBLIC MEETING ITEMS**

**5-A FOR POSSIBLE ACTION – DISCUSSION AND POSSIBLE ACTION TO CERTIFY TO THE NEVADA DEPARTMENT OF TRANSPORTATION (“NDOT”) THE (1) TOTAL MILEAGE OF THE CITY’S PUBLIC ROADS, AS DEFINED BY FEDERAL REGULATIONS FOR HIGHWAY SAFETY FUNDING, AND (2) IDENTITY AND TOTAL MILEAGE OF THE IMPROVED ROADS MAINTAINED BY THE CITY FOR THE PURPOSES OF NEVADA’S MOTOR FUEL TAX AND NRS 365.550(8).**

(5:43:50) – Chairperson Bagwell introduced the item. Ms. Norman presented the Staff Report and accompanying documentation, all of which are incorporated into the record, and responded to clarifying questions. Commissioner Novak inquired about upgrading Kings Canyon Road. Mr. Martinovich explained that portions of Kings Canyon Road were maintained by the Parks, Recreation, and Open Space Department and believed they had not planned on upgrading it to “a different type of road.” Chairperson Bagwell suggested including the prior year’s mileage in future presentations to ensure the capitalization dollars in the audit match the report. Ms. Norman and Mr. Martinovich defined Centerline Mile as a single line down the center of the road. Chairperson Bagwell entertained public comments.

(5:56:44) – Jediah Haller recommended including “lane miles” in the report to ensure better decisions on infrastructure projects. There were no other public comments; therefore, Chairperson Bagwell entertained a motion.

**(5:57:33) – Commissioner Maloney moved to certify (1) the total mileage of Carson City public roads, as presented, and (2) the identity and mileage of roads maintained by the City, as presented. The motion was seconded by Commissioner Novak and carried 5-0-0.**

**5-B FOR POSSIBLE ACTION – DISCUSSION AND POSSIBLE ACTION REGARDING CONTRACT NO. 23300244 (“CONTRACT”) FOR CONSTRUCTION MATERIALS ENGINEERS, INC. (“CME”) TO PERFORM MATERIAL TESTING SERVICES**

**CARSON CITY REGIONAL TRANSPORTATION COMMISSION**

**Minutes of the February 8, 2023 Meeting**

**Page 3**

**DRAFT**

**FOR THE COLORADO STREET CORRIDOR PROJECT (“PROJECT”) FOR A TOTAL NOT TO EXCEED AMOUNT OF \$89,360.**

(5:58:00) – Chairperson Bagwell introduced the item. Mr. Byrne referenced the Staff Report, incorporated into the record, noting that the contract was for a pavement reconstruction project on Colorado Street, between California Street and Saliman Road, and included concrete curb, gutter, and sidewalk upgrades, as well as utility improvements. There were no Commissioner or public comments. Chairperson Bagwell entertained a motion.

**(5:58:58) – Commissioner Novak moved to approve the contract (No. 23300244) as presented. The motion was seconded by Commissioner Dodson and carried 5-0-0.**

**5-C FOR POSSIBLE ACTION – DISCUSSION AND POSSIBLE ACTION REGARDING CONTRACT 23300288 FOR LUMOS & ASSOCIATES, INC. (“LUMOS”) TO PERFORM CIVIL ENGINEERING SERVICES FOR THE DISTRICT 5 WINNIE LANE RECONSTRUCTION PROJECT (“PROJECT”) FOR A TOTAL NOT TO EXCEED AMOUNT OF \$84,820.**

(5:59:15) – Chairperson Bagwell introduced the item. Mr. Byrne referenced the Staff Report and explained that the contract was for a pavement reconstruction project in Performance District 5 and included roadway reconstruction on Winnie Lane between North Carson and Mountain Streets. He also noted that the Project included pedestrian and bicycle improvements. Mr. Martinovich clarified for Chair Bagwell that the Project had initially included School Zone beacons which had been installed earlier as part of the Safe Routes to School Program. Commissioner Dodson recommended changing *Section 5 Compensation* to match the *Fees* section on the last page of the Contract, noting that one was for time and materials and the other cited fixed fees. Mr. Tully agreed that the change should be made. Mayor Bagwell entertained public comments.

(6:04:26) – Mr. French believed he had the wrong supporting documents and requested that Staff check them. There were no additional public comments. Chairperson Bagwell entertained a motion.

**(6:05:58) – Chairperson Bagwell moved to approve the contract (No. 23300288) and to allow the District Attorney’s Office to conform the required changes for time and materials versus a fixed fee. The motion was seconded by Commissioner Dodson and carried 5-0-0.**

**5-D FOR POSSIBLE ACTION – DISCUSSION AND POSSIBLE ACTION REGARDING AMENDMENT NO. 4 (“AMENDMENT”) TO CONTRACT NO. 1516-018 (“CONTRACT”) FOR ECOLANE USA, INC. (“ECOLANE”) TO PROVIDE TRANSIT SERVICE SOFTWARE AND SUPPORT FOR JUMP AROUND CARSON (“JAC”) TRANSIT SERVICE OPERATIONS THROUGH JANUARY 1, 2026 FOR \$6,987.50 ANNUALLY, RESULTING IN A NOT TO EXCEED AMOUNT OF \$20,962.50 FOR THE AMENDMENT’S THREE-YEAR TERM AND A NEW, TOTAL NOT TO EXCEED AMOUNT OF \$123,323.50 FOR THE CONTRACT.**

# CARSON CITY REGIONAL TRANSPORTATION COMMISSION

## Minutes of the February 8, 2023 Meeting

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**DRAFT**

(6:06:34) – Chairperson Bagwell introduced the item. Vice Chair Schuette read into the record a prepared disclosure statement, advised of no disqualifying conflict of interest, and stated that she would participate in discussion and action. In response to a question by Commissioner Maloney, Mr. Tully clarified that because the RTC is a governing body, “this contracting can be done via amendments.” Mr. Martinovich referenced the late material, incorporated into the record, and noted that the lobbying form for contracts with the Federal Transit Administration (FTA) over \$100,000 would be attached to the contract for the vendor to sign. He also recommended amending the motion to make the approval contingent upon FTA approval, although he did not anticipate any issues with the approval. Chairperson Bagwell inquired whether federal contract bidding requirements would be followed since the contract involved federal funds, and Mr. Martinovich noted that he would confirm with the FTA when he meets with them. He also stated that the FTA’s bidding threshold was below \$150,000; however, should the FTA require bids, the contract will not be signed and Staff “will go out for bids.” Chairperson Bagwell entertained public comments and when none were forthcoming, a motion.

**(6:12:44) – Commissioner Maloney moved to approve Amendment No. 4 as presented, with the addition of the lobbying form in late material and contingent upon FTA approval. The motion was seconded by Vice Chair Schuette and carried 5-0-0.**

## 6. NON-ACTION ITEMS:

### 6-A TRANSPORTATION MANAGER’S REPORT

(6:13:29) – Mr. Martinovich called the transit and FTA financing and grant coordination “very challenging” and thanked the Commission for their patience. He explained that the Board of Supervisors would hear about Roadway Funding in its upcoming meeting. Mr. Martinovich announced that Carson City had not been awarded a *Safe Street for All* grant due to a large pool of projects. He also noted that Staff were working with Public Works to develop an electric vehicle charging station policy with possible collaboration with, and funding from, NV Energy and explained that they were exploring scooter or bicycle share programs. Mr. Martinovich updated the Commission on the William Street Project’s 60 percent design public meeting, calling the discussion great and lively.

### 6-B STREET OPERATIONS REPORT

(6:17:26) – Mr. Martinovich reviewed the Street Operations Activity Report for November 2022 and December 2022, which are incorporated into the record. He also noted that 43 potholes had been filled in November. Chairperson Bagwell relayed a question from a member of the public who had inquired about salt and brine usage and Mr. Martinovich offered to bring the information to the next RTC meeting.

### 6-C OTHER COMMENTS AND REPORTS, WHICH COULD INCLUDE:

- FUTURE AGENDA ITEMS

Previously discussed (item 6-A).

**CARSON CITY REGIONAL TRANSPORTATION COMMISSION**

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**DRAFT**

- **STATUS REVIEW OF ADDITIONAL PROJECTS**
- **INTERNAL COMMUNICATIONS AND ADMINISTRATIVE MATTERS**
- **CORRESPONDENCE TO THE RTC**
- **ADDITIONAL STATUS REPORTS AND COMMENTS FROM THE RTC**
- **ADDITIONAL STAFF COMMENTS AND STATUS REPORTS**

**7. PUBLIC COMMENT**

(6:20:04) – Chairperson Bagwell entertained final public comments; however, none were forthcoming.

**8. FOR POSSIBLE ACTION: TO ADJOURN**

(6:20:17) – Chairperson Bagwell adjourned the meeting at 6:20 p.m.

The Minutes of the February 8, 2023 Carson City Regional Transportation Commission meeting are so approved on this 8<sup>th</sup> day of March, 2023.

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## STAFF REPORT

**Report To:** The Carson City Regional Transportation Commission (RTC)

**Meeting Date:** March 8, 2023

**Staff Contact:** Bryan Byrne, Transportation / Traffic Engineer

**Agenda Title: For Discussion Only** – Discussion and presentation regarding 60% design concepts for the East William Street Complete Streets Project (“Project”).

**Staff Summary:** This Project includes complete street improvements along East William Street between North Carson Street and the I-580/U.S. Highway 50 interchange, including pavement reconstruction and preservation, utility replacement, safety enhancements, and multi-modal transportation infrastructure. Staff will present the 60% level of design concepts that have been developed for the corridor based on the previous input and direction from the public, Regional Transportation Commission (“RTC”), and Board of Supervisors (“BOS”). Staff will also discuss the overall status of the design improvements planned for the corridor.

**Agenda Action:** Other/Presentation

**Time Requested:** 20 Minutes

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### **Proposed Motion**

N/A

### **Previous Action**

October 20, 2022 (Item 18A) – Staff presented 30% design concepts for the Project to the BOS.

October 12, 2022 (Item 5A) – Staff presented 30% design concepts for the Project to the RTC.

July 13, 2022 (Item 5A) – The Carson Area Metropolitan Planning Organization approved the East William Street Complete Streets Feasibility Study.

May 11, 2022 (Item 5A) – The RTC directed staff to advance specified design alternatives for the Project.

### **Background/Issues & Analysis**

The Project is focused on the safety of all transportation modes, infrastructure for alternative modes, efficiency of traffic operations, facilities for people with disabilities, and integration with land-use plans. The Complete Streets vision for East William Street began with the Greening America’s Capitals East William Street Study, completed in 2016.

The 60% design plans have been developed for the corridor using a combination of the input collected from the public, RTC, and BOS. Staff have reviewed possible ways to incorporate pedestrian crossing and connectivity enhancements and add buffered bike lanes as elements into the design. Staff will present these design concepts which include curb, gutter and sidewalk improvements, buffered bike lanes, narrowed lane

widths, enhanced pedestrian crosswalk locations, and small median islands. The corridor design was balanced between the input provided, the known corridor needs, and the available funding. This balanced approach will be necessary to distribute the funding to the identified needs.

The following is a tentative schedule of key milestones leading up to final design of the Project:

**Design milestones & Future Board/Committee updates (Redevelopment Authority, RTC, BOS):**

- Summer 2023 – 90% design and presentation of 90% design to RTC, Redevelopment Authority, and BOS
- Summer 2023 – Final design

**Community meetings and workshops:**

- Jan/Mar 2022 – Survey and Comment Map – **Complete**
- February 1, 3 and 8, 2022 – Open House – **Complete**
- May 3, 2022 – Design Alternates Open House Meeting – **Complete**
- February 7, 2023 – Public Meeting for 60% Design Concepts – **Complete**
- Winter 2023/2024 – Construction Impacts Workshop Meeting

Direction and comments from the RTC will be incorporated into the East William Complete Streets 90% design.

If you have any questions regarding the East William Complete Streets Project contact Randall Rice, City Engineer, at [rrice@carson.org](mailto:rrice@carson.org)/775-283-7378.

**Applicable Statute, Code, Policy, Rule or Regulation**

N/A

**Financial Information**

Is there a fiscal impact?  Yes  No

If yes, account name/number: N/A

Is it currently budgeted?  Yes  No

Explanation of Fiscal Impact: N/A

**Alternatives**

N/A

**Supporting Material**

-Exhibit-1: East William Complete Streets Project PowerPoint Presentation



# CONNECTING

WITH THE CAPITAL

## East William Complete Streets Project 60% Update

March 8th, 2023 Regional Transportation Commission  
Carson City Community Center

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### Project Overview



This project will transform the corridor between N. Carson Street and the I-580 interchange from a busy, congested vehicle thoroughfare to a safer multimodal, accessible roadway shared by all users including drivers, cyclists, and pedestrians; otherwise known as a Complete Street.

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## What have we been up to?

- Development of 60% Design
- Public Meeting for 60% Design on 2/7/2022
- Coordination with NDOT and FHWA
- Development of Draft Environmental Impacts document
- Identified Right of Way Needs
- Coordination with property owners and businesses



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## Today's Presentation

- **60% Design Concept**
- **Summary of the Public Meeting**
- **Discussion on the Mills Park Pedestrian Crossing**
- **Update on Project Timeline**

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## North Carson to Stewart



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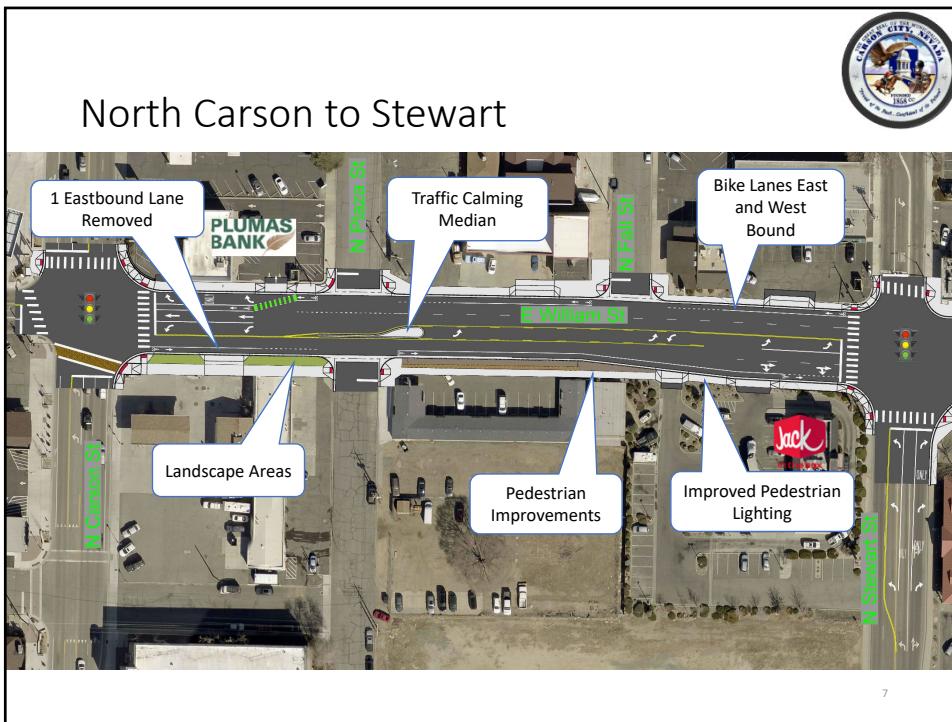
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## North Carson to Stewart

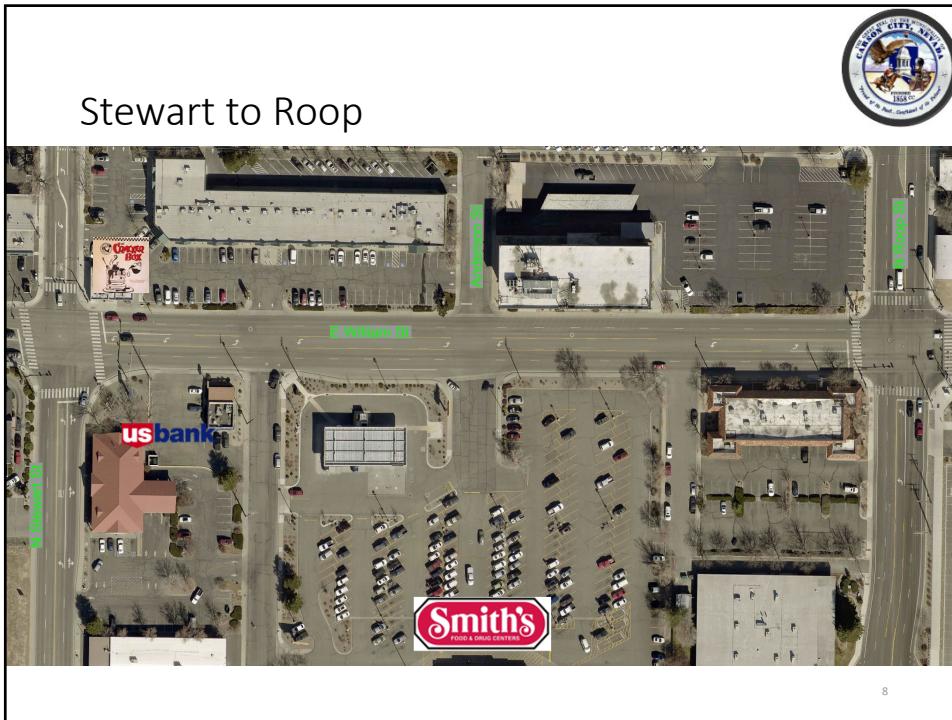


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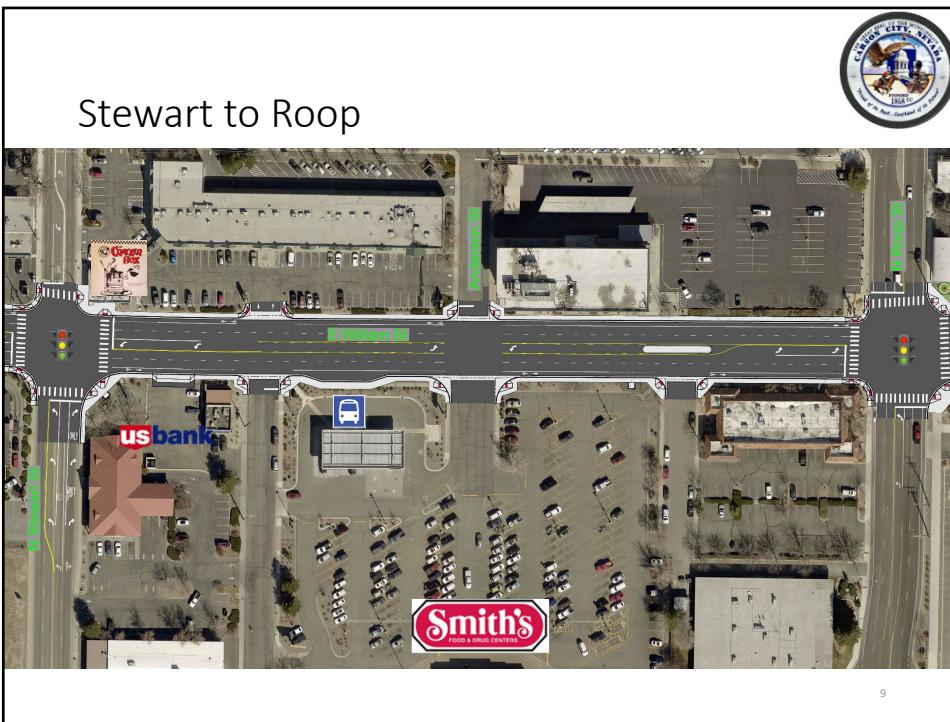
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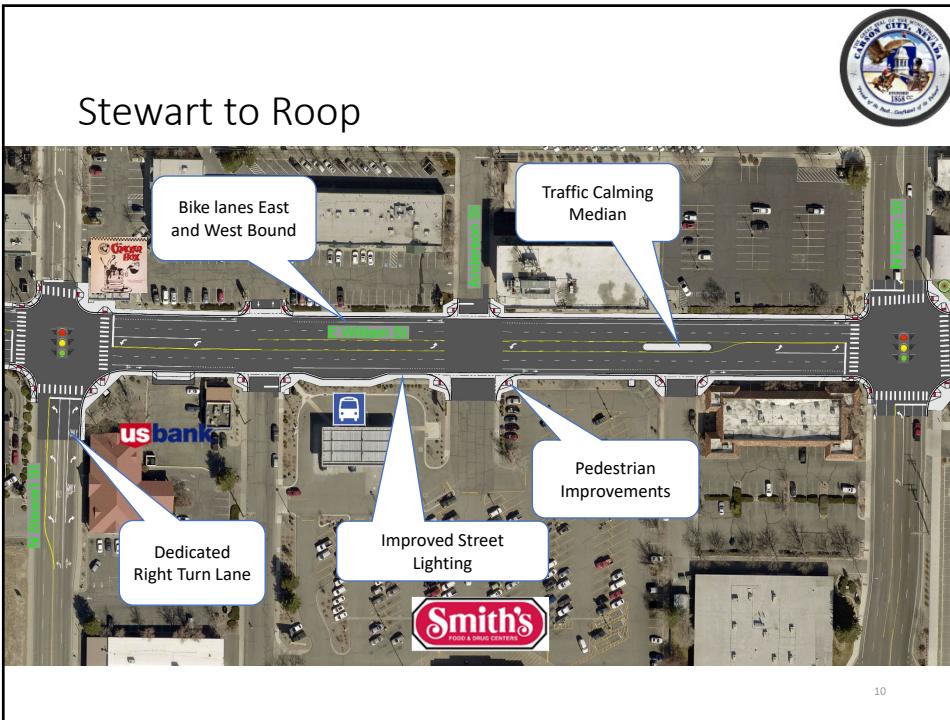
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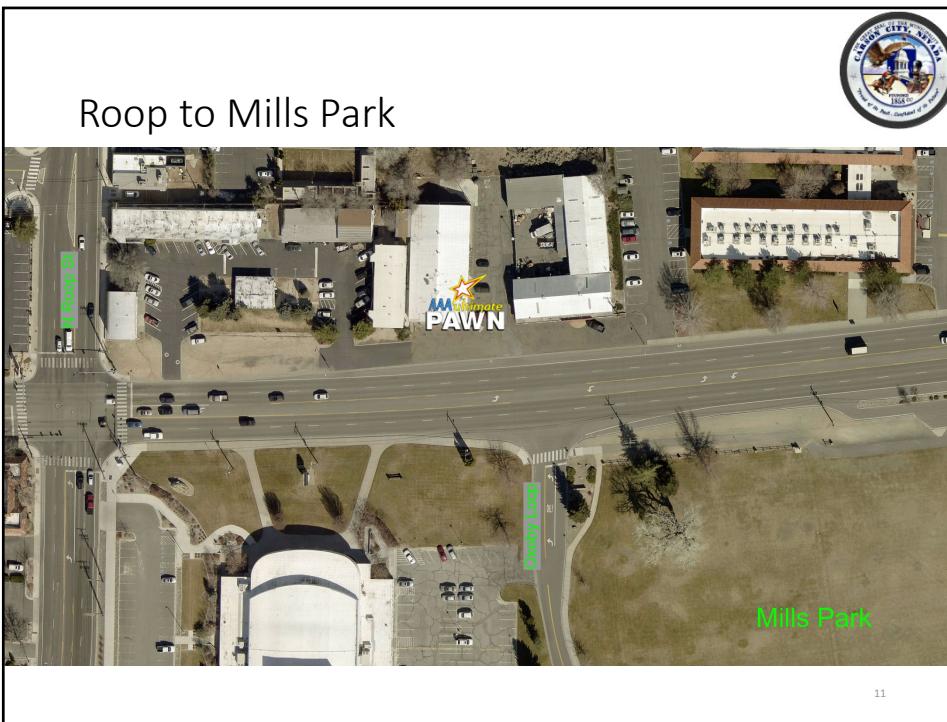
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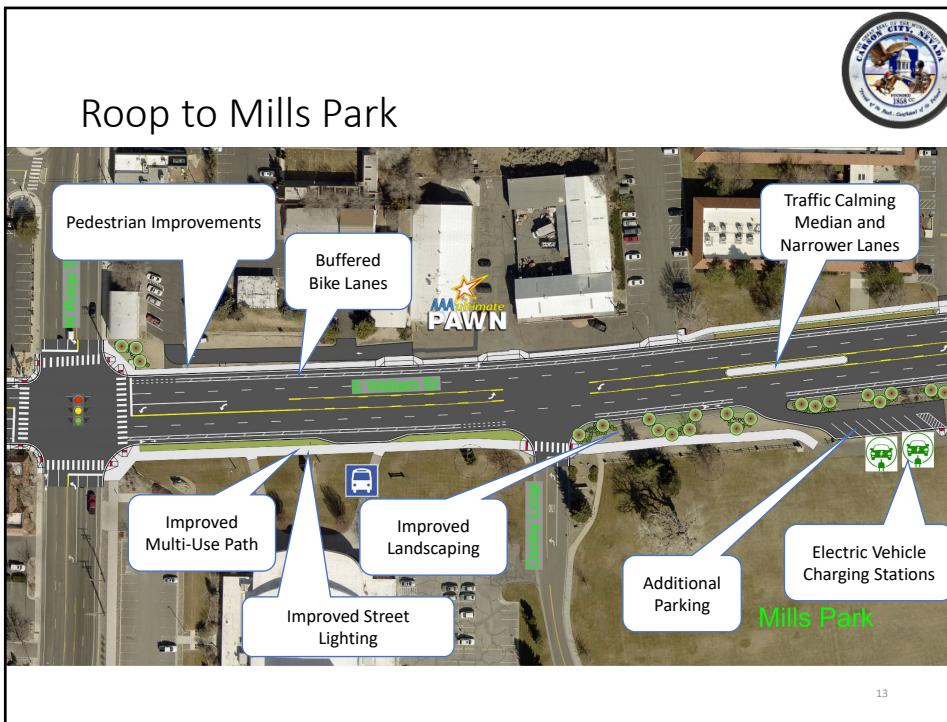
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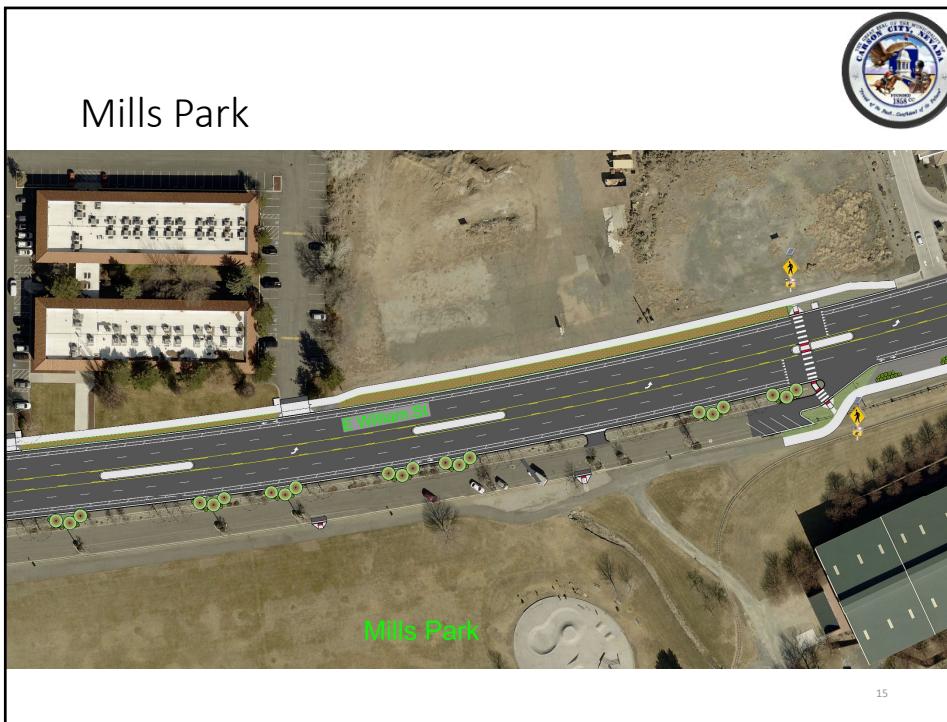
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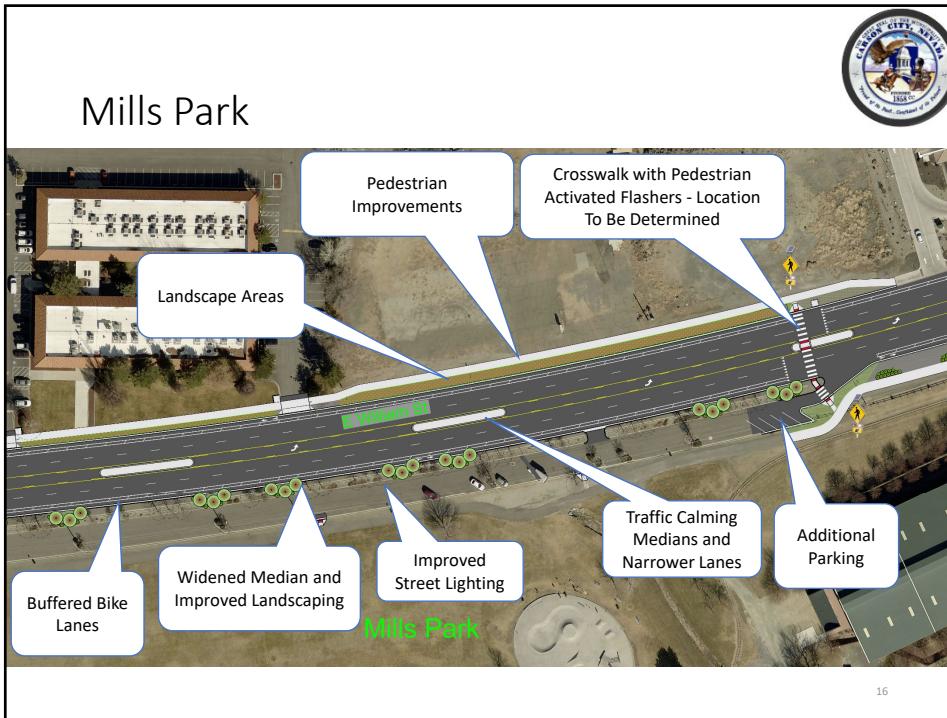
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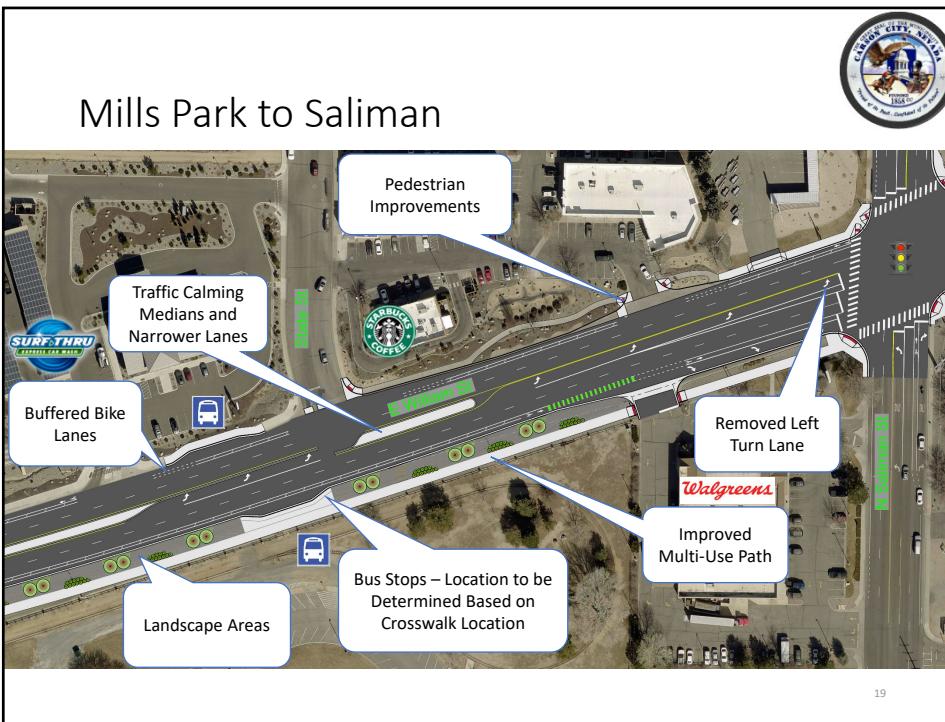
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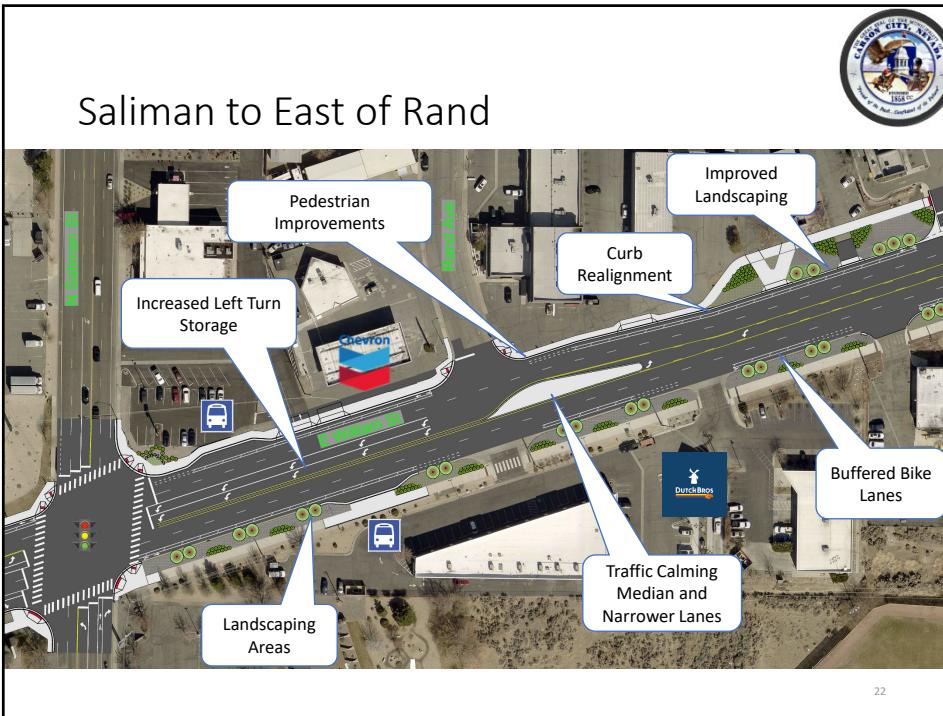
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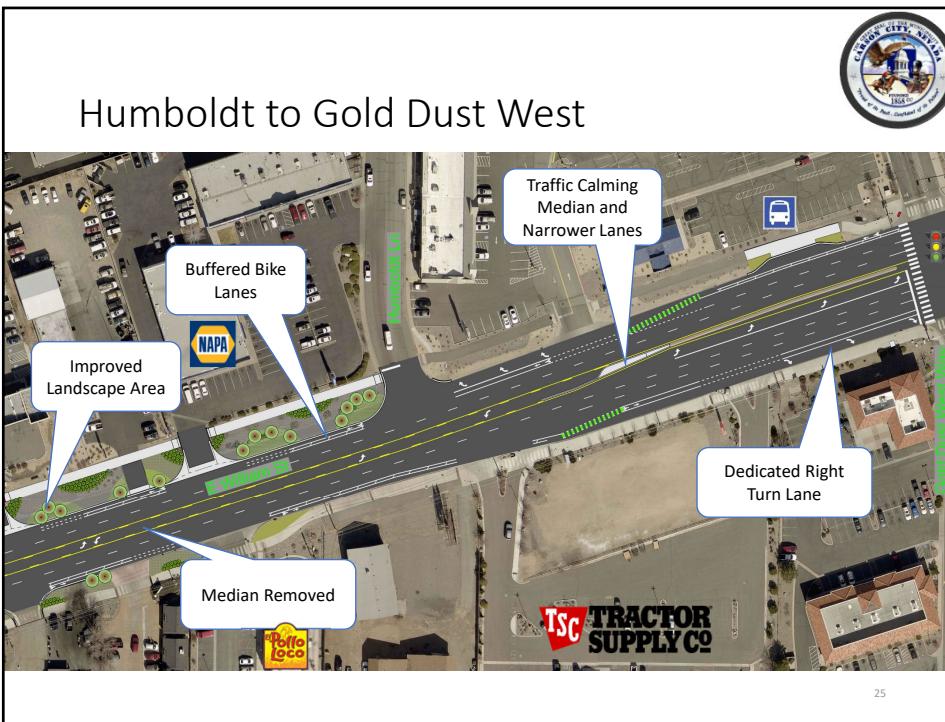
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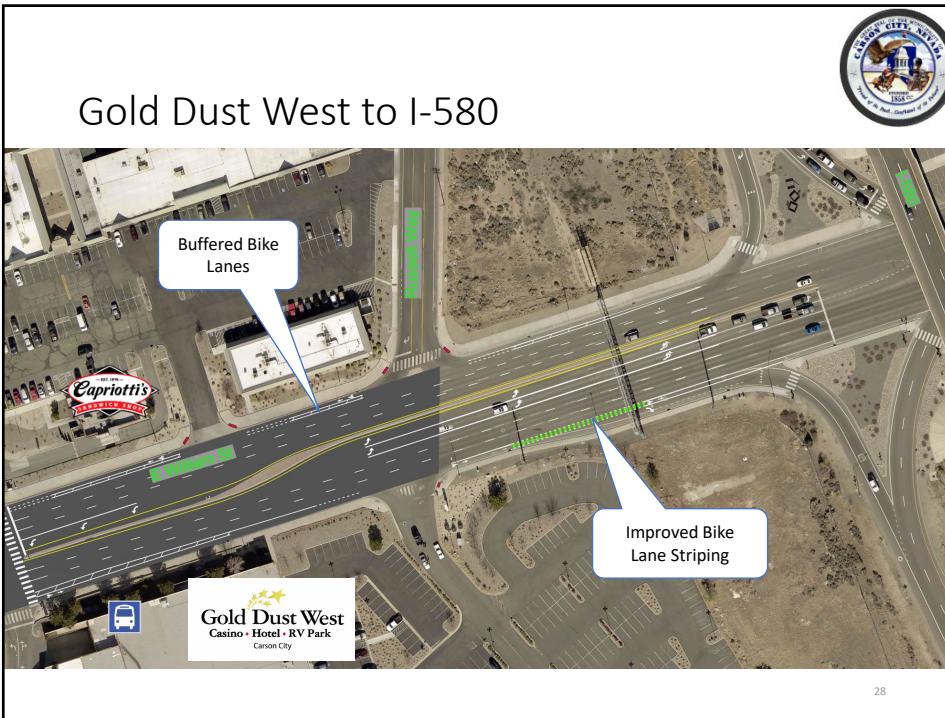
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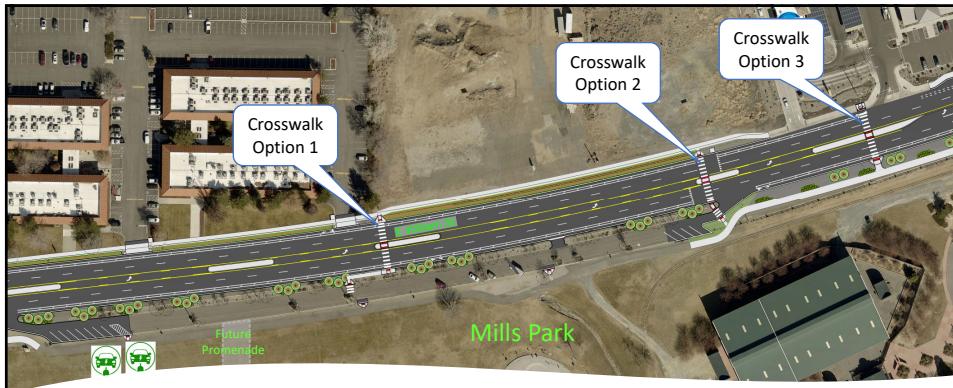
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## Public Meeting Recap

- Roughly 45 people attended
- Comments Included Consideration Towards:
  - Lane Widths
  - Speed Limits
  - Bike and Vehicle Accommodations
  - Accessibility
  - Roundabouts and Pedestrian Bridges
  - Medians
  - Access to Businesses (during and after construction)

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### Pedestrian Crossing at Mills Park

- Staff is recommending location 2
- Accommodates current use and future development
- Provides simpler route than location 3
- Does not end in the parking lot but is adjacent to it
- Provides good separation from the traffic signals at Saliman and Roop

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## Next Steps

- Design Milestones:
  - Summer 2023 – Final design
  - Construction – Start in early 2024
- Project Delivery
  - Complete Environmental Review
  - Obtain Easements
  - Obtain grant agreement with FHWA
  - Coordination with property owners and businesses
- Future Board/Committee updates (RACC, RTC, BOS):
  - Present at 90% project stage
- Future Community Meeting:
  - Construction Impacts Meeting

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## Project Communication Tools



**www.CarsonProud.com**

**Text "Carson Proud" to (775) 522-5722**

Darren Anderson, PE  
 Senior Project Manager  
[danderson@carson.org](mailto:danderson@carson.org)  
 775-283-7584



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## STAFF REPORT

**Report To:** The Carson City Regional Transportation Commission (RTC)

**Meeting Date:** March 8, 2023

**Staff Contact:** Chris Martinovich, Transportation Manager

**Agenda Title: For Possible Action** – Discussion and possible action regarding the Carson City Transit Center Feasibility Study (“Study”) for Jump Around Carson’s (“JAC”) bus service and the identification of a recommended location allowing for design of the JAC Transit Center (“Project”).

**Staff Summary:** The JAC bus system currently uses a centralized transfer hub on N. Plaza Street between Washington Street and Robinson Street in Downtown Carson City. The transfer hub allows riders to transfer between JAC routes and other regional and statewide bus transit providers. The Study evaluates several potential transit center locations, identifies long-term cost and funding needs, and provides additional planning background to assist with future grant applications to fund the Project. The Study also identifies a recommended location for the Project, allowing it to advance to design. Staff will present the Study results.

**Agenda Action:** Formal Action/Motion

**Time Requested:** 10 Minutes

---

### **Proposed Motion**

I move to approve finalization of the Carson City Transit Center Feasibility Study including proceeding with design of the recommended location, as discussed.

### **Previous Action**

July 14, 2021 (Item 5B) – The Carson City Regional Transportation Commission (“RTC”) approved Contract No. 20300333 with LSC Transportation Consultants, Inc. (“LSC”) to provide a preliminary feasibility study for the Project.

March 10, 2021 (Item 6D) – RTC authorized staff to conduct a preliminary feasibility study for the Project.

### **Background/Issues & Analysis**

LSC has completed the draft Study for the Project. The Study identifies existing deficiencies of the transfer center located on N. Plaza Street, and it outlines current and future needs for JAC’s service. The Study also explores expansion and possible relocation of the transit center by analyzing six potential locations. Following completion of the analysis, input from the public and JAC riders, and coordination with JAC staff, LSC is recommending enhancement of the existing transfer center location on N. Plaza Street as the future site of the Project.

The need for the Project was first identified in the JAC Transit Development and Coordinated Human Service Plan (“Plan”) to address current deficiencies with JAC’s existing transfer station. The deficiencies are noted

in Chapter 8 *Capital Alternatives* of the Plan. The material excerpt from the Plan is included as supporting material for this item, and the complete Plan is available here:

<https://www.carson.org/home/showpublisheddocument?id=68984>

The Project is supported by the Carson Area Metropolitan Planning Organization's ("CAMPO") 2050 Regional Transportation Plan ("2050 RTP"), which identifies the transit center as a short-term (2020-2030) unfunded project. This 2050 RTP can be found here:

<https://www.carson.org/home/showpublisheddocument/74094/637462257582430000>

The Project is also identified in the CAMPO Federal Fiscal Year 2023-2026 Transportation Improvement Program found here: <https://www.carson.org/home/showpublisheddocument/84038/638120678190430000>

Following RTC input on the draft Study, Staff will coordinate with LSC to finalize the Study. Staff will also begin the procurement of a consultant for the design and environmental clearance of the Project. Design is anticipated to take approximately 18 months. Construction is anticipated to begin in 2025.

#### **Applicable Statute, Code, Policy, Rule or Regulation**

N/A

#### **Financial Information**

Is there a fiscal impact?  Yes  No

If yes, account name/number:

Is it currently budgeted?  Yes  No

Explanation of Fiscal Impact:

#### **Alternatives**

N/A

#### **Supporting Material**

- Exhibit-1: Draft, Carson City JAC Transit Center Feasibility Study
- Exhibit-2: Transit Center Presentation
- Exhibit-3: Excerpt from JAC Transit Development and Coordinated Human Service Plan

#### **Board Action Taken:**

Motion: \_\_\_\_\_ 1) \_\_\_\_\_ Aye/Nay  
2) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Vote Recorded By)



# Carson City JAC Transit Center Study

*Draft Report*

*February 21, 2023*



*Prepared for the*  
**Carson City Department of Public Works**



*Prepared by LSC Transportation Consultants*



# **Carson City JAC Transit Center Study**

## **Draft Report**

*Prepared for*

**Carson City Department of Public Works**

*Prepared by*

**LSC Transportation Consultants, Inc.**

P.O. Box 5875  
2690 Lake Forest Road, Suite C  
Tahoe City, California, 96145  
530 583-4053

February 21, 2023

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## Chapter 1

# INTRODUCTION

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Public transportation is an important service in and around Carson City. Transit services provide mobility to residents, including access to important educational, medical, recreational, social, and economic services. In addition to being important to residential quality of life in Carson City and beyond, public transit services assist in supporting educational programs, public and private employers and social service programs throughout the region.

In an effort to better serve Carson City, the City commissioned LSC Transportation Consultants to conduct the following study to explore the possible relocation and/or expansion of the existing transit center (the Downtown Transfer Plaza) along the east side of Plaza Street south of Washington Street to better serve existing passengers as well as to accommodate future transit service growth. This facility would serve as the hub for the Jump Around Transit (JAC) public transit service, as well as the key downtown Carson City stop for other regional transit services such as Washoe RTC Regional Connector service to Reno, Tahoe Transportation District service to Minden/Gardnerville, and Eastern Sierra Transit Authority service to Bishop and Reno.

This document first presents a review of the existing transit center followed by a summary of other plans regarding the transit service and the downtown area. Future transit center needs are then evaluated, including input from transit staff. An initial set of potential sites are described and assessed followed by a summary of public outreach efforts, including an on-site popup workshop and public survey. A focused set of three sites is then evaluated. Based on this detailed analysis, recommendations are presented towards a preferred site.

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## Chapter 2

# EXISTING CONDITIONS

---

### EXISTING DOWNTOWN TRANSFER PLAZA

The current transit hub of the JAC fixed route system is the Downtown Transfer Plaza. This limited facility consists of the curb along the eastern side of N. Plaza Street between E. Robinson Street and E. Washington Street, as well as a portion of the curb on eastbound E. Washington Street just east of Plaza Street and a portion of the curb on westbound Robinson Street just east of Plaza Street. This site is adjacent to the Federal Building, which encompasses the entire block. There is a total of 260 feet of curb length available for buses along Plaza Street, excluding a driveway to a parking lot. This is sufficient to accommodate up to six vehicles at one time. At present, up to four JAC buses are at the Plaza at peak times (at 30 minutes past each hour). Up to approximately 40 passengers can be waiting for buses at peak times.

Beyond the curbside bus loading locations, this facility consists of a 14-foot-wide sidewalk (sufficient for wheelchair loading and unloading), along with an 8-foot-long shelter at the south end and a 20-foot-long shelter at the north end. There are three 6-foot benches and a bike rack.

#### Existing Site Conditions: Strengths and Weaknesses

The current transit center location has both benefits and challenges. The current transit center provides a reasonably convenient location with regards to downtown activity centers as well as efficient bus movements into and out of the site. It is also well located within the fixed route system. However, there are numerous challenges to the existing transit plaza, including the following:

- It lacks restroom facilities for drivers. Drivers currently have to depart their buses (requiring all passengers to disembark) and go into the Carson Nugget to use their restrooms (on a "gratis" basis). This additional walk time can add roughly five minutes to the layover time at the transit plaza and can add to service delays.
- It provides insufficient protection from the elements. In particular, the west facing shelters lack adequate seating capacity for peak waiting loads, provide little to no shade in the late afternoon on hot summer days, and deliver scant protection from wind-driven rain and snow.
- Because of the limited seating and shade opportunities, passengers are tempted to wander into the landscaping areas of the Federal Building, potentially causing damage.
- Lighting is limited to two streetlights and low lighting in the shelters. As a result, passengers are often boarding and alighting in dark locations, adding to safety concerns.
- Walks of up to 400 feet are required between Intercity and JAC buses, inconveniencing passengers and increasing the delays as passengers transfer between services.

## RECENT PLANNING DOCUMENTS

### JAC Transit Development and Coordinated Human Services Plan (2019)

The Carson City Regional Transportation Commission (RTC), using funding through the Nevada Department of Transportation (NDOT) and the Carson Area Metropolitan Planning Organization (CAMPO), retained LSC Transportation Consultants, Inc. to prepare a Transit Development and Coordinated Human Services Plan (TDCHSP) for the Jump-Around-Carson (JAC) public transit program and the CAMPO service area in 2019. This planning process provided an opportunity to develop integrated short- and long-range recommended alternatives for the JAC public transit program while meeting the needs of the region's human services organizations by promoting coordination amongst agencies.

As a long-term capital investment, the plan stressed the importance for a transit center that would be able to accommodate the needs of the transit program for at least the next twenty years. The following describes design elements and site consideration the plan recommended for consideration.

#### *Design Elements*

Specific design elements that should be considered in the redesign of the future transit center should include the following:

- Bus Loading Area: The facility needs to accommodate up to four JAC fixed route buses as well as a Washoe Intercity bus or a TTD bus. The space should also accommodate a downtown microtransit shuttle vehicle. Lighting should be provided for all loading areas.
- Passenger Facilities: A climate controlled indoor waiting area should be provided with a minimum floor area of 600 square feet (such as 15' X 40'). This waiting area should have clear lines of sight for security purposes, as well as a clear view of approaching buses. Public restrooms are not necessary so long as public restrooms are available within a block walk. In addition, outdoor shaded passenger waiting areas should be provided with benches, totaling approximately 1,500 square feet in area.
- Bicycle racks or other bicycle parking should be provided.
- Driver Facilities: As the key facility for the transit drivers, restroom facilities should be provided. In addition, a separate entrance (with key card access) should be provided to a portion of the space that includes a driver break room as well as the restrooms.
- Improved Passenger Information: "Real time" information screens should be provided in the facility that provides information on schedules, service interruptions and public notices.
- A small utility space (approximately 160 square feet) should be provided for custodial storage.

### *Site Location Considerations*

The following are key elements in considering the location of a transit center. These key elements were considered in the creation of the potential site criteria evaluated in Chapter 5.

- Adequate size to accommodate the transit program.
- Proximity to the center of the local transit service area, to minimize out-of-direction travel time and costs. Given the many times per day that transit vehicles travel to and from the site, even an additional distance of a few blocks can add thousands of dollars to the annual operating costs.
- Convenient access for regional transit routes that minimize out-of-direction travel.
- Adequate access, thus avoiding excessive delays for transit routes.
- Convenience to major trip destinations. As the single location most accessible by public transit, it benefits the overall effectiveness of transit services if there is a concentration of transit trip generators (shopping, community facilities, public offices, etc.) within a convenient walk distance of the transit center.
- High visibility that enhances the community's awareness of transit services.
- Personal security and safety. Locations in areas with a high crime reputation (deserved or not) should be avoided, and locations that have greater vehicle and pedestrian activity are preferable.
- Appropriate zoning and consistency with community plans.
- Availability of adequate utilities.
- Lack of known hazardous soils.

In addition to transit center facility study recommendation, the plan also suggested rerouting specific routes, improving various bus stops, and implementing a strong marketing plan.

## **JAC OPERATIONS AND RIDERSHIP**

### Fleet Inventory

As shown in Table 1, the JAC transit program has a total of 17 vehicles in the fleet, along with a staff car, including 5 designated for fixed route service, 5 used for paratransit service, and 7 which are used in either fixed route or demand responsive service. The demand response vehicles range from a seating capacity of 5 to 21 seats and one wheelchair position, although additional seats may be moved to accommodate up to three wheelchairs at a time. The fixed route vehicles range in capacity from 21 to 32 seats and have one or two wheelchair positions and a two-capacity bike rack. Vehicles are stored at 3770 Butti Way and maintained at fleet maintenance facility located at 3505 Butti Way.

**Table 1: JAC Fleet Inventory**

| Model Year | Vehicle # | Type         | Use   | Length |
|------------|-----------|--------------|-------|--------|
| 2008       | 2233      | JAC Explorer | Staff | --     |
| 2012       | 4238      | JAC Bus      | Para  | 21'    |
| 2012       | 4239      | JAC Bus      | Para  | 21'    |
| 2015       | 4241      | JAC Bus      | Para  | 24'    |
| 2015       | 4242      | JAC Bus      | Para  | 24'    |
| 2016       | 4243      | JAC Bus      | Fixed | 35'    |
| 2016       | 4244      | JAC Bus      | Fixed | 35'    |
| 2016       | 4245      | JAC Bus      | Fixed | 35'    |
| 2019       | 4249      | JAC Bus      | Fixed | 34'    |
| 2019       | 4250      | JAC Bus      | Fixed | 34'    |
| 2020       | 4253      | JAC Van      | Para  | --     |
| 2020       | 4251      | JAC Bus      | P1/F  | 24'    |
| 2020       | 4252      | JAC Bus      | P1/F  | 24'    |
| 2022       | 4254      | JAC Bus      | P/F1  | 28'    |
| 2022       | 4255      | JAC Bus      | P/F1  | 28'    |
| 2022       | 4256      | JAC Bus      | P/F1  | 28'    |
| 2022       | 4257      | JAC Bus      | P/F1  | 28'    |
| 2022       | 4258      | JAC Bus      | P/F1  | 28'    |

*Source: Carson City Department of Public Works, 2023*

### Historical Annual Ridership

Overall JAC ridership along fixed routes has varied over the past five years with pre-COVID levels resulting in a decrease in ridership by 11 percent (Table 2). The route that has experienced the great decline in recent years has been Route 3 with a five-year decrease in ridership by 23 percent. Over the pre-COVID fiscal years of 2017-18 and 2018-19 overall ridership declined by 10 percent, with the greatest decrease in ridership occurring along Route 3 (a drop of 14 percent). With all this in mind, ridership was expected to rise again with the implementation of new route alternatives and service areas, however COVID-19 has impacted transit system ridership across the nation, including Carson City. In determining the needed capacity of a future transit center, this study considers ridership pre-COVID as it is anticipated to return to that ridership level in the future.

**Table 2: JAC Transit Fixed Route Annual Ridership**

| JAC Route | Fiscal Years |         |         |         |         | Pre-Covid Trends |       |
|-----------|--------------|---------|---------|---------|---------|------------------|-------|
|           | 2014-15      | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 5 Yrs            | 2 Yrs |
| Route 1   | 54,213       | 54,092  | 50,840  | 53,453  | 48,095  | -11%             | -10%  |
| Route 2A  | 43,657       | 44,360  | 42,318  | 45,587  | 41,243  | -6%              | -10%  |
| Route 2B  | 39,117       | 36,947  | 37,062  | 42,451  | 39,680  | 1%               | -7%   |
| Route 3   | 59,790       | 56,223  | 47,986  | 53,636  | 46,166  | -23%             | -14%  |
| WNC       | 264          | 228     | 224     | 33      | --      | --               | --    |
| Total     | 197,041      | 191,850 | 178,430 | 195,160 | 175,184 | -11%             | -10%  |

*Source: Ridership by Route Data, Carson City Public Works Department, Received March 15, 2019*

## Pre-COVID Ridership by Route

Weekly ridership along each route is depicted in Table 3. As shown, weekday ridership is greatest on Route 1, with 185 passengers per day, followed by Route 3 with 180 passengers per day. The average daily weekday ridership along all routes is 665 passengers per day. The average ridership on Saturdays is 108 passengers along Route 1, followed by 92 passengers along Route 2A. The total ridership along all routes is 345 passengers on Saturdays.

**Table 3: Average Daily Ridership**

|          | Route 1 | Route 2A | Route 2B | Route 3 | Total |
|----------|---------|----------|----------|---------|-------|
| Weekday  | 185     | 155      | 144      | 180     | 665   |
| Saturday | 108     | 92       | 81       | 64      | 345   |

*Source: Ecolane JAC Ridership data provided March, 2019*

Hourly ridership illustrates how many passengers will possibly need to use the transit center at one time. As depicted in Table 4 and Figures 1 and 2, hourly ridership peaks around noon with 86 passengers, followed by 8:00 AM with 67 passengers. On Saturdays the peak is 63 passengers around 3:00 PM. Note that many passengers stay on the bus while at the transit center.

Based on this data, it is estimated that approximately 360 passengers passed through the existing transit center over the course of an average weekday prior to the pandemic. Of these, approximately 240 transfer between buses and an additional 120 passengers ride through without changing buses.

## **TRANSIT CENTER BENEFITS TO RIDERSHIP**

The professional literature regarding the ridership increase generated by new transit facilities is limited. This is in large part because service enhancements are typically implemented along with a new center, making it difficult to define the ridership benefit specifically resulting from the new facility. Bus Rapid Transit planning guides<sup>1</sup> indicate anecdotal evidence ranging from a negligible impact up to a 10 percent increase. Given the importance of a central transit center to the JAC transit system and as a stop to serve the surrounding region (through other regional services), a modest (4 percent) increase in ridership on the routes serving the new potential transit center can be applied. Based on pre-COVID ridership (FY 2018-19), this would be equal to an additional 7,000 passenger-trips per year.

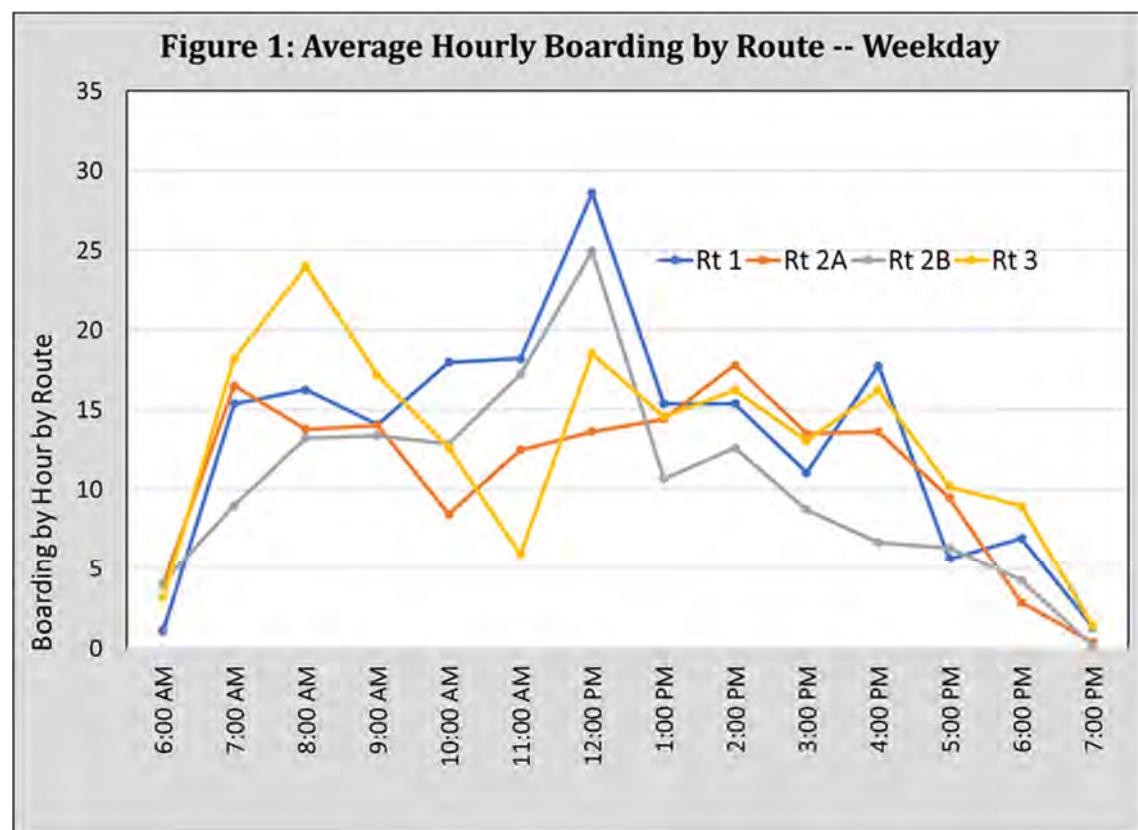
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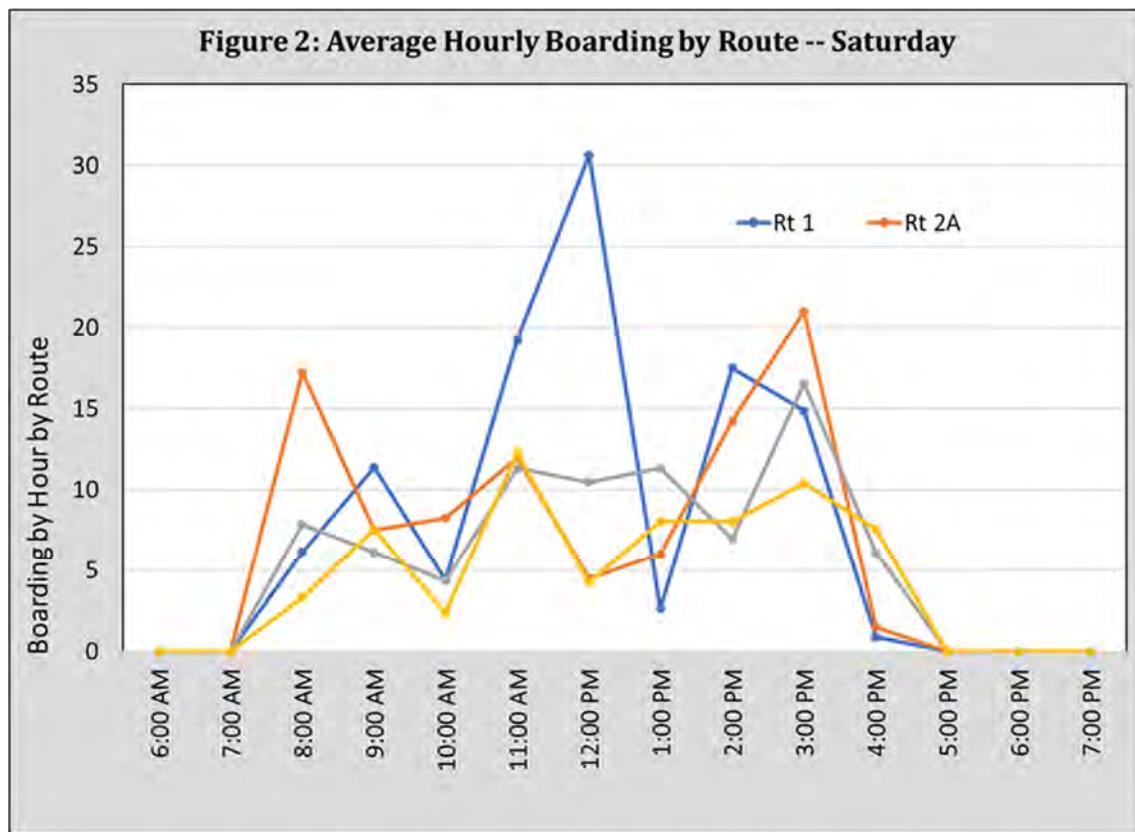
<sup>1</sup> Such as the Transit Cooperative Research Program Report 90: Bus Rapid Transit, 2003.

**Table 4: JAC Fixed Route Ridership by Hour of Day**

| Hour<br>Beginning | Average Weekday |       |       |      |       | Average Saturday |       |       |      |       |
|-------------------|-----------------|-------|-------|------|-------|------------------|-------|-------|------|-------|
|                   | Rt 1            | Rt 2A | Rt 2B | Rt 3 | Total | Rt 1             | Rt 2A | Rt 2B | Rt 3 | Total |
| 6:00 AM           | 1               | 4     | 4     | 3    | 12    | --               | --    | --    | --   | --    |
| 7:00 AM           | 15              | 17    | 9     | 18   | 59    | --               | --    | --    | --   | --    |
| 8:00 AM           | 16              | 14    | 13    | 24   | 67    | 6                | 17    | 8     | 3    | 35    |
| 9:00 AM           | 14              | 14    | 13    | 17   | 59    | 11               | 7     | 6     | 8    | 33    |
| 10:00 AM          | 18              | 8     | 13    | 13   | 52    | 4                | 8     | 4     | 2    | 19    |
| 11:00 AM          | 18              | 12    | 17    | 6    | 54    | 19               | 12    | 11    | 12   | 55    |
| 12:00 PM          | 29              | 14    | 25    | 19   | 86    | 31               | 4     | 10    | 4    | 50    |
| 1:00 PM           | 15              | 14    | 11    | 15   | 55    | 3                | 6     | 11    | 8    | 28    |
| 2:00 PM           | 15              | 18    | 13    | 16   | 62    | 18               | 14    | 7     | 8    | 47    |
| 3:00 PM           | 11              | 14    | 9     | 13   | 46    | 15               | 21    | 17    | 10   | 63    |
| 4:00 PM           | 18              | 14    | 7     | 16   | 54    | 1                | 1     | 6     | 8    | 16    |
| 5:00 PM           | 6               | 9     | 6     | 10   | 32    | --               | --    | --    | --   | --    |
| 6:00 PM           | 7               | 3     | 4     | 9    | 23    | --               | --    | --    | --   | --    |
| 7:00 PM           | 1               | 0     | 0     | 1    | 3     | --               | --    | --    | --   | --    |
| TOTAL             | 185             | 155   | 144   | 180  | 665   | 108              | 92    | 81    | 64   | 345   |

Source: Ecolane data. Totals for March 2019, factored by hourly ridership proportions for Sept and Oct 2017.





## REGIONAL TRANSIT SERVICES

Regional transit services are essential for transit dependent community members needing to get to medical appointments, job opportunities, and social services. The transit plaza currently facilitates the connection of three regional routes, as described in further detail below.

### Tahoe Transportation District (TTD) Service

The TTD operates Route 19X (Lake and Valley Express Service) connecting Carson City with Gardnerville, along with Route 22 that provides service between Gardnerville and South Lake Tahoe. The Tahoe Transportation District Route 19X serves a stop on the south side of E. Washington Street east of N. Plaza Street. This stop is served five times a day but not at the same time as JAC. Both routes provide daily connections between the South Shore area of Lake Tahoe and the Carson Valley. Route 19X offers service from 7:00 AM until 7:40 PM. This route begins in Gardnerville, Nevada at the Douglas County Community and Senior Center located at 1329 Waterloo Lane and continues north along the US 395 corridor through Minden, Nevada.

The northbound route ends at the Downtown Transfer Plaza in Carson City, where it turns around before heading south for the return trip of this bi-directional route through Carson Valley. Transfers to Route 22 at the Douglas County Community and Senior Center provide access to Stateline, Nevada in the Tahoe Basin. Northbound buses arrive at the Downtown Transfer Plaza at 7:40 AM, 9:40 AM, 4:10 PM,

6:10 PM and 7:40 PM, while southbound departures are provided at 6:15 AM, 7:45 AM, 9:45 AM, 4:15 PM and 6:15 PM.

### Washoe Regional Transportation Commission (RTC) Regional Connector Service

The Washoe RTC Regional Connector service consists of commuter transportation between Reno and Carson City between 5:47 AM and 6:37 PM. The route serves five stops in total, including three in Reno (4th Street Station, Meadowood Mall, and the Wal-Mart at Damonte Ranch) and two in Carson City (including the Downtown Transfer Plaza and the southern terminus at the NDOT offices on Little Lane). Southbound, six runs per day are operated, arriving in Carson City at 6:35 AM, 7:05 AM, 7:35 AM, 3:59 PM, 4:59 PM and 6:24 PM. Northbound, runs depart Carson City at 6:50 AM, 7:20 AM, 7:50 AM, 4:17 PM, 5:17 PM and 6:42 PM.

The RTC Regional Connector service provides connections to both JAC and TTD services. Transfers to the JAC service can be made in Carson City at the Downtown Transfer Plaza. TTD passengers on most runs will need to first transfer to JAC before transferring to RTC Intercity.

### Eastern Sierra Transit Authority (ESTA) Service

ESTA currently operates their Hwy 395 routes running between Reno, Nevada and Lancaster, California. The 395 North Route leaves Lone Pine at 6:10 AM and arrives in Carson City at 11:17 AM, making a stop Walmart in northern Carson City on to Reno and Sparks (it does not serve a stop in the downtown area). Southbound, this route departs Reno at 1:30 PM, stopping at Walmart in Carson City at 2:15 PM. This route runs Monday through Friday and does not operate during federal holidays. As a part of their Short Range Transit Plan, consideration is being given to providing service seven days a week.

## **EXISTING ZONING ORDINANCES AND ALLOWABLE LAND USES**

The Carson City Downtown Mixed-Use Consolidated Development Code established a form-based zoning code for the area. It is designed to accommodate a variety of uses based on how they relate to one another. The Downtown Mixed Use (DT-MU) areas established in downtown Carson City include the following sub areas:

- Main Street Mixed-Use: Provides opportunities for infill and redevelopment, while retaining the traditional “Main Street” character and scale of Carson Street. To support this objective, building heights will be limited along the Carson Street frontage and adjacent to the State Capitol Complex and other historic structures, but will be permitted to “step up” away from the street – providing for a broader range of development opportunities. Active uses, such as retail shops and restaurants, as well as urban residential units, are desired throughout the character area to promote a lively street environment and expanded hours of activity.

- Urban Mixed-Use: Provides for urban-intensity mixed-use development in areas of Downtown that contain larger tracts of vacant or underutilized land. It is intended to provide opportunities for concentrations of active uses such as convention space, casinos, hotels, urban residential or similar uses which typically have more intensive land requirements than could be readily accommodated in other areas of Downtown. To support these objectives, building heights in this area are permitted to be higher than in other character areas within Downtown, provided appropriate transitions are provided to the more modest scale of development found along Carson Street, the surrounding neighborhoods, and the State Capitol Complex.
- Neighborhood Transition: Provides a more gradual transition between the more urban patterns of development desired in other locations within Downtown and the surrounding residential neighborhoods. To support this objective, building heights are much more restrictive than in other character areas and are required to “step down” towards the surrounding neighborhood and building design becomes less blocky and urban and more residential in character. Uses in this area will tend to be primarily a mix of office and residential, however, a broad range of uses is permitted provided the design of the uses is compatible with the established character of the area.

Each of these districts permit a “Transit Passenger Facility” as an allowed, primary permitted use.

### Land Use Compatibility Analysis

Sites 2 through 5 are within 400 feet of the existing Transfer Plaza. The area is characterized by commercial businesses, government offices, and large surface parking lots. When considering equity to the area, these sites are not expected to result in any new or increased impacts to the area due to the potential sites being such a short distance to the existing site with no adjacent sensitive land uses. Site 6 however is within 100 feet of a residential neighborhood boundary. For this reason, the use of Site 6 may generate inequitable impacts to adjacent residents.

### **STAFF INTERVIEWS**

A series of questions were distributed in the form of a paper survey to drivers during a safety meeting conducted during September. Questions ranged from types of preferred amenities to how many passengers are typically observed at any given time at the existing transit center. The four completed surveys are included under Appendix A and the results summarized below.

Question 1: What are some pros and cons about the existing location along Plaza Street by the Federal Building?

- Pros included the following:
  - Wide parking area to pull in and out from.
  - Central location in town.
  - Close proximity to casinos.
- Cons included the following:
  - Fire hydrant location is too close to curb.
  - No food or beverage options.
  - Lack of designated bus bays.
  - No restrooms.

Question 2: As a driver, what should site planners consider when evaluating a site for a transit center (access, circulation, etc.)

- Need for restrooms.
- Parking provision.
- Shelter orientation that blocks weather.
- Marked bus bays for each bus.
- Accessible pedestrian walkways.

Question 3: What are some transit center features you would like to see included in the new location?

- Of the amenities listed in the survey, security cameras and lighting and restrooms for drivers ranked as the most desirable amenities.
- Public restrooms, additional seating, and a small office space ranked lowest.

Question 4: What is the greatest number of people you have seen waiting at the current Plaza Street stop?

- Two drivers mentioned that they typically observe between 10 to 20 people waiting at one time while the other two noted 20 to 30 and 30 to 40 people at one time.

Question 5: Is there anything else you would like to share regarding the evaluation of a future transit center?

- Only two drivers replied to this question. One mentioned that the transit center should be driver friendly with a one-way in and out for bus traffic only. The other asked what the future size and make of JAC vehicles would be.

Overall, it appeared that there is a need for driver restrooms. They also had input on the existing location needing some improvements regarding improving passenger shelter, security and the location of the fire hydrant if this site was to remain the Downtown Transfer Plaza.

## Chapter 3

# TRANSIT CENTER PROGRAM NEEDS AND POTENTIAL SITES

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A development program for the transit center has been prepared, based on the following:

- Discussions with City and JAC staff, as well as the driver surveys.
- Evaluation of the existing and recent (pre-pandemic) service and ridership data.
- Review of forecasts for transit service and for growth in the Carson City area.
- Review of transit centers that have proven effective and efficient in similar-sized communities and transit systems with a hub route design.

The following have been indicated as desired and needed for a future transit center to accommodate service and ridership growth. A summary of these perceived needs, as well as their estimated space requirements, is shown in Table 5. The following describes what will be included in the new transit center:

- A small climate-controlled building with the following features:
  - Indoor and outdoor passenger waiting areas. “Indoor” areas may consist of a large shelter or shelters with heating elements.
  - Two public restrooms and one staff restroom.
  - One small office space for JAC staff, including a public counter area that can be locked.
  - Real-time public information, including a screen showing mapped location of buses and a departures screen.
  - Vending machines for snacks/drinks.
  - Closet for janitorial supplies, with space for electronics.

In total, this building should be approximately 1,460 square feet in floor area to accommodate long-term demand.

- Vehicle bays as follows:
  - Four bus bays accommodating 35' buses for current service, with a potential of two additional bays for future growth.
  - One bus bay accommodating a 40' Intercity (RTC, TTD, ESTA) bus.
  - One parking space for JAC Assist vehicle (25') that could also be used for crew van or supervisor vehicle.
  - Optimally, 1 space (at center or nearby) to stage one additional JAC bus in order to swap buses over the course of the day.
  - 8 bus bays should be provided for long term needs, if possible.

- Bike parking for up to 10 bikes. Should be covered and provide locking capability. No need for bike lockers.
- Security improvements (lighting and cameras).
- Optimally, some park-and-ride auto spaces would be provided as part of the facility, or nearby. This would be for intercity (Regional Connector or TTD) service, as there is no demand for JAC park-and-ride parking. Typical park-and-ride patterns for intercity service are that passengers tend to use the last stop served in a community rather than in the center of a community, which reduces the need for park-and-ride spaces in downtown Carson City.

**Table 5: JAC Transit Facility Space Requirements**

| Program Element                                   | Standard | Sq.Ft. per Unit |           | # of Units   |               | Square Feet of Floor Area |           |  |
|---|----------|-----------------|-----------|--------------|---------------|---------------------------|-----------|--|
|   |          | Near Term       | Long Term | Near Term    | Long Term     | Near Term                 | Long Term |  |
|   |          | Standard        | Long Term | Standard     | Long Term     | Standard                  | Long Term |  |
| <b>Office Space</b>                               |          |                 |           |              |               |                           |           |  |
| Office Space/Counter                              | 250      | 1               | 1         | 250          | 250           | 250                       | 250       |  |
| <i>Subtotal: Administrative Space</i>             |          |                 |           | 250          | 250           |                           |           |  |
| <b>Building Support Space</b>                     |          |                 |           |              |               |                           |           |  |
| Restrooms (2 Public, 1 Staff)                     | 150      | 3               | -         | 450          | 450           |                           |           |  |
| Janitor Closet                                    | 36       | 1               | -         | 36           | 36            |                           |           |  |
| Utility space (electronics, water heater)         | 120      | 1               | -         | 120          | 120           |                           |           |  |
| <i>Subtotal: Building Support Space</i>           |          |                 |           | 606          | 606           |                           |           |  |
| <b>Indoor Passenger Waiting Area</b>              |          |                 |           |              |               |                           |           |  |
| Standing  | 10       | 15              | 20        | 150          | 200           |                           |           |  |
| Sitting   | 20       | 15              | 20        | 300          | 400           |                           |           |  |
| <i>Subtotal Waiting Area</i>                      |          |                 |           | 450          | 600           |                           |           |  |
| <i>Subtotal Building Footprint</i>                |          |                 |           |              |               | 1,306                     | 1,456     |  |
| <b>Landscape/Plaza Area</b>                       |          |                 |           |              |               |                           |           |  |
| Outdoor waiting area (benches)                    |          |                 |           | 600          | 600           |                           |           |  |
| Pedestrian Circulation                            |          |                 |           | 1,600        | 1,600         |                           |           |  |
| Bicycle Racks                                     | 19       | 3               | 5         | 57           | 95            |                           |           |  |
| <i>Subtotal Plaza Area</i>                        |          |                 |           | 2,200        | 2,200         |                           |           |  |
| <i>Landscaping Area (25 percent of Plaza)</i>     |          |                 |           | 550          | 550           |                           |           |  |
| <i>Total Landscape/Plaza Area</i>                 |          |                 |           | 2,750        | 2,750         |                           |           |  |
| Total Building Footprint and Landscape/Plaza Area |          |                 |           | 4,056        | 4,206         |                           |           |  |
| <b>Bus Bays (35' - 40')</b>                       | 800      | 5               | 8         | 4,000        | 6,400         |                           |           |  |
| <b>JAC Assist/Operational Parking</b>             | 360      | 1               | 2         | 360          | 720           |                           |           |  |
| <b>Total Site Development Program</b>             |          |                 |           | <b>8,416</b> | <b>11,326</b> |                           |           |  |
|   |          |                 |           |              |               |                           |           |  |

According to the *Transit Capacity and Quality of Service Manual*, 3<sup>rd</sup> Edition (TCRP, 2017) (p 4-4) 7 to 10 square feet per standing waiting passenger is recommended for a transit facility. Sitting passengers require approximately 20 square feet per passenger. Assuming that half are standing and half are sitting (as the “pulse” nature of the JAC system means than many passengers wait only a few minutes), this indicates that the provision of between 450 and 600 square feet of waiting area should be considered for a future transit center, preferably the higher figure. A similar area should be provided for outdoor waiting areas.

Including bus bays, parking areas, building area and landscaping areas, as shown in Table 5 the space that is selected would ideally require between 8,400 and 11,300 square feet total to accommodate near term and future growth.

## POTENTIAL LOCATIONS

In discussion with City and JAC staff, a total of six potential locations for a future transit center were identified. These sites are described in further detail below and shown in Figure 3. A more in-depth page summary of each site is also included under Appendix B. In addition, for the purpose of this study, strengths and weaknesses of each site are discussed, focusing on the availability of the site, impact on transit/traffic opportunities, impact on access to nearby transit destinations, constructability factors such as onsite utilities, and impacts on downtown parking spaces.

### Site 1 – Downtown Transfer Plaza

This is the existing site located west adjacent to the Federal Building on the east side of Plaza Street between Robinson Street and Washington Street. It consists of approximately 200 feet of curb length and is sufficient enough to accommodate up to six vehicles at one time. At present, up to four JAC buses are at the Plaza at the peak times (at the bottom of the hour). In its current configuration, there is a limitation in its space to accommodate more than six vehicles at one time. There is also not sufficient space in the existing 14-foot-wide sidewalk to provide a building.

A potential option to develop a transit center at this site would be to convert N. Plaza Street to one way (northbound) between E. Robinson Street and E. Washington Street. With 54 feet between the existing west curb face and the eastern back of sidewalk and elimination of on-street parking on the west side of the street, sufficient width would be available to provide a single northbound travel lane as well as space for a building site (with pedestrian circulation) and bus bays to the north and/or south.

- Strengths: Familiarity and functionality at current service levels. High visibility along Washington Street.
- Weaknesses: The current property owners and employees of the federally-owned parcel do not like the loitering that occurs on site. There is also a lack of existing space to expand and include any amenities for drivers and passengers such as restrooms or weatherproof shelter. However, removal of on-street parking on the west side of Plaza Street and/or conversion to one-way

northbound operation could provide the footprint needed for a facility building. As the lack of adequate shelter (such as from the sun) is a factor in waiting passengers entering the Federal Building site, improving the facility along with fencing could reduce the loitering issue. Traffic reconfiguration associated with one-way street conversion.

### Site 2 - V&T Train Station

The building originally constructed as the Virginia and Truckee Train Station is located along the south side of Washington Street just west of Plaza Street. Currently owned by the Masonic Lodge, it is an existing structure of approximately 6,000 square feet. The owner has indicated it is not interested in a sale or a joint use. As such, it is not considered further.

### Site 3 - Coin Lot

This site is located along the north side of Caroline Street and the west side of Plaza Street from Caroline Street south to Robinson Street. This is the northeast portion of the small block formed by Caroline Street, Plaza Street, Robinson Street and Carson Street and is currently the site of Carson City Coin (in the southwest corner) with the remainder consisting of a surface parking lot. The owner indicates that the existing parcel is not available. Setting aside the private lot, the use of existing public right-of-way was considered. Caroline Street could be converted to one-way eastbound operation, providing adequate width on the south side of the right-of-way for the transit center building (closing the eastern access point to the coin lot, but preserving the western access point).

One bus bay could be provided on the south side of Caroline Street between the western lot driveway and the building, and two bus bays could be provided on the west side of Plaza Street between Caroline Street and Robinson Street. However, other bus bays would need to be provided across Caroline Street along the west side of Plaza Street and on the east side of Plaza Street. This would require JAC passengers to cross streets while transferring between buses.

- Strengths: Location convenient to downtown land uses.
- Weaknesses: Traffic changes of one-way street conversion, including changes to parking lot access and impact to Shell station access. Requires passengers to cross travel lane while transferring between buses. Constrained space between surface parking and public streets would provide less potential for landscaping and less attractive environment.

Figure 3

JAC Transit Center Site Options



## Site 4 - Robinson Street

Under this site, the transit center would be located along the north side of Robinson Street between Stewart Street and Plaza Street, with some bus bays on the east side of Plaza Street just north of Robinson Street. This stretch has a wide (16 foot) existing sidewalk and is currently where the RTC Regional Connector serves passengers heading northbound to Reno. Given the traffic activity on Robinson Street, it is probably not feasible to convert it to one-way traffic. Expanding the area available for a transit center by narrowing the existing 32-foot wide street would therefore be limited to reducing Robinson Street to two 12-foot travel lanes (an additional 8 feet), yielding 24 feet total without using Federal Building land. Considering the need for an ADA-accessible sidewalk and the building floor area identified in Table 5, use of this site would require some land from the Federal Building parcel (such as the western 12 parking spaces in the southernmost row of perpendicular parking spaces).

- Strengths: The site is already being used by Washoe RTC Regional Connector and is likely a familiar location being less than a block from the existing transit center. It is also the most efficient in access by existing routes, though as mentioned above, these impacts are minor.
- Weaknesses: As Robinson Street is too busy to close or convert to a 1-way street, this site would require land from the Federal government, which may be very difficult to negotiate. It could also have many of the similar weaknesses the current transit center location experiences including lack of space for amenities and its location on federally owned parcel with negative employee opinions regarding the stop location.

## Site 5 - Spear St. West

This site consists of the westernmost block of Spear Street just east of the Carson Nugget (between Fall Street and Stewart Street. The existing-curb-to-curb width (34 feet) is not sufficient to provide a transit center building, and the owner of the adjacent parking lots to the north and south indicates that the private parcels are not available. However, the existing public right-of way is approximately 66 feet in width (north-south dimension) by 200 feet in length (east-west dimension). This is sufficient to accommodate a center island for the building, with an eastbound one-way bus lane to the north and a westbound one-way bus lane to the south, sufficient to accommodate up to 8 buses at peak time. As shown in Appendix B, at present, off-street parking spaces encroach on the right-of-way. Reconfiguring the lots to provide the transit center space would reduce the total number of spaces by approximately 17 (along with 14 on-street spaces). In addition, as there is not sufficient space for a bus passing lane, buses could be delayed if a bus in front does not depart in a timely manner (such as delays for securing a wheelchair passenger).

- Strengths: As this site is bound by surface parking lots and located at the end of Spear Street that terminates into a parking lot, there are no immediate adjacent land use incompatibility concerns. A center island layout would provide conveniently short walk distances between buses, and the building amenities would be close to all bus loading locations.

- Weaknesses: This site would require removing the existing encroachments (surface parking spaces) to the north and south, resulting in a 31-space reduction in total parking supply. Bus operations could be delayed as buses must depart in the same order they arrive. This location is also non-signalized and could cause issues with left-turns into the stations and with pedestrians crossing the area.

## Site 6 – Spear Street East

This would be located along the south side of Spear Street between Stewart Street and North Valley Street. It is currently adjacent to a surface parking lot. The owner of this lot has indicated that the lot (which consists of two parcels) is potentially available for a long-term ground lease. (Note that Federal transit funds are typically available for use on leased sites, so long as the lease term is at least 20 years). This site is approximately 172 feet in the east-west dimension and 85 feet in the north-south dimension. This is sufficient (along with the adjacent Spear Street travel lane) to allow buses to circulate past the individual bus bays.

- Strengths: Sufficient land to provide a central transit plaza allowing convenient walk distances between the bus bays, close proximity between the bays and the transit building, and independent operation of the individual bus bays.
- Weaknesses: This site is adjacent to residential uses to the east and south and lodging uses (including the Nugget Inn) to the north. It is a farther walk from destinations in the area, such as along Carson Street. Buses circulating east of the site could also impact residences.

## Other Sites Considered

Other sites were discussed, including the Library and Community Center, but each were found to be too far from the center of the route system and thus would be inefficient to serve. The Old V&T railyard site (N. side of Washington/E side of Stewart Street) was not viable due to possible contamination and lack of an overall master plan for the property.

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## Chapter 4

# PUBLIC OUTREACH

During the month of October 2021, LSC led a public outreach effort including a community-wide online survey and an on-site outreach event. The survey was advertised on Carson NOW and posted to Carson City municipality Facebook pages.

### ONLINE COMMUNITY SURVEY

#### Questions 1 – 6 – Getting to know our participants.

Questions 1 through 6 were asked to better understand who was taking our survey. As shown in Table 6, 39 percent of participants were between the age of 45 and 64 years old. Ages 25 to 44 years old (25 percent) and 65 to 74 years old (25 percent) made up the second most popular age groups participating in the survey.

**Table 6: Survey Summary of Questions 1, 2, 4, 5, and 6**

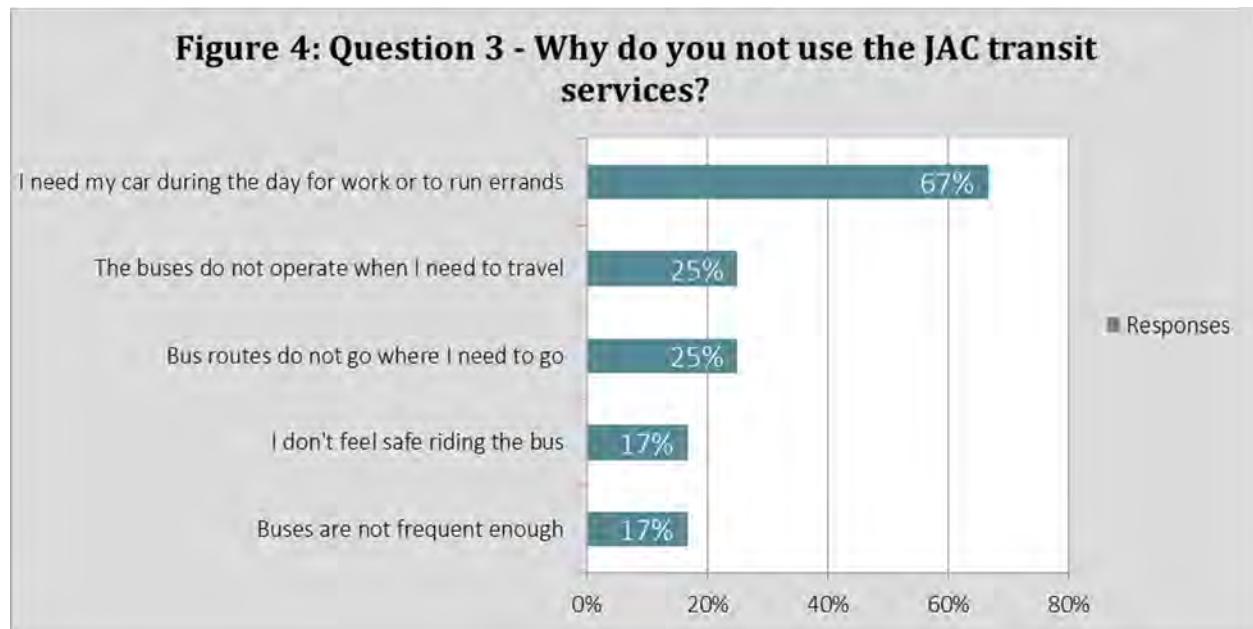
| Question   | Responses |       | Question  | Responses |       |
|--|-----------|-------|---|-----------|-------|
|  | #         | %     |   | #         | %     |
| Q1 What is your age?                               |           |       | Q5 When riding JAC, do you start your ride or transfer buses at the current transit center on Plaza Street near the Federal Building? |           |       |
| 17 years old or younger                            | 0         | 0.0%  | Yes   | 7         | 50.0% |
| 18 to 24 years old                                 | 1         | 3.6%  | No  | 7         | 50.0% |
| 25 to 44 years old                                 | 7         | 25.0% |   |           |       |
| 45 to 64 years old                                 | 11        | 39.3% | Q6 How do you typically get to or from the transit center?  |           |       |
| 65 to 74 years old                                 | 7         | 25.0% | I walk  | 2         | 25.0% |
| 75 years or older                                  | 2         | 7.1%  | I ride a bike   | 1         | 12.5% |
|  |           |       | I drive   | 0         | 0.0%  |
| Q2 Have you ever used JAC transit services before? |           |       | I get dropped off or picked up by a vehicle   | 0         | 0.0%  |
| Yes  | 15        | 53.6% | I transfer between buses  | 5         | 62.5% |
| No   | 13        | 46.4% |   |           |       |
| Q4 How often do you use JAC transit?               |           |       |   |           |       |
| 5 or more times per week                           | 4         | 26.7% |   |           |       |
| 1 to 4 times per week                              | 2         | 13.3% |   |           |       |
| 1 to 4 times per month                             | 1         | 6.7%  |   |           |       |
| Less than once a month                             | 3         | 20.0% |   |           |       |
| 1 to 2 times per year                              | 5         | 33.3% |   |           |       |

More than half (53.6 percent) of respondents had used JAC transit services before. Of these participants, 33.3 percent use JAC 1 to 2 times per year, followed by about 26.7 percent who use JAC 5 or more times per week. The number of participants who either start their ride at or transfer through the existing JAC transit center was 50 percent with 62.5 percent of these respondents getting to the transit center by transferring from another bus. Another 37.5 percent either walk or bike.

The survey asked participants why they don't use JAC transit services (Figure 4). Over half responded that they need their car during the day to work or run errands. Others indicated that the buses don't go where they need to go (25 percent) or that the bus doesn't operate when they need them (25 percent).

#### Question 7 – What do you like about the existing transit center?

Participants indicated that they like the general location of the existing transit center. Comments included that the transit center is within 5 blocks of their home and feels very centralized.



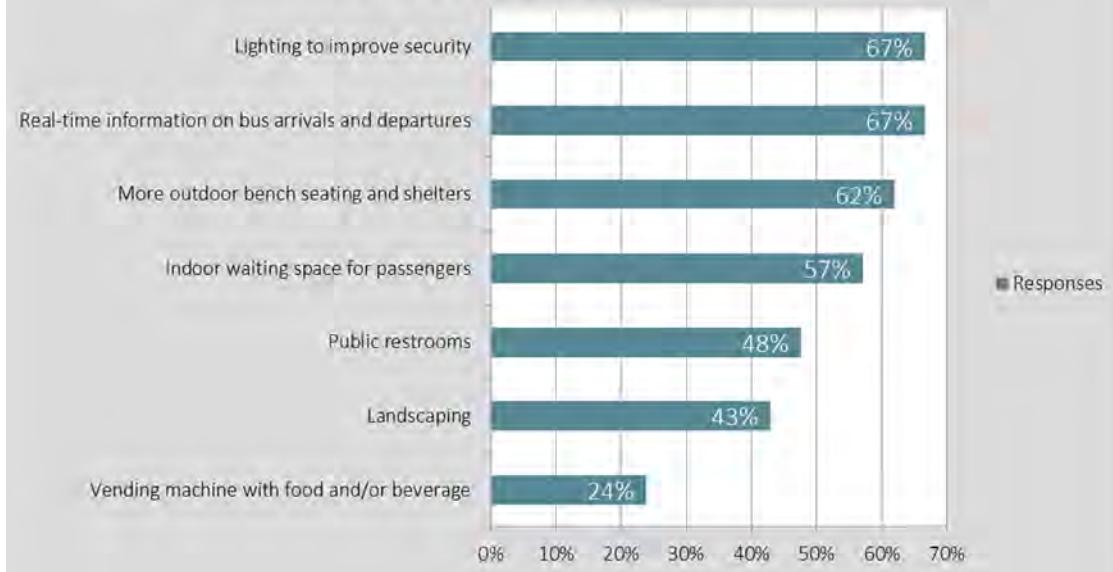
#### Question 8 - What do you not like about the existing transit center location?

Respondents indicated that the existing transit center doesn't feel safe due to lack of sufficient lighting and/or security. Others indicated that having no public amenities or restrooms is an issue for them. The lack of protection from seasonal weather was also disliked. One respondent indicated that they don't feel safe due to the homelessness population and loitering at the site.

#### Question 9 - What sorts of amenities would you like to see added to this location?

Participants were asked to select all amenities they would like to see at a new transit center. As shown in Figure 5, providing lighting to improve security (66.7 percent) and real-time information on bus arrivals and departures (66.7 percent) are the most desired amenities for transit center improvements. Adding more outdoor bench seating and shelters were also requested by 61.9 percent of participants, followed by indoor waiting space (57.1 percent).

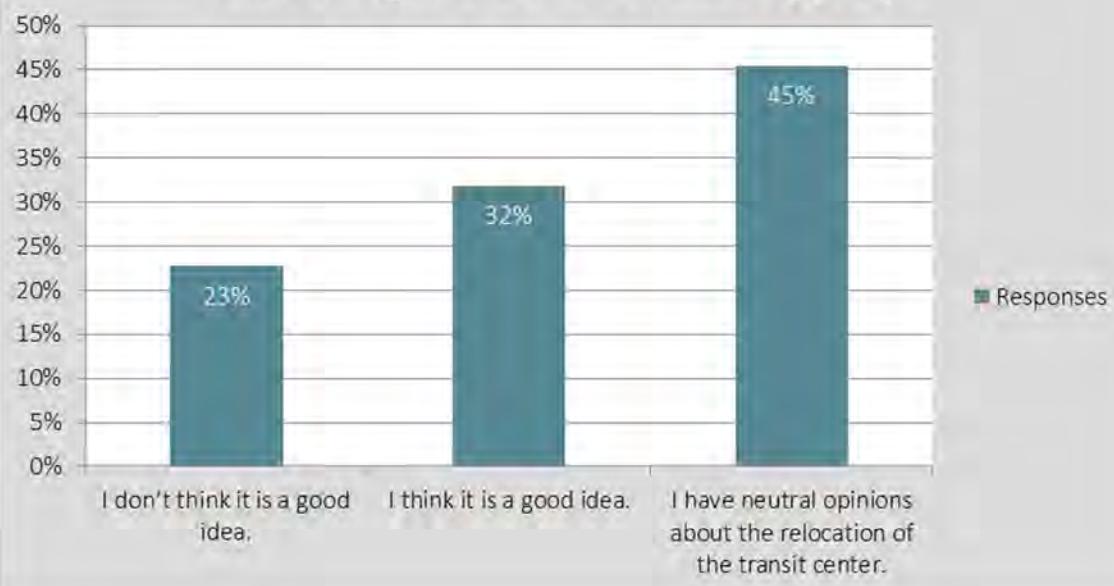
**Figure 5: Question 9 - What sorts of amenities would you like to see added to this location?**



**Question 10 - How do you feel about relocating the transit center?**

When asked about the potential relocation of the transit center, 45.5 percent of participants had neutral opinions about it (Figure 6). Another 31.8 percent thought it is a good idea, followed by 22.7 percent who did not think it is a good idea.

**Figure 6: Question 10 - How do you feel about relocating the transit center? (Q10)**



### **Question 11 - Is there anything else you would like to add for our consideration?**

Additional comments for consideration included amenity requests (coffee, WiFi, and landscaping). Others commented that they were not aware of the existing center and that it needed to be marketed more.

### **ON-SITE POP-UP OUTREACH**

LSC Transportation Consultants conducted an on-site public outreach event between 11:00 AM and 4:00 PM on October 28<sup>th</sup>. A questionnaire was distributed to various passengers and JAC drivers. The survey was simple and asked two questions: "What do you like about the existing JAC transit center?" and "What do you not like about the existing transit center? Of the 15 participants, many respondents indicated that the existing site was conveniently located and easy to access. Characteristics that people did not like about the existing transit center included that there is currently no schedule information displayed, there is not enough shelter to protect from poor weather, and that there are no restrooms.

## Chapter 5

# SITE ANALYSIS AND INITIAL RECOMMENDATIONS

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### OPERATIONAL IMPACT BY SITE

Table 7 represents site impacts by how many blocks the existing routes would need to deviate to accommodate the change in transit center location. The existing site was determined by how many blocks each route travels from their turn off Roop Street. Each alternative site was then measured against the existing, resulting in a total deviated block count by each route (as shown at the bottom of Table 7). As shown, Site 2 resulted in the most deviated blocks from existing route paths, followed by Site 3. These blocks were then converted to miles per year and multiplied by \$0.82 (cost per mile). As depicted, the differences in annual operational cost were very small (between \$500 less than current and \$1,000 more than current cost conditions).

| Blocks Deviated Per Site    |        |         |        |       |        |       |        |         |        |         |        |     |
|-----------------------------|--------|---------|--------|-------|--------|-------|--------|---------|--------|---------|--------|-----|
| Route                       | Site 1 |         | Site 2 |       | Site 3 |       | Site 4 |         | Site 5 |         | Site 6 |     |
|                             | In     | Out     | In     | Out   | In     | Out   | In     | Out     | In     | Out     | In     | Out |
| 1                           | 7      | 9       | 9      | 9     | 9      | 7     | 5      | 11      | 6      | 6       | 6      | 4   |
| 2A                          | 7      | 1       | 10     | 3     | 9      | 4     | 6      | 3       | 4      | 5       | 4      | 7   |
| 3                           | 5      | 2       | 6      | 3     | 5      | 2     | 6      | 4       | 5      | 6       | 6      | 7   |
| 4                           | 5      | 7       | 8      | 6     | 7      | 5     | 3      | 9       | 2      | 4       | 3      | 1   |
| <i>Difference by Site</i>   |        |         |        |       |        |       |        |         |        |         |        |     |
| 1                           | -      | -       | 2      | 0     | 2      | -2    | -2     | 2       | -1     | -3      | -1     | -5  |
| 2A                          | -      | -       | 3      | 2     | 2      | 3     | -1     | 2       | -3     | 4       | -3     | 6   |
| 3                           | -      | -       | 1      | 1     | 0      | 0     | 1      | 2       | 0      | 4       | 1      | 5   |
| 4                           | -      | -       | 3      | -1    | 2      | -2    | -2     | 2       | -3     | -3      | -2     | -6  |
| <i>Total by Direction</i>   |        | 9       | 2      | 6     | -1     | -4    | 8      | -7      | 2      | -5      | 0      |     |
| <i>Total Both Direction</i> |        | 11      |        | 5     |        | 4     |        | -5      |        | -5      |        |     |
| <i>Total Miles per hour</i> |        | 0.49    |        | 0.22  |        | 0.18  |        | -0.22   |        | -0.22   |        |     |
| <i>Total Miles per year</i> |        | 1,279   |        | 582   |        | 465   |        | -582    |        | -582    |        |     |
| <i>Cost Impact per year</i> |        | \$1,000 |        | \$500 |        | \$400 |        | (\$500) |        | (\$500) |        |     |

### INITIAL SITE RANKING AND PRELIMINARY RECOMMENDATIONS

In an effort to quantify the above-mentioned site-factors, LSC created a set of seven site factors to differentiate various characteristics amongst each potential site, as shown in Table 8. As a “screening criteria”, site availability was first considered separately. As Site 2 (V&T Station) is not available, it was screened from further consideration. The remaining five site were evaluated based on the following six factors:

1. Construction Cost – Is there any extra associated costs with implementing a transit center on the site (obvious utilities, additional need for street reconfiguration, etc)? Note that a relatively high costs is reflected in a relatively low score.
2. Parking Impact – Will existing parking be eliminated?
3. Downtown Area Goals – Does it align with the Downtown Area Goals?
4. Transit Efficiency & Access – Does it negatively impact transit operating costs or accessibility along the existing routes? This reflects both the excess bus circulation as well as the potential for buses to be delayed due to site design complaints.
5. Passenger Safety and Convenience – Can passengers conveniently walk between buses? Are bus bays close to the transit building amenities?
6. Adjacent Land Use Compatibility – Is a transit center use consistent with existing surrounding land uses?

**Table 8: Preliminary Weighted Score of Site Alternatives**

| Factor                          | Scoring (1 = Very Poor to 5 = Very Good) |                      |                         |                           |                          |                   |                           |
|---------------------------------|--|----------------------|-------------------------|---------------------------|--------------------------|-------------------|---------------------------|
|                                 | Weight<br>(0 to 1)                       | Site 1 -<br>Existing | Site 2 - V&T<br>Station | Site 3 -<br>Coin Lot      | Site 4 -<br>Robinson St. | Spear St.<br>West | Site 6 -Spear<br>St. East |
| Site Availability (Screening)   | 1.00                                     | Yes                  | No                      | <i>Limited<br/>to ROW</i> | Possibly                 | Yes               | Yes                       |
| Construction Cost               | 0.50                                     | 2                    | --                      | 3                         | 3                        | 4                 | 3                         |
| Parking Impact                  | 0.75                                     | 5                    | --                      | 3                         | 3                        | 2                 | 3                         |
| Downtown Area Goals             | 1.00                                     | 5                    | --                      | 5                         | 5                        | 5                 | 4                         |
| Transit Efficiency & Access     | 0.75                                     | 4                    | --                      | 4                         | 4                        | 3                 | 4                         |
| Passenger Safety & Convenience  | 1.00                                     | 4                    | --                      | 1                         | 4                        | 5                 | 4                         |
| Adjacent Land Use Compatibility | 1.00                                     | 4                    | --                      | 3                         | 3                        | 5                 | 2                         |
| <b>Weighted Score</b>           | <b>20.8</b>                              |                      | --                      | <b>15.8</b>               | <b>18.8</b>              | <b>20.8</b>       | <b>16.8</b>               |

These various factors were then weighted based on feasibility of project implementation, project benefits to the community, and potential operational impacts. Based on the Consultant's experience and discussions with JAC staff, the Consultant has assigned weights reflecting the relative importance, on a scale of 0.0 (no importance) to 1.0 (highest importance).

Next, a score was identified for each site and for each factor, on a scale of 1 (worst score) to 5 (best score), based on the site characteristics. Each score was multiplied by the factor weight and then summed over all factors to determine a weighted score. As shown, three sites (Site 1 – Existing Site, Site 4 – Robinson Street, and Site 5 -- Spear Street West) all rank relatively high and close in value (between 18.8 and 20.8). These are followed by Site 6 – (Spear Street East) with 16.8 and Site 3 (Coin Lot) with 15.8. Based on this analysis and the background information, LSC recommends further analysis of providing an improved transit center on the following three sites:

- Site 1 – Existing Site
- Site 4 – Robinson Street
- Site 5 – Spear Street West

If none of these three sites are determined to be viable, Site 6 (Spear Street East) could then be considered, followed by the Coin Lot.

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## Chapter 6

# DETAILED ANALYSIS OF THREE CONCEPTUAL SITES

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Based on the screening process described in the previous chapter, the following three sites have been identified as those with the highest potential to meet the needs of the service in a cost-effective manner:

- *Existing Downtown Transfer Plaza Site*—This could include use of existing Plaza Street travel lanes.
- *Robinson Street Site*—This consists of the north side of Robinson Street, east of Plaza Street.
- *E. Spear Street Site*—This consists of the existing public right-of-way between N. Fall Street on the west and N. Stewart Street on the east.

Figure 7 presents a map showing these three general locations. This chapter presents a detailed evaluation of each of these three sites.

### SITE 1 - EXISTING DOWNTOWN TRANSFER PLAZA SITE

Under this site option, the transit hub would remain in its current location along the east side of N. Plaza Street between E. Washington Street and E. Robinson Street, adjacent to the Federal Building. The facility would be improved as shown in Figure 8 and as follows:

- Between E. Robinson Street and E. Washington Street, the eastern curb would be extended approximately 19 feet to the west. This segment of N. Plaza Street would be converted to one-way northbound traffic only. As shown in the cross section provided in Figure 9, the remaining street width would be 28 feet (excluding curb and gutter), sufficient to provide 9 feet for a northbound bus parking lane and a 19-foot northbound travel lane. Parking along the west side of N. Plaza Street would be prohibited for this portion of the block.<sup>2</sup>
- The curb extension would yield a building pad/plaza area 32 feet in width and 150 feet in length north of the northern Federal Building parking lot driveway. This space would be used to provide:
  - A single-story transit center building approximately 1,450 square feet in floor area, providing passenger waiting space, restrooms, JAC counter and operational space and custodial space. The center portion of this building could have a raised roof section to provide some architectural interest; Low landscaping areas to the north and south with

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<sup>2</sup> Consideration was given to converting only the portion north of the northern driveway to one-way, leaving the segment between E. Robinson Street and this northern driveway two-way. However, this could be potentially confusing to drivers.

perimeter passenger seating. Landscaping in these areas would be designed to provide good line of sight across the plaza for security reasons; and

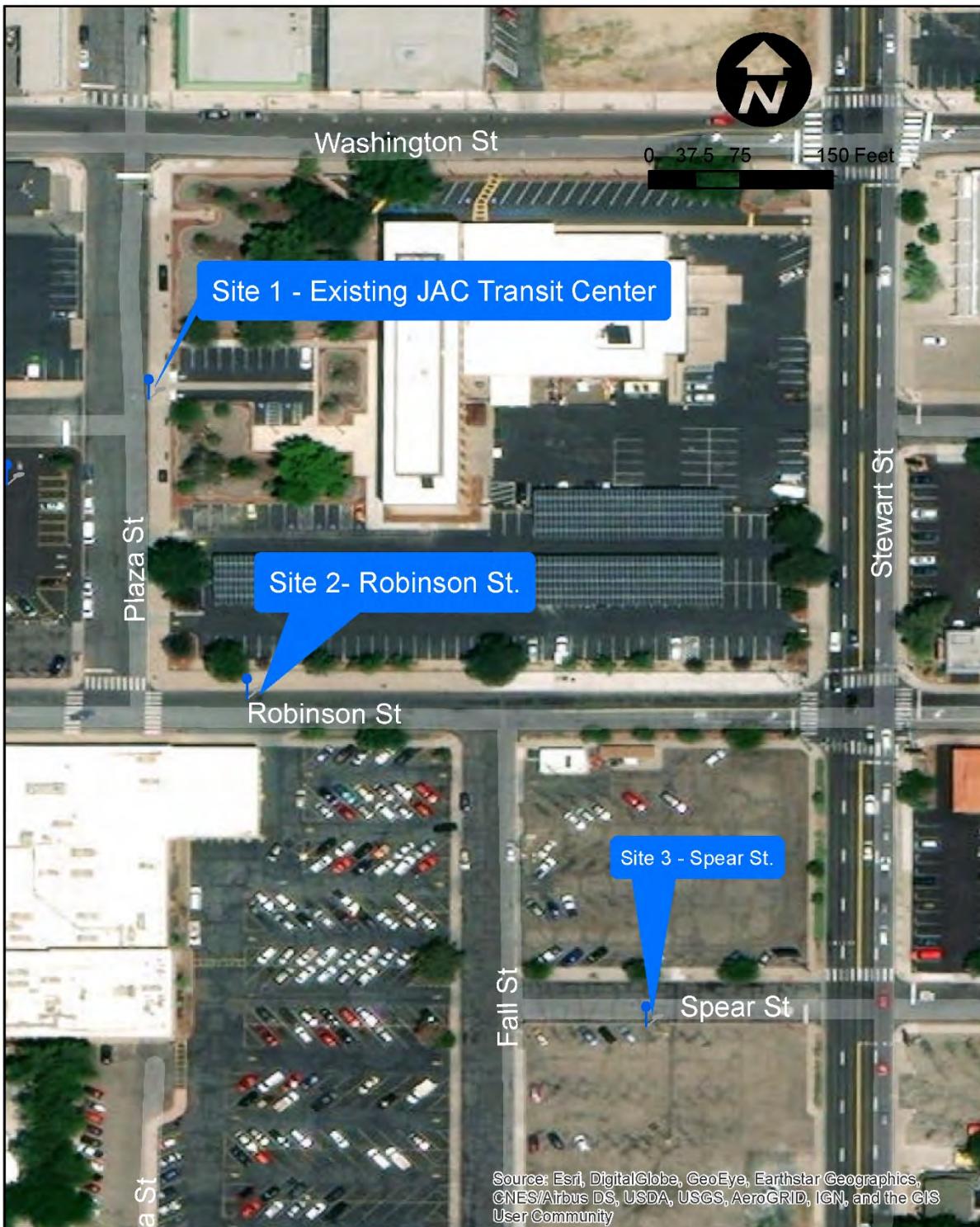
- A set of covered bike racks.
- An improved fence would be provided along the east side of N. Plaza Street, as well as along the south side of E. Washington Street eastward to the first driveway. This fencing would preferably incorporate artwork (such as steel cutouts) and would be designed to stop direct access into the Federal Building property. It would tie into the corners of the transit center building to eliminate pedestrian access behind the building. The existing short walkway to the monument would be relocated to avoid the transit center building.
- Three JAC bus bays would be provided on N. Plaza Street along the extended curb, while the fourth JAC bus bay needed for regular service would be provided along E. Washington Street. Space for an intercity (RTC, ESTA, TTD) bus would also be provided on E. Washington Street.
- To the south of the northern Federal Building driveway on N. Plaza Street, space would be available for a layover JAC bus (such as when buses are being switched out) and a JAC Assist van. The existing sidewalk would be shifted west and a new landscaping strip provided along the eastern right-of-way line. Optimally, one of the two existing driveways serving the Federal Building lot would be eliminated. As passenger loading/unloading would typically not occur in this area, no benches or shelters would be provided. Curb parking could be provided to the south. If battery electric bus charging equipment is needed at the transit center in the future, this area would be the appropriate location and there would be more than adequate space available for the equipment.

### National Historic Preservation Act Considerations

This site is immediately across the street from the Virginia and Truckee Railroad Depot, which is listed on the National Register of Historic Places. As such, any federal funding for a transit center project would trigger the need to comply with Section 106 of the National Historic Preservation Act of 1966. Any site that would have a visual impact on the Depot (e.g., could be seen from the Depot) would need to conform to the Section 106 process of consultation and review. This should include a discussion of the plan with the Carson City Historic Resources Commission. In discussing the potential project with the Nevada State Historic Preservation Office, the Office indicated that while the project proponent would need to go through this process, there is no reason to expect that it would prohibit a transit center on this site. It was also concluded that shifting the building location to the southern end of the block would not change the process, as in both cases the building could be seen from the Depot.



Figure 7  
JAC Transit Center Site Options



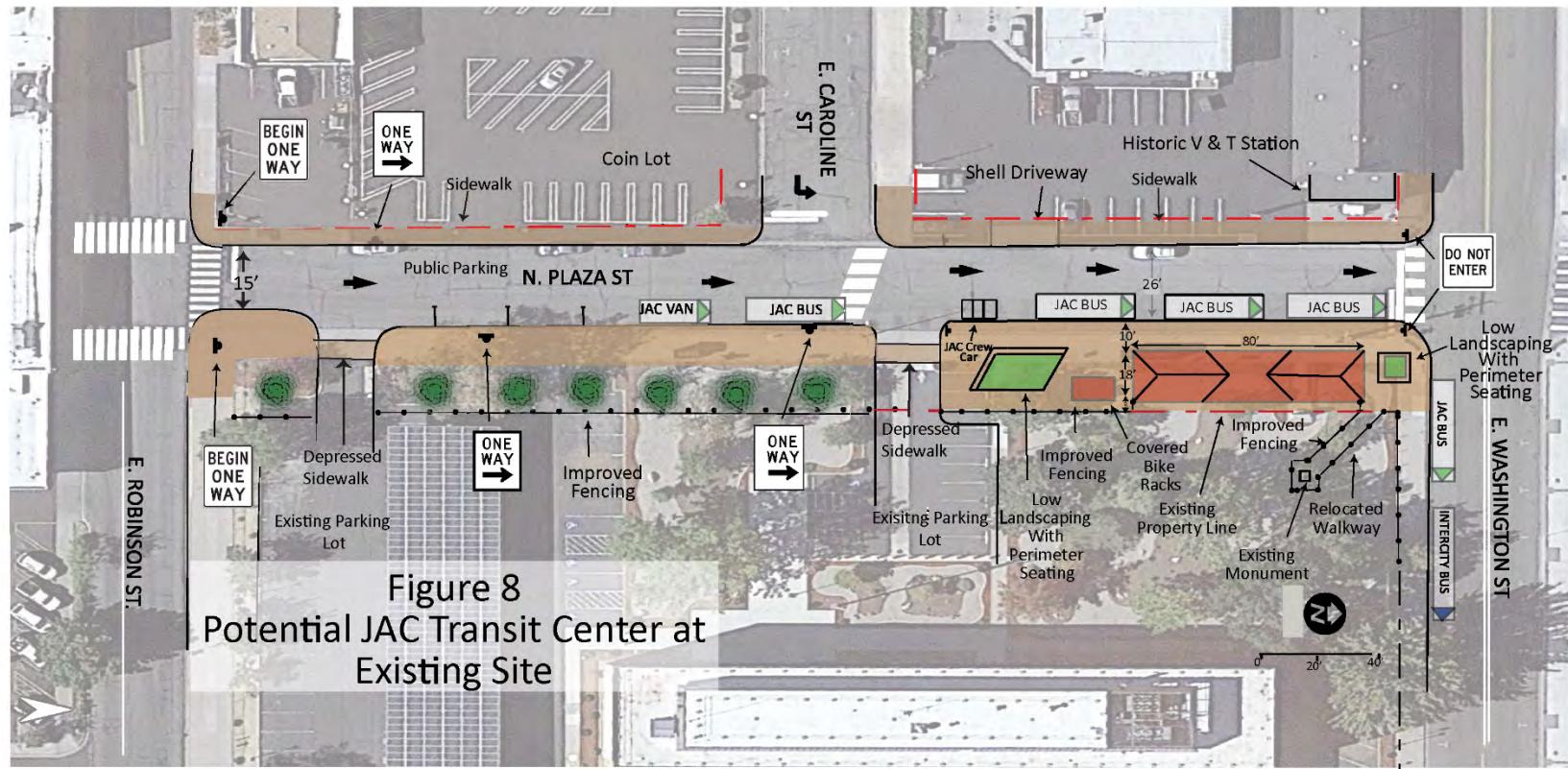
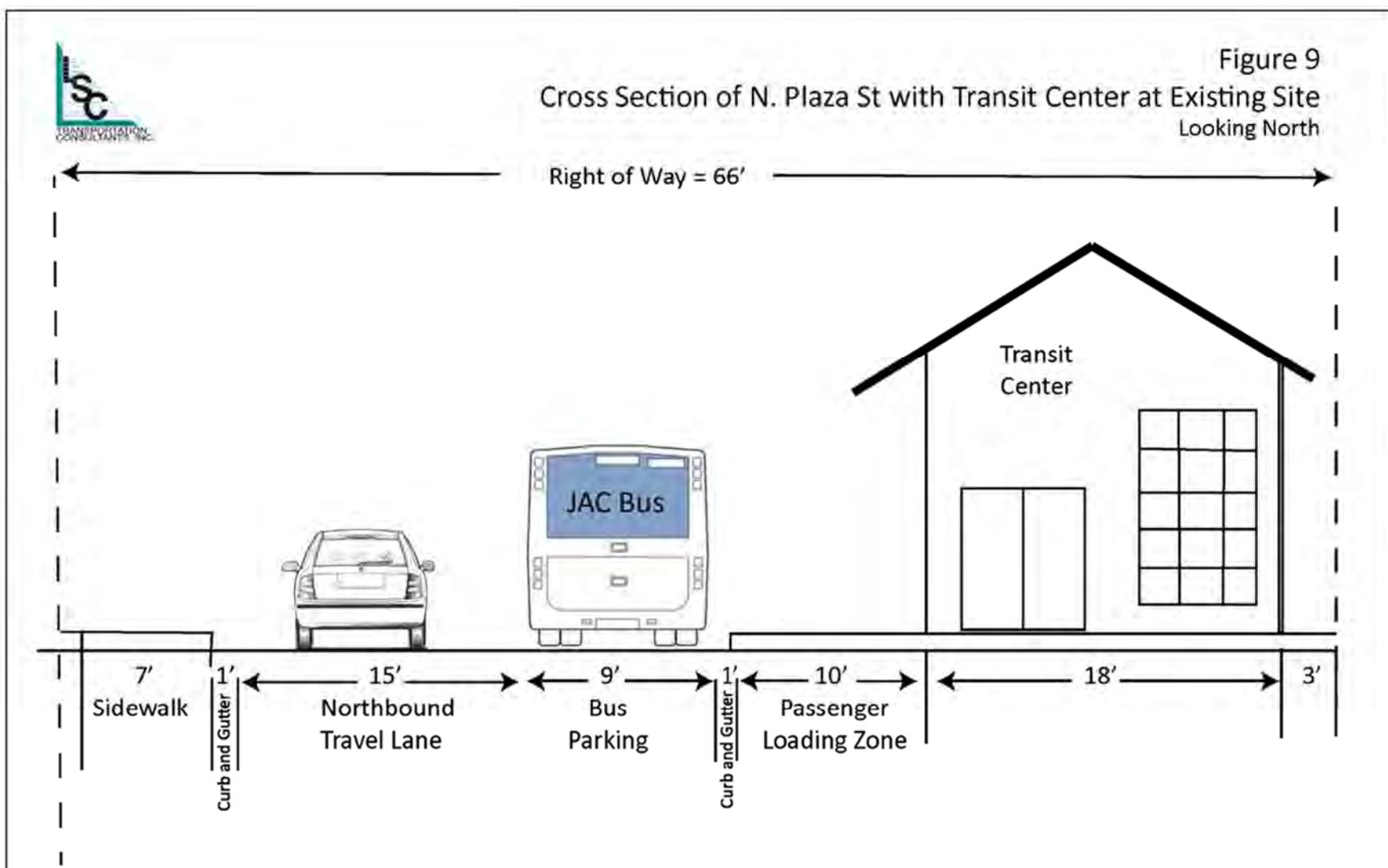


Figure 8  
Potential JAC Transit Center at  
Existing Site



## Traffic Impact of One-Way Street Conversion

Any conversion of an existing street to one-way operation warrants careful consideration of the impact on existing drivers and traffic movements. As a basis for this review, LSC conducted traffic counts over a weekday afternoon peak period. As shown in Table 9, these counts focused on tracking the southbound movements from E. Washington Street through the site to their destination or exit location. A review of these counts indicates the following:

- The observed peak hour of southbound traffic occurred between 2:45 PM and 3:45 PM, when a total of 13 southbound vehicle-movements were observed. Of these, 5 made southbound through movements from N. Plaza Street north of E. Robinson Street), 5 made westbound left turns off of E. Washington Street and 3 made eastbound right turns from E. Washington Street.
- Most of these drivers departed the area by making a southbound left turn movement from N. Plaza Street to eastbound E. Robinson Street (9), while 2 parked along the west side of N. Plaza Street (including a JAC bus), 1 pulled into the Shell station and 1 pulled into the Coin Lot.

Based on these observed patterns, most of the vehicles eliminated from N. Plaza Street southbound would shift to N. Stewart Street. The few drivers heading to the Shell station or Coin Lot would likely shift to Carson Street to the west. At most, the greatest shift would be 5 southbound through movements at Plaza/Washington that would shift to southbound left turn movements. Given these low volumes and the generally good traffic conditions in the area, there is no potential for any significant traffic issues or driver delays, beyond the need for a low number of drivers to circle the block. Access to individual adjacent parcels would be provided as follows:

- The Shell station would lose southbound ingress to the driveway on N. Plaza Street, as well as eastbound egress to the south on N. Plaza Street. However, inbound drivers can easily go around the block to Stewart Street or Carson Street to use one of the other four access points, and outbound drivers can exit onto E. Caroline Street less than 100 feet away.
- While southbound movements in and out of the Coin Lot at the two driveways on Plaza Street would be eliminated, this lot also has access drives on both Caroline and Robinson Streets. The few drivers from the north on N. Plaza Street can easily go around the block to Stewart or Carson.

Access to the Federal Building would remain unchanged, except that southbound ingress on N Plaza Street would be eliminated. As the larger lot on the south side of the parcel also has access off of N. Stewart Street, drivers from the north would shift to that street. For the smaller 13-space lot, drivers from the north would largely access via Carson Street and Caroline Street. Left turns out of this smaller lot would still be provided.

## Transit Operations During Construction

Construction at this site would require staging to allow continuance of JAC operations during construction. Bus bays would be relocated to the south (south of Caroline Street) and the existing northern shelter would be relocated temporarily to the south. In the limited periods when Plaza Street north of Caroline Street is closed for construction, buses would exit via Caroline Street westbound. Once construction north of Caroline Street is complete, the relatively simple construction south of Caroline Street could be completed by shifting to the new bus bays to the north. When this segment is closed, buses would access the busy bays via Caroline Street eastbound. The temporarily relocated bus shelter would then be removed and made available for another location in the JAC system.

## Construction Cost Estimate

Table 10 presents a planning-level cost estimate for development of a transit center on the existing site. This estimate applies standard unit costs provided by Carson City Department of Public Works for many of the standard roadway and streetscape islands, and unit costs defined by LSC for similar previous studies regarding the transit-specific items. Items of note in this cost estimate are as follows:

- A unit cost of \$660 per square foot is assumed for the transit center building. This factor can vary widely based on the quality of finish and the degree to which custom architectural features are incorporated. While this is consistent with other transit center projects, it reflects a high level of finish and could well be lower if a more utilitarian design approach is used.
- Roadway costs assume full removal and replacement of Plaza Street between E. Robinson Street and E. Washington Street, including adjacent areas of Robinson and Washington Streets to allow transitions.
- Costs are included for the removal of the existing fencing and replacement with a non-standard custom designed fence (that could incorporate artwork).
- Sidewalk/plaza area is assumed to be removed and replaced from E. Robinson Street around to the existing Federal Building driveway on Washington Street.
- It is assumed that the existing fire hydrant south of the northern driveway can remain in the current location.
- Costs for enhanced lighting is included.
- Costs are included for the additional mobilization and relocation of the bus shelter to allow for staged construction.

- “Soft costs” are included for contingency, design/engineering, construction management and project administration.

To reflect that the project will require several years to obtain funding and prepare plans and contracts, costs are increased to reflect estimated 2028 values. 2022 values are increased assuming 3 years of 5 percent inflation and 3 years of 3 percent inflation.<sup>3</sup>

As indicated, total project construction and development costs are estimated to be \$3,430,000. Of this total, just over half consists of the transit facility building costs and associated soft costs.

## **SITE 2 - ROBINSON STREET SITE**

This site consists of the north side of E. Robinson Street between N. Plaza Street and N. Stewart Street, and also makes use of the southern portion of the existing transit center sidewalk area along N. Plaza Street. As shown in Figure 10, to provide a footprint for the transit center building it would be necessary to negotiate purchase (or long-term lease) of a portion of the existing Federal Building parcel in the northeast corner of the Plaza/Robinson intersection. This land area is approximately 88 feet in east-west dimension and 28 feet in north-south dimension (2,464 square feet). It would allow the existing driveway on Plaza Street to remain unchanged but would require the elimination of eight existing parking spaces. As shown in the cross-section provided in Figure 11, Robinson Street would provide 2 24' travel lanes.

The Transit Center building is configured to wrap partially around the corner to provide good line of sight and pedestrian travel paths. To the east, the existing sidewalk area would include shelters and benches for passengers waiting for the buses queuing farther east along Robinson Street. Enhanced fencing would be provided between the transit uses and the Federal Building. All buses would line up along the north side of E. Robinson Street (facing westbound), with room for a van or crew vehicle along the existing curb on N. Plaza Street. This site alternative would require no changes to existing streets or circulation.

East of Fell Street, the Robinson Street centerline would need to transition approximately 8 feet to the north over a 110' distance, in order to align with the eastbound left turn lane at Stewart Street. As the through movement vehicles do not need to shift, this is effectively a bay taper for the eastbound left turn vehicles. Section 9.7.2.3 of the *Manual on Uniform Traffic Control Devices* (American Association of State Highway and Transportation Officials, 2018) indicates a minimum bay taper length of 100 feet, indicating that this restriping can be accommodated.

To allow adequate distance for the eastbound through lane shift entering the site, the existing 40' yellow curb taxi loading zone directly south of Plaza Street (between the existing crosswalks) would need to be eliminated with a red curb, reducing capacity by two loading vehicles. The loading zone west of the western crosswalk would remain.

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<sup>3</sup> The Congressional Budget Office forecasts consumer inflation for 2023 at 2 to 4 percent. However, construction costs are expected to increase by 5 percent in 2023 per the firm of CBRE.

One option to this plan would be for the overall project to include “decommissioning” of the existing transit center by reducing the existing sidewalk width and expanding landscaping into this area.

### Construction Cost Estimate

A cost estimate for development at this site is shown in Table 11, consistent with the approach used for the existing site cost estimate. Items of note in this cost estimate are as follows:

- A unit cost of \$660 per square foot is assumed for the transit center building. This factor can vary widely based on the quality of finish and the degree to which custom architectural features are incorporated. While this is consistent with other transit center projects, it reflects a high level of finish and could well be lower if a more utilitarian design approach is used.
- Roadway costs assume full removal and replacement of the north side of E. Robinson Street from N. Fall Street and N. Plaza Street.
- Costs are included for the removal of the existing fencing and replacement with a non-standard custom designed fence (that could incorporate artwork).
- Sidewalk/plaza area is assumed to be removed and replaced from the existing southern Federal Building driveway on Plaza Street and along the north side of E. Robinson Street as far east as N. Fall Street. East of this point, a relatively new sidewalk is already in place that appears to be adequate.
- Costs for enhanced lighting is included.
- \$5,000 is included for decommissioning of the existing transit center site, including removal of shelters and benches and minor pavement repair.
- “Soft costs” are included for contingency, design/engineering, construction management and project administration.
- Land acquisition costs are included, assuming current land value of \$700,000 per acre for commercial land in central Carson City and including appraisal costs and closing costs.

As indicated, total project construction, land acquisition and development costs are estimated in 2028 to be \$2,890,000. This is approximately \$540,000 less than for the existing site option, largely due to the smaller area of street reconfiguration.

**TABLE 9: North Plaza Street Southbound Traffic Counts**

Location: North Plaza Street, Carson City, Nevada  
 Date: Monday, January 10, 2022  
 Time: 2:30pm-5:30pm

Southbound Peak Hour Shown in Blue



**Number of Vehicles by Southbound Entry Movement and Destination**

|         | 1 - Shell Gas |     |     | 2 - Fed Bldg Small Lot |     |     | 3 - E Carolina Street |     |     | 4 - Coin Parking Lot |     |     |
|---------|---------------|-----|-----|------------------------|-----|-----|-----------------------|-----|-----|----------------------|-----|-----|
|         | EBR SBT WBL   |     |     | EBR SBT WBL            |     |     | EBR SBT WBL           |     |     | EBR SBT WBL          |     |     |
|         | EBR           | SBT | WBL | EBR                    | SBT | WBL | EBR                   | SBT | WBL | EBR                  | SBT | WBL |
| 2:30 PM |               |     |     |                        |     |     |                       |     |     |                      |     |     |
| 2:45 PM |               |     |     |                        |     |     |                       |     |     |                      |     |     |
| 3:00 PM |               |     |     |                        |     |     |                       |     |     |                      |     |     |
| 3:15 PM | 1             |     |     |                        |     |     |                       |     |     |                      |     |     |
| 3:30 PM |               |     |     |                        |     |     |                       |     |     |                      |     | 1   |
| 3:45 PM |               |     |     |                        |     |     |                       |     |     |                      |     |     |
| 4:00 PM |               |     |     |                        |     |     |                       |     |     |                      |     |     |
| 4:15 PM |               |     |     |                        |     |     |                       |     |     |                      |     |     |
| 4:30 PM |               |     |     |                        |     |     |                       |     |     |                      |     |     |
| 4:45 PM |               |     |     |                        |     |     |                       |     |     |                      |     |     |
| 5:00 PM |               |     |     |                        |     |     |                       |     |     |                      |     |     |
| 5:15 PM |               |     |     |                        |     |     |                       |     |     |                      |     |     |
| Total   | 1             | 0   | 0   | 0                      | 0   | 0   | 0                     | 0   | 0   | 0                    | 0   | 1   |

|         | 5 - Fed Bldg Large Lot |     |     | 6 - SBR E Robinson St |     |     | 7 - SBL E Robinson St |     |     | Parked on Plaza Street |     |     |
|---------|------------------------|-----|-----|-----------------------|-----|-----|-----------------------|-----|-----|------------------------|-----|-----|
|         | EBR SBT WBL            |     |     | EBR SBT WBL           |     |     | EBR SBT WBL           |     |     | EBR SBT WBL            |     |     |
|         | EBR                    | SBT | WBL | EBR                   | SBT | WBL | EBR                   | SBT | WBL | EBR                    | SBT | WBL |
| 2:30 PM |                        |     |     |                       |     |     |                       |     |     |                        |     |     |
| 2:45 PM |                        |     |     |                       |     |     |                       |     |     |                        |     | 1   |
| 3:00 PM |                        |     |     |                       |     |     |                       |     |     |                        |     | 1   |
| 3:15 PM |                        |     |     |                       |     |     |                       |     |     |                        |     | 1   |
| 3:30 PM |                        |     |     |                       |     |     |                       |     |     |                        |     | 1   |
| 3:45 PM |                        |     |     |                       |     |     |                       |     |     |                        |     | 1   |
| 4:00 PM |                        |     |     | 1                     |     |     |                       | 1   | 1   |                        |     |     |
| 4:15 PM |                        |     |     |                       |     |     |                       |     |     |                        |     | 1   |
| 4:30 PM |                        |     |     |                       |     |     |                       |     |     |                        |     | 1   |
| 4:45 PM | 1                      |     |     |                       |     |     |                       |     |     |                        |     | 1   |
| 5:00 PM |                        |     |     |                       |     |     |                       |     |     |                        |     | 1   |
| 5:15 PM |                        |     |     |                       |     |     |                       |     |     |                        |     |     |
| Total   | 0                      | 1   | 0   | 1                     | 0   | 0   | 0                     | 3   | 9   | 4                      | 0   | 1   |

|         | Total Northbound |     |     | JAC Buses |
|---------|------------------|-----|-----|-----------|
|         | NBL              | NBT | NBR |           |
| 2:30 PM | 1                |     | 3   |           |
| 2:45 PM | 1                | 1   | 1   |           |
| 3:00 PM | 2                | 4   |     |           |
| 3:15 PM | 2                | 2   | 4   |           |
| 3:30 PM | 1                | 2   | 1   |           |
| 3:45 PM | 2                |     |     |           |
| 4:00 PM | 2                | 1   | 1   |           |
| 4:15 PM | 3                | 1   | 4   |           |
| 4:30 PM | 2                |     |     |           |
| 4:45 PM |                  | 1   |     |           |
| 5:00 PM | 1                | 5   | 2   |           |
| 5:15 PM | 2                | 2   | 4   |           |
| Total   | 6                | 22  | 18  | 12        |

|    | Total |    |         |
|----|-------|----|---------|
|    | SB    | NB | Total   |
| 0  | 4     | 4  |         |
| 4  | 3     | 7  |         |
| 2  | 6     | 8  |         |
| 2  | 8     | 10 |         |
| 5  | 4     | 9  |         |
| 2  | 2     | 4  |         |
| 3  | 4     | 7  |         |
| 1  | 8     | 9  |         |
| 1  | 2     | 3  |         |
| 2  | 1     | 3  |         |
| 1  | 8     | 9  |         |
| 0  | 8     | 8  |         |
| 23 | 58    | 81 |         |
| 13 | 21    | 34 | Peak Hr |

**TABLE 10: Existing Site Transit Center Cost Estimate**

| ITEM   | QTY    | UNIT | UNIT PRICE | ESTIMATE  | TOTAL<br>Subtotal  |
|--|--------|------|------------|-----------|--------------------|
| <b>Site Preparation</b>  |        |      |            |           |                    |
| Mobilization and Demobilization  | 1      | EA   | \$50,000   | \$50,000  |                    |
| Erosion and Sediment Control   | 1      | LS   | \$5,000    | \$5,000   |                    |
| Construction Staking / Survey  | 1      | LS   | \$10,000   | \$10,000  |                    |
| Temporary Fence  | 1,210  | LF   | \$6.00     | \$7,260   |                    |
| Utility Relocation   | 1      | EA   | \$10,000   | \$10,000  |                    |
| Remove Existing Sidewalk   | 6,660  | SF   | \$4.50     | \$29,970  |                    |
| Remove Existing Curb Ramp  | 3      | EA   | \$800      | \$2,400   |                    |
| Remove Existing Curb and Gutter  | 1,005  | LF   | \$10.00    | \$10,050  |                    |
| Remove Existing Roadway  | 19,200 | SF   | \$1.15     | \$22,080  |                    |
| QC/Materials Testing   | 1      | LS   | \$20,000   | \$20,000  |                    |
| <b>Earthwork</b>   |        |      |            |           |                    |
| Fine Grading   | 27,350 | SF   | \$0.50     | \$13,700  | \$13,700           |
| <b>Road, Parking Lot, Curb, Sidewalk</b>   |        |      |            |           |                    |
| Circulation Aggregate Base   | 375    | CY   | \$80.00    | \$30,000  |                    |
| Site Concrete  | 78     | CY   | \$250      | \$19,500  |                    |
| 5" Bituminous Pavement   | 3,602  | SF   | \$4.20     | \$15,100  |                    |
| Concrete Ribbon Curb   | 1,110  | LF   | \$45.00    | \$50,000  |                    |
| Concrete ADA Ramp  | 10     | LS   | \$4,800    | \$48,000  |                    |
| Plaza and Walkways   | 10,870 | SF   | \$20.00    | \$217,400 |                    |
| Planting Beds/Perimeter Seating  | 550    | SF   | \$50.00    | \$27,500  |                    |
| Landscaping/Irrigation   | --     | LS   | --         | \$30,000  |                    |
| Miscellaneous  | 1      | LS   | \$10,000   | \$10,000  |                    |
| <b>Facilities, Furnishings, Lighting</b>   |        |      |            |           |                    |
| Transit Building   | 1,458  | SF   | \$660      | \$962,280 |                    |
| Benches  | 8      | LS   | \$1,500    | \$12,000  |                    |
| Facility Furnishings   | 1      | LS   | \$50,000   | \$50,000  |                    |
| Covered Bicycle Rack   | 120    | SF   | \$100      | \$12,000  |                    |
| Enhanced Fencing   | 500    | LF   | \$100      | \$50,000  |                    |
| Lighting   | 9      | EA   | \$7,080    | \$63,720  |                    |
| Utility Connections  | 1      | EA   | \$30,000   | \$30,000  |                    |
| Miscellaneous  | 1      | LS   | \$5,000    | \$5,000   |                    |
| <b>Signing &amp; Striping</b>  |        |      |            |           |                    |
| Monument Sign  | 1      | LS   | \$4,000    | \$4,000   |                    |
| Misc Signs   | 28     | LS   | \$650      | \$18,200  |                    |
| Crosswalk Markings   | 9,000  | SF   | \$5.50     | \$49,500  |                    |
| Pavement Markings  | 120    | LF   | \$6.00     | \$700     |                    |
| <b>Total Construction Cost</b>   |        |      |            |           | \$1,885,360        |
| <b>Contingency (15%)</b>   |        |      |            |           | \$282,800          |
| <b>Subtotal</b>  |        |      |            |           | \$2,168,160        |
| <b>Design &amp; Engineering (15%)</b>  |        |      |            |           | \$325,200          |
| <b>Construction Management/Oversight (10%)</b>   |        |      |            |           | \$216,800          |
| <b>Project Administration (5%)</b>   |        |      |            |           | \$10,800           |
| <b>TOTAL DEVELOPMENT COSTS -- 2022</b>   |        |      |            |           | <b>\$2,720,960</b> |
| <b>Land Acquisition</b>  |        |      |            |           |                    |
| Land Value   | 0      | Acre | \$700,000  | \$0       |                    |
| Closing Costs  | 5%     |      |            | \$0       | \$0                |
| Appraisal  | 0      | EA   | \$10,000   | \$0       |                    |
| <b>TOTAL ESTIMATE - 2022</b>   |        |      |            |           | <b>\$2,720,960</b> |
| <i>2022 to 2028 Escalation Factor - 3 years at 5% per year, 3 years at 3% per year</i> |        |      |            |           |                    |
| <b>TOTAL ORDER OF MAGNITUDE ESTIMATE - 2028</b>  |        |      |            |           |                    |
|  |        |      |            |           | 1.26               |
|  |        |      |            |           | <b>\$3,430,000</b> |

LSC Transportation Consultants, Inc.

Figure 10  
Potential JAC Transit Center at  
Robinson Street Site

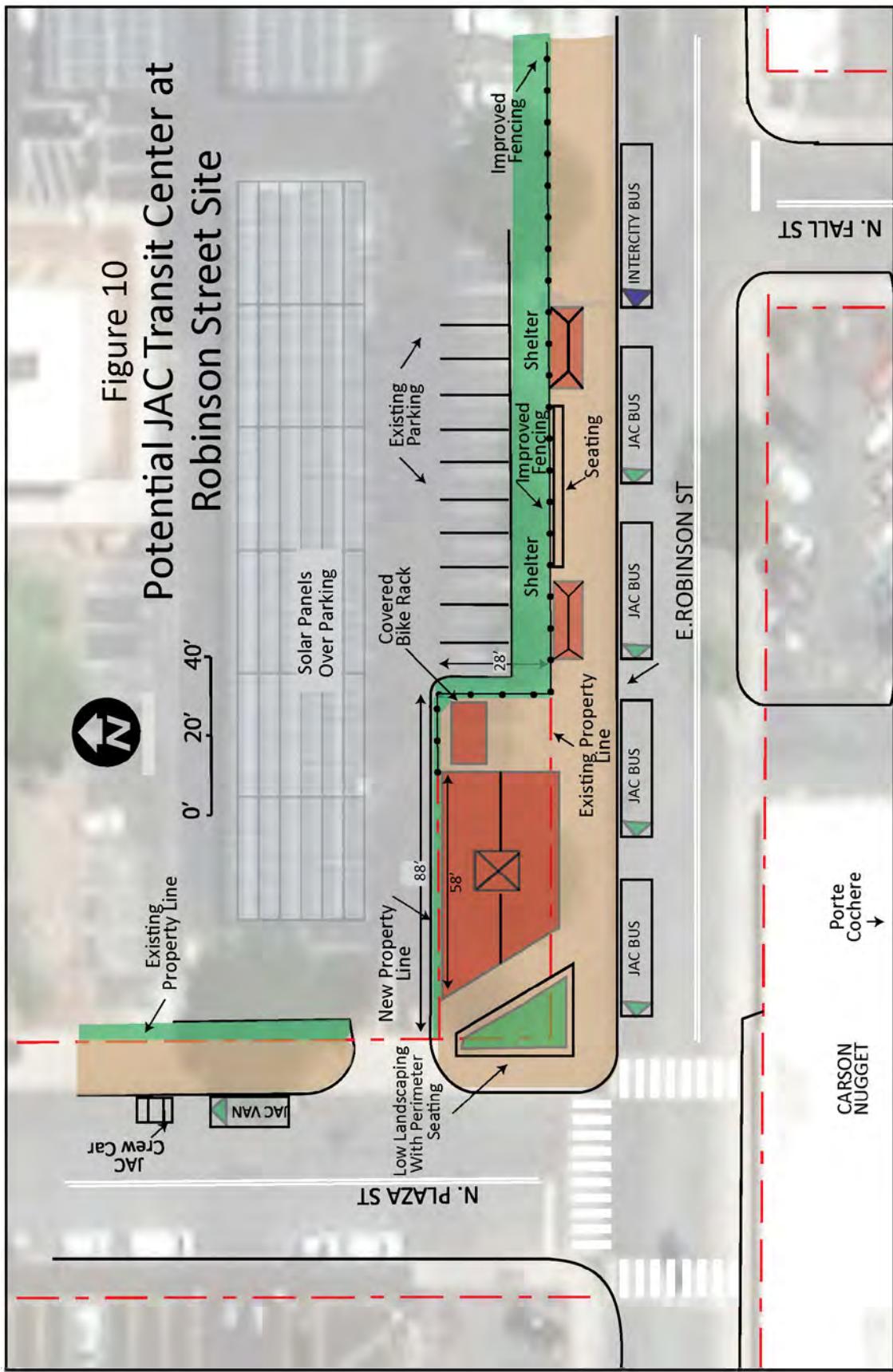
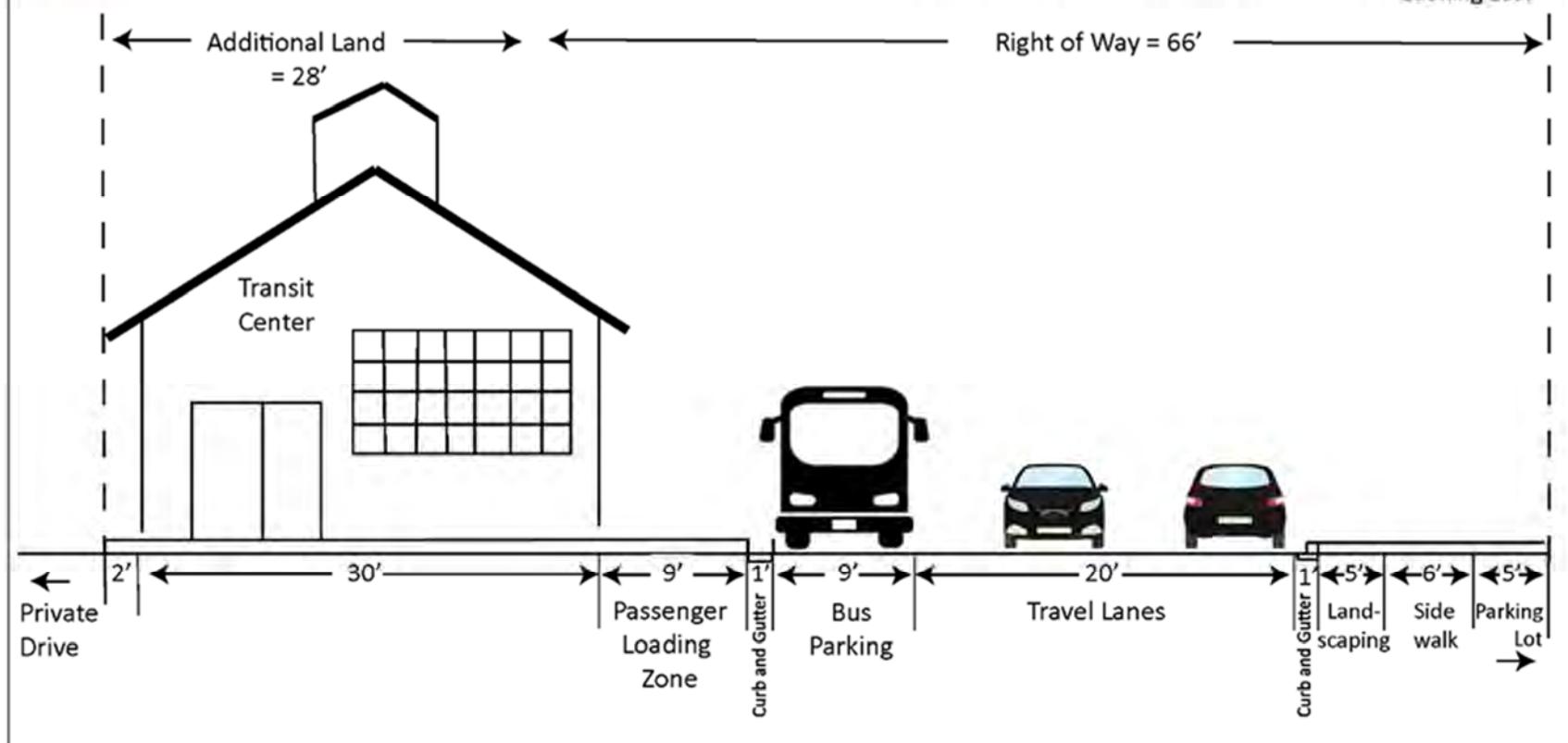




Figure 11  
Cross Section of E. Robinson St with Transit Center  
Looking East



LSC Transportation Consultants, Inc.

**TABLE 11: Robinson Street Site Transit Center Cost Estimate**

| ITEM   | QTY   | UNIT | UNIT PRICE | ESTIMATE  | TOTAL<br>Subtotal  |
|--|-------|------|------------|-----------|--------------------|
| <b>Site Preparation</b>  |       |      |            |           |                    |
| Mobilization and Demobilization  | 1     | EA   | \$50,000   | \$50,000  |                    |
| Erosion and Sediment Control   | 1     | LS   | \$5,000    | \$5,000   |                    |
| Construction Staking / Survey  | 1     | LS   | \$10,000   | \$10,000  |                    |
| Temporary Fence  | 600   | LF   | \$6.00     | \$3,600   |                    |
| Utility Relocation   | 0     | EA   | \$10,000   | \$0       |                    |
| Remove Existing Sidewalk   | 3,660 | SF   | \$4.50     | \$16,470  |                    |
| Remove Existing Curb Ramp  | 2     | EA   | \$800      | \$1,600   |                    |
| Remove Existing Curb and Gutter  | 180   | LF   | \$10.00    | \$1,800   |                    |
| Remove Existing Roadway  | 6,100 | SF   | \$1.15     | \$7,015   |                    |
| QC/Materials Testing   | 1     | LS   | \$20,000   | \$20,000  |                    |
| <b>Earthwork</b>   |       |      |            |           |                    |
| Fine Grading   | 5,000 | SF   | \$0.50     | \$2,500   | \$2,500            |
| <b>Road, Parking Lot, Curb, Sidewalk</b>   |       |      |            |           |                    |
| Circulation Aggregate Base   | 333   | CY   | \$80.00    | \$26,700  |                    |
| Site Concrete  | 125   | CY   | \$250      | \$31,200  |                    |
| 5" Bituminous Pavement   | 8,520 | SF   | \$4.20     | \$35,800  |                    |
| Concrete Ribbon Curb   | 390   | LF   | \$45.00    | \$17,600  |                    |
| Concrete ADA Ramp  | 3     | LS   | \$4,800    | \$14,400  |                    |
| Plaza and Walkways   | 2970  | SF   | \$20.00    | \$59,400  |                    |
| Planting Beds/Perimeter Seating  | 390   | SF   | \$50.00    | \$19,500  |                    |
| Landscaping/Irrigation   | --    | LS   | --         | \$30,000  |                    |
| Miscellaneous  | 1     | LS   | \$10,000   | \$10,000  |                    |
| <b>Facilities, Furnishings, Lighting</b>   |       |      |            |           |                    |
| Transit Building   | 1,440 | SF   | \$660      | \$950,400 |                    |
| Bus Shelters (Custom)  | 2     | EA   | \$20,000   | \$40,000  |                    |
| Benches  | 6     | LS   | \$1,500    | \$9,000   |                    |
| Facility Furnishings   | 1     | LS   | \$50,000   | \$50,000  |                    |
| Covered Bicycle Rack   | 120   | SF   | \$100      | \$12,000  |                    |
| Enhanced Fencing   | 290   | LF   | \$100      | \$29,000  |                    |
| Lighting   | 6     | EA   | \$7,080    | \$42,480  |                    |
| Utility Connections  | 1     | EA   | \$30,000   | \$30,000  |                    |
| Decommissioning of Existing Site   | 1     | EA   | \$5,000    | \$5,000   |                    |
| Miscellaneous  | 1     | LS   | \$5,000    | \$5,000   |                    |
| <b>Signing &amp; Striping</b>  |       |      |            |           |                    |
| Monument Sign  | 1     | LS   | \$4,000    | \$4,000   |                    |
| Misc Signs   | 10    | LS   | \$650      | \$6,500   |                    |
| Crosswalk Markings   | 700   | SF   | \$5.50     | \$3,850   |                    |
| Pavement Markings  | 500   | LF   | \$0.42     | \$200     |                    |
| <b>Total Construction Cost</b>   |       |      |            |           | \$1,550,015        |
| <b>Contingency (15%)</b>   |       |      |            |           | \$232,500          |
| <b>Subtotal</b>  |       |      |            |           | \$1,782,515        |
| <b>Design &amp; Engineering (15%)</b>  |       |      |            |           | \$267,400          |
| <b>Construction Management/Oversight (10%)</b>   |       |      |            |           | \$178,300          |
| <b>Project Administration (5%)</b>   |       |      |            |           | \$8,900            |
| <b>TOTAL DEVELOPMENT COSTS</b>   |       |      |            |           | <b>\$2,237,115</b> |
| <b>Land Acquisition</b>  |       |      |            |           |                    |
| Land Value   | 0.06  | Acre | \$700,000  | \$42,000  |                    |
| Closing Costs  | 5%    |      |            | \$2,100   |                    |
| Appraisal  | 1     | EA   | \$10,000   | \$10,000  |                    |
| <b>TOTAL ESTIMATE - 2022</b>   |       |      |            |           | <b>\$2,291,215</b> |
| <i>2022 to 2028 Escalation Factor - 3 years at 5% per year, 3 years at 3% per year</i> |       |      |            |           | 1.26               |
| <b>TOTAL ORDER OF MAGNITUDE ESTIMATE - 2028</b>  |       |      |            |           | <b>\$2,890,000</b> |

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## **SITE 3 - SPEAR STREET SITE**

The final site under consideration consists of the existing right-of-way of E. Spear Street between N. Fall Street and N. Stewart Street. While the existing right-of-way is currently used as part of parking lots on both the north and south sides of Spear Street, the existing right-of-way is 66 feet in width, which is sufficient to accommodate the transit center site program (with reconfiguration of the existing adjacent parking lots), as shown in Figure 12.

To provide a footprint adequate for the transit center building as well as adequate width for passenger loading/unloading at five bus bays, it is necessary to configure the site as a central plaza area with one-way 15-foot-wide transit-only drive lanes on the north and south sides. These one-way lanes need to be eastbound on the north side and westbound on the south side.

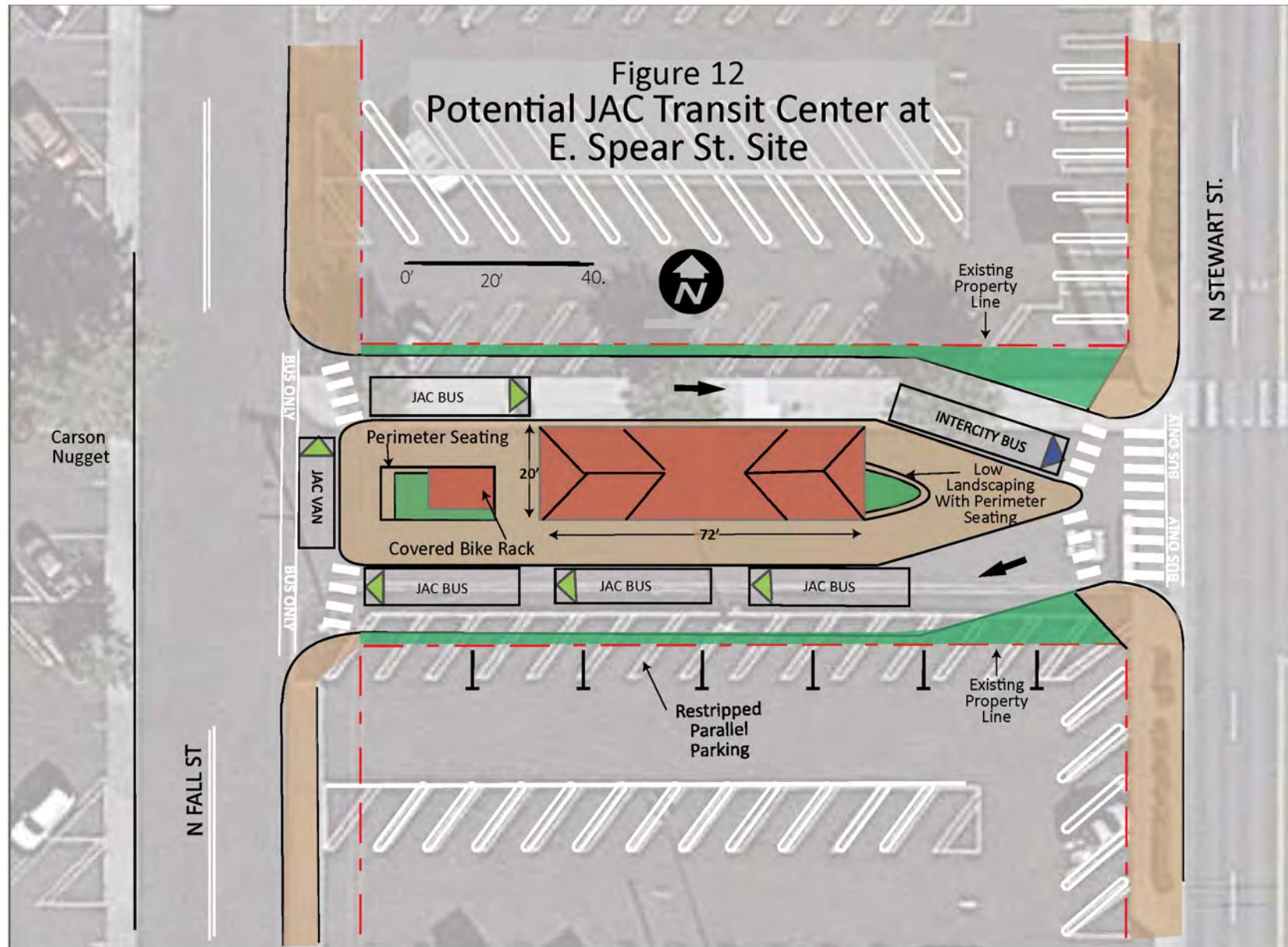
As there is not sufficient right-of-way width to provide transit lanes with width to allow buses to pass each other, bus drivers would typically need to pull as far forward as possible upon entering. Bus drivers would also need to wait for buses in front to depart before they can depart. This could create some delays of a few minutes at times, such as when the bus in front is loading a wheelchair user. Typically, JAC buses are scheduled to only be at the transit center for a few minutes. The Washoe RTC and ESTA routes also are on-site only as long as needed to deboard and board passengers. At present, only the TTD route uses Carson City as a layover point, which could necessitate a longer stay. Depending on the specific schedule overlap with JAC schedules, it may be necessary for the TTD bus to deboard passengers and then exit the transit center to lay over at another location (such as along the north side of Telegraph Street to the south) in order to not delay the JAC bus using the other bus bay on the north side.

This layout is convenient for passengers transferring between buses, as the walk distances between buses are relatively short. This also allows the transit center building to be conveniently located close to all five bus bays. However, there is very limited space for snow storage provided by this site design.

To ensure that entering buses are not blocked in a manner that stops traffic on Stewart Street, the bus bays on the south side of the transit plaza would be shifted to the west, providing space for an additional bus to pull into the transit lane even with three buses present on the south side of the plaza.

The lot to the north would need to be restriped to eliminate the existing 13 angled spaces along the south side (partially on City right-of-way) but would allow 1 more head-in space on the east side for a net loss of 12 spaces. In the lot to the south, 14 angled spaces partially on City right-of-way would be eliminated but six parallel spaces could be provided for a net loss of 8 spaces. Overall, 20 parking spaces would be eliminated.

The lot to the south of Spear Street is currently used for the Carson Farmers Market, which operated on Saturdays in June through September, from 8:30 AM to 1:00 PM. Use of the full right-of-way for the transit center would eliminate the northernmost 10 feet of the existing lot (or roughly 5 percent of the existing lot area).



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## Traffic Discussion

This site option would require the closure E. Spear Street west of N. Stewart Street to general public traffic. This 200-foot-long roadway effectively only serves as internal circulation to Carson Nugget parking lots. Existing traffic activity exclusive of special events is exceptionally low. Given that alternative access is provided both 200 feet to the north via Robinson Street and 200 feet to the south via Telegraph Street and considering the good overall traffic conditions in the vicinity, there is no chance that the relocation of existing traffic would create any significant traffic issues.

The bus circulation plan does present an unusual condition at the intersection of Spear Street and Stewart Street. Buses entering from Stewart Street will need to pass to the left of buses waiting to exit onto N Stewart Street. Exiting drivers will need to be aware that entering drivers from the north will pass in front of them. Given that only bus drivers will be making these movements, they can be trained to be aware of this condition. In addition, there is good driver sight distances in all directions. Signage and pavement markings would need to clearly identify that access is limited to buses only. In addition, the presence of the traffic signal on Stewart Street 200 feet to the north at Robinson Street creates gaps in southbound traffic that helps exiting bus drivers to pull onto Stewart Street. Given these factors, it is likely that no significant traffic safety impacts would be created. However, if this site is pursued a detailed traffic operations and safety analysis should be conducted.

## Construction Cost Estimate

As shown in Table 12, the cost estimate for development at this site reflects the following (in addition to the factors discussed above):

- Removal of all roadways, parking lot pavement, sidewalk and curb and gutter within the Spear Street right-of-way and to the centerlines on Fall Street and Stewart Street is assumed.
- Costs are included for reconstruction of curbs at the new edges of the parking lots, as well as fencing between the transit center and adjacent lots.
- Costs are included for new sidewalks along the east side of Fall Street and the west side of Stewart Street between Telegraph Street and Robinson Street.
- \$5,000 is included for decommissioning of the existing transit center site, including removal of shelters and benches and minor pavement repair.

In total, and including soft costs, development of a transit center on this site is estimated to require total costs of \$2,990,000 in 2028 dollars. This is \$100,000 more than the estimated cost of the E. Robinson Street site, and \$300,000 less than the existing site.

**TABLE 12: Spear Street Site Transit Center Cost Estimate**

| ITEM   | QTY    | UNIT | UNIT PRICE | TOTAL ESTIMATE | Subtotal           |
|--|--------|------|------------|----------------|--------------------|
| <b>Site Preparation</b>  |        |      |            |                |                    |
| Mobilization and Demobilization  | 2      | EA   | \$50,000   | \$100,000      |                    |
| Erosion and Sediment Control   | 1      | LS   | \$5,000    | \$5,000        |                    |
| Construction Staking / Survey  | 1      | LS   | \$10,000   | \$10,000       |                    |
| Temporary Fence  | 530    | LF   | \$6.00     | \$3,180        |                    |
| Temporary Relocation of Shelter  | 1      | LS   | \$2,000    | \$2,000        |                    |
| Utility Relocation   | 1      | EA   | \$10,000   | \$10,000       |                    |
| Remove Existing Streetlight  | 2      | EA   | \$650      | \$1,300        |                    |
| Remove Existing Sidewalk   | 2,200  | SF   | \$4.50     | \$9,900        |                    |
| Remove Existing Curb Ramp  | 0      | EA   | \$800      | \$0            |                    |
| Remove Existing Curb and Gutter  | 500    | LF   | \$10.00    | \$5,000        |                    |
| Remove Existing Roadway  | 11,200 | SF   | \$1.15     | \$12,880       |                    |
| QC/Materials Testing   | 1      | LS   | \$20,000   | \$20,000       |                    |
| <b>Earthwork</b>   |        |      |            |                |                    |
| Fine Grading   | 13,200 | SF   | \$0.50     | \$6,600        | \$6,600            |
| <b>Road, Parking Lot, Curb, Sidewalk</b>   |        |      |            |                |                    |
| Circulation Aggregate Base   | 243    | CY   | \$80.00    | \$19,500       |                    |
| Site Concrete  | 150    | CY   | \$250      | \$37,500       |                    |
| 5" Bituminous Pavement   | 3,870  | SF   | \$4.20     | \$16,300       |                    |
| Concrete Ribbon Curb   | 830    | LF   | \$45.00    | \$37,400       |                    |
| Concrete ADA Ramp  | 8      | LS   | \$4,800    | \$38,400       |                    |
| Plaza and Walkways   | 2900   | SF   | \$20.00    | \$58,000       |                    |
| Sidewalks along Fall and Stewart Sts.  | 4000   | SF   | \$12.00    | \$48,000       |                    |
| Planting Beds/Perimeter Seating  | 300    | SF   | \$50.00    | \$15,000       |                    |
| Landscaping/Irrigation   | --     | LS   | --         | \$20,000       |                    |
| Miscellaneous  | 1      | LS   | \$10,000   | \$10,000       |                    |
| <b>Facilities, Furnishings, Lighting</b>   |        |      |            |                |                    |
| Transit Building   | 1,440  | SF   | \$660      | \$950,400      |                    |
| Bus Shelters (Custom)  | 0      | EA   | \$20,000   | \$0            |                    |
| Benches  | 4      | LS   | \$1,500    | \$6,000        |                    |
| Facility Furnishings   | 1      | LS   | \$50,000   | \$50,000       |                    |
| Covered Bicycle Rack   | 120    | SF   | \$100      | \$12,000       |                    |
| Enhanced Fencing   | 340    | LF   | \$100      | \$34,000       |                    |
| Lighting   | 6      | EA   | \$7,080    | \$42,480       |                    |
| Utility Connections  | 1      | EA   | \$30,000   | \$30,000       |                    |
| Decommissioning of Existing Site   | 1      | EA   | \$5,000    | \$5,000        |                    |
| Miscellaneous  | 1      | LS   | \$5,000    | \$5,000        |                    |
| <b>Signing &amp; Striping</b>  |        |      |            |                |                    |
| Monument Sign  | 1      | LS   | \$4,000    | \$4,000        |                    |
| Misc Signs   | 16     | LS   | \$650      | \$10,400       |                    |
| Crosswalk Markings   | 1,380  | SF   | \$5.50     | \$7,590        |                    |
| Pavement Markings  | 1,000  | LF   | \$0.42     | \$400          |                    |
| <b>Total Construction Cost</b>   |        |      |            |                | \$1,643,230        |
| <b>Contingency (15%)</b>   |        |      |            |                | \$246,500          |
| <b>Subtotal</b>  |        |      |            |                | \$1,889,730        |
| <b>Design &amp; Engineering (15%)</b>  |        |      |            |                | \$283,500          |
| <b>Construction Management/Oversight (10%)</b>   |        |      |            |                | \$189,000          |
| <b>Project Administration (5%)</b>   |        |      |            |                | \$9,500            |
| <b>TOTAL DEVELOPMENT COSTS</b>   |        |      |            |                | <b>\$2,371,730</b> |
| <b>Land Acquisition</b>  |        |      |            |                |                    |
| Land Value   | 0      | Acre | \$700,000  | \$0            |                    |
| <b>Closing Costs</b>   | 5%     |      |            | \$0            | <b>\$0</b>         |
| <b>Appraisal</b>   | 0      | EA   | \$10,000   | \$0            |                    |
| <b>TOTAL ESTIMATE - 2022</b>   |        |      |            |                | <b>\$2,371,730</b> |
| <i>2022 to 2028 Escalation Factor - 3 years at 5% per year, 3 years at 3% per year</i> |        |      |            |                |                    |
| <b>TOTAL ORDER OF MAGNITUDE ESTIMATE - 2028</b>  |        |      |            |                | <b>1.26</b>        |
|  |        |      |            |                | <b>\$2,990,000</b> |

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## Chapter 7

# BENEFIT COST ANALYSIS

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A new transit center for Carson City would have many benefits that are not possible to quantify, including the following:

- Raising the overall perception of public transit in the community as an attractive mobility option. The current facility does not provide an inviting environment to encourage “discretionary” travelers to use public transit.
- Addressing the existing lack of convenient driver restroom and break facilities.
- Addressing the existing impacts on the adjacent properties. The current lack of amenities on the site causes passengers to encroach on the adjacent Federal Building property, particularly in search of shade. An improved center can also accommodate improvements in fencing and security systems to minimize impacts on adjacent properties.
- Providing indoor climate-controlled waiting areas for passengers. This is particularly important for persons travelling on intercity buses with lower service frequency (Washoe RTC, ESTA, TTD).

Beyond these “intangibles,” the US Department of Transportation’s *Benefit-Cost Analysis Guidance for Discretionary Grant Programs* (January 2023) provides a framework for evaluating quantitative financial benefits, specifically the net present value benefits over a 20-year period (2027—the first year that a transit center is assumed to be open—to 2046). Per the guidelines, benefits are calculated at a seven percent annual discount rate.

Some of the potential quantifiable benefits identified for transit center proposals in other communities do not pertain for the Carson City proposal. As the existing center is in a good, centralized location and the potential alternative sites are within a few blocks of the existing site, there is no appreciable reduction in transit operating costs. The existing facility also accommodates all the buses in a convenient timed-transfer schedule, so a new center does not allow improved connections between buses (and associated reductions in passenger travel times). There is therefore no direct reduction in passenger travel time that would accrue from a new transit center.

### ANALYSIS OF TRANSIT RIDERSHIP IMPACTS

The basis for this benefit analysis is an evaluation of how the project elements will expand transit ridership. The Carson City Transit Center would provide an improvement in amenities, including expanded indoor passenger waiting area, space for public information systems and greater visibility/public profile.

The professional literature regarding the ridership increase generated by new transit facilities (absent any reduction in travel time, as discussed above) is limited. This is in large part because service enhancements are typically implemented along with a new center, making it difficult to define the ridership benefit specifically resulting from the new facility. Bus Rapid Transit planning guides<sup>4</sup> indicate anecdotal evidence ranging from a negligible impact up to a 10 percent increase. Given the importance of the downtown Transit Center site as a key junction in the JAC transit system and as a transfer facility for other intercity transit services, a moderate (4 percent) increase in JAC fixed route ridership is applied. This is equal to an additional 11,700 passenger-trips per year. In addition, a modest (2 percent) increase in ridership on the Washoe RTC Regional Connector. The ridership impact on TTD and ESTA services is expected to be minimal. In sum, the transit center is estimated to increase existing annual ridership by 8,400 passenger-trips.

## **ANALYSIS OF QUANTIFIABLE TRANSIT BENEFITS**

The transit improvement program will generate the quantifiable benefits discussed below.

### Transit Rider Transportation Cost Savings

The increased transit ridership will reduce overall travel-related costs, as the operating costs for auto use are higher than transit fares. As shown in Table 13, the ridership estimates were divided by an average vehicle occupancy (over all trip types) of 1.67, per the BCA Guidance document, to yield the eliminated annual one-way vehicle-trips for each service. Multiplying by the average person-trip length on each service corridor yields the reduction in annual Vehicle-Miles of Travel (VMT). The cost savings per VMT rate is calculated at an average operating cost per vehicle-mile of 46 cents (per the BCA Guidance document) minus the average fare per person-mile for the various routes multiplied by the average vehicle occupancy. The ridership is expected to grow at the forecast rate of Carson City annual population growth (0.2 percent per year). As shown in Table 14, this benefit is \$6,000 in 2027, increasing to \$6,300 in 2046 with growth in ridership. The net present value of this benefit is \$58,357.

### Air Emission Benefits

The reduction in private vehicle (auto, light truck, and SUV) use will yield overall reductions in air pollutant emissions, even when the additional transit service is considered. The analysis of this benefit, as shown in Table 15, is based upon the VMT reductions (identified in Table 14) multiplied by standard auto emission cost factors. This yields a relatively small benefit of \$700 per year. Over the 20-year analysis period this yields a net present value benefit of \$7,799.

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<sup>4</sup> Such as the Transit Cooperative Research Program Report 90: Bus Rapid Transit, 2003.

**TABLE 13: Transit Benefits -- Base Year**

|  | JAC Fixed Route | Washoe RTC Regional Connector | Total         |
|--|-----------------|-------------------------------|---------------|
| <b><i>Existing Annual Ridership (2018)</i></b> | <b>195,160</b>  | <b>30,000</b>                 |               |
| Ridership Increase                             | 7,800           | 600                           | <b>8,400</b>  |
| <i>Percent Increase</i>                        | 4%              | 2%                            |               |
| Average Avoided Vehicle Occupancy              | 1.67            | 1.67                          |               |
| Eliminated 1-Way Vehicle-Trips (1)             | 4,700           | 400                           |               |
| Average Trip Length (Miles)                    | 2.5             | 28                            |               |
| Reduction in Private Vehicle VMT               | 11,800          | 11,200                        | <b>23,000</b> |

**TABLE 14: Motorist Travel Cost Reduction Benefits**

**Annual Reduction in VMT by  
Transit Service**

| Year         | Washoe RTC      |                    |        | Discounted      |              |
|--------------|-----------------|--------------------|--------|-----------------|--------------|
|              | JAC Fixed Route | Regional Connector | TOTAL  | Annual Value    | at 7 Percent |
| 2027         | 12,000          | 11,400             | 23,400 | \$6,000         | \$5,189      |
| 2028         | 12,100          | 11,500             | 23,600 | \$6,100         | \$4,907      |
| 2029         | 12,100          | 11,500             | 23,600 | \$6,100         | \$4,563      |
| 2030         | 12,100          | 11,500             | 23,600 | \$6,100         | \$4,244      |
| 2031         | 12,100          | 11,500             | 23,600 | \$6,100         | \$3,947      |
| 2032         | 12,200          | 11,600             | 23,800 | \$6,200         | \$3,731      |
| 2033         | 12,200          | 11,600             | 23,800 | \$6,200         | \$3,469      |
| 2034         | 12,200          | 11,600             | 23,800 | \$6,200         | \$3,227      |
| 2035         | 12,200          | 11,600             | 23,800 | \$6,200         | \$3,001      |
| 2036         | 12,300          | 11,600             | 23,900 | \$6,200         | \$2,791      |
| 2037         | 12,300          | 11,700             | 24,000 | \$6,200         | \$2,595      |
| 2038         | 12,300          | 11,700             | 24,000 | \$6,200         | \$2,414      |
| 2039         | 12,300          | 11,700             | 24,000 | \$6,200         | \$2,245      |
| 2040         | 12,400          | 11,700             | 24,100 | \$6,200         | \$2,088      |
| 2041         | 12,400          | 11,800             | 24,200 | \$6,300         | \$1,973      |
| 2042         | 12,400          | 11,800             | 24,200 | \$6,300         | \$1,835      |
| 2043         | 12,400          | 11,800             | 24,200 | \$6,300         | \$1,706      |
| 2044         | 12,500          | 11,800             | 24,300 | \$6,300         | \$1,587      |
| 2045         | 12,500          | 11,900             | 24,400 | \$6,300         | \$1,476      |
| 2046         | 12,500          | 11,900             | 24,400 | \$6,300         | \$1,372      |
| <b>TOTAL</b> |                 |                    |        | <b>\$58,357</b> |              |

**TABLE 15: Air Emission Reduction Benefit**

| Year                          | Annual Reduction in Auto VMT | Annual Value of Auto Air Emission Reduction |                      |                     |                                  |                |                | Net Annual Value | Discounted at 7 Percent |
|-------------------------------|------------------------------|---|----------------------|---------------------|----------------------------------|----------------|----------------|------------------|-------------------------|
|                               |                              | Particulate Matter (PM)                     | Nitrous Oxides (NOx) | Sulfur Oxides (SOx) | Volatile Organic Compounds (VOC) | Carbon Dioxide |                |                  |                         |
| <i>Value (\$ per VMT) (1)</i> | \$0.01893                    | \$0.00602                                   | \$0.00039            | \$0.00219           | \$0.00520                        |                |                |                  |                         |
| 2027                          | 23,400                       | \$400                                       | \$100                | \$0                 | \$100                            | \$100          | \$700          | \$605            |                         |
| 2028                          | 23,600                       | \$400                                       | \$100                | \$0                 | \$100                            | \$100          | \$700          | \$563            |                         |
| 2029                          | 23,600                       | \$400                                       | \$100                | \$0                 | \$100                            | \$100          | \$700          | \$524            |                         |
| 2030                          | 23,600                       | \$400                                       | \$100                | \$0                 | \$100                            | \$100          | \$700          | \$487            |                         |
| 2031                          | 23,600                       | \$400                                       | \$100                | \$0                 | \$100                            | \$100          | \$700          | \$453            |                         |
| 2032                          | 23,800                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$481            |                         |
| 2033                          | 23,800                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$448            |                         |
| 2034                          | 23,800                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$416            |                         |
| 2035                          | 23,800                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$387            |                         |
| 2036                          | 23,900                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$360            |                         |
| 2037                          | 24,000                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$335            |                         |
| 2038                          | 24,000                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$311            |                         |
| 2039                          | 24,000                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$290            |                         |
| 2040                          | 24,100                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$269            |                         |
| 2041                          | 24,200                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$251            |                         |
| 2042                          | 24,200                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$233            |                         |
| 2043                          | 24,200                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$217            |                         |
| 2044                          | 24,300                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$201            |                         |
| 2045                          | 24,400                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$187            |                         |
| 2046                          | 24,400                       | \$500                                       | \$100                | \$0                 | \$100                            | \$100          | \$800          | \$174            |                         |
| <b>TOTAL</b>                  |                              |   |                      |                     |                                  |                | <b>\$7,799</b> |                  |                         |

Note 1: Based on emission rates identified in *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects -- Emission Factor Tables*, California Air Resources Board, September 2019.

## Safety Benefits

As fatality/injury rates per mile traveled are significantly lower for bus passengers than for auto (and light truck/SUV) passengers, the increase in transit ridership resulting from the transit center would provide a safety benefit. Existing crash rates were defined from NDOT Office of Traffic Safety data. Based on National Safety Council data<sup>5</sup>, the fatality rate (deaths per million passenger-miles) for light duty motor vehicles (passenger cars, light trucks, SUVs) for the ten years between 2009 and 2018 was 0.488, while the rate over the same period for buses was 0.047.

This indicates that the ratio of bus fatality rate to light duty motor vehicle rate was 9.63 percent (a crash modification factor of 90.4). This in turn can be used to identify the number and severity of crashes that would be avoided due to the shift of motorists to transit use. These are multiplied by the costs

<sup>5</sup> Death by Transportation Mode, Website: <https://injuryfacts.nsc.org/home-and-community/safety-topics/deaths-by-transportation-mode/> 2007-2018

associated with crashes by severity, as identified in *Benefit-Cost Analysis Guidance for Discretionary Grant Programs* to yield the safety benefit. As shown in Table 16, the annual safety benefits are estimated to be \$6,505 in the 2027. In total, the 20-year net present value of safety benefits is found to be \$62,656.

**TABLE 16: Safety Benefits**  
**Annual Reduction in Auto**  
**Million Passenger-Miles by**  
**Transit Service**

| Year         | JAC Fixed Route | RTC Regional Connector | Washoe TOTAL | Annual Value    | Discounted at 7 Percent |
|--------------|-----------------|------------------------|--------------|-----------------|-------------------------|
| 2027         | 0.0200          | 0.0190                 | 0.0391       | \$6,505         | \$5,626                 |
| 2028         | 0.0202          | 0.0192                 | 0.0394       | \$6,561         | \$5,277                 |
| 2029         | 0.0202          | 0.0192                 | 0.0394       | \$6,561         | \$4,908                 |
| 2030         | 0.0202          | 0.0192                 | 0.0394       | \$6,561         | \$4,564                 |
| 2031         | 0.0202          | 0.0192                 | 0.0394       | \$6,561         | \$4,245                 |
| 2032         | 0.0204          | 0.0194                 | 0.0397       | \$6,616         | \$3,981                 |
| 2033         | 0.0204          | 0.0194                 | 0.0397       | \$6,616         | \$3,702                 |
| 2034         | 0.0204          | 0.0194                 | 0.0397       | \$6,616         | \$3,443                 |
| 2035         | 0.0204          | 0.0194                 | 0.0397       | \$6,616         | \$3,202                 |
| 2036         | 0.0205          | 0.0194                 | 0.0399       | \$6,643         | \$2,990                 |
| 2037         | 0.0205          | 0.0195                 | 0.0401       | \$6,672         | \$2,793                 |
| 2038         | 0.0205          | 0.0195                 | 0.0401       | \$6,672         | \$2,597                 |
| 2039         | 0.0205          | 0.0195                 | 0.0401       | \$6,672         | \$2,416                 |
| 2040         | 0.0207          | 0.0195                 | 0.0402       | \$6,698         | \$2,255                 |
| 2041         | 0.0207          | 0.0197                 | 0.0404       | \$6,728         | \$2,107                 |
| 2042         | 0.0207          | 0.0197                 | 0.0404       | \$6,728         | \$1,959                 |
| 2043         | 0.0207          | 0.0197                 | 0.0404       | \$6,728         | \$1,822                 |
| 2044         | 0.0209          | 0.0197                 | 0.0406       | \$6,754         | \$1,701                 |
| 2045         | 0.0209          | 0.0199                 | 0.0407       | \$6,784         | \$1,589                 |
| 2046         | 0.0209          | 0.0199                 | 0.0407       | \$6,784         | \$1,478                 |
| <b>TOTAL</b> |                 |                        |              | <b>\$62,656</b> |                         |

## Benefit-Cost Analysis

Costs will consist of capital costs (design, engineering, construction, land acquisition and project management) as well as ongoing maintenance costs. These costs were defined as follows:

- The middle of the three site cost estimates was assumed (\$2,990,000).
- Ongoing facility maintenance costs also need to be considered. A reasonable planning-level estimate is as follows:
  - Custodial and Grounds—\$40,000
  - General building maintenance—\$15,000
  - Utilities—\$6,000
  - Security/Cameras/IT—\$4,000.

This indicates a total annual facility cost of \$65,000 per year. Annualized over the period from 2027—2046, the net present value of all costs is \$4,201,050 as shown in Table 17. The various benefits discussed above, as shown in the bottom portion of Table 17, total \$128,812 in present value. Dividing this figure by the total present value of all costs, the Benefit-to-Cost Ratio is found to be 0.04.

**TABLE 17: Annual Costs and Benefit-Cost Ratio**

| Year                      | Capital     | Maintenance              | Total           | Discounted at 7<br>Percent |
|---------------------------|-------------|--------------------------|-----------------|----------------------------|
|                           | Costs       | Costs                    | Annual<br>Costs |                            |
| 2027                      | \$2,990,000 | \$65,000                 | \$3,055,000     | \$2,642,270                |
| 2028                      | \$0         | \$65,000                 | \$65,000        | \$52,283                   |
| 2029                      | \$0         | \$65,000                 | \$65,000        | \$48,623                   |
| 2030                      | \$0         | \$65,000                 | \$65,000        | \$45,220                   |
| 2031                      | \$0         | \$65,000                 | \$65,000        | \$42,054                   |
| 2032                      | \$0         | \$65,000                 | \$65,000        | \$39,111                   |
| 2033                      | \$0         | \$65,000                 | \$65,000        | \$36,373                   |
| 2034                      | \$0         | \$65,000                 | \$65,000        | \$33,827                   |
| 2035                      | \$0         | \$65,000                 | \$65,000        | \$31,459                   |
| 2036                      | \$0         | \$65,000                 | \$65,000        | \$29,257                   |
| 2037                      | \$0         | \$65,000                 | \$65,000        | \$27,209                   |
| 2038                      | \$0         | \$65,000                 | \$65,000        | \$25,304                   |
| 2039                      | \$0         | \$65,000                 | \$65,000        | \$23,533                   |
| 2040                      | \$0         | \$65,000                 | \$65,000        | \$21,886                   |
| 2041                      | \$0         | \$65,000                 | \$65,000        | \$20,354                   |
| 2042                      | \$0         | \$65,000                 | \$65,000        | \$18,929                   |
| 2043                      | \$0         | \$65,000                 | \$65,000        | \$17,604                   |
| 2044                      | \$0         | \$65,000                 | \$65,000        | \$16,372                   |
| 2045                      | \$0         | \$65,000                 | \$65,000        | \$15,226                   |
| 2046                      | \$0         | \$65,000                 | \$65,000        | \$14,160                   |
| <b>TOTAL</b>              |             |                          |                 | <b>\$3,201,050</b>         |
| <b>Benefits</b>           |             | <u>Net Present Value</u> |                 |                            |
| Rider Travel Cost Savings |             | \$58,357                 |                 |                            |
| Air Emission Reductions   |             | \$7,799                  |                 |                            |
| Safety Benefits           |             | \$62,656                 |                 |                            |
| <b>TOTAL</b>              |             | <b>\$128,812</b>         |                 |                            |
| <b>Benefit-Cost Ratio</b> |             |                          |                 |                            |
| Benefit                   |             | \$128,812                |                 |                            |
| Cost                      |             | \$3,201,050              |                 |                            |
| Ratio                     |             | 0.04                     |                 |                            |

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## Chapter 8

# FOCUSED SITE SCORING AND COMPARISON

### ANALYSIS OF FOCUS SITES

Chapter 5 of this study prepared as part of this study presented a ranking/weighting system for evaluation of potential sites. This was used to narrow down the six original site options to the three discussed in this document. Using the results of the additional design and analysis documented in previous chapters of this document, this analysis was updated, as shown in Table 18.

**Table 18: Updated Weighted Score of Site Alternatives**

| Factor<br>Weight<br>(0 to 1)    | Scoring (1 = Very Poor to 5 = Very Good) |              |                |             |
|---------------------------------|--|--------------|----------------|-------------|
|                                 | Existing Site                            | Robinson St. | Spear St. West |             |
| Site Availability (Screening)   | 1.00                                     | Yes          | Possibly       | Yes         |
| Construction Cost               | 0.50                                     | 2            | 3              | 3           |
| Parking Impact                  | 0.75                                     | 4            | 3              | 3           |
| Downtown Area Goals             | 1.00                                     | 5            | 5              | 5           |
| Transit Efficiency & Access     | 0.75                                     | 4            | 4              | 3           |
| Passenger Safety & Convenience  | 1.00                                     | 5            | 4              | 3           |
| Adjacent Land Use Compatibility | 1.00                                     | 4            | 4              | 5           |
| Expandability/Flexibility       | 0.75                                     | 4            | 3              | 1           |
|                                 | <b>Weighted Score</b>                    | <b>24.0</b>  | <b>22.0</b>    | <b>19.8</b> |

These scores were defined as follows:

- **Construction Cost**— The Existing Site costs would be higher than the other two sites (due to the larger roadway reconstruction area), scoring slightly lower on this factor.
- **Parking Impact**—The Existing Site would reduce on-street parking by a net five spaces, while the Robinson Street Site would reduce parking supply by 8 spaces (along with two taxi loading spaces) and the Spear Street Site would reduce parking by 20 spaces.
- **Downtown Area Goals**—All sites align with Downtown Area Goals.

- **Transit Efficiency and Access**—As discussed in Chapter 5, the transit mileage needed to serve any of the sites are remarkably similar (within \$400 per year of operating costs). The potential for buses at the Spear Street site to be blocked from exiting due to the presence of other buses is a disadvantage to that site.
- **Passenger Safety and Convenience**—All three sites allow passengers to transfer between buses without the need to cross public streets or driveways, which is a safety benefit. The Spear Street Site has a convenience benefit in that bus bays are closer together (reducing walk distance) than for the other two sites. However, the Spear Street Site is a one block longer walk to trip destinations along Carson Street. The Existing Site benefits in this regard by the relatively low traffic volumes on Plaza Street compared with Robinson Street.
- **Adjacent Land Use Compatibility**—Both the Existing Site and the Robinson Street Site would keep the transit functions immediately adjacent to the Federal Building, which has been an issue in the past. While the site improvements are expected to address this issue, the Spear Street Site avoids the issue altogether. Assuming the slight 5 percent reduction in the parking lot to the south of the site does not have a substantial impact on the Farmers Market, the Spear Street Site ranks slightly higher than the other two sites.
- **Expandability/Flexibility** – While each of the sites can accommodate the currently-foreseeable site program, as a long-term facility investment there is always the potential for new technologies or site requirements to be accommodated. Examples may include charging equipment for battery electric transit vehicles or providing space for a bike share or scooter share program. The relatively large amount of space provided at the Existing Site due to the viability of reducing Plaza Street to a single lane provides a clear benefit in this category.

Consideration was given to also adding a “Traffic Impact” category, as two options (existing and Spear Street) change current traffic access patterns slightly. As none of the options were found to have any significant traffic/circulation impacts, however, adding this category would not change the relative weighted rankings.

As shown, all sites yield an overall score within a relatively narrow range of 19.8 to 24.0. This analysis, however, does indicate a modest overall advantage to the Existing Site at 24.0, compared with 22.0 for the Robinson Street Site and 19.8 for the Spear Street Site.

## Chapter 9

# STUDY FINDINGS AND RECOMMENDATIONS

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### KEY STUDY FINDINGS

Ultimately, after assessing existing transit center site challenges, generating potential new sites, exploring each site for feasible viability in development and operations, and determining cost impacts to implementation, the key findings of this study are as follows:

- The JAC fixed route service is important to many Carson City residents. As a “hub and spoke” “pulse” system, the downtown transfer facility is a key element of the service. It also serves as a connection point for regional transit services providing service to Reno/Sparks and Lake Tahoe.
- The existing Downtown Transfer Plaza consists only of a wide sidewalk with 2 shelters, 3 benches, and a bike rack along the sidewalk adjacent to the east side of North Plaza Street. This facility has numerous existing deficiencies:
  - It lacks sufficient shelter for the existing peak passenger loads.
  - It does not provide driver break facilities, such as restrooms.
  - Lack of lighting is a potential safety issue.
  - The poor facilities result in some passengers encroaching onto nearby properties (in particular, the Federal Building) in search of seating and shade.
  - The current configuration results in long walking distance for passengers transferring between some buses.
  - The facility does not provide a positive public image for the transit service, nor does it have adequate wayfinding signage, real-time information, or marketing for the services it accommodates and links together.
- An improved transit center would warrant the provision of a modest enclosed building of approximately 1,500 square feet of floor area, providing a passenger waiting area, staff break facilities and office, and restrooms. Transit bays to accommodate up to 8 buses are also warranted.

### RECOMMENDATIONS

With these findings in mind and based on a detailed analysis of each site, it is recommended to pursue construction on the existing site along Plaza Drive. Advantages of this site over the others considered are as follows:

- It does not require the purchase of additional property.

- It provides greater flexibility to provide for future modifications, such as for electric vehicle charging.
- It has less impact on other adjacent uses. By providing better facilities on site, in fact, it can reduce the existing nuisance use of the Federal Building lawn area.
- It provides for better pedestrian safety than the other locations.

The recommended conceptual site plan is shown in Figure 8, Chapter 6. North Plaza Street should be converted to one-way northbound operation between East Robinson Street and East Washington Street. The space made available by the reduction in street width should be used for a building in the southeast corner of Plaza and Washington, expanded sidewalk and landscaping on the east side of the roadway, and a sidewalk on the west side of the roadway. JAC bus bays should be provided along the east side of Plaza Street, along with one JAC bus bay on the south side of E. Washington Street east of Plaza Street. An additional bus bay for RTC and TTD buses should also be provided along E. Washington Street.

## Implementation

Achieving a new transit center for Carson City is a substantial endeavor. Key implementation steps consist of the following:

- Pursue Federal funding for planning and construction, such as the Federal Transit Administration's 5339 Grants for Buses and Bus Facilities program.
- Coordinate with the property owners of the adjacent Federal Building parcel. While the transit center project will not require additional land, it will affect this parcel. Discussions are needed regarding access to the monument, the possible reduction in driveways to the southwestern parking area, and changes to fencing and landscaping.
- Through the environmental process, present the proposed project to the Carson City Historic Resources Commission and discuss how the project can minimize impacts on the Virginia and Truckee Railroad Depot and best be compatible with this historic asset.
- Conduct a focused traffic study to support the conversion of Plaza Street to one-way northbound.
- Conduct a procurement process to retain an architectural/engineering firm to develop plans for the new facility.

Appendix A  
**DRIVER SURVEY RESULTS**

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## Carson City JAC Transit Center Facility Feasibility Study – Bus Driver Interview Questions –

In the 2019 Carson City Transit Development Plan, the need for an improved JAC transit center was identified. Carson City has hired LSC Consultants, Inc to complete a feasibility study to identify needs, conduct outreach, and to evaluate the existing downtown transfer site as well as other potential locations to consider for a future transit station. As a part of these efforts, we would like to ask the bus drivers a few questions.

\*This is only a study; future action requires direction from the Carson City Regional Transportation Commission\*

1. What are some pros and cons about the existing location along Plaza Street by the Federal Building?

Pros

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Cons

- Fire Hydrant need remove

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2. As a driver, what should site planners consider when evaluating a site for a transit center (access, circulation, etc.)?

\* Need to build  
a public restroom!

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\*\*Use back if needed\*\*

3. What are some transit center features you would like to see included in the new location? (Check the following)

| Amenities                         | Yes | No |
|-----------------------------------|-----|----|
| Indoor waiting area               | ✓   |    |
| Driver Restrooms                  | ✓   |    |
| Public Restrooms                  | ✓   |    |
| Security (Cameras and Lighting)   | ✓   |    |
| Bicycle Racks                     | ✓   |    |
| Additional seating                | ✓   |    |
| Small Office Space                | ✓   |    |
| Storage Area                      | ✓   |    |
| Vending Machine (Food and Drinks) | ✓   |    |

4. What is the greatest number of people you have ever seen waiting at the current Plaza Street stop? (Check the best answer)  Less than 10 people  10-20 people  20-30 people  
 30-40 people  40-50 people  More than 50, specifically my best estimate is \_\_\_\_\_

5. Is there anything else you would like to share regarding the evaluation of a future transit center?

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## Carson City JAC Transit Center Facility Feasibility Study – Bus Driver Interview Questions –

In the 2019 Carson City Transit Development Plan, the need for an improved JAC transit center was identified. Carson City has hired LSC Consultants, Inc to complete a feasibility study to identify needs, conduct outreach, and to evaluate the existing downtown transfer site as well as other potential locations to consider for a future transit station. As a part of these efforts, we would like to ask the bus drivers a few questions.

\*This is only a study; future action requires direction from the Carson City Regional Transportation Commission\*

1. What are some pros and cons about the existing location along Plaza Street by the Federal Building?

wide parking area

Pros

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Cons

Not always enough  
time to get to restroom  
no food plaza close by

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2. As a driver, what should site planners consider when evaluating a site for a transit center (access, circulation, etc.)?

plenty of parking  
restroom employee  
accessible only  
waiting area

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---

\*\*Use back if needed\*\*

3. What are some transit center features you would like to see included in the new location? (Check the following)

| Amenities                         | Yes | No |
|-----------------------------------|-----|----|
| Indoor waiting area               | X   |    |
| Driver Restrooms                  | X   |    |
| Public Restrooms                  |     | X  |
| Security (Cameras and Lighting)   | X   |    |
| Bicycle Racks                     | X   |    |
| Additional seating                |     |    |
| Small Office Space                |     |    |
| Storage Area                      | X   |    |
| Vending Machine (Food and Drinks) | X   |    |

4. What is the greatest number of people you have ever seen waiting at the current Plaza Street stop? (Check the best answer)  Less than 10 people  10-20 people  20-30 people  
 30-40 people  40-50 people  More than 50, specifically my best estimate is \_\_\_\_\_

5. Is there anything else you would like to share regarding the evaluation of a future transit center?

make it driver friendly one way in/out for  
bus traffic only

## Carson City JAC Transit Center Facility Feasibility Study – Bus Driver Interview Questions –

In the 2019 Carson City Transit Development Plan, the need for an improved JAC transit center was identified. Carson City has hired LSC Consultants, Inc to complete a feasibility study to identify needs, conduct outreach, and to evaluate the existing downtown transfer site as well as other potential locations to consider for a future transit station. As a part of these efforts, we would like to ask the bus drivers a few questions.

\*This is only a study; future action requires direction from the Carson City Regional Transportation Commission\*

1. What are some pros and cons about the existing location along Plaza Street by the Federal Building?

Pros

1. Central location in town.

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Cons

1. Position of fire hydrant?

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2. As a driver, what should site planners consider when evaluating a site for a transit center (access, circulation, etc.)?

1. Direction of weather?

2. Safety of clients in wait.

3. Transfers?

4.

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\*\*Use back if needed\*\*

3. What are some transit center features you would like to see included in the new location? (Check the following)

| Amenities                         | Yes | No |
|-----------------------------------|-----|----|
| Indoor waiting area               |     |    |
| Driver Restrooms                  | ✗   |    |
| Public Restrooms                  |     |    |
| Security (Cameras and Lighting)   | ✗   |    |
| Bicycle Racks                     | ✗   |    |
| Additional seating                |     |    |
| Small Office Space                |     |    |
| Storage Area                      |     |    |
| Vending Machine (Food and Drinks) |     |    |

4. What is the greatest number of people you have ever seen waiting at the current Plaza Street stop? (Check the best answer)  Less than 10 people  10-20 people  20-30 people  
 30-40 people  40-50 people  More than 50, specifically my best estimate is \_\_\_\_\_

5. Is there anything else you would like to share regarding the evaluation of a future transit center?

What type of vehicles are in the transit future?  
Electric/Battery?

---

## Carson City JAC Transit Center Facility Feasibility Study

### – Bus Driver Interview Questions –

In the 2019 Carson City Transit Development Plan, the need for an improved JAC transit center was identified. Carson City has hired LSC Consultants, Inc to complete a feasibility study to identify needs, conduct outreach, and to evaluate the existing downtown transfer site as well as other potential locations to consider for a future transit station. As a part of these efforts, we would like to ask the bus drivers a few questions.

\*This is only a study; future action requires direction from the Carson City Regional Transportation Commission\*

1. What are some pros and cons about the existing location along Plaza Street by the Federal Building?

EASY TO PULL INTO  
<sup>Pros</sup>  
NEARBY CASINO  
STREET IS WIDE  
EASY TO PULL OUT FROM

Fire Hydrant, NEAR CURB.  
<sup>Cons</sup>  
NO DESIGNATED BAYS FOR BUSES  
CARS Sometimes interfere by  
PARKING too close.

2. As a driver, what should site planners consider when evaluating a site for a transit center (access, circulation, etc.)?

PEDESTRIAN WALKWAYS  
BAYS FOR EACH BUS  
Shelter for Bad Weather

\*\*Use back if needed\*\*

3. What are some transit center features you would like to see included in the new location? (Check the following)

| Amenities                         | Yes | No |
|-----------------------------------|-----|----|
| Indoor waiting area               | ✓   |    |
| Driver Restrooms                  | ✓   |    |
| Public Restrooms                  |     | ✓  |
| Security (Cameras and Lighting)   | ✓   |    |
| Bicycle Racks                     |     | ✓  |
| Additional seating                | ✓   |    |
| Small Office Space                |     | ✓  |
| Storage Area                      |     | ✓  |
| Vending Machine (Food and Drinks) | ✓   |    |

4. What is the greatest number of people you have ever seen waiting at the current Plaza Street stop? (Check the best answer)  Less than 10 people  10-20 people  20-30 people  
 30-40 people  40-50 people  More than 50, specifically my best estimate is \_\_\_\_\_

5. Is there anything else you would like to share regarding the evaluation of a future transit center?

NO

Appendix B

**POTENTIAL SITE INFORMATION**

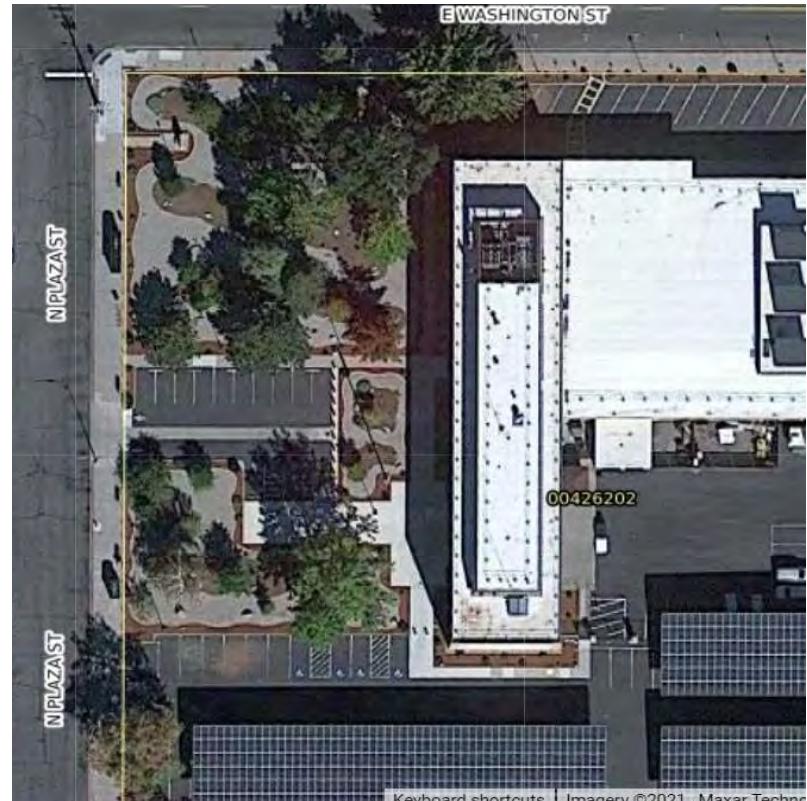
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## Site 1 - Existing Site Summary

### Site Information

Site Address 705 N Plaza Street  
APN 426202  
Owners US Government  
Zoning Public Regional  
Allowable Use Yes



## Site 2 - V&T Freight House Summary

### Site Information

Address 113 E Washington Street  
APN 426101  
Owners Masonic Lodge, Carson  
Size 0.2 Acres  
Zoning Downtown Mixed Use  
Allowable Use Yes



## Site 3 - Coin Lot

### Site Information

Address 617 N Carson Street  
APN 426301  
Owners Adams N Carson LLC  
Size 0.51 Acres  
Zoning Downtown Mixed-Use  
Allowable Use Yes



## Site 4 - Robinson St.

### Site Information

Address 705 N Plaza Street  
APN 426202  
Owners US Government  
Zoning Public Regional  
Allowable Use Yes



## Site 5 - Spear St. West

### Site Information

Address                    East Spear Street between Fall Street and Stewart Street  
APN                        00422407, 00422408, & 00422402  
Owners                    Adams N Carson LLC  
Zoning                    Downtown Mixed Use



## Site 6 – Spear Street East

### Site Information

Addresses                      Spear Street between Stewart Street and Valley Street  
APN                              00422306 & 00422307  
Owners                           Adams N Carson LLC  
Zoning                           Downtown Mixed Use



# Carson City Transit Center Feasibility Study

Carson City Regional Transportation Commission  
March 8, 2023



1

## Background

- North Plaza Street
- Existing site conditions, challenges, and operation limitations
- Identification of future needs and enhancements
  - Passenger information
  - Driver restrooms
  - Regional Transit providers

2

## Space Need Requirements

**Table 5: JAC Transit Facility Space Requirements**

| Program Element                                   | Sq.Ft.<br>per Unit | # of Units | Square Feet of Floor Area |              |               |           |
|---|--------------------|------------|---------------------------|--------------|---------------|-----------|
|   |                    |            | Standard                  | Near Term    | Long Term     | Near Term |
| <u>Office Space</u>                               |                    |            |                           |              |               |           |
| Office Space/Counter                              | 250                | 1          | 1                         | 250          | 250           | 250       |
| <i>Subtotal: Administrative Space</i>             |                    |            |                           |              |               |           |
| <u>Building Support Space</u>                     |                    |            |                           |              |               |           |
| Restrooms (2 Public, 1 Staff)                     | 150                | 3          | -                         | 450          | 450           |           |
| Janitor Closet                                    | 36                 | 1          | -                         | 36           | 36            |           |
| Utility space (electronics, water heater)         | 120                | 1          | -                         | 120          | 120           |           |
| <i>Subtotal: Building Support Space</i>           |                    |            |                           |              |               |           |
| <u>Indoor Passenger Waiting Area</u>              |                    |            |                           |              |               |           |
| Standing  | 10                 | 15         | 20                        | 150          | 200           |           |
| Sitting   | 20                 | 15         | 20                        | 300          | 400           |           |
| <i>Subtotal Waiting Area</i>                      |                    |            |                           |              |               |           |
| <i>Subtotal Building Footprint</i>                |                    |            |                           |              |               |           |
| <u>Landscape/Plaza Area</u>                       |                    |            |                           |              |               |           |
| Outdoor waiting area (benches)                    |                    |            |                           | 600          | 600           |           |
| Pedestrian Circulation                            |                    |            |                           | 1,600        | 1,600         |           |
| Bicycle Racks                                     | 19                 | 3          | 5                         | 57           | 95            |           |
| <i>Subtotal Plaza Area</i>                        |                    |            |                           |              |               |           |
| <i>Landscape Area (25 percent of Plaza)</i>       |                    |            |                           |              |               |           |
| <i>Total Landscape/Plaza Area</i>                 |                    |            |                           |              |               |           |
| Total Building Footprint and Landscape/Plaza Area |                    |            |                           |              |               |           |
| <u>Bus Bays (35' x 40')</u>                       | 800                | 5          | 8                         | 4,000        | 6,400         |           |
| <u>JAC Assist/Operational Parking</u>             | 360                | 1          | 2                         | 360          | 720           |           |
| <b>Total Site Development Program</b>             |                    |            |                           | <b>8,416</b> | <b>11,326</b> |           |

3

## Potential Location Sites



4

## Evaluation Process

- Compatibility with Downtown goals
- Transit Efficiently and Access
- Parking Impact
- Construction Cost
- Passenger Safety and Convenience
- Adjacent Land Use Compatibility
- Staff and driver interviews
- Public input

Table 8: Preliminary Weighted Score of Site Alternatives

| Site Availability (Screening)   | Factor Weight<br>(0 to 1) | Scoring (1 = Very Poor to 5 = Very Good) |                      |                   |                       |                |                         |
|---------------------------------|---------------------------|--|----------------------|-------------------|-----------------------|----------------|-------------------------|
|                                 |                           | Site 1 - Existing                        | Site 2 - V&T Station | Site 3 - Coin Lot | Site 4 - Robinson St. | Spear St. West | Site 6 - Spear St. East |
| Construction Cost               | 0.50                      | 2  | --                   | 3                 | 3                     | 4              | 3                       |
| Parking Impact                  | 0.75                      | 5  | --                   | 3                 | 3                     | 2              | 3                       |
| Downtown Area Goals             | 1.00                      | 5  | --                   | 5                 | 5                     | 5              | 4                       |
| Transit Efficiency & Access     | 0.75                      | 4  | --                   | 4                 | 4                     | 3              | 4                       |
| Passenger Safety & Convenience  | 1.00                      | 4  | --                   | 1                 | 4                     | 5              | 4                       |
| Adjacent Land Use Compatibility | 1.00                      | 4  | --                   | 3                 | 3                     | 5              | 2                       |
| <b>Weighted Score</b>           | <b>20.8</b>               | --                                       | <b>15.8</b>          | <b>18.8</b>       | <b>20.8</b>           | <b>16.8</b>    |                         |

5

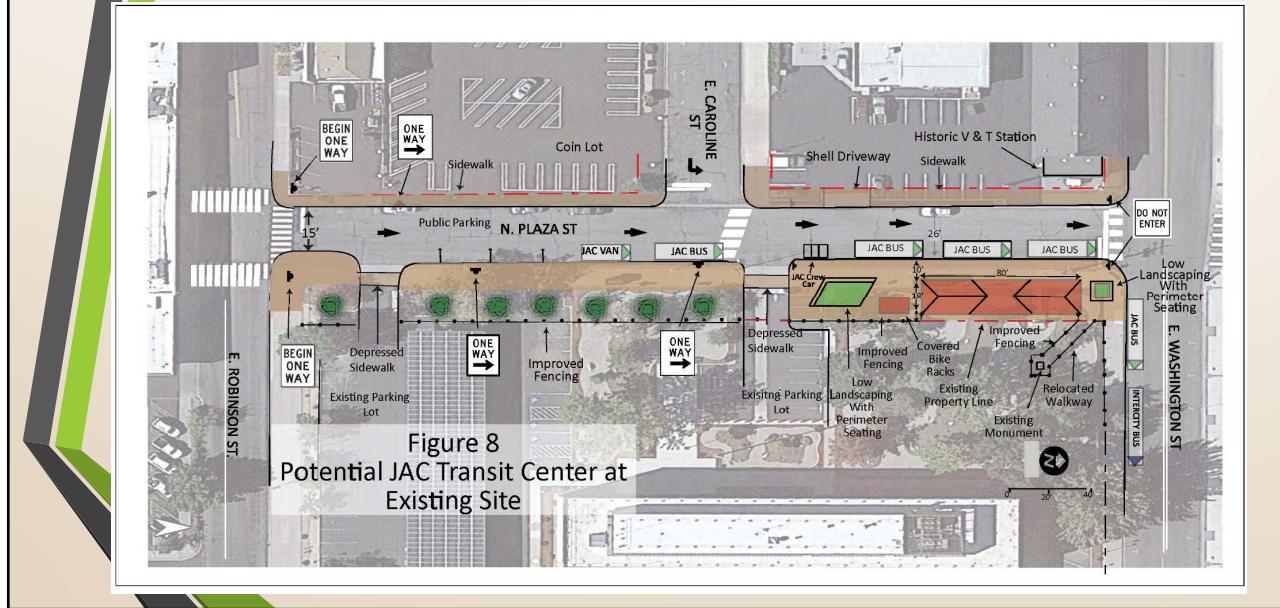
## Shortlist of Sites

- Sites reduced to three with additional analysis completed on each



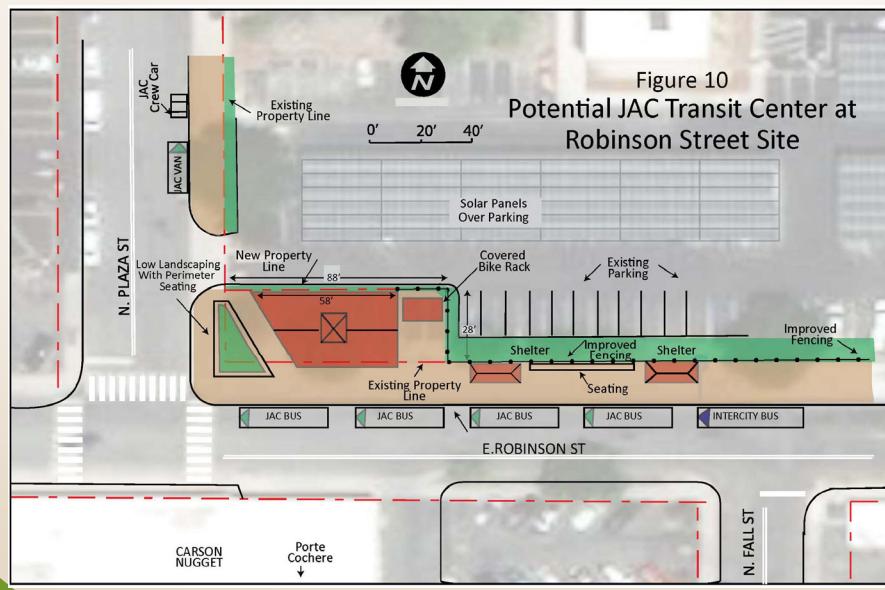
6

## Site 1 - Existing Transfer Station



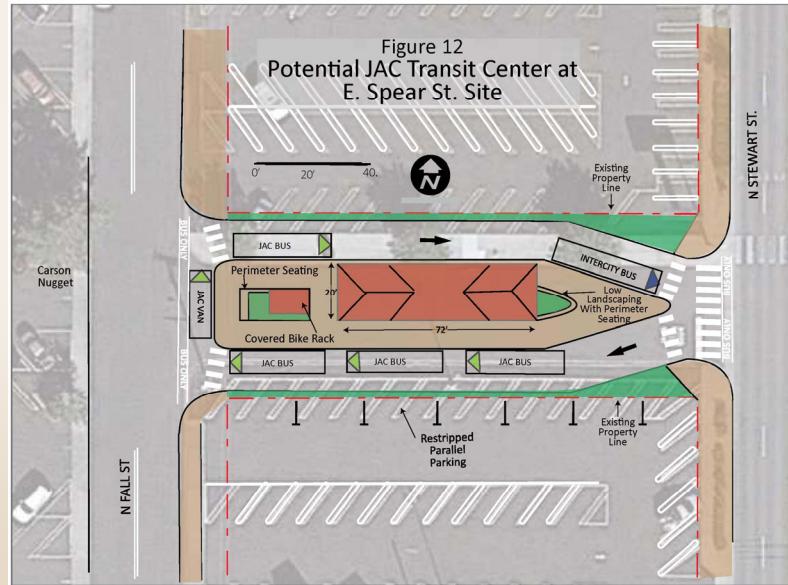
7

## Site 2 – Robinson Street Site



8

## Site 3 – Spear Street



9

## Stage 2 Evaluation Result

- Compatibility with Downtown goals
- Transit Efficiently and Access
- Parking Impact
- Construction Cost
- Passenger Safety and Convenience
- Adjacent Land Use Compatibility
- Expandability/Flexibility

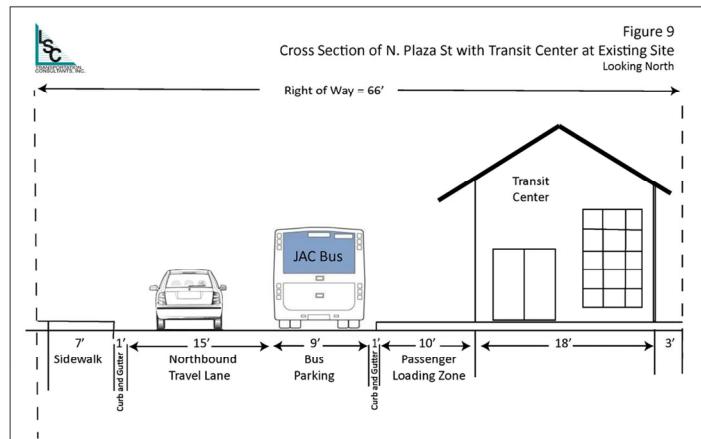
**Table 18: Updated Weighted Score of Site Alternatives**

| Factor Weight (0 to 1)          | Scoring (1 = Very Poor to 5 = Very Good) | Existing Site | Robinson St. | Spear St. West |
|---------------------------------|--|---------------|--------------|----------------|
| Site Availability (Screening)   | 1.00                                     | Yes           | Possibly     | Yes            |
| Construction Cost               | 0.50                                     | 2             | 3            | 3              |
| Parking Impact                  | 0.75                                     | 4             | 3            | 3              |
| Downtown Area Goals             | 1.00                                     | 5             | 5            | 5              |
| Transit Efficiency & Access     | 0.75                                     | 4             | 4            | 3              |
| Passenger Safety & Convenience  | 1.00                                     | 5             | 4            | 3              |
| Adjacent Land Use Compatibility | 1.00                                     | 4             | 4            | 5              |
| Expandability/Flexibility       | 0.75                                     | 4             | 3            | 1              |
| <b>Weighted Score</b>           | <b>24.0</b>                              | <b>22.0</b>   | <b>19.8</b>  |                |

10

## Recommendation

- Site 1 – Enhancement of the existing location on N. Plaza Street
  - Site provides the best opportunity for growth and flexibility
  - No property impacts or acquisitions
  - Conversion to a one-way street provides added pedestrian safety
  - Cost Estimate (2026) = \$

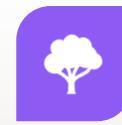


11

## Next Steps



FINALIZE THE  
STUDY BASED ON  
RTC INPUT



BEGIN DESIGN AND  
ENVIRONMENTAL  
REVIEW OF THE  
PROJECT



COORDINATION  
WITH ADJACENT  
PROPERTY  
OWNERS



IDENTIFY  
POTENTIAL  
CONSTRUCTION  
FUNDING  
OPPORTUNITIES



CONSTRUCTION  
TARGET – 2026

12



# JAC Transit Development and Coordinated Human Services Plan

## Final Report



Prepared for the



**Carson Area Metropolitan Planning Organization  
(CAMPO)  
and  
Carson City Regional Transportation Commission  
(RTC)**



## Chapter 8

# Capital Alternatives

### INTRODUCTION

This chapter first discusses capital facilities, including transfer centers and bus stops. Fleet improvements are then discussed, including the appropriate size of transit vehicles as well as the potential for battery electric buses.

### FACILITIES

#### Downtown Transit Center

The current hub of the JAC fixed route system is the Downtown Transit Plaza. This consists of the curb along the eastern side of N. Plaza Street between E. Robinson Street and E. Washington Street as well as a portion of the curb adjacent to the Federal Building. Excluding the driveway to a parking lot, there is a total of 200 feet of curb length available for buses. This is sufficient to accommodate up to six vehicles at one time. At present, up to four JAC buses are at the Plaza at the peak times (at the bottom of the hour). Up to approximately 30 passengers are waiting for buses at peak times.

The Tahoe Transportation District Route 19X serves a stop on the south side of E. Washington Street east of N. Plaza Street. This stop is served five times a day but not at the same time as JAC. In addition, the Washoe RTC Intercity Route serves the stop on E. Washington Street six times per day in the southbound direction from Reno to NDOT Headquarters on Stewart Street and serves a stop on the north side of E. Robinson Street east of N. Plaza Street six times per day in the northbound direction. While the Washoe RTC schedules do not define a specific time for service to these stops, the southbound runs arriving at NDOT at 7:15 AM, 4:12 PM and 5:12 PM provide a reasonably convenient transfer from the Intercity buses to JAC fixed routes while the northbound runs departing at 7:20 AM, 4:17 PM and 5:17 PM provide the opportunity (with coordination between the systems) for convenient transfers from JAC fixed routes to the Intercity service.

Beyond the curbside bus loading locations, this facility consists of a 14-foot-wide sidewalk (sufficient for wheelchair loading and unloading), along with an 8-foot-long shelter at the south end and a 20-foot-long shelter at the north end. There are three 6-foot benches and a bike rack.

This facility provides a reasonably convenient location with regards to downtown activity centers as well as efficient bus movements into and out of the site. However, there are numerous deficiencies to the existing transit plaza:

- It lacks restroom facilities for drivers. Drivers currently have to depart their buses (requiring all passengers to disembark) and go into the Nugget to use their restrooms (on a “gratis” basis). This additional walk time can add roughly 5 minutes to the layover time at the transit plaza and can add to service delays.

- It provides insufficient protection from the elements. In particular, the west facing shelters do not provide adequate seating capacity for peak waiting loads, provide little shade in the late afternoon on hot summer days, and provide scant protection from wind-driven rain and snow.
- Because of the limited seating and shade opportunities, passengers are tempted to wander into the landscaping areas of the Federal Building, potentially causing damage.
- Lighting is limited to two streetlights and low lighting in the shelters. As a result, passengers are often boarding and alighting in dark locations, adding to safety concerns.
- Walks of up to 400 feet are required between Intercity and JAC buses, increasing the delays as passengers transfer.

As a long-term capital investment, it is important for a transit center to be able to accommodate the needs of the transit program for at least the next twenty years. The following describes design elements and site considerations for such an investment.

### **Design Elements**

Specific design elements that should be considered in the redesign of the Transit Center should include the following:

- Bus Loading Area: The facility needs to accommodate five JAC fixed route buses as well as a Washoe Intercity bus, a TTD bus and potentially a downtown shuttle vehicle. Lighting should be provided for all loading areas.
- Passenger Facilities: A climate controlled indoor waiting area should be provided with a minimum floor area of 600 square feet (such as 15' X 40'). This waiting area should have clear lines of sight for security purposes, as well as a clear view of approaching buses. Public restrooms are not necessary so long as public restrooms are available within a block walk. In addition, outdoor shaded passenger waiting areas should be provided with benches, totaling approximately 1,500 square feet in area.
- Bicycle racks or other bicycle parking should be provided.
- Driver Facilities: As the key facility for the transit drivers, restroom facilities should be provided. In addition, a separate entrance (with key card access) should be provided to a portion of the space that includes a driver break room as well as the restrooms.
- Improved Passenger Information: “Real time” information screens should be provided in the facility that provides information on schedules, service interruptions and public notices.
- A small utility space (approximately 160 square feet) should be provided for custodial storage.

## Site Location Considerations

The following are key considerations in considering the location of a transit center.

- Adequate size to accommodate the transit program.
- Proximity to the center of the local transit service area, to minimize out-of-direction travel time and costs. Given the many times per day that transit vehicles travel to and from the site, even an additional distance of a few blocks can add thousands of dollars to the annual operating costs.
- Convenient access for regional transit routes that minimize out-of-direction travel.
- Adequate access, thus avoiding excessive delays for transit routes.
- Convenience to major trip destinations. As the single location most accessible by public transit, it benefits the overall effectiveness of transit services if there is a concentration of transit trip generators (shopping, community facilities, public offices, etc.) within a convenient walk distance of the transit center.
- High visibility that enhances the community's awareness of transit services.
- Personal security and safety. Locations in area's with a high crime reputation (deserved or not) should be avoided, and locations that have greater vehicle and pedestrian activity are preferable.
- Appropriate zoning and consistency with community plans.
- Availability of adequate utilities.
- Lack of known hazardous soils.

## Potential Second Transit Hub in South Carson City

As a transit system grows, there is sometimes the need to establish a second transit hub. As discussed in the service alternatives, the geography of Carson City lends itself to a strong central hub in the downtown area. However, if a second route in South Carson is established, there is a potential for transfers between the existing Route 3 and an additional route serving the southern area.

The prevailing trip pattern, however, is such that this demand is not expected to be significant. A full second transit hub is therefore not warranted. However, if a second route serves the Fuji Park stop, this could serve as an informal transfer location. While this stop already has a good shelter and loading facilities, it could benefit from additional outside bench seating, improved lighting and a bike rack.

## Review of Existing Stop Locations

When reviewing the distance between existing stops throughout Carson City, most appeared to be adequately spaced from one another. A major gap in service was identified between Emerson Drive and



## STAFF REPORT

**Report To:** The Carson City Regional Transportation Commission (RTC)

**Meeting Date:** March 8, 2023

**Staff Contact:** Bryan Byrne, Transportation/Traffic Engineer

**Agenda Title: For Possible Action** – Discussion and possible action regarding the submission of a 2023 Transportation Alternatives Program (“TAP”) grant application to the Nevada Department of Transportation (“NDOT”) for \$766,000, subject to a 5% local match totaling \$38,300, to complete North Lompa Multi-Use Path (“Project”).

**Staff Summary:** NDOT is requesting TAP grant applications for community-based transportation projects that improve safety, expand travel choices, and enhance the transportation user experience. Staff is seeking approval to submit a grant application for the Project in the amount of \$766,000. TAP is a federally funded program through the Federal Highway Administration and requires a minimum of a 5% local match. TAP grant applications will be accepted through April 14, 2023.

**Agenda Action:** Formal Action/Motion

**Time Requested:** 5 minutes

### **Proposed Motion**

I move to approve the submission of the grant application as presented.

### **Background/Issues & Analysis**

NDOT announced the opening of the 2023 TAP funding cycle on February 14, 2023. Applications can be submitted as an infrastructure, planning, or non-infrastructure project. Eligible infrastructure projects include the construction of pedestrian and bicycle facilities, historic preservation, vegetation management, and environmental mitigation, among others. Eligible planning projects include the analysis required to develop an eligible infrastructure project, including project scope, schedule, and budget. Eligible non-infrastructure projects include Safe-Routes to School programs.

Staff is seeking approval to submit an infrastructure grant application for the Project and is requesting \$727,700 in grant funding, with a 5% local match of \$38,300, for a total of \$766,000 for the Project. The Project would construct a 10-foot-wide multi-use path extension from Modoc Court to US Highway 50, approximately 1,400 feet. This portion of the multi-use path would run adjacent to the I-580 freeway and connect a gap within the existing multi-use path network. This grant application continues Carson City’s goal of creating and maintaining a regional pathway network.

A portion of the required local match will be provided through development pro-rata contributions. The Project would be maintained by Carson City, similar to other multi-use pathways.

**Applicable Statute, Code, Policy, Rule or Regulation**

Carson City Grant Policy, 23 U.S.C § 133(h)(3)

**Financial Information**

Is there a fiscal impact?  Yes  No

If yes, account name/number:

For Revenues: Regional Transportation Fund, Federal Grants / 2503082-431010

For Expenses: Regional Transportation Fund, Capital Projects account / 2503035-507010

Is it currently budgeted?  Yes  No

Explanation of Fiscal Impact: The Federal share of project costs for which an expenditure is made under the TAP grant may not exceed 95% with a 5% minimum local match. If approved, the total estimated local match would be approximately \$38,300 for the Project. This local match would be transferred from the Regional Transportation Fund, Infrastructure Capital account 2503035-507102. Additional local match funding is expected to be available from development pro-rata contributions and will be transferred from the Regional Transportation Fund, Developer Contributions Expenses account 2503035-507865, if available. If approved and awarded the grant, the revenue and capital project expenses will be augmented by \$727,700.

**Alternatives**

-Do not submit application and provide alternative direction to staff.

**Supporting Material**

-Exhibit-1: Project Map

-Exhibit-2: TA Set-Aside Program Fact Sheet

**Board Action Taken:**

Motion: \_\_\_\_\_

1) \_\_\_\_\_

Aye/Nay

2) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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(Vote Recorded By)

## North Lompa Multi-Use Path Project



## Project Limit



**MAP FOR REFERENCE ONLY  
NOT A LEGAL DOCUMENT**

Carson City, NV makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 11/17/2018  
Data updated 11/17/2018

Print map scale is approximate.  
Critical layout or measurement  
activities should not be done using  
this resource.

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# Transportation Alternatives Set-Aside Program

## Project Background

The Transportation Alternatives (TA) Set-Aside Program provides federal funds for a variety of smaller-scale, non-traditional, community-based transportation projects that improve safety, expand travel choices, and enhance the transportation experience. These projects are intended to integrate travel modes and improve the cultural, historic, and environmental aspects of our transportation infrastructure.

## Eligible Project Types

Eligible project types include the following, at any stage of project development, including planning, design, and construction:

- Bicycle, pedestrian, and nonmotorized transportation facilities
- Traffic calming, lighting, and safety-related infrastructure
- Projects to achieve ADA compliance
- Turnouts, overlooks, and viewing areas
- Recreational trails
- Safe Routes to School (SRTS), including infrastructure, non-infrastructure, and coordinator positions\*
- Vulnerable road user safety assessments
- Environmental mitigation related to stormwater, water pollution prevention, wildlife crossings, and habitat connectivity
- Rails to trails
- Community improvement activities:
  - Removal of outdoor advertising
  - Vegetation management
  - Historic preservation related to historic transportation facilities
- Micromobility projects, including bike and scooter share

\* SRTS Programs apply to students K-12<sup>th</sup> grade

## Technical Support for Applicants

NDOT will conduct pre-meetings with local agencies to help them understand the process and requirements before applying.

## Eligible Applicants

- Local governments
- Regional transportation authorities
- Transit agencies
- Natural resource or public land agencies
- School districts/schools
- Tribal governments
- Metropolitan Planning Organizations serving a population under 200,000
- Nonprofit organizations
- Other local or regional governmental entities with responsibility for oversight of transportation or recreational trails
- States, at the request of an eligible entity

## Project Sponsor Expectations

- Federal funds contribute up to 95% of the total eligible project cost. Sponsors must ensure other sources of non-federal transportation funding can cover the minimum 5% local match
- Project budget must include 20% contingency for infrastructure projects
- Applicant is required to cover cost overages
- TA is a federal cost reimbursement grant program – no funding is provided upfront
- Regular project reporting to NDOT is required

## Application Process

Per federal guidelines, NDOT utilizes a competitive application process to select projects for the TA Set-Aside Program. NDOT will be hosting an informational webinar and offering pre-application meetings for potential applicants.

### Getting Started

As a potential project sponsor, first establish that your project is eligible and determine its qualifying category:

- **Infrastructure** (Engineering, environmental analysis, and/or construction)
- **Non-Infrastructure** (SRTS programs)
- **Planning** (Scope, schedule, budget development)

Program information and online application are available at: <https://www.dot.nv.gov/projects-programs/transportation-alternatives-program>

### One Nevada Goals

NDOT developed the One Nevada Transportation Plan, the state's Long-Range Transportation Plan, that establishes goals for transparent decision-making. The six One Nevada goals will be integrated into TA application screening to better align the prioritization process with both federal and state priorities.



### Scoring Criteria

#### Infrastructure-Related Improvements

#### Non-Infrastructure-Related Improvements

|                                |  |   |
|--------------------------------|--|---|
| <b>Enhance Safety</b>          | Project identified in a safety plan<br>Project is located in a high crash area<br>Project incorporates proven safety countermeasures | Project provides safety education   |
| <b>Preserve Infrastructure</b> | Project improves functionality of an existing transportation facility  | NA  |
| <b>Optimize Mobility</b>       | Project improves conditions for walking, bicycling, or accessing transit   | Project improves knowledge about alternative modes of transportation                |
| <b>Transform Economies</b>     | Project supports local land use goals  | NA  |
| <b>Foster Sustainability</b>   | Project improves alternatives to driving   | Project improves alternatives to driving for students                               |
| <b>Connect Communities</b>     | Project improves connections between communities or to community facilities  | Improves knowledge and skills needed for students to safely walk and bike to school |
| <b>Equity</b>                  | Project benefits a low-income or underserved community   | Project benefits a low-income or underserved community                              |

Each of the included criteria is worth 1 point, with three potential points available for safety infrastructure.

### Alignment with State and Federal Goals

The Federal Highway Administration (FHWA) encourages states to prioritize **safety, equity, and climate sustainability** in their project selection process.

Scoring criteria developed as part of this program align with federal priorities and NDOT's One Nevada prioritization process.



## STAFF REPORT

**Report To:** The Carson City Regional Transportation Commission (RTC)

**Meeting Date:** March 8, 2023

**Staff Contact:** Scott Bohemier, Transportation Planner/Analyst

**Agenda Title: For Possible Action** – Discussion and possible action regarding the submission of a 2023 Transportation Alternatives Program (“TAP”) grant application to the Nevada Department of Transportation (“NDOT”) for \$1,312,321.50, subject to a 5% local match totaling \$62,491.50, to fund the Western Nevada Safe Routes to School Program (“WN-SRTS Program”) through federal fiscal year (“FFY”) 2027.

**Staff Summary:** NDOT is requesting TAP grant applications for community-based transportation projects that improve safety, expand travel choices, and enhance the transportation user experience. Staff is seeking approval to submit a grant application for the WN-SRTS Program in the amount of \$1,312,321.50. TAP is a federally funded program through the Federal Highway Administration and requires a minimum of a 5% local match. TAP grant applications will be accepted through April 14, 2023.

**Agenda Action:** Formal Action/Motion

**Time Requested:** 5 minutes

---

### **Proposed Motion**

I move to approve the submission of the grant application as presented.

### **Background/Issues & Analysis**

NDOT announced the opening of the 2023 TAP funding cycle on February 14, 2023. Applications can be submitted as an infrastructure, planning, or non-infrastructure project. Eligible infrastructure projects include the construction of pedestrian and bicycle facilities, historic preservation, vegetation management, and environmental mitigation, among others. Eligible planning projects include the analysis required to develop an eligible infrastructure project, including project scope, schedule, and budget. Eligible non-infrastructure projects include safe Routes to School programs such as the WN-SRTS Program.

Staff is seeking approval to submit a non-infrastructure grant application to continue funding the WN-SRTS Program for the next four-years in the amount of \$1,312,321.50, comprising a 5% local in-kind match of \$62,491.50 and grant funds in the amount of \$1,249,830. Consistent with the currently ongoing WN-SRTS Program, staff is proposing that the local match for this grant application be made through an in-kind match.

The WN-SRTS Program was established in 2017 and serves Kindergarten through 12th grade students within Carson City and Douglas, Lyon, and Storey Counties. The RTC administers the WN-SRTS Program through a cooperative agreement with NDOT. If approved and awarded, this grant will fund the WN-SRTS Program through FFY 2027.

**Applicable Statute, Code, Policy, Rule or Regulation**

Carson City Grant Policy, 23 U.S.C § 133(h)(3)

**Financial Information**

Is there a fiscal impact?  Yes  No

If yes, account name/number:

For Revenues: Regional Transportation Fund, Federal Grants / 2503082-431010

For Expenses: Regional Transportation Fund, Various Safe Routes to School Accounts / 2503040

Is it currently budgeted?  Yes  No

Explanation of Fiscal Impact: The Federal share of program costs for which an expenditure is made under the TAP grant may not exceed 95% with a 5% minimum local match. If approved, the total estimated local match would be approximately \$62,491.50 for the WN-SRTS Program. Consistent with the currently ongoing Safe Routes to School TAP grant, staff is proposing an in-kind match for this grant application.

**Alternatives**

-Do not submit application and provide alternative direction to staff.

**Supporting Material**

-Exhibit-1: WN-SRTS Program Projected Budget 2024-2027

-Exhibit-2: TA Set-Aside Program Fact Sheet

**Board Action Taken:**

Motion: \_\_\_\_\_

1) \_\_\_\_\_  
2) \_\_\_\_\_

Aye/Nay  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

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(Vote Recorded By)

Exhibit-1: WN-SRTS Program Projected Budget 2024-2027

| BUDGET 2024-2027   | Total               |  | 2024              | 2025              | 2026              | 2027              |
|--|---------------------|--|-------------------|-------------------|-------------------|-------------------|
| Western Nevada Safe Routes to School Coordinator and Associated Operating Costs  | 534,670.00          |  | 125,865.00        | 130,252.00        | 136,858.00        | 141,695.00        |
| Safe Routes to School Champions and Support Staff  | 150,000.00          |  | 37,500.00         | 37,500.00         | 37,500.00         | 37,500.00         |
| <b>PERSONNEL COSTS</b>   | <b>684,670.00</b>   |  | <b>165,389.00</b> | <b>169,777.00</b> | <b>176,384.00</b> | <b>181,222.00</b> |
| Bicycle Repair Mechanic/Shop for Bike Fleet Maintenance  | 2,000.00            |  | 500.00            | 500.00            | 500.00            | 500.00            |
| Safety and Education Campaigns- for example(JAC, DART buses, Banners, Thank you for Driving Safely Campaigns)  | 80,000.00           |  | 20,000.00         | 20,000.00         | 20,000.00         | 20,000.00         |
| Planned Lyon County Bicycle and Pedestrian School Safety Study   | 300,000.00          |  | 300,000.00        |                   |                   |                   |
| <b>CONSULTANT/CONTRACT SERVICES</b>  | <b>382,000.00</b>   |  | <b>20,500.00</b>  | <b>320,500.00</b> | <b>20,500.00</b>  | <b>20,500.00</b>  |
| High School Task Force Program CC, Douglas, Lyon and Storey Counties   | 10,000.00           |  | 2,500.00          | 2,500.00          | 2,500.00          | 2,500.00          |
| Walking Wednesdays, Turbo Tuesdays CC, Douglas, Lyon Counties  | 10,000.00           |  | 2,500.00          | 2,500.00          | 2,500.00          | 2,500.00          |
| <b>SCHOOL SAFETY PROGRAMS</b>  | <b>20,000.00</b>    |  | <b>5,000.00</b>   | <b>5,000.00</b>   | <b>5,000.00</b>   | <b>5,000.00</b>   |
| WN-SRTS Coordinator and Champion Travel  | 4,000.00            |  | 1,000.00          | 1,000.00          | 1,000.00          | 1,000.00          |
| Continued education such as National Safe Routes to School Conference, National Planning Conference, Walk Bike Places Conference, National Bike Summit for Coordinator and Champions | 16,000.00           |  | 4,000.00          | 4,000.00          | 4,000.00          | 4,000.00          |
| Conference Registration Fees   | 4,000.00            |  | 1,000.00          | 1,000.00          | 1,000.00          | 1,000.00          |
| <b>TRAVEL &amp; TRAINING</b>   | <b>24,000.00</b>    |  | <b>6,000.00</b>   | <b>6,000.00</b>   | <b>6,000.00</b>   | <b>6,000.00</b>   |
| General Supplies   | 4,000.00            |  | 1,000.00          | 1,000.00          | 1,000.00          | 1,000.00          |
| Safe Routes to School Incentives for example (Helmets, bikes, scooters, giveaways, printing)   | 100,000.00          |  | 25,000.00         | 25,000.00         | 25,000.00         | 25,000.00         |
| Volunteer and Program Apparel  | 3,000.00            |  | 1,000.00          | 1,000.00          | 500.00            | 500.00            |
| SRTS Events for example (Bike Rodeos, Poster Contests, TikTok Contests and PSA Contests K-12)  | 30,000.00           |  | 7,500.00          | 7,500.00          | 7,500.00          | 7,500.00          |
| Survey Monkey License and Mailchimp Subscription for Surveys and Quarterly Newsletters   | 2,160.00            |  | 540.00            | 540.00            | 540.00            | 540.00            |
| <b>SUPPLIES &amp; EQUIPMENT</b>  | <b>139,160.00</b>   |  | <b>35,040.00</b>  | <b>35,040.00</b>  | <b>34,540.00</b>  | <b>34,540.00</b>  |
| <b>TOTAL</b>   | <b>1,249,830.00</b> |  | <b>231,929.00</b> | <b>536,317.00</b> | <b>242,424.00</b> | <b>247,262.00</b> |
| Local Match 5.00%  | 62,491.50           |  | 11,596.45         | 26,815.85         | 12,121.20         | 12,363.10         |
| <b>TOTAL</b>   | <b>1,312,321.50</b> |  | <b>243,525.45</b> | <b>563,132.85</b> | <b>254,545.20</b> | <b>259,625.10</b> |

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# Transportation Alternatives Set-Aside Program

## Project Background

The Transportation Alternatives (TA) Set-Aside Program provides federal funds for a variety of smaller-scale, non-traditional, community-based transportation projects that improve safety, expand travel choices, and enhance the transportation experience. These projects are intended to integrate travel modes and improve the cultural, historic, and environmental aspects of our transportation infrastructure.

## Eligible Project Types

Eligible project types include the following, at any stage of project development, including planning, design, and construction:

- Bicycle, pedestrian, and nonmotorized transportation facilities
- Traffic calming, lighting, and safety-related infrastructure
- Projects to achieve ADA compliance
- Turnouts, overlooks, and viewing areas
- Recreational trails
- Safe Routes to School (SRTS), including infrastructure, non-infrastructure, and coordinator positions\*
- Vulnerable road user safety assessments
- Environmental mitigation related to stormwater, water pollution prevention, wildlife crossings, and habitat connectivity
- Rails to trails
- Community improvement activities:
  - Removal of outdoor advertising
  - Vegetation management
  - Historic preservation related to historic transportation facilities
- Micromobility projects, including bike and scooter share

\* SRTS Programs apply to students K-12<sup>th</sup> grade

## Technical Support for Applicants

NDOT will conduct pre-meetings with local agencies to help them understand the process and requirements before applying.

## Eligible Applicants

- Local governments
- Regional transportation authorities
- Transit agencies
- Natural resource or public land agencies
- School districts/schools
- Tribal governments
- Metropolitan Planning Organizations serving a population under 200,000
- Nonprofit organizations
- Other local or regional governmental entities with responsibility for oversight of transportation or recreational trails
- States, at the request of an eligible entity

## Project Sponsor Expectations

- Federal funds contribute up to 95% of the total eligible project cost. Sponsors must ensure other sources of non-federal transportation funding can cover the minimum 5% local match
- Project budget must include 20% contingency for infrastructure projects
- Applicant is required to cover cost overages
- TA is a federal cost reimbursement grant program – no funding is provided upfront
- Regular project reporting to NDOT is required

## Application Process

Per federal guidelines, NDOT utilizes a competitive application process to select projects for the TA Set-Aside Program. NDOT will be hosting an informational webinar and offering pre-application meetings for potential applicants.

### Getting Started

As a potential project sponsor, first establish that your project is eligible and determine its qualifying category:

- **Infrastructure** (Engineering, environmental analysis, and/or construction)
- **Non-Infrastructure** (SRTS programs)
- **Planning** (Scope, schedule, budget development)

Program information and online application are available at: <https://www.dot.nv.gov/projects-programs/transportation-alternatives-program>

### One Nevada Goals

NDOT developed the One Nevada Transportation Plan, the state's Long-Range Transportation Plan, that establishes goals for transparent decision-making. The six One Nevada goals will be integrated into TA application screening to better align the prioritization process with both federal and state priorities.



### Scoring Criteria

#### Infrastructure-Related Improvements

#### Non-Infrastructure-Related Improvements

|                                |  |   |
|--------------------------------|--|---|
| <b>Enhance Safety</b>          | Project identified in a safety plan<br>Project is located in a high crash area<br>Project incorporates proven safety countermeasures | Project provides safety education   |
| <b>Preserve Infrastructure</b> | Project improves functionality of an existing transportation facility  | NA  |
| <b>Optimize Mobility</b>       | Project improves conditions for walking, bicycling, or accessing transit   | Project improves knowledge about alternative modes of transportation                |
| <b>Transform Economies</b>     | Project supports local land use goals  | NA  |
| <b>Foster Sustainability</b>   | Project improves alternatives to driving   | Project improves alternatives to driving for students                               |
| <b>Connect Communities</b>     | Project improves connections between communities or to community facilities  | Improves knowledge and skills needed for students to safely walk and bike to school |
| <b>Equity</b>                  | Project benefits a low-income or underserved community   | Project benefits a low-income or underserved community                              |

Each of the included criteria is worth 1 point, with three potential points available for safety infrastructure.

### Alignment with State and Federal Goals

The Federal Highway Administration (FHWA) encourages states to prioritize **safety, equity, and climate sustainability** in their project selection process.

Scoring criteria developed as part of this program align with federal priorities and NDOT's One Nevada prioritization process.



# STAFF REPORT

**Report To:** The Carson City Regional Transportation Commission (RTC)

**Meeting Date:** March 8, 2023

**Staff Contact:** Bryan Byrne, Transportation/Traffic Engineer

**Agenda Title: For Possible Action** – Discussion and possible action regarding a proposed resolution authorizing the submission of a Federal Transit Administration (“FTA”) Section 5310 grant application to the Carson Area Metropolitan Planning Organization (“CAMPO”) for \$477,499, subject to a 20% local match estimated to be \$95,500, to fund capitalized operating expenses for Jump Around Carson’s (“JAC”) JAC Assist paratransit service.

**Staff Summary:** CAMPO is requesting grant applications for FTA Section 5310 funding for Federal Fiscal Year (“FFY”) 2022 and 2023. FTA Section 5310 grants provide funding to enhance the mobility of seniors and individuals with disabilities. The proposed application to CAMPO seeks \$381,999 in federal funding for JAC Assist capitalized operating expenses with a minimum of a 20% local match, estimated to total \$95,500, for a total expense of \$477,499. Grant applications will be accepted through March 17, 2023.

**Agenda Action:** Formal Action/Motion

**Time Requested:** 15 minutes

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## **Proposed Motion**

I move to approve the proposed resolution.

## **Background/Issues & Analysis**

CAMPO, as the direct recipient of 5310 funds, is responsible for overseeing the funds and monitoring subrecipients of these funds. CAMPO is considered a small urbanized area because its population is under 200,000. A determination of funding allocation and award by CAMPO is estimated to take place at the April 12, 2023, CAMPO meeting. The grant application has been developed by staff in response to CAMPO’s notice of funding availability. Available funding for operations is provided at 50% federal share, and funding for capital, including capitalized operating expenses, is provided at 80% federal share.

JAC Assist is an Americans with Disabilities Act (ADA) complementary paratransit service. This is "origin to destination" transportation service for persons with disabilities who cannot use the regular bus service. It is primarily a curb-to-curb service, but door-to-door service is provided upon request. If awarded, FTA Section 5310 funding will be used to fund capital operating expenses for JAC Assist. FTA Section 5307 grant funds are also eligible to fund JAC Assist for operating expenses but only at a 50% federal share; therefore, Section 5310 funding is preferred.

## **Applicable Statute, Code, Policy, Rule or Regulation**

49 U.S.C. § 5310; NRS 277A.270

**Financial Information**

Is there a fiscal impact?  Yes  No

If yes, account name/number: Transit Fund, Federal Grants revenue account / 2253081-431010; Transit Fund, and Transit Fund, Operating Contract account / 2253026-500331.

Is it currently budgeted?  Yes  No

Explanation of Fiscal Impact: Acceptance of awarded Section 5310 funds will increase available operating funds. If awarded, the grant amount of \$381,999 will be added to the Fiscal Year 2024 Transit Fund revenue account. Local match is provided through a combination of state grants, Carson City's operating match, and miscellaneous revenues.

**Alternatives**

Do not approve the application(s) and provide alternate direction to staff.

**Supporting Material**

- Exhibit-1: JAC Grant Application for Section 5310 Program FFY22 & 23 Funds for JAC Assist Capitalized Operating
- Exhibit 2: Proposed Resolution

**Board Action Taken:**

Motion: \_\_\_\_\_

1) \_\_\_\_\_

Aye/Nay

2) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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(Vote Recorded By)

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**Grant Application Packet for  
Federal Transit Administration  
Section 5310 Program  
Apportionment Funding for  
Federal Fiscal Years (FFY) 2022 and 2023**

## Introduction

The Carson Area Metropolitan Planning Organization (CAMPO) is accepting grant applications for the distribution of annual formula-based funding from the Federal Transit Administration (FTA) for Section 5310 Program funds. An overview of program goals, available funding, and applicant eligibility is provided on the following pages.

Funding from the FTA Section 5310 Program occurs in the form of a **reimbursement grant**. A reimbursement grant provides funding to grant recipients after expenses have been incurred. The grantee must follow all FTA procedures to obtain the reimbursement for expenses.

To receive federal funding through this program, an applicant must be eligible, per the federal requirements discussed below, and must comply with all other applicable federal and local regulations. CAMPO, as the direct recipient of 5310 funds, is responsible for overseeing the funds and monitoring subrecipients of these funds. CAMPO is considered a Small Urbanized area of under 200,000 population. Compliance with federal and local regulations does not end with documents required by this grant application. Applicants should reference the resources located in the packet to determine whether they have the technical and financial capacity to manage federal grant funds while maintaining full compliance. CAMPO staff will screen applicants based on information submitted in the application and will verify compliance on an ongoing basis with regular subrecipient monitoring.

For further information or assistance, please contact:

Rebecca Bustos, Grant Analyst  
Carson Area Metropolitan Planning Organization  
3505 Butti Way  
Carson City, NV 89701  
Phone: 775-283-7045  
E-mail: [rbustos@carson.org](mailto:rbustos@carson.org)

Grant applications will be reviewed by staff for application completeness and eligibility. If applications are complete and eligible, applications will be submitted to the CAMPO Board for evaluation and consideration for award at a public hearing. Information on the Carson Area MPO is available online at [www.CarsonAreaMPO.com](http://www.CarsonAreaMPO.com).

**\*\*\*Deadline to submit a complete application is March 17, 2023\*\*\***

## Grant Program Information

### **FTA Section 5310 Program - Enhanced Mobility of Seniors & Individuals with Disabilities**

The program aims to improve mobility for seniors and individuals with disabilities by removing barriers to transportation services and expanding transportation mobility options. This program supports transportation services planned, designed, and carried out to meet the special transportation needs of seniors and individuals with disabilities.

### **Eligible Recipients**

Eligible recipients include private nonprofit organizations, states or local government authorities, or operators of public transportation.

### **Eligible Activities/Purchases**

The Section 5310 funds are available for capital and operating expenses to support the provision of transportation services to address the specific needs of seniors and individuals with disabilities. All projects must either be situated in the CAMPO Area or may originate in a rural area and provide service with the CAMPO area.

Traditional Section 5310 project examples include (55% of program funds must be used on traditional projects. Up to 10% may be used for program administration):

- buses and vans – additional requirements apply.
- wheelchair lifts, ramps, and securement devices
- transit-related information technology systems, including scheduling/routing/one-call systems
- mobility management programs
- acquisition of transportation services under a contract, lease, or other arrangement

Nontraditional Section 5310 project examples include:

- travel training
- volunteer driver programs
- building an accessible path to a bus stop, including curb-cuts, sidewalks, accessible pedestrian signals or other accessible features
- improving signage, or way-finding technology
- incremental cost of providing same day service or door-to-door service
- purchasing vehicles to support new accessible taxi, rides sharing and/or vanpooling programs

Projects must be included as part of local Coordinated Human Services Transportation Plan (or similar) and must be planned, designed, and carried out to meet the specific needs of senior persons and individuals with disabilities. Additional eligibility requirements can be found in FTA Circular C 9070.1G. <https://www.transit.dot.gov/regulations-and-guidance/fta-circulars/enhanced-mobility-seniors-and-individuals-disabilities>

### **Match**

The federal share of eligible capital or capitalized costs may not exceed 80 percent, and 50 percent for standard operating assistance. The 10 percent that is eligible to fund program administrative costs including administration, planning, and technical assistance may be funded at 100 percent federal share. The federal share may exceed 80 percent for certain projects related to ADA and Clean Air Act (CAA) compliance.

## **Available Funding**

- Federal Fiscal Year 2022 - \$205,789
- Federal Fiscal Year 2023 - \$176,210 - UPDATED TO ACTUAL AMOUNT

## **Statutory References**

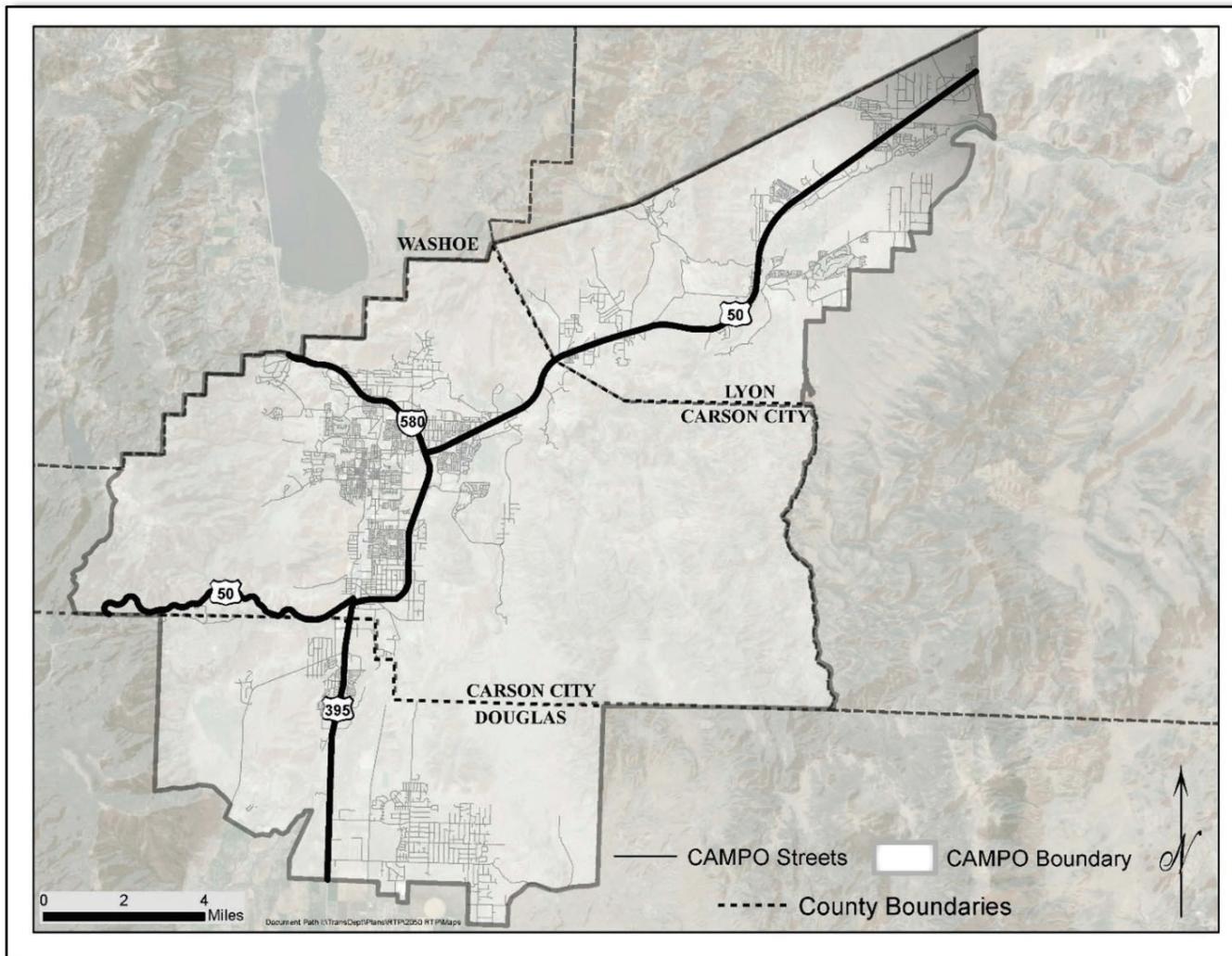
49 U.S.C. Section 5310 / Fixing America's Surface Transportation Act 3006 (FAST) / Infrastructure, Investment and Jobs Act (IIJA). Additional grant information available online:

<https://www.transit.dot.gov/funding/grants/enhanced-mobility-seniors-individuals-disabilities-section-5310>

<https://www.transit.dot.gov/funding/grants/coronavirus-response-and-relief-supplemental-appropriations-act-2021>

<https://www.transit.dot.gov/funding/american-rescue-plan-act-2021>

## **Map of CAMPO**



## Application Process

Completed applications should be submitted to:

Rebecca Bustos  
[rbustos@carson.org](mailto:rbustos@carson.org)

Email Subject: Grant Application for Federal Transit Administration Section 5310 Program –  
*Organization Name*

Applications can be completed either as a Microsoft Word Document or a PDF.

**Grant applications must be submitted by 5:00 pm on the noticed deadline of March 17, 2023.**

Applications received will be screened for completeness and eligibility prior to evaluation and consideration of award.

Application Schedule:

- Release Date - January 27, 2023
- Grant Application Submission Due – March 17, 2023
- Anticipated Award by CAMPO – April 12, 2023

## Required Information

**To determine eligibility and for the CAMPO Board to evaluate grant applications, applicants must complete the attached application.**

CAMPO will use the following criteria to evaluate submitted grant applications:

### Evaluation Criteria

- Eligibility of Organization
- Ability of applicant to administer proposed project
- Ability of applicant to comply with FTA regulations
- Availability of federal funds
- Service area being served
- Project cost estimate and availability of applicant to provide local match, if required
- Demonstration of project need
- Existence of similar projects in the identified service area
- Number of persons estimated to be served
- For replacement and new vehicles, applicant's ability to manage asset
- For new or additional vehicles, factors necessitating additional equipment
- Availability of the equipment/asset to the general public

Upon completion of the selection process, CAMPO will coordinate with the project applicant to submit the necessary FTA documentation.

**Grant Application  
for  
Federal Transit Administration  
Section 5310 Program  
Apportionment Funding**

## General Information

### **Brief Project Description:**

Jump Around Carson is seeking funding to assist in the payment of capitalized operating expenses for JAC Assist, an origin-to-destination ADA paratransit service.

### **Name of Organization:**

#### **Type of Organization:**

|  |  |
|--|--|
| <input type="checkbox"/> Private Non-Profit              | <input checked="" type="checkbox"/> Operator of Public Transportation Services |
| <input type="checkbox"/> State/Local Governmental Entity | <input type="checkbox"/> Tribal Agency (Sovereign Nation)                      |
| <input type="checkbox"/> Other                           |  |

Applicants should provide documentation that they are an eligible organization.

## Funding Category & Amount

Please check only one funding category below. If multiple funding categories are requested, please submit a separate application for each. The FTA provides for different match requirements by funding source and category.

### **FTA Section 5310 Program Grant for Enhanced Mobility for Seniors & Individuals with Disabilities**

#### **5310 Capital Funds (general)**

Amount Requested: \$205,789 FFY2022 & \$176,210 FFY23 Totaling \$381,999

#### **5310 Capital Funds (compliance with ADA)**

Amount Requested:

#### **5310 Capital Funds (compliance with Clean Air Act)**

Amount Requested:

#### **5310 Operating Funds**

Amount Requested:

The requested funding will be used to address needs from CAMPO's Transit Development and Coordinated Human Service Plan (available here: <https://www.carson.org/home/showpublisheddocument?id=68984>).

## Applicant/Organization Information

**Physical Address:**

3770 Butti Way, Carson City NV 89701

**Mailing Address (if different from physical address):****Contact Person:** Bryan Byrne

Title: Transportation/Traffic Engineer

Phone Number: 775-283-7431

Email Address: bbyrne@carson.org

**Applicant Federal ID#:** 6825

**Applicant DUNS#:** DTBPJMA2QFC8

**Organization's mission statement and/or describe the organization's vision:**

The mission of Jump Around Carson (JAC) is to provide safe, dependable and friendly transit service to the residents and visitors of Carson City. JAC's vision is to continue to improve the transit system and to work through funding challenges through creative and coordinated planning.

**Detailed description of your organization:**

JAC is Carson City's public transit system serving the community with a fleet of bright white, purple and green busses. JAC began operating in October 2005 and is governed by the Carson City Regional Transportation Commission, RTC. JAC operations has two systems. The JAC fixed-route which is open to the general public and the JAC Assist which is an origin-to-destination program that provides transportation for eligible persons with disabilities.

**Detailed description of your existing transportation program/services:**

JAC currently operates four buses on four distinct fixed-routes in Carson City. JAC also operates JAC Assist, an origin-to-destination complementary ADA paratransit service. JAC buses run Monday through Friday from 6:30am to 7:30pm, and on Saturdays from 8:30am to 4:30pm. JAC Assist is a dial-a-ride service providing scheduled rides across Carson City upon Client scheduling.

**Describe any current connectivity/coordination efforts with surrounding area transit providers:**

JAC partners with area transit providers in various ways. JAC currently partners with RTC Washoe to operate the Regional Connector service that travels to/from Reno and Carson City. The Regional Connector service shares many stops with JAC in Carson City and riders are able to transfer from the Regional Connector to JAC at no extra charge. JAC also partners with Tahoe Transportation District's Valley Express Daily service. The Valley Express Daily's route 19X travels between Minden/Gardnerville and Carson City. The 19X route also shares many stops with the JAC service and is free to transfer between services.

## Project Information

### **Project Description:**

These 5310 grant funds will be used to continue transportation services at the system's current levels. The Carson City RTC provides bus service in two forms: JAC fixed-route and JAC Assist complementary paratransit. Both services include buses that are ADA compliant, providing easy access to transportation for seniors and disabled individuals. The grant funds would be used towards capitalized operating expenses for JAC Assist complementary ADA paratransit services which serve our aging and disabled community.

### **Type of Service funding is requested for:**

|  |   |
|--|---|
| <input type="checkbox"/> Senior Center/Disabled Workshop | <input type="checkbox"/> Deviated Fixed Route                                   |
| <input type="checkbox"/> Fixed Route                     | <input checked="" type="checkbox"/> Demand Response (Dial-a-Ride, Door-to-Door) |
| <input type="checkbox"/> Other (describe)                |   |

### **Clientele served by service/purchase/program (check all that apply):**

|   |   |
|---|---|
| <input type="checkbox"/> Elderly (60+ years old)              | <input type="checkbox"/> Low Income/Welfare |
| <input checked="" type="checkbox"/> Persons with disabilities | <input type="checkbox"/> General Public     |
| <input type="checkbox"/> Other                                |   |

### **Area Served (check all that apply):**

|  |   |
|--|---|
| <input checked="" type="checkbox"/> Small Urbanized Area (50,000 – 200,000 population) | <input type="checkbox"/> Lyon County            |
| <input type="checkbox"/> Non-Urbanized Area (Rural under 50,000 population)            | <input checked="" type="checkbox"/> Carson City |
| <input type="checkbox"/> Douglas County  | <input type="checkbox"/> Other                  |

### **Does the project include vehicle purchases?:**

|   |  |
|---|--|
| <input type="checkbox"/> Yes (Additional Form Required) | <input checked="" type="checkbox"/> No |
|---|--|

Federal transit law requires that projects selected for funding under the [Enhanced Mobility for Individuals and Individuals with Disabilities \(Section 5310\) Program](#) be "included in a locally developed, coordinated public transit-human services transportation plan".

### **Vehicle Purchase Information**

Applicants must complete if requesting funds for vehicle purchase or replacement. Applicants will be required to procure requested vehicle(s) after review of procurement documents by CAMPO staff. Actual price will be based on bids received.

| Quantity | Vehicle Description (including size, capacity, wheelchair positions, etc.) | Estimated Cost              |
|----------|--|-----------------------------|
|          | N/A  |                             |
|          |  |                             |
|          |  |                             |
|          | <b>Total Quantity</b>  | <b>Total Estimated Cost</b> |

Procurement must follow CAMPO's Policies and Procedures Manual, available upon request of CAMPO.

## Project Budget

Applicants must complete the applicable budget sheets. A separate application is required for each funding source.

For operations programs, projected farebox revenue must be included. Revenue functions different than local match as revenue offsets the overall budget, reducing the total project cost and required local match. It can be in the form of farebox contributions, advertising revenue, donations, or agency financial assistance from service groups, businesses, charities, etc.

Required local match differs by expenses type and provides the required non-federal share of the project cost. The source of the matching funds must be verifiable. A letter or other documentation stating the monetary commitment from the contributing agency/entity must be included within the submitted application packet. Typically, local match reduces the funding amount reimbursed to the applicant from the FTA as part of the reimbursement grant process.

| <b>Budget Work Sheet</b>       |                                      |  |                       |
|--------------------------------|--------------------------------------|--|-----------------------|
| <b>Operating Expenses</b>      |                                      | <b>Local Match</b>   |                       |
| <b>Description</b>             | <b>Amount</b>                        | <b>Description</b>   | <b>Amount</b>         |
|                                |                                      |  |                       |
|                                |                                      |  |                       |
|                                |                                      |  |                       |
|                                |                                      |  |                       |
|                                |                                      |  |                       |
| <b>Total Expenses</b>          | <b>Total Revenue</b>                 | <b>Total Expenses minus Revenue</b>                        | <b>Optional Match</b> |
|                                | Anticipated Fare Revenue<br>\$37,872 |  |                       |
| <b>Capital Expenses</b>        |                                      | <b>Local Match (20% General / 15% ADA / 10% Clean Air)</b> |                       |
| <b>Description</b>             | <b>Amount</b>                        | <b>Description</b>   | <b>Amount</b>         |
| Capitalized Operating Cost     | \$515,371                            | General Fund   | \$95,500              |
|                                |                                      |  |                       |
|                                |                                      |  |                       |
|                                |                                      |  |                       |
| <b>Total Capital</b>           | <b>\$477,499</b>                     | <b>Total Match</b>   | <b>\$95,500</b>       |
| <b>Administrative Expenses</b> |                                      | <b>Optional Local Match</b>                                |                       |
| <b>Description</b>             | <b>Amount</b>                        | <b>Description</b>   | <b>Amount</b>         |
|                                |                                      |  |                       |
|                                |                                      |  |                       |
|                                |                                      |  |                       |

## **Required Documentation for 5310 or 5339 Funding**

Applicants may attach a copy of the required document to the application, provide a link to the document, or ensure the document is available upon request.

### **Safety Plan**

Applicants currently receiving financial assistance under 49 U.S.C. § 5307 that operate a public transportation system are required to submit a safety plan. An operator of a public transportation system that only receives financial assistance under the Formula Grants for Enhanced Mobility of Seniors and Individuals with Disabilities Program (49 U.S.C. § 5310) and/or Formula Grants for Rural Areas Program (49 U.S.C. § 5311) is exempt from this requirement.

### **Performance Targets/Transit Asset Management Plan**

CAMPO subrecipients for Sections 5310 and 5339(a) funding must comply with applicable provisions of 49 C.F.R. Part 625. All subrecipients of Federal financial assistance under 49 U.S.C. Chapter 53 that own, operate, or manage capital assets used in the provision of public transportation must prepare a Transit Asset Management (TAM) Plan and establish performance targets on an annual basis for use in National Transit Database (NTD) reporting. This is done with the goal of helping achieve and maintain a state of good repair for the nation's public transportation systems. The plan must discuss the maintenance and safety of assets. The purpose is to ensure proper utilization of FTA assets and to help ensure success of the program/project. The plan should include vehicle maintenance information such as a detailed repair schedule (for routine maintenance) and the approach for unscheduled maintenance activities. A TAM Plan and annual performance targets must be submitted with this application. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

### **Title VI Plan**

CAMPO subrecipients for Sections 5310 and 5339(a) funding must comply with applicable provisions of 49 C.F.R. Part 21. These provisions prohibit discrimination based on race, color, and national origin, including the denial of meaningful access of limited English proficient (LEP) persons. Applicants must submit a Title VI Plan with this application. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

### **Disadvantaged Business Enterprise (DBE) Program and DBE Goal**

CAMPO subrecipients of Sections 5310 and 5339(a) funding must comply with applicable provisions of 49 C.F.R. Part 26. These provisions ensure nondiscrimination in the award and administration of US Department of Transportation (US DOT)-assisted contracts. Subrecipients also must create a level playing field on which DBEs can compete fairly for US DOT-assisted contracts. Applicants must submit a DBE Program and DBE Goal with this application. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

### **Vehicle Policy and Information**

Applicants requesting funding for vehicle(s) must provide a description of the desired vehicle. Application must note if the vehicle is a replacement or an expansion of the existing vehicle fleet and if any special vehicle options are requested (i.e. 4-wheel drive, bike racks, etc.). Vehicle maintenance and safety policies must be included in the application to be considered for award. Rider policy information must be included, which will describe how to ride, complaint procedures, fare structure, and etc.

A Certificate of Insurance will need to be provided. City/CAMPO requires full coverage for the vehicle as long as City/CAMPO holds lien. The standard insurance for a paratransit vehicle under this program is Liability and Property Damage Insurance with a limit of \$1,000,000 for each occurrence, for bodily injury, and property damage, naming Carson City/CAMPO as an additional insured. This shall be maintained through the useful life of the vehicle and until Carson City/CAMPO releases lien of the title.

## **Training Policy**

Organization's employee training policy is required, which should include, at a minimum, the frequency, type, and who will be trained in safety, substance abuse awareness, passenger sensitivity, and customer service.

## **Drug and Alcohol Policy (5339(a) only)**

Subrecipients of 5339(a) FTA funds are required to comply with regulations issued by the FTA on drug and alcohol testing, 49 C.F.R. Part 655. Among other requirements, these regulations require that all safety sensitive employees be tested for drug and alcohol use, pre-employment (drug only), random, reasonable suspicion and post-accident, that certifications be made, and reports submitted. There are limited exceptions to the testing requirements for contract maintenance workers under Section 5339(a) and for volunteers. Annual reporting of the testing results must be submitted to CAMPO by subrecipients on Management Information System (MIS) forms. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

## **Americans with Disabilities Act Policy**

Subrecipients of 5310 and 5339(a) FTA funds are required to comply with applicable provisions of 49 C.F.R. Parts 38 and 39. The Americans with Disabilities Act of 1990 (ADA) prohibits discrimination and ensures equal opportunity and access for persons with disabilities. The FTA works to ensure nondiscriminatory transportation in support of its mission to enhance the social and economic quality of life for all Americans. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

## **Equal Employment Opportunities Program**

Subrecipients of 5310 and 5339(a) FTA funds are required to comply with applicable provisions of 49 U.S.C. 5332. The FTA requires entities meeting certain thresholds to either submit or prepare and maintain an EEO Program. An EEO Program is a detailed set of procedures and employment information designed to ensure entities meet the EEO requirements. The FTA's Office of Civil Rights helps FTA recipients develop, implement, and monitor an effective Equal Employment Opportunity Program to ensure that recipients do not discriminate against any employees or applicants for employment because of race, color, religion, sex, disability, age or national origin. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

## **Public Notice**

Subrecipients of 5310 and 5339(a) FTA funds are required to comply with applicable provisions of 49 U.S.C. 5323(b). The FTA requires applicants to provide notice and adequate opportunity for comment on projects impacting the public transportation service of a community. Any required public noticing conducted by the applicant shall be incorporated into application submittal.

## **Annual Certifications and Assurances**

Successful applicants for Federal Section 5310 and 5339(a) funds must complete and sign the latest certifications and assurances prior to award of any federal assistance. Category 01 applies to all applicants. Category 02 applies to all applications for federal assistance in excess of \$100,000, unless the applicant is a Native American tribe or organization, or a tribal organization. Categories 03 through 21 will apply to some, but not all, applicants and projects. This process ONLY excludes the submittal of documents with your application, NOT from collecting documents and having them on file. Certifications and assurances are special pre-award requirements specifically prescribed by federal law or regulation and do not encompass all federal laws, regulations, and directives that may apply to the applicant or its project. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

## **Authorizing Resolution**

A signed resolution authorizing the appropriate applicant representative to execute and file an application with CAMPO on behalf of the agency must be submitted (see Appendix B).

## Appendix A

### Links to Resources and Required Documentation

#### *Certifications and Assurances*

<https://www.transit.dot.gov/grantee-resources/certifications-and-assurances/fy2021-annual-list-certifications-and-assurances>

#### *Fixing America's Surface Transportation (FAST) Act*

<https://www.transit.dot.gov/FAST>

#### *United States Department of Transportation (USDOT)*

[www.dot.gov](http://www.dot.gov)

#### *Federal Transit Administration (FTA)*

[www.fta.dot.gov](http://www.fta.dot.gov)

#### *Title 49 USC Chapter 53 Grant Programs*

<https://www.transit.dot.gov/grants>

#### *Best Practices Procurement Manual*

<https://www.transit.dot.gov/funding/procurement/best-practices-procurement-manual>

*OMB "Super Circular" or 2 C.F.R. 200* <https://www.federalregister.gov/articles/2013/12/26/2013-30465/uniform-administrative- requirements-cost-principles-and-audit-requirements-for-federal-awards>

#### *Civil Rights (ADA, DBE, Title VI, EEO)*

[www.fta.dot.gov/civil\\_rights.html](http://www.fta.dot.gov/civil_rights.html)

#### *Drug and Alcohol Regulations*

<https://www.federalregister.gov/articles/2001/08/09/01-19234/prevention-of-alcohol-misuse- and-prohibited-drug-use-in-transit-operations>

#### *United States of American Department of Transportation FTA Master Agreement*

<https://www.transit.dot.gov/funding/grantee-resources/sample-fta-agreements/fta-grant-agreements>

#### *Transit Asset Management*

<https://www.transit.dot.gov/TAM>

#### *Data Universal Numbering System (DUNS) information*

<https://www.dnb.com/duns-number.html>

#### *Coronavirus Response and Relief Supplemental Appropriations Act of 2021*

<https://www.transit.dot.gov/funding/grants/coronavirus-response-and-relief-supplemental-appropriations-act-2021>

#### *American Rescue Plan Act of 2021*

<https://www.transit.dot.gov/funding/american-rescue-plan-act-2021>

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## **Appendix B**

### **AUTHORIZING RESOLUTION**

**APPLICANT** \_\_\_\_\_

Printed Name of Transportation Provider

Resolution authorizing the filing of an application for a Federal Transit Administration / Carson Area Metropolitan Planning Organization grant under 49 USC Chapter 53.

WHEREAS, the U S Department of Transportation (USDOT) is authorized to make grants to metropolitan planning organizations through the Federal Transit Administration (FTA) to support transportation projects under 49 USC Chapter 53; and

WHEREAS, the Carson Area Metropolitan Planning Organization (CAMPO) has been designated to administer certain transportation projects under 49 USC Chapter 53; and

WHEREAS, the contract for financial assistance will impose certain obligations upon the APPLICANT, including provisions by it of the local share of project costs.

**NOW, THEREFORE, BE IT RESOLVED BY THE APPLICANT:**

That the above-named representative is authorized to execute and file an application with CAMPO on behalf of our agency to aid in the financing of capital, and / or operating costs pursuant to 49 USC Chapter 53; and

That the above-named representative is authorized to furnish such additional information as CAMPO may require in connection with the application or the project.

The undersigned certifies that the foregoing is a true and correct statement.

---

Printed Title of Authorized Representative

---

Signature of Authorized Representative

Date

## ATTACHMENT A

### Safety Plan

<https://www.carson.org/home/showpublisheddocument/75316>

### TAM Plan

<https://www.carson.org/home/showpublisheddocument?id=63245>

### Title VI Plan

<https://www.carson.org/government/departments-g-z/public-works/transportation/jac-jump-around-carson>

### DBE Program & DBE Goal

<https://www.carson.org/home/showpublisheddocument/82178/638010869326700000>

Training Policy : Available Upon Request

Drug and Alcohol Policy : Available Upon Request

### ADA Policy

<https://www.carson.org/home/showpublisheddocument/75318>

### EEO Policy

<https://www.carson.org/home/showpublisheddocument/64988/636870292059330000>

Annual Certifications and Assurances : Available Upon Request

**A RESOLUTION AUTHORIZING THE FILING OF AN APPLICATION FOR A FEDERAL TRANSIT ADMINISTRATION / CARSON AREA METROPOLITAN PLANNING ORGANIZATION GRANT UNDER 49 USC CHAPTER 53.**

**WHEREAS**, the U.S. Department of Transportation is authorized to make grants to metropolitan planning organizations through the Federal Transit Administration to support transportation projects under 49 USC Chapter 53; and

**WHEREAS**, the Carson Area Metropolitan Planning Organization (“CAMPO”) has been designated to administer certain transportation projects under 49 USC Chapter 53; and

**WHEREAS**, the contract for financial assistance will impose certain obligations upon the APPLICANT, including provisions by it of the local share of project costs;

**NOW, THEREFORE**, the Carson City Regional Transportation Commission (“RTC”) resolves that:

(1) The RTC Chairperson is authorized to execute and file an application with CAMPO on behalf of our agency to aid in the financing of capital, and / or operating costs pursuant to 49 USC Chapter 53; and

(2) The Carson City Transit Coordinator is authorized to furnish such additional information as CAMPO may require in connection with the application or the project.

Upon motion by Commissioner \_\_\_\_\_, seconded by Commissioner \_\_\_\_\_, the foregoing Resolution was passed and adopted this \_\_\_th day of \_\_\_\_, 2023 by the following vote.

VOTE:                    AYES: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

NAYS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ABSENT: \_\_\_\_\_

\_\_\_\_\_

ABSTAIN: \_\_\_\_\_

The undersigned certifies that the foregoing is a true and correct statement.

\_\_\_\_\_  
Lori Bagwell, Chair

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# STAFF REPORT

**Report To:** The Carson City Regional Transportation Commission (RTC)

**Meeting Date:** March 8, 2023

**Staff Contact:** Chris Martinovich, Transportation Manager

**Agenda Title: For Possible Action** – Discussion and possible action regarding the submission of a Letter of Intent (“LOI”) and Traffic Safety Grant (“Grant”) application to the Nevada Department of Public Safety’s Office of Traffic Safety (“OTS”) for \$200,000, subject to a 25% local match totaling \$50,000, for the Carson City School Crosswalk Striping and Education Project (“Project”).

**Staff Summary:** The OTS is requesting applications for the Grant to fund projects that reduce fatal and serious injury crashes in our communities and on Nevada’s roads. Staff is seeking approval to submit an LOI and Grant application for the Project in the amount of \$200,000. This Grant is a federally funded program through the National Highway Traffic Safety Administration (“NHTSA”) and requires a minimum of a 25% local match. Grant applications will be accepted through March 17, 2023.

**Agenda Action:** Formal Action/Motion

**Time Requested:** 5 minutes

## **Proposed Motion**

I move to approve the submission of a letter of intent and grant application as presented.

## **Background/Issues & Analysis**

The OTS announced the opening of the Grant opportunity on January 16, 2023. Applications are due March 17, 2023. Grant funds are provided by the NHTSA and the Nevada Department of Transportation for education, enforcement of traffic laws, and adoption of safe driving behaviors that support the State’s Strategic Highway Safety Plan. The OTS is specifically interested in proposals that address the following:

- Speeding and aggressive driving
- Impaired driving, riding, or walking
- Pedestrian, bicyclist, and/or motorcycle safety
- Preventing roadside deaths or injuries of first responders or in work zones
- Protecting passengers and children during vehicle operation
- Protecting children and others from risks related to being left unattended in a vehicle
- Community based safety programs
- Traffic safety studies and improved data collection
- Public health partnerships and Emergency Management Services (EMS)
- New drivers, older drivers, and/or programs that reach underserved communities

Prior to submitting the Grant application, the staff must submit a proposal for the Project to OTS through a LOI. If the LOI is approved, the Grant application can be submitted to OTS.

Staff is seeking approval to submit the LOI and Grant application for the Project the amount of \$150,000 in Grant funding with a 25% local match of \$50,000, for a total of \$200,000. The Project includes the restriping of existing crosswalks near schools in Carson City. The Project also includes coordination with the Safe Routes to School Program for public outreach, including informational mailers regarding crosswalk safety and driver behavior.

Should Carson City be successful in receiving the Grant, the Project is anticipated to be completed in the summer and fall of 2023.

#### **Applicable Statute, Code, Policy, Rule or Regulation**

Carson City Grant Policy; NRS 277A.270

#### **Financial Information**

Is there a fiscal impact?  Yes  No

If yes, account name/number:

For Revenues: Street Maintenance Fund, Federal Grants / 2563081-431010

For Expenses: Street Maintenance Fund, Long Line Striping / 2563038-500488

Is it currently budgeted?  Yes  No

Explanation of Fiscal Impact: The Federal share of program costs for which an expenditure is made under the Grant may not exceed 75% with a 25% minimum local match. If approved, the total estimated local match would be approximately \$50,000 for the Project. This local match would be paid from the Street Maintenance Fund, Long Line Striping account 2563028-500488. If approved and awarded the grant, the revenue and capital project expenses will be augmented by \$150,000.

#### **Alternatives**

-Do not submit application and provide alternative direction to staff.

#### **Supporting Material**

-Exhibit-1: OTS Traffic Safety Grant Funding Opportunity fact sheet

#### **Board Action Taken:**

|               |          |         |
|---------------|----------|---------|
| Motion: _____ | 1) _____ | Aye/Nay |
|               | 2) _____ | _____   |
|               |          | _____   |
|               |          | _____   |

\_\_\_\_\_  
(Vote Recorded By)

Steve Sisolak  
*Governor*



Nevada Department of  
**Public Safety**  
Office of Traffic Safety

George Togliatti  
*Director*

Sheri Brueggemann  
*Deputy Director*

Amy Davey  
*Administrator*

107 Jacobsen Way  
Carson City, Nevada 89711-0525  
Telephone (775) 684-7470 Fax (775) 684-7482

## Traffic Safety Grant Funding Opportunities

The Office of Traffic Safety (OTS) invites government, non-profit, and community organizations to submit proposals for funding consideration for projects that reduce fatal and serious injury crashes in our communities and on Nevada's roads. Project proposals are submitted through a "Letter of Interest" (LOI). The projected period of performance is October 1, 2023 to September 30, 2024 however projects of longer duration will be considered.

The LOI is a summary proposal and estimate of funds. If the proposal is approved for further consideration, you will be eligible to complete the OTS grant application; all existing grant funding requirements apply. Proposals must be submitted through OTS' online grant management portal at <http://egrants.nv.gov> beginning January 16, 2023.

You are welcome to contact us to discuss proposed projects, or for additional assistance. New partnerships and organizations that work with underserved or at-risk communities are encouraged to apply. Please contact Pete Vander Aa at [pvanderaa@dps.state.nv.us](mailto:pvanderaa@dps.state.nv.us) or (775) 684-7473.

Grant funds are provided by the National Highway Traffic Safety Administration (NHTSA) and the Nevada Department of Transportation (NDOT) for education, enforcement of traffic laws, and adoption of safe driving behaviors that support the State's Strategic Highway Safety Plan. The OTS is specifically interested in proposals that address the following:

- Speeding and aggressive driving
- Impaired driving, riding, or walking
- Pedestrian, bicyclist, and/or motorcycle safety
- Preventing roadside deaths or injuries of first responders or in work zones
- Protecting passengers and children during vehicle operation
- Protecting children and others from risks related to being left unattended in a vehicle
- Community based safety programs
- Traffic safety studies and improved data collection
- Public health partnerships and Emergency Management Services (EMS)
- New drivers, older drivers, and/or programs that reach underserved communities

Page 1 of 2

Projects and programs that introduce innovative ideas or best practices with measurable outcomes are encouraged, as are programs that foster collaboration amongst community resources. More information and resources are found on the OTS grant portal: <http://egrants.nv.gov>.

Request for Proposal period opens January 16, 2023.

**Deadline for completed applications is March 17, 2023.**

Resources for traffic safety data and recommended countermeasures can be found by following these links:

[Zero Fatalities Nevada](#)

[Nevada Traffic Fatality Statistics and Reports](#)

[National Highway Traffic Safety Administration](#)

[NHTSA Countermeasures That Work](#)

[Strategic Highway Safety Plan](#)



## STAFF REPORT

**Report To:** The Carson City Regional Transportation Commission (RTC)

**Meeting Date:** March 8, 2023

**Staff Contact:** Chris Martinovich, Transportation Manager

**Agenda Title: For Possible Action** – Discussion and possible action regarding the submission of a request to Carson City’s Congressional delegation seeking \$2.6 million in federal Community Project Funding (“CPF”) for Federal Fiscal Year (“FFY”) 2024 for the Curry Street Complete Streets Improvement Project (“Project”), with an estimated \$1.3 million in local funds contributed to cover the Project’s preliminary estimated cost of \$3.9 million.

**Staff Summary:** The House and Senate Appropriations Committee have issued guidance to members of Congress for FFY 2024 CPF requests. The proposed multi-modal Project will provide improved traffic and pedestrian circulation, enhanced access to south Carson City, and a more resilient storm drainage system. The Project’s preliminary estimated cost is \$3.9 million. Staff is seeking approval to submit a CPF request for \$2.6 million. The remaining estimated cost of \$1.3 million for the Project will utilize local funds.

**Agenda Action:** Formal Action/Motion

**Time Requested:** 5 Minutes

### Proposed Motion

I move to approve the Community Project Funding request as presented.

### Background/Issues & Analysis

The House and Senate Appropriations Committee have issued their guidance to members of Congress for FFY 2024 CPF/Congressionally Directed Spending, otherwise known as “earmarks”. Staff has identified the Project as a candidate to receive community support and funding through a CPF request. The Project to be submitted for consideration is identified in CAMPO’s 2050 Regional Transportation Plan and includes rehabilitation of pavement and enhancement/widening of the rural road section, between Rhodes Street and Fifth Street, to improve circulation and safety for all modes. The Project improvements would benefit the citizens of Carson City, as well as multiple stakeholders, including the Washoe Tribe, the United States Forest Service, and the State of Nevada by providing improved traffic and pedestrian circulation, enhanced access to south Carson City, and a more resilient storm drainage system. This Project aligns with the goals of all stakeholders to enhance both transportation and non-transportation infrastructure and promote economic development in this portion of the city. The proposed collaboration on this Project will lead to a more connected and sustainable community for all participants.

CPF requests in the Highway Infrastructure Project category typically require a minimum 5% local match. The City’s CPF request is for \$3.9 million to construct the Project, with 67% of the Project funds (\$2.6 million) coming from the CPF request and a 33% local match (\$1.3 million). Funding for the required local match will

come from the Regional Transportation Fund, Redevelopment Revolving Fund, and the Stormwater Utility Fund.

The Project is intended to be timed to coincide with the District 4 Pavement Preservation Projects with Project construction planned in Fiscal Year (“FY”) 2027. The Project funding will be for design and construction. If approved, staff will complete and submit the request in advance of the March 31, 2023 deadline. The complete FFY 2024 House and Senate Appropriations Committee CPF guidance can be found at:

House:

<https://appropriations.house.gov/fiscal-year-2024-member-request-guidance>

Senate:

<https://www.appropriations.senate.gov/imo/media/doc/FY2024%20Appropriations%20Requests%20General%20Guidance.pdf>

### **Applicable Statute, Code, Policy, Rule or Regulation**

Carson City Grant Policy

### **Financial Information**

Is there a fiscal impact?  Yes  No

If yes, Fund Name, Account Name / Account Number:

For Revenues: Federal Grants / 2503082-431010

For Expenses: Regional Transportation Fund, Capital Projects account / 2503035-507010 in FY 2027, Redevelopment Revolving Fund Capital Projects account / 6037510-507010 in FY 2027, and Stormwater Utility Fund Capital Projects account / 5053702-507010 FY 2027

Is it currently budgeted?  Yes  No

Explanation of fiscal impact: If approved and awarded the grant, the revenue and capital project expenses will be augmented by \$2.6 million and \$3.9 million, respectively. Local funding would be transferred from the Regional Transportation Fund, Infrastructure Capital account; Redevelopment Revolving Fund; and Stormwater Utility Fund, Infrastructure Capital account, as part of the FY 2027 District 4 Pavement Preservation Projects. Should the request not be approved or awarded, the Project will be delayed until sufficient local funding or alternate grant opportunities can be acquired.

### **Alternatives**

Direct staff not to pursue the CPF request or provide alternate direction.

### **Supporting Material**

-Exhibit-1: Project Cut Sheet

### **Board Action Taken:**

Motion: \_\_\_\_\_

1) \_\_\_\_\_

Aye/Nay

2) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
(Vote Recorded By)



# Carson City Public Works

## Curry Street Complete Streets Improvement Project

Carson City's proposed multi-modal road project along Curry Street would greatly benefit the citizens of Carson City along with multiple stakeholders, including the Washoe Tribe, the United States Forest Service (USFS), and the State of Nevada by providing improved traffic and pedestrian circulation, improved access to south Carson City, and a more resilient storm drainage system. This project aligns with the goals of all stakeholders to enhance both transportation and non-transportation infrastructure and promote economic development in this portion of the city. The collaboration between the Washoe Tribe and other agencies on this project will lead to a more connected and sustainable community for all participants.

The Curry Street Improvement Project is a vital undertaking that aims to enhance the safety and efficiency of the corridor for all users. As the area continues to experience growth with a mix of residential and commercial developments, this project is essential for improving traffic flow along this critical north-south corridor and promoting economic development in the area.

The current road meanders around a hill with narrow lanes and limited visibility for drivers. There is no bicycle or pedestrian infrastructure. The area also has intermittent and disconnected storm drainage systems leading to increased maintenance costs. The project aims to address these challenges by widening the road to include bike lanes, providing new pedestrian connections, enhanced street lighting, and providing additional stormwater infrastructure, crucial for preventing flooding and preserving the natural environment.

The project is in a strategic location within Carson City, specifically in Redevelopment Area #2. This area was identified through completion of the Southwest Carson Circulation Study as a key transportation corridor for economic revitalization and safety improvements. By investing in infrastructure, traffic improvements, flood management, maintenance, and other public enhancements, this project aims to improve the traffic circulation and overall appearance of South Carson, aligning with the core objectives of the Redevelopment Area #2 Plan. This project, combined with the recently completed award-winning South Carson Complete Streets Project, will help to improve traffic circulation and indirectly spur economic growth in the area.

### Next step: Engineering Design and Construction

The next phase on the project is to conduct environmental assessments and preliminary engineering. This will allow for a comprehensive understanding of the project scope and inform the final design. Following this, the bidding and construction phase is expected to take 12 months. The total cost of the project will include expenses for engineering design, actual construction, and construction management. The City has already secured a portion of the funding, approximately \$1.3 million out of the \$3.9 million total, through local contributions and local redevelopment funds. The remaining funds required for the project will be sourced from other funding sources.



### Project at a Glance

- Meets City Strategic Goal for Sustainable Infrastructure.
- Builds off the recently completed, award-winning South Carson Complete Streets Project.
- Stakeholder Partnership with Washoe Tribe, USFS, and State.
- 12-Month Design and 12-Month Construction Periods.
- Meets Redevelopment Area #2 objective to improve traffic circulation.
- Total Project Cost is \$3.9M.
  - \$200,000 in Stormwater Funds
  - \$600,000 in City Redevelopment Funds.
  - \$500,000 in RTC Funds.
- Balance: \$2.6M



- Limited Sight Distance
- Clear Zone Obstructions
- Minimum Storm Drainage



- No Bike Lane
- Limited Shoulder
- No Pedestrian Amenities

Submitted to:  
Congressman Amodei  
Senator Cortez Masto  
Senator Rosen



## Project Status Report

6-B

Carson City  
Regional Transportation Commission  
Capital Project Information

Meeting Date: March 8, 2023

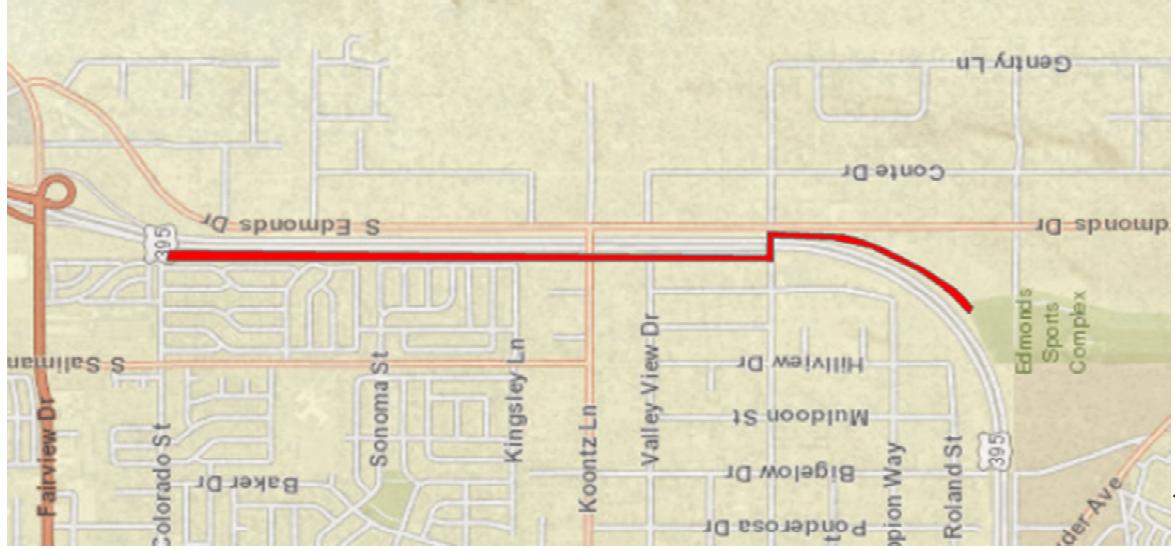
Time Requested: 10 Minutes

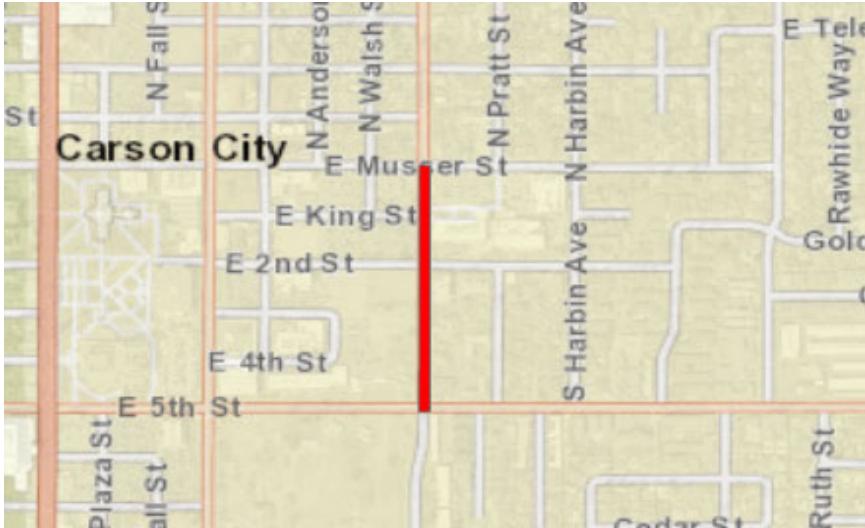
To: Regional Transportation Commission

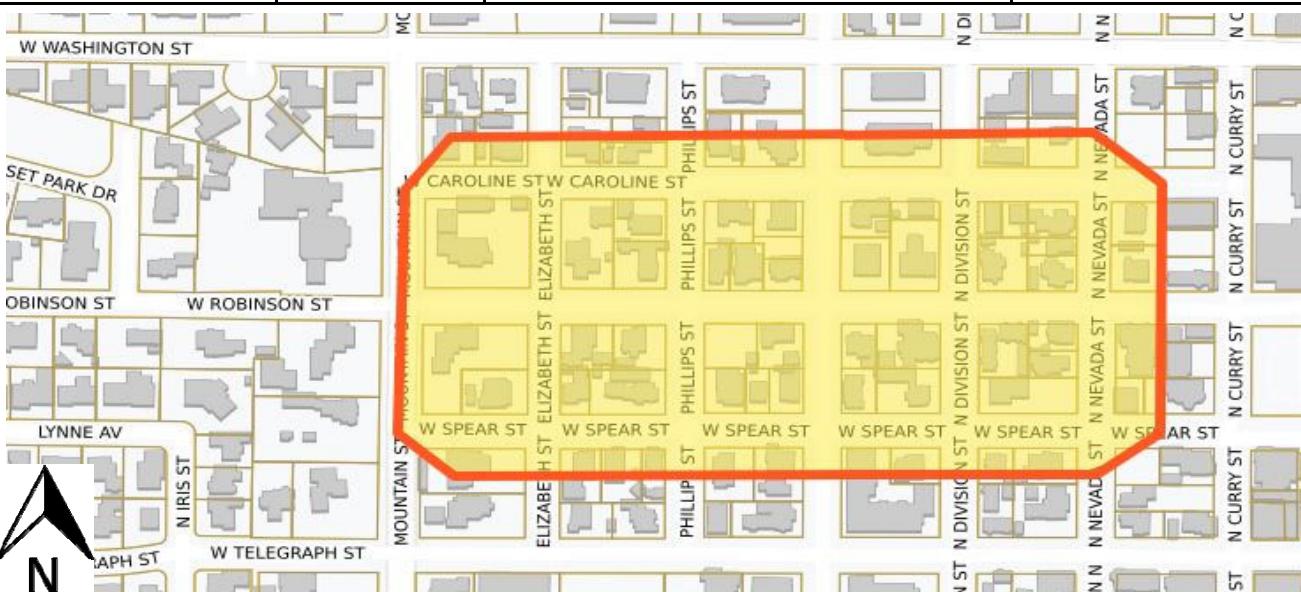
From: Bryan Byrne, Transportation Engineer

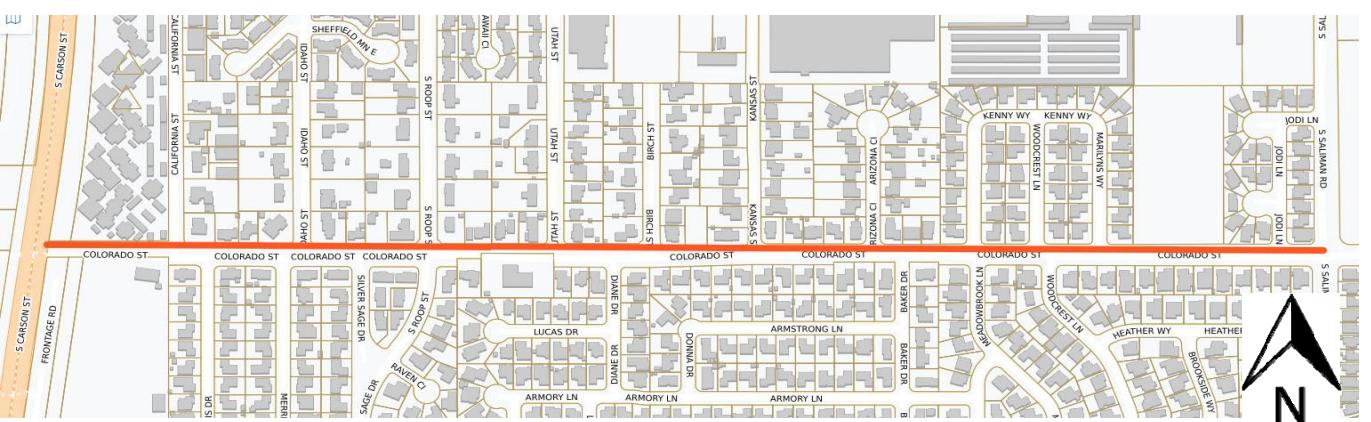
Subject: Bi-Monthly Capital Project Status Report for the Commission's Information

| Project Name  | *Project Cost to Date | Page #             |
|---|-----------------------|--------------------|
| P303518008 - Freeway Multi-Use Path to Edmonds Sports Complex                                       | \$95,474              | 2                  |
| P303519009 - Roop Street Rehabilitation Project   | \$115,394             | 3                  |
| P320121001 - FY 2021 Robinson Area Sewer Rehabilitation Project                                     | \$2,929,420           | 4                  |
| P303521001 - Colorado Street CDBG Pavement Project  | \$151,973             | 5                  |
| P303521008 - District 3 E. 5th Street Reconstruction Project  | \$331,227             | 6                  |
| P751021001 - East William Complete Streets Project  | \$1,134,410           | 7                  |
| P303522005 - DMV Multi-Use Path Project   | \$31,603              | 8                  |
| P751021002 - Appion Way Traffic Signal and Intersection Improvement Project                         | \$135,281             | 9                  |
| P303523001 - Desatoya ADA Improvements CDBG   | \$16,084              | 10                 |
| P303523003 - District 5 – Medical Parkway Preservation Project                                      | \$7,001               | 11                 |
| P303523004 - District 5 – Mountain Street Preservation Project                                      | \$13,745              | 12                 |
| P303523002 - District 5 - Winnie Lane Reconstruction Project  | \$573                 | 13                 |
| P303523005 - SRTS - Vulnerable User Pedestrian Safety Improvement Project                           | \$0                   | 14                 |
| *As of February 24, 2023; includes design, construction management, and construction costs to date. |                       | <b>\$4,962,184</b> |

|   |  |                            |                               |                       |  |  |  |  |
|---|--|----------------------------|-------------------------------|-----------------------|--|--|--|--|
| <b>Project Name:</b>  | Freeway Multi-Use Path to Edmonds Sports Complex |                            |                               |                       |  |  |  |  |
| <b>Project Number:</b>  | P303518008                                       |                            |                               |                       |  |  |  |  |
| <b>Department Lead:</b>   | Public Works                                     |                            |                               |                       |  |  |  |  |
| <b>Project Cost to Date</b>   | \$95,474   | <b>As of Date</b>          | <b>Grant Funded</b>           | <b>Total Budget</b>   |  |  |  |  |
|   |  | February 24, 2023          | Yes                           | \$1,618,000           |  |  |  |  |
| <b>ORG #</b>  | <b>OBJ #</b>                                     | <b>Account Description</b> | <b>Fiscal Year</b>            | <b>Project Budget</b> |  |  |  |  |
| 2503035   | 507010   | RT Fund (Federal-TAP)      | FY20                          | \$1,537,100           |  |  |  |  |
| 2503035   | 507010   | RT Fund                    | FY20                          | \$80,900              |  |  |  |  |
| <b>Project Description</b>  |  |                            |                               |                       |  |  |  |  |
| <b>Project Length</b>   | 2.3 miles of multi-use path.                     |                            |                               |                       |  |  |  |  |
| This project will construct a multi-use path and associated improvements between Colorado Street and the Edmonds Sports Complex. The path will be located along the freeway along the edge of the right-of-way. |  |                            |                               |                       |  |  |  |  |
| <b>Project Justification</b>  |  |                            |                               |                       |  |  |  |  |
| This project is in line with the City's Unified Pathways Master Plan and goals from the CAMPO 2050 Regional Transportation Plan. The project is 95% funded through a competitive TAP grant, awarded by NDOT.    |  |                            |                               |                       |  |  |  |  |
| <b>Project Status</b>   |  |                            |                               |                       |  |  |  |  |
| This project is currently out for bid. Construction is anticipated to start Summer of 2023.   |  |                            |                               |                       |  |  |  |  |
| <b>Project Schedule</b>   |  |                            |                               |                       |  |  |  |  |
| <b>Phase</b>  | <b>Start Date</b>                                | <b>Completion Date</b>     | <b>Notice to Proceed Date</b> |                       |  |  |  |  |
| Design  | Jan-20   | Oct-22                     | 23-Sep-19                     |                       |  |  |  |  |
| Construction  | Apr-23   | Oct-23                     | TBD                           |                       |  |  |  |  |
|   |  |                            |                               |                       |  |  |  |  |

|   |  |                            |                               |                       |  |  |  |  |
|---|--|----------------------------|-------------------------------|-----------------------|--|--|--|--|
| <b>Project Name:</b>  | Roop Street Rehabilitation Project                     |                            |                               |                       |  |  |  |  |
| <b>Project Number:</b>  | P303519009   |                            |                               |                       |  |  |  |  |
| <b>Department Lead:</b>   | Public Works   |                            |                               |                       |  |  |  |  |
| <b>Project Cost to Date</b>   | \$115,394  | <b>As of Date</b>          | <b>Grant Funded</b>           | <b>Total Budget</b>   |  |  |  |  |
|   |  | February 24, 2023          | No                            | \$1,574,702           |  |  |  |  |
| <b>ORG #</b>  | <b>OBJ #</b>   | <b>Account Description</b> | <b>Fiscal Year</b>            | <b>Project Budget</b> |  |  |  |  |
| 2535005   | 507010   | V&T Infrastructure Fund    | FY19                          | \$79,000              |  |  |  |  |
| 2535005   | 507010   | V&T Infrastructure Fund    | FY20                          | \$562,000             |  |  |  |  |
| 2535005   | 507010   | V&T Infrastructure Fund    | FY23                          | \$280,000             |  |  |  |  |
| 5103205   | 507010   | Wastewater Utility Fund    | FY21                          | \$465,000             |  |  |  |  |
| 5203505   | 507010   | Water Fund                 | FY 22                         | \$93,702              |  |  |  |  |
| 2503035   | 507010   | RT Fund                    | FY21                          | \$95,000              |  |  |  |  |
| <b>Project Description</b>  |  |                            |                               |                       |  |  |  |  |
| <b>Project Length</b>   | 0.2 miles (1,200 feet) of full roadway reconstruction. |                            |                               |                       |  |  |  |  |
| This project includes the reconstruction of Roop Street, between East 5th Street and East Musser Street. The project improvements also include the repair and construction of sidewalk infrastructure to improve connectivity and meet Federal Americans with Disabilities (ADA) standards. |  |                            |                               |                       |  |  |  |  |
| <b>Project Justification</b>  |  |                            |                               |                       |  |  |  |  |
| This route provides a critical north-south access connection to the Carson City Public Safety Complex. The pavement is in very poor condition and pedestrian facilities do not meet ADA standards.  |  |                            |                               |                       |  |  |  |  |
| <b>Project Status</b>   |  |                            |                               |                       |  |  |  |  |
| This project will be repacked to combine with the future design phase of Roop Street, between Musser Street and Washington Street. The Project will be reported again once design resumes.  |  |                            |                               |                       |  |  |  |  |
| <b>Project Schedule</b>   |  |                            |                               |                       |  |  |  |  |
| <b>Phase</b>  | <b>Start Date</b>                                      | <b>Completion Date</b>     | <b>Notice to Proceed Date</b> |                       |  |  |  |  |
| Design  | Aug-19   | Feb-22                     | N/A                           |                       |  |  |  |  |
| Construction  | TBD  | TBD                        | N/A                           |                       |  |  |  |  |
|   |  |                            |                               |                       |  |  |  |  |

|   |   |                            |                               |  |  |  |
|---|---|----------------------------|-------------------------------|--|--|--|
| <b>Project Name:</b>  | Robinson Area Sewer Replacement Project                                     |                            |                               |  |  |  |
| <b>Project Number:</b>  | P320121001  |                            |                               |  |  |  |
| <b>Department Lead:</b>   | Public Works  |                            |                               |  |  |  |
| <b>Project Cost to Date</b>   | \$2,929,420   | <b>As of Date</b>          | <b>Grant Funded</b>           |  |  |  |
|   |   | February 24, 2023          | No                            |  |  |  |
| <b>ORG #</b>  | <b>OBJ #</b>  | <b>Account Description</b> | <b>Fiscal Year</b>            |  |  |  |
| 2503035   | 507010  | RT Fund                    | FY21                          |  |  |  |
| 5103205   | 507010  | Wastewater Utility Fund    | FY21                          |  |  |  |
| 5203505   | 507010  | Waterline Replace/Rehab    | FY21                          |  |  |  |
| <b>Project Description</b>  |   |                            |                               |  |  |  |
| <b>Project Length</b>   | 5,000 feet of sewer line replacement, 1,300 feet of roadway reconstruction. |                            |                               |  |  |  |
| The project consists of replacing sewer mains and manholes and pavement patching along Caroline Street, Robinson Street, Spear Street, and Telegraph Street in the area generally bounded by Mountain Street and Nevada Street. The project also include the pavement reconstruction of Robinson between Mountain Street and Nevada Street. |   |                            |                               |  |  |  |
| <b>Project Justification</b>  |   |                            |                               |  |  |  |
| The existing sewer mains in the project limits were constructed in the 1950s and are at the end of their useful service life. They are undersized and are in need of replacement. Regional Transportation funds are being used to assist with the roadway reconstruction.   |   |                            |                               |  |  |  |
| <b>Project Status</b>   |   |                            |                               |  |  |  |
| The contractor and City are coordinating on punch list items.   |   |                            |                               |  |  |  |
| <b>Project Schedule</b>   |   |                            |                               |  |  |  |
| <b>Phase</b>  | <b>Start Date</b>   | <b>Completion Date</b>     | <b>Notice to Proceed Date</b> |  |  |  |
| Design  | May-20  | Mar-21                     | NA                            |  |  |  |
| Construction  | Jul-21  | Jun-22                     | NA                            |  |  |  |
|   |   |                            |                               |  |  |  |

| <b>Project Name:</b>  | Colorado Street CDBG Pavement Project                                   |                            |                        |                       |  |  |  |  |
|---|---|----------------------------|------------------------|-----------------------|--|--|--|--|
| <b>Project Number:</b>  | P303521001  |                            |                        |                       |  |  |  |  |
| <b>Department Lead:</b>   | Public Works  |                            |                        |                       |  |  |  |  |
| <b>Project Cost to Date</b>   | \$151,973   | <b>As of Date</b>          | <b>Grant Funded</b>    | <b>Total Budget</b>   |  |  |  |  |
|   |   | February 24, 2023          | Yes                    | \$4,397,101           |  |  |  |  |
| <b>ORG #</b>  | <b>OBJ #</b>  | <b>Account Description</b> | <b>Fiscal Year</b>     | <b>Project Budget</b> |  |  |  |  |
| 5203505   | 507010  | Water Fund                 | FY 22                  | \$1,822,937           |  |  |  |  |
| 2750620   | 507010  | RT Fund (Federal-CDBG)     | FY 21                  | \$340,868             |  |  |  |  |
| 2750620   | 507010  | RT Fund (Federal-CDBG)     | FY 22                  | \$234,237             |  |  |  |  |
| 2503035   | 507010  | RT Fund (Federal-STBG)     | FY 20                  | \$741,292             |  |  |  |  |
| 2535005   | 507010  | V&T Infrastructure Fund    | FY 21                  | \$927,767             |  |  |  |  |
| 6037510   | 507010  | Redevelopment Capital      | FY 22                  | \$330,000             |  |  |  |  |
| <b>Project Description</b>  |   |                            |                        |                       |  |  |  |  |
| <b>Project Length</b>   | 0.83 miles (4,400 feet) of roadway rehabilitation and ADA improvements. |                            |                        |                       |  |  |  |  |
| This project is for ADA and roadway improvements along Colorado Street between S. Carson Street and Saliman Road. It includes pavement rehabilitation and reduction, ADA upgrades, and construction of missing sidewalk links near California and Idaho Streets.  |   |                            |                        |                       |  |  |  |  |
| <b>Project Justification</b>  |   |                            |                        |                       |  |  |  |  |
| There are missing and incomplete sections of sidewalk along Colorado Street as well as ADA deficiencies in the corridor. The existing pavement condition is poor and in need of rehabilitation. There are known concerns along Colorado Street including speeding, difficulty backing out of driveways, and high maintenance costs associated with the wide pavement area. This project was awarded a CDBG grant for ADA improvements. Project costs are being supplemented with Federal STBG and V&T Infrastructure funding. |   |                            |                        |                       |  |  |  |  |
| <b>Project Status</b>   |   |                            |                        |                       |  |  |  |  |
| The construction project commenced in February and began the installation of the water main. This is expected to be ongoing until early summer.   |   |                            |                        |                       |  |  |  |  |
| <b>Project Schedule</b>   |   |                            |                        |                       |  |  |  |  |
| Phase   | Start Date  | Completion Date            | Notice to Proceed Date |                       |  |  |  |  |
| Design  | Oct-20  | Nov-21                     | Jan-21                 |                       |  |  |  |  |
| Construction  | Mar-23  | Oct-23                     | Feb-22                 |                       |  |  |  |  |
|   |   |                            |                        |                       |  |  |  |  |

|                         |   |  |  |
|-------------------------|---|--|--|
| <b>Project Name:</b>    | District 3 E. 5th Street Reconstruction Project |  |  |
| <b>Project Number:</b>  | P303521008                                      |  |  |
| <b>Department Lead:</b> | Public Works                                    |  |  |

| Project Cost to Date | \$331,227 | As of Date              | Grant Funded | Total Budget   |
|----------------------|-----------|-------------------------|--------------|----------------|
|                      |           | February 24, 2023       | Yes          | \$3,495,200    |
| ORG #                | OBJ #     | Account Description     | Fiscal Year  | Project Budget |
| 2503035              | 507010    | RT Fund                 | FY 22        | \$646,000      |
| 2503035              | 507010    | RT Fund (Federal-STBG)  | FY 22        | \$2,366,000    |
| 2533035              | 507010    | V&T Infrastructure Fund | FY 22        | \$108,200      |
| 5203035              | 507010    | Water Fund              | FY 22        | \$375,000      |

### Project Description

|                       |           |
|-----------------------|-----------|
| <b>Project Length</b> | 1.2 Miles |
|-----------------------|-----------|

E. 5th Street between and including the intersection of Fairview Drive and Marsh Road. Scope includes roundabout expansion, pavement reconstruction, pavement rehabilitation, a new right-turn lane, waterline replacement, ADA curb ramp improvements, curb, gutter and sidewalk reconstruction, multi-use path enhancement, drainage, landscaping, and utility cover adjustments.

### Project Justification

The project is a transportation infrastructure projects for Pavement Performance District 3. It was identified as being a Major Rehabilitation/Reconstruction Project due to the deteriorating pavement condition and includes a combination of rehabilitation and pavement preservation treatments. The project also includes an expansion of the 5th Street / Fairview Drive Roundabout to enhance access to the neighborhood and relieve congestion. Improvements along E. 5th Street will improve pedestrian safety for children and families walking to and from Eagle Valley Middle School as identified in the 2020 Safe Routes to School Master Plan. Lastly, the Water Utility Division has identified the need to replace the waterline along E. 5th Street. This replacement will be included as a component of the project.

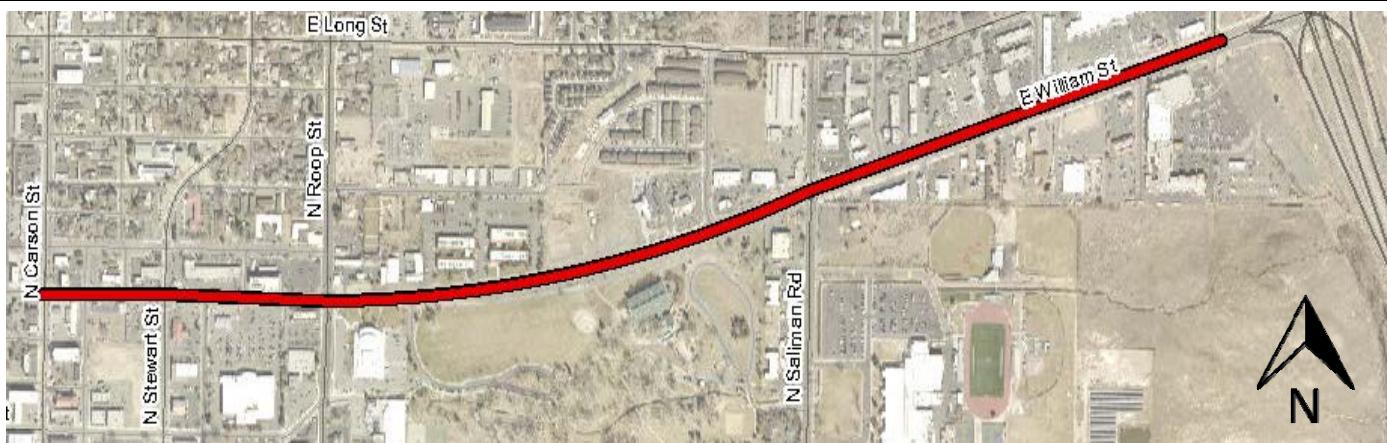
### Project Status

The project has completed 60% design for the roundabout and other portions of the project for staff to begin review. Staff are working on completing a noise study required as part of the Project's Environmental Review. Final design of the project is expected in July of 2023.

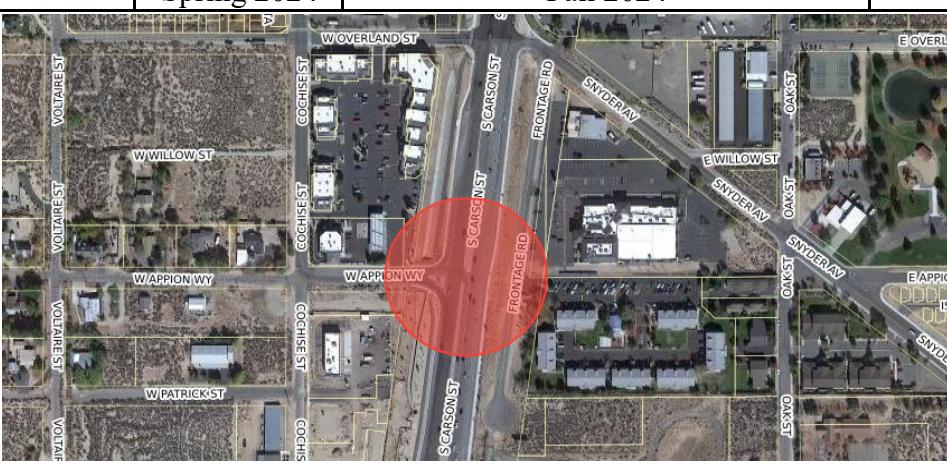
### Project Schedule

| Phase        | Start Date  | Completion Date | Notice to Proceed Date |
|--------------|-------------|-----------------|------------------------|
| Design       | Jul-21      | Jul-23          | 8/5/2021               |
| Construction | Winter 2023 | 2024            | TBD                    |

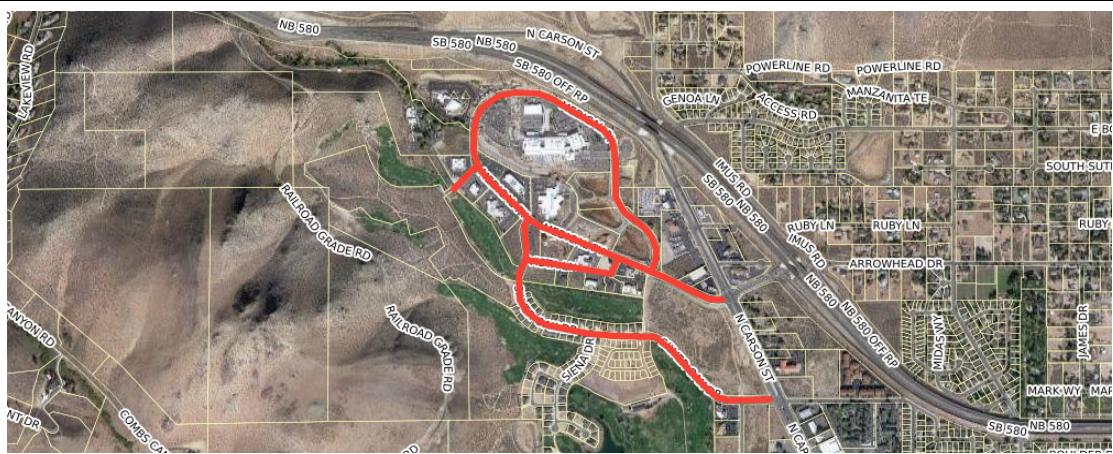


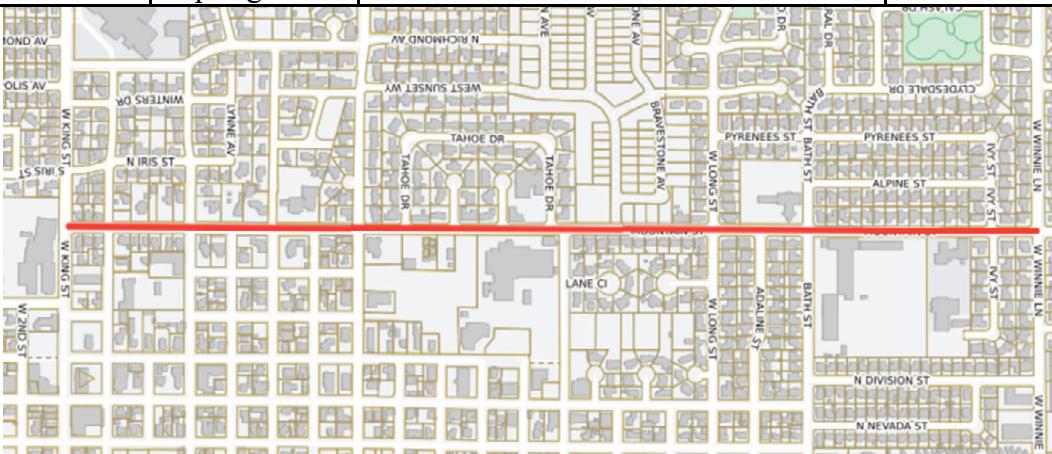
| <b>Project Name:</b>  | East William Complete Streets Project  |                             |                        |                       |  |  |  |  |
|---|--|-----------------------------|------------------------|-----------------------|--|--|--|--|
| <b>Project Number:</b>  | P751021001   |                             |                        |                       |  |  |  |  |
| <b>Department Lead:</b>   | Public Works   |                             |                        |                       |  |  |  |  |
| <b>Project Cost to Date</b>   | \$1,134,410  | <b>As of Date</b>           | <b>Grant Funded</b>    | <b>Total Budget</b>   |  |  |  |  |
|   |  | February 24, 2023           | Yes                    | \$21,400,047          |  |  |  |  |
| <b>ORG #</b>  | <b>OBJ #</b>   | <b>Account Description</b>  | <b>Fiscal Year</b>     | <b>Project Budget</b> |  |  |  |  |
| 2453028   | 501210   | CAMPO                       | FY 22                  | \$100,000             |  |  |  |  |
| 2503035   | 507010   | RT Fund (RAISE)             | FY 23                  | \$9,300,000           |  |  |  |  |
| 3100615   | 507010   | Infrastructure Fund         | FY 22/23/24            | \$4,459,260           |  |  |  |  |
| 6037510   | 507010   | Redevelopment Capital       | FY 22/23               | \$385,000             |  |  |  |  |
| 2503082   | 431010   | Federally Directed Spending | FY 23                  | \$2,000,000           |  |  |  |  |
|   |  | Water / Sewer / Stormwater  | FY 23/24               | \$5,155,787           |  |  |  |  |
| <b>Project Description</b>  |  |                             |                        |                       |  |  |  |  |
| <b>Project Length</b>   | 1.5 Miles of complete streets improvements and associated utility infrastructure |                             |                        |                       |  |  |  |  |
| The project limits are along East William Street between North Carson Street and the interchange of I-580. The project will include roadway resurfacing and the addition of Complete Streets improvements such as sidewalks, bike lanes, transit stops, and landscaping. The project is being completed in three phases; a feasibility study, engineering design, and construction.   |  |                             |                        |                       |  |  |  |  |
| <b>Project Justification</b>  |  |                             |                        |                       |  |  |  |  |
| William Street is wide, with traffic moving at higher speeds, and there are few bicycle or pedestrian amenities. In some sections, there are no sidewalks. While traffic has decreased since the completion of the freeway, crashes have increased. Blocks are long, and intersections with protected pedestrian crossings are infrequent. The result is a vehicle focused corridor with only minimal accommodations for pedestrians and bicyclists. The project was awarded a RAISE Grant in the amount of \$9,300,000. This competitive grant awarded by the US Department of Transportation will support project roadway and complete street . |  |                             |                        |                       |  |  |  |  |
| <b>Project Status</b>   |  |                             |                        |                       |  |  |  |  |
| The consultant has developed and submitted 60% design plans, NEPA documents and technical studies to the City for review. The City held a public meeting in late January. The 60% design plans are being presented to RACC, RTC, and BOS.   |  |                             |                        |                       |  |  |  |  |
| <b>Project Schedule</b>   |  |                             |                        |                       |  |  |  |  |
| Phase   | Start Date   | Completion Date             | Notice to Proceed Date |                       |  |  |  |  |
| Design  | Nov-21   | Aug-23                      | NA                     |                       |  |  |  |  |
| Construction  | Oct-23   | Dec-24                      | TBD                    |                       |  |  |  |  |
|   |  |                             |                        |                       |  |  |  |  |

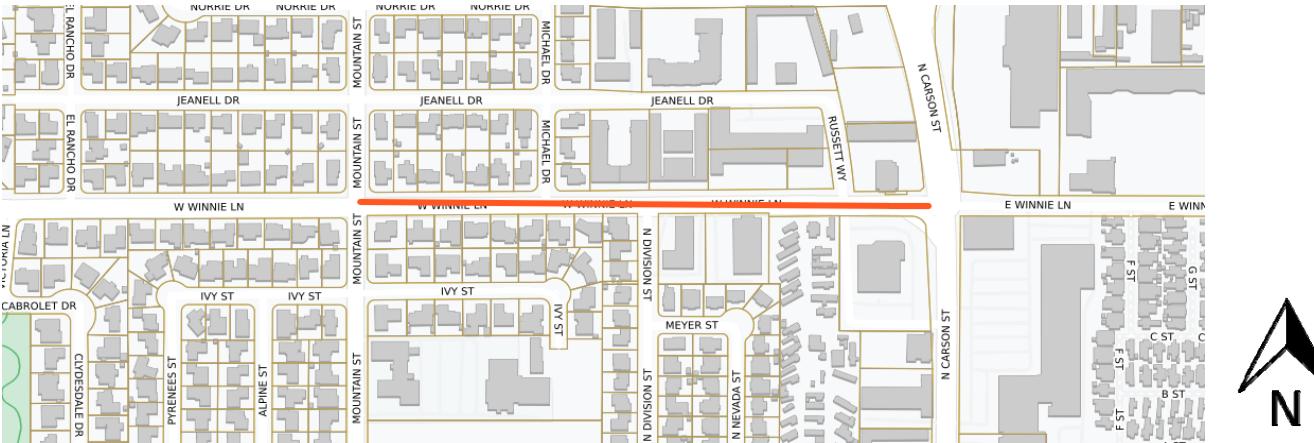


| <b>Project Name:</b>  | Appion Way Traffic Signal and Intersection Improvement Project |                             |                        |                     |  |  |  |  |
|---|--|-----------------------------|------------------------|---------------------|--|--|--|--|
| <b>Project Number:</b>  | P751021002   |                             |                        |                     |  |  |  |  |
| <b>Department Lead:</b>   | Public Works   |                             |                        |                     |  |  |  |  |
| <b>Project Cost to Date</b>   | \$135,281  | <b>As of Date</b>           | <b>Grant Funded</b>    | <b>Total Budget</b> |  |  |  |  |
|   |  | February 24, 2023           | No                     | \$1,478,800         |  |  |  |  |
| ORG #   | OBJ #  | Account Description         | Fiscal Year            | Project Budget      |  |  |  |  |
| 2503035   | 507010   | RT Fund                     | FY 22                  | \$58,000            |  |  |  |  |
| 6037510   | 507010   | Redevelopment Capital       | FY 22                  | \$100,000           |  |  |  |  |
| 2503082   | 431010   | Federally Directed Spending | FY 23                  | \$1,100,000         |  |  |  |  |
| 2503082   | 475100   | Developer Contribution      | FY 22                  | \$220,800           |  |  |  |  |
| <b>Project Description</b>  |  |                             |                        |                     |  |  |  |  |
| <b>Project Length</b>   | New signal at intersection of S. Carson Street and Appion Way  |                             |                        |                     |  |  |  |  |
| Construction of a new traffic signal and intersection improvements at the intersection of S. Carson Street and Appion Way in Carson City. This project will design the signalized intersection to operate as a three-leg intersection in the near-term, and a four-leg intersection in the long-term with minimal geometric and traffic signal modifications required to the existing intersection when the fourth leg is constructed. The future leg of this intersection will connect a new frontage road to Snyder Avenue. |  |                             |                        |                     |  |  |  |  |
| <b>Project Justification</b>  |  |                             |                        |                     |  |  |  |  |
| Providing a new signalized crossing of S. Carson Street at W. Appion Way will help facilitate future traffic volumes including anticipated traffic from approved development. This project would accommodate left turns from W. Appion Way and improve emergency response time to the west side of S. Carson Street from Carson City Fire Station 5.  |  |                             |                        |                     |  |  |  |  |
| <b>Project Status</b>   |  |                             |                        |                     |  |  |  |  |
| The City has received 90% plans from the Consultant, which are currently undergoing internal review. Additionally, subsurface utility investigations have been conducted, and NVE is currently engaged in designing a new meter. The completion of the design is anticipated by Spring 2023.  |  |                             |                        |                     |  |  |  |  |
| <b>Project Schedule</b>   |  |                             |                        |                     |  |  |  |  |
| Phase   | Start Date   | Completion Date             | Notice to Proceed Date |                     |  |  |  |  |
| Design  | Apr-22   | Apr-23                      | NA                     |                     |  |  |  |  |
| Construction  | Spring 2024  | Fall 2024                   | TBD                    |                     |  |  |  |  |
|   |  |                             |                        |                     |  |  |  |  |

|   |                                |                            |                               |                       |  |  |  |  |
|---|--------------------------------|----------------------------|-------------------------------|-----------------------|--|--|--|--|
| <b>Project Name:</b>  | Desatoya ADA Improvements CDBG |                            |                               |                       |  |  |  |  |
| <b>Project Number:</b>  | P303523001                     |                            |                               |                       |  |  |  |  |
| <b>Department Lead:</b>   | Public Works                   |                            |                               |                       |  |  |  |  |
| <b>Project Cost to Date</b>   | \$16,084                       | <b>As of Date</b>          | <b>Grant Funded</b>           | <b>Total Budget</b>   |  |  |  |  |
|   |                                | February 24, 2023          | Yes                           | \$330,000             |  |  |  |  |
| <b>ORG #</b>  | <b>OBJ #</b>                   | <b>Account Description</b> | <b>Fiscal Year</b>            | <b>Project Budget</b> |  |  |  |  |
| 2750620   | 507010                         | RT Fund (Federal-CDBG)     | FY 23                         | \$330,000             |  |  |  |  |
| <b>Project Description</b>  |                                |                            |                               |                       |  |  |  |  |
| <b>Project Length</b>   | Two intersections              |                            |                               |                       |  |  |  |  |
| <p>Project improvements include replacing existing and reconstructing new pedestrian curb ramps to be ADA compliant, replacing substandard or hazardous sidewalks, ensuring pedestrian landing areas are ADA compliant, enhancing crosswalk safety at intersections, and associated roadway pavement and drainage replacement as needed in areas where curb and sidewalk are being reconstructed. Improvements are at the intersections of La Loma Drive, and Monte Rosa Drive.</p> |                                |                            |                               |                       |  |  |  |  |
| <b>Project Justification</b>  |                                |                            |                               |                       |  |  |  |  |
| <p>Improvements in this area would improve pedestrian safety for children and families walking to and from nearby schools and commercial areas. Desatoya Drive is utilized by children accessing Empire Elementary School and Eagle Valley Middle School. The road was identified in the 2020 Safe Routes to School Master Plan as one of several projects aimed at enhancing safety and connectivity for students.</p>   |                                |                            |                               |                       |  |  |  |  |
| <b>Project Status</b>   |                                |                            |                               |                       |  |  |  |  |
| <p>Staff has completed 100% design plans . The project is scheduled for bidding in early March 2023.</p>  |                                |                            |                               |                       |  |  |  |  |
| <b>Project Schedule</b>   |                                |                            |                               |                       |  |  |  |  |
| <b>Phase</b>  | <b>Start Date</b>              | <b>Completion Date</b>     | <b>Notice to Proceed Date</b> |                       |  |  |  |  |
| Design  | Oct-22                         | Feb-23                     | N/A                           |                       |  |  |  |  |
| Construction  | Spring 2023                    | Fall 2023                  | N/A                           |                       |  |  |  |  |
|   |                                |                            |                               |                       |  |  |  |  |

|  |   |                            |                               |                       |  |  |  |  |
|--|---|----------------------------|-------------------------------|-----------------------|--|--|--|--|
| <b>Project Name:</b>   | District 5 – Medical Parkway Preservation Project |                            |                               |                       |  |  |  |  |
| <b>Project Number:</b>   | P303523003  |                            |                               |                       |  |  |  |  |
| <b>Department Lead:</b>  | Public Works                                      |                            |                               |                       |  |  |  |  |
| <b>Project Cost to Date</b>  | \$7,001   | <b>As of Date</b>          | <b>Grant Funded</b>           | <b>Total Budget</b>   |  |  |  |  |
|  |   | February 24, 2023          | Yes                           | \$670,000             |  |  |  |  |
| <b>ORG #</b>   | <b>OBJ #</b>                                      | <b>Account Description</b> | <b>Fiscal Year</b>            | <b>Project Budget</b> |  |  |  |  |
| 2503035  | 507010  | RT Fund                    | FY23                          | \$420,000             |  |  |  |  |
| 2750600  | 507010  | ARPA                       | FY23                          | \$250,000             |  |  |  |  |
| <b>Project Description</b>   |   |                            |                               |                       |  |  |  |  |
| <b>Project Length</b>  | 1.4 miles of slurry seal                          |                            |                               |                       |  |  |  |  |
| This is a pavement preservation project (Type 3 Modified Slurry Seal) of Medical Parkway between Carson Street and around the Medical Parkway loop. Pavement preservation is also planned for Silver Oak Drive, Presti Lane, and Vista It also includes some curb ramps modifications, pavement patching, and striping.  |   |                            |                               |                       |  |  |  |  |
| <b>Project Justification</b>   |   |                            |                               |                       |  |  |  |  |
| Medical Parkway provides access to the Carson Tahoe Hospital and commercial areas. Completing a pavement preservation treatment will maintain existing pavement life and avoid rapid deterioration of this collector roadway which provides the primary access to several medical facilities. In early 2022, the Board of Supervisors allocated ARPA funding to preservation of local roads in each performance district. a portion of the project includes preservation using ARPA funds. |   |                            |                               |                       |  |  |  |  |
| <b>Project Status</b>  |   |                            |                               |                       |  |  |  |  |
| The design is complete and the project is out for bid. Anticipated construction award in April 2023.   |   |                            |                               |                       |  |  |  |  |
| <b>Project Schedule</b>  |   |                            |                               |                       |  |  |  |  |
| <b>Phase</b>   | <b>Start Date</b>                                 | <b>Completion Date</b>     | <b>Notice to Proceed Date</b> |                       |  |  |  |  |
| Design   | Oct-22  | Jan-23                     | N/A                           |                       |  |  |  |  |
| Construction   | May-23  | Fall 2023                  | N/A                           |                       |  |  |  |  |
|    |   |                            |                               |                       |  |  |  |  |

|   |   |                            |                               |                       |  |  |  |  |
|---|---|----------------------------|-------------------------------|-----------------------|--|--|--|--|
| <b>Project Name:</b>  | District 5 – Mountain Street Preservation Project |                            |                               |                       |  |  |  |  |
| <b>Project Number:</b>  | P303523004  |                            |                               |                       |  |  |  |  |
| <b>Department Lead:</b>   | Public Works                                      |                            |                               |                       |  |  |  |  |
| <b>Project Cost to Date</b>   | \$13,745  | <b>As of Date</b>          | <b>Grant Funded</b>           | <b>Total Budget</b>   |  |  |  |  |
|   |   | February 24, 2023          | Yes                           | \$500,000             |  |  |  |  |
| <b>ORG #</b>  | <b>OBJ #</b>                                      | <b>Account Description</b> | <b>Fiscal Year</b>            | <b>Project Budget</b> |  |  |  |  |
| 2503035   | 507010  | RT Fund                    | FY 22                         | \$500,000             |  |  |  |  |
| <b>Project Description</b>  |   |                            |                               |                       |  |  |  |  |
| <b>Project Length</b>   | 1.1 miles of slurry seal and ADA upgrades         |                            |                               |                       |  |  |  |  |
| This is a pavement preservation project (Type 3 Modified Slurry Seal) of Mountain Street between King Street and Winnie Lane. It also includes ADA upgrades to several curb ramps along Mountain Road near Fritsch Elementary School and Bordewich Bray. Other items of work include pavement patching, and striping.   |   |                            |                               |                       |  |  |  |  |
| <b>Project Justification</b>  |   |                            |                               |                       |  |  |  |  |
| Mountain Street provides access to residential areas, Carson Middle School, Bordewich Bray, and Fritsch Elementary School. Completing a pavement preservation treatment will maintain existing pavement life and avoid rapid deterioration of this collector roadway. The project also includes improvements identified in the ADA Transition Plan and the Safe Routes to School Master Plan. |   |                            |                               |                       |  |  |  |  |
| <b>Project Status</b>   |   |                            |                               |                       |  |  |  |  |
| The design is complete and the project is out for bid. Anticipated construction award in April 2023.  |   |                            |                               |                       |  |  |  |  |
| <b>Project Schedule</b>   |   |                            |                               |                       |  |  |  |  |
| <b>Phase</b>  | <b>Start Date</b>                                 | <b>Completion Date</b>     | <b>Notice to Proceed Date</b> |                       |  |  |  |  |
| Design  | Oct-22  | Feb-23                     | N/A                           |                       |  |  |  |  |
| Construction  | Spring 2023                                       | Fall 2023                  | N/A                           |                       |  |  |  |  |
|   |   |                            |                               |                       |  |  |  |  |

|  |   |                            |                               |                       |  |  |  |  |
|--|---|----------------------------|-------------------------------|-----------------------|--|--|--|--|
| <b>Project Name:</b>   | District 5 - Winnie Lane Reconstruction Project                         |                            |                               |                       |  |  |  |  |
| <b>Project Number:</b>   | P303523002  |                            |                               |                       |  |  |  |  |
| <b>Department Lead:</b>  | Public Works  |                            |                               |                       |  |  |  |  |
| <b>Project Cost to Date</b>  | \$573   | <b>As of Date</b>          | <b>Grant Funded</b>           | <b>Total Budget</b>   |  |  |  |  |
|  |   | February 24, 2023          | No                            | \$920,000             |  |  |  |  |
| <b>ORG #</b>   | <b>OBJ #</b>  | <b>Account Description</b> | <b>Fiscal Year</b>            | <b>Project Budget</b> |  |  |  |  |
| 2535005  | 507010  | V&T Infrastructure Fund    | FY 23                         | \$920,000             |  |  |  |  |
| <b>Project Description</b>   |   |                            |                               |                       |  |  |  |  |
| <b>Project Length</b>  | 0.31 miles (1,640 feet) of roadway rehabilitation and ADA improvements. |                            |                               |                       |  |  |  |  |
| This project is for ADA and roadway improvements along Winnie Lane between S. Carson Street and Mountain Street. It includes pavement rehabilitation, ADA upgrades, curb and gutter, sidewalk, crosswalk enhancements, and minor utility improvements.   |   |                            |                               |                       |  |  |  |  |
| <b>Project Justification</b>   |   |                            |                               |                       |  |  |  |  |
| This section of Winnie Lane serves as a crucial link for connecting residential areas, local businesses, and public schools. However, the pavement has a Pavement Condition Index (PCI) of 52 (poor condition), and the pedestrian facilities fail to meet the ADA standards. Pavement reconstruction is required. |   |                            |                               |                       |  |  |  |  |
| <b>Project Status</b>  |   |                            |                               |                       |  |  |  |  |
| In late February, a project kick-off meeting was held with the consultant to initiate the survey, geotechnical investigation, and design. The design process will continue until the fall of 2023, with the construction anticipated to commence in early 2024.  |   |                            |                               |                       |  |  |  |  |
| <b>Project Schedule</b>  |   |                            |                               |                       |  |  |  |  |
| <b>Phase</b>   | <b>Start Date</b>   | <b>Completion Date</b>     | <b>Notice to Proceed Date</b> |                       |  |  |  |  |
| Design   | Feb-23  | Sep-23                     | Feb-23                        |                       |  |  |  |  |
| Construction   | Spring 2024   | Fall 2024                  | N/A                           |                       |  |  |  |  |
|    |   |                            |                               |                       |  |  |  |  |

|   |   |                             |                               |                       |  |  |  |  |
|---|---|-----------------------------|-------------------------------|-----------------------|--|--|--|--|
| <b>Project Name:</b>  | West Carson Vulnerable User Pedestrian Safety Improvement Project |                             |                               |                       |  |  |  |  |
| <b>Project Number:</b>  | P303523005  |                             |                               |                       |  |  |  |  |
| <b>Department Lead:</b>   | Public Works  |                             |                               |                       |  |  |  |  |
| <b>Project Cost to Date</b>   | \$0   | <b>As of Date</b>           | <b>Grant Funded</b>           | <b>Total Budget</b>   |  |  |  |  |
|   |   | February 24, 2023           | Yes                           | \$1,250,000           |  |  |  |  |
| <b>ORG #</b>  | <b>OBJ #</b>  | <b>Account Description</b>  | <b>Fiscal Year</b>            | <b>Project Budget</b> |  |  |  |  |
| 2503082   | 431010  | Federally Directed Spending | FY 23                         | \$1,000,000           |  |  |  |  |
| 2503035   | 507010  | RT Fund                     | FY 23                         | \$250,000             |  |  |  |  |
| <b>Project Description</b>  |   |                             |                               |                       |  |  |  |  |
| <b>Project Length</b>   | 0.7 miles of slurry seal and ADA upgrades                         |                             |                               |                       |  |  |  |  |
| <p>This project outlines improvements in sidewalk gap closures, bicycle enhancements, ADA compliant infrastructure, and intersection enhancements. Intersection enhancements may include additional signing or striping, curb ramps and extensions, additional crosswalks, and raised pedestrian crossings. Along with pedestrian and bicycle improvements, roadway improvements will include a preservation treatment. The Project area is between Musser St, Telegraph St, Thomson St, and W 5th Street, which are all in the Carson Middle School and Bordewich Bray Elementary School area.</p>   |   |                             |                               |                       |  |  |  |  |
| <b>Project Justification</b>  |   |                             |                               |                       |  |  |  |  |
| <p>The proposed project will improve pedestrian and bicycle safety near Carson Middle School and Bordewich Bray Elementary School to promote safe and accessible transportation options for students, staff, and community members. The project aligns with the City's vision of promoting active transportation and creating a safe and healthy community, making it a crucial investment in the safety and well-being of the community and its students. The Project is supported by the Safe Routes to School Master Plan.</p>   |   |                             |                               |                       |  |  |  |  |
| <b>Project Status</b>   |   |                             |                               |                       |  |  |  |  |
| <p>Staff is coordinating the survey data with the consultant. Design is anticipated to begin in Spring 2023.</p>  |   |                             |                               |                       |  |  |  |  |
| <b>Project Schedule</b>   |   |                             |                               |                       |  |  |  |  |
| <b>Phase</b>  | <b>Start Date</b>   | <b>Completion Date</b>      | <b>Notice to Proceed Date</b> |                       |  |  |  |  |
| Design  | Spring 2023   | Sep-24                      | Feb-23                        |                       |  |  |  |  |
| Construction  | Spring 2025   | Fall 2025                   | N/A                           |                       |  |  |  |  |
| <img alt="Aerial map of the project area showing the boundaries of the proposed improvements. The map includes labels for streets like W 1ST ST, W 2ND ST, W 3RD ST, W 4TH ST, W 5TH ST, W 6TH ST, W 7TH ST, W 8TH ST, W 9TH ST, W 10TH ST, W 11TH ST, W 12TH ST, W 13TH ST, W 14TH ST, W 15TH ST, W 16TH ST, W 17TH ST, W 18TH ST, W 19TH ST, W 20TH ST, W 21ST ST, W 22ND ST, W 23RD ST, W 24TH ST, W 25TH ST, W 26TH ST, W 27TH ST, W 28TH ST, W 29TH ST, W 30TH ST, W 31ST ST, W 32ND ST, W 33RD ST, W 34TH ST, W 35TH ST, W 36TH ST, W 37TH ST, W 38TH ST, W 39TH ST, W 40TH ST, W 41ST ST, W 42ND ST, W 43RD ST, W 44TH ST, W 45TH ST, W 46TH ST, W 47TH ST, W 48TH ST, W 49TH ST, W 50TH ST, W 51ST ST, W 52ND ST, W 53RD ST, W 54TH ST, W 55TH ST, W 56TH ST, W 57TH ST, W 58TH ST, W 59TH ST, W 60TH ST, W 61ST ST, W 62ND ST, W 63RD ST, W 64TH ST, W 65TH ST, W 66TH ST, W 67TH ST, W 68TH ST, W 69TH ST, W 70TH ST, W 71ST ST, W 72ND ST, W 73RD ST, W 74TH ST, W 75TH ST, W 76TH ST, W 77TH ST, W 78TH ST, W 79TH ST, W 80TH ST, W 81ST ST, W 82ND ST, W 83RD ST, W 84TH ST, W 85TH ST, W 86TH ST, W 87TH ST, W 88TH ST, 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