



LOCATION:

Meeting via teleconference/Zoom only pursuant to NRS 241.023 and Emergency Directive 006.

DATE February 19, 2021
TIME 9:00 a.m.

**REGIONAL TRANSPORTATION COMMISSION
OF WASHOE COUNTY
BOARD MEETING AGENDA**

Meeting via teleconference/Zoom only pursuant to NRS 241.023 and Emergency Directive 006.

The meeting may be viewed live on RTC's YouTube channel at:

[bit.ly/RTCWashoeYouTube](https://www.youtube.com/channel/UC11)

I. Pursuant to Section 1 of Governor Steve Sisolak's Declaration of Emergency Directive 006 ("Directive 006"), the requirement contained in NRS 241.023(1)(b) that there be a physical location designated for meetings of public bodies where members of the public are permitted to attend and participate has been suspended. Pursuant to Section 3 of Directive 006, the requirements contained in NRS 241.020(4)(a) that public notice agendas be posted at physical locations within the State of Nevada has likewise been suspended. Pursuant to Section 5 of Directive 006, the requirement contained in NRS 241.020(3)(c) that physical locations be available for the public to receive supporting material for public meetings has been suspended.

II. Members of the public may provide public comment by one of the following: (1) submitting comments via online Public Comment Form (<https://www.rtcwashoe.com/about/contact/contact-form/>); (2) emailing comments to: rtcpubliccomments@rtcwashoe.com; or (3) leaving a voicemail at (775) 335-0018. *Comments received prior to 4:00 p.m. on February 18, 2020, will be entered into the record.*

III. The Commission may combine two or more agenda items for consideration and/or may remove an item from the agenda or delay discussion relating to an item on the agenda at any time.

IV. The supporting materials for the meeting will be available at <https://www.rtcwashoe.com/meetings/>. In addition, a member of the public may request supporting materials electronically from Denise Thompson at the following email address: dthompson@rtcwashoe.com.

V. The RTC appreciates the public's patience and understanding during these difficult and challenging circumstances.

1. CALL TO ORDER

1.1 Roll Call

1.2 Pledge of Allegiance

2. PUBLIC COMMENT

Public input received prior to 4:00pm Thursday, February 18th, will be added to the record for this meeting. No live comment will be heard during the meeting. See paragraph II above.

3. APPROVAL OF AGENDA (For Possible Action)

4. CONSENT ITEMS (For Possible Action)

Minutes

4.1 Approve Minutes of the December 18, 2020 Meeting (For Possible Action)

4.2 Approve Minutes of the January 15, 2021 Meeting (For Possible Action)

Reports

4.3 Acknowledge receipt of the monthly Planning Activity Report (For Possible Action)

4.4 Acknowledge receipt of the monthly Engineering Activity Report (For Possible Action)

- 4.5 Acknowledge receipt of the monthly Public Transportation and Operations Activity Report *(For Possible Action)*
- 4.6 Acknowledge receipt of the monthly Procurement Activity Report *(For Possible Action)*
- 4.7 Acknowledge receipt of the monthly Summary Report for the Technical, Citizens Multimodal, and Regional Road Impact Fee Advisory Committees *(For Possible Action)*

Planning Department

- 4.8 Acknowledge receipt of a report on the Transportation Alternatives (TA) Set-Aside Program and funding for safety projects on local roads *(For Possible Action)*

Engineering Department

- 4.9 Approve a Professional Services Agreement (PSA) with Kimley-Horn and Associates to provide design services and optional engineering during construction for the ITS Phase 4 Project in an amount not to exceed \$397,607; authorize the RTC Executive Director to execute the agreement *(For Possible Action)*

Executive, Administrative and Finance Departments

- 4.10 Acknowledge receipt of the Investment Committee report for the quarter ended December 31, 2020 *(For Possible Action)*
- 4.11 Approve a new Regional Transportation Commission (RTC) Management Policy #63, Real Property Disposition *(For Possible Action)*

5. PUBLIC HEARING ITEMS

- 5.1 Conduct a public hearing on proposed services changes to add a pilot FlexRIDE transit service connecting the Truckee Meadows area to the Incline Village area along with miscellaneous time adjustments to other RTC RIDE routes, beginning on or after May 1, 2021; approve a May 2021 RTC RIDE Service Adjustment, currently scheduled for May 1, 2021, including a pilot FlexRIDE transit service connecting to the Lake Tahoe area and miscellaneous time adjustments *(For Possible Action)*
 - a. Staff presentation
 - b. Public input
 - c. Action

6. DISCUSSION ITEMS AND PRESENTATIONS

- 6.1 Acknowledge receipt of a report on the Arlington Bridges Project Update and Public Engagement Direction *(For Possible Action)*

7. METROPOLITAN PLANNING ORGANIZATION (MPO) ITEMS

- 7.1 Acknowledge receipt of a report on the draft 2050 Regional Transportation Plan (RTP) *(For Possible Action)*

8. REPORTS

- 8.1 Executive Director Report *(Informational Only)*
- 8.2 Federal Report *(Informational Only)*
- 8.3 NDOT Report *(Informational Only)*

9. COMMISSIONER ANNOUNCEMENTS AND UPDATES

Announcements and updates to include requests for information or topics for future agendas. No discussion will take place on this item.

10. PUBLIC COMMENT

Public input received prior to 4:00pm February 18th will be added to the record for this meeting. No live comment will be heard during the meeting. See paragraph II above.

11. ADJOURNMENT (For Possible Action)

Pursuant to Section 3 of Directive 006, the requirements contained in NRS 241.020(4)(a) that public notice agendas be posted at physical locations within the State of Nevada has likewise been suspended. Current posting locations:

RTC website: www.rtcwashoe.com, State website: <https://notice.nv.gov/>

**REGIONAL TRANSPORTATION COMMISSION
WASHOE COUNTY, NEVADA**

FRIDAY

9:00 A.M.

December 18, 2020

PRESENT:

**Neoma Jardon, Reno City Council Member, Chair
Ed Lawson, Mayor of Sparks, Vice Chair
Vaughn Hartung, Washoe County Commissioner
Oscar Delgado, Reno City Council Member**

**Bill Thomas, RTC Executive Director
Adam Spear, Legal Counsel
Kristina Swallow, Director of NDOT**

NOT PRESENT:

Bob Lucey, Washoe County Commissioner

The regular monthly meeting, held via Zoom, was called to order by Vice Chair Jardon. Following the roll call and the Pledge of Allegiance to the Flag of our country, the Board conducted the following business:

SPECIAL PRESENTATIONS, RECOGNITIONS, OTHER

LEGISLATIVE PRESENTATION AND DISCUSSION – Mike Hillerby

Mr. Hillerby provided a brief update on activities occurring in preparation for the upcoming state legislative session.

Item 1 APPROVAL OF AGENDA

On motion of Commissioner Hartung, seconded by Commissioner Lawson, which motion unanimously carried, Vice Chair Jardon ordered that the agenda for this meeting be approved.

Item 2.1 PUBLIC INPUT

Vice Chair Jardon opened the meeting to public input and called on anyone wishing to speak on topics relevant to the Regional Transportation Commission (RTC) that are not included in the current agenda. Comments received prior to 4:00 p.m. December 17^h are included in this record of the meeting.

Written comment was submitted 12/16/20 @ 8:22 p.m., by Mr. John Locke, Keolis coach operator, which states that in his opinion, Keolis is not doing enough to protect the drivers or customers from the COVID-19 virus or allowing them to enforce the Governor's mask mandate.

Written comment was submitted 12/17/20 @ 3:57 p.m., by Mr. Andrew Barbano, author of BARBWIRE, to say that coach operators are not allowed to enforce the Governor's mask mandate and that two dozen drivers and support staff had been infected (no source provided).

There being no additional comments submitted, the Vice Chair closed public input.

Item 3.1 thru 3.10 CONSENT ITEMS

Minutes

3.1 Approve the minutes of the November 20, 2020, meeting (*For Possible Action*)

Engineering

3.2 Acknowledge receipt of the monthly Engineering Activity Report (*For Possible Action*)

Public Transportation/Operations

3.3 Acknowledge receipt of the monthly Public Transportation/Operations Report (*For Possible Action*)

Planning

3.4 Acknowledge receipt of the monthly Planning Activity Report (*For Possible Action*)

3.5 Accept the monthly Summary Report for the Technical, Citizens Multimodal and Regional Road Impact Fee Advisory Committees (*For Possible Action*)

3.6 Authorize a request to FTA to use cost savings from the Virginia Street RAPID Extension Project for other capital improvements on South Virginia Street and at 4TH STREET STATION (*For Possible Action*)

General Administration

3.7 Acknowledge receipt of the monthly Procurement Activity Report (*For Possible Action*)

3.8 Approve modification to RTC Management Policies: Public Involvement for Modifications to Transit Service or Fares (P-18); Transit Passenger and Visitor Standard of Conduct (P-31); RTC RIDE and RTC ACCESS Emergency and Special Events Transportation Requests (P-32); RTC Fixed Route ADA Compliance (P-34); Real Property Acquisition (P-55) and Interlocal Agreements (P-56). Approve deletion to RTC Management Policies: Private Enterprise Participation in the Urban Mass Transportation Program (P-15); Nevada Contractor's License (P-17); Interagency Communication Procedures (P-20); and Soundwalls (P-30). Approve the elimination of Board approval for RTC Management Policies: Drug and Alcohol Free Workplace (P-22); Tuition Reimbursement (P-24); Information Technology Acceptable Use (P-40); Employee Remote Work (P-41); Leave of Absence (Non-FMLA) (P-44); Family and Medical Leave (FMLA) (P-44A); Layoff and Recall (P-51); Exempt Employee Pay (P-52) and Sustainability (P-53) (*For Possible Action*)

3.9 Approve letter from the Executive Director to the Agency Review Team of the U.S Department of Transportation identifying federal priorities of the RTC (*For Possible Action*)

Procurement and Contracts

- 3.10 Approve a Professional Services Agreement (PSA) with Nichols Consulting Engineers to provide design services and engineering during construction for the Peckham Lane Project in an amount not to exceed \$392,325, authorize the RTC Executive Director to execute the agreement (*For Possible Action*)**

On motion of Commissioner Hartung, seconded by Commissioner Lawson, which motion carried unanimously, Vice Chair Jardon ordered that Consent Items 3.1 through 3.10 be approved.

Item 4 METROPOLITAN PLANNING ORGANIZATION (MPO)

- 4.1 Receive a report on the 2050 Regional Transportation Plan (RTP) and provide direction accordingly (*No Action Required*)**

Ms. Amy Cummings, RTC Deputy Executive Director and Director of Planning, addressed the Board to provide a presentation update and answer questions pertaining to the 2050 RTP, as set forth in the briefing materials for this agenda item.

Vice Chair Jardon requested that the commissioners be allowed plenty of time to evaluate the information they are receiving.

Commissioner Hartung asked what the Pyramid/US 395 Connector project is trying to achieve.

Commissioner Hartung asked why Eagle Canyon is not on the project list when there are two new schools going in. He would like the RTC to coordinate better with the Washoe County School District.

Commissioner Hartung asked why the Mt. Rose Highway is not on the project list when it has such high volumes.

A copy of the full presentation is available by contacting Denise Thompson (dthompson@rtcwashoe.com)

Item 5 FINANCE

- 5.1 Receive a report on the FY 2020 Comprehensive Annual Financial Report (CAFR) for the Regional Transportation Commission of Washoe County (RTC) and authorize staff to submit the document to the Nevada Department of Taxation (*For Possible Action*)**

Ms. Stephanie Haddock, RTC CFO and Director of Finance, addressed the Board to provide the annual report presentation and to answer questions on the FY 2020 Comprehensive Annual Financial Report (CAFR) for the Regional Transportation Commission of Washoe County (RTC), as set forth in the briefing materials for this agenda item.

On motion of Commissioner Hartung, seconded by Commissioner Delgado, which motion carried unanimously, Vice Chair Jardon ordered that staff is authorized to submit the FY 2020

Comprehensive Annual Financial Report (CAFR) for the Regional Transportation Commission of Washoe County (RTC) to the Nevada Department of Taxation.

A copy of the full presentation is available by contacting Denise Thompson (dthompson@rtcwashoe.com)

**Commissioner Lawson departed the meeting at 9:54 a.m.

Item 6 PUBLIC TRANSPORTATION AND OPERATIONS

6.1 Approve the Regional Transportation Commission's 2020 Coordinated Human Services Public Transportation Plan (CTP) update (*For Possible Action*)

Mr. Jim Gee, RTC Service Planning/Innovation Manager, addressed the Board to give a presentation on the 2020 Coordinated Human Services Transportation Plan, and to answer any questions, as set forth in the briefing materials for this agenda item.

On motion of Commissioner Hartung, seconded by Commissioner Delgado, which motion carried unanimously, Vice Chair Jardon ordered that the Regional Transportation Commission's 2020 Coordinated Human Services Public Transportation Plan (CTP) update be approved.

A copy of the full presentation is available by contacting Denise Thompson (dthompson@rtcwashoe.com)

Item 7.1 thru 7.3 DIRECTOR REPORTS

Item 7.1 RTC Executive Director Report

RTC Executive Director Bill Thomas spoke on the following topics:

1. He announced the upcoming service milestone anniversary for:
 - Susi Trinidad, Paratransit Analyst – 15 years of service on January 9, 2021

Then thanked Susi for her public service to the RTC and our community and her steadfast commitment to serve our ACCESS customers.

2. After nearly 21 years of service, Warren Call, Engineer II will retire on January 8, 2021. Warren began his RTC career on May 22, 2000.

During his tenure, he completed at minimum 35 construction projects, which include Victorian Avenue, Parr Blvd., US 395 (I-580) McCarran Interchange, 4th Street/Prater Way BRT, and his final project, the Plumb Lane RAPID Station, among many others.

Warren has demonstrated a strong commitment and excellence in his work, not only recognized by all of us at RTC, but also among his peers, having been named 2019 Engineer of the Year by the American Society of Civil Engineers, Truckee Meadows Branch.

He thanked Warren for all of his contributions and expressed how much he will be missed.

3. He then thanked two of RTC's federal partners on their retirement. FTA Region 9 Deputy Regional Administrator Ed Carranza is retiring after 22 years of federal public service, and Greg Novak, FHWA Deputy Division Administrator, Nevada Division Office, is retiring after 42 years of federal public service.
4. The new Plumb Lane RAPID Station was completed the prior week and opened to passengers on Dec. 14th. On the 15th, media was invited to talk about the new station and the benefit it will bring to the neighborhood.

All major television outlets attended. Participating in the media event were Commissioner Delgado, Mark Maloney, director of public transportation, Joel Grace from the Reno Experience District (RED), and Rick Casazza and Nettie Oliverio from Reno Public Market.

Everyone shared their enthusiasm and excitement about the new Plumb Lane RAPID station and the future extension of the RAPID Virginia Line in early 2021. RED and Reno Public Market representatives highlighted how beneficial our transit service will be to their developments, supporting their residents and visitors, and everyone along the corridor from the University area, to downtown Reno, Midtown, and around the Meadowood Mall area. These improvements will be a significant boost to our local economy and future regional prosperity.

Our thanks to RTC project manager Warren Call, design consultant Stantec and Q&D Construction.

5. E.D. Thomas proudly announced the RTC had received another FTA grant award. The FTA announced the grant award on November 30th in the amount of \$131,661 for the Real-Time Transit Infrastructure Monitoring. The grant will help to fund a monitoring system on a portion of Virginia Street using 3 D imaging, cameras, and LiDAR to assist us in maintaining our transit system in a State of Good Repair, in collaboration with the University of Nevada, Reno and the City of Reno.

Our sincere thanks to the U.S. Department of Transportation, the Federal Transit Administration, and our Nevada Congressional leaders, Senator Cortez Masto, Senator Rosen, and Congressman Amodei, for their support and leadership, investing in our local infrastructure to improve our region's transportation systems.

6. The current situation with the COVID-19 pandemic in Washoe County has prompted us to cancel this year's New Year's Eve FREE Safe RIDE.

This was a difficult decision for us to make. But we want to encourage everyone to celebrate safely at home, with members of their immediate household to support and comply with Governor Sisolak's statewide 'pause' and the recommendation of the Washoe County Health District to stay home. These guidelines will help to protect Nevadans to avoid transmission of and contracting of COVID-19.

Even though the New Year's Eve free service will be canceled, transit will run on a normal schedule on New Year's Eve for essential trips.

On New Year's Day, transit will operate on a Sunday-level holiday schedule. Go to RTC Washoe DOT Com for route and schedule information.

A reminder masks are required when taking transit and transit passengers are reminded to practice social distancing while onboard and at transit stops and stations.

We greatly appreciate and owe a debt of gratitude to the frontline transit workers who have maintained essential transit service during the past ten months and through the holidays and into 2021.

7. Congratulations to Amy Cummings who has been elected Vice President on the Association of Metropolitan Planning Organizations' Board of Directors, beginning in January. Amy has served on the board since 2018.

The AMPO organization advocates for metropolitan regions and helps shape policy at the national and federal level that benefits all MPOs in order to craft a metropolitan vision for the future.

Item 7.2 RTC Federal Report

A written report is provided, as set forth in the briefing materials for this agenda item.

Item 7.3 NDOT Director Report

Ms. Kristina Swallow, Director of NDOT, provided a monthly presentation report containing updates on current Nevada safety statistics, the Spaghetti Bowl SBX project, warning flasher signs, and statewide CMAQ fund distributions.

Both Vice Chair Jardon and Commissioner Hartung requested road safety audits.

Item 8 PUBLIC INPUT

Vice Chair Jardon opened the meeting to public input pertaining to topics relevant to the Regional Transportation Commission (RTC) that are not included in the current agenda.

There being no additional comment submitted prior to the deadline of Nov. 17 at 4:00 pm, the Vice Chair closed public input.

Item 9 MEMBER ITEMS

Commissioner Hartung asked staff to come up with a concept for a pool of money that all three municipalities can access for work on side streets.

Vice Chair Jardon asked if the LiDAR study is inclusive of how to deploy the technology. The response was yes, it is.

Item 10 ADJOURNMENT (For Possible Action)

On motion of Commissioner Hartung, seconded by Commissioner Delgado, which motion carried unanimously, Vice Chair Jardon ordered that the meeting be adjourned.

There being no further business to come before the Board, the meeting adjourned at 10:59 a.m.

NEOMA JARDON, Vice Chair
Regional Transportation Commission

DRAFT

**REGIONAL TRANSPORTATION COMMISSION
WASHOE COUNTY, NEVADA**

FRIDAY

9:03 A.M.

January 15, 2021

PRESENT:

**Neoma Jardon, Reno City Council Member, Chair
Ed Lawson, Mayor of Sparks, Vice Chair
Vaughn Hartung, Washoe County Commissioner
Oscar Delgado, Reno City Council Member
Bob Lucey, Washoe County Commissioner**

**Bill Thomas, RTC Executive Director
Adam Spear, Legal Counsel
Kristina Swallow, Director of NDOT**

The regular monthly meeting, held via Zoom, was called to order by Chairman Lucey. Following the roll call and the Pledge of Allegiance to the Flag of our country, the Board conducted the following business:

GENERAL BUSINESS:

- Official welcome of Mayor Ed Lawson, RTC's newest commissioner, representing the City of Sparks
- Election of new RTC Board Chair and Vice Chair for a term of two (2) years (*For Possible Action*)

Chairman Lucey made a motion to nominate Neoma Jardon to the position of Board Chair, so moved by Commissioner Hartung and seconded by Commissioner Lawson and passed unanimously.

Chairman Lucey then handed the meeting over to the newly elected Chair Jardon.

Commissioner Hartung stated that per the Board Bylaws, the scheduled rotation dictates that the Vice Chair position goes to Sparks. With that noted, he made a motion to nominate Mayor Ed Lawson to the position of Vice chair, which Commissioner Lucey seconded and it passed unanimously.

PRESENTATION

- Nevada legislative update – Mike Hillerby, Kaempfer Crowell

Mr. Hillerby provided a brief update on activities occurring in preparation for the upcoming state legislative session.

Item 1 APPROVAL OF AGENDA

On motion of Commissioner Hartung, seconded by Commissioner Delgado, which motion unanimously carried, Chair Jardon ordered that the agenda for this meeting be approved.

Item 2.1 PUBLIC INPUT

Chair Jardon opened the meeting to public input and called on anyone wishing to speak on topics relevant to the Regional Transportation Commission (RTC) that are not included in the current agenda. Comments received prior to 4:00 p.m. November 19th are included in this record of the meeting.

Mr. Jeff Jacobs of Jacobs Entertainment submitted written comment on January 12th expressing his support of Agenda Items 3.11 and 4.1, which are included on this agenda.

There being no additional comments submitted, the Vice Chair closed public input.

Item 3.1 thru 3.16 CONSENT ITEMS

Engineering

3.1 Acknowledge receipt of the monthly Engineering Activity Report (For Possible Action)

Public Transportation/Operations

3.2 Acknowledge receipt of the monthly Public Transportation/Operations Report (For Possible Action)

3.3 Accept a report regarding the future relocation of the RTC's fixed-route Jerry L. Hall Maintenance and Operations facility located at 2050 Villanova Drive (For Possible Action)

3.4 Approve staff recommendation outlining guidelines for providing free fares on RTC's transit services (For Possible Action)

Planning

3.5 Acknowledge receipt of the monthly Planning Activity Report (For Possible Action)

3.6 Accept the monthly Summary Report for the Technical, Citizens Multimodal and Regional Road Impact Fee Advisory Committees (For Possible Action)

3.7 Approve the RTC federal priorities and provide direction accordingly (For Possible Action)

3.8 Approve staff recommended appointments to the RTC's Citizens Multimodal Advisory Committee (CMAC) as alternate members, effective February 2021:

- David Giacomini
- Matthew Boog

(For Possible Action)

Administration/Finance

3.9 Acknowledge receipt of the monthly Procurement Activity Report (For Possible Action)

Procurement and Contracts

- 3.10** Authorize the procurement of armed and unarmed security services and after hours patrol and alarm response at RTC's transit stations and facilities (*For Possible Action*)
- 3.11** Authorize the Executive Director to award a contract to Wood Rogers, Inc. for design of the West 4th Street Project in an amount not to exceed \$400,000 (*For Possible Action*)
- 3.12** Authorize the procurement of planning and engineering services for the McCarran Boulevard Corridor Study (*For Possible Action*)
- 3.13** Authorize the procurement of Construction Management Services for the Oddie/Wells Multi-modal Improvements Project (Wells Avenue/I-80 Ramps to Oddie Boulevard/Pyramid Way) (*For Possible Action*)
- 3.14** Approve an Administrative Settlement authorizing the RTC to acquire property (APNs: 020-111-03, 020-111-65, 020-111-36 and 37) from Virginia Reno Partners, LLC in the amount of up to \$666,465 above the appraised value of \$1,502,175, for a total purchase offer of \$2,168,640 (*For Possible Action*)

Inter-Agency Agreements

- 3.15** Approve an Interlocal Agreement with NDOT for administration and funding of necessary right-of-way acquisition, utility relocation, construction and construction management activities necessary to complete Phase 1 of the Pyramid Highway/US 395 Connector Project at an estimated cost of \$54,100,000; authorize the RTC Executive Director to execute the agreement (*For Possible Action*)
- 3.16** Approve a two-year Interlocal Cooperative Agreement in the amount of \$150,000 with the Center for Advanced Transportation Education and Research (CATER), UNR Civil Engineering Department; authorize the RTC Executive Director to execute the agreement (*For Possible Action*)

On motion of Commissioner Hartung, seconded by Commissioner Delgado, which motion carried unanimously, Chari Jardon ordered that Consent Items 3.1 through 3.16 be approved.

Item 4 METROPOLITAN PLANNING ORGANIZATION (MPO)

- 4.1** Receive a report on the 2050 Regional Transportation Plan (RTP) draft project listing and provide direction accordingly (*For Possible Action*)

Ms. Amy Cummings, RTC Deputy Executive Director and Director of Planning, addressed the Board to provide a presentation update and answer questions pertaining to the 2050 RTP, as set forth in the briefing materials for this agenda item.

Commissioner Lucey requested that land acquisitions be included in the long-term goals.

Chair Jardon would like to see street level improvements to support businesses retain customers. She would also like to have further discussion on the Pyramid/US 395 Connector Project.

Ms. Cummings said she would provide more data in February's staff report.

Commissioner Hartung would like to see capacity projections for US 395 with the proposed improvements.

Commissioner Delgado asked if there is eligibility for RRIF credits on new developments. The answer was yes.

There was discussion on putting a road out to the Tri-Center and it was mentioned that Storey County has voiced support for the northern road option but not the southern road option.

Commissioner Lucey said that the southern road option would require an investment from Storey County, so they are not willing to support it. The commissioners agreed that because a road would greatly benefit Storey County, they should be required to commit to some funding of the project.

Chair Jardon asked for the 5-year improvements for the Verdi area to be added to the RTP.

Discussion concluded with the direction provided. No action was taken on this item.

A copy of the full presentation is available by contacting Denise Thompson (dthompson@rtcwashoe.com)

Item 5.1 thru 5.3 DIRECTOR REPORTS

Item 5.1 RTC Executive Director Report

1. E.D. Thomas announce the upcoming service anniversary milestone for:
 - Nancy Mues, Senior Graphic and Web Designer – 15 years of service on February 20, 2021

He thanked Nancy for her public service to the RTC and our community and your great graphic design and award-winning work. (Nancy's design for the Lincoln Line received an international graphics design award)

2. In support of the January National Slavery & Trafficking Prevention Month, RTC is hosting a poster campaign at its transit centers and on all fixed-route buses in both English and Spanish. A similar message will be on display at both transit center station monitors. Additionally, RTC is sharing this messaging on RTC social media channels.

RTC's fixed-route contractor, Keolis, is conducting training this month for all transit which includes a 30-minute video from Busing On the Lookout (BOTL) called "Make the Call, Save Lives."

Since September 2020, Keolis has been reinforcing this important information to their staff through an educational campaign and on-going messaging. Additionally, all new hire orientation includes information regarding Human Trafficking and Project Safe Place.

RTC will also be participating in Truckers Against Trafficking, a Nevada-based virtual training scheduled for January 26, 9-10:30 am via Zoom. The training will include a law enforcement panel with representatives from the Reno and Washoe County Police Departments, and the Nevada Attorney General's Office. Their session is entitled, Human Trafficking 101.

The RTC is proud to partner and support our community's initiative to Stop Human Trafficking.

If anyone needs help or knows someone that does, please call the National Human Trafficking Hotline at 1-888-3737-888. To learn more, go to: [Busing On The Lookout dot Org](http://BusingOnTheLookout.org).

Item 5.2 RTC Federal Report

A written report is provided, as set forth in the briefing materials for this agenda item.

Item 5.3 NDOT Director Report

NDOT Director Kristina Swallow provided a monthly presentation report containing updates on current Nevada safety statistics, the COVID-19 Funding Relief Package the 2020 NV State Legislative Session, the Spaghetti Bowl SBX project, and the Mt. Rose Corridor Study.

Ms. Swallow also mentioned that January is National Slavery & Human Trafficking Prevention Month and that NDOT is committed to doing whatever they can to prevent these things from occurring in the state.

A copy of the full presentation is available by contacting Denise Thompson (dthompson@rtcwashoe.com)

Item 6 PUBLIC INPUT

Chair Jardon opened the meeting to public input pertaining to topics relevant to the Regional Transportation Commission (RTC) that are not included in the current agenda.

There being no additional comment submitted prior to the deadline of January 17th at 4:00 pm, the Chair closed public input.

Item 11 MEMBER ITEMS

There were no member items.

Item 12 ADJOURNMENT

On motion of Commissioner Hartung, seconded by Vice Chair Lawson, which motion carried unanimously, Chair Jardon ordered that the meeting be adjourned.

There being no further business to come before the Board, the meeting adjourned at 11:09 a.m.

NEOMA JARDON, Chair
Regional Transportation Commission

DRAFT



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 4.3

From: Daniel Doenges, PTP, RSP, Planning Manager

Through: Amy Cummings, AICP/LEED AP, Director of Planning and Deputy Director

RECOMMENDED ACTION

Acknowledge receipt of the monthly Planning Activity Report

PLANNING STUDIES

Eagle Canyon Extension Alignment Alternatives and Planning and Environmental Linkages (PEL) Study

The purpose of the study is to enhance mobility and connectivity between the growing communities of Spanish Springs and Lemmon Valley and to facilitate safe and equitable access to economic and recreational opportunities while preserving the character and heritage of the area. The project team is currently developing a draft report and has concluded a refined environmental analysis on the proposed corridor alignment alternatives.

Electric and Alternative Fuel Vehicle Infrastructure and Advanced Mobility Plan

The purpose of this plan is to address existing electric and alternative fuel vehicle infrastructure needs in the area as well as to best prepare for continued advances in mobility technology, including the following:

- Systems planning for autonomous and connected transportation infrastructure
- Systems planning and engineering services for autonomous transit infrastructure
- Traffic analysis for micromobility systems and projects
- Systems planning for electric and hydrogen fuel cell charging infrastructure
- Traffic analysis relating to safety of these proposed systems.

A contract was approved at the September 18, 2020, Board meeting, and a kick-off meeting with the consultant team was held on November 2. A stakeholder meeting was held on February 9.

Automatic Road Feature Extraction from State-Owned Mobile LiDAR Data for Traffic Safety Analysis and Evaluation

The RTC, in partnership with the University of Nevada, Reno (UNR), has received a grant from the US Department of Transportation (DOT) to develop a tool—Automatic Road Feature Extraction from LiDAR (ARFEL)—that automatically extracts highly accurate road geometric features from mobile light-detection-and-ranging (LiDAR) data collected on roads, which will further be used to:

- Analyze relationships between crashes and road factors;
- Identify locations and characteristics of crashes using network screening;
- Select appropriate countermeasures and strategies;
- Evaluate safety improvement projects.

On September 4, an agreement between USDOT, UNR and RTC was executed. On October 28-30, RTC staff attended an online peer exchange with other grantees to share information on the project. The creation of the tool has begun along with all required auxiliary documentation to meet deadlines previously set by the agreement.

Bicycle and Pedestrian Planning

The RTC is collaborating with other partner agencies on several initiatives to improve bicycle and pedestrian safety & facilities:

- The RTC internal working group met with the consultant and had a kick-off meeting for the new Bicycle, Pedestrian and Wheelchair Count Program.
- RTC staff continues to update the regional bike map.
- The Truckee Meadows Bicycle Alliance has not held any recent meetings.

Vision Zero Truckee Meadows

- Agendas are posted on www.visionzerotruckeemeadows.com. The next meeting is scheduled for February 11, 2021, at 3:00pm.
- Between January 1, 2020, and December 31, 2020, 13 pedestrians and zero bicyclists were killed in Washoe County. During this same time in 2019, there were 15 pedestrian and one bicycle fatality. The data states that there was a 13% decrease in pedestrian fatalities in Washoe County in 2020 compared to 2021.

Development Review

RTC staff routinely review development proposals from the local jurisdictions of Washoe County and the Cities of Reno and Sparks. Staff from Planning, Engineering and Public Transportation have reviewed and commented on the following number of development proposals from each of the jurisdictions since the last Board meeting:

- Washoe County – 1
- City of Reno – 8
- City of Sparks – 1

This does not include proposals that were reviewed on which staff did not have any comments.

COMMUNITY AND MEDIA OUTREACH ACTIVITIES

RTC staff conducted the following outreach activities from January 15 - February 19:

| | |
|------------|--|
| January 4 | Regional Information Center Meeting - COVID-19 Response Outreach |
| January 5 | 2050 RTP presentation to Washoe County Planning Commission |
| January 11 | Regional Information Center Meeting - COVID-19 Response Outreach |
| January 12 | 2050 RTP presentation to Washoe County Commission |
| January 18 | Regional Information Center Meeting - COVID-19 Response Outreach |
| January 20 | 2050 RTP Presentation to Reno Planning Commission |

| | |
|-------------|--|
| January 25 | Regional Information Center Meeting - COVID-19 Response Outreach |
| January 25 | 2050 RTP presentation to Sparks City Council |
| January 27 | 2050 RTP presentation to Reno City Council |
| January 28 | Meeting with Senator Dina Neal about RTC's COVID Response |
| February 1 | Regional Information Center Meeting - COVID-19 Response Outreach |
| February 3 | RTC Citizens Multimodal Advisory Committee (CMAC) |
| February 4 | RTC Technical Advisory Committee (TAC) |
| February 4 | 2050 RTP presentation to Sparks Planning Commission |
| February 8 | Regional Information Center Meeting - COVID-19 Response Outreach |
| February 11 | 2050 RTP presentation to Regional Planning Governing Board |
| February 15 | Regional Information Center Meeting - COVID-19 Response Outreach |

Media Relations & Social Media

The RTC issued two news releases and participated in three media interviews on various topics, including the start of construction on the Traffic Engineering Spot 9 - Package 2 project and the new traffic signal at Edison/Rock, the status of the Pyramid Highway project, RTC's holiday hours and schedule on Martin Luther King Jr. Day, transportation options for seniors seeking vaccines, the RTC's new hybrid buses and commitment to creating a sustainable transit fleet, and more.

Social media was used to promote COVID safety information, a link to regional vaccine information, the monthly RTC Board meeting, human trafficking awareness, reminding drivers to buckle up for safety, transit services on Martin Luther King Jr. Day, NDOT's Mt. Rose Highway study, Spaghetti Bowl road closures and detours, roundabout safety on Virginia Street, snow route detours, motorcycle safety, and more.

Social media metrics for the month of January: 20,809 impressions on Facebook, Twitter, YouTube, and Instagram.

Informational Materials and Video Production

Four topics were broadcast on KOLO-TV for The Road Ahead with RTC. Segments included a Virginia Street completion update, information about snow routes, an update on the Regional Transportation Plan, and RTC's EdPass program.

COORDINATION WITH PARTNER AGENCIES

Truckee Meadows Regional Planning Agency (TMRPA)

The RTC continues to have coordination meetings with staff from the TMRPA as the agencies progress with the Shared Work Program. Areas for collaboration include population and employment forecasts, and analysis of demographic and socioeconomic issues.

Nevada Department of Transportation (NDOT)

The RTC continues to have coordination meetings with staff from NDOT. Areas for collaboration include development of local public agency agreements between NDOT and RTC, maintenance of the regional travel demand model, bicycle and pedestrian improvements, transportation alternatives projects, coordination regarding funding and the State Transportation Improvement

Program, One Nevada statewide plan, the I-80 and US 395 widening and improvements to the Spaghetti Bowl, and other ongoing transportation studies.

Statewide Transportation Planning

RTC meets monthly with staff from NDOT, the Federal Highway Administration (FHWA), RTC of Southern Nevada, Tahoe Regional Planning Agency, Tahoe Transportation District and the Carson Area Metropolitan Planning Organization to discuss statewide transportation planning issues. Other topics addressed include statewide data for performance measures analysis, comments on proposed rulemaking, and reauthorization of federal transportation legislation.



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 4.4

From: Brian Stewart, Director of Engineering

RECOMMENDED ACTION

Acknowledge receipt of the monthly Engineering Activity Report.

BACKGROUND AND DISCUSSION

BICYCLE AND PEDESTRIAN IMPROVEMENTS

Bus Stop Improvement and Connectivity Program

The program is a multi-year effort to upgrade existing bus stops to comply with state and federal requirements, including the Americans with Disabilities Act (ADA). The first phase of bus stop improvements located within public right-of-way (13 bus stops) is complete. The process of obtaining necessary easements for other locations is ongoing. The design consultant, CA Group submitted easement packages for the second phase (37 bus stops) in July and acquisition work continues.

The R/W process continues for bus stops in Phase 2 and 3. The team is compiling plans, specs, and estimates for the second construction package that is anticipated to advertise as soon as agency reviews are complete.

Center Street Multimodal Improvements Project

The 30% Design (preliminary design) was completed earlier this month. An Interlocal Cooperative Agreement (ICA) with the City of Reno, based on the preliminary design, will be presented to the RTC Board for approval in the upcoming months. The project consists of constructing a two-way cycle track from Ninth Street to Moran Street in Reno. The majority of the improvements include traffic signal, pavement markings and signage modifications. Sidewalk improvements in some locations are incorporated. The project will provide a dedicated bicycle corridor between the university and downtown/midtown. Design is anticipated to be complete by the end of 2022 for construction beginning in 2023.

Mill Street (Terminal Way to McCarran Boulevard)

The scope of this project is to design and construct various complete street improvements along Mill Street from Terminal Way to McCarran Boulevard, as identified in the RTC Complete Streets Masterplan completed in July 2016, and the Mill/Terminal corridor study completed in March 2013. The emphasis of this project is to assess and identify improvements for pedestrians, bicyclists, and transit riders, as well as motorists. Deficiencies in pedestrian access related to Charter Schools and AACT High School in the area as well as a number of ADA deficient bus stops will be addressed.

100% design plans and solicitation documents are being prepared for submission to the City of Reno for review. Advertisement for bids is planned to start in May.

CAPACITY/CONGESTION RELIEF PROJECTS

ITS Pilot Project, Design of Phase 2 ITS Connectivity

The pilot project connected traffic signal systems of the City of Reno, the City of Sparks, Washoe County, and NDOT through fiber optic communication lines. This project also includes design of Phases 2A and 2B, which will expand communication to outlying signal systems and install ITS devices to monitor and remotely adjust traffic signals to respond to special events, changing traffic conditions, provide information to drivers and traffic incidents. Construction of the pilot project is complete. The ITS Phase 2A Project is complete. Phase 2B is currently under construction with a tentative completion in the winter of 2021.

ITS Phase 3

The project includes conduit and fiber optic cable at the following locations:

- Lake Street, from 1st Street to 2nd Street;
- Lemmon Drive, from North Virginia Street to US 395; and
- Rock Boulevard, from Greg Street to Prater Way.

Also included in ITS Phase 3 is a Road Weather Information Sensor (RWIS) at Sharlands Avenue at Robb Drive. The project will install 20 Gridsmart Performance Packages. These are upgrades to existing Gridsmart detection systems and can detect/count pedestrians and bicycles. Advertisement is scheduled for February 2021.

North Valleys Package 3B

Package 3B includes adding capacity to the right turn lane at North Virginia Street/Business 395. This project also includes improvements to two bus stop pads located within the project area, associated access and drainage improvements. Re-design is underway for a part of the storm drain system due to NDOT permitting requirements. The project is scheduled for construction in summer 2021.

Sparks Boulevard Project

The project seeks to increase safety, maintain roadway capacity, and improve bicycle and pedestrian facilities by widening Sparks Boulevard to six (6) lanes between Greg Street and Baring Boulevard. Professional engineering services are underway with Atkins North America, Inc. to begin environmental studies and preliminary design. The RTC in cooperation with the City of Sparks, Nevada Department of Transportation (NDOT) and the Federal Highway Administration (FHWA) is initiating an Environmental Assessment (EA) to evaluate and document the proposed project's potential impacts. The project team is working through possible phasing concepts associated with alternatives analysis to work towards a preferred alternative and the construction sequencing. Work is also occurring on the EA process by identifying and evaluating impacted resources adjacent to the project.

Traffic Signal Timing 6 Project

Following a three year cycle schedule, the project includes review and timing optimization of approximately one-third (1/3) of the signals in the region per year. For 2020, this begins a new cycle where signals that were retimed in 2016 will be reevaluated and retimed to address the changes to traffic demand. For 2020, approximately ninety-five (95) intersections will have revised timing implemented. Timing plans are developed in coordination with the local entities and the University of Nevada, Reno. In the process, re-evaluation of the other settings such as vehicle passage times are calculated at each intersection to make sure they are up to current standards.

Progress through September 2020:

- Plumb Lane (8 Signals) – Hunter Lake to Kirman Avenue – Completed
- Kietzke Lane (8 Signals) – E. 2nd Street to Peckham Lane – Completed
- Mill Street (4 Signals) – Kietzke Lane to Terminal Way – New timing under fine-tuning
- Plumb Lane (4 Signals) – Kietzke Lane to Terminal Way – New timing under fine-tuning
- Moana Lane (3 Signals) – Kietzke Lane to Neil Road – New timing under fine-tuning

Traffic Engineering (TE) Spot 9 – Package 1 Project

The project includes:

- Traffic signal improvements at the intersection of Sharlands Avenue and Mae Anne Avenue;
- Installation of battery backup systems for signalized intersections on Sun Valley Drive from Scottsdale Road to 7th Street;
- Minor striping improvements to improve traffic flow at Pyramid Way at York Way; and
- Completion of a traffic study to determine potential improvements to the southbound right turn lane at the intersection of Vista Boulevard and Baring Boulevard. This component of the project will not move forward due following a cost benefit analysis.

Titan Electrical Contractors was awarded the construction contract in July 2020 and construction will begin February 2021.

Traffic Engineering (TE) Spot 9 – Package 2 Project

The project includes various traffic updates throughout the Reno/Incline area:

- Traffic signal cabinet and camera upgrades at various intersections in the Reno area;
- New traffic signal at the intersection of Rock Boulevard/Edison Way; and a
- 4th Street/Mesa/Woodland intersection study for future improvements.

Titan Electrical Contractors was awarded the contract. Construction is in progress and expected to be complete by early April.

Traffic Engineering (TE) Spot 10 – Fuel Tax Project

The project is currently in the preliminary design phase and includes:

- Traffic signal at the intersection of Veterans Parkway and Long Meadow Drive;
- Update traffic signal equipment at the intersection of Victorian Avenue and 16th Street; and
- Rectangular Rapid Flashing Beacon (RRFB) installation at various locations within Reno, Washoe County and Sparks.

Traffic Engineering (TE) Spot 10 - South Project

The project is currently in the preliminary design phase and includes:

- A new roundabout at the intersection of 4th Street and Woodland Avenue;
- Geometric improvements at the nearby intersection of 4th Street and Mesa Park Road; and a
- Left turn bay extension for the southbound left turn lane at South Virginia and Kietzke Lane.

Traffic Engineering (TE) Spot 10 - North Project

The project is currently in the final design phase and includes:

- A Traffic Signal improvements at the intersection of Clear Acre/N. McCarran Boulevard; and a
- Traffic Signal improvements at the intersection of El Rancho Drive/Victorian Avenue.

The project advertised for bids on February 5, 2021, with award of contract scheduled in March.

CORRIDOR IMPROVEMENT PROJECTS

Arlington Avenue Bridges

The Arlington Avenue Bridges Project is a feasibility study to analyze possible replacement bridge types and aesthetic themes, document design and environmental criteria, improve safety and multi-modal access in the Wingfield Park area, and review flood-capacity requirements. The crossing of the Truckee River at Arlington Avenue has served the community of Reno and provided access to Wingfield Park for nearly a century. The bridges were built in the 1930's and while structurally safe to drive over they are showing signs of wear resulting from the variety of modifications over the years, their age, and the repeated exposure to flood events. The feasibility study is scheduled to be complete next month. Once the feasibility study is complete, a Request for Proposals will be advertised for the NEPA/Design phase of the project. Construction of the bridges is anticipated to begin in 2025.

Lemmon Drive Project

The project includes widening Lemmon Drive from US 395 to Military Road from four lanes to six lanes and reconstructing the US 395/Lemmon Drive interchange (Segment 1) and improving Lemmon Drive from Fleetwood Drive to Ramsey Way (Segment 2). The final design of Segment 1 is ongoing and 100% plans and specifications will be submitted for agency review in March. The anticipated construction start date is June 2021. The project team continues the Level 2 screening process for the top three (3) alternatives. The Top 3 Alternatives were presented to the RTC Board at the August 20, 2020 meeting. The Level 2 screening process includes a qualitative evaluation where the top alternatives are screen on the criteria developed and agreed upon the Technical Advisory Committee (TAC).

Oddie Boulevard/Wells Avenue Improvement Project

90% design comments are being reviewed and final design plans are underway. RTC is in the selection process for a construction manager consultant, per RFP approved last month.

Additional project information can be viewed at: <http://oddiewellsproject.com/>.

Pyramid Highway and US 395 Connection

Working with FHWA, the RTC transferred the recently awarded \$23 million BUILD grant to NDOT for construction of Phase 1 that is scheduled to begin in 2023. NDOT continues to work on the design that consists of increased roadway capacity and multimodal improvements on Pyramid from Queen Way to Golden View Drive. Design of this phase is scheduled to be complete in August 2022 and the estimated overall Phase 1 cost is \$54.1 million. An Interlocal Agreement between the RTC and NDOT associated with Phase 1 was approved by the RTC Board and NDOT in January. The agreement establishes the funding and administrative responsibilities for the remainder of the project. NDOT will administer remaining activities including right of way acquisition, utility relocation and construction.

Sun Valley Boulevard Corridor Improvement Project

Construction activities are complete from Staci Way to Highland Ranch Parkway. The road is open to traffic with no restrictions. The completion of the intersection of Sun Valley Boulevard and 7th Avenue is on hold until the spring of this year when weather conditions allow construction to resume. Additional information can be viewed at: <http://SunValleyBlvd.org>

Truckee River Shared Use Path Project

The proposed pathway will start at John Champion Memorial Park and continue along the south side of the Truckee River. RTC is working to acquire easements necessary for the pathway. Coordination has progressed on the required United States Army Corp of Engineers (USACE) 408 permit. This project was included in the fiscal year (FY) 2017 Program of Projects. The design portion of this project is funded through federal funds and includes oversight by NDOT through a Local Public Agency (LPA) agreement. The project is agreed to be constructed by NDOT through the agreement approved for Spaghetti Bowl Xpress (SBX) after RTC completes NEPA and the required acquisitions.

Virginia Street RAPID Extension

Roadway construction on the project is significantly complete with full public access to the constructed improvements. Outstanding items of work is focused on completion of punch list items. Coordination has been occurring over the past reporting period with the FTA regarding starting up revenue service for the extension of the RAPID Virginia Line BRT service from 4TH STREET STATION to UNR. It is anticipated that revenue service of this extension will occur sometime in early March 2021. Additional information can be viewed at: <http://virginiastreetproject.com/>

PAVEMENT PRESERVATION PROJECTS

2021 Preventive Maintenance (Various Locations)

The 2021 Preventive Maintenance project consists of patching, crack sealing, and slurry seal activities on approximately 200 lane miles of roadway. Lumos and Associates, Inc. is currently working on the scope for this year's program and candidate roadways have been submitted to the local agencies for review and prioritization.

Golden Valley Road Rehab Project

The project includes rehabilitation/reconstruction of Golden Valley Road from Yorkshire Drive to North Virginia Street. Lumos & Associates, Inc. is the consultant for Design and Engineering During Construction services. The RTC and Union Pacific Railroad (UPRR) have entered into an agreement for railroad crossing improvements. Construction is anticipated to begin in the spring of 2021 and be complete by the end of the summer of 2021.

Kings Row Rehab Project – Phase 1

The project includes rehabilitation/reconstruction of Kings Row from Keystone Avenue to Wyoming Avenue. Lumos and Associates, Inc. is the consultant for Design and Engineering During Construction Services. The consultant is currently finalizing the plans. Work is also progressing to obtain rights to easements for ADA compliance. This project is on track for construction to start in summer 2021.

Kings Row Rehab Project – Phase 2

The project includes rehabilitation/reconstruction of Kings Row from Wyoming Avenue to McCarran Boulevard. Lumos and Associates, Inc. has been selected as the consultant for Design and Engineering During Construction Services. The professional services agreement for this work was approved at the November 2020 RTC board meeting. Preliminary design and investigation related work is in progress for this project.

Newport Lane Rehab Project

The project includes rehabilitation/reconstruction of Newport Lane from Link Lane to McDaniel Street. CA Group is the consultant for Design and Engineering During Construction Services. Design will be complete in early 2021. The construction start date has not been determined.

Peckham Lane Rehab Project

The project includes rehabilitation/reconstruction of Peckham Lane from S. Virginia Street to Baker Lane. The project also includes driveway, sidewalk and curb ramp improvements. Traffic signal improvements at the intersection of Peckham and Baker are planned as well as providing fiber optic interconnectivity between South Virginia Street and Baker Lane. Engineering work has started with preliminary design expected to be complete by May 2021. Construction is anticipated to begin late spring/early summer of 2022.

Reno Consolidated 20-01 – Mayberry Drive, California Avenue, and First Street

The project includes rehabilitation/reconstruction of the following street segments: Mayberry Drive from Memory Lane to California Avenue, California Avenue from Hunter Lake Drive to Booth Street, and First Street from Sierra Center to Virginia Street. Nichols Consulting Engineers (NCE) is working on incorporating agency/public comments, design and grading of improvements. Utility coordination meetings and property acquisitions are ongoing. 100% design submittal is scheduled for March. Utility adjustments and relocations being performed by TMWA and NVE will begin soon. Construction is scheduled to begin in the summer of 2021.

Reno Consolidated 21-01 – Lund Lane, Armstrong Lane, and Yuma Lane

The project includes rehabilitation/reconstruction of the following street segments: Lund Lane from Wedekind Road to Northtowne Lane; Armstrong Lane from Susileen Drive to Yuma Lane; and Yuma Lane from Armstrong Lane to Hunter Lake Drive. Eastern Sierra Engineering (ESE) is the consultant providing Design and Engineering During Construction Services. The project team is currently incorporating agency design review comments and public comments received in September. Design of the project is complete. This project is currently being advertised for bids and construction is anticipated to begin late spring of 2021.

Sky Vista Parkway Widening and Rehabilitation Project

The project includes rehabilitation/widening of Sky Vista Parkway from just east of Vista Knolls Parkway to Silver Lake Road. Atkins Engineering, SNA-Lavalin (Atkins) is the consultant for Design and Engineering During Construction Services. Final design is anticipated to be complete in May 2021. A right of way setting meeting was held this past month and it was concluded that the design needed to continue to be refined to limit acquisitions. Other engineering details are being analyzed ensuring that project schedule, budget, and local agency concerns are meeting the project objectives.

Sparks Consolidated 21-01 – Packer Way and Wild Island Court Project

The project includes rehabilitation/reconstruction of Packer Way from Glendale Avenue to the Cul de Sac and Wild Island Court from Lincoln Way to the Cul de Sac in the City of Sparks. Wood Rodgers Inc. is the consultant for Design and Engineering During Construction Services. Construction is scheduled for the spring of 2021. 50% plans have been completed and reviewed. Wood Rodgers Inc. has submitted 90% plans and bid documents for review.

REPORT ON NEGOTIATED SETTLEMENT AGREEMENTS FOR THE ACQUISITION OF PROPERTY

| Project | Property Owner | Purchase Amount | Amount Over Appraisal |
|-------------------------------------|---|------------------------|------------------------------|
| Mill Street Complete Street Project | Ralph H. Martin, Paul G. Martin & James B. Martin | \$3,830.00 | \$0 |
| Mill Street Complete Street Project | Kohler Family Trust 2007 | \$8,350.00 | \$0 |
| Mill Street Complete Street Project | Longshot Investments, LLC Series 3 | \$5,100.00 | \$0 |
| Mill Street Complete Street Project | TD Mill Street Properties, LLC | \$5,850.00 | \$0 |
| Mill Street Complete Street Project | Reno Self Storage, LLC | \$2,050.00 | \$0 |
| Mill Street Complete Street Project | George Avanzino Family LP | \$4,080.00 | \$0 |
| Mill Street Complete Street Project | Cain Family Trust | \$3,220.00 | \$0 |

CONTRACTS UP TO \$100,000

TischlerBise, Inc., in the not-to-exceed amount of \$50,000 for the Regional Road Impact Fee (RRIF) System General Administrative Manual (GAM) Update.



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 4.5

From: Jennifer Meyers, Transit Contract Administrator

Through: Mark Maloney, Director of Public Transportation and Operations

RECOMMENDED ACTION

Acknowledge receipt of the monthly Public Transportation and Operations Activity Report.

BACKGROUND AND DISCUSSION

RTC Continues its Support – During the month of January, in support of National Slavery & Trafficking Prevention Month, the RTC hosted a poster campaign at its transit centers and on all fixed-route buses in both Spanish and English. Similar messaging is being displayed on RTC’s transit center station monitors and on social media. Since September 2020, Keolis has been reinforcing this important information to its staff through an educational campaign and consistent messaging. Keolis’ New Hire Orientation includes information regarding Human Trafficking and Project Safe Place.



ADA Sign Installation Project – Staff is pleased to report that the ADA compliant Nextbus signs were completed in January and installation has begun at all of our bus stops. These signs were funded by an NDOT grant and designed to help our ADA clients read the signs, as well as to help distinguish/identify our bus stops by mounting them on the pole at an easily located height. These signs are 6” x 18”, each bus stop number is printed on them and designed to be installed on the poles at around 34” height.

RTC RIDE Key Highlights

- Keolis staff has been working with RTC staff to complete the acceptance of the 17 new hybrid buses and the 2 Proterra buses.
- Keolis hired a Media Specialist to better facilitate community
- Keolis is nearing refinement and final touches to fully digitizing safety meetings and training resources for staff.

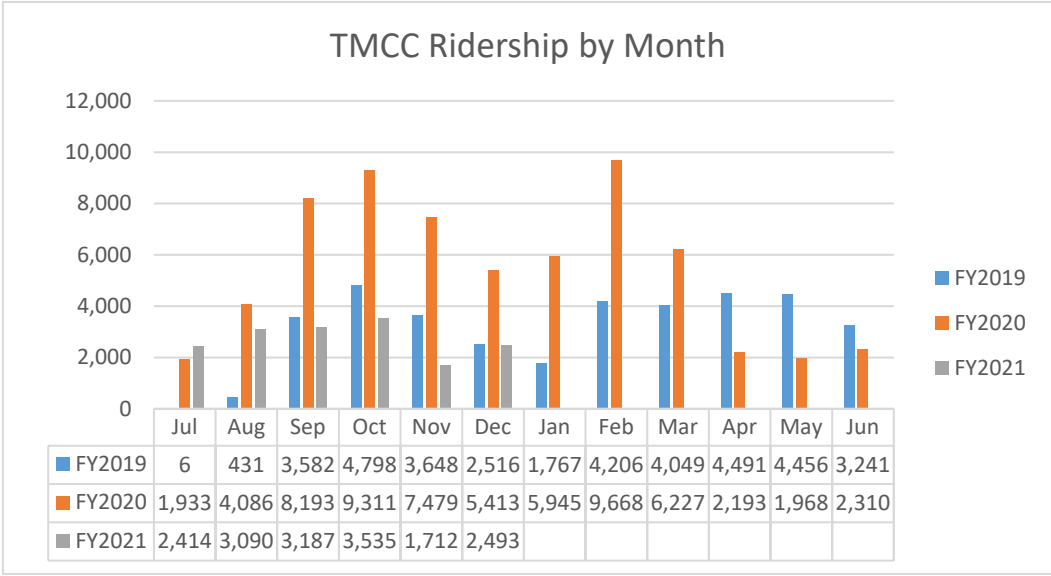
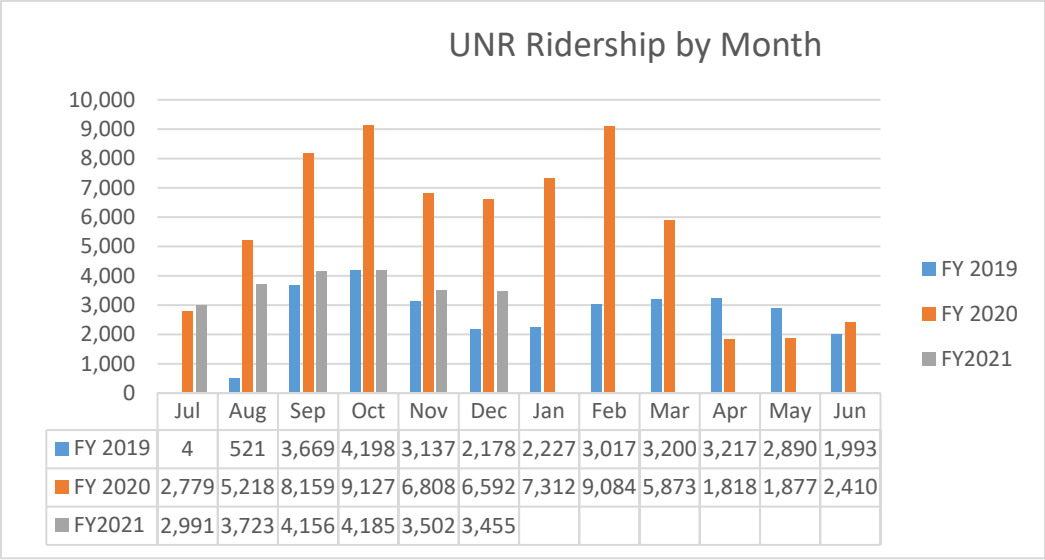
- The Keolis management team has facilitated a survey of interest amongst its employees in preparation for the Tier 2 COVID vaccination.
- Keolis continues its employee engagement momentum holding an event for staff working during Superbowl Sunday.
- Keolis is continuously focusing efforts on recruitment as a result of high attrition in the last quarter.

RTC ACCESS Key Highlights

- MTM Congratulates its Operators on 110 days of accident free driving. Staff will celebrate at 120 days accident free with a management hosted Taco Bar.
- January's Safety Blitz focused on Passenger Care. Reminding Operators to “walk a mile in your passenger's shoes” – one at a time off the bus, walk everyone to the door, don't take shortcuts with the lift or securement, seven (7) securement points on a wheelchair and user - every time, 5 MPH max around bends and corners, and lastly, exercise patience with every passenger and smile! Let them know they are valued.
- Safety Blitz reminders also included the TAPTCO 18 behaviors to reduce and remove accidents reinforcing operators to keep two hands on the wheel, allow a 4 second following distance, not to rush, to Look Ahead, Look Around, Leave Room, and Communicate; not to take chances and GET OUT AND LOOK.
- Staff are reminded to be extra careful when walking on pavement to avoid trips/slips and falls, such as to wear footwear with good traction, take shorter steps and to walk slower.
- January also featured an acknowledgment to MTM's Reservationist and Dispatch Teams for “holding it down for the past 11 months and making it happen – every day and every hour!”

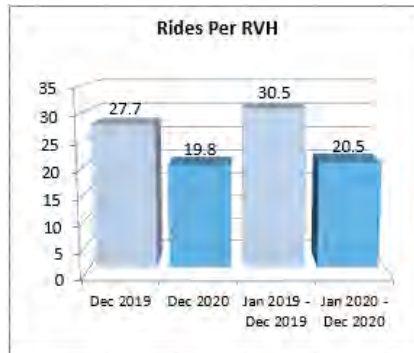
TRANSIT DEMAND MANAGEMENT (TDM) Update

- Vanpools rose to 233 from 227, with over 150 of those serving the Tahoe-Reno Industrial Center (TRIC). Vans are still running to the Army depot, the prisons and Air National Guard. Tesla continues operations with Covid-19 precautions. We are working with Walmart and Chewy, who could join the vanpool program early next year. The Vanpool program has not only rebounded to its pre-pandemic level, but has added to that total. Staff will continue to monitor this situation.
- The trip reduction ordinance for the city of Reno has been moved out of the city's new planning ordinance to an update on the business license requirements. Staff will continue to work with the city on this matter.
- Staff met via Zoom on January 19, 2021, with the graduate student senate at UNR to continue their backing of the ED pass program. The student senate is moving forward on putting the issue on the ballot this spring. In an online survey students supported the fee increase by 80%, but it was a small sample of students (50). The sustainability director at UNR is working with RTC's PR staff to produce a video on the ED pass for the University.
- Staff continues to work with developers to include bus pass subsidy programs in redeveloped apartment complexes in Reno.
- Ridership numbers from the Ed Pass Program through December 2020 are as follow:

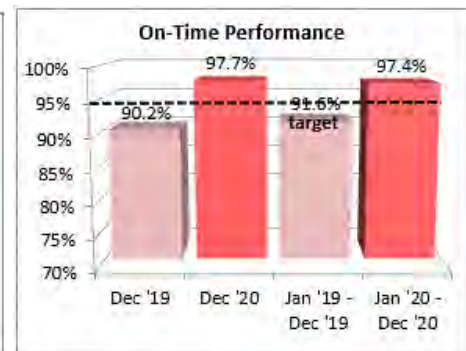
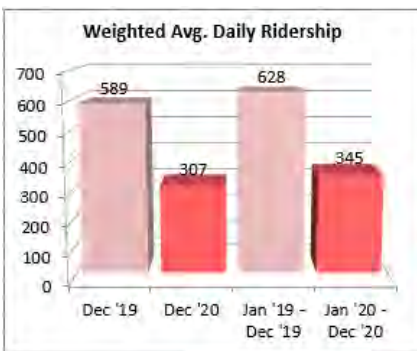


DECEMBER 2020 TRANSIT PERFORMANCE

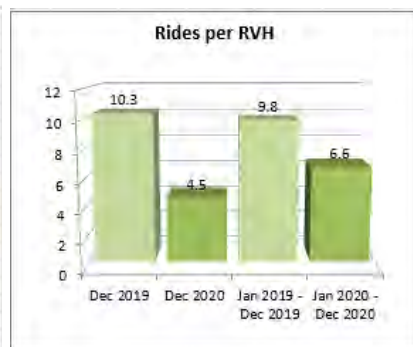
RTC RIDE



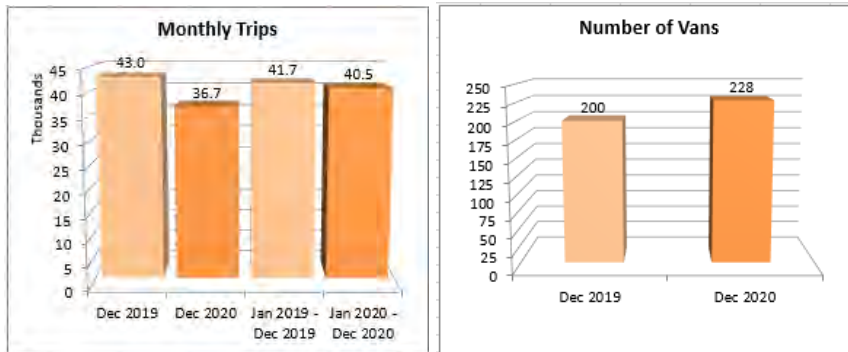
RTC ACCESS



TART



RTC VANPOOL



ATTACHMENTS

- A. RTC RIDE Performance Statistics Table
- B. RTC ACCESS Performance Statistics Table
- C. TART Performance Statistics Table
- D. RTC RIDE Fiscal Year Comparison Charts
- E. RTC ACCESS Fiscal Year Comparison Charts
- F. TART Fiscal Year Comparison Charts
- G. RTC Vanpool Fiscal Year Comparison Charts

RTC Transit Performance Statistics¹

| Performance Indicator | Current month compared with same month last year | | | Current 12-months compared with previous year | | |
|----------------------------------|--|----------------|----------|---|----------------|---------------------|
| | Dec 2020 | Percent Change | Dec 2019 | Jan 2020 - Dec 2020 | Percent Change | Jan 2019 - Dec 2019 |
| Monthly Ridership | 430,283 | -31.4% | 627,301 | 5,401,908 | -32.9% | 8,052,416 |
| Weighted Avg. Daily Ridership | 13,706 | -34.2% | 20,814 | 14,895 | -33.1% | 22,265 |
| Revenue Vehicle Hours (RVH)* | 21,731 | -4.0% | 22,633 | 263,787 | 0.0% | 263,762 |
| Rides Per RVH* | 19.8 | -28.6% | 27.7 | 20.5 | -32.9% | 30.5 |
| Revenue Vehicle Miles (RVM)* | 232,000 | -6.5% | 248,210 | 2,877,540 | -0.5% | 2,892,291 |
| Complaints Per 25,000 Rides | 3.31 | -13.4% | 3.83 | 3.48 | -2.8% | 3.58 |
| On-Time Performance ² | 90.3% | 4.8% | 86.1% | 91.1% | 1.2% | 90.0% |

| Performance Indicator | Nov 2020 | Percent Change | Nov 2019 | Dec 2019 - Nov 2020 | Percent Change | Dec 2018 - Nov 2019 |
|------------------------|-----------|----------------|-----------|---------------------|----------------|---------------------|
| Revenue | \$212,484 | -37.9% | \$342,052 | \$3,183,109 | -33.9% | \$4,817,386 |
| Farebox Recovery Ratio | 8.3% | -36.3% | 13.0% | 9.9% | -35.7% | 15.4% |
| Subsidy per Ride | \$5.71 | 52.3% | \$3.75 | \$5.18 | 57.6% | \$3.29 |

¹ RTC Transit includes RTC RIDE, RTC RAPID, RTC REGIONAL CONNECTOR, and UNR Midtown Direct

² Percent of trips zero min. early and five minutes or less late

* - RVH and RVM are preliminary for December

RTC ACCESS Performance Statistics

| Performance Indicator | Current month compared with same month last year | | | Current 12-months compared with previous year | | |
|---|--|----------------|-----------|---|----------------|---------------------|
| | Dec '20 | Percent Change | Dec '19 | Jan '20 - Dec '20 | Percent Change | Jan '19 - Dec '19 |
| Monthly Ridership | 9,375 | -46.5% | 17,537 | 123,425 | -45.1% | 224,737 |
| Weighted Avg. Daily Ridership | 307 | -47.9% | 589 | 345 | -45.0% | 628 |
| Revenue Vehicle Hours | 6,457 | -19.4% | 8,008 | 82,033 | -19.1% | 101,358 |
| Passenger per Revenue Vehicle Hour (does not include taxi data) | 1.45 | -33.7% | 2.19 | 1.50 | -31.8% | 2.21 |
| Revenue Vehicle Miles (RVM) | 78,891 | -41.8% | 135,529 | 1,007,881 | -40.8% | 1,702,027 |
| Complaints per 1,000 Rides | 0.75 | 63.7% | 0.46 | 0.69 | 46.0% | 0.47 |
| ADA Capacity Denials | 0 | 0.0% | 0 | 0 | 0.0% | 0 |
| Other Denials | 0 | 0.0% | 0 | 0 | #DIV/0! | 0 |
| Accidents per 100,000 Miles | 0.00 | -100.0% | 1.48 | 0.85 | 14.5% | 0.74 |
| On-Time Performance (does not include taxi data) | 97.7% | 8.3% | 90.2% | 97.4% | 6.3% | 91.6% |
| Taxi On-Time Performance | 0.0% | 0.0% | 0.0% | 0.0% | -100.0% | 7.3% |
| Performance Indicator | Sept '20 | Percent Change | Sept '19 | July '20 - Sept '20 | Percent Change | Sept '19 - July '19 |
| Revenue* | \$113,566 | -29.4% | \$160,905 | \$323,504 | -30.5% | \$465,547 |
| Farebox Recovery Ratio* | 14.16% | -39.36% | 23.35% | 14.64% | -31.04% | 21.23% |
| Subsidy per Passenger* | \$56.47 | 177.5% | \$20.35 | \$54.27 | 147.4% | \$21.94 |

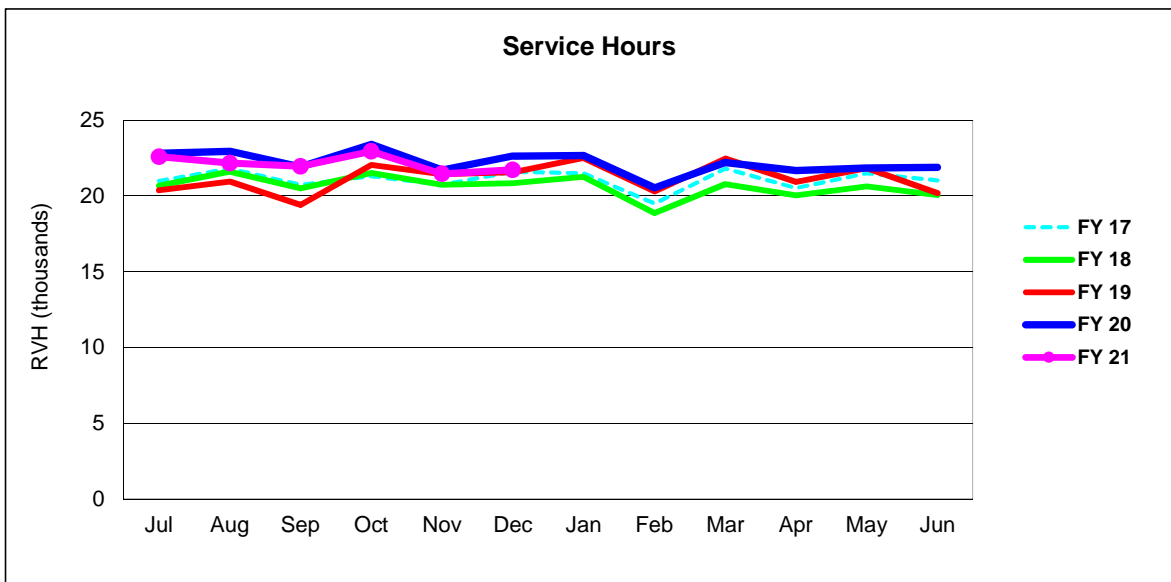
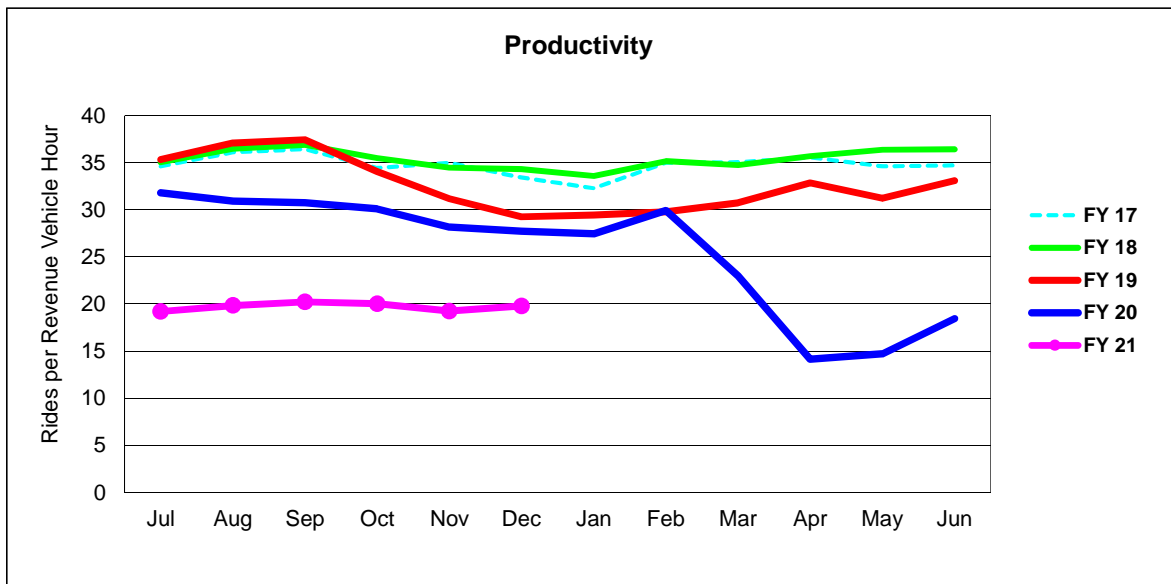
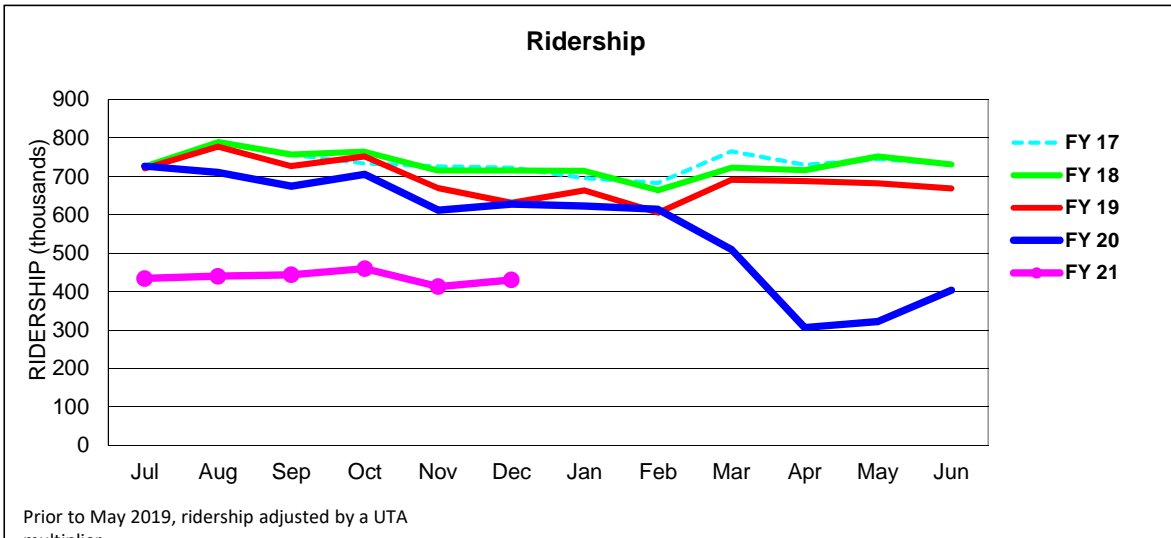
*September 2020 data is the latest available.

TART Performance Statistics

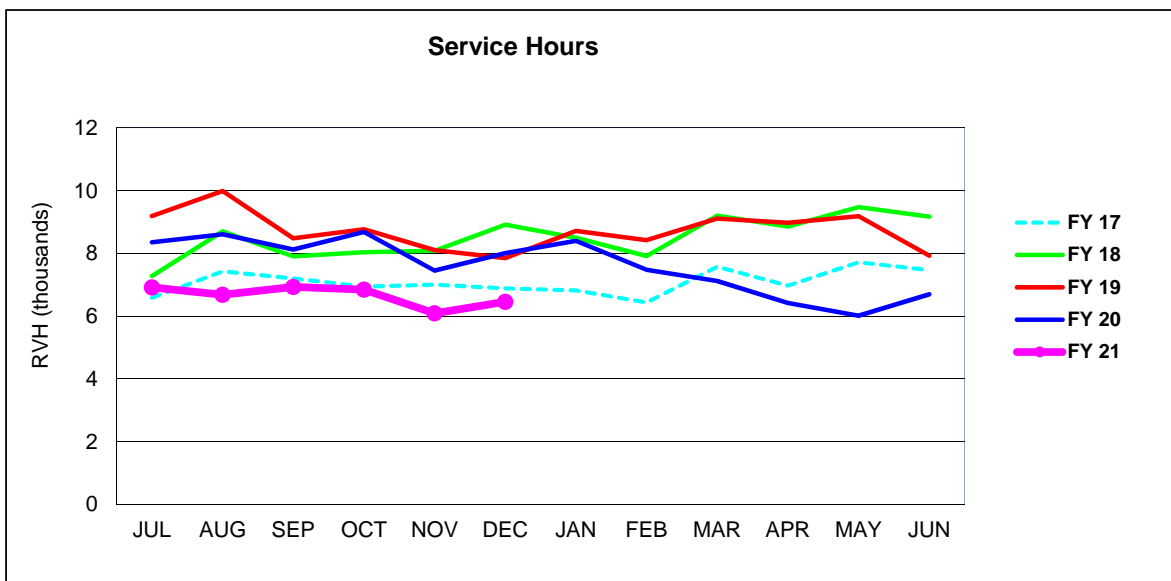
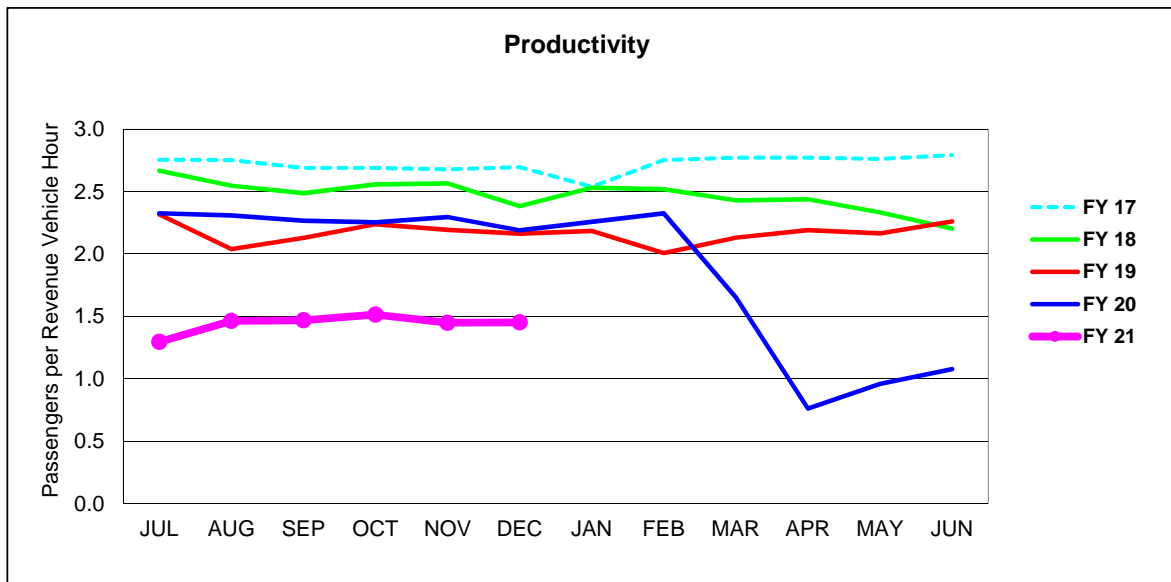
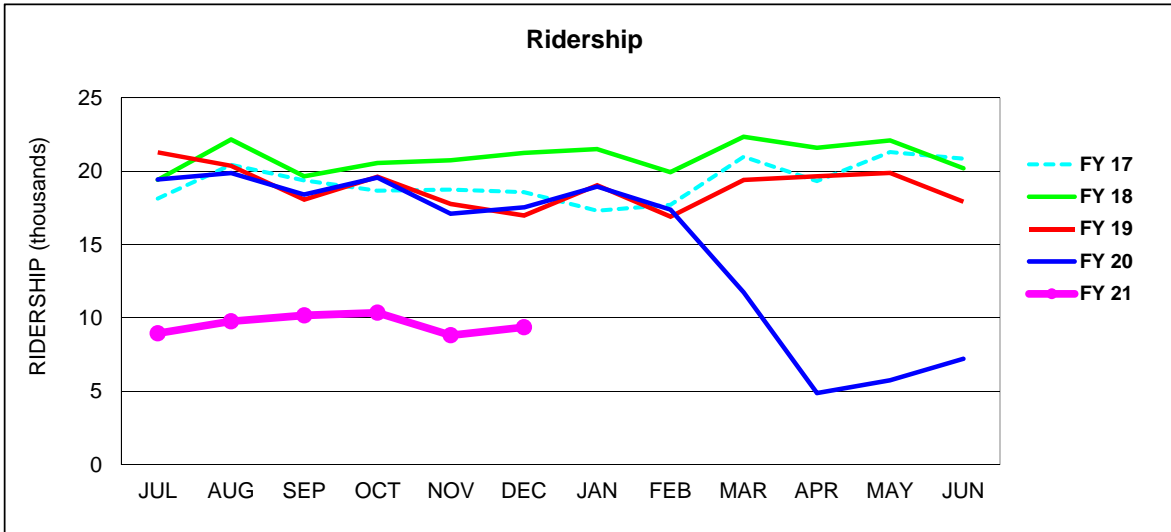
| Performance Indicator | Current month compared with same month last year | | | Current 12-months compared with previous year | | |
|-------------------------------|--|----------------|----------|---|----------------|---------------------|
| | Dec 2020 | Percent Change | Dec 2019 | Jan 2020 - Dec 2020 | Percent Change | Jan 2019 - Dec 2019 |
| Monthly Ridership | 1,578 | -60.9% | 4,036 | 29,097 | -33.9% | 43,993 |
| Weighted Avg. Daily Ridership | 53.9 | -60.7% | 137.1 | 80.5 | -34.4% | 122.7 |
| Revenue Vehicle Hours (RVH) | 354 | -9.7% | 392 | 4,394 | -1.8% | 4,475 |
| Rides per RVH | 4.5 | -56.7% | 10.3 | 6.6 | -32.6% | 9.8 |
| Revenue Vehicle Miles (RVM) | 6,250 | -11.3% | 7,049 | 86,148 | -9.4% | 95,066 |
| Revenue* | \$0 | -100.0% | \$953 | \$0 | -100.0% | \$42,409 |
| Farebox Recovery Ratio* | 0.0% | -100.0% | 2.0% | 0.0% | -100.0% | 7.8% |
| Subsidy per Ride | \$28.31 | 142.7% | \$11.66 | \$18.80 | 65.5% | \$11.36 |

* - Effective December 12, 2019 TART started providing free rides for a two-year trial period.

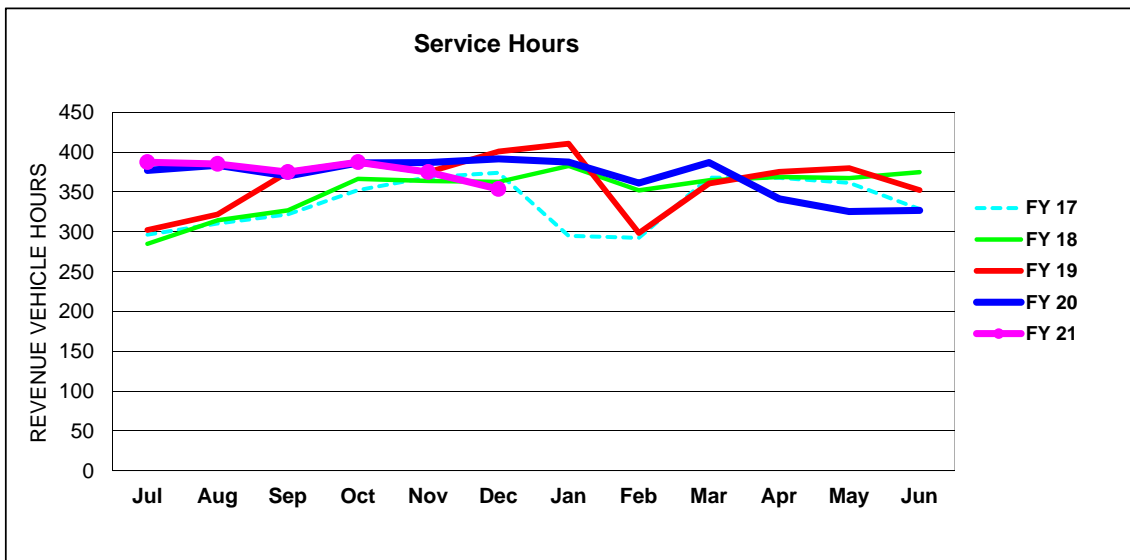
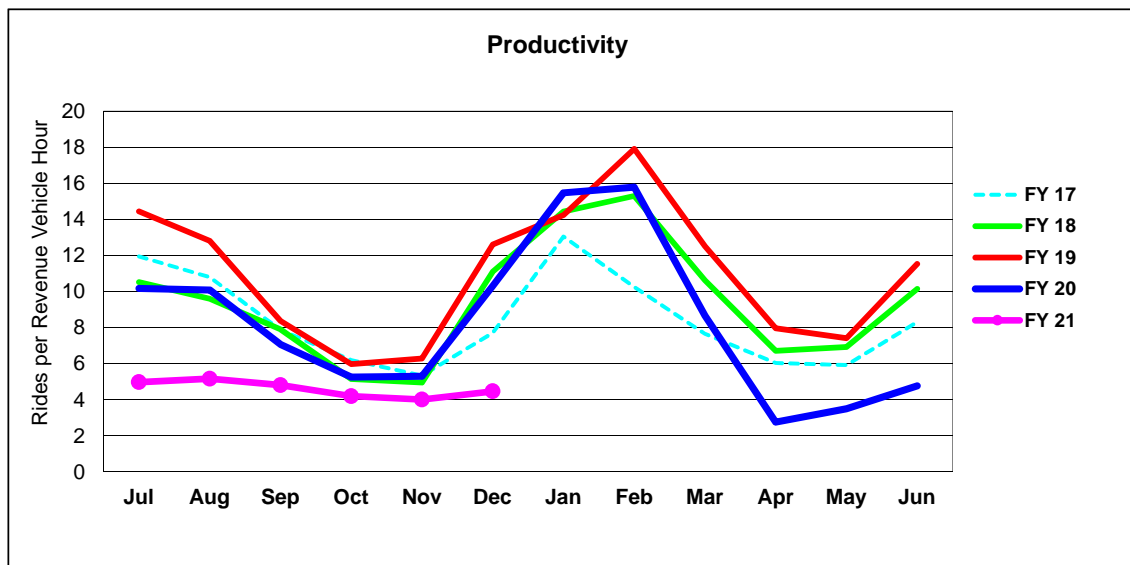
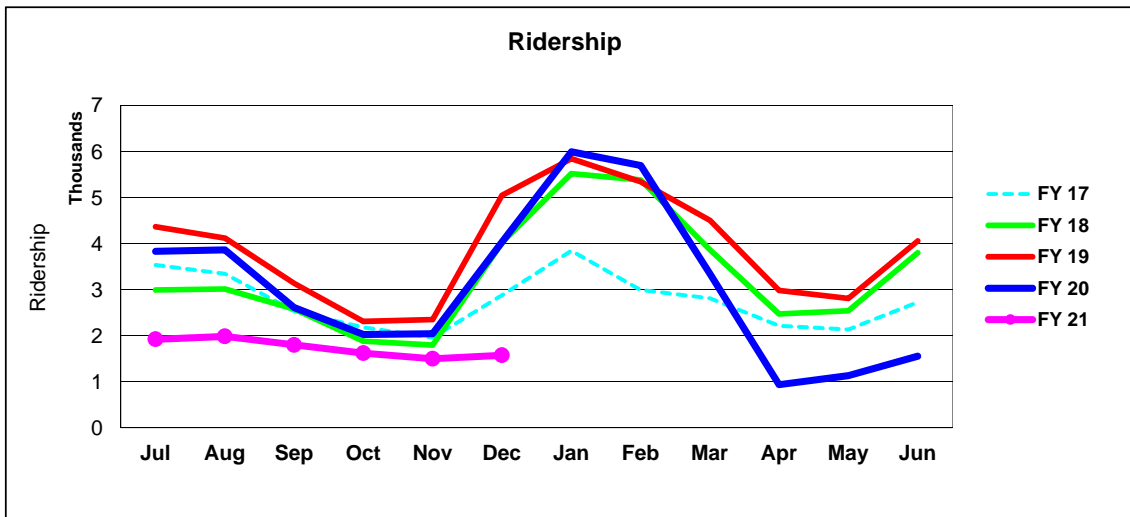
**RTC Transit
Fiscal Year Comparisons**



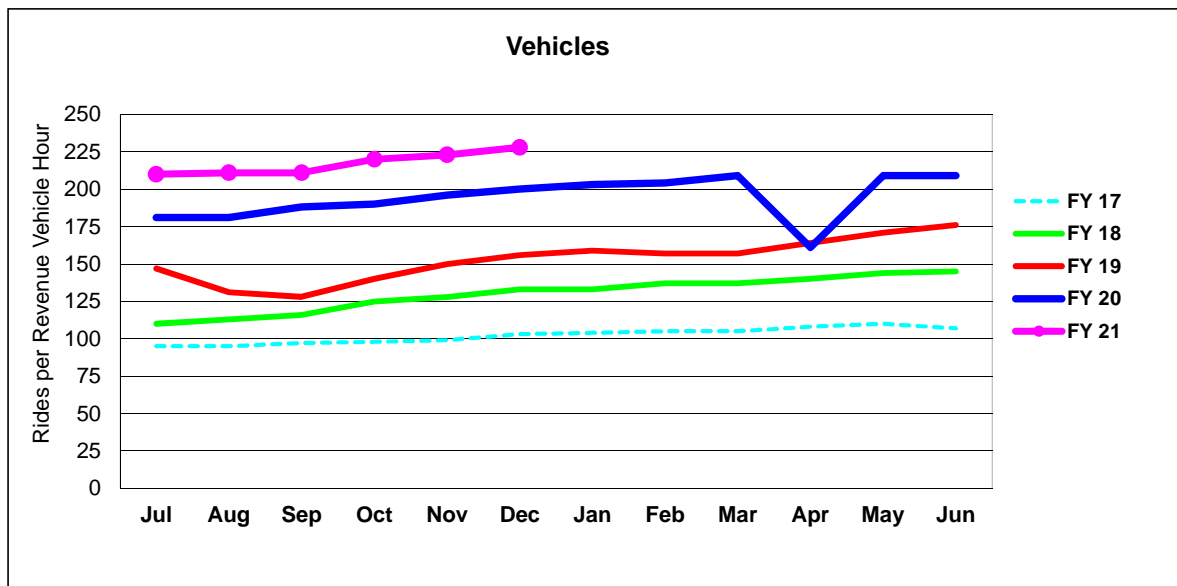
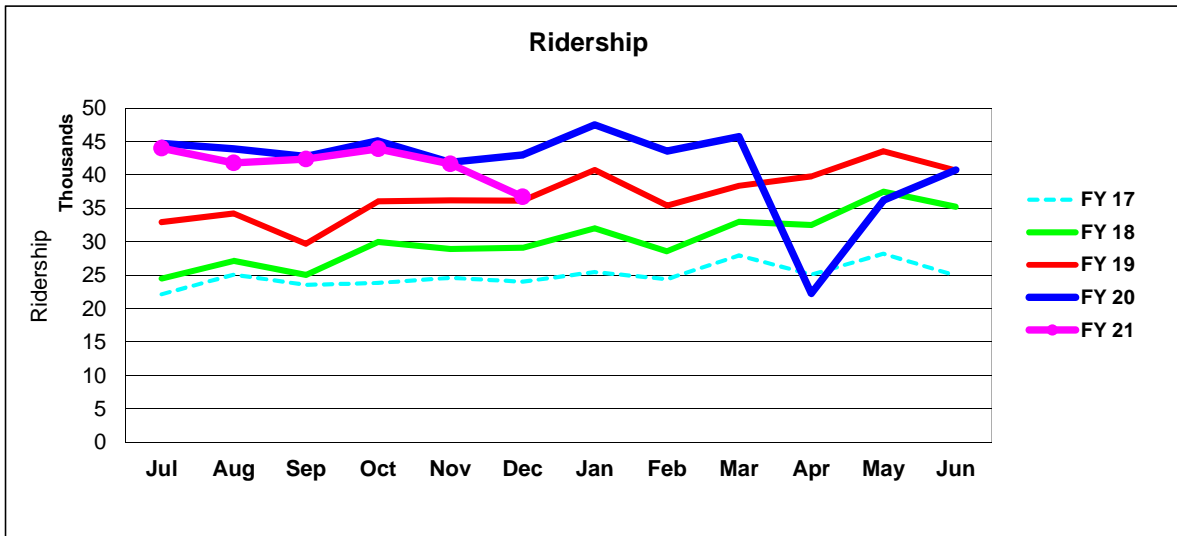
**RTC ACCESS
Fiscal Year Comparisons**



TART - Nevada Fiscal Year Comparisons



**RTC Vanpool
Fiscal Year Comparisons**





REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 4.6

From: Stephanie Haddock, Finance Director/CFO

RECOMMENDATION

Acknowledge receipt of the monthly Procurement Activity Report.

PROJECTS CURRENTLY ADVERTISED

| <u>Invitations for Bids (IFB)</u> | |
|--|-----------------|
| Project | Due Date |
| Reno Consolidated 21-01 | 2/17/2021 |

| <u>Request for Proposals (RFP)</u> | |
|---|-----------------|
| Project | Due Date |
| Design/Install Sutro Bus Wash | 02/5/2021 |
| CM Services for Oddie/Wells Multimodal | 02/12/2021 |
| McCarran Blvd Corridor Study | 02/23/2021 |
| Armed & Unarmed Security Services | 03/5/2021 |

REPORT ON INVITATION FOR BID (IFB) AWARDS

Per NRS 332, NRS 338 and RTC’s Management Policy P-13 “Purchasing,” the Executive Director has authority to negotiate and execute a contract with the lowest responsive and responsible bidder on an Invitation for Bid (IFB) without Commission approval.

There were no IFB awards.

PROFESSIONAL SERVICES/CONSULTING AGREEMENTS

Per RTC’s Management Policy P-13 Executive Director has authority to approve contracts greater than \$25,000 and less than (or equal to) \$100,000.

| Project | Contractor | Contract Amount |
|---|--|------------------------|
| Agency Wide Internet Connection Renewal | All Stream (Formerly Electric Lightwave) | \$49,680 |
| Golden Valley Road Rehab- Reconstruct Railroad Crossing | Union Pacific Railroad | \$61,152 |

CHANGE ORDERS AND CONTRACT AMENDMENTS WITHIN EXECUTIVE DIRECTOR'S RTC's P-13 PURCHASING POLICY AUTHORITY

There were no change orders or contract amendments within the executive director's signing authority.



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 4.7

From: Amy Cummings, AICP/LEED AP
Director of Planning, Deputy Executive Director

Mark Maloney
Director of Public Transportation

Brian Stewart, P.E.
Engineering Director

Through: Bill Thomas, AICP
Executive Director

RECOMMENDED ACTION

Acknowledge receipt of the Summary Report for the Technical, Citizens Multimodal, and Regional Road Impact Fee Advisory Committees.

BACKGROUND AND DISCUSSION

The RTC has three advisory committees that provide input on a wide range of policy and planning issues as well as key planning documents and the RTC Budget. The committees include:

- The Citizens Multimodal Advisory Committee (CMAC) and is comprised of three individuals who use RTC RIDE, two individuals who use RTC ACCESS, five individuals who represent bicyclists/pedestrians, and five individuals who represent general multimodal transportation. The RTC Board approves appointments to this advisory committee.
- The Technical Advisory Committee (TAC) that includes local public works directors, community development directors, and staff from other key agencies.
- The Regional Road Impact Fee Technical Advisory Committee (RRIF TAC) which was created to oversee and advise the local governments regarding land use classification assumptions and the Capital Improvements Plan (CIP) used in the impact fee program. The RRIF TAC consists of three representatives from each local entity, two RTC representatives and four private sector members who are appointed by the RTC Board.

The agenda and minutes of each advisory committee are provided to the RTC Board.

This staff report summarizes comments along with any action taken by the RTC advisory committees.

Citizens Multimodal Advisory Committee (CMAC)

The CMAC met on February 3, 2021, and received a project update from Engineering staff. The CMAC also received reports on a call for projects for the FY 2022-2023 Unified Planning Work Program (UPWP), development of the 2050 Regional Transportation Plan (RTP), and a proposed RTC RIDE service change in May 2021.

Technical Advisory Committee (TAC)

The TAC met on February 4, 2021, and received a project update from Engineering staff. The TAC also received reports on a call for projects for the FY 2022-2023 UPWP, development of the 2050 RTP, and a proposed RTC RIDE service change in May 2021.

Regional Road Impact Fee Technical Advisory Committee (RRIF TAC)

The RRIF TAC did not meet in January.

FISCAL IMPACT

There is no fiscal impact associated with this agenda item.



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 4.8

From: Rebecca Kapuler, Senior Transportation Planner

Through: Amy Cummings, AICP/LEED AP, Director of Planning and Deputy Executive Director

RECOMMENDED ACTION

Acknowledge receipt of a report on the Transportation Alternatives (TA) Set-Aside Program and funding for safety projects on local roads.

BACKGROUND AND DISCUSSION

As the Metropolitan Planning Organization (MPO) for the region, the RTC is tasked with administering the federal TA Set-Aside program for funding sub-allocated to the Reno-Sparks metropolitan planning area. The Board approved the guidelines and application for the program on July 15, 2016. Grants applications are submitted to the RTC, recommendations for awards are made by the Technical Advisory Committee and Citizens Multimodal Advisory Committee, and the RTC Board makes the decisions regarding TA Set-Aside grant awards.

Local road safety improvements are an eligible use of TA Set-Aside Funding. Other eligible uses include improvements to non-motorized mobility, historic preservation related to transportation, scenic accessibility, Safe Routes to School programs, and environmental management related to transportation activities.

The last call for projects was approved by the Board in August 2019. This call for projects was due to unspent funding for federal fiscal year 2019, which was awarded for the following projects as recommended by the Technical Advisory Committee and Citizens Multimodal Advisory Committee (CMAC):

- Regional Traffic Calming: \$34,000 each for Washoe County, City of Sparks and City of Reno (\$102,000 total)
- Bus Stop ADA Signage & Markers for Visually Impaired Customers: \$34,000 for RTC Transit

It is anticipated that future annual funding will be approximately \$390,000 based on previous funding levels. Once the federal fiscal year 2021 and 2022 funding is available, staff will conduct a call for projects. Staff has confirmed with the local jurisdictions that they would be interested in applying for local road safety improvements again in the future.

FISCAL IMPACT

These projects will be funded through the federal TA Set-Aside program with a minimum local match of 5%; there is no fiscal impact to the RTC with this Board action.

PREVIOUS BOARD ACTION

- | | |
|------------------|---|
| July 15, 2016 | Approved the TA Set-Aside program guidance and an application process for funding that is sub-allocated to the RTC. |
| October 14, 2016 | Approved funding for federal fiscal years 2019 and 2020 |
| August 16, 2019 | Approved additional applications for unspent federal funding for fiscal year 2019 |



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 4.9

From: Blaine Petersen, Engineer II
Through: Brian Stewart, Director of Engineering

RECOMMENDED ACTION

Approve a Professional Services Agreement (PSA) with Kimley-Horn and Associates to provide design services and optional engineering during construction for the ITS Phase 4 Project in an amount not to exceed \$397,607; authorize the RTC Executive Director to execute the agreement.

BACKGROUND AND DISCUSSION

This Agreement (see Attachment A) with Kimley-Horn and Associates is for professional design and ITS planning services for the ITS Phase 4 Project in the amount of \$256,134, and optional services including engineering during construction services (EDC) in the amount of \$141,473. The Project includes new conduit and fiber optic cable on Prater Way from Pyramid Way to Sparks City Hall, new conduit and fiber optic cable on Sharlands from Robb Drive to Mae Anne Avenue; Double R Boulevard from South Meadows Parkway to Sandhill Drive. Investigation of adding Dynamic Message Signs (DMS) to ITS network and feasibility of traveler time information.

Kimley-Horn and Associates was selected from the Intelligent Transportation Systems Services List as a qualified firm to perform engineering, construction management and quality assurance. Negotiation of Kimley-Horn and Associates scope, schedule and budget indicated the amount for design services is within the appropriated budget.

FISCAL IMPACT

ITS Phase 4 Project appropriations are included in the approved FY 2021 Budget and Program of Projects as part of the Traffic Management 4 Program.

PREVIOUS BOARD ACTION

| | |
|----------------|--|
| March 20, 2020 | Approved the FY 2021 Program of Projects |
| April 19, 2019 | Approved the Qualified Consultant List for Intelligent Transportation Systems (ITS) Services |

ATTACHMENT:

A - Professional Services Agreement

**AGREEMENT
FOR
PROFESSIONAL SERVICES**

This agreement (this “Agreement”) is dated and effective as of February 19, 2021, by and between the Regional Transportation Commission of Washoe County (“RTC”) and Kimley-Horn and Associates, Inc. (“CONSULTANT”).

WITNESSETH:

WHEREAS, RTC has selected CONTRACTOR from the Intelligent Transportation Systems (ITS) On-Call shortlist to perform design, planning, and optional engineering during construction (EDC) in connection with the ITS Phase 4 project.

NOW, THEREFORE, RTC and CONSULTANT, in consideration of the mutual covenants and other consideration set forth herein, do hereby agree as follows:

ARTICLE 1 – TERM AND ENGAGEMENT

- 1.1. The term of this Agreement shall be from the date first written above through December 31, 2022 unless terminated at an earlier date, or extended to a later date, pursuant to the provisions herein.
- 1.2. CONSULTANT will perform the work using the project team identified in Exhibit A. Any changes to the project team must be approved by RTC’s Project Manager.
- 1.3. CONSULTANT will promptly, diligently and faithfully execute the work to completion in accordance with applicable professional standards subject to any delays due to strikes, acts of God, act of any government, civil disturbances, or any other cause beyond the reasonable control of CONSULTANT.
- 1.4. CONSULTANT shall not proceed with work until both parties have executed this Agreement and a purchase order has been issued to CONSULTANT. If CONSULTANT violates that prohibition, CONSULTANT forfeits any and all right to reimbursement and payment for that work and waives any and all claims against RTC, its employees, agents, and affiliates, including but not limited to monetary damages, and any other remedy available at law or in equity arising under the terms of this Agreement. Furthermore, prior to execution and issuance of a purchase order, CONSULTANT shall not rely on the terms of this Agreement in any way, including but not limited to any written or oral representations, assurances or warranties made by RTC or any of its agents, employees or affiliates, or on any dates of performance, deadlines, indemnities, or any term contained in this Agreement or otherwise.

ARTICLE 2 - SERVICES OF CONSULTANT

2.1. SCOPE OF SERVICES

The scope of services consist of the tasks set forth in Exhibit A.

2.2. SCHEDULE OF SERVICES

Tasks and subtasks shall be completed in accordance with the schedule in Exhibit A. Any change(s) to the schedule must be approved by RTC's Project Manager.

2.3. CONTINGENCY

Contingency line items identified in the scope of services are for miscellaneous increases within the scope of work. Prior to the use of any contingency amounts, CONSULTANT shall provide a letter to RTC's Project Manager detailing the need, scope, and not-to-exceed budget for the proposed work. Work to be paid for out of contingency shall proceed only with the RTC Project Manager's written approval.

2.4. OPTIONS

RTC shall have the right to exercise its option(s) for all or any part of the optional tasks or subtasks identified in Exhibit A. CONSULTANT will prepare and submit a detailed scope of services reflecting the specific optional services requested, a schedule for such services, and a cost proposal. RTC will review and approve the scope of services and RTC and CONSULTANT will discuss and agree upon compensation and a schedule. CONSULTANT shall undertake no work on any optional task without written notice to proceed with the performance of said task. RTC, at its sole option and discretion, may select another individual or firm to perform the optional tasks or subtasks identified in Exhibit A.

2.5. ADDITIONAL SERVICES

CONSULTANT will provide additional services when agreed to in writing by RTC and CONSULTANT.

2.6. PERFORMANCE REQUIREMENTS

Any and all design and engineering work furnished by CONSULTANT shall be performed by or under the supervision of persons licensed to practice architecture, engineering, or surveying (as applicable) in the State of Nevada, by personnel who are careful, skilled, experienced and competent in their respective trades or professions, who are professionally qualified to perform the work, and who shall assume professional responsibility for the accuracy and completeness of documents prepared or checked by them, in accordance with appropriate prevailing professional standards. Notwithstanding the provision of any drawings, technical specifications, or other data by RTC, CONSULTANT shall have the

responsibility of supplying all items and details required for the deliverables required hereunder.

Any sampling and materials testing shall be performed by an approved testing laboratory accredited by AASHTO or other ASTM recognized accrediting organization in the applicable test methods. If any geotechnical or materials testing is performed by a sub-consultant, that laboratory shall maintain the required certification. Proof of certification shall be provided to RTC with this Agreement. If certification expires or is removed during the term of this Agreement, CONSULTANT shall notify RTC immediately, and propose a remedy. If an acceptable remedy cannot be agreed upon by both parties, RTC may terminate this Agreement for default.

CONSULTANT shall provide only Nevada Alliance for Quality Transportation Construction (NAQTC) qualified personnel to perform field and laboratory sampling and testing during the term of this Agreement. All test reports shall be signed by a licensed NAQTC tester and notated with his/her license number.

2.7. ERRORS AND OMISSIONS

CONSULTANT shall, without additional compensation, correct or revise any deficiencies, errors, or omissions caused by CONSULTANT in its analysis, reports, and services. CONSULTANT also agrees that if any error or omission is found, CONSULTANT will expeditiously make the necessary correction, at no expense to RTC. If an error or omission was directly caused by RTC, and not by CONSULTANT and RTC requires that such error or omission be corrected, CONSULTANT may be compensated for such additional work.

ARTICLE 3 - COMPENSATION

3.1. CONSULTANT shall be paid for hours worked at the hourly rates and rates for testing in Exhibit B. RTC shall not be responsible for any other costs or expenses except as provided in Exhibit B.

3.2. The maximum amount payable to CONSULTANT to complete each task is equal to the not-to-exceed amounts identified in Exhibit B. CONSULTANT can request in writing that RTC's Project Manager reallocate not-to-exceed amounts between tasks. A request to reallocate not-to-exceed amounts must be accompanied with a revised fee schedule, and must be approved in writing by RTC's Project Manager prior to performance of the work. In no case shall CONSULTANT be compensated in excess of the following not-to exceed amounts:

| | |
|----------------------------------|-----------------|
| Total Services (Tasks A to I) | \$256,134 |
| Optional Services (Task J and K) | \$115,473 |
| <u>Contingency</u> | <u>\$26,000</u> |
| Total Not-to-Exceed Amount | \$397,607 |

- 3.3. For any work authorized under Section 2.4, "Additional Services," RTC and CONSULTANT will negotiate not-to-exceed amounts based on the standard hourly rates and rates for testing in Exhibit B. Any work authorized under Section 2.4, "Additional Services," when performed by persons who are not employees or individuals employed by affiliates of CONSULTANT, will be billed at a mutually agreed upon rate for such services, but not more than 105% of the amounts billed to CONSULTANT for such services.
- 3.4. CONSULTANT shall receive compensation for preparing for and/or appearing in any litigation at the request of RTC, except: (1) if such litigation costs are incurred by CONSULTANT in defending its work or services or those of any of its sub-consultants; or (2) as may be required by CONSULTANT's indemnification obligations. Compensation for litigation services requested by RTC shall be paid at a mutually agreed upon rate and/or at a reasonable rate for such services.

ARTICLE 4 - INVOICING

- 4.1. CONSULTANT shall submit monthly invoices in the format specified by RTC. Invoices must be submitted to accountspayable@rtcwashoe.com. RTC's payment terms are 30 days after the receipt of the invoice. Simple interest will be paid at the rate of half a percent (0.5%) per month on all invoices approved by RTC that are not paid within thirty (30) days of receipt of the invoice.
- 4.2. RTC shall notify CONSULTANT of any disagreement with any submitted invoice for consulting services within thirty (30) days of receipt of an invoice. Any amounts not in dispute shall be promptly paid by RTC.
- 4.3. CONSULTANT shall maintain complete records supporting every request for payment that may become due. Upon request, CONSULTANT shall produce all or a portion of its records and RTC shall have the right to inspect and copy such records.

ARTICLE 5 - ACCESS TO INFORMATION AND PROPERTY

- 5.1. Upon request and without cost to CONSULTANT, RTC will provide all pertinent information that is reasonably available to RTC including surveys, reports and any other data relative to design and construction.
- 5.2. RTC will provide access to and make all provisions for CONSULTANT to enter upon RTC facilities and public lands, as required for CONSULTANT to perform its work under this Agreement.

ARTICLE 6 - OWNERSHIP OF WORK

- 6.1. Plans, reports, studies, tracings, maps, software, electronic files, licenses, programs, equipment manuals, and databases and other documents or instruments of service prepared or obtained by CONSULTANT in the course of performing work under this Agreement,

shall be delivered to and become the property of RTC. Software already developed and purchased by CONSULTANT prior to the Agreement is excluded from this requirement. CONSULTANT and its sub-consultants shall convey and transfer all copyrightable interests, trademarks, licenses, and other intellectual property rights in such materials to RTC upon completion of all services under this Agreement and upon payment in full of all compensation due to CONSULTANT in accordance with the terms of this Agreement. Basic survey notes, sketches, charts, computations and similar data prepared or obtained by CONSULTANT under this Agreement shall, upon request, also be provided to RTC.

- 6.2. CONSULTANT represents that it has secured all necessary licenses, consents, or approvals to use the components of any intellectual property, including computer software, used in providing services under this Agreement, that it has full legal title to and the right to reproduce such materials, and that it has the right to convey such title and other necessary rights and interests to RTC.
- 6.3. CONSULTANT shall bear all costs arising from the use of patented, copyrighted, trade secret, or trademarked materials, equipment, devices, or processes used on or incorporated in the services and materials produced under this Agreement.
- 6.4. CONSULTANT agrees that all reports, communications, electronic files, databases, documents, and information that it obtains or prepares in connection with performing this Agreement shall be treated as confidential material and shall not be released or published without the prior written consent of RTC; provided, however, that CONSULTANT may refer to this scope of work in connection with its promotional literature in a professional and commercially reasonable manner. The provisions of this subsection shall not apply to information in whatever form that comes into the public domain. The provisions of this paragraph also shall not restrict CONSULTANT from giving notices required by law or complying with an order to provide information or data when such order is issued by a court, administrative agency, or other entity with proper jurisdiction, or if it is reasonably necessary for CONSULTANT to defend itself from any suit or claim.

ARTICLE 7 - TERMINATION

7.1. CONTRACT TERMINATION FOR DEFAULT

If CONSULTANT fails to perform services in the manner called for in this Agreement or if CONSULTANT fails to comply with any other provisions of this Agreement, RTC may terminate this Agreement for default. Termination shall be effected by serving a notice of termination on CONSULTANT setting forth the manner in which CONSULTANT is in default. CONSULTANT will only be paid the contract price for services delivered and accepted, or services performed in accordance with the manner of performance set forth in this Agreement.

If it is later determined by RTC that CONSULTANT had an excusable reason for not performing, such as a fire, flood, or events which are not the fault of or are beyond the control of CONSULTANT, RTC, after setting up a new performance schedule, may allow

CONSULTANT to continue work, or treat the termination as a termination for convenience.

7.2. CONTRACT TERMINATION FOR CONVENIENCE

RTC may terminate this Agreement, in whole or in part, at any time by written notice to CONSULTANT when it is in RTC's best interest. CONSULTANT shall be paid its costs, including contract closeout costs, and profit on work performed up to the time of termination. CONSULTANT shall promptly submit its termination claim to RTC to be paid CONSULTANT. If CONSULTANT has any property in its possession belonging to RTC, CONSULTANT will account for the same, and dispose of it in the manner RTC directs.

ARTICLE 8 - INSURANCE

- 8.1. CONSULTANT shall not commence any work or permit any employee/agent to commence any work until satisfactory proof has been submitted to RTC that all insurance requirements have been met.
- 8.2. In conjunction with the performance of the services/work required by the terms of this Agreement, CONSULTANT shall obtain all types and amounts of insurance set forth in Exhibit C, and shall comply with all provisions set forth therein.

ARTICLE 9 - HOLD HARMLESS

- 9.1. CONSULTANT's obligation under this provision is as set forth in Exhibit C. Said obligation would also extend to any liability of RTC resulting from any action to clear any lien and/or to recover for damage to RTC property.

ARTICLE 10 - EQUAL EMPLOYMENT OPPORTUNITY

- 10.1. During the performance of this Agreement, CONSULTANT agrees not to discriminate against any employee or applicant for employment because of race, color, religion, sex, age, disability, or national origin. CONSULTANT will take affirmative action to ensure that applicants are employed, and that employees are treated fairly during employment, without regard to their race, color, religion, sex, age, disability, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by RTC setting forth the provisions of this nondiscrimination clause.
- 10.2. CONSULTANT will, in all solicitations or advertisements for employees placed by or on behalf of CONSULTANT, state that well qualified applicants will receive consideration of employment without regard to race, color, religion, sex, age, disability, or national origin.

- 10.3. CONSULTANT will cause the foregoing provisions to be inserted in all sub-agreements for any work covered by this Agreement so that such provisions will be binding upon each sub-consultant.

ARTICLE 11 - RESOLUTION OF CLAIMS AND DISPUTES

11.1. NEGOTIATED RESOLUTION

In the event that any dispute or claim arises under this Agreement, the parties shall timely cooperate and negotiate in good faith to resolve any such dispute or claim. Such cooperation shall include providing the other party with all information in order to properly evaluate the dispute or claim and making available the necessary personnel to discuss and make decisions relative to the dispute or claim.

11.2. MEDIATION

If the parties have been unable to reach an informal negotiated resolution to the dispute or claim within thirty (30) days following submission in writing of the dispute or claim to the other party, or such longer period of time as the parties may agree to in writing, either party may then request, in writing, that the dispute or claim be submitted to mediation (the "Mediation Notice"). After the other party's receipt or deemed receipt of the Mediation Notice, the parties shall endeavor to agree upon a mutually acceptable mediator, but if the parties have been unable to agree upon a mediator within ten (10) days following receipt of the Mediation Notice, then each party shall select a mediator and those two selected mediators shall select the mediator. A mediator selected by the parties' designated mediators shall meet the qualification set forth in as provided in Rule 4 of Part C., "Nevada Mediation Rules" of the "Rules Governing Alternative Dispute Resolutions adopted by the Nevada Supreme Court." Unless otherwise agreed to by the parties, in writing, the mediator shall have complete discretion over the conduct of the mediation proceeding. Unless otherwise agreed to by the parties, in writing, the mediation proceeding must take place within thirty (30) days following appointment of the mediator. The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in Washoe County, Nevada, unless otherwise agreed to by the parties, in writing. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

11.3. LITIGATION

In the event that the parties are unable to settle and/or resolve the dispute or claim as provided above, then either party may proceed with litigation in the Second Judicial District Court of the State of Nevada, County of Washoe.

11.4. CONTINUING CONTRACT PERFORMANCE

During the pendency of any dispute or claim the parties shall proceed diligently with performance of this Agreement and such dispute or claim shall not constitute an excuse or defense for a party's nonperformance or delay.

ARTICLE 12 – PROJECT MANAGERS

- 12.1. RTC's Project Manager is Blaine Petersen, P.E. or such other person as is later designated in writing by RTC. RTC's Project Manager has authority to act as RTC's representative with respect to the performance of this Agreement.
- 12.2. CONSULTANT' Project Manager is Michael Mosley, P.E. or such other person as is later designated in writing by CONSULTANT. CONSULTANT's Project Manager has authority to act as CONSULTANT's representative with respect to the performance of this Agreement.

ARTICLE 13 - NOTICE

- 13.1. Notices required under this Agreement shall be given as follows:

RTC: Bill Thomas, AICP
Executive Director
Blaine Petersen
RTC Project Manager
Regional Transportation Commission
1105 Terminal Way
Reno, Nevada 89502
(775)335-1871

CONSULTANT: Molly M. O'Brien, P.E., PTOE
Vice President/Principal-in-Charge
Michael S. Mosley, P.E., PTOE
Project Manager
Kimley-Horn and Associates, Inc.
5370 Kietzke Lane, Suite 100
Reno, NV 89511
775-200-1979

ARTICLE 14 - DELAYS IN PERFORMANCE

14.1. TIME IS OF THE ESSENCE

It is understood and agreed that all times stated and referred to herein are of the essence. The period for performance may be extended by RTC's Executive Director pursuant to the process specified herein. No extension of time shall be valid unless reduced to writing and signed by RTC's Executive Director.

14.2. UNAVOIDABLE DELAYS

If the timely completion of the services under this Agreement should be unavoidably delayed, RTC may extend the time for completion of this Agreement for not less than the number of days CONSULTANT was excusably delayed. A delay is unavoidable only if the delay is not reasonably expected to occur in connection with or during CONSULTANT's performance, is not caused directly or substantially by acts, omissions, negligence or mistakes of CONSULTANT, is substantial and in fact causes CONSULTANT to miss specified completion dates, and cannot adequately be guarded against by contractual or legal means.

14.3. NOTIFICATION OF DELAYS

CONSULTANT shall notify RTC as soon as CONSULTANT has knowledge that an event has occurred or otherwise becomes aware that CONSULTANT will be delayed in the completion of the work. Within ten (10) working days thereafter, CONSULTANT shall provide such notice to RTC, in writing, furnishing as much detail on the delay as possible and requesting an extension of time.

14.4. REQUEST FOR EXTENSION

Any request by CONSULTANT for an extension of time to complete the work under this Agreement shall be made in writing to RTC. CONSULTANT shall supply to RTC documentation to substantiate and justify the additional time needed to complete the work and shall provide a revised schedule. RTC shall provide CONSULTANT with notice of its decision within a reasonable time after receipt of a request.

ARTICLE 15 - GENERAL PROVISIONS

15.1. SUCCESSORS AND ASSIGNS

RTC and CONSULTANT bind themselves and their successors and assigns to the other party and to the successors and assigns of such party, with respect to the performance of all covenants of this Agreement. Except as set forth herein, neither RTC nor CONSULTANT shall assign or transfer interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating a personal liability on the part of any officer or agent or any public body which may be a party hereto, nor shall

it be construed as giving any rights or benefits hereunder to anyone other than RTC and CONSULTANT.

15.2. NON TRANSFERABILITY

This Agreement is for CONSULTANT's professional services, and CONSULTANT's rights and obligations hereunder may not be assigned without the prior written consent of RTC.

15.3. SEVERABILITY

If any part, term, article, or provision of this Agreement is, by a court of competent jurisdiction, held to be illegal, void, or unenforceable, or to be in conflict with any law of the State of Nevada, the validity of the remaining provisions or portions of this Agreement are not affected, and the rights and obligations of the parties shall be construed and enforced as if this Agreement did not contain the particular part, term, or provision held invalid.

15.4. RELATIONSHIP OF PARTIES

CONSULTANT is an independent contractor to RTC under this Agreement. Accordingly, CONSULTANT is not entitled to participate in any retirement, deferred compensation, health insurance plans or other benefits RTC provides to its employees. CONSULTANT shall be free to contract to provide similar services for others while it is under contract to RTC, so long as said services and advocacy are not in direct conflict, as determined by RTC, with services being provided by CONSULTANT to RTC.

15.5. WAIVER/BREACH

Any waiver or breach of a provision in this Agreement shall not be deemed a waiver of any other provision in this Agreement and no waiver is valid unless in writing and executed by the waiving party. An extension of the time for performance of any obligation or act shall not be deemed an extension of time for the performance of any other obligation or act. This Agreement inures to the benefit of and is binding upon the parties to this Agreement and their respective heirs, successors and assigns.

15.6. REGULATORY COMPLIANCE

- A. CONSULTANT shall comply with all applicable federal, state and local government laws, regulations and ordinances. CONSULTANT shall be responsible for obtaining all necessary permits and licenses for performance of services under this Agreement. Upon request of RTC, CONSULTANT shall furnish RTC certificates of compliance with all such laws, orders and regulations.
- B. CONSULTANT represents and warrants that none of the services to be rendered pursuant to this Agreement constitute the performance of public work, as that term is defined by Section 338.010(17) of the Nevada Revised Statutes. To the extent

CONSULTANT does engage in such public work, CONSULTANT shall be responsible for paying the prevailing wage as required by Chapter 338 of the Nevada Revised Statutes.

15.7. EXCLUSIVE AGREEMENT

There are no verbal agreements, representations or understandings affecting this Agreement, and all negotiations, representations and undertakings are set forth herein with the understanding that this Agreement constitutes the entire understanding by and between the parties.

15.8. AMENDMENTS

No alteration, amendment or modification of this Agreement shall be effective unless it is in writing and signed by both parties.

15.9. CONTINUING OBLIGATION

CONSULTANT agrees that if, because of death or any other occurrence it becomes impossible for any principal or employee of CONSULTANT to render the services required under this Agreement, neither CONSULTANT nor the surviving principals shall be relieved of any obligation to render complete performance. However, in such event, RTC may terminate this Agreement if it considers the death or incapacity of such principal or employee to be a loss of such magnitude as to affect CONSULTANT's ability to satisfactorily complete the performance of this Agreement.

15.10. APPLICABLE LAW AND VENUE

The provisions of this Agreement shall be governed and construed in accordance with the laws of the State of Nevada. The exclusive venue and court for all lawsuits concerning this Agreement shall be the Second Judicial District Court of the State of Nevada, County of Washoe, and the parties hereto submit to the jurisdiction of that District Court.

15.11. ATTORNEYS' FEES

In the event of a dispute between the parties result in a proceeding in any Court of Nevada having jurisdiction, the prevailing party shall be entitled to an award of costs and any reasonable attorneys' fees.

15.12. CERTIFICATION REQUIRED BY NEVADA SENATE BILL 27 (2017)

CONSULTANT expressly certifies and agrees, as a material part of this Agreement, that it is not currently engaged in a boycott of Israel. CONSULTANT further agrees, as a material part of this Agreement, it will not engage in a boycott of Israel for the duration of this Agreement. If, at any time during the formation or duration of this Agreement,

CONSULTANT is engaged or engages in a boycott of Israel, it will constitute a material breach of this Agreement.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement the day and year first above written.

REGIONAL TRANSPORTATION COMMISSION
OF WASHOE COUNTY

By: _____
Bill Thomas, AICP, Executive Director

KIMLEY-HORN AND ASSOCIATES, INC.

By: _____
Molly M. O'Brien, P.E., PTOE, RSP
Vice President/Principal-in Charge

Exhibit A

Scope of Services

EXHIBIT A

**SCOPE OF SERVICES FOR
THE ITS PHASE 4 PROJECT**

This scope of services includes design and construction support of the Intelligent Transportation System (ITS) Phase 4 Project. The project lies within the City of Reno and the City of Sparks. Two sites are within NDOT jurisdiction as indicated in the table below. Procurement and installation of actual infrastructure will be provided by the selected contractor after the bid has been awarded for the bidding documents provided by the CONSULTANT.

The extent of planning and design work includes the improvement objectives at the following locations:

| # | Main Street | Side Street | Improvement Objective |
|-----------------------|---|------------------------------------|---|
| City of Reno | | | |
| 1 | Sharlands Ave. (Approx. 4000 LF of new conduit and fiber) | Robb Dr. to Mae Anne Ave. | Signal interconnect design to facilitate better signal coordination and to support communication to a Road Weather Information System (RWIS), installed under another project, providing information on roadway conditions to inform snowplow crews more accurately of the need to clear snow. |
| 2 | Double R Blvd. (Approx. 2700 LF of new conduit and fiber) | South Meadows Pkwy to Sandhill Rd. | Signal interconnect with fiber optic cables and conduit for better operational coordination and connect new signal at Sandhill to the City of Reno ITS Network. |
| 3 | Geiger Grade Rd. (SR 341)* (Approx. 500 LF of new conduit and 1200 of fiber in existing conduit) | Virginia St. to Veterans Pkwy | Close gap in fiber communication by coordinating with NDOT to establish a conduit path over the Steamboat Creek bridge and connect the existing City of Reno conduit on each side. |
| 4 | (2) Dynamic Message Signs Feasibility Study* | Maple St. and 8 th St. | Signs will provide driver information about events and traffic conditions on Virginia Street. The scope for this improvement objective is to provide a feasibility study and preliminary concept as well as partnering with NDOT to establish location, and the operational concept of City of Reno using DMSs within NDOT R/W. |
| City of Sparks | | | |
| 5 | Prater Way* (Approx. 1200 LF or new conduit and fiber) | Pyramid Way (SR 445) to City Hall | This fiber interconnect and conduit will close one of the critical fiber optic rings in the City of Sparks by connecting an existing ring directly back to City Hall. |
| 6 | Traffic Data Collection and Traveler Information Conveyance Operational | Vista Blvd. and Sparks Blvd. | Better understanding of the operational impacts for traffic on these key north south routes will improve the City ability manage and optimize the traffic network. The scope for this improvement objective is to provide an operational concept including a technology assessment and make recommendations for deployment of the |

| | | | |
|--------------------------|-----------------------------|---------------------------------------|---|
| | Concept | | technology to meet the City's needs. |
| RTC (Region Wide) | | | |
| 7 | ITS Network Master Planning | Reno, Sparks, Washoe County, and NDOT | This task will develop an effective and valuable implementation plan of ITS projects for the next 5 year. |

* Work will necessitate NDOT coordination and two (2) NDOT Encroachment Permit for SR 341 Geiger Grade for conduit and conduit paths across Pyramid Way on Prater to be built within NDOT right of way.

A. Preliminary and General Items (Project Management):

1. Coordination with RTC project manager and staff will be ongoing throughout the project. Project management and coordination meetings or conference calls will be held with the RTC and other parties as appropriate. CONSULTANT will coordinate kick-off meeting and hold progress meetings during course of project monthly. The anticipated schedule will be 10 months. All meetings will be virtual due to the pandemic.
2. Coordination meetings with the City of Reno, City of Sparks, Washoe County, and NDOT. CONSULTANT will conduct up to five (5) in-person one-on-one agency meetings, outside of meetings included in other tasks, in order to confirm existing design conditions, needs, and coordinate design to complete project design objectives. The RTC Project Manager will determine appropriate contact personnel at each agency to be met with. Meeting notes will be developed and provided as a summary of discussions.

B. Data Collection, Analysis, and Design

1. Investigate Existing Conditions and Field Inventory for interconnect design:
 - a. CONSULTANT will obtain and review available as-built plans from NDOT, City of Sparks, and City of Reno for project locations. NDOT as-built plans will also be used to establish a centerline on NDOT facilities for the encroachment permit plan sets.
 - b. CONSULTANT will conduct a field review with City of Reno and City of Sparks to evaluate existing field conditions for new conduit paths.
 - c. CONSULTANT will evaluate existing network equipment at locations identified herein for connection to network.
 - d. CONSULTANT will not evaluate existing pedestrian ramps for general compliance with current ADA standards. If the ramps are in conflict with proposed improvements evaluation of ramps will be considered an additional service.
2. Survey and Mapping for site #s 1-5
 - a. Aerial Mapping: Aerial photography for these sites will be using NearMap or Washoe County aerials provided by the RTC. The aerials will be put in the same coordinate system for consistency.
 - b. Center lines will be developed off of existing features.

- c. CONSULTANT will evaluate right of way and easement needs based on County GIS data and where new equipment is to be installed.
 - d. Boundary Survey: Survey boundary services will not be done for these sites as work will be limited to infrastructure within existing right of way.
 - e. Supplemental Design Survey (Optional): Supplemental Survey is not anticipated to be required for these project sites. Where required it will be considered an additional service.
3. Subsurface Utilities: CONSULTANT will investigate and locate subsurface utilities within the roadway right-of-way, and areas reasonably effected, in accordance with the American Society of Civil Engineers Standard guideline for the Collection and Depiction of Existing Subsurface Utility Data, Quality Level C. Deliverables will include: Depiction of subsurface utilities on plan sheets developed under design. All located, existing underground utilities will be shown on the Plan Sheets accompanied with the following “Note: Subsurface utilities are depicted by their Quality Levels in accordance American Society of Civil Engineers Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data (CI/ASCE 38-02). All utility information shown hereon is depicted to Quality Level ‘C’, unless otherwise noted.”
4. Utility coordination: Based on field investigation, CONSULTANT will provide RTC a list of utility company whose utilities are likely to be within the project limits or reasonably affected by the project. RTC will issue the initial notification to the utility agencies on the list and CONSULTANT will coordinate with the utility agencies for upcoming work, facility relocation and new installation, and to insure utilities likely affected by the project are drawn on the plans, evaluate potential conflicts through field investigation, investigate conflict resolution strategies.
5. Traffic Signal Basis of Design: Existing traffic signal/ ITS equipment shall be depicted in a “greyed out” format using “new” and “existing” stipple patterns with new installations shown superimposed unless important details are obscured.
6. A geotechnical evaluation will not be performed under this project as it is not required.
7. Drainage Evaluations are not anticipated for this project and therefore excluded.
8. Environmental Services are not anticipated for this project and therefore excluded.
9. Meet with NDOT Traffic Operations (Up to 2 times) to propose the use of NDOT conduit and infrastructure over Steamboat Creek Bridge. In exchange use the installation of fiber along Geiger Grade and then north along Veterans

Parkway with the potential to connect fiber, in the future, along South-East Connector corridor which would create a backup fiber ring for NDOT. Up to three meetings with NDOT Traffic Operations. Fiber on SR 341, Geiger Grade, would be designated as NDOT's and then fiber going north on Veteran's Parkway would be City of Reno's. A boring would be required to get under the roadway just to the east of the bridge as the NDOT conduit is on the North side of the bridge and the City conduit is on the South side of the roadway.

10. Utility Pothole Exploration: Should insufficient information be available from existing records to determine whether or not conflicts between the proposed work and existing utilities potholes can be performed. Up to three potholes are anticipated just east of the Steamboat Bridge on SR 341 for directional drill path. For all other utility locations, the CONSULTANT will not pothole to make such determinations. Potholes beyond those listed above will be an additional service if required.

C. 60% Design

1. Prepare 60% Plans and Specifications

- a. The construction plans will be on 11" x 17" size sheets and will show all elements of the project construction, including plan/profile view, right-of-way lines, cross-sections and construction/slope limits. The final plan set will include, as a minimum: Cover Sheet, Interconnect Plan Sheets (at 1"=40' scale, double banked), Detail Sheets (scales as noted).
- b. Plan updates and further development. Prepare plans, and an OPC suitable for RTC and Local Government review.

Project Plans (32) will include:

- i. Cover (1)
- ii. General notes (1)
- iii. Sheet index (1)
- iv. Project details (12)
- v. Project fiber splice details (5)
- vi. Plan sheets (12)
(x) indicated the number of plan sheets

- c. CONSULTANT will perform a project walk through to evaluate that every aspect of the project scope has been captured.
- d. A quality control review of the plans, contract documents and technical specifications will be performed by the CONSULTANT which will focus on technical aspects of the plans and specifications and will review that all items of work are adequately covered. The quality control reviewer will check, initial, and date each plan sheet as appropriate.

- e. CONSULTANT will submit 60% Plans to RTC, City of Reno, City of Sparks, and to utility agencies.

D. 90% Design

- 1. Prepare 90% Plans and Specifications
 - a. CONSULTANT shall incorporate review comments from RTC, City of Sparks, and City of Reno into the 90% design process
 - b. Plan updates and further development. Prepare plans and an OPC suitable for RTC and Local Government review.

Project Plans (32) will include:

- vii. Cover (1)
 - viii. General notes (1)
 - ix. Sheet index (1)
 - x. Project details (12)
 - xi. Project fiber splice details (5)
 - xii. Plan sheets (12)
- (x) indicated the number of plan sheets

- c. Project Specifications: CONSUTLANT will prepare Contract Documents and Technical Specifications which will reference the latest edition of Standard Specifications for Public Works Construction (Orange Book) for standard construction items.
- 2. A quality control review of the plans, contract documents and technical specifications will be performed by the CONSULTANT which will focus on technical aspects of the plans and specifications and will review that all items of work are adequately covered. The quality control reviewer will check, initial, and date each plan sheet as appropriate.
 - 3. CONSULTANT will perform a project walk through to evaluate that every aspect of the project scope has been captured.
 - 4. CONSULTANT will submit 90% Plans to RTC, City of Reno, City of Sparks, and to utility agencies. A mylar cover sheet will be produced at this submittal for routing to the agencies for project bidding.
 - 5. Prepare and Submit NDOT Encroachment Permit: CONSULTANT will prepare and process encroachment permit packages through the NDOT District 2. Two permits will be processed as part of the scope of this work for SR 341 (Geiger Grade Road) and SR 445 (Pyramid Way). The CONSULTANT will submit the completed application and submit the color coded plans at the 90% submittal. One set of review comments will be processed by the CONSULTANT for the permit. The final submittal of permit will be at the 100% submittal. The RTC or appropriate local agency

will be the applicant on the permit and will provide all applicant fees, signatures and submittal documentation needed by the CONSULTANT to process the permit. Permit Terms and Conditions will be incorporated into the project specifications.

E. Final Design (100% Signed and sealed bid documents)

1. CONSULTANT shall incorporate review comments from RTC, City of Sparks, and City of Reno into Final Construction Document process.
2. Prepare Final Plans and Specifications: Prepare Final Construction Plans, Contract Documents and Technical Specifications suitable for construction bid advertisement for the approved alignment in accordance with RTC standards and requirements. RTC will provide the boilerplate via e-mail in MS Word format.
3. A quality control review of the plans, contract documents and technical specifications will be performed by the CONSULTANT which will focus on technical aspects of the plans and specifications and will review that all items of work are adequately covered. The quality control reviewer will check, initial, and date each plan sheet as appropriate. The RTC, Local Entity and Quality Control review comments will be incorporated into the final Plans and Specifications.
4. The final construction plans will be on 11" x 17" size sheets and will show all elements of the project construction. The final plans and specifications will be signed and sealed by a Nevada Registered Professional Civil Engineer in responsible charge of preparation. Plans and specifications will be submitted to the RTC, City of Reno, utility agencies and other affected parties for review at the 60%, 90%, and final (100%) stages of completion per the following:
 - a. Electronic (pdf) 11"x17" plans and specifications will be sent to the review agencies at each submittal including the final cover sheet which will be routed digitally.

F. Bidding Services

1. Plan Set and Specification Distribution. CONSULTANT will provide the RTC with final plans and specifications, including addenda, in Portable Document Format (PDF), for use in the Procurement system.
2. Pre-bid Meeting. CONSULTANT will be available during the bidding process to answer technical questions and will participate in the pre-bid meeting. All questions and responses will be documented and provided to RTC. CONSULTANT will prepare and provide PDF addenda, if required. All questions regarding legal aspects of the contract documents will be referred directly to RTC. CONSULTANT will prepare and provide a PDF summary of the pre-bid meeting, as directed by the RTC.
3. Bid Opening. CONSULTANT will attend the bid opening and review the bids received for irregularities and provide a recommendation for award. CONSULTANT will tabulate bid results into a MS Excel spreadsheet and check multiplication and addition of bid items.

G. City of Reno DMS Feasibility Study

11. This feasibility study will evaluate the potential DMSs on 8th Street and Maple Street: These new DMSs will provide driver information about events and traffic conditions on Virginia Street near the I-80 interchanges. The signs would ideally be positioned at a location so that traffic exiting the freeway would be able to process the information and change their route based on the traveler information. The scope for this task is to provide a feasibility study and preliminary concept as well as partnering with NDOT to establish location of one DMS on 8th Street and one DMS on Maple Street. A key element of this feasibility study will be to partner with NDOT on placing DMS signs within NDOT right of way and the operational concept of City of Reno and NDOT sharing control of these signs or NDOT allowing Reno to solely control these signs as an advance traffic system. Specific items of scope include:
 - a. Needs Assessment: Meet with City of Reno to understand operational need and the potential effect of the signs with event traffic on Virginia Street. (two (2) one-hour meetings, one meeting for follow up)
 - b. Establish best location to place the signs based on the operational needs. Prepare two options and prepare exhibits to show the sign locations
 - c. Meeting with NDOT District 2 staff to convey the operational need and get their input on the potential locations for the project installations. Partner to understand their perspective on the ideal software and communication operation and if they would be willing share control of the signs or allow Reno to operate the sign within their right of way. (two (2) one-hour meetings, one meeting for follow up)
 - d. One meeting with FHWA to understand requirements for infrastructure with I-80 envelope.
 - e. Take feedback from both agencies and develop a concept plan that would work for each street, (two (2) sign concepts, one for each sign)

- f. Develop a preliminary Opinion of Probably Cost (OPC) for construction to be included in the memo.
- g. Develop a feasibility memo that contains; preliminary concept plans, construction requirements, construction limitations, permit process, summary of operational concepts that could be used for sharing the DMS between the agencies, power and communication locations, potential device equipment to be used, support structures, and software requirements.

Deliverables:

- Feasibility Study (Draft)
- Feasibility Study (Final)

H. City of Sparks Intelligent Corridor Plan

This plan will help the City with traffic data collection and traveler information conveyance and an Operational Concept of technology to better understand the impacts for traffic on Spark Blvd and Vista Blvd's north south routes. Implementation of plan technology will improve the City ability manage and optimize the traffic network. The City is interested in deploying data collection systems to collect flow, travel time, and origin and destination data. There are many options of technologies available. The scope for this task is to provide an operational concept including a technology assessment and make recommendations for deployment of the technology to meet the City's needs.

Specific items of scope include:

- a. Needs Assessment: Meet with City of Sparks (Jim Herman, Amber Sosa, and Jon Ericson) to understand operational needs and understand the existing devices and software that the City uses. The team will also need to understand constraints on operation and maintenance costs for this new infrastructure. (two (2) one-hour meetings, one meeting for follow up)
- b. Technology Assessment: Prepare a high-level summary and presentation of the different types of technologies with benefits and costs for each that would be applicable to meeting the City's needs. Present the technologies to the City staff. Gather City staff's opinions, questions, and preferences on the different types of technologies. Pick three technologies to evaluate further with the potential of one to be implemented on a pilot project.
- c. Write a detailed implementation memo of three technologies that could be deployed as a pilot in the City. Memo shall cover implementation cost and benefits, lifecycle costs, and make a recommendation based on the best technology to move forward with for a pilot installation.
- d. Develop a scope for the design to implement the selected technology.

Deliverables:

- Implementation Memo including Scope for Design (Draft and Final)

I. ITS Network Master Planning Services

These services will help RTC set a vision for the next five years on regional network expansion, deployment of new devices, and recommendations for further development of the C2C Network infrastructure based on existing infrastructure and standard protocols and practices for ITS networks. The purpose of these services is to create a planned path that will help RTC gain the most value for investments in ITS Infrastructure. These services include the following:

- e. Data Collection: CONSULTANT to create and update the regional GIS ITS Network Infrastructure Map based on available records from City of Reno, City of Sparks, NDOT, and RTC of non-freeway facilities. It is anticipated that the Map will then be updated by RTC and Cities periodically as new infrastructure is added to the ITS network. Map to include:
 - i. Fiber Cable Paths
 - ii. Other communications links
 - iii. Communications conduit locations
 - iv. Traffic Signal cabinet locations
 - v. CCTV locations
 - vi. DMS locations
 - vii. Flow detector locations
 - viii. 10-year Capital Improvement Projects
- f. Data Organization: Create a centralized location to collect and organize fiber optic splice detail information (PDF binder.) Develop a naming convention so that splice information is easily correlated with the GIS ITS Network Infrastructure Map.
- g. ITS Needs Assessment: CONSULTANT to meet with City of Reno and City of Sparks to understand their updates to the existing ITS network topology approach and make recommendations based on known industry practices for deploying ITS network infrastructure. Work with NDOT to partner on use and vision for C2C network. (Up to 3 meetings with each agency.)
- h. Develop Fiber Topology and Standards: CONSULTANT to prepare and document fiber assignment tables for agencies to use in ITS Network expansion projects that have new C2C network paths. CONSULTANT to make recommendations for achieving fiber path diversity (i.e., redundancy) as part of an overall network topology approach. Recommendations for standard details and standard specifications for ITS Network installation in Washoe County.
- i. Implementation Plan: CONSULTANT to map and make recommendation for next steps in expanding the geographical area covered by the C2C ITS network based on the recommended Network Topology, Existing Infrastructure Map, and information gathered during the meetings with each City. Prepare an implementation plan, including project description and planning level cost estimate, for recommendations for the next 5 years as well as long term recommendations for implementation including associated plan budgets for projects to be implemented.

Deliverables:

- GIS files of ITS Network Infrastructure Map and Centralized fiber splice data.
- Meetings with Cities (3 meetings with Sparks, 3 meetings with Reno, 3 Meetings with NDOT)
- ITS Master Plan (Draft)
- ITS Master Plan (Final)

J. Construction Phase Services or Engineering During Construction (Sole Option and Discretion of RTC)

The RTC and CONSULTANT shall review Optional Construction Services following the completion of final design. The following tasks summarize the major elements of Construction Support Services anticipated with this project.

1. Contract Administration: Provide contract administration services as follows:
 - a. Pre-Construction Conference: CONSULTANT will attend a Pre-Construction Conference prior to commencement of Work at the Site.
 - b. Visits to Site and Observation of Construction: CONSULTANT will provide on-site construction observation services during the construction phase. CONSULTANT will make visits at intervals as directed by RTC in order to observe the progress of the Work. Such visits and observations by CONSULTANT are not intended to be exhaustive or to extend to every aspect of Contractor's work in progress. Observations are to be limited to spot checking, selective measurement, and similar methods of general observation of the Work based on CONSULTANT's exercise of professional judgment. Based on information obtained during such visits and such observations, CONSULTANT will evaluate whether Contractor's work is generally proceeding in accordance with the Contract Documents, and CONSULTANT will keep RTC informed of the general progress of the Work. CONSULTANT shall also provide recommendations to RTC for any construction changes necessitated by field conditions.
 - c. The purpose of CONSULTANT's site visits will be to enable CONSULTANT to better carry out the duties and responsibilities specifically assigned in this Agreement to CONSULTANT, and to provide RTC a greater degree of confidence that the completed Work will conform in general to the Contract Documents. CONSULTANT shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have control over Contractor's work, nor shall CONSULTANT have authority over or responsibility for the means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction selected by Contractor, for safety precautions and programs incident to Contractor's work, nor for any failure of

Contractor to comply with laws and regulations applicable to Contractor's furnishing and performing the Work. Accordingly, CONSULTANT neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform its work in accordance with the Contract Documents.

- d. Review and provide recommendations on contractor's traffic control plans.
- e. CONSULTANT will review and provide feedback to the RTC on traffic control plans submitted to RTC for approval.
- f. Review and provide recommendations on contractor's construction schedule and work progress. CONSULTANT will review and provide feedback to the RTC on the construction schedule and work progress submitted to the RTC for approval.
- g. Submittals: CONSULTANT will review and approve or take other appropriate action in respect to Submittals, Shop Drawings, Samples, and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs.
- h. Substitutes and "or-equal": Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor in accordance with the Contract Documents, but subject to the provisions of applicable standards of state or local government entities.
- i. Recommendations with Respect to Defective Work. CONSULTANT will recommend to RTC that Contractor's work be disapproved and rejected while it is in progress if, on the basis of such observations, CONSULTANT believes that such work will not produce a completed Project that conforms generally to Contract Documents.
- j. Clarifications and Interpretations: CONSULTANT will respond to reasonable and appropriate Contractor requests for information and issue necessary clarifications and interpretations of the Contract Documents to RTC as appropriate to the orderly completion of Contractor's work. Any orders authorizing variations from the Contract Documents will be made by RTC.
- k. Disagreements between RTC and Contractor: CONSULTANT will, if requested by RTC, render written decision on all claims of RTC and Contractor relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the progress of Contractor's work. In rendering such decisions, CONSULTANT shall be fair and not show partiality to RTC or Contractor and shall not be liable in

connection with any decision rendered in good faith in such capacity.

- l. Applications for Payment: Based on its observations and on review of applications for payment and accompanying supporting documentation, CONSULTANT will determine the amounts that CONSULTANT recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute CONSULTANT's representation to RTC, based on such observations and review, that, to the best of CONSULTANT's knowledge, information and belief, Contractor's work has progressed to the point indicated and that such work-in-progress is generally in accordance with the Contract Documents subject to any qualifications stated in the recommendation. In the case of unit price work, CONSULTANT's recommendations of payment will include determinations of quantities and classifications of Contractor's work, based on observations and measurements of quantities provided with pay requests.
- m. By recommending any payment, CONSULTANT shall not thereby be deemed to have represented that its observations to check Contractor's work have been exhaustive, extended to every aspect of Contractor's work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to CONSULTANT in this Agreement. It will also not impose responsibility on CONSULTANT to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, nor to determine that title to any portion of the work in progress, materials, or equipment has passed to RTC free and clear of any liens, claims, security interests, or encumbrances, nor that there may not be other matters at issue between RTC and Contractor that might affect the amount that should be paid.
- n. Substantial Completion: CONSULTANT will, promptly after notice from Contractor that it considers the entire Work ready for its intended use, in company with RTC and Contractor, conduct a site visit to determine if the Work is substantially complete. Work will be considered substantially complete following satisfactory completion of all items with the exception of those identified on a final punch list. If after considering any objections of RTC, CONSULTANT considers the Work substantially complete, CONSULTANT will notify RTC and Contractor.
- o. Final Notice of Acceptability of the Work: CONSULTANT will conduct a final site visit to determine if the completed Work of Contractor is generally in accordance with the Contract Documents and the final punch list so that CONSULTANT may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, CONSULTANT shall also provide a notice that the Work is generally in accordance with the

Contract Documents to the best of CONSULTANT's knowledge, information, and belief based on the extent of its services and based upon information provided to CONSULTANT upon which it is entitled to rely.

- p. Inspections and Tests: CONSULTANT may require special inspections or tests of Contractor's work as CONSULTANT deems appropriate and as further defined in the scope of services below, and will receive and review certificates of inspections from Subconsultants within CONSULTANT's area of responsibility or of tests and approvals required by laws and regulations or the Contract Documents. CONSULTANT's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. CONSULTANT shall be entitled to rely on the results of such tests and the facts being certified.
- q. Change Orders: CONSULTANT may recommend Change Orders to RTC, and will review and make recommendations related to reasonable and appropriate Change Orders submitted or proposed by the Contractor.
- r. Limitation of Responsibilities: CONSULTANT shall not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual or entity performing or furnishing the Work. CONSULTANT shall not have the authority or responsibility to stop the work of any Contractor.

2. Inspection

- a. "Inspection services" means the observation of construction process for the purpose of determining that the Contractor is in substantial compliance with the plans and specifications and reporting to the RTC any observed deficiencies. The following tasks summarize the major elements of Inspection anticipated with this project.
- b. Construction of the project that requires inspection is anticipated at 60 working days (12 weeks). A full-time (8 hours per day) primary inspector will be on site during working days that include trenching, pouring concrete, grading, utility adjustments and paving (15 working days anticipated). A part-time (3 hours per day) primary inspector will be on site during all other working days (45 working days anticipated). A full-time supplemental technician will be provided at 8 hours per day (5 working days anticipated) and will perform asphalt sampling and density testing during paving operations. The primary inspector will be responsible for the following items:
 - i. Attend the preconstruction conference.
 - ii. Monitor the work performed by the Contractor to ascertain whether the work is in substantial accordance with the plans and specifications.
 - iii. Assist in problem resolution with the RTC, contractor personnel,

utility agencies, the public and others.

- iv. Prepare daily inspection reports, submitted weekly to RTC and copied to the appropriate government jurisdiction(s). The daily inspection will contain materials delivered to the site, excavation and earthwork, preparation of sub grades, placement of aggregate base material, asphaltic concrete, Portland cement concrete, the forming, placement or erection of structures, and review of contractor daily progress logs.
- v. Provide materials quantity reports and assist in reviewing and analyzing contractor's monthly progress payments.
- vi. Provide verification of the distribution of public relation notices required to be delivered by the Contractor.
- vii. Assist in preparation of the Punch List.
- viii. Maintain a field blueline set of drawings (bond copy) to incorporate contractor record drawing mark-ups.

3. Materials Testing

- a. Upon receiving authorization from the RTC, the CONSULTANT will engage a Subconsultant to perform the Materials Testing services. The following tasks summarize the major elements of testing anticipated with this project.
- b. Provide Material Testing for compliance with the specifications per the latest edition of the Standard Specifications for Public Works Construction (Orange Book) testing requirements. Materials to be tested will include plantmix bituminous pavement, aggregate base, concrete cylinder samples, and trenching backfill material. Test reports, accompanied with CONSULTANT's recommendation regarding acceptance/mitigation of materials, shall be submitted promptly to the RTC and CC'd to appropriate governmental jurisdiction(s).

4. As-Built Information

- a. Record Drawings. Provide as-built record drawings for the completed project. A single file PDF format (11" x 17" at 300 dpi), will be provided to RTC for its files and distribution. The PDF file shall include all plan sheets in one file with index/bookmark for easy access to different sheets or sections of the plan set.
- b. The final record drawings must be identified, dated, and signed as the record drawings and must also contain the engineer's stamp and signature. The Consultant may either:
 - i. Provide the final revisions on the original engineer-stamped/signed reproducible drawings, which will then also be identified as the record drawings, or
 - ii. Provide new engineer-stamped/signed reproducible drawings identified as the record drawings.
- c. The Record Drawings shall include a scan of the original title sheet (including the appropriate signatures by RTC, local government, signed and stamped by the CONSULTANT) and identified as record drawings.

K. System Implementation Services (Optional)

1. Further evaluation, planning, and design of technology, systems, or infrastructure to be implemented as the result of other tasks. Examples include:
 - a. DMS Structures
 - b. Cloud Based Traffic Data
 - c. Virtual DMS Concept
 - d. Additional C2C Software or Network Improvements
 - e. ITS Asset Management Software's

L. Design Contingency

1. This is a contingency for miscellaneous increases within the scope of this contract. CONSULTANT shall provide a letter detailing the need, scope, and not-to-exceed budget for any proposed work. Work under this task shall proceed only with the RTC Project Manager's written approval. A 10% contingency was added to the design tasks only.

Exhibit B

Compensation

**Exhibit B - Fee Schedule of Services
ITS PHASE 4 PROJECT**



| TASK | DESCRIPTION | TASK TOTALS |
|------|---|---------------------|
| | | |
| A | Preliminary and General Items | \$ 13,995.00 |
| B | Data Collection and Analysis | \$ 23,383.00 |
| C | 60% Design Phase | \$ 26,154.00 |
| D | 90% Design Phase | \$ 36,539.00 |
| E | Final Design Phase | \$ 18,747.00 |
| F | Bidding Services | \$ 4,483.00 |
| | Total Design Services (Task A-F) | \$123,301.00 |
| G | Reno DMS Feasibility Study | \$ 24,260.00 |
| H | Sparks Intelligent Corridor Plan | \$ 21,735.00 |
| I | ITS Network Master Planning | \$ 86,838.00 |
| | Total Planning Services (Task G-H) | \$132,833.00 |
| J | Engineering During Construction (Optional Services) | \$ 96,748.00 |
| K | System Implementation Services (Optional Services) | \$ 18,725.00 |
| L | Design Contingency (10% of Design) | \$ 26,000.00 |
| | Total Not-to-Exceed Amount | \$397,607.00 |



**Exhibit B - Fee Schedule of
Services ITS PHASE 4 PROJECT**

Prepared by Kimley-Horn MSM 1/27/2021 v0.1

| TASK | DESCRIPTION | | | | | | | | | Hours Subtotal | Expenses | Expense Description | Lump Sum Task Amounts |
|----------|---|-------------------|-----------------|-------------------|-------------------|--------------------------|-------------------|-------------------|-------------------|----------------|----------------|---------------------|-----------------------|
| | | Sys. Man. | Senior Prof. II | Senior Prof. I | Prof. | Senior Technical Support | Analyst | Technical Support | Support Staff | | | | |
| | | \$275 | \$255 | \$215 | \$165 | \$140 | \$130 | \$117 | \$105 | | | | |
| A | Preliminary and General Items | | | | | | | | | | | | |
| | | | | | | | | | | 0 | | | \$0.00 |
| | Project Management (10 months) | | | | | | | | | 0 | | | \$0.00 |
| | Kickoff Meeting | 1 | | 4 | | | 4 | | | 9 | | | \$1,655.00 |
| | Monthly Progress calls | 3 | | 12 | 3 | | 12 | | | 30 | | | \$5,460.00 |
| | Coordination Meetings (5) | | | 8 | 8 | | | | | 16 | | | \$3,040.00 |
| | Invoicing, Progress Reports, Work | | | 12 | | | | | 12 | 24 | | | \$3,840.00 |
| | | | | | | | | | | 0 | | | \$0.00 |
| | Subtotal Hours | 4 | 0 | 36 | 11 | 0 | 16 | 0 | 12 | 79 | | | |
| | Subtotal Fee | \$1,100.00 | \$0.00 | \$7,740.00 | \$1,815.00 | \$0.00 | \$2,080.00 | \$0.00 | \$1,260.00 | | \$0 | | \$13,995.00 |
| B | Data Collection and Analysis | | | | | | | | | | | | |
| | | | | | | | | | | 0 | | | \$0.00 |
| | Field Review with Reno, NDOT | | | 12 | | | 12 | | | 24 | \$988 | Travel | \$5,128.00 |
| | Aerial mapping | | | | | 10 | | 10 | | 20 | | | \$2,570.00 |
| | Centerline development | | | | 2 | | 2 | | | 4 | | | \$590.00 |
| | Utility mapping | | | 1 | | 15 | 15 | 15 | | 46 | | | \$6,020.00 |
| | Utility Coordination | | | 1 | | 5 | 5 | 5 | | 16 | | | \$2,150.00 |
| | NDOT Steamboat Creek Meeting (2) | | | 4 | 4 | | 4 | | | 12 | | | \$2,040.00 |
| | Potholes (3) | | | | 3 | | 3 | | | 6 | \$4,000 | Potholes | \$4,885.00 |
| | | | | | | | | | | 0 | | | \$0.00 |
| | Subtotal Hours | 0 | 0 | 18 | 9 | 30 | 41 | 30 | 0 | 128 | | | |
| | Subtotal Fee | \$0.00 | \$0.00 | \$3,870.00 | \$1,485.00 | \$4,200.00 | \$5,330.00 | \$3,510.00 | \$0.00 | | \$4,988 | | \$23,383.00 |
| C | 60% Design Phase | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | Cover, General Notes, Sheet Index (3) | | | 1 | | 5 | | 5 | | 11 | | | \$1,500.00 |
| | Project details (12) | | | | 12 | | 12 | | | 24 | | | \$3,540.00 |
| | Project fiber splice details (5) | 4 | | 4 | 4 | | | | | 12 | | | \$2,620.00 |
| | Interconnect Plans (12) | | | | 15 | 20 | 20 | 20 | | 75 | | | \$10,215.00 |
| | OPC | | | 1 | | | 7 | 7 | | 15 | | | \$1,944.00 |
| | Quality Control Review | 2 | | 10 | 4 | 8 | 8 | | | 32 | | | \$5,520.00 |
| | Submit 60% RTC and utilities | | | | 1 | | 5 | | | 6 | | | \$815.00 |
| | Subtotal Hours | 6 | 0 | 16 | 36 | 33 | 52 | 32 | 0 | 175 | | | |
| | Subtotal Fee | \$1,650.00 | \$0.00 | \$3,440.00 | \$5,940.00 | \$4,620.00 | \$6,760.00 | \$3,744.00 | \$0.00 | | \$0 | | \$26,154.00 |
| D | 90% Design Phase | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | Comment Review and Response | | | 4 | 4 | | 4 | | | 12 | | | \$2,040.00 |
| | Cover, General Notes, Sheet Index (3) | | | 1 | | 1 | | 1 | | 3 | | | \$472.00 |
| | Project details (12) | | | | 12 | | 12 | | | 24 | | | \$3,540.00 |
| | Project fiber splice details (5) | 4 | | 4 | 4 | | | | | 12 | | | \$2,620.00 |
| | Interconnect Plans (12) | | | | 10 | 10 | 10 | 10 | | 40 | | | \$5,520.00 |

Exhibit "B"

| TASK | DESCRIPTION | | | | | | | | | Hours Subtotal | Expenses | Expense Description | Lump Sum Task Amounts |
|----------|--|-------------------|-----------------|-------------------|-------------------|--------------------------|-------------------|-------------------|---------------|----------------|--------------|-----------------------|-----------------------|
| | | Sys. Man. | Senior Prof. II | Senior Prof. I | Prof. | Senior Technical Support | Analyst | Technical Support | Support Staff | | | | |
| | Prepare specifications | 1 | | 5 | 5 | | 5 | | | 16 | | | \$2,825.00 |
| | OPC | | | 1 | 1 | | 7 | | 7 | 16 | | | \$2,109.00 |
| | Quality Control Review | 2 | | 10 | 4 | 8 | 8 | | | 32 | | | \$5,520.00 |
| | Plan in Hand Field Walk | | | 12 | | | 12 | | | 24 | \$988 | Travel for Field Walk | \$5,128.00 |
| | Submit 90% RTC and utilities | | | 1 | 1 | | 5 | | | 7 | | | \$1,030.00 |
| | NDOT Encroach. (permit 1st Submittal) | | | 1 | 10 | 10 | 10 | 10 | | 41 | | | \$5,735.00 |
| | Subtotal Hours | 7 | 0 | 39 | 51 | 29 | 73 | 28 | 0 | 227 | | | |
| | Subtotal Fee | \$1,925.00 | \$0.00 | \$8,385.00 | \$8,415.00 | \$4,060.00 | \$9,490.00 | \$3,276.00 | \$0.00 | | \$988 | | \$36,539.00 |
| E | Final Design Phase | | | | | | | | | | | | |
| | Comment Review and Response | | | 4 | 4 | | 4 | | | 12 | | | \$2,040.00 |
| | Cover, General Notes, Sheet Index (3) | | | 1 | | 1 | | 1 | | 3 | | | \$472.00 |
| | Project details (12) | | | | 4 | | 4 | | | 8 | | | \$1,180.00 |
| | Project fiber splice details (5) | 1 | | 1 | 4 | | | | | 6 | | | \$1,150.00 |
| | Interconnect Plans (12) | | | | 5 | 5 | 5 | 5 | | 20 | | | \$2,760.00 |
| | Prepare specifications | 1 | | 5 | 5 | | 5 | | | 16 | | | \$2,825.00 |
| | OPC | | | 1 | 1 | | 5 | 5 | | 12 | | | \$1,615.00 |
| | Quality Control Review | 1 | | 5 | 3 | 4 | 4 | | | 17 | | | \$2,925.00 |
| | NDOT Encroach. permit 2nd Submittal | | | 2 | | | 5 | 5 | | 12 | | | \$1,665.00 |
| | Submit Bid documents to RTC | 1 | | 3 | 1 | | 6 | | | 11 | \$250 | Printing/Delivery | \$2,115.00 |
| | Subtotal Hours | 4 | 0 | 22 | 27 | 10 | 38 | 16 | 0 | 117 | | | |
| | Subtotal Fee | \$1,100.00 | \$0.00 | \$4,730.00 | \$4,455.00 | \$1,400.00 | \$4,940.00 | \$1,872.00 | \$0.00 | | \$250 | | \$18,747.00 |
| F | Bidding Services | | | | | | | | | | | | |
| | Pre-Bid Meeting | | | 1 | | | 3 | | | 4 | | | \$605.00 |
| | RFI Responses | 1 | | 2 | 5 | | | | | 8 | | | \$1,530.00 |
| | Bid Opening and Bid Tabs | | | 4 | | | 4 | 4 | | 12 | \$500 | PM Travel | \$2,348.00 |
| | | | | | | | | | | 0 | | | \$0.00 |
| | Subtotal Hours | 1 | 0 | 7 | 5 | 0 | 7 | 4 | 0 | 24 | | | |
| | Subtotal Fee | \$275.00 | \$0.00 | \$1,505.00 | \$825.00 | \$0.00 | \$910.00 | \$468.00 | \$0.00 | | \$500 | | \$4,483.00 |
| G | Reno DMS Feasibility Study | | | | | | | | | | | | |
| | Reno Operational Needs Meeting (2) | 1 | | 4 | 2 | | 4 | | | 11 | | | \$1,985.00 |
| | Preliminary Plan | | | 2 | | 5 | 5 | 5 | | 17 | | | \$2,365.00 |
| | NDOT Meetings (2) | 1 | | 4 | 2 | | 4 | | | 11 | | | \$1,985.00 |
| | FHWA Meeting (1) | | | 1 | 1 | | 1 | | | 3 | | | \$510.00 |
| | Prelliminary OPC | 1 | | 1 | | 2 | | | | 4 | | | \$770.00 |
| | Draft Feasibility Memo | 2 | | 18 | 18 | 18 | 18 | | | 74 | | | \$12,250.00 |
| | Final Feasibility Memo | 1 | | 5 | 7 | 7 | 7 | | | 27 | | | \$4,395.00 |
| | | | | | | | | | | 0 | | | \$0.00 |
| | Subtotal Hours | 6 | 0 | 35 | 30 | 32 | 39 | 5 | 0 | 147 | | | |
| | Subtotal Fee | \$1,650.00 | \$0.00 | \$7,525.00 | \$4,950.00 | \$4,480.00 | \$5,070.00 | \$585.00 | \$0.00 | | \$0 | | \$24,260.00 |
| H | Sparks Intelligent Corridor Plan | | | | | | | | | | | | |
| | Spark Needs Assesments and Technology Assessment | 1 | | 4 | 2 | | 4 | | | 11 | | | \$1,985.00 |
| | | 2 | | 10 | 15 | | 20 | | | 47 | | | \$7,775.00 |

Exhibit "B"

| TASK | DESCRIPTION | | | | | | | | | Hours Subtotal | Expenses | Expense Description | Lump Sum Task Amounts |
|----------|--|--------------------|-----------------|--------------------|--------------------|--------------------------|---------------------|--------------------|-------------------|----------------|-----------------|---------------------|-----------------------|
| | | Sys. Man. | Senior Prof. II | Senior Prof. I | Prof. | Senior Technical Support | Analyst | Technical Support | Support Staff | | | | |
| | Implementation Memo | 1 | | 18 | 18 | 18 | 18 | | | 73 | | | \$11,975.00 |
| | | | | | | | | | | 0 | | | \$0.00 |
| | Subtotal Hours | 4 | 0 | 32 | 35 | 18 | 42 | 0 | 0 | 131 | | | |
| | Subtotal Fee | \$1,100.00 | \$0.00 | \$6,880.00 | \$5,775.00 | \$2,520.00 | \$5,460.00 | \$0.00 | \$0.00 | | \$0 | | \$21,735.00 |
| I | ITS Network Master Planning | | | | | | | | | | | | |
| | Data Collection and Map Building | 4 | | 5 | 70 | 70 | 70 | 70 | | 289 | | | \$40,815.00 |
| | Meetings (9) | 4 | | 10 | 15 | | 4 | | | 33 | \$988 | Travel | \$7,233.00 |
| | Data Organization | 4 | | 5 | 10 | | 10 | | | 29 | | | \$5,125.00 |
| | ITS Needs Assessment | 2 | | 20 | 20 | | 20 | | | 62 | | | \$10,750.00 |
| | Network Topology and Standards | 10 | | 8 | 8 | | 5 | | | 31 | | | \$6,440.00 |
| | Implementation Plan | 2 | | 10 | 10 | 10 | 10 | | | 42 | | | \$7,050.00 |
| | ITS Master Plan (Draft) | 4 | | 10 | | | 20 | | | 34 | | | \$5,850.00 |
| | ITS Master Plan (Final) | 2 | | 5 | | | 15 | | | 22 | | | \$3,575.00 |
| | | | | | | | | | | 0 | | | \$0.00 |
| | Subtotal Hours | 32 | 0 | 73 | 133 | 80 | 154 | 70 | 0 | 542 | | | |
| | Subtotal Fee | \$8,800.00 | \$0.00 | \$15,695.00 | \$21,945.00 | \$11,200.00 | \$20,020.00 | \$8,190.00 | \$0.00 | | \$988 | | \$86,838.00 |
| J | Engineering During Construction (Optional Services) | | | | | | | | | | | | |
| | 60 Working Days | | | | | | | | | 0 | | | \$0.00 |
| | Construction Administration | 5 | | 25 | 20 | 20 | 60 | | 5 | 135 | \$988 | PM Travel (2 trips) | \$22,163.00 |
| | Inspection | | | 10 | 100 | 25 | 250 | | | 385 | \$750 | Mileage | \$55,400.00 |
| | Material Testing | | | 2 | 4 | 4 | 15 | | | 25 | \$10,000 | Materials Testing | \$13,600.00 |
| | As-built information | | | 5 | 2 | 2 | 30 | | | 39 | | | \$5,585.00 |
| | | | | | | | | | | 0 | | | \$0.00 |
| | Subtotal Hours | 5 | 0 | 42 | 126 | 51 | 355 | 0 | 5 | 584 | | | |
| | Subtotal Fee | \$1,375.00 | \$0.00 | \$9,030.00 | \$20,790.00 | \$7,140.00 | \$46,150.00 | \$0.00 | \$525.00 | | \$11,738 | | \$96,748.00 |
| K | System Implementation Services (Optional Services) | | | | | | | | | | | | |
| | Evaluation, Planning and Design | 5 | | 20 | 30 | 30 | 30 | | | 115 | | | \$18,725.00 |
| | | | | | | | | | | 0 | | | \$0.00 |
| | Subtotal Hours | 5 | 0 | 20 | 30 | 30 | 30 | 0 | 0 | 115 | | | |
| | Subtotal Fee | \$1,375.00 | \$0.00 | \$4,300.00 | \$4,950.00 | \$4,200.00 | \$3,900.00 | \$0.00 | \$0.00 | | \$0 | | \$18,725.00 |
| L | Design Contingency (10% of Design) | | | | | | | | | | | 10% of Design | \$26,000.00 |
| | Total Basic Services Hours | 74 | 0 | 340 | 493 | 313 | 847 | 185 | 17 | 2,269 | | | |
| | Total Basic Services Fee | \$20,350.00 | \$0.00 | \$73,100.00 | \$81,345.00 | \$43,820.00 | \$110,110.00 | \$21,645.00 | \$1,785.00 | | \$19,452 | | \$397,607.00 |

Exhibit C

Indemnification and Insurance Requirements

Exhibit C

**INDEMNIFICATION AND INSURANCE REQUIREMENTS FOR
PROFESSIONAL SERVICE AGREEMENTS
[NRS 338 DESIGN PROFESSIONAL]**

2020-08-27 Version

1. INTRODUCTION

IT IS HIGHLY RECOMMENDED THAT CONSULTANTS CONFER WITH THEIR INSURANCE CARRIERS OR BROKERS TO DETERMINE THE AVAILABILITY OF THESE INSURANCE CERTIFICATES AND ENDORSEMENTS IN ADVANCE OF PROPOSAL SUBMISSION. IF THERE ARE ANY QUESTIONS REGARDING THESE INSURANCE REQUIREMENTS, IT IS RECOMMENDED THAT THE AGENT/BROKER CONTACT RTC'S FINANCE DIRECTOR AT (775) 335-1845.

2. INDEMNIFICATION

CONSULTANT agrees , subject to the limitations in the Nevada Revised Statutes Section 338.155, to save and hold harmless and fully indemnify RTC, Washoe County, City of Reno and City of Sparks including their elected officials, officers, employees, and agents (hereafter, "Indemnitees") from and against any and all claims, proceedings, actions, liability and damages, including reasonable attorneys' fees and defense costs incurred in any action or proceeding (collectively "Damages") to the extent arising out of the:

- A. Negligence, errors, omissions, recklessness or intentional misconduct of CONSULTANT or CONSULTANT's agents, employees, officers, directors, subconsultants, or anyone else for whom CONSULTANT may be legally responsible, which are based upon or arising out of the professional services of CONSULTANT; and
- B. Violation of law or any contractual provisions or any infringement related to trade names, licenses, franchises, patents or other means of protecting interests in products or inventions resulting from the use by the Indemnitees of any materials, devices, processes, equipment, or other deliverable (including software) supplied by CONSULTANT under or as a result of this Agreement, but excluding any violation or infringement resulting from the modification or alteration by the Indemnitees of any materials, devices, processes, equipment, or other deliverable (including software) not consented to by CONSULTANT.

CONSULTANT further agrees to defend, save and hold harmless and fully indemnify the Indemnitees from and against any and all Damages arising out the negligence, errors, omissions, recklessness or intentional misconduct of CONSULTANT or CONSULTANT's agents, employees, officers, directors, subconsultants, or anyone else for whom CONSULTANT may be legally responsible, which are not based upon or arising out of the professional services of CONSULTANT.

The Damages shall include, but are not limited to, those resulting from personal injury to any person, including bodily injury, sickness, disease or death and injury to real property or personal property, tangible or intangible, and the loss of use of any of that property, whether or not it is physically injured.

If the Indemnitees are involved in defending actions of CONSULTANT or anyone else for whom CONSULTANT is legally responsible, CONSULTANT shall reimburse the Indemnitees for the time spent by such personnel at the rate of the Indemnitees pay or compensation for such services.

If an Indemnitee is found to be liable in the proceeding, then CONSULTANT'S obligation hereunder shall be limited to the proportional share of the liability attributed to CONSULTANT.

In determining whether a claim is subject to indemnification, the incident underlying the claim shall determine the nature of the claim.

In the event of a violation or an infringement under paragraph 2.B above and the use is enjoined, CONSULTANT, at its sole expense, shall either (1) secure for the Indemnitees the right to continue using the materials by suspension of any injunction or by procuring a license or licenses for the Indemnitees; or (2) modify the materials so that they become non-infringing. This covenant shall survive the termination of the Professional Services Agreement.

The provisions of this Agreement are separate and severable and it is the intent of the Parties hereto that in the event any provision of this Agreement should be determined by any court of competent jurisdiction to be void, voidable or too restrictive for any reason whatsoever, the remaining provisions of this Agreement shall remain valid and binding upon said Parties. It is also understood and agreed that in the event any provision should be considered, by any court of competent jurisdiction, to be void because it imposes a greater obligation on CONSULTANT than is permitted by law, such court may reduce and reform such provisions to limitations which are deemed reasonable and enforceable by said court.

3. GENERAL REQUIREMENTS

Prior to the start of any work on a RTC project, CONSULTANT shall purchase and maintain insurance of the types and limits as described below insuring against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONSULTANT, its subconsultants, or their employees, agents, or representatives. The cost of all such insurance shall be borne by CONSULTANT.

4. VERIFICATION OF COVERAGE

CONSULTANT shall furnish RTC with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth herein, on forms acceptable to RTC. All deductibles and self-insured retentions requiring RTC approval shall be shown on the certificate. All certificates and endorsements are to be addressed to RTC's Finance Director and be received by RTC before work commences. CONSULTANT agrees that RTC has the right to inspect CONSULTANT'S and the Sub's insurance policies, or certified copies of the policies, upon request. Copies of applicable policy forms or endorsements

confirming required additional insured, waiver of subrogation and notice of cancellation provisions are required to be provided with any certificate(s) evidencing the required coverage.

5. NOTICE OF CANCELLATION

CONSULTANT or its insurers shall provide at least thirty (30) days' prior written notice to RTC prior to the cancellation or non-renewal of any insurance required under this Agreement. An exception may be included to provide at least ten (10) days' written notice if cancellation is due to non-payment of premium. CONSULTANT shall be responsible to provide prior written notice to RTC as soon as practicable upon receipt of any notice of cancellation, non-renewal, reduction in required limits or other material change in the insurance required under this Agreement.

6. SUBCONSULTANTS & SUBCONTRACTORS

CONSULTANT shall include all Subcontractors and Subconsultants (referred to collectively as "Subs") as insureds under its liability policies OR shall cause Subs employed by CONSULTANT to purchase and maintain separate liability coverages and limits of the types specified herein. If any Subs maintain separate liability coverages and limits, each shall include the RTC, Washoe County, City of Reno and City of Sparks as additional insureds under its commercial general liability policy, subject to the same requirements stated herein, without requiring a written contract or agreement between each of the additional insureds and any sub-consultant or sub-contractor. Any separate coverage limits of liability maintained by Subs shall be at least **\$1,000,000** per occurrence and at least **\$2,000,000** for any applicable coverage aggregates or the amount customarily carried by the Sub, whichever is GREATER. If any Subs provide their own insurance with limits less than required of the Contractor, Contractor shall include Subs in their coverage up to the full limits required of the Contractor. When requested by RTC, CONSULTANT shall furnish copies of certificates of insurance evidencing coverage for each subconsultant. CONSULTANT need not require its non-design subcontractors to carry Professional Errors and Omissions Liability insurance.

7. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions that exceed \$5,000 per occurrence or claim must be declared to RTC's Finance Director prior to signing this Agreement. RTC is entitled to request and receive additional documentation, financial or otherwise, prior to giving its approval of the deductibles and self-insured retentions. Any changes to the deductibles or self-insured retentions made during the term of this Agreement or during the term of any policy must be declared to RTC's Finance Director prior to the change taking effect.

8. ACCEPTABILITY OF INSURERS

Required insurance is to be placed with insurers with a Best's rating of no less than A-VII and acceptable to RTC. RTC may accept coverage with carriers having lower Best's ratings upon review of financial information concerning CONSULTANT and the insurance carrier. RTC reserves the right to require that CONSULTANT'S insurer(s) be licensed and admitted in the State of Nevada or meet any applicable state and federal laws and regulations for non-admitted insurance placements.

9. OTHER CONDITIONS

- A. Failure to furnish the required certificate(s) or failure to maintain the required insurance may result in termination of this Agreement at RTC's option.
- B. If CONSULTANT fails to furnish the required certificate or fails to maintain the required insurance as set forth herein, RTC shall have the right, but not the obligation, to purchase said insurance at CONSULTANT's expense.
- C. Any waiver of CONSULTANT's obligation to furnish such certificate or maintain such insurance must be in writing and signed by an authorized representative of RTC. Failure of RTC to demand such certificate or other evidence of full compliance with these insurance requirements or failure of RTC to identify a deficiency from evidence that is provided shall not be construed as a waiver of CONSULTANT's obligation to maintain such insurance, or as a waiver as to the enforcement of any of these provisions at a later date.
- D. By requiring insurance herein, RTC does not represent that coverage and limits will necessarily be adequate to protect CONSULTANT, and such coverage and limits shall not be deemed as a limitation on CONSULTANT's liability under the indemnities granted to RTC in this contract.
- E. If CONSULTANT'S liability policies do not contain the standard ISO separation of insureds condition, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

10. COMMERCIAL GENERAL LIABILITY

CONSULTANT shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than **\$2,000,000** each occurrence. If such CGL insurance contains a general aggregate limit, it shall be increased to equal twice the required occurrence limit or revised to apply separately to this project.

CGL insurance shall be written on ISO occurrence form CG 00 01 04 13 (or a substitute form providing equivalent coverage) and shall cover liability arising from premises, operations,

products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

RTC and any other Indemnitees listed in Section 2. INDEMNIFICATION of this Agreement shall be included as an insured under the CGL, using ISO additional insured endorsement CG 20 10 07/04 or CG 20 33 07/04 or a substitute providing equivalent coverage, and under the commercial umbrella, if any.

This insurance shall apply as primary insurance with respect to any other insurance or self-insurance programs afforded to RTC or any other Indemnitees under this Agreement.

CONSULTANT waives all rights against RTC and any other Indemnitees listed in section 2. INDEMNIFICATION of this Agreement for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant to this agreement. CONSULTANT's insurer shall endorse CGL policy to waive subrogation against RTC with respect to any loss paid under the policy.

11. COMMERCIAL AUTOMOBILE LIABILITY

CONSULTANT shall maintain automobile liability and, if necessary, commercial umbrella liability insurance with a limit of not less than **\$1,000,000** each accident. Such insurance shall cover liability arising out of any auto (including owned, hired, and non-owned autos).

Coverage shall be written on ISO form CA 00 01, CA 00 05, CA 00 25, or a substitute form providing equivalent liability coverage for all owned, leased, hired (rented) and non-owned vehicles (as applicable). RTC may agree to accept auto liability for non-owned and hired (rented) vehicles under the CGL if CONSULTANT does not own or operate any owned or leased vehicles.

CONSULTANT waives all rights against RTC, its officers, employees and volunteers for recovery of damages to the extent these damages are covered by the automobile liability or commercial umbrella liability insurance obtained by CONSULTANT pursuant to this Agreement.

12. INDUSTRIAL (WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY) INSURANCE

It is understood and agreed that there shall be no Industrial (Worker's Compensation and Employer's Liability) Insurance coverage provided for CONSULTANT or any subconsultants by RTC. CONSULTANT, and any subconsultants, shall procure, pay for and maintain the required coverages.

CONSULTANT shall maintain workers' compensation and employer's liability insurance meeting the statutory requirements of the State of Nevada, including but not limited to NRS 616B.627 and NRS 617.210. The employer's liability limits shall not be less than **\$1,000,000** each accident for bodily injury by accident or **\$1,000,000** each employee for bodily injury by disease.

CONSULTANT shall provide a Final Certificate for itself and each subconsultant evidencing that CONSULTANT and each subconsultant maintained workers' compensation and employer's liability insurance throughout the entire course of the project.

If CONSULTANT, or any subconsultant is a sole proprietor, coverage for the sole proprietor must be purchased and evidence of coverage must appear on the Certificate of Insurance and Final Certificate.

CONSULTANT waives all rights against RTC, its elected officials, officers, employees and agents for recovery of damages to the extent these damages are covered by the workers compensation and employer's liability or commercial umbrella liability insurance obtained by Tenant pursuant to this agreement. CONSULTANT shall obtain an endorsement equivalent to WC 00 03 13 to affect this waiver.

13. PROFESSIONAL ERRORS AND OMISSIONS LIABILITY

CONSULTANT shall maintain professional liability insurance applying to liability for a professional, error, act, or omission arising out of the scope of CONSULTANT'S services provided under this Agreement with a limit of not less than **\$1,000,000** each claim and annual aggregate. CONSULTANT shall maintain professional liability insurance during the term of this Agreement and, if coverage is provided on a "claims made" or "claims made and reported" basis, shall maintain coverage or purchase an extended reporting period for a period of at least three (3) years following the termination of this Agreement.



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 4.10

From: Stephanie Haddock, Director of Finance/CFO

RECOMMENDED ACTION

Acknowledge receipt of the Investment Committee report for the quarter ended December 31, 2020.

BACKGROUND AND DISCUSSION

The Investment Committee (Committee) met with PFM Asset Management LLC (PFM) on January 25, 2021 to discuss the investment performance of RTC's bond debt service reserve funds for the quarter ending December 31, 2020. Committee members in attendance were Bill Thomas, Stephanie Haddock, Hannah Yue and Nelia Belen. The current investment portfolio consists of 84.9% U.S. Treasuries and 15.1% Money Market Fund. For the next quarter, the Investment Committee recommended utilizing Money Market Funds towards purchases of Commercial Paper for the portfolio to take advantage of the higher yields in the equities market. Year to date earnings through December 31, 2020, was 0.28%. The investment earnings target is 1.50% for the 2021 calendar year.

FISCAL IMPACT

The reserve fund earnings for the quarter ended December 31, 2020, are \$5,024.

PREVIOUS BOARD ACTION

12/16/2011 Approved an investment policy of 92% Federal Agencies and 18% Corporate Notes as authorized per NRS 355.170.

The RTC Board has since acknowledged receipt of the Investment Committee reports on a quarterly basis, beginning in June 2012.

ATTACHMENT:

A. December 2020 Fourth Quarter Investment Report



WASHOE COUNTY RTC

Investment Performance Review For the Quarter Ended December 31, 2020

Client Management Team

Monique Spyke, Managing Director
Robert Cheddar, CFA, Managing Director

50 California Street, Suite 2300
San Francisco, CA 94111
415-982-5544

PFM Asset Management LLC

213 Market Street
Harrisburg, PA 17101-2141
717-232-2723

Market Update

Markets Weigh Massive Policy Support Against Economic Challenges

◆ Coronavirus

- **Resurgence** in fourth quarter due to colder weather
- Initial distribution of **vaccines**

◆ Economy

- **Recovery** continues
- **Big business** built liquidity cushion
- **Consumers** generally in good shape to drive future spending
- **Impact of pandemic** not felt evenly

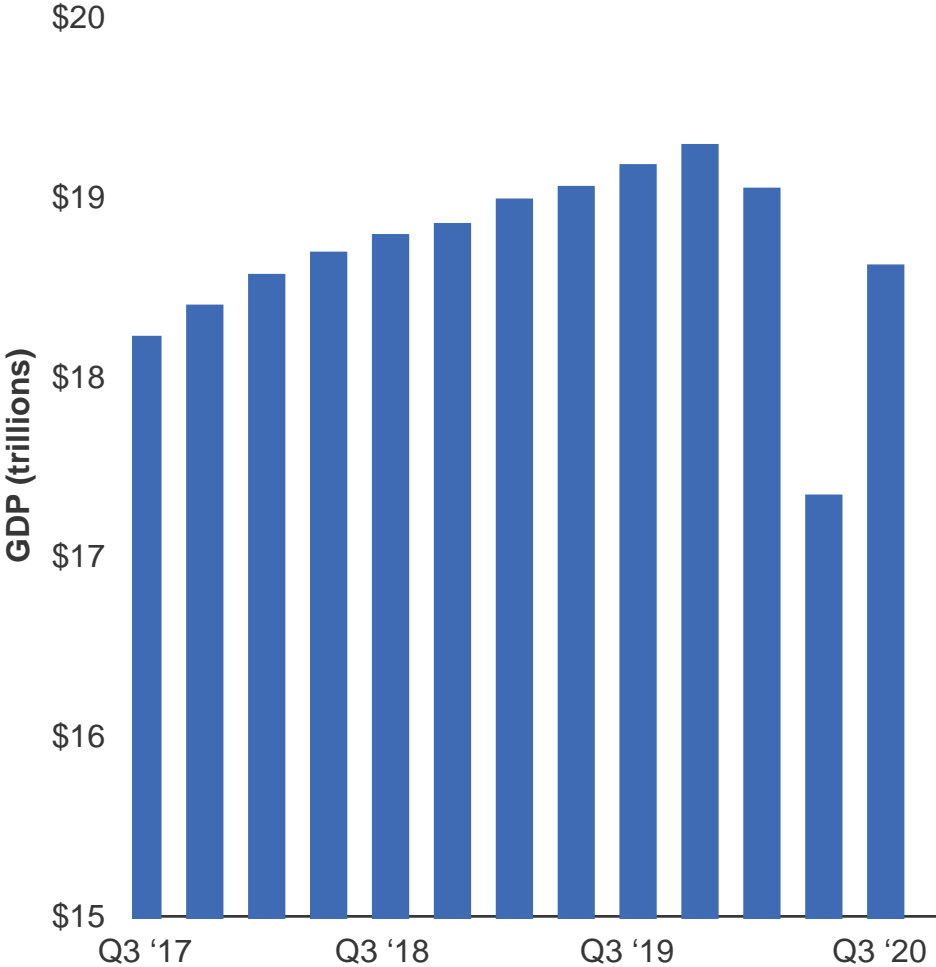
◆ Markets

- Markets rally after **presidential election**
- **Fed** committed to strong accommodation
- Additional **fiscal stimulus** on the way

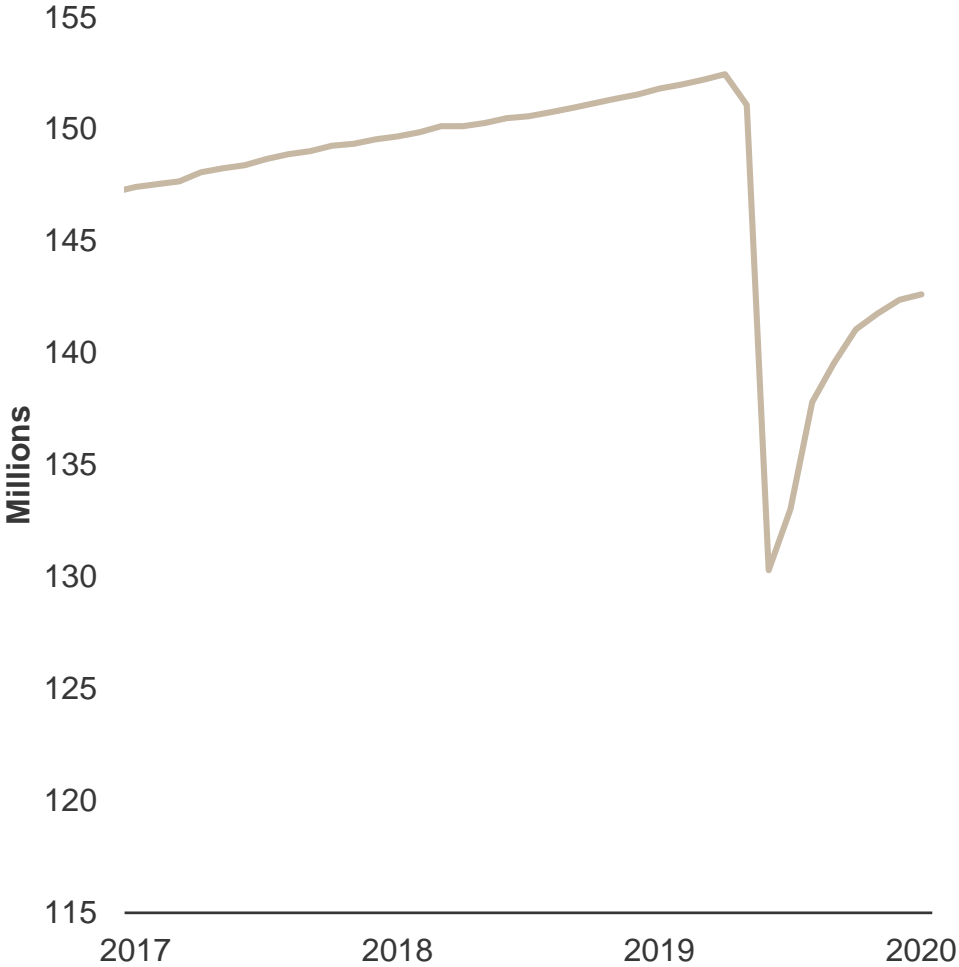


Economy Still Has a Long Road Ahead to Full Recovery

U.S. Real GDP



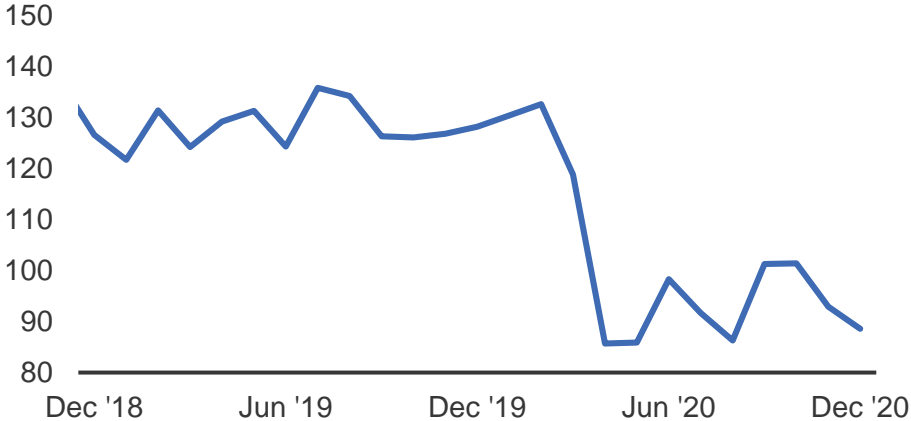
Total U.S. Employment



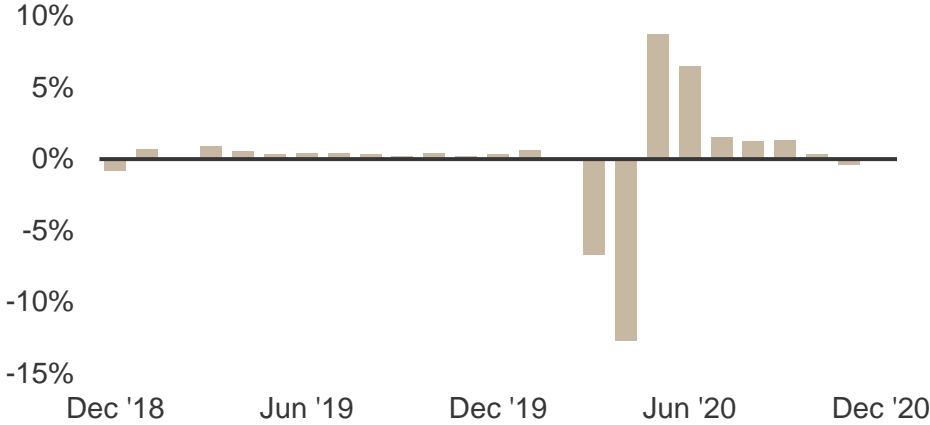
Source: Bloomberg, latest available data as of 12/31/2020. Total U.S. Employment is total non-farm payrolls.

Uptick in COVID-19 Cases Slows Economic Recovery

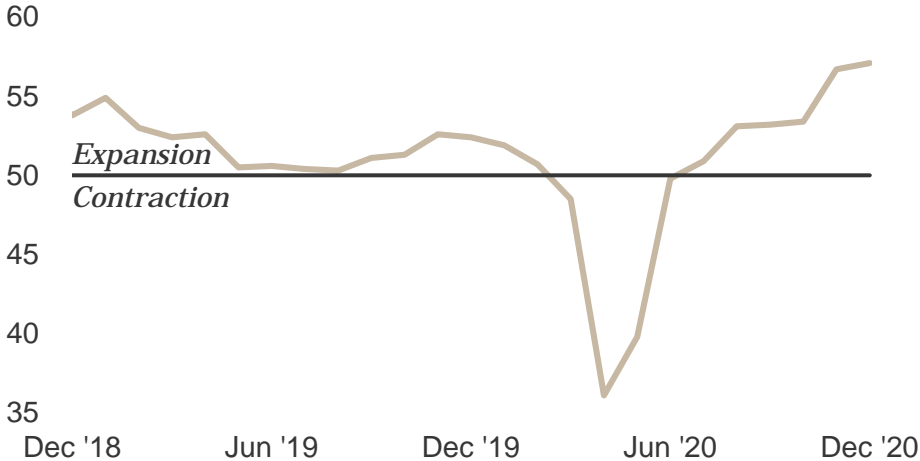
Conference Board Consumer Confidence



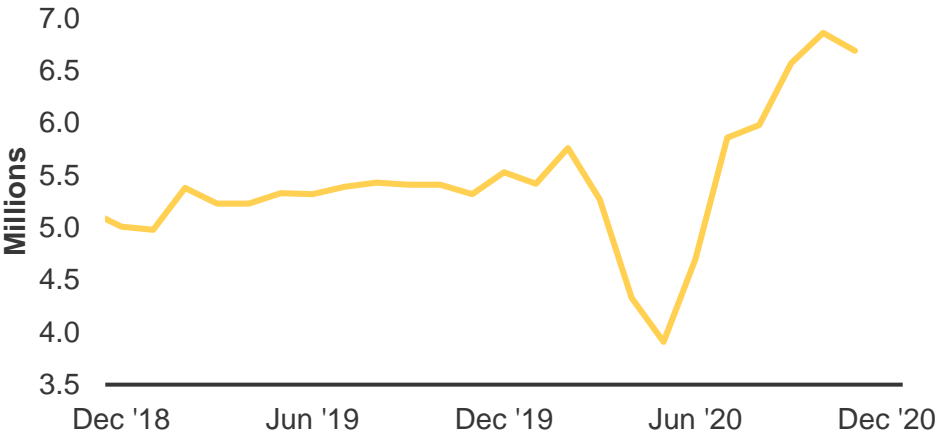
Personal Spending (MoM%)



Manufacturing Markit PMI



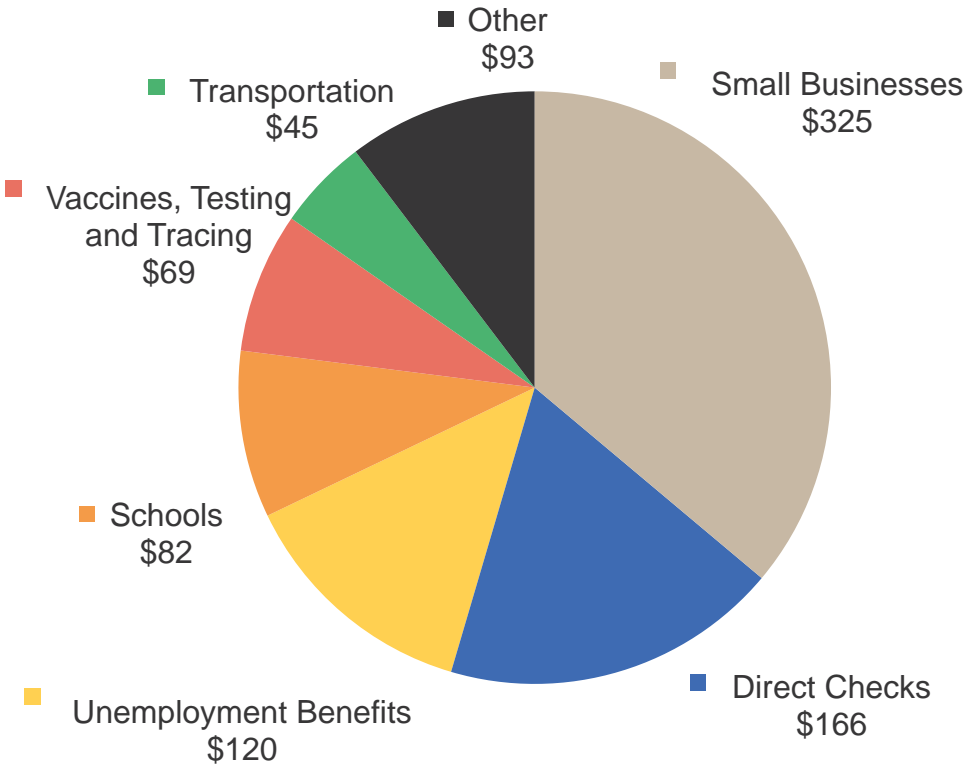
Existing Home Sales (SAAR)



Source: Bloomberg and FRED, latest available data as of 12/31/2020. SAAR is Seasonally Adjusted Annual Rate.

Congress Passes a New \$900 Billion Pandemic Relief Package

New Emergency Relief Package, in billions



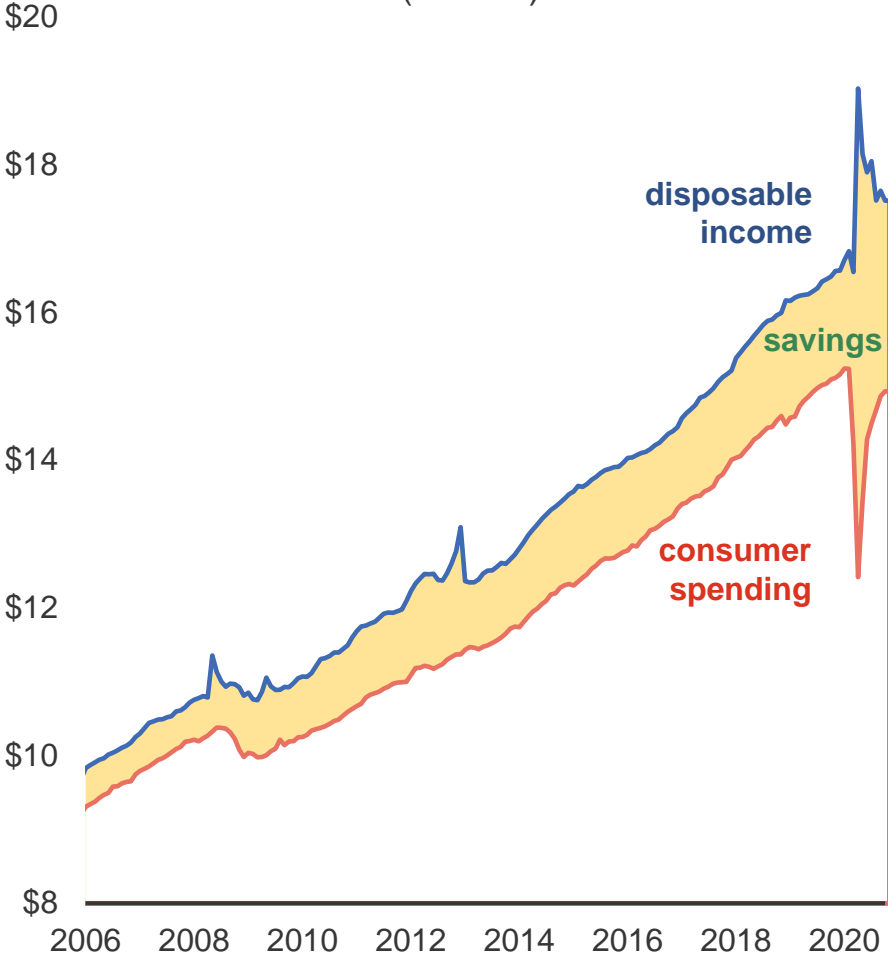
Other Ongoing Economic Support Measures

- Federal Reserve’s near-zero interest rate target
- Federal Reserve’s asset purchase programs and backstop of multiple asset classes
- CARES Act and Pandemic Unemployment Assistance programs
- Reduced bank reserve requirements, allowing looser financial conditions

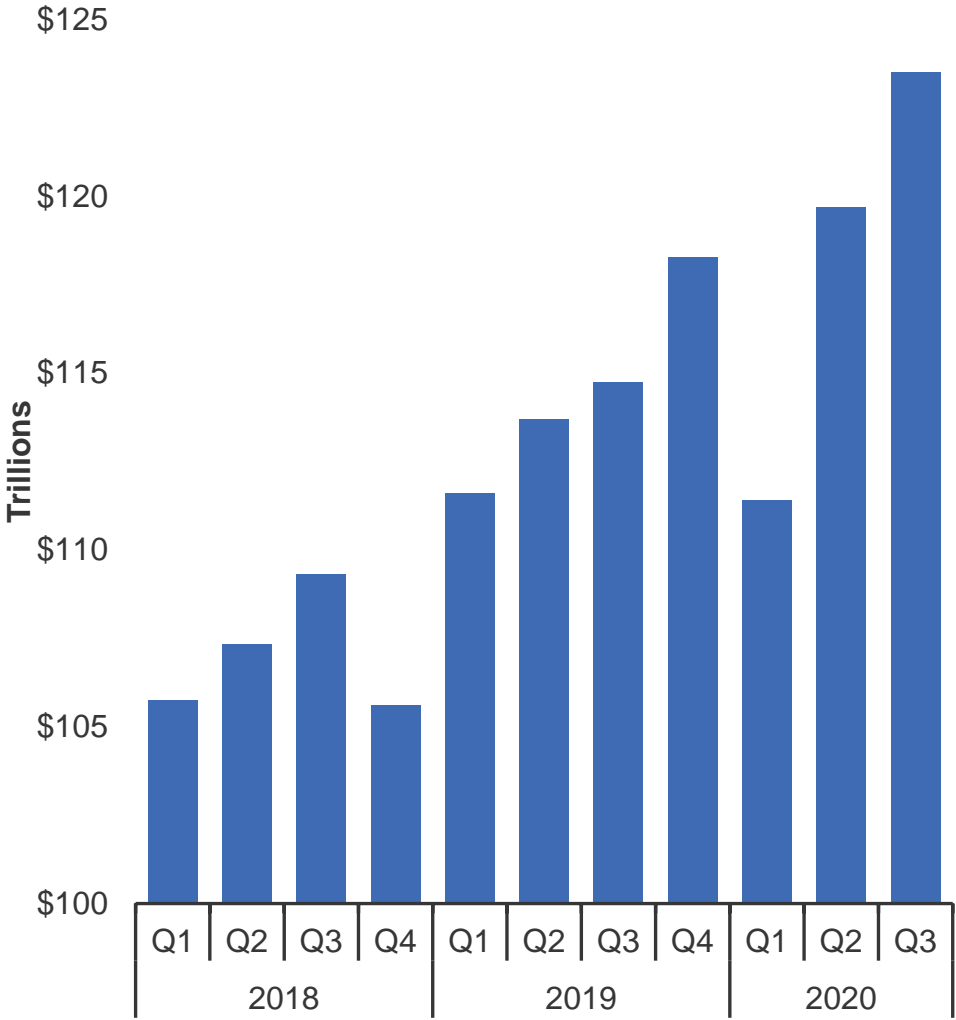
Source: WSJ and Congressional aides, most recent data as of 12/31/2020. “Other” includes support for small banks that serve low-income and minority communities, childcare and broadband services, among other categories.

Accumulated Savings and Wealth Are Likely to Fuel Consumer Spending

Personal Savings in U.S. (trillions)



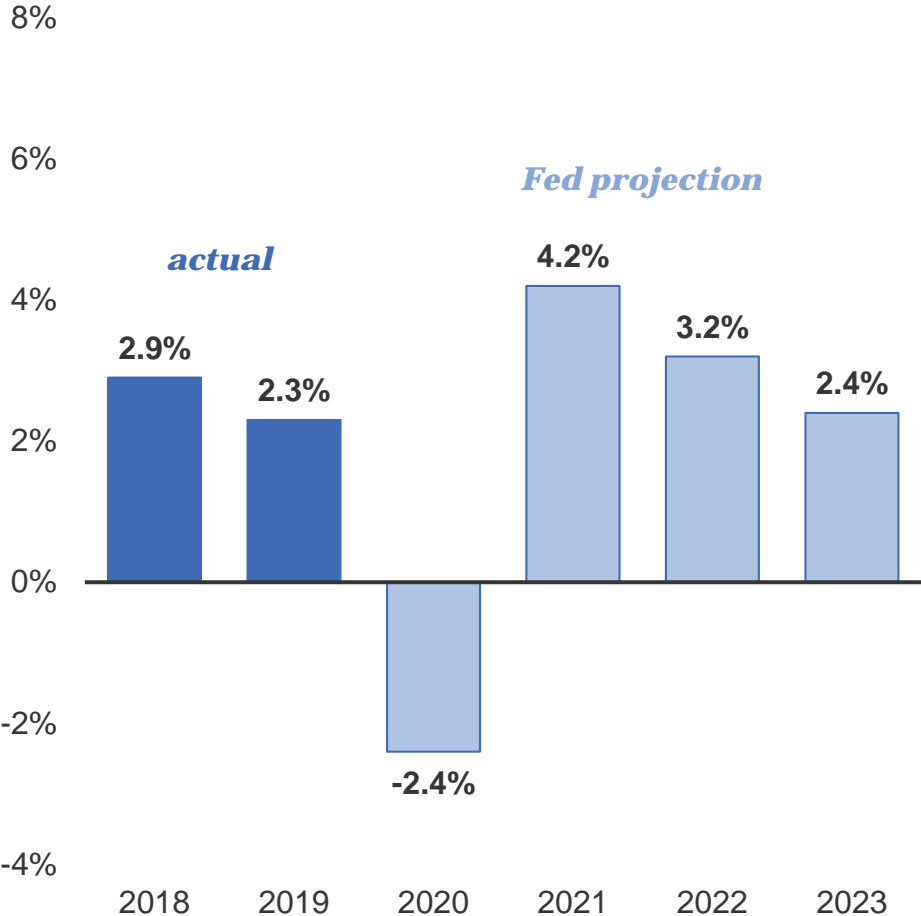
Household Net Worth



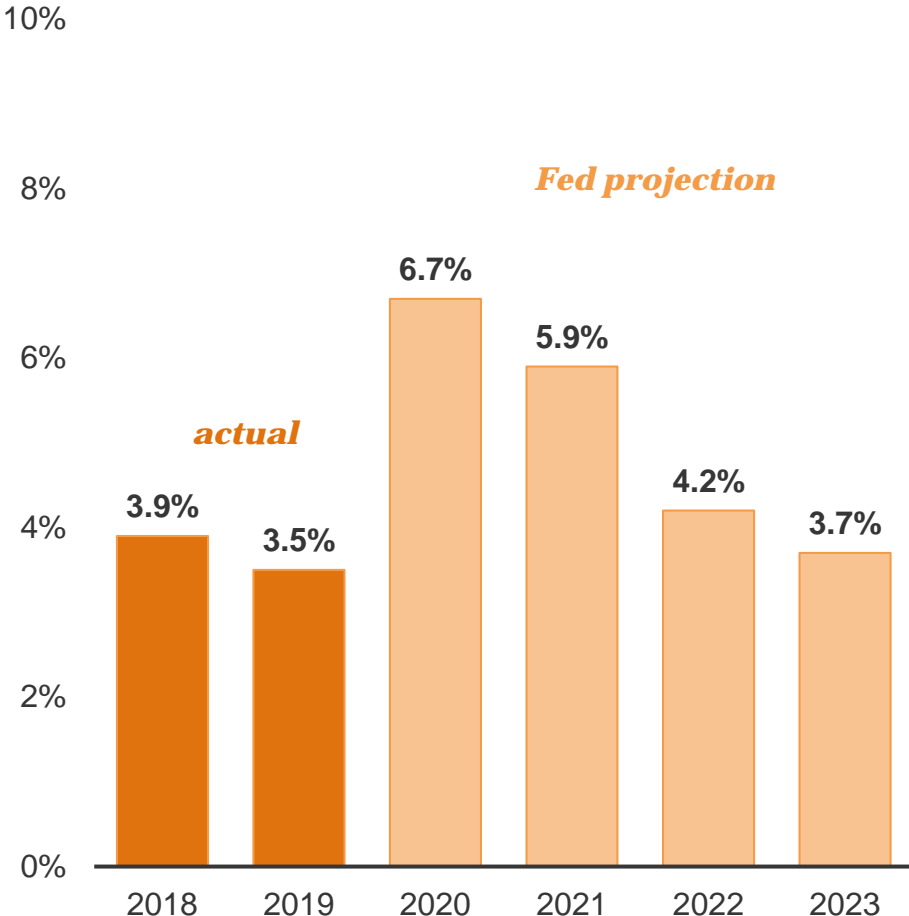
Source (left): Federal Reserve, as of December 2020. Sources (right): U.S. Bureau of Economic Analysis and FRED.

Fed Expects Economy to Recover Further in 2021

Change in Real GDP



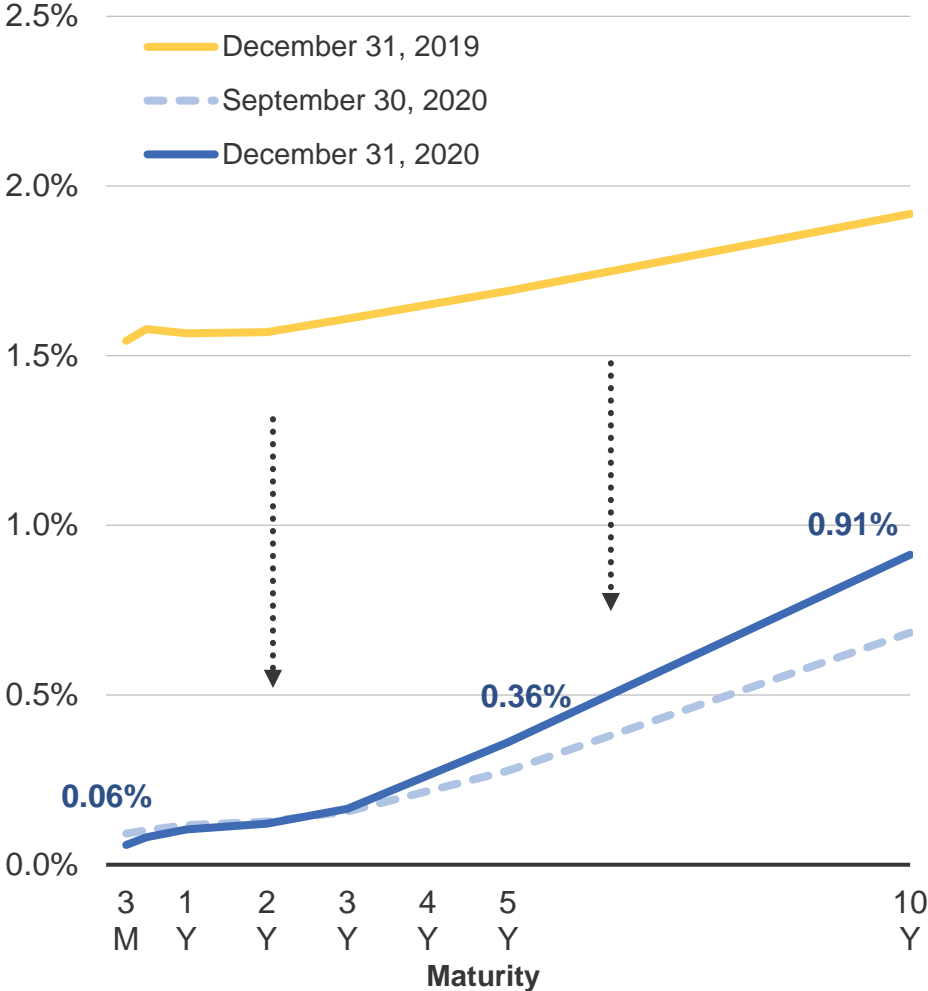
Unemployment Rate



Source: Federal Reserve, economic projections as of December 2020.

Short Rates Were Steady, but the Yield Curve Steepened in Fourth Quarter

U.S. Treasury Yield Curve



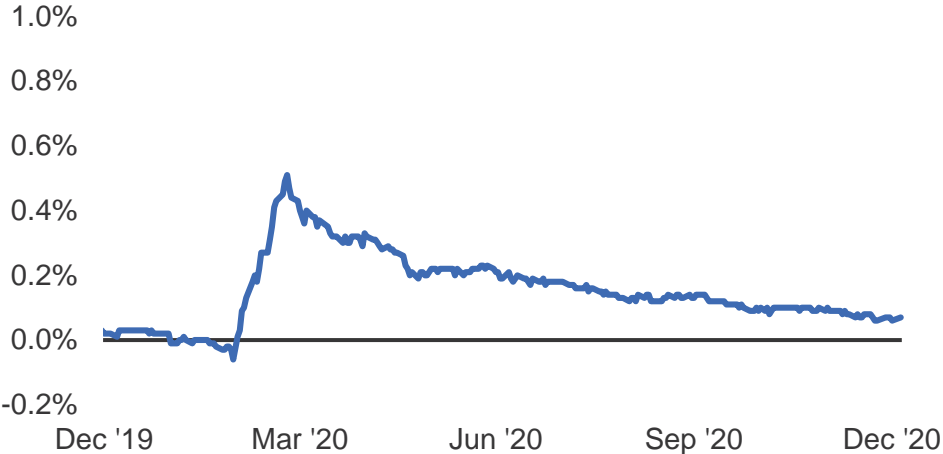
3-Year Treasury Yield



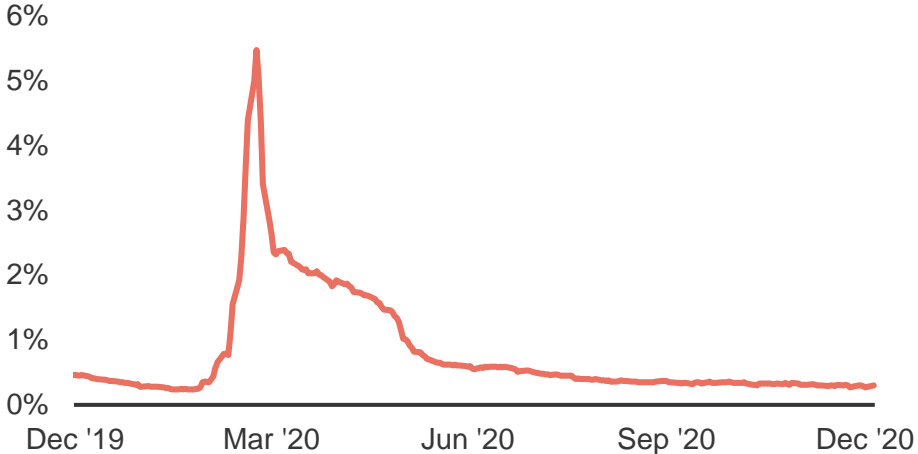
Source: Bloomberg as of 12/31/2020.

Yield Spread Narrowing Continued During Fourth Quarter

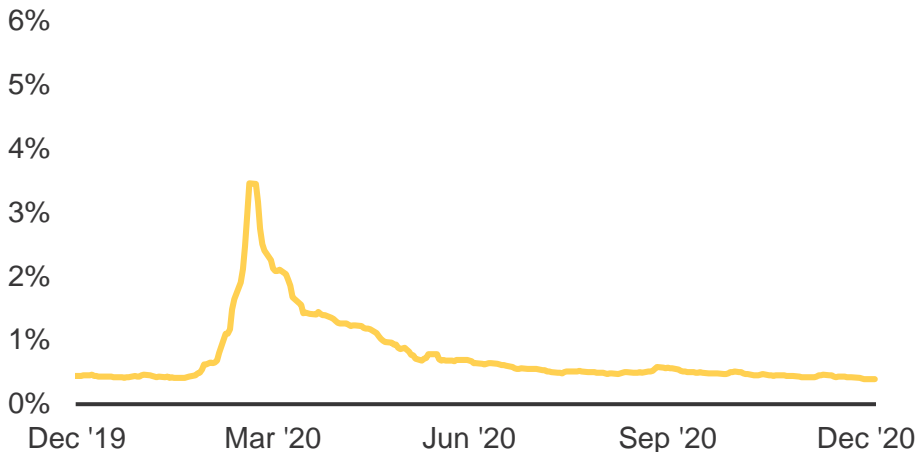
Federal Agency Yield Spreads



Asset-Backed Securities Yield Spreads



Corporate Notes A-AAA Yield Spreads



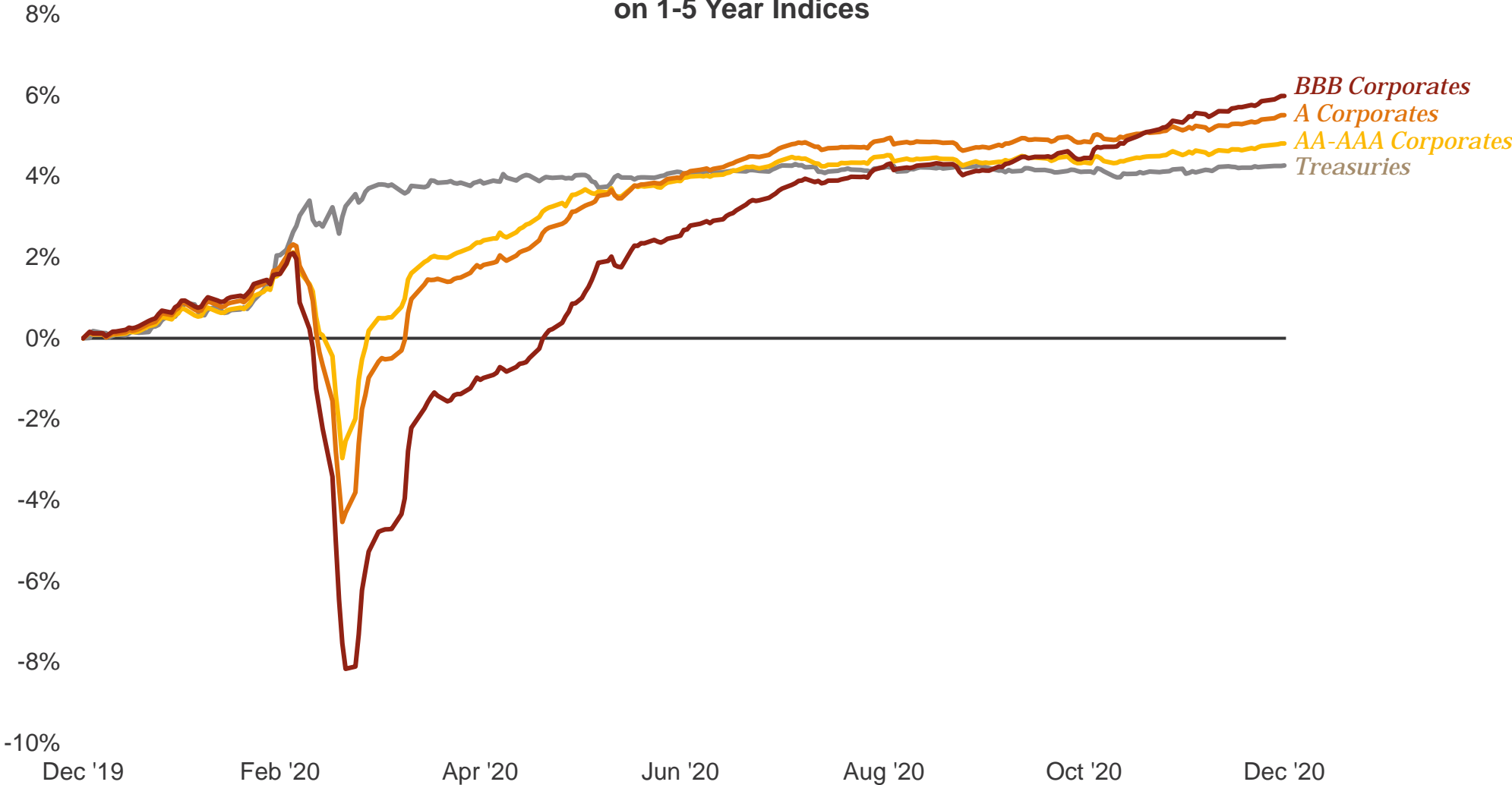
Corporate High Yield Spread



Source: ICE BofAML 1-5 year Indices via Bloomberg, MarketAxess and PFM as of 12/31/2020. Spreads on ABS and MBS are option-adjusted spreads of 0-5 year indices based on weighted average life; spreads on agencies are relative to comparable maturity Treasuries. CMBS is Commercial Mortgage-Backed Securities.

After Big Decline in the First Quarter, Corporates Ultimately Lead Performance for 2020

2020 Year-to-Date Return on 1-5 Year Indices



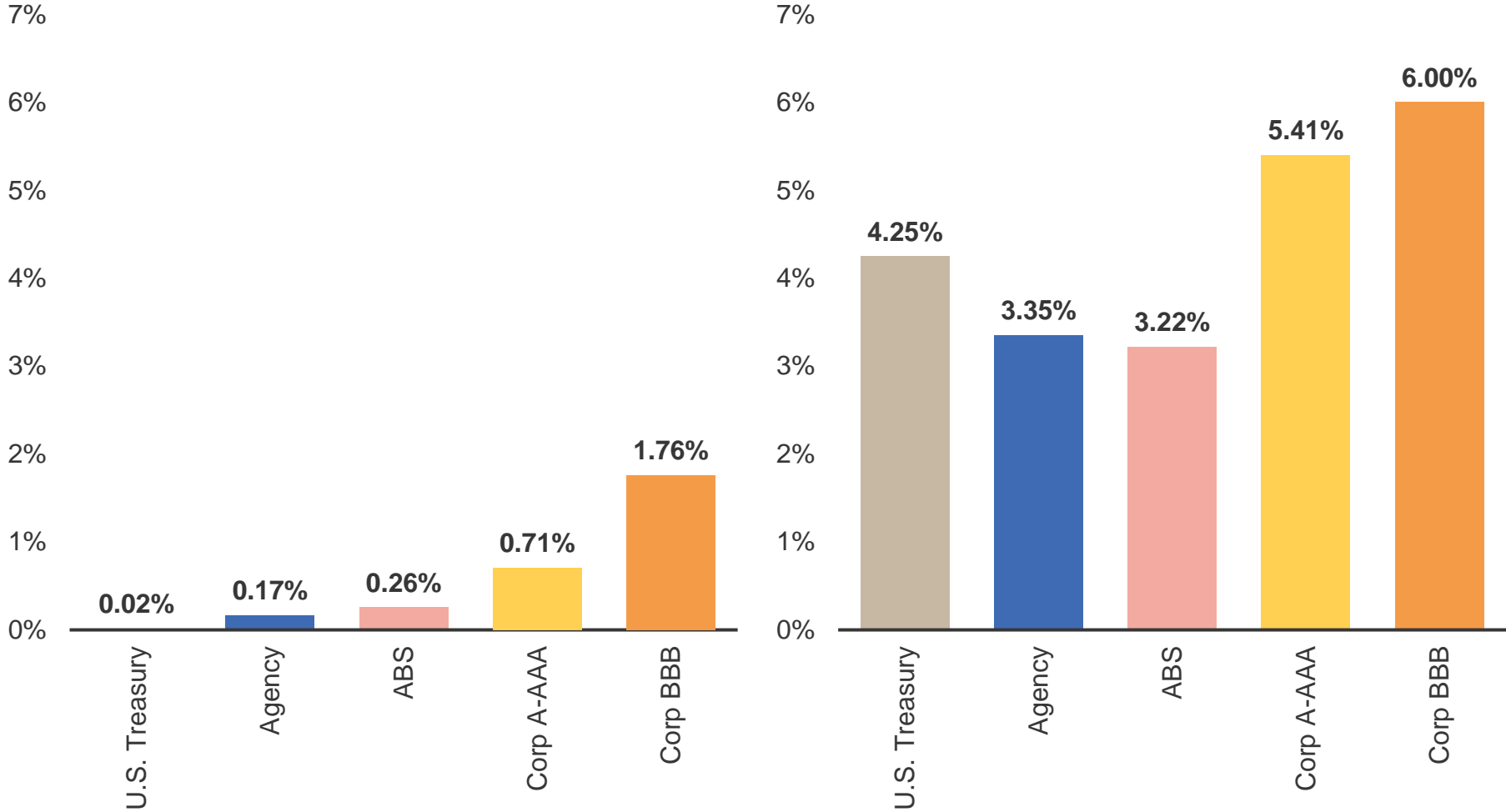
Source: ICE BofAML 1-5 Year Indices, as of 12/31/2020.

Credit Sector Continues Strong Outperformance in the Fourth Quarter

1-5 Year Indices

Fourth Quarter 2020

Full Year 2020



Source: ICE BofAML Indices. ABS indices are 0-5 year, based on weighted average life. As of 12/30/2020.

Equities Rise to Record High on Vaccine News and Passing of New Stimulus

S&P 500 Price Chart

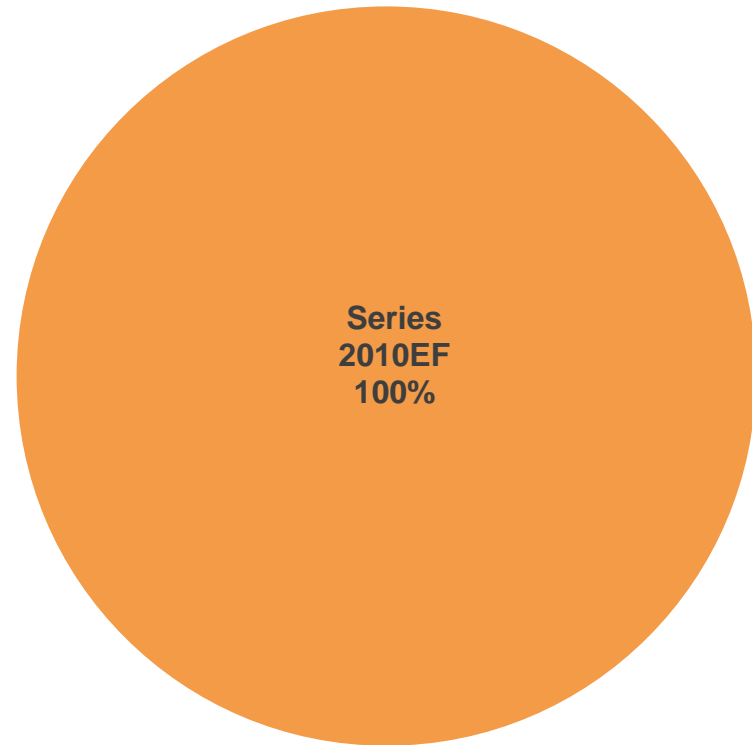


Source: Bloomberg, as of 12/31/2020.

Portfolio Review

Allocation of Bond Reserve Portfolios

| | Market Value ¹ |
|---------------|---------------------------|
| Series 2010EF | 8,118,727 |



1. Includes accrued interest and money market funds.

Sector Allocation & Compliance

- The portfolio is in compliance with the RTC's Investment Policy and Nevada Revised Statutes.

| Security Type | Market Value | % of Portfolio | % Change vs. 9/30/20 | Permitted by Policy | In Compliance |
|-----------------------------|--------------------|----------------|----------------------|---------------------|---------------|
| Federal Agency | \$6,889,609 | 84.9% | +24.6% | 100% | ✓ |
| Securities Sub-Total | \$6,889,609 | 84.9% | | | |
| Accrued Interest | \$5,024 | | | | |
| Securities Total | \$6,894,633 | | | | |
| Money Market Fund | \$1,224,094 | 15.1% | -24.6% | 100% | ✓ |
| Total Investments | \$8,118,727 | 100.0% | | | |

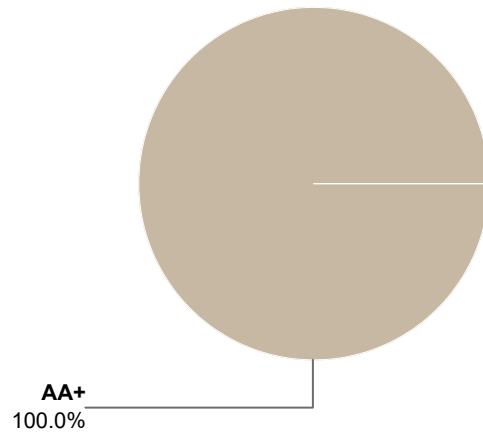
Market values, excluding accrued interest. Detail may not add to total due to rounding. Current investment policy as of December 2011.

Portfolio Statistics

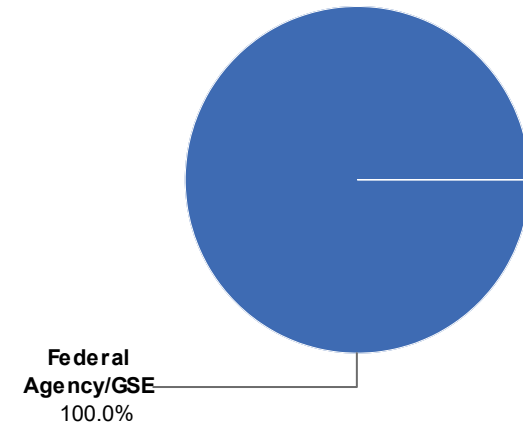
As of December 31, 2020

| | |
|-------------------------------|-------------|
| Par Value: | \$6,885,000 |
| Total Market Value: | \$8,118,727 |
| Security Market Value: | \$6,889,609 |
| Accrued Interest: | \$5,024 |
| Cash: | \$1,224,094 |
| Amortized Cost: | \$6,873,747 |
| Yield at Market: | 0.17% |
| Yield at Cost: | 0.28% |
| Effective Duration: | 2.29 Years |
| Average Maturity: | 2.30 Years |
| Average Credit: * | AA |

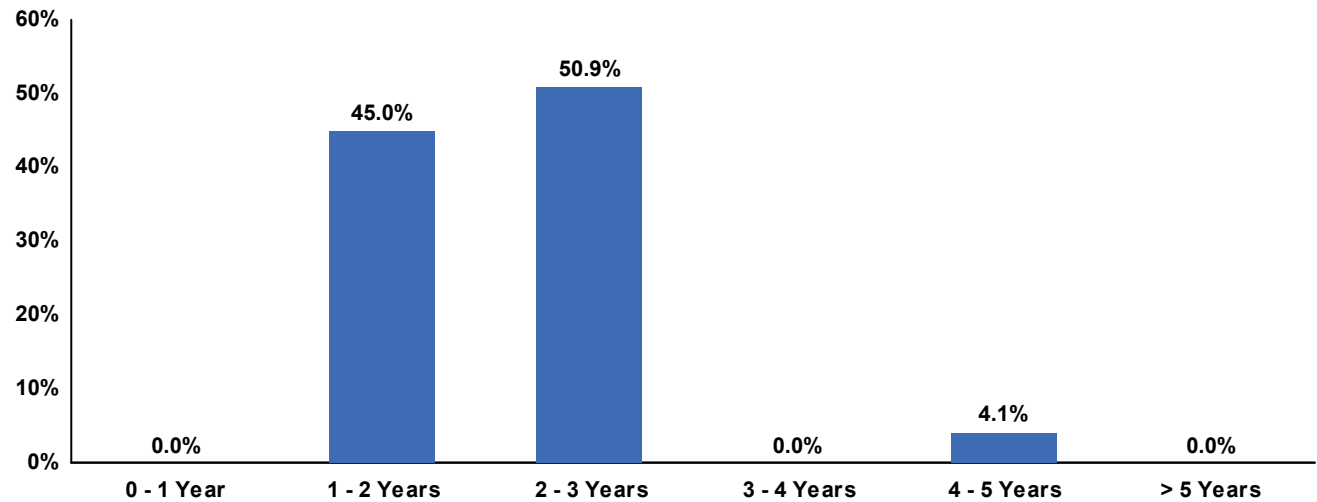
Credit Quality (S&P Ratings)



Sector Allocation



Maturity Distribution



* An average of each security's credit rating assigned a numeric value and adjusted for its relative weighting in the portfolio.

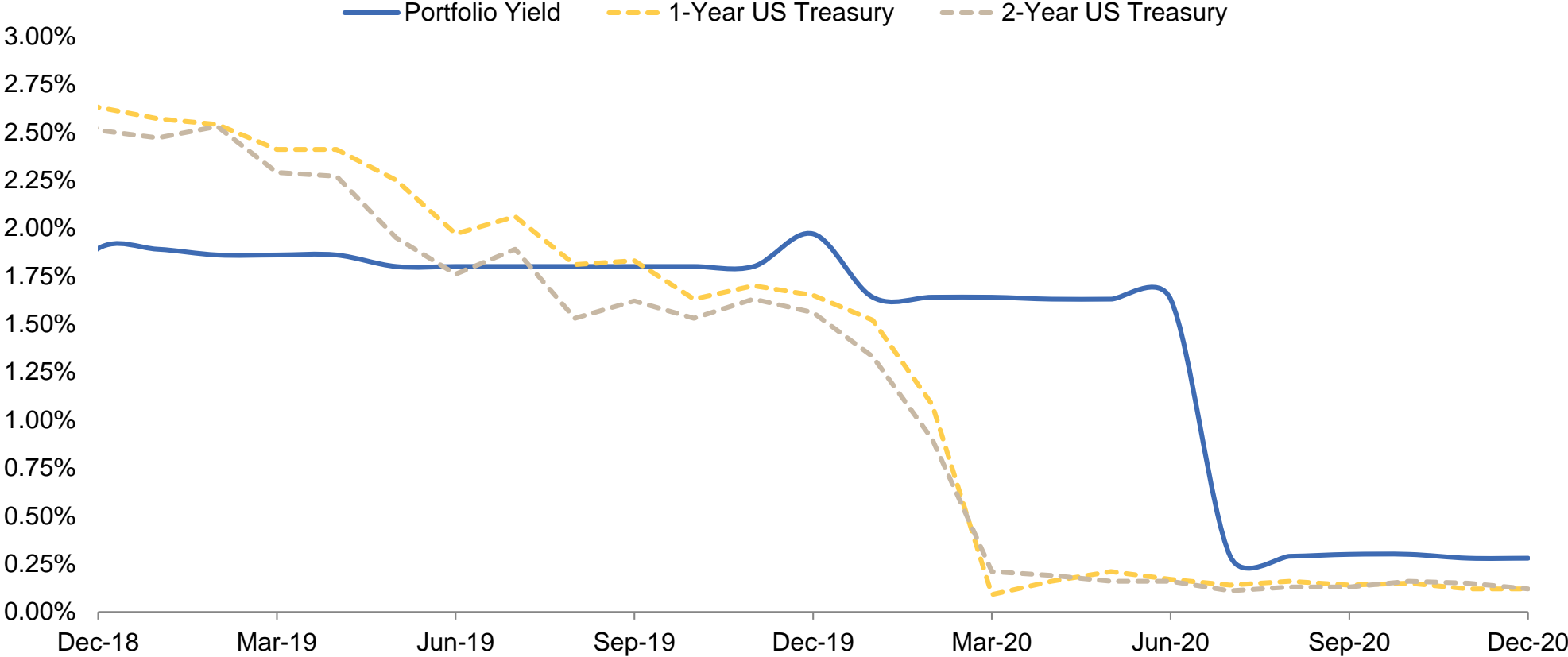
Issuer Distribution
As of December 31, 2020

| Issuer | Market Value (\$) | % of Portfolio |
|---------------------------|-------------------|----------------|
| FANNIE MAE | 2,504,545 | 36.4% |
| FREDDIE MAC | 2,385,538 | 34.6% |
| FEDERAL FARM CREDIT BANKS | 1,999,526 | 29.0% |
| Grand Total: | 6,889,609 | 100.0% |

Portfolio Yield

- ◆ The yield to maturity at cost on the aggregate portfolio was 0.28% as of December 31, 2020.
 - The average portfolio yield was 0.96% over the last trailing twelve months (1/1/20 – 12/31/20) compared to the average yield of 1.84% during the prior year’s trailing twelve months (1/1/19 – 12/31/19).

Washoe County RTC Aggregate Portfolio vs. U.S. Treasury Month End Yields December 2018 – December 2020



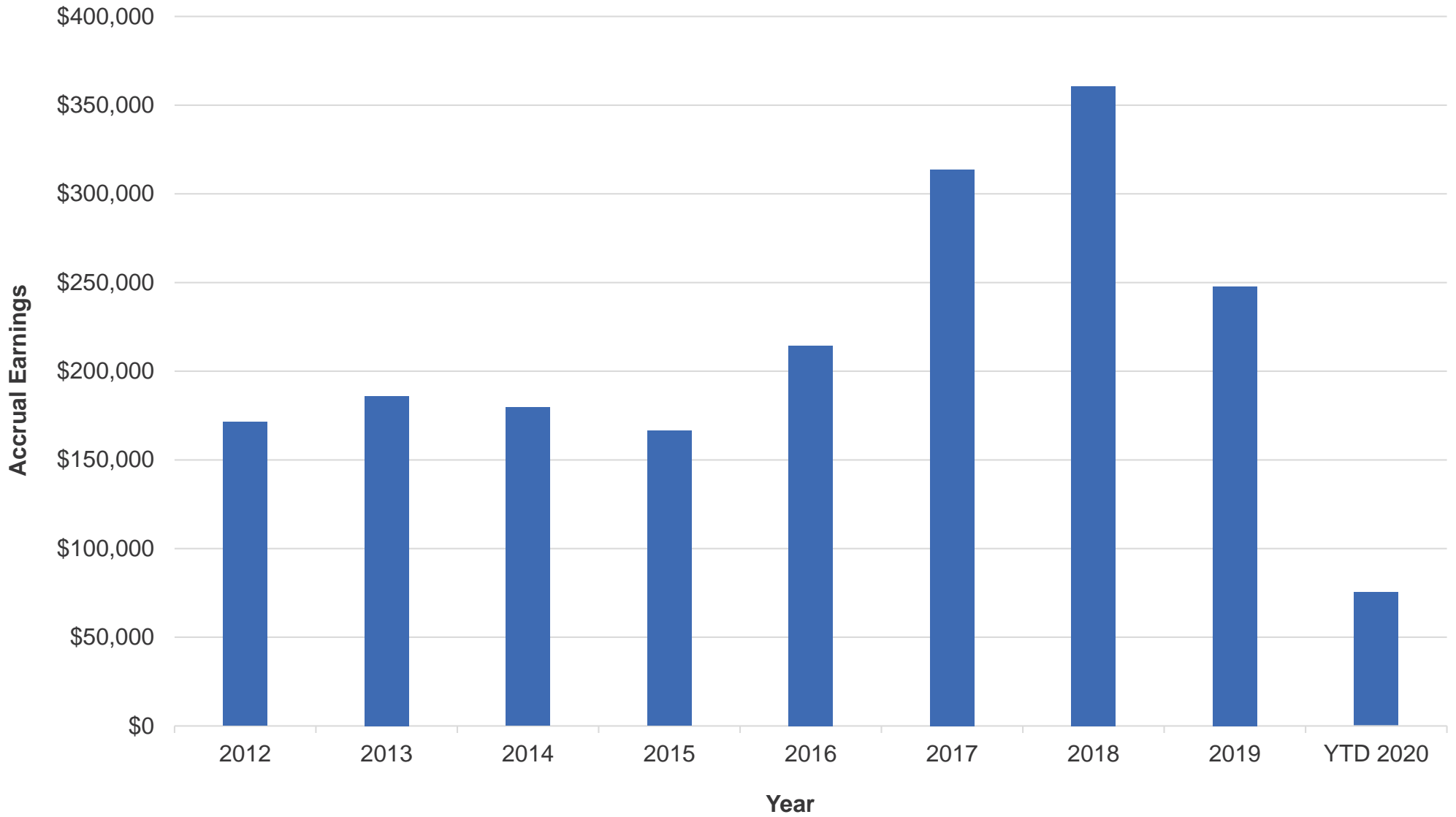
Source: Bloomberg.

Portfolio Earnings

Quarter-Ended December 31, 2020

| | Market Value Basis | Accrual (Amortized Cost) Basis |
|-------------------------------------|---------------------------|---------------------------------------|
| Beginning Value (09/30/2020) | \$4,885,827.94 | \$4,876,527.61 |
| Net Purchases/Sales | \$1,996,180.00 | \$1,996,180.00 |
| Change in Value | \$7,601.02 | \$1,039.63 |
| Ending Value (12/31/2020) | \$6,889,608.96 | \$6,873,747.24 |
| Interest Earned | \$3,110.36 | \$3,110.36 |
| Portfolio Earnings | \$10,711.38 | \$4,149.99 |

Accrual Earnings by Year



Investment Strategy Outlook

- ◆ As 2020 ends, the uncertainties of 2021 now come into focus. Significant central bank intervention is expected to continue, and we expect interest rates will remain low for the foreseeable future. The speed of vaccine rollouts will ultimately drive the pace of the anticipated “return to normalcy.” Considering the economic uncertainties that remain, we plan on maintaining the portfolio’s neutral duration position relative to the benchmark.
- ◆ Our outlook for major investment-grade sectors includes the following:
 - Agencies: Strong demand for agency bonds has pushed incremental yield spreads in basis points down to single digits. While the portfolio currently includes larger allocations relative to prior years when spreads were consistently tighter to similar-duration treasuries, holdings for 2021 will be more strategic--reduced holdings of shorter maturities where spreads may be narrower while continuing to participate in attractive longer new issues.

*Holdings &
Transactions*

Quarterly Portfolio Transactions

| Trade Date | Settle Date | Par (\$) | CUSIP | Security Description | Coupon | Maturity Date | Transact Amt (\$) | Yield at Market | Realized G/L (BV) |
|-----------------------|-------------|------------------|-----------|----------------------|--------|---------------|---------------------|-----------------|-------------------|
| BUY | | | | | | | | | |
| 11/16/20 | 11/23/20 | 2,000,000 | 3133EMGX4 | FFCB NOTES | 0.12% | 11/23/22 | 1,996,180.00 | 0.22% | |
| Total BUY | | 2,000,000 | | | | | 1,996,180.00 | | |
| INTEREST | | | | | | | | | |
| 10/1/20 | 10/1/20 | 0 | MONEY0002 | MONEY MARKET FUND | | | 16.96 | | |
| 11/2/20 | 11/2/20 | 0 | MONEY0002 | MONEY MARKET FUND | | | 16.42 | | |
| 12/1/20 | 12/1/20 | 0 | MONEY0002 | MONEY MARKET FUND | | | 13.22 | | |
| 12/29/20 | 12/29/20 | 0 | MONEY0002 | MONEY MARKET FUND | | | 1.43 | | |
| Total INTEREST | | 0 | | | | | 48.03 | | |

Managed Account Detail of Securities Held

| Security Type/Description Dated Date/Coupon/Maturity | CUSIP | Par | S&P Rating | Moody's Rating | Trade Date | Settle Date | Original Cost | YTM at Cost | Accrued Interest | Amortized Cost | Market Value |
|---|-----------|-----------------------|---------------|-------------------|---------------|----------------|-----------------------|----------------|---------------------|-----------------------|-----------------------|
| Federal Agency Bond / Note | | | | | | | | | | | |
| FREDDIE MAC NOTES DTD 07/23/2020 0.125% 07/25/2022 | 3137EAET2 | 295,000.00 | AA+ | Aaa | 7/22/2020 | 7/23/2020 | 294,420.92 | 0.22 | 161.84 | 294,549.08 | 294,908.25 |
| FREDDIE MAC NOTES DTD 07/23/2020 0.125% 07/25/2022 | 3137EAET2 | 805,000.00 | AA+ | Aaa | 7/21/2020 | 7/23/2020 | 803,180.70 | 0.24 | 441.63 | 803,583.33 | 804,749.65 |
| FFCB NOTES DTD 11/23/2020 0.125% 11/23/2022 | 3133EMGX4 | 2,000,000.00 | AA+ | Aaa | 11/16/2020 | 11/23/2020 | 1,996,180.00 | 0.22 | 263.89 | 1,996,384.08 | 1,999,526.00 |
| FANNIE MAE NOTES DTD 07/10/2020 0.250% 07/10/2023 | 3135G05G4 | 2,500,000.00 | AA+ | Aaa | 7/9/2020 | 7/10/2020 | 2,495,350.00 | 0.31 | 2,968.75 | 2,496,093.15 | 2,504,545.00 |
| FREDDIE MAC NOTES DTD 08/21/2020 0.250% 08/24/2023 | 3137EAEV7 | 1,000,000.00 | AA+ | Aaa | 8/25/2020 | 8/26/2020 | 998,810.00 | 0.29 | 902.77 | 998,949.36 | 1,001,643.00 |
| FREDDIE MAC NOTES DTD 09/25/2020 0.375% 09/23/2025 | 3137EAEX3 | 285,000.00 | AA+ | Aaa | 9/23/2020 | 9/25/2020 | 284,142.15 | 0.44 | 285.00 | 284,188.24 | 284,237.06 |
| Security Type Sub-Total | | 6,885,000.00 | | | | | 6,872,083.77 | 0.28 | 5,023.88 | 6,873,747.24 | 6,889,608.96 |
| Managed Account Sub Total | | 6,885,000.00 | | | | | 6,872,083.77 | 0.28 | 5,023.88 | 6,873,747.24 | 6,889,608.96 |
| Securities Sub-Total | | \$6,885,000.00 | | | | | \$6,872,083.77 | 0.28% | \$5,023.88 | \$6,873,747.24 | \$6,889,608.96 |
| Accrued Interest | | | | | | | | | | | \$5,023.88 |
| Total Investments | | | | | | | | | | | \$6,894,632.84 |

Bolded items are forward settling trades.

IMPORTANT DISCLOSURES

This material is based on information obtained from sources generally believed to be reliable and available to the public; however, PFM Asset Management LLC cannot guarantee its accuracy, completeness or suitability. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation. All statements as to what will or may happen under certain circumstances are based on assumptions, some, but not all of which, are noted in the presentation. Assumptions may or may not be proven correct as actual events occur, and results may depend on events outside of your or our control. Changes in assumptions may have a material effect on results. Past performance does not necessarily reflect and is not a guaranty of future results. The information contained in this presentation is not an offer to purchase or sell any securities.

- Market values that include accrued interest are derived from closing bid prices as of the last business day of the month as supplied by Refinitiv, Bloomberg, or Telerate. Where prices are not available from generally recognized sources, the securities are priced using a yield based matrix system to arrive at an estimated market value.
- In accordance with generally accepted accounting principles, information is presented on a trade date basis; forward settling purchases are included in the monthly balances, and forward settling sales are excluded.
- Performance is presented in accordance with the CFA Institute's Global Investment Performance Standards (GIPS). Unless otherwise noted, performance is shown gross of fees. Quarterly returns are presented on an unannualized basis. Returns for periods greater than one year are presented on an annualized basis. Past performance is not indicative of future returns.
- Bank of America/Merrill Lynch Indices provided by Bloomberg Financial Markets.
- Money market fund/cash balances are included in performance and duration computations.
- Standard & Poor's is the source of the credit ratings. Distribution of credit rating is exclusive of money market fund/LGIP holdings.
- Callable securities in the portfolio are included in the maturity distribution analysis to their stated maturity date, although, they may be called prior to maturity.
- MBS maturities are represented by expected average life.

GLOSSARY

- **ACCRUED INTEREST:** Interest that is due on a bond or other fixed income security since the last interest payment was made.
- **AGENCIES:** Federal agency securities and/or Government-sponsored enterprises.
- **AMORTIZED COST:** The original cost of the principal of the security is adjusted for the amount of the periodic reduction of any discount or premium from the purchase date until the date of the report. Discount or premium with respect to short-term securities (those with less than one year to maturity at time of issuance) is amortized on a straight line basis. Such discount or premium with respect to longer-term securities is amortized using the constant yield basis.
- **BANKERS' ACCEPTANCE:** A draft or bill of exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill as well as the insurer.
- **COMMERCIAL PAPER:** An unsecured obligation issued by a corporation or bank to finance its short-term credit needs, such as accounts receivable and inventory.
- **CONTRIBUTION TO DURATION:** Represents each sector or maturity range's relative contribution to the overall duration of the portfolio measured as a percentage weighting. Since duration is a key measure of interest rate sensitivity, the contribution to duration measures the relative amount or contribution of that sector or maturity range to the total rate sensitivity of the portfolio.
- **EFFECTIVE DURATION:** A measure of the sensitivity of a security's price to a change in interest rates, stated in years.
- **EFFECTIVE YIELD:** The total yield an investor receives in relation to the nominal yield or coupon of a bond. Effective yield takes into account the power of compounding on investment returns, while nominal yield does not.
- **FDIC:** Federal Deposit Insurance Corporation. A federal agency that insures bank deposits to a specified amount.
- **INTEREST RATE:** Interest per year divided by principal amount and expressed as a percentage.
- **MARKET VALUE:** The value that would be received or paid for an investment in an orderly transaction between market participants at the measurement date.
- **MATURITY:** The date upon which the principal or stated value of an investment becomes due and payable.
- **NEGOTIABLE CERTIFICATES OF DEPOSIT:** A CD with a very large denomination, usually \$1 million or more, that can be traded in secondary markets.
- **PAR VALUE:** The nominal dollar face amount of a security.
- **PASS THROUGH SECURITY:** A security representing pooled debt obligations that passes income from debtors to its shareholders. The most common type is the mortgage-backed security.

GLOSSARY

- **REPURCHASE AGREEMENTS:** A holder of securities sells these securities to an investor with an agreement to repurchase them at a fixed price on a fixed date.
- **SETTLE DATE:** The date on which the transaction is settled and monies/securities are exchanged. If the settle date of the transaction (i.e., coupon payments and maturity proceeds) occurs on a non-business day, the funds are exchanged on the next business day.
- **TRADE DATE:** The date on which the transaction occurred; however, the final consummation of the security transaction and payment has not yet taken place.
- **UNSETTLED TRADE:** A trade which has been executed; however, the final consummation of the security transaction and payment has not yet taken place.
- **U.S. TREASURY:** The department of the U.S. government that issues Treasury securities.
- **YIELD:** The rate of return based on the current market value, the annual interest receipts, maturity value, and the time period remaining until maturity, stated as a percentage on an annualized basis.
- **YTM AT COST:** The yield to maturity at cost is the expected rate of return based on the original cost, the annual interest receipts, maturity value, and the time period from purchase date to maturity, stated as a percentage on an annualized basis.
- **YTM AT MARKET:** The yield to maturity at market is the rate of return based on the current market value, the annual interest receipts, maturity value, and the time period remaining until maturity, stated as a percentage on an annualized basis.



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 4.11

From: Bill Thomas, AICP, Executive Director

RECOMMENDED ACTION

Approve the new Regional Transportation Commission (RTC) Management Policy #63, Real Property Disposition.

BACKGROUND AND DISCUSSION

This agenda item establishes a formal management policy to provide authorities and responsibilities for the disposition of RTC-owned real property. The policy is intended to provide staff with uniform guidelines and procedures for real property disposition. A formal policy is needed to ensure property transactions comply with all applicable state and federal requirements, as well as ensure the proper use of RTC resources in providing good stewardship over public funds.

If the Board approves this policy, staff will formally implement procedures for the disposal of unneeded RTC-owned real property. The goals of any property disposition under this policy are to:

- Eliminate unnecessary operations and maintenance costs;
- Encourage the development and use of property;
- Strengthen the tax base by placing property on the tax rolls; AND
- Dispose of property using a predictable, timely, and transparent process.

In line with current practices, Board approval of property disposition agreements must occur prior to any execution.

FISCAL IMPACT

There is no additional cost in connection with this agenda item.

PREVIOUS BOARD ACTION

There has been no previous Board action or direction on this matter.

ATTACHMENT:

A. Draft Policy - Property Disposition

MANAGEMENT POLICY

SUBJECT: REAL PROPERTY DISPOSITION

I. PURPOSE

It is the policy of the Regional Transportation Commission (RTC) to provide authorities and responsibilities for the disposition of real property. In carrying out a disposition of real property, RTC will comply with all applicable state and federal requirements. In the event of a conflict between this policy and state or federal requirements, RTC will comply with the state and federal requirements. This policy does not apply to:

- Transfers of right-of-way to Washoe County, the City of Reno, or the City of Sparks upon completion of an RTC project;
- Facility and property use agreements with governmental agencies for the temporary use of RTC property, excluding leases; OR
- Revocable licenses.

II. SCOPE

Public

X Board Members

X RTC Officers

X RTC Employees

Other: _____

III. DEFINITIONS

- A. Disposition - The sale, exchange, lease, conveyance, or other means of disposing of rights, interests, or title to real property.
- B. Real property - Land, buildings, structures, fixtures, and improvements on land.

IV. POLICY

A. Legal Framework

1. RTC will complete dispositions of real property in accordance with Nevada Revised Statutes (NRS) chapters 37, 241, 277, 277A, and Article I - Section 22 of the Nevada Constitution, as applicable, and any other applicable state laws and regulations. Dispositions of real property purchased in whole, or in part, with federal funding must comply with applicable federal laws and regulations.
2. If no portion of a parcel acquired by eminent domain is used for the project or other public use for which it was acquired, RTC will offer the parcel back to the person from whom it was acquired if required by NRS 37.270 and Article I - Section 22 of the Nevada Constitution.

B. Real Property Dispositions

1. Objectives: RTC shall dispose of real property no longer needed to construct RTC projects, operate the transit system, or otherwise fulfill the statutorily authorized purposes of RTC. The goals are to:
 - a. Eliminate unnecessary operations and maintenance costs;
 - b. Encourage the development and use of property;
 - c. Strengthen the tax base by placing property on the tax rolls; AND
 - d. Dispose of property using a predictable, timely, and transparent process.
2. Eligible Costs: RTC may pay reasonable costs associated with the disposition of real property. In the case of real property acquired by eminent domain or under the threat of eminent domain, any conveyance must be quitclaim in nature, and RTC shall not warrant title, furnish title insurance or pay the tax on the transfer of real property. NRS 277A.255.
3. Procedures: The Executive Director shall develop procedures for the disposition options available under state and federal laws and regulations.

- C. Disposition Approval: The Executive Director shall analyze the relevant characteristics of the real property and potential uses and develop a recommendation as to which disposition options are available and in the best interests of RTC. The Board must approve the disposition before RTC commences with the disposition.

- D. Routing and Review: Agreements for the disposition of real property must be developed and reviewed pursuant to procedures adopted by the Executive Director.
- E. Agreement Approval:
 - 1. Sales: The Executive Director is authorized to approve sale agreements for a price greater than the appraised value, or less than the appraised value by an amount not to exceed \$50,000. The Board must approve sale agreements for a price less than the appraised value by an amount in excess of \$50,000.
 - 2. Leases: The Board must approve lease agreements prior to execution.
- F. Execution: The property disposition agreement must be executed to be binding and effective. The Executive Director will execute such agreements.
- G. Proceeds: Any proceeds from the disposition of real property shall be deposited into the governmental or proprietary fund or funds that were originally used to purchase the real property.

- END -

REFERENCES

NRS chapters 37, 241, 277, 277A

Article I - Section 22 of the Nevada Constitution



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 20, 2021

AGENDA ITEM 5.1

From: James Gee, Service Planning and Innovation Manager
Through: Mark Maloney, Director of Public Transportation

RECOMMENDED ACTION

Approve a May 2021 RTC RIDE Service Adjustment, currently scheduled for May 1, 2021, including a pilot FlexRIDE transit service connecting to the Lake Tahoe area and miscellaneous time adjustments.

BACKGROUND AND DISCUSSION

RTC RIDE continually looks to provide the best service by improving on-time performance, shortening passenger's travel times, and offering innovative services. The next service change is scheduled for May 1, 2021 and is proposed to contain the following items:

Truckee Meadows – Incline Village / Sand Harbor FlexRIDE Pilot Service

In partnership with the Tahoe Regional Planning Agency (TRPA), Tahoe Truckee Area Regional Transit (TART), and the Tahoe Transportation District (TTD). RTC is developing a Truckee Meadows – Incline Village area pilot service using the FlexRIDE model the RTC began operating in November 2019 with current service operating in the Sparks-Spanish Springs, Somerset, and North Valleys communities.

This pilot project will allow people in the Reno/Sparks and nearby Washoe County (Truckee Meadows) area and Incline Village area to book a public transit trip on an RTC FlexRIDE vehicle 24 hours prior to their trip by calling the FlexRIDE customer service phone number.

For this pilot project, the current end-point in the Truckee Meadows would be the Summit Mall Park & Ride in Reno. In the Tahoe area, potential stops include the Southwood Park & Ride facility, Tunnel Creek, and Sand Harbor State Park. Additional potential stops are at various trailheads along State Route 431 (Mt. Rose Highway) between the Reno and Tahoe areas.

The daily service span will be from 7:00 AM to 9:00 PM. Trips will require reservations using the application or phone 24 hours in advance to allow dispatch to group rides to ensure the most efficient and effective use of the equipment and service. All vehicles are accessible and bicycles are allowed on the service. Passenger fare will be set at \$5.00 per trip with a \$2 per person surcharge for persons requesting a drop-off at Sand Harbor State Park.

Routine Schedule Time Adjustments

As part of RTC's on-going effort to provide reliable and on-time service, staff monitors bus travel times and speeds, as well as other statistics. As traffic patterns change, passenger habits change, and street networks change, these an effect on the reliability and on-time performance of each route. Therefore, each service change contains small adjustments to the schedule timetables to maintain their relevance to what the bus can actual perform, thereby improving reliability and on-time performance, as well as customer service. This service change will contain these small adjustments to a small group of routes.

FISCAL IMPACT

Funding for this item is included in the approved FY 2021 budget, and there is no additional cost in connection with this agenda item.

PREVIOUS BOARD ACTION

There has been no previous Board action or direction on this matter.

ADVISORY COMMITTEE(S) RECOMMENDATION

The proposed service change concepts discussed above were presented to the Citizens Multimodal Advisory Committee on February 3, 2021 and the Technical Advisory Committee on February 4, 2021.



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 6.1

From: Judy Tortelli, Engineer II
Through: Brian Stewart, Director of Engineering

RECOMMENDED ACTION

Acknowledge receipt of a report on the Arlington Bridges Project Update and Public Engagement Direction.

BACKGROUND AND DISCUSSION

The Arlington Avenue bridges were built in the 1930's and have served the community of Reno and provided access to Wingfield Park for nearly a century. The park, the Truckee River, and the surrounding area have evolved over that time, and the Arlington Avenue bridges have been widened, repaired, and modified in ways that met the needs of the community at the time. However, the bridges are showing signs of wear resulting from the variety of modifications made, their age and the repeated exposure to flood events.

The RTC's Feasibility Study intends to analyze various bridge structure types, aesthetic themes, and determine what the requirements are as the Project moves into the NEPA/Design phase. It has included evaluating options to ensure continued public safety, to meet the needs of the community, and to provide additional flood conveyance for the Truckee River. RTC is following a Planning and Environmental Linkages (PEL) approach for this study to help inform decision-making, engage the public and stakeholders, and streamline the future NEPA process. Following the PEL process ensures that any so-called 'planning products' or decisions made can be used for NEPA without having to fully revisit that product or decision.

Alternative concepts have been developed for the two Arlington Avenue bridges and analyzed based on their ability to:

- meet the project's Purpose and Need;
- minimize impacts to right of way, the river, and surrounding properties;
- provide access to the park; and
- achieve required flood conveyance criteria.

They have also been analyzed based on cost and level of support received from project stakeholders. Five alternatives were presented at the first Public Meeting. Feedback received from the public helped shape the engineering design and environmental constraints and criteria that were presented at the first Stakeholder Working Group (SWG) meeting. The primary role of the SWG is to provide feedback to the project team and City Council. At SWG-1, constraints and criteria defined by the design team were further vetted and added to. The team developed a summary of anticipated permitting and regulatory requirements. This summary was presented at the first Technical Advisory

Committee (TAC) meeting, where members confirmed anticipated permit timeframes and referenced additional requirements that would need to be considered. The primary role of the TAC is to analyze information on technical aspects of the project. TAC-1 members concluded that two of the five alternatives would be more challenging from a permitting/regulatory perspective.

The five alternatives were further developed into nine concepts. Qualitative attributes (i.e. construction cost, schedule, maintenance access, river recreation impacts, and environmental impacts) were defined by the team so Level 1 Screening of alternatives could be performed by TAC members. TAC members individually scored the range of alternatives. Scores were reviewed and discussed as a group at the TAC-2 meeting where consensus on moving forward with two concepts as the preferred alternatives was achieved. Next, the SWG-2 meeting conveyed input received from the TAC meetings. Members were reminded of the goal to reduce the range of alternatives that are carried forward into NEPA and design. The group concurred that moving forward with the two TAC-2 concept recommendations made the most sense. At the third and final SWG meeting, aesthetics for the Project were presented to the group. High-level aesthetic elements were discussed that focused on overall theme, various lighting potentials, opportunities for railing, widening the sidewalk space, and surface texture options. Again, the group agreed on which elements to carry forward, recognizing the need to start determining the appearance of the bridges while maintaining flexibility as aesthetics are carried forward.

Recommendations for the concepts that best meet the purpose and needs of the Project are being presented today and will be advanced for NEPA clearance and design.

The following is a timeline of the project development:

- November 16, 2018 – RTC Board approved Jacobs Professional Services Agreement
- November 13, 2019 – City of Reno Council approved process and confirmed SWG members
- May 19, 2019 – RTC Board approved the Arlington Bridges Replacement Project Feasibility Study process
- December 12, 2019 – Public Meeting #1 Presented alternatives and gathered input from the public
- February 6, 2020 – SWG-1 Meeting held in-person at the RTC to identify engineering design and environmental constraints and criteria
- July 15, 2020 – TAC-1 Virtual meeting hosted by the US Army Corp of Engineers to review permitting and regulatory requirements
- August 31, 2020 – TAC-2 Virtual Meeting hosted by the RTC to discuss bridge/roadway elements and score various alternatives
- November 5, 2020 – SWG-2 Virtual meeting hosted by the RTC to discuss bridge type recommendations
- December 15, 2020 – SWG-3 Virtual meeting hosted by the RTC to discuss aesthetic themes and recommendations
- February 24, 2021 – City of Reno Council Presentation to get approval on presenting recommended concepts to the public

- March 2021 – Public Meeting #2 (Virtual Project Presentation) Present study findings and gather additional feedback to inform decisions regarding which alternatives should be carried forward

The RTC and City staff have worked together following the previously approved process to complete the feasibility study that has been modeled after the Virginia Street Bridge Project where FHWA funding was also used. This process utilizes documented decisions using the Nevada Department of Transportation (NDOT) and Federal Highway Association (FHWA), Planning and Environmental Linkages (PEL) checklist.

Extensive outreach and coordination with local resource agencies, the public, and City of Reno staff has taken place this past year. Various opportunities for input have been provided and documented. Input received from outreach efforts has been included in the work of the SWG and TAC. Alternatives analysis based on input received has determined the recommended concepts to carry forward. RTC and City of Reno staff support the recommendation that those concepts continue to be explored.

FISCAL IMPACT

Funding for this item is included in the approved FY 2021 budget and there is no additional cost in connection with this agenda item.

PREVIOUS BOARD ACTION

| | |
|-------------------|---|
| May 20, 2019 | Acknowledged receipt of the Arlington Avenue Bridges Project update |
| November 16, 2018 | Approved Professional Services Agreement (PSA) with Jacobs Engineering Group, Inc. to provide design services |
| June 15, 2018 | Approved the FY 2019 Program of Projects |



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 7.1

From: Dan Doenges, PTP, RSP, Planning Manager

Through: Amy Cummings, AICP/LEED AP, Director of Planning and Deputy Executive Director

RECOMMENDED ACTION

Acknowledge receipt of a report on the draft 2050 Regional Transportation Plan (RTP) and provide direction.

BACKGROUND AND DISCUSSION

The 2050 Regional Transportation Plan (RTP) is the RTC’s long-range transportation plan as required under Title 23, Part 450 of the Code of Federal Regulations (CFR). It contains major transportation projects and programs for Washoe County for all modes of travel. It functions as the major tool for implementing long-range transportation planning.

RTC has completed the analysis of project for the RTP and prepared a draft plan for review. Staff sought input from other regional partners through the following events:

| | |
|-------------|---|
| January 5 | 2050 RTP presentation to Washoe County Planning Commission |
| January 12 | 2050 RTP presentation to Washoe County Commission |
| January 20 | 2050 RTP Presentation to Reno Planning Commission |
| January 25 | 2050 RTP presentation to Sparks City Council |
| January 27 | 2050 RTP presentation to Reno City Council |
| February 3 | 2050 RTP presentation to RTC Citizens Multimodal Advisory Committee |
| February 4 | 2050 RTP presentation to RTC Technical Advisory Committee |
| February 4 | 2050 RTP presentation to Sparks Planning Commission |
| February 11 | 2050 RTP presentation to Regional Planning Governing Board |

Staff anticipates incorporating direction provided from the RTC Board, finalizing the air quality analysis, and circulating a draft plan for a 21-day public comment period prior to bringing the plan to the Board for action.

FISCAL IMPACT

There is no additional cost in connection with this agenda item.

PREVIOUS BOARD ACTION

| | |
|-------------------|--|
| January 15, 2021 | Received a report on the 2050 Regional Transportation Plan (RTP) |
| December 18, 2020 | Received a report on the 2050 Regional Transportation Plan (RTP) |

| | |
|-------------------|--|
| November 20, 2020 | Received a report on the 2050 Regional Transportation Plan (RTP) |
| August 20, 2020 | Received a report on the 2050 Regional Transportation Plan (RTP) Transportation call for projects and provided direction |
| June 19, 2020 | Approved 2050 RTP Guiding Principles |
| December 20, 2019 | Received report on the 2050 RTP visioning exercise |
| November 15, 2019 | Received report regarding the 2050 RTP public and agency outreach process and schedule |
| August 17, 2018 | Approved Amendment No. 1 to the 2040 RTP |
| May 21, 2017 | Approved 2040 RTP |

ATTACHMENT:

A. Draft 2050 Regional Transportation Plan

DRAFT



ATTACHMENT A

2050

REGIONAL TRANSPORTATION PLAN



RTP Table of Contents

LETTER FROM THE EXECUTIVE DIRECTOR..... 14

A SPECIAL THANK YOU 15

EXECUTIVE SUMMARY 18

PROGRAMMATIC INVESTMENTS18

TRANSIT INVESTMENTS19

UNFUNDED VISION FOR TRANSIT20

Transit Service Vision20

CHAPTER 1 – INTRODUCTION24

1.1 – ABOUT THE RTC25

1.2 – TRANSPORTATION PLANNING FACTORS31

1.3 – GUIDING PRINCIPLES34

1.4 – GOALS.....36

1.5 – 2013-2017 ACCOMPLISHMENTS38

CHAPTER 2 – COMMUNITY-BASED
PLANNING 40

2.1 – RTP AGENCY WORKING GROUPS42

2.2 – RTC CITIZENS MULTIMODAL
ADVISORY COMMITTEE42

2.3 – RTC TECHNICAL ADVISORY COMMITTEE.....42

**2.4 – INTER-COUNTY
WORKING GROUP42**

2.5 – COMMUNITY PLANNING WORKSHOPS43

Community Planning Workshop #2:43

Community Planning Workshop #3:44

2.6 – COMMUNITY FORUMS44

Washoe County School District44

Sparks Industrial Forum44

Economic Development Forum.....45

Downtown Reno Circulation Virtual Workshop.....46

**2.7 – COORDINATED HUMAN SERVICES
TRANSPORTATION PLAN46**

2.8 – RTC BOARD OF COMMISSIONERS46

**2.9 – ELECTED OFFICIALS, BOARDS, &
COMMISSIONS46**

3.0 – BROADCAST & DIGITAL MEDIA OUTREACH47

RTC Website47

Online Surveys47

Social Media.....47

RTC eNews.....47

MyRTC Email Updates47

Media Outreach.....47

The Road Ahead with RTC Segments48

News Releases.....48

CHAPTER 3 – IMPROVING SAFETY50

| | |
|--|-----------|
| 3.1 – VISION ZERO TRUCKEE MEADOWS | 51 |
| 3.2 – SAFETY PLANNING | 52 |
| Nevada Strategic Highway Safety Plan (SHSP) | 52 |
| Complete Streets Master Plan | 52 |
| 3.3 – COMMUNITY AWARENESS & EDUCATION | 53 |
| Safe Routes to School | 55 |
| RTC SMART TRIPS | 55 |
| 3.4 – OPERATIONS | 56 |
| Safe Transit Operations | 56 |
| Nevada Traffic Incident Management (NV TIM) | 57 |
| Emergency Management Plan | 57 |
| Washoe County Regional Resiliency Study | 58 |
| 3.5 – SAFETY DESIGN IMPROVEMENTS | 58 |
| 3.6 – RTP SAFETY PROJECTS | 60 |
| CHAPTER 4 – INTEGRATING LANDUSE & ECONOMIC PROSPERITY | 62 |
| Transit-Supportive Development | 63 |
| 4.1 – REGIONAL PLANNING | 64 |
| Reno Housing Authority | 64 |
| Reno-Tahoe International Airport | 64 |
| Truckee Meadows Regional Planning Agency | 65 |
| Washoe County Health District | 65 |

| | |
|---|----|
| Community Health Improvement Plan..... | 67 |
| Washoe County School District | 67 |
| Washoe County Senior Services | 68 |
| Truckee River Flood Management Project..... | 68 |
| Floodplain Management | 70 |

4.2 – LOCAL GOVERNMENT PLANNING70

| | |
|----------------------|----|
| City of Reno | 70 |
| City of Sparks | 71 |
| Washoe County | 72 |

4.3 – TRIBAL GOVERNMENTS72

| | |
|--|----|
| Pyramid Lake Paiute Tribe (PLPT) | 72 |
| Reno-Sparks Indian Colony (RSIC)..... | 73 |

4.4 – OTHER REGIONAL PARTNERS74

| | |
|--|----|
| Nevada Governor’s Office of Economic Development . | 74 |
| Nevada Center for Advanced Mobility..... | 74 |
| University of Nevada, Reno | 76 |

4.5 – TRAVEL & TOURISM77

4.6 – RTP PROJECTS SUPPORTING LAND-USE PLANS.....79

CHAPTER 5 – HEALTHY COMMUNITIES & SUSTAINABILITY80

5.1 – SUSTAINABILITY.....81

| | |
|-------------------------------|----|
| RTC Sustainability Plan | 81 |
|-------------------------------|----|

| | |
|-------------------------------------|----|
| RTC Facilities and Vehicles | 81 |
| APTA Sustainability Commitment..... | 82 |
| Nevada State Climate Strategy..... | 82 |
| Nevada Climate Action..... | 82 |

5.2 – AIR QUALITY83

5.3 – ACTIVE LIVING & COMMUNITY DESIGN86

| | |
|---|----|
| 2018-2020 Community Health Improvement Plan (CHP) | 86 |
| Washoe County Senior Services | 86 |
| Safe Routes to School | 87 |
| Food Deserts and Transit Access..... | 87 |
| Chronic Disease Prevention..... | 89 |

5.4 – NATURAL RESOURCES89

| | |
|--|----|
| Washoe County Open Space and Natural Resource Plan | 89 |
| Bureau of Land Management Nevada | 90 |
| Southern Washoe County Urban Interface Plan..... | 91 |
| US Forest Service..... | 91 |
| Lake Tahoe Basin Management Unit Land Resource Management Plan (LTBMU) | 91 |
| Humboldt-Toiyabe National Forest Climate Change Vulnerability Report | 93 |
| Department of Conservation and Natural Resources: Nevada State Parks | 93 |
| State of Nevada Division of Water Resources..... | 93 |
| Washoe County Protected Species | 94 |

**5.5 – RESILIENCY & STORMWATER
MANAGEMENT95**

Truckee River Flood Project96

**CHAPTER 6 – MANAGING EXISTING
SYSTEMS EFFICIENTLY98**

6.1 – TRAFFIC OPERATIONS99

6.2 – PAVEMENT PRESERVATION.....103

6.3 – TRANSIT OPERATIONS106

**CHAPTER 7 – INTEGRATING ALL TYPES OF
TRANSPORTATION.....110**

7.1 – COMPLETE STREETS..... 111

7.2 – WALKING & BIKING..... 112

Vision Zero Truckee Meadows Task Force 112

The Bicycle Pedestrian Plan & ADA Transition Plan.... 113

Bus Stop Improvement and Connectivity Program 113

Spot Improvements 113

Bicycle Friendly America 114

7.3 – TRANSIT 115

Short Range Transit Plan..... 115

RTC RAPID Expansion..... 116

**RTC to Have 80% Alternative-Fuel
Transit Fleet in 2021 116**

Maintenance Facility Infrastructure 117

| | |
|--|------------|
| RTC ACCESS | 119 |
| RTC FlexRIDE | 119 |
| Supplemental Mobility Services..... | 120 |
| Coordinated Human Service Transportation Plan..... | 120 |
| Not-for-Profit Partnerships | 120 |
| Washoe Senior Ride/Taxi Bucks | 121 |
| RTC SMART TRIPS..... | 121 |
| RTC VANPOOL Program..... | 121 |
| RTC REGIONAL CONNECTOR | 122 |
| Privately Operated Intercity Bus Service | 122 |
| Token Transit – Smart Phone Fare Payment..... | 122 |
| Joint Development Through the Federal Transit Administration Program..... | 122 |
| Park and Ride Facilities | 123 |
| Unfunded Vision for Transit | 124 |

7.4 – ADVANCED MOBILITY & INNOVATION 125

| | |
|--|------------|
| Zero-Emission Vehicles & Charging Infrastructure | 125 |
| LiDAR Safety Analysis | 126 |
| Connected and Autonomous Vehicles | 126 |
| Shared Mobility..... | 127 |

**CHAPTER 8 – FOCUSING ON REGIONAL
CONNECTIVITY 130**

8.1 – CONNECTIVITY IN NORTHERN NEVADA..... 131

| | |
|---|------------|
| One Nevada Transportation Plan | 132 |
| City of Fernley..... | 136 |

| | |
|------------------------|-----|
| I-80 Corridor | 136 |
| US 395 Coalition | 137 |
| I-11 Corridor | 137 |

8.2 – CONNECTIVITY IN THE URBANIZED AREA..... 138

| | |
|--|-----|
| Spaghetti Bowl Project | 138 |
| US 395 North Valleys Project..... | 138 |
| Connecting Spanish Springs and the North Valleys..... | 139 |
| Extension of Lemmon Drive and Moya Boulevard..... | 139 |
| RTC FlexRIDE | 139 |
| Expansion of RAPID Service on the RTC Lincoln Line and RTC Virginia Line..... | 139 |

CHAPTER 9 – PROMOTING EQUITY & ENVIRONMENTAL JUSTICE.....140

9.1 – TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 141

| | |
|---|-----|
| RTC TITLE VI POLICY | 143 |
| Equal Opportunity in Procurement..... | 143 |
| ADA Transition Plan | 144 |
| Bus Stop & Sidewalk Connectivity Program | 144 |
| RTC ACCESS Paratransit Service..... | 144 |
| Improving Accessibility of the Regional Road Network | 145 |

9.3 – EXECUTIVE ORDER ON ENVIRONMENTAL JUSTICE 147

CHAPTER 10 – IMPROVING FREIGHT & GOOD MOVEMENT 156

10.1 – NEVADA STATE FREIGHT PLAN..... 157

I-11 Corridor 159

Truck Parking..... 159

10.2 – AIR CARGO 159

10.3 – RAIL 160

Nevada State Rail Plan..... 160

10.4 – ROADWAYS 161

I-80 163

10.5 – OUTREACH & COORDINATION..... 163

10.6 – RTP PROJECTS SUPPORTING FREIGHT & GOODS MOVEMENT 164

CHAPTER 11 – INVESTING STRATEGICALLY 166

11.1 – REVENUE PROJECTIONS 167

11.2 – FUNDING SOURCES..... 168

11.3 – 2020 REVENUES BY FUNDING SOURCE 169

Federal Funding..... 169

State Funding..... 171

Regional Funding 171

Total Funding 172

11.4 – PLAN INVESTMENT NEEDS 172

Public Transportation.....173

Complete Streets.....174

11.4 – FINANCIAL SUMMARY.....176

**CHAPTER 12 – MONITORING IMPLEMENTATION
& PERFORMANCE 178**

12.1 – SAFETY PERFORMANCE MEASURES.....180

**12.2 – INFRASTRUCTURE CONDITIONS/
TRANSIT STATE OF GOOD REPAIR
PERFORMANCE MEASURES182**

12.3 – CONGESTION REDUCTION.....184

12.4 – SYSTEM RELIABILITY185

12.5 – ENVIRONMENTAL SUSTAINABILITY.....185

12.6 – OTHER TRANSIT MEASURES186

12.7 – SAFETY.....187

**12.8 – INFRASTRUCTURE CONDITION/TRANSIT
STATE OF GOOD REPAIR.....189**

12.9 – CONGESTION REDUCTION.....190

12.10 – SYSTEM RELIABILITY191

12.11 – ENVIRONMENTAL SUSTAINABILITY.....191

| | |
|---|-----|
| APPENDIX A – COMPLETE STREETS PROJECT LISTING..... | 194 |
|---|-----|

| | |
|---|-----|
| APPENDIX B – CONGESTION MANAGEMENT PROCESS | 206 |
|---|-----|

| | |
|--|-----|
| 1. CONGESTION MANAGEMENT OBJECTIVES..... | 206 |
|--|-----|

| | |
|---------------------------------------|-----|
| 2. IDENTIFY AREA OF APPLICATION | 207 |
|---------------------------------------|-----|

| | |
|---|-----|
| 3. DEFINE SYSTEM OR NETWORK OF INTEREST ... | 207 |
|---|-----|

| | |
|--------------------------------------|-----|
| 4. DEVELOP PERFORMANCE MEASURES..... | 211 |
|--------------------------------------|-----|

| | |
|---|-----|
| 5. INSTITUTE SYSTEM PERFORMANCE MONITORING PLAN..... | 212 |
|---|-----|

| | |
|--|-----|
| 6. IDENTIFY & EVALUATE STRATEGIES..... | 213 |
|--|-----|

| | |
|--|-----|
| 7. IMPLEMENT SELECTED STRATEGIES AND MANAGE TRANSPORTATION SYSTEM | 214 |
|--|-----|

| | |
|--|-----|
| Evaluation Criteria for Projects on Existing Regional Roads | 215 |
|--|-----|

| | |
|---|-----|
| Evaluation Criteria for New Road Construction | 215 |
|---|-----|

| | |
|-------------------|-----|
| Methodology | 215 |
|-------------------|-----|

| | |
|--|-----|
| Criteria for New Road Construction | 217 |
|--|-----|

| | |
|---|-----|
| 8. MONITOR STRATEGY EFFECTIVENESS | 217 |
|---|-----|

| | |
|--------------------------------|-----|
| APPENDIX C – AIR QUALITY | 219 |
|--------------------------------|-----|

| | |
|--------------------------------------|-----|
| APPENDIX D – ACCESS MANAGEMENT | 220 |
|--------------------------------------|-----|

| | |
|---|-----|
| APPENDIX E – DOCUMENTATION OF POPULATION & EMPLOYMENT & TRAVEL DEMAND MODEL ... | 221 |
|---|-----|

| | |
|--|-----|
| APPENDIX F – REVENUE ASSUMPTIONS | 222 |
|--|-----|

| | |
|------------------|-----|
| ASSUMPTIONS..... | 222 |
|------------------|-----|

| | |
|----------------------|-----|
| FUNDING SOURCES..... | 223 |
|----------------------|-----|

| | |
|---|-----|
| Fixing America’s Surface Transportation (FAST) Act .. | 223 |
|---|-----|

| | |
|---------------|-----|
| Indexing..... | 224 |
|---------------|-----|

| | |
|--------------------------------------|-----|
| Regional Road Impact Fee (RRIF)..... | 224 |
|--------------------------------------|-----|

| | |
|---|-----|
| FINANCIAL ASSUMPTIONS – REVENUE SOURCES..... | 224 |
|---|-----|

| | |
|----------------------------------|-----|
| STREET AND HIGHWAY REVENUE | 224 |
|----------------------------------|-----|

| | |
|------------------------------------|-----|
| PUBLIC TRANSPORTATION REVENUE..... | 226 |
|------------------------------------|-----|

| | |
|--------------------------------------|-----|
| <i>Federal Funding Sources</i> | 226 |
|--------------------------------------|-----|

| | |
|--------------------|-----|
| STATE REVENUE..... | 227 |
|--------------------|-----|

| | |
|------------------------|-----|
| REGIONAL REVENUE | 227 |
|------------------------|-----|

| | |
|--------------------------------|-----|
| <i>Sales and Use Tax</i> | 227 |
|--------------------------------|-----|

| | |
|------------------------------------|-----|
| <i>Other Revenue Sources</i> | 227 |
|------------------------------------|-----|

| | |
|---|-----|
| APPENDIX G – SPARKS INDUSTRIAL STUDY .. | 229 |
|---|-----|

| | |
|---|-----|
| APPENDIX H – DOWNTOWN RENO CIRCULATION STUDY | 230 |
|---|-----|

| | |
|--|-----|
| APPENDIX I – COMMON TRANSPORTATION ACRONYMS | 231 |
|--|-----|

APPENDIX J – RTC ORGANIZATIONAL
CHART.....232

APPENDIX K – COORDINATED HUMAN
SERVICES PUBLIC
TRANSPORTATION PLAN
EXECUTIVE SUMMARY.....233

LETTER FROM THE EXECUTIVE DIRECTOR

The RTC is proud to present the 2050 Regional Transportation Plan (RTP) for our community. The overarching vision contained in this plan focuses on improving safety and using transportation as a catalyst for developing economic opportunities that sustain our valued quality of life. The plan identifies the long-range vision for connecting our community. It is a key component to improving our region's transportation systems, air quality, and quality of life.

I would like to thank the community, our regional partners, and the RTC staff for their commitment, participation and support to inspire, innovate and implement an integrated, efficient regional transportation system. I also recognize and thank the RTC Board of Commissioners for their leadership and vision in guiding the future of transportation investment in the Truckee Meadows.

*Sincerely,
Bill Thomas, AICP
Executive Director*

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A SPECIAL THANK YOU

A special thank you to our agency partners and community members for their participation and significant contribution in developing the 2050 RTP.

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EXECUTIVE SUMMARY

The 2050 Regional Transportation Plan (RTP) identifies the long-term transportation investments that will be made in the urbanized area of Reno, Sparks, and Washoe County, Nevada, also known as the Truckee Meadows. The plan was founded on a people-based approach, which included extensive collaboration with the community and federal, state and local partner agencies. The RTP process was shaped by the guiding principle that RTC will strive to support:

- Safe and Healthy Communities
- Economic Vitality & Innovation
- Sustainability
- Travel Choices

The projects in this RTP (see Appendix A) support the vision that the Truckee Meadows is the best place to live, work, recreate, visit, and invest. The plan includes transportation projects, programs and services for walking, biking, driving, and riding transit. In addition, the plan provides for maintaining existing infrastructure in good condition and improving the operation of existing services.

The goals of the RTP, which are discussed further in each chapter of the plan, include the following:

- Improve and promote safety

- Integrate all types of transportation
- Promote healthy communities and sustainability
- Promote and foster equity and environmental justice
- Integrate land-use and economic development
- Manage existing systems efficiently
- Enhance regional connectivity
- Improve freight and goods movement
- Invest strategically
- Engage the public and encourage community involvement

PROGRAMMATIC INVESTMENTS

In support of these guiding principles and goals, the RTP includes four programmatic investments that will be ongoing throughout the life of the plan.

- ***Spot improvement for bicycle, pedestrian and ADA needs*** — Ongoing implementation of the ADA Transition Plan and RTC Bicycle and Pedestrian Master Plan is a priority for the RTC. Annual funding will be programmed for spot improvements through-out the region to upgrade sidewalks, cross-walks, curb ramps, and improve bicycle network connectivity.

- **Traffic Signals and Intelligent Transportation Systems (ITS) Operations** — Technology and traffic operations strategies promote faster travel times on the existing roadway network. Investments in ITS have proven to be a cost-effective alternative to adding road capacity. The plan identifies annual funding to upgrade traffic signals and associated communications technologies.
- **Pavement Preservation** — Maintaining roads and bridges in good condition and extending the useful life of pavement on regional roads is a proven way to minimize long-term costs. The RTP identifies annual funding to apply the appropriate pavement preservation treatment to regional roads and bridge decks, which can include surface seals, resurfacing, or reconstruction. RTC partners with the NDOT Highway Bridge Program to provide funding to replace or rehabilitate substandard bridges.

With the aging of the population, the public is also concerned with mobility issues that will face many residents over the next 20 years. A clear message expressed during the community outreach process is the need to plan, build, and operate services such as accessible bus stops and sidewalks, transit lines, and roadways that support an aging population.

Transit helps shape development patterns and is an economic development tool that supports a higher-density, mixed-use urban form. The Virginia Street RTC RAPID project is an example where a transit investment is helping spur new and revitalized investments from Downtown to Midtown and Meadowood Mall. Similarly, the Lincoln Line connecting Downtown Reno and Downtown Sparks supports economic vitality in this important corridor.

The Short Range Transit Plan (S RTP) outlines a strategy for transit service over the next five years. The short-term fiscally constrained transit program includes existing service plus the following modifications to the extent that funding is available:

- Reallocation of service hours to achieve greater efficiency
- Increase service hours to high ridership corridors where feasible
- Expand FlexRIDE Program

TRANSIT INVESTMENTS

Transit is recognized as an essential part of the local economy that helps thousands of Washoe County residents access essential jobs and services each day. The environmental benefits of transit are also well recognized: reducing the number of cars on the road reduces traffic congestion and air pollution.

UNFUNDED VISION FOR TRANSIT

- Increase subsidy and expand eligibility for taxi bucks/Washoe Senior Ride Program
- Continuation of grant program for not-for-profit transportation services, as identified in the Coordinated Human Services Transportation Plan (CTP).

In addition to providing transit service, RTC is currently undertaking the following passenger facility improvements:

- Expand RTC 4TH STREET STATION to construct four additional bus bays, electric bus chargers, and parking spaces
- Installation of electric bus charging infrastructure at RTC CENTENNIAL PLAZA STATION
- Upgrade the northbound Virginia Line station at Peppermill to provide full ADA accessibility, additional seating capacity, and full RAPID amenities
- Bus stop accessibility improvements throughout the region, in support of the ADA Transition Plan
- Park and ride facilities to support RTC VANPOOL passengers

The RTP outreach process provided an opportunity to develop a vision for transit in the Truckee Meadows through 2050. This vision is not constrained by available financial resources. Based on community input, the vision includes the following elements:

Transit Service Vision

- **Increased frequency and span of service on existing high-productivity routes in the urban core** – Investments in existing routes will improve convenience and service levels in areas with well-established transit ridership that have the greatest potential for increased growth.
- **Expand FlexRIDE service areas** – FlexRIDE offers a tool to serve some outlying suburban areas, providing increased convenience to potential customers where fixed-route transit would not be effective. Potential areas for future expansions include South Meadows and Incline Village.

- **Extend Virginia Line RAPID to Mt. Rose Highway** – Providing transit connectivity to employment, education, commercial, and residential centers in South Reno would improve access to opportunities, expand travel options, and encourage transit supportive development along South Virginia Street. The RAPID extension could be supported by a FlexRIDE zone to provide increased connectivity to surrounding neighborhoods.
- **Extend Lincoln Line RAPID to Stoker Avenue** – This extension along West 4th Street would support safety and other multimodal improvements planned for the corridor. It would also encourage transit supportive development that is anticipated in the West 4th Street corridor.
- **Improved Transit Connectivity to the Lake Tahoe Region** – Develop new transit solutions to better connect the existing transit systems in Reno/Sparks, Carson City, and Lake Tahoe. This would improve access to the treasured resources in the Lake Tahoe Basin and reduce the environmental impact of vehicle travel.
- **Truckee to TRI Center Commuter Bus Service** – Develop new transit solutions to better connect residential and employment centers along the I-80 corridor, extending from the Town of Truckee to Reno/Sparks, and Storey County.

Transit Facilities Vision

- **Bus Maintenance Facility** – Construct a larger maintenance facility for long-term expansion that can accommodate a diverse zero-emission fleet, including electric and hydrogen fuel cell operations.
- **New Transfer Facility at Meadowood Mall** – Relocate the Meadowood Mall transfer facility and explore opportunities for joint development.
- **Mobility Hubs** – The need for Mobility Hubs was identified through the Downtown Reno Circulation Study, Sparks Industrial Area analysis, and planning initiatives in Midtown District of Reno. They would include parking for automobiles, bikes, RTC VANPOOL participants, and offer connectivity to public transit and private employer shuttles. Structured parking would be considered.

With this vision for transit, the RTC hopes to continue the dialog about the role of transit in the community and the need for sustainable funding for transit operations.

Complete Streets Investments

This RTP includes a package of roadway investments that promote livability and regional connectivity.

All of these projects incorporate a Complete Streets design concept, which addresses the needs of all roadway users in a way that is sensitive to the local land-use context and travel demand. The primary purpose of Complete Streets projects are to provide safe access and travel for pedestrians, bicyclists, motorists and transit users of all ages and abilities. Safety is an important aspect of all project planning, with high-crash locations being improved through many of the recommended projects. Complete Streets designs have reduced crashes up to 46% on regional roads in Washoe County.

Projects that focus on regional connectivity link major concentrations of employment and housing across the Truckee Meadows. Major capacity investments include the Spaghetti Bowl, US 395 North Widening, I-80 Widening, the Pyramid Highway/US 395 Connector, and other corridors to better connect the North Valleys and Spanish Springs.

Conclusion

This RTP was driven by the feedback from local residents, businesses, and partner agencies, as well as the recognition that transportation plays a critical role in the region's efforts to improve safety and sustain long-term opportunities. This plan identifies a path to improve the quality of life in the Truckee Meadows. Roadways are an important part of the local community and shape the daily experience of the people that travel them, whether on bus, bike, foot, or in a car. This plan supports the economic vitality of the region by promoting safety, providing accessible places to walk and bike, improving connectivity between where people live and work, and conserving resources through environmentally and fiscally sustainable practices.



CHAPTER 1 – INTRODUCTION

Transportation investments promote safety and a healthy community, create new opportunities for prosperity, expand regional connectivity, and enhance neighborhood livability. The RTP is the region’s long-range, multimodal transportation plan. It defines the policies and priorities for the community’s future transportation system and is the blueprint to improving the region’s quality of life.

**Guiding Principles of the
RTC are to Promote**

Safe and Healthy Communities

**Economic Prosperity and
Innovation**

Sustainability

Increased Travel Choices

1.1 – ABOUT THE RTC

The Regional Transportation Commission of Washoe County (RTC) serves three roles for the Washoe County urban area: it is the Metropolitan Planning Organization (MPO), the transit service provider, and builds the regional roadway network. As the MPO, RTC conducts a collaborative short- and long-range multimodal transportation planning program, consistent with Fixing America’s Surface Transportation (FAST) Act requirements.

As the transit service provider, RTC operates **RTC RIDE** regional fixed route bus system, the demand-responsive **RTC FlexRIDE**, **RTC ACCESS** paratransit service, and **RTC VANPOOL**. **RTC RIDE** and **RAPID** transit service include 25 routes that provide about 7.6 million trips per year. RTC uses technology to enhance the customer experience, including WiFi on buses and NextBus arrival information and bus pass purchases available on mobile devices.



RTC RIDE — Local Fixed Route Service (2019)

| | |
|---|-----------------------------|
| Description | Regular fixed route service |
| Ridership | 6,078,028 |
| Revenue Vehicle Hours | 219,575 |
| Productivity (Passengers per Service Hour) | 27.7 |

RTC RIDE operates in the cities of Reno and Sparks, and areas of Washoe County using a fleet of 72 buses on 25 routes. The service area is approximately 136 square miles. All RIDE buses offer free WiFi.



| RTC RAPID — Virginia Line and Lincoln Line (2019) | |
|---|---|
| Description | Bus rapid transit on Virginia Street & 4th/Prater |
| Ridership | 1,533,929 |
| Revenue Vehicle Hours | 40,970 |
| Productivity (Passengers per Service Hour) | 37.4 |

Designed to be more like rail, **RTC RAPID** is a faster transit service. The **RAPID Virginia Line** and **Lincoln Line** serve the primary north-south and east-west corridors of the metro region. **RTC RAPID** includes level-boarding stations with more amenities served by electric buses. The service includes technology that allows the buses to communicate with the traffic signals to extend the green time several seconds for the bus.



| RTC REGIONAL CONNECTOR (RC) — RIDE Regional Service to Carson City (2019) | |
|--|--|
| Description | Peak hour commuter service between Reno and Carson City |
| Ridership | 27,577 |
| Revenue Vehicle Hours | 3,371 |
| Productivity (Passengers per Service Hour) | 8.2 |

In partnership with the Carson Area Metropolitan Planning Organization (CAMPO), the RTC provides a connection between Reno and Nevada’s state capital. This route is 33 miles each way. It is ideal for commuters and runs three trips in the morning and three trips in the afternoon.



| | |
|---------------------|--|
| RTC FlexRIDE | |
| Description | On-demand curb-to-curb transit service within designated zones in Sparks (fall 2019), North Valleys (spring 2020), and Somerset/Verdi |

RTC FlexRIDE offers the convenience of on-demand, curb-to-curb service in selected zones. The initial **RTC FlexRIDE** pilot in Sparks started in November 2019 and tripled the ridership of the fixed route it replaced within just a few months. Following this success, other **RTC FlexRIDE** zones were established in the North Valleys, Somerset/Verdi, and the Sparks zone was expanded to include Spanish Springs. During November and December of 2019, **RTC FlexRIDE** served an average of 4.7 passengers per revenue service hour.



| RTC ACCESS (2019) | |
|---|---|
| Description | Demand responsive ADA paratransit service |
| Ridership | 223,640 |
| Revenue Vehicle Hours | 101,357 |
| Productivity (Passengers per Service Hour) | 2.2 |

RTC ACCESS is the paratransit service that provides door-to-door, prescheduled transportation for people who meet the eligibility criteria of the Americans with Disabilities Act (ADA). **RTC ACCESS** passengers have disabilities which prevent them from riding **RTC RIDE** independently some or all of the time.



| RTC VANPOOL | |
|--|---|
| Description | Commuter vans organized by volunteer participants |
| Ridership | 443,830 |
| Revenue Vehicle Hours | 71,748 |
| Productivity (Passengers per Service Hour) | 6.2 |

RTC VANPOOLS offer people with long commutes a great way to reduce their transportation costs. Participants lease vehicles from a national vanpool company that covers the van’s maintenance and insurance. RTC subsidizes 40% of the cost of leasing the van as an incentive.

RTC is responsible for planning, designing, and constructing regional road projects. In addition to new capacity, the RTC emphasizes maximizing the life of existing roadway infrastructure by funding a preventive-maintenance program that keeps regional roads in good condition. The RTC’s regional Intelligent Transportation System (ITS) program maximizes the operational efficiency of the existing roadway network by coordinating traffic signals and other communications technology.

The RTC was formed in July 1979 by the Nevada State Legislature through the consolidation of the Regional Street and Highway Commission, the Regional Transit Commission and the Washoe County Area Transportation Study Policy Committee. The agency is governed by the RTC Board of Commissioners, which consists of five voting members: two representatives from the Washoe County Board of County Commissioners, two representatives from the Reno City Council, and one representative from the Sparks City Council. The Nevada Department of Transportation (NDOT) Director is an ex-officio member of the RTC Board. The RTC has three standing advisory committees that provide recommendations to the RTC Board: the Technical Advisory Committee, which consists of staff from partner jurisdictions and agencies, the Citizens Multimodal Advisory Committee, and the Regional Road Impact Fee Technical Advisory Committee.

1.2 – TRANSPORTATION PLANNING FACTORS

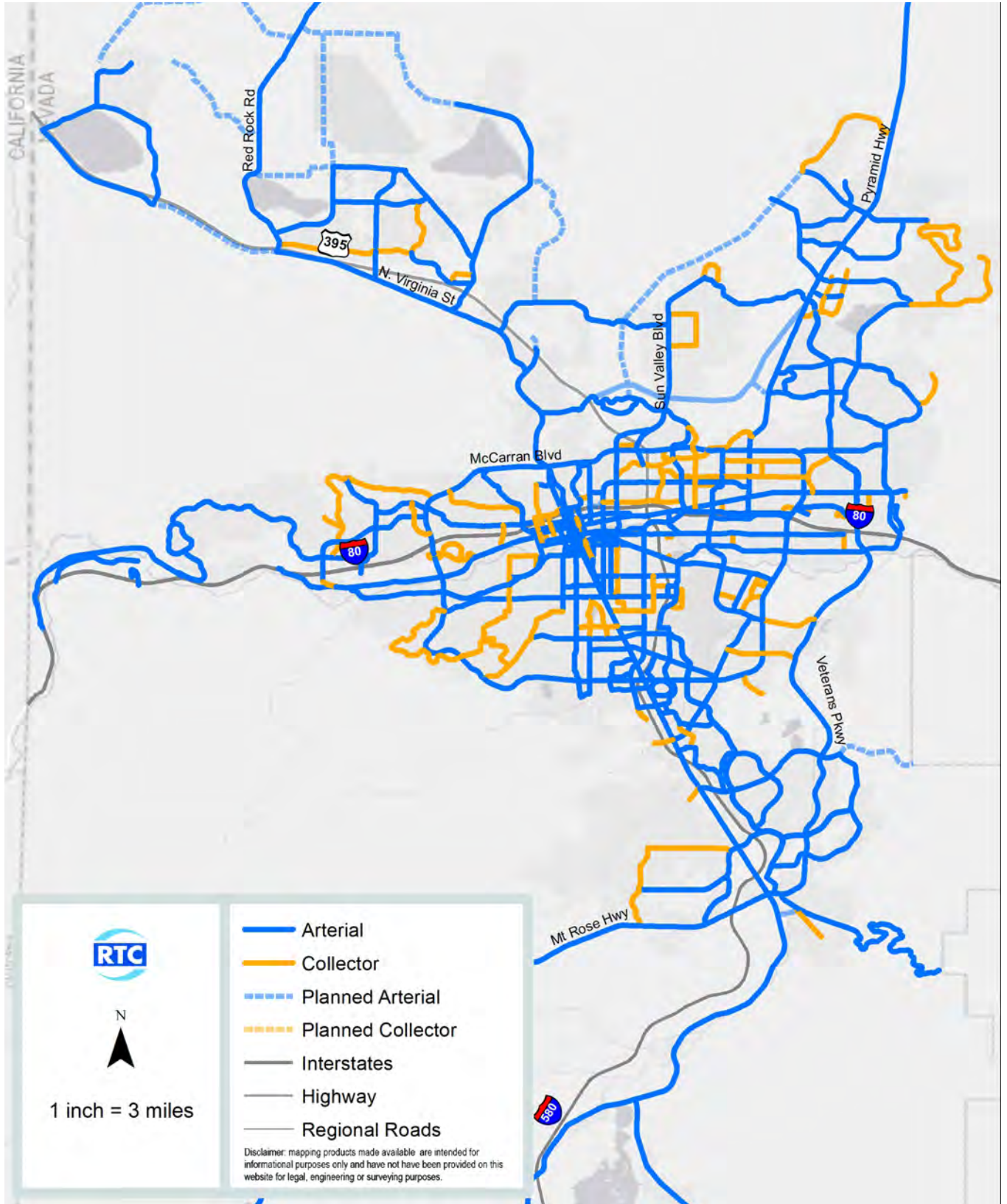
This RTP was developed through a continuous, cooperative, and comprehensive planning process. Federal regulations require that the metropolitan planning process include consideration of eight planning factors.

These factors, listed below, illustrate the need for transportation plans to recognize and address the inter-relationship of transportation, land-use and economic development planning. The factors are considered and integrated throughout the 2050 RTP.

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Increase the safety of the transportation system for motorized and non-motorized users.
- Increase the security of the transportation system for motorized and non-motorized users.
- Increase the accessibility and mobility of people and for freight.
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- Promote efficient system management and operation.

2050 FUNCTIONAL CLASSIFICATION OF ROADWAYS

MAP 1.1



- Emphasize the preservation of the existing transportation system.
- Improving transportation system resiliency and reliability.
- Reducing storm water impacts of surface transportation.
- Enhancing travel and tourism.
- Consideration of bus service between cities in the region.

Recognizing the special nature of transportation problems within major metropolitan areas with more than 200,000 residents, these areas – including the Reno-Sparks, NV-CA metropolitan area – have been designated as “Transportation Management Areas,” or TMAs, within which MPOs are given expanded responsibilities in planning for the safe and efficient movement of people, including motorists, transit customers, pedestrians, and bicyclists. The TMA is located in the urbanized area as defined by the U.S. Census, and is smaller than the metropolitan planning-area boundary. The planning area boundary encompasses all of Washoe County, with the exception of Incline Village, which is in the Tahoe Regional Planning Agency boundary.

| | 2020 | 2050 | Percent Change |
|--------------------------|---------|---------|----------------|
| Washoe County Population | 461,858 | 591,294 | 28.0% |
| Washoe County Employment | 290,100 | 389,688 | 34.3% |
| TRI Center Employment | 16,050 | 40,749 | 153.9% |

The Reno-Sparks metropolitan region is expecting to gain more than 129,000 new residents over the next 30 years, increasing from 461,858 residents to 591,294. The number of jobs in the region is expected to grow from 290,100 to 389,688 during the same period. The increase in population will result in growing travel demand. The regional travel demand model forecasts that daily vehicle miles of travel will increase from 10.3 million in 2020 to 14.8 million in 2050. The multimodal projects in this RTP are expected to reduce the future average daily traffic delay by about 112,000 hours per day compared to a no-action alternative.

1.3 – GUIDING PRINCIPLES

The RTC worked closely with the community to develop guiding principles for the RTP at the beginning of plan development. The guiding principles are the overarching themes that recur throughout the RTP and on which the goals and selection of transportation investments are based. A description of the guiding principles is below.

- **Safe and Healthy Communities**

Community safety and health are closely tied to transportation infrastructure in many ways.

RTC is part of the Vision Zero coalition that seeks to eliminate traffic-related fatalities. Safety for bicyclists and pedestrians can be enhanced by providing safe and accessible space for all roadway users.

Offering safe and convenient infrastructure for active transportation, such as walking and biking, provides the opportunity for many other health benefits. Including physical activity as part of a daily routine helps prevent some chronic diseases. Providing opportunities to walk, bike, and use transit also reduces the need for some auto trips, and subsequently vehicle emissions and air pollution. Cleaner air promotes respiratory health for all Washoe County residents.

- **Economic Vitality and Innovation**

Transportation infrastructure investments can position Washoe County for sustained economic prosperity in several ways.

Construction of roadway, transit, sidewalk, and other multimodal improvements creates immediate jobs for local residents. The increased access and mobility provided by efficient transportation infrastructure systems and services allows for increased investment and job growth by local businesses. The quality of life improvements, like wider sidewalks, new bicycle lanes, and corridor beautification, create a unique sense of place and this makes the region more attractive to residents, businesses, and visitors. The multimodal investments in this plan improve regional connections, further strengthening the Northern Nevada economy.

RTC uses emerging technology to improve the efficiency of the transportation system. An effective transportation system also fosters mobility and innovation in the community.



Victorian Avenue in Sparks. The project included the addition of a cycle track, wider sidewalks, and improved bus stops.

- **Sustainability**

Transportation has an important role in environmental, economic, and social sustainability in Washoe County. RTC promotes sustainability by offering alternatives to driving: riding transit, walking, and biking. By partnering with the local jurisdictions, land-use planning can be integrated with transportation to allow the creation of new opportunities and choices. Outcomes of these partnerships can include transit-supportive development, reduced auto emissions, complete streets, and increased mobility options.

- RTC also promotes sustainability through internal agency operations such as the Leadership in Energy and Environmental Design (LEED) certified transit centers at RTC 4TH STREET STATION and RTC CENTENNIAL PLAZA, using hybrid biodiesel-electric buses and electric-only buses, recycling, using solar panels to generate power for administrative buildings, using recycled materials in construction, and using warm-mix asphalt in roadway resurfacing projects.



RTC RAPID articulated bus: photographed by Vance Fox.

- **Travel Choices**

Increasing travel choices means providing safe and convenient options for walking, biking, driving, and using transit. Providing local residents with a variety of mobility options increases the quality of life and daily convenience of getting to work, school, and recreational activities. Increased travel choices also promote equality in transportation because it provides options to all residents regardless of age or ability.

1.4 – GOALS

Goals were developed through the public participation process to support the RTP guiding principles. These goals highlight the areas where transportation investments can significantly impact quality of life for the region and include the following:

- **Improve and Promote Safety**

RTC seeks to improve and promote safety for all modes of transportation and is a committed partner in the Vision Zero Truckee Meadows coalition. High-crash corridors and intersections are prioritized for infrastructure and operational investments in this RTP. RTC also participates in regional outreach and educational campaigns to promote traffic safety.

- **Integrate all Types of Transportation**

RTC seeks to have an interconnected multimodal transportation system that gives residents more travel choices, including convenient alternatives for walking, biking, riding transit, or driving. The regional transportation system must provide mobility options that are appropriate to the land-use context and address the needs of neighborhoods, commercial districts, and goods movement.

- **Promote Healthy Communities and Sustainability**

Sustainable practices include preservation of existing facilities through initiatives such as the pavement preservation program, focusing on green technology to promote economic development, and utilizing renewable resources to reduce energy costs.

A healthier community can be realized by providing access to nutritious foods to local residents regardless of demographics or location, encouraging active transportation by improving bicycle and pedestrian accessibility and lighting for a safer walking/biking environment, supporting the needs of freight and logistics industries, and reducing dependence on automobiles in order to improve air quality.

- **Promote and Foster Equity and Environmental Justice**

Work toward a more equitable and balanced transportation system that can be safely used by all regardless of age, race, economic status, or ability. It is a priority of RTC to ensure that transportation and mobility benefits are equitably shared among residents of the region.

- **Integrate Land-Use and Economic Development**

RTC is partnering with local jurisdictions and economic development agencies to identify how transportation investments can support regional development goals. This can be achieved by providing connectivity between communities and economic centers, supporting access to local businesses in transit-supportive development districts and other areas, lowering transportation costs, and encouraging density and land-use that supports walking, bicycling, and transit.

- **Manage Existing Systems Efficiently**

It is imperative that RTC minimize the life-cycle costs of area roadways and maximize the utilization of existing infrastructure. By making the most of current transportation resources, RTC can stretch limited revenues farther.

Examples of this include the RTC pavement preservation, annual traffic signal retiming, ITS, and bus maintenance programs.



Bike racks at RTC 4TH STREET STATION.



Bike repair station at RTC 4TH STREET STATION.



School crosswalk on Mayberry Drive.

- **Enhance Regional Connectivity**

Economic and transportation linkages tie Northern Nevada communities together, including Carson City, the Lake Tahoe region, Virginia City, Pyramid Lake, Storey County, and other nearby areas. The community desires regional connectivity for residents, businesses, and visitors alike to have multimodal travel options and freight mobility between these regions and into California.

- **Improve Freight and Goods Movement**

Freight and goods movement contribute to the economic success of this region and play a role in diversifying the employment base.

Because of the strategic location of Reno and Sparks, the manufacturing, air cargo, freight rail, e-commerce, and trucking industries bring significant opportunities for economic growth.

- **Invest Strategically**

Funding is essential to provide a quality transportation system. RTC has limited state, local, and federal resources available and must maximize the positive impact of each transportation dollar. A top priority of investing strategically is to help the community realize that transportation is an investment in our future.

- **Engage the Public and Encourage Community Involvement**

A robust community engagement process is the foundation of all RTC initiatives. It is our commitment to go to the public early and often to seek input, and to consider and incorporate this input when feasible.

These guiding principles and goals are the cornerstone of planning for the future of the community. These goals were an important part of the project selection process.

1.5 – 2013-2017 ACCOMPLISHMENTS

The 2040 Regional Transportation Plan, adopted in 2017, guided transportation investments over the last four years. These transportation improvements have generated significant benefits for the region, including the following:

- SouthEast Connector, now known as Veterans Parkway Extension – Completed a 5.5-mile six-lane arterial with adjacent multi-use path, which included flood mitigation and water quality improvement features.

- 4th Street/Prater Way Bus RAPID Transit Project – Constructed new RTC RAPID Lincoln Line extension between downtown Reno and Sparks, including safety improvements, bike lanes, and construction of ADA compliant sidewalks.
- Virginia Street RAPID Extension Project – Extended RAPID from 4TH STREET STATION to the University of Nevada Reno, including the construction of eight new RAPID stations, sidewalk improvements, shared bus-bicycle lanes, and full reconstruction of Virginia Street in Midtown.
- Keystone Avenue & California Avenue Intersection – Safety, pedestrian, and bicycle improvements at the Keystone Avenue and California Avenue intersection.
- Pyramid Highway and McCarran Boulevard Intersection – Constructed safety, operational, and multimodal improvements at this major intersection.
- Upgraded the Jerry L. Hall Regional Transit Operations and Maintenance Center to increase charging and maintenance capacity for electric buses.
- Installed 30 miles of bike lanes, 10 miles of sidewalk, almost 12 miles of multiuse paths, and 445 ADA-compliant curb ramps.
- Upgraded traffic signals region wide.
- Implemented electric bus program.
- Improved bus stops region wide.



Keystone Avenue & California Avenue Intersection.



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CHAPTER 2 – COMMUNITY-BASED PLANNING

The RTP is founded on a community outreach process designed to more fully understand the region’s diverse and complex transportation needs with a people-based approach. Effective transportation planning requires involvement from community stakeholders, elected officials, business owners, schools, economic development groups, and area residents. Collaboration with the public encourages innovative ideas to emerge that address complex transportation issues.

Ensuring a broad base of participation helps develop a cohesive effort in planning region-wide. It also allows RTC's priorities to interline with those of other groups and agencies who are working to enrich quality of life and create a more-livable community. Strong community support for the planning process will also greatly enhance implementation of specific projects and programs in the plan.

The 2050 RTP process was formed around the following outreach types of outreach:

- Participation of advisory groups that guided the planning process
 - Agency Working Group
 - RTC Citizens Multimodal Advisory Committee
 - RTC Technical Advisory Committee
 - Inter-County Working Group
- Community planning workshops and virtual meetings held at strategic points during the plan-development process: identifying the vision and goals, developing alternatives, and evaluating/prioritizing alternatives
- Use of online surveys

- Forums that brought local residents together to focus on specific special topics important to the plan, including economic development, safety for school students, the Downtown Reno Circulation Study, and the Sparks Industrial Area Study
- Integration with the Coordinated Human Services Transportation Plan outreach process
- Presentations to the RTC Board
- Involvement of other elected officials, boards, commissions, and community organizations
- Digital and traditional media to reach a broad audience, including the RTC website, news releases, interviews, videos, the RTC YouTube channel, Facebook and Twitter, The Road Ahead with RTC (a television news segment on KOLO 8 News Now), and meeting announcements in English- and Spanish-language publications.

RTC held traditional public meetings in the early phases of plan development. The 2050 RTP process adapted to the unexpected onset of the COVID-19 pandemic in March of 2020, which restricted the ability to hold in-person meetings. The innovative use of technology allowed advisory committee meetings to transition to an online format. Virtual public meetings replaced in-person events.

Public comments were received using online surveys, phone calls, and emails. A robust community engagement continued to occur in a digital format.

2.1 – RTP AGENCY WORKING GROUPS

The Agency Working Group (AWG) helped to guide, inform, and provide technical expertise in all areas of the plan. The AWG collaborated with the RTC to ensure consistency with other planning strategies, initiatives, and policies in the region. This group has a more-expansive membership than the RTC Technical Advisory Committee.

This group contributed significantly to:

- Coordinating regional planning efforts
- Identifying the impacts of transportation on other agencies
- Providing a forum to present innovative ideas at a regional level

2.2 – RTC CITIZENS MULTIMODAL ADVISORY COMMITTEE

The Citizens Multimodal Advisory Committee (CMAC) is a standing committee that provides feedback to staff and the RTC Board of Commissioners.

The group meets monthly and is made up of residents from throughout the region with an interest in the transportation system. This diverse group represents community needs and concerns related to all modes of transportation. CMAC provided input regarding priorities for projects and services in the 2050 RTP.

2.3 – RTC TECHNICAL ADVISORY COMMITTEE

The Technical Advisory Committee (TAC) is a standing committee that provides feedback to staff and the RTC Board of Commissioners. The group meets monthly and is made up of staff members from partner agencies. This diverse group represents community needs and concerns related to all modes of transportation for local jurisdictions and agencies. CMAC provided input regarding priorities for projects and services in the 2050 RTP.

2.4 – INTER-COUNTY WORKING GROUP

It is important that the RTP is comprehensive and illustrates the vision for transportation planning efforts and challenges in Northern Nevada and the Lake Tahoe Region. Inter-regional collaboration with other nearby cities, counties, and MPOs ensures that RTC is able to build on transportation linkages and economic ties, as well as reduce the duplication of efforts attempting to accomplish the same goal.

Collaboration among regions allows for the development of greater ideas and partnerships that can have a positive impact on mobility options. The Inter-County Working Group included representatives from surrounding jurisdictions, including Carson City, Storey County, Tahoe Regional Planning Agency, Tahoe Transportation District, Lyon County, the City of Fernley, Placer County, Nevada Association of Counties, and NDOT.

2.5 – COMMUNITY PLANNING WORKSHOPS

Community planning workshops provided an opportunity for the public to actively participate in the planning process. The workshops took place at key decision points during the RTP including:

- Developing the vision, guiding principles, and goals
- Identifying alternatives
- Project evaluation and prioritization

Community Planning Workshop #1:

Community Visioning Workshop

RTC held a public meeting to introduce the community to the 2050 RTP on February 27, 2020 from 5 - 7 p.m. at the Terry Lee Wells Discovery Museum.

The purpose of the workshop was to seek input on the community's long-term vision for transportation in the region. The guiding principles and goals of the RTP were discussed at the meeting.

The visioning survey was launched on February 25 and remained open until May 1, 2020. The RTC received more than 300 responses. The following is a summary of the responses:

- In terms of priorities, transportation safety has been ranked the most number of times, followed closely by bicycle infrastructure.
- Considering tradeoffs, respondents are significantly favoring basic connected sidewalks over those with amenities, investment in the core transit system over expansion, complete streets with lower speeds over roadway capacity, off-street bike facilities significantly more than less-expensive, on-street facilities, and investment in pavement preservation over new roadways.
- The majority (75%) of respondents indicated that their primary mode of transportation is driving alone in a personal vehicle.

Community Planning Workshop #2:

Alternatives Development

The Alternatives Development Workshop was launched in June 22, 2020 as a virtual public meeting and online survey. This included a video presentation and a survey that allowed people to identify any multimodal transportation concerns or ideas that they might have within the planning area. The survey was open through the end of July, 2020. All projects suggested during the call for projects were analyzed for consideration in the 2050 RTP.

Community Planning Workshop #3:

Alternatives Evaluation and Prioritization

The Alternatives Evaluation and Prioritization Workshop was available as a virtual public meeting and online survey from December 17, 2020 through January 14, 2021. This included a video presentation about the alternatives under consideration and an online survey that encouraged members of the public to identify their top-priority projects. Survey results were incorporated into the alternatives analysis and project-prioritization process.

Also critical to the development of the RTP was a series of community forums held on various topics including schools, specific regional areas, and the regional economy. A summary of these outreach events is provided below.

Washoe County School District

RTC staff participated in the Student Leadership Council meeting to gather input about youth transportation safety and other concerns.

Sparks Industrial Forum

An in-person workshop with businesses and members of the public was held on February 26, 2020, to identify needs in the Sparks Industrial Area. The Sparks Industrial area is generally defined as the area between I-80 and the Truckee River. Participants identified needs related to pedestrian and bicycle access to employment opportunities. This area includes strong transit ridership that remained high even during the COVID-19 shutdown. The high-pedestrian activity that accompanies transit ridership further supports the need for increased sidewalk connectivity to provide walking access to jobs.

Safety for all modes of transportation was identified as a priority, with particular focus the unique needs created by high-truck-traffic volumes.

The land use in this area is transitioning from primarily industrial to including recreation and commercial uses. City land-use plans indicate a vision for making the Truckee River more accessible to the public and encouraging residential uses.

Economic Development Forum

The Economic Development Forum was held online on May 27, 2020. It included presentation by Mike Kazmierski of the Economic Development Authority of Western Nevada (EDAWN), Ann Silver of the Reno+Sparks Chamber, and Jennifer Cunningham of the Reno-Sparks Convention and Visitor Authority. These speakers provided insights into the ways transportation can support economic prosperity.

Employment Growth: The region is targeting advanced manufacturing, technology, e-commerce, and logistics as sectors for future economic expansion and job growth. Industrial development is occurring in Washoe County as well as the larger region, including TRI Center, Fernley, and Silver Springs. Priority corridors for freight movement and commuting to these emerging employment centers include:

- I-80 from Reno to Fernley
- US 395 from Reno into the North Valleys

- Pyramid Highway
- Spaghetti Bowl
- New corridor to connect the North Valleys, Spanish Springs, and USA Parkway

Business-friendly transportation:

Transportation investment that support the unique quality of life in Washoe County will benefit local business activity. Components of this include ease of commuting, reliable transportation, and mobility through various types of transportation such as walking, biking, and transit. A vibrant local economy will support the mobility needs of seniors, disabled residents, and youth, who may be less reliant on driving. Clean transportation infrastructure will also support the local economy, including zero-emission transit and an expansion of electric vehicle charging options for residents.

Supporting travel and tourism:

Reno and Sparks attract visitors to resort casino destinations as well as outdoor recreation opportunities. Travel and tourism trends are shifting as a result of COVID-19, with a greater reliance on the drive-up market. Supporting highway infrastructure improvements will encourage visitors to drive to Washoe County from surrounding states. Expanding the transit system's connectivity to the Reno-Sparks Convention Center will also support the convention industry.

Of particular importance is the connection between the University, Downtown, Midtown, and the Convention Center. More than 4,000 hotel rooms are located in the Downtown Reno corridor and the Virginia Line RAPID transit service provides essential connectivity to the Convention Center.

Downtown Reno Circulation Virtual Workshop

The RTP process included a Downtown Reno Circulation Study to focus on mobility in the central core. Staff from the City of Reno and RTC analyzed a series of transportation alternatives and that were presented through this virtual workshop. The workshop included a video presentation and provided an option for individuals to submit comments about the alternatives as well as other suggestions or ideas. The virtual meeting was available from November 13 through December 11, 2020. A presentation of the concept was also made to the Downtown Reno Partnership.

2.7 – COORDINATED HUMAN SERVICES TRANSPORTATION PLAN

The Coordinated Human Services Transportation Plan (CTP) was developed in coordination with the RTP. The CTP process included a series of virtual public meetings and stakeholder outreach.

Interviews with representatives of human services agencies and non-profits were the initial steps. This included human service transportation providers, medical providers, veteran's services, and transportation network companies. A community transportation survey was conducted to identify issues to consider in the plan. The CTP was adopted by the RTC Board in December 2020.

2.8 – RTC BOARD OF COMMISSIONERS

The RTC provided regular reports to the RTC Board of Commissioners throughout the development process. The Board provided direction at strategic points, including adoption of the guiding principles and goals, the list of projects to be considered, the transit vision, and evaluation of alternatives.

2.9 – ELECTED OFFICIALS, BOARDS, & COMMISSIONS

The RTC also sought input about the 2050 RTP from local elected officials and appointed boards and commissions. Presentations were made to the following:

- Reno City Council
- Sparks City Council
- Washoe County Commission
- Regional Planning Governing Board

- Reno Planning Commission
- Sparks Planning Commission
- Washoe County Planning Commission
- Regional Planning Commission

3.0 – BROADCAST & DIGITAL MEDIA OUTREACH

RTC used a variety of tools to reach a broad spectrum of the community. In addition to workshops and other meetings, both traditional and electronic media were instrumental in sharing information and gathering feedback.

RTC Website

The RTC website was employed to encourage public participation, and as a method to store documents, presentations, and other materials related to the 2050 RTP.

Online Surveys

The RTC engaged the community with online surveys to help guide the RTP process.

Social Media

Public participation opportunities were promoted through social media outlets. These messages included links to the online surveys and information about participating in virtual public presentations and workshops.

Facebook, Twitter, and YouTube all featured content.

RTC eNews

Information about the 2050 RTP was included in the RTC’s monthly electronic newsletter which is distributed to elected and government officials, businesses, community leaders, and stakeholders.

MyRTC Email Updates

Members of the community who subscribe to MyRTC were also invited to participate. MyRTC enables internet users to sign up for updates on topics of interest to them.

Media Outreach

Another important component of the outreach program included news coverage, in newspapers, television, and radio. The RTC issued press releases to local media outlets and participated in media interview to inform the public about the RTP process, its topics, ways to get involved, and the importance of the RTP to the region. The RTC utilized its weekly broadcast segment, “The Road Ahead with RTC,” which airs on KOLO 8 News Now, to further promote the RTP planning process including meetings and workshops (see schedule below).

- Advertisements for the community workshops were placed in local English and Spanish language newspapers.

The Road Ahead with RTC Segments

- February 25, 26, and 27, 2020: Regional Transportation Plan Kick-Off Meeting
 - March 17, 18, and 19, 2020: Regional Transportation Plan MetroQuest Survey
 - June 30, July 1 and 2, 2020: Regional Transportation Plan Alternatives Analysis Virtual Public Meeting and Survey
 - December 1, 2, and 3: Regional Transportation Plan Process Continues
 - January 12, 13, and 14: Regional Transportation Plan Virtual Public Meeting and Survey to Prioritize Programs and Projects
- June 22, 2020: RTC Launches Community Survey for 2050 Regional Transportation Plan
 - November 12, 2020: RTC Launches Virtual Presentation for Downtown Reno Circulation Study
 - December 17, 2020: RTC Launches Virtual Presentation, Survey for Input on Future Projects

News Releases

- February 6, 2020: RTC invites Sparks Industrial Businesses to 2050 Regional Transportation Plan Community Meeting on February 26
- February 20, 2020: RTC Launches 2050 Regional Transportation Plan with Community Meeting on February 27
- April 20, 2020: RTC Encourages the Community to Take Two Quick Surveys



CHAPTER 3 – IMPROVING SAFETY

Planning and building a safe multimodal transportation system is the most critical goal of the RTC. Safety is involved in all types of transportation: driving, walking, cycling, and riding transit. RTC engages in innovative planning and data analysis, public education, interdisciplinary collaboration, operations, and design, with the purposeful goal of reducing the number of crashes, injuries, and fatalities in Washoe County. In addition, RTC is a partner with local emergency response teams and law enforcement agencies, in an effort to provide evacuation assistance and coordination during regional disasters.

Safety priorities include:

- Continue building stakeholder and multi-agency partnerships.
- Promote safety awareness and education through community outreach.
- Implement a Complete Streets approach.
- Enhance the accessibility and safety of transit stops.
- Implement ITS technologies.

3.1 – VISION ZERO TRUCKEE MEADOWS

In 2017, RTC led the creation of the Vision Zero Truckee Meadows task force. The task force was established to take equitable, data-driven, and transparent actions to improve safety throughout the community. By working together to make roads and sidewalks safer for pedestrians, the task force will make the roads safer for everyone. The task force has a goal of zero pedestrian fatalities by 2030. The only acceptable number of traffic deaths in our community is zero.

Through the shared regional commitment to safety, Vision Zero Truckee Meadows is committed to changing the rising trend of traffic deaths in the region.

The RTC recognizes the importance of pedestrian safety in addressing equity concerns in underserved parts of our community.

The Vision Zero Truckee Meadows task force members include:

- City of Reno
- City of Sparks
- Washoe County
- Regional Transportation Commission of Washoe County
- Washoe County Health District
- Federal Highway Administration
- Nevada Department of Transportation
- Office of Traffic Safety
- Reno Bike Project
- Reno-Sparks Chamber of Commerce
- Renown Health
- Safe Kids, Washoe County
- University of Nevada, Las Vegas
- University of Nevada, Reno
- Washoe County School District
- Members of the community

The task force created an action plan to bring the number of traffic fatalities to zero. Regional collaboration is vital to achieving this goal. The plan unites the region around a common goal to make the community a stronger and safer place for everyone.

Resolutions have been signed by the City of Reno, City of Sparks, Regional Transportation Commission, Washoe County Board of Health, and Washoe County to adopt the goal of zero pedestrian fatalities by 2030 as well as to support that action plan. Visit VisionZeroTruckeeMeadows.com to see the entire plan.

3.2 – SAFETY PLANNING

Nevada Strategic Highway Safety Plan (SHSP)

Nevada’s Strategic Highway Safety Plan (SHSP) is produced by NDOT in cooperation with many agencies, including the RTC. The SHSP is a state-wide plan that covers six critical-emphasis areas and suggests many safety improvement strategies using the 5E approach, which focuses on education, enforcement, engineering, and emergency response. This plan is incorporated in the RTP and includes goals and objectives of the Vision Zero Truckee Meadows Task Force in the pedestrian goals of the plan.

Nevada’s 2015 SHSP identifies seven Critical Emphasis Areas (CEA): impaired driving, intersections, lane departures, motorcycles, occupant protection, pedestrians, and teen drivers. NDOT has implemented strong public awareness campaigns regarding impaired driving and seat belt use. Because intersection crashes and incidents involving pedestrians and bicyclists are the most common on roads in the RTC planning areas, these CEAs receive the greatest focus in the RTP.

Complete Streets Master Plan

Adopted in 2016, the Complete Streets Master Plan identifies a long-range strategy to improve safety for all users on regional roadways. The plan is based on extensive community outreach and identifies corridors where multimodal infrastructure investments will improve safety and connectivity.

Complete Streets can include a variety of elements and are designed to improve safety and accommodate local land-use characteristics. Potential components of Complete Streets can include sidewalks, bike lanes, shared-use paths, enhanced crosswalks, reduction in the number of travel lanes, and bus stops.

Because each Complete Streets design is customized to meet corridor needs, not all designs will include the same elements.

Data Analysis

The collection and analysis of crash data is important for continuous safety planning. RTC works closely with NDOT to analyze and publish information about safety trends over time as well as the specific safety impacts of particular projects. RTC staff serves on the SHSP data team and receives weekly updates about data available from NDOT and the Nevada Office of Traffic Safety (OTS).

Corridor and Area Plans

Corridor planning is used to identify safety concerns and infrastructure solutions. The RTC has conducted plans for several regional corridors that have been incorporated into the investments shown in the RTP project listing. These plans incorporate safety analysis, needs for multimodal investments such as bicycle lanes and sidewalks, and other operational needs. Area plans have been completed for the North Valleys, South Meadows, and University Area.

Projects in several corridor and area plans have advanced to design and delivery, including Keystone Avenue and Sun Valley Boulevard.

In a continued effort to reduce the severity of crashes and improve roadway safety, transportation and safety experts take part in NDOT's Road Safety Assessments (RSA) and Safety Management Plans (SMP) along with various corridors within the region. The assessments and plans are conducted in partnership with NDOT, RTC, local government agencies, emergency responders, and bicycle and pedestrian experts.

RSAs and SMPs are formal safety performance reviews of existing or future road or intersections by multidisciplinary teams which are performed to support corridor studies and identify short-, medium-, and long-term safety improvements.

3.3 – COMMUNITY AWARENESS & EDUCATION

Raising public awareness about safety concerns and providing educational materials is an important tool in improving safety. Of particular importance is awareness of pedestrian and bicycle safety best practices.

RTC attends various outreach events and provides the community with safety materials and information.

Motorist Tips to Help Keep Pedestrians Safe:

Look for and yield to pedestrians at intersections and in crosswalks.

Pay attention - avoid distractions such as talking on your cell phone and texting while driving (it is against the law in Nevada).

Watch for vehicles slowing down around you. They could be yielding to a pedestrian.

Never pass a vehicle that is stopped at a crosswalk - it may be stopped for a pedestrian crossing the road.

When turning at intersections, always look for pedestrians on both the streets you are leaving and entering.

Slow down - speeding greatly increases the likelihood and severity of a crash.

At 20 MPH, it can take a car 69 feet or more to stop and at 40 MPH, it can take 189 feet or more for a car to come to a stop - more than two and a half times the distance at 20 MPH.

Many factors (reaction time, pavement condition, vehicle size, tire age, driver experience, etc.) can also increase stopping distances greatly.

Pedestrians can also help prevent crashes by remembering the following tips:

Make eye contact with drivers before you step into the street.

Make sure they see you, plan on stopping and have time to stop.

Cross the street at crosswalks where motorists expect to see you.

Just because one car has stopped for you, others may not. Be cautious.

Keep looking. If not, walk on the left side of the street facing traffic.

Safety measures are often shared with the public through programs such as “The Road Ahead With RTC” segments on KOLO 8 as well as Safe Routes to School, Truckee Meadows Bicycle Alliance, SMART TRIPS, Healthy Communities, social media, and website outreach.

Safe Routes to School

RTC works closely with the Washoe County School District and NDOT to implement a successful Safe Routes to School Program (SRTS).

This includes a significant educational component geared toward students, parents, and school staff. The School District Police Department Safe Routes to School Coordinator conducts regular school-based events to teach K-8 grade students how to be more visible to motorists and how to follow safety precautions.

The SRTS Coordinator works with parents, school faculty, and staff to reconfigure school zone areas and to implement no idling zones in a way that minimizes potential conflicts. The SRTS Coordinator also provides input to RTC about capital investments that would improve safety on regional roads near schools.



Safe Routes to School event.

RTC SMART TRIPS

The RTC SMART TRIPS program assists businesses and citizens in using sustainable modes of transportation and adopting trip reduction strategies. The reduction in vehicle trips is a critical step toward maintaining and improving air quality in the Truckee Meadows and lessening traffic congestion. Lower congestion is linked to a reduction in crashes. Additionally, studies indicate that as the number of bicycle and walking trips increase there is a reduction in the crash risk for those travel modes.

In addition to promoting the benefits of sustainable transportation, the program helps educate the public on how to travel safely.

Safety messages for motorists, bicyclists, and pedestrians are distributed throughout the year at public events and employee benefit fairs. Safety lights that can be worn on clothing or placed on bikes are also given to members of the public at these events. Safety brochures can be downloaded from the RTC website in the Public Transportation section on the Bicycling page (<https://www.rtcwashoe.com/public-transportation/bicycling>).

3.4 – OPERATIONS

Operations are another key component of the RTC safety program. Safety is a vital priority of the RTC RIDE and RTC ACCESS transit services. Safety operations include RTC’s partnership in the Nevada Traffic Incident Management (NV TIM) program as well as emergency management.

Safe Transit Operations

The Short-Range Transit Plan identifies the provision of safe and secure transit service as a primary goal. The standard practices that address this goal include the following:

- The RTC shall pursue specific programs to enhance the safety of public transportation and minimize the number of avoidable accidents involving transit vehicles.

- The RTC shall work with local, state, national, and private law enforcement agencies to eliminate security incidents in the RTC public transportation system.
- The RTC will inspect equipment and facilities biweekly based on industry-defined condition performance standards. Deficiencies shall be corrected immediately and before placing equipment and facilities into service.
- The RTC follows state requirements and national best practices to reduce the spread of COVID-19 on transit.
- Maintain visible level of system-wide security presence and surveillance coverage throughout the operating periods of the system.

RTC works with the local jurisdictions to improve pedestrian safety at bus stops by enhancing ADA accessibility, installing solar-powered lights where feasible, installing security cameras at RTC RAPID stations and at RTC 4TH STREET STATION and RTC CENTENNIAL PLAZA, and promoting general roadway safety.

Research by the Federal Transit Administration and the US DOT Federal Motor Carrier Safety Administration indicates that riding a bus is 26 times safer than driving an automobile.

Fatality rates per 100-million passenger miles are .93 for motor vehicles and .10 for bus travel.

Nevada Traffic Incident Management (NV TIM)

The Nevada TIM program is a partnership of agencies and organizations working together toward a common objective: to reduce roadway and incident clearance times and to reduce secondary crashes.

It is a systematic, state-wide, multi-agency effort to improve the management of highway incidents (crashes), disabled or abandoned vehicles, debris in the roadway, work zones, adverse weather, and any other events and emergencies that impact the transportation system. A unified goal of the NV TIM is to restore roadways quickly and safely following an incident and to save lives.

NV TIM partners include:

- Law Enforcement
- Federal Highway, Homeland Security, and Federal Transit
- Fire and Rescue
- Emergency Medical Services
- Transportation Agencies
- Towing and Recovery Companies
- Emergency Managers

- Hazardous Materials Responders and
- Environmental Agencies (private and public)
- Media and Agency Public Information Officers
- Medical Examiner and Coroner's Office
- University Systems

Emergency Management Plan

The RTC Emergency Management Plan (EMP) is the framework for emergency response and preparedness throughout Washoe County. The EMP is intended to support a comprehensive, all-hazards approach to emergency response management.

The plan will respond to a region-wide spectrum of emergencies as warranted by external professional emergency response organizations. The purpose of the plan is to protect life, minimize damage, and ensure continuity of operations so essential services may continue to be provided to the community.

The EMP applies to all emergencies that could impact Northern Nevada. Planned training, exercises, and drills are part of the EMP.

These planned events provide better coordination, response, and management of actual incidents or events. Planned events allow regional partners to test and exercise plans to improve the response and management of actual events.

Washoe County Regional Resiliency Study

The Washoe County Regional Resiliency Study was completed in 2014. The Resilience Study was prepared in response to potential climate variability related impacts specific to the Northern Nevada Region. The last several decades have seen dramatic growth in the region, coupled with increased resource demands that have forced local governments to consider how these impacts will affect the region and may, in turn, impact the regions ability to provide essential services.

3.5 – SAFETY DESIGN IMPROVEMENTS



When building or reconstructing regional roads, RTC includes safety as a primary factor in project selection and design. The Complete Streets design approach has reduced crashes on many regional roads by between 31 and 46 percent.

The range of improvements, which are selected based on corridor land-use characteristics and transportation patterns, include the following:

- Installing or upgrading sidewalks and crosswalks.
- Adding bicycle lanes, shared paths, buffered bike lanes, or bike boulevards.
- Providing a center turn lane or median, or other access management treatments.
- Adding concrete bus pads that allow for passengers to safely load and unload.
- Providing intersection and traffic signal upgrades.
- Reducing the number of or width of travel lanes.
- Roundabouts to reduce speed and crash severity.
- Installation of Flashing Yellow Arrows and retroreflective backplates at traffic signals.
- Modifying signal timing to accommodate pedestrians and cyclists.
- Installing pedestrian crossing/ waiting areas in median islands.
- Road right of way, pedestrian walkways, and intersection lighting.



Roundabouts along Eagle Canyon Drive and La Posada Drive.



- Use of rumble strips on shoulders and centerlines along curves.
- Shoulder widening, slope flattening, and use of pavement safety edge.
- Street lighting.

By installing design treatments that encourage cars to travel at speeds closer to the posted speed limit, RTC is able to reduce the number and severity of crashes.

Complete Streets design principles apply context-sensitive solutions to support all types of transportation. The primary purpose of Complete Street projects is to provide safe access and travel for all users, including pedestrians, bicyclists, motorists, and transit users of all ages and abilities.

These design treatments have been demonstrated to consistently reduce crashes on regional roads in the Reno-Sparks metropolitan region.

3.6 – RTP SAFETY PROJECTS

Safety was a key project prioritization factor in this RTP. While all projects are designed to improve safety, projects that address safety issues in high-crash locations or issues identified in road safety audits are listed in below.

- Pyramid Highway/Sun Valley/ US 395 Connector.
- Oddie Boulevard/Wells Avenue multimodal improvements.
- Mill Street/Terminal Way multimodal improvements.

- Keystone Avenue multimodal improvements.
- Sparks Boulevard multimodal improvements.
- Sun Valley Boulevard multimodal improvements.
- Spaghetti Bowl improvements.
- Center Street Cycle Track





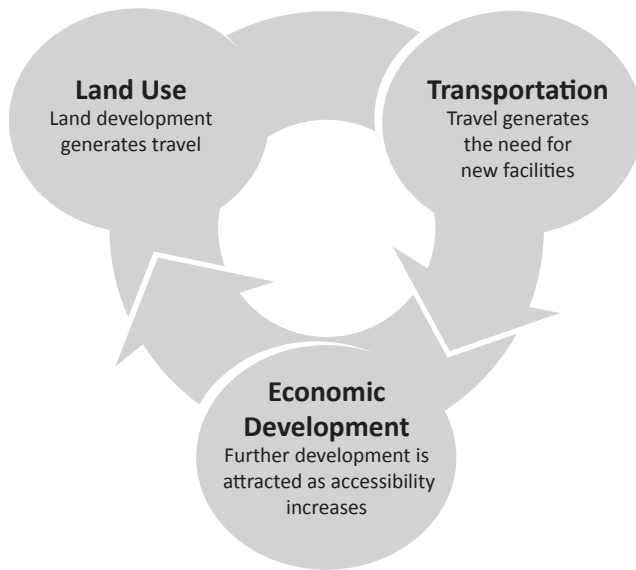
CHAPTER 4 – INTEGRATING LANDUSE & ECONOMIC PROSPERITY

Landuse, economic prosperity, and transportation are deeply connected. Transportation investments enhance access and mobility, improve the quality of the streetscape, and help create public spaces where people want to be. Transportation infrastructure is needed to serve existing neighborhoods and new growth that is occurring in the community. A safe and efficient regional road network is also needed to support travel and tourism as well as industrial growth related to logistics, distribution, and advanced manufacturing.

Integration of Land Use, Transportation, and Economical Development

Figure 4.1

Integration of Land Use, Transportation, and Economic Development



Source: This graphic is based on a document produced by the US Department of Federal Highway Administration called An Overview: Landuse and Economic Development in Statewide Transportation Planning.

Transit-Supportive Development

One of the best ways to increase transit ridership is to encourage high-density housing and employment near transit stops. Providing convenient, enjoyable, and accessible pedestrian connections to bus stops is essential.

Land-use policies established by Reno, Sparks, and the Truckee Meadows Regional Planning Agency have incentivized this type of development in the Virginia Street, 4th Street/Prater Way, and other key transit corridors. As an example, Midtown has emerged as a major shopping and dining destination with a growing residential and office component. Victorian Square in downtown Sparks has also experienced a resurgence, as evidenced by the housing development near RTC CENTENNIAL PLAZA. Affordable housing and essential services are best suited to locations near transit lines to promote accessibility.

Multimodal infrastructure provides more options to get to work, school, recreational activities and provides access to necessary goods and services. High-capacity transit combined with Complete Streets design elements that provide pedestrian and bicycle access support a vibrant urban environment.

Transit supports regional tourism and economic development initiatives. It plays an important role in getting people to conventions, athletic venues, and other special events. As an example, RTC RAPID Virginia Line connects the Reno-Sparks Convention Center to downtown and major resorts supporting the tourism and convention industries. The RAPID extension to UNR will provide access to education and employment opportunities, as well as football, basketball, and other sporting events.

4.1 – REGIONAL PLANNING

The RTC collaborates with other regional agencies that influence land-use, quality of life, and economic development. These organizations include the Reno-Tahoe Airport Authority, Truckee Meadows Regional Planning Agency, the Washoe County Health District, Washoe County School District, Washoe County Senior Services, the Truckee River Flood Management Authority, and the Reno Housing Authority.

A summary of planning policies that influence transportation investments are described below.

Reno Housing Authority

The Housing Authority of the City of Reno (Reno Housing Authority or RHA), was founded in 1943. RHA has been appointed as the Public Housing Authority for the City of Sparks and Washoe County as well. RHA owns and manages public housing in the City of Reno and Sparks under the Public Housing programs.



Through the use of the Neighborhood Stabilization Programs and other funding, RHA owns rental properties specifically targeted for low-income households. RHA also provides housing subsidies to low-income families in Reno, Sparks, and Washoe County through Rental Assistance programs.

Reno-Tahoe International Airport

Owned and operated by the Reno-Tahoe Airport Authority, the Reno-Tahoe International Airport (RTIA) is located in the core of the Reno-Sparks metropolitan area and is essential to the economic growth of the region. The RTIA is an important asset to the region, generating a total annual economic impact of \$3.1 billion. The airport functions like a small city with more than 2,400 employees working for a variety of companies. It serves 4.1 million passengers per year. In 2019, approximately 147 million pounds of cargo arrived/departed RTIA. The airport is crucial to the success of tourism and cargo-related industries in Northern Nevada.

The Reno-Tahoe Airport Authority also operates the Reno-Stead Airport. The Reno-Stead Airport is a 5,000 acre general aviation facility and is home to the National Championship Air Races and contains an FAA-designated Unmanned Autonomous Systems (UAS) test range.

Truckee Meadows Regional Planning Agency

The Truckee Meadows Regional Planning Agency (TMRPA) is responsible for the preparation and implementation of the Truckee Meadows Regional Plan (referred to as the Regional Plan). The TMRPA is comprised of the Regional Planning Governing Board (RPGB), the Regional Planning Commission (RPC), and staff.



The Regional Plan was updated in 2019 and provides the framework for growth in the Truckee Meadows for the next 20 years. The Plan focuses on the coordination of master planning in Washoe County as it relates to population, regional form and land use patterns, public facilities and service provision, natural resources, and intergovernmental coordination.

It is a cooperative effort of the local and regional units of government, the major service providers, and the citizens of the Truckee Meadows and is intended to represent a regional consensus reached through a process of public dialog and decision-making to provide a unifying framework for local and regional policies and services.

TMRPA works closely with the local jurisdictions to develop population and employment projections by Traffic Analysis Zone (TAZ), which are assigned in the RTC travel demand forecast model. In accordance with RPGB policy, the Washoe County population and employment projections, called the Consensus Forecast, uses a number of leading forecasts, which has several advantages over using a single source for forecasting population.

RTC and TMRPA collaborate closely on a wide range of data management and analytical issues. Through a Shared Work Program, the two agencies are able to access data on a common server and undertake joint technical analysis.

Washoe County Health District

The Washoe County Health District is a strong partner with RTC in promoting a healthy community. The District's Air Quality Management Division (AQMD) and Chronic Disease Prevention Program actively support transportation investments that improve community health.

The World Health Organization defines a healthy community as “one that is safe with affordable housing and accessible transportation systems, work for all who want to work, a healthy and safe environment with a sustainable ecosystem, and offers access to health care services which focus on prevention and staying healthy.”

The Health District sponsors several healthy community initiatives based on the concept that health is more than the absence of disease, and is defined broadly to include the full range of quality of life issues.

Air Quality Management Division (AQMD)

The AQMD implements clean air solutions that protect the quality of life for residents of Washoe County through community partnerships and programs such as air monitoring, permitting and enforcement, planning, and education. The Division monitors ambient air quality for the determination of compliance with National Ambient Air Quality Standards (NAAQS).

Additional information about air quality is provided in Section 5.2.



Chronic Disease Prevention Program

In addition to the link between auto emissions and respiratory health, RTC works with the Washoe County Health District to promote active transportation and awareness of its associated health benefits. Active transportation includes walking, biking, and riding transit (which generally begins or ends with walking to or from a bus stop). Including physical activity as a part of daily activities helps to reduce obesity and the resulting chronic conditions such as heart disease and diabetes. However, this will occur only if safe and accessible sidewalks and bicycle facilities are readily available. GetHealthyWashoe.com is a website that includes information about active living and biking to work was sponsored by the Health District and in coordination with RTC.

Community Health Improvement Plan

The Health District, in partnership with Truckee Meadows Healthy Communities, developed a Community Health Improvement Plan in 2016.

This plan developed priorities and action plans to improve health in the region with a focus on access to healthcare and social services, behavioral health, education, and food security.

The plan included a goal to expand public and private transportation options that support access to transportation for essential services, such as medical appointments and social services, and allow seniors to live independently.



Washoe County School District

RTC works closely with the Washoe County School District and the Nevada Department of Transportation on the Safe Routes to School Program (SRTS).

The School District Police Department implements this program, which includes a combination of capital investments, organization of parent volunteers at school zones, development of operational plans, and student education. The School District's SRTS Coordinator participates in RTC plans and studies to identify issues important to student safety and accessibility.

The program is funded by RTC through Surface Transportation Block Group grant funds.

RTC also works closely with School District regarding school siting and associated transportation infrastructure needs.



The regional school population is significantly growing. In 2019 there were four new schools that opened and two additional new schools opened in 2020. During the 2019-2020 school year, the walk zones were expanded in the community, which resulted to more youth walking and bicycling to school.

SRTS focuses on K-8 grades; therefore, RTC, NDOT and local jurisdictions work together to evaluate school zone safety for the region's high schools.

GIS map access is being constructed to provide tools for guardians and students use to find safe infrastructure and routes for students to use to get to and from school. In addition to the GIS mapping tool, additional electronic and media platforms are being utilized for expansion of home-based and remote learning. This is significant because with more families choosing in-home learning, the number of students walking and bicycling to school is reduced.



Safe Routes to School is a Vision Zero Truckee Meadows partner and is exploring the Vision Youth program moving forward. Vision Youth utilizes the same mindset that fatalities are not acceptable and sets the goal of zero fatalities for students walking and biking to and from school.

Washoe County Senior Services

Washoe County Senior Services assists older adults in the community so they can maintain independence and quality in their lives. Washoe County Senior Services offers a nutrition program, legal services, social services, adult day care, and recreational activities at the Washoe County Senior Center and Sparks Senior Citizens Center. The Strategic Plan for Washoe County Senior Citizens identifies the short- and long-term issues facing the region's aging population, including mobility and accessibility.

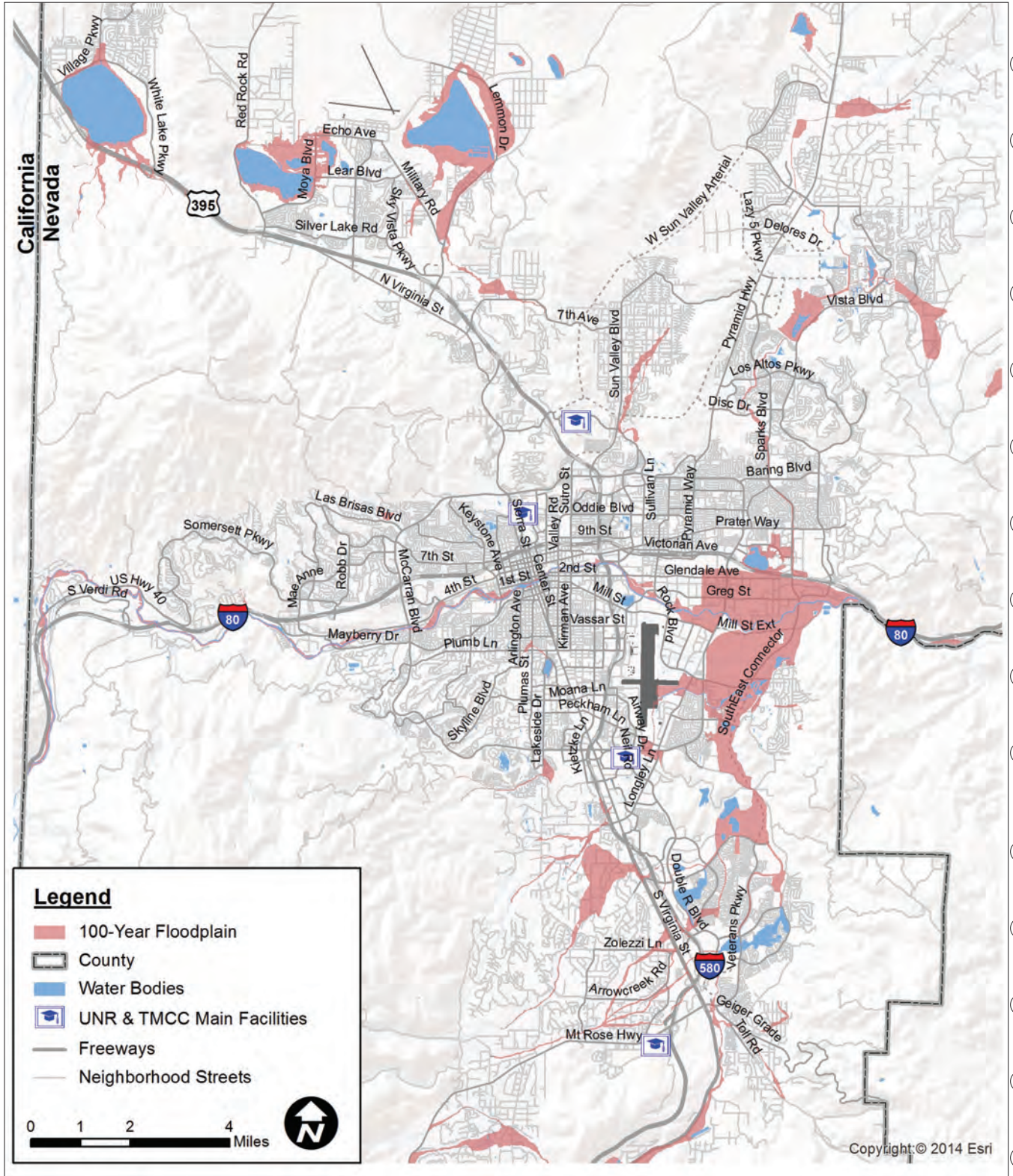
The Strategic Plan highlights the importance of locating senior housing developments and other services near existing transit routes and improving the sidewalk network to promote active, healthy lifestyles. Senior Services is a partner with RTC in providing transportation information and other resources to local senior citizens.

Truckee River Flood Management Project

The mission of the Truckee River Flood Management Project is to reduce the impact of flooding in the Truckee Meadows, restore the Truckee River ecosystem, and improve recreational opportunities by managing the development and implementation of the Truckee River Flood Management Project.

WATER RESOURCES AND FLOOD HAZARDS

MAP 4.1



The Truckee River Flood Project developed an action plan that provided a forum for residents, businesses, community leaders, regulatory agencies and government officials to conduct an analysis of flooding issues and evaluate possible solutions.

Floodplain Management

Washoe County has been a member of the National Flood Insurance Program (NFIP) since 1984 reviewing all new development in special flood hazard areas (Flood Zones).

All development in the flood zones are controlled by Washoe County Flood Hazard Ordinance 416, and Federal Emergency Management Agency (FEMA) regulations. In May 2009, Washoe County qualified to be part of the FEMA Community Rating System (CRS). A map of the flood plains can be found in Map 4-1 (page 63).

4.2 – LOCAL GOVERNMENT PLANNING

The City of Reno, City of Sparks, and Washoe County are responsible for local land-use planning in the region. A summary of key land-use policies as they relate to transportation for each entity is provided below.

In addition, RTC participates in the development review processes with each local government to provide input on access management, transit, pedestrian and bicycle facility improvements, and consistency with long range transportation plans. Additional coordination occurs at a local and regional level between all agencies when needed for specific projects or activities.

City of Reno

The Reno City Council adopted their Master Plan, titled ReImagine Reno, on December 13, 2017.

This Master Plan is the result of the widest public engagement effort in Reno's history. The Plan reflects the ideas, values, and desires of the community, aligning these with a range of plans, policies, and initiatives in place or underway in both Reno and the wider region.



The guiding principles are the first level of policy guidance included in the Master Plan.

Each reflects one aspect of the community's visions and values and articulates the type of place desired for Reno. Together, they address a range of topics, providing the framework for Master Plan goals and policies that will help to guide decision making across the City. Guiding Principle 5, a Well-Connected City and Region, is supported by the following goals:

- Continue to develop a safe, balanced, and well-connected transportation system that enhances mobility for all modes.
- Actively manage transportation systems and infrastructure to improve reliability, efficiency, and safety.
- Facilitate the movement of goods and services throughout the region via truck, air, and rail.
- Encourage the use of transit, car or van pools, bicycling, walking, and other forms of alternative transportation.
- Anticipate and plan for the implications and opportunities associated with connected vehicles, autonomous vehicles (AVs), and the expected transition from personal car ownership to mobility-as-a-service.

City of Sparks

The City of Sparks completed its comprehensive plan, Ignite Sparks, in August 2016. The City is in the process of updating the plan to ensure compliance with the 2019 Regional Plan. Ignite Sparks addresses the relationship between land-use, economic development, and transportation.



Included within its Vision Statement is a desire for “integrated connectivity with a maintained road network which includes bike and pedestrian pathways.” This vision is supported by the following goals:

- Develop a complete, efficient transportation system that gives Sparks residents of all ages and visitors access to employment, housing, services, and recreation throughout urban Washoe County.
- Provide a transportation network that supports business formation and attraction and economic vitality.

- Facilitate non-motorized travel throughout the community.



Washoe County

The Washoe County Master Plan is divided into three volumes. It includes county-wide elements, area plans, and a number of more detailed plans. The Master Plan is used to determine the most desirable location of each type of development. The plan has policies and maps designated to define development suitability and conserve natural resources.

It also includes growth forecasts as well as policies and maps reflecting desires related to landuse and transportation. Finally, the Master Plan has standards and maps to guide provision of public services and facilities.

The primary focus of the Land-Use and Transportation Element (LUTE) of the Master Plan is to provide for future population and employment in Washoe County.

The purpose of the land-use and transportation section is to encourage sustainable growth practices while discouraging sprawled communities where the automobile is viewed as a necessity to obtain daily amenities.

The following transportation-specific policies identified in the plan support the goal of seamless and efficient transportation systems:

- Promote the connectivity of the neighborhoods within the larger community and region.
- Direct public transportation to the core of an area or to areas with more intense development.
- Establish a high-quality, pedestrian-oriented street environment that is visually interesting, comprehensive, and varied.

The RTC is currently coordinating with the County as they have begun to update their Master Plan.

4.3 – TRIBAL GOVERNMENTS

Pyramid Lake Paiute Tribe (PLPT)

The Pyramid Lake Indian Reservation is comprised of more than 475,000 acres in Northern Nevada and contains portions of Interstate 80 and several State highways including SR 445, SR 446, SR 447, and SR 427.

The approximate 2,200 members of the Tribe (of whom about 1,300 live on the reservation) are direct descendants of the Northern Paiute people who have occupied the vast areas of the Great Basin for thousands of years. Pyramid Lake is located 35 miles northeast of Reno and is the property of and managed by the PLPT and is visited annually by over 150,000 people from around the world.

The PLPT operates its own transit system which serves communities within the Reservation and as well as to services in nearby Reno and Sparks.

The Long-Range Transportation Plan for the Pyramid Lake Paiute Reservation (updated in May 2018) identified the following needs:

- Road and traffic safety, especially on state highways.
- Transportation improvements to serve economic development goals.
- Pedestrian safety improvements.
- Address condition of unpaved roads.
- Safety signage.
- Regular roadway maintenance.
- Safety improvements around schools and preschools.
- Maintenance and continued development of tourism infrastructure.

Reno-Sparks Indian Colony (RSIC)

The Reno-Sparks Indian Colony is a federally recognized Native American Tribe located within the Reno/Sparks metropolitan area. The Reno-Sparks Indian Colony was established in 1917 and was formally recognized in 1936 under the Indian Reorganization Act. Currently, the tribal membership consists of over 1,100 members from three Great Basin Tribes – the Paiute (Numu), the Shoshone (Newe), and the Washoe (Wa She Shu).

The reservation lands primarily consist of the original 28-acre residential Colony and another 15,263 acres in Hungry Valley, which is 19 miles north of the Colony nestled in scenic Eagle Canyon.

Over the past three decades the Colony has assembled various development sites in Reno, Sparks, and Washoe County, representing 83 acres of commercial property. The redevelopment of Reno's East Second Street neighborhood, where half the Colony's residents live, consists of the development of the Three Nations Plaza (Wal-Mart), relocation of the Northern Nevada Transitional Center and the RSIC Health Center.

The development of the 65,000 square foot outpatient Health Care facility was constructed from the proceeds of the Colony's economic development projects for the benefit of its community members and more than 9,000 Native Americans residing in the region.

The Reno-Sparks Indian Colony operates a fixed-route transit system between the Reno and Hungry Valley communities. The transit system runs Monday through Saturday and includes nine stops to connect Tribal Members with Tribal Government services, the RSIC Health Center, residential neighborhoods, and Tribal Enterprises.

4.4 – OTHER REGIONAL PARTNERS

Nevada Governor's Office of Economic Development

The Nevada Governor's Office of Economic Development has a vision for a vibrant, innovative, and sustainable economy with high-paying jobs for Nevadans. Objectives, as identified in the State Plan for Economic Development are:

- Increase opportunity through education and workforce development.
- Catalyze innovation in core and emerging industries.
- Advance targeted sectors and opportunities in the region.

- Expand global engagement.

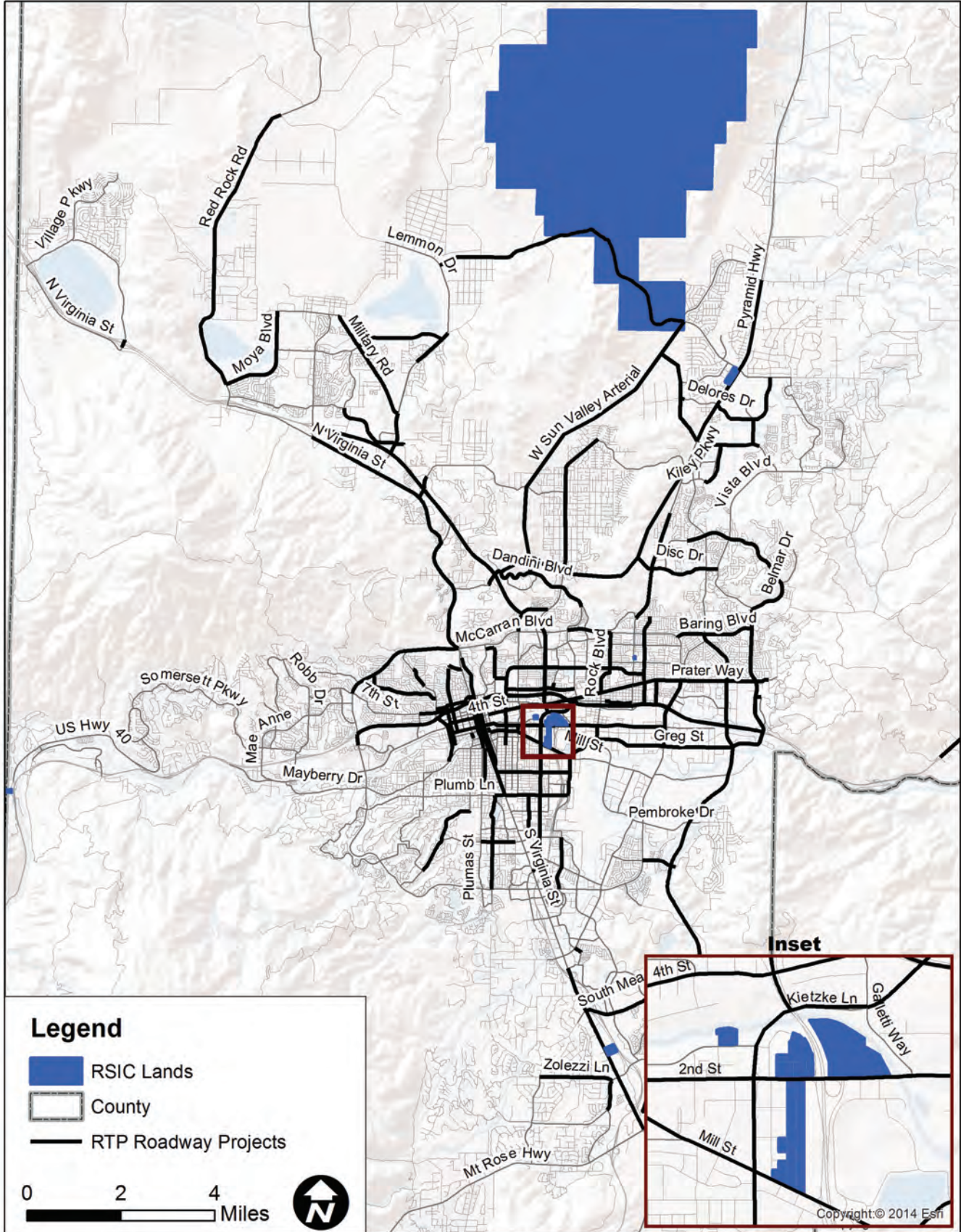
Business IT ecosystems, such as E-commerce operations and headquarters, and logistics businesses such as warehousing and distribution, advanced logistics, air cargo, integrated manufacturing-distribution, and freight transport, are targeted industries for Northern Nevada. RTC is partnering with the State of Nevada to invest in infrastructure that supports these strategic economic development sectors.

Nevada Center for Advanced Mobility

The Nevada Center for Advanced Mobility (CAM) provides the contact point bringing together industry, government and academia to develop and deploy policy, standards and technology around advanced mobility including electric, connected, autonomous vehicles, and related infrastructure. RTC is a partner with the Nevada CAM in outreach activities.

In 2011, Google worked with Nevada DMV to pass the first ever autonomous vehicle law and create the first autonomous testing and consumer regulations. Nevada maintains leadership in regulation and policy development at the city, regional, and state levels, serving as a reference for other cities and states.

RSIC PROPERTIES MAP



Nevada CAM works with partner agencies such as RTC, industry representatives, and other stakeholders to gather input and help shape the future.

University of Nevada, Reno

The University of Nevada, Reno (UNR) was established in Reno in 1891 and as of fall 2019 had more than 21,000 students. The University is one of the largest activity centers in the region. RTC often partners with UNR staff and students to conduct research related to engineering and planning projects.

UNR works closely with RTC to promote safe multimodal transportation for its students especially in the downtown and campus areas. The RAPID Virginia Line extension to UNR and the EdPass Program that allows students, faculty, and staff to ride transit free with their university identification card, will reduce the need for cars on campus and greatly expand the travelling convenience for the student population. The partnership with UNR also extended to development of the University Area Multimodal Transportation Study, which identifies planned safety and mobility improvements in the campus area.



Economic Development Authority of Western Nevada (EDAWN)

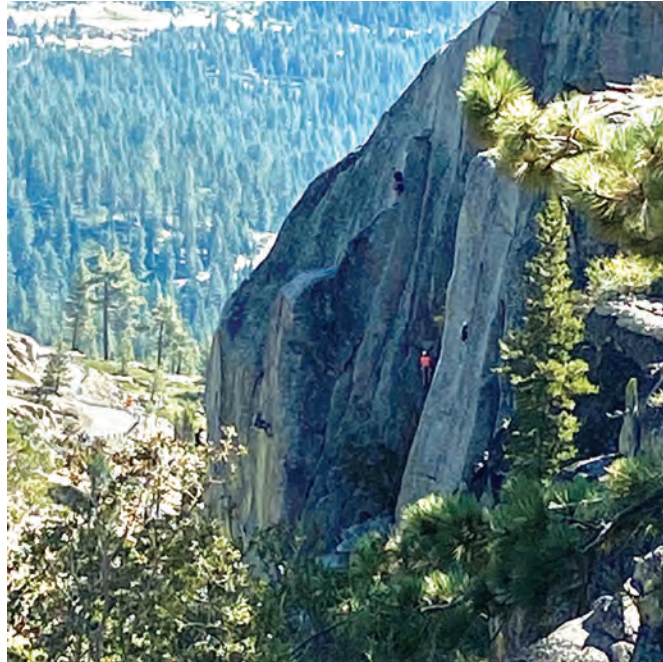
EDAWN is a private/public partnership committed to recruiting and expanding quality companies that have a positive economic impact on the quality of life in Greater Reno-Sparks-Tahoe.

In accordance with the Economic Development Strategic Plan, EDAWN works to support job growth in target industries including:

- Aerospace/Aviation/Defense.
- Back Office/Business Support (call centers).
- Clean Energy/Geothermal.
- Distribution/Logistics.
- Financial and Intangible Assets.
- eCommerce Fulfillment.
- Headquarters for any type of industry.
- Manufacturing.

EDAWN is a supporter of RTC's initiatives to promote transportation investments such as bicycle, pedestrian, and transit amenities that attract people to the region.

These amenities lead to a better quality of life, a healthier community and contribute to the recreational opportunities that are an asset to the Truckee Meadows. In addition, strategic transportation investments in roadways facilitate goods movement in support of logistics, distribution, and advanced manufacturing.



Climbers ascend one of the many rock surfaces on the Sierra Mountain range (above).

4.5 – TRAVEL & TOURISM

The travel and tourism industry is central to the Northern Nevada economy. With more than 20,000 hotel rooms in the Reno-Sparks metro area, resorts and gaming have long been major economic drivers for the region. Reno is a gateway to the outdoor mountain destinations surrounding the Lake Tahoe area, including world-class ski resorts, and world-renown hiking trails.

The growing arts community, including Reno's annual Artown festival and the many events associated with the Burning Man festival, are expanding the tourism base. Public art, including sculptures and murals, further integrate this vibrant creativity into the fabric of the community. This emerging arts tourism is further supported by the growing craft brewery and restaurant scenes in downtown Reno and Sparks.



The Reno-Sparks metropolitan area is uniquely suited to hosting large events due to the strength of the existing hospitality industry. Other strengths include the centrally located Reno-Tahoe International Airport and the successful RTC RAPID transit system.

The region's major resort hotels are connected to downtown Reno and Sparks as well as the Reno-Sparks Convention Center by the Virginia Line and Lincoln Line RAPID transit services.

Sporting events at various levels, ranging from professional events such as the Reno Aces to high school and senior tournaments, support the local tourism industry and wider economy. Public transit and the efficiency of traffic operations on the regional road network play a key role in facilitating the movement of tens of thousands of visitors during these events.

RTC partners with the Reno-Sparks Convention and Visitors Authority to support the travel and tourism industry.

Sports tourism has a major impact on the regional economy. The premier professional sporting venues in the region, including Greater Nevada Field, the Reno Events Center, and the National Bowling Stadium, are adjacent to the RTC 4TH STREET STATION. Sporting events supported by the regional transportation network that have a positive impact on Northern Nevada include:

- University of Nevada, Reno Division I Games – The Nevada Wolf Pack sports teams play at Mackay Stadium and Lawlor Events Center, which are located on North Virginia Street. These venues are currently served by RTC RIDE routes 7 and the Virginia Line.
- Reno-Tahoe Senior Winter Games – This event is sponsored by the City of Reno Senior Advisory Committee and Senior Care Plus.

The program is dedicated to promoting and implementing fitness programs and activities for people 50 years and older.

- Reno Aces Baseball – The 2012 AAA National Championship team plays at Greater Nevada Field in downtown Reno, a block from RTC 4TH STREET STATION. The Reno Aces are a team affiliate of the Major League Baseball (MLB) Arizona Diamondbacks.

4.6 – RTP PROJECTS SUPPORTING LAND-USE PLANS

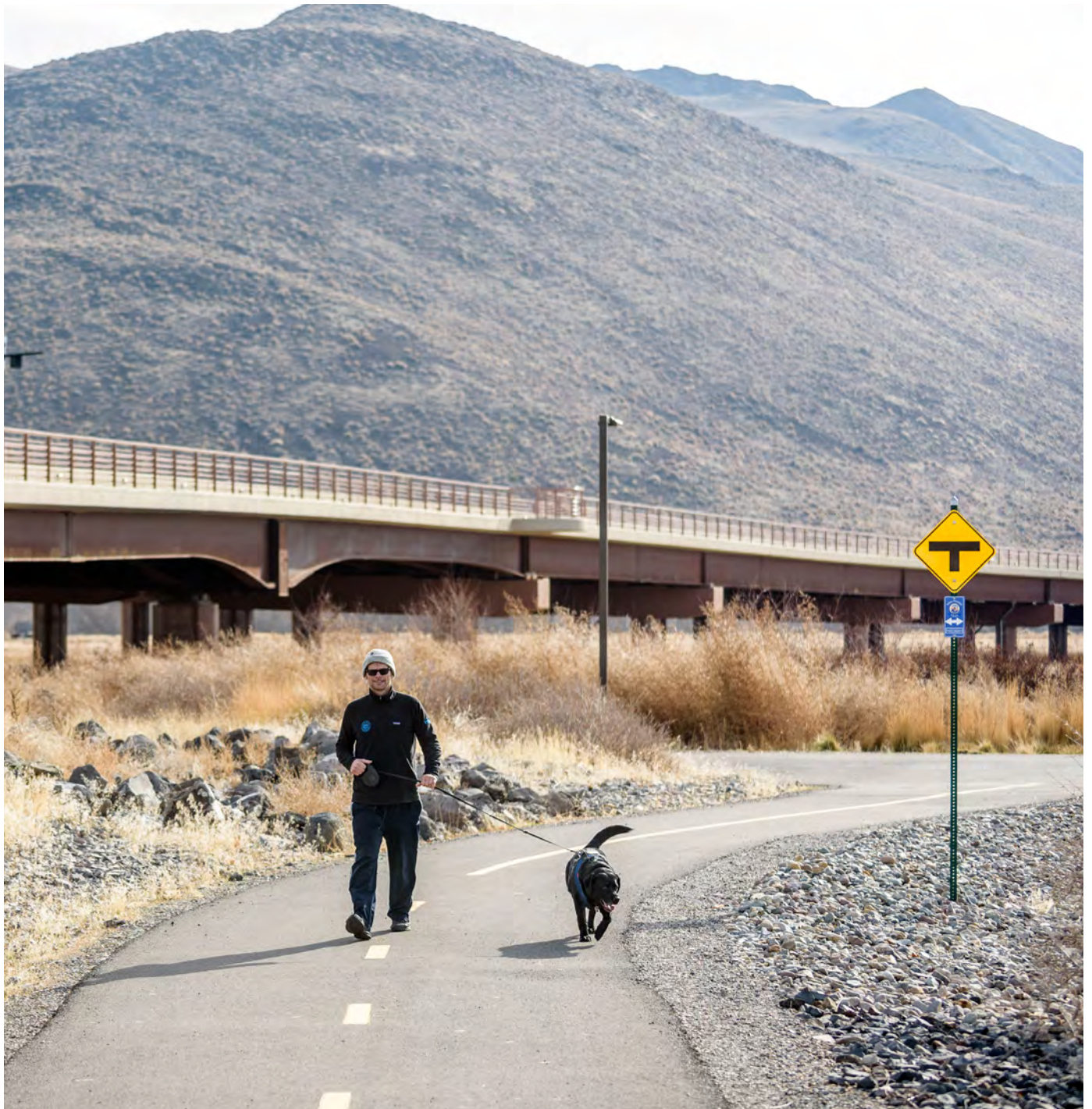
- United States Bowling Congress Tournaments – This national championship event is held at the National Bowling Stadium, which is located across the street from RTC 4TH STREET STATION.
- Reno-Tahoe Open – This golf tournament is held at Montreux Golf & Country Club, which is located on Mount Rose Highway in south Reno.
- National Freestyle Skiing Championships and US National Alpine Skiing Championships – These national ski competitions are hosted by venues in or near the Lake Tahoe Basin.

Consistency with local land-use plans was an evaluation factor in selecting projects for inclusion in this RTP. Several projects were developed with a specialized focus toward supporting land-use and economic development policies, as listed below.

- Oddie Boulevard/Wells Avenue multimodal improvements.
- Mill Street/Terminal Way multimodal improvements.
- Center Street Cycle Track
- West 4th Street Multimodal Improvement



One of the preliminary plans for Oddie Boulevard/Wells Avenue Project.



CHAPTER 5 – HEALTHY COMMUNITIES & SUSTAINABILITY

Transportation plays an important role in community health and environmental sustainability. This chapter describes initiatives to reduce greenhouse gas emissions, improve air quality, and provide opportunities for active transportation. This plan supports the RTC Sustainability Policy and the State of Nevada Climate Strategy.

5.1 – SUSTAINABILITY

The RTC is committed to providing Washoe County with sustainable multimodal transportation options. The Complete Streets program advanced through this RTP will continue to provide infrastructure that supports active transportation. As a part of this commitment, the RTC adopted a Sustainability Policy in September 2011. This policy affirms RTC's initiatives to promote, continually improve upon, and implement sustainable practices within the agency.

RTC Sustainability Policy

The RTC shall provide a safe, effective, and efficient transportation system that addresses environmental, social, and economic sustainability issues. By providing sustainable transportation, the RTC can actively play a role in improving the health and economic competitiveness of the region as well as reduce costs by using resources more efficiently.

RTC Sustainability Plan

In 2017, RTC completed its Sustainability Plan, which serves as a guideline for conducting operations more efficiently by implementing sustainable practices and continuing to provide sustainable and reliable transportation options. The plan created a benchmark of the current sustainability initiatives in which the RTC engages. It also includes a comprehensive organizational vision of sustainability to guide the agency's future planning and construction efforts, operations and maintenance, and internal activities.

RTC Facilities and Vehicles

The RTC incorporates sustainable practices at all of its facilities. Some examples of these efforts include upgrades to improve the efficiency of HVAC systems, installation of external LED lighting, reduction in water usage for landscaping, and solar lighting at several bus shelters. In addition, RTC purchases sustainable products for use in daily maintenance and operations.

The RTC operates a mixed fleet of alternatively fueled fixed-route buses, including 100% electric (zero emission) and hybrid-electric buses, and is exploring hydrogen fuel cell technologies for consideration in future bus purchases. Additional information is available in Chapter 7.

APTA Sustainability Commitment

The RTC signed the American Public Transportation Association (APTA) Sustainability Commitment in October 2012. This requires signatories to enact core sustainability principles throughout their organizations and to develop sustainability action plans.

Nevada State Climate Strategy

Under Governor Sisolak's executive order on climate change, state agencies were directed to develop Nevada's first-ever State Climate Strategy establishing a framework to advance Nevada-wide climate action for a healthy, sustainable, resilient future. The State Climate Strategy was developed using the best available science, combined with robust input from thousands of Nevadans through a series of listening sessions on a full range of climate topics, a climate survey, consultation with subject-matter experts, stakeholder meetings, webinars, and more.

Nevada climate strategies, as they relate to transportation, include the following:

- Adopt low- and zero-emissions vehicle standards
- Implement clean truck program
- Adopt low-carbon fuel standards
- Implement state car allowance rebate system, such as a Cash for Clunkers Program

- Close emissions inspection loopholes for classic cars license plates

RTC fully supports addressing the climate crisis through strategic transportation investments. Reducing greenhouse gas emissions from the transportation sector improves air quality and community health. This RTP contains investments in public transportation, sidewalks, and bicycle facilities that give people a wide range of mobility options. The investments in sidewalk, crosswalks, and lighting in underserved communities will further promote transportation choices and support equity by addressing pedestrian safety. RTC staff will continue to work with the State on the many important aspects of climate action.

Nevada Climate Action

The overarching goals of the 2020 Climate Strategy are to:

1. Provide a framework for reducing Nevada's greenhouse gas (GHG) emissions across all economic sectors
2. Lay the groundwork for climate adaptation and resilience, and
3. Establish a structure for continued, ongoing climate action across the state.

The 2020 State Climate Strategy builds a foundation for future climate action under the State of Nevada Climate Initiative.

With the vision of ensuring a vibrant, climate-resilient future for Nevada, the State of Nevada Climate Initiative (NCI) was launched in the summer of 2020. As the home of Nevada-wide climate action, the NCI is committed to reducing Nevada’s GHG emissions and dedicated to achieving resilient communities that are prepared to successfully adapt to a changing environment and climate.

Climate Justice

Across the United States and in Nevada, low-income communities, people of color, and Indigenous populations have disproportionately borne the burden of climate change impacts. As temperatures continue to rise and climate-related challenges expand and intensify, particular attention must be paid to these vulnerable populations. Through climate action, there is the opportunity to reconcile the social justice challenges Nevadans face.

Nevada is committed to reducing GHG emissions, which contribute directly to climate change. With the passage of SB 254 in 2019, Nevada adopted aggressive GHG emissions-reduction targets: 28% by 2025, 45% by 2030, and net-zero (near-zero) by 2050.

The 2020 State Climate Strategy informs policymaking on how Nevada will achieve the ambitious targets established by SB 254 and provides an integrated framework for evaluating climate policies that make sense for Nevada. Given the complexities of climate change, it is imperative that policies to reduce GHG emissions be approached systematically so there is a clear understanding of the benefits and tradeoffs.

5.2 – AIR QUALITY

Initiatives to improve air quality benefit both cardiovascular and respiratory health and can help to conserve resources. Through the promotion of active transportation and use of alternative fuels, RTC is working to improve air quality. By increasing the number of passengers who utilize transit there will be fewer single-occupant vehicles on the road, leading to reduced air pollutants.

Complete Streets are roadways that accommodate multiple modes of transportation, which could include transit, bicycles, pedestrians, and automobiles. Data collected at recent RTC projects indicates that people are more likely to utilize alternate modes of travel if there are safe facilities such as bike amenities and wide sidewalks.

RTC data demonstrates that the proportion of people walking in a corridor increases 10 times when sidewalks are provided and the proportion of people biking doubles when bike lanes are provided. Walking and bicycling not only promote improved air quality, but can lead to a healthier and more active community.

RTC works closely with the Washoe County Health District Air Quality Management Division (AQMD) to promote efforts that improve air quality. The Truckee Meadows is approximately 200 square miles in size and includes Hydrographic Area 87 (HA 87) as defined by the State of Nevada Division of Water Resources. This geographic area is subject to air quality monitoring. The U.S. Environmental Protection Agency (EPA) has set health and welfare based National Ambient Air Quality Standard (NAAQS) for the following pollutants:

- Ozone (O³)
- Particulate matter less than or equal to 2.5 microns (PM^{2.5})
- Particulate matter less than or equal to 10 microns (PM¹⁰)
- Carbon Monoxide (CO)
- Nitrogen Dioxide (NO²)
- Sulfur Dioxide (SO²)
- Lead (Pb)

The mission of the AQMD Monitoring Program is to monitor and assure the accuracy of the ambient air quality data collected for the determination of compliance with the NAAQS. The AQMD has established a monitoring network to collect ambient air quality data from around the metropolitan portion of Washoe County and Incline Village. There are two distinct pollution seasons in Washoe County — wintertime PM^{2.5} and summertime ozone.

In the 1980s and 90s, Washoe County failed to meet air quality standards for carbon monoxide and particulate matter (PM¹⁰) and was designated “non-attainment” for those pollutants. Due to successful efforts to improve air quality over recent decades, the region now meets current standards and has plans in place to maintain or further improve air quality. The EPA redesignated HA 87 to “attainment” in 2008 for CO and 2016 for PM¹⁰. Additional information about air quality measurements, state implementation plans, and maintenance plans are available at the Health District’s website, OurCleanAir.com.

Transportation has a substantial impact on air quality in Washoe County, as outlined below.

- Motor vehicles, trucks, and buses on our roadways cause 57% of nitrogen oxides (NO^x) pollution, which are precursors to ozone, during the summer when ozone is usually at its highest levels.
- Motor vehicles cause 24% of volatile organic compound (VOC) pollution, another ozone precursor.
- They cause 6% of small particulate pollution (PM^{2.5}) during the wintertime PM^{2.5} pollution season.
- They cause 2% of large particulate pollution (PM¹⁰) during the wintertime particulate pollution season.
- Vehicles traveling on our roadways also create air pollution from the re-entrained road dust.
- In addition, air pollution is created from road construction activities and from non-road mobile equipment used for roadway construction, as well as from other transportation sources such as railroad locomotives and aircraft.

The EPA regularly reviews each air quality standard to ensure they are set at levels that protect public health. In 2015, EPA strengthened the eight-hour ozone standard from 0.075 to 0.070 ppm.

This revision was based on dozens of health-based studies showing that lower levels of ozone are harmful to the public. Monitoring data through 2019 indicates that the southern portion of Washoe County is at 0.070 ppm, or 100 percent of the NAAQS. The AQMD is participating in EPA's Ozone Advance program, which includes voluntary initiatives to improve ozone levels. The initiatives focus on three categories of strategies – technology, behavior, and the built environment. Resolutions supporting the Ozone Advance program have been adopted by the District Board of Health, Board of County Commissioners, City of Reno, City of Sparks, Regional Planning Governing Board, and the RTC. This program supports additional transportation options to reduce motor vehicle trips and vehicle miles traveled (VMT) and a clean and efficient motor vehicle fleet mix in Washoe County.

A key, long-term Ozone Advance initiative is to incorporate smart-growth elements into the built environment to reduce our region's per capita trips and VMT. Providing transportation choices improves air quality and public health. To date the RTC has implemented or achieved 40 different strategies to help the RTC significantly reduce its carbon footprint and reduce pollution.

5.3 – ACTIVE LIVING & COMMUNITY DESIGN

Community design influences access to physical activity opportunities, healthy foods, jobs, schools, and other essential services. Many neighborhoods, shopping centers, and employment centers are designed to require a car to access services, thus leading to a lack of daily physical activity associated with mobility/transportation. This lack of activity has contributed to an increase of chronic diseases. In Washoe County only 21% of high school and 32% of middle school students are getting the recommended amounts of physical activity and 57% of adults report being overweight or obese. More information is available at GetHealthyWashoe.com.

One way to encourage active living is to create a community with mixed land-uses that allow residents to walk to school, work, parks, and shopping. As demonstrated in the RTC Bicycle and Pedestrian Count Program, providing sidewalks and bike lanes correlates to an increase in the proportion of people walking and biking on regional roads.

2018-2020 Community Health Improvement Plan (CHIP)

RTC participated in development of the CHIP in 2017, a process that was led by the Washoe County Health District. Three primary areas of focus for the plan included housing, behavioral health, and nutrition/physical activity.

Nutrition and physical activity was selected as a focus area as it plays a critical role in preventing a wide array of chronic diseases. While diabetes, heart disease and stroke are diseases of concern, they are all diseases that can be decreased by improving nutrition and physical activity. Providing infrastructure for active transportation such as walking and biking can help improve community health.

Washoe County Senior Services

The Strategic Plan for Washoe County Senior Citizens identifies transportation as one of the most significant challenges for people that care for seniors. In a survey of care providers conducted for the strategic plan, transportation needs follow finding medical/dental care and obtaining necessary medication in importance. Public transportation and walkable neighborhoods are both top transportation priorities that contribute to the plan's mobility goals for seniors. This is especially true for seniors who live in isolation and would benefit from links to resource centers and other services.

The plan also includes a goal for healthy aging, or increasing the percentage of seniors living in the setting of their choice with support to remain as independent and healthy as possible.

Community design and infrastructure that provide access to services and a sidewalk network that promotes walking will support healthy aging and allow seniors to reside in their homes longer. To further support this goal, new senior housing developments and other services targeted to seniors should be located in areas with existing transit service.

Safe Routes to School

RTC has partnered with the Washoe County School District Safe Routes to School Program. The goal of the program is to improve the health of school age children and build life-long habits of walking and bicycling. The program provides encouragement for walking and biking as well as safety education and awareness training throughout the school year. Additional information is provided in Chapter 3.

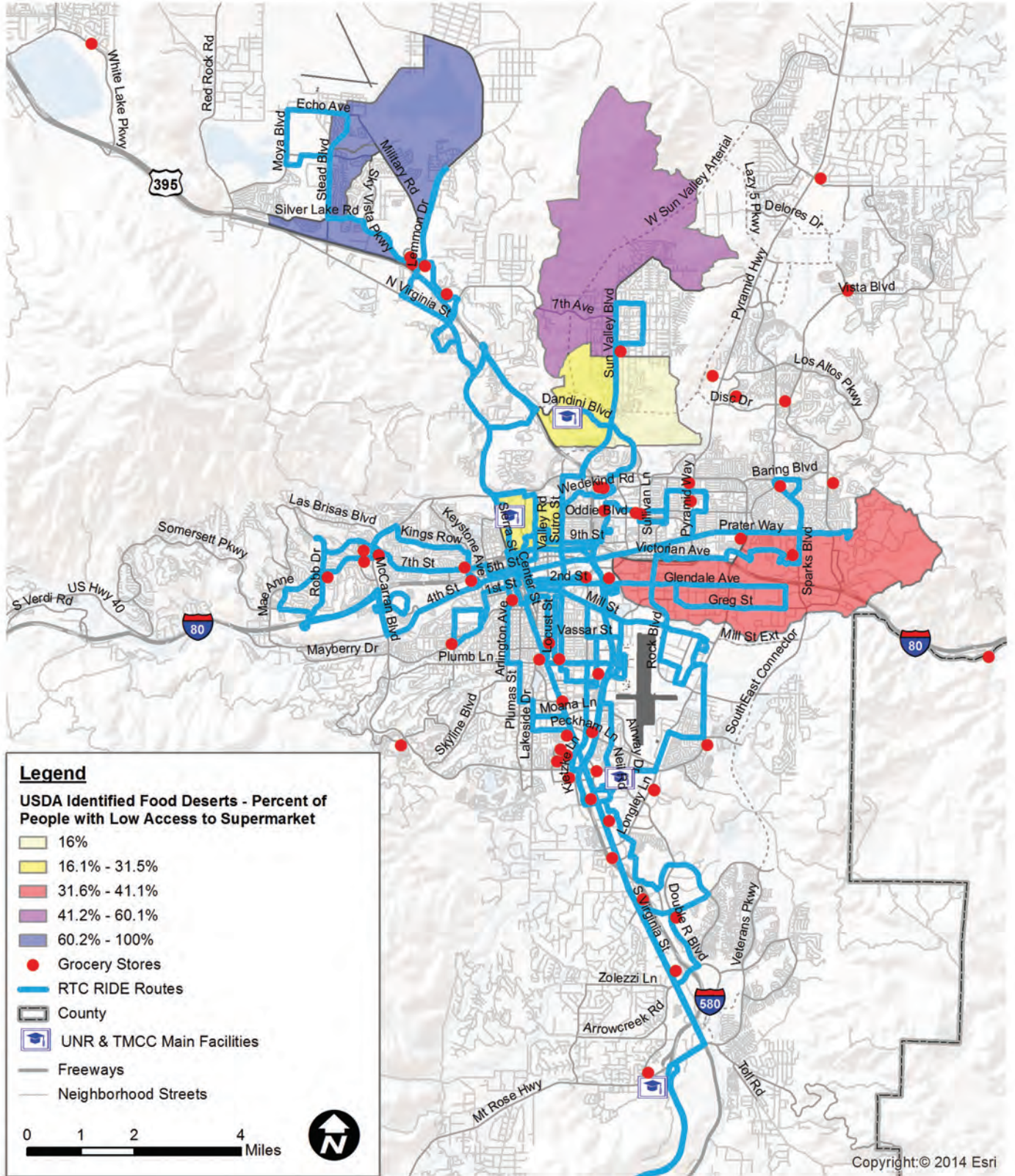
Food Deserts and Transit Access

Access to fresh and nutritious foods is an important part of community health. The U.S. Department of Agriculture (USDA) had identified areas where convenient access to healthy food is limited. Food deserts are defined as low-income census tracts where a substantial number of residents have low access to a supermarket or large grocery store.

Low access to a healthy food retail outlet is defined as more than one mile from a supermarket or large grocery store in urban areas and as more than 10 miles from a supermarket or large grocery store in rural areas.

RTC has studied transit access in food desert census tracts and identified the routes serving these areas, as shown below. The ridership on routes through these census tracts is strong, highlighting the need to provide regional mobility to areas with limited auto ownership. Transit provides a vital service to low income residents in these areas, offering connectivity to areas with grocery stores.

FOOD DESERTS AND TRANSIT ROUTES



Chronic Disease Prevention

Three of the top 11 leading causes of death in Washoe County can be influenced by physical activity and air quality: heart disease, chronic respiratory disease, and diabetes. The Washoe County Chronic Disease Coalition brings together agencies that can have a positive impact on the health of our local community, including transportation, emergency response, medical, and regulatory sectors.

5.4 – NATURAL RESOURCES

Quality of life in Northern Nevada is greatly enhanced by the natural resources that are available all around the region. The community is well known for its trails with stunning views of the Sierra Nevada Mountains and the Truckee River. Many agencies and organizations contribute to the preservation and quality of these recreational opportunities, and the regional transportation network provides access to these resources.

Identifying natural resources is an important step toward avoiding, minimizing, or mitigating adverse environmental impacts on sensitive resources. RTC considers environmental resources as transportation projects are developed in the early planning stages.

Planning and Environmental Linkages

Planning and Environment Linkages (PEL) represents a collaborative and integrated approach to transportation decision-making that 1) considers environmental, community, and economic goals early in the transportation planning process, and 2) uses the information, analysis, and products developed during planning to inform the environmental review process. Linking the planning process with analysis and documentation under the National Environmental Policy Act (NEPA) will improve project design and expedite delivery. An integrated process will assist in gaining regional consensus, getting public support, and responding to community needs early in the project. The Nevada Department of Transportation (NDOT) has adopted PEL guidance, which RTC has incorporated into projects on NDOT facilities as well as RTC-led planning studies.

Washoe County Open Space and Natural Resource Plan

Open space is a critical component of the quality of life in Washoe County. This includes access to world-class recreation, defining views of the ridges and peaks of the region, and a unique landscape of natural and human history. Open space also serves to define the many local communities.

Ridges, hills, and open space areas shape each community's unique character. The geology of the region provides special places, including springs, geological structures, playas, and canyons. This region is also home to numerous wildlife and plant species that are found only in Washoe County, and these species depend on the natural functions of open space.

The 2008 Washoe County Open Space and Natural Resource Plan seeks to maintain, conserve, and restore the open spaces and natural resources of the region. The plan creates an inventory of unique geological features, areas of critical environmental concern, unique water resources, cultural resources, recreational opportunities, and urban open space.

Unique water resources in Washoe County include the Truckee River, Steamboat Creek, floodplains, wetlands, and the network of irrigation ditches in the urban area. In addition, Washoe Lake, Pyramid Lake, and Lake Tahoe are identified as valuable environmental resources.

Bureau of Land Management Nevada

To ensure the best balance of uses and resource protections for America's public lands, the BLM undertakes extensive land-use planning through a collaborative approach with local, state and tribal governments, the public, and stakeholder groups. Based on this collaboration, the BLM establishes Resource Management Plans that provide the framework to guide decisions for every action and approved use on the National System of Public Lands. In Nevada, the BLM administers nearly 48 million acres of public lands. BLM public lands make up about 67 percent of Nevada's land base. BLM lands are adjacent to the Reno-Sparks urbanized area.

The BLM of Nevada provides public land statistics, manages the wild horse and burro program, administers permits to ranchers who raise livestock on public lands and plays a leading role in the goal for new energy such as production of solar, wind, geothermal, and biomass energy. The BLM also assists wild land fire management efforts. Another responsibility of the BLM is to regulate outdoor recreational activities and oversee the 310,000-acre Black Rock Desert Wilderness. The Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area (NCA) is located approximately 100 miles northeast of Reno.

Southern Washoe County Urban Interface Plan

The objective of this plan is to improve management of public lands in the southern portion of Washoe County, where public lands are in proximity to urbanized areas. The plan identifies 160,020 acres that will be retained in public ownership under the administration of the BLM. These lands will be managed to protect open space, visual, recreation, watershed, and wild-life resources. Public lands are an important natural resource for open space for the people of the Reno-Sparks metropolitan area. The plan designated 4,390 acres for use by state and local governments for recreation purposes and 2,140 acres for potential disposal into private ownership.

US Forest Service

The US Forest Service manages the Humboldt-Toiyabe National Forest lands adjacent to the Reno-Sparks urbanized area. These National Forest lands in the Carson Ranger District include nearby attractions such as the Mount Rose Wilderness Area, Galena Creek area trails, and Tahoe Meadows trails. These resources are popular recreation places for residents of the metropolitan region as well as tourist destinations.

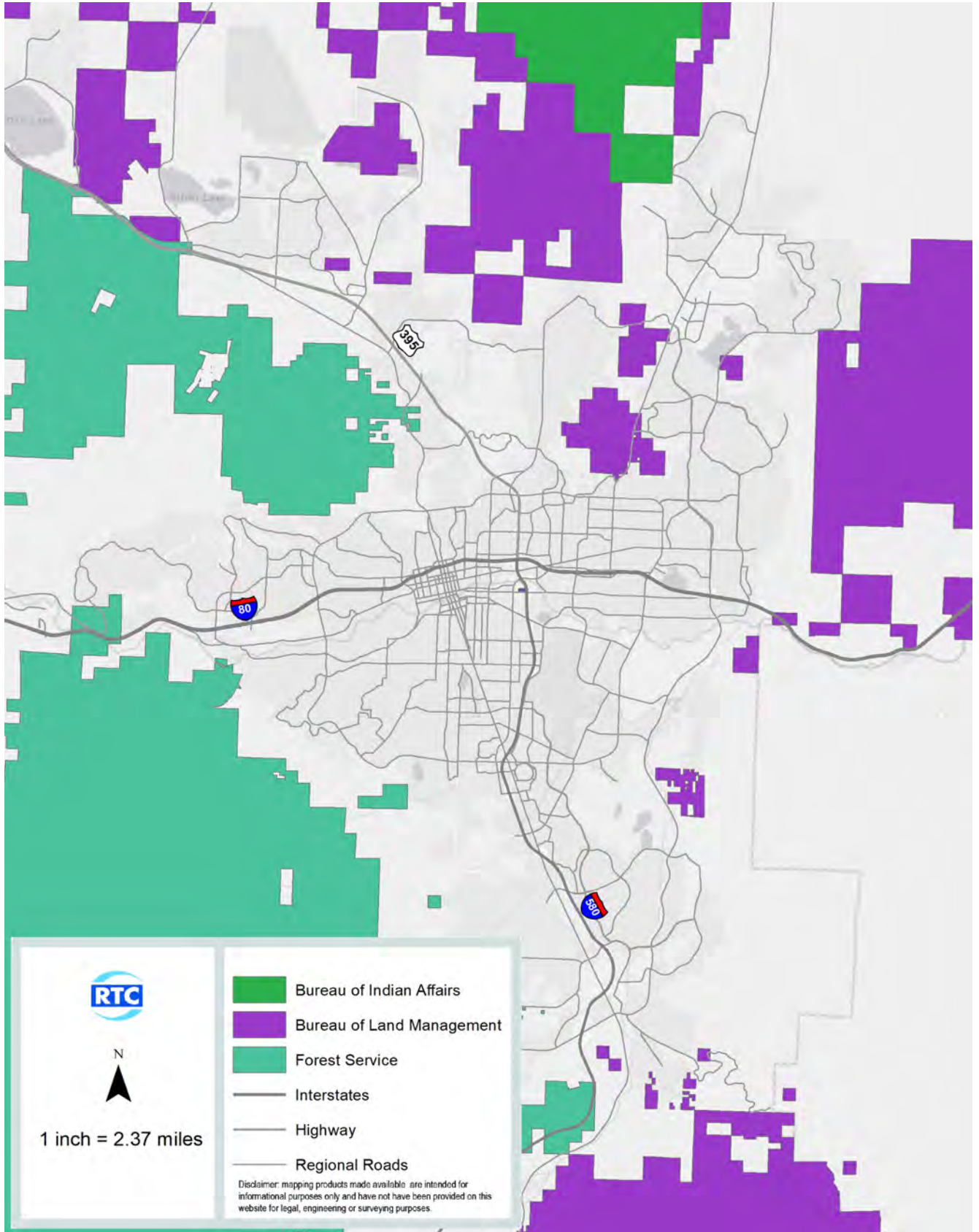
Lake Tahoe Basin Management Unit Land Resource Management Plan (LTBMU)

The LTBMU was established in 1973, to facilitate unified management of Forest Service lands within the Lake Tahoe Basin watershed. The LTBMU encompasses over 154,000 acres of Forest Service lands (78% of the land in the Lake Tahoe Basin), and ranges in altitude from approximately 6,225 feet at lake level to 10,881 feet. Projects and programs include habitat management, fire management, and urban forest parcel management.

Additionally, the LTBMU provides and maintains high quality recreational opportunities for millions of visitors and residents annually. Many common forest activities such as mining or grazing are either not a part of LTBMU management or play a very small role. The LTBMU manages Forest Services lands within a mix of forest and urban communities that surround Lake Tahoe. The work of the Forest Service supports (and is supported by) many partners.

The plan focuses on watershed health, forest health, sustainable recreation, and access to National Forests.

RTC 2050 PROJECTS GOVERNMENT LANDS



It supports the use of alternative transportation options such as public transit, pedestrian, and bike trails to access Forest Service lands. Reducing automobile dependence for site access will alleviate pollution and crowding, thereby protecting sensitive environmental resources.

Humboldt-Toiyabe National Forest Climate Change Vulnerability Report

Climate change is expected to have significant impacts on the Great Basin by the mid-21st century. Since about 1980, western U.S. winter temperatures have been consistently higher than long-term values and average winter snow packs have declined.

Since 1986, the length of the active wildfire season has increased by 78 days and the average burn duration of large fires has increased from 7.5 days to 37.1 days. Forest wildfire frequency is nearly four times higher and the total area burned by these fires is more than six and a half times its previous levels.

Department of Conservation and Natural Resources: Nevada State Parks

The Division of State Parks manages and maintains 24 parks in the State Parks system, including the Lake Tahoe Nevada State Park and Washoe Lake State Park in Washoe County.

The purpose of the Division is to plan, develop and maintain a system of parks and recreation areas for the use and enjoyment of residents and visitors. The Division also preserves areas of scenic, historic and scientific significance in Nevada.

State of Nevada Division of Water Resources

The mission of the Nevada Division of Water Resources (NDWR) is to conserve, protect, manage, and enhance the State's water resources for Nevada's citizens through the appropriation and reallocation of the public waters.

In addition, the Division is responsible for quantifying existing water rights; monitoring water use; distributing water in accordance with court decrees; reviewing water availability for new subdivisions and condominiums; reviewing the construction and operation of dams; appropriating geothermal water; licensing and regulation well drillers and water rights surveyors; reviewing flood control projects; monitoring water resource data and records; and providing technical assistance to the public and governmental agencies.

Washoe County Protected Species

The U.S. Fish and Wildlife Service provides data about the threatened (T), endangered (E), proposed, and candidate species (C) in Washoe County, as listed in the following table.

| | | |
|--|--|-------------------------|
| Amphibian | | |
| C Mountain yellow-legged frog (Sierra Nevada Distinct Population Segment) | Rana muscosa | |
| Bird | | |
| C Greater sage-grouse | Centrocercus | Urophasianus |
| Fishes | | |
| E Cui-ui | Chasmistes cujus | |
| T Lahontan cutthroat trout | Oncorhynchus | Clarkii henshawi |
| T Warner sucker | Catostomus warnerensis | |
| Invertebrate | | |
| E Carson wandering skipper | Pseudocopaedes eunus obscurus | |
| Plants | | |
| E Steamboat buckwheat | Eriogonum ovalifolium var williamsiae | |
| C Tahoe yellow cress | Rorippa subumbellata | |
| T Webber's ivesia | Ivesia webberi | |
| C Whitebark pine | Pinus albicaulis | |

5.5 – RESILIENCY & STORMWATER MANAGEMENT

As described in the Washoe County Regional Resiliency Study (discussed further in Chapter 3), the Truckee Meadows area has endured significant flood events over the course of its history. Some of the earliest-documented floods coincided with deep snow accumulations, followed by unprecedented heavy rain and flood events that were occurring in California during the 1860s (now labeled as atmospheric river events). Regionally destructive flood events have periodically followed with notable floods occurring in 1907, 1955, 1963, 1997, and 2016. Economic impacts and infrastructure damage was significant to area business and transportation features.

The Northern Nevada Region has evolved a proactive approach in determining flooding potential since the 1997 event by developing a flood warning system of river and precipitation gauges and the regional Truckee River Flood Warning Plan. Current plans involve the design, funding, and construction of the Truckee River Flood Control Project that would protect critical areas of the region to a 1% frequency (100 year) flood event upon completion.

The design of roadway infrastructure has an important role in minimizing the adverse impact of stormwater and protecting water quality. Protecting the safety and quality of our water resources is a key consideration during the entire process of a project from planning to construction. In order to minimize any potentially harmful impacts to our water resources during any stage of a project, the RTC prioritizes stormwater management from the beginning. During the construction of any roadway, each contractor is required to develop a Stormwater Pollution Prevention Plan (SWPPP), which identifies any potentially harmful impacts to local water resources caused by the construction project and develops mitigation strategies to eliminate or mitigate those potential impacts.

In addition to managing impacts to water resources during construction. The engineering design of all roadway projects incorporates stormwater management techniques. Stormwater run-off from roadways often contains harmful pollutants such as oil, grease, heavy metals, solids, and nutrients. Due to the impermeable nature of roadways, stormwater run-off from roadways collects these pollutants and carries them to local rivers and other water bodies such as the Truckee River, Virginia Lake, or Pyramid Lake.

RTC incorporates permeable surfaces and other green infrastructure when appropriate throughout the design and construction of each roadway project.

Additionally, the Plan incorporates certain recreational and ecosystem-restoration features within the footprint of the flood protection infrastructure.

Truckee River Flood Project

The Truckee River Flood Management Project is a joint effort among the cities of Reno and Sparks, Washoe County, the US Army Corps of Engineers, and numerous other stakeholders to reduce the devastating impacts of flooding in the Truckee Meadows. Its primary goal is to create a more resilient community by reducing flood damages and deaths resulting from a 1997-type flood event (117-year event).

The Flood Project Plan is based on the “Living River Plan.” This plan emphasizes the community’s vision of incorporating environmentally friendly elements into the flood protection infrastructure (“green” infrastructure) in order to reconnect the river to its floodplain, restore habitat for native species, and enhance recreational opportunities along the river.



The SouthEast Connector is designed to store stormwater runoff and reduce flooding in nearby areas, as demonstrated during the 2017 flood events.



CHAPTER 6 – MANAGING EXISTING SYSTEMS EFFICIENTLY

The RTC strives to maximize the use of limited resources by maintaining existing systems in good repair and continuously seeking operational improvements. This is most apparent in the RTC's transit, traffic operations, intelligent transportation systems (ITS), and pavement preservation programs. These programs provide a framework for obtaining the best and most-efficient use of existing resources, minimizing life-cycle costs, and in some cases reducing the need for costly capital investments.

6.1 – TRAFFIC OPERATIONS

Traffic operations management includes a wide range of programs that maximize the efficient use of existing roadway capacity. RTC partners with NDOT, the cities of Reno and Sparks, and Washoe County to deploy ITS tools such as fiber optic cable, flow cameras, and smart phone apps. This allows for the delivery of improved traffic signal timing and coordinated incident response for the traveling public. Traffic operations management is an important part of the congestion management process as shown in Appendix F.

Using ITS to Reduce Capital Costs

RTC installed ITS components on 4th Street/Prater Way project, which allows buses to request a traffic signal priority request so buses can stay on schedule. The ITS project provides significant operational improvements between Evans Avenue and 15th Street and includes:

Fiber optic communication lines

Connecting eleven traffic signals to the City of Reno and City of Sparks signal system.

Traffic flow cameras at strategic locations

More reliable vehicle detection (LOOPS)

- ITS Pilot Project, ITS Phase 2A and 2B installed fiber optic communication, traffic cameras and partnered with NDOT to utilize a portion of existing fiber optic systems to reduce costs in a collaborative effort.



Functional Roles and Their Interactions

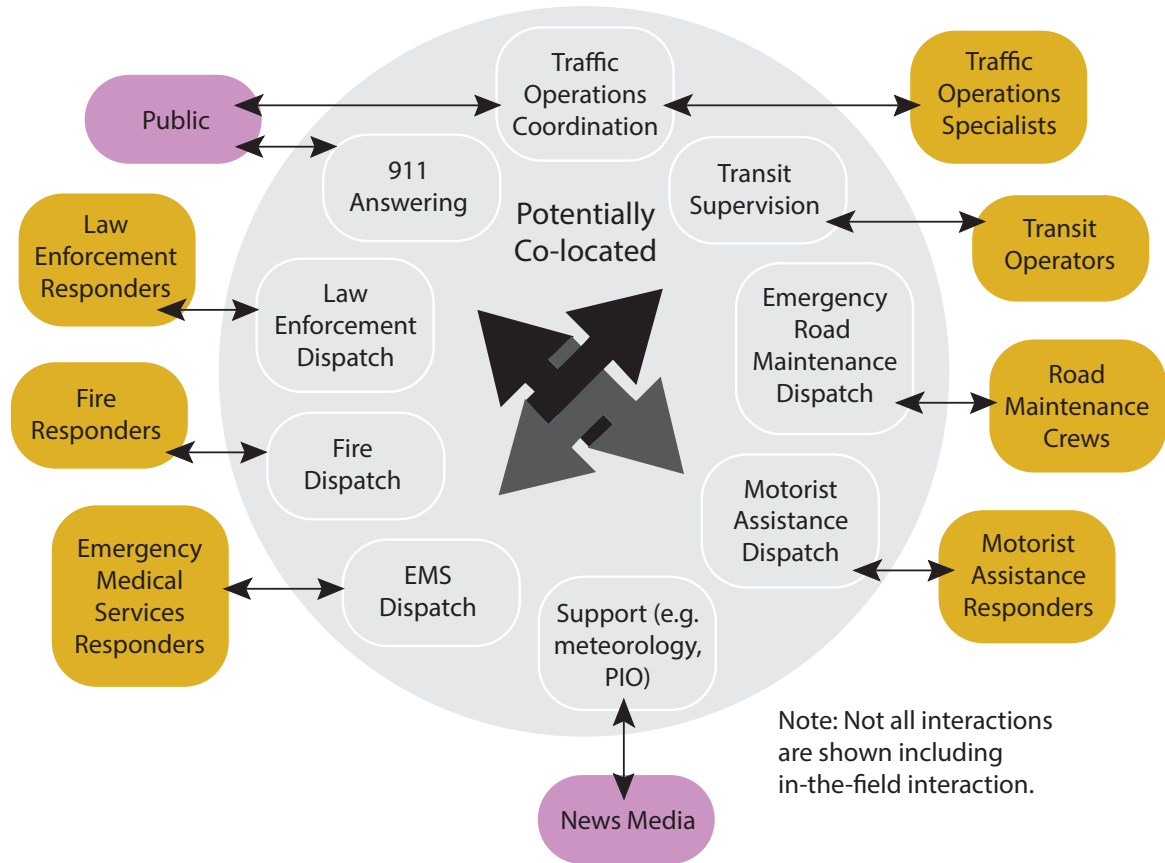


Figure 6-1

In addition, RTC partners with emergency medical providers, fire departments, and law enforcement as part of the traffic operations program. The interconnected nature of these relationships is shown in the figure above. All traffic signals in the region are owned and maintained by the local jurisdictions. NDOT brings additional resources in fiber optic communication infrastructure, count detectors, changeable message signs, and weather stations. While RTC does not own any roadways or signals, the agency assists in facilitation of inter-jurisdictional coordination and hosts a monthly Traffic Operations Committee meeting to streamline communications.

Additionally, RTC hosts a quarterly Traffic Roundtable meeting with the local agencies to exchange ideas and promote regional consensus on traffic related standards. RTC is also a partner in funding and installing ITS capital investments. In addition, RTC operates a traffic signal comment hotline, (775) 335-ROAD.

| Existing Regional ITS Resources – Table 6.1 | | | | |
|---|------|------|--------|---------------|
| Device Type | NDOT | Reno | Sparks | Washoe County |
| Traffic Signals | 0 | 273 | 114 | 19 |
| Count/ Speed Detectors | 12 | 0 | 0 | 0 |
| CCTV Cameras | 51 | 30 | 0 | 0 |
| Change-able Signs | 12 | 0 | 0 | 0 |
| Advisory Radios | 1 | 0 | 0 | 0 |
| Weather Stations | 4 | 0 | 0 | 0 |

ITS Projects allow for information sharing between agencies to improve incident response, establishment of integrated and continuous traffic signal coordination across jurisdictional boundaries, sharing of resources to minimize operating costs, and enhanced training and learning for operations personnel.

Future ITS projects will include: installation of additional fiber optic communication links, Road Weather Information System (RWIS) devices, traffic management devices on surface streets, communication links to traffic signals making information available to all agencies.

Specific objectives of the program include:

- Improved event (incident) response, which could include a traffic accident, severe weather, road construction, failure of a traffic signal, an on-street parade, a major sporting event, or any other event that may impede traffic flow or cause an unusual surge in traffic volume.
- Integrated and continuous coordination of traffic signals across jurisdictional boundaries via interconnected signals. One objective is to enable each involved agency to confirm that both their traffic signals and their neighbors are operating as planned and that detector or other equipment failures are identified and corrected quickly.

- Access to more information by the traveling public, and more consistent and seamless information about current travel conditions regardless of the mixture of agencies responsible for portions of their planned journey.
- Sharing resources to enable agencies to perform their missions at a lower cost. Shared resources could include specialized equipment, fiber optic communication or joint maintenance contracts.
- Providing the data needed to assess region-wide transportation and incident management performance measures.

Fiber optic cables used by traffic operation agencies for ITS device communication can be interconnected to provide communication links between agencies.

The highest priority infrastructure improvements needed to support improved traffic operations are as follows:

- Communication links between ITS networks operated by different agencies.
- Communication links to traffic signals on major surface streets that are currently not connected to a central system.
- Closed Caption Television (CCTV) cameras on major surface streets.

- CCTV cameras, vehicle detectors, and associated communication links on all urban area freeway segments.
- The RTC leads the traffic signal timing program in Washoe County. In partnership with the cities of Reno, Sparks and Washoe County, and the University of Nevada, Reno, the program aims to retime the more than 400 traffic signals in the region on a three year basis. Using the technology employed through the ITS Program, retiming and maintenance of all signal timing are done efficiently.

1. The purpose of this program is to reassess the signal timing due to changes in traffic patterns and volumes throughout the road network.
2. Improve travel times and fuel savings
3. Reduce emissions and air pollution
4. Improve traffic safety by reducing frustration from drivers experiencing excessive delays.
5. Update various timing settings to current federal standards.

6.2 – PAVEMENT PRESERVATION

Whether trips are taken by automobiles, transit, bicycle, or walking, everyone benefits when the streets are maintained in a safe and serviceable condition. The RTC in cooperation with the public works officials of Reno, Sparks, and Washoe County implements a comprehensive Pavement Preservation Program.

The purpose of the Pavement Preservation Program is to maintain regional roads in good condition and minimize long-term costs.

The goal is to apply the most cost-effective treatment to the right pavements, at the right time to minimize pavement life cycle costs while maximizing serviceable pavement life. An effective Pavement Preservation Program saves money that can be used for other important transportation initiatives. Through a process of collaboration and coordination with the local governments, RTC funds tactical roadway preservation programs to accomplish goals for the Regional Road System. The regional road system includes:

- Arterials that are direct connections between freeways and other arterials, provide continuity through the region, and generally accommodate longer trips within the region;

- Collectors that have an average daily traffic of 5,000 or greater (either currently or in the 2050 forecast), cross a significant travel barrier such as the Truckee River or freeway, or provide access to major existing or future regional facilities,
- Industrial roadways; and
- Roadways that include a transit route.

The local governments provide preservation services for non-regional road neighborhood roadways and day to day maintenance for all non-state maintained facilities. As part of the pavement preservation system, RTC maintains pavement condition index data for each regional road. Programs are developed for roadway preservation primarily through two processes.

**Functional Classification of Roads,
Percent of Pavements**

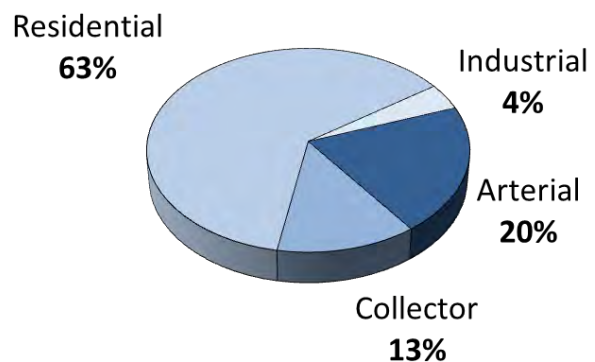


Figure 6-2

First, the Regional Pavement Management Systems (PMS) is used by the RTC and local governments to create the Regional Pavement Preservation Program. The PMS provides a comprehensive regional assessment of roadway pavement assets and condition, and is a tool to prioritize preservation projects. The use of the Regional PMS gives RTC and the local governments the ability to provide the right treatments to the right pavements at the right time.

| All Roads | RTP Roads | Local Roads |
|------------|------------|-------------|
| Good 73.7% | Good 83.0% | Good 69.7% |
| Fair 18.3% | Fair 14.5% | Fair 20.6% |
| Poor 7.5% | Poor 2.5% | Poor 9.7% |

Roads in the Planning Area

RTC does not own or operate any area roadways .

Residential roadways serve neighborhoods and carry the fewest trips on the system, with few buses or trucks.

Collector roads serve as connections between residential and arterial roadways.

Industrial roads carry a relatively high number of trucks serving industry and warehousing.

Arterials carry the majority of trips on the roadway system and function as alternatives to highways to relieve traffic congestion.

Arterials, major collectors, and industrial roads carry 50% of vehicle miles travelled (VMT) and are eligible for funding through the RTC Pavement Preservation Program.

Residential streets and minor collectors are maintained by the local jurisdictions (Reno, Sparks and Washoe County) and carry 8% of VMT.

I-80 and US 395 are maintained by NDOT and carry 42% of VMT.

This proactive maintenance strategy relies on preventive and corrective maintenance methods to maintain good pavements in good condition. In turn, this slows the rate of pavements falling into poor condition which would require costly major reconstruction. It is six to 10 times less expensive to properly maintain streets than to allow them to fail and pay for costly reconstruction treatments.

RTC's Pavement Preservation Program has significantly improved driving conditions and reduced the region's backlog of pavement reconstruction needs. Since initiation of the program the average Pavement Condition Index (PCI) for regional roadways (excluding NDOT maintained roads) has been raised above the goal of 80 and is currently 83 which is optimal for minimizing costs and maximizing performance life. Two percent of the regional network are in poor condition (PCI below 50).

The NDOT PMS monitors state-maintained facilities in Washoe County. The NDOT PMS also quantifies the backlog of pavement repairs on the state highway system and identifies project priorities. The NDOT PMS is used to identify NDOT's long-range funding needs to maintain the state highway network at a serviceable level. NDOT conducts a pavement condition survey annually.

The RTC's Pavement Preservation Program is central to implementation of Complete Streets strategies. Through the preventative maintenance slurry seal program and close coordination with the local jurisdictions, RTC is narrowing travel lanes, adding bicycle lanes, and in some cases eliminating travel lanes. The effects of these Complete Streets strategies are to slow traffic to the designated posted speed, reduce vehicle crashes, and provide a safe space for other non-auto users. Crash reductions ranging from 25-45 percent have been documented on regional roads that have undergone these reconfigurations.

The program is implemented in coordination with the Pavement Preservation Committee, which consists of public works and maintenance staff of Reno, Sparks, and Washoe County. The committee identifies projects based on need, including pavement condition and average daily traffic levels. It does not consider jurisdiction and prioritizes projects to maximize benefits to the network as a whole.

Despite the overall "good rating" of the region's pavements, challenges do exist in maintaining our existing roadway system. More efficient cars that use less fuel and electric cars are affecting the amount of fuel sold and taxed.

The reduction in revenue will challenge RTC and local jurisdictions to maintain the “good rating” of the next few years.

The local jurisdictions’ and NDOT’s ability to fund and operate an effective maintenance program continues to be a challenge. For the non-regional and residential system of roads, the Cities of Sparks and Reno in particular have a significant reconstruction backlog. However, through the effective use of their available resources, the local agencies have reduced the amount of residential roads in poor condition from 12% to 10% since 2012. While these roads account for approximately two-thirds of the pavement network, they carry only 8% of the VMT in the region. Limited expansion of the RTC Pavement Preservation Program to include neighborhood collectors is under consideration and will be evaluated.

6.3 – TRANSIT OPERATIONS

Public transit is a valuable community asset that:

- Provides access to essential jobs and supports economic growth through improved mobility and access to opportunity,
- Provides access to important resources such as medical services, colleges and universities, and government services, and

- Provides health benefits through improved air quality and active transportation options.

Operational efficiency is one of the goals for the regional transit system. Because transit funding sources are limited, it is essential that cost effectiveness be a consideration in transit planning. RTC publishes monthly reports about the system’s operational performance. RTC operates RTC RIDE fixed route, RAPID bus rapid transit, REGIONAL CONNECTOR intercity, ACCESS paratransit, and FlexRIDE on-demand services.

The RTC operates 23 fixed routes in the Reno-Sparks metropolitan area as well as areas of unincorporated Washoe County. The system operates in a 90 square-mile service area. Existing service offers the greatest frequency in the urban core, reflecting the goal of maximizing the number of passengers per service hour. With two separate central business districts in Reno and Sparks, RTC operates a high-frequency connector between the two cities with less-frequent or on-demand feeder service increasing the coverage area.

Both downtown Reno and Sparks are serviced by transit transfer terminals: RTC 4TH STREET STATION and RTC CENTENNIAL PLAZA.

RTC continuously monitors the performance of each transit route, coordinates with the local jurisdictions regarding land-use changes, and makes routing or scheduling adjustments as necessary up to three times each year to maximize the performance of the system.

RTC actively manages the transit fleet and facilities to ensure a state of good repair. RTC invests in preventive maintenance as well as replacement of vehicles once they reach the end of their useful life.

RTC has identified the need for a new maintenance facility that can accommodate expansion of the RTC bus fleet in the long-term as well as hydrogen fuel cell fueling and maintenance capabilities. This could potentially be accommodated with an expansion of the Sutro Street maintenance facility.

Short Range Transit Plan: Priorities Relating to Operations

Reallocation of service hours to achieve greater efficiency

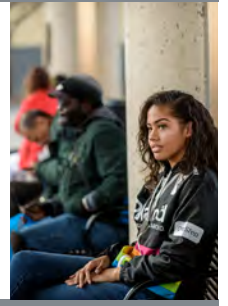
Increase service hours to high ridership corridors where feasible

Expand FlexRIDE Program

Increase subsidy and expand eligibility for taxi bucks/Washoe Senior Ride Program

Continuation of grant program for not-for-profit transportation services, as identified in the Coordinated Human Services Transportation Plan (CTP).

Additional information about RTC's transit programs, including RTC RIDE, ACCESS, FlexRIDE, VANPOOL, SMART TRIPS, and not-for-profit partnerships is provided in Chapter 7.



CHAPTER 7 – INTEGRATING ALL TYPES OF TRANSPORTATION

A goal of the RTP is to integrate all types of transportation. RTC seeks to have an interconnected multimodal transportation system that gives residents more travel choices. Local residents have expressed a desire to have transportation options, which include convenient alternatives for walking, biking, riding transit, or driving. An integrated regional transportation system must provide mobility options that are appropriate to the land-use context and address the needs of neighborhoods, commercial districts, and the movement of goods.

Complete Street designs have reduced crashes up to 46% on regional roads in Washoe County

- Installing pedestrian crossing/waiting areas in median islands
- Installing or upgrading transit stops

7.1 – COMPLETE STREETS

Complete Streets design principles apply context-sensitive solutions to support all types of transportation. The primary purpose of Complete Streets projects is to provide safe access and travel for all users, including pedestrians, bicyclists, motorists and transit users of all ages and abilities. These design treatments have been demonstrated to consistently reduce crashes on regional roads in the Reno-Sparks metropolitan region. The range of improvements, which are selected based on corridor land-use characteristics and transportation patterns, include the following:

- Roundabouts
- Narrow (less than 12-foot) travel lanes
- Reducing vehicle and pedestrian conflict points by reducing underutilized travel lanes
- Adding center turn lanes
- Adding bicycle lanes, multiuse paths, buffered bike lanes, or sharrows
- Installing or upgrading sidewalks and crosswalks

Complete Streets designs in many instances can slow traffic to about the speed limit, which reduces the number and severity of crashes, making the roadway safer for all users. Roadway designs that encourage motorists to drive at posted speeds and provide designated space for walking and biking will improve safety for all pedestrians.



Bicyclists and joggers on Plumas Street after Complete Street project

7.2 – WALKING & BIKING

Vision Zero Truckee Meadows Task Force

Between 2008 and 2018, 327 traffic fatalities occurred in Washoe County. Eighty seven of these were pedestrian fatalities. Even one fatality is too many. The foundation of the Vision Zero Truckee Meadows (VZTM) task force, which was established in 2018, is to explore a different approach to eliminate pedestrian fatalities in Washoe County.

The VZTM is working together to keep everyone safe on our roads. The regional task force, with the support of local leaders, has made a commitment to change our culture regarding safety in the Truckee Meadows. Vision Zero Truckee Meadows is working together to bring the number of fatalities on our roadways to zero; following the principle that if you make a road safer for a pedestrian, the most vulnerable road user, the road will be safer for everyone.

Vision Zero Truckee Meadows Task Force has evaluated crash trends in the region. Crash data for the region indicates that, between 2012 – 2017, 28% of the fatalities on our roadways were pedestrian fatalities. The highest year of pedestrian fatalities during this 5-year period was 2013 with 37% of the fatalities in Washoe County.

The projects in this RTP support Complete Streets design objectives, including projects that focus on community livability as well as regional connectivity.

Multimodal projects address the safety and mobility needs of all corridor travelers, but generally do not add additional lane capacity for automobiles. These types of projects are closely linked with community land-use and economic development plan objectives. Additional information about specific projects and design objectives is available in the Complete Streets Master Plan, adopted in 2016.

Regional connectivity projects also incorporate Complete Streets design concepts. With the exception of freeway projects, all regional road widenings will include upgrades to the sidewalk network, as well as transit stops and bicycle lanes where it is consistent with applicable plans and policies. The need for these regional connections or road widenings are identified by the regional transportation demand model, land-use planning (see Appendix G), and community input.

The commitment to be pedestrian-fatality free by 2030 has been made by the regional leaders and VZTM. The Vision Zero Truckee Meadows action plan is located at VisionZeroTruckeeMeadows.com.

The Bicycle Pedestrian Plan & ADA Transition Plan

The Reno-Sparks Bicycle Pedestrian Master Plan was adopted in June 2017 and ADA Transition Plan was completed in January 2020. The two plans establish a well-connected walking and bicycling network that provides residents and visitors a more livable and healthier community. It also created an opportunity to plan for safe access to transit stops throughout the region. The ADA Transition Plan Update focused included evaluation of RTC transit stops and assessable connectivity to transit. The Bicycle Pedestrian Master Plan was coordinated concurrently with the Complete Streets Master Plan in an effort to update the project lists for bicycle and pedestrian infrastructure on regional roads, to increase connectivity, and provide the community with multimodal transportation options.

Bus Stop Improvement and Connectivity Program

The RTC Board made a commitment to accessibility and walkability in our community by increasing funding ADA improvements at existing bus stops. This program, called the Bus Stop Improvement and Connectivity Program (Bus Stop ICP), also includes constructing sidewalks that provide improved connectivity to transit. Bus stop improvements have been prioritized based on the following factors: overall operational safety, boarding/alighting activity, (particularly among seniors and persons with disabilities), available right-of-way, and frequency of service. \$2 million in fuel tax funding, are programmed for bus stop and pedestrian connectivity improvements for FY 2020 for the first of three phases of this project.

Spot Improvements

The RTC programs funds each year to implement spot improvements for ADA, other pedestrian and bicycle improvements. A prioritization framework was developed as part of the Bicycle and Pedestrian Master Plan, which includes safety, transit ridership, and proximity to schools, medical facilities, public services, and senior housing. A summary of recent bicycle and pedestrian improvements is provided in the following table.

Bicycle and Pedestrian Infrastructure Added 2016-2019

| Bike Lanes (miles) | Side-Walks (miles) | Cross-Walks | Pedestrian Ramps | Multi Use Path (miles) | Cross-walk Warning Devices | New Cross-Walk Lighting | Cross-Walks Replaced |
|--------------------|--------------------|-------------|------------------|------------------------|----------------------------|-------------------------|----------------------|
| 30.4 | 9.7 | 179 | 445 | 11.7 | 11 | 19 | 29 |

Bicycle Friendly America

The Bicycle Friendly America program administered by the League of American Bicyclists provides guidance and recognition for communities working toward the creation of a bicycling culture and environment. A Bicycle Friendly Community, Business, or University welcomes bicyclists by providing safe accommodations for bicycling and encouraging people to bike for transportation and recreation. A bicycle-friendly place makes bicycling safe, comfortable, and convenient for people of all ages and abilities. In 2015, the Reno, Sparks, and Washoe County region was re-designated a bronze level Bicycle Friendly Community by the League of American Bicyclists. The community received this designation based on local efforts to improve and expand the bicycle network.

The League of American Bicyclists also highlighted the benefit of local bicycle events such as the Bike Swap, Bike to Work Week and the work done through the Reno Sparks Kiwanis Bike Program, Reno Bike Project, and Safe Routes to School (SRTS).

Also in 2015, University of Nevada, Reno was the first University in the state of Nevada to be awarded a Bicycle Friendly University.



Bicycle Friendly Community Sign

In December 2016, the RTC was awarded a silver level Bicycle Friendly Business designation by the League of American Bicyclists. The Bicycle Friendly Business award recognizes local businesses and corporations for creating a bicycle friendly environment for customers and bicycle commuting employees.

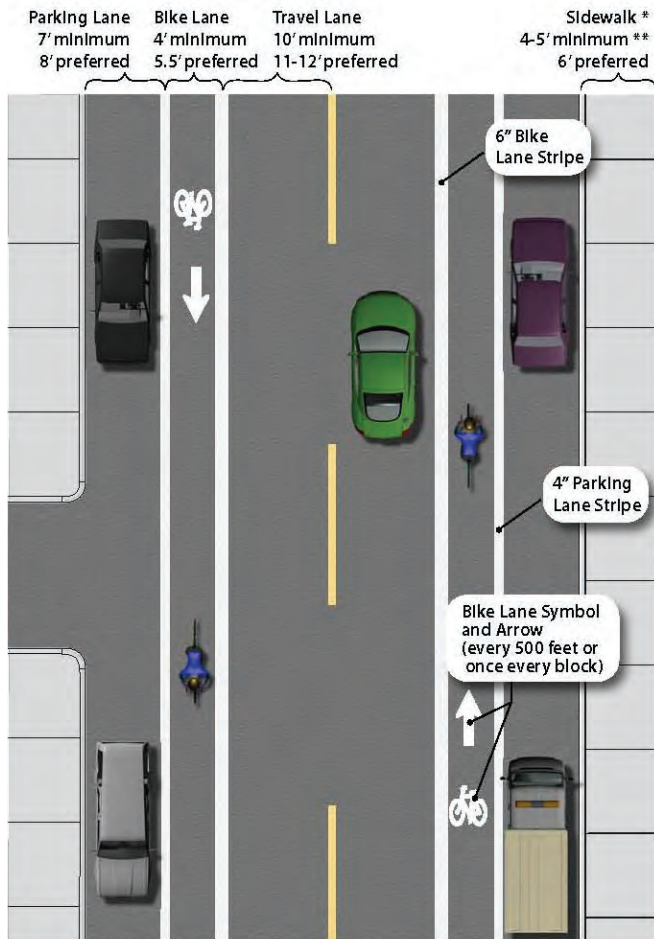
RTC was recognized for encouraging employees and customers to bicycle through participation in Bike Month, SRTS, and in working with advocacy groups.

The League also recognized some of RTC’s engineering efforts such as the installation of a free bike repair area with tools and work stand for employees and customers who need to make adjustments to their bike at RTC 4TH STREET STATION, and having parking available in well-lit areas with security cameras. Other efforts acknowledged include educating bicyclists through the production and distribution of free bicycle maps and for providing safety and educational materials for both bicyclists and drivers.

7.3 – TRANSIT

Transit is an essential part of the local economy that helps thousands of Washoe County residents get to work each day. Transit supports vibrant development patterns and local zoning and land-use policies. In addition, transit provides a critical public service to residents and visitors.

The environmental benefits of transit service are also well recognized: reducing the number of cars on the road reduces traffic congestion and air pollution.



Short Range Transit Plan

The Short Range Transit Plan (S RTP) outlines a strategy for transit service over the next five years. The short-term, fiscally constrained transit program includes existing service plus the following modifications:

- Reallocation of service hours to achieve greater efficiency
- Increase service hours to high ridership corridors where feasible
- Expand FlexRIDE Program
- Increase subsidy and expand eligibility for taxi bucks/Washoe Senior Ride Program

Example of a possible road configuration to narrow travel lanes and include bicycle lanes.

- Continuation of grant program for not-for-profit transportation services, as identified in the Coordinated Human Services Transportation Plan (CTP).

The SRTP will be updated in 2021-2022.

RTC RAPID Expansion

RAPID is RTC's premier bus rapid transit service. It offers high-frequency service through the heart of Reno and Sparks on the Virginia Line and Lincoln Line. The successful RTC RAPID transit service that debuted on Virginia Street in 2009 was extended to the University of Nevada, Reno in 2021.

The Virginia Line extension included eight new RAPID stations, construction of wide sidewalks, extensive safety improvements, and bicycle facilities. The 4th Street/Prater Way RAPID corridor, known as the Lincoln Line, began operating in 2018. This RTC RAPID service operates five zero-emission, all electric buses and provides eight enhanced stations. This corridor links the Reno and Sparks downtowns and provide enhanced access to employment centers and opportunities for higher education. By constructing wide sidewalks and bike lanes, the Lincoln Line project provides for improved safety and multimodal access to transit stops.

These RAPID investments have made significant contributions to the economic vitality of both corridors, supporting increased density and mixed-use development.

RTC to Have 80% Alternative-Fuel Transit Fleet in 2021

The RTC is a leader in the adoption of electric bus technology. The RTC electric buses significantly reduce diesel fuel use. This improves air quality in the Truckee Meadows and reduces operating costs for the RTC transit system.

The RTC has added an additional 19 new hybrid and electric buses to its fleet in 2021. Seventeen of the 19 new buses are New Flyer Hybrid electric/biodiesel buses and two buses are Proterra 100% electric buses. The new hybrid buses are already running on various RTC bus routes as part of RTC's transit system.

The two Proterra all-electric buses debuted on the RTC's extended RAPID Virginia Line during its launch in early March 2021. The hybrid buses are replacing aging, end-of-life vehicles. Now that the new buses have been deployed, 55 out of the 68 buses in RTC's fleet, or more than 80%, are hybrid or electric alternative-fuel vehicles. The RTC's goal is to have an all-alternative-fuel transit fleet by the year 2035. The RTC used federal funds to purchase the buses.

Importance of Transit in the Community

Supporting the economy – Getting people to work, including essential jobs and services

Shaping development – Economic revitalization

Public service – Mobility for people that do not drive

Environmental benefit – Reducing traffic congestion and air pollution

Access to essential services – Providing service to healthcare, pharmacies, groceries, and other public services

Maintenance Facility Infrastructure

Existing Infrastructure

RTC currently has two transit maintenance facilities:

- **Jerry L. Hall Regional Transit Operations and Maintenance Center:** Located at Villanova Drive under the I-580 viaduct, this facility is used to store and maintain the fixed route transit fleet.

Major improvements were completed in 2018 to expand electric bus fueling and maintenance capabilities at this site.

This 6.8 acre property has the capacity to store 78 buses and contains a bus wash, body repair bay, chassis inspection, vehicle inspection area, and RIDE dispatch.

- **Sutro Paratransit Maintenance Facility:** Located at Sutro Street and 6th Street near downtown Reno, this facility is used to store and maintain the ACCESS paratransit and FlexRIDE fleet. It contains infrastructure to fuel the compressed natural gas (CNG) fleet and administrative offices house ACCESS dispatch. The Sutro facility has also been identified as a back-up office location for RTC administrative staff for operations in the event of an emergency that renders the Terminal Way building inaccessible.

Maintenance Facility Needs

RTC has established a goal of transitioning to a 100% alternative fuels transit fleet. The first four electric buses purchased by RTC in 2014 have a range of about 30 miles per charge. The latest generation of Proterra Catalyst buses purchased in 2020 have a range of up to 150 miles, depending on conditions. RTC is currently exploring options to establish a hydrogen fuel cell bus program.

The 300 mile range of hydrogen fuel cell buses could allow RTC to transition the rest of the fixed-route fleet to zero emissions with minimal impact to route scheduling and operations. However, the location of the Jerry L. Hall Regional Transit Operations and Maintenance Center under I-580 precludes the use of this facility for hydrogen fuel cell maintenance. Expansion of the Sutro Maintenance Facility would provide a suitable location to initiate a hydrogen fuel cell program. RTC would also pursue opportunities to transition the ACCESS and FlexRIDE fleet to hydrogen fuel cell technology when it becomes available for the paratransit vehicle type.

In addition, NDOT has adopted the Spaghetti Bowl Project, which is a plan for safety, operational, and capacity improvements on I-80 and I-580.

Phase 4 of the Spaghetti Bowl Project, currently planned for the year 2035, would involve reconstruction of the Villanova/Plumb Lane interchanges at I-580 and would require relocation of RTC's fixed-route transit facility. RTC is coordinating with NDOT on identifying a suitable relocation site.

To accommodate planned growth in the transit system as well as electric, hydrogen fuel cell, and diesel charging and maintenance needs, the facility would need to include:

- Approximately 10 acres
- 30,000 square feet for maintenance bays
- 45,000 square feet for covered outdoor storage
- 40 bus parking spaces with capacity for 80 buses
- 100 employee and 12 service vehicle parking spaces
- 20 electric bus chargers with 4,000 amp service
- Bus wash, body repair bay, chassis inspection and vehicle inspection pit

Expansion of the Sutro Maintenance Facility has been identified as an optimal location that could accommodate these infrastructure requirements and still provide a central location that meets transit operational needs.

Passenger Facility Needs

RTC is currently undertaking the following passenger facility improvements:

- Expand RTC 4TH STREET STATION to construct four additional bus bays, electric bus chargers, and parking spaces
- Installation of electric bus charging infrastructure at RTC CENTENNIAL PLAZA STATION
- Upgrade the northbound Virginia Line station at Peppermill to provide full ADA accessibility, additional seating capacity, and full RAPID amenities
- Bus stop accessibility improvements throughout the region, in support of the ADA Transition Plan
- Park and ride facilities to support RTC VANPOOL passengers

RTC ACCESS

Paratransit service is a civil right required under the Americans with Disabilities Act (ADA).

This requirement is met through the provision of RTC ACCESS service, which provides mobility for people whose disability prevents them from using fixed-route transit service. Rides are reserved one to three days in advance on demand through a call center.

RTC ACCESS passenger trips are made using a combination of full-size accessible cut-away buses, mini-vans, and taxis. The service operates 24 hours a day, seven days a week. In 2019, about 224,000 rides were provided, with an average of 2.2 rides per service hour. Approximately 3,700 individuals are certified as ADA paratransit eligible in Washoe County. The ADA requires paratransit service to be provided within $\frac{3}{4}$ of a mile of fixed-route transit service. The one-way fare is \$3.

RTC FlexRIDE

FlexRIDE is a curbside-to-curbside transit service available by requesting a ride through an app or by phone. Rides can be scheduled at your desired travel time and can be expected to arrive to the curbside closest to your location within 8 to 15 minutes. Fares are the same as the standard RTC RIDE fares.

RTC initiated the first FlexRIDE pilot program in Sparks in 2019 and added additional FlexRIDE zones in the North Valleys, Spanish Springs, and Somerset/Verdi in 2020.

The convenience of this service has made it very popular with customers, and resulted in strong increases over previously offered fixed route services in those areas.

Supplemental Mobility Services

Because RTC does not have the resources to provide fixed-route, FlexRIDE, and paratransit service to all residences in Washoe County, the agency is pursuing innovative services and partnerships with not-for-profit providers that can serve other specialized transportation needs.

Coordinated Human Service Transportation Plan

The Coordinated Human Service Transportation Plan (CTP) is required by the Federal Transit Administration (FTA) as a part of the Section 5310 grant funding program. To be funded, projects must be contained in the CTP and be intended to improve transportation options for senior citizens and persons with disabilities above and beyond the requirements of the Americans with Disabilities Act. The CTP was updated in 2020 and contains the following primary goals:

- Create a Local Coordinated Council to facilitate coordination and recommend Section 5310 funding activities.
- Continue to enhance mobility and accessible transportation options
- Establish a One-Call/One-Click Center

Not-for-Profit Partnerships

The Section 5310 Program, funded by the FTA, allows RTC to offer competitive grant funding to organizations that provide enhanced mobility. Mobility services currently funded by this program include the following:

- Non-Emergency Medical Related Transportation through Access to Healthcare Network (AHN)
- Neighbor Network of Northern Nevada (N4) and the purchase of non-ADA Paratransit rides
- Seniors in Service volunteer program to provide social support for seniors, including transportation to doctor appointments, grocery stores, pharmacy's etc.
- Senior Outreach Services volunteer program at the Sanford Center for Aging at UNR to provide transportation for frail, homebound, and below-poverty seniors.
- Washoe County Human Services Agency.

Washoe Senior Ride/Taxi Bucks

The Washoe Senior Ride/Taxi Bucks program provides a subsidy for eligible participants to hail a cab. This program extends a mobility option to people who do not live within the RTC RIDE and ACCESS service area. This program is currently available to veterans, residents 60 years of age or older, and ACCESS clients with annual incomes under \$45,000. As part of the Short Range Transit Plan, RTC is considering options to expand eligibility and increase the subsidy for this program.

RTC SMART TRIPS

The RTC's trip reduction program, RTC SMART TRIPS, encourages the use of sustainable travel modes and trip-reduction strategies such as telecommuting, compressed work weeks, and trip chaining. Major components of the program include a bus pass subsidy program in which the RTC matches an employer's contribution to their employees' 31-day transit passes up to 20%; a subsidized vanpool program, RTC VANPOOL; and an online trip matching program that makes it quick, easy, and convenient to look for carpool partners and also bus, bike, and walking buddies for either recurring or one time trips. One of the most common deterrents to ridesharing is the fear of being "stranded."

Consequently, people who either carpool or VANPOOL to work can sign up for the guaranteed ride home program and be reimbursed for a taxi ride home up to four times a year if an unexpected event prevents normal ridesharing arrangements from working.

Making trips on foot and by bicycle are promoted by the RTC SMART TRIPS program throughout the year in various manners such as participation on the Truckee Meadows Bicycle Alliance, which implements the Bike to Work Week campaign each spring, and maintaining the Street Smart website that educates the public about the benefits of walking and how to do it safely.

RTC VANPOOL Program

RTC VANPOOL is the fastest-growing component of the trip-reduction program and now represents the RTC's largest transit vehicle fleet. This program provides an opportunity to reduce auto trips and serve long-commute distances effectively. The program grew to 227 vehicles in 2020, with vans traveling to Carson City, the Tahoe-Reno Industrial Center, North Spanish Springs, Stead, Herlong, and Susanville. Participants share the costs of the vehicle lease and gas, with RTC providing a subsidy to encourage participation based on the distance traveled. The RTC VANPOOL program eliminated over 6,000 metric tons of CO₂ in 2019.

RTC REGIONAL CONNECTOR

RTC currently provides REGIONAL CONNECTOR transit between Reno and Carson City. This premium service carried over 27,000 passengers in 2019.

Privately Operated Intercity Bus Service

RTC supports private intercity bus transportation where feasible and appropriate. RTC leases bus bay access at RTC CENTENNIAL PLAZA to My Ride to Work, which provides privately operated transit access to employees at the Tahoe-Reno Industrial Center. An estimated 2,000 employees use this service every day. Greyhound, which provides intercity transit access with nationwide connectivity, also leases bus bay access as well as a waiting room space at RTC CENTENNIAL PLAZA.

The North Lake Tahoe Express offers service from the Reno airport to Truckee and North Lake Tahoe area. The South Tahoe Airporter provides service from Stateline to the Reno airport.

Token Transit – Smart Phone Fare Payment



RTC has partnered with Token Transit to provide riders the option of using their smart phone to purchase and board buses. Riders simply download the Token Transit app from the app store or text “TOKEN” to 41411 for a download link. The user can store or activate a ticket on their phone. To board, riders simply show the driver your animated ticket on your phone.

Joint Development Through the Federal Transit Administration Program

The Reno-Sparks region is facing a significant challenge relating to housing affordability. Public transportation is an important resource for area residents and provides access to essential services. Affordable housing in close proximity to transit routes offers improved access to services and increases transit ridership. RTC conducted an Affordable Housing Study that identified opportunities for the development of affordable housing in transit corridors.

RTC coordinated the study with staff at the Truckee Meadows Regional Planning Agency, City of Reno, City of Sparks, Washoe County, and Reno Housing Authority, as well as representatives of Truckee Meadows Healthy Communities initiative regarding ongoing analysis of regional housing needs.

Joint Development as defined by the FTA refers to a public transportation project that integrally relates to and often co-locates with commercial, residential, mixed-use or other non-transit development. The RTC study evaluated vacant parcels throughout the region and then identified potential locations for more detailed analysis. The report includes a market analysis and conceptual site plans for consideration at these locations. There could be a potential opportunity for private or public sector partners to develop affordable housing in conjunction with future RTC transit facility improvements. The sites considered include the following:

- Clear Acre Lane site – owned by RTC, no longer needed for future roadway project
- South Virginia Street site – construction of full-sized RAPID station planned for this site
- Neil Road site – relocation of Meadowood Mall transit transfer station under study for this site

Park and Ride Facilities

Park and rides are multimodal transfer points where people typically transfer from an individual mode of transportation, such as walking or driving alone, to a shared transportation mode, like public transportation or a carpool. Park and ride lots can be used for many trip types but are most typically oriented towards commuter trips.

Park and rides can either be exclusively owned and operated by a public agency or under contract with a private owner.

The latter type of park and ride facility is often called a shared facility because parking is shared between park and ride users and other users of the facility. Shared facilities are often located at large faith institutions, major retailers, or other locations that may have a surplus of weekday, daytime parking.

Publicly owned park and ride facilities in the region are currently operated by the Nevada Department of Transportation (NDOT). These park and rides are primarily designed to serve long-distance commutes or recreation opportunities in the Lake Tahoe Basin.

Park and ride facilities are a critical element of the RTC VANPOOL program.

Due to the continued success of the RTC VANPOOL program, there is an increased demand for park and ride facilities. As a result, the RTC is currently evaluating options to expand the availability of these types of facilities within the region. These options include improving vacant properties that the RTC currently owns and working with major retailers and faith institutions to enter into agreements for shared use facilities. In addition, RTC has previously considered locations for park and rides as a component to other projects such as the planned Pyramid Highway-US 395 Connector.

Unfunded Vision for Transit

The RTP outreach process provided an opportunity to develop a vision for transit in the Truckee Meadows through 2050. This vision is not constrained by available financial resources. Based on community input, the vision includes the following elements:

Transit Service Vision

- Increased frequency and span of service on existing high-productivity routes in the urban core – Investments in existing routes will improve convenience and service levels in areas with well-established transit ridership that have the greatest potential for increased growth.

- **Expand FlexRIDE service areas** – FlexRIDE offers a tool to serve some outlying suburban areas, providing increased convenience to potential customers where fixed-route transit would not be effective. Potential areas for future expansions include South Meadows and Incline Village.
- **Extend Virginia Line RAPID to Mt. Rose Highway** – Providing transit connectivity to employment, education, commercial, and residential centers in South Reno would improve access to opportunities, expand travel options, and encourage transit supportive development along South Virginia Street. The RAPID extension could be supported by a FlexRIDE zone to provide increased connectivity to surrounding neighborhoods.
- **Extend Lincoln Line RAPID to Stoker Avenue** – This extension along West 4th Street would support safety and other multimodal improvements planned for the corridor. It would also encourage transit supportive development that is anticipated in the West 4th Street corridor.
- **Improved Transit Connectivity to the Lake Tahoe Region** – Develop new transit solutions to better connect the existing transit systems in Reno/Sparks, Carson City, and Lake Tahoe.

This would improve access to the treasured resources in the Lake Tahoe Basin and reduce the environmental impact of vehicle travel.

- **Truckee to TRI Center Commuter Bus Service** – Develop new transit solutions to better connect residential and employment centers along the I-80 corridor, extending from the Town of Truckee to Reno/Sparks, and Storey County.

Transit Facilities Vision

- **Bus Maintenance Facility** – Construct a larger maintenance facility for long-term expansion that can accommodate a diverse zero-emission fleet, including electric and hydrogen fuel cell operations.
- **New Transfer Facility at Meadowood Mall** – Relocate the Meadowood Mall transfer facility and explore opportunities for joint development.
- **Mobility Hubs** – The need for Mobility Hubs was identified through the Downtown Reno Circulation Study, Sparks Industrial Area analysis, and planning initiatives in Midtown District of Reno. They would include parking for automobiles, bikes, RTC VANPOOL participants, and offer connectivity to public transit and private employer shuttles. Structured parking would be considered.

With this vision for transit, the RTC hopes to continue the dialog about the role of transit in the community and the need for sustainable funding for transit operations.

7.4 – ADVANCED MOBILITY & INNOVATION

Zero-Emission Vehicles & Charging Infrastructure

Increasing the proportion of zero-emission vehicles in use throughout the region, including both electric and hydrogen fuel cell vehicles, will have benefits to air quality and reduce greenhouse gas emissions. The growth of zero-emission vehicles will require the development of fueling/charging infrastructure as well. RTC is developing an Advanced Mobility Study that includes the evaluation of existing electric vehicle charging resources and identification of strategies for long-term development of alternative charging technologies. In addition to supporting the needs of local zero emission vehicle operators, charging infrastructure, along with the Nevada Electric Highway initiative, would encourage zero emission vehicle owners in other states to visit our region and support the tourism economy.

LiDAR Safety Analysis

The RTC received a grant from the U.S. Department of Transportation to develop a tool, called Automatic Road Feature Extraction from LiDAR (ARFEL), that automatically extracts highly accurate road geometric features from mobile light-detection-and-ranging (LiDAR) data collected on roads.

RTC will collaborate with NDOT, which collects and manages statewide mobile LiDAR data using their own data collection vehicle and will also be a user of the ARFEL tool. The development team includes researchers and programmers from the University of Nevada, Reno (UNR) and Texas Tech University (TTU). RTC will use this tool to:

- Analyze relationships between crashes and road factors;
- Identify locations and characteristics of crashes using network screening;
- Select appropriate countermeasures and strategies;
- Evaluate safety improvement projects.

Other applications for LiDAR under development include flashing lights at crosswalks that could be activated by LiDAR when pedestrians approach the intersection.

Connected and Autonomous Vehicles

The concept of fully autonomous (also called self-driving, driverless, or robotic) vehicles has gone from being a distant possibility to a near-term reality. Vehicles of all types are becoming more autonomous as this technology continues to improve at a rapid rate.

Nevada has been leading the way for autonomous cars and trucks by becoming one of the first states in the nation to pass regulations regarding the safety requirements and licensing for autonomous vehicles. Nevada was also the first state in the nation to provide a license to an autonomous commercial truck.

RTC is collaborating with the University of Nevada, Reno on research into intelligent mobility. The University's Nevada Center for Applied Research integrates expertise in advanced autonomous systems, computer sciences, synchronized transportation, and robotics with community needs. The Center is creating a Living Lab to allow the testing of mobility technologies in urban environments. The Center and RTC are partnering to research autonomous bus technologies and applications using zero-emission electric vehicles.

In addition to individual vehicles becoming autonomous, some concepts have proposed a fully connected transportation system in which vehicles would communicate with each other and with the surrounding infrastructure in order to improve both safety and operational efficiency.

A fully integrated transportation system may have other impacts as well, including reduced car ownership, demand response ride-sharing, and modified land-use needs.

This technology is expected to increase the need for expanded broadband and internet connectivity.

Autonomous aircraft are also beginning to emerge as a transportation option of the future. Drones are small aircraft which are piloted remotely and do not require a human to be seated within the aircraft itself. Nevada has been on the forefront of regulating and providing resources to this new technology. In 2015, the University of Nevada, Reno (UNR) opened the Nevada Advanced Autonomous Systems Innovation Center as a catalyst for innovation in the field of autonomous systems.

Shared Mobility

Shared-use mobility describes transportation services that multiple users can access on demand, including public transit, taxis and limos, bikesharing, carsharing (round-trip, one-way, and personal vehicle sharing), ridesharing (carpooling, vanpooling), ridesourcing (Transportation Network Companies or TNCs), scooter sharing, shuttle services, and commercial delivery vehicles providing flexible goods movement. Shared-use transportation is becoming increasingly common in urban areas and utilizes wireless technology to improve the options and ease of access for users.

The Shared-Use Mobility Center states that these new services represent innovative responses to the demand for new options and offer an opportunity to:

- Provide more mobility choices
- Address last mile and first mile solutions
- Reduce traffic congestion and pollution
- Reduce transportation costs
- Reduce fossil fuel consumption
- Reduce pressures on parking spaces
- Improve efficiency

- Identify choices for those who cannot afford to purchase and maintain a vehicle

By utilizing wireless technology to easily access shared-use mobility options, companies are offering downloadable applications for cell phone and/or tablet users to create convenient shared-use transportation choices.

Ride Sourcing

Ridesourcing became available in the Truckee Meadows through Uber and Lyft in the fall of 2015.

Technology allows for Lyft customers to request a ride through an app, and they are provided with a photo of the driver and license plate information as well as tracking information once the ride has been requested. RTC is exploring the viability of using public-private partnerships with ridesourcing services to expand mobility opportunities in outlying areas, similar to the Taxi Bucks program.

The impact of ridesourcing on mobility will require additional analysis as its use continues to increase. These services have the potential to increase traffic congestion and may draw customers away from traditional public transportation. Due to costs that are typically higher than transit fares, equity concerns should also be given consideration.

Bike Share

Early in 2016, RTC completed the Truckee Meadows Bike Share Feasibility Study. The study researched the possibility of launching a bike share program in the Reno and Sparks areas. The study revealed that a successful bike share would likely require a public-private partnership. The study recommended a hybrid system utilizing both smart bike systems and station-based systems. Smart bikes can be rented from any location and all of the necessary equipment to facilitate the rental is physically located on the bike.

A station-based system utilizes a fixed number of racks at a given location and the user must return the rented bike at one of these locations.

In April 2018 the City of Reno executed the Exclusive Agreement for a pilot dockless (smart bike) bike share program between the City of Reno and City of Sparks, Washoe County, University of Nevada, Reno, and The Reno-Sparks Indian Colony. This pilot project was the first in the country that included a tribal government. RTC had a support role in the dockless bike share pilot, which involved no public capital infrastructure investment. The pilot projected ended and the local jurisdictions determined not to continue with dockless bike share.



CHAPTER 8 – FOCUSING ON REGIONAL CONNECTIVITY

Regional connectivity has three primary contexts in this RTP: the larger mega-region that extends from San Francisco to Reno-Sparks, the Northern Nevada and Lake Tahoe Region, and the local communities within Reno and Sparks. Economic and transportation linkages tie Northern Nevada communities together including Carson City, the Lake Tahoe Region, Virginia City, Pyramid Lake, Storey County, Fernley, and other nearby areas. These economic connections continue into California, extending to Sacramento and the San Francisco Bay Area. A strong desire to improve regional connectivity for residents, businesses and visitors was expressed during the RTP outreach process. Local residents would like to see more multimodal travel options and freight mobility between these communities and into California.

Northern Nevada is directly impacted by the economic activity surrounding the San Francisco metropolitan region and the Port of Oakland. This relationship is reflected in the concept of Megapolitan Regions, as defined by Arthur Nelson and Robert Lang. Megapolitan Regions share a number of attributes including environmental systems, infrastructure systems, economic linkages, culture, and history. Reno and Sparks are part of the Sierra-Pacific region, which extends from San Francisco to Reno. The Megaregion is connected by the approximately 225-mile-long I-80 corridor, which is generally parallel to a Union Pacific mainline railroad. Intercity bus transit is provided between these metropolitan areas by Greyhound and other operators. Amtrak provides passenger rail service in the corridor on the California Zephyr route between San Francisco and Chicago.

Amtrak provides passenger rail service from San Jose to Auburn, California on the Capital Corridor route. RTC joins the Lake Tahoe Region and Town of Truckee in support of extending the Capital Corridor service to Reno/Sparks and continuing to Storey County and Fernley.

This larger region is important because economic activity in one city has a direct impact on the economy in other cities within the region.

For example, if the number of ships increases in the Port of Oakland there is a subsequent increase in traffic on I-80. More trucks and trains pass through Reno, where they unload cargo for redirection to all points throughout the Intermountain West. Reno, Sparks, and Washoe County have become an increasingly significant warehouse, distribution, and advanced manufacturing hub in the megapolitan region. This impacts the transportation network and indicates there is a need to coordinate not only with entities in Washoe County, but also with other regional partners.

8.1 – CONNECTIVITY IN NORTHERN NEVADA

The transportation networks and economies of Northern Nevada and the Lake Tahoe Region are even more closely linked. The catchment area for the Reno-Tahoe International Airport, shown in Figure 8-1, encompasses a population of 1.3 million. Support has been expressed through the RTP process for increasing transit connectivity between the Reno, Sparks, Carson City and Lake Tahoe regions. Strengthening these transit linkages will support sustainable economic development in the region. The RTC collaborated with the Nevada Department of Transportation (NDOT) and the other Northern Nevada Metropolitan Planning Organizations (MPO's) in developing the 2050 RTP.

Staff from the Carson Area Metropolitan Planning Organization (CAMPO), Tahoe Regional Planning Agency (TRPA) and the Tahoe Transportation District (TTD) were members of the 2050 RTP Inter-County Working Group. All of the MPO's and NDOT meet monthly to discuss regional issues. Staff from the Carson Area Metropolitan Planning Organization (CAMPO), Tahoe Regional Planning Agency (TRPA), and the Tahoe Transportation District (TTD) were members of the 2050 RTP Inter-County Working Group. All of the MPO's and NDOT meet monthly to discuss regional issues.

One Nevada Transportation Plan

The Nevada Department of Transportation (NDOT) adopted their long-range plan, One Nevada Transportation Plan, in November 2018 and most recently revised it in February 2020. The One Nevada Transportation Plan equips NDOT and its partners with the strategic direction and essential actions to meet Nevada's current and future transportation needs. This plan provides a common foundation and shared policy framework for making more informed, transparent, and responsive transportation investment decisions. It is intended to be a living document and is a part of a continuous process of planning, implementation, operation, and preservation of Nevada's transportation system that will evolve over time to reflect and be responsive to future changes in needs, resources, and priorities.



Figure 8-1: Reno Tahoe International Airport Catchment Area

Carson City

Carson City, the capital of Nevada, is located about 25 miles south of the Reno-Sparks metropolitan area. Significant commuter, commercial, and recreational traffic occurs between these two regions. The Carson City Regional Transportation Commission (CCRTC) is the governing agency for transportation improvements in Carson City, and operates Jump Around Carson (JAC), the city's public transit system.

The Carson Area Metropolitan Planning Organization (CAMPO) is responsible for transportation planning within the metropolitan planning area, which includes Carson City, as well as portions of Douglas and Lyon Counties. CAMPO is the designated recipient and grantee of urbanized area public transportation funding received directly from the Federal Transit Administration (FTA). Carson City Public Works provides staffing for both CAMPO and the CCRTC. The RTC of Washoe County partners with CCRTC to provide the REGIONAL CONNECTOR transit service between Reno and Carson City.

Lake Tahoe Region

The Lake Tahoe Region and surrounding area are recognized for their unique beauty, environmental resources, and recreational amenities. Reno is a gateway for visitors travelling to Lake Tahoe, with many entering the region at the Reno-Tahoe International Airport. In addition, Lake Tahoe is a popular recreation destination for residents of the Reno-Sparks metropolitan region. Primary vehicle access is from I-80, Mount Rose Highway, and US 50 via I-580. Millions of visitors travel to Lake Tahoe each year. Commuting patterns between the urbanized area and towns such as Truckee, South Lake Tahoe, and Kings Beach are also substantial.

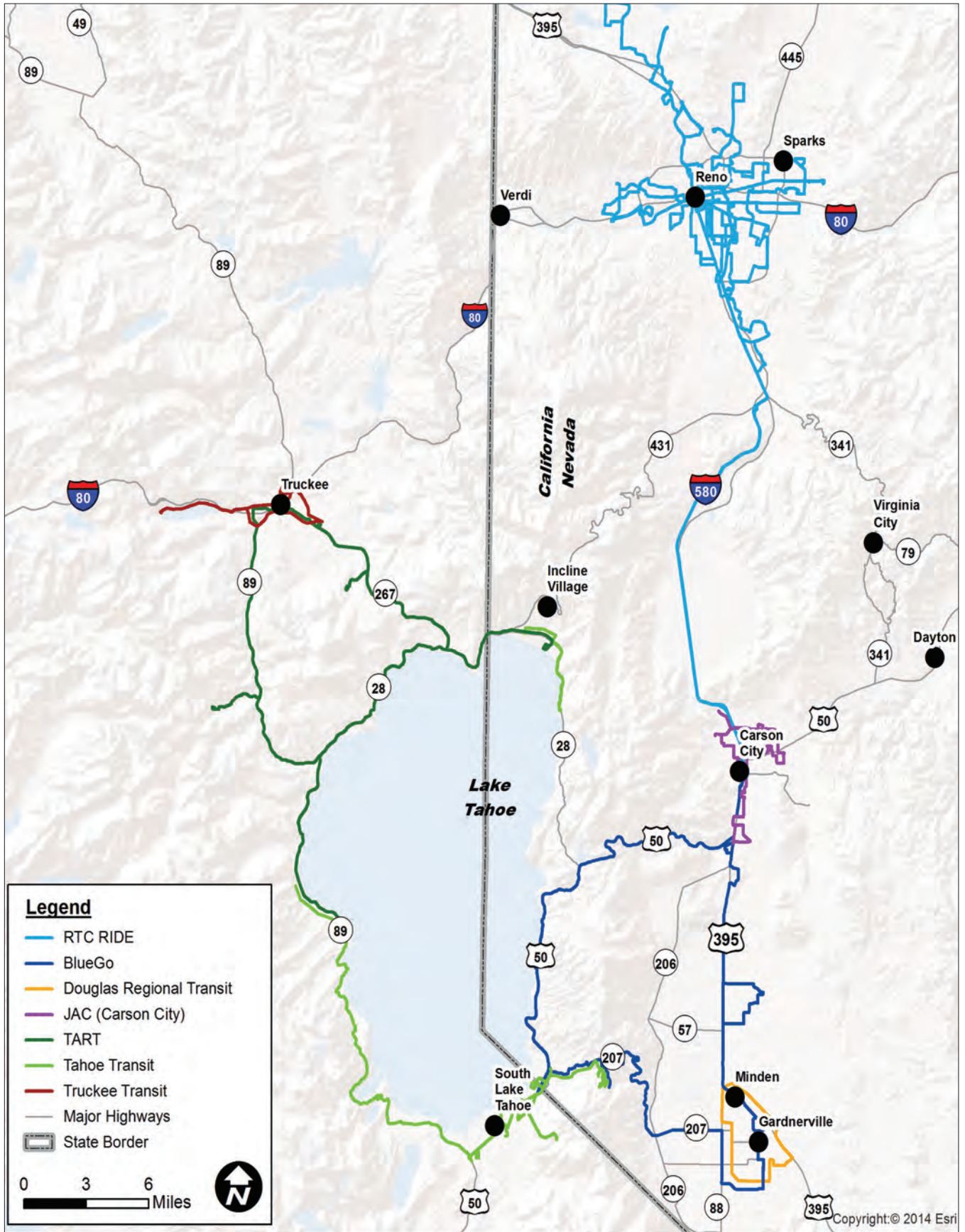
In 1969, California and Nevada legislators agreed to a unique Compact for protecting Lake Tahoe and sharing responsibility for that protection. The two states and the U.S. Congress amended the Compact in 1980, with public law 96-551, and at that time also established the Tahoe Transportation District (TTD). The TTD is responsible for facilitating and implementing safe, environmentally positive, multimodal projects for the Lake Tahoe Basin, including transit operations.

The Tahoe Regional Planning Agency (TRPA) is the federally designated Metropolitan Planning Organization (Tahoe MPO) for the Lake Tahoe Basin. In 2015, the FAST Act identified the Lake Tahoe Region as a Transportation Management Area (TMA). Staff at TRPA work with TTD, the RTC, and other local implementing agencies to plan for and implement a transportation system that serves the transportation needs of residents, commuters, and visitors of Lake Tahoe while reducing the environmental impact of transportation in the region and enhancing quality of life.

The South Lake Tahoe area's coordinated transit system is operated by the TTD and provides fixed-route service through the South Shore as well as the East Shore Express, which includes transfer service to Tahoe Area Regional Transit (TART), providing access to the North Shore and the Town of Truckee.

REGIONAL MAP OF TRANSIT SYSTEMS IN CARSON, TAHOE AND RENO/SPARKS

MAP 8.1



TTD also operates commuter bus service to Carson City and Minden and Gardnerville in Douglas County (the Carson Valley). In addition, TTD provides ADA paratransit and on-demand service within the city of South Lake Tahoe, northern El Dorado County and western Douglas County.

RTC partners with TTD and Placer County to contribute to the TART service, and is currently in discussion with TTD to consider microtransit (FlexRIDE) service in Incline Village. Long range elements of the transit vision include:

- Improved Transit Connectivity to the Lake Tahoe Region – Develop new transit solutions to better connect the existing transit systems in Reno/Sparks, Carson City, and Lake Tahoe. This would improve access to the treasured resources in the Lake Tahoe Basin and reduce the environmental impact of vehicle travel.
- Truckee to Fernley Commuter Transit Service – Develop new transit solutions to better connect residential and employment centers along the I-80 corridor, extending from the Town of Truckee to Reno/Sparks, Storey County, and Fernley.

Storey County

Storey County is home to the Tahoe Reno Industrial (TRI) Center. The TRI Center is a 107,000 acre park, located in the community of McCarran. The center is the largest in the United States, occupying over half of the land mass in Storey County, and is home to more than a hundred companies and their warehouse logistics and fulfillment centers. Many sites are served directly by rail. Some of the larger companies at the TRI Center include the Tesla Gigafactory, Panasonic, Wal-Mart Distribution Center, and Zulily, Inc. The TRI Center is also home to major technology companies such as the Switch Datacenter, Google Datacenter, Blockchains, and many others.

With a county population of just over 4,100 residents, the majority of employees working at the TRI Center commute from Reno and Sparks and nearby Lyon County (including the City of Fernley) along the I-80 corridor. In addition, the USA Parkway was recently constructed (opened in 2017) between I-80 and U.S. Highway 50, and provides direct access to the TRI Center from the major highway to the south.

Storey County is also home to historic Virginia City. Nevada's most famous short rail line is the Virginia and Truckee Railroad, which connected Reno with Carson City, Virginia City, and Minden.



With a population of about 900, Virginia City is a National Historic landmark and popular tourist destination. Virginia City is accessed from Geiger Grade/SR 341 in south Reno.

This plan identifies potential improvements on three corridors that could improve connectivity between Washoe and Storey Counties:

- I-80 widening between Sparks and USA Parkway
- Extension of La Posada Drive to USA Parkway, which would support additional industrial growth in Sparks
- Extension of South Meadows Parkway to Storey County

City of Fernley

Fernley is a growing city of over 20,000 residents. The population is expected to double over the next 20 years. It's location along the UPRR corridor and I-80 about 45 minutes to the east of Reno/Sparks has made it attractive for growth in the manufacturing, ecommerce, and distribution sectors. Fernley is planning for development of a major rail facility that would function as an inland port, potentially generating a significant increase in truck traffic along the I-80 and US 395 corridors.

I-80 Corridor

The I-80 Corridor links the Reno-Sparks metropolitan region with San Francisco, Sacramento, and Salt Lake City.

RTC partnered with NDOT on development of the I-80 Corridor Study. This study used comprehensive and inclusive strategic dialogue with stakeholders in the entire metropolitan region to generate a vision and plan for I-80.

I-80 Corridor Coalition is a group designed to improve the overall freight mobility and safety of this nationally significant freight corridor. Work will be performed to enhance communication between transportation system operators and commercial users of the I-80 corridor, particularly during winter weather-related closures. The Coalition includes NDOT, Caltrans, Wyoming DOT and Nebraska DOT. Data interfaces are already in place for Nevada and Utah and will require that additional elements from the I-80 corridor be integrated.

NDOT has also developed the Nevada State Freight Plan and is in the process of updating the Nevada State Rail Plan, both which address freight-specific issues on the I-80 corridor. More information on those plans can be found in Chapter 10 of this RTP.

US 395 Coalition

The US 395 Coalition is a group created to raise awareness about safety and mobility needs on the highway between Hallelujah Junction and Susanville, California.

This corridor is used for commuting from the Reno/Sparks area to Herlong and Susanville and is also a heavily used truck freight corridor. This segment is currently one lane in each direction with no center median. The US 395 Coalition advocates for constructing additional lanes and safety improvements in the corridor. Short term improvements would include segments of passing lanes. Although located in California, RTC and NDOT are participating in this regionally important planning initiative.

I-11 Corridor

I-11 is envisioned as a continuous north-south high-capacity transportation corridor that has the potential to enhance movement of people and freight, and to facilitate regional connectivity, trade, communications, and technology. This Corridor could provide needed connectivity, offer alternative routes for freight and passenger traffic, and improve reliability for better trade and commerce opportunities. Developing a north-south multimodal corridor through Nevada provides the foundation for a renewed, stronger, diversified economy.

Construction of the roughly 450-mile long future I-11 could be phased over future decades as environmental impact reviews are completed and funding is prioritized.

I-11 is currently being analyzed as a limited access four-lane divided highway designed to accommodate future traffic.

8.2 – CONNECTIVITY IN THE URBANIZED AREA

Regional connections are also needed to tie together the neighborhoods and employment centers in the urbanized area of Reno, Sparks, and Washoe County. Topography and historic development patterns limit direct roadway connections in many areas. While the historic core of the metropolitan region is centered on the axis of Virginia Street and 4th Street/Prater Way, recent decades have seen large concentrations of both jobs and housing emerge in outlying areas such as South Meadows, Spanish Springs, and the North Valleys. These newer neighborhoods and employment districts are generally not connected by a grid network and cross-regional mobility is limited.

Spaghetti Bowl Project

NDOT completed the Reno-Sparks Freeway Traffic Study, which identifies solutions to the safety and congestion concerns at the I-80/I-580/U.S. 395 system-to-system interchange, known to local residents as the Spaghetti Bowl.

This system-to-system interchange is the highest-crash interchange in Nevada. The project limits extend along the corridors from the Keystone Avenue interchange to the Pyramid Highway interchange on I-80 and from the McCarran Boulevard/Clear Acre Lane interchange to the Virginia Street/Kietzke Lane interchange on U.S. 395/I-580.

NDOT received a Record of Decision (ROD) on Final Environmental Impact Statement (FEIS) in July 2019. Through this process, NDOT identified a preferred alternative and has since initiated construction on Phase 1 of the project, referred to as the Spaghetti Bowl Xpress (SBX). This early action project addresses the areas most critical for safety within the Spaghetti Bowl system-to-system interchange. SBX and other future phases of improvements to the Spaghetti Bowl are included in this plan.

US 395 North Valleys Project

US 395 from North McCarran Boulevard to Stead Boulevard experiences some of the most severe traffic congestion in the region, resulting from rapid residential and industrial growth in the North Valleys. This project would improve safety and mobility by constructing additional travel lanes and interchange improvements.

Pyramid-US 395 Connector

The Pyramid-US 395 Connector will convert six miles of existing Pyramid Highway from an arterial to a high access controlled arterial and add one lane in each direction. A new four lane high access controlled arterial (Connector) from US 395 to Pyramid Highway would be added. This project will reduce current and future congestion in Spanish Springs, serve future growth areas, provide additional east/west connectivity and create better overall mobility in the region.

Connecting Spanish Springs and the North Valleys

The high levels of existing and projected traffic congestion on roadways in the Spanish Springs and North Valleys areas indicate the need for increased connectivity across the northern portion of the urbanized area.

Multiple projects, including the extension of Eagle Canyon and the West Sun Valley Arterial, have the objective of developing a roadway network that will improve access, connectivity, and fire evacuation options in these communities.

Extension of Lemmon Drive and Moya Boulevard

The combination of these roadway extensions would support connectivity in the North Valleys and improve access to the Reno-Stead Airport, providing alternate routes for freight movement.

RTC FlexRIDE

FlexRIDE is RTC's on-demand, curbside-to-curbside transit service that provides connection within select zones as well as connections to the fixed-route transit network. The first pilot project was launched in Sparks in 2019 and more than doubled transit ridership in the area. During 2020, RTC initiated additional FlexRIDE zones the North Valleys, Spanish Springs, and Verdi/Somerset. This service provides convenient access to transit and improves mobility throughout the region by connecting to the fixed route system.

Expansion of RAPID Service on the RTC Lincoln Line and RTC Virginia Line

The high-frequency transit service on RAPID would continue to improve regional connectivity through future extensions along West 4th Street to Stoker Avenue and on South Virginia Street to Mt. Rose Highway. The projects would improve access to jobs and essential services. In addition, these extensions have the potential to shape the urban form of these corridors and encourage high-density, mixed-use development, in support of local land use policies and the Truckee Meadows Regional Plan.



CHAPTER 9 – PROMOTING EQUITY & ENVIRONMENTAL JUSTICE

Achieving equity and environmental justice in the provision of transportation projects and services is an important goal of the RTP. The RTC strives to serve the transportation needs of all residents and visitors in the planning area without discrimination based on age, income, race, language, ethnicity, or ability. RTC complies with the federal policies and requirements listed below:

- Title VI of the Civil Rights Act of 1964: No person in the U.S. shall, on the basis of race, color, or national origin, be excluded from participation in, denied benefits of, or subjected to discrimination under any program receiving federal funding. RTC is required to take steps to ensure that no discrimination on the basis of race occurs.

Title VI requires reporting about how transit services are implemented and what measures the RTC is taking to provide equal access to public transportation.

- Americans with Disabilities Act (ADA) of 1990: Requires that disabled persons have equal access to transportation facilities and services. This includes wheelchair accessible accommodations in the transit system.
- Executive Order on Environmental Justice: Executive Order 12898 requires the identification and assessment of disproportionately high and adverse impacts on minority and low-income populations.

As identified in the report, the following measures are in place to comply with Title VI requirements:

- Minority, low-income, and Limited English Proficiency (LEP) persons are able to provide meaningful input into the planning process through participating in public meetings held in locations near transit routes and where translators and materials are provided in Spanish and English.
- RTC has a complaint procedure in place to investigate and track Title VI concerns.
- RTC submits an annual Title VI Certification and Assurance report to the US Department of Transportation.

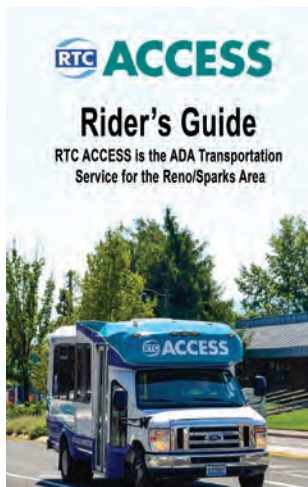
9.1 – TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

Transportation projects and services are implemented in conformance with the RTC Title VI Policy. RTC submits a Title VI Report to the Federal Transit Administration every three years, with the most recent developed in 2020.

RTC engages low-income, disabled, minority, and Limited English Proficiency (LEP) persons in a meaningful public participation process. The RTC works with senior centers, assisted living facilities and senior organizations within the RTC RIDE service area to reach out to seniors and those with disabilities. The program involves a presentation about RTC RIDE and a field trip allowing the participants to experience riding the bus. The goal of the program is to make the participants more comfortable using public transportation as well as to solicit input from them about RTC services.

In addition to outreach to people with disabilities, RTC also ensures LEP persons understand the transit operations of RTC RIDE and RTC ACCESS by making the following information available in both English and Spanish:

- RTC RIDE bus route information.
- RTC ACCESS Rider's Guide book.



- Signs on buses (fare signs, information for RTC RIDE programs, etc.).
- Signage at the bus stops stating detour information or temporary route changes.
- Bus announcements explaining how to exit the bus.
- New RTC ACCESS voice recordings that reminds passengers of upcoming reservations.
- RTC Passenger Services has Spanish speaking passenger service representatives available to assist passengers.

RTC Social Distancing Inside Buses

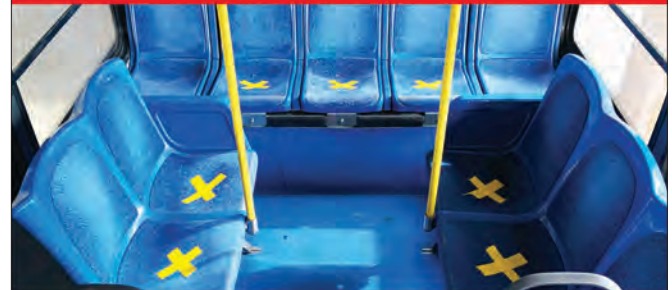


The RTC and Keolis are working together to help maintain social distancing on our buses. Some bus seats are marked with an X to identify no seating areas. This helps to ensure passengers are riding 6 feet away from each other. Passengers should monitor their seating locations to ensure social distancing guidelines are followed for their safety and the safety of their fellow passengers.

rtcwashoe.com

 Your RTC. Our Community.

RTC El Distanciamiento Social Dentro Del Autobús



Las empresas RTC y Keolis están trabajando en conjunto para ayudar a mantener el distanciamiento social en nuestros autobuses. Algunos asientos están marcados con una X para identificar que son áreas donde no se debe sentar. Esto nos ayuda a asegurar que los pasajeros se mantengan a 6 pies de distancia uno del otro. Los pasajeros deben monitorear sus asientos para asegurar que se cumpla con los reglamentos del distanciamiento social por su seguridad y la seguridad de los demás.

rtcwashoe.com

 Your RTC. Our Community.

COVID-19 informational flyers posted on RTC Buses (Figure 9-1)

RTC TITLE VI POLICY

The RTC is committed to ensuring that no person is excluded from participation in, or denied the benefits of, its services on the basis of race, color, or national origin as protected by Title VI of the Civil Rights Act of 1964, as amended.

No person or group of persons will be discriminated against with regard to fares, routing, scheduling, or quality of transportation service that the RTC furnishes on the basis of race, color, or national origin. Frequency of service, age, and quality of RTC vehicles assigned to routes, quality of RTC stations serving Washoe County, and location of routes will not be determined on the basis of race, color, or national origin.

Equal Opportunity in Procurement

RTC procurement activities are conducted in accordance with RTC Board-adopted policies and the RTC Disadvantaged Business Enterprise (DBE) Program. Objectives of the RTC DBE Program are to ensure nondiscrimination, create a level playing field, remove barriers to DBE participation, and assist in the development of DBE firms that can compete successfully in the market place. RTC has a race-neutral DBE goal of 1.0 percent and race-conscious goal of 0.9%. RTC has also developed a Fostering Small Business Participation Program.

RTC conducts outreach to educate DBEs and small businesses about the procurement process and ways they can participate. RTC has provided information and resources to the Hispanic Chamber of Commerce, Veterans Affairs, and at other community forums. RTC participates in Nevada Unified Certification Program for DBEs. RTC is committed to: providing technical assistance, providing information and communication programs on contracting procedures and specific contracting opportunities, assisting DBEs and small businesses to develop their capability to utilize emerging technology, and unbundling larger contracts when feasible.

The purpose of the RTC Fostering Small Business Participation Program is to provide full and fair opportunities for equal participation by small businesses in federally-funded contracting and procurement opportunities. RTC procurement policies comply with all applicable civil rights and equal opportunity laws, to ensure that all individuals – regardless of race, gender, age, disability, and national origin – benefit from federal funding programs.

ADA Transition Plan

The RTC adopted an updated ADA Transition Plan in 2020, which identifies and prioritizes ADA needs at RTC facilities. The updated Plan complemented the 2011 ADA Transition Plan by incorporating its previous action items and expanding the scope of the plan. The ADA Transition Plan addresses physical obstacles in areas that are open to the public in the six RTC buildings and at 360 RTC transit stops. The ADA Transition Plan update also included the provision of a schedule for implementing the access modifications, and identification of a position and official who is responsible for implementing the ADA Transition Plan.

Bus Stop & Sidewalk Connectivity Program

RTC initiated a program that funds ADA improvements and sidewalk connectivity at high-priority bus stops in 2019. Upon completion of improvements at these initial stops, RTC will continue to upgrade bus stops in accordance with the needs identified through the ADA Transition Plan. RTC also works with local governments to bring existing bus stops up to ADA standards as part of the development review process.

Accessibility Features of RTC Transit Fleet RTD fixed-route vehicles contain the following accessibility features:

- Wheelchair ramps/lifts.
- Low floor buses.
- Audio announcements for timepoints.
- Exterior audio announcement for route names.
- Interior stop announcement signs.
- Overhand straps.
- Yellow stop request door tapes.
- Push activated rear door exits.

RTC ACCESS Paratransit Service

RTC ACCESS is the paratransit service that provides door-to-door, prescheduled transportation for people who meet the eligibility criteria of the ADA. RTC ACCESS passengers have disabilities that prevent them from riding RTC RIDE independently some or all of the time.



Trips are not prioritized by purpose and may be scheduled one to three days in advance. Passengers requiring fixed-schedule service may request subscription service, which has limited availability.

Improving Accessibility of the Regional Road Network

The RTC Bicycle and Pedestrian Master Plan has identified priorities for the region related to improving the accessibility of sidewalks and crosswalks. The ADA requires that newly constructed or altered facilities be readily accessible to and usable by persons with disabilities.

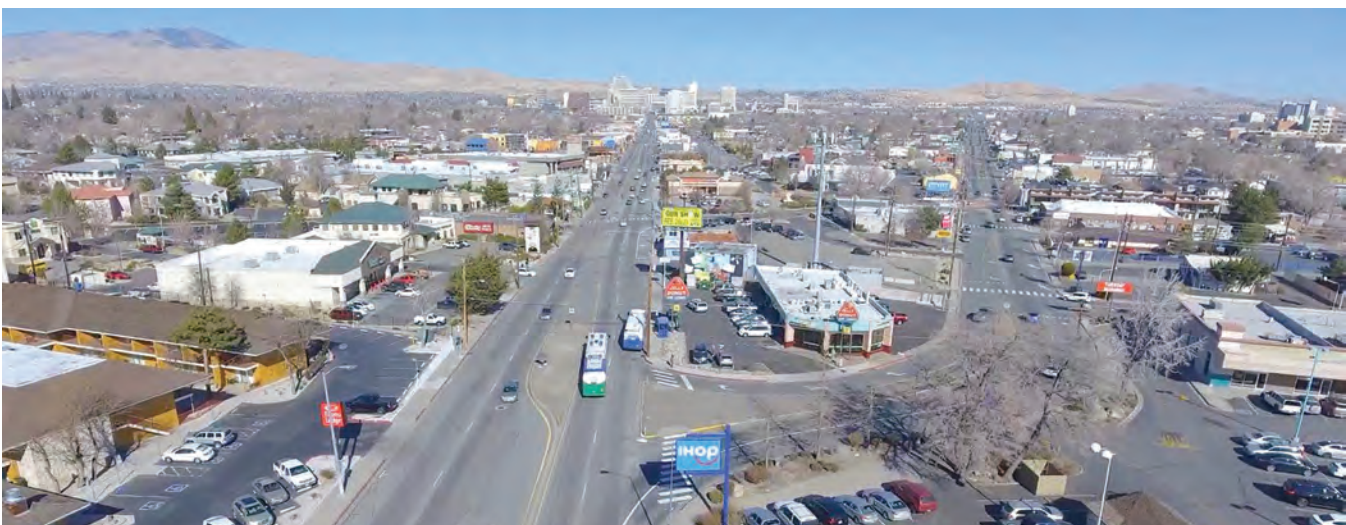
When reconstruction of roadways occurs, upgrades must be provided to bring the roadway into compliance with ADA standards.

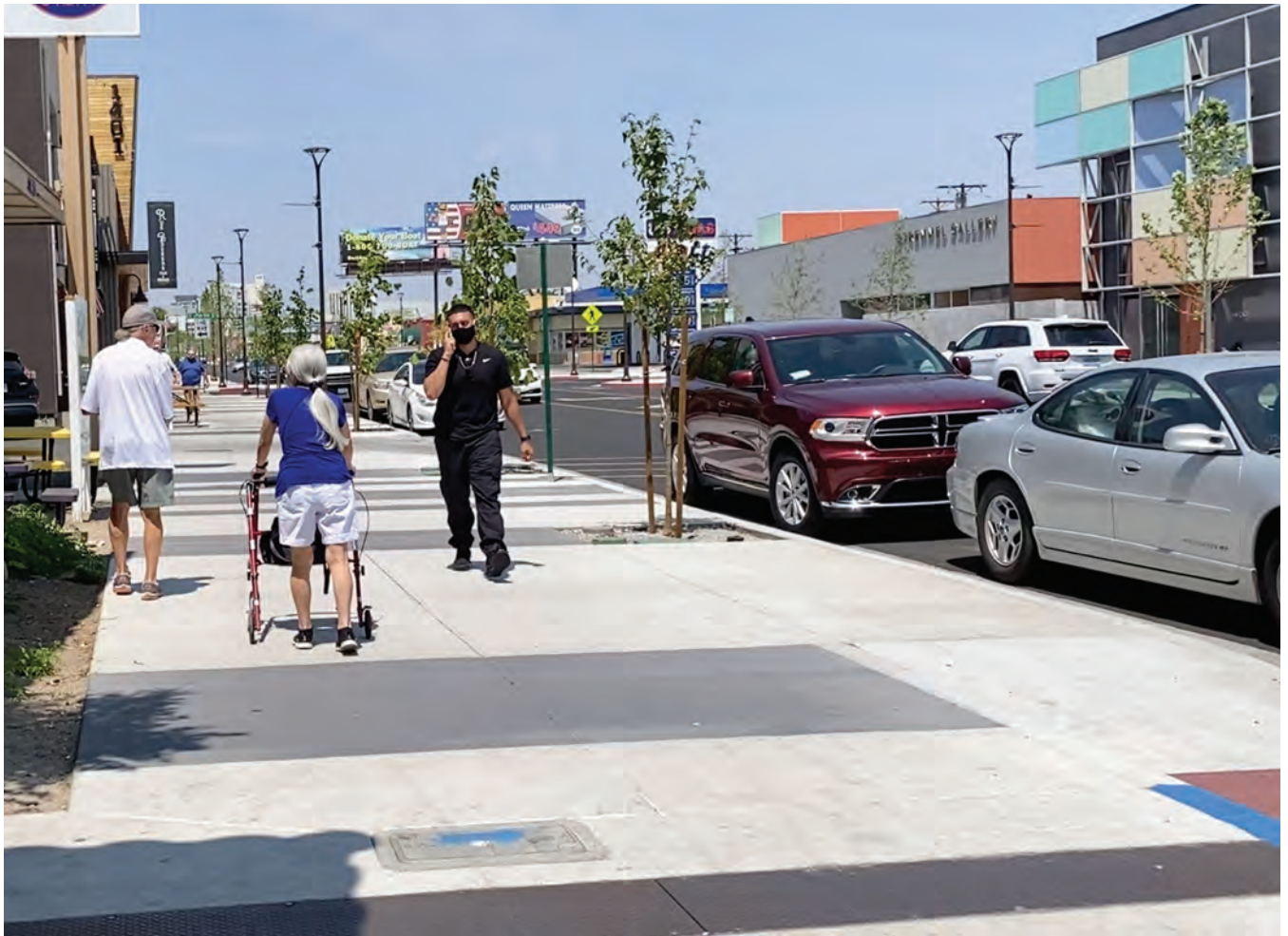
As RTC delivers major roadway improvements, the corridor sidewalks and crosswalks are brought to current ADA standards.

Examples of this include the recently completed Virginia Street Bus RAPID Transit Extension Project and 4th Street/Prater Way Bus RAPID Transit Project, both of which were designed to provide wider, accessible sidewalks.



Virginia Street under construction (above). Aerial view of Virginia Street (below).





Virginia Street: Safety improvements, like widened sidewalks, provide ample space for social distancing during the 2020 COVID-19 pandemic.



Passengers enjoy the afternoon sun at an RTC Lincoln Line RAPID station on 4th Street/Prater Way (left). Buses provide service on Route 11 on 4th Street/Prater Way (right).

9.3 – EXECUTIVE ORDER ON ENVIRONMENTAL JUSTICE

A 1994 Presidential Executive Order directed every federal agency to identify and address the effects of all programs, policies, and activities on minority populations and low-income populations.

Effective transportation decision making depends upon understanding and properly addressing the unique needs of different socioeconomic groups. RTC considers the potential adverse impacts of projects on environmental justice populations. This includes impacts to neighborhood cohesiveness, regional accessibility, neighborhood quality of life, and health impacts. RTC also implements outreach strategies targeted toward minority residents and households with limited English proficiency (LEP). These strategies include outreach in Spanish-language media, bilingual meeting and transit notices, and the availability of bilingual staff at public meetings. These strategies are important considering the population of Washoe County which includes a 35.5% minority population and 4.6% of households with LEP .

When the RTC alters transit service, staff ensures that no disproportionately high or adverse impacts on minority and low-income populations occur.



Passengers on-board RTC REGIONAL CONNECTOR.

When a service change is being considered, staff holds open houses to receive input from passengers including many people who are part of minority and low-income populations. In addition, the RTC holds a formal public hearing for substantial changes to service (any changes that affect 25 percent or more of a route's revenue vehicle miles), and analyzes how these changes will impact all passengers within the RTC service area. RTC transit activities are continually reviewed and results summarized once every three years in a Title VI Report, which is described in Section 9.1.

| Demographic and Socioeconomic Summary | | | Table 9.1 |
|---|---|---|---|
| | Washoe County Population and Demographics | Population Within ¼ Mile of Roadway Projects | Population Within ¼ Mile of Transit Routes |
| Population 2015 Estimate | 435,019 (100%) | 188,741 (100%) | 187,512 (100%) |
| Persons 65 Years and Over, Percent, 2015 | 54,637 (12.6%) | 21,970 (11.6%) | 20,839 (11.1%) |
| Minority population, Percent, 2015 (100%-65.5%) | 154,280 (35.5%) | 84,582 (44.8%) | 85,726 (45.7%) |
| Persons Below Poverty Level, Percent, 2015 | 65,248 (15.0%) | 39,877 (21.1%) | 43,001 (22.9%) |
| Households 2015 Estimate | 166,345 (100%) | 74,275 (100%) | 74,734 (100%) |
| Limited English Proficiency, Households, 2015 | 7,634 (4.6%) | 5,176 (7.0%) | 5,433 (7.3%) |

The projects and services in this plan provide enhanced mobility to all residents regardless of age, race, language, or income. Several of the projects that focus on pedestrian safety, bicycle accessibility, and quality of life are located in lower income communities, including the multimodal improvements on Oddie Boulevard/ Wells Avenue, Sun Valley Boulevard, and Mill Street/Terminal Way.

Many projects on regional roads in areas with low-income communities involve bringing them up to current ADA-accessibility standards and improving pavement condition. While construction may generate temporary negative impacts, the long-term mobility benefits of these projects will be significant.

As shown in the table of demographic information (above), approximately 45 percent of the residents living within ¼ mile of the projects included in the RTP are minorities and 46 percent of the residents living within ¼ mile of transit routes are minorities. Approximately 36 percent of Washoe County residents are minorities. This indicates that transportation investments and benefits are shared equitably throughout the community.

Similarly, 15 percent of the Washoe County population have incomes below the poverty level. About 21 percent of the residents near roadway projects and 23 percent of residents near transit routes have incomes below the poverty level. The proportion of seniors served by the projects and services in the RTP is lower than the county average; this is because of the high senior populations in lower density outlying areas such as Cold Springs and southwest Reno, which are not served by transit.

The RTC's outreach includes numerous efforts to support transportation for economically disadvantaged populations. The RTC also provides bus passes to charitable organizations at discounted rates, or for free. For example, bus passes are provided to the Reno Works program, which transitions homeless individuals in Washoe County into jobs and housing.

The RTC participates in, and organizes, numerous events for seniors, disabled individuals, and students of all ages. These events help residents connect with transportation services that are often a lifeline for social activities, medical appointments, access to educational opportunities and the ability to earn an income. Notably, the RTC organizes the Stuff-A-Bus for Seniors drive, which collects needed donations of clothing and other essentials.

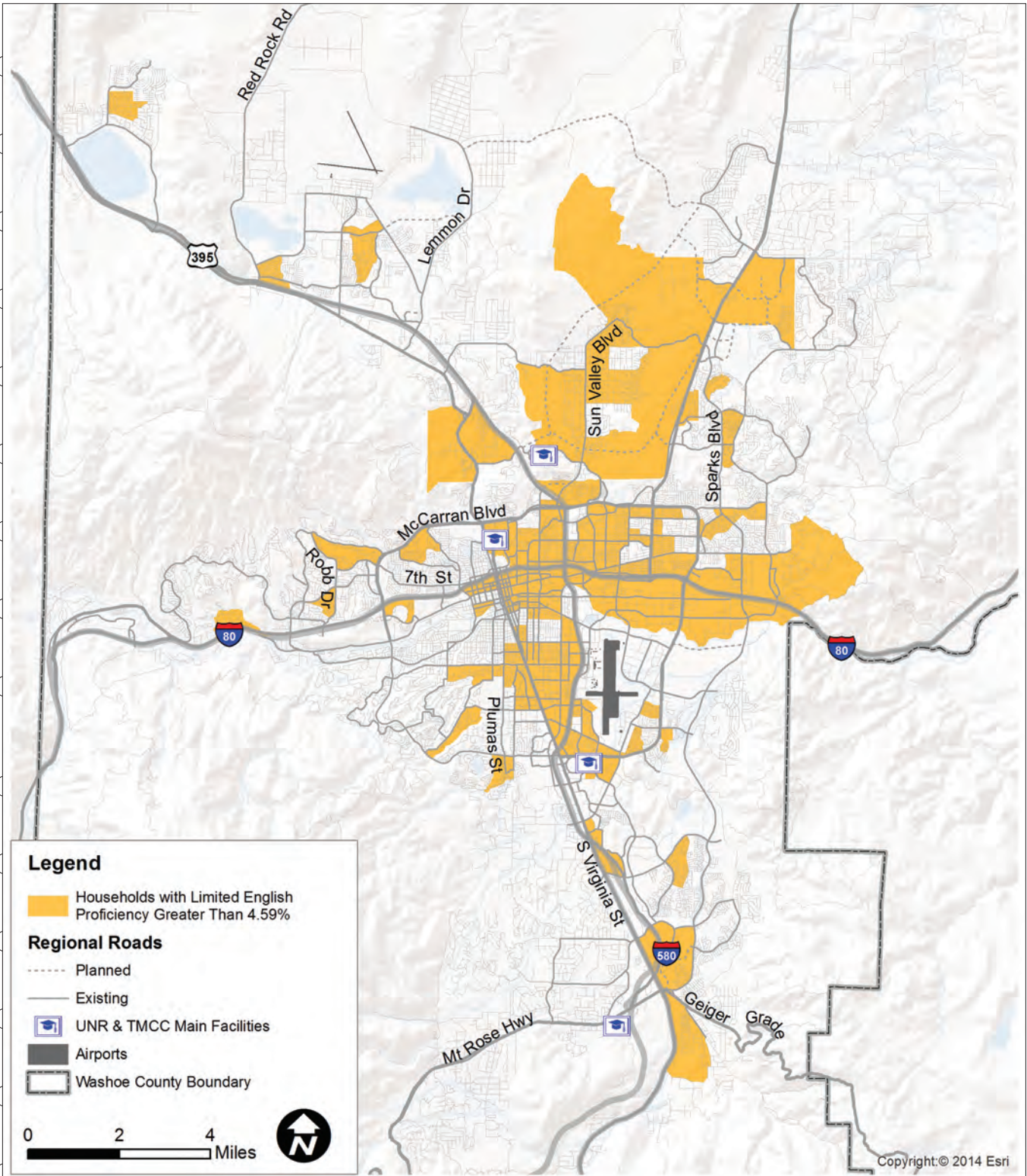
Thousands of seniors also interact with the RTC at the annual Senior Fest event. In addition to incorporating seniors and disabled individuals on standing committees, these populations are also offered free mobility travel training. This training instills confidence and builds skills in using transit and navigating the community.



Seniors gather information at the RTC Senior Fest booth.

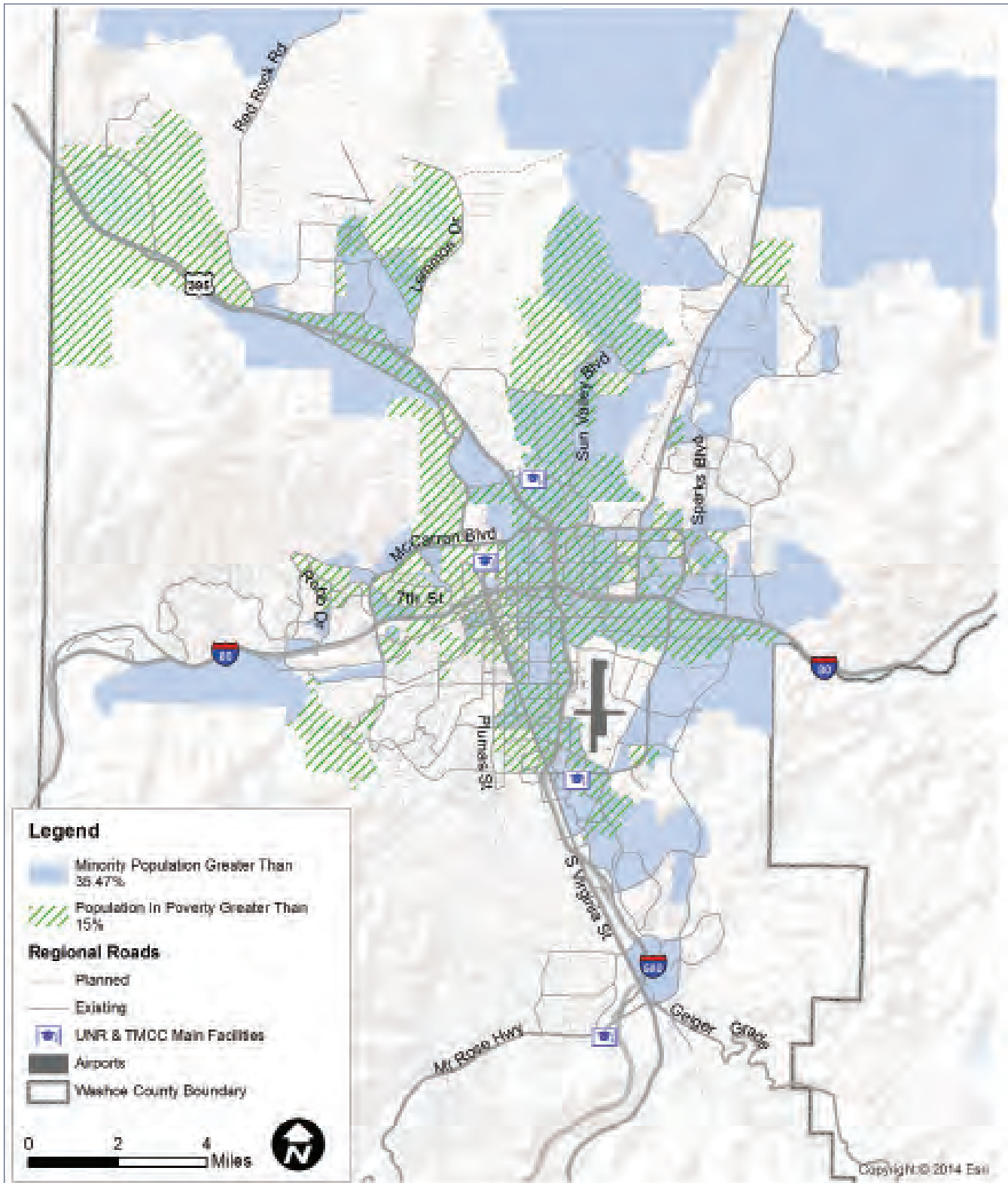
CENSUS TRACTS WITH HIGHER LIMITED ENGLISH PROFICIENCY POPULATIONS

MAP 9.1



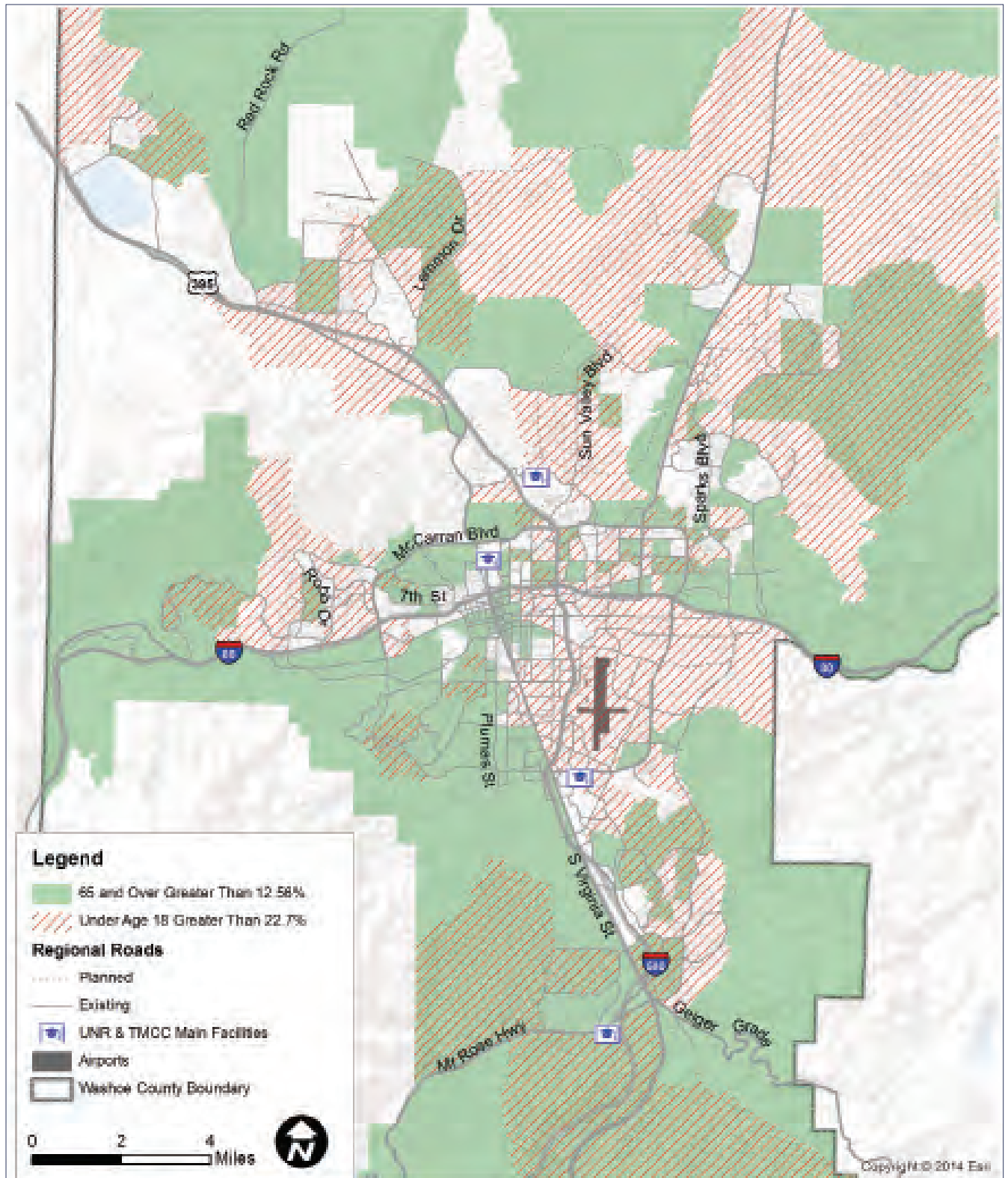
CENSUS TRACTS WITH HIGHER LOW INCOME AND MINORITY POPULATIONS

MAP 9.2



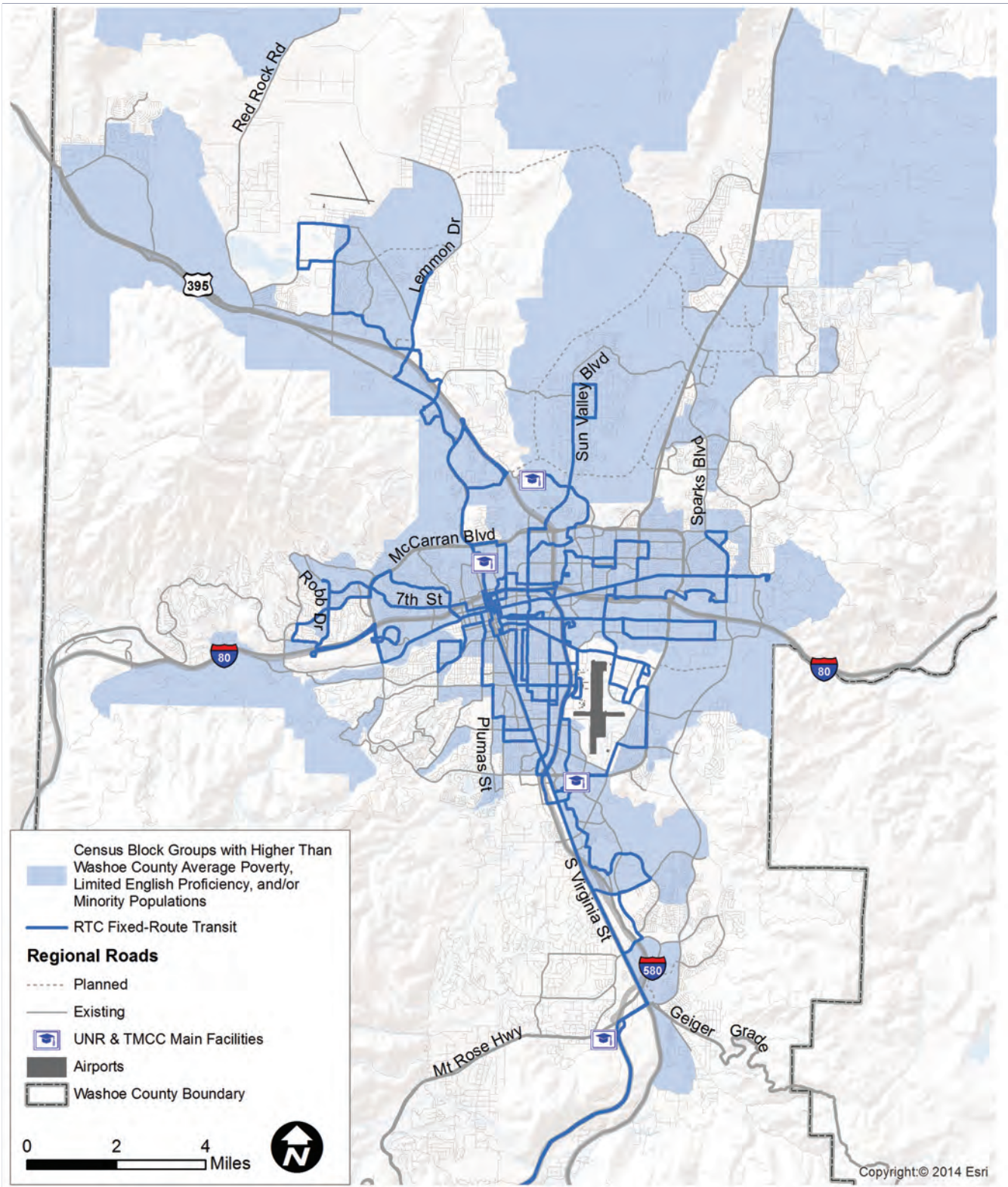
CENSUS TRACTS WITH HIGHER UNDER 18 AND OVER 65 POPULATIONS

MAP 9.3



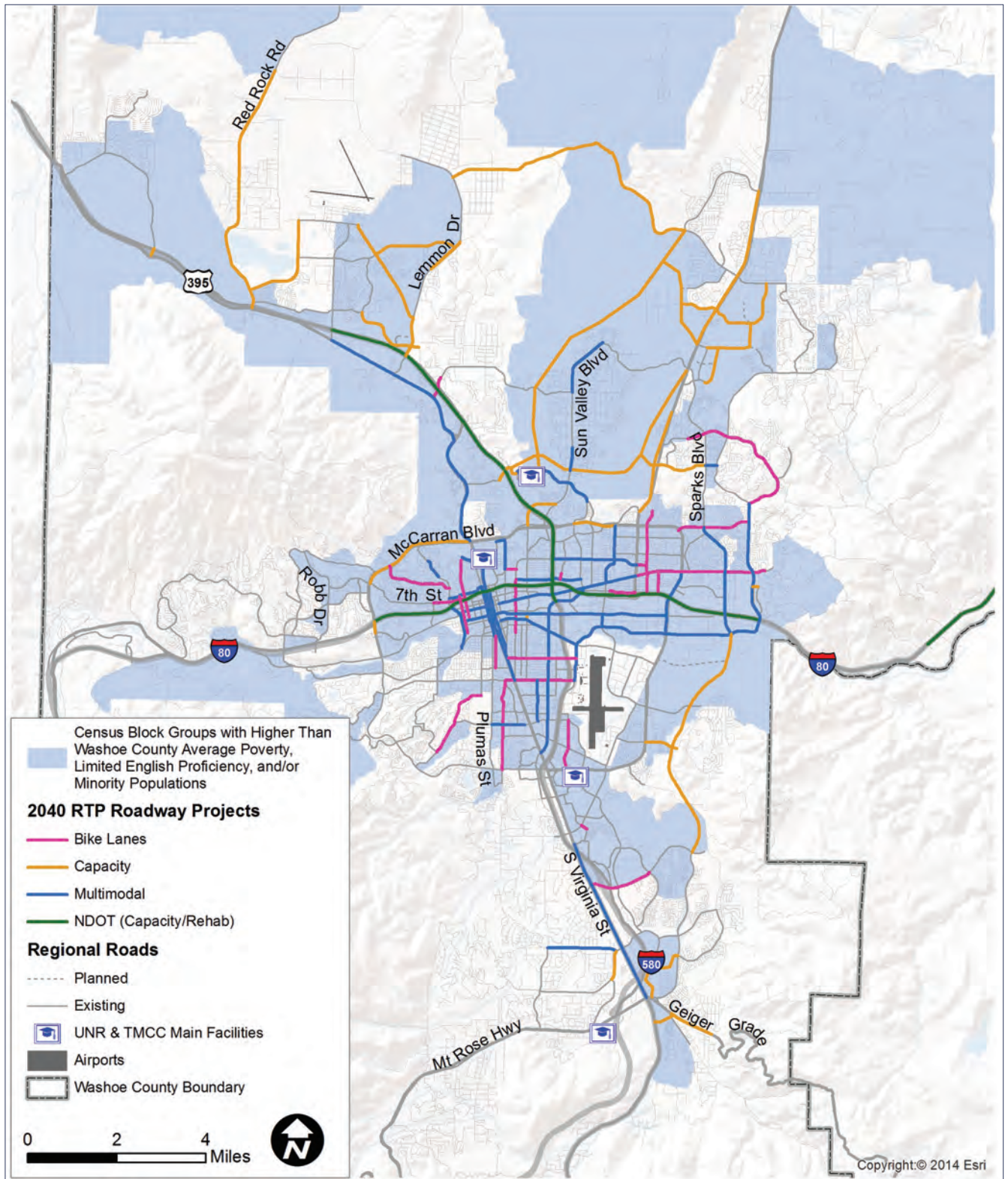
ENVIRONMENTAL JUSTICE POPULATIONS WITH TRANSIT

MAP 9.4



ENVIRONMENTAL JUSTICE POPULATIONS WITH RTP PROJECTS

MAP 9.5





CHAPTER 10 – IMPROVING FREIGHT & GOOD MOVEMENT

Freight transportation is closely tied to economic development, particularly in the Reno-Sparks metropolitan region. Effective freight movement is important to the economic competitiveness of Northern Nevada and to the overall health and efficiency of the transportation system. Freight distribution, logistics, and advanced manufacturing have become increasingly important to the regional economy, with strong employment growth in these sectors over recent years. This growth and diversification is supported by the nationally significant I-80 corridor, I 580, the US 395 critical urban freight corridor, the Union Pacific Railroad (UPRR), and the Reno-Tahoe International Airport and Reno-Stead Airport.

10.1 – NEVADA STATE FREIGHT PLAN

Centers of freight distribution activities include:

- Sparks industrial area and Sparks rail yard.
- North Valleys, including the Reno-Stead Airport and US 395 corridor.
- South Meadows industrial areas.
- Pyramid Highway industrial areas.
- Reno-Tahoe International Airport.

MAP-21 established a policy to improve the condition and performance of the national freight network. The purpose of the policy is to provide a foundation for the United States to compete in the global economy and achieve goals related to economic competitiveness and efficiency, congestion, productivity, safety, security, and resilience of freight movement. This is particularly significant in Northern Nevada, through which a significant amount of national freight movement occurs.

The passage of the current transportation bill, Fixing America's Surface Transportation (FAST) Act, further reinforces the importance of freight to the national economy. Specifically, the FAST Act established grant programs to fund critical transportation projects that benefit freight movements. The FAST Act emphasizes the importance of coordination between local governments and freight transportation providers.

The 2050 RTP supports the vision and goals described in the Nevada State Freight Plan (NSFP), which was adopted in 2017. The following strategic goals were identified in the NSFP with supporting objectives and performance measures:

- Economic Competitiveness
- Mobility and Reliability
- Safety
- Infrastructure Preservation
- Advanced Innovative Technology
- Environmental Sustainability and Livability
- Sustainable Funding
- Collaboration, Land-Use, and Community Values

These goals provide the context for the implementation of 18 strategies listed in the NSFP that will collectively address improvements to Nevada's freight network to achieve the desired vision.

HIGHWAY FREIGHT NETWORK AND PROJECTS RENO-SPARKS AREA

MAP 10.3



I-11 Corridor

The Nevada State Freight Plan promotes development of the proposed I-11 corridor. This continental corridor would link Nevada and other western states to Mexico and Canada.

The plan highlights the benefits to the state of creating a north-south freight corridor. This added connectivity would increase synergy between Nevada's major hubs and improve their access to western US markets, eventually to Canada, and Mexico.

Truck Parking

According to the Federal Highway Administration, truck parking shortages are a national safety concern. Washoe County has a deficit of approximately 250 truck parking spaces. Nevada Truck Parking Implementation Plan was developed in 2019. This plan identifies opportunities to expand and improve existing facilities and integrate truck parking technology in response to rising demand, changing hours of service requirements and safety standards noted in Jason's Law, and rapid advancements in technology.

When implemented, these improvements will help truck drivers by providing adequate and safe public truck parking where it is most needed and enhanced by real-time truck parking availability information.

The RTC has been an active participant in developing and implementing the Nevada Truck Parking Implementation Plan.

10.2 – AIR CARGO

Reno's proximity to major West Coast ports provide next day capability for movement of cargo back and forth for import and export as well as domestic spoke and hub services via air, truck, or rail. Reno has customs facilities and personnel to handle import and export needs, while Reno-Tahoe International Airport (RNO) is capable of handling a variety of international and domestic services and flights. In 2019, RNO handled more than 66,621 tons or nearly 147 million pounds of cargo shipments.

Approximately 402,465 pounds of cargo arrives or departs the airport each day. Companies handling air cargo at RNO include DHL, FedEx, and UPS (Reno-Tahoe Airport Authority, 2019). RNO is within a designated foreign trade zone and is located within 2 miles of two major highway corridors, I-80 and US 395, and less than one mile from the Union Pacific (UP) Sparks Intermodal Facility.

10.3 – RAIL

Nevada's geography and historic development patterns have resulted in two primary rail corridors, which generally run east-west across the state, along with a few supplemental branch and excursion lines.

Rail shipments accounted for eight percent of the shipments to other states, six percent of the total traffic to Nevada, and less than one percent of in state traffic in 2015. The UP Railroad operates two east-west corridors; Burlington Northern Santa Fe (BNSF) Railway has rights to operate on nearly three-quarters of the UP railways in Nevada. The northern corridors serve Reno and Sparks, as well as other Northern Nevada communities, and connect with Salt Lake City and Denver to the east and with Sacramento and the San Francisco area to the west.

Amtrak operates once a day passenger rail service in each direction across this northern Nevada corridor; I-80 generally parallels the rail lines in this corridor. Total route miles of freight railroad in Washoe County is 144 miles.

Nevada State Rail Plan

The 2012 Nevada State Rail Plan was developed by the Nevada Department of Transportation (NDOT).

The plan reflects Nevada's leadership with public and private transport providers at the state, regional and local levels, to expand and enhance passenger and freight rail and better integrate rail into the larger transportation system. The 2012 Nevada State Rail Plan:

- Provides a plan for freight and passenger rail transportation in the state.



Sparks rail yard.

- Prioritizes projects and describes intended strategies to enhance rail service in the state to benefit the public.
- Serves as the basis for federal and state investments in Nevada.
- Currently, the RTC is working with NDOT and other stakeholders to update the existing Nevada State Rail Plan, and looks for opportunities to improve rail transportation in Washoe County.

The first UP rail yard in Sparks was built in 1904. From that point, Sparks was an important stop for trains serving Nevada businesses and residents.

Today, the UP railyard in Sparks is an integral part of the railroad's 32,000-mile operation.

Playing a major role in the application of distributed power, the Sparks yard has been a focal point for the safe and efficient operation of freight trains over Donner Summit.

With nearly 1,200 miles of track and 600 employees in the state, the Sparks yard plays a critical role in the efficient movement of goods in and around Nevada.²

10.4 – ROADWAYS

Area roadways provide a critical link in both national and local goods movement. Regional roads connect manufacturers to intermodal transfer sites as well as the larger freeway network. This area includes local industrial roads, I-580/US 395, and I-80. The Pyramid Highway corridor has also experienced strong growth in industrial activities and is a designated Critical Urban Freight Corridor.

² (http://www.uprr.com/newsinfo/releases/community/2012/train-towns/0926_sparks.shtml)

FREIGHT RAIL FACILITIES

MAP 10.5



Industrial roads accommodate significant freight movement through the Reno-Sparks metropolitan planning area. They connect major freight traffic generators, including industrial areas, inter-modal rail and air facilities, and the regional freeway network. The industrial road network defines critical connections for freight movement throughout the area and these roadways need to maintain the function of and capacity for truck movements. Industrial roads generally carry heavier loads and at least 6 percent trucks.

I-80

I-80, designated as a part of the nation's Primary Highway Freight System, is a heavily used goods movement corridor through the western states. States have implemented key strategies to mitigate the impacts of truck traffic on the roadways while still providing a good route for trucks to travel for their commercial needs, even during winter months when truck holds at the Nevada/California state line can be frequent.

Along some sections of I-80 in Washoe County, trucks can reach as high as 30% of the total volume of traffic on the roadways.

I-580/US 395

I-580 exists today from I-80 in Reno south to US 50 just south of Carson City. US 395 in Nevada is a major freeway from I-80 north to the state line and has been designated as a critical urban freight corridor. It serves significant freight traffic generated by the industrial and warehousing developments in the North Valleys area. These routes are absolutely vital to the state's freight network, serving as the state's primary truck routes connecting Nevada to the national freight network.

10.5 – OUTREACH & COORDINATION

The Freight Advisory Committee (FAC) is a group formed during the development of the Nevada State Freight Plan to coordinate and collect input from a range of public and private sector stakeholders. FAC meetings are held quarterly. RTC has been participating the meetings and working closely with NDOT and other partners to develop and prioritize freight projects.

The RTC participated the Northern Nevada Truck Parking Workshop. On September 17, 2019, the Federal Highway Administration (FHWA), in cooperation with NDOT, hosted a 1-day roundtable, focused on truck parking in the Northern Nevada region.

Truck parking challenges and potential solutions specific to Northern Nevada were discussed. This workshop provided the RTC an opportunity to engage with public and private sector partners on potential shared solutions. Topics included:

- Truck parking situation throughout the US and within Northern Nevada.
- Current truck parking assessments and needs.
- Best practices and possible solutions.
- Develop truck parking actions, strategies, and priorities.



10.6 – RTP PROJECTS SUPPORTING FREIGHT & GOODS MOVEMENT

Several projects in the RTP focus on improving freight and goods movement through Northern Nevada. A summary of these projects are listed below.

- System wide ITS improvements on I-80 and US 395/I-580.
- Pyramid Highway/US 395 Connector.
- Spaghetti Bowl Project, and US 395 Widening.



CHAPTER 11 – INVESTING STRATEGICALLY

Federal transportation legislation (Fixing America's Surface Transportation Act – FAST Act) requires that the 2050 RTP be based on a financial plan that demonstrates how the program of projects can be paid for and implemented. The program of projects incorporates all modes of transportation improvements, including transit (both operations and maintenance), roadway capacity, new roadways, Intelligent Transportation Systems (ITS)/operations, pavement preservation, and bicycle and pedestrian facilities.

11.1 – REVENUE PROJECTIONS

The financial plan must:

- Demonstrate how the adopted transportation plan can be implemented/funded
- Identify resources from public and private sources that are reasonably expected to be made available to carry out the plan
- Recommend any additional financing strategies for needed projects and programs

The financial plan is shown in Year-of-Expenditure (YOE) dollars. Converting all costs and revenues to YOE dollars assumes a more accurate depiction of all costs, revenues and deficits with long-range transportation plans.

This chapter outlines the revenue projections with a brief discussion on the methods of developing the projections and then further discusses each funding source including federal, state, and local and regional sources. Additional data on the methods for developing the revenue projections are included in Appendix H. The plan addresses public transportation and roadway needs.

The financial assumptions have been developed in a coordinated effort with state and federal agencies and the other MPO's in the state. Partners in this effort included:

- Federal Highway Administration
- Federal Transit Administration
- Nevada Department of Transportation
- Nevada Department of Motor Vehicles
- Carson Area Metropolitan Planning Organization
- Tahoe Regional Planning Agency
- Regional Transportation Commission of Southern Nevada

RTC participated in a series of meetings with these partner agencies to develop consistent future revenue growth factors statewide to be used by all the MPOs in estimating federal and state revenues. Revenue forecast assumptions identified through this process are outlined below:

- State revenues for vehicle registration fees, motor carrier fees, driver's license fees, and petroleum cleanup funds will increase by two percent annually

11.2 – FUNDING SOURCES

- Federal revenues will increase by two percent annually
- Each metropolitan region developed forecasts for local tax revenues, based on regional conditions

While funding programs are subject to change over time, the RTC is tasked with using the best available data at the time the long-range plan is developed. In developing the projections, historical growth trends of current revenue sources attributable to the region were considered, as well as current conditions, effects of inflation, and changes in population.

Using these indicators as a base, assumptions were made that there will be increases in all revenue sources over the life of the plan and that the projects included will not exceed the reasonably foreseeable future revenues, which will meet the fiscally constrained plan requirement. Many projects are included in the plan as unfunded needs due to the lack of resources.

The RTP is revisited at least every four years, which will allow for timely adjustments to be addressed as needed.

Current revenue sources include the federal government, state government, and RTC. Table 11-1 shows the types of funding sources available and the allowable use under that source – either for roads or transit. The allowable use for the various funding sources is limited by statute, regulation, or state constitutional provisions. As an example, the Nevada Constitution allows local fuel taxes to be spent only on roadway construction. State law precludes the use of fuel tax by RTC for routine roadway operation and maintenance. In addition, some federal funds are restricted to capital improvements and may not be used for operations or maintenance.

| Funding Sources and Allowance Uses | Table 11.1 |
|--|-------------------|
| Types of Funds | Uses |
| National Highway Performance Program (NHPP) | Roads (Primarily) |
| Surface Transportation Block Grant (STGB) | Roads & Transit |
| Congestion Mitigation Air Quality (CMAQ) | Roads & Transit |
| Transportation Alternatives (TA) Set-Aside Program | Roads & Transit |
| Highway Safety Improvement Program (HSIP) | Roads (Primarily) |

11.3 – 2020 REVENUES BY FUNDING SOURCE

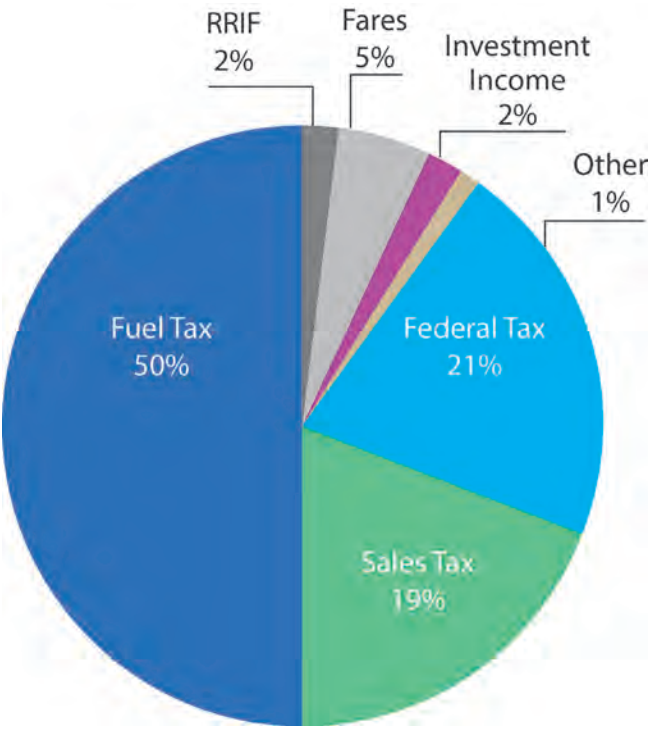
| | |
|---|------------------|
| FTA Section 5307 | Transit |
| Section 5309 | Roads & Transit |
| Discretionary | Transit |
| FTA Section 5339 | Roads |
| Gas and Special Fuel Tax | Roads |
| Driver's License, Vehicle Registration and Motor Carrier Fees | Roads |
| Regional Road Impact Fee (RRIF) | Roads (capacity) |
| Sales and Use Tax | Roads & Transit |

Federal Funding

Federal funds for transportation are collected nationally and allocated back to the states through a series of formulas and grants. A Continuing Resolution (CR) extends the expired federal surface transportation legislation, the Fixing America's Surface transportation (FAST) Act, passed in December 2015 by one year at FY 2020 authorization levels. The FAST Act was the first federal law in over a decade to provide long-term funding certainty for surface transportation infrastructure planning and investment. The FAST Act authorized \$305 billion over fiscal years 2016 through 2020 for highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs.

Revenues in 2020 were approximately \$186 million. Figure 11-1 shows the funding sources for that revenue. In 2020, 35 percent of revenues were used for transit and 65 percent were used for roadways.

2016 Revenues by Funding Source



The primary funding source provided by the federal government is the Highway Trust Fund (HTF) through the programs in the FAST Act. The HTF is comprised of the Highway Account (funds highway and intermodal programs) and the Mass Transit Account. Federal motor fuel taxes are the major source of income into the HTF.

These taxes have not been increased since 1992 and with fuel consumption declining primarily due to more fuel efficient vehicles, there is concern about maintaining the current revenue streams. FAST Act programs generally available to the RTC include:

- National Highway Performance Program (NHPP) – funds are to support the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS and to ensure that investments of federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets to be established in the states asset management plan
- Surface Transportation Block Grant Program (STBG) – flexible funding that may be used for projects to preserve or improve conditions and performance on any federal-aid highway, bridge projects on any public road, facilities for nonmotorized transportation, transit capital projects and public bus terminals and facilities
- Congestion Mitigation and Air Quality Improvement Program (CMAQ) – flexible funding for transportation projects and programs to help meet the requirements of the Clean Air Act; to reduce congestion and improve air quality for the region

- Highway Safety Improvement Program (HSIP) – funds are to improve highway safety on all public roads through a strategic approach that focuses on performance
- Transportation Alternatives (TA) Set-Aside Program – funds are for a variety of alternative transportation projects such as transportation safety, bicycle or pedestrian improvements, and safe routes to schools programs
- Bus and Bus Facilities Program (FTA Section 5339) – funds are to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities
- Urbanized Area Formula Grant (FTA Section 5307) – funds are to support public transportation
- Discretionary Grant Programs – funds are awarded on the basis of a competitive process for eligible transportation projects

Generally, federal funding programs require a state or local contribution of funds toward the cost of a project, which is referred to as matching funds. The typical match for street and highway programs is five percent and for transit programs it is 20 percent.

The FAST Act also provides for competitive grants such as Better Utilizing Investments to Leverage Development (BUILD); Bus and Bus Facilities and Infrastructure for Rebuilding America (INFRA) that RTC competes for on a national level.

State Funding

State funding sources include gas tax, special fuel (diesel) tax, vehicle registration fees, motor carrier fees, driver’s license fees, and petroleum cleanup funds. Fuel tax revenue projections take into account the increasing fuel efficiency of cars as new electric, hybrid, and alternative fuel technologies emerge. The majority of state funding is applicable to street and highway projects. See Appendix H.

The Nevada State Legislature is exploring potential alternative transportation funding methods, including a road usage charge for electric and hybrid vehicles and a tax on vehicle miles of travel. The Nevada Department of Transportation is undertaking a more detailed analysis of various funding options to supplement the fuel tax. Only existing revenue sources are included in the financial projections for this plan.

Regional Funding

Regional funding sources include fuel tax, sales and use tax, passenger fares and other revenue such as regional road impact fees (RRIF) paid by private developers, the Truckee River Flood Project, bus advertising and lease income.

In 2008, Washoe County voters approved the indexing of fuel taxes to keep pace with inflation. This allows RTC to implement major-capacity projects and the pavement preservation program. In 2002 voters approved a 1/8 cent sales tax that is eligible for both transit and roadway uses, and a 1982 ballot initiative approved the use of 1/4 cent sales tax to fund the transit program.

A summary of fuel tax rates is shown below in Table 11-2.

| Summary of Fuel Tax Rates (2021) | Table 11-2 |
|--------------------------------------|-----------------|
| Source | Rate per Gallon |
| County Optional Plus Inflation Index | 40.87¢ |
| County Mandatory | 12.22¢ |
| Federal | 18.4¢ |
| State | 18.45¢ |

Total Funding

A complete description of the methods for determining the future funding for each source is included in Appendix H. Table 11-3 outlines the revenue projections by timeframe and it identifies whether the funding is eligible for roadway projects or public transportation. This table indicates anticipated revenues in year of expenditure (YOE) dollars. No new funding sources were considered for the timeframe covered by this document.

| Revenue Projections | | | | Table 11-3 |
|--------------------------------------|----------------------|------------------------|------------------------|------------------------|
| Fund Source | 2021-2025 | 2026-2030 | 2031-2050 | Total |
| Complete Street Funding | | | | |
| Federal | \$235,132,000 | \$338,840,000 | \$1,746,682,000 | \$2,320,654,000 |
| State | \$208,593,000 | \$294,349,000 | \$1,214,037,000 | \$1,716,980,000 |
| Regional | \$554,344,000 | \$646,338,000 | \$3,910,007,000 | \$5,110,689,000 |
| Total | \$998,070,000 | \$1,279,527,000 | \$6,870,726,000 | \$9,148,323,000 |
| Public Transportation Funding | | | | |
| Federal | \$96,709,000 | \$118,119,000 | \$608,891,000 | \$823,719,000 |
| State | \$0 | \$0 | \$0 | \$0 |
| Regional | \$160,268,000 | \$174,362,000 | \$864,870,000 | \$1,199,501,000 |
| Fares & Other Revenues | \$27,412,000 | \$28,545,000 | \$137,860,000 | \$193,817,000 |
| Total | \$284,390,000 | \$321,026,000 | \$1,611,621,000 | \$2,217,037,000 |

11.4 – PLAN INVESTMENT NEEDS

The RTP contains the community's vision for the transportation system. The projects, programs and activities identified in the RTP are necessary to make the long-range vision a reality. The needs assessment includes all jurisdictions (local, regional and state) and includes all activities, projects and programs on regional roads. A discussion of unfunded needs is also included.

The transportation needs for this plan have been divided into two major categories – public transportation and Complete Streets. The projects/programs are identified in Appendix A. Needs were placed into the following planning horizons and are shown in year of expenditures (YOE) dollars:

- 2021-2025
- 2026-2030
- 2031-2050

Public Transportation

A vision for the future of transit in the Truckee Meadows was developed through the RTP, as described in Chapter 7, and incorporates the adopted Short Range Transit Plan (SRTP). Recommendations have been implemented as a result of the SRTP that have reallocated service hours to achieve greater efficiencies on several routes. In addition, the RTC has implemented FlexRIDE, a microtransit service, in several sub-areas of the region, which provides an on-demand curb-to-curb service within specified zones. This service provides residents previously outside of the transit service area a direct connection to several destinations and established fixed routes.

Existing transit-eligible revenues are being utilized for current transit operations. Should additional revenues become available, effective uses for these funds would include increased frequency and span of service on productive routes, as identified in the SRTP, and potential expansions of FlexRIDE service areas. The RAPID transit service provided on the Lincoln Line and Virginia Line is the core of the regional transit system. This plan includes expansions of these routes as part of the unfunded vision for transit. Also included in the unfunded vision are the creation of an inter-regional transit route between Truckee and the Tahoe Reno Industrial Center, development of a new bus transfer facility, a new or expanded bus maintenance facility, and parking/mobility hubs. Due to the significant costs of these projects, they are listed as unfunded needs in the transit vision. Table 11.4 lists some of the projects that were identified along with their estimated costs.

| Unfunded Transit Vision | Table 11-4 | Initial Capital Cost (2020 \$) | Annual Operating Cost (2020 \$) |
|--|------------|--------------------------------|---|
| Increased frequency and span of service on existing high-productivity routes | | \$2.4 million | \$1.5 million per year |
| Expand FlexRIDE service areas | | \$500,000 | \$1 million per year (for 2 additional zones) |
| Extend Virginia Line RAPID to Mt. Rose Highway | | \$12.7 million | \$2.7 million per year |
| Extend Lincoln Line RAPID to Stoker Avenue | | \$4.2 million | \$620,000 per year |
| Improved Transit Connectivity to the Lake Tahoe Region | | \$1 million | \$1.9 million per year |
| Truckee to TRI Center Commuter Bus Service | | \$5.9 million | \$886,000 per year |
| Total Unfunded Operating Costs | | \$26.7 million | \$8.6 million per year |
| Bus Maintenance Facility | | \$50 million | |
| New Transfer Facility at Meadowood Mall | | \$16 million | |
| Mobility Hubs | | \$50 million | |
| Total Unfunded Facility Needs | | \$116 million | |

RTC faces rising costs to provide paratransit service if fixed-route service is expanded in the future. RTC is federally required to provide paratransit service to eligible customers within 3/4 of a mile of fixed routes. The average RTC ACCESS trip costs about \$25 to provide, compared with about \$2.50 for the average RTC RIDE trip. Demographic projections about the aging of the population for the Reno-Sparks metropolitan area are consistent with national trends. The number of residents within the metropolitan area that are age 75 or above is expected to continue to increase. Demand for RTC ACCESS service is expected to grow over the life of this plan.

For the purposes of this fiscally constrained plan, the transit system is assumed to remain at existing service. The public transportation needs are summarized in Table 11-5 with costs shown in year of expenditure dollars. Other unfunded transit facility needs include a new transfer facility, maintenance facility, and park-and-ride facilities/Mobility Hubs. The transfer facility would accommodate expansion of an electric or hydrogen fuel cell RTC RAPID and RTC RIDE fleet.

| Public Transportation Needs by Activity | | | | Table 11-5 |
|---|----------------------|----------------------|------------------------|------------------------|
| | 2021-2025 | 2026-2030 | 2031-2050 | Total |
| Operations | \$255,078,757 | \$373,754,440 | \$2,253,464,504 | \$2,882,297,701 |
| Vehicles | \$32,440,449 | \$51,416,406 | \$100,843,923 | \$184,700,778 |
| Facilities | \$11,640,000 | \$700,000 | \$ - | \$12,340,000 |
| Total | \$299,159,206 | \$425,870,847 | \$2,354,308,427 | \$3,079,338,479 |

Complete Streets

The Complete Streets program includes safety, pavement preservation, system efficiency, multimodal, and congestion relief projects for regional roads and highways. Pavement preservation includes the treatments used strategically to keep roads in good condition, extend the useful life of pavement, and minimize the life-cycle costs of regional roads. Preservation includes preventive maintenance, rehabilitation, and reconstruction of pavements and bridges, as described in Chapter 6. This plan includes annual funding for preventive maintenance on regional roads. Expansion of the program to fund pavement preservation on some collector roads is under consideration.

System efficiency projects include traffic signal coordination, communications technology, and other Intelligent Transportation Systems (ITS) technologies that improve traffic flow without adding new travel lanes. These are projects that contribute to the efficient operation of the transportation system as a whole. The plan includes annual funding for traffic operations improvements.

The RTP includes annual funding for spot improvements throughout the region that further implement the ADA Transition Plan and Reno-Sparks Bicycle Pedestrian Master Plan. Sidewalk projects that improve ADA accessibility to RTC RIDE bus stops have the potential to allow some RTC ACCESS customers to use fixed-route service instead of paratransit.

Multimodal projects include ADA-accessibility improvements, pedestrian/bicycle facility improvements, and roadway reconstruction projects that focus on safety, economic development, and quality of life rather than auto capacity.

Capacity improvement projects typically include the addition of new lanes for general purpose traffic, specific improvements to facilitate goods movement, and other improvements to increase the efficiency of existing road segments and intersections. Capacity improvement needs are identified through the regional travel demand model. Capacity projects also address safety and multimodal transportation needs.

The Complete Streets needs are summarized in Table 11-6 with costs shown in year of expenditure dollars.

| Complete Street Needs by Activity | | | | Table 11-6 |
|--|----------------------|------------------------|------------------------|------------------------|
| | 2021-2025 | 2026-2030 | 2031-2050 | Total |
| Pavement Preservation | \$112,500,000 | \$125,000,000 | \$600,000,000 | \$837,500,000 |
| Traffic Signals/ITS/Operations | \$50,000,000 | \$57,500,000 | \$304,640,000 | \$412,140,000 |
| Bicycle, Pedestrian & ADA Spot Improvements | \$15,000,000 | \$17,500,000 | \$91,400,000 | \$123,900,000 |
| Major Roadway Projects | \$703,318,000 | \$972,237,000 | \$5,633,604,000 | \$7,309,159,000 |
| Total* | \$880,818,000 | \$1,172,237,000 | \$6,629,644,000 | \$8,682,699,000 |

** Total includes project costs anticipated to be funded by private developers*

The program of projects in this RTP does not bring all regional roads up to level of service standards. The capacity projects included in the plan reflect the prioritization of the most severely congested corridors and the bottleneck locations that have wide-ranging impacts on the regional network.

The unfunded needs listing includes projects for which no funding is available. These are projects that would be included in the RTP if additional funding resources were available. Including this listing of projects provides an opportunity to identify additional projects for future consideration in the event additional funding becomes available. The total unfunded needs is estimated at approximately \$4,012,000,000 for roadway projects (see Appendix A).

11.4 – FINANCIAL SUMMARY

As revenues from the majority of funding sources are not keeping up with growing needs for the projects within the region, the RTC faces a difficult challenge in setting priorities for future spending. Looking at the revenues and needs for the RTP as a simple budget, once the funds for operating and maintaining the existing system are subtracted from the revenues, the remainder can be applied to new projects or expanded services. These could be new transit services, new roads, widened roads, bicycle facilities – all modes considered under the RTP.

RTC will continue to partner with local agencies and residents to implement transportation investments that improve the quality of life in the Truckee Meadows.





CHAPTER 12 – MONITORING IMPLEMENTATION & PERFORMANCE

The FAST Act continues the legislation authorized under MAP-21, which created a data-driven, performance-based multimodal program to address the many challenges facing the U.S. transportation system. Performance management will lead to more efficient investment of transportation funds by focusing on national transportation goals, increasing accountability and transparency, and improving decision making. This chapter describes the performance measures and targets to be used in assessing system performance. RTC will continue to develop annual reports to track progress toward achieving these targets as well as gather additional community input into the transportation planning process.

The U.S. Secretary of Transportation, in consultation with States and MPOs, established national performance measures for several areas: pavement conditions and performance for the Interstate System and National Highway System (NHS), bridge conditions, injuries and fatalities, traffic congestion, on-road mobile source emissions, and freight movement on the Interstate System.

The performance measures were developed by the U.S. Department of Transportation, in consultation with State DOTs, MPOs, and other stakeholders. States, in coordination with MPOs, set performance targets in support of those measures, and state and metropolitan plans describe how program and project selection will help achieve the targets. The RTC has collaborated with the FHWA Nevada Division Office, the Nevada Department of Transportation (NDOT), and other stakeholder jurisdictions and agencies to develop performance measures. These performance measures and targets will be updated upon release of national and state performance measures. The national performance goals for federal highway programs initially established in MAP-21 include the following:

- Safety – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

- Infrastructure condition – To maintain the highway infrastructure asset system in a state of good repair.
- Congestion reduction – To achieve a significant reduction in congestion on the NHS.
- System reliability – To improve the efficiency of the surface transportation system.
- Freight movement and economic vitality – To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- Environmental sustainability – To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- Reduced project delivery delays – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

National transit goals and performance measures are developed by the Federal Transit Administration.

These include state of good repair (SGR) standards for measuring the condition of transit capital assets:

- Equipment – Non-revenue support-service and maintenance vehicles.
- Rolling stock – Revenue vehicles by mode.
- Infrastructure – Only rail fixed-guideway, track signals and systems. RTC does not own or operate any assets in this category, therefore, this is not applicable to RTC.
- Facilities – Maintenance and administrative facilities; and passenger stations (buildings) and parking facilities.

The FAST Act and MAP-21 provide a framework for linking goals and performance targets with project selection and implementation. Performance plans will track the progress toward achieving these targets and will be used to facilitate a community dialog about the track record of the RTC's transportation program. RTC will develop the following performance plans:

- Metropolitan Transportation Plan, to be updated every four years, which will include a discussion of:

- Anticipated effects of the improvement program toward achieving the performance targets

- How investment priorities are linked to performance targets

- Annual Metropolitan System and Transit Performance Report, which will include:
 - Evaluation of the condition and performance of the transportation system
 - Progress achieved in meeting performance targets
 - Evaluation of how transportation investments have improved conditions
- Transit Asset Management (TAM) Plan
- Public Transportation Safety Plan

The performance measures build upon existing and planned data collection efforts. Both transit and roadway performance measures are included in table 12-1. Additional description of the performance measures is below.

12.1 – SAFETY PERFORMANCE MEASURES

The RTC's aspirational vision is that zero fatalities on our region's roadways is the only acceptable goal and RTC recognizes that reaching that goal will require time and significant effort by all stakeholders.

The annual safety performance targets identified in the RTP represent an important step in working toward the ultimate goal of eliminating traffic-related deaths and serious injuries. The safety performance targets are considered interim-performance levels that make progress toward the long-term goal of zero fatalities. This approach is consistent with guidance from the U.S. Department of Transportation as well as states and MPOs across the nation, including NDOT.

- Preventable transit accidents per 100,000 miles of service – RTC tracks the number of preventable crashes (that is, the number of crashes in which the driver is at fault) that RTC RIDE and RTC ACCESS vehicles experience. While travelling on a bus is generally much safer than riding in other types of vehicles, RTC continuously strives to increase safety of transit travel. This data is currently reported to the RTC Board on a monthly basis.
- Number of fatalities and rate of fatalities per 100 million vehicle miles traveled (VMT) – These performance measures address vehicles on all roadways within the metropolitan planning area and utilize data provided by the Fatality Analysis Reporting System (FARS). The aspirational goal of zero fatalities is consistent with the Strategic Highway Safety Plan (SHSP).

After analysis of 2016 baseline data, the RTC has adopted a goal of an 8% annual reduction from the previous year trendline in the number of fatal crashes in the region.

- Number of serious injuries and rate of serious injuries per 100 million VMT – Serious injuries resulting from automobile crashes are also tracked by FARS. After analysis of 2016 baseline data, the RTC has adopted a goal of maintaining the existing decreasing trend in the number of serious-injury crashes.
- Number of non-motorized fatalities and non-motorized serious injuries – Similar to the goals for a reduction in the motorized fatalities and serious injuries, RTC has adopted a goal of an 8% annual reduction from the previous year trendline in the number of non-motorized fatalities and to maintain the existing decreasing trend in the number of non-motorized serious injuries.
- Miles of bicycle lanes added and percent of the Bicycle Pedestrian Master Plan completed – Because providing designated space for bicyclists is an important element of multimodal safety, this performance measure tracks implementation of the master plan. RTC tracks the number of bicycle lane miles added each year and will identify the percentage of projects in the plan that have been completed.

Implementing between three and seven percent of the plan each year will keep the region on track to complete the initial goal of implementation of the master plan by 2035. Currently, approximately 30% of the Bicycle Pedestrian Master Plan has been completed.

- Miles of sidewalk added or enhanced and percent of the ADA Transition Plan completed – As described previously, making sidewalks more accessible will promote pedestrian safety. RTC will track the implementation of projects in the transition plan. Over the past few years, the RTC has been exceeding the annual goal for constructing new sidewalks.

12.2 – INFRASTRUCTURE CONDITIONS/ TRANSIT STATE OF GOOD REPAIR PERFORMANCE MEASURES

- Pavement Condition Index (PCI) for Regional Roads – RTC has an established management system to monitor pavement condition and determine resource allocation, as described in Chapter 6. An average PCI rating of 80 will be maintained, and no more than 3% of Regional Roads as determined in Table E3 will have a condition index rating of less than 50. The PCI for Regional Roads was reported as 83.3 in the 2019 Annual Report.

- One of the initial MAP-21 performance areas also addressed pavement and bridge performance. Six national performance measures were developed under this area, and include the percentage of pavements in good condition and percentage of pavements in poor condition on both the Interstate System and non-Interstate NHS, as well as the percentage of bridges in good condition and the percentage of bridges in poor condition. The national performance measures for assessing pavement condition differ from the RTC measures in that they won't apply to all Regional Roads and that the condition will be assessed using a different methodology. The FHWA requires measures that reflect data elements in the Highway Performance Monitoring System (HPMS), including: International Roughness Index (IRI), rutting for asphalt surfaced pavements, faulting for jointed concrete surface pavements, and cracking percent. The method for assessing bridges is based upon elements in the National Bridge Inventory (NBI), which examines the condition of the bridge deck, superstructure, substructure, and culverts. The data to support these measures will be provided by NDOT, which assess pavement and bridge infrastructure on a periodic basis.

Targets have been determined in collaboration with NDOT, and are as follows as of October 1, 2020, Mid Performance Period (MPP) Progress Report.

| Performance Measures | Baseline | 2-Year Condition/ Performance | 2-Year Target | 4-Year Target | 4-Year Adjustment |
|--|----------|-------------------------------|---------------|---------------|-------------------|
| Percentage of Pavements of the Interstate System in Good Condition | | 81.8% | | 74.7% | |
| Percentage of Pavements of the Interstate System in Poor Condition | | 0.3% | | 1.4% | |
| Percentage of Pavements of the Non- Interstate NHS in Good Condition | 79.4% | 77.6% | 67.6% | 55.8% | |
| Percentage of Pavements of the Non- Interstate NHS in Poor Condition | 4.7% | 4.1% | 5.7% | 6.5% | |
| Percentage of NHS Bridges Classified as in Good Condition | 42.2% | 42.9% | 35.0% | 35.0% | |
| Percentage of NHS Bridges Classified as in Poor Condition | 0.5% | 0.9% | 7.0% | 7.0% | |

- Preventive maintenance of transit rolling stock and facilities – the Short Range Transit Plan identifies an inspection and maintenance schedule for transit capital resources. This performance measure tracks the timeliness of implementation of inspections and corrective actions. As of the most recent annual report, 100% of preventative maintenance is being performed on time.

- Maintain industry standard vehicle life cycle – RTC will maintain vehicles in good repair to the expected life cycle for transit rolling stock. The RTC follows Federal Transit Administration (FTA) standards, which vary by type of vehicle. This measure, as well as related measures, will be further developed through the TAM Plan, which will address the applicable asset categories described previously.

12.3 – CONGESTION REDUCTION

- Level of Travel Time Reliability (LOTTR) – is defined as the ratio of the longer travel times (80th percentile) of a reporting segment to a “normal” travel time (50th percentile), using data from FHWA’s National Performance Management Research Data Set (NPMRDS). Data are collected in 15-minute segments during all time periods between 6 a.m. and 8 p.m. The measures are the percent of person-miles traveled on the relevant Interstate System and Non-Interstate NHS that are reliable. Person-miles take into account the users of the NHS. Data to reflect the users can include bus, auto, and truck occupancy levels.

- Truck Travel Time Reliability (TTTR) ratio – is determined by dividing the 95th percentile time by the normal time (50th percentile) for each segment. Then, the TTTR Index is generated by multiplying each segment’s largest ratio from defined time periods by its length, then dividing the sum of all length-weighted segments by the total length of the Interstate. In addition to the national measures, NDOT has identified performance measures through their State Freight Plan. Some of these measures address truck speeds on I-80, I-580, and US 395; fatal crashes involving trucks; and the registration of trucks in Nevada with an engine model year of 2010 or newer (for air quality purposes).
- Transit passengers per service hour – Transit operating efficiency is a priority of the RTC. An RTC RIDE system-wide average of 30 passengers per service hour is the performance target. RTC currently tracks this data and provides regular reports to the RTC Board.
- Vehicle miles traveled (VMT) per person – This performance measure uses the regional travel demand model to estimate the number of VMT per person. The performance target is that VMT will not exceed 27 VMT per person by 2040.

12.4 – SYSTEM RELIABILITY

- **Peak Hour Excessive Delay –**
This measure applies to mainline highway segments on the NHS that cross any part of an urbanized area with a population of more than 200,000 and that is part of a nonattainment or maintenance area for any one of the criteria pollutants listed under the National Ambient Air Quality Standards (NAAQS). Excessive delay will be based on travel time at 20 miles per hour or 60 percent of the posted speed limit travel time, whichever is greater, during 15 minute intervals per vehicle. The RTC is required to begin reporting on this measure in 2022. As with other measures, NDOT will be responsible for reporting once targets have been identified through collaboration.
- **Percent Non-SOV Travel –** Non-SOV (single occupancy vehicle) travel is defined as any travel mode other than driving alone in a motorized vehicle, including travel avoided by telecommuting. The FHWA has provided three different options for calculating this measure, and the RTC has opted to use the American Community Survey (ACS) method (Method A).

This method utilizes the most recent ACS 5-year estimates for “Percent; COMMUTING TO WORK - Workers 16 years and over.” As with the Peak Hour Excessive Delay measure, the RTC is required to begin reporting in 2022, and will collaborate with NDOT.

- **Transit system on-time performance –** The goal of the RTC RIDE system is to have 90% of all transit departures occur on schedule. This data is currently collected and reported to the RTC Board.

12.5 – ENVIRONMENTAL SUSTAINABILITY

- **CMAQ program performance measures –** These measures track reductions for each applicable criteria pollutant and precursor in areas designated as nonattainment or maintenance for NAAQS as it relates to the Congestion Mitigation and Air Quality (CMAQ) Improvement Program. The RTC reports these measures directly to FHWA.
- **Alternative mode share by corridor –** In 2013, the RTC initiated a systematic program to document bicycle and pedestrian activity in key transit-oriented development (TOD) corridors. Combined with vehicle counts and transit ridership data, this allows the comparison of mode share changes over time.

12.6 – OTHER TRANSIT MEASURES

The target for the Virginia Street and 4th Street/Prater Way TOD corridors is 40% by 2040.

- Alternative mode share in the transit service area – Similar to the mode share by corridor, the RTC also tracks mode share by transit service area, which requires use of regional data about pedestrian and bicycle activity as well as analysis of transit ridership and VMT. The performance target is 15 percent alternative mode use by 2040.
- Transit fleet mix – The long-term performance target is to have 100% of the fleet operating on other cost-effective alternative fuels such as electric by 2035. This will require development of an alternative fuel maintenance facility. The RTC continues to work toward this target by replacing diesel vehicles that have reached the end of their useful lives with new vehicles that run on alternative fuels. RTC is pursuing hydrogen fuel cell bus technology as well. In 2015, RTC ACCESS was operating on a 100% CNG fleet.
- Auto emissions – RTC, in partnership with the Washoe County Health District Air Quality Management Division, monitors the emissions generated by on-road mobile sources. The performance target is that auto emissions remain under the emissions budget established in the State Implementation Program.

The RTC reports on a variety of other performance measures related to transit operations for metrics such as ridership, farebox recovery rate, passengers per revenue vehicle hour and revenue vehicle miles, and several others. The RTC reports these performance measures on a monthly basis, as well as provides annual reports for a year-to-year comparison. These reports help RTC monitor the efficiency of the variety of transportation services offered and performance of individual routes to make informed decisions for future projects and demand for services.

12.7 – SAFETY

| | Performance Measures | Performance Target | Performance Measure Status | 2019 Performance Target Status |
|-------------------------|---|--|---|---|
| RTP Goal Improve Safety | Preventable transit crashes per 100,000 miles of service | 0 | RTC RIDE 1.36 per 100,000 miles (2019) RTC ACCESS 0.50 per 100,000 miles | Working towards goal |
| | Number of fatal crashes (5-year average) | *8% annual reduction from previous year trendline (37 for year 2017) | * 37 (2017) | *Met 2017 goal and working towards aspirational goal of Zero Fatalities |
| | Number of fatal crashes per 100 million VMT (5-year average) | *1.01 for year 2017 based on fatal crashes target | * 1.00 (2017) | Met 2017 goal and working towards aspirational goal of Zero Fatalities |
| | Number of serious injury crashes (5-year average) | * Maintain existing decreasing trend (172 for year 2017) | * 161 (2017) | *Met 2017 goal and working towards aspirational goal of Zero Fatalities |
| | Number of serious injury crashes per 100 million VMT (5-year average) | 4.80 base on serious injury crashes target | * 3.59 (2017) | *Met 2017 goal and working towards aspirational goal of Zero Fatalities |

12.7 – SAFETY (CONTINUED...)

| | Performance Measures | Performance Target | Performance Measure Status | 2019 Performance Target Status |
|--|--|--|---|--|
| RTP Goal Improve Safety *The latest available crash data from NDOT is for 2017. These performance measures are reported for 2017 | Number of non-motorized fatalities (5-year average) | 8% annual reduction from previous year trend line - (13 for year 2017) | * 13 (2017) | Met 2017 goal and working towards aspirational goal of Zero Fatalities |
| | Number of non-motorized serious injuries (5-year average) | Maintain existing decreasing trend (33 in 2017) | * 32 (2017) | Met 2017 goal and working towards aspirational goal of Zero Fatalities |
| | Miles of bicycle lanes added & percent of Bicycle Pedestrian Master Plan completed | 3-7% of plan implemented per year | ↓ 4.5 miles of bike lanes added (2019) | Working towards goal |
| | Miles of sidewalks added of enhanced & percent of ADA Transition Plan completed | 3-7% of plan implemented per year | • 161 New crosswalks ↑ • 100 new pedestrian ramps ↓ • 10.7 miles new sidewalk ↑ • 10 new crosswalk warning devices ↑ • 4.5 miles of new sidewalk (2019) | Working towards goal |

12.8 – INFRASTRUCTURE CONDITION/TRANSIT STATE OF GOOD REPAIR

| | Performance Measures | Performance Target | 2019 Performance Measure Status | 2019 Performance Target Status |
|---|--|--|---|--|
| RTP Goal Manage Existing Systems Efficiently | Pavement condition index for Regional Roads | 80 | ↓ 83.3 | Exceeded goal |
| | Preventive maintenance of transit rolling stock and facilities | Target: 100% of transit preventive maintenance performed on time | 100% of preventive maintenance performed on time for RTC RIDE and RTC ACCESS | Met goal |
| | Maintain industry standard vehicle life cycle | Varies per vehicle | Vehicle life cycle: Access paratransit vehicles = 7 years RIDE fixed route vehicles = 12 years. | ACCESS paratranist met, RIDE fixed route not met. 95% vehicles at less than 12 years useful life |

12.9 – CONGESTION REDUCTION

| | Performance Measures | Performance Target | 2020 Performance Measure Status | 2020 Performance Target Status |
|-------------------------------|--|------------------------------------|---|--------------------------------|
| RTP Goal Improve Safety | Percentage of person- miles traveled that are reliable on the Interstate System | Adopt NDOT 4-year target of 87 | ↑99.6% of the system has a Level of Travel Time Reliability (LOTTR) less than 1.50 | Establishing Baseline Data |
| | Percentage of person- miles traveled that are reliable on the Non-Interstate National Highway System (NHS) | Establish RTC 4-year target of 70% | ↑ 84.6% of the system has a Level of Travel Time Reliability (LOTTR) less than 1.50 | Establishing Baseline Data |
| | Truck Travel Time Reliability (TTTR) Index | Adopt NDOT 4-year target of 1.26 | ↑1.24 | Met goal |
| | Transit passengers per service hour | 30 (ongoing) | ↓ 28.9 (2019) | Working towards goal (2019) |
| | Vehicle Miles Traveled (VMT) per person | Max of 27 VMT per person, per day | ↓ 23 (2019) | Met goal (2019) |

12.10 – SYSTEM RELIABILITY

| RTP Goal | Performance Measures | Performance Target | 2019 Performance Measure Status | 2019 Performance Target Status |
|-------------------------------------|--|---------------------------------|---------------------------------|--------------------------------|
| Manage Existing Systems Efficiently | Transit on-time performance for all trips operated | 90% transit on-time performance | ↑ 91.5% | Met goal |

12.11 – ENVIRONMENTAL SUSTAINABILITY

| RTP Goal | Performance Measures | Performance Target | 2019 Performance Measure Status | 2019 Performance Target Status |
|--|--|---|--|--------------------------------|
| Promote Healthy Communities & Sustainability | Alternative mode share by corridor | 40% on Virginia Street & 4th Street/ Prater Way by 2040 | ↓ 22.4% on Virginia St ↑ 38.5% on 4th Street/ Prater Way | Working towards goal |
| Integrate Land Use & Economic Development | Alternative mode share in the transit service area | 15% by 2040 | ↑ 12.9% | Working towards goal |
| Integrate all types of transportation | Fleet mix - alternative fueling technologies | 100% electric, hydrogen fuel cell, or CNG fleet by 2035 | The RTC ACCESS fleet mix is 100% CNG. The RTC fleet mix breaks down as follows: - ↓ Diesel - 33 - ↑ Electric Diesel - Hybrid- 18 - Electric - 21 | Working towards goal |

12.11 – ENVIRONMENTAL SUSTAINABILITY (CONTINUED...)

| | Performance Measures | Performance Target | 2019 Performance Measure Status | 2019 Performance Target Status |
|---|----------------------|---|---|--------------------------------|
| RTP Goal Integrate all types of transportation | Auto emissions | The current status of the various pollutants in Washoe County is listed below: <ul style="list-style-type: none"> • CO (8-hr): Attainment/Maintenance for Hydrographic Area #87. • Attainment/Unclassifiable for the rest of Washoe County | CO: 54,331 lbs. / day in Hydrographic Area #87. PM ₁₀ : 4,395lbs. / day in Hydrographic Area #87. | Met Goal |

APPENDIX A – COMPLETE STREETS PROJECT LISTING

The roadway projects in the 2050 RTP are presented in three time periods: the first five years of the plan (2021-2025), the second five years of the plan (2026-2030), and the remaining years of the plan (2031-2050). These projects include a combination of sidewalk accessibility, bicycle and other pedestrian facilities, operations and maintenance, pavement preservation, other multimodal investments to promote safety and livability, and capacity improvements and new roadway connection to address long term mobility needs. The projects for each time period are illustrated in a map and described in the following tables. The tables also include the estimated project cost in year of expenditure dollars and potential funding sources. All of the roadway projects incorporate Complete Street design principles. The safety needs of all roadway travelers, including pedestrians, cyclists, and transit customers, will be addressed in the design of these projects.

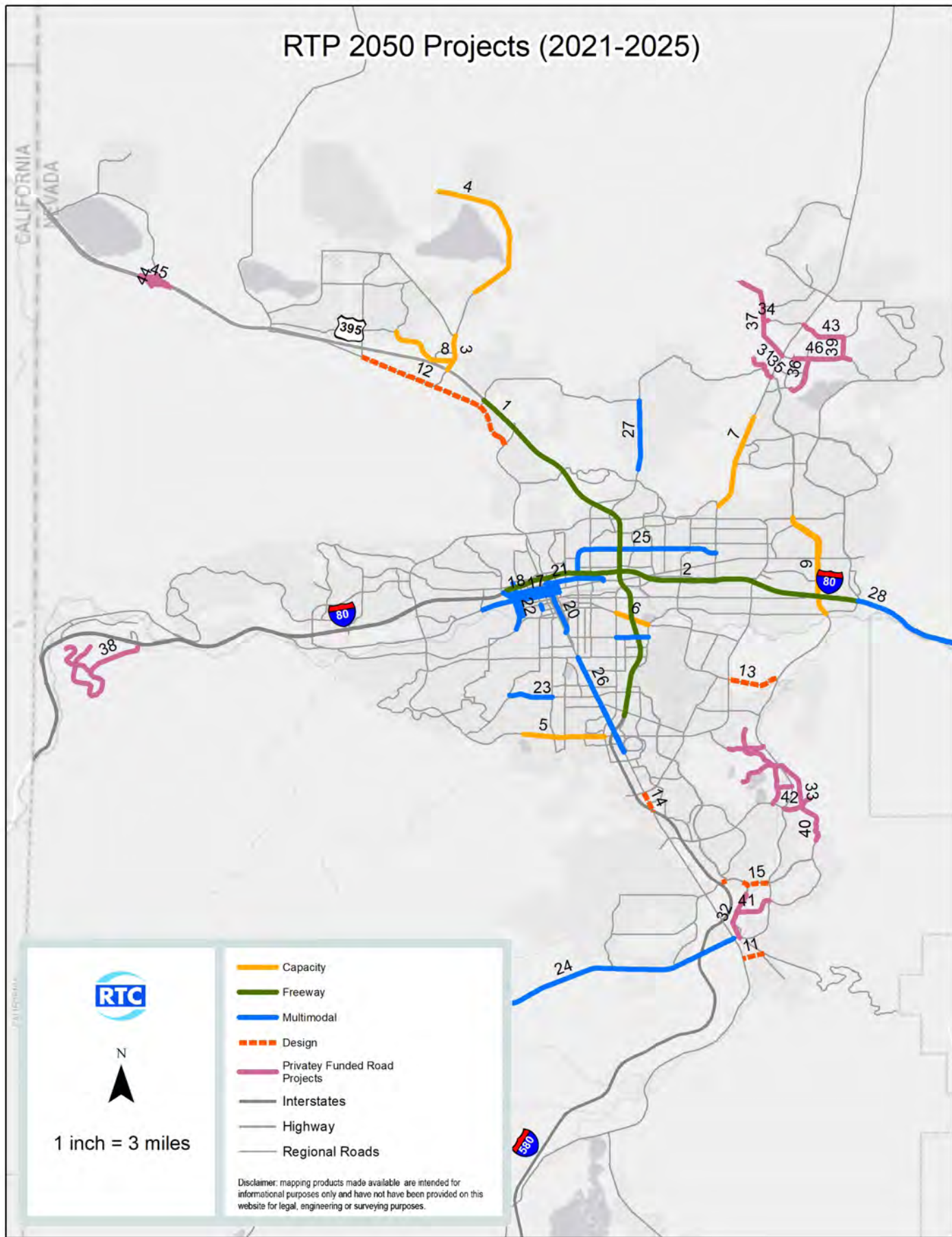
The delivery of some projects will occur over multiple years and may be shown in two or more time periods. For example, construction of Sparks Boulevard improvements would be initiated in the 2021-2025 time period but completed in 2026. The design for projects may be identified in one time period while construction may occur in a subsequent time period.

Projected funding levels are not sufficient to address all of the transportation needs identified in the region over the next 30 years. A listing of unfunded roadway needs totaling approximately \$4 billion is available at the end of this section.

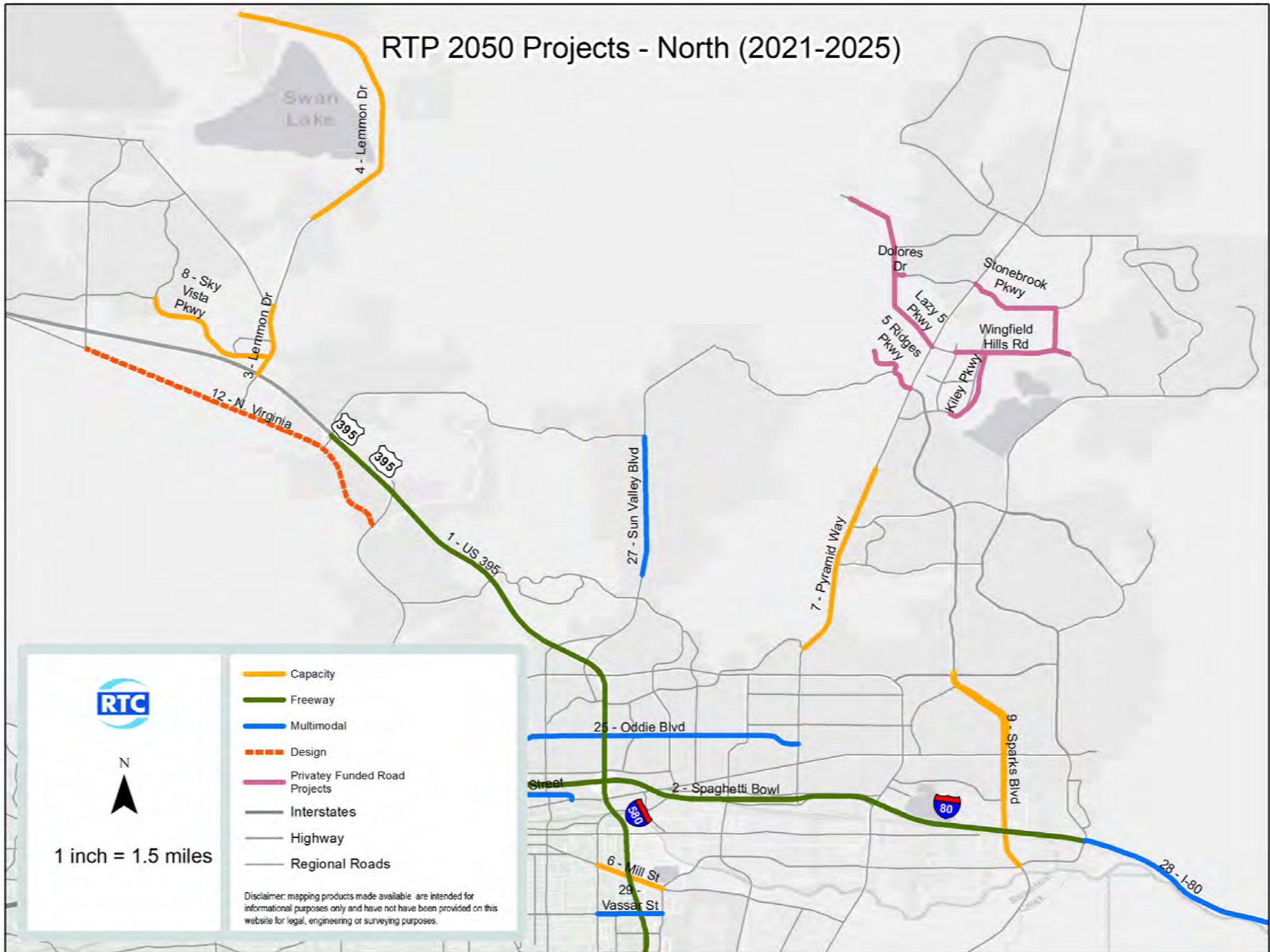
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| Program | Description | Annual Amount | 5 Year Amount |
|---|---|-----------------------|---------------------------|
| A Bicycle, Pedestrian & ADA | Bus stop ADA improvements, other bike/ped spot improvements | \$3,000,000 | \$15,000,000 |
| B Traffic Signals, ITS Operations & Intersections | 3-5 intersection improvements per year | \$10,000,000 | \$50,000,000 |
| C Pavement Preservation | Preventive & corrective maintenance, reconstruction | \$22,500,000 | \$112,500,000 |
| D Debt Service | | \$23,000,000 | \$115,000,000 |
| Projects | Limits | Cost | Potential Funding Sources |
| Freeway | | | |
| 1 US 395 Add SB Lane, Aux Lanes, NB & SB | N. McCarran to Golden Valley | \$94,750,000 | Regional, State, Federal |
| 2 Spaghetti Bowl Phase 2 | Spaghetti Bowl | \$130,000,000 | Regional, State, Federal |
| Capacity | | | |
| - Construction | | | |
| 3 Lemmon Drive Segment 1 Widen 4 to 6 lanes | US 395 and Military Rd | \$22,500,000 | Regional, State |
| 4 Lemmon Drive Segment 2 Traffic improvements/Reconstruct | Fleetwood Dr to Ramsay | \$39,000,000 | Regional, Federal |
| 5 McCarran Blvd Intersection & Operations | Keitzke to Greensboro | \$10,000,000 | Regional, State, Federal |
| 6 Mill Street | Keitzke to Terminal | \$60,000,000 | Regional, State, Federal |
| 7 Pyramid Hwy (Phase 1) - Widen & safety improvements | Queen Way to Golden View | \$54,100,000 | Regional, State, Federal |
| 8 Sky Vista Parkway Widen 2 to 4 lanes | Silver Lake Rd to Lemmon Dr | \$15,800,000 | Regional |
| 9 Sparks Boulevard | Greg Street to N side of Baring Blvd | \$40,000,000 | Regional, State, Federal |
| - Design | | | |
| 10 Damonte Ranch Pkwy - Widen | Double R to I 580 | \$400,000 | Regional |
| 11 Geiger Grade New 4 Lane Rd | Virginia St to Toll Rd | \$5,000,000 | Regional, State, Federal |
| 12 North Virginia Street widening | Panther to Stead Blvd | \$5,000,000 | Regional, State, Federal |
| 13 Pembroke Dr - Widen | McCarran to Veterans | \$2,000,000 | Regional |
| 14 S. Virginia Street - Add NB lane | Longley Ln to I-580 | \$2,000,000 | Regional, State, Federal |
| 15 Steamboat Pkwy and Damonte Ranch Pkwy - Widen | Veterans Pkwy to Promenade Wy | \$400,000 | Regional |
| Multimodal | | | |
| 16 3rd St Bike Facility | Vine st - Evans St | \$7,500,000 | Regional |
| 17 4th Street - Multimodal | Stoker Ave to Evans Ave | \$35,000,000 | Regional, State, Federal |
| 18 5th Street - Multimodal | Keystone to Evans | \$1,676,000 | Regional |
| 19 Arlington Avenue Replace existing bridges | At Truckee River | \$25,500,000 | Regional, State, Federal |
| 20 Center Street Widen sidewalks & add bike lanes | 9th Street to Moran | \$10,000,000 | Regional |
| 21 E 6th Street Bicycle Facility & Safety Improvements | Virginia St to 4th St | \$8,073,000 | Regional |
| 22 Keystone Ave Multimodal Improvements | California to I-80 & Truckee Bridge replacement | \$5,000,000 | Regional, State, Federal |
| 23 Moana - Multimodal | Skyline Blvd to Plumas | \$5,600,000 | Regional |
| 24 Mt. Rose Highway Improvements | Geiger Grade to Joy Lake Rd | \$10,000,000 | Regional, State, Federal |
| 25 Oddie Blvd/Wells Ave Multimodal Improvements | Kuenzli Ln to Pyramid Way | \$36,000,000 | Regional |
| 26 S. Virginia Street Multimodal and ADA | Plumb Lane to Meadowood | \$25,900,000 | Regional, Federal |
| 27 Sun Valley Blvd Multimodal Improvements | 7th Ave to Scottsdale | \$36,000,000 | Regional, State |
| 28 Tahoe-Pyramid Trail | Vista Blvd to Mustang | \$3,600,000 | Private, Federal |
| 29 Vassar Street Bike Facility | Kietzke Ln to Terminal Way | \$1,219,000 | Regional |
| 30 Vine Street Bike Facility | Riverside Drive to University Terrace | \$11,300,000 | Regional |
| Privately Constructed Roads | | Funding Source | |
| 31 5 Ridges Pkwy | Highland Ranch Pkwy to 2nd roundabout | Private | |
| 32 Damonte Ranch Pkwy Extension | Veterans Pkw to Rio Wrangler Pkwy | Private | |
| 33 Daybreak Regional Road Network (South Meadows) | See map | Private | |
| 34 Dolores Drive Extension | West to Lazy 5 Pkwy | Private | |
| 35 Highland Ranch Pkwy Widening | Pyramid Highway to 5 Ridges entrance | Private | |
| 36 Kiley Pkwy | Wingfield Hills Rd to Henry Orr Pkwy | Private | |
| 37 Lazy 5 Pkwy | W Sun Valley Arterial to Pyramid Hwy | Private | |
| 38 Meridian & Santerra Regional Road Network (Verdi) | See map | Private | |
| 39 N/S Connector Rd | Sonebrook Pkwy to Wingfield Hills Rd | Private | |
| 40 Rio Wrangler Pkwy Extension (North) | Bucephalus Pkwy to South Meadows Pkwy | Private | |
| 41 Rio Wrangler Pkwy Extension (South) | Damonte Ranch Pkwy to Veterans Pkwy | Private | |
| 42 South Meadows Extension | Mojave Sky Dr to Rio Wrangler Pkwy | Private | |
| 43 Stonebrook Pkwy | N/S Connector Rd to Pyramid Hwy | Private | |
| 44 Whitelake Pkwy Extension | US 395 to Stonegate Entrance | Private | |
| 45 Whitelake Pkwy Interchange | Interchange Improvement at US 395 | Private | |
| 46 Wingfield Hills Rd Extension | West to David Allen Pkwy | Private | |

RTP 2050 Projects (2021-2025)



RTP 2050 Projects - North (2021-2025)



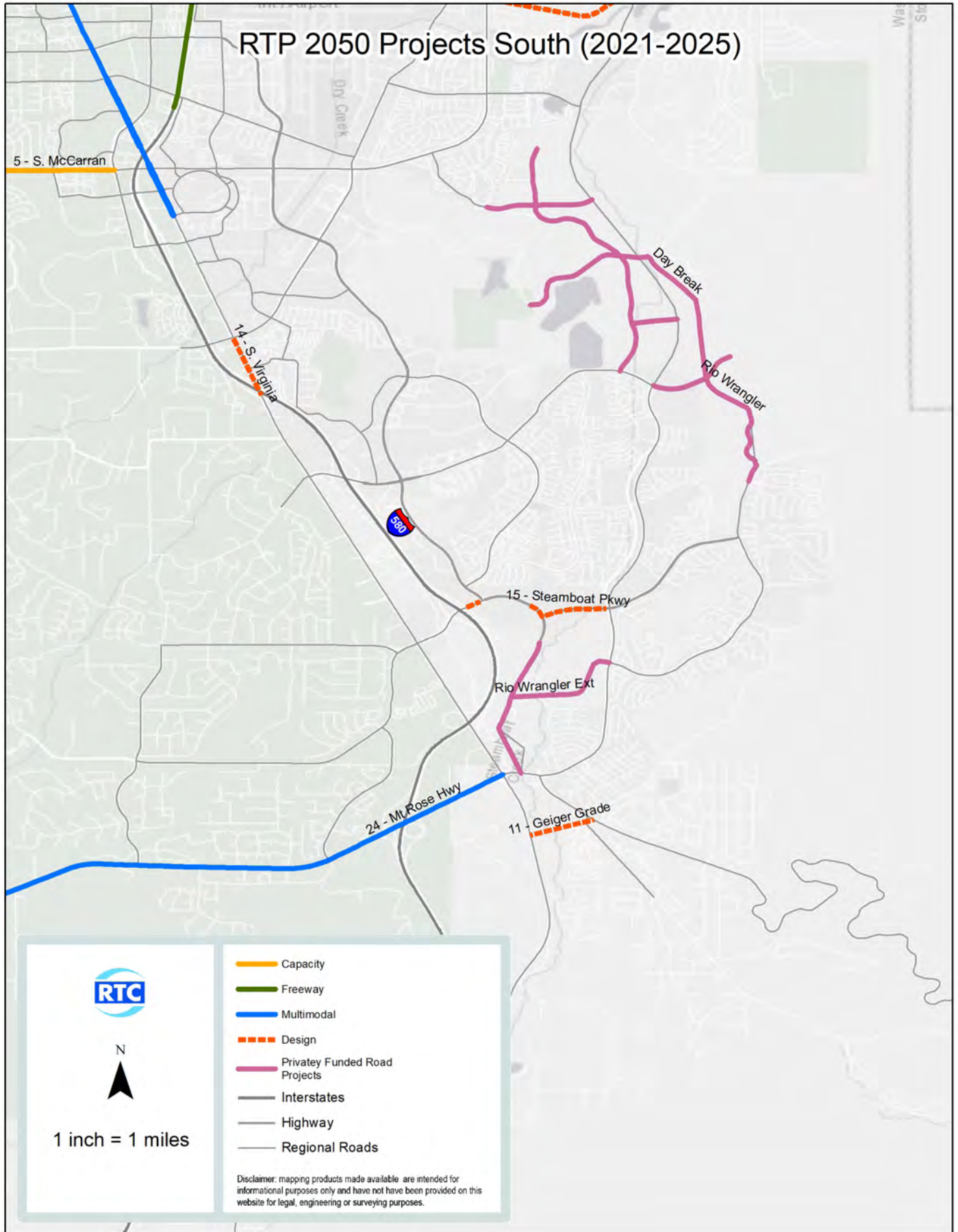
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- Capacity
- Freeway
- Multimodal
- - - Design
- Privatey Funded Road Projects
- Interstates
- Highway
- Regional Roads

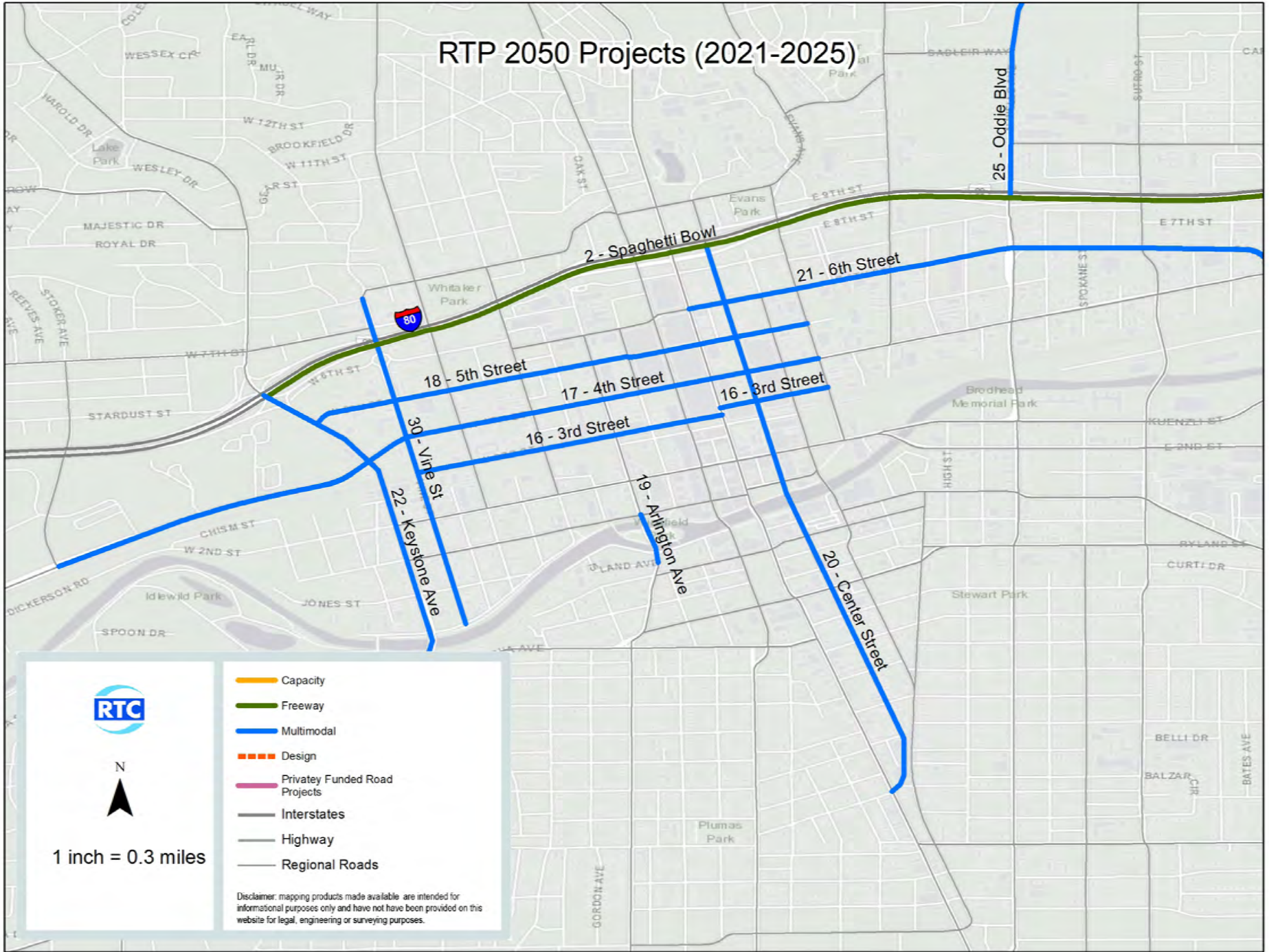
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RTP 2050 Projects South (2021-2025)



RTP 2050 Projects (2021-2025)



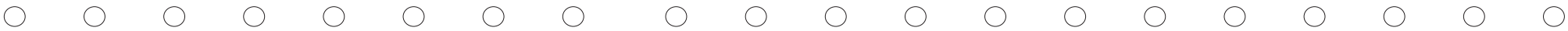
200 | 2050 RTP



1 inch = 0.3 miles

- Capacity
- Freeway
- Multimodal
- - - Design
- Privatey Funded Road Projects
- Interstates
- Highway
- Regional Roads

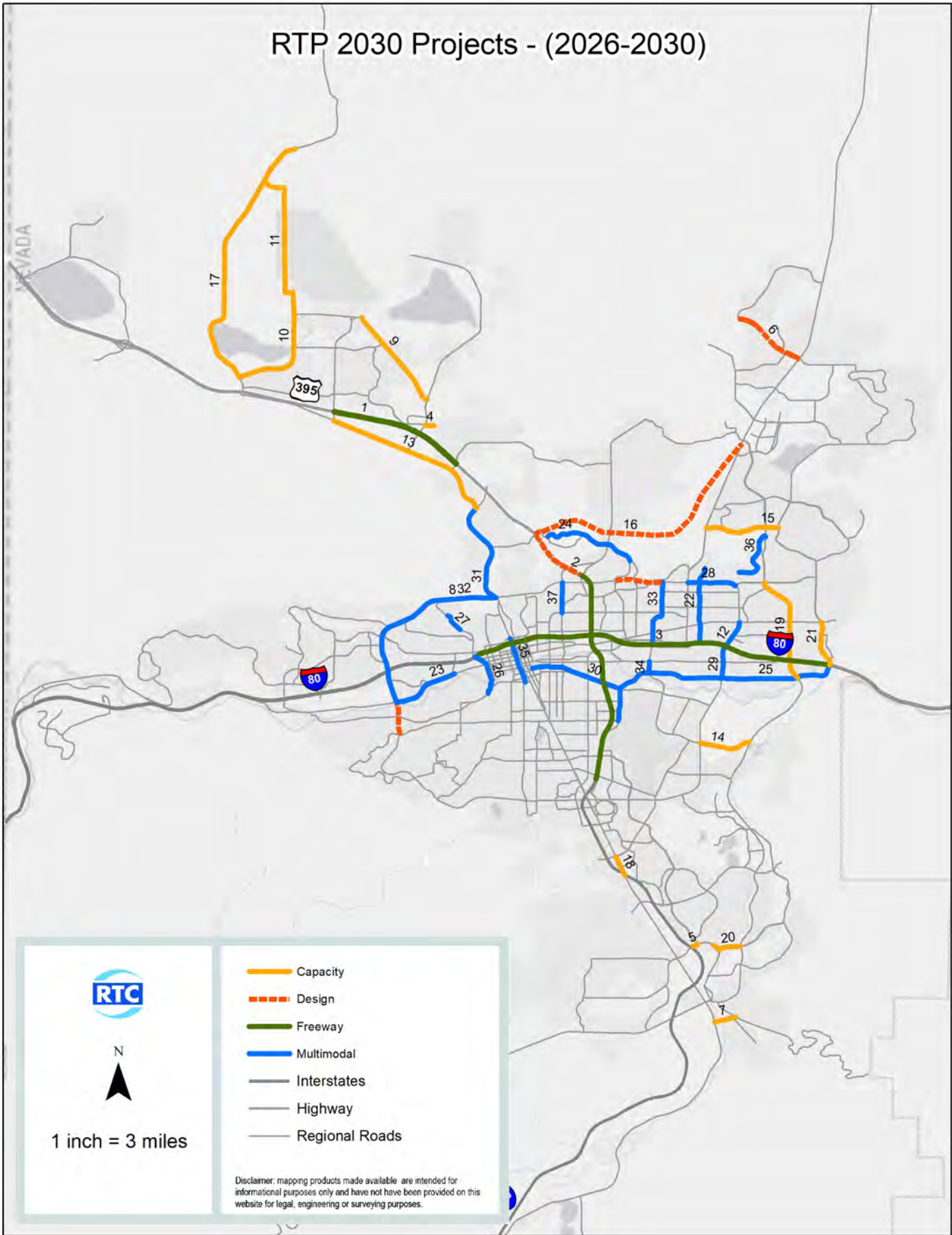
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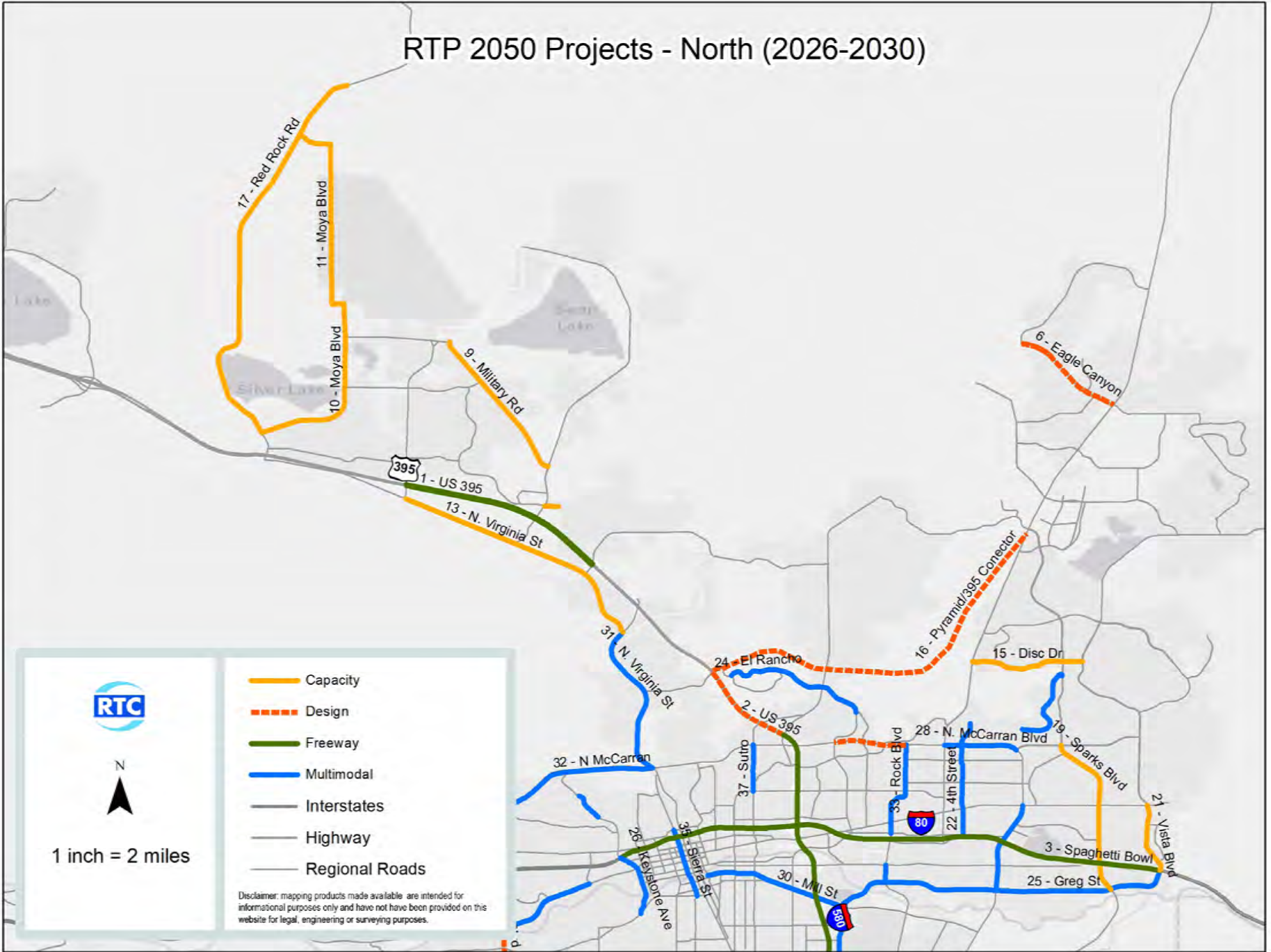
DRAFT 2026-2030 Listing

| | Program | Description | Annual Amount (est) | 5 Year Amount |
|------------|--|---|---------------------|----------------------------|
| A | Bicycle, Pedestrian & ADA | Bus stop ADA improvements, other bike/ped spot improvements | \$3,500,000 | \$17,500,000 |
| B | Traffic Signals, ITS Operations & Intersections | 3-5 intersection improvements per year | \$11,500,000 | \$57,500,000 |
| C | Pavement Preservation | Preventive & corrective maintenance, reconstruction | \$25,000,000 | \$125,000,000 |
| D | Debt Service | | \$23,000,000 | \$115,000,000 |
| | Projects | Limits | YOE Cost Rounded | Potential Funding Sources |
| Freeway | | | | |
| 1 | US 395 Additional lane in each direction | Golden Valley to Stead Blvd | \$79,177,000 | Regional, State, Federal |
| 2 | US 395 Additional Northbound Lane - Design | Clear Acre to Parr | \$19,115,000 | Regional, State, Federal |
| 3 | Spaghetti Bowl Phase 2 | Spaghetti Bowl | \$80,088,000 | Regional, State, Federal |
| Capacity | | | | |
| 4 | Buck Dr Widen 2 to 4 lanes | Lemmon Dr to N Hills Blvd | \$1,912,000 | Regional |
| 5 | Damonte Ranch Pkwy - Widen | Double R to I 580 | \$4,723,000 | Regional, Private |
| 6 | Eagle Canyon - Widen 2 to 4 lanes - Design | Pyramid Hwy to W Calle de la Plata | \$2,000,000 | Regional, State, Federal |
| 7 | Geiger Grade New 4 Lane Rd | Virginia St to Toll Rd | \$84,445,000 | Regional, State, Federal |
| 8 | McCarran Blvd Safety & Operational Improvements - Design | Plumb Ln to N Virginia St; El Rancho Dr to Rock Blvd | \$15,000,000 | Regional, State, Federal |
| 9 | Military Rd Widen 2 to 4 lanes | Lemmon Dr to Echo Ave | \$25,412,000 | Regional |
| 10 | Moya Boulevard Widen 2 to 4 lanes | Red Rock Rd to Echo Ave | \$19,678,000 | Regional, Federal, Private |
| 11 | Moya Boulevard Extension | Red Rock Dr to Echo Ave | \$74,100,000 | Regional |
| 12 | N. Hills Blvd | Golden Valley Rd to Buck Dr | \$20,465,000 | Regional |
| 13 | N Virginia Street Widen 2-4 lanes & Multimodal | Panther Dr to Stead Blvd | \$43,291,000 | Regional, State, Federal |
| 14 | Pembroke Dr - Widen | McCarran to Veterans | \$19,790,000 | Regional |
| 15 | Pyramid Hwy/395 Connector Phase 2 | Widen Disc Dr from Pyramid to Vista Blvd | \$22,300,000 | Regional, State, Federal |
| 16 | Pyramid/395 Connector Phase 3 (Connector) - Design | US 395 to Pyramid Hwy south of Sparks Blvd | \$38,000,000 | Regional, State, Federal |
| 17 | Red Rock Rd Widen 2 to 4 lanes | US 395 to Placerville Dr | \$58,246,000 | Regional, Private |
| 18 | S. Virginia Street - Add NB lane | Longley Ln to I-580 | \$23,613,000 | Regional, State, Federal |
| 19 | Sparks Blvd Multimodal Improvements and widen 4 to 6 lanes | Greg St to Baring Blvd | \$44,977,000 | Regional, State, Federal |
| 20 | Steamboat Pkwy and Damonte Ranch Pkwy - Widen | Veterans Pkwy to Promenade Wy | \$4,610,000 | Regional, Private |
| 21 | Vista Boulevard Widen 4 to 6 lanes | I-80 to Prater Way | \$11,244,000 | Regional, State, Federal |
| Multimodal | | | | |
| 22 | 4th Street Bike lanes (Sparks) | Victorian Ave to Queen Way | \$6,747,000 | Regional |
| 23 | 4th Street Pedestrian & Safety Improvements (Reno) | Stoker to McCarran | \$20,240,000 | Regional, State, Federal |
| 24 | El Rancho Dr / Dandini Blvd Sidewalks | Raggio Pkwy to Sullivan Ln | \$20,690,000 | Regional |
| 25 | Greg St Sidewalks and Bike lanes | Mill Street to Vista Blvd | \$29,123,000 | Regional, Federal, Private |
| 26 | Keystone Ave Multimodal Improvements | California to I-80 & Truckee Bridge replacement | \$61,169,000 | Regional, State, Federal |
| 27 | Keystone Ave Sidewalks and Bike Lanes | Coleman Dr to Peavine Rd | \$1,012,000 | Regional |
| 28 | McCarran - Pedestrian Improvements | Baring to Pyramid | \$12,594,000 | Regional, State, Federal |
| 29 | McCarran Blvd Multimodal & Safety Improvements | Greg to Prater | \$10,682,000 | Regional, State, Federal |
| 30 | Mill St/Terminal Way Multimodal Improvements | Airport to downtown Reno | \$27,436,000 | Regional, State, Federal |
| 31 | N Virginia St Sidewalks and buffered bike lanes | Panther Dr to McCarran Blvd | \$17,878,000 | Regional, State, Federal |
| 32 | NW McCarran Safety and Bike Lanes | 4th Street to N Virginia | \$10,570,000 | Regional, State, Federal |
| 33 | Rock Blvd Enhanced Sidewalks and Bike Lanes | Victorian Ave to McCarran Blvd | \$7,309,000 | Regional, Federal |
| 34 | Rock Blvd Sidewalks and bike lanes | Greg St to Glendale Ave | \$3,823,000 | Regional, Federal |
| 35 | Sierra St Widen Sidewalks | California Ave to 9th St | \$5,060,000 | Regional |
| 36 | Spanish Springs Rd Safety & Multimodal Improvements | N. Truckee Lane to Sparks Boulevard | \$8,500,000 | Local, Federal* |
| 37 | Sutro - MultiModal | N McCarran to Oddie Blvd | \$8,995,000 | Regional |

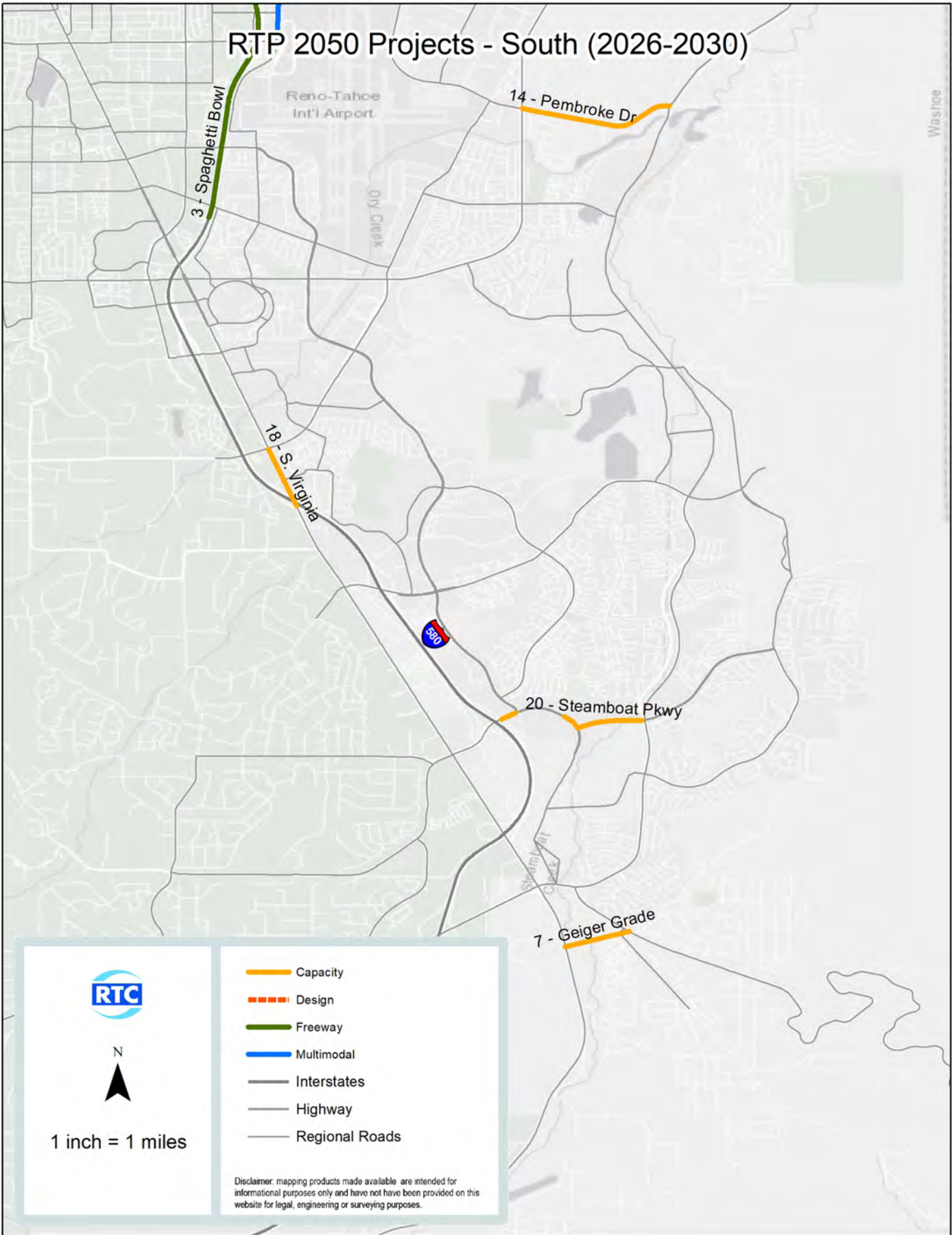
RTP 2030 Projects - (2026-2030)



RTP 2050 Projects - North (2026-2030)



RTP 2050 Projects - South (2026-2030)



1 inch = 1 miles

- Capacity
- Design
- Freeway
- Multimodal
- Interstates
- Highway
- Regional Roads

Disclaimer: mapping products made available are intended for informational purposes only and have not been provided on this website for legal, engineering or surveying purposes.

DRAFT 2031-2050

| | Program | Description | Annual Amount (est) | 20 Year Amount |
|-----------------|--|---|----------------------------|----------------------------------|
| A | Bicycle, Pedestrian & ADA | Bus stop ADA improvements, other bike/ped spot improvements | \$4,570,000 | \$91,400,000 |
| B | Traffic Signals, ITS Operations & Intersections | 3-5 intersection improvements per year | \$15,232,000 | \$304,640,000 |
| C | Pavement Preservation | Preventive & corrective maintenance, reconstruction | \$30,000,000 | \$600,000,000 |
| D | Debt Service | | \$23,000,000 | \$230,000,000 |
| | Projects | Limits | YOE Cost Rounded | Potential Funding Sources |
| Freeway | | | | |
| 1 | Spaghetti Bowl Phases 3-5 | Spaghetti Bowl | \$1,500,000,000 | Regional, State, Federal |
| 2 | US 395 Widen for Connector traffic - add'l NB lane | Clear Acre to Parr Blvd | \$248,282,000 | Regional, State, Federal |
| 3 | US 395 Widening - Design & ROW | Stead to Red Rock Rd | \$100,000,000 | Regional, State, Federal |
| 4 | I-580 Widening | Neil Rd to S Virginia St/Kietzke Ln | \$53,617,000 | Regional, State, Federal |
| 5 | I-80 Widening | W McCarran Blvd to Keystone Ave | \$60,471,000 | Regional, State, Federal |
| 6 | I-80 Widening | Garson Rd to West 4 th St | \$193,295,000 | Regional, State, Federal |
| 7 | I-80 Operations & Capacity | Vista Blvd to US Parkway | \$338,532,000 | Regional, State, Federal |
| Capacity | | | | |
| 8 | 9th Street Extension | To N Wells Ave | \$3,351,000 | Regional, State, Federal |
| 9 | Arrowcreek Pkwy - Widen | Wedge Pkwy to Thomas Creek Rd | \$35,948,000 | Regional |
| 10 | Arrowcreek Pkwy Widen 2 to 4 lanes | Wedge Pkwy to Zolezzi Ln | \$12,643,000 | Regional |
| 11 | Double R Blvd - Widen & multimodal | South Meadows Pkwy to Longley Ln | \$35,100,000 | Regional |
| 12 | Eagle Canyon - Widen 2 to 4 lanes | Pyramid Hwy to W Calle de la Plata | \$14,500,000 | Regional, State, Federal |
| 13 | Lemmon Valley -Spanish Springs Connector - New 4 lane road | Lemmon Valley to Spanish Springs | \$213,249,000 | Regional, State, Federal |
| 14 | Echo Ave - Extension | Red Rock Rd to Moya Blvd | \$29,702,000 | Regional |
| 15 | Estates Dr - Reconstruct | Lemmon Dr to Golden Valley Rd | \$48,895,000 | Regional, State, Federal |
| 16 | Golden Valley Road/7th Avenue (O'Brien Pass) | N Hills to W 7th Ave | \$111,042,000 | Regional, State, Federal |
| 17 | Highland Ranch Parkway - Widen | Pyramid to Sun Valley Blvd | \$45,239,000 | Regional, State, Federal |
| 18 | Lemmon Dr - Extension | To Red Rock Rd | \$161,460,000 | Regional, State, Federal |
| 19 | McCarran Blvd | Plumb Ln to Mayberry Dr | \$20,868,000 | Regional, State, Federal |
| 20 | McCarran Boulevard Widen 4 to 6 lanes | El Rancho Dr to Rock Blvd | \$40,822,000 | Regional, State, Federal |
| 21 | McCarran Boulevard Widen 4 to 6 lanes | Sky Mountain Dr to I80 | \$12,033,000 | Regional, State, Federal |
| 22 | McCarran Boulevard Widen 4 to 6 lanes | 7th St to N Virginia St | \$95,353,000 | Regional, State, Federal |
| 23 | McCarran Widening | Mayberry to 4th Street | \$61,994,000 | Regional, State, Federal |
| 24 | Mira Loma Drive Widen 2 to 4 lanes | McCarran to Veterans | \$14,318,000 | Regional |
| 25 | North Virginia - New Road | Stead to White Lake | \$86,213,000 | Regional, State, Federal |
| 26 | Panther Extension | N. Virginia to Panther to N. Hills Blvd | \$12,947,000 | Regional, Private |
| 27 | Pyramid/395 Connector Phase 3 Construct Connector | US 395 to Pyramid Hwy south of Sparks Blvd | \$378,300,000 | Regional, State, Federal |
| 28 | Pyramid/395 Connector Phase 4 System Ramps | System Ramps at US 395 | \$85,800,000 | Regional, State, Federal |
| 29 | Pyramid Way Phase 5 Widen 2 to 4 lanes | Sparks Blvd to Calle de la Plata | \$205,500,000 | Regional, State, Federal |
| 30 | Pyramid/395 Phase 6 West Sun Valley Interchange | Interchange and local improvements | \$60,200,000 | Regional, State, Federal |
| 31 | Record St realignment and parking garage access | Evans Ave to 9th Street; Lake St to Evans Ave | \$2,175,000 | Regional, State, Federal |
| 32 | Rio Wrangler - Widen | Spring Flower Dr to Western Skies Dr | \$3,503,000 | Regional |
| 33 | Robb Dr Ext | 4th Street to I-80 | \$28,332,000 | Regional, State, Federal |
| 34 | S. McCarran - Widen | Manzanita to Plumb | \$117,896,000 | Regional, State, Federal |
| 35 | S. McCarran - Widen | Lakeside to Manzanita | \$43,564,000 | Regional, State, Federal |
| 36 | Silver Knolls Blvd - New Road - Private funding required | Red Rock Rd to Silver Knolls Blvd | \$74,485,000 | Regional, Private |
| 37 | SS/ER Parkway - New Road - Private funding required | Red Rock Rd to Mud Spring Dr | \$144,400,000 | Regional, Private |

205 | 2050 RTP

| Unfunded Needs | Description | Cost |
|----------------------------------|---|------------------------|
| US 395 Widening | Stead to Red Rock Rd | \$1,157,640,000 |
| I-580 Widening | S Virginia St@Mt Rose to South Meadows Pkwy | \$163,744,000 |
| I-580 Widening | South Meadows Pkwy to Neil Rd | \$242,799,000 |
| US 395 Widening | Stead to Red Rock Rd | \$1,097,925,000 |
| Spaghetti Bowl Phase 5 (partial) | Spaghetti Bowl | \$685,442,000 |
| I-80 Widening (partial) | Vista Blvd to USA Pkwy | \$664,878,000 |
| <i>Total unfunded</i> | | <i>\$4,012,428,000</i> |

APPENDIX B – CONGESTION MANAGEMENT PROCESS

The purpose of the Congestion Management Process (CMP) is to identify how RTC selects and prioritizes projects to reduce traffic congestion. This process was developed in coordination with the 2050 Regional Transportation Plan (RTP) Agency Working Group, Technical Advisory Committee, and Citizens Multimodal Advisory Committee. The process was used to select projects included in this RTP. The CMP is a systematic approach that is collaboratively developed for the region and provides safe and effective management of new and existing transportation facilities.

Congestion management, as defined by the Federal Highway Administration (FHWA), is the application of strategies to improve transportation system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods. A CMP is a regionally-accepted approach that provides information on performance and assesses strategies for congestion management. The performance management metrics identified in Chapter 12, as well as the Transportation Conformity requirements regarding air quality, play an important role in the CMP. Flexibility in the development of the CMP allows the RTC to design their own process that will best serve the region. The CMP is an on-going process, adjusting over time as goals and objectives change, new congestion issues arise, new resources become available, and new strategies are identified and evaluated. The RTP identifies a well-balanced project selection process across all modes of transportation and outlines the implementation schedule and anticipated funding sources for a truly multimodal program.

1. CONGESTION MANAGEMENT OBJECTIVES

Traffic congestion is an impediment to economic activity, degrades air quality, and has an adverse impact on quality of life in the Truckee Meadows. Traffic congestion on freeway facilities, particularly I-80, has an adverse impact on national freight movement in addition to local traffic operations. Significant proportions of traffic congestion are non-recurring. This type of congestion is caused by crashes, work zones, weather, and special events. The objectives of this CMP are to reduce both recurring and non-recurring traffic congestion. An important component to this process is the implementation of operations and management strategies that improve signal timing coordination and communications between traffic operations engineers at RTC, NDOT, City of

Reno, City of Sparks, and Washoe County. The Nevada Traffic Incident Management (NV TIM) is another important program that addresses incident response. A guiding principle of the RTP is to improve safety on area roadways for all users, including pedestrians and cyclists. Selecting projects that reduce crashes on regional roads will also reduce congestion that results from incidents.

The CMP also provides an opportunity to address freight issues. RTC regularly participates in Freight Advisory Committee meetings facilitated by NDOT that involved regional partners in freight and logistics, economic development, and infrastructure development. RTC will continue to coordinate with regional stakeholders as freight needs evolve.

2. IDENTIFY AREA OF APPLICATION

The CMP applies to the Reno-Sparks urbanized area in Washoe County, Nevada. This is the planning area addressed in the 2050 RTP. It addresses project prioritization for roadway capacity, safety, and operations.

3. DEFINE SYSTEM OR NETWORK OF INTEREST

The CMP addresses congestion issues on regional roads and freeways in the Reno-Sparks metropolitan area. Regional roads generally include facilities with 5,000+ average daily trips. Roads with fixed-route bus service or corridors identified as industrial roads are also included.

RTC identified existing traffic congestion hotspots using INRIX data provided by NDOT. The INRIX roadway network includes freeways and major roads in the region. The congestion analysis focuses on AM and PM peak hours when congestion is the most severe. Congestion is measured as observed speed as a percentage of the free flow speed. The INRIX data used for existing congestion analysis is from weekdays of January 2021 (Figure B-1 & 2). Note that this was during a “pause” in business openings as mandated by Governor Sisolak in response to the COVID 19 pandemic. Projected 2050 traffic levels under a no-build scenario is provided in Figure B-3.

Figure B-1: Existing AM Traffic Congestion (January 2021)

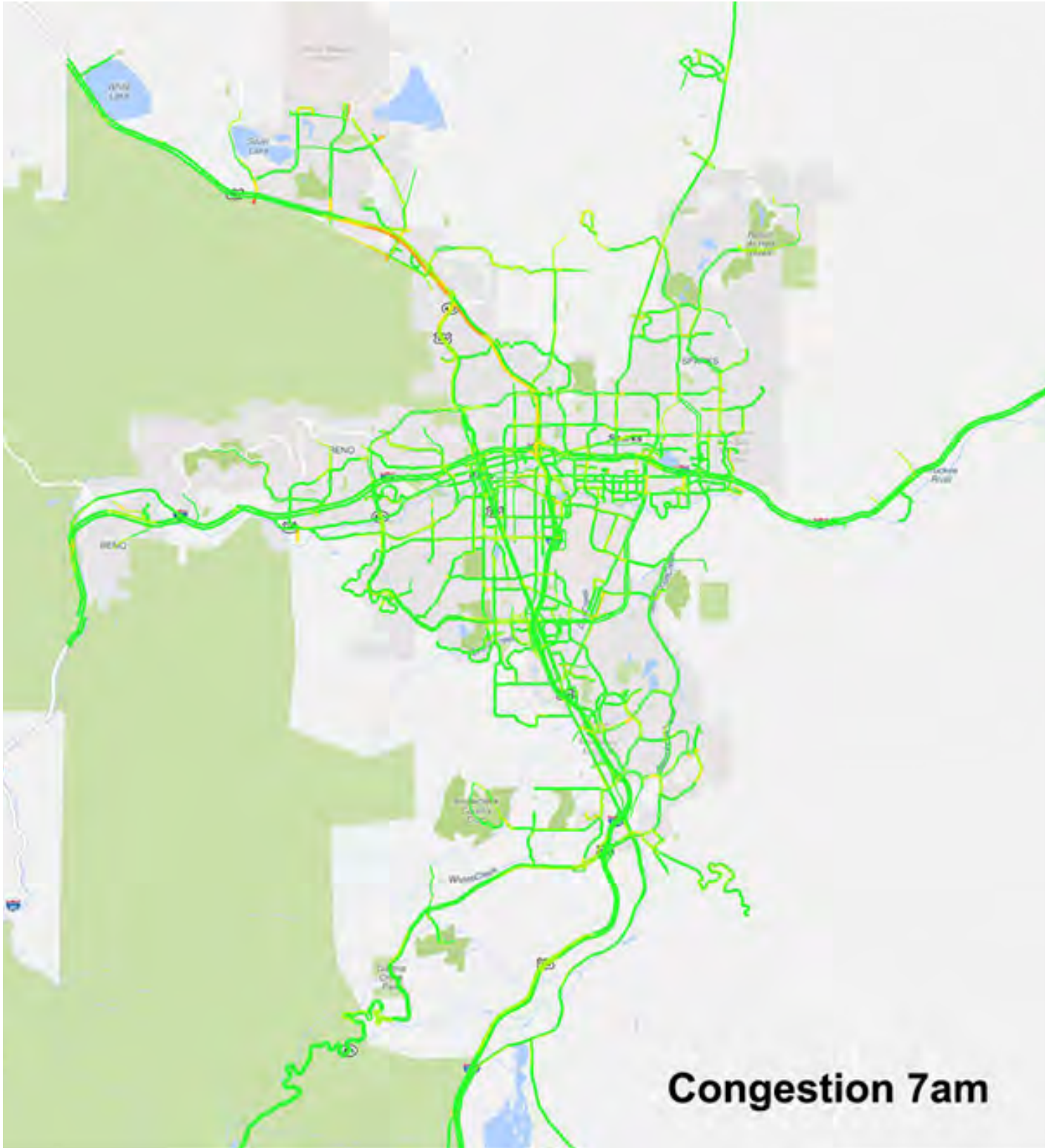


Figure B-2: Existing PM Traffic Congestion (January 2021)

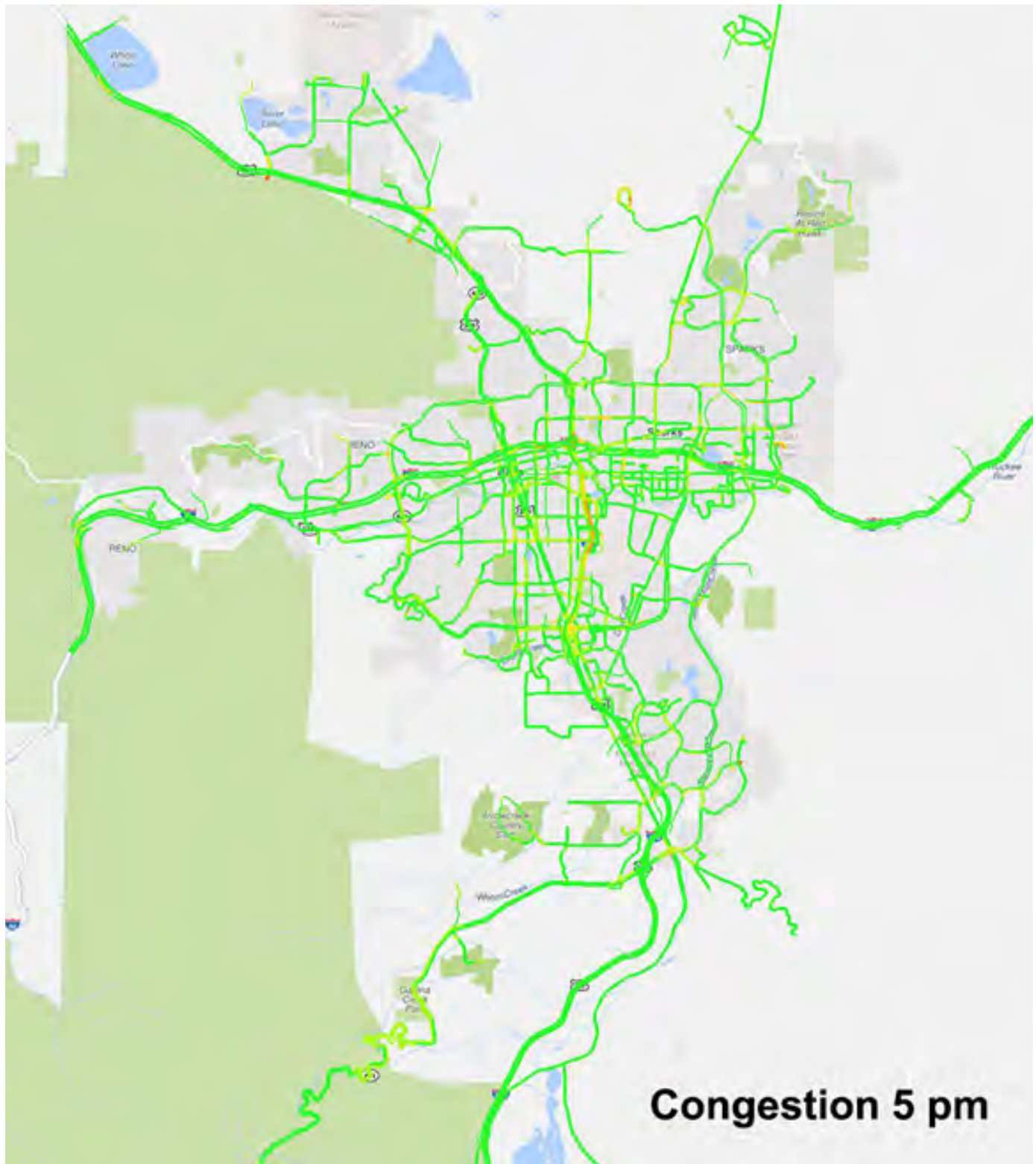
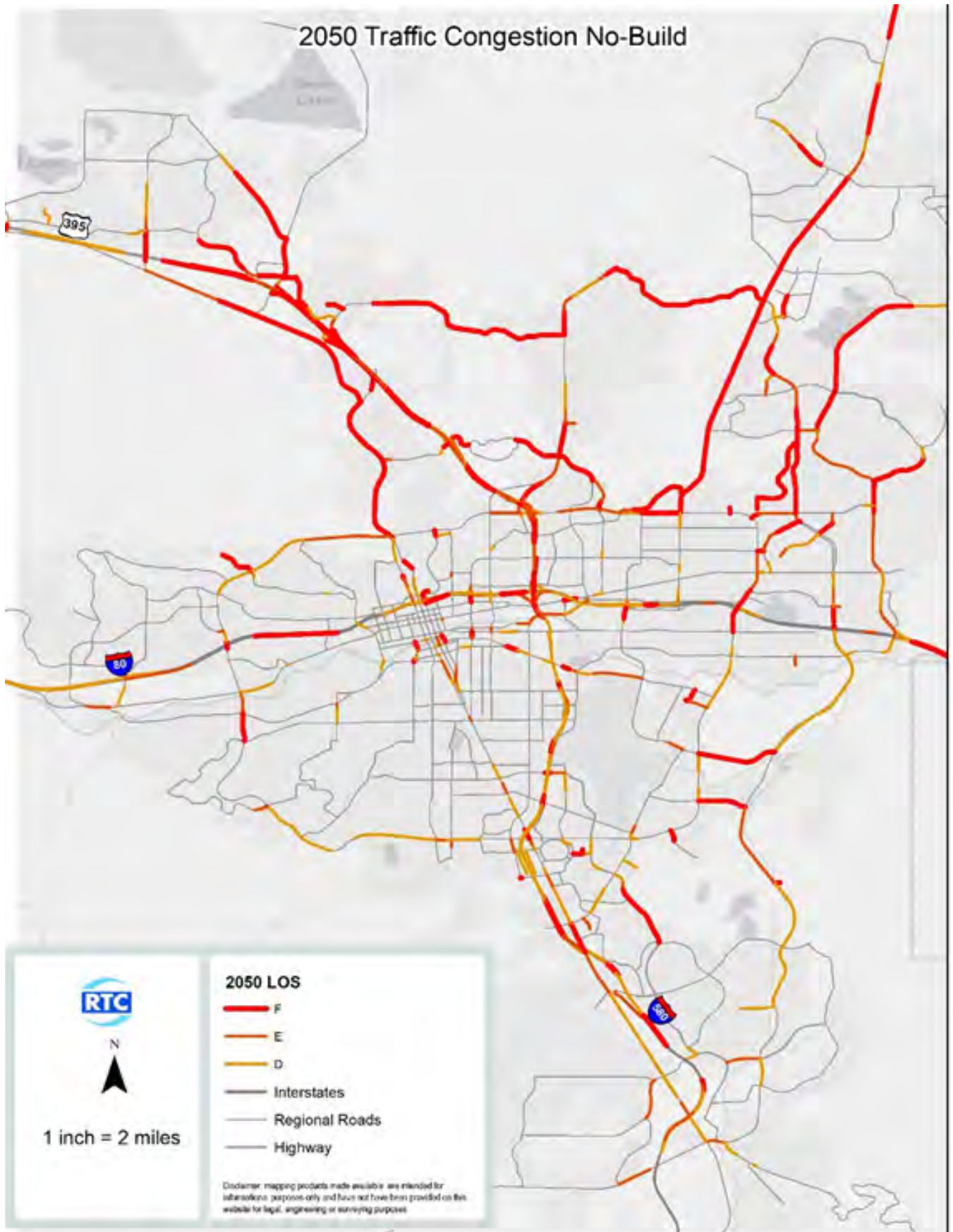


Figure B-3: Projected 2050 Peak Period Level of Service



4. DEVELOP PERFORMANCE MEASURES

The FAST Act continues the legislation authorized under MAP-21, which created a data-driven, performance-based multimodal program to address the many challenges facing the U.S. transportation system. Performance management will lead to more efficient investment of transportation funds by focusing on national transportation goals, increasing accountability and transparency, and improving decision-making. This section describes the performance measures and targets to be used in assessing system performance. RTC will continue to develop annual reports to track progress toward achieving these targets and will continue to gather additional community input into the transportation planning process.

The U.S. Secretary of Transportation, in consultation with states, MPOs, and other stakeholders, established national performance measures for several areas: pavement conditions and performance for the Interstate and National Highway System (NHS), bridge conditions, injuries and fatalities, traffic congestion, on-road mobile source emissions, and freight movement on the Interstate System.

States, in coordination with MPOs, set performance targets in support of those measures, and state and metropolitan plans describe how program and project selection will help achieve the targets. The RTC has collaborated with the FHWA Nevada Division Office, the Nevada Department of Transportation (NDOT), and other stakeholder jurisdictions and agencies to develop performance measures.

The national performance goals for federal highway programs initially established in MAP-21 include the following:

- **Safety** – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- **Infrastructure condition** – To maintain the highway infrastructure asset system in a state of good repair.
- **Congestion reduction** – To achieve a significant reduction in congestion on the NHS.
- **System reliability** – To improve the efficiency of the surface transportation system.
- **Freight movement and economic vitality** – To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.

- **Environmental sustainability** – To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- **Reduced project delivery delays** – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

The national transportation goals that have been identified are contained in Chapter 12 – Monitoring Implementation and Performance identifies. Also identified is how these national goals link to the RTP goals and applicable performance measures. The zero fatalities goal and crash reduction goals are consistent with the Nevada Strategic Highway Safety Plan.

5. INSTITUTE SYSTEM PERFORMANCE MONITORING PLAN

MAP-21 also provided a framework for linking goals and performance targets with project selection and implementation. Performance plans will track the progress toward achieving these targets and will be used to facilitate a community dialog about the track record of the RTC's transportation program.

RTC develops the following performance plans:

- Metropolitan (Regional) Transportation Plan, to be updated every four years, which will include a discussion of:
 - Anticipated effects of the improvement program toward achieving the performance targets,
 - How investment priorities are linked to performance targets
- Annual Metropolitan System & Transit Performance Report, which will include:
 - Evaluation of the condition and performance of the transportation system
 - Progress achieved in meeting performance targets
 - Evaluation of how transportation investments have improved conditions
- Transit Asset Management Plan
- Public Transportation Safety Plan

These performance plans will inform the congestion management process, which will be ongoing throughout the life of the RTP.

As projects in the five-year Regional Transportation Improvement Plan (RTIP) are completed, the CMP framework and evaluation criteria will be used to select projects from the RTP for inclusion in future years of the RTIP and future updates of the RTP. The CMP evaluation criteria for safety, congestion, and multimodal integration are part of the RTP performance measures that will be reported in the Annual Metropolitan System Performance Report.

availability of data in development of the evaluation criteria.

- RTP Guiding Principles are to promote:
 - Safe and healthy communities
 - Economic vitality and innovation
 - Sustainability
 - Increase travel choices
- RTP Goals
 - Improve and promote safety
 - Integrate all types of transportation
 - Promote healthy communities and sustainability
 - Promote and foster equity and environmental justice
 - Integrate land use and economic development
 - Manage existing systems efficiently
 - Enhance regional connectivity
 - Improve freight and goods movement
 - Invest strategically
 - Engage the public and encourage community involvement

6. IDENTIFY & EVALUATE STRATEGIES

RTC gathered information about priorities for operational strategies and capacity improvements from stakeholders, the general public, and partner agencies. This included the 2050 RTP Agency Working Group, Inter-County Working Group, RTC Technical Advisory Committee, and RTC Citizens Multimodal Advisory Committee. Input was gathered at meetings of the committees listed above, as well as at RTC Board meetings. Survey were made available online and public feedback was obtained through a series of several outreach events. The evaluation criteria were developed based on the guiding principles and goals (see list below and Chapter 1 of the RTP for more details) for the RTP, which emerged from the public and agency participation process. RTC also considered national performance measures and the

7. IMPLEMENT SELECTED STRATEGIES AND MANAGE TRANSPORTATION SYSTEM

The RTP project prioritization framework is a crucial element in the CMP. The projects identified in the 2050 RTP were compiled from a variety of sources, including:

- The 2040 RTP (developed in 2017)
- Corridor plans and studies such as the South Meadows Multimodal Transportation Study, University Area Transportation Study, and other corridor plans
- Road Safety Assessments and Safety Management Plans
- Community workshops and other public comments
- A series of online surveys
- Input from local governing bodies
- Input from the 2050 RTP Agency Working Group, RTC Citizens Multimodal Advisory Committee, RTC Technical Advisory Committee, and RTC Regional Road Impact Fee Advisory Committee.

After all project suggestions were reviewed for feasibility and any inconsistencies, each project was evaluated based on a series of criteria developed in support of the RTP Guiding Principles and CMP.

Projects were distributed into one of the following four categories in an effort to establish a basis for comparison amongst similar project types.

- Freeway projects
- Capacity projects (widening or expansion of existing roadways, inclusive of multimodal amenities where feasible and appropriate)
- New roadways
- Multimodal projects (transportation infrastructure improvements exclusive of new capacity)

The framework described in the following sections was developed to assist in the prioritization process for regional roadway projects. It provided input and data for the RTC Board to consider during the project evaluation and selection process. It is important to note that a mathematical formula did not provide the final determination on project rankings and that professional judgement and community/agency staff input was considered by the RTC staff and Board in making final recommendations and decisions. Separate evaluation frameworks were applied to projects on existing roadways and construction of new roads. The factors for evaluating projects on existing roadways consists of the criteria below.

Evaluation Criteria for Projects on Existing Regional Roads

- Safety – crash frequency, rate, severity
- Congestion – travel demand model existing/forecasted level of service (LOS)
- Bike/Pedestrian Score – criteria in Bicycle & Pedestrian Master Plan
- Equity
- Project Readiness
- Regional Plan Land Use Priority – Truckee Meadows Regional Planning Agency (TMRPA) tier system
- Pavement Condition Index (PCI)/ Bridge Rating
- Flood Mitigation
- Private/Other Agency Funding
- Public Input
- Agency Working Group Input

For analysis of new roads, a different methodology was developed because safety, congestion, pavement condition, and other data used to evaluate projects on existing roads would not be available for new construction.

RTC developed cost estimates for each proposed new road project, identified the projected average daily traffic (ADT) that would use the road, and developed an estimate for cost per ADT.

Evaluation Criteria for New Road Construction

- Average Daily Traffic
- Cost per ADT
- Project Readiness
- Regional Plan Land Use Priority – TMRPA tier system
- Private/Other Agency Funding
- Flood Mitigation
- Emergency Response/Fire Evacuation
- Public Input
- Agency Working Group Input

Methodology

Safety

An analysis of all regional roads and freeways was conducted based on the three most recent years of crash data available from the Nevada Department of Transportation. Projects were scored based on a combination of crash frequency, rate, and severity.

Traffic Congestion

Traffic congestion is derived from 2020 (existing) traffic level of service as well as from the 2050 “no build” level of service obtained through the RTC Travel Demand Model.

Bicycle & Pedestrian Score

The bicycle and pedestrian score for each project was provided by the rating identified in the RTC Bicycle and Pedestrian Master Plan when applicable.

Project Readiness

This criteria is intended to reflect the analysis, community input, and vetting of projects that occurs through other stages of the planning process. It recognizes a commitment to completing a project that has progressed to the design phase, and the level of community support for projects that have been adopted into the Program of Projects (POP) or Regional Transportation Improvement Program (RTIP).

Equity

Higher priority is given to the extent to which a project improves transportation in an underserved community. Additional emphasis on equity in the 2050 RTP was requested during the RTC Citizens Multimodal Advisory Committee, and the following factors were considered in determining the level of equity a project has.

Is the project located in or in proximity to the following areas:

- Food desert as identified by the USDA
- Census track with higher than Washoe County average proportion of disabled residents
- Census track with higher than Washoe County average proportion of low income households
- Census track with higher than Washoe County average proportion of zero vehicle households
- Census track with higher than Washoe County average proportion of minority residents
- Census track with higher than Washoe County average proportion of residents age 65 and older
- Within ¼ mile of a school or hospital

Regional Land Use Tier

This criteria is based on the tiered land use system identified in the TMRPA Regional Plan. The policies in the Regional Plan support investment in the urban core.

Pavement/Bridge Condition

This criteria recognizes the benefit of investing in the state of good repair for regional roads and bridges. Projects with a lower pavement condition index (PCI) or bridge rating receive higher priority.

Flood Impact

Projects that address a critical need for flood mitigation are given a higher priority. An example of this would be road access that has cut off by flood waters for extended period. Other projects that are identified as Truckee River Flood Projects are given medium priority.

Private or Other Agency Funding

The purpose of this criteria is to recognize that the opportunity to maximize RTC revenues through public-private partnerships or financial participation of other agencies is a benefit to the region.

Criteria for New Road Construction

For construction of roads on new locations, the following additional criteria were evaluated.

- Projected ADT
- Cost per ADT
- Emergency Response/Fire Evacuation - This need was identified by both members of the public and the Truckee Meadows Fire Protection District. Proposed roadways that improve regional connectivity or provide a secondary route to isolated areas received higher priority. Projects that provide improved access within a neighborhood or community received medium priority.

- Projects Identified in a Plan or Study - Similar to Project Readiness for projects on existing roads, this criteria is intended to reflect the analysis, community input, and vetting of projects that occurs through other stages of the planning process. It recognizes a commitment to completing a project that has been identified as a recommendation in an individual corridor or area study, apart from the Regional Transportation Plan (RTP).

Following the project screening, RTC staff developed a draft fiscally constrained project listing for review by the RTC Agency Working Group, RTC advisory committees, and ultimately the RTC Board. The list was also provided for public comment prior to finalizing the RTP.

8. MONITOR STRATEGY EFFECTIVENESS

As described in the RTP, RTC monitors impacts of capacity projects on an on-going basis. In addition to the Annual Report, RTC also develops before and after studies of specific projects that currently address safety and operations impacts. The regional travel demand model, combined with updates from our traffic count program, will further be used to monitor impacts on regional traffic congestion. An additional tool is the creation of annual progress reports to document implementation of the RTP.

The performance measures in the RTP, which will be tracked on an annual basis, are consistent with the CMP evaluation criteria. Monitoring crash and injury data, construction of multimodal elements such as sidewalks and bicycle facilities, and changes in travel delay will assist RTC in continuously evaluating the suitability of projects in the RTP and RTIP for effectiveness.

APPENDIX F – REVENUE ASSUMPTIONS

As part of the development of the 2050 Regional Transportation Plan, federal regulations require the total cost of projects in the financially constrained list of projects not exceed the total revenues reasonably expected to be available to the Washoe County Region over the life of the plan. This document outlines the assumptions used to project these revenues for the Washoe County Region through the year 2050.

Under rules and direction from FHWA and FTA, the financial constraint of the RTP must be shown in Year-of-Expenditure (YOE) dollars. Converting all costs and revenues to YOE dollars assumes a more accurate depiction of all costs, revenues and deficits associated with long-range transportation plans.

ASSUMPTIONS

This document describes the assumptions the Regional Transportation Commission of Washoe County adopted to meet the regulatory requirements as it concerns federal, state, regional and local funding sources and the distribution and use of revenue expected from these sources.

Once the assumptions were determined, an estimate of how much revenue was available for debt service, street and highway routine maintenance and operations, system preservation and highway modernization, facilities, transit and other infrastructure and overhead cost and reserves was developed.

While it is difficult to forecast transportation revenues over a long period especially in this time of uncertainty; when developing these projections RTC examined and relied on historical growth trends of current revenue sources attributable to the Reno-Sparks urban area. RTC also considered current conditions, the effects of inflation, changes in population and made thoughtful decisions about what is expected to occur in this region over the next thirty years. Using these indicators as a base; it seems reasonable to assume that there will be increases in all revenue sources over this plan period and that the program of projects adopted will not exceed these reasonable foreseeable future revenues. Since these plans are reviewed every three to four years, timely adjustments can be addressed when and as needed.

These assumptions were developed with input and collaboration from many parties including the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Nevada Department of Transportation (NDOT), and Nevada MPOs.

FUNDING SOURCES

The Reno-Sparks Regional Financial Plan includes multiple funding sources. The timing of this plan happens to coincide with the beginning of a new Presidential administration, and there is a degree of uncertainty regarding the types of transportation programs as well as associated funding that will continue under the current administration. There continues to be concern about maintaining the current revenue streams at the federal and state levels. Money that funds the Federal Highway trust fund (includes Highway Account and the Mass Transit Account) primarily comes from gas tax which has not been increased since 1993. Fuel consumption is declining primarily due to more fuel efficient vehicles. In Washoe County, the fuel tax revenue, which is dedicated by law for street and highway purposes, continues to increase year-over-year due to RTC-5 (Senate Bill 201) indexing that was implemented in January 2010. Conversely, the primary source of revenue for transit is the local sales tax which fluctuates with changes in the economy.

Initiatives having the biggest impact on the revenue assumptions are in three critical categories; a future surface transportation bill, fuel indexing and the Regional Road Impact Fee (RRIF) program.

Fixing America's Surface Transportation (FAST) Act

The Fixing America's Surface Transportation (FAST) ACT was set to expire in September 2020, but has been extended to the end of federal fiscal year 2021 through a continuing resolution (CR) authorized by Congress. The FAST Act authorized \$305 billion over fiscal years 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. Talks of a comprehensive funding package has been on-going for the last few years. While a consensus has not been reached on a final bill, some short-term funding methods have been implemented beyond the FAST Act. It is expected that a long-term solution will be passed in 2021 to maintain current funding levels. Any changes in programs or funding levels provided in the next reauthorization legislation will be incorporated into updated financial assumptions in the next major plan update in four years.

At the federal level, there is a significant shortfall of funding. This coupled with recent changes, in the regulatory framework means that RTC must use local resources more sparingly. This financial plan reflects the most current data available at the time these revenue assumptions were prepared.

Revenue projections for federal transportation programs were made based on the structure of federally funded programs identified through the FAST Act. The base year for revenue projections in this document is FY 2020. The FAST Act provided for an annual increase of approximately two percent per year across the board for all funding categories over the five-year life of the bill; that same increase is assumed over the next 30 years.

Indexing

A strong revenue component of the plan is that local fuel tax rates have been adjusted to inflation when Senate Bill 201 (indexing of local, State and Federal fuel taxes) was approved by the Legislature in June 2009. The Street and Highway program received a substantial revenue boost from this initiative. The purpose is to recapture the lost purchasing power on the federal and state fuel taxes being paid in Washoe County by indexing the federal and state taxes on gas, alternative fuels and diesel. Collections of the producer price indexed (PPI) fuel taxes began on January 1, 2010. The RTC received the first proceeds in March 2010. It has also allowed the Commission greater flexibility in programming capital improvements and maintenance activities by easing cash flow constraints.

Regional Road Impact Fee (RRIF)

Beginning in 1995, RRIFs have been levied on all new development to capture the costs of capacity consumed by new traffic on the defined Regional Road System. Since the adoption of the previous plan, development has continued to steadily increase, and the RRIF program is anticipated to alleviate a portion of the cost of necessary transportation infrastructure improvements to support that development.

FINANCIAL ASSUMPTIONS – REVENUE SOURCES

Revenue sources relevant to this section are those received from the federal government; received from the State of Nevada; those generated by Regional and Local fuel and sales tax; and other revenue sources related to both the street and highway and the public transportation programs.

STREET AND HIGHWAY REVENUE

Federal Funding Sources

As previously stated, through the recently expired FAST Act, core federal programs including the National Highway Performance Program (NHPP), Surface Transportation Block Grant (STBG), Highway Safety Improvement Program (HSIP),

Congestion Mitigation and Air Quality Improvement (CMAQ) and the Transportation Alternatives Set-Aside program are assumed to grow at a rate of two percent annually. The RTC of Washoe County is projected to receive a proportionate share of the amount allocated to Nevada based on taxable gallons of gasoline/gasohol fuel sold. Based on population, Washoe County's percentage is assumed at 15.2%.

State Highway Fund Revenue

Projections for future state contributions were based on historic data and forecast trends. RTC staff met with NDOT staff during the development of this plan to review the assumptions included in this document. Based on this and earlier discussion with NDOT staff, with the exception of gas and diesel tax (see fuel tax section) all state revenue are also assumed to grow at a rate of two percent annually. The principal sources of state transportation funding are:

- Gas Taxes
- Special fuel (diesel) taxes
- Vehicle Registration Fees
- Motor Carrier Fees
- Driver's License Fees
- SBS Petroleum Cleanup funds

Fuel Tax (Local, State and Indexed)

Per NRS this revenue source must be used exclusively for street and highway projects. The indexed portion of this revenue source was approved by Washoe County voters in November 2008. Key assumptions used to forecast local gas and state gas tax (including diesel) are as follows:

- Continued adjustments to gas tax to recapture buying power lost to inflation at an average annual change in CPI of 3%
- Gasoline use will increase proportionate to population growth based on Washoe County consensus forecast
- Per Capita consumption of gas changes at a rate consistent with a combination of the SAFE Average Fuel Economy (SAFE) standard and the Corporate Average Fuel Economy (CAFÉ) standard over the 30 year period.
- Vehicle turnover rate is projected at .055. The rate used accounts for baby boomers retiring and downsizing of vehicles per household.

Sales and Use Tax

- 1/8 % dedicated to either Roads or Transit as approved by voters in 2002. By policy, the RTC Board has authorized a 50/50 split between Roads and Transit
- Based on historic trends, revenue is expected to grow at an annual rate of 3% for the base year of 2020

PUBLIC TRANSPORTATION REVENUE

Federal Funding Sources

FTA Urbanized Area Formula Program (5307)

As previously mentioned, with the FAST Act extension, some short-term funding methods were implemented and it is expected that a long-term solution will be put in place to maintain current funding levels. Some modifications could be made to this program but the basic structure is expected to be maintained. The FTA provides these funds to urban areas to support public transportation planning, capital and operating projects.

These funds are projected to grow at a rate of 2% annually. For this plan, it is assumed that 70% of these funds will be used for operating assistance and 30% for capital assistance.

FTA Bus and Bus Facilities Program (5339)

Under the FAST Act these funds were put in place to replace, rehabilitate and purchase buses, vans and related equipment and to construct bus-related facilities. Funding was provided through formula allocations and competitive grants. Under the FAST Act, two discretionary components were added to this program: A bus and bus facilities complete program based on asset age and condition, and a low or no emissions bus deployment program. This program is assumed to continue as structured under the FAST Act. These funds are projected to grow at a rate of 2% annually.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

CMAQ funds can only be used for projects that reduce, delay or make significant improvements to overall regional air quality. These funds can be used for both capital and operating assistance and for both street and highway and transit projects. These funds are projected to grow at a rate of 2% annually. These funds are flexed between the transit and road program based on the projects that support the purpose of this funding category requirement.

STATE REVENUE

All current funding for public transportation is generated at the federal, regional and local levels with a very small amount from state resources.

REGIONAL REVENUE

Sales and Use Tax

- 1/4 % dedicated to Public Transportation as approved by voters in 1982
- 1/8 % dedicated to either Roads or Transit as approved by voters in 2002. By policy, the RTC Board has authorized a 50/50 split between Roads and Transit
- Based on historic trends, revenue is expected to grow at an annual rate of 3% for the base year of 2020

Passenger Fares

- Fares will be continually evaluated based on current performance levels before implementing a new fare
- This plan includes a slight increase in Fare Revenue annually based on a projected increase in ridership

Other Revenue Sources

- Other revenue sources include bus advertising revenue; which is calculated based on a fleet of 71 active coaches with a 2.1% annual growth rate
- Other revenue sources also include rental income.

APPENDIX K – COORDINATED HUMAN SERVICES
PUBLIC TRANSPORTATION PLAN
EXECUTIVE SUMMARY

To view the full document, go to http://bit.ly/RTC_CTPReport.

**Washoe County
Coordinated Human Services
Public Transportation Plan Update**

INTRODUCTION

The Regional Transportation Commission of Washoe County (RTC) has contracted with LSC Transportation Consultants, Inc. (LSC) to revise and update its Coordinated Human Services Public Transportation Plan (CTP). This is an opportunity to identify unmet senior and disabled transportation needs, reduce duplication of services, and improve the coordinated transportation system for Washoe County, Nevada which includes the cities of Reno and Sparks. RTC's last Coordinated Human Services Public Transportation Plan was developed in 2015 and while the plan is due for an update every four years, this update is being completed in alignment with RTC's 2050 Regional Transportation Plan.



The study began by developing an understanding of the local community and the existing transportation services in Washoe County. Two Interim Reports were prepared as part of the planning process. The information from the two Interim Reports was then integrated into a Draft Report for review and approval.



STAKEHOLDER INPUT AND PUBLIC OUTREACH

Public input is an important part of developing a Coordinated Human Services Public Transportation Plan that meets the needs of the community. While in-person meetings and open houses would have been the preferred method to obtain public feedback, due to Covid-19 restrictions telephone and virtual engagement platforms were used.

Stakeholder Questionnaire and Interviews

One of the first tasks of this study was to identify and contact stakeholders. Using the list of stakeholders from the previous CTP as a starting point, stakeholders who represent the broad composition of human services agencies, non-profits, human service transportation providers, medical providers, veteran's services, and

transportation network companies were contacted and asked to participate in the study. The stakeholder questionnaire asked participants to identify current and future unmet transportation needs, as well as existing coordination efforts and ideas for improving coordination.

Identified unmet transportation needs included:

- ➔ Lack of Affordable Transportation
- ➔ Need for Door-to-Door or Door-through-Door Service
- ➔ Limited Service Area
- ➔ Lack of Wheelchair Accessible Vehicles
- ➔ Advanced Reservation Requirements
- ➔ Limited service hours (need for 24/7 service)

Identified coordination issues included:

- ➔ Lack of information about services
- ➔ Difficulty matching resources with needs of the passenger
- ➔ Agencies are focused on their own clients and services

The 2015 Coordinated Transportation Plan identified a number of client services transportation gaps through discussions in public meetings and from other sources. Upon comparison, many of the issues raised by the public as part of the 2015 CTP still remain, including:

- ➔ Affordability of transportation
- ➔ Expanded service area boundaries and service hours
- ➔ Need for additional help to/from the vehicle
- ➔ Reservation requirements
- ➔ Need for a centralized information directory

Community Transportation Survey

As part of an effort to obtain input from Washoe County residents and stakeholders, an online community survey was created. The survey was publicized and distributed through a variety of means, and a total of 155 survey responses were received. Key findings from the survey included:

- ➔ Nearly 62 percent of respondents are not able to drive and do not possess a driver's license.
- ➔ Approximately 65 percent of those surveyed do not have a personal vehicle available for their use.
- ➔ Approximately 48 percent of respondents find themselves not having a reliable form of transportation when needed.
- ➔ About 36 percent of respondents indicated that they have a mobility limitation that limits their ability to walk to or board a vehicle without assistance.
- ➔ Respondents were given a list of current transportation options and asked to select all of the services that they currently use. Taxis, Uber, and Lyft services are used the most frequently (48 percent), followed by RTC ACCESS paratransit services (42 percent), and RTC RIDE fixed-route services (30 percent).



- ➔ Respondents were asked to indicate the primary purpose for travel when they are unable to find a ride. Approximately 59 percent of respondents stated that they most consistently find themselves without a ride to go shopping, followed by 58 percent who need a ride to and from medical appointments.
- ➔ Respondents were asked to indicate what deters them from using transportation services such as RTC, rideshareing, and other services. Approximately 42 percent of respondents answered that services are too expensive followed by 40 percent who mentioned that they cannot walk far enough to access services, 33 percent who said they are apprehensive or fearful of using the services, and 28 percent who answered that they have personal access to transportation through family.

POTENTIAL COORDINATION STRATEGIES

Building upon the positive coordination efforts recognized by stakeholders, specific strategies to enhance coordination and improve transportation services based identified unmet needs were developed. The following lists the advantages and challenges associated with each potential coordination strategy.

| Local Coordinating Council | Microtransit | Subsidized Transportation Network Companies | Expand RTC's Washoe Senior Ride Program |
|---|--|---|---|
| <ul style="list-style-type: none"> • Advantages: <ul style="list-style-type: none"> • Forum for setting service and coordination priorities • Key stakeholders develop recommendations to RTC for 5310 program funding • Resolve coordination issues • Identify and overcome barriers to coordination • Challenges: <ul style="list-style-type: none"> • Requires an organization to be responsible for forming and administering the LCC • Requires participation by all funding agencies and transportation providers | <ul style="list-style-type: none"> • Advantages: <ul style="list-style-type: none"> • Smaller vehicles to serve lower passengers per hour • Lower operating cost than traditional transit • Effective when connecting to regional services • Serves everyone, not limited to elderly or individuals with disabilities • Challenges: <ul style="list-style-type: none"> • Not effective in very low-density areas or longer trips • Many examples have low productivity and high cost per passenger-trip • May require alternate means of scheduling trips • Fare payment must allow for seamless transfers | <ul style="list-style-type: none"> • Advantages: <ul style="list-style-type: none"> • May be cost-effective depending on density and trip lengths • Challenges: <ul style="list-style-type: none"> • Cost-effective in areas with sufficient demand • May require additional paratransit service • May require alternate means of scheduling trips • Potential regulatory issues in contracts with private companies including drug and alcohol testing • Lack of accessible vehicles | <ul style="list-style-type: none"> • Advantages: <ul style="list-style-type: none"> • Expands service beyond the area served by RTC ACCESS • Opportunity to use lowest cost option • Provides flexibility for users • Taxis have a fleet of accessible vehicles • Challenges: <ul style="list-style-type: none"> • Requires contracts with taxi companies and TNCs |



Expand RTC SMART TRIPS Program

- **Advantages:**
 - Provides additional opportunities for people with disabilities
 - Provides access to employment
 - May be a lower cost option for commuters with a disability
- **Challenges:**
 - Limited to commute trips
 - May require new accessible vehicles
 - Depends on multiple people with similar commutes

Volunteer Drivers

- **Advantages:**
 - Low cost option for difficult to serve trips
 - Flexibility in scheduling rides
- **Challenges:**
 - Relies on having sufficient number of volunteers
 - Potential insurance issues
 - May need coordinator for scheduling rides

Nonprofit Transportation Providers

- **Advantages:**
 - Provides options to meet range of needs
 - Opportunity to schedule rides on most cost-effective provider
- **Challenges:**
 - Possible insurance issues for shared trips
 - Functions best with a one-call center
 - Nonprofit agencies must serve passengers for multiple programs

Vehicle Sharing

- **Advantages:**
 - Reduces total number of vehicles required
 - More efficient use of vehicles
 - May reduce costs
- **Challenges:**
 - Reduces total number of vehicles required
 - More efficient use of vehicles
 - May reduce costs

One-Call/One-Click Center

- **Advantages:**
 - Single point of contact for users
 - Could enhance opportunities for regional connections
 - Basic capability for operating a call center exists in the region
 - RTC is currently the primary operator of paratransit services and could continue to provide the 'core' of services
 - Other providers could serve individuals with higher level of needs
 - Improved operational efficiency
 - Cost savings could be used for enhanced services
- **Challenges:**
 - Technology must be implemented for all providers
 - Requires detailed cost analysis for each provider
 - Requires mixing of passengers on vehicles

Expand RTC ACCESS Service Area

- **Advantages:**
 - Uses existing service operated by RTC
 - RTC has existing call center capability for reservations and scheduling
- **Challenges:**
 - Would increase demand and costs for RTC ACCESS paratransit
 - Would reduce RTC ACCESS productivity and increase average cost per passenger-trip
 - Could require increased capacity with additional vehicles
 - Requires an in-person evaluation to confirm qualifications
 - Would not serve seniors without disabilities. Would only serve people eligible for RTC ACCESS service who have completed the certification process.



IMPLEMENTATION PLAN

Chapter X of the report presents the implementation plan, which consists of three primary goals supported by the input provided by participants, including the general public, private and public entities, participating organizations, and local stakeholders.

Goal #1: Create a Local Coordinating Council

The first priority goal is to create a Local Coordinating Council (LCC). The LCC should have representation from RTC, each human services transportation provider, other human services agencies which serve people with transportation needs, local governments, and consumers. The LCC would have two primary functions. The first would be to facilitate coordination of transportation services, which may include identifying barriers to coordination and developing approaches to overcome the barrier, identifying opportunities to improve coordination, identifying service enhancements, and implementing the coordination strategies contained in this plan. The second role will be for the LCC to recommend program and funding activities to the RTC as part of the grant review processes.



Goal #2: Enhance Mobility and Accessible Transportation Options

Community input and the assessment of transportation needs identified ongoing issues and gaps in transportation service. These include the affordability of transportation for users, areas of Washoe County with limited transportation options, and the need for assistance for many users. Enhanced mobility options may include expansion of microtransit, extension of RTC RIDE service to new areas, and specialized transportation services. One of the roles for the LCC is to identify specific activities to enhance mobility and determine the priorities for funding enhanced services. RTC will continue to work with local transportation providers and human services agencies to identify opportunities to enhance service and provide funding to implement enhanced service options.



Goal #3: Establish a One-Call/One-Click Center

The primary recommendation in this plan is to form a one-call/one-click center. The center would provide a consolidated call reservation, scheduling, and dispatch function. It would also provide a central resource for customers' information about matching trip needs with available services so the customer can identify the best option for their trip. Implementation will require development of a user portal for online access to transportation services. All transportation services should be integrated into the one-call center. be made through the web portal or by telephone call to the one-call center. Depending on needs and eligibility, the individual would be scheduled on the most appropriate service. The scheduling/dispatch software should allow all vehicles operated by all transportation providers to be available for scheduling trips. By having access to all vehicles, there is a potential for gains in productivity and opportunities to enhance services.



Implementation Timeline and Potential Costs Summary

Table ES-1 outlines a potential implementation timeline for the goals and strategies. Of course, each step is dependent upon a number of factors including funding cycles and available local match to draw down Federal funds. Table ES-2 presents potential annual costs by year.

| Table ES-1: Implementation Timeline | | | | | |
|--|--------|--------|--------|--------|--------|
| Goals and Objectives | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Goal #1: Establish a Local Coordinating Council | | | | | |
| 1.1: Develop LCC Membership | | | | | |
| 1.2: Establish the LCC Structure, Mission, and Mobility Goals | | | | | |
| 1.3: Lead Coordinated Efforts to Address Mobility Goals | | | | | |
| Goal #2: Enhance Mobility and Accessible Transportation Options | | | | | |
| 2.1: Encourage Enhanced Transportation Services | | | | | |
| 2.2: Provide Funding for Enhanced Transportation Services | | | | | |
| Goal #3: Establish a One-Call/One-Click Center | | | | | |
| 3.1: Identify the Functions to be Included in the Center | | | | | |
| 3.2: Identify a Lead Agency | | | | | |
| 3.3: Develop a User Portal for Online Access | | | | | |
| 3.4: Integrate Transportation Services into the Center | | | | | |



| Table ES-2: Potential Costs by Year | | | | | |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Goals and Objectives | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Goal #1: Establish a Local Coordinating Council | | | | | |
| | \$8,000 to \$20,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 |
| Goal #2: Encourage Mobility and Accessible Transportation Options | | | | | |
| Enhanced Services | \$500,000 | \$500,000 | \$500,000 | \$500,000 | \$500,000 |
| Goal #3: Establish a One-Call/One-Click Center | | | | | |
| Initial Start-UP | | \$70,000 to \$100,000 | | | |
| Staffing (Annual Costs for 2 FTEs) | | | \$60,000 to \$100,000 | \$60,000 to \$100,000 | \$60,000 to \$100,000 |
| Expanding to Include Online Access | | | | \$50,000 to \$200,000 | \$10,000 |
| Project Management | | | | | \$50,000 to \$100,000 |
| Total Annual Cost: | \$508,000 to \$520,000 | \$575,000 to \$605,000 | \$565,000 to \$605,000 | \$615,000 to \$805,000 | \$625,000 to \$715,000 |





REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 8.1

From: Bill Thomas, Executive Director

Monthly verbal update/messages from RTC Executive Director Bill Thomas – *no action will be taken on this item.*



REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 8.2

From: Bill Thomas, Executive Director

Monthly update/messages from RTC Executive Director Bill Thomas on federal matters related to the RTC – *no action will be taken on this item.*

ATTACHMENT

A. Written report prepared by Cardinal Infrastructure and Thompson Coburn

Federal Update for RTC of Washoe County
Prepared by Cardinal Infrastructure and Thompson Coburn
February 19, 2021 Board Meeting
Prepared February 18, 2021

President Biden COVID Relief

President Biden released a \$1.9 trillion COVID relief proposal, which provides \$350 billion for state and local governments, as well as \$20 billion in relief “for the hardest hit public transit agencies.” Distribution methods were not proposed. The provision in the proposal states:

Protect the future of public transit. Safe and dependable public transit systems are critical for a robust and equitable economy recovery. The president-elect is calling for \$20 billion in relief for the hardest hit public transit agencies. This relief will keep agencies from laying off transit workers and cutting the routes that essential workers rely on every day while making these transit systems more resilient and ensuring that communities of color maintain the access to opportunity that public transportation provides.

In a conference call alongside the U.S. Conference of Mayors, we heard from Julie Rodriguez, Director of the White House Office of Intergovernmental Affairs and David Kamin, Special Assistant to the President and Deputy Director of the National Economic Council. David said urgent and bold action is needed to change the course of the pandemic and help our economy. These efforts will be accomplished under a two-pronged plan; the first, rescue, the second, recovery. The first step of the plan includes the \$20 billion for public transit, while the second, recovery, will be announced in February and include plans to make strong investment to boost our economy.

Congressional COVID Relief

On February 8th, the House Transportation and Infrastructure Committee released its budget reconciliation bill, providing \$30 billion in supplemental funding to public transit. As proposed, this funding is to remain available until September 30, 2024. The funding is available for operating expenses including payroll, to cover lost revenue, and the purchase of personal protective equipment, at 100% federal share. This funding is "not subject to any prior restriction on the total amount of funds available for implementation or execution of programs authorized under sections 5307, 5310, or 5311." The breakdown of the \$30 billion is as follows:

- \$26 billion for grants to recipients and subrecipients under the section 5307 Urbanized Area Formula up to a cumulative total of 130% of an urbanized area’s 2018 operating costs.
- An additional \$2.2 billion for recipients that need additional assistance to maintain operations to be allocated by the Secretary based on need.
- \$1 billion for new start and core capacity Capital Investment Grant (CIG) projects, proportionally provided to each recipient to all projects with existing full funding grant agreements that received funding in Fiscal Years 2019 or 2020 and are not in revenue service.
- \$250 million for small start CIG projects (the allocation of which is unclear)
- \$50 million for 5310 Enhanced Mobility of Seniors & People with Disabilities program.
- \$280.85 million for 5311 Formula Grants for Rural Areas.

On February 10th, the Committee held a markup of the bill, which resulted in the \$30 billion for public transit remaining as initially proposed. Once the House passes its budget reconciliation bill, anticipated to occur by the end of the month, it will move to the Senate for consideration and possible passage in early March. Since the legislative vehicle is budget reconciliation only a simple majority vote is required in the Senate for passage.

FTA and TSA Mask Mandate

The Center for Disease Control and Prevention (CDC) issued an Order establishing a Requirement for Persons to Wear Masks While on Conveyances and at Transportation Hubs. The CDC Order, which imposes a mask requirement for public transportation systems, rail, van, bus and motorcoach service providers, implements President Biden's Executive Order, "Promoting COVID-19 Safety in Domestic and International Travel." The Transportation Security Administration issued a (TSA's) Security Directive – Security Measures: Face Mask Requirements, implementing the CDC Order.

The Federal Transit Administration (FTA) has held stakeholder briefings to discuss the implementation of the Order and Security Directive, in addition to the publication of Frequently Asked Question's on its webpage.

Low-No Grant Funding

FTA announced the availability of \$180 million in competitive grant funds for the Low or No Emission (Low-No) Grant Program. Applications are due by April 12, 2021. There are significant differences in this notice of funding opportunity (NOFO) compared to the one issued under the previous Administration.

The FY 2021 NOFO encourages projects to include environmental justice goals, workforce development activities, and additional climate benefits. As secondary review criteria, the FTA Administrator will consider Departmental objectives, including applications that:

- Provide other air quality benefits as part of the application review;
- Advance the Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis;
- Prioritize benefits to environmental justice communities; and
- Include "workforce development activities that improve the technical expertise of America's transit workers."

The NOFO no longer includes preferences for projects located in an Opportunity Zone, or projects that include a higher local financial commitment. Furthermore, while last year's notice made no mention of autonomous vehicles, the FY 2021 NOFO discusses applications that include "autonomous vehicles or other innovative motor vehicle technology."

Senate Appropriations

The Democratic Majority of the Senate Appropriations Committee released updated information on the makeup of its subcommittees. For the Subcommittee on Transportation, Housing and Urban Development, and Related Agencies, Senator Schatz (D-HI) will serve as its new Chairman.

Senator Schatz as Chairman of the Subcommittee is expected to focus on and direct funding to strong investments in a zero-emission future. The Senator is one of the strongest advocates for addressing the climate crisis; serving as chair of the Senate Democrats' Special Committee on the Climate Crisis. He is also a member of the Senate Commerce Committee and Senate Banking Committee (which has jurisdiction over the transit program).

U.S. DOT Leadership and Personnel

President Biden announced the nomination and appointment of key U.S. DOT officials, including:

Polly Trottenberg, Deputy Secretary
Christopher Coes, Principal Deputy Assistant Secretary for Transportation Policy
Robert Hampshire, Principal Deputy Assistant Secretary for Research and Technology
Robin Hutcherson, Deputy Assistant Secretary for Safety Policy
Michael Shapiro, Deputy Assistant Secretary for Economic Policy
Victoria Baecher Wassmer, Deputy Assistant Secretary for Finance and Budget

Dani Simons, Assistant to the Secretary and Director of Public Affairs
Sophie Shulman, Deputy Chief of Staff for Policy
Nuria Fernandez, Deputy Administrator, FTA
Subash Iyer, Chief Counsel, FTA
Charles Small, Deputy Assistant Secretary for Intergovernmental Affairs
Mohsin Syed, Principal Deputy Assistant Secretary for Congressional Affairs (Senate)
Edward McGlone, Deputy Assistant Secretary for Congressional Affairs (House)
Allie Panther, White House Liaison

Secretary of Transportation Buttigieg

Secretary Pete Buttigieg has been confirmed by the Senate and is currently serving in the role of Secretary of Transportation. Background on his confirmation process includes a nomination hearing held by the Senate Commerce, Science, and Transportation Committee on January 21st. Buttigieg's written testimony provided themes of safety, infrastructure investments, economic development, and addressing the climate crisis. These priorities are echoed in President Biden's Build Back Better initiative and will remain front and center in policy developed by the White House and U.S. DOT.

With respect to the Administration's infrastructure investment priority, Buttigieg noted that conversations with Congress and departments "still need to be had" and that it is a "needed part of economic recovery." He also noted the multi-modal priority and the need to address the condition of the Highway Trust Fund so funding is more sustainable and predictable. Buttigieg stated that existing discretionary grant programs will be a "central part of building on the goal of enhancing infrastructure."

Several Senators questioned Buttigieg about how he would address the issue of funding. Buttigieg initially said "all options need to be on the table," but then specified that in the "short- to medium-term...could adjust the gas tax and [connect it to] inflation" and continue general fund transfers. These comments were later walked-back by a White House spokesperson, who said, "A variety of options need to be on the table to ensure we can invest in our highways and create jobs but increasing the gas tax is not among them." Furthermore, while noting privacy and technological concerns, Buttigieg remarked that a vehicle miles traveled user fee could also be a potential solution, especially given increases in vehicle gas efficiency.

On the topic of permitting delays and regulatory burdens, Buttigieg said, "Any time we can make federal processes more friendly for states or local or tribal partners, we should. When we find that anything is duplicative or burdensome, would welcome finding ways to streamline that, provided that we're meeting fundamental goals of those rules." Buttigieg made no mention of specific regulations but welcomed the opportunity to work with local leaders and Congress to address regulatory streamlining.

As for funding for various modes, including bicycles and walking paths, Buttigieg said "There are so many ways that people get around, and often I think we've had an auto-centric view that has forgotten historically about all the different modes." He said street designs should support cyclists and other modes, downtown businesses, etc. Buttigieg also addressed the Administration's action to address climate change, noting that U.S. DOT will play a big role in this initiative, with fuel economy standards, vehicle electrification, and charging station infrastructure as only several means to address the climate crisis.

Further, on the topic of emerging technologies, Buttigieg said, "We must make sure we are fast acting so we are prepared for everything automated vehicles will bring to our roads and our economy." Buttigieg is "enthusiastic about the opportunity" to work with the Committee on advancing automated vehicle legislation and expanding electric vehicle charging infrastructure and related manufacturing.

On Buy America, Buttigieg committed to ensuring strong standards are in place to increase domestic purchasing and ensure growth in domestic manufacturing. Buttigieg highlighted his support for investigating the exceptions that have emerged, including under the Transportation Infrastructure Vehicle Security Act, as well as the waiver process – he will look to "adjust, change, or rescind" provisions that offer waivers.

FTA Deputy Administrator

President Biden appointed Nuria Fernandez to serve as the Deputy Administrator for the FTA and is now the Acting Administrator. In addition to APTA Chair, Nuria Fernandez most recently served as General Manager and CEO of the Santa Clara Valley Transportation Authority. Under the Clinton Administration, Nuria served as Deputy and Acting FTA Administrator. Prior roles also include Chief Operating Officer of the New York MTA, Sr. Vice President of Design and Construction for the Chicago Transit Authority and the Washington Metropolitan Area Transit Authority, as well as Commissioner for the Chicago Department of Aviation.

We have been informed that the Administration's strategy is to appoint the intended Administrator as Deputy (which does not require Senate confirmation); then, nominate the Deputy as Administrator. Once the Senate confirmation process is completed, the next step will be to appoint a Deputy Administrator.

Presidential Executive Orders and Memoranda

Modernizing Regulatory Review

This memorandum directs the Office of Management and Budget (OMB) to produce recommendations for "improving and modernizing regulatory review." This effort will be in consultation with departments and agencies, including USDOT.

The memorandum states: *These recommendations should provide concrete suggestions on how the regulatory review process can promote public health and safety, economic growth, social welfare, racial justice, environmental stewardship, human dignity, equity, and the interests of future generations.*

Ensuring the Future Is Made in All of America by All of America's Workers

The Executive Order is intended to boost federal department and agency purchases of American-made products, thereby strengthening the U.S. manufacturing sector. The overarching policy is to: 1) Maximize the use of goods, products, and materials produced in, and services offered in the U.S.; 2) Procure goods, products, materials, and services from sources that will help American businesses; and 3) Promote an accountable and transparent procurement policy.

It directs U.S. DOT to consider "proposing any additional agency actions necessary to enforce the policy set forth [in this Order]." This includes using the terms and conditions of federal financial assistance to maximize the use of American made products and goods, consistent with applicable law. The Executive Order requires each agency to vest waiver issuance authority in senior agency leadership and also establishes a Made in America Office within the White House Office of Management and Budget, which will, among other activities, review and approve Buy America waivers.

The Order directs U.S. DOT to submit a report on its "implementation of, and compliance with [Buy America] ...and recommendations for how to further effectuate the policy set forth in section 1 of this order." It also directs the U.S. DOT to submit a bi-annual report on "the agency's analysis of goods, products, materials, and services not subject to Made in America Laws..."

Promoting COVID-19 Safety in Domestic and International Travel

This Executive Order advances action to require the use of masks on certain domestic modes of transportation, including airports, trains, intercity bus services, public transit, among others. The Executive Order states that the Secretary of Transportation “shall immediately take action, to the extent appropriate and consistent with applicable law, to require masks to be worn in compliance with CDC guidelines...” In consultation with federal departments and agencies, as well as state and local stakeholders, a set of recommendations will be developed and provided to the COVID-19 Response Coordinator.

Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis

This Executive Order mandates a review of agency actions between January 20, 2017 and January 20, 2021. The Executive Order also establishes an Interagency Working Group on the Social Cost of Greenhouse Gases. This Working Group includes the Secretary of Transportation, among other department, agency, and advisor members. The Working Group is charged with publishing an interim “social cost of carbon”, “social cost of nitrous oxide”, and “social cost of methane” policy, thereby providing estimates of the “monetized damages associated with incremental increases in greenhouse gas emissions.”

The Order revokes Trump-era NEPA guidance and numerous Trump Executive Orders, including Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects; COVID-19 Emergency by Expediting Infrastructure Investments and Other Activities; and Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects.

Climate Change Agenda

Climate change initiatives remain at the forefront of the congressional agenda, and consist of a variety of legislative efforts, including surface transportation reauthorization, infrastructure, tax credits, etc. A consensus on priority may now be more possible with Democratic control in the Senate.

The House has reauthorized the Select Committee on the Climate Crisis, which has jurisdiction to investigate “policies, strategies, and innovations to achieve substantial and permanent reductions in pollution and other activities that contribute to the climate crisis...”, but no jurisdiction to move legislation. The 116th Congress report of the Select Committee included transportation legislation to advance this mission. Similar to its charge under the previous Congress, the Select Committee will develop a report of policy recommendations, to be submitted to the House by December 31, 2022.

The House rules also provide that “the Chair of the Committee on Budget may adjust an estimate to exempt the budgetary effects of measures to prevent, prepare for, or respond to economic or public health consequences resulting from the COVID-19 pandemic...[or] climate change.” For example, this rule would permit the Committee to no longer factor in PAYGO (pay-as-you-go) for such measures, which is a budget rule requiring that tax cuts and mandatory spending increases in legislation be paid for by tax increases or cuts in mandatory spending. At this time, there are no clear parameters on what is eligible under this provision; however, public transit, congestion mitigation, and other issue areas may qualify.



REGIONAL TRANSPORTATION COMMISSION

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Metropolitan Planning Organization of Washoe County, Nevada

MEETING DATE: February 19, 2021

AGENDA ITEM 8.3

From: Kristina Swallow, Director NDOT

Monthly verbal update/messages from NDOT Director Kristina Swallow – *no action will be taken on this item.*