# 2050 **RTP – Regional Transportation Plan2025 Update,** *February 2025*

SCREEN-READER VERSION

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# Letter from the Executive Director

The Regional Transportation Commission of Washoe County (RTC) is pleased to present the 2050 Regional Transportation Plan Update (RTP). This RTP sets the course for transportation investment in our region over the next 25 years and includes projects and programs that can create economic opportunities, protect air quality, improve connectivity, increase mobility, and sustain a high
quality of life.

This RTP reflects our community’s long-range vision for transportation in the Truckee Meadows and
was developed in coordination with policy makers, elected officials, stakeholders, and the public.
I would like to thank the community, our regional partners and RTC staff for their commitment and participation during the planning process.

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*

# A Special Thank You

A special thank you to our regional partners who served on the Agency Working Group, Inter-
County Working Group, and the RTC staff who contributed to the development of this RTP!

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# Executive Summary: Introduction

This Regional Transportation Plan (RTP) fulfills federal and state legal requirements by establishing a 25-year vision for transportation improvements within the Truckee Meadows region, including short- and long-term strategies, prioritized projects, and a fiscally constrained roadmap for implementation. In addition to meeting the federal requirements for a regional transportation plan, this RTP also serves as the long-range transportation plan for purposes of compliance with state law through its utilization by the Truckee Meadows Regional Plan (the Regional Plan) developed by the Truckee Meadows Regional Planning Agency (TMRPA).

This RTP serves as the foundation for addressing the region’s current and future transportation needs, ensuring the safe, efficient, and sustainable movement of people and goods while supporting economic growth and improving quality of life. Additionally, this RTP, and the planning program it reflects, allows the region and its projects to be eligible for federal formula funding and to compete for federal discretionary grants.

As the designated Metropolitan Planning Organization (MPO) for Washoe County, the Regional Transportation Commission of Washoe County (RTC) is tasked with conducting continuing, cooperative, and comprehensive multimodal transportation planning for the Truckee Meadows region including the development of the RTP.

## The Truckee Meadows Region

The Truckee Meadows Region (the region) refers to the over 6,000 square mile area which includes all of Washoe County except the portion within the drainage basin of Lake Tahoe. To effectively address transportation need the unique dynamics of the region should be considered. One of the primary factors shaping transportation need is population growth. The recently adopted TMRPA 2024 Washoe County Consensus Forecast projects that Washoe County’s total population will grow from 515,085 in 2024 to 602,455 in 2044. This translates to an average of about 4,500 new residents per year. Given this expected population increase, an overarching function of this RTP is to plan for the needed growth of transportation infrastructure, programs, and services in order to retain high levels of connectivity and accessibility across the region.

## Regional Goals

This RTP outlines goals representing the desired state of the regional multimodal transportation system over the next 25 years. Federal law establishes seven national transportation goals, and MPOs are encouraged to align their long-range plans with these or develop equivalent goals, per United States Department of Transportation (USDOT) guidance. Additionally, ten federally required planning factors addressing priority community concerns must be integrated into the metropolitan transportation planning process.

This RTP includes nine unranked goals, representing the desired state of the region’s transportation future. The goals were developed based on federal requirements, national objectives, and input from stakeholders and the public. They identify priorities for the region and also guide the creation of objectives and evaluation criteria used to prioritize transportation projects. Linking project selection to these goals ensures the resulting projects can address the region’s transportation priorities. The nine RTP goals below are explored in detail through the goal chapters of this RTP.

RTP Goal #1: Safety

RTP Goal #2: Maintain Infrastructure Condition

RTP Goal #3: Congestion Reduction

RTP Goal #4: System Reliability and Resiliency

RTP Goal #5: Efficient Freight Movement and Economic Vitality

RTP Goal #6: Equity and Environmental Sustainability

RTP Goal #7: Reduced Project Delivery Delays

RTP Goal #8: Accessibility and Mobility

RTP Goal #9: Integrated Land-Use and Economic Development

## Financial Element

This RTP determines if proposed transportation investments including roadways, transit, bike, pedestrian, and technology projects and services, are feasible and can be funded within the next 25 years. It includes a financial plan that projects future revenues, adjusts for inflation, and suggests additional funding strategies, if needed. Revenue estimates consider growth, inflation, and changes in fuel efficiency, using Year-of-Expenditure (YOE) dollars for accuracy.

Funding sources include federal programs under the Infrastructure Investment and Jobs Act (IIJA), state and local taxes, and local developer fees. While revenues are expected to grow modestly, funding gaps remain, especially for public transit projects.

Project prioritization is critical to ensuring funds are allocated to those transportation investments that best position the region to meet the RTP’s goals. Project prioritization is based on input from stakeholder agencies as well as the RTP goals and objectives. Transit system needs are identified through a short-range transit plan which aims to maintain current services while identifying future opportunities, such as extending bus lines and improving connections.

Funding does not exist for all projects identified through the RTP process, necessitating an unfunded list of projects. Unfunded projects are those that would be included in the RTP if additional funding resources were available and those that could be considered in the event additional funding is identified. As revenues from most funding sources are not keeping up with the growing need for transportation projects within the region, RTC faces a difficult challenge in setting priorities for future spending. However, this RTP provides the framework for future decision-making by identifying the projects most valuable to, and having the greatest impact on the region.

# RESUMEN EJECUTIVO: Introducción

El Plan de Transporte Regional (RTP, por sus siglas en inglés) cumple con los requisitos legales federales y estatales al establecer una visión a 25 años para la mejora del transporte en la Región de Truckee Meadows, incluyendo estrategias a corto y largo plazo, proyectos priorizados y con limitaciones fiscales, organizados dentro de un marco viable para su implementación. Además de satisfacer los requisitos federales para un plan de transporte regional, el RTP también actúa como un plan de largo plazo que respalda los propósitos de la legislación estatal, formando parte del Plan Regional de Truckee Meadows (Plan Regional), elaborado por la Agencia de Planificación Regional de Truckee Meadows (TMRPA, por sus siglas en inglés).

El RTP es la herramienta clave para abordar las necesidades de transporte actuales y futuras en la región, asegurando el movimiento seguro, eficiente y sostenible de personas y bienes, al mismo tiempo respaldando el crecimiento económico y mejorando la calidad de vida de los habitantes. Además, el RTP y el programa de planificación que representa, permiten que la región y sus proyectos sean elegibles para recibir financiamientos federales y participar en programas federales de subvenciones discrecionales.

Como la Organización de Planificación Metropolitana (MPO, por sus siglas en inglés) designada para el condado de Washoe, la Comisión de Transporte Regional del Condado de Washoe (RTC, por sus siglas en inglés) tiene la tarea de llevar a cabo la planificación de transporte multimodal de manera continua, cooperativa e integral para la región de Truckee Meadows, incluyendo la elaboración del RTP.

La Región de Truckee Meadows

La región de Truckee Meadows (la región) abarca un área de más de 6,000 millas cuadradas, que incluye todo el condado de Washoe, excepto la parte perteneciente a la cuenca del Lago Tahoe. Para abordar eficazmente las necesidades de transporte, es esencial tener en cuenta las dinámicas particulares de esta región. Uno de los factores más relevantes que influyen estas necesidades es el crecimiento poblacional. Según el Pronóstico de Consenso 2024 del Condado de Washoe, recientemente adoptado por TMRPA, se proyecta que la población total del Condado de Washoe aumentará de 515,085 en 2024 a 602,455 en 2044, lo que representa un promedio de aproximadamente 4,500 nuevos residentes por año. Dado este esperado crecimiento, la función primordial del RTP es planificar el desarrollo de la infraestructura, los programas y los servicios de transporte para mantener altos niveles de conectividad y accesibilidad en toda la región.

## Metas Regionales

El RTP establece las metas que definen el estado deseado del sistema de transporte multimodal regional durante los próximos 25 años. La legislación federal establece siete metas nacionales de transporte, y fomenta a las MPO a alinear sus planes a largo plazo con estas metas o a desarrollar metas equivalentes, según la guía de la agencia USDOT. Además, durante el proceso de planificacion de transporte metropolitano, se deben integrar diez factores de planificación requeridos por el gobierno federal, los cuales incluyen las prioridades e intereses de la comunidad.

El RTP establece nueve metas no priorizadas que representan el estado deseado para el futuro del transporte en la región. Estas metas se desarrollaron tomando en cuenta los requisitos federales, los objetivos nacionales, así como los aportes de las partes interesadas y la retroalimentación del público. Estas metas no solo identifican las prioridades para la región, sino que también orientan la creación de objetivos y criterios para evaluar y priorizar proyectos de transporte.

Al vincular la selección de proyectos a estas metas, se asegura que los proyectos se enfoquen en las prioridades más relevantes para la región.

Las nueve metas del RTP se exploran con mayor detalle en los capítulos correspondientes:

RTP Meta #1: Seguridad

RTP Meta #2: Mantener la condición de la infraestructura

RTP Meta #3: Reducir la congestión

RTP Meta #4: Fiabilidad y resiliencia
del sistema

RTP Meta #5: Movimiento eficiente de
carga y vitalidad económica

RTP Meta #6: Equidad y sustentabilidad ambiental

RTP Meta #7: Reducir los retrasos de entrega del proyecto

RTP Meta #8: Accesibilidad y movilidad

RTP Meta #9: Integrar el uso de terrenos
con desarrollo económico

## Elemento Financiero

El RTP evalúa la viabilidad y financiación de las inversiones propuestas en transporte incluyendo proyectos y servicios relacionados con carreteras, tránsito, bicicletas, peatones y tecnología, para los próximos 25 años. Esto abarca un plan financiero que proyecta los ingresos futuros, ajusta los costos por inflación y propone estrategias de financiación adicionales si fuera necesario. Las estimaciones de ingresos consideran factores como el crecimiento, la inflación y los cambios en la eficiencia del combustible, utilizando el monto total de los gastos en dólares del año correspondiente (YOE, por sus siglas en inglés) para garantizar mayor precisión.

Las fuentes de financiación incluyen programas federales bajo la Ley de Inversión en Infraestructura y Empleo (IIJA, por sus siglas en inglés), así como impuestos estatales y locales, y tasas de impacto y permiso para desarrolladores inmobiliarios. Aunque se prevé un modesto aumento en los ingresos, persisten déficits financieros, especialmente en el ámbito de los proyectos de transporte público.

La priorización de proyectos es fundamental para asegurar que los fondos se asignen a las inversiones en transporte que mejor posicionan a la región para cumplir con las metas del RTP. Este proceso de priorización de proyectos se basa en los aportes de las agencias involucradas, así como en las metas y objetivos establecidos por el RTP. Las necesidades del sistema de transporte público se identifican a través de un plan de corto plazo, enfocado a mantener los servicios actuales mientras se exploran oportunidades futuras, como la expansión de las líneas de autobús y la mejora de las conexiones.

No se dispone de financiación suficiente para todos los proyectos identificados a través del proceso del RTP, por lo que es indispensable contar con una lista de proyectos sin financiamiento. Los proyectos sin financiamiento son aquellos que se incorporarían al RTP si se dispusiera de recursos adicionales y aquellos que podrían evaluarse en caso de identificarse fondos adicionales. Dado a que los ingresos provenientes de la mayoría de las fuentes de financiación no logran cubrir la creciente demanda de proyectos de transporte en la región, RTC enfrenta el difícil desafío de priorizar el gasto futuro. No obstante, el RTP ofrece un marco sólido para la toma de decisiones, al identificar los proyectos más relevantes y con mayor impacto en la región.

# CHAPTER 1: Introduction

Why is the Regional Transportation Plan (RTP) important to the Truckee Meadows Region? Put simply, the RTP matters because transportation plays a vital role in both the region’s quality of life and economic prosperity. Therefore, having a RTP is essential for identifying, prioritizing, and implementing the transportation projects, programs and services necessary to community mobility.

A RTP is required by federal and state law. The Regional Transportation Commission of Washoe County (RTC) is the entity responsible for developing the RTP, in collaboration with policy makers, elected officials, stakeholders, and the public. Public and stakeholder engagement is vital throughout the RTP development process, and the process itself is intended to build greater consensus around the RTP. The development of the RTP requires a regional, collective effort.

The RTP is required to address at least a 20-year planning timeframe. It must also include short- and long-term strategies to foster the development of an integrated multimodal regional transportation system that facilitates the safe and efficient movement of people and goods. Additional requirements of the RTP include a prioritized and fiscally constrained list of the transportation projects for the region that are needed over the next 20 years.

An update to the RTP is currently required every four years due to air quality regulations. This 2050 RTP Update serves as an update to the current plan which was adopted on March 19, 2021.

RTC is the designated Metropolitan Planning Organization (MPO) for the Truckee Meadows region and is therefore required by federal law to develop the RTP for the region. Federal law requires a MPO to be created when an urbanized area (as defined by the Census Bureau) reaches 50,000 in population. The MPO for the Washoe County area was first created in 1979 when the Census reported a population of 50,000 in the urbanized area.

Per 23 Code of Federal Regulations (CFR) 450.312, federally required MPO planning boundaries must include, at minimum, the Census defined urbanized area, “plus the contiguous area expected to become urbanized within a 20-year forecast period for the metropolitan transportation plan,” but that boundary can be extended in order to foster effective transportation planning. Additionally, MPOs are required to review their planning boundaries every ten years when the Census determines new urbanized areas. The current MPO planning boundary includes the urbanized area and extends to encompass all of Washoe County, except the portion within the drainage basin of Lake Tahoe, an area over 6,000 square miles with an estimated population of 493,556, according to Truckee Meadows Regional Planning Agency (TMRPA) regional population estimates.

As the MPO, RTC conducts a continuing, cooperative, and comprehensive multimodal transportation planning program consistent with federal planning law. Federal planning law is largely found in Titles 23 and 49 of the United State Code (USC), and United States Department of Transportation (USDOT) Code of Federal Regulations (CFR). The RTP, and the planning program it reflects, allows the region and its projects to be eligible for federal formula funding and to compete for federal discretionary grants.

This RTP has been developed to comply with both federal and state planning requirements. In addition to meeting the federal requirements for a regional transportation plan, this RTP also serves as the long-range transportation plan for purposes of compliance with state law through its utilization by the Truckee Meadows Regional Plan (the Regional Plan) developed by the Truckee Meadows Regional Planning Agency (TMRPA). TMRPA shares a similar planning area to RTC and produces a regional land-use plan, the Regional Plan, which is a comprehensive plan for managing growth and development, inclusive of transportation facilities. For the purposes of the Regional Plan, state law requires the RTP to include transportation facilities that will be necessary to support future development as prioritized in the Regional Plan. The RTP must also establish the timeframe within which those transportation facilities would need to be made available to satisfy the requirements created by future development. The RTP must be found by TMRPA to be in conformance with their Regional Plan to ensure it supports TMRPA’s efforts to
plan for orderly growth and development in the region.

In addition to serving as the MPO and conducting the regional transportation planning program, RTC also delivers transportation projects and services. As required by federal law, the RTP identifies a prioritized and fiscally constrained list of the transportation projects and services that are needed in the region. The project list is included as Appendix B. RTC delivers many of the projects and services on that list and makes related decisions regarding the use of regional revenue sources that are dedicated to transportation purposes. RTC delivers roadway projects and other multimodal facilities as part of its regional street and highway program. RTC operates the regional transportation system including public transit and other transportation services. RTC also administers regional programs pursuant to interlocal cooperative agreements such as the Regional Pavement Preservation Program, and the Regional Road Impact Fee Program.

# CHAPTER 2: The Truckee Meadows Region

(A screen reader compatible version, or other alternate format of this table/map/graphic is available upon request. Please send requests by email to rtp@rtcwashoe.com)

The Truckee Meadows region (the region) refers to the over 6,000 square mile area which includes all of Washoe County except the portion within the drainage basin of Lake Tahoe. The region encompasses a diverse landscape, with the Sierra Nevada mountain range to the west and the expansive Great Basin to the east, it is also characterized by its unique blend of urban and rural environments. The region includes the urban hubs of the City of Reno and the City of Sparks as well as a mosaic of neighborhoods, each with its own distinct character. The region’s proximity to Sacramento and the San Francisco Bay Area offers economic and tourism opportunities but can also create transportation challenges.

## Population

The region is home to a diverse range of ethnicities and cultures stemming from a strong immigrant history, proximity to diverse populations in Northern California, and a desirable quality of life. Just over 60 percent of Washoe County residents identify as White, non-Hispanic. Hispanic or Latino is the next largest demographic at nearly one-quarter of the population. The remaining population represents a broad cross-section of race and ethnicities.

Within the MPO planning area, the population is currently estimated at 493,556, reflecting an increase of 19 percent, or 78,936 residents since 2010, for an average of 6,568 new residents per year. The Nevada State Demographer’s Office forecasts a population increase for Washoe County to 579,706 by 2042, an increase of 15.5 percent from the 2022 population or 78,071 residents. This equates to an average of 3,904 new residents per year. TMRPA’s 2024 Washoe County Consensus Forecast (CF) on population growth incorporates the State Demographer’s projection along with three other independent sources to minimize projection bias.

The recently adopted CF is more optimistic and projects that Washoe County’s total population will grow from 515,085 in 2024 to 602,455 in 2044. This translates to an average of about 4,500 new residents per year and an average annual growth rate of 0.81 percent.

Population growth estimates for Washoe County outpace projected growth for the United States, which, according to the Congressional Budget Office, is expected to average approximately 0.3 percent annually between 2023 and 2053. As the population continues to increase, there will likely be greater overall pressure on the existing transportation system.

## Employment

Between 2014 (when Tesla announced Storey County as their first Gigafactory location) and 2023, the region added an average of 7,100 jobs per year. This important period of industry diversification has significantly affected the distribution of job types in the Reno-Sparks economy. Businesses in the region, previously dominated by leisure and hospitality, have begun to shift toward a logistics and manufacturing hub. Secondary economic impacts, resulting from spending and hiring in these growing sectors, also created job gains in the Construction, Professional and Business Services, and Education and Health Care Services industries.

According to the State of Nevada’s Current Employment Survey of employers, there were 271,900 jobs spread across worksites located in Storey and Washoe Counties, as of May 2024. The area also saw an additional 6,380 jobs (2.4 percent) added in January 2024 through May 2024, compared to the same period in 2023. Based on recent trends, increasing employment in Storey, Lyon and Washoe Counties can be expected to continue.

## Household Income

In 2022, 10.2 percent of households in Washoe County had incomes at or below the poverty level, which is lower than the state of Nevada at 12.5 percent, and lower than the national poverty rate of 11.5 percent, according to 2022 American Community Survey 1-year Estimates. A lower poverty rate for Washoe County stems from several factors such as a robust local economy consisting of opportunities for both professional and skilled labor, and employment diversity. In contrast, during the years leading up to the 2008 Great Recession, the County was dependent on just a few employment sectors.

## Housing

As of 2022, Washoe County had around 192,420 households compared with 160,797 households in 2010, according to the US Census ACS 5-year Estimates. This represents a near 20 percent increase in households since 2010. The majority of residences are single-family homes at 65 percent, followed by multi-family housing at 29 percent, and finally, mobile homes around 6 percent. Like many communities, the demand for housing in the region outpaces supply, even with a strong residential construction sector. In fact, 2023 saw the City of Reno issue the highest number of new residential construction permits ever.

## Transportation

The transportation system in the region includes roadways, pedestrian and bicycle facilities, transit services and facilities, air, rail, and inter- and intrastate bus service. Based on 2023 Nevada Department of Transportation (NDOT) vehicle miles traveled (VMT) data, freeways dominate the traffic landscape, accounting for 44.0 percent of total vehicle VMT with 1,736,216,564 miles traveled across 87 miles of road in 2023. Major arterials and minor arterials together represent a significant portion of traffic, with 19.9 percent and 19.4 percent of the total VMT, respectively.

Local roads, despite their extensive mileage at a total of 1,561 miles, contribute only 11.4 percent to the total VMT. Major collectors and minor collectors play a smaller role, with 0.5 percent and 4.9 percent of the total VMT, respectively.

## Regional Roadways

Previous versions of the RTP have utilized the term “Regional Roads” to describe roadways where both RTP projects and RTC programs were implemented. This RTP seeks to clarify and differentiate between eligibility requirements of regionally significant projects for inclusion in the RTP and the eligibility requirements of projects for programming activities of the RTC such as the Pavement Preservation Program. Roadways eligible for the Pavement Preservation Program, as shown in Appendix F, may include some roads, as agreed to by the local jurisdictions, with a roadway functional classification of local.

Projects eligible for inclusion in the RTP, and for federal funding, must adhere to the federal definition of regional significance, and project location aligns, in most cases, with a roadway functional classification of arterial or collector.

Roadway functional classifications are determined by the United States Department of Transportation (US DOT) Federal Highway Administration (FHWA). Functional classifications are based on the type of service the road provides, and the design elements of the roadway such lane widths, shoulder widths, and curve radii. The four main road functional classifications are: Principal Arterial, Minor Arterial, Collector, and Local.

Public roads that are functionally classified higher than rural minor collector, rural local, or urban local are eligible for federal-aid highway assistance. Rural minor collectors and local roads usually do not qualify, although certain federal funding sources can be used on bridges and tunnels that are not part of the Federal-aid highway system. The utilization of the functional classification system is also crucial for reporting on performance metrics. Map 2.1and Map 2.2 show the functional classification of roads in the region. Table 2.1 summarizes the four main roadway functional classifications.

***Map 2.1 NDOT 2016 Functional Roadway Classification***
(A screen reader compatible version, or other alternate format is available upon request.)

***Map 2.2 NDOT 2016 Functional Roadway Classification Map Inset***

***Table 2.1 Main Roadway Functional Classifications****Source: FHWA.DOT.GOV and FHWA Highway Functional Classification Concepts, Criteria and
Procedures 2023 Edition*

## Access Management

Access Management Standards are used in the design of future improvements to regional roads and the classification of existing improvements for planning purposes. Access refers to the entry of vehicles to and from the traveled portion of a roadway. This access can be to/from homes or businesses adjacent to the road, from intersecting streets or from parking on the sides of the roadway. Access control is a proven safety measure, as it reduces the potential for vehicle conflict. Vehicles need to access the roadway, but they also interrupt the flow of traffic. The greater the number of these interruptions, the more impact they have on flow. Access management controls the amount of these interruptions and is a tradeoff between the need for access and the maintenance of traffic flow. The degree to which access is managed needs to be appropriate to the type of adjacent land uses, volume of traffic and purpose of the roadway.

Access management decisions are made based on the latest edition of the NDOT Access Management System and Standards manual, Transportation Research Board Access Management Manual, or locally-adopted standards, as directed the local jurisdiction. Access management can include an analysis of the functional area at signalized intersections.

Access management may typically involve exercising control over the number and location of driveways and turning movements. Related to this is the control of the type of movements allowed into or out of these driveways through such things as signage and medians. Access control may also involve control of parking adjacent to the travel lanes. The degree to which access of all types is controlled can have a substantial impact on the ability of a roadway to carry traffic. For example, consider the very limited access allowed on an interstate highway versus a neighborhood street. The degree of access is an important consideration in sizing the street and highway system. All other things being equal, the greater the degree of access control, the greater number of vehicles that can be accommodated per lane. When the degree of actual access significantly exceeds the original planning assumptions, significant unforeseen problems can occur, inducing additional congestion.

Access controls also have a direct impact on safety as shown in Table 2.2. Minimizing the number of turning movements across lanes of traffic has been demonstrated to reduce crashes.

***Table 2.2 Effects of Access Management Techniques Access Management Technique***(A screen reader compatible version, or other alternate format is available upon request.)

Design standards and operational standards (agreed to by implementing jurisdictions) can help facilitate trip movements. Some important considerations include the following:

1. On-street parking shall not be allowed on any new arterials. Elimination of existing on-street parking shall be considered a priority for major and minor arterials operating at or below the policy level of service.
2. Minimum signal spacing is for planning purposes only; additional analysis must be made of proposed new signals in the context of existing conditions, planned signalized intersections, and other relevant factors impacting corridor level of service.
3. Minimum spacing from signalized intersection/spacing from other driveways
4. If there are more than 30 inbound, right-turn movements during the peak-hour
5. If there are more than 60 inbound, right-turn movements during the peak-hour
6. Minimum spacing on collectors

Additional roadway design access elements that influence safety and traffic flow include the following:

* Number of through lanes
* Minimum signal spacing
* Left turn from a major street
* Right deceleration lanes at driveways
* Driveway spacing
* Number of signalized intersections per mile
* Design speed
* Bicycle facilities
* Left turn lanes
* Left turn from minor street or driveway
* Median type or existence of median

The Access Management Standards shown in Table 2.3 are used in the design of future improvements to regional roads and the classification of existing improvements for planning purposes.

***Table 2.3 Access Management Standards***

(A screen reader compatible version, or other alternate format is available upon request.)

## Regionally Significant Projects

Federal law requires regional transportation plans to emphasize facilities that serve national and regional transportation functions. Per 23 CFR § 450.104: “Regionally significant project means a transportation project (other than projects that may be grouped in the TIP and/or STIP or exempt projects as defined in EPA’s transportation conformity regulations (40 CFR part 93, subpart A) that is on a facility that serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; major planned developments such as new retail malls, sports complexes, or employment centers; or transportation terminals) and would normally be included in the modeling of the metropolitan area’s transportation network. At a minimum, this includes all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel.”

The core function of the MPO is to develop the RTP, through which the MPO is required to identify transportation projects that are considered critical for regional connectivity. This RTP addresses regional transportation issues involving the multimodal transportation system, identifying and prioritizing projects on existing or proposed roadways that handle high volumes of vehicle trips, facilitate connectivity across different jurisdictions, overcome significant travel barriers, or otherwise comply with the federal definition of regional significance. In terms of roadway functional classifications, RTC generally considers projects on the following roadways to be regionally significant:

* Principal arterial highways or minor arterials that are direct connections between freeways and other arterials, provide continuity throughout the region, and generally accommodate longer trips within the region, especially in the peak periods on high traffic volume corridors
* Collectors that cross a significant travel barrier or provide access to major existing or future regional facilities

Though functional classification often determines a project’s regional significance, local conditions may also meet the federal definition of regional significance. As a result, projects are evaluated on a case-by-case basis to determine their eligibility for inclusion in the RTP.

This RTP does not identify projects on roadways that are functionally classified as local roads. The local jurisdictions (Washoe County, the City of Reno, and the City of Sparks) engage in planning efforts that focus on identifying and prioritizing projects on local roads. The function of the RTP is to identify regionally significant projects, however the RTC is also responsible for regional programs such as the Pavement Preservation Program. Roadways eligible for the Pavement Preservation Program, as shown in Appendix F, may include some roads, as agreed to by the local jurisdictions, with a roadway functional classification of local.

RTC and the local jurisdictions collaborate and cooperate to plan, construct, and maintain the regional road network. Varied goals and regulations require differing criteria for roadway planning and programming efforts. Transportation and air quality modeling, safety analysis and programming, and access management standards all have unique requirements and criteria. Likewise, criteria appropriate to regional RTC programs such as the Regional Pavement Preservation Program, the Regional Road Impact Fee Program, and RTC’s overall regional street and highway program vary based on regulatory and other factors.

## State Roadways

As outlined in the 2020 NDOT One Nevada Transportation Plan, the statewide transportation planning program focuses on the state highway system, which includes the four categories of regionally significant roadways listed below.

* Interstate Routes
* US Routes
* State Routes
* Other state-owned roads that are regionally significant

The regionally significant state-owned roads in the region are referred to as state roads for purposes of this RTP. The RTC integrates NDOT planning for state roads and related projects into its transportation planning program and NDOT projects on state roads are included in the prioritized list of regionally significant projects that must be included in the RTP.

## Pedestrian and Bicycle Facilities

The pedestrian and bicycle network in the region includes sidewalks, multi-use paths, bike lanes, bike paths, overpasses, crosswalks, and bike amenities. Roadway projects are planned and designed to include pedestrian and bicycle facilities for purposes related to vehicle capacity, safety, and accessibility and mobility, considering all users of the roadway. Pedestrian and bicycle facilities can provide greater accessibility and mobility options to further the interests of congestion management, public health, regional air quality, and quality of life. In some cases, pedestrian and bicycle facilities can also provide increased regional connectivity.

## Transit Services and Facilities

RTC transit services include regional fixed-route, paratransit, and a micro-transit system. Facilities that support those services include transit stations, transit routes, dedicated roadway lanes for transit routes, bus stops, passenger transfer facilities, and park-and-ride locations. The RTC has two main transit stations, 4th Street Station in downtown Reno, and Centennial Plaza in downtown Sparks, as well as a passenger transfer station at Meadowood Mall in Reno. The fixed-route system has 20 routes on approximately 204 miles of roadway that connect approximately 136 square miles in the region. RTC’s intercity transit service connects Washoe County and Carson City.

The RTC has two bus rapid transit (BRT) routes, one on Virginia Street connecting north and south Reno, and one on 4th Street and Prater Way connecting Reno and Sparks, that include BRT stations and dedicated transit lanes. There are over 800 bus stops in Reno and Sparks that are part of the public transit system. Regional park-and-ride facilities are located at the Summit Mall in Reno and in the North Valleys area. Map 2.3 shows RTC transit routes and the area of
transit service.

## Air, Rail, and Inter- and Intrastate Bus Service

The Reno-Tahoe Airport Authority (RTAA) operates and maintains the Reno-Tahoe International Airport (RNO), as well as the Reno-Stead Airport which does not carry commercial airline traffic. RNO is the 62nd busiest airport in the United States, with approximately 4.6 million passengers per year, generating a total economic impact of $3.6 billion annually, according to the Reno-Sparks Convention & Visitors Authority (RSCVA) 2023 Economic Impact Study. RNO hosts ten commercial airlines and three cargo carriers, which access more than 20 nonstop destinations that can link passengers to virtually anywhere in the world. RNO is vital for tourism in the region as it is a key entry point for people looking to explore the Reno and Lake Tahoe area. The billions of dollars generated annually by the airport translate into jobs, infrastructure development, and community investment that directly benefit Nevada’s critical tourism industry.

The region is also served by passenger rail. Amtrak provides daily rail service via a station in downtown Reno under agreement with the Union Pacific Railroad (UPRR) to use its tracks. Train services generally cater to regional and cross-country travelers. The UPRR railyard in Sparks is an integral part of the railroad’s 32,000-mile operation and has been a focal point for the safe and efficient operation of freight trains over Donner Summit. UPRR has nearly 1,200 miles of track and 600 employees in the state, and the UPRR railyard in Sparks plays a critical role in
the efficient movement of goods in and around Nevada.

Inter- and intrastate bus service to the region is provided by Greyhound. Pick-up/drop-off locations include the Amtrak station in Downtown Reno, the RTC’s Centennial Plaza, and the Reno-Tahoe International Airport.

***Map 2.3 RTC Existing Transit Routes***(A screen reader compatible version, or other alternate format is available upon request.)

CHAPTER 3: Performance Measures and Targets

(A screen reader compatible version, or other alternate format of this table/map/graphic is available upon request. Please send requests by email to rtp@rtcwashoe.com)

Performance measures and targets help to support long-range investment and policy decision-making. The RTP must include a description of the performance measures and performance targets used in assessing the performance of the transportation system. Those performance measures must include the national performance measures established by federal law and regulation. The RTP must monitor and report on progress toward achieving targets for the national performance measures. As the MPO, the RTC must also integrate into the metropolitan planning process, directly or by reference, the performance measures and targets in state transportation plans and planning processes.

## Performance-Based Planning

Federal law requires MPOs to conduct performance-based transportation planning. The RTP must be developed through a performance-driven, outcome-based planning approach. Performance-based planning and programming is a system-level, data-driven process to identify management and operational strategies and capital investments.

It is intended to result in more efficient investment of transportation funding by focusing on national and regional transportation goals, increasing accountability and transparency, and improving decision-making.

The RTP is the centerpiece of RTC’s comprehensive
performance-based transportation planning program and serves as an umbrella document that informs programming decisions, including the development of RTC’s Regional Transportation Improvement Program (RTIP). The RTP draws from multiple regional and state performance-based plans, programs, and processes, and connects performance measures to goals and objectives in order to identify needs, progress, and gaps in the performance of the transportation system.

The United States Department of Transportation (USDOT) identifies essential elements for performance-based long-range transportation plans, and the overall transportation planning process.
The RTP has been structured to reflect current USDOT guidance on performance-based planning.

National Performance Measures and Targets, and System Performance Report

As the MPO, RTC must establish performance targets for the national performance measures.
Those targets are summarized in Table 3.1. As RTC is both the MPO and the transit system provider
in the region, RTC develops a Transit Asset Management Plan and a Public Transportation Agency Safety Plan. RTC updates those transit plans regularly to monitor, report, and evaluate progress in meeting those targets.

The RTP must include a system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the national performance targets. The following system performance report describes the national performance measures and targets to evaluate the condition and performance of the region’s transportation system.

***Table 3.1 Performance Measures and Targets***

(A screen reader compatible version, or other alternate format is available upon request.)

# CHAPTER 4: Goals and Objectives

(A screen reader compatible version, or other alternate format of this table/map/graphic is available upon request. Please send requests by email to rtp@rtcwashoe.com)

The 2023 USDOT Guide for Performance-Based Planning defines a goal as a broad statement that describes a desired end state. The Guide defines an objective as a specific, measurable statement that supports achievement of a goal. These strategic elements set the stage for the performance measures that are incorporated in the plan and help to drive investment and policy priorities that address transportation system and community outcomes. Planning is a continuous process and plan goals and objectives can and should build on those from previous plans.

## State and Local Planning

This RTP draws from past state and local plans and programs, to help shape the goals, objectives, performance measures, and targets in future planning and programing processes. Federal law requires that RTC integrate certain performance-based plans into the transportation planning process. RTC must integrate, either directly or by reference, the goals, objectives, performance measures and targets described in those plans. State and local plans that were reviewed and integrated as a part of the RTP planning process include the following:

* 2024 RTC South Virginia Street Transit-Oriented Development (SVTOD) Plan
* 2024 RTC Regional Freight Plan
* 2024 RTC Active Transportation Plan –
Walk & Roll Truckee Meadows
* 2024 Truckee Meadows Regional Plan
* 2023-2027 RTC Transportation Optimization Plan Strategies (TOPS)
* 2023 Washoe County Master Plan –
Envision Washoe 2040
* 2021-2025 Nevada Strategic Highway
Safety Plan (SHSP)
* 2022 Nevada State Freight Plan
* 2050 RTC Regional Transportation Plan (RTP) (Adopted March 2021)
* 2020 One Nevada Transportation Plan
* 2020 NDOT Coordinated Human Services Transportation Plan
* 2020 RTC Public Transportation Agency
Safety Plan
* 2019 RTC ADA Transition Plan
* 2018 RTC Regional Travel Characteristics
Study (Regional Household Travel Survey)
* 2017 RTC Bicycle and Pedestrian Master
Plan (BPMP)
* 2017 City of Reno Master Plan –
ReImagine Reno
* 2016 RTC Complete Streets Master Plan
* 2016 City of Sparks Comprehensive Plan
* 2014 NNPH Air Quality Management
Division (AQMD) Carbon Monoxide and
PM10 Maintenance Plans

## RTP Goals

The goals in this RTP describe a desired end state for the regional multimodal transportation system over the next 20 years. Federal law and regulation establish seven national goals. As explained in USDOT guidance, MPOs should incorporate the national goals into their long-range transportation plans or provide new goals that align with them. In addition, ten planning factors must be considered within the metropolitan transportation planning process. These planning factors address a wide array of issues important to communities. As shown in Figure 4.1, current RTP goals, the federally required planning factors, and the national goals were considered in the development of Plan goals.

Stakeholder and public input was utilized in the development of the draft goals which were also vetted through the Agency Working Group (AWG). A summary of the public and stakeholder engagement process conducted for this RTP is included as Appendix A.

 ***Figure 4.1 RTP Update Goal Development Process***

(A screen reader compatible version, or other alternate format is available upon request.)

The goals in this RTP, collectively, are a broad statement that describes the intent behind transportation investments in the region. The goals were used to develop objectives and evaluation factors for project prioritization. Keeping the Plan’s goals at the core of project prioritization will result in a project list that can best meet the identified transportation goals for the region. Figure 4.2 illustrates the process of creating evaluation measures from goals.

***Figure 4.2 RTP Update Evaluation Factors Process***

(A screen reader compatible version, or other alternate format is available upon request.)

The following nine (unranked) goals were created for this RTP and reflect the desired state of transportation for the region over the next 20 years. Each goal is further discussed in nine goal chapters of this RTP.

* Safety - To achieve a significant reduction in traffic fatalities and serious injuries on regional roadways.
* Maintain Infrastructure Condition - To maintain regional roadway infrastructure in a state of good repair.
* Congestion Reduction - To achieve a significant reduction in congestion on the regional roadway network.
* System Reliability and Resiliency - To improve the efficiency, resiliency, and overall reliability of the multimodal transportation system.
* Efficient 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.
* Equity and Environmental Sustainability - To enhance the performance of the transportation system while protecting and enhancing equity and 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.
* Accessibility and Mobility - To increase the accessibility and mobility of people on the transportation system and enhance the integration and connectivity of the transportation system.
* Integrated Land-Use and Economic Development - To increase partnership among local jurisdictions and other stakeholders to identify how transportation investments can support regional development goals**.**

## RTP Objectives

Objectives in this RTP support the achievement of the goals for the multimodal transportation system. Objectives are intended to reflect outcomes that are experienced by system users and the public, and integrate objectives described in state transportation plans and processes. Building on previous versions of the RTP and other planning efforts, this RTP addresses the following nine objectives under the nine goals, as shown in the chart below. Each objective is further discussed within the goal chapters.

Table 4.1 2050 RTP Update Goals and Objectives

(A screen reader compatible version, or other alternate format is available upon request.)

1. The goal: Safety. The objectives are to Reduce Traffic Fatalities and Serious Injuries.
2. The goal: Maintain Infrastructure Condition. The objective: Manage Existing Infrastructure Efficiently
3. The goal: Congestion Reduction. The objective: Manage Vehicle Travel Demand and Reduce Congestion
4. The goal: System Reliability and Resiliency. The objective: Integrate All Travel Modes and Increase Travel Options
5. The goal: Efficient Freight Movement and Economic Vitality. The objective: Improve the Movement of Freight and Goods.
6. The goal: Equity and Environmental Sustainability. The objective: Promote Equity and Environmental Justice
7. The goal: Reduced Project Delivery Delays. The objective: Monitor Implementation and Performance
8. The goal: Accessibility and Mobility. The objective: Provide a Regional Transit System and Other Transportation Services
9. The goal: Integrated Land-Use and Economic Development. The objective: Improve Regional Connectivity.

# CHAPTER 5: Goal #1: Safety

The goal of Safety is defined in this RTP as the achievement of a significant reduction in traffic fatalities and serious injuries on roadways. The goal is achieved through its objective to: Reduce Traffic Fatalities and Serious Injuries. This chapter describes the regional efforts and strategies to address safety in a manner that will result in the reduction of fatalities and serious injuries for all road users.

The following efforts and strategies are described in this chapter:

**Section 1 – Safety Analyses and Planning**

**Section 2 – Safety Design Standards**

**Section 3 – Regional Safety Collaboration**

**Section 4 – Community Safety Awareness and Education**

## Section 1 – Safety Analyses and Planning

The RTC conducts several safety analyses and planning activities. As discussed in Chapter 3, RTC utilizes national and state performance measures to track and report on data that are related to safety. Safety data are also collected through regional efforts and through local tools like the RTC High Injury Network. Safety data are analyzed to inform RTC planning efforts such as corridor studies and area plans. The RTC is also preparing to develop a comprehensive safety action plan with funding from the Safe Streets and Roads for All grant program that will utilize robust data collection to produce a predictive safety tool to assist in creating a safer transportation network. RTC and regional activities involving safety data analysis and planning are further described below.

Data Analyses

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 serve on the Strategic Highway Safety Plan (SHSP) data team and receive weekly updates about data available from NDOT and the Nevada Office of Traffic Safety (OTS). RTC also uses these data to perform a more in-depth analysis to produce tools like the High Injury Network (HIN) to inform project selection and design. Finally, the RTC utilizes data collection and analysis agreements with UNR to better understand crash and near-miss characteristics as well as potential contributing factors based on roadway and intersection attributes.

Nevada State Highway Safety Plan

The Nevada State Highway Safety Plan is produced by NDOT in cooperation with many agencies, including the RTC. It is a comprehensive statewide safety plan that identifies the greatest causes of fatalities and serious injuries on Nevada roadways and provides a coordinated framework for reducing the crashes that cause fatalities and serious injuries. It establishes statewide goals and strategies focusing on the 6 “Es” of traffic safety: Equity, Engineering, Education, Enforcement, Emergency Medical Services/Emergency Response/Incident Management, and Everyone. The goals of this plan are incorporated into the RTP, and many of the Vision Zero Truckee Meadows pedestrian-oriented goals align with the plan.

Corridor and Area Plans

Corridor planning is used to identify safety concerns and infrastructure solutions. The RTC has conducted plans for several corridors in the region that have been incorporated into the investments shown in the RTP project listing provided in Appendix B. These plans incorporate safety analyses, needs for multimodal investments such as bicycle facilities and sidewalks, and other operational needs. For example, an area plan has been completed for Verdi which details safety and other infrastructure needs. Additionally, the Active Transportation Plan, which is covered in more detail in Chapter 12, establishes a pedestrian experience index and bicycle level of traffic stress that seek to determine potential barriers to active transportation. These indicators reflect what a non-motorized user’s perception of safety might be and how comfortable they might be using the facility. The Active Transportation Plan recommended a formal Active Transportation Program be established, under which a series of Neighborhood Network Plans will be developed. These plans aim to create a safer environment for all users of the active transportation network, reducing the risk of crashes and injuries. Projects in several corridor and area plans have advanced to design and delivery, including West Fourth Street, East Sixth Street and Sun Valley Boulevard.

## Section 2 – Safety Design Standards

Safety design standards and facility elements can greatly impact both roadway and transit safety. The RTC employs safety design standards in the installation of roadway projects and at bus stops and bus stations. The RTC’s activities involving safety design standards for roadway and transit are further described below.

Safe Roadways

The primary objective of roadway design is to develop facilities that meet the long-term transportation needs of the region in a safe, efficient, and cost-effective manner complying with all applicable statutes, codes, and regulations. The range of roadway safety improvements, which are selected based on roadway context, attributes and transportation patterns, are effective in reducing roadway fatalities and serious injuries. These improvements are based on the FHWA’s Proven Safety Countermeasures initiative. The FHWA Proven Safety Countermeasures include the following:

* Appropriate speed limits for all road users
* Speed safety cameras
* Variable speed limits
* Bicycle lanes
* Crosswalk visibility enhancements
* Leading pedestrian interval
* Medians and pedestrian refuge islands
* Pedestrian hybrid beacons
* Rectangular Rapid Flashing Beacons (RRFB)
* Road diets (roadway reconfiguration)
* Walkways
* Enhanced delineation for horizontal curves
* Longitudinal rumble strips and stripes
* Median barriers
* Roadside design improvements at curves
* SafetyEdge technology
* Wider edge lines
* Backplates with retroreflective borders
* Corridor access management
* Dedicated left- and right-turn lanes at intersections
* Reduced left-turn conflict intersections
* Roundabouts
* Systemic application of multiple low-cost countermeasures at stop-controlled intersections
* Yellow change intervals
* Lighting
* Local road safety plans
* Pavement friction management
* Road safety audit

The RTC’s Street and Highway Program states that projects may include any of the above as “standard improvements,” as determined necessary by RTC staff during project scoping or the preliminary design phase.

The RTC installs design treatments that encourage cars to travel at speeds closer to the posted speed limit, based on research that shows speed management can reduce the number and severity of crashes. In 2022, The National Highway Traffic Safety Administration found that speed contributed to 29 percent of all traffic facilities. The research also shows that the average risk of death for a pedestrian reaches 10 percent at an impact speed of 23 mph, 25 percent at 32 mph, 50 percent at 42 mph, 75 percent at 50 mph and 90 percent at 58 mph.

The RTC uses Complete Streets design principles in its projects, wherever applicable, which 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 roadways in the Truckee Meadows, and many of them are part of FHWA’s Proven Safety Countermeasures initiative. On state-owned facilities, NDOT also applies improvements in Intelligent Transportation Systems (ITS) to help identify and provide notification of crashes, which helps with emergency response and to reduce the risk of secondary crashes.

While all projects are designed with safety in mind, projects included in this RTP that address specific roadway safety issues, were identified in road safety audits, or are in high-crash locations are listed below.

* East 6th Street Bicycle Facility and Safety Improvements
* Keystone Avenue Improvements
* Military Road Capacity and Safety
* Mill Street Capacity and Safety
* Mt. Rose Corridor Study Recommendations Phase 1 Improvements
* Pembroke Drive Safety
* Sparks Boulevard Corridor – Phase 2
* Sun Valley Boulevard Corridor Improvements

Safe Transit Operations

Ensuring safe service is one of the four goals identified in the Transportation Optimization Plan Strategies (TOPS) which serves as the RTC’s short-range transit plan. The plan is the basis for changes to the RTC’s public transportation services over a five-year period. The stated objective associated with the TOPS safety goal is: “maintain and operate transit vehicles and stations to ensure customer safety.” Travel by transit is already safer than by car as research by the National Safety Council indicates the national passenger vehicle death rate, per 100,000,000 passenger miles, was over 50 times higher for cars than for buses. RTC strives to ensure continued safety in transit operations with high standards for maintenance, security, and coordination with law enforcement and local jurisdictions. Examples of recent RTC efforts to improve safety at bus stops include implementation of the Public Transit Agency Safety Plan, the installation of solar-powered lights where feasible, and the installation of security cameras onboard vehicles and at RTC RAPID stations, RTC 4TH STREET STATION, and
RTC CENTENNIAL PLAZA.

## Section 3 – Regional Collaboration

Regional safety operations include the RTC’s partnership in the Nevada Traffic Incident Management program as well as emergency management, Road Safety Assessments and Safety Management Plans. Additionally, participation as a member of the Vision Zero Truckee Meadows Task Force is another way the RTC improves safety through regional collaboration.

Nevada Traffic Incident Management

The goal of the Nevada Traffic Incident Management (NV TIM) program is to remove incidents (crashes) from Nevada’s highways and restore normal travel operations as safely and quickly as possible. TIM is a systematic, statewide, multi-agency effort to enhance the safe and quick clearance of traffic crashes; support prompt, reliable, and interoperable communications; improve responder safety; support economic vitality by reducing delays; and reduce secondary crashes. The NV TIM Coalition is a forum of collaborative members from public and private agencies that facilitates continuous dialogue about TIM practices. These well-rounded, multi-disciplinary teams bring together their diverse experience to advance and implement TIM practices within specific areas of responsibility across the state.

NV TIM partners include:

* Nevada Department of Transportation (NDOT)
* State of Nevada Department of Public Safety
* Law Enforcement (City and County)
* Fire and Rescue (City, County, and Volunteer)
* Local Ambulance Agencies
* Local Emergency Management Offices / Services
* Public Works (City, County, and Tribal)
* Environmental Agencies / Hazardous Materials Responders (private and public)
* Towing and Recovery
* Federal Highway Administration, Department of Homeland Security, and Federal Transit Administration
* Media and Agency Public Information Officers
* Traffic Management Centers / Dispatchers (public and private)

Road Safety Assessments and Safety Management Plans

Regional transportation and safety experts take part in NDOT’s Road Safety Assessments (RSA) and Safety Management Plans (SMP) which are efforts to identify roadway safety issues and recommend solutions to correct them. 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 roads or intersections by multi-disciplinary teams which are performed to support corridor studies and identify short-, medium-, and long-term roadway safety improvements.

Emergency Management Plan

The RTC Emergency Management Plan (EMP) is a critical portion of 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 and works seamlessly with Washoe County’s Plan along with other agency, jurisdiction, and neighboring county plans. The EMP 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.

Vision Zero Truckee Meadows and the Safe System Approach

In 2017, the RTC led the creation of Vision Zero Truckee Meadows (VZTM) and formed an associated task force made up of members of local, regional, state, and federal government, universities, non-profits, emergency response, health providers, and the public. The VZTM Task Force was established to take equitable, data-driven, and transparent actions to improve safety throughout the community. The Task Force maintains that the only acceptable number of traffic deaths in our community is zero and has a stated goal of reaching zero traffic fatalities and serious injuries by 2030.

Vision Zero implements a Safe System Approach, which is based on the premise that it is unacceptable to allow deaths and serious injuries to occur on the roads. To achieve zero deaths and serious injuries, crashes must be managed so that when they do happen, the kinetic energy exchange on the human body is kept below the tolerable limits for serious harm to occur.

This important principle is at the core of applying a Safe System Approach in designing and operating the road system. The Safe System Approach is guided by six principles—or fundamental tenants—and five elements, which are avenues for implementation. A Safe System cannot be achieved without all five elements working in synergy. With a Safe System Approach, weaknesses in one element may be compensated for with solutions in other areas. A true Safe System Approach involves optimizing across all the elements to create layers of protection against harm on the roads.

The VZTM Task Force created an Action Plan, originally adopted in 2019 and updated in 2022, that guides actionable steps meant to bring the region closer to its goal of zero fatalities and serious injuries. RTC continues to facilitate activities and regular meetings of the Task Force. It also maintains a website, VisionZeroTruckeeMeadows.com, where the Action Plan and other information can be found.

## Section 4 – Community Awareness and Education

Raising public awareness about safety concerns and providing educational materials are important tools to improve safety. RTC attends various outreach events and provides the community with safety materials and information. Of particular importance is safety messaging related to pedestrians and bicyclists, who are considered the most vulnerable road users. To that end, the RTC communicates best practices in safety and participates in outreach activities using forums such as the Vision Zero Truckee Meadows Task Force and Safe Routes to School. Additionally, safety measures are often shared with the public through programs such as “The Road Ahead With RTC” segments on KOLO 8 as well as Truckee Meadows Bicycle Alliance, SMART TRIPS, Northern Nevada Public Health, social media, and dedicated and targeted webpages.

Safe Routes to School

The RTC works closely with the Washoe County School District and NDOT to implement a Safe Routes to School (SRTS) Program. The program includes a significant educational component geared toward K-12 students, parents, and school staff. The School District Police Department SRTS Coordinator conducts regular school-based events to teach K-12 grade students how to be more visible to motorists and how to follow safety precautions. The SRTS Coordinator also 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 between motorists and pedestrians. The SRTS Coordinator is also a source of input to the RTC about capital investments that would improve safety on roadways near schools.

RTC SMART TRIPS

The RTC SMART TRIPS program assists businesses and citizens in using sustainable modes of transportation and adopting trip reduction strategies. A reduction in vehicle trips is a critical step toward maintaining and improving air quality in the Truckee Meadows and reducing traffic congestion. In addition to promoting the benefits of sustainable transportation, the SMART TRIPS 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. SMART TRIPS safety brochures can be downloaded from rtcwashoe.com in the Safety and Security section of the About page.

# CHAPTER 6: Goal #2: Maintain Infrastructure Condition

(A screen reader compatible version, or other alternate format of this table/map/graphic is available upon request. Please send requests by email to rtp@rtcwashoe.com)

The goal, Maintain Infrastructure Condition, is defined in this RTP as maintaining regional roadway infrastructure in a state of good repair. The goal is accomplished through its objective to: Manage Existing Infrastructure Efficiently. This chapter describes the regional efforts and strategies to manage existing multimodal infrastructure efficiently.

Collectively, the purpose of these efforts and strategies is to obtain the best and most efficient use of existing resources, stretch limited resources further, and, in some cases, reduce the need for costly capital investments. 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 RTC’s pavement preservation and transit 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.

The following efforts and strategies are discussed in this chapter:

**Section 1 – Pavement Preservation Program**

**Section 2 – Transit Assets and Infrastructure**

**Section 1 – Pavement Preservation Program**

Whether traveling by automobile, transit, bicycle, or as a pedestrian, all roadway users benefit when streets are well maintained. The goals of pavement preservation are to keep roadways in good condition and to minimize long-term repair costs. By applying the most cost-effective treatment in the right location, at the right time, pavement life cycle costs can be minimized, and serviceable pavement life can be maximized. An effective pavement preservation program saves money and keeps roadways in good condition for the traveling public.

The pavement condition of roadways in the region is maintained through pavement preservation
efforts at the state, regional, and local levels. At the state level, the Nevada Department of Transportation’s (NDOT) pavement preservation program addresses the state highway system. At the regional level, RTC manages a Regional Pavement Preservation Program that addresses roadways of regional significance. At the local level, Washoe County, Reno, and Sparks have pavement preservation programs for roadways within their respective jurisdictions that are not eligible for the RTC Pavement Preservation Program. The local jurisdictions are also responsible for routine maintenance of all roadways within their respective jurisdictions, such as street sweeping, snow removal, and pothole repairs.

As shown in Table 6.1, roadway usage and ownership vary. Variables such as ownership and facility type must be considered in the efficient management of existing multimodal infrastructure.

*T****able 6.1 – Roadway Facilities in Washoe County***

(A screen reader compatible version, or other alternate format is available upon request.)

* RTC does not own or operate any roadways
* Local roads serve neighborhoods and carry the fewest trips on the system
* Local roads and minor collectors are maintained by the local jurisdictions (Reno, Sparks and Washoe County) and carry 16% of the vehicle miles traveled (VMT) in Washoe County
* Collectors serve as connections between local and arterial roads
* Arterials carry the majority of trips on the roadway system and function as alternatives to highways to relieve traffic congestion
* Arterials and major collectors carry 47% of VMT in Washoe County and are eligible for funding through the RTC Pavement Preservation Program
* I-80 and US 395 are maintained by NDOT and carry 37% of the VMT in Washoe County

RTC Regional Pavement Preservation Program

RTC manages the Regional Pavement Preservation Program which includes eligible roadways within Washoe County. Eligibility criteria include both the functional classification of the roadway and the Average Daily Traffic (ADT). Eligible roads must be collector and above in functional classification and must carry a minimum of 5,000 ADT.

Approximately 25 percent of non-state roads (not owned or maintained by NDOT) in Washoe County are eligible for the Regional Pavement Preservation Program. The current list of eligible regional roadways for pavement preservation projects is provided as Appendix F. The pavement preservation roadway list is updated approximately every three years through a comprehensive regional assessment of roadway pavement assets and condition.

The Program is funded through a portion of the annual fuel tax revenue which is set aside for pavement preservation. The fuel tax is a function of previous voter approval, state statute, and Washoe County code. The Regional Pavement Preservation Program is an efficient use of tax-funded resources as preventative maintenance maximizes the life of the roadway and prevents costly repairs. It is six to ten times less expensive to properly maintain roadways than to allow them to fail and pay for costly reconstruction treatments.

In order to determine which roadways need maintenance and in what timeframe, RTC collects and tracks Pavement Condition Index (PCI) data for each eligible roadway and utilizes the Regional Pavement Management System (PMS). The PMS tool helps to prioritize pavement preservation projects and provide a comprehensive regional assessment of roadway pavement assets and condition. Projects are selected based on both this initial analysis and input from the Pavement Preservation Committee which consists of public works and maintenance staff from Washoe County, the City of Reno, and the City of Sparks.

The Regional Pavement Preservation Program has significantly improved roadway conditions and reduced the region’s backlog of pavement reconstruction needs. Since initiation of the program, the average PCI for eligible roadways has been raised to within the optimal range for minimizing costs and maximizing performance life.

As seen in Figure 6.1, over 78 percent of roads are in Very Good condition, while slightly more than three percent are in Poor or Very Poor condition. PCI ratings of 70 and above are considered Very Good; 55-70 is considered Good (whether Non-Load or Load); 40-55 is considered Poor; and a PCI under 40 is considered Very Poor. It should be noted that although the Good (Non-Load) and Good (Load) categories share the same PCI range, load-related distresses and failures require more intensive corrections, whereas non-load-related failures are less costly to address.

***Figure 6.1 – Condition of Regionally Significant Roads***

(A screen reader compatible version, or other alternate format is available upon request.)

* 78% very good
* 14% Good (non-load)
* 5% Good (load)
* 3% Poor
* 0% Very Poor

Despite the overall Very Good rating of the roads in the region, challenges do exist in maintaining existing roadways. More efficient cars that use less fuel and electric cars are affecting the amount of fuel sold and taxed. The reduction in fuel tax revenue for this program could impact the region’s ability to maintain the Very Good - Good rating in the future.

State and Local Government Pavement Preservation Efforts

NDOT performs pavement preservation on the state highway system in the region and throughout the state. The NDOT pavement preservation program’s goals and strategies to achieve and sustain a state of good repair over the life cycle of its assets are included in the NDOT Transportation Asset Management Plan (TAMP). The goal for highway maintenance is to assure that NDOT-maintained roads are maintained to as high a level as possible consistent with work plans, policies, program objectives, budget, and available resources. NDOT defines highway maintenance as the preservation of roadway facilities in a safe and usable condition and divides this program into three areas:

* Routine Maintenance – work needed on a daily basis to repair damage to the highway system and perform operational activities which keep the traveling public moving in a safe and efficient manner. Examples are crack filling, striping, sweeping, culvert cleaning, repairing concrete, replacing traffic signs, and sealing pavement.
* Capital Improvement – work that will slow down the deterioration or extend the life of the highway system. Examples are chip seal, cold in-place recycle, microsurfacing, bridge maintenance, slope flattening, and guardrail installation.
* Emergency Activities – work needed due to accidents and natural disasters to stabilize and remediate travelways and damaged structures. Examples are snow removal, traffic incident cleanup, flood damage repair and guardrail/impact attenuator repair.

NDOT also uses a PMS to assess its roadway pavement assets and condition, and to prioritize pavement preservation projects. PMS enables NDOT to make informed decisions on how to maintain and improve the condition of the roadway network while maximizing pavement performance through the practical use of available funds. NDOT collects pavement condition data annually or biennially, which is used to assign a Present Serviceability Index value that aids in determining which facilities are in a state of good repair. It also allows NDOT to make informed and cost-effective decisions about prioritizing pavement preservation activities.

Washoe County, the City of Reno, and the City of Sparks perform pavement preservation on the roadways that are not included in NDOT’s pavement preservation program or the Regional Pavement Preservation Program. Streets and highways have different needs and the performance indicators for highways are not the same as those for an urban network.

Washoe County is required to use all gasoline tax revenues for road maintenance and to maintain condition of the roads to meet a regional standard of 73 on the PCI. The County evaluates maintenance and reconstruction needs based on an analysis of PCI, timing, cost, and available funds.

The City of Reno’s Pavement Management group uses a PMS to assist in evaluating the pavement condition, serviceable life, and maintenance strategies for its 755 miles of City owned roads, 22 miles of alleys, and 75 parking lots. The City conducts an annual survey of a portion of city streets to collect data used to produce a PCI rating. This PCI rating is used to determine what type of treatment is most appropriate and a PMS is used to evaluate maintenance strategies that help minimize costs while improving overall pavement conditions.

NDOT and local governments face challenges in their ability to fund and operate effective pavement preservation programs and other maintenance and operations activities. However, through the effective use of their available resources, local governments work to maintain local roads in an optimal state of repair. While these local roads account for approximately 60 percent of roadways in the region, they only carry 11 percent of VMT in Washoe County.

## Section 2 – Transit Assets and Infrastructure

In accordance with federal regulations in 49 U.S.C. 5326 and 49 CFR 625, RTC has developed a Transit Asset Management (TAM) Plan to monitor and manage public transportation capital assets to enhance safety, reduce maintenance costs, increase reliability, and improve performance. The TAM Plan was developed in 2018 with an update completed in 2022.

TAM is defined, in the RTC TAM Plan, as a “strategic and systematic process through which an organization procures, operates, maintains, rehabilitates, and replaces transit assets to manage their performance, risks, and costs over their life cycle to provide safe, cost-effective, and reliable service for the community.” RTC is committed to operating a public transportation system that offers reliable, accessible and convenient service with safe vehicles, equipment and facilities.

TAM combines the components of investment (available funding and revenue), rehabilitation and replacement actions, and performance measures with the outcome of operating assets within the parameters of a state of good repair. Sufficiently maintained assets, those in a state of good repair, are instrumental to RTC’s ability to provide reliable service, as well as minimize operating and maintenance costs over the life cycle of rolling stock, equipment, and facilities. A capital asset is considered to be in a state of good repair when it is able to operate at a full level of performance.

RTC considers TAM to be a critical component in managing its growing service demands with limited financial resources. The TAM Plan includes an asset inventory portfolio, an asset condition assessment, a decision support tool and management approach, and investment prioritization that are used to aid in the following:

* Assessing the current condition of capital assets
* Determining the condition the assets should be in and what level of performance they should achieve
* Identifying the unacceptable risks, including safety risks, in continuing to use an asset that is not in a state of good repair
* Deciding how to best balance and prioritize anticipated funds (revenues from all sources) to improve asset condition and achieve a sufficient level of performance within those means

The TAM Plan establishes a process for supporting investment decision-making, including project selection and prioritization. The process involves use of a tool developed to prioritize assets for investment, and another to maximize the use of available resources to meet the greatest needs. The first tool in the process uses a weighted prioritization score of each factor used in the assessment. The resulting score for each asset can be used to produce a ranked list that is further refined in the next step.
Following this asset weighting, assets with a total weighted prioritization score of 2.75 or more are fed into a data analysis model which identifies the combination of assets with the highest sum of weighted prioritization scores while utilizing a minimum of 90 percent of the identified budget for that year. The result is a final prioritized list of projects that will maximize available funds to address the most immediate needs.

# CHAPTER 7: Goal #3: Congestion Reduction

(A screen reader compatible version, or other alternate format of this table/map/graphic is available upon request. Please send requests by email to rtp@rtcwashoe.com)

The goal of Congestion Reduction is defined in this RTP as achieving a significant reduction in congestion on the roadway network. The goal is achieved through its objective to: Manage Vehicle Travel Demand and Reduce Congestion. This chapter describes the regional efforts and strategies to address congestion reduction.

The following efforts and strategies are described in this chapter:

**Section 1 – Congestion Management Process**

**Section 2 – Intelligent Transportation Systems**

## Section 1 – Congestion Management Process

The Congestion Management Process (CMP) was developed as part of the RTP and is documented in Appendix D. The CMP establishes a framework for the RTC to prioritize projects aimed at reducing traffic congestion, enhancing transportation system performance, and meeting broad regional goals. The CMP’s scope covers the major roads and freeways in the Truckee Meadows region, emphasizing data-driven congestion analysis, such as using INRIX data and the regional travel demand model to identify congestion hotspots and plan targeted improvements.

The CMP aligns closely with the overarching RTP goals, emphasizing safety, infrastructure condition, congestion reduction, system reliability, freight movement, equity, environmental sustainability, efficient project delivery, and accessibility. One of the CMP’s primary objectives is to reduce both recurring and non-recurring congestion by implementing various strategies, including signal timing improvements, expanding fiber optic network connectivity, and strengthening traffic incident management practices. These initiatives collectively support smoother and more efficient traffic flow across the region.

Performance measures are central to the CMP and have been developed in alignment with federal legislation, specifically the Infrastructure Investment and Jobs Act and Moving Ahead for Progress in the 21st Century Act. These measures include targets for safety, infrastructure, system reliability, freight movement, environmental sustainability, and mobility, providing a clear structure for assessing progress and aligning with national transportation goals.

The CMP also includes mechanisms for monitoring and evaluating project performance. Through annual reports and performance plans, the RTC assesses project outcomes and makes adjustments as necessary based on performance data and community feedback. This adaptive approach ensures that projects remain responsive to evolving regional needs.

The CMP emphasizes a well-defined project selection framework, drawing on input from community members, studies, and partner agencies. Projects are prioritized based on criteria that reflect congestion, safety, and multimodal integration, aligning with the RTP project prioritization. This approach supports RTC’s goal of Congestion Reduction to achieve a significant reduction in congestion on the roadway network.

## Section 2 – Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) improve the transportation system by optimizing traffic flow, enhancing safety, and reducing congestion. RTC has developed an ITS Strategic Master Plan and invested heavily in ITS to reduce congestion and improve safety through the following strategies:

1. Real-Time Traffic Monitoring– Using sensors, cameras, and GPS data, smart traffic management systems continuously monitor traffic conditions. This data is analyzed to detect congestion, crashes, and other incidents in real-time.
2. Adaptive Traffic Signal Control– Traffic signals are adjusted dynamically based on current traffic conditions. This helps to minimize wait times at intersections and improve overall traffic flow.
3. Incident Detection and Management – Automated systems can quickly identify crashes or breakdowns and alert emergency services. Early detection and response to incidents minimizes the amount of time lanes are blocked and reduces traffic queuing.
4. Predictive Analytics– By analyzing historical and real-time data, these systems can predict traffic patterns, potential congestion points, and possible high-risk crash locations. This allows for proactive measures, such as adjusting traffic signals or providing route recommendations to drivers.
5. Enhanced Infrastructure and Public Information Systems– Intelligent infrastructure, such as dynamic message signs, motorist apps, and smart intersections, provides real-time information to drivers about traffic conditions, alternate routes, and estimated travel times which helps distribute traffic more evenly across the regional transportation network.
6. Public Transit Integration– Coordinating public transportation schedules and routes with real-time traffic conditions and providing transit priority systems at traffic signals makes buses more reliable, encouraging increased usage which reduces congestion.

These technologies and strategies work together to create a more efficient and safer transportation network.

# CHAPTER 8: Goal #4: System Reliability and Resiliency

(A screen reader compatible version, or other alternate format of this table/map/graphic is available upon request. Please send requests by email to rtp@rtcwashoe.com)

The RTP goal of System Reliability and Resiliency is defined in this RTP as improvement in the efficiency, resiliency, and overall reliability of the multimodal transportation system. System reliability refers to travel time predictability and resiliency refers to the ability of the transportation system to adapt as well as respond and recover quickly in emergency events. The goal of system reliability and resiliency is achieved through its objective to: Integrate All Travel Modes and Increase Travel Options. This chapter describes the regional efforts and strategies to integrate all travel modes and increase travel options. Collectively, these efforts and strategies aim to achieve the goal of system reliability and resiliency.

The following efforts and strategies are discussed in this chapter:

**Section 1** **– Complete Streets**

**Section 2 – Active Transportation**

**Section 3 – Environmental Sustainability, Flood and Stormwater Management**

**Section 1 – Complete Streets**

Complete Streets design principles apply context-sensitive solutions to integrate travel modes, and 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 the number and severity of crashes on roadways. In the Reno-Sparks metropolitan region, Complete Streets designs encourage motorists to drive at posted speeds and provide a designated space for walking and biking.

Reducing the potential for crashes also improves travel time reliability as crashes are not predictable and can slow or stop traffic, adding time to a trip. The range of Complete Streets 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
* Installing pedestrian crossing/waiting areas
in median islands
* Installing or upgrading transit stops

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. Regional connectivity projects also incorporate Complete Streets design concepts. With the exception of freeway projects, all road widenings are evaluated for upgrades to the sidewalk network, as well as transit stops and bicycle lanes where it is consistent with applicable plans and policies. Additional information about specific projects and design objectives is available in the 2016 RTC Complete Streets Master Plan.

## Section 2 – Active Transportation

Active transportation is a way of getting around that relies on human physical power. This includes walking, cycling, rolling (skateboarding, scooters), and using a wheelchair. When active transportation is part of a transportation network, the network’s travel options increase and the network is made more resilient. Adding redundancy through multiple modes provides options for mobility and network adaptability if a roadway corridor becomes unavailable due to an emergency. Additionally, as mode shift occurs and travelers choose to utilize active transportation, instead of a vehicle, roadway congestion decreases, extending the longevity of the existing roadway system.

Active Transportation Plan

Adopted in September of 2024, the RTC Active Transportation Plan (ATP) establishes a clear vision and goals for the future of active transportation in the Truckee Meadows and introduces a new approach to active transportation planning through Neighborhood Network Planning (NNP). The NNP approach will engage residents and stakeholders at the local level to identify active transportation solutions that address the unique needs of each neighborhood. The goals of the
ATP are to:

* Improve Safety
* Expand Mode Share
* Maintain the System Sustainably
* Enhance the Community

The ATP is RTC’s guiding document for project identification, prioritization, design, and implementation as related to active transportation improvements. The community-driven Plan moves beyond the Complete Streets approach by emphasizing the importance of a well-connected neighborhood as a key driver of active trips. The Plan identifies 12 active transportation neighborhoods within the Truckee Meadows, as shown in Map 8.1. RTC will complete a neighborhood network plan (NNP) for each of the twelve neighborhoods to identify and prioritize projects that create a comfortable and safe environment for active transportation for residents, business owners, and other stakeholders in that area.

***Map 8.1 Neighborhood Network Planning Areas***

(A screen reader compatible version, or other alternate format is available upon request.)

To quantify the increases in safety and comfort on the active network, the ATP presents two key metrics: bicycle level of traffic stress (BLTS) and pedestrian experience index (PEI). These two metrics use factors such as level of separation, type of facility, speed limits, and number of vehicle lanes to determine how attractive a bike facility or sidewalk is to an “interested but concerned” user. Additionally, the active trip potential metric considers land use to highlight areas with the strongest potential for increased active trips if given supportive infrastructure for people to use.

The ATP is also equipped with a typology guide containing best practices for roadway design to achieve target BLTS and PEI levels. This typology guide can be used to inform project managers and designers in places with or without an associated neighborhood plan.

The approach to implementation recommended by the ATP, is the formation of an Active Transportation Program guided by an Active Transportation Technical Working Group (ATWG) which will include representatives from the City of Reno, City of Sparks, and Washoe County. The Active Transportation Program will focus on planning, design, and construction of active transportation improvements identified through the neighborhood planning process.

Performance metrics are another key part of this Plan and are designed to measure how well policy
and infrastructure changes improve sidewalk and bike path quality and utilization.

Spot Improvements

RTC programs funds each year to implement spot improvements for ADA, and other pedestrian and bicycle improvements. A summary of bicycle and pedestrian improvements completed through the Spot Improvement Program from 2020 to 2023 is provided in Table 8.1.

***Table 8.1 Bicycle and Pedestrian Spot Improvements 2020-2023***

(A screen reader compatible version, or other alternate format is available upon request.)

## Section 3 – Environmental Sustainability, Flood, and Stormwater Management

Weather events have can have significant effects on the transportation network, causing disruptions to infrastructure and service. Similarly, the transportation network has the potential to aid in the environmental sustainability of the region, reducing the impacts of disruptions and contributing to sustainability efforts. Efforts of particular relevance to transportation include emissions reduction, stormwater management, and flood prevention. RTC and regional activities involving environmental sustainability and stormwater management are further described below.

RTC Sustainability Efforts

RTC provides the region with sustainable multimodal transportation options, including infrastructure that supports active transportation. As a part of this commitment, RTC adopted a Sustainability Policy in September 2011. This policy affirms RTC initiatives to promote, continually improve upon, and implement sustainable practices:

**Boxed text: 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.

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 RTC’s future planning and construction efforts, operations and maintenance, and internal activities.

Facilities and Vehicles

RTC incorporates sustainable practices at 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.

RTC operates a mixed fleet of alternatively fueled fixed-route buses, including 100 percent battery electric, hydrogen fuel cell, and hybrid-electric buses. Additional information is available in Chapter 9.

Stormwater Management

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. To minimize any potentially harmful impacts to our water resources during any stage of a project, RTC prioritizes stormwater management from the beginning. During the construction of any roadway, each contractor is required to develop a Stormwater Pollution Prevention Plan, 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 design of all roadway projects incorporates stormwater management techniques to address runoff. 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. Due to the impermeable nature of roadways, stormwater run-off from roadways collects these pollutants and can carry them to local rivers and other water bodies such as the Truckee River, Virginia Lake, or Pyramid Lake.
Water Quality Protection

Truckee Meadows Water Authority, Western Regional Water Commission, Nevada Division of Environmental Protection, and Washoe County Health District have collaborated to create the 2020 Integrated Source Water and Watershed Protection Plan for Public Water Systems and the Truckee River in the Truckee Meadows Plan. This Plan serves as a watershed management tool for organizations, agencies and the public to help protect water quality. TMRP has implemented this Plan through a new policy for their 2024 Regional Plan, NR 15 -Source Water Protection and Watershed Management, which states that, “Local government and affected entity master plans and other similar plans shall include policies that:

* Reference and/or utilize the Integrated Source Water and 319(h) Watershed Protection Plan for Public Water Systems and the Truckee River in the Truckee Meadows. Available at: https://washoecountycleanwater.org/
* Promote awareness and consideration of critical source water protection areas as identified in the above referenced plan.”

Washoe County Community Climate Action Plan

Washoe County is currently in the process of developing its first-ever Community Climate Action Plan (CAP). The purpose of the CAP is to identify specific actions that can help protect the local climate, improve public health, and reduce risks associated with increased greenhouse gas (GHG) emissions. The CAP aims to be a guide for residents, businesses, and public agencies to contribute to the County’s target of net zero GHG emissions by 2050. As part of plan development, the County is working with local and regional jurisdictions, public agencies, and community organizations to identify and recommend sustainability best practices across multiple sectors, including transportation. The CAP strategy most pertinent to the transportation sector is emissions reduction.
To reduce emissions in the transportation sector, the Plan will focus on two goals. The first is to lower the number of vehicles on the road and total vehicle miles traveled (VMT). The second goal is a shift from traditional combustion engine vehicles to cleaner vehicles such as zero -emissions vehicles or to active transportation modes such as walking, biking, and riding scooters.

Washoe County Regional Resiliency Study

As described in the 2014 Washoe County Regional Resiliency Study, 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 occurring in California during the 1860s. Regionally destructive flood events have periodically followed with notable floods occurring in 1907, 1955, 1963, 1997, and 2016. Economic impacts and infrastructure damage were 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 the regional Truckee River Flood Warning Plan and installing a flood warning system of river and precipitation gauges. Recent flood prevention projects include the Truckee River Flood Control Project that aims to protect critical areas of the region to a one percent frequency (100- year) flood event.

Washoe County 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). Washoe County’s membership in the NFIP provides residents an option for federally backed flood insurance for any structure, whether located within the floodplain or not. In addition, residents can receive a discounted rate on their flood insurance.

In May 2009, Washoe County qualified to be part of the Federal Emergency Management Agency (FEMA) Community Rating System (CRS), a program which rewards communities through further discounts on flood insurance, for activities that exceed the minimum NFIP requirements.

Currently, all development in flood zones is controlled by Washoe County Flood Hazard Ordinance 416, and FEMA regulations. Map 8.2 shows a map of the floodplains in Washoe County.

***Map 8.2 Washoe County Floodplains***

(A screen reader compatible version, or other alternate format is available upon request.)

Truckee River Flood Project

The Truckee River Flood Management Project (The Flood Project) is an ongoing 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. There is a need for flood prevention activities in the Truckee Meadows as approximately every 10 years, the Truckee River overflows its banks, causing damage to homes, businesses, and infrastructure. Significant flooding of the Truckee River occurred in 1986, 1997 (the flood of record), and 2005. In 2017, high flows almost overtopped the riverbanks. The implementation strategies of The Flood Project are designed to provide 100-year level of flood protection for the Truckee Meadows and include projects such as the construction of levees, floodwalls, vegetative terraces and ecosystem restoration.

# CHAPTER 9:Goal #5: Efficient Freight Movement and Economic Vitality

(A screen reader compatible version, or other alternate format of this table/map/graphic is available upon request. Please send requests by email to rtp@rtcwashoe.com)

The goal of Efficient Freight Movement and Economic Vitality is defined in this RTP as the improvement of the regional freight network, strengthening of the ability of rural communities to access national and international trade markets, and support of regional economic development. The goal is achieved through its objective to: Improve the Movement of Freight and Goods. Effective goods movement is vital to the economic competitiveness of Northern Nevada and to the overall health of the transportation system. This chapter describes efforts and strategies to address efficient freight movement and economic vitality through the improved movement of freight and goods.

The following efforts and strategies are described in this chapter:

**Section 1** **– RTC Regional Freight Plan**

**Section 2 – National, State, and Local Policies and Plans**

**Section 3 – Outreach and Coordination**

**Section 4 – Projects Supporting Freight and Goods Movement**

The above efforts and strategies will be discussed further in Sections 1-4. Collectively, these efforts
and strategies to improve the movement of freight and goods aim to achieve the goal of efficient freight movement and economic vitality.

## Section 1 – RTC Regional Freight Plan

In 2024, RTC adopted the Regional Freight Plan which identifies the transportation needs and priorities that will support a thriving regional economy through efficient freight and goods movement as well as workforce access. While the Plan focuses primarily on Washoe County, it is recognized that freight and its associated economic impacts expand across multiple county and jurisdictional boundaries in Northern Nevada and Northern California. The Plan therefore considers needs and opportunities in surrounding counties in addition to the Truckee Meadows.
The five goals of this Plan are:

1. Improve safety – Transportation safety is a guiding principle for RTC, and providing for the safety of freight movement on Washoe County roadways is an important element of planning for goods movement.
2. Improve multimodal integration and rail access – About a quarter of freight activity in Northern Nevada transfers between multiple modes, which could include truck, rail, and/or aviation. Providing for efficient connections between modes is essential. Maintaining rail access to existing industrial properties helps ensure the seamless movement of goods and supports industrial operations. Because rail service is difficult to restore once lost, the Regional Freight Plan identifies preservation
of rail access as a key priority.
3. Improve efficiency of freight movement – Reducing travel delays and improving travel time reliability is important for freight movement, just as it is for all types of transportation in the region.
4. Provide for equity and sustainability in freight movement – Freight may have impacts on neighborhoods and the environment that are different from other types of transportation. Potential impacts resulting from noise, air quality, and safety are of particular concern
in traditionally underserved areas.
5. Improve truck parking – The limited availability of truck parking is one of the most significant and challenging issues facing Northern Nevada. With periodic winter closures on I-80 over the Sierra Nevada, this is a concern that impacts Washoe County in addition to communities along I-80 across Nevada and beyond.

The Regional Freight Plan emphasizes the significance of regional highways that 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. Freight-significant regional roads are designated by NDOT as Critical Urban Freight Corridors, and include corridors such as McCarran Boulevard, Pyramid Way, and Lemmon Drive. Map 9.1 shows the 2023 National Highway Freight Network Subsystems within urban Washoe County and surrounding areas.

Tables 9.1 and 9.2 show the top commodities by tonnage and value in 2022 and 2050 (projected). The purpose of the top commodity analysis is to understand trade patterns and enhance freight planning by identifying key goods that drive trade flows and their impact on the region’s economy.

***Table 9.1 Top Commodities by Tonnage and Value in 2022
Table 9.2 Top Commodities by Tonnage and Value in 2050***

*Source Freight Analysis Framework 5.4.1, disaggregated by Cambridge Systematics Inc. 2023*(A screen reader compatible version, or other alternate format is available upon request.)

Most of the goods movement activity in the region is transported by truck, as shown in Figure 9.1. The Regional Freight Study examined the impacts of this high volume of truck traffic on safety. Map 9.2 illustrates that the highest concentration of semi-truck involved vehicle crashes occur on the freeways, with a particular hotspot along I-80 in industrial Sparks. A project included in this RTP that addresses safety concerns in the corridor is the widening of I-80 to three lanes in each direction from East McCarran Boulevard in Sparks to Vista Blvd. Though a need for the region, this project currently has no identified funding.

***Figure 9.1 Commodity Flow Modal Split in 2022 and 2050 by Tonnage and Value****Source: Freight Analysis Framework 5.4.1, disaggregated by Cambridge Systematics Inc. 2023****Map 9.2 Truck-Involved Crashes in Central Reno and Sparks***(A screen reader compatible version, or other alternate format is available upon request.)

## Section 2 – National, State, and Local Policies and Plans

An overview of key national, state, and local freight plans and policies that affect the movement of freight and goods is provided below.

National Policy

The 2012 Moving Ahead for Progress in the 21st Century Act (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 2015 Fixing America’s Surface Transportation Act (FAST) emphasized the importance of coordination between local governments and freight transportation providers.

The passage of the current transportation bill, the 2021 Infrastructure Investment and Jobs Act (IIJA), further reinforces the importance of freight to the national economy. Specifically, the IIJA Act established grant programs, such as INFRA, to fund critical transportation projects that benefit freight movements.

Nevada State Freight Plan

The 2050 RTP supports the vision and goals described in the Nevada State Freight Plan (NSFP), which was adopted in 2017 and updated in 2022. 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.

Nevada Truck Parking Implementation Plan

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. The 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, 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.

Nevada State Rail Plan

The 2021 Nevada State Rail Plan was developed by 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 2021 Nevada State Rail Plan:

* Provides a plan for freight and passenger rail transportation in the state.
* 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.

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 Union Pacific (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 Bay 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. There are a total of 144 route miles of freight railroad 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 railyard 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 railyard plays a critical role in the efficient movement of goods in and around Nevada.

RNO Master Plan

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 two miles of both major highway corridors, I-80 and US 395, and less than one mile from the UP Sparks Intermodal Facility.

More details about the airports and planned expansion initiatives can be found in the RNO Master Plan, approved in January 2019.

## Section 3 – Outreach AND 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 in the meetings and working closely with NDOT and other partners to develop and prioritize freight projects.

Additionally, the Regional Freight Plan recommends the creation of a Regional Freight Advisory Committee that would include a combination of public and private sector agencies and organizations with an interest in freight and goods movement. This committee, in combination with surveys of those agencies and organizations, would be used to foster collaboration and information sharing among stakeholders to guide implementation of recommendations in the Regional Freight Plan and Regional Transportation Plan.

Truck parking challenges and potential solutions specific to Northern Nevada were discussed during a FAC workshop. 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
* Development of truck parking actions, strategies, and priorities

## Section 4 – Projects Supporting Freight and Goods Movement

Multiple projects in this RTP focus on improving freight and goods movement through Northern Nevada. Three of these projects are summarized below.

* Systemwide Intelligent Traffic System (ITS)improvements on I-80 and US 395/I-580
	+ This project makes improvements to traffic signal timing. Traffic signal timing determines traffic movements for different time intervals depending on variables like average traffic flow levels. ITS improvements support freight and goods movement by reducing idle times and delays, making roadway travel more efficient for freight trucks.
* Pyramid Highway/US 395 Connector
	+ This project supports freight and goods movement by improving capacity and safety and reducing travel delays. Efficient corridors, characterized by consistent travel times, are essential for ensuring timely deliveries and reducing supply chain disruptions.
* Spaghetti Bowl Project and US 395 Widening
	+ Phase 1 of improvements to the Spaghetti Bowl have been completed and Phase 2 of the project includes the widening of the segment eastward to Sparks Boulevard. This project supports freight and goods movement by improving capacity and safety and reducing travel delays. I-80 through downtown Reno and Sparks contains the highest concentrations of truck-involved crashes in the region and NDOT’s planned I-80 improvements as part of the Spaghetti Bowl Project, are a high priority for improving safety.

# CHAPTER 10: Goal #6: Equity and Environmental Sustainability

(A screen reader compatible version, or other alternate format of this table/map/graphic is available upon request. Please send requests by email to rtp@rtcwashoe.com)

This RTP defines the goal of Equity and Environmental Sustainability as enhancing the performance of the transportation system while protecting and enhancing equity and the natural environment. The goal of equity and environmental sustainability is achieved through its objective to: Promote Equity and Environmental Justice. The RTC strives to serve the transportation needs of all residents and visitors in the region without discrimination based on age, income, race, language, ethnicity, or ability. This chapter describes the regional efforts and strategies to promote equity and environmental justice.

The following federal policies and associated actions are discussed in this chapter:

Section 1 – Title VI of the Civil Rights Act of 1964

Section 2 – Americans with Disabilities Act (ADA) of 1990

Section 3 – Executive Order on Environmental Justice

Section 4 – Executive Order on Climate Change and Sustainability

The RTC complies with the above federal policies and requirements and implements each toward
the goal of achieving equity and environmental sustainability.

## Section 1 – Title VI of the Civil Rights Act of 1964

According to Title VI of the Civil Rights Act of 1964, “no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” Per Title VI, RTC is required to take steps to ensure that no discrimination occurs based on the factors above.

RTC transportation projects and services are implemented in conformance with the RTC Title VI Report. The RTC submits a Title VI Report to the Federal Transit Administration every three years, with the most recent report approved by RTC’s Board in February 2023. Additionally, the RTC submits a Title VI Certification and Assurance to the FTA on an annual basis.

An inclusive participation strategy is one of the primary measures used to comply with Title VI requirements. RTC ensures that persons who are a member of a minority group, have low-income, and/or have Limited English Proficiency (LEP) are able to provide meaningful input into the planning process. One example of inclusive participation practices is public meetings which are held in locations near transit routes and where translators and materials are provided in Spanish and English. RTC works with senior centers, assisted living facilities and senior organizations within the RTC transit service area to introduce seniors and people with disabilities to the RTC Travel Training Program. The Travel Training Program curriculum includes a presentation about RTC transit services and a field trip allowing the participants to experience riding the bus. The goal of the program is to make the participants feel more comfortable using public transportation as well as to solicit input from them about RTC services.

In addition to outreach efforts designed to engage people with disabilities, RTC also ensures persons with LEP 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
* 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
* RTC ACCESS voice recordings that reminds passengers of upcoming reservations
* RTC Passenger Services has Spanish speaking passenger service representatives available
to assist passengers
* RTC website content is translatable to multiple languages, including Spanish.

Another strategy in place to ensure compliance with Title VI requirements is the RTC complaint process. RTC has established complaint procedures to receive, investigate, and track Title VI complaints. These procedures include a Title VI policy statement, specific directions detailing how to file a complaint, an explanation of how the complaint will be investigated, and a complaint form specific to the RTC. The RTC complaint process and forms are translated into Spanish and are available in other languages upon request.

Equal Opportunity in Procurement

Many of RTC’s transportation projects are implemented using federal sources of funding. RTC is an Equal Opportunity Employer and encourages Minority, Women, and Disadvantaged Business Enterprises (DBE) to participate in the competitive procurement process. All planning and project development work is procured and administered through RTC’s Board-adopted DBE Program. RTC supports inclusive economic development by incorporating nondiscriminatory elements in its DBE program to facilitate competition by small businesses and ensure DBEs have an equal opportunity to receive and participate in contracts. RTC sets project-specific DBE goals, provides DBE training, and conducts outreach to local and regional DBEs to advise them of opportunities. RTC has established an overall goal of 1.3 percent for DBE participation in FTA and other federally-funded contract opportunities for federal fiscal years 2023 – 2025. This goal is updated triennially, and changes based on the relative availability of DBE firms in the region and the type of projects proposed for implementation during the triennial period.

The State of Nevada has a robust workforce development and apprenticeship program. Similarly, RTC’s contracting regulations promote the hiring of underrepresented workers and residents. For example, RTC works with the Small Business Development Center at the University of Nevada, Reno to develop a listing of local and regional small businesses. RTC utilizes this listing and a directory of Emerging Small Businesses, developed by the Nevada Governor’s Office of Economic Development, to conduct procurement outreach.

In addition, Nevada’s Apprenticeship Utilization Act requires that “a contractor or subcontractor engaged in horizontal construction who employs workers on one or more public works during a calendar year pursuant to NRS 338.040 use one or more apprentices for at least three percent, or any increased percentage established pursuant to subsection 3, of the total hours of labor worked for each apprenticed craft or type of work to be performed on those public works.” Finally, Nevada’s prevailing wage requirements ensure that jobs created by RTC projects will pay a fair wage. Construction contracting companies, hired by RTC, also must comply with Nevada’s prevailing wage requirements and federal DBE programs.

Objectives of the RTC DBE Program are to ensure nondiscrimination, remove barriers to DBE participation, create full and fair opportunities for equal participation by small businesses in federally funded contracting and procurement opportunities, and assist in the development of DBE firms that can compete successfully in the marketplace. RTC’s 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.

## Section 2 – Americans with Disabilities Act (ADA) of 1990

The 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. RTC complies with ADA requirements in all aspects of its administration and operations. Specific examples are provided below.

ADA Transition Plan

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. As RTC continues to address ADA-related issues identified in the Plan, the Plan will be updated at regular intervals or as needed.

Bus Stop and Sidewalk Connectivity Program

RTC initiated a program that funds ADA improvements and sidewalk connectivity at high-priority bus stops in 2019. These improvements were completed in 2023. However, additional phases of the program are expected to be identified and completed in future years. The RTC will continue to upgrade bus stops in accordance with the needs identified through the ADA Transition Plan and its subsequent updates. RTC also works with local governments to bring existing bus stops up to ADA standards as part of the development review process.

Accessibility of the Transit Fleet

The RTC fleet used for RIDE (fixed-route), ACCESS (paratransit), and FlexRIDE (microtransit) services contain accessibility features such as wheelchair ramps and lifts, interior and exterior audio announcements, accessible stop requests with audible chimes, and others to aid users in navigating the system. The ACCESS service provides service specifically for those with disabilities that prevent them from riding the RIDE service independently some or all of the time. It provides door-to-door, prescheduled transportation for people who meet the eligibility criteria of the ADA.

Additionally, the RTC Reasonable Modification Policy allows individuals to make requests beyond those noted above or required by law. RTC may allow the reasonable modification of its policies to accommodate the needs of persons with disabilities in order to allow them to fully utilize available services.

Improving Accessibility of the Regional Road Network

RTC Active Transportation Plan includes a tool to help identify areas in the region most in need of pedestrian and bicycle facility improvements. 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, project area sidewalks and crosswalks are brought to current ADA standards.

Examples include the recently completed Oddie/Wells Corridor Multimodal Improvements, Sky Vista Parkway Capacity, and Sparks Boulevard Corridor Phase 1 projects, which were all designed to provide wider and/or safer sidewalks with accessibility improvements.

## Section 3 – Executive Order on Environmental Justice

Executive Order 12898 – the Executive Order on Environmental Justice – requires the identification and assessment of disproportionately high and adverse impacts on minority and low-income populations. The 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. Nearly three decades later, the federal government built upon and strengthened its commitment to deliver environmental justice to all communities across America through Executive Order 14096 (2023).

The Executive Order includes implementation and enforcement of environmental and civil rights laws, preventing pollution, addressing climate change and its effects, and working to clean up legacy pollution that is harming human health and the environment.

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 impactful as the population of Washoe County consists of 37 percent minority and four percent of households with LEP. Map 10.1 shows the relation of census tracts with higher than county average LEP population to projects included in this RTP.

It should be noted that the demographic data used in this chapter was produced using the Climate and Economic Justice Screening Tool (CEJST), which was created under the 2021 Executive Order 14008to identify communities that are experiencing burdens in any of eight categories. The tool uses census tracts boundaries from 2010 as well as data from the 2019 American Community Survey five-year estimates. More information on Executive Order 14008 and CEJST is provided in Section 4 of this chapter.

When RTC alters transit service, staff ensures that no disproportionately high or adverse impacts on minority and low-income populations occur. When a major service change is being considered, staff receives input from passengers, including many people who are part of minority and low-income populations. RTC policy identifies a major service change as:

* A reduction or increase of 10 percent or more of system-wide service hours
* The elimination or expansion of any existing service that affects:
	+ 25 percent or more of the service hours of a route
	+ 25 percent or more of the route’s ridership (defined as activity at impacted bus stops)

Additionally, RTC holds a formal public hearing and analyzes how these changes will impact all passengers within the RTC service area. RTC transit activities are continually reviewed, and the results are summarized once every three years in a Title VI Report, which is described in Section 1
of this chapter.

***Map 10.1 Census Tracts with Higher Limited English Proficiency Populations***(A screen reader compatible version, or other alternate format is available upon request.)

The projects, programs, 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 East Sixth Street, Sun Valley Boulevard, and Vassar Street.

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.

***Table 10.1 Demographic and Socioeconomic Summary, 2019 ACS Five-Year Estimates***(A screen reader compatible version, or other alternate format is available upon request.)

As shown in the table of demographic information above, approximately 37.1 percent of the residents living within ¼ mile of the projects included in the RTP and 41 percent of the residents living within ¼ mile of transit routes are members of a minority group. Just under 37 percent of Washoe County residents are members of a minority group. These data indicate that transportation investments and benefits are shared equitably throughout the community. Map 10.2 shows the relation of census tracts with higher than county average minority population to projects included in this RTP.

***Map 10.2 Census Tracts with Higher Minority Populations***(A screen reader compatible version, or other alternate format is available upon request.)

Approximately 11.1 percent of Washoe County residents have incomes that are below the poverty level. About 11.3 percent of residents near roadway projects and 12.5 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 slightly 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. Maps 10.3 and 10.4 show the distribution of RTP projects relative to the location of populations experiencing higher than average poverty levels or that are age 65 or older.

RTC’s outreach includes numerous efforts to support transportation for economically disadvantaged populations. 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.

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 many individuals, allowing them to access social activities, medical appointments, educational opportunities, and employment. 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 RTC at the annual Senior Fest event. In addition to incorporating seniors and persons with disabilities 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.

***Map 10.3 Census Tracts with Higher Poverty
Map 10.4 Census Tracts with Higher Senior Populations***(A screen reader compatible version, or other alternate format is available upon request.)

## Section 4 – Executive Order on Climate Change and Sustainability

Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad addresses issues related to climate change and sustainability. One of the initiatives under this order is Justice 40. Justice 40 establishes a goal that 40 percent of overall benefits from certain federal climate, clean energy, and affordable and sustainable housing investments flow to disadvantaged communities that are marginalized by underinvestment and overburdened by pollution.

In response to Justice 40, hundreds of federal programs have been updated to ensure that disadvantaged communities receive the benefits of new and existing federal investments. Investments made will help confront decades of underinvestment in disadvantaged communities and bring critical resources to communities that have been overburdened by legacy pollution and environmental hazards.

In response, RTC has reaffirmed existing policies to ensure meaningful engagement and equitable investment in the planning, design, and implementation of projects.

For example, RTC utilizes the Climate and Economic Justice Screening Tool (CEJST) to identify disadvantaged census tracts directly impacted by proposed projects. The tool uses various datasets as indicators of burdens, which are organized into eight categories: 1) climate change, 2) energy, 3) health, 4) housing, 5) legacy pollution, 6) transportation, 7) water and wastewater, and 8) workforce development.

RTC may also reference other tools, such as the Environmental Protection Agency’s (EPA) Environmental Justice Screening and Mapping Tool (EJScreen) or the Department of Transportation’s (DOT) Screening Tool for Equity Analysis of Projects (STEAP) to identify disadvantaged or Justice40 populations. Maps 10.5 and 10.6 were produced using the EJScreen tool to show the relation of disadvantaged populations to RTP projects and RTC RIDE routes, respectively. Once identified, these communities will typically be targeted for outreach events as determined by the applicable project’s community engagement plan. Engagement strategies ensure meaningful participation of these communities consistent with Federal Highway Administration (FHWA) guidance in Promising Practices for Meaningful Public Involvement in Transportation Decision-Making.

***Map 10.5 Environmental Justice Populations and RTP Projects
Map 10.6 Environmental Justice Populations and RTC RIDE Routes***(A screen reader compatible version, or other alternate format is available upon request.)

# CHAPTER 11:Goal #7: Reduced Project Delivery Delays

(A screen reader compatible version, or other alternate format of this table/map/graphic is available upon request. Please send requests by email to rtp@rtcwashoe.com)

The goal of Reduced Project Delivery Delays is defined in this RTP as a reduction in project costs, promotion of jobs and the economy, and the expeditious movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process. This includes reducing regulatory burdens and improving agencies’ work practices. The goal
is achieved through its objective of Monitoring Implementation and Performance.

Effective implementation and performance monitoring fosters a culture of accountability and continuous improvement. By aligning system performance with broader regulatory and funding priorities, RTC can streamline compliance and make projects more competitive for federal grants and support. This proactive oversight ensures that the delivery process remains aligned with national priorities, supports economic growth, and enhances the movement of people and goods while
reducing regulatory burdens and optimizing project delivery practices.

This chapter describes the regional performance measures used to support the goal of reduced project delivery delays. The following performance measures and practices are discussed in this chapter:

**Section 1 – RTC Performance Plans**

**Section 2 – Safety**

**Section 3 – Roadway Infrastructure Condition**

**Section 4 – Congestion Reduction**

**Section 5** **– System Reliability**

**Section 6 – Environmental Sustainability**

**Section 7 – Transit State of Good Repair and Other Transit Measures**

**Section 8 – RTC Key Performance Indicators (KPIs)**

## Section 1 – RTC Performance Plans

The Fixing America’s Surface Transportation Act and the Moving Ahead for Progress in the 21st Century Act provide a framework for linking goals and performance targets with project selection and implementation. Performance management leads to more efficient investment of transportation funds by focusing on national transportation goals, increasing accountability and transparency, and improving decision making.

Performance plans chart progress toward achieving performance targets and are used to facilitate a community conversation about the track record of the RTC’s transportation program. The performance measures included in performance plans build upon existing and planned data collection efforts. RTC develops the following performance plans:

* Regional Transportation Plan, to be
updated every four years, which includes
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 includes:
* 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
* Transportation Optimization Plan Strategies (TOPS)
* Public Transportation Agency Safety Plan

The U.S. Secretary of Transportation, in consultation with states, MPOs and other stakeholders, establishes national performance measures for several areas: pavement conditions and performance for the Interstate System and National Highway System, 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. RTC has collaborated with the Federal Highway Administration (FHWA) Nevada Division Office, Nevada Department of Transportation (NDOT), and other stakeholder jurisdictions and agencies to develop performance measures. These performance measures and targets are updated upon release of national and state performance measures.

## Section 2 – 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 requires time and significant effort by all stakeholders.

The safety performance targets identified in the RTP represent important steps 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, NDOT, as well as states and MPOs across the nation. RTC tracks progress toward safety goals using the following safety performance measures:

* Number of Fatalities and Rate of Fatalities per 100 Million Vehicle Miles Travelled (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 Nevada’s Strategic Highway Safety Plan.
* Number of Serious Injuries and Rate of Serious Injuries Per 100 Million VMT –
Serious injuries resulting from automobile crashes are also tracked by FARS.
* Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries –
This data is provided by NDOT.
* Preventable Transit Crashes 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 traveling on a bus is much safer than riding in other types of vehicles, RTC continuously strives to increase safety of transit travel.

## Section 3 – Roadway Infrastructure Condition

The six FHWA national performance measures for assessing roadway pavement infrastructure condition reflect elements in the Highway Performance Monitoring System, including the International Roughness Index, rutting for asphalt surfaced pavements, faulting for jointed concrete surface pavements, and cracking percent. The measures include the percentage of pavements in good and poor condition on both the Interstate System and Non-Interstate National Highway System, as well as the percentage of bridges in good and poor condition.

The measures for assessing bridge infrastructure condition are based upon elements in the National Bridge Inventory (NBI), which reports the condition of the bridge deck, superstructure, substructure, and culverts. The data to determine bridge condition using the FHWA measures are provided by NDOT, through their periodic assessment of pavement and bridge infrastructure.

## Section 4 – Congestion Reduction

RTC tracks the following measures for Congestion Reduction:

* Level of Travel Time Reliability (LOTTR) – 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). The measures are the percent of person-miles traveled on the relevant Interstate System and Non-Interstate National Highway System that are reliable. Person-miles take into account the users of the National Highway System. Data to reflect the users can include bus, auto, and truck occupancy levels.
* Truck Travel Time Reliability (TTTR) Ratio – 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 for RTC. A system-wide average of 21 passengers per service hour is the 2025 performance target for RTC RIDE. This goal is updated every five years through the Transit Optimization Plan Strategies (TOPS) planning process. RTC currently tracks this data and provides regular reports to the RTC Board. This measure is also tracked for ACCESS and FlexRIDE.

## Section 5 – System Reliability

RTC tracks the following measures for System Reliability:

* Peak Hour Excessive Delay – This measure applies to mainline highway segments on the National Highway System 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 NAAQS. Excessive delay is based on travel time lower than 20 miles per hour or 60 percent of the posted speed limit travel time, whichever is greater. RTC was required to begin reporting on this measure in 2022.
* Percent Non-SOV Travel – Non-single occupancy vehicle (SOV) 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 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, RTC
was required to begin reporting on this measure in 2022.
* Transit System On-Time Performance – The goal of the RTC RIDE system is to have 85 percent of all transit departures occur on schedule. This data is currently collected and reported to the RTC Board. This measure is also reported for ACCESS and FlexRIDE.

## Section 6 – Environmental Sustainability

RTC tracks the following measures for 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 CMAQ Improvement Program. RTC reports these measures annually directly to FHWA.
* Transit Fleet Mix – Monitoring fleet mix not only helps RTC assess transit assets and vehicle budgets, but also helps confirm that efficient and climate-friendly vehicle technologies are being integrated into the RTC fleet and are benefiting the Truckee Meadows community. RTC has set a vehicle replacement goal of a 100 percent electric or CNG fuel fleet by 2040. In support of this effort, RTC has already met its goal of 100 percent battery electric, hydrogen fuel cell, and battery hybrid vehicles for the RIDE fixed-route fleet.
* Auto Emissions – RTC, in partnership with the Northern Nevada Public Health 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.

One of the community benefits of public transportation is a reduction of greenhouse gas emissions. Most fixed-route and vanpool trips replace trips that would otherwise be taken by a SOV. RTC focuses on reducing SOV trips through initiatives such as growing ridership in the fixed-route and vanpool programs.

## Section 7 – Transit State of Good Repair Performance Measures and Other Transit Measures

RTC tracks the following measures for Transit State of Good Repair:

Preventive Maintenance of Transit Rolling Stock and Facilities – The RTC TOPS 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 percent of preventive 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. RTC follows FTA useful life standards, which vary by type of vehicle. This measure, as well as related measures such as percent of vehicles past retirement age, are further developed through the TAM Plan.

National transit goals and performance measures are developed by the Federal Transit Administration. These include state of good repair standards for measuring the condition of the following 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

RTC reports on a variety of other performance measures related to transit operations with metrics such as ridership, farebox recovery rate, passengers per revenue vehicle hour and revenue vehicle miles. RTC reports on performance measures monthly and provides annual reports for a year-to-year comparison. These reports help RTC monitor the efficiency of transportation services offered and the performance of individual routes to make informed decisions about future projects and demand for services.

## Section 8 – RTC Key Performance Indicators

RTC not only tracks federally required performance measures but also employs Key Performance Indicators (KPIs) to ensure that near-term goals are achieved efficiently. While federal performance measures provide a framework for long-term compliance and progress, RTC uses KPIs to assess and monitor additional metrics that are crucial for the success of programs and projects. These KPIs include operational efficiency, service reliability, customer satisfaction, and safety. By balancing both federally mandated and internal performance measures, RTC ensures that short-term implementations consistently support long-term transportation goals.

Each year, RTC develops and tracks KPIs to assess progress and success in achieving annual strategic goals. The use of KPIs and milestone tracking is central to the approach. Strategic goals are broken into actionable items with specific targets, allowing for real-time tracking of progress. Each project or initiative is categorized as either “on target,” “achieved,” or “off target,” providing a transparent view of the current status.

The KPI and milestone tracking process addresses the goals and milestones across different RTC departments (Engineering, Public Transportation, Planning, etc.), each with its own deliverables, timelines, and performance outcomes. It promotes department collaborations and streamlines project implementation by clarifying expectations and providing transparency. KPIs are developed to monitor departmental progress, in areas such as:

* Engineering Department – Status of road design, construction, and traffic
management projects
* Public Transportation Department – Improvements to transit services, infrastructure upgrades, and efforts to expand rider access
* Planning Department – Long-term transportation planning, safety improvements, and public engagement efforts

The KPI process also significantly emphasizes financial stewardship, ensuring that projects stay within budget and outlines long-term financial strategies to sustain operations. KPIs provide a clear framework for assessing RTC’s performance, allowing the organization to track its success in delivering safe, efficient, and sustainable transportation solutions across the region.

# CHAPTER 12: Goal #8: Accessibility and Mobility

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The goal of Accessibility and Mobility is defined in this RTP as an increase in the accessibility and mobility of people on the multimodal transportation system and enhancement of the integration and connectivity of the multimodal transportation system. The goal is achieved through its objective: to Provide a Regional Transit System and Other Transportation Services. This chapter describes the regional efforts and strategies to provide a regional transit system and other transportation services.

Regional travel options beyond single-occupancy vehicles (SOVs) include walking, rolling, and the use of public transit. These modes are a major component of the regional transportation network used for commutes, utilitarian trips, and active recreation. Continued investment in active transportation and public transit is an investment in the social and economic success of the community, especially for vulnerable populations.

RTC seeks to have an interconnected multimodal transportation system that gives residents more travel choices. 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.

The following efforts and strategies are discussed in this chapter:

**Section 1 – Local Multimodal Connectivity Initiatives**

**Section 2 – Advanced Mobility and Innovation Efforts**

**Section 3** **– Transit Services**

## Section 1 – Local Multimodal Connectivity Initiatives

Active Transportation Plan and ADA Transition Plan

The RTC Active Transportation Plan was adopted in 2024, and the ADA Transition Plan was adopted in 2020. The two plans establish strategies for the development of a well-connected regional walking and bicycling network that provides residents and visitors a more livable and healthy community.

These planning efforts also created an opportunity to identify safe access to transit stops throughout the region. The ADA Transition Plan included an evaluation of RTC transit stops and accessible connectivity to transit. The Active Transportation Plan’s neighborhood approach to improving pedestrian and bicycle infrastructure increases connectivity and provides the community with multimodal transportation options. More information on the Active Transportation Plan can be found in Chapter Eight.

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. Also in 2015, the University of Nevada, Reno was the first University in the state of Nevada to be recognized as a Bicycle Friendly University.

In December 2016, 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, working with advocacy groups, the installation of a public bike repair area at the RTC 4th Street Station, and offering bike parking in well-lit areas with security cameras. Re-designation occurs every four years, and efforts are currently underway for RTC to update its Bicycle Friendly Business designation.

Truckee Meadows Regional Trails Plan

The mission of the Truckee Meadows Regional Trails Plan, as stated on the Plan webpage, is “to work with community and agency partners to create a regional, sustainable, system trail network that enhances the quality of life for Truckee Meadows residents.” The Plan includes goals and objectives that aim to guide future bicycle and pedestrian facilities and facility connectivity throughout the region.

RTC was a planning partner on this effort and Plan implementation is supported by RTC through the Active Transportation Program and by the Truckee Meadows Regional Planning Agency (TMRPA) through a new policy (NR 11) in the 2024 Regional Plan which states that: “Local government and affected entity master plans and other similar plans shall include policies that:

Reference and/or utilize the Truckee Meadows Regional Trails Plan (TMRTP). Available at: https://www.tmparksfoundation.org/truckee-meadows-trails-initiative

Promote the construction of trails and trailheads and the connectivity of trails with existing, planned, and proposed trails as identified in the TMRTP.”

## Section 2 – Advanced Mobility and Innovation Efforts

Advancements in mobility and transportation technologies such as alternative fuels, automated vehicles, and shared mobility stand to significantly change the future of transportation networks. RTC and regional activities involving advanced mobility and innovation efforts are further described below.

Zero-Emission Vehicles and 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. To prepare for continued growth in the alternative fuel and advanced mobility sectors, in 2022 RTC completed the Electric Vehicle and Alternative Fuel Infrastructure and Advanced Mobility Plan. The Plan investigates advanced mobility solutions that can be implemented in Washoe County to create a more convenient, connected, equitable and sustainable transportation network. In addition to an evaluation of existing electric vehicle charging resources and identification of strategies for long-term development of alternative charging technologies, the Plan also investigates other innovative and emerging mobility trends such as connected vehicles, autonomous vehicles, and micromobility.

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 has also collaborated with the University of Nevada, Reno (UNR) on research into
intelligent mobility. UNR’s Center for Applied Research integrates expertise in advanced autonomous systems, computer sciences, synchronized transportation, and robotics to help address community needs. The Center has created a Living Lab to allow the testing of mobility technologies in urban environments. The Center and RTC have partnered 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 could improve both safety and operational efficiency.

Autonomous aircraft are also beginning to emerge as a transportation option of the future. Drones are small aircraft that 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, UNR opened the Nevada Advanced Autonomous Systems Innovation Center as a catalyst for innovation in the field of autonomous systems.

Bike and Scooter 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 Truckee Meadows region. 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 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, UNR, and The Reno-Sparks Indian Colony. This pilot project was the first in the country that included a tribal government. RTC had a supporting role in the dockless bike share pilot, which involved no public capital infrastructure investment. The pilot project ended, and the local jurisdictions determined not to continue with dockless bike share.

While there may still be interest in bike share for the region, the local jurisdictions and other partner entities would need to revisit the type and structure of any future system.

In 2022, the City of Reno launched an e-scooter share option with Bird in Downtown and Midtown Reno. Scooter operating rules include a “no sidewalk riding” requirement in Downtown and Midtown, as well as designated parking areas. Since the launch of the e-scooter share, 484,276 total trips have been made.

## Section 3 – Transit

RTC is the main transit provider for Washoe County. 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 main benefits of transit service are summarized below:

* Supports the Economy – Getting people to work, including essential jobs and services
* Shapes Development – Economic revitalization
* Provides a Public Service – Mobility for people that do not drive
* Aids Environmental Efforts – Reducing traffic congestion also reduces air pollution
* Provides Access to Essential Services – Providing service to healthcare, pharmacies, groceries, and other public services

RTC transit services, programs, and initiatives are further described below.

RTC RIDE and RAPID

RTC operates the RIDE and RAPID fixed-route bus system. There are 18 RIDE local bus routes, and two RAPID bus rapid transit routes. All routes connect to three major passenger transit centers which are 4TH STREET STATION in Downtown Reno, CENTENNIAL PLAZA in Sparks, and the Meadowood Mall Transfer Center in the southern portion of the service area. Schedules are coordinated at these transit centers to allow riders to quickly transfer between routes. Routes generally operate on compatible clock-based headways of 10, 30, and 60 minutes. The ticket cost is $2, one-way, and in fiscal year 2024 (July 1, 2023, to June 30, 2024), approximately 5.4 million trips were provided on RIDE and RAPID.

RTC Regional Connector

RTC currently provides the REGIONAL CONNECTOR transit route between Reno and Carson City. This premium service carried over 20,000 passengers in fiscal year 2024.

RTC ACCESS

RTC ACCESS is a paratransit service, required as a civil right under the Americans with Disabilities Act (ADA), which provides mobility for people whose disability prevents them from using fixed-route transit service. Rides are reserved through a call center one to three days in advance of travel.

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 fiscal year 2024, about 140,000 rides were provided. Approximately 3,700 individuals are certified as ADA paratransit eligible in Washoe County and are eligible for the ACCESS service. The ADA requires paratransit service to be provided within 3/4 of a mile of fixed-route transit service. The ticket cost is $3, one-way.

RTC FlexRIDE

RTC FlexRIDE is a curbside-to-curbside transit service available by requesting a ride through an app or by phone. Rides can be scheduled at the desired travel time and can be expected to arrive to the curbside closest to the pick-up location in as little as 20 minutes. The convenience of this service has made it very popular with customers and resulted in strong ridership increases over previously offered fixed-route services.

RTC initiated the first FlexRIDE pilot program in Sparks in 2019 and added additional FlexRIDE zones in the North Valleys, Spanish Springs, and Somersett/Verdi in 2020 and in the South Meadows area in 2024. Approximately 110,000 FlexRIDE trips were taken in fiscal year 2024. The ticket cost is the same as the standard RTC RIDE fare.

Taxi and Ride-Hailing

The RTC partners with both taxi and ride-hailing services to broaden mobility options for eligible passengers. Washoe Senior Ride (WSR) Taxi Bucks program is a subsidized taxi program of the RTC and is funded by the ¼ percent of Washoe County sales tax allocated for public transportation. This program extends a mobility option to people who do not live within the RTC RIDE and ACCESS service area. WSR provides alternative, reliable, and affordable transportation to Washoe County residents 60 years and older, RTC ACCESS clients (any age), and Washoe County Veterans (any age). Participants are issued an RTC WSR CardONE re-loadable card, which can be used to pay any part of a taxi fare.

Ride-hailing first became available in the Truckee Meadows through Lyft and Uber in the fall of 2015. On-demand ride-hailing services like Lyft or Uber require a credit card and smartphone app to book and pay for trips. Currently, the RTC offers the RTC Washoe Lyft or Uber Rides which is a subsidized voucher program. The RTC Washoe Lyft or Uber Rides program provides alternative, reliable, and affordable transportation to Washoe County residents 60 years and older, RTC ACCESS clients (any age), and Washoe County Veterans (any age). Each month registered participants receive a $60 voucher subsidy, which can be used to pay any part of a Lyft or Uber ride.

RTC VANPOOL Program

The RTC VANPOOL Program is the fastest growing component of the RTC SMART TRIPS trip reduction program and now represents RTC’s largest transit vehicle fleet. This program provides an opportunity to reduce auto trips and serve long-distance commutes effectively. As of 2024, the program has approximately 330 vehicles with vans traveling to locations such as Carson City, the Tahoe-Reno Industrial Center, Spanish Springs, Stead, Herlong, Susanville, and the Lake Tahoe basin. Participants share the costs of the vehicle lease and gas, with RTC providing a subsidy to encourage participation based on the distance traveled. In fiscal year 2024, by reducing auto trips for commuting, the VANPOOL program prevented the emission of over 9,600 metric tons of carbon dioxide (CO2).

RTC SMART TRIPS

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 RTC matches an employer’s contribution to their employees’ 31-day transit passes up to 20 percent, 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 unexpected events prevent normal ridesharing arrangements.

Pedestrian and bicycle travel is promoted by the RTC SMART TRIPS program throughout the year through participation in the Truckee Meadows Bicycle Alliance’s Bike to Work Week campaign each spring, and maintenance of the Street Smart website that educates the public about the benefits of walking and how to do it safely.

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 is a service that 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 and waiting room space at RTC CENTENNIAL PLAZA.

Additional intercity services include the North Lake Tahoe Express offering service from the Reno airport to Truckee and North Lake Tahoe area, and the South Tahoe Airporter which provides service from Stateline to the Reno airport.

Transit Optimization Plan Strategies (TOPS)

The Transit Optimization Plan Strategies (TOPS) Plan outlines a strategy for transit service and improvements over a five-year period. TOPS provides an overview of the current status of mass transit in southern Washoe County and contains proposed programs and budgets. The main focus of TOPS is RTC RIDE, but detailed operating, capital, and planning information for RTC ACCESS and Tahoe Area Regional Transit (TART) is also included. The TOPS Plan will be updated beginning in 2025 and will include the plan years of 2026-2030. Some elements included in the Plan are the:

* Evaluation of RTC’s RIDE service as a component of the overall RTC public transportation service, including recommendations for addition or subtraction of service;
* Comprehensive review of the Washoe Senior Ride Program and areas where RTC can improve the program;
* Comprehensive review of RTC ACCESS service and areas where RTC can improve
the program; and
* Evaluation of the grant program for not-for-profit transportation services, as identified
in the Coordinated Public Transit-Human Services Transportation Plan.

Coordinated Public Transit-Human Services Transportation Plan

The Coordinated Public Transit-Human Services 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 improve transportation options for senior citizens and persons with disabilities above and beyond the requirements of the ADA. The current CTP was updated in 2024, and is included in this RTP as Appendix D.

Not-for-Profit Partnerships

RTC’s 5310 equivalent sales tax program offers competitive grant funding to organizations, such as nonprofits, 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
* Senior Outreach Services volunteer program at the Sanford Center for Aging at UNR to provide transportation for frail, homebound, and below-poverty seniors
* Volunteers of America transportation specifically for senior/disabled clients at its Nevada CARES Campus and Shelter

Maintenance Facility Infrastructure

RTC currently operates the following 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. This 6.8-acre property has capacity to store 78 buses and contains a bus wash, body repair bay, chassis inspection, vehicle inspection area, and RIDE dispatch office.
* 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 fleets. It contains the ACCESS dispatch office and infrastructure to fuel the Compressed Natural Gas (CNG) fleet. 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. Recent improvements to the property include the construction of a hydrogen fueling station to support the implementation of hydrogen fuel cell buses as a part of RTC’s fixed-route service.

Maintenance Facility Needs

RTC has a long-standing commitment to sustainability and utilizing alternative fuels for public transit services including, most recently, the purchase of eight hydrogen fuel cell buses. 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. With an appropriate facility, RTC could 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, the Nevada Department of Transportation (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 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 for timing of the relocation.

To accommodate planned growth in the transit system as well charging and maintenance needs for diesel, electric, and hydrogen fuel cell vehicles, a new/replacement 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

The expansion of the Sutro Maintenance Facility 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, parking spaces, and operating space in support of RTC’s relationship with the City of Reno Business Improvement District Ambassador program
* Bus stop accessibility improvements throughout the region, in support of the
ADA Transition Plan
* Improvements of existing BRT stations and construction of potential BRT expansion to correspond with development opportunities

# CHAPTER 13: Goal #9: Integrated Land-Use and Economic Development

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The goal of Integrated Land-Use and Economic Development is defined as an increase of partnerships among local jurisdictions and other stakeholders to identify how transportation investments can support regional development, housing, and tourism. The goal is achieved through its objective to: Improve Regional Connectivity. The improvement of regional connectivity, or connections to points both inside and outside the region, begins with thoughtful and strategic transportation planning to align with the travel needs of both residents and visitors. Such planning informs facility selection and mobility options that create economic development opportunities and ensure that infrastructure is appropriately located with regard to land use. This chapter describes the regional efforts and strategies to address the integration of land-use and support economic development through the improvement of regional connectivity.

The following efforts and strategies are described in this chapter:

**Section 1 – Land-Use Planning Partnerships**

**Section 2 – Economic Development Partnerships**

**Section 3 – Sustainable and Efficient Growth**

The above efforts and strategies will be discussed further in Sections 1-3. Collectively, these efforts
and strategies to improve regional connectivity aim to achieve the goal of integrated land-use and economic development.

## Section 1 – Land-Use Planning Partnerships

The Integrated Land Use and Economic Development goal is predicated on increasing RTC partnerships among local jurisdictions and other stakeholders to identify how transportation investments can support regional development goals. The purpose of land-use partnerships is the coordination of land use and transportation planning that accommodates pedestrian and bike safety, mobility options, enhances public transportation service, improves road network connectivity, and includes a multimodal approach to transportation. The RTC develops and maintains partnerships with numerous regional and local entities to understand and support the land-use development patterns that should inform transportation planning.

Regional Planning

The RTC collaborates with many regional agencies that influence land-use. Some of the organizations the RTC works with regularly include the Truckee Meadows Regional Planning Agency, Northern Nevada Public Health, Washoe County School District, Washoe County Senior Services, Reno-Tahoe Airport Authority, and the Reno Housing Authority. The RTC also works closely with agencies at the state and federal levels.

An overview of regional planning agencies and their policies that influence transportation investment is provided below.

Truckee Meadows Regional Planning Agency (TMRPA)

RTC and Truckee Meadows Regional Planning Agency (TMRPA) collaborate closely on a wide range of data management and analytical issues. Through a Shared Work Program, the two agencies access data on a common server and undertake joint technical analyses. Additionally, this RTP serves as the long-range transportation plan for purposes of compliance with state law through its utilization by the Truckee Meadows Regional Plan.

The Truckee Meadows Regional Planning Agency (TMRPA) was created by Nevada legislature in 1989 to facilitate regional land-use planning for the region within the City of Reno, City of Sparks and Washoe County. 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 TMRPA staff.

The current Regional Plan was updated in 2024 and provides the framework for growth in the Truckee Meadows over the next 20 years. The Plan focuses on the coordination of master land-use planning in the region as it relates to population, land use patterns, public facilities, service provision, natural resources, and intergovernmental coordination. The Regional Plan is a cooperative effort of the local and regional units of government, affected entities, the major service providers, and the citizens of the Truckee Meadows. The Plan is intended to present a regional consensus reached through a process of public conversation and decision-making, to provide a unifying framework for local and regional policies and services.

The Regional Plan also establishes the Truckee Meadows Service Area (TMSA), the area within which services and infrastructure are anticipated to be provided over the next 20 years. The TMSA concept is further refined into five Regional Land Designations to establish a priority hierarchy for managing regional growth. TMRPA requires that local government and affected entities’ master plans, facilities plans, and other similar plans promote and not conflict with the growth and investment priorities defined by the Regional Land Designations.

The 2024 Regional Plan defines and ranks in priority for development the five (5) Regional Land Designations as follows: The highest priority is the Mixed Use Core, “an area that promotes the highest density and intensity of development, prioritizes infrastructure provision, and promotes a pedestrian-friendly atmosphere served by transit.” The second priority is Tier 1, “an area within the TMSA where a varying range of development is expected and with a secondary priority for development and investment.” The third priority is Tier 2, “an area where there is generally less dense development occurring at suburban levels, with a few higher density nodes.” The fourth priority is Tier 3, which “comprises the remaining areas within the TMSA. These areas contain lands that are developed at low densities, are undeveloped, or have significant constraints.” Finally, the 5th and last priority is the Rural Area which is an area “stretching from the boundaries of the TMSA across the remainder of Washoe County (areas outside TMRPA’s jurisdiction such as Tribal Lands and the Lake Tahoe Basin are not included). This area is restricted to very low residential densities and generally consists of dispersed development on large parcels.”

The Facilities and Services standards table in the 2024 Regional Plan outlines expectations for various forms of infrastructure both within and outside of the TMSA. In order to align regional efforts, the 2050 RTP Update recognizes this priority hierarchy and the RTC has utilized the hierarchy to inform the projects list and their time frames.

The RTC also consistently coordinates with TMRPA and the local jurisdictions to ensure the priorities in the Regional Plan as well as the master plans are reflected in the RTP.

Further, 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.

Northen Nevada Public Health

RTC formally partners with Northern Nevada Public Health (NNPH), formerly the Washoe County Health District, through NNPH’s participation on the RTC Technical Advisory Committee (TAC) which is convened monthly and advises RTC staff and the Board. NNPH Air Quality Management Division (AQMD) and Chronic Disease and Injury Prevention Program actively support transportation investments that improve community health. Additionally, NNPH 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, including transportation.

Air Quality Management Division (AQMD)

Another RTC partner is the Air Quality Management Division (AQMD) which 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 Appendix B.

Because motor vehicles are the largest source of ozone pollution in Washoe County, the Air Quality Management Division (AQMD) has partnered with the RTC and other government and non-government bicycle advocacy groups in the Truckee Meadows to promote cycling in place of vehicle trips. AQMD works with the Truckee Meadows Bicycle Alliance on outreach and events such as Bike Month. Another AQMD’s program that promotes community health and sustainable transportation and demonstrates its commitment to collaboration with regional partners is the Rack ‘Em Up Program. The program supports bicycle advocacy through outreach and special events.

Chronic Disease and Injury Prevention Program

The Chronic Disease and Injury Prevention Program (CDIP) focuses on modifiable risk factors that impact the top five leading causes of death in Washoe County. One of these factors is lack of physical activity. As part of an effort through the CDIP, as well as to fulfill part of the requirements of Assembly Bill 343, NNPH staff conducted a physical activity survey and subsequent walk audit in an area determined to be in need of a higher degree of focus. A walk audit can briefly be described an assessment used to determine the viability of walking in a given environment. The results of the walk audit were presented to the Vision Zero Truckee Meadows Task Force and, going forward, the RTC will seek to collaborate with NNPH in future walk audit efforts. These efforts will not only help meet the requirement to complete at least one walk audit per year but will assist the RTC in the development of the series of Neighborhood Network Plans discussed in Chapter 12.

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. Creation of comfortable and convenient active transportation facilities that encourage physical activity is part of RTC’s vision for active transportation in the region.

Community Health Improvement Plan

The 2022-2025 Community Health Improvement Plan, developed by NNPH, is based on findings from the 2022-2025 Community Health Assessment and reflects a long-term, comprehensive commitment to addressing public health problems. The plan outlines top priorities and a collective action plan for how health will be improved through a series of goals housed under four focus areas.

One of the primary concerns of participants of community-based meetings under the “Access to Health Care” focus area was lack of transportation to care. This is also one of the primary concerns according to outreach conducted as part of the RTC’s Coordinated Public Transit-Human Services Transportation Plan (CTP), which is included in this document as Appendix D. The issues related to the lack of transportation to care are addressed, in part, through the implementation of projects identified in the CTP and RTP.

Washoe County School District

RTC works closely with the Washoe County School District (WCSD) and the Nevada Department of Transportation on the Safe Routes to School (SRTS) Program. The program is funded, in part, by RTC through Surface Transportation Block Group grant funding and was recently expanded under IIJA to explicitly include high schools. The School District Police Department now implements this program for grades K-12, 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 important student safety and accessibility issues.

RTC also works closely with WCSD regarding school siting and associated transportation infrastructure needs as part of its Facility Modernization Plan. As the regional school population continues to grow, it will be increasingly important to properly site and orient schools to enhance accessibility and encourage more youth to walk, bike, and roll to school.

Finally, WCSD and SRTS participate as members of the Vision Zero Truckee Meadows Task Force and are often recipients of funding through the RTC’s Transportation Alternatives Set-Aside Program. Collaboration resulting from these efforts is typically focused on school zone safety and the enhancement of active transportation facilities.

Washoe County Senior Services

Washoe County’s Senior Services Division is committed to building a higher quality of life for all residents, regardless of age. Its mission is to provide a variety of direct and indirect support and services to meet the needs of older adults and those who care for them. Washoe County Senior Services offers a nutrition program, legal services, social services, adult day care, and recreational activities. The Washoe County Master Plan for Aging Services is the roadmap that guides the enhancement and development of Washoe County’s senior programs and services.

The Plan’s Guiding Principles detail a series of goals, with associated objectives and strategies, and were developed by Washoe County Senior Services’ partners, stakeholders, Advisory Board, and employees. The goal for transportation is to expand public and private options that allow seniors to live independently. The RTC involved Washoe County Senior Services in the development of its CTP and also partner in providing transportation information and other resources to local senior citizens.

Reno Housing Authority

The Reno Housing Authority (RHA) was founded in 1943 and was appointed the Public Housing Authority for Reno, Sparks, and Washoe County. The RHA’s mission is to provide fair, sustainable, quality housing in diverse neighborhoods throughout Reno, Sparks and Washoe County that offers a stable foundation for low-income families to pursue economic opportunities, become self-sufficient and improve their quality of life. Through its various subsidies, rental assistance, and other programs, the RHA helps ensure 15,000 Nevadans have a safe, secure place to call home.

Local Planning

The City of Reno, City of Sparks, and Washoe County are responsible for local land-use planning in the region. The RTC works extensively with these local jurisdictions to develop and implement projects in accordance with local and regional master planning documents. For example, the RTC participates in the development review processes with each local government to provide input on access management, transit, pedestrian and bicycle facility improvements, and to ensure consistency with long-range and regional transportation plans. Additional coordination occurs at a local and regional level between all agencies, when needed, for specific projects
or activities.

A summary of key land-use policies as they relate to transportation for each entity is
provided below.

***City of Reno***

The Reno City Council adopted their Master Plan, titled ReImagine Reno, on December 13, 2017, with additional updates effective as of November 2021.

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 adopted its comprehensive plan, Ignite Sparks, in August 2016. In 2021, the plan was updated and was found to be in conformance with the 2019 TMRPA Regional Plan. Ignite Sparks establishes goals and policies centered around managing growth through land-use, economic vitality, and connectivity.

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, Envision Washoe 2040, was adopted in 2023 and was found to be in conformance with TMRPA’s Regional Plan in 2024. This update removed regulatory information and more detailed standards, integrating them into the Washoe County Development Code. The vision, goals, policies, and actions from the 2010 Master Plan were updated and remain a part of Envision Washoe 2040. The Plan was developed to adapt to today’s challenges and opportunities while also aligning with the structure of the TMRPA Regional Plan in order to improve consistency throughout the region and to make interjurisdictional coordination easier.

The document identifies seven planning elements with principles and policies that are informed by an existing conditions analysis and used to address key opportunities and constraints related to each element. These elements were adapted from other plans to further enhance regional cohesion. The land use element was built around the TMRPA Regional Plan and master plans from the cities of Reno and Sparks, as well as the Pyramid Lake Paiute Tribe and Reno-Sparks Indian Colony. The Transportation element considers several RTC documents including the Complete Streets Master Plan, Bicycle and Pedestrian Master Plan, Advanced Mobility Plan, and the (previous)
2050 RTP.

The overarching goal of the land use element is to demonstrate a commitment to the regional form and pattern described by the TMRPA Regional Plan, while the policies express a commitment to direct new development inside the Truckee Meadows Service Area to promote infill development.

The transportation element focuses on the challenges of creating and maintaining a quality transportation system and increasing accessibility across multiple jurisdictions. Envision Washoe 2040 demonstrates a commitment to ensuring that transportation infrastructure meets the needs of existing and future development and responds to the community’s desire to pursue innovative transit and multimodal opportunities through the following principles:

* Create an interconnected transportation network.
* Provide an efficient transportation network through coordinated operations, system management, technology, and targeted investments.
* Prioritize multimodal transportation to support healthy communities.
* Coordinate transportation decisions with regional and local partners.
* Reduce transportation-related emissions and pollutants.

***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 3,000 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 connects to services in nearby Reno and Sparks.

The Long-Range Transportation Plan (LRTP) for the Pyramid Lake Paiute Reservation (updated in May 2021) provides the inventory and analysis of infrastructure to support improvements to existing transportation facilities and develop new transportation opportunities within the PLPT Reservation and evaluate present and future transportation needs in and around Reservation Lands.

The LRTP establishes a prioritized listing of road improvement/construction projects to meet current and projected transportation needs. The LRTP incorporates these needs by way of the included Tribal Transportation Improvement Program and priority list that is forwarded to the Bureau of Indian Affairs for inclusion in a regional Tribal Transportation Plan and the Statewide Transportation Improvement Program (STIP). Projects from the STIP that are within the RTC’s planning area are subsequently adopted into the Region Transportation Improvement Program (RTIP).

***Reno-Sparks Indian Colony (RSIC)***

The Reno-Sparks Indian Colony (RSIC) is a federally recognized Native American Tribe located within the Truckee Meadows. The RSIC was established in 1917 and was formally recognized in 1936 under the Indian Reorganization Act. Currently, the tribal membership consists of over 1,300 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 15,539 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 RSIC also 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.

The RSIC’s Long Range Transportation Plan (LRTP) identifies and evaluates current and future transportation needs of the Colony. Existing conditions and RSIC’s current goals were used to determine present needs, while future needs were evaluated based on the RSIC’s social, economic, and development goals and objectives, including specific development proposals, as well as the land use and transportation plans of the surrounding area. The RSIC’s LRTP follows the same process noted in the PLPT section above for including projects in the STIP and RTIP.

## Section 2 – Economic Development Partnerships

Economic development is supported though regional partnerships and is important to the improvement of regional connectivity. Economic development activities can influence transportation patterns and travel demand which often leads to investment in transportation infrastructure and can also influence land use. For example, a growing tech hub might increase the need for better transportation links, leading to the construction of a new transit line, which is likely to induce increased development around its stations. In this example, the availability and efficiency of transportation options attract businesses and influence economic decisions. Simliarly, efficient transportation connections to the area can induce visitor demand. Areas with well-planned transportation infrastructure are often more attractive for businesses and visitors and can experience faster economic growth. Partnerships are key to keeping in the loop on ongoing economic development activities and aligning transportation planning with those initiatives.

A summary of key economic development initiatives and policies as they relate to transportation for statewide, regional, and local entities is provided below.

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. The 2023 statewide Comprehensive Economic Development Strategy, Realizing Nevada’s Electric, Innovative, and Connected Future lays out a roadmap for Nevada to fully develop industries critical to world markets. The document uses a SWOT analysis and an analysis of Nevada’s competitive position relative to national and global market trends to develop a strategic plan to align and coordinate action by state policymakers in the areas of clean energy, innovation, and infrastructure. It also identified five target industries—one of which is Transportation and Logistics—and actions to advance them over the next five years.

The University of Nevada, Reno

The University of Nevada, Reno (UNR) was established in Reno in 1891 and serves 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 traveling 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.

The Economic Development Authority of Western Nevada

The Economic Development Authority of Western Nevada (EDAWN) is a private/public partnership committed to adding quality jobs to the region by recruiting new companies, supporting the success of existing companies, and assisting newly forming companies, to diversify the economy and have a positive impact on the quality of life in the Truckee Meadows.

Included in EDAWN’s Strategic Plan is the objective to attract new businesses to downtown districts to support job growth in target industries including:

* Advance Manufacturing
* Aerospace and Defense
* Biotechnology
* Blockchain
* Business-to-Business Software
* Fintech
* Internet of Things
* Logistics and E-Commerce

EDAWN is a supporter of RTC’s initiatives to promote transportation investments such as bicycle, pedestrian, and transit amenities that can attract people to the region and are quality of life assets for the Truckee Meadows. In addition, strategic transportation investments in roadways facilitate goods movement in support of logistics, distribution, and advanced manufacturing. EDAWN is an advocate for expanding economic opportunities and implementing infrastructure upgrades needed to accommodate expected growth, while doing so without putting a strain on infrastructure.

Reno-Tahoe Airport Authority

The Reno-Tahoe Airport Authority (RTAA), which owns and operates the Reno-Tahoe International Airport (RTIA) and Reno-Stead Airport, is an important asset to the region, generating a total annual economic impact of $3.6 billion and directly supporting over 6,300 jobs. The RTIA is located in the core of the Truckee Meadows and is essential to the economic growth of the region. It serves over four million passengers per year and is estimated to have served 4.6 million in 2023. In 2022, approximately 139 million pounds of cargo arrived/departed RTIA.

The Reno-Stead Airport is a 5,000-acre general aviation facility that is quickly becoming a major economic hub in northern Nevada and is an Federal Aviation Administration (FAA) designated Unmanned Autonomous Systems (UAS) test site. The Reno-Stead Airport campus also includes a business park, which has been identified as a future regional jobs center by TMRPA and represents 60 percent of vacant industrial land in the City of Reno and 37 percent of vacant industrial land in Washoe County. The Reno-Stead Airport business park is designed to cater to industries such as aerospace, advanced manufacturing, and logistics.

The RTIA and Reno-Stead airports are crucial to the success of tourism and cargo-related industries in Northern Nevada, as outlined in the RTIA Master Plan. The plan identifies air cargo growth and the need to expand capacity and modernize air cargo facilities.

These developments not only underscore the RTAA’s potential to drive economic growth but also highlights its pivotal role in meeting the region’s future employment and industrial needs.

Reno-Sparks Convention and Visitors Authority

The Reno-Sparks Convention and Visitors Authority (RSCVA) was established in 1959 and acts as a marketing organization for the county to promote convention and tourism business. Unlike many convention and visitors bureaus across the country, the RSCVA owns and operates several facilities designed to draw out-of-town visitors. In addition, the RSCVA is mandated by the Nevada State Legislature (NRS 244A), and is not a partnership-based organization. The RSCVA, as a public body, also functions as a collection agency, ensuring that room taxes are distributed to the appropriate governmental organizations benefitting visitors and residents of Reno Tahoe. The RSCVA’s vision is to be the preferred outdoor, gaming and event destination and its mission is to attract overnight visitors to Reno Tahoe while supporting the sustainable growth of local communities.

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-renowned 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 Truckee Meadows 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 Reno Aces Minor League Baseball games to high school and senior tournaments, support the local tourism industry and wider economy. More than 15,000 athletes and coaches come to the area annually for basketball and volleyball tournaments, and internationally sanctioned sporting events in bowling, fencing, boxing, handball, and weightlifting. Public transit and the efficiency of traffic operations on the regional road network play a key role in facilitating the movement of the thousands of visitors attending and participating in these events.

The RTC partners with the RSCVA to support the travel and tourism industry and enhance this industry’s impact on the local economy. In many cases, the RTC provides special event transportation, as it does during the Best in the West Nugget Rib Cook Off or The Great Reno Balloon Race. The RTC’s regular bus service facilitates travel to and from many event venues as well, such as Greater Nevada Field for Reno Aces baseball games, Lawlor Events Center and Mackay Stadium for Nevada Wolf Pack basketball and football games, the Livestock Events Center for the Reno Rodeo and other events throughout the year, the National Bowling Stadium, and many others.

## Section 3 – Sustainable and Efficient Growth

Sustainable and efficient transportation network development creates regional connectivity that is integrated with land use and is delivered at the appropriate time and location. Whether for transit service, roadways, or bicycle and pedestrian infrastructure, the RTC seeks to provide the appropriate level of connectivity, at the appropriate time, that will serve the community today and for years to come. Transportation needs for the movement of people and goods evolve, as land development generates travel, travel generates new transportation facilities, new transportation facilities increase accessibility, and increased transportation accessibility attracts further land development. Sustainable growth includes identifying the appropriate investment needed at the appropriate time to keep pace with growth. Efficient growth is achieved through sound transportation planning, based on data, to identify the transportation needs of the region. Sustainably and efficiency or right-timing and right-sizing of the transportation network are essential in order to ensure that the transportation network can serve the needs of the region, now and in the years to come.

An overview of efforts to improve regional connectivity through sustainable and efficient growth is provided below.

South Virginia Street Transit-Oriented Development Plan

The RTC, in partnership with the City of Reno, studied the South Virginia Street corridor to determine the feasibility of extending the Virginia Line Bus Rapid Transit (BRT) service from its current terminus at Meadowood Mall to south Reno. With hundreds of acres of vacant and underutilized land in the corridor, there is opportunity to help shape land-use to improve accessibility and enhance economic development opportunities. The Plan recommended land-use planning tools most appropriate for encouraging a walkable, transit-supportive development pattern that meets the growth and development needs of the region.

High-density housing and employment near transit stops is necessary to support a BRT level of service. Providing safe, convenient, and accessible pedestrian connections to bus stops is essential to promoting not only transit trips, but active transportation trips as well. This type of transit-oriented development (TOD) has advantages beyond increased ridership. Effective transit not only boosts property values and business attractiveness but also stimulates broader economic development by better connecting industry to the workforce on which it relies.

Despite the City of Reno’s 2017 adoption of the ReImagine Reno Master Plan, which included the removal of its TOD zoning along South Virginia Street, the region has had success with higher-intensity development. 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. For 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. The evolution of South Virginia Street, and other areas in the region prioritized for growth, is largely dependent on outside influences and will continue to respond to growth and the market. Planning for and continuing to encourage sustainable growth is essential to ensuring these areas are catalysts for vibrant changes to the community. Infrastructure investments, intergovernmental collaboration, public/private partnerships, and the continued phasing of transit enhancements will all work to support the land-use, transportation, and economic development goals for the region.

Active Transportation Plan: Walk & Roll Truckee Meadows

The RTC’s Active Transportation Plan: Walk & Roll Truckee Meadows establishes a clear vision and goals for the future of active transportation in the Truckee Meadows and introduces a new approach to active transportation planning and implementation in the region called Neighborhood Network Planning. This approach has been established to engage residents and stakeholders at the local level to tailor active transportation solutions that address the unique needs of each neighborhood. This innovative and interactive planning process will inform the creation of a comprehensive and connected active transportation network across the Truckee Meadows for all users.

The Active Transportation Plan aligns with the Regional Plan, utilizing its Land Use Tiers to identify Land Use Contexts (Urban, Suburban, and Rural) with similar characteristics that will help guide implementation of active transportation facilities in a context sensitive manner.

Promoting active transportation in Washoe County offers a multitude of benefits which align with and support the goals of the City of Reno, City of Sparks, and Washoe County. Among them is economic development, which is achieved through the creation of a more walkable and bikeable environment. This attracts businesses and residents while supporting local shops
and restaurants.

Over the next four to five years, the RTC will complete the series of Neighborhood Network Plans for the twelve Neighborhood Network Planning areas identified in the Active Transportation Plan. The resulting plans will adapt the regional vision and goals to the local context while aligning with overall objectives for the region, as applied through the unique lens of each neighborhood.

Incorporating Land-Use and Economic Development into Project Selection

Effective planning must consider how transportation infrastructure will influence land use and economic development and vice versa, aiming for a harmonious balance that supports sustainable and efficient growth. There is a necessary balance required between economic development and sustainable land use to avoid issues like congestion, environmental degradation, and uneven development. This means incorporating transit-oriented development, mixed-use areas, and maintaining green spaces among the more conventional commercial, residential, and industrial uses.

Integration of land-use and transportation was carried forward as a goal from the previous RTP and was incorporated into the evaluation factors used 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.

* Biggest Little Bike Network (projects on Vine Street, Virginia Street, 5th Street, 6th Street, and Evans Avenue/Lake Street/Sinclair Street
* Buck Drive Circulation
* Sun Valley Boulevard Corridor Improvements
* West Fourth Street Downtown
* West 4th Street Multimodal Improvement
* Examples of projects implemented in support of land-use and economic development under the previous RTP’s prioritization are listed below.
* Oddie Boulevard/Wells Avenue Multimodal Improvements
* Holcomb Avenue Rehabilitation
* Peppermill BRT

USDOT guidance related to national goals and planning factors does not explicitly require incorporation or consideration of the relationship between land-use and transportation. However, land-use and transportation are closely connected and are, in turn, linked to economic factors such as housing opportunities, employment locations, commute patterns, and the costs of transportation to households. Effective transportation planning requires integrating land use and economic development policies to ensure that transportation infrastructure supports and is supported by economic activities and land use patterns. The RTC and its partners, recognizing the importance of this dynamic, work to create consistency between local land-use, regional transportation, and economic strategic plans in pursuit of a functional and thriving community.

# CHAPTER 14: Prioritizing Projects and Investing Strategically

(A screen reader compatible version, or other alternate format of this table/map/graphic is available upon request. Please send requests by email to rtp@rtcwashoe.com)

Federal transportation legislation (The Bipartisan Infrastructure Law (BIL)), enacted as the Infrastructure Investment and Jobs Act (IIJA) requires that the 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 transportation improvements, including transit (both operations and maintenance), roadway capacity, new roadways, Intelligent Transportation Systems (ITS)/operations, pavement preservation, and bicycle and pedestrian facilities.

* 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 project development and prioritization methodology, revenue projections, and funding sources including federal, state, and local and regional sources.

**Section 1 – Revenue Projections**

**Section 2 – Funding Sources**

**Section 3** **– Project Development and Prioritization**

**Section 4 – Plan Investment Needs**

**Section 5 – Financial Summary**

## Section 1 – Revenue Projections

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 0.92 percent annually matching population growth.
* Regional revenues will increase by 0.92 percent annually matching population
growth, with an additional 3.28 percent growth factor for indexed fuel tax.
* Fuel tax at both the State and Regional level are reduced by two percent annually to match CAFE standards of fuel efficiency.
* 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, 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. An example of an unfunded need is the Pyramid/395 Connector. Though funding for Phase 2 of the project has been identified, Phases 3, 4, and 5 currently remain unfunded due to their high cost. Combined, the cost of Phases 3, 4, and 5 is estimated at $756,648,000 with Phase 3 estimated to cost $427,479,000.

The RTP is revisited at least every four years, which allows for timely adjustments to be addressed as needed.

## Section 2 – Funding Sources

Current revenue sources include the federal government, state government, and RTC. Table 14.1 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.

***Table 14.1 Funding Sources and Allowable Uses***

* Types of funds: National Highway Performance Program (NHPP). Uses: Roads (Primarily).
* Types of funds: Surface Transportation Block Grant (STGB). Uses: Roads & Transit.
* Types of funds: Congestion Mitigation Air Quality (CMAQ). Uses: Roads & Transit.
* Types of funds: Transportation Alternatives (TA) Set-Aside Program. Uses: Roads & Transit.
* Types of funds: Highway Safety Improvement Program (HSIP). Uses: Roads (Primarily).
* Types of funds: FTA Section 5307. Uses: Transit.
* Types of funds: FTA Section 5310. Uses: Transit.
* Types of funds: FTA Section 5337. Uses: Transit
* Types of funds: Bus and Bus Facilities Program (FTA Section 5339). Uses: Transit.
* Types of funds: Gas and Special Fuel Tax. Uses: Roads.
* Types of funds: Driver’s License, Vehicle Registration, and Motor Carrier Fees. Uses: Roads.
* Types of funds: Regional Road Impact Fee (RRIF). Uses: Roads (Capacity).
* Types of funds: Sales and Use Tax. Uses: Roads (Capacity).

Revenues in fiscal year (FY) 2024, July 1, 2023, to June 30, 2024, were approximately $180.4 million. Figure 14.1 shows the funding sources for that revenue. In FY 2024, 28 percent of revenues were used for transit and 58 percent were used for roadways, 14 percent for debt service, and 1 percent for
MPO Operations.

***Figure 14.1 FY 2024 Revenues by Funding Source***(A screen reader compatible version, or other alternate format is available upon request.)

***Federal Funding***

Federal funds for transportation are collected nationally and allocated back to the states through a series of formulas and grants. 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 Fixing America’s Surface Transportation (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. The IIJA (Public Law 117-58, also known as the “Bipartisan Infrastructure Law,” continues the FAST Act Metropolitan Planning Program, which establishes a cooperative, continuous, and comprehensive framework for making transportation investment decisions in metropolitan areas. The IIJA provides approximately $350 billion for Federal highway programs over a five-year period (fiscal years 2022 through 2026). Most of this funding is apportioned to States based on formulas specified in Federal law. However, the Bipartisan Infrastructure Law also provides funding through a wide range of competitive grant programs.

The primary funding source provided by the federal government is the Highway Trust Fund (HTF) through the programs in the IIJA. 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.

Starting in 2021, HIF programs received increases of 24 percent for Highway Account programs and 32 percent for the Mass Transit Accounts, with increases thereafter in the range of 2 to 3 percent per year. Additional formula funding 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.

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.

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.

Highway Safety Improvement Program (HSIP) – Funds are to improve highway safety on all public roads through a strategic approach that focuses on performance.

Urbanized Area Formula Grant (FTA Section 5307) – Funds are to support public transportation.

Enhanced Mobility of Seniors and Individuals with Disabilities (FTA Section 5310) – Funds are to provide improved mobility for seniors and people with disabilities.

State of Good Repair (FTA Section 5337) – Funds are to provide capital assistance for maintenance, replacement, and rehabilitation projects of high-intensity fixed guideway and motorbus systems to help transit agencies maintain assets in a state of good repair in urbanized areas.

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.

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 5 percent and for transit programs it
is 20 percent.

***State Funding***

State funding sources include gas tax, special fuel (diesel) tax, vehicle registration fees, motor carrier fees, and driver’s license fees. 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. Currently no state funding is available to be used for transit projects.

The Nevada State Legislature and RTC are 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. RTC is also completing a study specific to local fuel tax replacement options.

***Regional Funding***

Regional funding sources include fuel tax, sales and use tax, passenger fares and other revenue such as the Regional Road Impact Fee (RRIF) paid by private developers, 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 ¼ cent sales tax to fund the transit program.

A summary of fuel tax rates is shown below in the table below.

***Table 14.2 Summary of Fuel Tax Rates (2025)***

* Source:County Optional Plus Inflation Index. Rate per gallon: 51.93₵
* Source:County Mandatory. Rate per gallon: 12.22₵
* Source: Federal. Rate per gallon: 18.40₵
* Source: State. Rate per gallon: 18.45₵

***Total Funding***

Table 14.3 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 YOE dollars. No new funding sources were considered for the timeframe covered by this document.

***Table 14.3 Revenue Projections***(A screen reader compatible version, or other alternate is available upon request.)

## Section 3 – Project Development and Prioritization

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 funding needs assessment includes all jurisdictions (local, regional and state) and all activities, projects and programs on regional roads. A discussion of unfunded needs is
also included.

Project Development

Projects in this RTP were developed in coordination with local jurisdictions (City of Reno, City of Sparks, and Washoe County), the Nevada Department of Transportation (NDOT) and regional stakeholders. About half of draft projects were informed by past transportation plans and studies for the region, and the other half were added through a call for projects conducted for the local jurisdictions. The draft project list was provided for review to the RTP Agency Working Group, local jurisdictions, and NDOT. Once the review period concluded, project scopes were developed or confirmed. After project scoping, estimated costs were forecasted for each project. As most of the projects included little or no engineering work, beyond a basic project scope, most cost estimates included in this RTP are intended to be used as a planning-level tool with the expectation that costs will change as projects progress toward implementation.

Project Prioritization

Plan goals and objectives were used to develop a scoring tool for project prioritization. Keeping the Plan’s goals at the core of project prioritization produces a project list that can best meet the transportation goals for the region. Metrics selected for the scoring tool included the integration of the new BIL requirement to “provide for consideration of projects and strategies that will promote consistency between transportation improvements and State and local housing patterns (in addition to planned growth and economic development patterns).” This requirement is addressed through several metrics but especially through the metric assessing in which of the five Truckee Meadows Regional Planning Agency (TMRPA) tiers the project is located. The TMRPA tiers identify current and expected housing density for the region. The TMRPA tiers are further discussed in Chapter Thirteen, Land-Use and Economic Development.

The first eight goals were utilized to rank projects, per project type, and the ninth goal was used to determine project timing within the planning horizons. Goals utilized to rank projects were weighted equally, with a total possible score of 100 per goal. The project scoring tool is included as Table 14.4.

***Table 14.4 2050 RTP Update Project Scoring Tool***(A screen reader compatible version, or other alternate format is available upon request.)

## Section 4 – Plan Investment Needs

The transportation funding needs for this RTP have been divided into two major categories – public transportation and complete streets. The projects/programs are identified in Appendix B. Needs are shown in YOE dollars and were placed into the following planning horizons:

* 2025-2034
* 2035-2050

Public Transportation

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 Transit Optimization Plan Strategies (TOPS), 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. The unfunded vision for transit includes expansions of these routes, 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.

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.

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 14.6 with costs shown in year of expenditure (YOE) dollars. Other unfunded transit facility needs include a new transfer facility, maintenance facility, and mobility hubs. The transfer facility would accommodate expansion of an electric or hydrogen fuel cell RTC RAPID and RTC RIDE fleet.

***Table 14.6 Public Transportation Needs by Activity***(A screen reader compatible version, or other alternate format is available upon request.)

Complete Streets

Complete Streets include pavement preservation, system efficiency, multimodal, and congestion relief projects for regional roads.

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 eligible roads. Preservation includes preventive maintenance, rehabilitation, and reconstruction of pavements and bridges, as described in Chapter Six, Infrastructure Condition. This RTP includes annual funding for preventive maintenance on eligible roads.

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. This RTP includes annual funding for traffic operations improvements.

The RTP includes annual funding for Active Transportation improvements throughout the region. Active transportation projects can impact multiple modes of travel. For example, 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.

Congestion relief 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.

Complete Streets needs are summarized in Table 14.7 with costs shown in year of expenditure dollars.

***Table 14.7 Complete Streets Needs***(A screen reader compatible version, or other alternate format is available upon request.)

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 the unfunded project listing provides an opportunity to identify additional projects for future consideration in the event additional funding becomes available. The total unfunded needs are estimated at approximately $3,926,186,395 for roadway projects.

## Section 4 – Financial Summary

As revenues from the majority of funding sources are not keeping up with growing need transportation projects within the region, 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, or bicycle facilities – all modes considered in this RTP.

# CHAPTER 15: Connection to Programming

This chapter will discuss the relationship between the goals of the RTP and the implementation and operation of RTC programs. RTC facilitates programs related to multiple facets of transportation including roadway construction and maintenance, transit operation, congestion management, and active transportation. Coordinating funding and programming for each of these programs is essential
to achieve the goals of the RTP.

The following efforts and strategies are described in this chapter:

**Section 1 – Regional Transportation Improvement Program**

**Section 2 – Other RTP Programs**

## Section 1 – Regional Transportation Improvement Program

The Regional Transportation Improvement Program (RTIP) is a federally required five-year plan that identifies and prioritizes transportation projects for a region. The RTIP includes a subset of projects from a region’s RTP. Projects must be included in the RTP to be eligible for inclusion in the RTIP. RTC, as the Metropolitan Planning Organization for the region is responsible for developing the RTIP.

The RTIP provides a summary of projects and programs by federal fiscal year and shows the agency responsible for implementing the project, funding source and other related information.
The RTIP represents a prioritized program directed at addressing the region’s transportation needs while improving the region’s safety, air quality, transportation efficiency, and mobility.

The RTIP assists in implementing the RTP by advancing projects selected from the first ten years of the plan. Additional projects are advanced during biennial adoptions of the RTIP and if more funding becomes available. Figure 15.1 shows how the RTP directly impacts project and program implementation through the RTIP.

Appendix B of this RTP includes a fiscally constrained list of projects and programs that represents
the needed transportation improvements for the region over the next 25 years. Upon approval of this RTP by the RTC Board, the enclosed list of projects and programs will be eligible for future addition
to the RTIP.

***Figure 15.1 RTC Planning Process***(A screen reader compatible version, or other alternate format is available upon request.)

## Section 2 – RTP Programs

RTC facilitates several regional transportation programs. Typically, smaller scale projects such as pavement preservation and active transportation quick-builds are funded through these programs. The following programs have designated budgets and unique criteria that are used to guide project selection and fund eligible projects.

Pavement Preservation Program

The purpose of the Pavement Preservation Program is to maintain 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. As part of the pavement preservation system RTC maintains data on index rating for each regional road. Through a process of collaboration and coordination with the local governments, RTC completes roadway preservation projects on eligible roadways within Washoe County. The local governments provide preservation services for roadways not eligible for the Regional Pavement Preservation Program. As part of the pavement preservation system RTC maintains data on index rating for each regional road.

More information about the Pavement Preservation Program can be found in Chapter 6, Infrastructure Condition.

Traffic Signalization Program

RTC has initiated a regional traffic signal optimization and improvement program to enhance the capacity of the existing system and reduce traffic congestion. This is an ongoing program that will allow nearly 400 intersections in the Truckee Meadows to be coordinated.

Projects completed through this program seek to achieve two primary objectives: 1) improved traffic flow resulting in improved level of service and 2) mobile source emission reductions through decreased delay, fewer accelerations/decelerations and a decreased number of stops. Modeled benefits of this program include up to an 11 percent reduction of pollutants along improved corridors. This program is funded annually to allow for approximately one-third of the region’s signals to be re-timed and optimized each year.

Traffic Intersection Improvements and Intelligent Transportation Systems Program

RTC enhances existing intersections through the Traffic Intersection Improvements Program, focusing on measures that boost service levels and safety. These improvements include intersection widening, reconfiguration, signal installation, and alternative designs such as roundabouts, upgraded traffic signal detection, and equipment enhancements. Eligible projects through the Traffic Intersection Improvements and Intelligent Transportation Systems Program are generally lower cost traffic operation and safety improvements at locations that fall outside of capacity and multimodal projects identified in the RTP. Projects are prioritized through this program based on feedback from the partner agencies and compatibility with the RTP’s nine goals including an emphasis on projects that have a lower risk of delivery delays.

RTC administers the Intelligent Transportation Systems (ITS) Program that will leverage technology to reduce congestion along the region’s busiest corridors. More information about ITS can be found in Chapter 7, Congestion Reduction.

Regional Road Impact Fee Program

Impact fees under the Regional Road Impact Fee Program (RRIF) have been levied on all new development projects within urbanized Washoe County since 1996. The funds collected are used to finance the costs of capacity enhancement projects necessitated by and attributable to new development. The Program is a way to charge new development for its proportionate fair share of those costs.

Eligible projects must be on the RRIF network, which is comprised of existing or planned arterial or collector streets and roads that meet the criteria specified in the current RRIF Capital Improvements Plan (CIP). As of 2024, those criteria include:

Arterials categorized as High, Moderate, or Low Access control as defined by RTC Engineering;

Collectors that have a forecast volume of at least 14,000 annualized average daily trips at “build-out,” which is defined as full development based on the approved land use assumptions in each jurisdiction;

Freeway and highway ramps that connect to arterial or collector streets and roads that are included in the RRIF Network are considered arterial or collector streets and roads.

The RRIF Network only includes arterial or collector streets and roads that meet the criteria above that are either existing or planned in the first 10 years of the RTP. The RRIF CIP is developed using projects identified in the current RTP that are on the RRIF Network, and then further refined using sound engineering and planning judgement to make reasonable adjustments detailed in the CIP document.

The resulting list of projects is the planned capital improvements and facility expansions necessitated by and attributable to new development.

Active Transportation Program

RTC is committed to improving safety and comfort for non-vehicular travelers including pedestrians and bicyclists. Annual funding will be programmed for the implementation of low-cost, high-impact projects identified in the Active Transportation Plan and the subsequent Neighborhood Network Plans. Quick-build projects implemented using program funds will provide valuable insights into how to best increase active transportation infrastructure utilization and can inform where RTC ultimately implements more permanent infrastructure projects. More details about the Active Transportation Program can be found in Chapter 8, System Reliability and Resiliency.

APPENDICES A-F

(A screen reader compatible version, or other alternate format is available upon request.)