

Nevada Sustainable Transportation Funding
Advisory Work Group

Background information for AWG Meeting #2



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The legislative directive from HB 413 and the process for carrying it out

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3 Statewide transportation revenue sources in Nevada

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Appendix: Helpful links and resources

How to use this briefing book

This briefing book is provided to Advisory Working Group members as background for the August 10, 2021, meeting. These materials are aligned with the Agenda for the meeting and provide background information on several of the topics to be reviewed and discussed.

During the meeting, slide presentations will summarize each of these topics (but not repeat everything), so it will be helpful to read the content of the briefing book prior to the meeting.

The project team is happy to answer any questions that arise prior to or during the meeting.

Section 1

Advisory Working Group charter and operating procedures

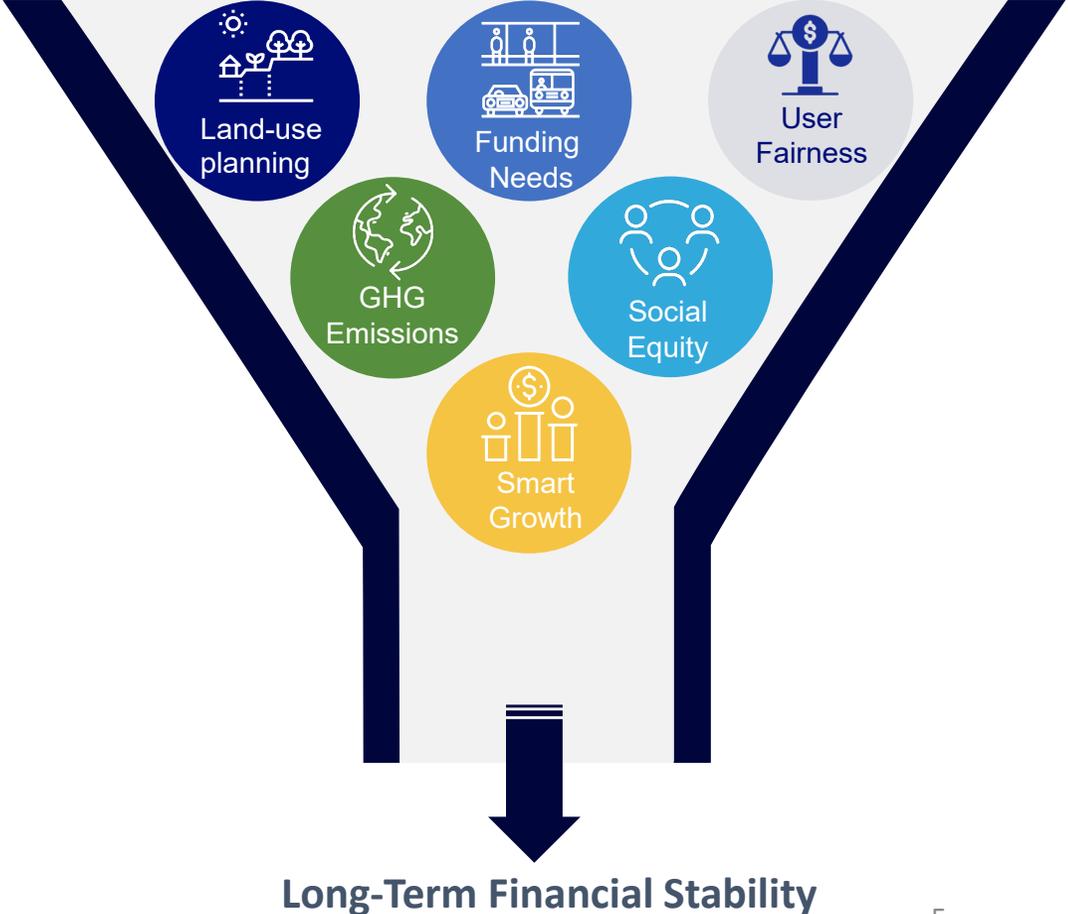


LEGISLATIVE DIRECTION

Assembly Bill 413 (2021) directs the Nevada DOT to convene an Advisory Working Group to study transportation needs of the state and recommend sustainable funding options.

The transportation funding options should, at a minimum, provide long-term financial sustainability for the State Highway Fund, while considering the needs for greater social and user equity and the imperative to reduce Greenhouse Gas emissions from the transportation sector. The Advisory Working Group will also consider the role that land use and smart growth strategies can play in transportation costs, reducing emissions, and improving system efficiency and equity.

[Link to full text of AB 413](#)



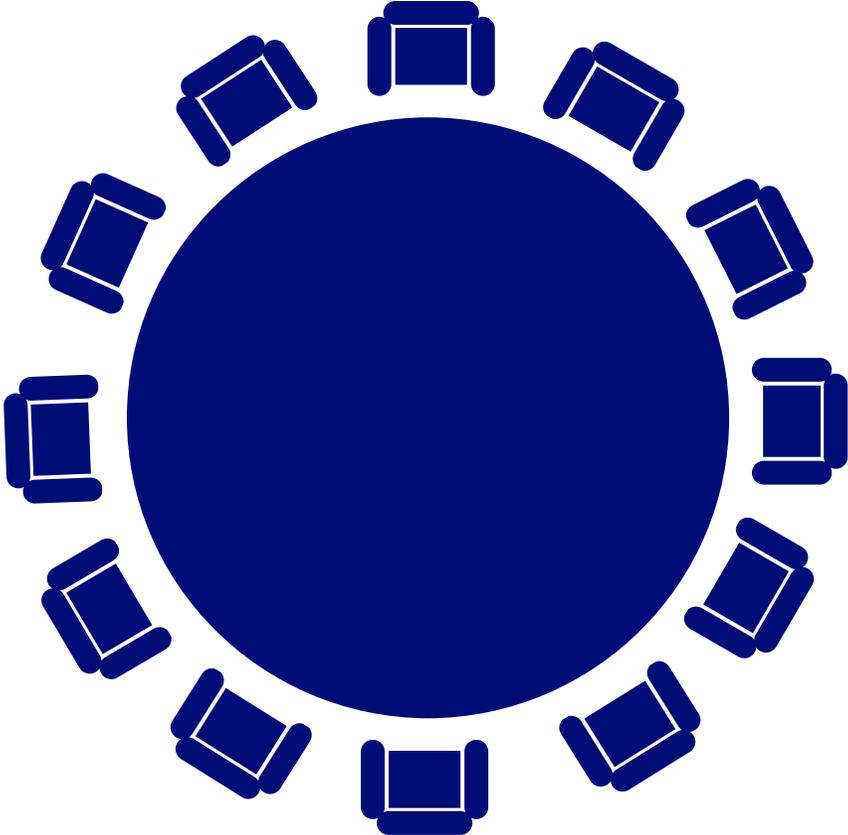
ADVISORY WORKING GROUP MEMBERSHIP

AWG members represent the various public, civic, business and social sectors throughout Nevada.

The Advisory Working Group includes entities and individuals with a specific interest in (or responsibility for) managing a financially and environmentally sustainable statewide, multimodal transportation network. The membership is representative of the geographic areas and ethnic groups of Nevada.

Organizations and expertise identified in AB 413:

- Metropolitan planning organizations;
- Environmental agencies and organizations;
- Clean energy;
- Tax policy expertise;
- Local, county, tribal, state and federal agencies with expertise in transportation and clean energy;
- The Chairs of the Nevada Senate and Assembly Standing Committees on Growth and Infrastructure;
- Organized labor;
- Local chambers of commerce;
- The Nevada Resort Association;
- Entities that represent or promote the interests of minority groups in Nevada.



ADVISORY WORKING GROUP OPERATING PROCEDURES

Important policies for how the AWG will conduct its work are found in the AWG Operating Procedures.

The Advisory Working Group has **three primary responsibilities**: **(1)** participate in deliberations in an open, constructive manner to help the Group arrive at findings, conclusions, and recommendations; **(2)** provide relevant information and perspectives to help improve the research and broader understanding; and **(3)** actively and accurately share information with others. Operating Procedures will help ensure the Group remains in alignment with these responsibilities and the overall mission of the study.

Key provisions include:

- Appointed ("seated") AWG members or, if the seated member is absent, their designated alternates can participate in discussions, speak for their organization or sector, vote, etc. Others wishing to express an opinion or share information are invited to do so during the public comment period or in writing to be shared with the full AWG.
- Organizations who are not seated AWG members and the general public will be invited to offer any comments during a public comment period to be held each meeting.
- Smaller groups of the AWG may need to be convened from time to time to conduct more detailed research and analysis on specific issues. All results from these smaller, ad hoc groups will be brought forth to the full AWG for consideration.
- The AWG will operate by consensus. The goal will be to reach unanimous consensus – meaning that all members support, or can live with, the AWG recommendations. If unanimous consensus cannot be reached on findings, conclusions, or recommendations, the majority opinion as determined by members entitled to vote will be conveyed as the AWG recommendations, with any differences of opinion noted and included as part of the AWG's final report.
- An "issues registry" will be used to keep track of relevant questions or issues that need further exploration and consideration between meetings or at future meetings.
- AWG members are asked to let the process reach its conclusion before describing potential strategies or concepts as AWG "recommendations".

Link to more detail: [AWG Operating Procedures](#)

Section 2

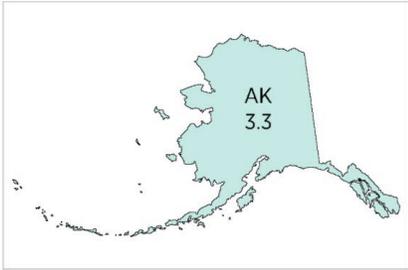
Nevada demographics and transportation system overview



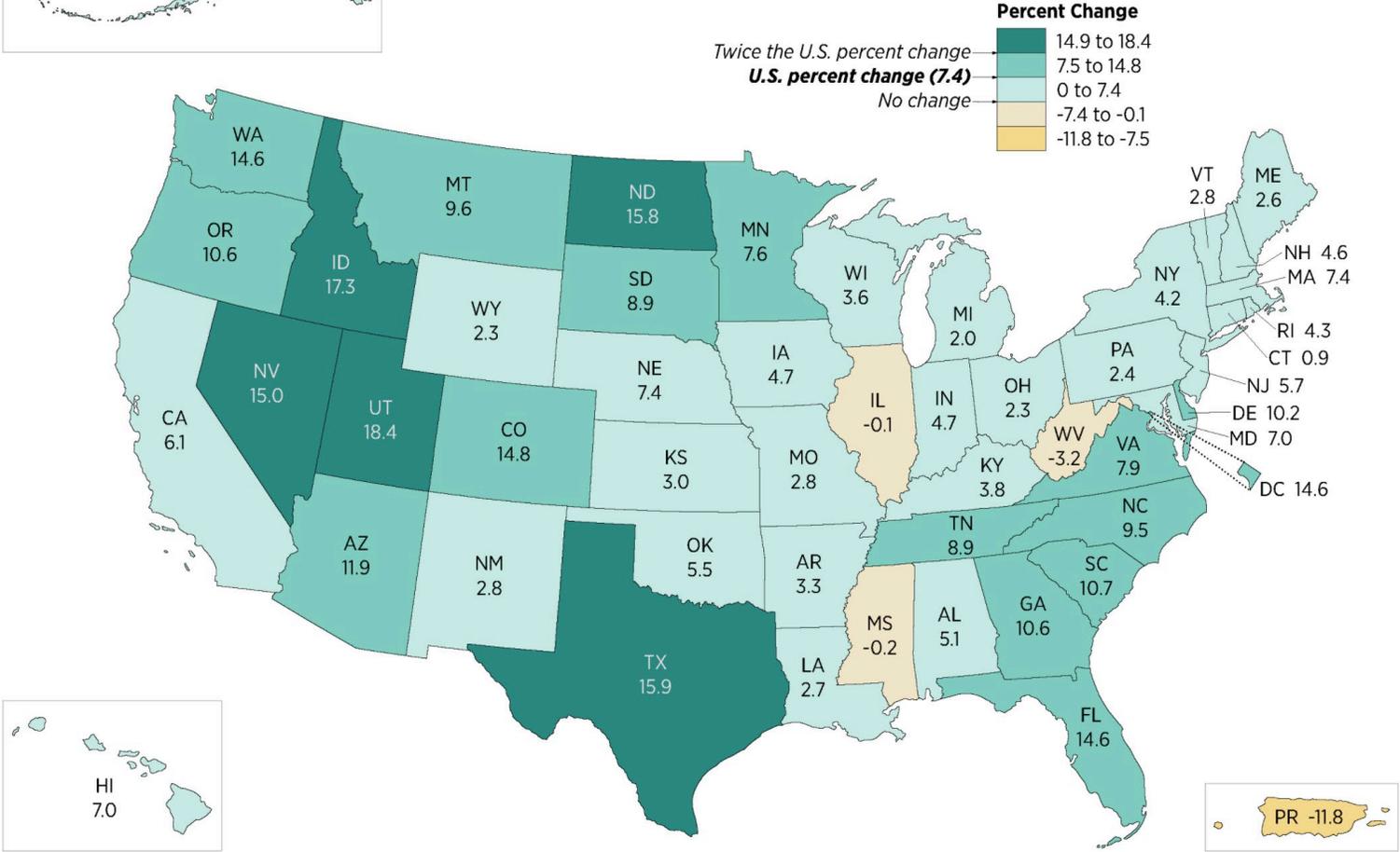
BASIC NEVADA DEMOGRAPHICS

As one of the fastest growing states in the nation, demands on Nevada's transportation system outpace the resources available.

According to the 2020 U.S. Census, Nevada was the fifth-fastest growing state in the country, adding over 400,000 residents since 2010, a 15% increase.



Percent Change in Resident Population for the 50 States, the District of Columbia, and Puerto Rico: 2010 to 2020



BASIC NEVADA DEMOGRAPHICS

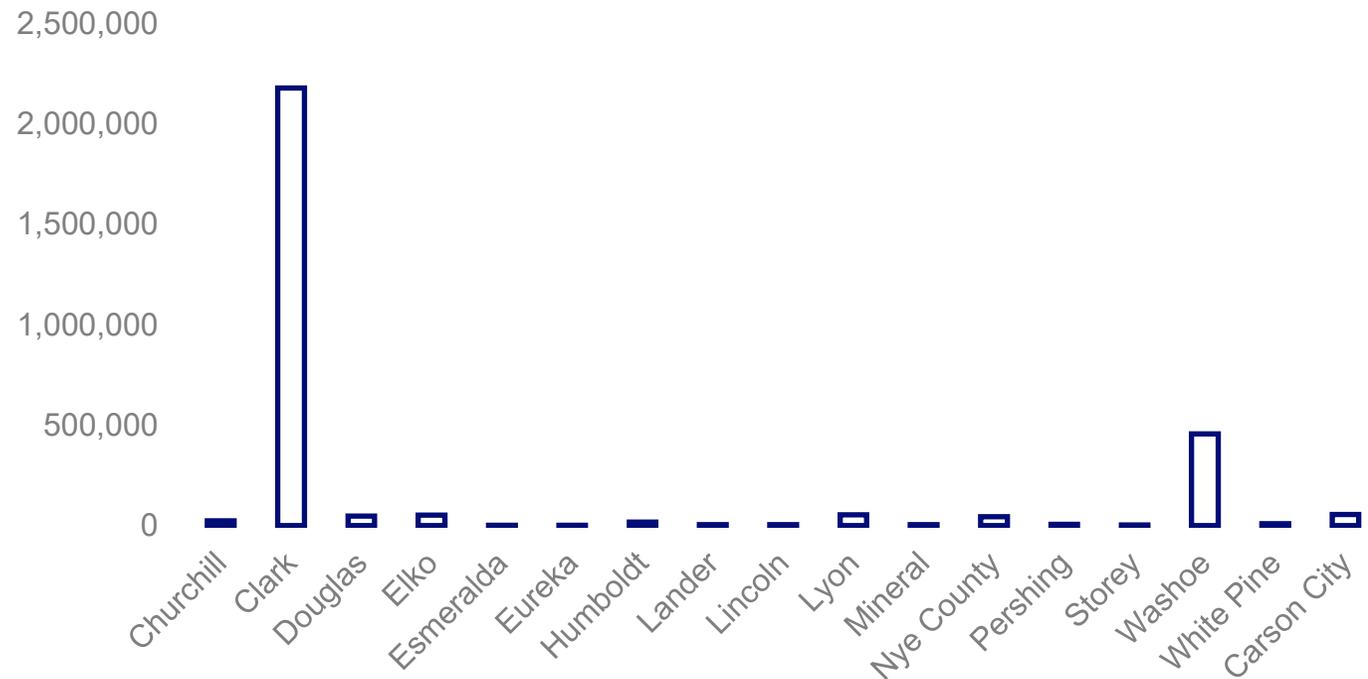
Nevada's population is heavily concentrated in two counties.

The state population is 3.0 million, with 2.2 million (74%) located in Clark County.

Washoe County is the second most-populous county in the state (15% of total).

The remaining 11% of the population is spread among the other 15 counties in Nevada.

Population by County



Source: ACS 2019

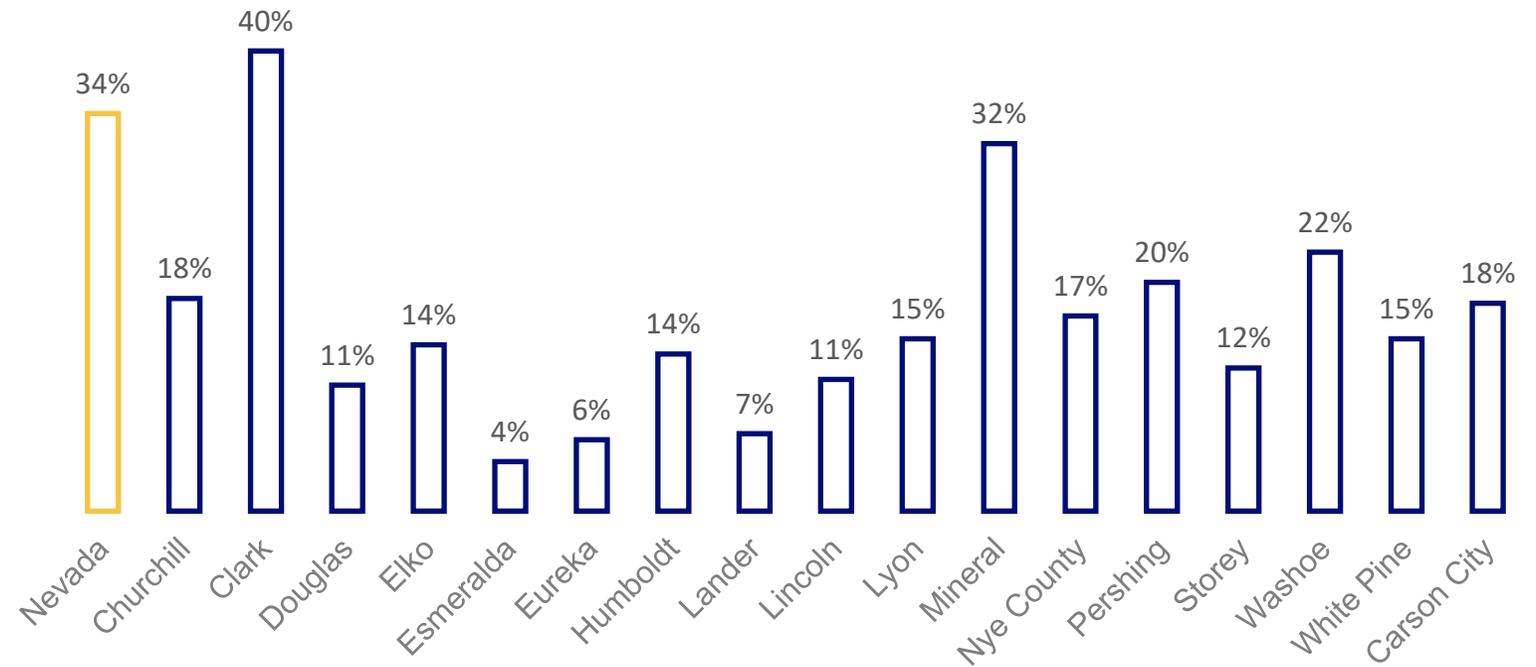
BASIC NEVADA DEMOGRAPHICS

Based on 2019 data, Nevada has been ranked the third most ethnically and racially diverse state in the nation.

Clark County leads the way with people of color comprising 40% of the county population.

Statewide, 34% of Nevada is comprised of people of color, ranking third in the nation.

Percent People of Color by County



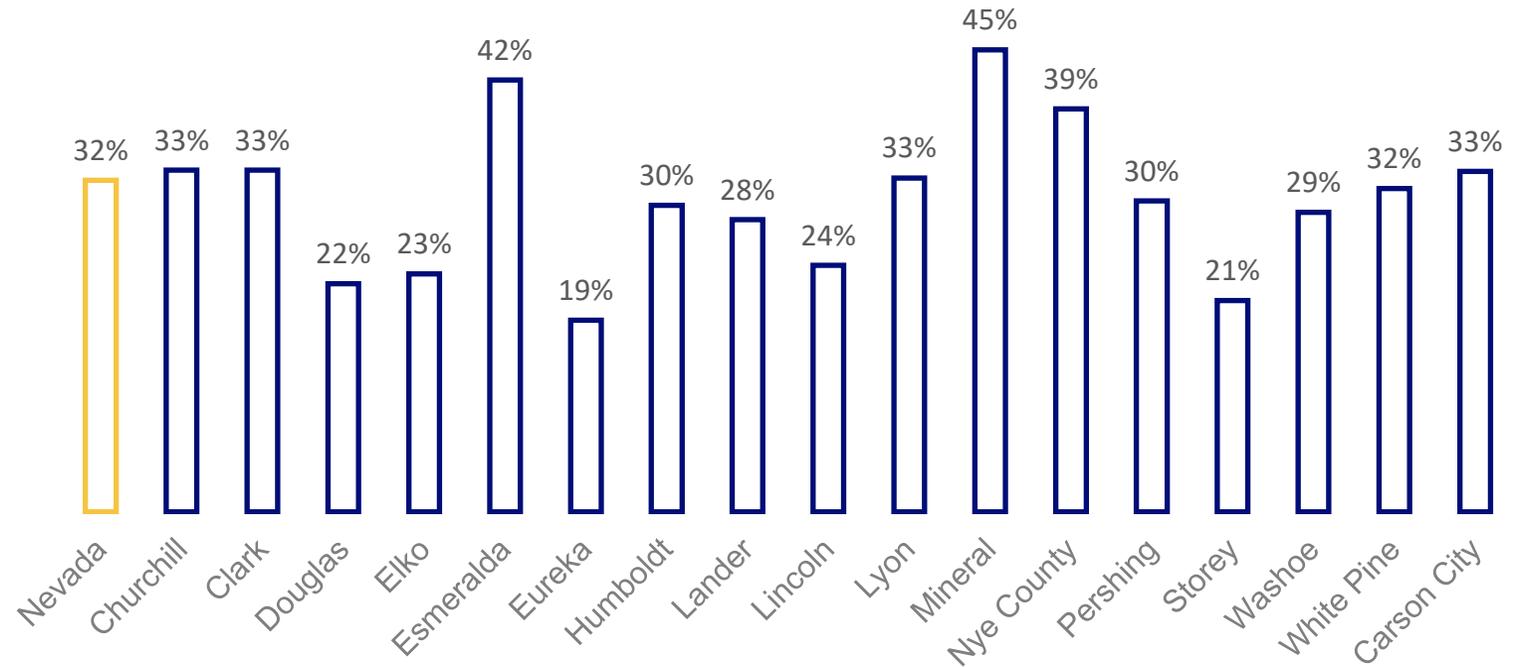
Source: ACS 2019

BASIC NEVADA DEMOGRAPHICS

Statewide, about 32% of the population could be considered low income.

Low income is defined as households with less than 200% of the federal poverty level. This measure is commonly used throughout the United States and often serves as a threshold for public policy initiatives and programs.

Percent Low Income by County



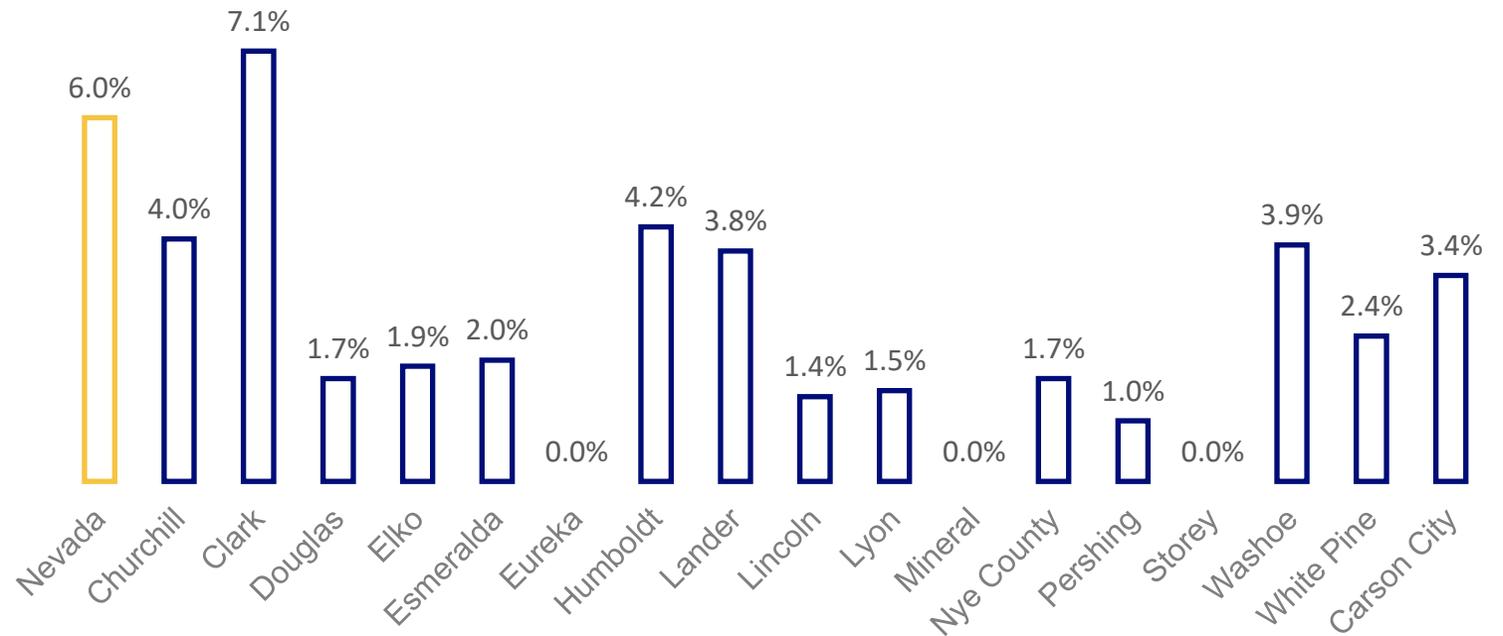
Source: ACS 2019

BASIC NEVADA DEMOGRAPHICS

About 6% of Nevadans have limited ability to speak English.

As policymakers consider various options for collecting state transportation taxes, fees, or charges, any transportation revenue system of the future should be designed for ease of use. This includes the need to make accommodations for linguistically-isolated households that speak limited English.

Percent limited English-speaking households by County



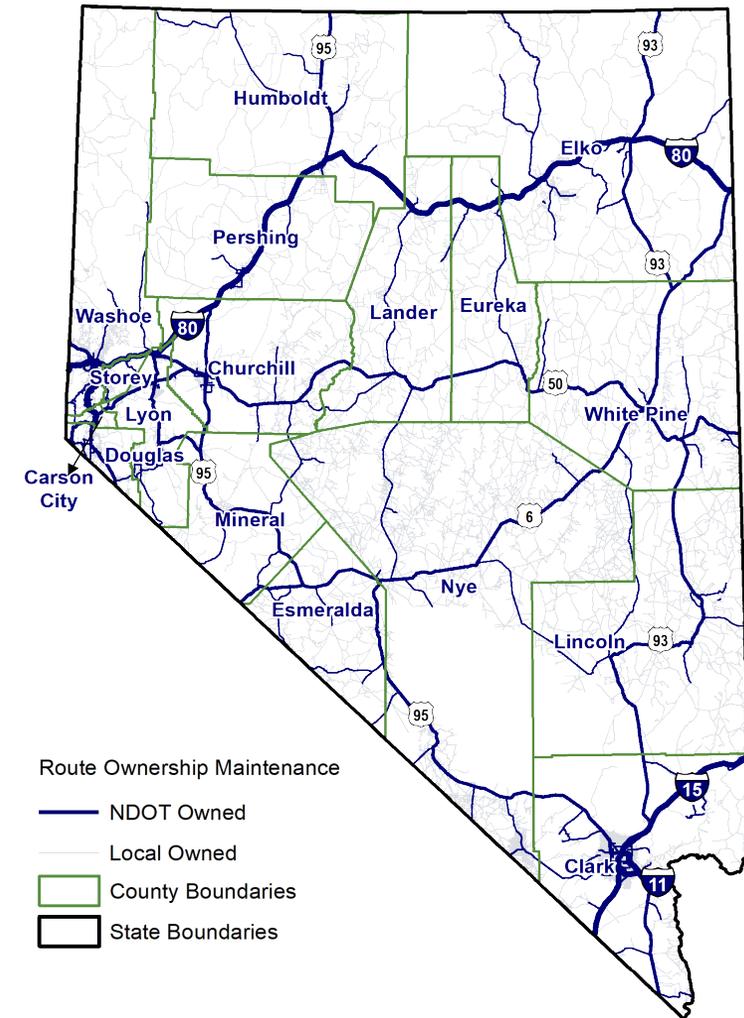
Source: ACS 2019

ROADWAY OVERVIEW

The roadway network is critical to Nevada's economy and the quality of life of its residents.

Transportation networks are key to the growth and competitiveness of the state as well as the mobility and safety of its residents. Through its wide range of responsibilities, NDOT plays a critical role in supporting Nevadans and visitors.

One of NDOT's crucial functions is the maintenance of state and federal roads, which include Interstate, U.S. and state highways. Despite these highways accounting for about 14% of roadways in Nevada, NDOT-maintained highways carry nearly 50% of the vehicle traffic in the state, including 70% of all truck traffic and 68% of heavy truck traffic. It is essential that these corridors are adequately maintained and improved when necessary.

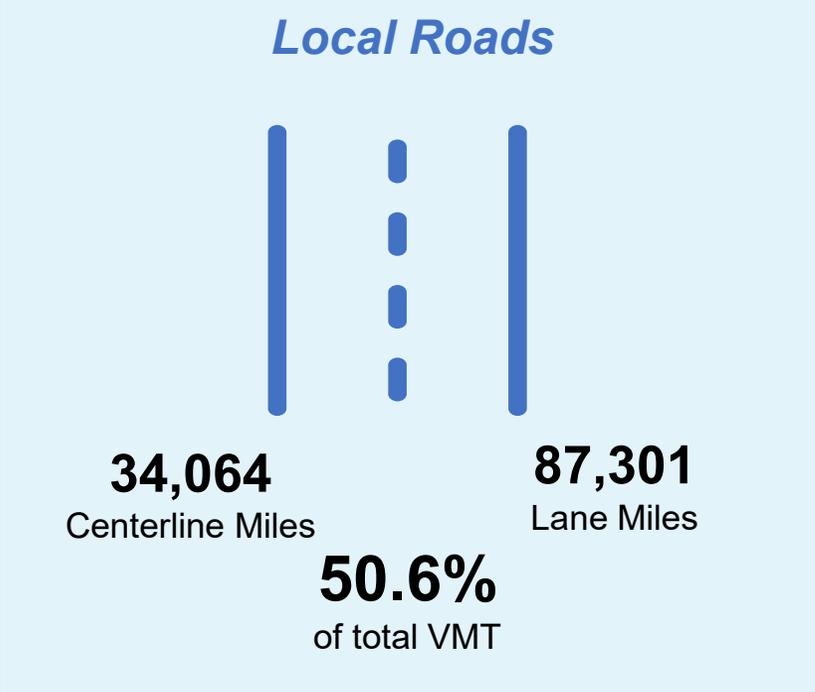


Sources: NDOT, *One Nevada Transportation Plan*, 2020 Quick Facts & Figures

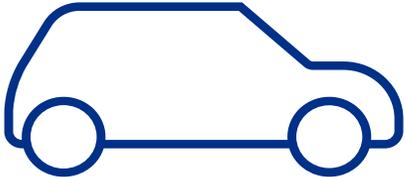
ROADWAY OVERVIEW

Centerline Miles are calculated by measuring down the center of all lanes of traffic whereas **Lane Miles** are calculated by multiplying the centerline roadway length by the number of lanes

Vehicle Miles Traveled (VMT) measures the amount of travel for all vehicles in a geographic region over a given period of time

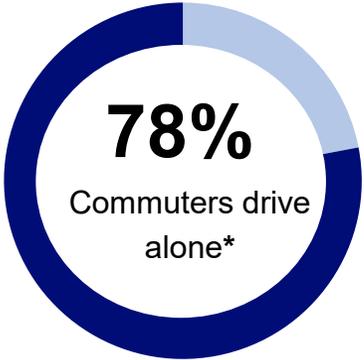


- * 10.5% carpooled
- 4.3% work from home
- 3.1% commute by public transit
- 2.2% commute by walking or cycling
- 1.9% commute by cab/rideshare



27.9 billion

Vehicle Miles Traveled each year on all Nevada roadways



1.85

billion

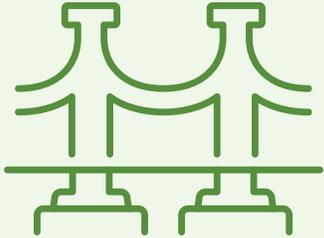
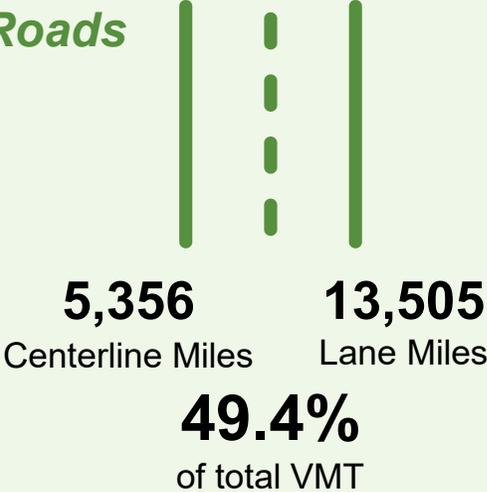
Truck Vehicle Miles Traveled each year on all Nevada roadways

\$156 billion

Goods shipped into/out of Nevada



NDOT Roads



1,221
NDOT Bridges



MULTIMODAL OVERVIEW

While there are transit services throughout the state, the largest transit operations are in the Las Vegas and Reno metro areas.



3.1%

Commuter by
Public Transit

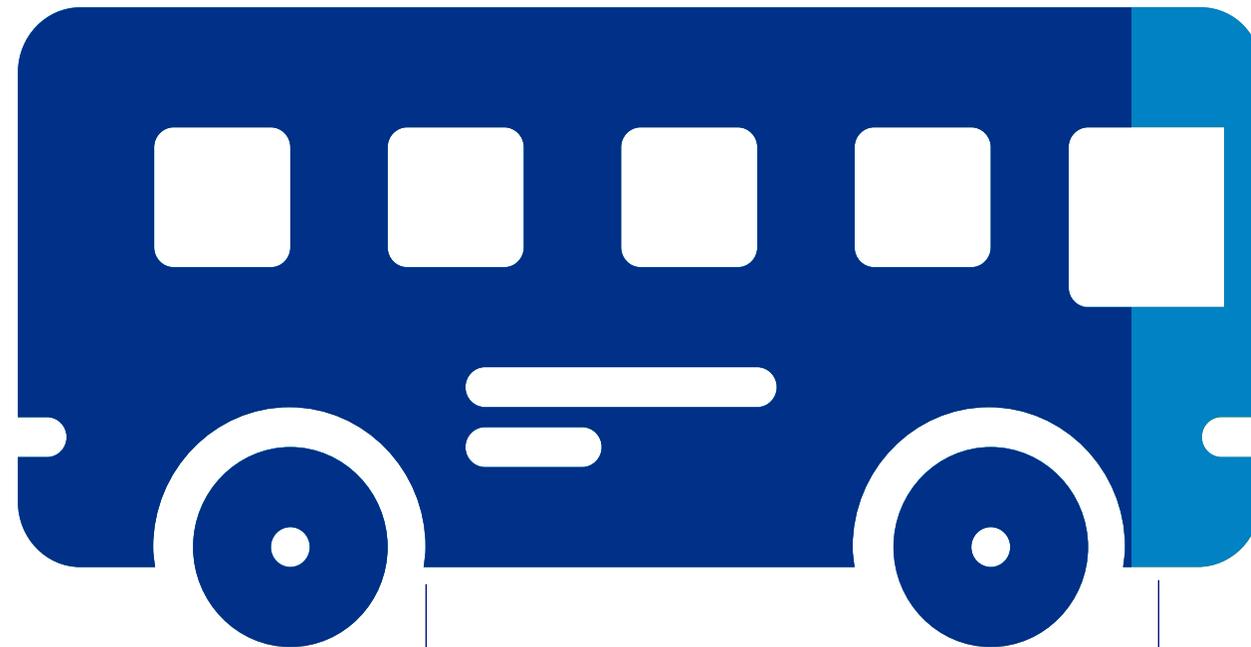


2.2%

Commuter by
Walking or Cycling

73.3 million trips

Total Transit Trips (2019)



0.562 million

All Other
System Trips

64.4 million

RTC Southern Nevada Trips

8.4 million

RTC Washoe Trips

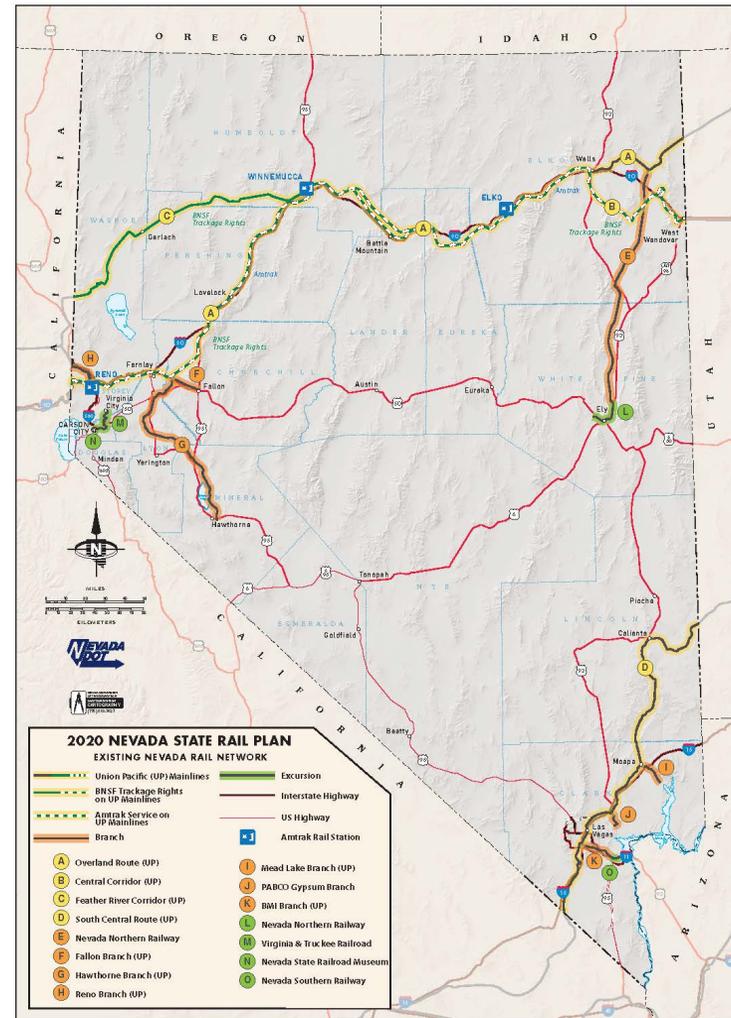
Source: 2019 US Census Bureau

RAILWAY OVERVIEW

Nevada is served by two major rail routes (the Overland Route and the South-Central Route), both of which are owned by Union Pacific Railroad.

Union Pacific Railroad and BNSF Railway operate on over 1,805 track miles within the state. More than 5.6 million tons of goods were shipped on these rails in 2016.

Freight rail movements account for about 25% of all freight-ton miles of all modes exported from Nevada.



Sources: NDOT, One Nevada Transportation Plan, Nevada State Rail Plan

Today's Amtrak passenger rail service operates on existing rail lines that also serve freight. Private high-speed passenger rail service is proposed for a future connection between Los Angeles and Las Vegas.

NDOT is statutorily prohibited from operating rail and has no funding sources available for rail expenditures. Passenger rail in the state is served by Amtrak, solely on the Overland Route. Amtrak operates the California Zephyr through Northern Nevada, connecting Reno, Winnemucca and Elko to the San Francisco Bay Area and Chicago. This service runs daily in each direction.

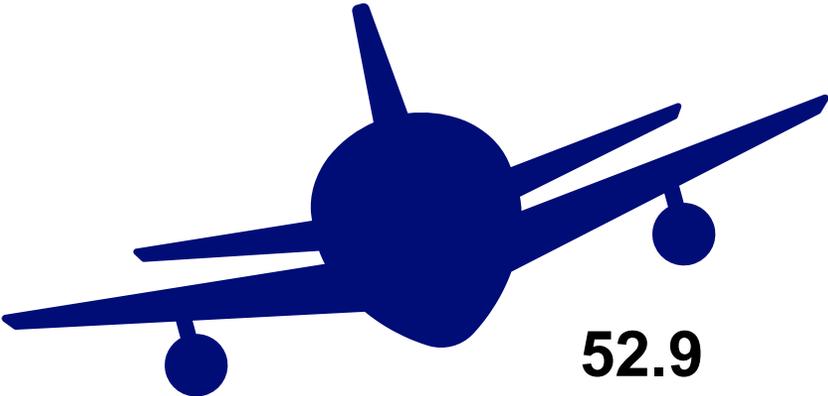
Brightline West, a private consortium, is planning a high-speed rail line between Las Vegas and Victorville, CA, near Los Angeles; construction is planned to start in 2021 and finish in 2023.

AVIATION OVERVIEW

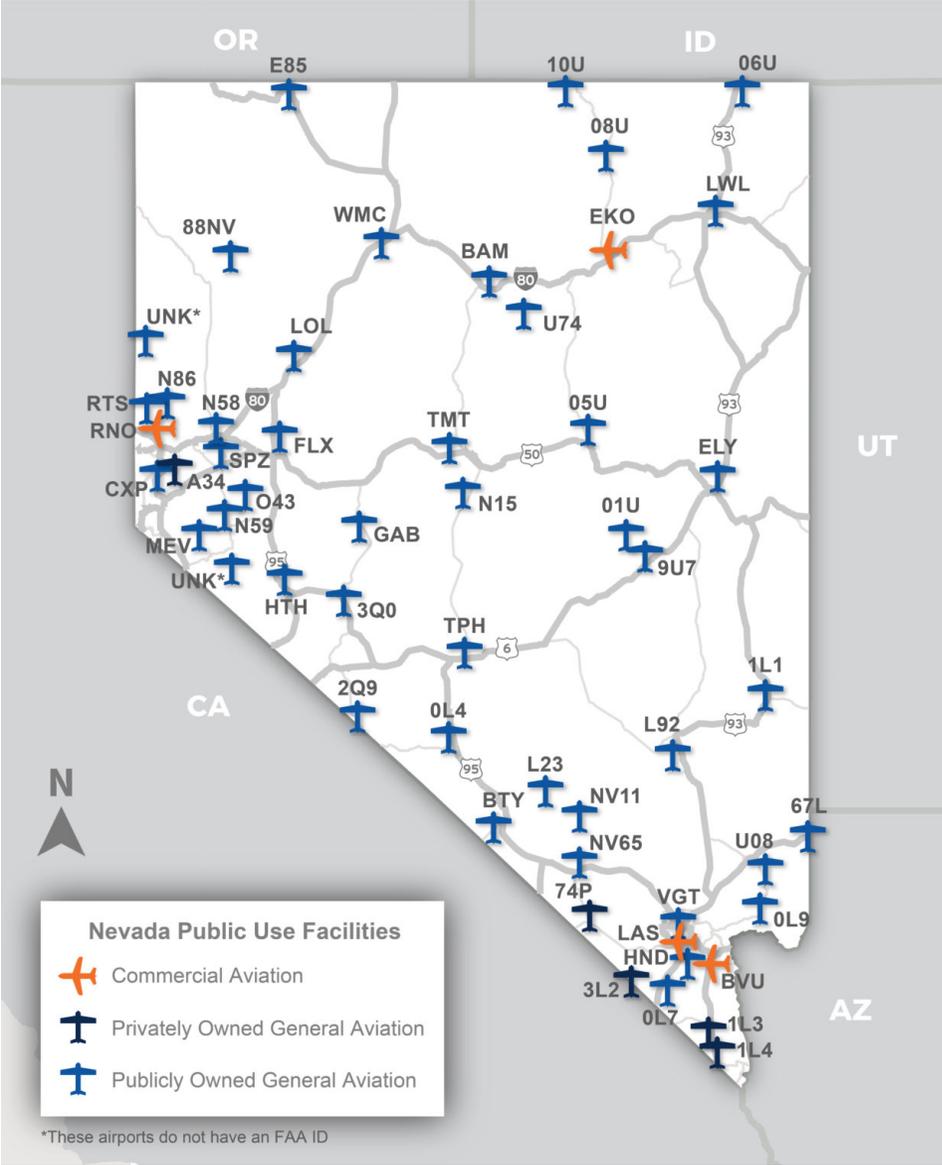
Nevada has four commercial service airports and 45 general aviation airports.

Nevada's commercial airports play a critical role for both passengers and freight. In 2016, more than 350 million pounds of domestic air cargo moved through Nevada's major commercial airports.

In 2017, 52.9 million passengers arrived and departed through Nevada airports. Year after year, McCarran International Airport in Las Vegas consistently ranks in the top 10 busiest US airports by total passenger boardings.



52.9
million
Passengers in 2017



Sources: NDOT, One Nevada Transportation Plan, Nevada Airport and Heliport System Plan

JURISDICTIONS & GOVERNANCE



NEVADA Department of Transportation

Plans, operates, maintains and administers the state highway system and federal highway program within Nevada as well as the state and federal rural transit program.



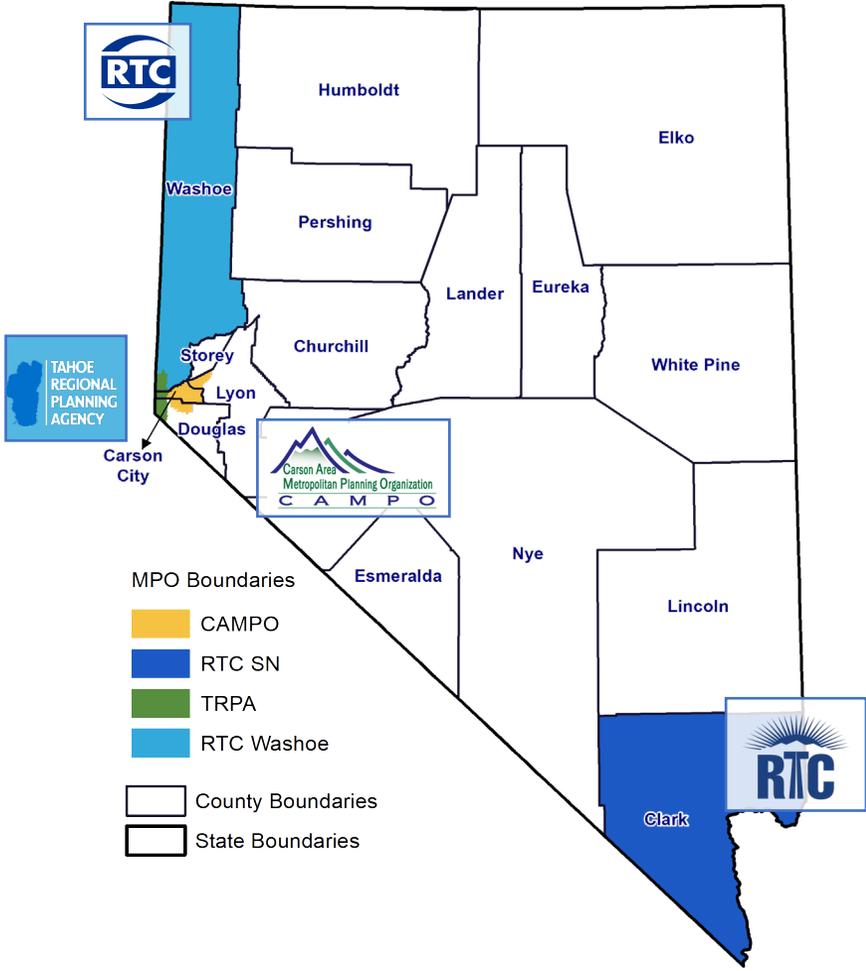
RTC of Southern Nevada

Manages public transit, traffic management, construction funding and transportation planning in Southern Nevada



RTC of Washoe County

Manages public transit, construction funding, and transportation planning in Washoe County



Carson Area Planning Organization

Manages construction funding and transportation planning in for Carson City and parts of Douglas and Lyon Counties



Tahoe Regional Planning Agency

Provides regional planning, development and regulatory oversight and environmental protection for the Lake Tahoe region. The Tahoe Transportation District is a project delivery and transit operations partner.



Local Governments

Cities and counties administer local roads and perform local planning



Section 3

Statewide transportation revenues in Nevada



STATEWIDE TRANSPORTATION REVENUE OVERVIEW

Nevada residents and road users contribute about \$1.4 billion per year through a variety of state and local transportation taxes and fees to support transportation investments by state, regional, county, and municipal agencies.

Not included in this annual investment amount:

- Proceeds from **bond sales** (i.e., borrowed money to repay from existing taxes and fees)
- **General tax revenues** like sales and property taxes, even if some of those funds occasionally are transferred to support transportation
- Revenue from the **federal gas tax** and other transportation user fees paid by Nevada motorists



How the tax is paid. There are ten major distinct state and local tax and fee mechanisms that collectively generate funding for transportation investments in Nevada. This section profiles each existing revenue mechanism -- "how" the funds are collected -- and includes a rate summary and how much revenue is generated.



Who receives the revenue. A full understanding of Nevada's transportation revenue situation requires clear accounting of which tax and fee mechanisms align funding for which recipients, especially between the state and counties. This section clarifies which funding mechanisms and amounts are dedicated to various levels of government and specific recipients.



Who pays the tax. More difficult to assess are precise attributions of taxes and fees paid by individuals or households according to vehicle type, income level, or residence location. Future briefing books will provide more detailed assessments of who pays.

STATE AND COUNTY MOTOR FUEL TAXES

Nevada fuel taxes: it's complicated

Transportation funding policy rests on a simple premise: Nevada road users pay for transportation via fixed fees that act as access charges (such as vehicle registration fees) and usage charges (fuel taxes). The details are not as simple. With 70 individual line items specifying distinct tax rates or rate formulas for various types of fuel destined for various jurisdictions, and corresponding direction on how to invest the revenues collected from each individual tax, Nevada fuel tax statutes are among the nation's most complex.

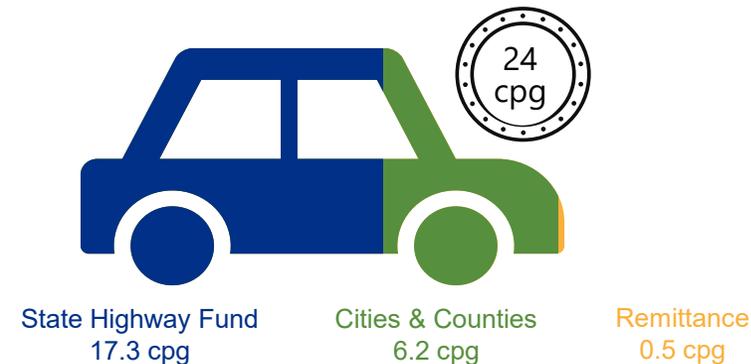
State imposed fuel taxes

The State of Nevada taxes all motor fuel (gasoline) distributed in Nevada for highway purposes at a flat rate of 24 cents per gallon.* This tax rate reflects the sum of five individual statutory taxes set at distinct rates with distinct distribution formulas. The bulk of the revenue from this tax, equivalent to 17.3 cents per gallon, goes to the State Highway Fund. Revenue corresponding to 6.2 cents per gallon is distributed according to three separate formulas spelled out in statute to counties and cities. The remaining 0.5 cents per gallon goes to the fuel distributors to compensate them for collecting and remitting the tax to the state.

Similarly, the State of Nevada taxes all special fuel (diesel) distributed in Nevada for highway purposes at a flat rate of 27 cents per gallon. Almost all of this revenue, equivalent to 26.5 cents per gallon, is deposited into the State Highway Fund. The remaining 0.5 cents per gallon goes to the fuel distributors to compensate them for collecting and remitting the tax to the state.

*Non-motor liquid fuel used to propel vehicles is taxed at 23 cents per gallon.

State imposed motor fuel (gas) tax, per gallon



State imposed special fuel (diesel) tax, per gallon



STATE AND COUNTY MOTOR FUEL TAXES

Nevada fuel taxes: it gets even more complicated

Optional County-Imposed Fuel Taxes

Optional county fuel taxes are more complex. County fuel taxes comprise 62 individual line items in Nevada statute, 60 of which are not flat per-gallon rates but formulas tied to cost indices ("fuel revenue indexing") that vary by county, fuel type, and index type. Most of the county option taxes also require an election by voters or ordinance by county elected officials before the county option tax becomes law.

Collectively, as of 2021, county motor fuel (gasoline) taxes are imposed at rates varying between 4 cents per gallon to 47.9 cents per gallon.** Special fuel (diesel) taxes also vary by county, from no additional tax to 5 cents per gallon. Of these additional taxes, fuel distributors retain two percent of gross receipts. The remaining 98 percent is distributed to the county in which it was sold.****



**County motor fuel tax rates as of July 1, 2021 include Esmeralda, Eureka, Lincoln, and Storey Counties at a flat 4 cents per gallon; Clark County at 24.7 cents per gallon (of which 9 cents is flat and the remainder is a collection of 12 taxes indexed to the producer price index for highway and street construction); Washoe County at 47.9 cents per gallon (of which 9 cents is flat, 36.3 cents is a collection of 12 taxes indexed to producer price index for highway and street construction, and 2.7 cents is a collection of eight taxes indexed to consumer price index); and all other counties (including Carson City) at a flat 9 cents per gallon.

***County special fuel tax rates as of July 1, 2021 include Carson City, Churchill, Humboldt, Lyon, Mineral, Pershing, Storey, and White Pine at 5 cents per gallon; Clark County at 15.7 cents per gallon; and Washoe County at 34.5 cents per gallon. Douglas, Elko, Esmeralda, Eureka, Lander, Lincoln, and Nye do not impose an additional county special fuel tax.

****A portion of fuel tax collected on fuel sold in Clark County is directed to the State Highway Fund for expenditure on projects in Clark County.

STATEWIDE TRANSPORTATION REVENUE OVERVIEW

Nevada governments impose a variety of revenue mechanisms to support transportation investments, largely based on taxation of fuel and vehicles, but 10 stand out.

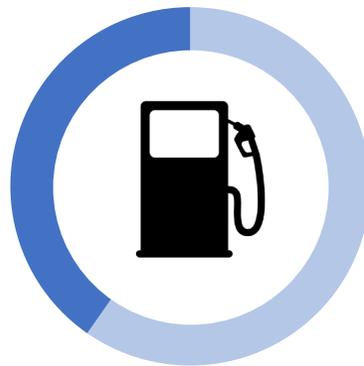
Revenue source	Imposed by (last increased)	Rate	Est. FY2020 revenue (\$ millions)
Fuel tax (gasoline + diesel) to State Highway Fund	State (1992)	\$0.173/gal gasoline, \$0.265 diesel	\$ 197
County option flat per-gallon fuel taxes	All counties (2016, Nye County)	\$0.04-09/gal	\$ 171.6
Washoe fuel tax indexing	Washoe County (2010)	\$0.389/gal motor fuel \$0.345/gal special fuel	\$ 56.6 \$ 18.6
Clark fuel tax indexing	Clark County (2016)	\$0.157/gal motor fuel \$0.157/gal special fuel	\$ 93.2 \$ 17.3
Driver license fees	State (2009)	\$23.25/4-year passenger license	\$ 17.2
Vehicle registration fees	State (2005)	\$33/passenger vehicle	\$ 175.1
Motor carrier fees	State	\$48+ \$12/1k lbs 10-26k lbs \$17/1k lbs 26k+ lbs	\$ 38.3
Various DMV fees	State (2015)	e.g., \$36 out-of-state title fee	\$ 100.6
County taxes, licenses and fees (primarily county portion of GST)	Counties		\$ 393.4
Governmental services tax (GST)	State (1991)	4% of adjusted MSRP	\$ 61.8

STATEWIDE TRANSPORTATION REVENUE OVERVIEW

State tax and fee revenue represents just under half of the total amount contributed by Nevada residents and road users.

In 2020, state-imposed taxes and fees for transportation totaled \$681 million, or 48% of the total amount contributed by Nevada taxpayers.

The motor fuels tax (gas tax) and the special fuels tax (diesel) provides the largest single source of funding for the state, providing 42% of revenue. Vehicle registration fees, including governmental services tax (GST) are the largest source of revenue derived from state taxes and fees on drivers and vehicles (34%). Taxes and fees comprising the remaining 24% include miscellaneous DMV fees such as plate fees and emissions control fees.



42%

Fuel Taxes

State gas taxes and special fuels (diesel) taxes



34%

Taxes on Vehicles and Drivers

Vehicle registration fees, Motor carrier fees, Drivers' license fees



24%

All Other Taxes and Fees

DMV & Public Safety revenue, Other taxes and fees

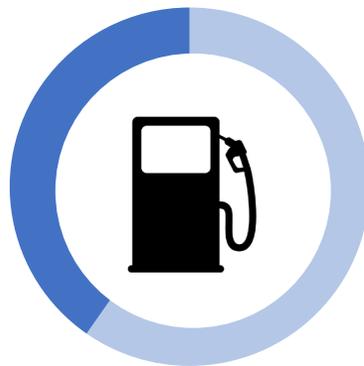
**Bond proceeds not included because they are not "revenues collected"*

STATEWIDE TRANSPORTATION REVENUE OVERVIEW

Counties receive slightly more than half of Nevada transportation tax and fee revenue, driven in part by fuel taxes but primarily by vehicle-related fees.

Counties receive a guaranteed share of fuel tax collections – referred to as the “mandatory” county gas tax. Counties also may enact an additional fuel tax (optional county fuel tax). As of 2021, all but four counties have enacted an additional 9-cent county fuel tax (Esmeralda, Eureka, Lincoln, and Storey each enacted an additional 4-cent county tax). Finally, both Clark and Washoe Counties enacted provisions that allow them to adjust their fuel tax rates for inflation, resulting in additional revenue for those counties.

County fuel taxes, licenses and fee revenue¹



39%

Fuel Taxes

Mandatory and optional county gas taxes; Inflation indexes on gas tax and special fuels tax (Clark and Washoe); and Alternative Fuels taxes



43%

Taxes on Vehicles and Drivers

County taxes, licenses and fees on motor vehicles, primarily the county portion of the governmental services tax



9%*

All Other Taxes and Fees

Impact fees, sales tax, etc.

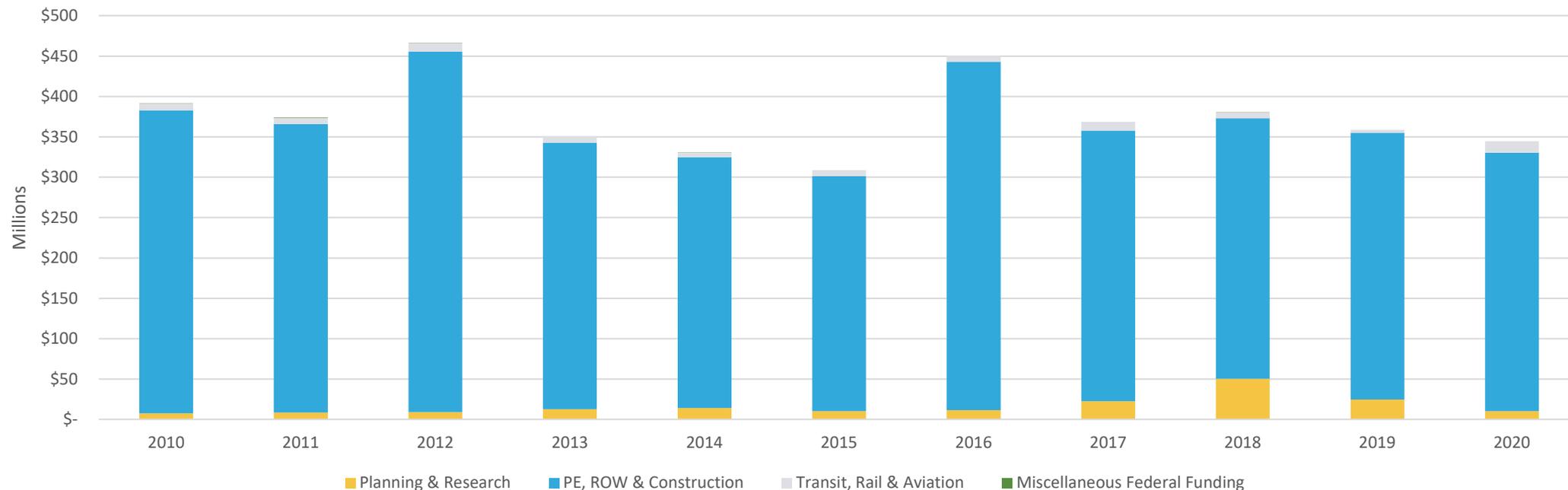
¹Based on 2019 data

STATEWIDE TRANSPORTATION REVENUE OVERVIEW

Federal funding constitutes a large portion of funding in Nevada – but the federal gas tax has not been raised since 1993.

Federal funding is provided to Nevada through ongoing distributions (“apportionments”) from the federal Highway Trust Fund. Funds can be used for surface transportation projects in Nevada as well as transit systems (federal transit funding is primarily distributed directly to transit agencies).

The federal government determines the funding levels for each of these purposes. The primary revenue source for the federal Highway Trust Fund is the federal gas tax, which is currently 18.4 cents per gallon. The federal gas tax has not been increased since 1993.



SPENDING RESTRICTIONS ON STATEWIDE REVENUE SOURCES

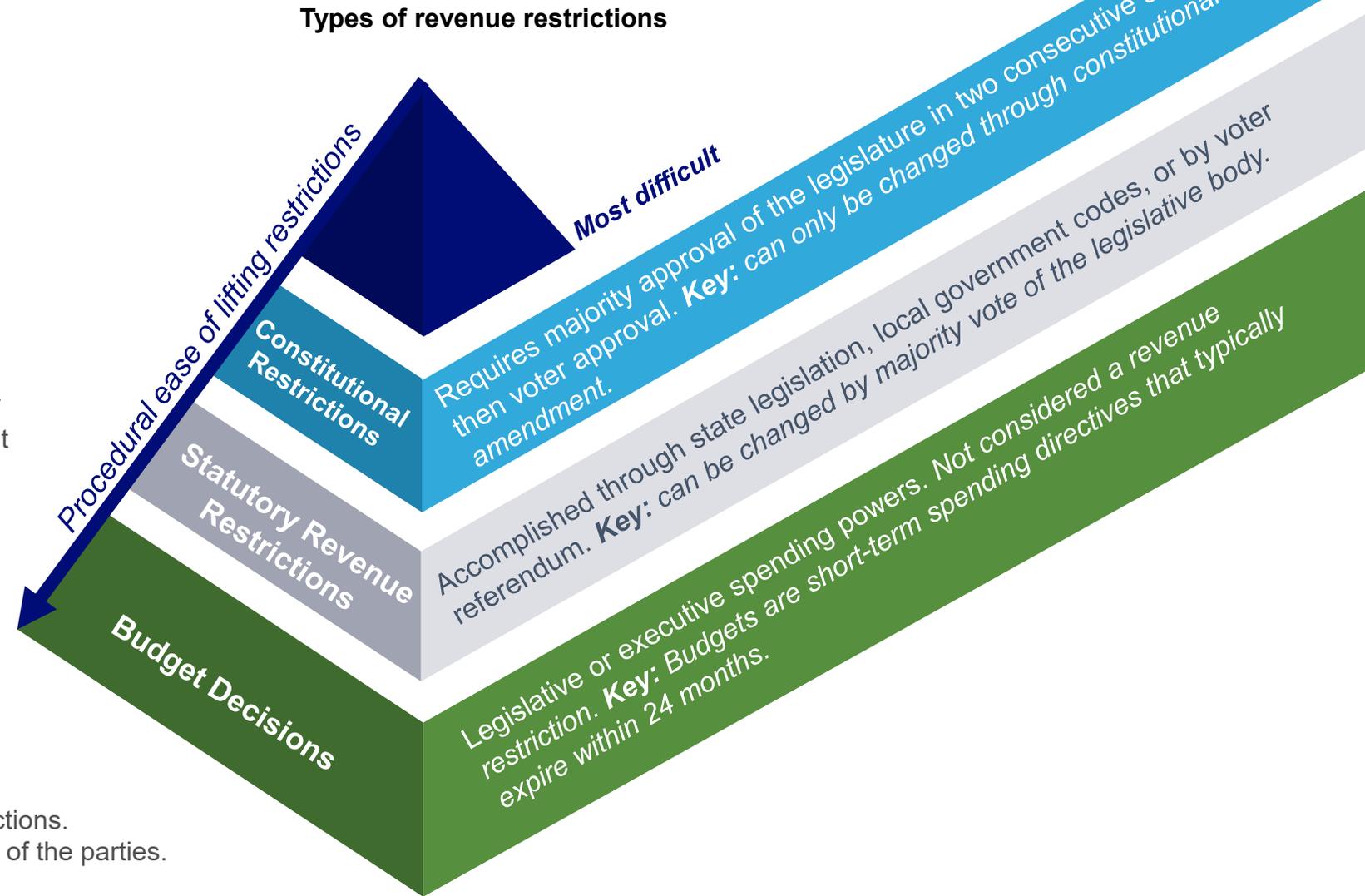
Certain transportation revenues can only be spent for highway-related purposes.

A large portion of transportation revenues are legally restricted and can only be spent for transportation purposes. By far, the largest portion of restricted revenues must be spent on highway-related purposes.

There are two primary ways revenues become legally restricted: through laws enacted by the legislature that narrowly define how the money can be spent (statutory restrictions); or state constitutional provisions that restrict the use of the revenue.

Other notable restrictions:

Contract law (bond covenants, grants); Federal restrictions.
 Key: Contracts can be changed by mutual agreement of the parties.
 Example: refinancing bonds.



SPENDING RESTRICTIONS ON STATEWIDE REVENUE SOURCES

Spotlight: Constitutional restrictions on motor fuel taxes

Relevant history:

1919: Oregon first to impose a 1 cent per gallon tax on motor vehicle fuel.

1929: All states have enacted gas taxes.

1932: Federal gas tax enacted for deficit reduction (and later, national defense).

Great Depression: States begin to divert gas taxes to other social programs (example: unemployment benefits).

1935: Automobile clubs and concerned citizens begin to press legislatures to pass laws requiring “highway revenue” to be spent exclusively for “highways.”

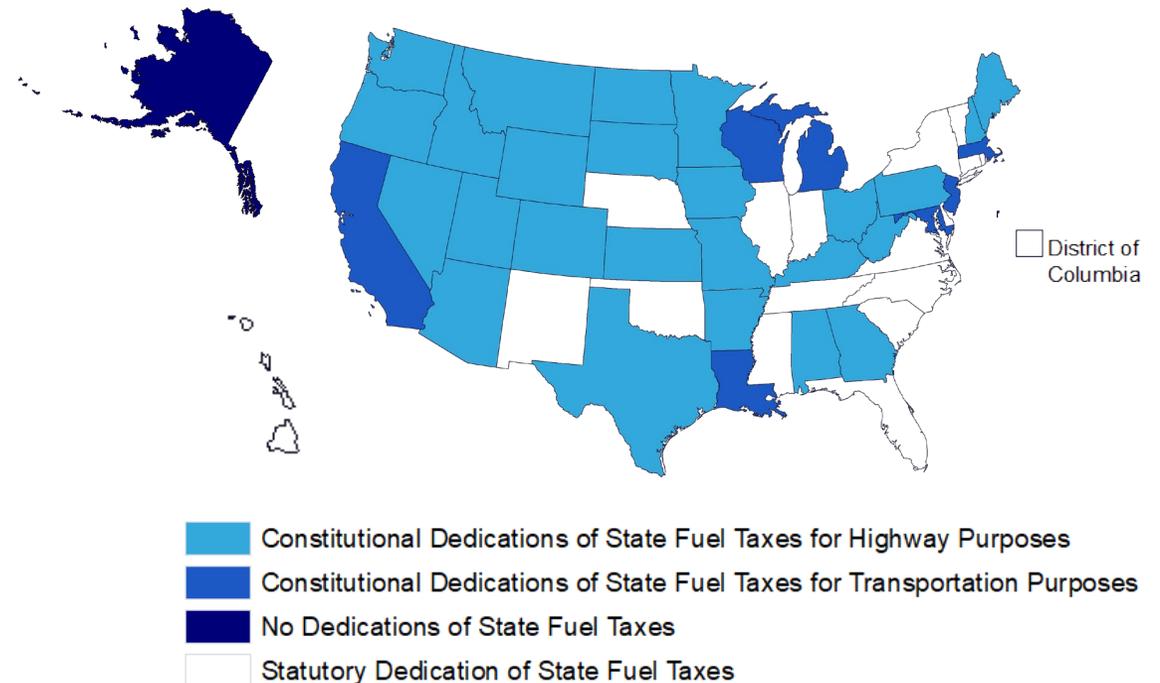
1940: Nevada voters pass constitutional amendment requiring state gas tax and motor vehicle related fees to be spent on highway purposes.

1944: Proposed national highway system calls for states to provide matching funds for construction of the federal highways.

1956: Federal Interstate System created and financed with periodic increases in the federal gas tax (plus 10% state matching funds).

All states (except Alaska) have some level of requirement that motor fuel taxes be spent on transportation. The most common restriction is requiring that gas tax revenue be used strictly for “highway purposes” (24 states have this constitutional restriction). Most of these states also restrict the expenditure of other motor vehicle related taxes and fees – especially vehicle and driver license fees.

Use of Fuel Tax Revenue for Transportation



SPENDING RESTRICTIONS ON STATEWIDE REVENUE SOURCES

Spotlight: Nevada's constitutional restrictions on motor fuel taxes and vehicle registration fees

In 1937 and again in 1939, the Nevada Legislature approved a constitutional amendment that requires motor fuel taxes, vehicle registration and driver licenses fees to be used exclusively for construction, maintenance and repair of public highways. This amendment was approved by voters in 1940. In 1962 a further amendment clarified that any taxes based on the value of a vehicle (ad valorem property tax) are not subject to these highway-only spending restrictions.

Article 9, Section 5 of Nevada constitution

“The proceeds from the imposition of any license or registration fee and other charge with respect to the operation of any motor vehicle upon any public highway in this State and the proceeds from the imposition of any excise tax on gasoline or other motor vehicle fuel shall, except costs of administration, be used exclusively for the construction, maintenance, and repair of the public highways of this State. The provisions of this section do not apply to the proceeds of any tax imposed upon motor vehicles by the Legislature in lieu of an ad valorem property tax.”

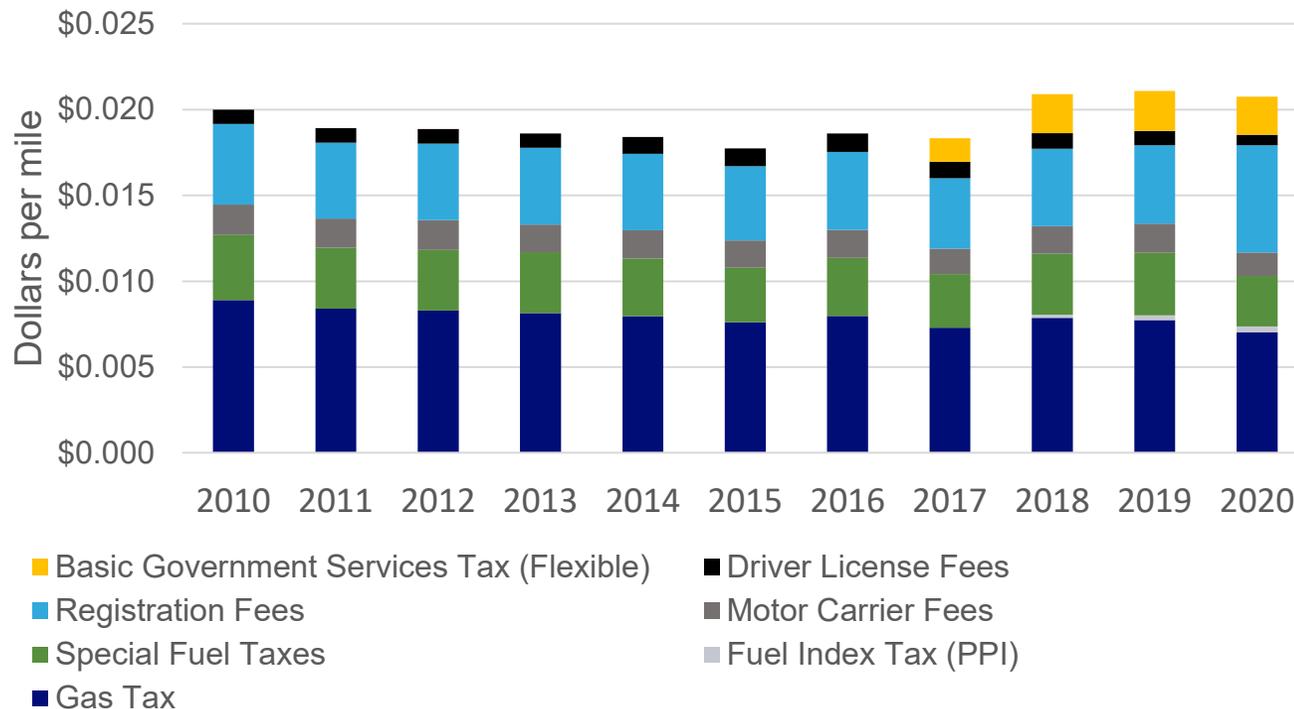
AB 413 AND THE STATE HIGHWAY FUND

Spotlight: The State Highway Fund

Like many states, Nevada has a special account – the State Highway Fund -- where restricted revenues (gas taxes, vehicle and driver license fee revenue, etc.) must be deposited. Funds from this account can only be used for the construction, maintenance, repair and administration of the highway system.

Within the context of Nevada's system-wide multimodal transportation needs – including the need improve equity and reduce GHG emissions – AB 413 requires the AWG to specifically study the sustainability of the State Highway Fund (SHF).

State Highway Fund Revenue Per Mile Driven



Examples of Allowable uses:

- Construction, maintenance and repair and administration of highways
- Licensing and registration of vehicles
- Public safety and patrolling of the highways

Examples of Unallowable uses:

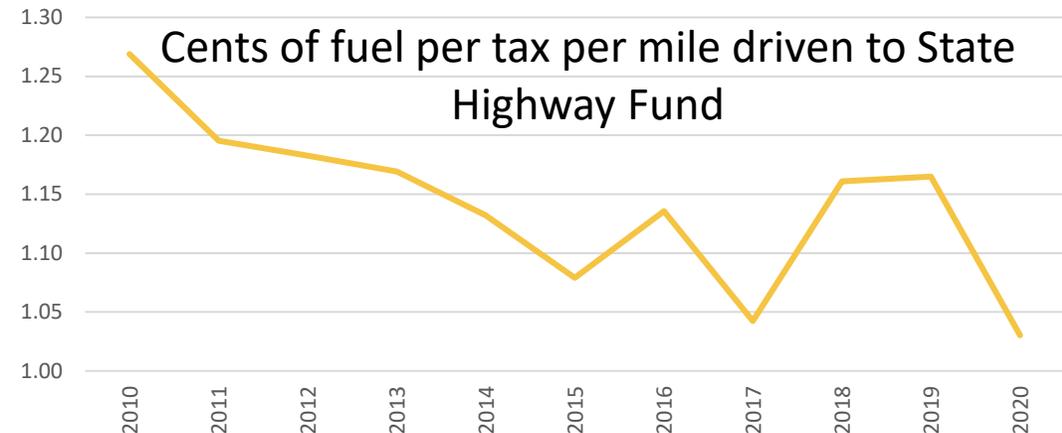
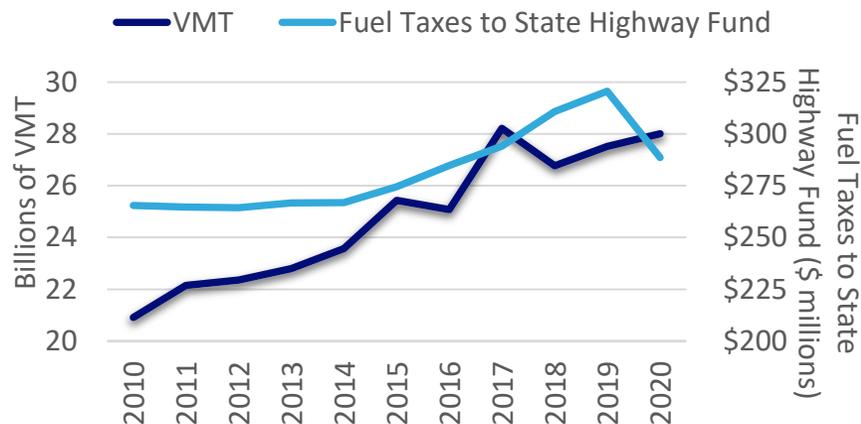
- Public transit equipment and operations
- Freight and passenger rail
- Bicycle and pedestrian facilities (unless part of a larger roadway project)

AB 413 AND THE STATE HIGHWAY FUND

Recent trends are affecting the sustainability of the State Highway Fund. On a per-mile basis, fuel tax deposits to the State Highway Fund have declined over 19% since 2010.

The State Highway Fund, by statute, aligns with the allowable uses of fuel tax and vehicle registration fees per Article 9, Section 5 of the Nevada Constitution. This does not preclude the deposit of additional revenue mechanisms, such as the basic governmental services tax (GST) or a general tax such as sales taxes, into the State Highway Fund. But, once there, the funds are subject to allowable uses of the account as set in statute. Several recent trends, all expected to persist, affect the sustainability of the current funding sources for the State Highway Fund:

- On one hand, growth in population and economic activity in Nevada are increasing the taxable base of vehicles and leading to an increase in miles of travel by Nevada motorists. Vehicle miles traveled in the state has increased 34% since 2010.
- On the other hand, improved vehicle fuel economy and increased adoption of all-electric vehicles is undermining revenue from excise and inflation-indexed fuel taxes. On a per-mile basis, fuel tax deposits to the State Highway Fund have declined 19% since 2010, from 1.27 to 1.03 cent per mile.
- These competing forces have led to modest growth in total State Highway Fund revenue from fuel taxes and registration fees, putting pressure on the state to find additional revenue. This has been accomplished by supplementing the State Highway Fund with revenue from other tax and fee mechanisms, including a portion of the basic government services tax (for Fiscal Years 2018-2020).

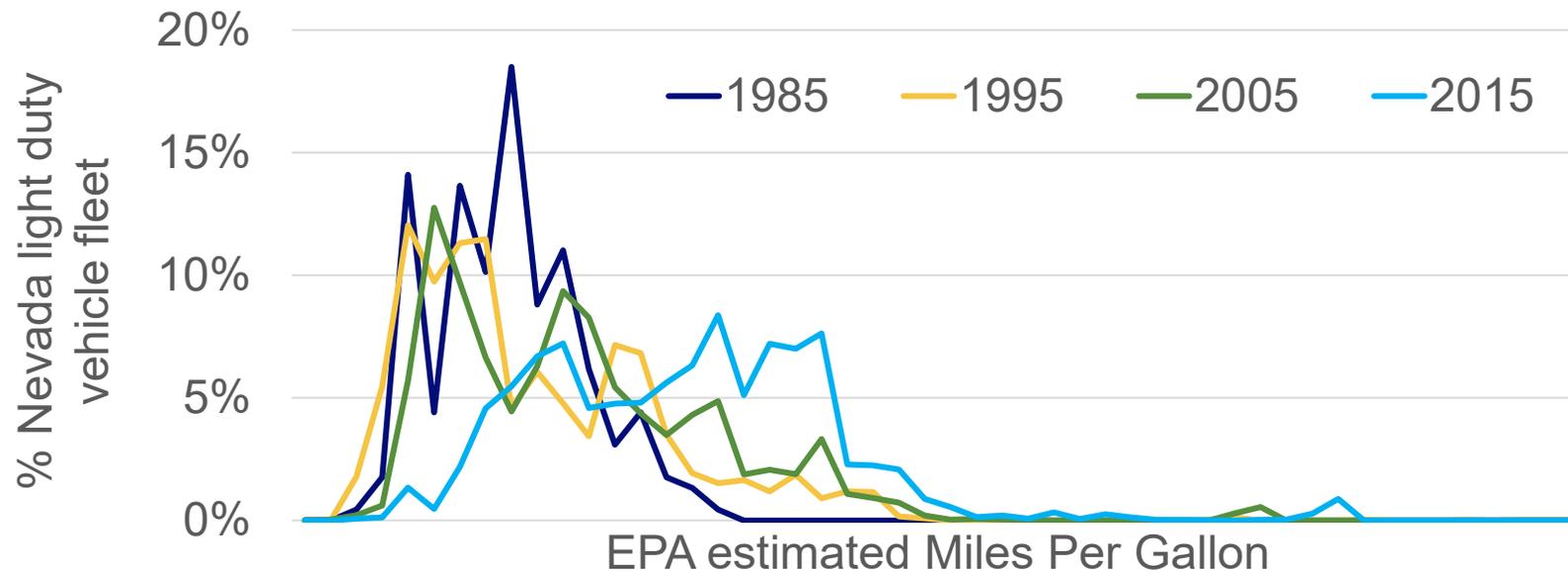


AB 413 AND THE STATE HIGHWAY FUND

The future of motor fuel taxation as a sustainable revenue source is uncertain as passenger vehicles become more fuel efficient

MPG for about 1.8 million Nevada light-duty passenger vehicles registered as of June 2021 (over 80% of the state's total passenger vehicle fleet) can be determined from U.S. Environmental Protection Agency (EPA) fuel economy ratings.

As the chart below shows, newer vehicles in Nevada tend to have a flatter MPG distribution with a higher mean compared to older vehicles. Mean MPG among vehicles Model Year 1985 is 17.4, compared to 17.8 for Model Year 1995 vehicles, 19.3 for Model Year 2005, and 23.5 for Model Year 2015. The nature of this trend and its likely future trajectory will be analyzed in detail and discussed at upcoming AWG meetings.

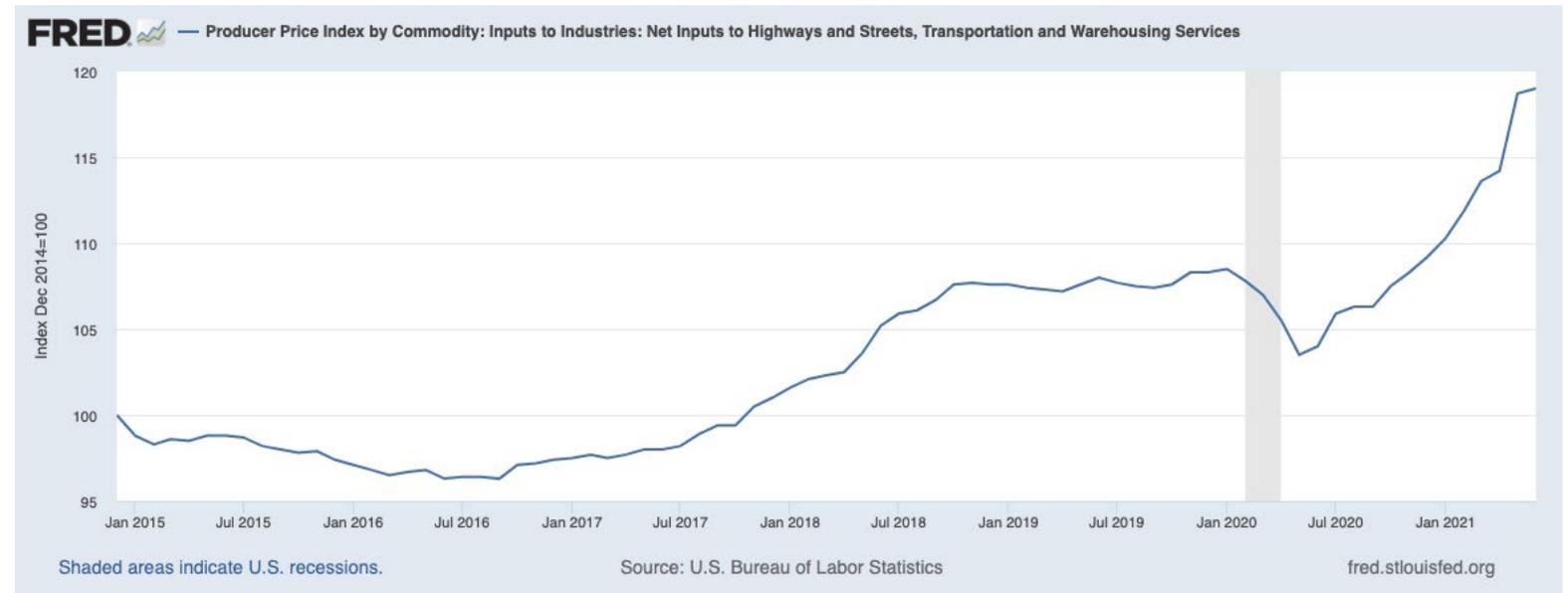


AB 413 AND THE STATE HIGHWAY FUND

Increasing transportation costs and non-roadway needs put further pressure on revenue sources dedicated to the State Highway Fund.

Aside from the trends impacting State Highway Fund revenue sources, the fund faces external challenges. These fall into two broad categories: pressure to extend existing revenues further as buying power declines and competition for funding sources grow.

- Cost increases in project funded from the State Highway Fund (as reflected in the construction cost index, at right) put pressure on the Fund, since its revenue sources are not indexed.
- Increases in demand for investment in transportation infrastructure and services at the local level (cities, counties, and RTCs) and among non-highway travel modes (public transportation and active modes) puts pressure on overall resource allocation across the state. Lawmakers must wrestle with the optimal allocation of scarce flexible funding sources.
- Once constructed, roadways must be maintained for their full lifecycle – a cost that also increases over time but is not reflected in construction cost estimates.



Section 4

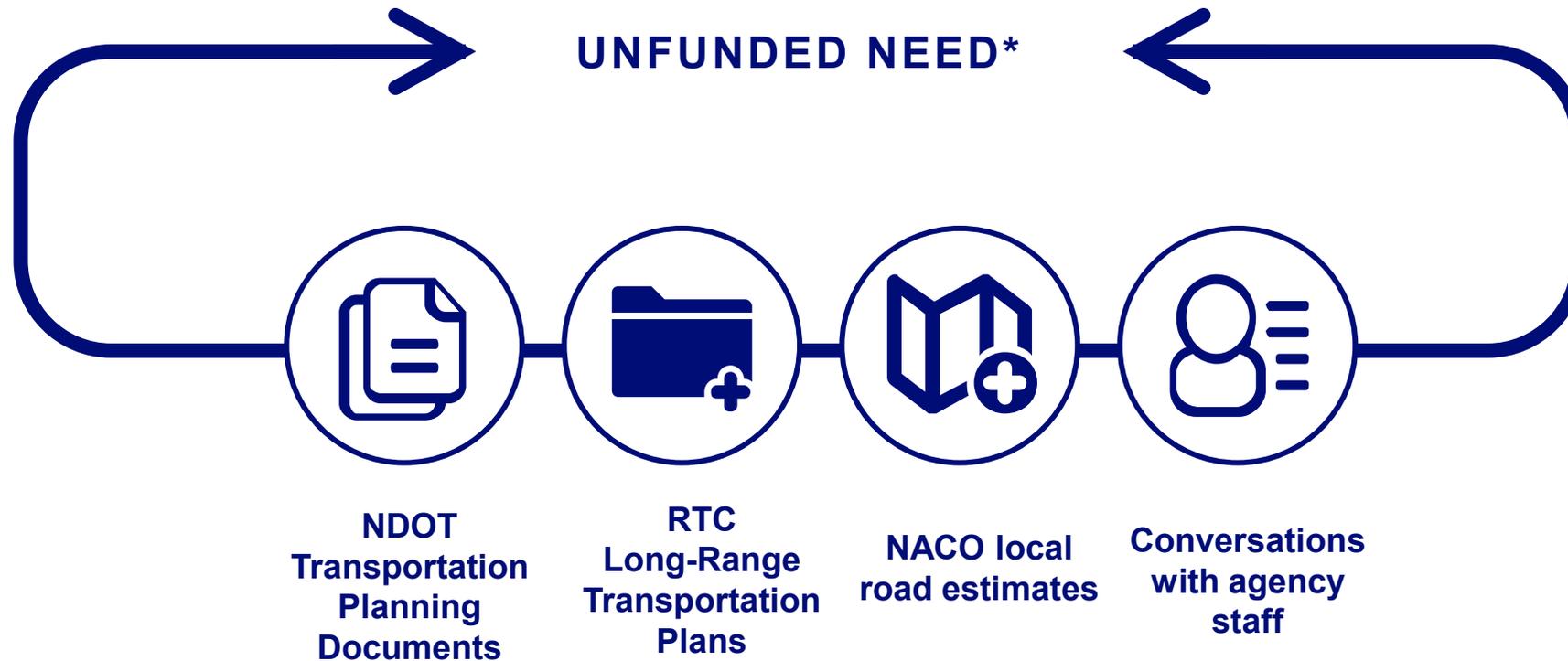
Nevada's unfunded transportation needs



OVERVIEW OF NEEDS

Unfunded need estimates come from unfunded need forecasts in long-range transportation plans and input from agency staff.

Need estimates have been annualized to compare across agencies. They come from different time frames and varying assumptions that do not necessarily align with how different agency's staffs put together their plans.



**Need estimates are based on priorities and resources available at the time the long-range plans were adopted.*

UNFUNDED NEEDS

Unfunded needs are grouped into five categories.

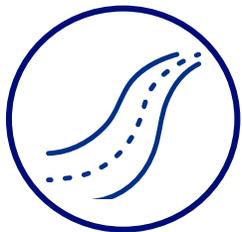
Roadway Capital: New roadway projects including state and local roads (e.g., adding a lane to a highway).

Roadway Operations and Maintenance (O&M): Funding needed to operate and maintain roadway facilities for existing and planned roadway projects; also includes highway preservation needs.

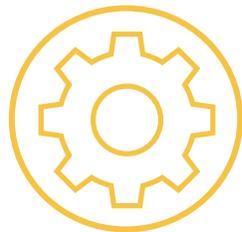
Transit Capital: New transit facilities or equipment (e.g., building a new light rail line).

Transit Operations: Funding needed to operate expanded transit services.

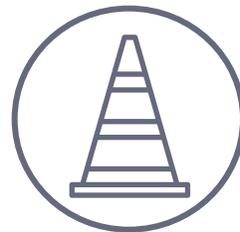
Active Transportation Capital: New sidewalk, walkway, bicycle infrastructure and new trails.



**Roadway
Capital**



**Roadway Operations
& Maintenance**



**Transit
Capital**



**Transit
Operations**

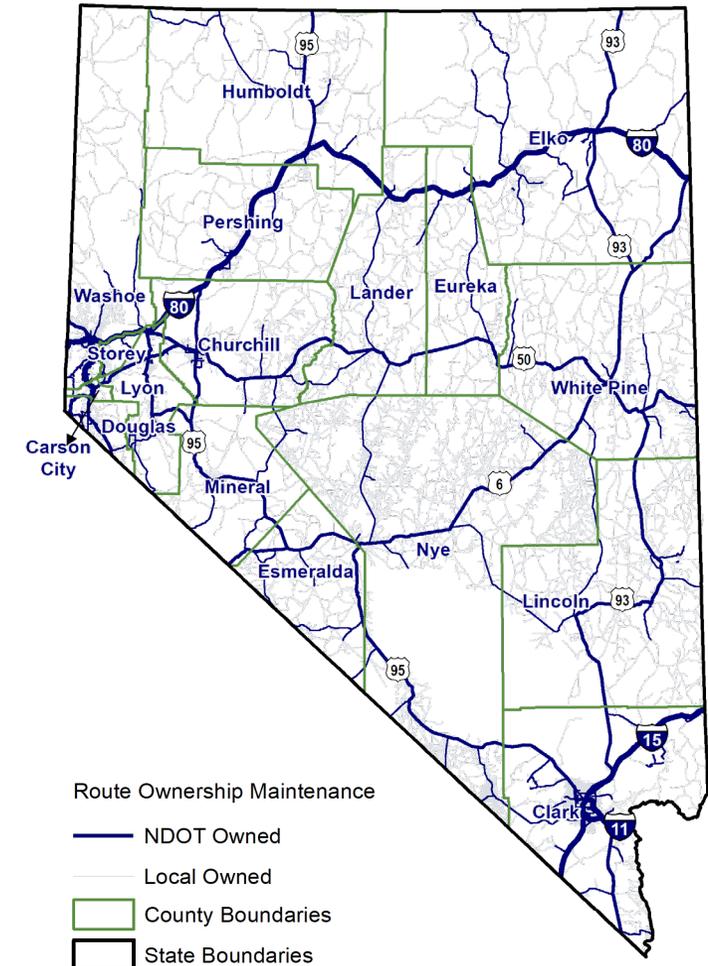
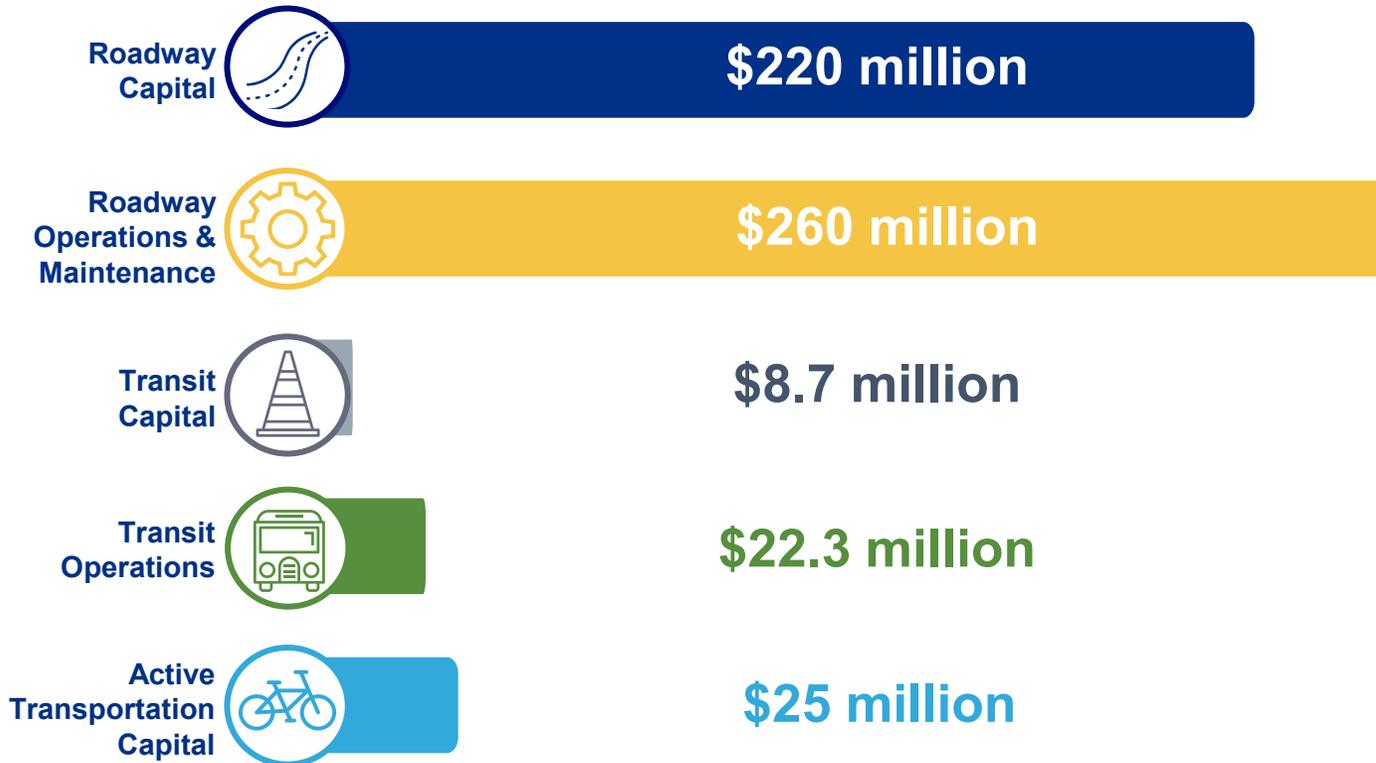


**Active
Transportation Capital**

NDOT NEEDS

NDOT has an annual unfunded need of \$536M

These estimates are based on known unfunded projects and preliminary requests. This does not represent a full assessment of all potential needs, nor do they reflect emerging priorities if additional funding becomes available.



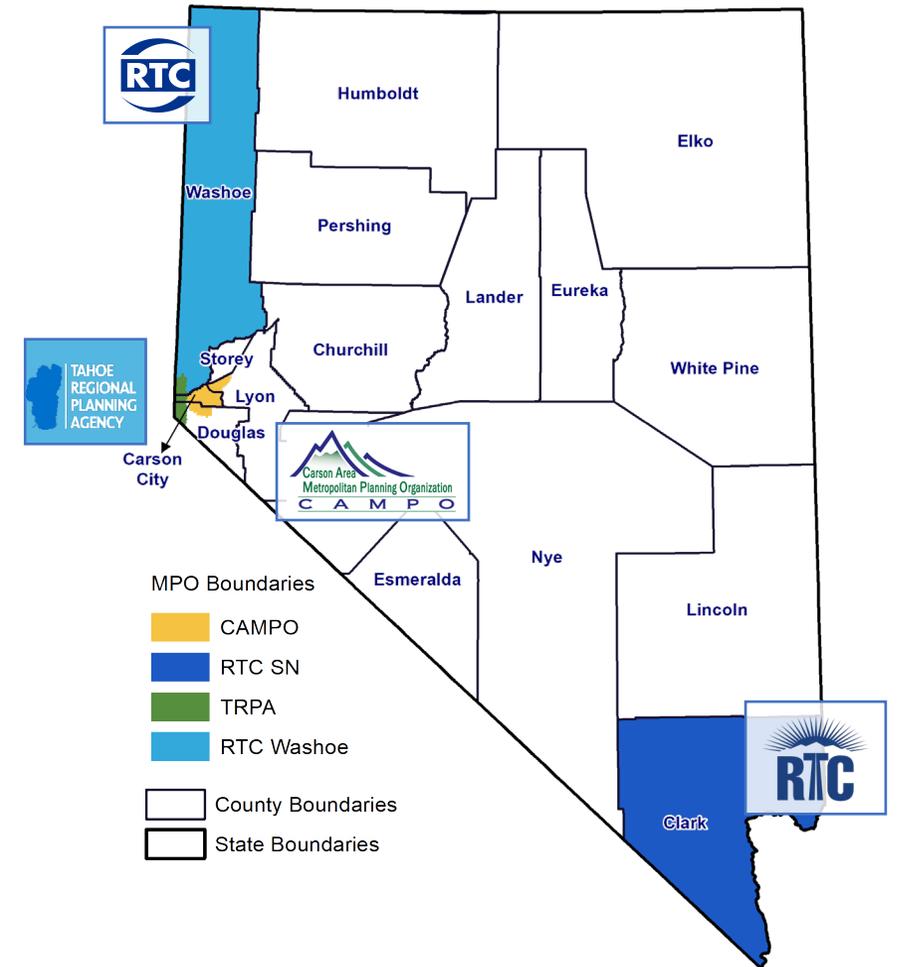
Data sources: NDOT internal estimates; NDOT staff discussions

MPO OVERVIEW

MPO unfunded needs represent all transportation needs within their given geography.

Four agencies are represented: RTC of Southern Nevada, RTC of Washoe County, CAMPO and TRPA. All of these groups are Metropolitan Transportation Organizations (MPOs) and do regional transportation planning for their geographies.

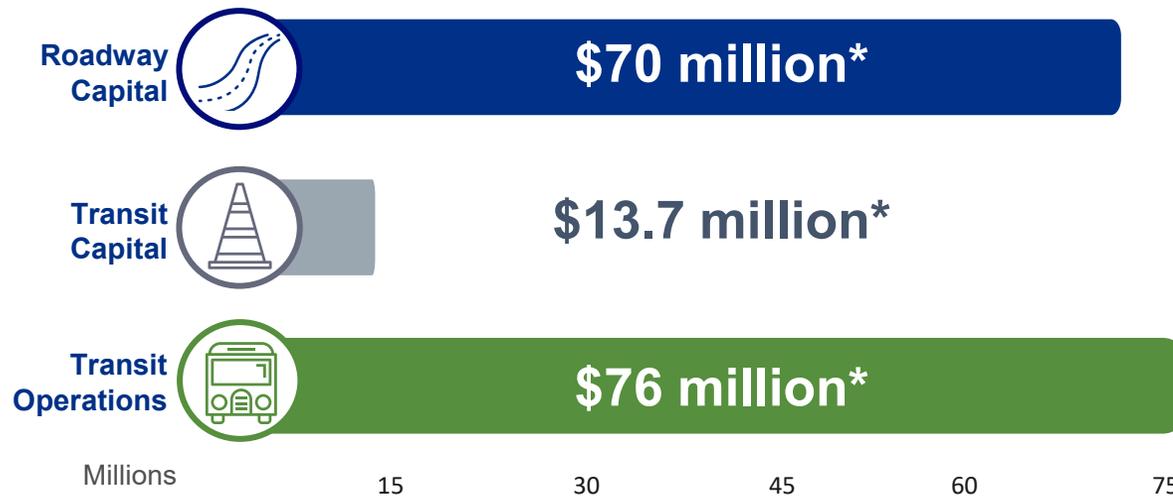
MPOs are organizations across the US that do long range transportation planning and distribute federal transportation funds towards projects. Regional Transportation Commissions (RTCs) are only in Nevada; they are also MPOs but also operate transit services, among performing other roles.



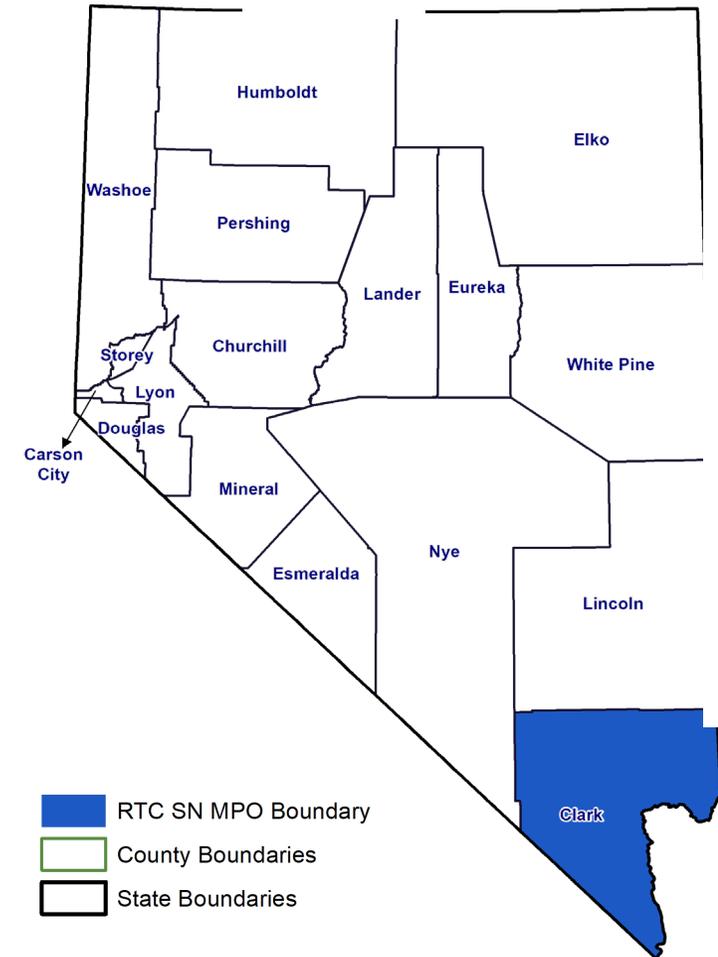
RTC OF SOUTHERN NEVADA NEEDS

RTC of Southern Nevada has a total annual unfunded need of \$159.7 million.

The agency has adopted a major transit expansion plan that does not have an estimate at this time.



*Subject to change.



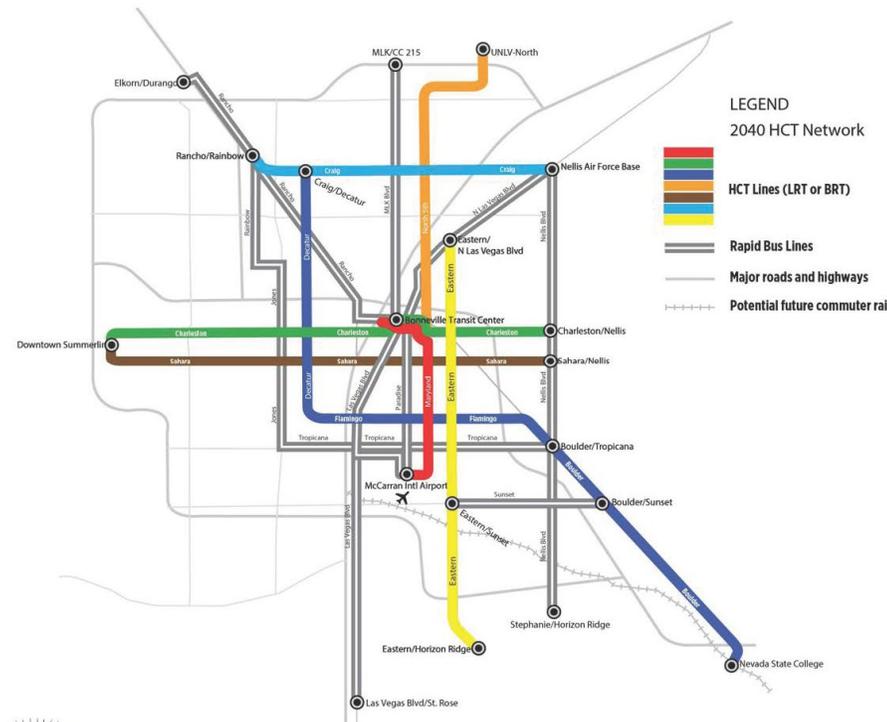
Data sources: RTC Southern Nevada staff discussions

RTC SOUTHERN NEVADA NEEDS

RTC of Southern Nevada has released the On Board Mobility Plan that would build 200 miles of high-capacity transit.

The On Board Mobility Plan stems from an extensive analysis of a major transit expansion in the Las Vegas metro area. The plan includes three light rail or Bus Rapid Transit corridors in phase one, three more BRT routes in phase two and eleven rapid bus routes across both phases. Currently, it has no dedicated funding.

Proposed Southern Nevada High Capacity Transit System

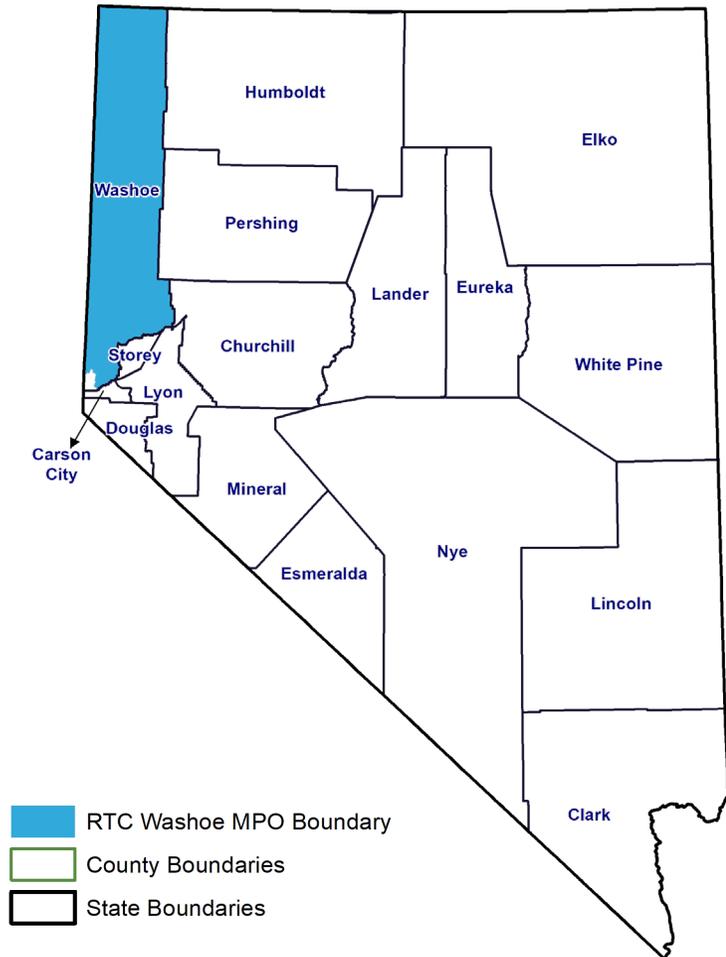
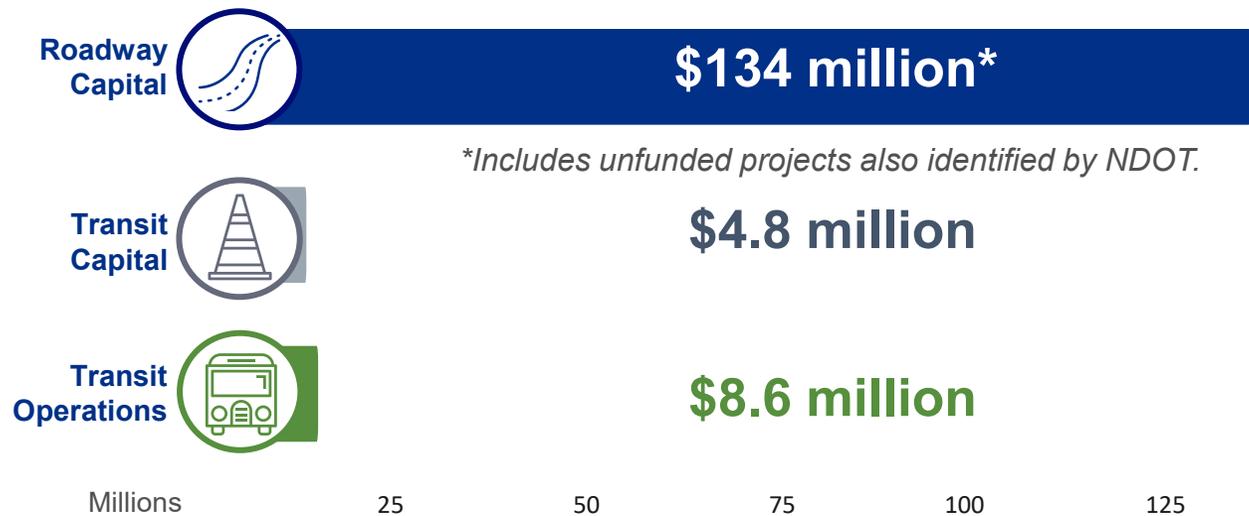


Source: RTC of Southern Nevada, *On Board Mobility Plan*



RTC WASHOE NEEDS

RTC Washoe has an annual unfunded need of \$147 million.

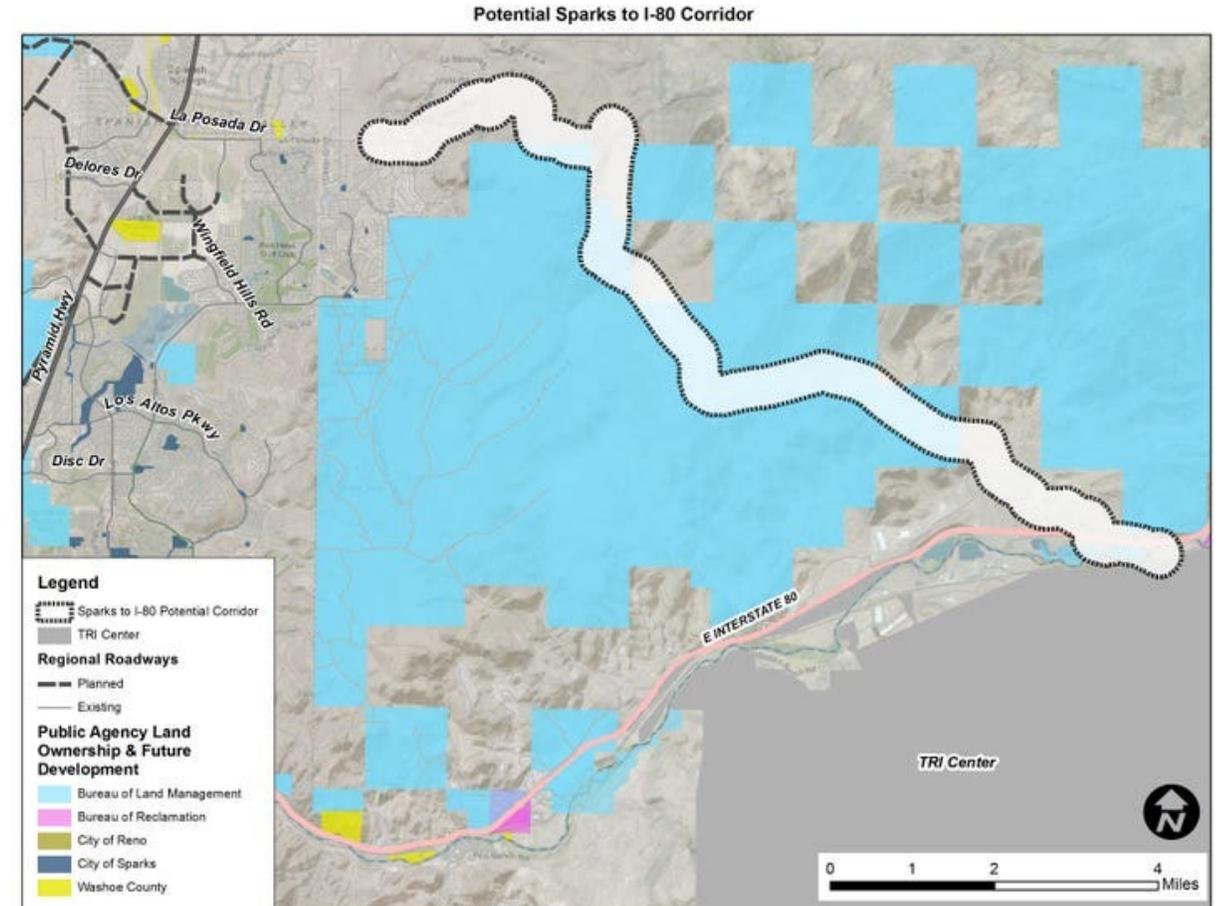


Data sources: RTC Washoe 2050 Regional Transportation Plan; RTC Washoe staff discussions

RTC WASHOE NEEDS

RTC Washoe identified a project to continue La Posada Drive from north Sparks to I-80.

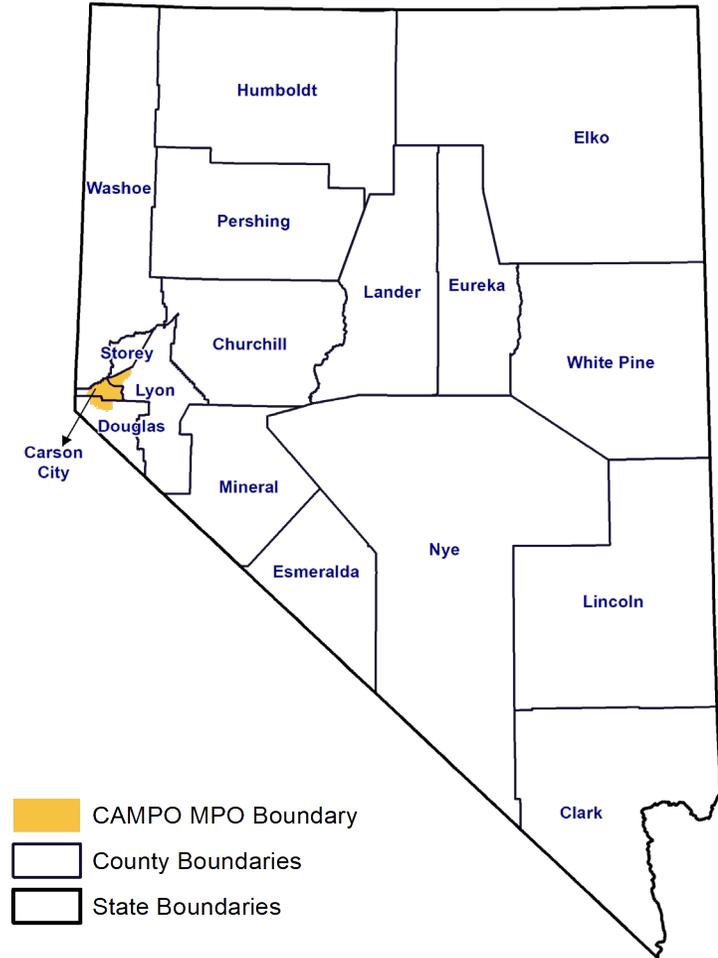
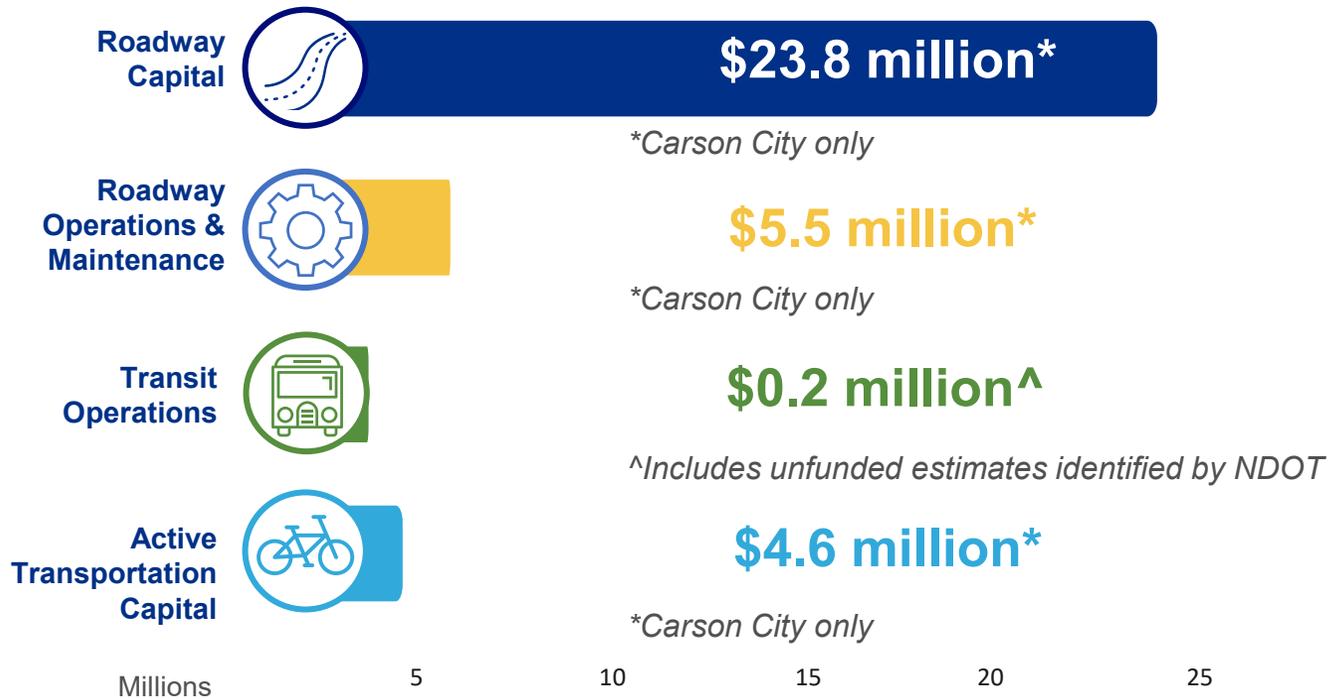
This is an example of a project listed in RTC Washoe's long-range transportation plan that would rely heavily on private investment. It would provide a new travel corridor between north Sparks and the Tahoe-Reno Industrial Center. It has an estimated cost of \$373 million and currently has no committed funding from the private sector.



Source: <https://www.ktvn.com/story/37433571/rtc-considering-road-to-connect-sparks-area-directly-to-usa-parkway>

CAMPO NEEDS

CAMPO has an unfunded annual need of \$34.1 million.

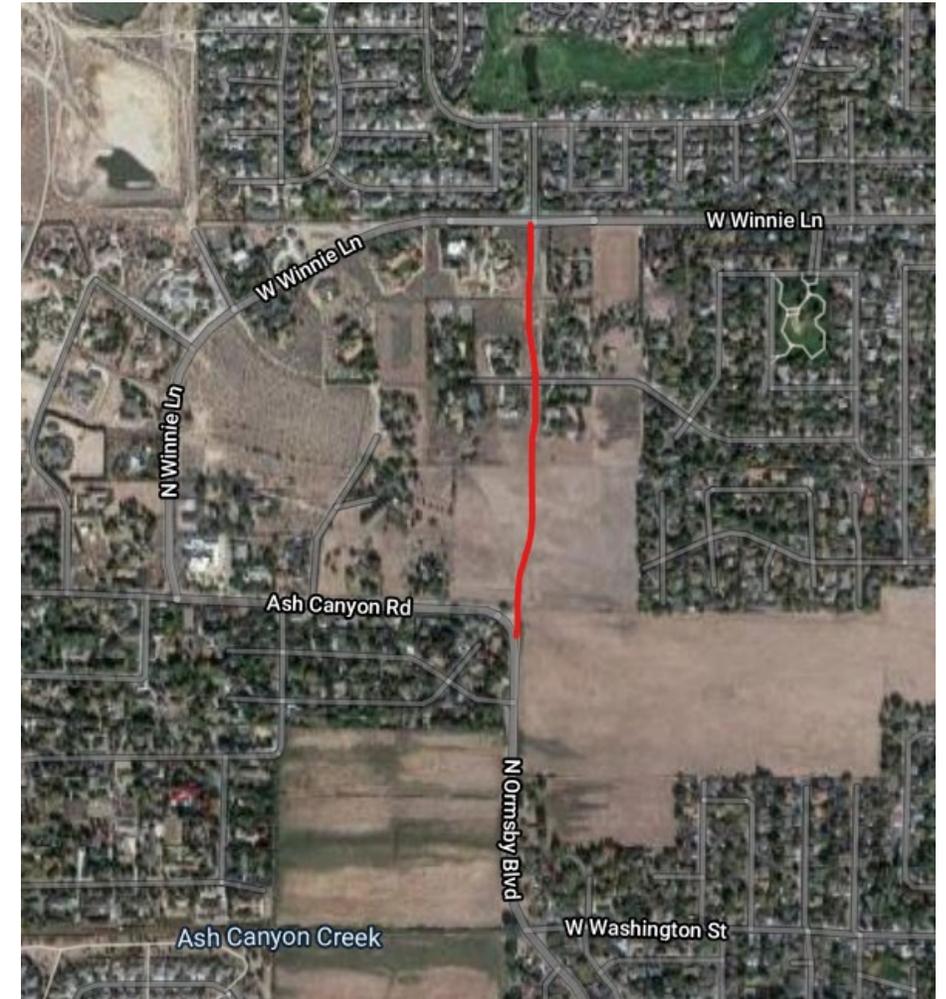


Data sources: CAMPO 2050 Regional Transportation Plan; CAMPO staff discussions

CAMPO NEEDS

Ormsby Boulevard Connector in Carson City

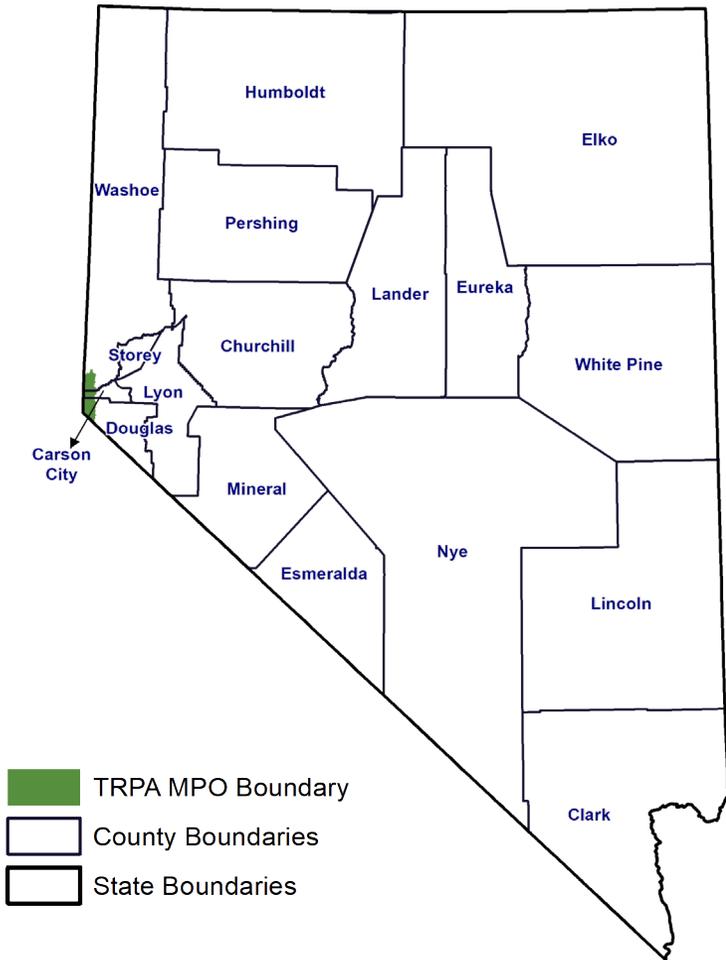
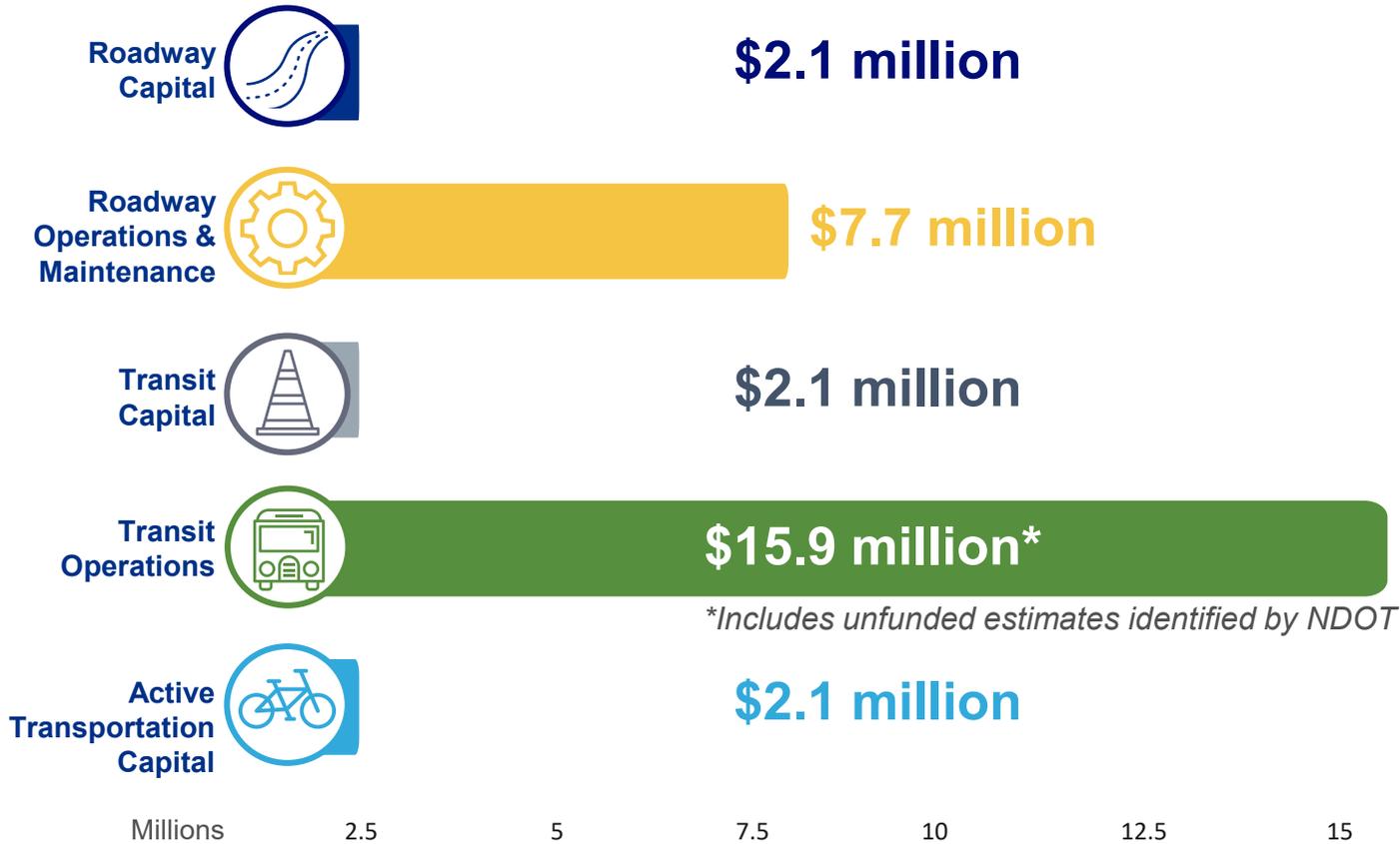
This project is an example that is representative of the unfunded projects identified by CAMPO. It would construct a new road to improve north-south circulation and access between Ash Canyon Road and Winnie Lane. It has an estimated cost of \$1.2 million and currently has no designated funding.



Source: Google Maps

TRPA NEEDS

TRPA has a total annual unfunded need of \$29.9 million.



Data sources: TRPA 2020 Regional Transportation Plan; TRPA staff discussions

TRPA NEEDS

Priority Intersection Safety Projects

The 2019 Lake Tahoe Region Safety Strategy, led by TRPA, identified intersections in the region that had safety issues for cyclists and pedestrians. Upgrading these intersections to make safety improvements would cost \$4.3 million.



LAKE TAHOE REGION SAFETY STRATEGY

TAHOE REGIONAL PLANNING AGENCY



Source: TRPA

LOCAL NEEDS

County roads have a funding shortfall of \$90.6M per year.

NACO works with counties to assess local roadway needs. The current estimate includes unfunded needs that have been identified in 12 counties. Four counties found that they have adequate funding to support their local roadway needs. Carson City's local needs were referenced on page 44.

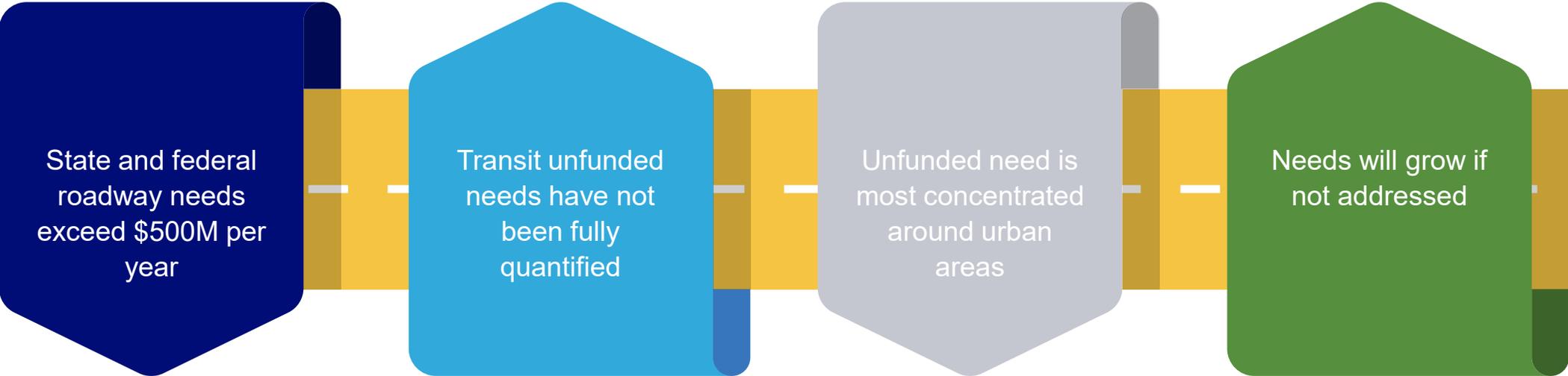
This estimate may include some projects that have been identified by MPOs. City and municipality transportation needs are not included in this estimate.



KEY TAKEAWAYS

Unfunded transportation need in Nevada is very high.

Unfunded need estimates are largely based on known (but unfunded) projects and preliminary plans. Because these estimates are financially constrained by current funding conditions, they do not represent a full assessment of all transportation needs. Furthermore, with improved transportation revenues, other projects and programs would likely emerge as priorities for NDOT, regional and local government investments.



State and federal roadway needs exceed \$500M per year

Transit unfunded needs have not been fully quantified

Unfunded need is most concentrated around urban areas

Needs will grow if not addressed

Section 5

Future meeting schedule



MEETING SCHEDULE

To ensure AWG member engagement, members can attend at either Carson City or Las Vegas locations. Both locations will be connected through video teleconferencing. *Exception:* March and April 2022 meetings will be held in one location only, with all members present in the same meeting room.

2021 Meeting Schedule

✓ **July 13**, 9:00 AM – 10:30 AM: Online-only kickoff meeting and project orientation

August 10, 9:00 AM – 4 PM: Carson City and Las Vegas (in-person meeting from both locations, with live video conference connection between the two sites)

September 14, 9:00 AM – 4 PM: Carson City and Las Vegas (in-person meeting from both locations, with live video conference connection between the two sites)

November 9, 9:00 AM – 4 PM: Carson City and Las Vegas (in-person meeting from both locations, with live video conference connection between the two sites)

2022 Meeting Schedule

January 11, 9:00 AM – 4 PM: Carson City and Las Vegas (in-person meeting from both locations, with live video conference connection between the two sites)

March 8, 9:00 AM – 4 PM: one location only, all members together (in-person meeting at a single site in N. or S. Nevada)

April 12, 9:00 AM – 4 PM: one location only, all members together (in-person meeting at a single site in N. or S. Nevada)

June 14, 9:00 AM – 4 PM: Carson City and Las Vegas (in-person meeting from both locations, with live video conference connection between the two sites)

August 9, 9 AM – 4 PM: *HOLD date (on if a meeting is needed)*

September 13, 9 AM – 4 PM: *HOLD date (on if a meeting is needed)*

Appendix

Helpful links and resources



HELPFUL LINKS

Links cited in this briefing book:

Nevada Sustainable Transportation Funding Study website: <https://nvtransportationfuture.org/>

Assembly bill 413 (2021), as enrolled: <https://www.leg.state.nv.us/App/NELIS/REL/81st2021/Bill/8039/Text#>

Advisory Working Group information: <https://nvtransportationfuture.org/about>

Operating Procedures for Advisory Working Group:

<https://static1.squarespace.com/static/60e73380ba9a11168e828e95/t/610862f9453cf2332434684f/1627939577041/AWGDraftGroundRulesandOper.pdf>

Nevada State Constitution, Article 9: <https://www.leg.state.nv.us/const/nvconst.html#Art9>

Federal Reserve Economic Data (FRED): <https://fred.stlouisfed.org/>

HELPFUL LINKS

Other useful links and references for additional background information:

U.S. Census Bureau data: <https://www.census.gov/data.html>

2019 American Community Survey: <https://www.census.gov/programs-surveys/acs>

One Nevada Transportation Plan: <https://www.dot.nv.gov/home/showpublisheddocument/17554/637193659345900000>

Nevada Department of Transportation 2019 Facts and Figures: <https://www.dot.nv.gov/home/showpublisheddocument/17434/637183016125670000>

Nevada State Rail Plan: <https://www.dot.nv.gov/mobility/rail-planning/state-rail-plan>

RTC of Southern Nevada: <https://www.rtcnv.com/about/about-the-rtc/>

RTC of Washoe: <https://www.rtcwashoe.com/about/>

Carson Area Metropolitan Planning Organization (CAMPO): <https://www.carson.org/government/departments-g-z/public-works/transportation/campo-carson-area-metropolitan-planning-organization>

Tahoe Regional Planning Agency: <https://www.trpa.gov/>

Nevada Association of Counties: <https://www.nvnaco.org/>