

# US 50 East Carson Complete Streets Study

2025



V & T R A I L W A Y



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## 1. INTRODUCTION

### 1.1 Study Purpose and Background

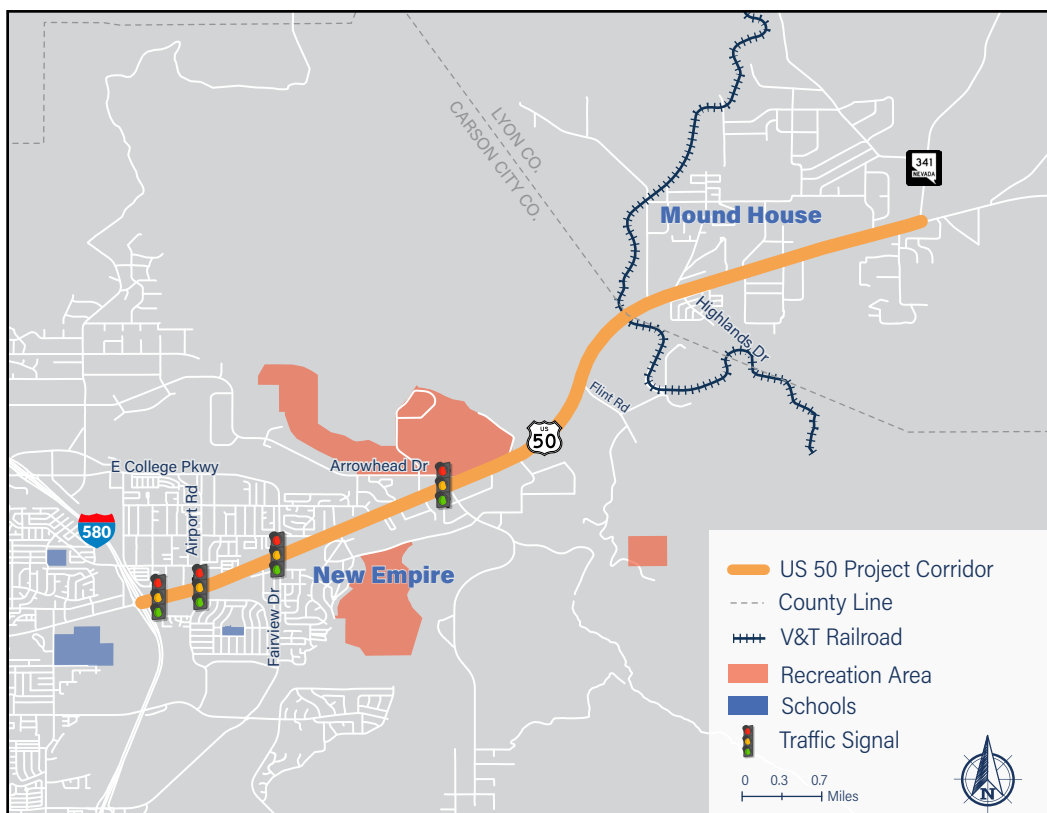
The Carson Area Metropolitan Planning Organization (CAMPO) initiated the US 50 East Carson Complete Streets Study to identify, evaluate, and recommend potential safety, operational, and multimodal transportation improvements along US 50 between the I-580 interchange in Carson City and SR-341 in Mound House.

The results of this study will be used to help identify and inform the design and construction of future corridor projects intended to improve safety for all users, including motor vehicles, transit riders, pedestrians, and bicyclists. The study was also designed to help weigh the tradeoffs between travel, circulation, and access along the corridor, including the needs of those using the corridor for through traffic, local circulation, and business access along the corridor.

This study was completed in two phases. Phase I focused primarily on safety and operations improvements between I-580 and Highlands Drive. Phase II of the study expanded the eastern limits to include the Mound House area. A more detailed analysis of potential intersection improvements was also conducted in Phase II.

### 1.2 Study Area

Figure 1 shows the US 50 East study area limits beginning at the I-580 interchange and extending to the junction of SR-341 in Mound House. The study focused primarily on transportation issues along US 50 however, the study area was expanded in Mound House to consider potential local connector road connections in the industrial and residential areas.



**Figure 1: Study Area Map**



## 2. EXISTING CONDITIONS

Existing conditions along the project corridor were reviewed, including safety, traffic/congestion, land use, and multimodal facilities, to gain a better understanding of the holistic context of the corridor. Many of these elements are interconnected, and issues affecting one primary aspect of the corridor often impact others.

### 2.1 Corridor Characteristics

US 50 is a National Highway System route that spans over 3,000 miles and crosses 12 states from the Pacific to Atlantic oceans. Famously known as the “Loneliest Road in America”, the section in the study area is quite busy, connecting regional employment areas to residential and facilitates critical freight movement. The route also provides access to recreation and tourism destinations including the Lake Tahoe Basin. US 50 is primarily owned and operated by the Nevada Department of Transportation and in partnership with Carson City within the urban limits.

#### 2.1.1 Roadway Dimensions

US 50 within the study area is a 5-lane asphalt paved roadway consisting of two, 12-foot travel lanes in each direction, a continuous 17-foot-wide center two-way left turn lane (TWLTL), and wide outside shoulders approximately 8 feet in width. A median barrier exists for approximately one-half mile between Drako and Flint Drives.

#### 2.1.2 Volumes and Speed

Annual Average Daily Traffic (AADT) at the western end of the study is approximately 31,500, decreasing to 25,000 near the eastern end. The posted speed east of the I-580 interchange is 45 MPH, increasing to 55 MPH approximately 700 feet east of College Parkway. The 55-MPH zone extends to just west of the V&T Railroad crossing where it reduces to 45 MPH and continues through the easterly limit of the study at SR-341.

#### 2.1.3 Freight Mobility

The stretch of US 50 within the study area is part of the National Highway Freight Network. According to NDOT’s 2024 Vehicle Classification Distribution Report, this segment carries approximately 1,700 heavy vehicles per day, representing at least 5 percent of total traffic, with some sections experiencing even higher percentages. These truck volumes are expected to grow over the next 20 years as the region continues to develop and as US 50 increasingly serves as an alternative route to USA Parkway and I-80 for certain freight related trips.

#### 2.1.4 Access Management

The local arterial and collector street network access is provided through both signalized and unsignalized at-grade intersections. Between intersections many commercial driveways line both sides of the roadway throughout the study area within the east Carson City and Mound House areas. Left turn movements from all driveways and side streets are facilitated through use of the center TWLTL.

#### 2.1.5 Traffic Signals

Beyond the traffic signal located at the I-580 Single-Point Urban Interchange (SPUI), the corridor includes signalized intersections at Lompa Lane, Airport Road, College Parkway/Fairview Drive, and Arrowhead Drive/



Deer Run Road. With the exception of the Arrowhead Drive/Deer Run Road intersection, many of these signals operate under a coordinated system to improve traffic progression and reduce delays. Carson City operates and maintains the traffic signal system along US 50. However, there is no established program to pro-actively monitor signal performance or re-time traffic signals. The Carson Area Transportation System Management Plan provided recommendations related to signal timing and signal detection needs.

## 2.1.6 Right of Way

The right of way width is 200' between the I-580 interchange and Drako Drive where it transitions to 400'. The right of way width narrows back to 200' near the V&T Railroad Crossing where it remains constant through the easterly study limit at SR-341.

## 2.1.7 Utilities

Utilities exist within the NDOT right of way, are under occupancy permit and include both above and below ground facilities. These include gas, fiber optic, electrical, telephone, water, sewer, storm and cable TV.

## 2.1.8 Drainage

Surface drainage is accommodated at the west end of the project from Arrowhead Road to the I-580 interchange with an enclosed storm drain system. The remaining project area to the eastern limits conveys roadway drainage to roadside ditches with further conveyance to the right of way limit. Mapped FEMA floodways cross the corridor in two locations and are identified as 0.2% Annual Chance Flood Hazard Areas. These areas occur at the I-580 interchange and along US 50 between Centennial Park Drive and Arrowhead Drive.

## 2.1.9 Lighting

Corridor overhead lighting is limited to the signalized intersections at Lompa Lane, Airport Road, College Parkway, and Arrowhead Drive. Overhead lighting is also present in the east Carson City area at the unsignalized intersections with Sherman Lane, Empire Ranch Road, Nye Lane, Sunrise Drive, and Centennial Park Drive. This lighting will be upgraded to LED lighting as part of a planned NDOT maintenance project (STIP ID# CC20220004). Limited lighting is provided at the V&T Railroad structure, Linehan Road, Highland Drive, Bunnyranch Road, Kit Kat Drive, Alfonso Drive, and from Jeanette Drive through the intersection with SR-341 to Yhvona Drive.

## 2.1.10 Land Use

A variety of land uses are adjacent to US 50 within the project limits of the Complete Streets Study corridor. Heading east from the I-580 interchange toward Mound House, the land use pattern gradually transitions from higher density suburban commercial development to more industrial and exurban in nature.

As shown in Figure 2, the section of US 50 within Carson City is predominately fronted by the Corridor Mixed-Use (CMU) land use designation and a few small areas of Industrial (IND) along with Parks and Recreation (PR), Open Space (OS), and State and Federal Lands (SFL) at the east end of the corridor. The Carson City Master Plan describes the primary use of the CMU designation as retail, commercial, office, medium-to high-density housing types, such as apartments and live/work units, and light-intensity industrial uses; and the secondary use as pocket parks, squares, plazas, multiuse pathways, schools, places of worship, and other public uses such as senior housing facilities. The Master Plan further identifies the characteristics of CMU as a mix of commercial, retail, and medium- to high-density residential uses located along arterial and collector streets, which allows for the vertical or horizontal mix of uses on a single site. Mixed-use development is encouraged to be located where



it may be readily served by existing or future transit and should be designed with clear bicycle and pedestrian connections to transit stops and the surrounding development. This Master Plan designation demonstrates a need to plan for projects that consider multimodal connectivity.

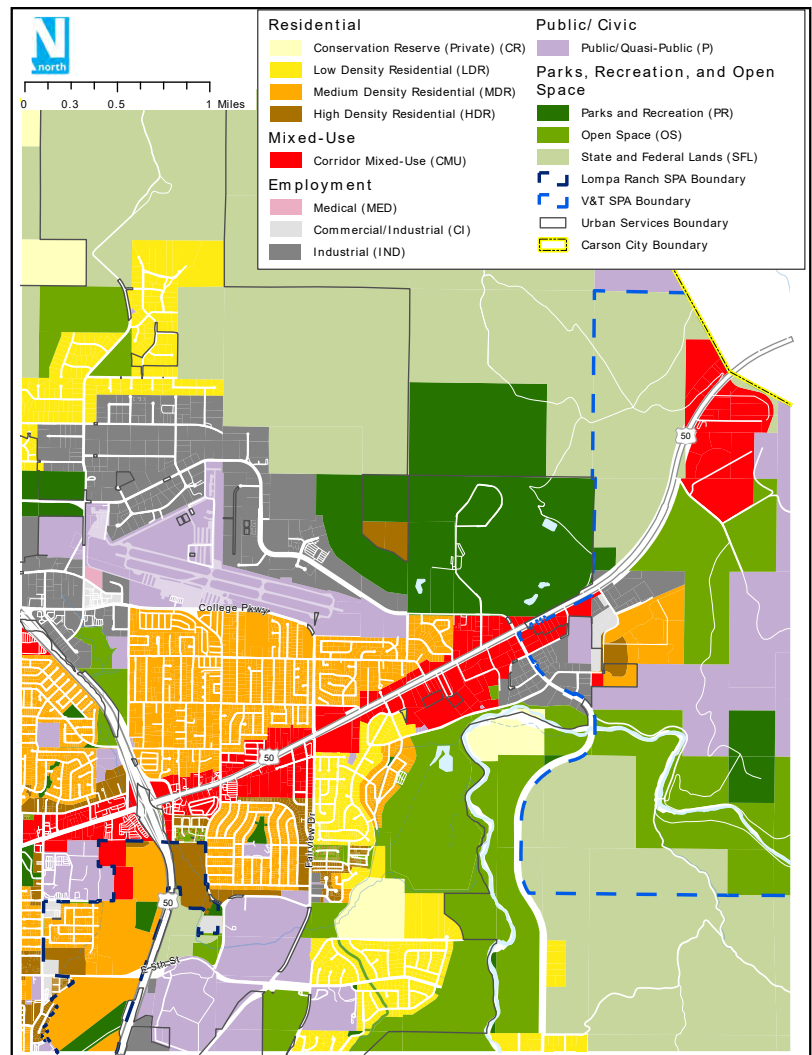
The Master Plan specifically addresses the US 50 corridor and suggests close coordination with CAMPO and NDOT to “develop an area plan to establish a coordinated vision and corridor-specific policies for land use, access management, multi-modal transportation, landscaping, signage, lighting, safety, and other considerations, as appropriate.” The Master Plan recommends adoption of supporting regulations to implement the plan and consideration of a program to encourage redevelopment along Highway 50.

Development in eastern Carson City, near the county line, is currently limited due to a lack of city utility infrastructure. If and when city utilities are extended to the county line, there may be a need to review changes in land use designations and travel demand patterns. Future development must plan for projects that balance future residential connectivity, commercial access, and commuter needs. Future development in this area of Carson City may present a need for new east/west roadway connections between Lyon County and Carson City.

The 2020 Lyon County Master Plan identifies seven distinct communities within the county due to its vast land area and cultural diversity, including Mound House. Residential designations in Mound House are often found on the edges of employment zones, where industrial and commercial uses are established and live/work arrangements are prevalent.

For the portion of Mound House within the study area, the land use designations are Employment on the north side of US 50, and Suburban Residential on the south side. This land use pattern forces residents to cross US 50 to reach employment destinations and services. Approximately 46% of residences in the Mound House census tract are mobile homes. Resource areas lie adjacent to the Lyon County Employment land use designations, and comprise the majority land use on the US 50 corridor. Resource Land is defined as private properties located within federal lands as in-holdings, or in very rural and/or remote areas of the County away from developed lands.

Lyon County Policy LU 1.4 as it relates to Mound House states that “new industrial uses should only be located in areas that do not adversely impact existing residential settlements.” In addition, commercial and industrial development is encouraged where sufficient public facilities currently exist or are planned. Figure 3 shows the Lyon



**Figure 2: Carson City Land Use Map**

Source: Carson City Community Development, Planning Division



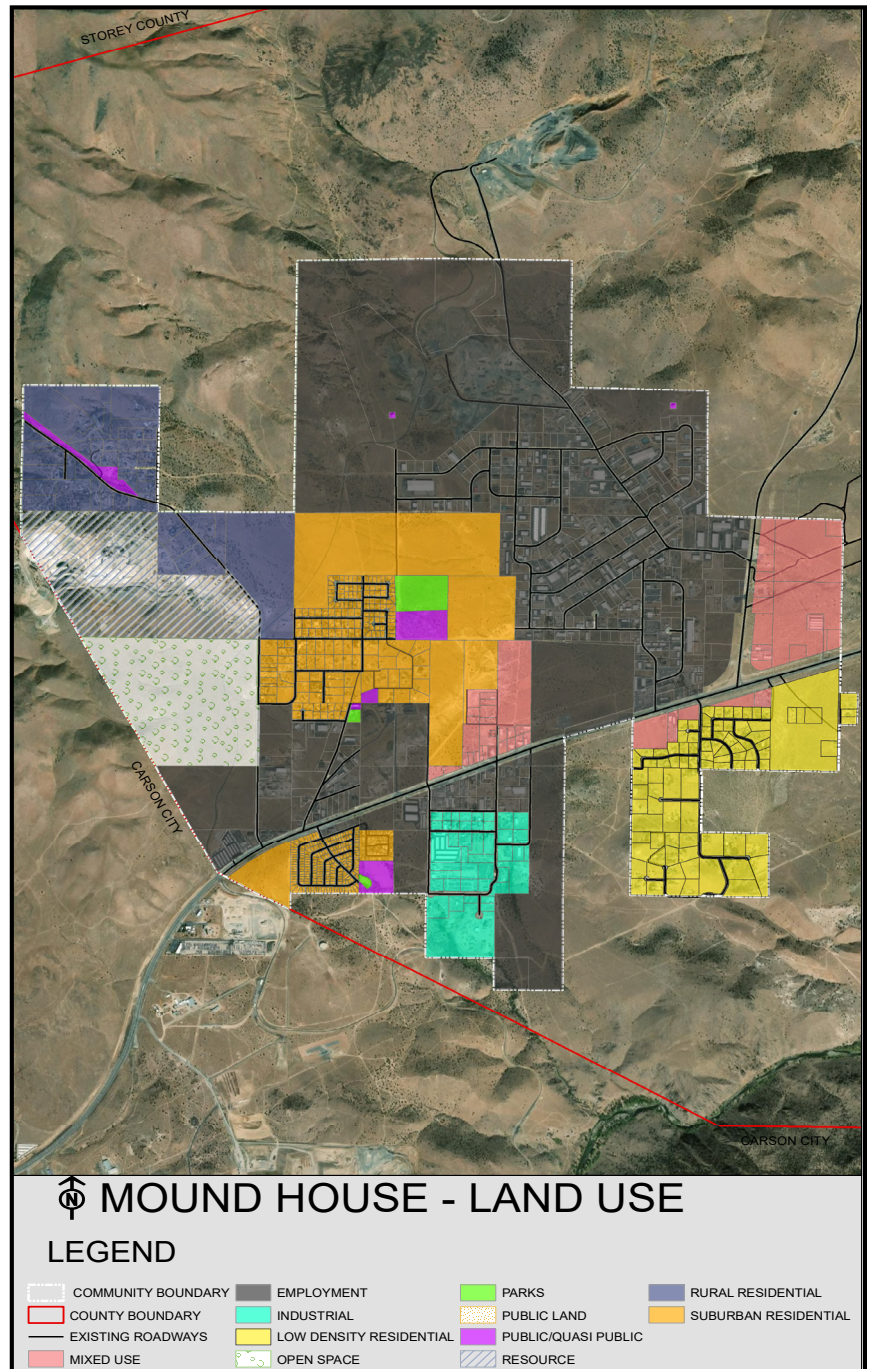


County land use designations in the Mound House area, with the red box identifying the area within the study limits.

## Employment

According to the US Census Bureau On The Map tool, in 2022 Carson City residents filled over 40% of the total jobs in the City, or 11,727 of the 28,405 total jobs. The remainder were filled by residents of nearby locations, including Reno (~11%) and Dayton (~8%), meaning that approximately 2,200 people were commuting on US 50 into Carson City on the typical workday from Dayton alone. Carson City is the capital of Nevada and a number of public agencies have headquarters there, which contributes to the in-flow of commuters. Conversely, there was a much smaller contingent of about 405 Carson City residents who commuted to jobs in Dayton. Figure 4 shows the number of jobs per square mile in Carson City and Mound House, near the study area, as well as the total number of jobs.

As would be expected, the number of jobs is most dense in downtown Carson City and gradually decreases further away from the core. However, along US 50, there are areas of significant employment extending out to the intersection of Arrowhead Drive/Deer Run Road. There is another area northeast of the corridor project limits off of Affonso Drive in Mound House where employment density is higher than the surrounding areas.



**Figure 3: Mound House Land Use Map**

Source: Lyon County Planning Division

The USDOT Equitable Transportation Community (ETC) Explorer is an interactive web application that uses 2020 Census tracts and data to explore the cumulative burden communities experience as a result of underinvestment in transportation, including the following five components: transportation insecurity, climate and disaster risk burden, environmental burden, health vulnerability, and social vulnerability. This tool was used to assess the Census tracts adjacent to US 50 within the project limits.

Two of the five census tracts that are adjacent to US 50 are defined as “disadvantaged” based on the criteria established by US DOT. In total, this accounts for approximately 9,800 people living within disadvantaged tracts. The remaining three census tracts have a significantly larger geography and, due to their size, include a much

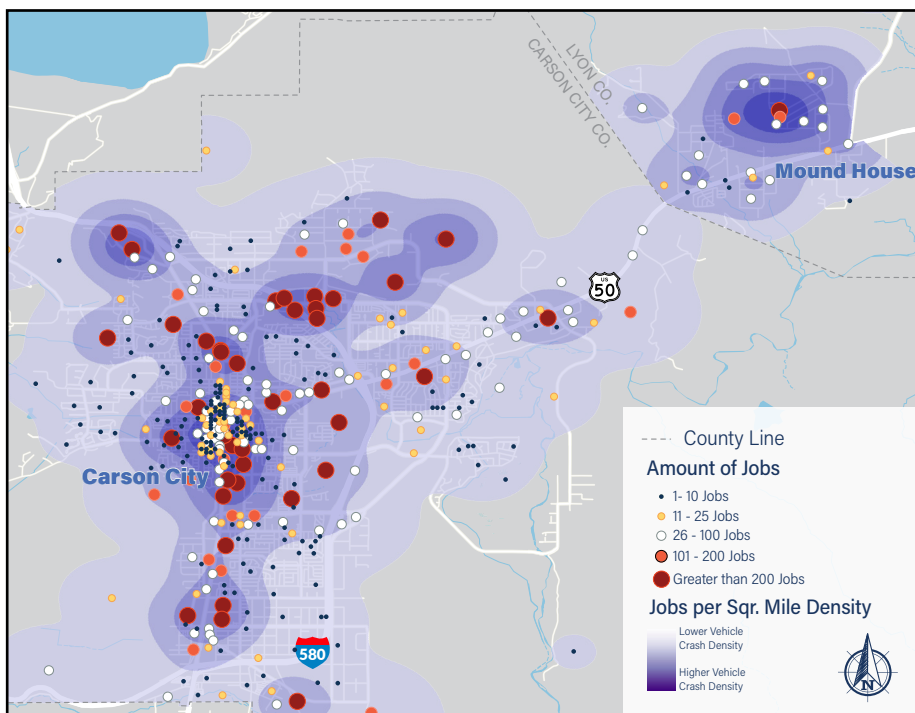




more diverse population in terms of social and economic backgrounds. In all, those combined tracts account for 9,500 people. In short, over half of the people living in census tracts along US 50 are identified as part of a disadvantaged community. Figure 5 shows each of the tracts relative to the project study area.

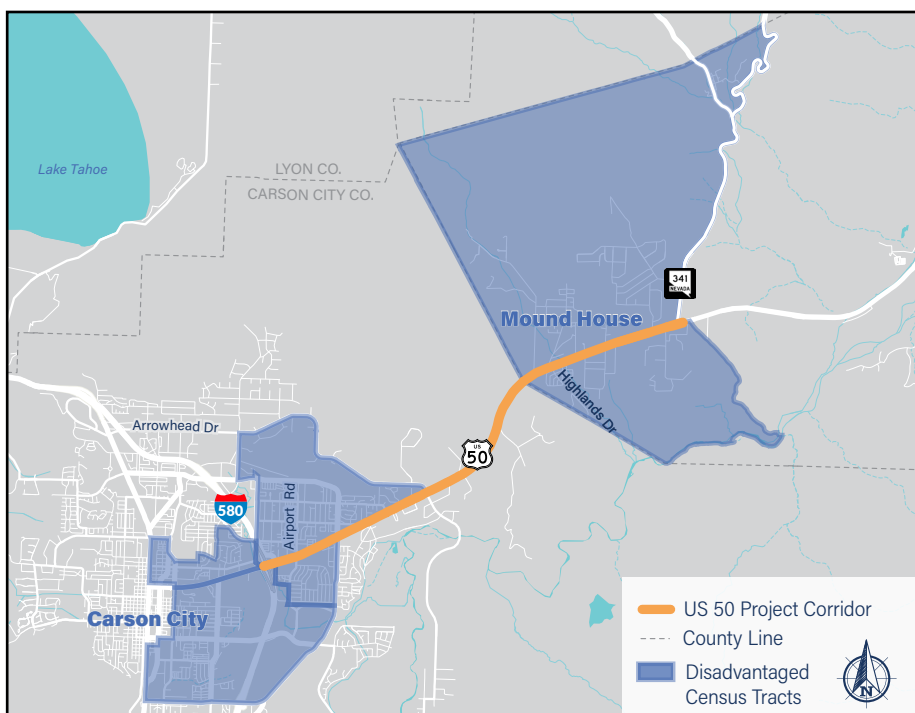
Across all Census tracts, transportation access is at 78%. Communities with higher scores may experience difficulty traveling to important destinations across all modes of travel. Limited access to personal vehicles or transit can create significant barriers to employment and resources. Transportation access is one of three factors comprising transportation insecurity, which can be a significant contributor to persistent poverty. The other two factors are transportation cost burden and transportation safety. Transportation cost burden is a measure of the percentage of household income spent on transportation, including transit costs; vehicle maintenance and insurance costs; and gasoline and fuel, which leaves less money for other expenses like housing, medical care, and food. Transportation safety, in this case, is determined by fatalities per 100,000 persons related to motor vehicle crashes. Of the US 50 census tracts, transportation cost burden is as high as 78% and transportation safety reaches a score of 82%. As with access, the higher the score, the greater the impact.

According to the ETC Explorer, the population in the most burdened census tract had a median household income of \$43,498, spent roughly 24% of their income on transportation, and over 20% had incomes below the poverty level. The Bureau of Transportation Statistics (BTS) reported that in 2022, transportation was the second largest household expenditure behind housing, accounting for 15% of average household spending. Additionally, the cost burden of transportation fell hardest on households in the lowest fifth by household income, while households in



**Figure 4: Carson City and Mound House Employment (2022)**

Source: U.S. Census Bureau, On The Map



**Figure 5: US DOT Equitable Transportation Community (ETC) Disadvantaged Census Tracts**

Source: U.S. Department of Transportation, ETC



the highest fifth experienced the least amount of transportation cost burden. Across all tracts, there were over 300 households without access to a vehicle. Average commute times for the population living in census tracts within the corridor study area ranged from 17 to 23 minutes. With the exception of one census tract, none of the others had less than a 15-minute walk to adult education, grocery stores, medical facilities, or parks. Twenty-five percent of households in the Lyon County Census tract, which includes Mound House, do not have an internet subscription, which could be an indicator of affordability.

## 2.1.11 Multimodal Facilities

The presence and type of multimodal facilities vary considerably along the study corridor, changing with land use and development density. Facilities provided at various locations include sidewalks, a multi-use path, and striped bike lanes/roadway shoulders.

### Sidewalks and Pedestrian Crossings

There are concrete sidewalks on the south side of US 50 between the I-580 interchange and Airport Road, and intermittently along the north side of this segment. Sidewalks appear more frequently on the western end of the corridor, where businesses are more densely clustered. However, their width and presence are inconsistent, which poses safety hazards and connectivity issues for pedestrians.



**Intersection of US 50 and Airport Road. Inconsistent sidewalk, faded crosswalk, gap in connectivity.**

Pedestrian crossings are currently facilitated at each of the signalized intersections along the corridor. A mid-block Rectangular Rapid Flashing Beacon (RRFB) pedestrian crossing exists near Silver State Street. An NDOT Maintenance project planned for construction to begin in 2027 will upgrade this system to a Pedestrian Hybrid Beacon (PHB) system. This mid-block system is the only protected pedestrian crossing system within the study corridor, aside from the signalized intersections. Pedestrian crossings occur at uncontrolled locations, particularly in the Mound House area where there are no signalized intersections or protected pedestrian crossing systems. Pedestrian crossings at Highland Drive and Red Rock Road are frequent and have been the subject of a recent LiDAR analysis.

### Bike Lanes and Multiuse Path

Designated bike lanes are striped from the I-580 interchange to Arrowhead Drive/N. Deer Run Road, where they transition into striped shoulders. Their width and condition also vary considerably. East of Arrowhead Drive/N. Deer Run Road, bike lanes are maintained at select intersections such as Drako Way and Flint Drive to inform motorists turning on and off US 50 at those locations.

There is also a multiuse path on the north side of US 50, which is signed as a bike route and extends from N. Lompa Lane to Arrowhead Drive/N. Deer Run Road. Although the multiuse path provides a dedicated facility for walking and bicycling, with separation from motor vehicle traffic, there are safety challenges and concerns related to the frequent driveway access along the western section of the corridor. The majority of driveway points do not have signage or other information indicating to motorists that pedestrians and bicyclists may be crossing in front of them.



The path surface is also inconsistent and in need of maintenance in some areas. There are sections of asphalt and concrete, and others that appear to be unpaved or wholly covered by sand. This surface variability poses concerns for safe usage by bicyclists, as well as pedestrians with various levels of mobility (e.g., individuals using a scooter, wheelchair, or other mobility assistance device). The NDOT Maintenance Project will repave and upgrade the surfacing of this path.

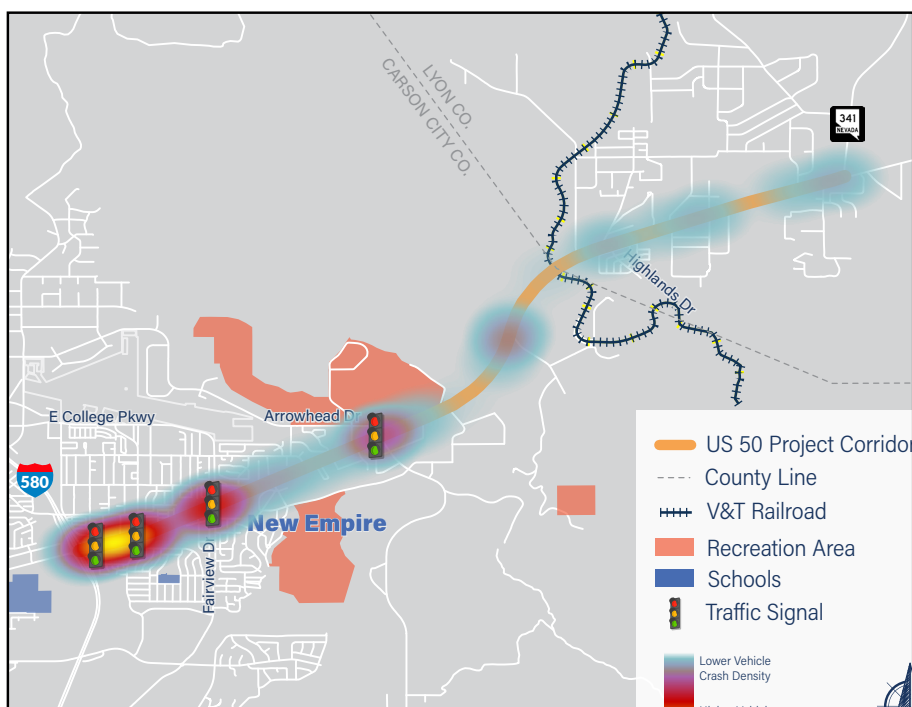


**Multiuse path on US 50. Does not meet design standards; loose gravel on asphalt is a hazard.**

As land uses become less dense in the central and eastern portions of the corridor, the multiuse path transitions to wide paved shoulders which can be used for bicycling, combined with unpaved shoulders of varying width. The roadway maintains this character into Mound House until (and beyond) the eastern terminus of the study area. US 50 is a designated National Bike Route (USBR50) and discontinuities in facilities along with future development pressure throughout the corridor represent a need to improve multimodal access along US 50 and enhance both bike and pedestrian access.

## 2.2 Safety

Crash history was reviewed for US 50 within the project limits, using data from January 2019 to December 2023. 2024 crash data was unavailable, although supplemental crash data was provided by NDOT as described below. As shown in Figure 6, the crashes that occurred over the approximate 5-year time frame are somewhat evenly distributed throughout the corridor, with the exception of a notable concentration between the I-580 interchange and Airport Road (32% of all crashes) and a few localized clusters near the intersections with College Parkway/Fairview Drive, Arrowhead Drive/Deer Run Road, and Flint Drive. Alcohol use was a factor in 34 (6%) of overall crashes and drug use was a factor in fewer than 2% of crashes. It should be noted that portions of this corridor were evaluated in CAMPO's Local Road Safety Plan (LRSP), specifically, the intersections of US 50 and Airport Road and US 50 and Highlands Drive. The LRSP utilized data from a slightly different period (2018-2022) and did not evaluate the corridor within the project limits as a whole, therefore, the crash data was presented in a different manner and context.



**Figure 6: US 50 Crashes (January 2019 – December 2023)**





The corridor crash data is summarized in Table 1 below by severity, type, and location.

**Table 1: Selected Crash Data on US 50 (January 2019– December 2023)**

Number of Crashes by Severity	
Total Crashes	544
Fatal Crashes	6
Overall Fatalities	6
Serious Injury Crashes (Incapacitating)	12
Overall Serious Injuries	12
Injury Crashes (Non-Incapacitating)	72
Overall Injuries	255
Pedestrian Crashes	5 (resulting in 3 fatalities)
Bicycle Crashes	3
Crash Type	
Rear End	229
Angle	127
Non-Collision*	108
Sideswipe	62
Head On	7
Backing	5
Unknown	4
Rear-to-Rear	2
Number of Crashes by Roadway Location	
Travel Lane	372
Intersection	83
Turn Lane	34
Outside Shoulder	26
Other/Unknown	29

Source: Nevada Department of Transportation.

\*A non-collision crash is one that does not involve contact between units or a motor vehicle and a fixed object. Examples: lane departure, rollover, mechanical failure/fire, etc. All pedestrian crashes are defined as non-collision.

As noted in the table above, five of the six fatal crashes on the corridor involved pedestrians. All but one of the pedestrian fatalities occurred in the late evening or early morning hours when it was dark and where there was little to no roadway lighting. In addition, all but one of the crashes occurred in the travel lane with the exception of one occurring in a marked crosswalk at Airport Road. Drugs or alcohol were a factor in three of the pedestrian fatalities. One collision involved a motorist who was killed by an angle crash at the intersection of US 50 and Airport Road. A non-fatal pedestrian crash also occurred as part of the same incident at Airport Road and resulted in a non-incapacitating injury.



The serious injury crashes included a variety of crash types, with most occurring during the daytime hours. One of the bicycle crashes resulted in a serious injury at the intersection with Lompa Lane. Alcohol was not a factor in any of the serious injury crashes. It was reported for one of the crashes that vehicle backups due to traffic congestion was a factor. Information regarding vehicle speeds was not included with the crash data.

Regarding crash type, rear end crashes accounted for almost half of all crashes, and over 53% of total rear end crashes occurred between the hours of 2 p.m. and 6 p.m., when traffic volumes tend to be higher for US 50 as identified in the Carson Area Transportation System Management Plan (CATSMP). Angle crashes were the second most common crash type, followed closely by non-collision crashes. The majority of crashes occurred in the travel lane, which coincides with the high number of rear end collisions.



**Intersection of US 50 and Highlands Drive.**

NDOT provided additional crash data through January 23, 2024, which included three additional fatalities: one near the intersection with Red Rock Road, and two others just to the east between Highlands Drive and Newman Lane. NDOT compared average crash data along this segment to the statewide average for like roadways (rural principal arterial) and found that crash rates are higher across all severity types (property damage only, injuries, and fatalities) by roughly 35%. For fatalities alone, the average crash rate is 117% higher than the statewide average. This type of safety data represents a need to consider safety improvements for all users of the corridor, vehicle, and non-vehicle alike.

## 2.3 Traffic/Congestion

AADT counts were obtained from NDOT's Traffic Records Information Access (TRINA) system. AADT counts from 2023 ranged from 25,000 to 30,500 vehicles within the study area. The AADT counts represent estimates for the combined number of vehicles traveling in each direction (east and west) over a 24-hour period. NDOT applies seasonal and daily factors to develop these estimates.

Turning movement count data (TMC) was collected over a 4-hour period during the AM and PM peak periods. This data was also used to determine the AM and PM peak hour timeframes and in support of the analysis. Volumes during the systemwide AM and PM peak hours were utilized to calculate the peak hour factor (PHF) at each intersection. TMC's at intersections were conservatively adjusted to ensure that the inflow and outflow of vehicles at each intersection were consistent with each other, maintaining a balanced approach. This adjustment was made to ensure consistency and realistic traffic flow in the model. The adjusted volumes were then utilized to calculate existing conditions, delays, and the level of service (LOS) at each intersection using Synchro software. The results are shown in Table 2 below. The LOS of the entire intersection (all movements combined) for both the AM and PM peak periods are shown and intersections with a LOS of E or below are highlighted. The Carson City Streets and Traffic LOS policy is to maintain a LOS of D or better. Typically, the LOS is worse during the PM peak at stop-controlled intersections where vehicle must cross a four lane highway. This highlights the need for improved





access management and changes in intersection controls to provide reliable mobility throughout the corridor. The signalized intersections on US 50 at Airport Road as well as US 50 and College Parkway also experience significant traffic delay.

The worst movements at these intersections indicate PM congestion in the eastbound direction, likely caused by commuter traffic returning to residences in Lyon County. The complete detailed analysis can be found in Appendix A.

**Table 2: Intersection Traffic Operations Results for 2023 Existing Conditions**

Location	Control Type	Existing AM Peak				Existing PM Peak			
		Delay (sec)	LOS	Worst Movement	Longest Queue (Veh/Ln)	Delay (sec)	LOS	Worst Movement	Longest Queue (Veh/Ln)
US 50 & Ramps I-580	Signal	25	C	EBL	6 (WBL)	31	C	SBL	6 (WBL)
US 50 & Lompa Lane	Signal	18	B	WBL	9 (WBR)	24	C	NBL	10 (WBR)
US 50 & Airport Road	Signal	16	B	NBL	6 (NBL)	44	D	NB	19 (EBT)
US 50 & Silver State Street	Stop	16	C	SB	1 (SB)	16	C	SB	1 (SB)
US 50 & Brown Street	Stop	19	C	NB	1 (NB)	28	D	NB	1 (NB)
US 50 & College Parkway	Signal	55	E	NBR	18 (WBT)	101	F	NBR	28(NBR)
US 50 & Sherman Lane	Stop	25	C	SB	1 (SB)	20	C	SB	1 (SB)
US 50 & Empire Ranch Road	Stop	175	F	SB	2 (SB)	>300	F	NB	8 (SB)
US 50 & Nye Lane	Stop	30	D	SB	1 (SB)	22	C	SB	1 (SB)
US 50 & Arrowhead Drive	Signal	18	B	EBL	13 (WBR)	55	D	EBT	32 (EBT)
US 50 & Flint Road	Stop	35	D	WBL	1 (WBL)	>300	F	WBL	8 (WBL)
US 50 & Linehan Road	Stop	92	F	SB	2 (SB)	135	F	SB	3 (SB)
US 50 & Red Rock Road	Stop	33	D	SB	2 (SB)	16	C	SB	1 (SB)
US 50 & Highlands Drive	Stop	32	D	NB	2 (NB)	84	F	NB	2 (NB)

**EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; L = Left-turn movement; R = Right-turn movement; T = Through movement.**

**Note 1:** In accordance with Highway Capacity Manual (HCM) methodology, Level of Service (LOS) for stop-controlled intersections is determined by the control delay of the worst-performing movement. For signalized intersections, LOS is based on the average control delay across all approaches.

**Note 2:** The worst-performing movement is determined by delay, which may not correspond to the movement with the longest queue.

**Note 3:** Based on Synchro HCM results, reported queue lengths represent the 50th percentile for signalized intersections and the 95th percentile for unsignalized intersections.

**Note 4:** For US 50 and SR 341 intersection, please refer to NDOT Intersection Control Evaluation (ICE) Study (2025).



## 3. PUBLIC AND STAKEHOLDER OUTREACH

Public and stakeholder outreach occurred in two phases during the study. Phase I outreach was concentrated in late 2023/early 2024, and focused on better understanding the needs, concerns, and preferences of stakeholders and members of the public. Phase II outreach primarily occurred in the Spring of 2025, and asked stakeholders and members of the public for feedback about specific intersection and roadway concepts.

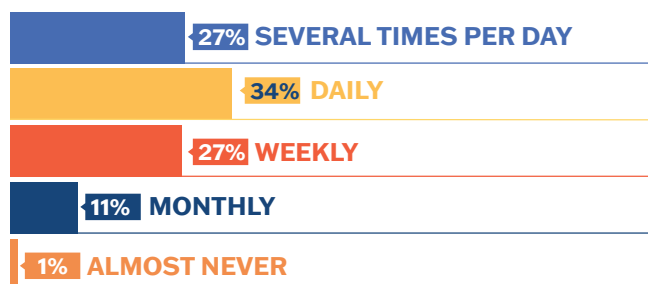
### 3.1 Phase I Outreach

Public outreach opportunities helped to gather feedback about needs, goals, and concerns along the corridor. Opportunities for feedback included an online survey and an open invitation to contact the CAMPO project manager via email or telephone.

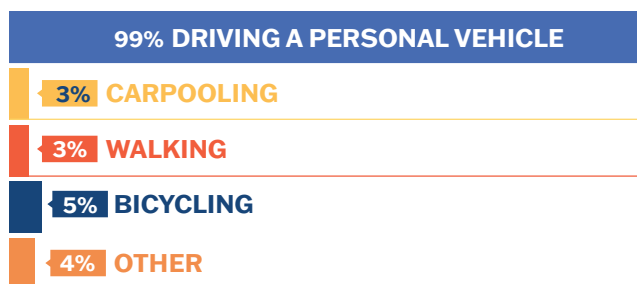
#### 3.1.1 Online Survey

The study team developed a five-question online survey to better understand the needs and preferences of those who travel along US 50. The survey was available online between November 28, 2023, and January 9, 2024. In total, 940 responses were received. The core questions included in the survey were:

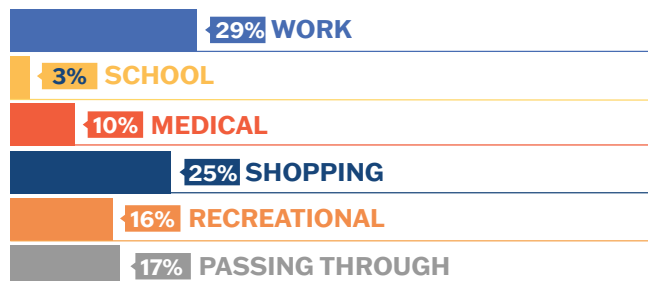
**How often do you travel along the study area section of US 50?**



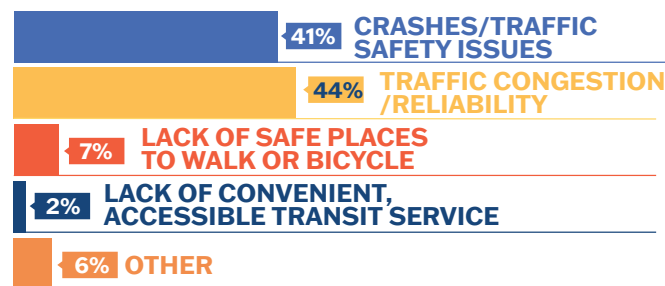
**When you travel along US 50, which mode(s) of transportation do you typically use?**



**For which of the following trip purposes do you most often travel along the study area section of US 50?**



**What do you think is currently the biggest problem on or along this section of US 50?**



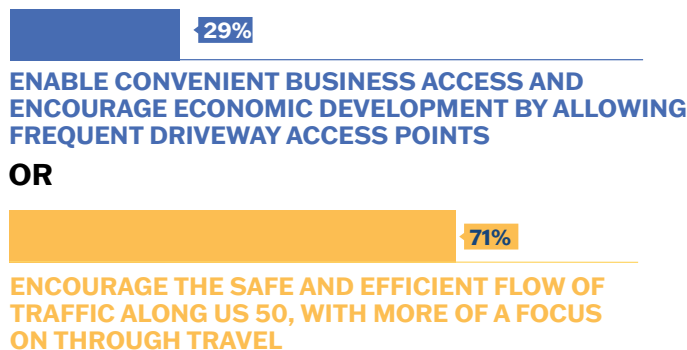
These questions were followed by a series of five optional demographic questions to provide basic information about the location (home zip code), age, gender, race/ethnicity, and household income of respondents.



## Major Themes:

- The majority of survey respondents traveled the project corridor either daily (35%), several times per day (27%), or weekly (27%).
- 915 of the 923 respondents who answered this question indicated that they travel along US 50 using a personal vehicle. Because respondents had the option to choose more than one mode, some individuals indicated that they also carpool (32 responses), walk (28 responses), bicycle (46 responses), or use other modes (e.g., a company vehicle or motorcycle) (38 responses).
- When asked about trip purpose, respondents indicated a variety of reasons for traveling the corridor, with work (29%) and shopping (25%) being the most common.
- Respondents were somewhat divided about the biggest problem on or along this section of US 50, with 44% indicating traffic congestion/reliability and 41% citing crashes/traffic safety issues.
- More than 2/3 of respondents (71%) felt it was more important for US 50 to encourage the safe and efficient flow of travel (i.e., focus on through travel) than to enable convenient business access and encourage economic development via frequent driveway access points.

## Do you think it is more important for US 50 to:



A detailed log of survey responses, including demographics, is included in Appendix B.

## 3.1.2 Emails and Phone Calls

During the first comment period, the CAMPO project manager received nine comments either via email or telephone call. These comments are provided in full in Appendix B.

## 3.1.3 Social Media

In early December, CAMPO posted updates on its social media accounts and also partnered with Carson City and [CarsonNOW.org](https://carsonnow.org) to help disseminate information about the study. Posts focused on opportunities for public and stakeholder input, particularly the online survey.

## 3.1.4 Web Presence

CAMPO posted information about the US 50 project on the agency's web page, including a study area map, the project fact sheet, a link to the online survey, and contact information for the study's project manager. This information was updated periodically throughout the duration of the study.

## 3.1.5 Press Release

CAMPO released a press release on December 6, 2023, announcing the availability of the online survey. The press release is included as Appendix C.



## 3.1.6 Fact Sheet/Flyer

The study team developed a project fact sheet containing basic information about the study, as well as a series of frequently asked questions (FAQs). The fact sheet is included as Appendix C.

## 3.2 Phase II Outreach

Phase II of the study brought an expanded study area (as discussed in Section 1), and an opportunity to explore potential intersection improvements along US 50 with stakeholders and members of the public.

### 3.2.1 Stakeholder Outreach

Stakeholder input was gathered via a Business Focus Group held in Mound House and meetings with partner agencies.

#### Business Focus Group

The Mound House Focus Group was held on March 25, 2025, at the Dayton Valley Community Center. The meeting lasted from 5:00 to 6:30 PM, with a presentation at 5:30 PM. The focus group was advertised primarily through mailers sent to Mound House and Dayton business owners. A total of 267 mailers were sent out in advance of the meeting.

#### Agency Meetings

A series of one-on-one meetings were held with NDOT and Lyon County throughout the course of the study. The first set of meetings was held at the beginning of Phase II to better understand agency concerns and any ongoing plans or projects in the vicinity of the study area. The second set of meetings was held to review and receive comments on draft design concepts.

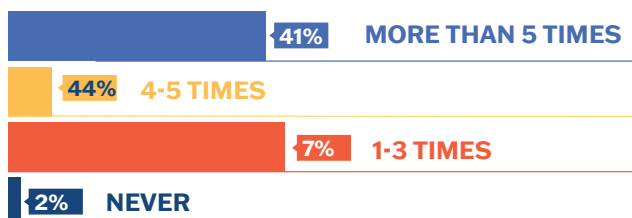
### 3.2.2 Public Outreach

Public outreach was gathered primarily via an online survey and an in-person public meeting. CAMPO also continued to provide updated project materials on their website throughout Phase II.

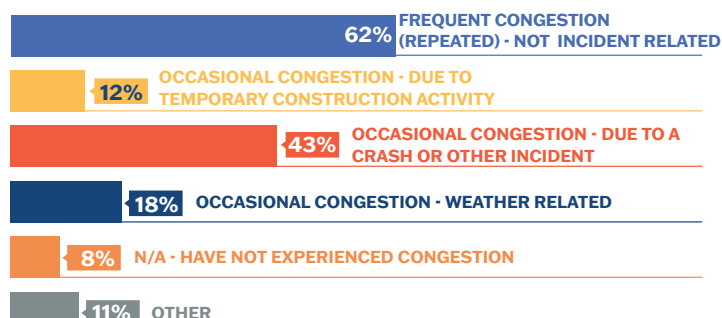
#### Online Survey

The online survey included eight core questions, along with an optional demographic section. Results from the core questions are summarized in the following charts. The survey was available between February 5 and April 1, 2025, and received 562 responses. A detailed log of survey responses, including demographics, is included in Appendix B.

**In the past six months, how often has traffic congestion along the study area section of US 50 impacted your ability to drive to destinations in a timely manner?**

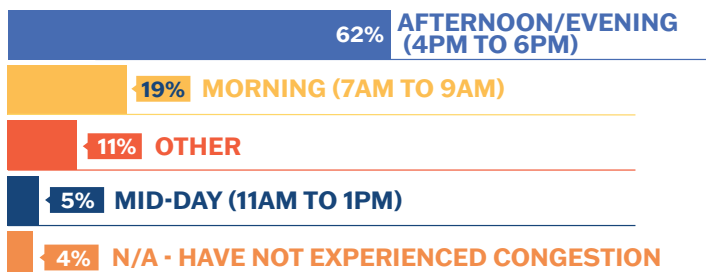


**If you have experienced traffic congestion on this section of US 50, what was the main cause?**

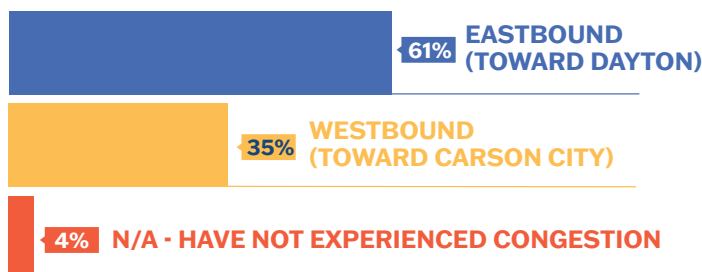




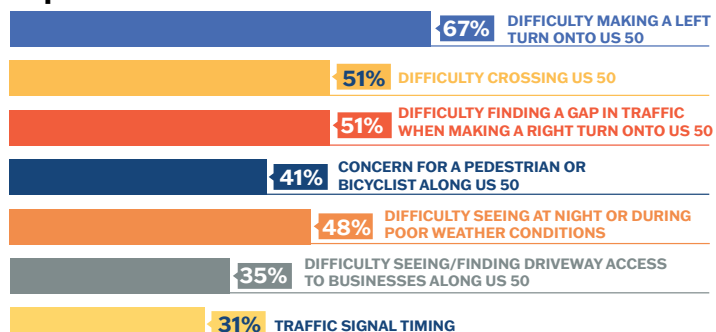
**What time of day do you most often experience traffic congestion along the study area section of US 50?**



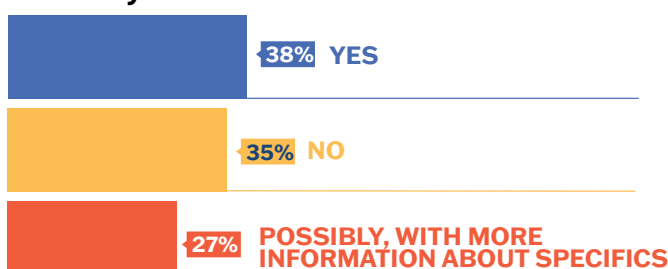
**Which direction have you been traveling when you most often experience traffic congestion along the study area section of US 50?**



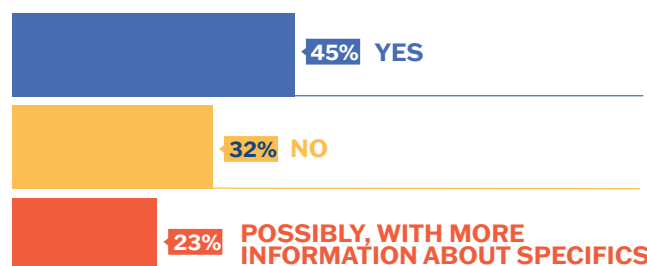
**Which of the following issues have you experienced or have been a cause of concern?**



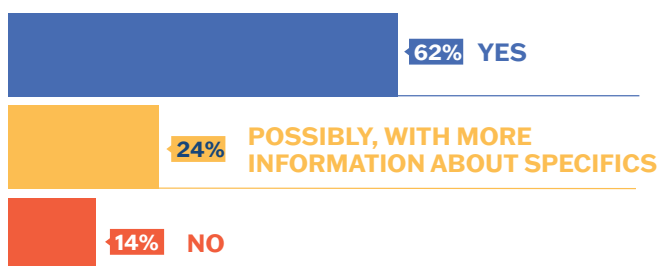
**Would you be supportive of the implementation of roundabouts at select signalized or unsignalized intersections along the study area section of US 50?**



**Would you be supportive of the implementation of RCUTs at select signalized or unsignalized intersections along the study area section of US 50?**



**Would you be supportive of the implementation of CGTs at select signalized or unsignalized intersections along the study area section of US 50?**



## Major Themes:

- The majority (75 percent) of respondents have experienced congestion and delay along US 50 in the past six months.
- Repeated, non-incident-related congestion was the most common type experienced.
- Sixty-two percent of respondents experienced congestion in the afternoon or evening.
- Most respondents experienced congestion when heading eastbound.
- Respondents identified several issues of concern, including difficulty making a left turn onto US 50; difficulty crossing US 50; and difficulty finding a gap in traffic to turn right onto US 50.
- Thirty-eight percent of respondents were supportive of roundabouts at key intersections along US 50; 45 percent were supportive of Restricted Crossing U-Turns, and 62 percent were supportive of High Ts.





## In-Person Public Meeting

The in-person public meeting was held on April 30, 2025, from 4:30 to 6:00 PM at the Carson City Community Center. There were 33 attendees, in addition to the consultant team and CAMPO staff. Two representatives from NDOT were also present. The meeting included a presentation and review of potential improvement alternatives which provided attendees an opportunity to make location-specific comments along the corridor.

The public meeting was advertised via a press release, which was picked up by Carson Now ([Carson City asks residents to provide feedback on US 50 E. Complete Streets Corridor](#)) and the Nevada Appeal ([U.S. 50 East Carson street project open house April 30](#)). The press release is provided in Appendix C. The meeting was also advertised on the CarsonAreaMPO.com website.

## 3.2.3 Board and Committee Presentations

CAMPO staff made several presentations and updates regarding the study to the CAMPO Board, Carson City Regional Transportation Commission (RTC), and other boards and committees. Some notable occurrences include:

- **March 8, 2023** – CAMPO/Carson City RTC presentation and permission to apply for Transportation Alternatives Program (TAP) to fund Phase 2 of the US 50 East Carson Complete Streets Corridor Study.
- **September 13, 2023** – CAMPO presentation and permission to hire a consultant to assist with development of the study.
- **January 29, 2023** – Healthy Communities Coalition had a Traffic Safety Meeting in Mound House. Items discussed included the CAMPO Local Road Safety Plan and the US 50 East Carson Complete Streets Corridor Study.
- **March 5, 2024** – Mound House Citizens Advisory Board presentation on the CAMPO Local Road Safety Plan and the US 50 East Carson Complete Streets Corridor Study; specifically, about Mound House. There were close to 100 attendees.
- **July 10, 2024** – CAMPO presentation of Phase I Study results
- **August 1, 2024** – Lyon County Commissioners briefing on the Phase I US 50 East Carson Complete Streets Corridor Study

## 3.2.4 Nevada Department of Transportation

NDOT owns and maintains US 50 throughout the entire study limits. During the development of this study, NDOT was concurrently working on design of a pavement preservation and safety improvement project for a portion of the corridor. Close coordination between the CAMPO team and NDOT was maintained throughout the study.

The NDOT preservation project limits are from the I-580 Interchange to Deer Run Road, a distance of approximately 2.5 miles. Preliminary plans for the project include a mill and replacement of existing roadway surfacing; improvement of existing pedestrian walkways, ramps and crossings to current Americans with Disabilities Act (ADA) Standards; turn lane channelization; and installation of new corridor lighting. Additional improvements will include grading roadside ditches and installing new drainage inlets to eliminate areas of water ponding during storm events; improvements to multiuse paths; driveway reconstruction; addition of a fiber optic trunk line cable and upgrades to traffic signal systems such as proper alignment of signal heads over travel lanes as well as

The safety and mobility upgrades that will be completed by this project include:

- [illegible]

# US 50 3R 60% Title Sheet



## 4. CORRIDOR VISION AND GOALS

### 4.1 Project Vision

The US 50 East Corridor Study vision is to develop a menu of safety and multimodal improvements that provide safe and reliable mobility through stakeholder collaboration and data driven analysis. Improvements that can be implemented across short, medium and long term as the corridor travel demand increases through the year 2050.

### 4.2 Character Zones

The project corridor was divided into three zones based on changing land use characteristics. These zones are summarized below and illustrated in Figure 7.

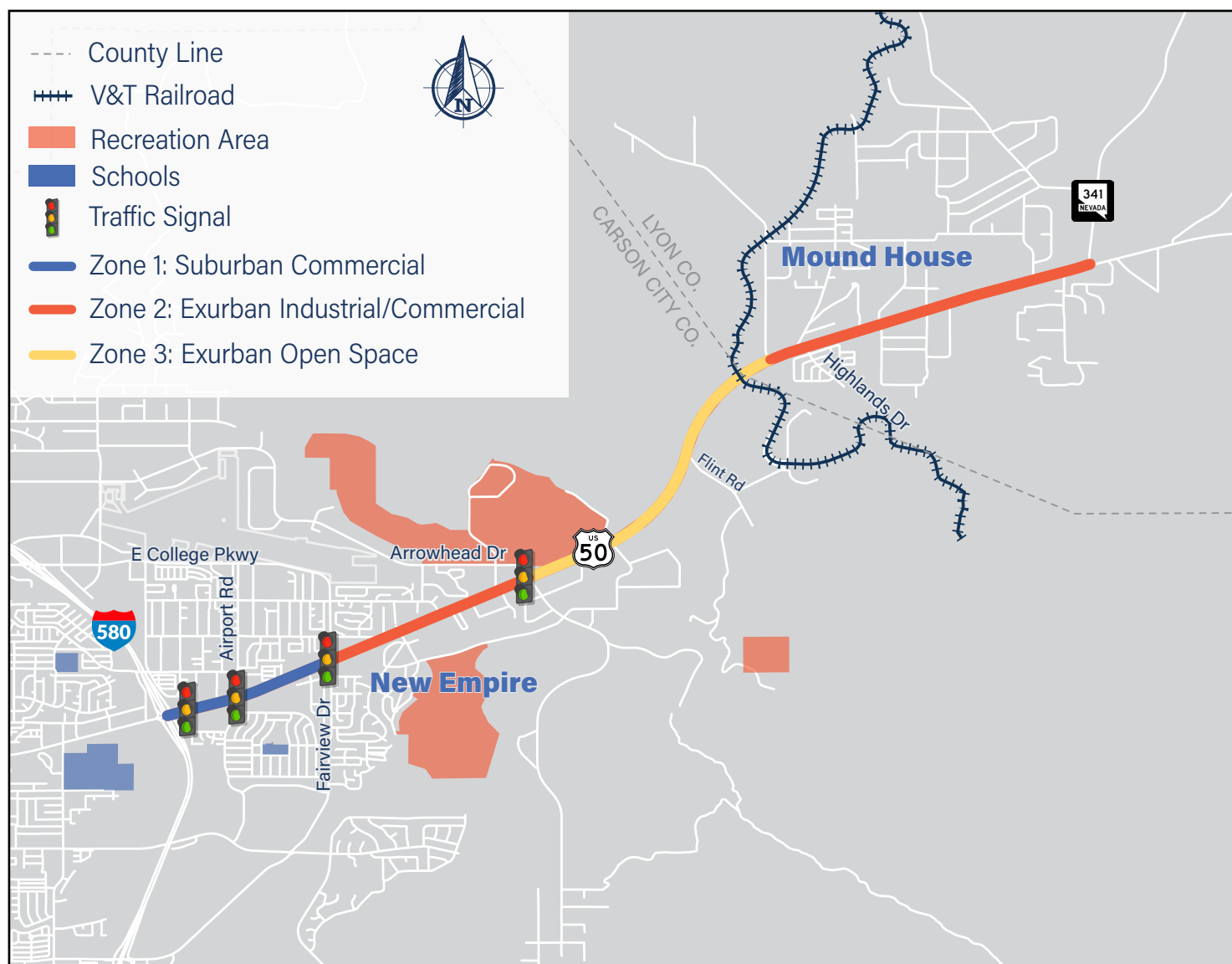


Figure 7: US 50 Corridor Character Zones



## Zone 1: Suburban Commercial

The section of US 50 between the I-580 interchange and Fairview Drive was classified as Suburban Commercial due to the presence of predominantly commercial land uses and relatively frequent driveway access points.

## Zone 2: Exurban Industrial/Commercial

The section of US 50 between Fairview Drive and Deer Run Road/Arrowhead Drive was classified as Exurban Industrial/Commercial due to the presence of predominantly industrial and commercial land uses, with less frequent driveway spacing and lower density overall.

The section between Linehan Road and SR-341 was also classified as Exurban Industrial/Commercial, as the roadway resumes this general character as you enter the western edge of Mound House.

## Zone 3: Exurban Open Space

The section of US 50 between Deer Run Road/Arrowhead Drive and Linehan Road was classified as Exurban Open Space due to the low-density nature of the land uses and infrequent spacing of driveway access points.

## 4.3 Corridor Goals

A set of goals was developed to help guide improvements along the project corridor and ensure that recommendations are aligned with input received via public and stakeholder outreach, as well as previous planning efforts. The four corridor goals identified are:



**GOAL 1: Identify improvements that enhance safety for all corridor users.**



**GOAL 2: Plan and deliver roadway safety and traffic projects that meet the needs of local residents, commuters, freight, and business owners.**



**GOAL 3: Improve multimodal and non-motorized connections between residential areas, essential services, and recreational opportunities.**



**GOAL 4: Identify improvements that prioritize business access and economic development objectives while maintaining mobility.**

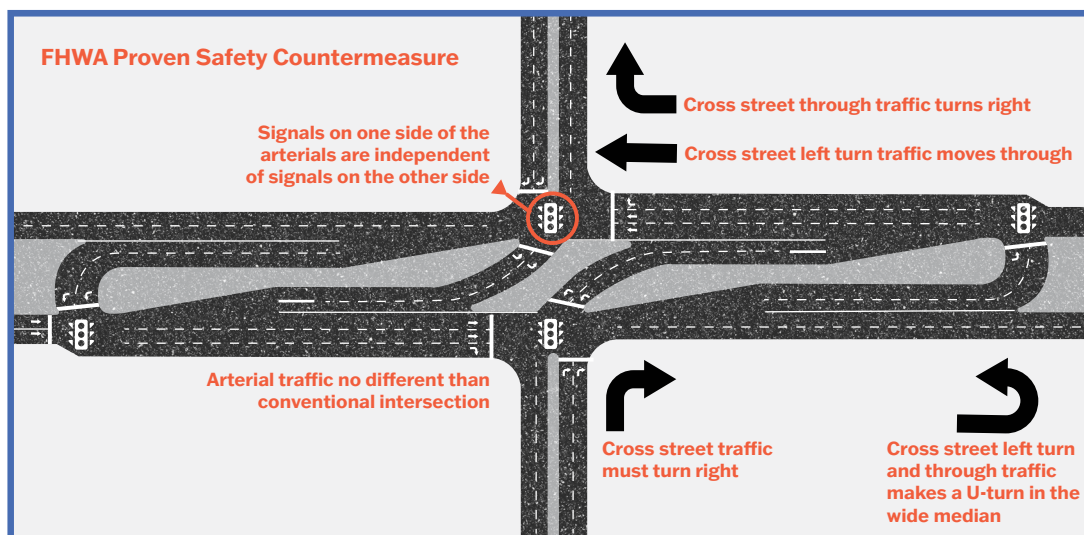
These corridor goals align well with the goals identified in NDOT's *One Nevada Transportation Plan*. The goals identified in this US 50 Study mirror four of the six One Nevada goals, including: Enhance Safety, Optimize Mobility, Transform Economies, and Connect Communities. Additionally, the Plan identifies US 50 as a critical corridor, which is defined as a primary artery for freight and people movement essential to Nevada's future economic vitality. As a US Bike Route (USBR 50), US 50 has the highest volume of touring bicyclists in Nevada, who are supported by local businesses along the corridor.



## 5. INTERSECTION IMPROVEMENT CONSIDERATIONS

To mitigate safety and operational deficiencies identified in sections 2.2 and 2.3, four intersection types were identified for potential implementation within the US 50 corridor. Two of the four intersection types, the Restricted Crossing U-Turn (RCUT) and a roundabout are FHWA Proven Safety Countermeasures (PSC). Each type is presented below along with benefits and drawbacks associated with each configuration.

### 5.1 Restricted Crossing U-Turn (RCUT)



**Figure 8: Restricted Crossing U-Turn (RCUT)**

A Restricted Crossing U-Turn, or RCUT, is an intersection design that alters how side street traffic enters the major road. Under this configuration, vehicles on the minor road make a right turn onto the major road, then perform a U-turn at a designated location (see Figure 8). These vehicles are not permitted to make left turns or cross directly through the main road. Traffic on the main road flows as usual, allowing through and left turn movements at the intersection. Shoulder widening may be done to facilitate U-turns in areas with inadequate median width, similar to the Mound House area.

#### Benefits

- This design reduces the number of conflict points at the intersection, including severe angle and T-bone crashes.
- RCUTs can manage high traffic volumes and improve overall throughput.

#### Drawbacks

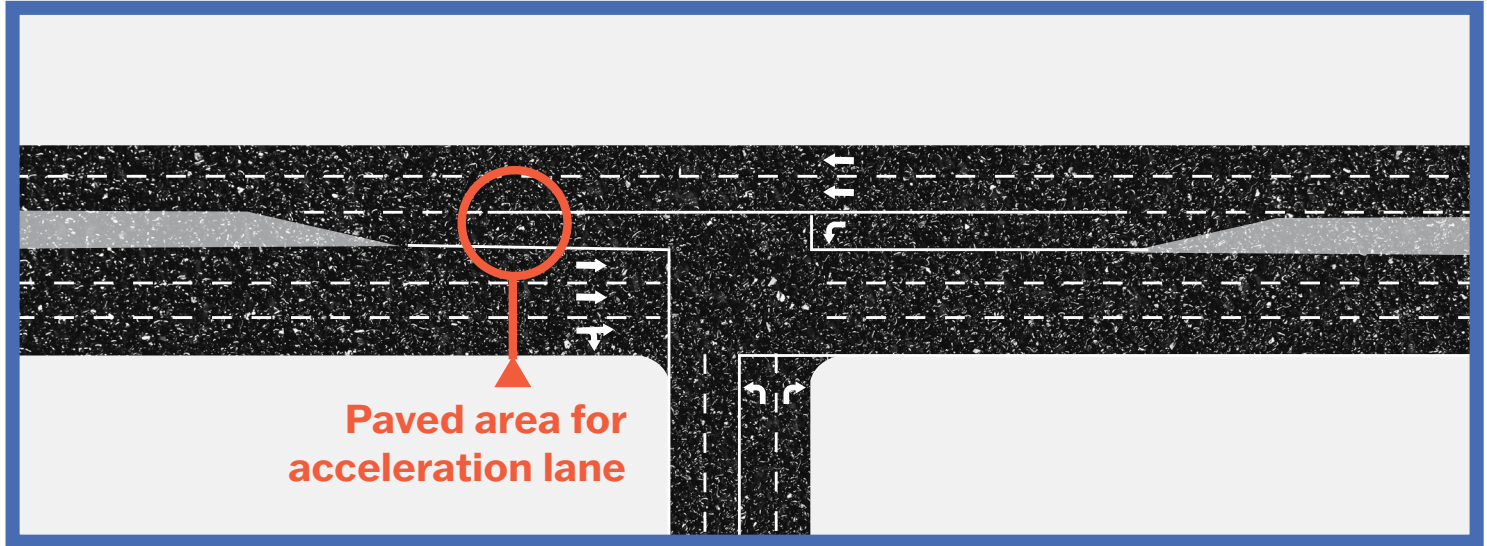
- Large trucks may require additional turning space at the U-turn location.
- Pedestrian crossings are not prioritized and should be accommodated outside of the RCUT limits.
- RCUTs have higher implementation and maintenance costs compared to some other intersection types.

**Conclusion: Works well on highways or major arterials with moderate to high speed limits.**





## 5.2 High T, Signalized and Unsignalized



**Figure 9: High T**

A signalized High T is a three-leg or T-shaped intersection where one direction of traffic on the main road can continue traveling through the intersection without stopping, while the other direction is stop controlled. This configuration allows for a continuous flow of traffic on the main road. High T intersections may be signalized or unsignalized.

### Benefits

- Improves safety by removing left-turn conflicts from the side street.
- Reduces delay and improves traffic flow.
- Beneficial for freight movement.

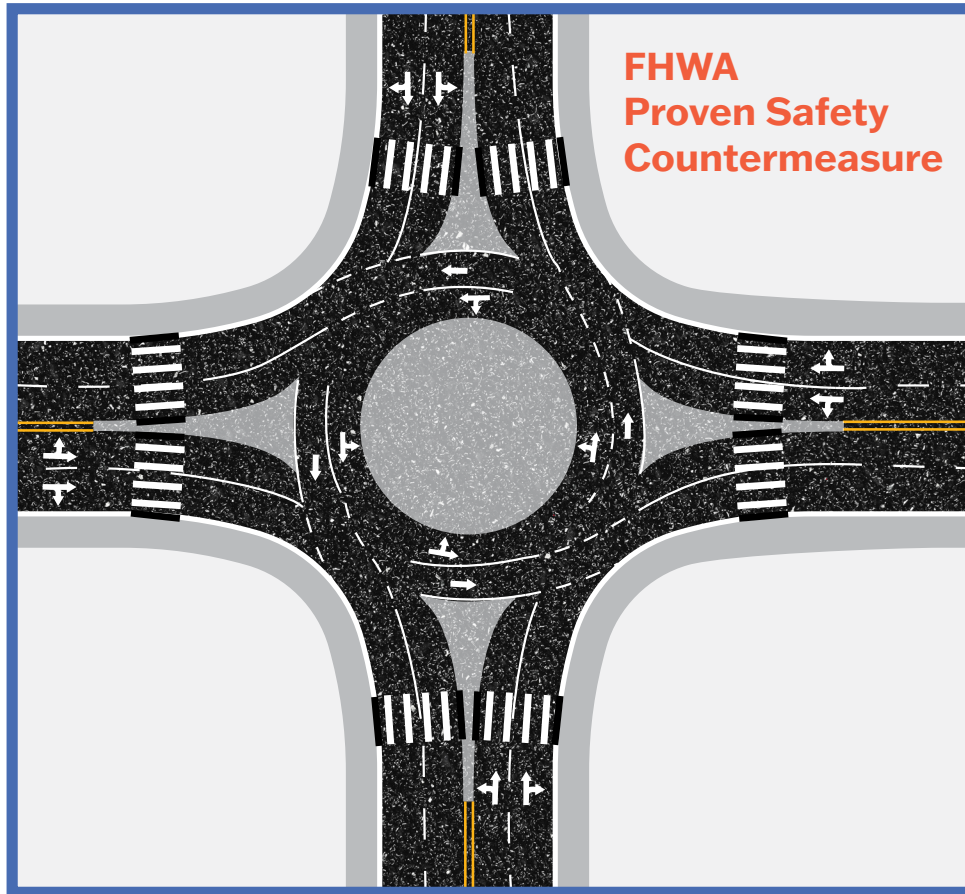
### Drawbacks

- Pedestrian movements across the major roadways at High T intersections are not accommodated.
- Implementation cost can be higher than traditional signalized intersections.

**Conclusion: Best suited for T-intersections with high through volumes on the major road and lower side-street demand.**



## 5.3 Roundabout



**Figure 10: Roundabout**

A roundabout is a circular intersection in which traffic flows counterclockwise around a central island. Vehicles entering a roundabout must yield to those already traveling within it. Roundabouts can be single-lane, multi-lane (as shown in Figure 10), or “compact.” A compact roundabout is a smaller version of a standard roundabout, and is designed for intersections with lower traffic volumes and/or where space is limited.

### Benefits

- Roundabouts eliminate angle and head-on crashes and reduce crash severity.
- They can reduce delay and queueing at some locations.
- Roundabouts can accommodate freight with proper design.
- Roundabouts provide safer pedestrian crossings than traditional signalized intersections.

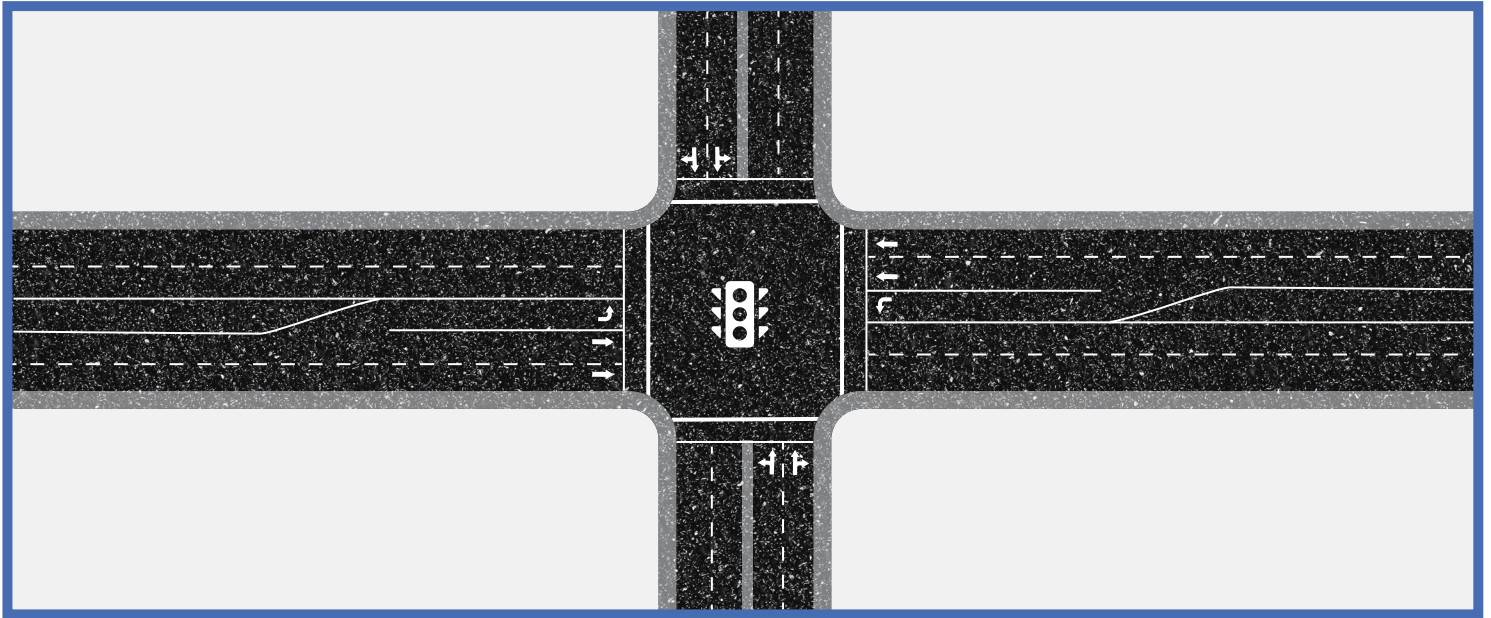
### Drawbacks

- Higher upfront construction costs but lower long-term maintenance costs compared to traffic signals.

**Conclusion: Ideal for intersections with balanced traffic volumes, where reducing speeds and improving safety is a priority.**



## 5.4 Signalized Intersection



**Figure 11: Signalized Intersection**

At a signalized intersection, traffic flow is controlled by traffic signals which dictate when drivers, bicyclists, and pedestrians can proceed through the intersection. The signals operate in phases, with different phases allowing specific movements to proceed through the intersection while others are stopped.

### Benefits

- Provides controlled movements for all users.
- Can manage high traffic volumes and manage freight efficiently.
- Allows clear pedestrian crossing opportunities with dedicated signal phases.

### Drawbacks

- Has moderate implementation and maintenance costs.

**Conclusion: Best suited for locations with high traffic demand, complex turning movements, or multimodal needs.**

Signal system upgrades are recommended at each of the existing signalized intersections on US 50 in the study area. These include intersections with N. Lompa Lane, Airport Road, Fairview Drive/College Parkway, and Deer Run Road/Arrowhead Drive. Recommended improvements include enhanced signal coordination, phasing, and timing, as described below.





## 6. RECOMMENDED IMPROVEMENTS

The primary goal of the US 50 East Carson Complete Streets Study was to identify improvements that enhance safety and reliability along the corridor while supporting efficient mobility for all users. The study was conducted in two phases, beginning with the development of vision and goals and initial recommendations in Phase 1, which established the foundation for more detailed enhancement considerations, such as the intersection improvement concepts discussed in section 5. These initial findings informed a deeper analysis in Phase 2, during which refined recommendations were developed to address identified safety, access, and traffic operations needs. Throughout this process, the project team collaborated with stakeholders and the public, presenting proposed improvements through virtual surveys and stakeholder and public meetings. Feedback gathered through these efforts played a key role in shaping the final set of corridor recommendations, ensuring they reflect both technical priorities and community perspectives.

To develop the recommended improvements, the project team conducted a comprehensive analysis of existing conditions, including detailed evaluations of traffic operations, safety performance, land use characteristics, and future traffic projections. The data-driven approach allowed the team to identify key challenges along the corridor, such as high-conflict intersections, constrained access points, and areas with limited pedestrian and bicycle facilities. Building on these findings, the study focused on targeted strategies that enhance corridor function, promote safer crossings, improve multimodal connectivity, and reduce the potential for severe crashes. While congestion reduction and operational efficiency were important considerations, the overarching emphasis remained on improving safety and creating a more predictable and comfortable environment for all users, including drivers, pedestrians, bicyclists.



Looking west towards the I-580 Interchange

The recommendations presented in this report represent a balanced combination of strategies intended to improve safety, mobility, and access along US 50. They incorporate engineering judgment, performance data, and stakeholder input to ensure feasibility and effectiveness across a range of considerations. The recommendations vary in scale, from near-term signal timing or signage modifications to larger capital projects that will require future design and funding commitments. Collectively, they form a cohesive framework for guiding future investments and policy decisions along the US 50 corridor, ensuring that improvements made today will continue to support a safe and efficient multimodal transportation system well into the future.











Table 3: Recommended Corridor Improvements

#	Description	Location/ Extent	Cost 2025 Dollars	R/W Acquisition	Implementation Timeframe	Goal Area
1	Extend WB to SB Left Turn Lane	I-580 Interchange	\$500,000	None	<div></div>	<div></div>
2*	Convert protected-permissive phasing from side streets to protected phasing only	Lompa Lane, Airport Road, College Parkway, Fairview Drive and Deer Run Road	\$40,000	None	<div></div>	<div></div>
3*	Program leading pedestrian intervals		\$150,000	None	<div></div>	<div></div>
4*	Install Advance Dilemma Zone Detection (ADZD) signal equipment to allow for All Red Extension		\$360,000	None	<div></div>	<div></div>
5*	Add Signal Visibility Louvers - Adjust for Design Speed SSD		\$80,000	None	<div></div>	<div></div>
6*	Add near-side signal heads to US 50 approaches		\$90,000	None	<div></div>	<div></div>
7	Free right turn lane	Free right turn lane NB Fairview to EB US 50	\$800,000	None	<div></div>	<div></div> <div></div>
8	Multiuse path	South side of US 50 from Airport Road to Arrowhead Drive	\$1,600,000	None	<div></div>	<div></div>
9	Unsignalized High T	Brown Street	\$300,000	None	<div></div>	<div></div> <div></div>



\*2, 3, 4, 5, 6 to be done at the signalized intersections at Lompa Ln., Airport Rd., College Pkwy./Fairview Dr., Arrowhead Dr./Deer Run Rd.



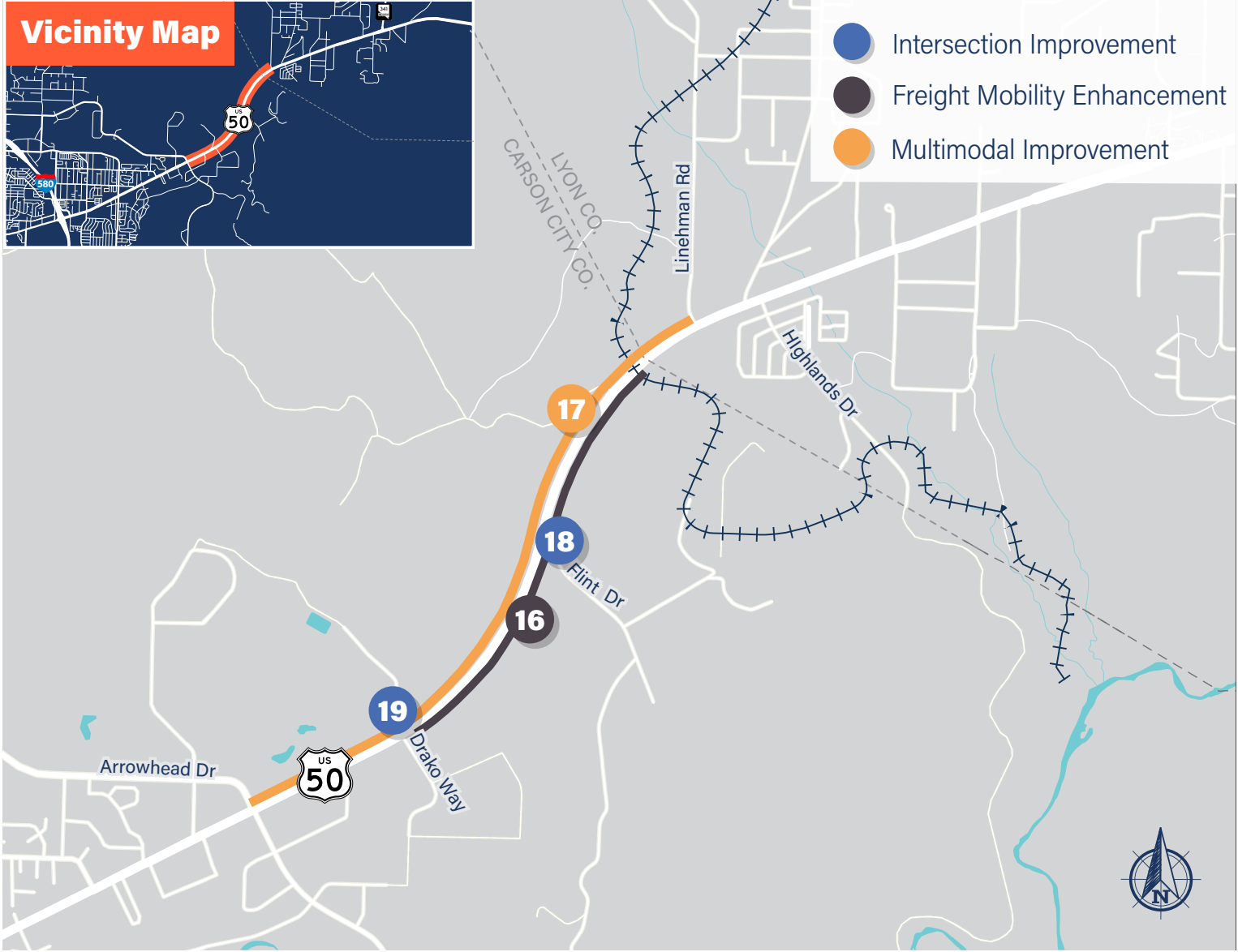
#	Description	Location/ Extent	Cost 2025 Dollars	R/W Acquisition	Implementation Timeframe	Goal Area
10	Frontage Road	Sherman Lane to E. Nye Lane	\$1,000,000	Low	●	 
11	Frontage Road	Empire Ranch Road to 400' East of Akron Way	\$2,200,000	Low	●	 
12	Signalized High T	Empire Ranch Road	\$500,000	None	●	 
13	Unsignalized High T	Sherman Lane	\$300,000	None	●	 
14	Free Right Turn Lane.	Right Turn Lane SB Arrowhead to WB US 50	\$330,000	None	◐	 
15	Signalized High T	Nye Lane	\$500,000	None	◑	 







#	Description	Location/ Extent	Cost 2025 Dollars	R/W Acquisition	Implementation Timeframe	Goal Area
16	Eastbound Truck Climbing Lane	Drako Way to V&T Grade Separation	\$4,600,000	None	<div></div>	
17	Multiuse Path	Arrowhead Drive to Linehan Road North Side	\$2,100,000	None	<div></div>	
18	Signalized High-T	Flint Drive	\$400,000	None	<div></div>	
19	Traffic Signal	Drako Way	Developer Funded	None	<div></div>	





#	Description	Location/ Extent	Cost 2025 Dollars	R/W Acquisition	Implementation Timeframe	Goal Area
20	Roadway Lighting	RR crossing to SR-341	\$900,000	None	<div></div>	<div></div>
21	Right In/Right Out	Linehan Road and US 50	\$900,000	None	<div></div>	<div></div>
22	Pedestrian Hybrid Beacon (PHB)	Highland Drive and US 50	\$700,000	None	<div></div>	<div></div>
23	Signalized Intersection	Realign Red Rock Road at Highlands Drive	\$5,300,000	High	<div></div>	<div></div>
24	Right In/Right Out	Bunnyranch Boulevard and US 50	\$800,000	None	<div></div>	<div></div>
25	Restricted Crossing U-Turn (RCUT)	Newman Lane and US 50	\$1,700,000	None	<div></div>	<div></div>
26	Unsignalized High T	US 50 and Kit Kat Drive/Julius Lane	\$300,000	None	<div></div>	<div></div>
27	Roundabout**	US 50 at SR- 341 Expand to 4 Legs	\$15,000,000	None	<div></div>	<div></div>

\*\* Roundabout or Signalized Intersection may be implemented





#	Description	Location/ Extent	Cost 2025 Dollars	R/W Acquisition	Implementation Timeframe	Goal Area
28	Signalized Intersection**	4-Legged System SR-341/ US 50	\$3,200,000	Medium	<div></div>	<div></div>
29	Collector Road Improvements	Mound House Collector Roads	\$11,700,000	Medium	<div></div>	<div></div>
30	Multiuse path	North and south sides of US 50 from Linehan Road to SR-341	\$1,900,000	None	<div></div>	<div></div>

\*\* Roundabout or Signalized Intersection may be implemented





## 6.1 US 50 East Carson Proposed Improvements

### I-580 to Lompa Lane

On the west side of the study corridor, while the overall I-580 interchange is expected to perform at a satisfactory LOS under the 2050 No-Build scenario, the storage length for the US 50 westbound left-turn movement to I-580 southbound has been extended to Lompa Lane to provide additional capacity for managing longer queues for that specific movement. These changes will enhance operational efficiency while reducing the potential for crashes involving merging and weaving traffic at the interchange ramps.

### Signal System Improvements

At the Lompa Lane intersection, in addition to the added westbound through lane—which provides extra storage for the left-turn movement at the I-580 interchange—improvements such as Leading Pedestrian Intervals (LPIs), Advance Dilemma Zone Detection (ADZD), Rest in Red programming, and lead-lag phasing for left turns are proposed. These measures will improve pedestrian safety, provide drivers with more predictable operations, and reduce crash risks associated with left-turn movements. The recommendations can deliver significant safety benefits while still maintaining a satisfactory LOS of D or better during both AM and PM peak periods. Also, at US 50/Airport Road, recommendations include protected left-turn phasing, LPIs, median channelization, and sidewalk/crosswalk enhancements to reduce conflicts between vehicles, bicyclists, and pedestrians. These measures will improve visibility, reduce the potential for severe angle crashes, and create safer crossings for all users, while maintaining a satisfactory LOS at this intersection.

### Turn Lane Improvements

Similar targeted safety improvements are also recommended for the other two signalized intersections at College Parkway/Fairview Drive and Arrowhead Drive/Deer Run Road. At College Parkway/Fairview Drive, the plan also recommends a channelized right-turn movement from northbound Fairview to eastbound US 50, along with an appropriate acceleration lane to facilitate a free-flow right-turn movement. At Arrowhead Drive/Deer Run Road, enhanced right-turn movements are recommended for southbound Arrowhead, eastbound US 50, and westbound US 50. These improvements are expected to create a safer environment for all road users and significantly improve traffic operations; however, the 2050 Build Scenario still shows a LOS F during the PM peak period at these two intersections.

The project team also evaluated a multilane roundabout at Arrowhead Drive/Deer Run Road. However, operational analysis did not indicate a satisfactory LOS, largely because high through-traffic volumes along US 50 would restrict side-street entry, leading to long queues and delays for those approaches. This assessment could change in the future with updated traffic data collection, and it is recommended to revisit this evaluation when new data or revised travel demand model outputs become available.

While adding lanes at these two intersections (and adding a third lane in each direction between them) could improve operations and LOS, the project team decided not to recommend such an improvement. A wider roadway and intersections, combined with the existing continuous two-way left-turn lane, could significantly increase the risk of severe crashes. Although operational results indicate some PM peak congestion, the proposed improvements focus on enhancing safety and reliability throughout the day for all users. More detailed access modifications and demand management strategies—such as providing alternative routes or encouraging mode shifts to biking, walking, and transit—could be evaluated in the future to help alleviate congestion at these intersections.





## Proposed Improvements at Unsignalized Intersections

At Brown Street and Sherman Lane the implementation of unsignalized High T intersections is recommended to enhance safety while maintaining efficient traffic flow. A High T configuration allows one direction of US 50 traffic to flow continuously without stopping, while turning movements from the side street are accommodated through channelization and yield control. This design reduces the number of vehicle conflict points, organizes traffic movements more clearly, and lowers the likelihood of angle crashes—particularly during higher-volume periods. In addition, these improvements promote smoother traffic progression along US 50 while reducing unnecessary stop-and-go movements for the major street.

At Empire Ranch Road, Nye Lane, and Flint Road, a signalized High T intersection is recommended in the long term. Operational analysis of the 2050 traffic volumes indicated that an unsignalized High T would not maintain an acceptable level of service at these locations. However, an unsignalized High T could serve as a cost-effective interim solution, providing immediate safety and operational benefits until traffic volumes warrant full signalization. The conversion to a signalized High T design will better control turning movements, reduce high-speed crossing conflicts, and provide protected pedestrian phases for safer non-motorized crossings. At Nye Lane, a PHB—together with an unsignalized CGT—could be implemented as an interim treatment until a signalized High T is warranted.

## Frontage Roads

To further support safety and mobility, construction of a north-side frontage road between Sherman Lane and Nye Lane is proposed to consolidate local access points. This will reduce the number of direct driveways and intersections feeding into US 50, thereby decreasing opportunities for collisions and improving through-traffic operations. A similar improvement is proposed for the south side between Empire Ranch Road and approximately 400 feet east of Akron Way, providing parallel access for local traffic and further minimizing conflicts on the mainline.

## Truck Climbing Lane

In addition to the signalized High T at Flint Drive, the construction of an eastbound truck climbing lane is recommended. This will allow slower-moving heavy vehicles to ascend the grade without impeding through traffic, thereby improving both operations and safety. US 50 between I-580 and USA Parkway is part of the National Highway Freight Network and separating heavy vehicle movements from passenger car flows reduces the risk of rear-end collisions and improves travel time reliability for all users.

## US 50 Mound House

At Linehan Road, Bunnyranch Boulevard and Julius Lane the installation of a raised median and right-in/right-out (RI/RO) restrictions will substantially reduce high-risk turning and crossing movements. This access control strategy eliminates direct left turns from the side street onto US 50 and discourages unsafe mid-block crossings, improving both safety and operational efficiency along the corridor.

At Red Rock Road and Highlands Drive, improvements include realigning Red Rock Road to create a four-leg, signalized intersection. This realignment will simplify traffic movements, improve sight distance, and ensure more orderly vehicle operations, while also providing U-turn movements. Enhanced traffic control at this location will



better manage high-speed crossing and turning movements, significantly lowering the risk of severe crashes. Signalization will also provide controlled turning and pedestrian crossing opportunities, thereby improving overall safety for vehicles entering from side streets as well as for pedestrians and bicyclists navigating the intersection.

A PHB is also recommended at Highlands Drive as a short term improvement to provide for safer pedestrian crossings until a signalized intersection can be implemented

Newman Lane provides an opportunity to safely separate left turn movements with the implementation of a RCUT intersection type. This would reduce conflict points and reduce severe angle crashes and can accommodate U-turns.

At Kit Kat Drive the implementation of unsignalized High T intersections is recommended to enhance safety while maintaining efficient traffic flow, and would work in combination with the RI/RO. A High T configuration allows one direction of US 50 traffic to flow continuously without stopping, while turning movements from the side street are accommodated through channelization and yield control. This design reduces the number of vehicle conflict points, organizes traffic movements more clearly, and lowers the likelihood of angle crashes—particularly during higher-volume periods. In addition, these improvements promote smoother traffic progression along US 50 while reducing unnecessary stop-and-go movements for the major street.

Corridor lighting recommended in the Mound House area will improve visibility and provide a reduction in crashes.

## Collector Road Improvements

New collector road connections within the Mound House area would direct local traffic to intersections that would better accommodate left turn access which would improve safety, prioritize access, and provide increased connectivity for residents and business owners.

## US 50 and SR-341

NDOT conducted an Intersection Control Evaluation (ICE) study to evaluate both a roundabout and signalized intersection at US 50 and SR 341. While both intersection types are effective, the study determined that a roundabout could produce significant safety benefits although, would begin to fail beyond 2040 without modifications to accommodate the increased traffic. Additionally, the NDOT study considered only a three-legged intersection for both configurations; however, a four-legged intersection, either as a roundabout or signalized would be necessary to incorporate changes to local access recommended as part of this study.

## Multi-Use Path Connectivity

Multi-use path improvements are recommended in east Carson City along the north side of US 50, east from Arrowhead Drive to Linehan Road and along both sides of US 50 from Highlands Drive to SR-341. This recommendation would bring several important benefits to the community, especially in places without sidewalks currently. It creates a safe, separated space for walking and biking, and reduces conflicts with vehicles, encouraging nonmotorized trips, and improving safety for all users. It also enhances access for people with limited mobility, youth, older adults, and lower-income households. Over time, those options can shift people away from short car trips toward active modes and transit, easing traffic congestion and reducing emissions.



## Developer Project

In 2023, NDOT and Carson City determined that based on an approved traffic analysis of the Plateau Development, the intersection of US 50 and Drako Way shall be modified to include the following transportation mitigations:

- Installation of a traffic signal, advanced signal warning system, right turn deceleration lane in the eastbound direction of on US 50, Drako Way widening to separate left and right turn lanes, and other items as required by NDOT. As of December 2025, the Plateau Development is on Phase 2 of 5 planned Phases.
- An updated traffic impact study and signal warrant analysis will be required with each Phase of the development to determine when the signal may be installed. This is a developer funded project.

## ITS and ATM

Some Phase 1 recommendations that were not carried forward are either included in work planned as part of the NDOT pavement maintenance project planned for 2027 or are dependent upon future connectivity and technology improvements identified in the 2024 NDOT Intelligent Transportation System (ITS) and Active Transportation (ATM) Master Plan shown below:

ID# D2-010	Project Concept Title	Estimated Cost (2023)	Technologies Included in Project Concept
US 50 from I-580 to Stagecoach	US 50 Urban Lite - Permanent Lite = 25.84 Miles (NDOT D2)	\$8,810,000	Vehicle detection, CCTV, Side Mounted DMS, Flashing Beacon, Connected Vehicle Devices

## 6.2 Crash Modification Factors

The proposed improvements include significant safety enhancements to the US 50 corridor that could reduce both the number and severity of crashes. The FHWA's Crash Modification Factor (CMF) Clearinghouse provides CMFs associated with these types of improvements. A CMF is a measure of the effectiveness of a safety countermeasure; for example, a CMF of 0.7 indicates an expected 30 percent reduction in crashes following implementation. The proposed safety enhancements, along with their CMF values and the IDs from FHWA CMF Clearinghouse, are listed below:

Improvement	CMF ID#	CMF
Change from protected/permitted to protected-only left turn	2108	0.58
Lead-lead to lead-lag for protected-only left-turn phasing	2019	0.69
Implement a Leading Pedestrian Interval	9903	0.81
Install a pedestrian hybrid beacon	10585	0.88
Install a dilemma zone protection system	4854	0.56
Install additional/near-side signal heads	1485	0.54
Provide right-turn channelization	11154	0.73
Install lighting	7774	0.63
Convert intersection to restricted crossing U-turn (RCUT) intersection	10383	0.80
Convert a T intersection into a High-T intersection	8656	0.85
Convert a stop-controlled intersection into a multi-lane roundabout	208	0.95



Among these improvements, LPIs, PHBs, dedicated left and right-turn lanes, roundabouts, RCUT intersections, improved lighting, and crosswalk visibility enhancements are recognized by FHWA as Proven Safety Countermeasures. Collectively, these improvements could provide substantial safety benefits and make the US 50 corridor a safer facility for all users.

In addition to their demonstrated safety benefits, many of these countermeasures also contribute to improved traffic flow and operational efficiency when applied in a coordinated manner. By reducing conflict points, improving signal timing, and enhancing intersection control, these treatments help balance safety objectives with the need to maintain acceptable levels of service along this vital regional corridor.





## 6.3 Operations Analysis Results for Proposed Improvements

The primary objective of this study was to enhance safety and reliability along the corridor. However, the recommended improvements also yield substantial benefits for traffic operations and congestion relief. To assess these impacts, 2050 forecasted traffic volumes were developed using a combination of collected field data and the CAMPO travel demand model. Operational results for the 2050 No-Build and 2050 Build scenarios are summarized in Tables 4 and 5, respectively. More details on traffic forecasting and operations analysis are provided in Appendix A.

**Table 4: Intersection Traffic Operations Results for 2050 No-Build Alternative (without Proposed Improvements)**

Location	Control Type	2050 No Build AM Peak				2050 No Build PM Peak			
		Delay (sec)	LOS	Worst Movement	Longest Queue (Veh/Ln)	Delay (sec)	LOS	Worst Movement	Longest Queue (Veh/Ln)
US 50 & Ramps I-580	Signal	40	D	WBL	10 (WBL)	33	C	SBL	6 (WBL)
US 50 & Lompa Lane	Signal	28	C	NBL	11 (WBR)	26	C	NBL	4 (WBR)
US 50 & Airport Road	Signal	22	C	SBR	7 (NBL)	57	E	NBL	27 (EBT)
US 50 & Silver State Street	Stop	23	C	SB	1 (SB)	21	C	SB	1 (SB)
US 50 & Brown Street	Stop	21	C	NB	1 (NB)	52	F	NB	3 (NB)
US 50 & College Parkway	Signal	83	F	WBT	28 (WBT)	177	F	NBR	43 (NBR)
US 50 & Sherman Lane	Stop	46	E	SB	2 (SB)	42	E	SB	1 (SB)
US 50 & Empire Ranch Road	Stop	>300	F	SB	>20 (SB)	>300	F	NB	>50 (SB)
US 50 & Nye Lane	Stop	87	F	SB	2 (SB)	43	E	SB	2 (SB)
US 50 & Arrowhead Drive	Signal	68	E	WBR	42 (WBR)	191	F	EBT	83 (EBT)
US 50 & Flint Road	Stop	121	F	WB	2 (WBL)	>300	F	WB	13 (WBL)
US 50 & Linehan Road	Stop	>300	F	SB	7 (SB)	>300	F	SB	11 (SB)
US 50 & Red Rock Road	Stop	242	F	SB	7 (SB)	34	D	SB	2 (SB)
US 50 & Highlands Drive	Stop	118	F	NB	7 (NB)	>300	F	NB	6 (NB)



**Table 5: Intersection Traffic Operations Results for 2050 Build Alternative (with Proposed Improvements)**

Location	Control Type	2050 Build AM Peak				2050 Build PM Peak			
		Delay (sec)	LOS	Worst Movement	Longest Queue (Veh/Ln)	Delay (sec)	LOS	Worst Movement	Longest Queue (Veh/Ln)
US 50 & Ramps I-580	Signal	28	C	EBL	7 (WBL)	32	C	SBL	6 (WBL)
US 50 & Lompa Lane	Signal	32	C	NBL	13 (WBR)	20	B	NBL	10 (WBR)
US 50 & Airport Road	Signal	42	D	SBR	16 (WBT)	43	D	SBT	15 (EBT)
US 50 & Silver State Street	Stop	23	C	SB	1 (SB)	21	C	SB	1 (SB)
US 50 & Brown Street	Stop	15	C	NB	1 (NB)	42	E	NB	2 (NB)
US 50 & College Parkway	Signal	54	D	WBT	19 (WBT)	92	F	SBL	31 (EBT)
US 50 & Sherman Lane	Stop	40	E	SB	1 (SB)	29	D	SB	1 (SB)
US 50 & Empire Ranch Road	Signal	6	A	WBT	1 (NB)	17	B	NB	1 (NB)
US 50 & Nye Lane	Signal	44	D	SB	6 (WBT)	9	A	SB	5 (WBT)
US 50 & Arrowhead Drive	Signal	30	C	WBT	21 (WBT)	188	F	EBT	84 (EBT)
US 50 & Flint Road	Signal	4	A	WBL	1 (WBL)	10	B	WBL	10 (NBT)
US 50 & Linehan Road	Stop	49	E	SB	1 (SB)	20	C	SB	1 (SB)
US 50 & Red Rock Road	Signal	52	D	WBT	30 (WBT)	64	E	EBT	38 (EBT)
US 50 & Highlands Drive	Signal	52	D	WBT	30 (WBT)	64	E	EBT	38 (EBT)

**EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; L = Left-turn movement; R = Right-turn movement; T = Through movement.**

**Note 1:** In accordance with Highway Capacity Manual (HCM) methodology, Level of Service (LOS) for stop-controlled intersections is determined by the control delay of the worst-performing movement. For signalized intersections, LOS is based on the average control delay across all approaches.

**Note 2:** The worst-performing movement is determined by delay, which may not correspond to the movement with the longest queue.

**Note 3:** Based on Synchro HCM results, reported queue lengths represent the 50th percentile for signalized intersections and the 95th percentile for unsignalized intersections.

**Note 4:** For US 50 and SR 341 intersection, please refer to NDOT Intersection Control Evaluation (ICE) Study (2025).

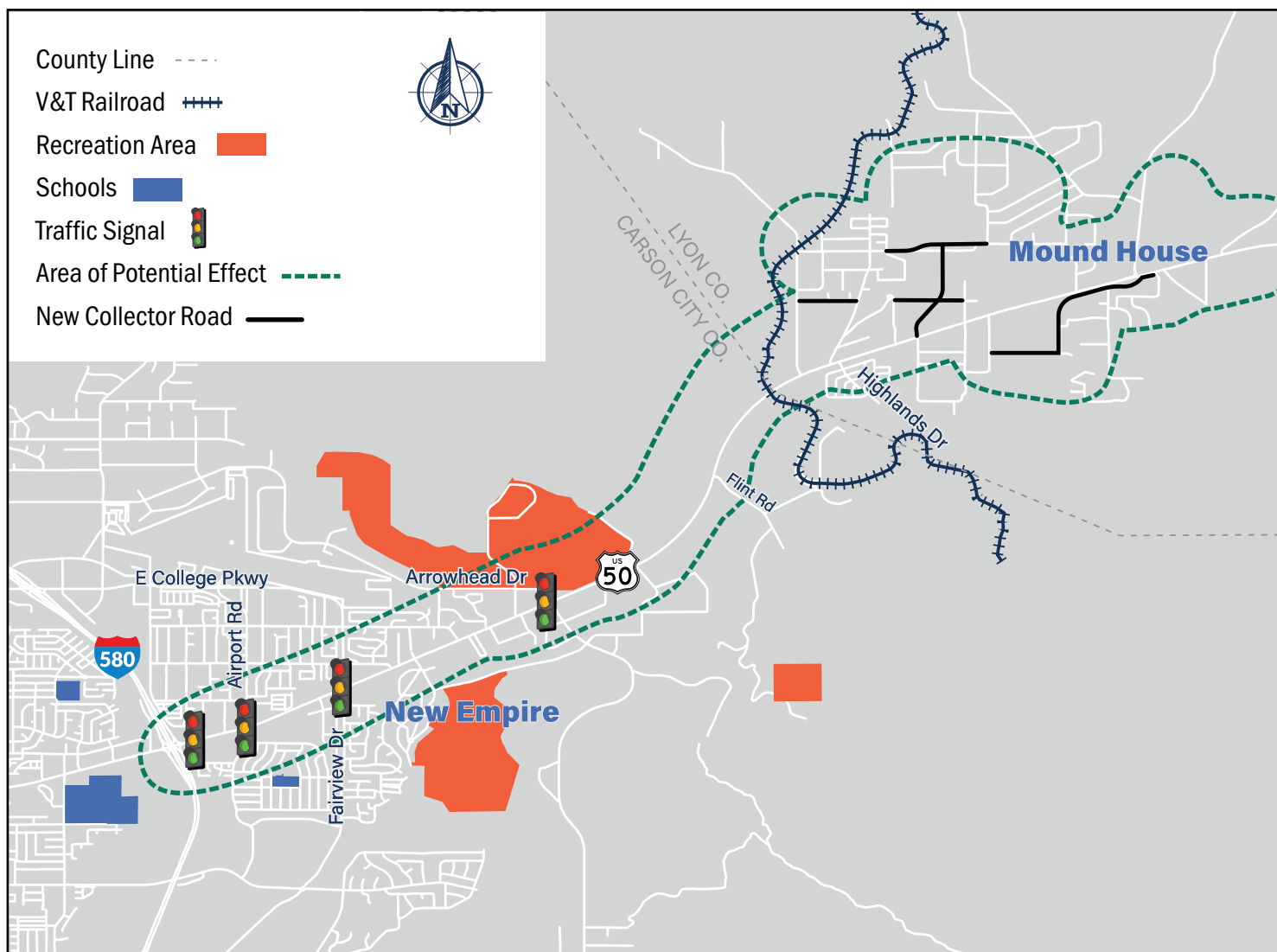
The operations analysis for the Build scenario shows a significant improvement in overall corridor performance compared to the No-Build condition. At a few locations where the results do not indicate improvements, the differences are primarily due to inclusion of safety-focused treatments (such as protected left-turn phasing), which are designed to reduce crash risk and improve safety for all users, even if they result in slightly higher delays for certain movements



## 7. ENVIRONMENTAL PLANNING

A review of Section 106 of the National Historic Preservation Act properties was performed for an assumed Area of Potential Effect (APE) (Figure 12), developed once the conceptual improvements were established. The review consisted of a Class I desktop files survey which is a comprehensive literature and records review to identify potential historical and archeological sites within a project's APE. The survey involved an electronic records search of the Nevada Cultural Resources Information System (NVCRIS) database and National Register of Historic places (NRHP) listings to obtain information on all previously conducted surveys and recorded cultural resources located within a one mile radius of the APE.

**Figure 12: Area of Potential Effect (APE)**



The findings of the Class 1 survey are provided for future Section 106 reviews and SHPO consultation associated with the recommended improvements included as part of this study. Additional details on the cultural resources and associated investigations are provided in Appendix E: .

These resources should be considered as the project implemented and will need to be addressed as part of the SHPO consultation for the project.



Six previously documented cultural resources were found to be located within the project area, (Appendix E, Table 2). In addition to the NVCRIS files search, a review of tax assessor data indicates that up to 36 buildings adjacent to the project area are at least 50 years old and will also need to be considered during SHPO consultation on the project.

Archaeological site locational information is confidential and for official use only—public disclosure of archaeological site locations is prohibited by 16 United States Code (USC) 470hh and 36 Code of Federal Regulations (CFR) 296.18

## Previous Cultural Resource Investigations

No portions of the project area appear to have been comprehensively surveyed (Appendix E, Table 1). There are 27 reconnaissance surveys that intersect the project's direct APE, however, none of them are qualifying (Table 1).





## 8. IMPLEMENTATION AND FUNDING

### 8.1 Implementation and Phasing

Many of the project recommendations in this report are near-term in nature and do not require major capital investment. Planning level cost estimates were developed that include engineering, construction and construction engineering along with a 25% contingency. It is estimated that approximately \$58,250,000 would be needed to implement all the recommended improvements through the year 2050. However, CAMPO and NDOT could take a phased approach to implement the “low hanging fruit” first which would require the least amount of coordinated investment, such as signage and striping improvements. Areas where existing utilities and infrastructure exist (such as an existing power source for PHB should also be considered for early implementation.

### 8.2 Funding Mechanisms and Sources

The following section lists Federal-aid programs that provide funding to NDOT through apportionment, which would be eligible for use on US 50 recommended improvements. The Federal-aid programs are formula-based and generally see a modest increase year-over-year. In Nevada, most Federal-aid programs require a 5% match in local funds to utilize the available funding. It is assumed that NDOT would be the project lead on any improvements as the owner/operator of US 50. Of the funding sources listed below, CAMPO receives an allocation of Surface Transportation Block Grant Program, Transportation Alternatives Set-Aside, and Carbon Reduction Program funds. CAMPO is also eligible to receive Highway Safety Improvement Program funds due to the recently completed LRSP. NDOT may choose to sub-allocate a portion of funds they receive through any of the formula programs.

#### 8.2.1 National Highway Performance Program (NHPP)

The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments in highway construction are directed to support progress toward the achievement of performance targets established in state asset management plans. The US 50 corridor is part of the NHS and would be eligible to receive NHPP funding for the proposed improvements.

#### 8.2.2 Highway Safety Improvement Program (HSIP)

The HSIP is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance. With an average fatality crash rate on this section of US 50 of 117% more than the statewide average, it is a high-ranking candidate for investment of HSIP funds. Nevada received \$27,424,835 in HSIP funds in FY 2023.



## 8.2.3 Surface Transportation Block Grant Program (STBG)

The STBG program provides flexible funding that may be used by states and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, pedestrian and bicycle infrastructure, and transit capital projects. CAMPO is eligible for suballocation of statewide STBG funds as well as those designated for areas between 50,000 and 200,000 population. CAMPO is one of the few regions in Nevada to fall within this population threshold, and therefore would be a good candidate to benefit from a significant portion of these funds.

## 8.2.4 National Highway Freight Program (NHFP)

The NHFP is focused on improving the condition and performance of the National Highway Freight Network (NHFN) and ensuring the network provides the foundation for the United States to compete in the global economy. The NHFN was established to strategically direct Federal resources and policies toward improved performance of highway portions of the US freight transportation system. The section of US 50 from I-580 to SR-341 is designated as a Critical Urban Freight Corridor (CUFC), which is part of the NHFN, making it eligible for NHFP funds.

## 8.2.5 Transportation Alternatives (TA) Set-Aside Funds

The TA Set-Aside from the STBG program provides funding for a variety of typically smaller-scale transportation projects such as pedestrian and bicycle facilities and safe routes to school (SRTS) projects. The current transportation authorization, the Bipartisan Infrastructure Law (BIL), requires states to suballocate 59% of total funds based on population. Similarly to STBG, a portion of TA Set-Aside is suballocated to areas of the state between 50,000 and 200,000 population, in addition to a suballocation for projects in any area of Nevada.

## 8.2.6 Carbon Reduction Program (CRP)

The BIL also established the CRP, which provides funds for projects designed to reduce transportation emissions, defined as carbon dioxide (CO<sub>2</sub>) emissions from on-road highway sources. CAMPO receives a state suballocation for areas of population between 50,000 and 200,000. Any of the proposed pedestrian and bicycle improvements would be an eligible use of CRP funds as it supports non-motorized travel. In addition, items like energy efficient street lighting and traffic control devices, roadway enhancements that improve traffic flow without adding capacity, and infrastructure-based intelligent transportation systems are also eligible.

## 8.2.7 Discretionary Grants

There are frequent grant opportunities through the USDOT, many of which are offered on a recurring basis. Some grants that could potentially align well with the needs and goals of the US 50 corridor include the Better Utilizing Investments to Leverage Development (BUILD) and Safe Streets and Roads for All (SS4A) Programs. Historical grant opportunities are being refined to align with updated administration goals and it is anticipated that new funding opportunities will continue to be announced over the next few years.

While state and local funds are limited, there could be opportunities for funding through other state-run programs or even other sectors such as public health. Oftentimes, programs such as these can be leveraged as a match



to federal funds. In addition, it is always beneficial to capitalize on maintenance or preservation projects by identifying opportunities to add in additional infrastructure improvements where efficiencies can be captured and maximized.

## 8.2.8 SAFE ROADS

On July 1, 2025, USDOT launched the Safe Arterials for Everyone through Reliable Operations and Distraction-Reducing Strategies—SAFE ROADS—initiative to prioritize investments that improve mobility and safety on roadways. The program targets non-freeway arterial roads, which is where more than half of U.S. roadway deaths occur. A [letter from the Transportation Secretary](#) requests that state DOTs coordinate with their MPOs to “develop a list of arterial segments, including intersections, with the highest safety, operational, or compliance concerns that will be addressed by the end of Fiscal Year 2026,” and submit these locations to their FHWA division office. US 50 is a prime candidate for this initiative, and it is recommended that CAMPO coordinate with NDOT to ensure that it is included in NDOT’s list of locations to identify it as a priority for potential future funding opportunities.

## 8.3 Long-Term Considerations

Traffic modeling was completed for the base year and 2050 to better understand how projected growth will change travel conditions along US 50. As discussed in Sections 2, 5, and 6, level of service is expected to decrease at key intersections along the corridor by 2050.

The recommendations made in this report focus on advancing the four goals presented in Section 4. Although each proposed improvement is in alignment with one or more of these goal areas, it is important to note the inherent tradeoffs between transportation-related objectives such as mobility, safety, and accessibility.

The long-term vision for this corridor is a policy discussion requiring input from NDOT, Carson City, Lyon County, and CAMPO. These entities may collectively decide to pursue one of three strategies:

- Managing congestion through system optimization strategies and incremental improvements
- Pursuing a large-scale widening or grade separation project
- Accepting increasing levels of congestion along the corridor, particularly at major intersections

## 8.4 Next Steps

The primary focus of the US 50 East Carson Complete Streets Study was to recommend improvements that enhance safety for all roadway users, while also supporting mobility to the greatest extent feasible. This corridor plays a dual role in the region: it is both a vital segment of the National Highway Freight Network, supporting economic activity and goods movement; and a corridor that runs through residential and mixed-use communities, where residents walk, bike, and access local businesses. The interaction between heavy freight traffic and local road users presents growing safety challenges, particularly as the region continues to develop.

As land use intensifies and new development occurs along the corridor, the potential for congestion, delays, and conflicts between travel modes will increase. While the recommended improvements in this study are designed to improve safety and reduce congestion in the near to mid-term, they may not be sufficient to meet the anticipated demand by 2050 and beyond. Without proactive planning, the existing infrastructure will likely



fall short in accommodating future traffic volumes and capacity needs. To ensure the corridor can meet future demands while maintaining safety and operational integrity, the following strategies could be explored further in future studies/plans:

- **Access Management Policies Specific to US 50:** As growth continues along the US 50 corridor, the existing continuous two-way left-turn lane (TWLTL) will become increasingly unsafe due to the rising number of turning conflicts and direct access points. A corridor-specific access management policy could proactively identify the issues and address these risks. This strategy could include converting portions of the TWLTL into raised medians, which reduce conflict points and improve safety, as well as constructing frontage roads in select segments to consolidate driveway access and minimize mid-block turning movements. These measures would help preserve traffic flow while significantly lowering the likelihood of severe crashes as development intensifies.
- **Alternative or Parallel Routes for Emerging Development Areas:** Future development is expected to place considerable traffic demand on major intersections such as College Parkway/Fairview Drive and Arrowhead Drive/Deer Run Road, potentially leading to severe congestion and operational challenges. To relieve this demand, an alternative or parallel access route could be an option. This may need conducting detailed Origin-Destination (O-D) analyses using travel demand models and local development forecasts to better understand future traffic patterns. Findings from such analyses could potentially support the creation of new signalized intersections between College Parkway/Fairview Drive and Arrowhead Drive/Deer Run Road intersections, distributing traffic more evenly and reducing the burden on these already constrained intersections.
- **Multimodal Demand Management and Mode Shift Strategies:** Preserving long-term corridor performance will require reducing reliance on single-occupancy vehicles and encouraging a greater share of trips by transit, bicycling, and walking. A mode share analysis can be conducted to evaluate the realistic potential for shifting trips away from automobiles along US 50. Based on these results, the region can consider targeted investments in transit service, active transportation infrastructure, and supportive policies or incentive programs that make alternatives to driving more convenient and attractive. By diversifying travel modes, congestion can be mitigated while creating a safer and more balanced transportation system for all users.
- **Increasing Capacity along US 50 Corridor:** The improvements identified in this study assume that two general-purpose lanes in each direction will be sufficient to manage corridor operations in the short to mid-term. However, as development increases, localized capacity enhancements may be warranted at select intersections or segments. Any such expansions must be pursued cautiously, paired with robust access management measures to avoid creating a high-speed, high-crash corridor. Without strong controls on access, additional lanes could exacerbate conflict points and undermine safety outcomes. The long-term vision for US 50 should balance the need for added capacity with the equally critical goal of maintaining a safe, reliable, and context-sensitive corridor.
- **Potential Revision to Carson City LOS Policy:** The Carson City Development Code, Streets and Traffic section currently requires that traffic operations maintain a Level of Service (LOS) D or better in support of a safe, efficient, and convenient transportation system. Given the existing high traffic volumes and the scale of future development anticipated along the US 50 corridor, the LOS D policy may warrant reconsideration. Specifically, revising the requirement to LOS E (at least for certain segments of US 50) could better balance mobility expectations with realistic operating conditions along this constrained and heavily utilized corridor.



## 8.4.1 Regional Coordination

Regional Coordination with NDOT, Carson City, and Lyon County staff is an essential first step to ensure that there is support and agreement on project concepts and above-mentioned strategies. Agency leads for projects will need to be identified as well as anticipated funding sources and implementation scheduling prior to programming projects in the TIP and STIP. It is recommended that CAMPO focus on short-term projects for inclusion into these programs and that any projects considered for NDOT implementation be moved forward through the One Nevada process for prioritization. Opportunities for coordination with other projects or programs in the vicinity, such as a potential pavement improvement project, signal upgrade, or planned safety improvement, should be explored as well. This approach can lead to potential cost-sharing and efficiencies that allow for greater overall benefit in project outcomes. Long-term projects that require further scoping and greater funding needs should be included in the RTP (through an amendment or future update), ideally as part of the fiscally constrained program, or at least in the unfunded project list, to establish purpose and need. When feasible, project development should be refined to better position for future funding opportunities that align with specific discretionary grants or changes to federal formula funds. If appropriate, phasing could be considered on large-scale projects to make incremental progress when funding is limited. Any project recommendations that require right-of-way should be initiated as early as possible once funding has been identified to avoid significant cost increases and legal delays.

