Appendix E: Air Quality Conformity Analysis



TABLE OF CONTENTS

TABLE OF CONTENTS	1
1. INTRODUCTION	3
Background	3
Contents	3
2. AIR QUALITY CONFORMITY PROCESS	4
Background	4
Conformity Guidelines and Interagency Consultation	4
State Implementation Plans Relating to Clark County	5
Motor Vehicle Emissions Budgets	7
Ozone Emission Budgets	7
Mobile Source PM10 Emission Budgets	7
Mobile Source CO Emission Budgets	8
Conformity Procedures	8
3. FORECAST POPULATION AND EMPLOYMENT	9
Background	9
Population Forecasts	9
Employment Forecasts	9
4. TRAVEL DEMAND FORECAST MODEL	
Introduction	
Model Overview	
Model Zone Structure	14
Roadway Functional Classification	15
RTP Horizon Year Networks	16
TDM Output Summary	
Air Quality (MOVES4) Interface	21
5. EMISSION FORECAST METHODOLOGY	22
MOVES Methodology	22
VMT Adjustment Factors	22
PM10 Fugitive Emissions Methodology	24
PM10 Roadway Emissions Calculation	24
Roadway Construction PM_{10} Emissions	25

	CONSTRUCTION: Highway Construction PM10 Emission Rates	25
	WIND EROSION: Highway Construction Emission Calculations for PM_{10}	26
6.	EMISSIONS CALCULATIONS	27
	Ozone	27
	PM10	28
	Carbon Monoxide	31
7.	TRANSPORTATION CONTROL MEASURES	32
	Background	32
	Statement of TCM Progress and TCM Certification	32
8.	CONCLUSION	35

1. INTRODUCTION

Background

A necessary component of any Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP) is air quality conformity analysis. Since 1991, air quality and transportation have been linked through a process known as transportation plan conformity. Conformity is a demonstration that the levels of emissions from travel on the transportation system are consistent with the goals for air quality in the State Implementation Plan (SIP) that is a control plan developed by the State of Nevada's air quality planning agencies.

The RTP/TIP shall include a determination that the plan implementation will reduce certain pollutants to the acceptable levels in ways that conform in the SIP. The term "conformity" describes the determination of this acceptable result. Supporting the determination is a complex modeling process that assumes all projects and programs in the RTP/TIP are implemented as scheduled. The conforming RTP/TIP projects shall reduce the pollutants to acceptable levels within an acceptable time frame to meet the National Ambient Air Quality Standards (NAAQS). Failure to demonstrate conformity may result in withholding of federal funding and associated project approval. Figure 1 shows the linkage between air quality planning and transportation planning toward the conformity determination.



Source: Transportation Conformity: A Basic Guide for State & Local Officials, U.S. Department of Transportation Federal Highway Administration FHWA-HEP-17-034, Revised February 2017.

To this end, the current RTP and TIP, *Let's Go 2050 (RTP 2025-2050)* and *TIP 2025-2029*, respectively, are evaluated for air quality conformity. This document summarizes the analysis conducted to make a conformity determination.

Contents

This determination of conformity begins with a discussion of the conformity process, conducted for both the RTP and TIP, and documentation of emissions budgets. Next, a summary of the travel demand model (TDM) and its role in providing key information for input to the emissions analysis for the different horizon years is given. Lastly, forecast emissions are measured against their respective budgets for the modeled horizon years and a determination of conformity is made.

2. AIR QUALITY CONFORMITY PROCESS

This section describes the process for conducting the air quality conformity analysis as part of the *Let's Go 2050 (RTP 2025-2050)* and *TIP 2025-2029*. It includes a general discussion of the conformity guidelines, the SIP applicable to Clark County, the emission budgets for key pollutants for which conformity is sought, and the procedures for determining conformity.

Background

The SIP defines how the area shall act to improve air quality to meet the NAAQS and emission targets. The target or pollution limits are defined as "budgets" for transportation related emissions. These standards are set for several pollutants that can cause respiratory diseases and other health problems. A region that exceeds the maximum threshold for a given pollutant is defined in the Clean Air Act (CAA) as being non-attainment. Non-attainment is the term to describe the level of the pollutants that U.S. Environmental Protection Agency (EPA) designated as not meeting the clean air standards for the pollutant. The Clean Air Act Amendments of 1990 (CAAA) requires each non- attainment area to address the pollutant issue by way of the SIP.

There are six primary pollutants defined in NAAQS:

- Carbon monoxide (CO)
- Particulate matter 10 microns in size or less (PM₁₀) and 2.5 microns in size or less (PM_{2.5})
- Ozone (O₃)
- Sulfur dioxide (SO₂)
- Lead
- Nitrogen dioxide (NO₂)

Many of these pollutants are produced by automobiles and other transportation modes and are classified as "mobile source emissions".

Conformity Guidelines and Interagency Consultation

As stated in *Transportation Conformity: A Basic Guide for State and Local Officials*¹, the concept of transportation conformity was introduced in the Clean Air Act (CAA) of 1977. The conformity process provides a provision to ensure the transportation investments conform to the state's SIP to meet the federal air quality standards. The transportation conformity regulations establish the criteria and procedures for transportation agencies to demonstrate that air pollutant emissions from metropolitan transportation plans or regional transportation plans (RTP), transportation improvement programs (TIP) and projects are consistent with ("conform to") the State's air quality goals in the SIP. Transportation conformity is required under CAA Section 176(c) to ensure that federally supported transportation activities are consistent with ("conform to") the purpose of a State's SIP.

Conformity requirements apply in areas that either do not meet or previously have not met national ambient air quality standards (NAAQS) for ozone (O3), carbon monoxide (CO), particulate matter (PM10 and PM2.5) or nitrogen dioxide (NO₂). These areas are known as "nonattainment areas" and "maintenance areas," respectively. Conformity applies to long-range metropolitan transportation plans (such as *Let's Go 2050 (RTP 2025-2050)*, transportation improvement programs (such as *TIP 2025-2029)*, and transportation projects funded or approved by Federal Highway Administration (FHWA) or Federal Transit Administration (FTA).

¹ U.S. Department of Transportation Federal Highway Administration FHWA-HEP-17-034, Revised February 2017.

A conformity determination demonstrates that implementation of the RTP, TIP, or project will not cause any new violations of the air quality standard, increase the frequency or severity of violations of the standard, or delay timely attainment of the standard or any interim milestone. For RTP and TIP conformity, the determination shows that the total emissions from on-road travel on an area's transportation system are consistent with goals for air quality found in the SIP. Before a SIP is available, other tests of conformity are used.

Conformity determinations are made by FHWA/FTA while Metropolitan Planning Organization (MPO) policy boards make initial conformity determinations for metropolitan transportation plans and TIPs in metropolitan areas. A formal interagency consultation process is required for developing SIPs, RTPs, TIPs and making conformity determinations. The process includes the EPA, FHWA, FTA, and state and local transportation and air quality agencies.

Conformity determinations must be made at least every four years but may occur more often if RTPs or TIPs are updated more frequently or amended with nonexempt projects. Also, conformity determinations must be made within 24 months after SIP motor vehicle emission budgets (MVEB) are found adequate or approved, whichever is first.

The specific procedures are those established under federal law for ensuring conformity between transportation plans and air quality improvement plans. This process of conformity is intended to ensure that the projects and programs proposed in the RTP, TIP and TIP amendments conform to the purpose of the CAA and the SIPs. This means "...conformity to the (implementation) plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards...". The provisions of the CAAA in relation to conformity are amplified in EPA Final Rule, 40 CFR Part 93, as amended September 15, 1997.

Consultation is required when making a conformity determination, developing or revising a RTP, TIP, or SIP (40 CFR 93.105(a)(1)). The RTC of Southern Nevada, as the MPO for the region, shall consult with all concerned agencies, including the Clark County Department of Environment and Sustainability's Division of Air Quality (hereinafter referred to as "CCDES" or "Clark County DES". CCDES was formerly called Clark County Department of Air Quality, and Clark County Department of Air Quality and Environment Management), Nevada Department of Transportation (NDOT), Nevada Division of Environmental Protection (NDEP), EPA, U.S. Department of Transportation (DOT), FHWA, and FTA, before making conformity determinations, or before developing or revising a RTP or TIP. In addition, the RTC shall ensure that the public and any interested organizations can participate in the planning process. Similarly, the CCDES shall consult with these agencies and the RTC before developing or revising a SIP that establishes motor vehicle emission budgets. (Clark County Transportation Conformity Plan, January 2008).

State Implementation Plans Relating to Clark County

Within the RTC planning area, Hydrographic Area (HA 212) is currently designated as a moderate nonattainment area for the 2015 ozone standard. HAs 212/164A&B/165-167/213/214/216-218, excluding the areas within Moapa River Indian Reservation and Fort Mojave Indian Reservation are designated maintenance areas for the 1997 ozone standard.² HA 212 is a maintenance area for the PM₁₀ standard and encompasses the Bureau of Land Management (BLM) Southern Nevada Public Lands Management Act (SNPLMA) disposal area³. In October 2021, the EPA approved Clark County's Second 10-Year CO Maintenance Plan⁴, which is a Limited Maintenance Plan (LMP).⁵ Federal regulation states that areas that qualify for an LMP may demonstrate conformity without a regional emissions analysis because it is unreasonable to expect that such an area will experience so much growth in the 10-year period of the LMP that a violation of the CO NAAQS would result. Thus, this RTP is not required to have regional emissions analysis for CO

² 89 FR 23916 (April 5, 2024) [federalregister.gov].

³ 79 FR 60078 (October 6, 2014) [federalregister.gov].

⁴ 86 FR 58579 (October 22, 2021) [federalregister.gov].

⁵ A Limited Maintenance Plan is a streamlined demonstration of conformity to a particular pollutant based on an expectation that future violations of an air quality standard are unlikely to occur because emissions are less than or equal to 85 percent of the NAAQS standard and historically are so.

conformity demonstration. The RTC planning area is in attainment or otherwise unclassifiable for other pollutants. Figure 2 illustrates the area designations in Clark County for these key pollutants.





Motor Vehicle Emissions Budgets

The principal step towards making a conformity determination is to demonstrate that the anticipated levels of atmospheric pollution which will result from planned and programmed transportation projects will be less than the relevant budgets defined in the SIPs. The ozone and PM10 budgets developed by the Clark County DES and established in the Maintenance Plan are used in the conformity findings for this *Let's Go 2050 (RTP 2025-2050)* and *TIP 2025-2029*.

Ozone Emission Budgets

Two precursors of ozone are volatile organic compounds (VOC) and the oxides of nitrogen (NO_x). Table 1 describes the motor vehicle emissions budgets (MVEB) for ozone set forth in the Maintenance Plan.

(HA 212 164A 164B 165-167 213 214 216-218 Excluding the Indian Reservations)						
Year	NOx (tons/day)	VOC (tons/day)				
2025	26.77	20.92				
2030	26.77	20.92				
2040	23.35	15.51				
2050	23.35	15.51				

Table 1: MVEB for Las Vegas Area Ozone Source Emissions Budgets

Source: Revision to Motor Vehicle Emissions Budgets for the 1997 Ozone NAAQS, 2nd Maintenance Plan, CCDES, 2021 (effective May 2024).

Mobile Source PM₁₀ Emission Budgets

Table 2 shows the MVEB set forth for PM_{10} in the Maintenance Plan.

Table 2: MVEB for Las Vegas Area PM₁₀ Source Emissions Budgets (BLM/SNPLMA Disposal area within HA 212)

Year	PM ₁₀ (tons/day)
2025	141.41
2030	141.41
2040	141.41
2050	141.41

Source: Redesignation Request and Maintenance Plan for PM10, Clark County DES, August 2012.

Mobile Source CO Emission Budgets

As reported above, this RTP does not require a regional emissions analysis for conformity determination as the CO maintenance plan is a Limited Maintenance Plan. Accordingly, Table 3 shows there are no CO emissions budgets for this analysis area.

Year	CO (tons/day)
2025	N/A
2030	N/A
2040	N/A
2050	N/A

Table 3: Mobile Source CO Emissions Budgets for HA 212

Source: 2nd 10-Year CO Limited Maintenance Plan, CCDES, May 2019.

Conformity Procedures

Under Federal regulations, conformity must be determined for a series of "horizon" years. These must include the designated attainment year, if applicable, and the last year of the Transportation Plan and they must be not more than 10 years apart. For this conformity determination, conformity is performed for ozone and PM₁₀ for 2025 (RTP base year), 2030, 2040, and 2050 (RTP last horizon year). Year 2022 is also modeled as it is the base year of the TDM.

Key technical steps leading to the conformity determination are outlined below and detailed in the ensuing sections of this report:

- Each horizon year forecast population and employment for the region are documented, as these are key drivers of vehicular travel and hence, motor vehicle emissions.
- All regionally significant transportation projects are included in the RTC2022TDM for the appropriate horizon year(s).
- The RTC2022TDM is run for each horizon year required for the conformity analysis to produce forecast vehicle miles of travel (VMT) and travel speeds throughout the region.
- The TDM output VMT and speed information are used as input to the MOVES4 emissions model. MOVES4 is run for the same horizon years to yield mobile source emissions, except for PM₁₀ which are calculated separately.
- The emission benefits from transportation control measures (covered in section 7) may be subtracted from the modeled vehicle emissions to produce a forecast of net mobile source emissions.
- The resulting forecast net emissions are then compared with the mobile source emissions budgets to facilitate the conformity finding.

3. FORECAST POPULATION AND EMPLOYMENT

Background

Among the key planning assumptions of the air quality emission analysis are the land use, population, and employment projections. They are used to determine the future travel demand, travel patterns and the effects on the mobile source emissions in the model horizon years.

Due to the complexity of land-use forecasting, the Southern Nevada Regional Planning Coalition (SNRPC)⁶ formed a Land Use Working Group (LUWG) at the request of Regional Transportation Commission of Southern Nevada (RTCSNV). The LUWG is responsible for providing forecasted land use activity for the RTC. The LUWG consists of planning staff from the RTC, Clark County, City of Las Vegas, City of North Las Vegas, City of Henderson, Southern Nevada Water Authority, Clark County Water Reclamation District, Harry Reid International Airport, Clark County School District, Nellis Air Force Base, and from other planning entities. According to the inter-local agreement and established practice, the population and employment used in this analysis are based on the baseline projections developed by Clark County and local government land use planning staff. The total projections from this baseline are matched to the control total projections published by the Center for Business and Economic Research (CBER) at the University of Nevada, Las Vegas. The CBER forecasts are approved by the LUWG as a control total for Clark County as a whole. The land use projections are converted into the RTC model input as Planning Variables. For the development of the Planning Variables, refer to Let's Go 2050 Appendix D -Regional Planning Forecasts and Planning Variable.

Population Forecasts

Population forecasts are prepared annually by the CBER at the University of Nevada, Las Vegas. The projection issued in May 2023, covering the period from 2015 through 2050, was adopted as the population control totals for Clark County in conjunction with the employment forecasts. Table 4 summarizes the forecast population.

Year	Population
2025	2,438,000
2030	2,645,000
2040	2,848,000
2050	3,014,000

Table 4: Population Forecasts for Clark County, Nevada

Source: Center for Business and Economic Research at University of Nevada, Las Vegas, May 2023.

Employment Forecasts

The RTC's 2022 TDM uses a different classification of employment variables than predecessor RTC TDMs. Specifically, employment is now categorized by North American Industrial Classification System (NAICS) instead of more broadly defined land use categories. Table 5 summarizes the Clark County employment forecasts by NAICS for the different horizon years.

⁶ In its 1997 session, the Nevada State Legislature enabled the formation of the Southern Nevada Regional Planning Coalition (SNRPC). There are ten members in the Coalition membership and Board. Two elected officials are appointed by the governing body of each public entity (except Boulder City and the Clark County School District with one appoint member each). The SNRPC conducts some of its business through subcommittees.

NAICS Industry	Code	2022 ¹	2025	2030	2040	2050
Ag, Forestry, Fishing & Hunting	11	2,059	2,059	2,133	2,133	2,133
Mining	21	302	302	313	313	313
Utilities	22	3,163	3,414	3,675	3,946	4,178
Construction	23	66,542	69,264	74,869	79,044	81,776
Durable & Non-Durable	31-33	26,760	28,251	30,711	33,058	34,942
Wholesale Trade	42	19,877	21,045	23,325	25,561	27,390
Retail Trade	44-45	102,341	107,319	117,035	126,563	134,355
Transp. & Warehousing	48-49	73,461	78,991	86,250	97,661	107,299
Information	51	8,117	8,997	9,876	10,769	11,413
Finance and Insurance	52	24,750	25,884	27,397	27,403	27,403
Real Estate, Rental & Leasing	53	18,977	20,329	22,221	23,911	25,208
Prof., Scientific & Tech. Services	54	37,026	37,026	41,960	47,789	53,067
Mgmt. Companies and Enterprises	55	19,941	21,690	25,207	30,308	35,331
Admin. and Support and Waste Services	56	71,073	77,255	88,882	105,241	121,172
Educational Services (Public and Private)	61	44,271	49,343	54,644	62,751	69,269
Health Care and Social Assistance	62	98,181	103,046	112,419	122,272	130,670
Arts, Entertainment and Recreation	71	24,207	25,015	26,277	26,277	26,331
Accommodation & Food Services Constrained Unconstrained	72	244,886 244,886	252,324 252,324	282,183 282,183	302,969 315,828	319,708 336,984
Other Service	81	23,325	25,303	28,030	31,474	34,594
Public Admin.	92	50,624	52,809	56,075	60,442	64,585
Undet. Industry	99	2,187	2,372	2,628	2,951	3,244
TOTAL						
Constrained		961,549	1,012,039	1,116,111	1,222,837	1,314,382
Unconstrained		961,549	1,012,039	1,116,111	1,235,696	1,331,657

Table 5: Final Clark County Employment Forecasts by NAICS

¹Nevada Department of Employment Training and Rehabilitation (DETR).

Source: Planning Variables Methodology and Development, RTC, August 2024.

The Table 5 employment includes special generator employment, such as the air force bases, airports, colleges, and universities within Clark County. Table 6 enumerates the special generator employment forecasts and indicates in which NAICS industry code (Table 5) the special generator is included.

Table 6: Special Generator Information

		2022		2025		2030		2040		2050		
Special Generator	NAICS Code	TAZ	Enrollment/ Passengers	Employment								
Creech Air Force Base	92	2595		4,320		4,320		4,320		4,320		4,320
Nellis Air Force Base (Zone 1)	92	2105		12,965		13,354		14,021		15,458		17,043
Nellis Air Force Base (Zone 2)	92	2128		2,100		2,163		2,271		2,503		2,760
Harry Reid International Airport	48-49	1	144,000	21,123	154,000	22,500	174,000	25,000	158,000	25,000	178,000	25,000
Southern Nevada Supplemental Airport	48-49	2542	_	_	_	_	_	_	58,000	6,700	90,000	12,500
University of Nevada, Las Vegas—Main Campus	61	49	25,045	3,792	25,350	3,838	27,205	4,119	31,346	4,746	36,141	5,472
University of Nevada, Las Vegas—Shadow Lane Campus	61	683	318	286	322	290	345	311	398	358	459	413
University of Nevada, Las Vegas—North Las Vegas Campus (Zone 1)	61	2323	_	_	_	_	1,750	130	3,500	259	5,250	389
University of Nevada, Las Vegas—North Las Vegas Campus (Zone 2)	61	2409	_	_	_	_	3,250	241	6,500	482	9,750	722
Nevada State University	61	2284	2,533	333	2,598	339	3,317	443	4,458	705	5,483	1,148
College of Southern Nevada—Charleston Campus (Zone 1)	61	1097	8,303	583	8,720	612	9,450	664	8,791	617	8,791	617
College of Southern Nevada – Henderson Campus (Zone 2)	61	1903	3,208	161	3,369	169	3,651	183	3,397	170	3,397	170
College of Southern Nevada – North Las Vegas Campus (Zone 3)	61	1706	5,791	392	6,082	412	6,591	446	6,132	415	6,132	415
High-speed Rail Station ¹	48	139	_	_	_	_	41,644	_	60,274	_	66,301	—

¹The employment consists of station and on-train employees (NAICS 48), assumed to be 120 starting in 2028 and increasing to 230 starting in 2038 when train frequency is scheduled to increase from 46 to 90 daily runs. This employment is represented separate from the special generator file. Source: RTC, 2024

4. TRAVEL DEMAND FORECAST MODEL

Introduction

In the Summer of 2024, RTC completed the update of its travel demand model, named RTC2022TDM, where 2022 refers to the base or calibration year of the model. Prior to its release, the RTC 2015 Model was used. The new RTC2022TDM is a "hybrid" model, meaning it has elements of the previous four-step model blended with elements typically found in activity based models (ABM). The principal among these elements is a population synthesizer and destination choice/trip distribution components that produce tours rather than trips. Traditional four-step models are aggregated in nature and limited in their ability to capture the complexities or nuances of travel demand. Hybrid models, on the other hand, are more robust and provide at least some connections between trips and offer improved consistency with tours. Travel in hybrid models is segmented by types of tours.

The RTC2022TDM utilizes the latest travel survey information collected for the model update—a household travel survey, a visitor survey, and transit on-board survey, all collected in 2023. The source of validation traffic counts is 2022 NDOT counts. The new model's geographic domain has expanded to encompass all of Clark County, too, and now has 2,677 traffic analysis zones (TAZ). The RTC2022TDM uses TransCAD version 10.0 software platform, developed by Caliper Corporation of Newton, Massachusetts.

The RTC2022TDM is the approved travel demand model for use in regional planning applications. This model is used in the development of the current RTP "Let's Go 2050 (RTP 2025-2050)" and the current transportation improvement plan, or TIP 2025-2029.

Model Overview

RTCSNV's new hybrid travel demand model balances fidelity and running time by forecasting detailed, disaggregate outcomes (at the level of individual households, persons and tours) for the most critical mandatory travel decisions while switching to a simpler, aggregate, trip-based approach for all other travels.

Mandatory (i.e. work, school, university) activities are associated with destination zones and tour characteristics (frequency, mode and time of day). Potential stops to and/or from the main activity location, with information about the location and activity duration of these stops round out the tour. The mandatory models are sensitive to key household variables (such as auto sufficiency levels and income), built environment factors (e.g. transit stop density, employment density and transit/walk accessibility), and network level-of-service effects that capture congestion.

Detailed tracking of vehicle use within each household maximizes the utilization of available vehicles through a tiered priority list, and explicit assignment of adults for school drop-off and pick-up ensures consistency of schedules and mode.

Such a detailed treatment of mandatory tours is achieved with a state-of-the-art and efficient population synthesizer that enumerates each person and household in the region. For university-related travelers, dorm residents were also added to this synthetic population.

Non-mandatory travel is captured via a traditional trip-based approach, though mode and destination shares are predicted with aggregate logit models that provide more trip distribution fidelity than gravity models. Non-home-based travel is further anchored on home-based trip attractions to capture the often-complementary relationship between these two types of travel decisions.

Special markets such as air force bases, airport trips, visitors, and high-speed rail are captured in the model. Visitor travel, crucial to Las Vegas, is expanded from prior approaches by differentiating between trips that start or end near the visitors' hotel or lodging location, and other trips. Decision tree-based machine learning algorithms were deployed to estimate the associated trip rates. Trips made by trucks and those entering/leaving the region were estimated from Big Data and external station counts, respectively.

The RTC2022TDM exploits TransCAD's modern flowchart graphical user interface for unparalleled transparency and ease of managing/analyzing scenarios. The interface includes custom calibration tools to adjust model constants to match survey totals, with the base year model outputs successfully validated against observed link count data. The model implementation leverages TransCAD's Master Network solution for easy, error-free maintenance of future highway and public transit projects that are automatically activated based on the scenario year. Also included are various reports and post-processes, including support for the necessary emissions analysis. Figure 3 illustrates the RTC2022TDM basic flowchart. The steps shown in the flowchart are briefly summarized in the bullets following.



Figure 3: RTC2022TDM Flowchart

- Population Synthesis This first step takes the zonal population and employment information along with 2020 Census block and block group-based control totals and seed information to produce a full (synthetic) enumeration of the resident population and households. A visitor synthesis is applied to visitors to the region.
- Initialization This step prepares the roadway and transit networks for use in the modeling realm.
- Skim Matrices Computes the shortest path time and distance for all zone-to-zone movements for roadway, transit, bicycle, and walk networks. Additionally, transit skims are produced for the various components of using transit including fare, number of transfers, in-vehicle time, various out-of-vehicle time elements, and access drive distance.
- Accessibility Computes the logsum calculation from the destination choice (trip distribution) model. Also measures how accessible various demographics are within a set distance of each TAZ, and the accessibility of various modes—auto, transit, and non-motorized—for zone-to-zone movements.
- Mandatory Tours This step outputs mandatory (i.e., work, school, and university) tours made by the population, and includes characteristics of the tour including household and person ID, purpose, home/origin and mandatory activity destination zones, travel mode(s), tour and activity start/end times, intermediate stops, and sub-tours as necessary. Mandatory in this sense describes workers and students are expected to perform these activities (i.e., travel to the same work or school location on a recurring basis). The tour outputs are converted to mandatory trip outputs containing similar information as the tour segments with an added field to indicate if the trip should be included in the assignment step.
- Non-Mandatory Trips This step produces mode-specific zone-to-zone trip matrices by trip purpose and time of day for non-mandatory trip-making.

- Non-Resident Trips This encompasses generation and distribution of lodging and non-lodging-based trips made by visitors to the region, heavy truck trips, external trips, and special trips such as single- and multi-day airport trips and special generator trips.
- Highway Assignments This step assigns the relevant vehicle trips to the roadway network and outputs vehicle flows, speeds, travel times, VMT and VHT by link and time of day.
- Feedback Once congested travel times are computed in the previous step, this information is fed back to the Skim Matrices step and the model flow is repeated with the updated skim information until assignment convergence.
- Select Link and Turn Following assignment convergence, the model can output (if requested) select link path and flow information as well as intersection turning movements.
- Public Transit Assignments Transit ridership flows by route and route segment are produced, along with transit boardings and alightings by route and stop.
- Reports Various reports and files summarizing the modeled scenario are output. Among the reports produced are VMT and VHT aggregations by area type, functional classification, and speed category for air quality analysis.

Model Zone Structure

The number of TAZs has been increased from 1,647 to 2,677 to accommodate higher granularity modeling and include all of Clark County. TAZ boundaries were largely determined by 2020 census block groups, major roadways or railways, census published employment concentration⁷, natural features, as well as from input from the land use working group. Figure 4 illustrates the new TDM zone system focusing on the Las Vegas Valley portion of Clark County.

⁷ U.S. Census Bureau. LEHD Origin-Destination Employment Statistics Data (2002-2021). Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program, accessed at https://lehd.ces.census.gov/data/#lodes. LODES 8.1





Roadway Functional Classification

Figure 5 depicts the functional classification for the 2022 base year roadway network, focusing on the Las Vegas Valley region within Clark County.



Figure 5: 2025 RTP Base Year Functional Classification in Las Vegas Valley Portion of Clark County

RTP Horizon Year Networks

Those non-exempt air quality projects identified by the RTP are coded onto the 2022 base year roadway network to create 2025, 2030, 2040, and 2050 horizon year networks which form the basis for the transportation supply input to the TDM. The demand for transportation comes from the forecast population and employment information. The TDM is then run to produce outputs necessary for air quality conformity analysis. Both the non-exempt and exempt air quality project lists are presented as Let's Go 2050 Plan Non-exempt Project List and Let's Go 2050 Plan Exempt Project List and are included as this report's Appendix 1 and Appendix 2.

Table 7 summarizes the incremental change in both roadway miles and lane miles between RTP analysis years associated with the projects identified in the Let's Go 2050 Plan Non-exempt Project List. This information is subsequently used as one emissions component in the overall PM₁₀ emissions analysis.

Eurotional Classification	2022		2025		2030		2040		2050	
(ID)	Link Miles	Lane Miles	Link Miles	Lane Miles						
Interstate (1)	68	451	68	494	67	506	67	511	67	511
Freeway/Expressway (2)	60	385	60	395	63	432	63	433	69	473
Principal Arterial (3)	141	871	142	884	141	873	141	876	145	903
Minor Arterial (4)	528	2,558	537	2,625	549	2,690	551	2,703	554	2,716
Major Collector (5)	2	4	2	4	2	4	2	4	2	4
Minor Collector (6)	617	1,962	625	2,013	621	2,042	638	2,090	630	2,080
Local (7)	597	1,398	600	1,401	599	1,398	598	1,394	596	1,389
System Ramp (8)	34	53	43	67	48	82	49	85	51	86
Ramp (9)	168	230	169	234	172	241	177	248	183	254
Transit Only (98)	17	41	17	41	17	41	17	41	17	41
Centroid Connector (99)	1,384	2,768	1,385	2,770	1,385	2,770	1,383	2,767	1,383	2,765
Externals (101)	0	0	0	0	0	0	0	0	0	0
Totals	3,615	10,720	3,647	10,927	3,664	11,079	3,685	11,151	3,696	11,222
Change vs. 2022			33	207	50	359	70	431	81	502
Change vs. 2025					17	152	38	224	48	295
Change vs. 2030							20	72	31	143
Change vs. 2040									11	70

Table 7: Incremental Change in Road Miles and Lane Miles Associated with RTP Projects within PM₁₀ Geography

TDM Output Summary

The RTC2022TDM produces a significant amount of information for a given scenario. This section provides a very highlevel summary, focusing on the change in trips output by the model over the RTP planning horizon. Average daily tripmaking by mode for each modeled scenario in the planning period is shown in both Figure 6 and Table 8. Overall, trips are forecast to increase by 0.8% compounded annually over the 28-year period. Trips increase across all modes proportionally about the same over the planning horizon. By 2050, private auto trip share (both drive-alone and high occupancy vehicle) will decrease slightly with increasing transit and non-motorized shares offsetting that decrease.



Figure 6: Trips by Mode by Year

Source: RTC2022TDM

Year	Drive Alone	HOV	TNC	School Bus	Transit	Non- Motorized	Trucks	Total
2022	47.0%	39.2%	2.1%	2.7%	2.1%	5.7%	1.1%	100%
2025	47.1%	39.2%	2.0%	2.7%	2.2%	5.6%	1.2%	100%
2030	47.1%	39.2%	2.1%	2.7%	2.2%	5.5%	1.2%	100%
2040	46.8%	39.2%	2.1%	2.7%	2.3%	5.7%	1.2%	100%
2050	46.7%	39.1%	2.2%	2.6%	2.3%	5.9%	1.2%	100%

Table8: Trip Shares by Mode by Year

Source: RTC2022TDM

Figures 7 through 9 illustrate the assignment of vehicle trips to the roadway network in each of the RTP years. The red bands on each of the figures denote the forecast daily traffic volume on the road at a given location, with the thickness of the band proportional to the assigned volume. Note while the RTC2022TDM encompasses all of Clark County, Figures 7 through 11 focus on showing the Las Vegas Valley region of the county to be able to more clearly see volume gradations on the network.



Figure 7: 2022 Daily Volumes

Figure 8: 2025 Daily Volumes



Figure 9: 2050 Daily Volumes



Air Quality (MOVES4) Interface

After a full model run of a horizon year scenario, RTC2022TDM comes with a post-processing tool that can automatically produce a series of outputs necessary to run MOVES4. These include a ratio of observed count over modeled volume by urban code and functional class for the 2022 base year, and a series of VMT and VHT aggregations by urban code and functional class for the relevant air quality geographic areas for every TDM scenario year.

The count-to-model volume ratio file for the 2022 base year supplies urban code/functional class-specific correction factors which get applied to the output VMT. The factors account for differences that exist between observed traffic counts and model estimated volumes for the base year and get applied to all scenario years. Thus, if the RTC2022TDM is 5 percent low collectively on minor arterials in the urban areas, the output VMT for this classification is increased by 5 percent to reflect this under assignment.

Should a pollutants' geographic area for which emissions are to be measured change over time, the geography file must be updated before utilizing the air quality output files in MOVES4. For this RTP, each pollutant's geography files reflect the proper areas designated in the SIP.

5. EMISSION FORECAST METHODOLOGY

MOVES Methodology

Mobile source emissions for CO and Ozone were calculated using an emissions inventory developed through the Motor Vehicle Emissions Simulator (MOVES) model. MOVES model was developed by the U.S. EPA to estimate emissions for mobile sources covering a broad range of pollutant emissions from cars, trucks, and motorcycles. The current official version of MOVES is called MOVES4 and is used for this conformity determination. The previous conformity analysis used MOVES3.

MOVES4 requires county-specific data for each of the inputs listed below for each forecast horizon year:

- Fleet population data
- Annual Average daily vehicle miles traveled (AADVMT)
- Inspection/maintenance (I/M) programs
- Vehicle fuel types and technologies
- Seasonal fuel types and formulations
- Hourly temperature and relative humidity data
- Road type
- Fleet age distribution
- Vehicle speed distribution

The CCDES compiled some of these local input files for MOVES3 when developing Ozone budgets for a SIP revision entitled "Revision to Motor Vehicle Emissions Budgets for the 1997 Ozone NAAQS" (approved by EPA and effective on November 9, 2021). The RTC received those local input files for MOVES3 on Aug 9, 2021. In 2024, CCDES confirmed to the RTC that there was one change to the input files since that time—for the SIP work, CCDES utilized meteorological data from Harry Reid International Airport to calculate the average hourly temperature and humidity for July of the base year.

Although EPA developed the MOVES model to utilize regional-specific data for all the above inputs, regional-specific default data are provided for some of the inputs. Default data are used for the vehicle fuel types and technologies parameters. Both AAWDVMT and vehicle speed distributions by facility type are developed by RTC using RTC2022TDM. These data are converted to annual VMT by Highway Performance Monitoring System (HPMS) facility type and monthly, daily, and hourly VMT fractions by vehicle type using the AADVMT Calculator workbook developed by EPA (EPA, updated August 2023).

Annual vehicle population by vehicle type was updated by CCDES for the 2022 base year. To extrapolate this data for different horizon years. 2022 base year vehicle population is adjusted based on MOVES default vehicle populations for the base year and horizon year. MOVES runs are conducted for each horizon year for January and July. January is the month when the CO emission rates are the highest for each roadway type and July is the month when the Ozone (VOC and NOx) emission rates are the highest for each roadway type.

VMT Adjustment Factors

A composite correction factor is applied to the VMT output by the TDM for all RTP years analyzed. This composite correction factor is the product of three separate factors, as follows:

1. Link Calibration Adjustment Factor – This was discussed under the Travel Demand Forecast Model section (under Air Quality (MOVES) Interface). This factor corrects for base year 2022 under-/over-assignment as

compared to counts so that the model-based VMT is more in line with actual traffic count data throughout the region.

- HPMS Average Daily VMT-to-Average Weekday VMT Adjustment Factor The NDOT HPMS output VMT for Clark County in 2022 is annual. This is converted to an average day by first dividing by 365 and then converted to an average weekday by multiplying the average daily VMT by 1.06736 (provided by CCDES). When factored, the HPMS VMT is in an equivalent unit to the RTC2022TDM output VMT, which represents the average annual weekday.
- 3. HPMS Calibration Adjustment Factor The 2022 NDOT HPMS-based VMT for Clark County, adjusted to represent the average weekday, is then compared to the TDM-produced VMT by facility type. The HPMS calibration adjustment factor is the ratio of HPMS VMT for Clark County in 2022 to the model-produced VMT for base year 2022. Recognizing the HPMS VMT includes roadways functionally classified as locals and higher, certain classifications are removed from the model-produced VMT to better facilitate the comparison. These include local roads, and centroid connectors. Local roads are removed because due to practical considerations, the TDM cannot include all the local roads represented in the HPMS. With these removed, the HPMS VMT is 6.3 percent more than the model-produced VMT. Accordingly, the HPMS calibration adjustment factor is 1.063 and is applied countywide.

The steps involved in computing this HPMS Calibration Adjustment Factor are enumerated below:

- a) 2022 NDOT Clark County HPMS annual VMT is 14,312,210,599, excluding local roads⁸
- b) Step a) converted to average daily VMT is 39,211,536 (14,312,210,599 / 365)
- c) Step b) converted to average weekday VMT is 41,852,825 (39,211,536 x 1.06736)
- d) Base year 2022 RTC2022TDM VMT, excluding local roads, centroid connectors and externals is 39,365,144
- e) Ratio of Step c) to Step d) is 1.063 (41,852,825 / 39,365,144)

In summary, the first factor is both facility type- and urban classification type-specific generated from available count post data, while the second and third factors are countywide. Above step c) is introduced to convert HPMS average daily VMT to HPMS average weekday VMT to line it up with TDM output unit average weekday VMT. Table 9 shows the basis for the first factor (link calibration adjustment) along with resulting composite adjustment factors. Again, the composite factors are applied to the TDM output VMT for all RTP years. While the adjustment factors for rural collector and local road classifications are relatively large, it is noted the sample size of counts for rural local roads is small. In the case of rural collectors, which has a slightly larger sample size, the average count is 656 vehicles per day (vpd). In model validation, percent root mean square error (% RMSE) tolerances are greater for low-volume facilities, as it is difficult for travel demand models to accurately represent such low volumes and the impact of error on facility sizing is less critical at such low volumes.

The postprocessed average weekday VMT is then used as an input to the "moves4-aadvmt-converter-tool" to produce annual HPMS VMT by vehicle type that is used by the MOVES4 model.

⁸ Source: NDOT Annual Vehicle Miles of Travel, 2022 HPMS Data, August 2023.

MOVES4 Classification	Number of Observations	Count VMT	TDM VMT	Link Calibration Adjustment Factor ¹	Composite Adjustment Factor ²
Rural - Freeway	41	2,795,482	2,793,369	1.001	1.064
Rural - Expressway/Beltway	2	26,937	24,159	1.115	1.185
Rural - Super Arterial	35	516,863	700,591	0.738	0.784
Rural - Major Arterial	34	84,323	172,396	0.489	0.520
Rural - Minor Arterial	70	95,138	54,926	1.732	1.842
Rural - Collector	60	39,357	13,817	2.849	3.029
Rural - Local	8	14,100	1,876	7.517	7.992
Rural - Ramp	0	-	-	-	1.063
Rural - System to System Ramp	73	35,688	28,711	1.243	1.322
Rural - Unknown	0	-	-	-	1.063
Rural - Centroid Connector	0	-	-	-	1.063
Rural - Externals	0	-	-	-	1.063
Urban - Freeway	88	3,612,617	4,046,148	0.893	0.949
Urban - Expressway/Beltway	26	822,879	992,586	0.829	0.881
Urban - Super Arterial	271	1,043,898	983,565	1.061	1.128
Urban - Major Arterial	1015	2,354,804	2,230,939	1.056	1.122
Urban - Minor Arterial	18	2,672	1,724	1.549	1.647
Urban - Collector	924	711,290	519,735	1.369	1.455
Urban - Local	146	69,852	45,017	1.552	1.650
Urban - Ramp	35	352,522	210,222	1.677	1.783
Urban - System to System Ramp	260	766,369	899,428	0.852	0.906
Urban - Unknown	0	-	-	-	1.063
Urban - Centroid Connector	0	-	-	-	1.063
Urban - Externals	0	-	-	-	1.063

Table 9: Development of VMT Composite Adjustment Factors

¹Count VMT divided by TDM VMT.

²Product of the link calibration adjustment factor and 1.063.

In past applications of MOVES, seasonal adjustment factors were applied to HPMS VMT to reflect seasonal peaking of CO and ozone emissions. Such factors are no longer required as EPA developed a workbook "moves4-aadvmt-converter-tool-2023-08.xlsx" to automatically calculate monthly adjusted AAWDVMT for MOVES. In addition, a previous ozone non-attainment area spanned an area larger than the TDM geographic domain. The RTC2022TDM expansion of this domain to include the entirety of Clark County ensures the TDM explicitly captures VMT within any applicable non-attainment area.

PM₁₀ Fugitive Emissions Methodology

Fugitive emissions of PM_{10} resulting from roadway travel and construction activities are calculated in addition to the mobile source emissions discussed above. The PM_{10} Emission calculation methodology remains the same as that used for the previous RTP Conformity Determination.

PM₁₀ Roadway Emissions Calculation

During PM10 Maintenance Plan development, CCDES updated PM10 emission factors (EF) based on the average paved road silt loading (i.e. the amount of dust on a paved road) factors by road type from the most recent samples. Clark

County sampled 22 sites in 1999 and conducted quarterly sampling from 2002 through the first quarter of 2006 using the procedures outlined in AP-42 (EPA 1995, Appendix C.1). Silt loadings were collected on major arterials, minor arterials, collectors, and local roads, but not freeways. The data indicate that silt loading values have decreased since 2003, a trend that corresponds to the implementation of best construction practices in the Construction Activities Dust Control Handbook (DAQEM, 2003). Table 10 shows the average silt loading values by major road type. While larger differences are noted between the traffic counts and the TDM's VMT estimates for Rural Collector and Rural Local roads, it's duly noted that the RTC TDM is designed to primarily model roadway links that are at the collector level and above. A small number of local street links have been included when they form TAZ boundaries or are used by public transit routes. So, that larger difference may be attributed to (a) small sample sizes in the traffic count data and (b) the isolated locations of some of these links that make it harder to load flow with model's practical centroid connectors. In general, the TDM validates well with the broader set of traffic counts available and is consistent with HPMS VMT estimates.

Table 10: Average Paved Road Silt Loading Factors by Road Type

Road Type	Silt Loading Value (g/m²)
Major Arterial	0.29
Minor Arterial	0.49
Collector	0.49
Local	1.65
Freeway	0.02

Source: Redesignation Request and Maintenance Plan for Particulate matter (PM₁₀), Appendix A. Technical Support Document Table 8-1, August 2012, CCDES.

CCDES assessed average fleet vehicle weight using Nevada Department of Motor Vehicles data in 2005. Based on the assessment, it was determined that the average vehicle fleet weight for Clark County was 2.29 tons. The results were published in a report entitled *Average Vehicle Fleet Weight in Clark County, Nevada*, dated January 2006. The findings were presented to the Clark County Technical Advisory Committee for comment and reviewed by EPA Region 9 staff. Table 11 provides average paved road emissions factors by major road type based on the silt loading factors presented in Table 10.

Road Type	Emission Factor (g/VMT)
Major Arterial	0.761
Minor Arterial	1.220
Collector	1.225
Local	3.671
Freeway	0.066

Source: Redesignation Request and Maintenance Plan for Particulate matter (PM₁₀), Appendix A. Technical Support Document Table 8-2, August 2012, CCDES.

Roadway Construction PM₁₀ Emissions

A series of PM10 inventories were conducted during the 1999-2000 period to support the SIP development. The following identifies the assumptions to estimate PM10 from highway constructions.

CONSTRUCTION: HIGHWAY CONSTRUCTION PM10 EMISSION RATES

- 1. Calculate total number of months for analysis period
- 2. Convert the Lane Miles of Project to Acres
 - a. 5280 x 12 (average lane width) = 63,360 square feet in a lane mile
 - b. 63,360/43,560 (number of square feet in an acre) = 1.45 acres per lane mile
 - c. Factor: 1.45 x total project lane mile = number of acres under construction

- 3. Apply SIP emission factor = .42 tons/acre/month = 840 pounds/acre/month
- 4. Apply Best Management Practice reduction factor to total acres under construction = product (product x .68)
- 5. Convert to Average Day Emissions: divide by number of days in analysis period

WIND EROSION: HIGHWAY CONSTRUCTION EMISSION CALCULATIONS FOR $\ensuremath{\mathsf{PM}_{10}}$

- 1. Define project acres
- 2. Obtain acre calculation for analysis period from the steps of Highway Construction (above)
- 3. Apply PM_{10} wind erosion rates per day to acre calculation
 - a. 65% of acres x 7.60 x 10⁻⁴ tons
 - b. 35% of acres x 1.98 x 10⁻² tons
- 4. Compute total daily wind erosion by adding the results of Steps 3a and 3b
- 5. Apply Sections 90 through 94 of Clark County Air Quality Regulations: Reduce by 71%

6. EMISSIONS CALCULATIONS

This section documents the emissions calculated for ozone, PM_{10} , and CO for the current RTP plan years: 2025, 2030, 2040, and 2050.

Ozone

MOVES4 is run for the month of July as that is the month of highest ozone emission estimates. Table 12 reports the estimated emissions for the two precursors of ozone: NO_x and VOC. The established emissions budgets are also shown and indicate both pollutants are below budget levels for all years analyzed and therefore satisfy ozone conformity requirements.

	NO _x (to	ons/day)	Ocaformity	VOC (tons	Ocaformity	
Year	Emissions	Emissions Budget	Requirement	Emissions	Emissions Budget	Requirement
2025	14.65	26.77	Satisfied	13.50	20.92	Satisfied
2030	9.05	26.77	Satisfied	10.73	20.92	Satisfied
2040	4.73	23.35	Satisfied	8.58	15.51	Satisfied
2050	4.12	23.35	Satisfied	7.32	15.51	Satisfied

Table 12: Ozone Conformity Test Summary

Table 12 also indicates that while the emissions budgets become more stringent over the RTP planning horizon, the levels of emissions are forecast to decrease such that they meet the more stringent requirements, too. Figures 12 and 13 illustrate the decreasing rates of emission and budgets for both pollutants over the RTP planning horizon. The figures reveal both NO_x and VOC forecast emissions decline faster than the declining budgets. Thus, by the end of the 2050 RTP horizon, the amount of emission "reserve" (emissions budget – forecast emissions) is greater than at the start of the RTP.



Figure 13: VOC Emissions



PM₁₀

The following sources of PM₁₀ emissions are accounted for within the RTP air quality conformity process. These include:

- Vehicular exhaust
- Vehicular brake and tire wear
- Road construction⁹

Table 13 shows the calculation of PM_{10} emissions from paved roadways based on current silt loading factors and average vehicle fleet weight.

⁹ Note road construction is treated the same way that general construction is treated: all applicable dust control regulations are applied to the site during construction activity to ensure emission reductions.

	Adjusted AAWDVMT			2006	2022	2025	2030	2040	2050		
Facility Type	2022	2025	2030	2040	2050	PM ₁₀ Emission Factors (g/v-m)	Paved Road Emissions (kg/day)	Paved Road Emissions (kg/day)	Paved Road Emissions (kg/day)	Paved Road Emissions (kg/day)	Paved Road Emissions (kg/day)
Rural - Freeway	287,233	327,775	395,404	518,047	631,365	0.066	19	22	26	34	42
Rural - Expressway/Beltway	78,515	94,538	116,053	153,988	274,420	0.066	5	6	8	10	18
Rural - Super Arterial	136,282	134,767	140,416	150,638	158,026	0.761	104	103	107	115	120
Rural - Major Arterial	23,643	42,431	63,077	80,305	95,473	0.761	18	32	48	61	73
Rural - Minor Arterial	5,882	6,305	6,317	8,583	10,458	1.225	7	8	8	11	13
Rural - Collector	227,569	242,241	302,119	715,093	860,028	1.225	279	297	370	876	1,054
Rural - Local	285,359	490,151	667,742	1,026,252	1,196,934	1.225	350	600	818	1,257	1,466
Rural - Ramp	0	5,001	7,835	11,179	16,098	1.225	0	6	10	14	20
Rural - System to System Ramp	33,411	26,369	29,998	41,840	67,157	1.225	41	32	37	51	82
Rural - Unknown	780	869	904	1,472	2,429	1.225	1	1	1	2	3
Rural - Centroid Connector	92,772	138,905	235,961	429,334	565,768	3.671	341	510	866	1,576	2,077
Rural - Externals	0	0	0	0	0	1.225	0	0	0	0	0
Urban - Freeway	7,472,903	7,795,861	7,853,080	8,349,265	9,241,994	0.066	493	515	518	551	610
Urban - Expressway/Beltway	4,663,727	4,914,922	5,065,757	5,489,400	6,008,236	0.066	308	324	334	362	397
Urban - Super Arterial	5,147,457	5,336,584	5,760,688	6,265,150	6,260,435	0.761	3,917	4,061	4,384	4,768	4,764
Urban - Major Arterial	11,469,389	11,876,108	13,495,748	14,665,613	13,765,565	0.761	8,728	9,038	10,270	11,161	10,476
Urban - Minor Arterial	0	0	0	0	0	1.225	0	0	0	0	0
Urban - Collector	4,435,503	4,609,384	5,282,910	5,786,428	5,345,205	1.225	5,433	5,646	6,472	7,088	6,548
Urban - Local	1,663,121	1,669,850	1,884,477	2,088,758	2,028,133	1.225	2,037	2,046	2,308	2,559	2,484
Urban - Ramp	861,387	956,566	1,132,654	1,270,788	1,243,110	1.225	1,055	1,172	1,388	1,557	1,523
Urban - System to System Ramp	1,444,430	1,490,113	1,629,224	1,716,200	1,685,228	1.225	1,769	1,825	1,996	2,102	2,064
Urban - Unknown	17,368	19,084	22,006	26,441	25,995	1.225	21	23	27	32	32
Urban - Centroid Connector	2,197,803	2,275,704	2,391,587	2,532,977	2,624,769	3.671	8,068	8,354	8,780	9,299	9,636
Urban - Externals	0	0	0	0	0	1.225	0	0	0	0	0
SUBTOTAL (Daily)	40,544,533	42,453,527	46,483,959	51,327,751	52,106,826		32,995	34,622	38,775	43,485	43,500
Public Transit Bus	57,442	57,442	69,836	75,695	80,560	3.671	211	211	256	278	296
Intra-zonal	65,829	70,076	77,623	111,338	141,952	3.671	242	257	285	409	521
TOTAL (Daily)	40,667,804	42,581,045	46,631,418	51,514,784	52,329,338		33,448	35,090	39,316	44,172	44,317
Factor to convert to US tons/day							0.001102	0.001102	0.001102	0.001102	0.001102
PM ₁₀ Emissions (tons/day)							36.86	38.67	43.33	48.68	48.84

Table 13: PM₁₀ Roadway Analysis for Horizon Years

To calculate PM_{10} exhaust emissions, design day meteorological data sourced from CCDES' Redesignation Request and Maintenance Plan for Particulate Matter (PM_{10}) is input to MOVES4. Table 14 presents this data and Table 15 summarizes the mobile source PM_{10} exhaust emissions for the HA 212 region.

Hour	Temperature (F)	Relative Humidity (%)
1	73.0	12
2	71.1	12
3	71.1	14
4	69.1	18
5	68.0	17
6	68.0	18
7	68.0	16
8	70.0	13
9	70.0	14
10	73.0	11
11	75.0	9
12	75.9	8
13	78.1	8
14	78.1	8
15	80.1	6
16	80.1	6
17	79.0	5
18	78.1	5
19	75.9	6
20	70.0	8
21	68.0	8
22	66.0	7
23	64.0	6
24	63.0	8

Table 14: Design Day Meteorological Observations at McCarran International Airport¹

¹Since renamed Harry Reid International Airport.

Source: Clark County DES Redesignation Request and Maintenance Plan for Particulate Matter (PM₁₀), Table 8-8.

Table 15: Mobile Source PM₁₀ Emissions

	2025	2030	2040	2050
PM10 Vehicle Emissions (tons/day)	0.34	0.26	0.19	0.17

The PM_{10} emissions contributions from highway construction and wind erosion are shown in Tables 16 and 17, respectively, whereby acreages have been calculated based on projects identified in the RTP. The construction lane miles are those presented in Table 7.

Table 16: PM₁₀ Emissions from Highway Construction

	2025	2030	2040	2050
Construction Lane Miles	207	152	72	70
Horizon Year Total Projects				
Number of Months in Horizon Year	36	60	120	120
Estimated Acreage	301	221	105	102
Emissions Factors (tons/acre/month)	0.42	0.42	0.42	0.42
PM ₁₀ Vehicle Emissions (tons/day)	4.16	3.05	1.45	1.41
Best Practices Reduction	68%	68%	68%	68%
Net PM ₁₀ Emissions (tons/day)	1.33	0.98	0.46	0.45

Table 17: PM₁₀ Emissions from Wind Erosion

	2025	2030	2040	2050
Estimated Acreage	301	221	105	102
Erosion Rate (tons/acre/day)				
35 Percent of Site	0.00076	0.00076	0.00076	0.00076
65 Percent of Site	0.01980	0.01980	0.01980	0.01980
PM ₁₀ Emissions (tons/day)	2.24	1.64	0.78	0.76
Sections 90-94 (see Table 22) Reduction	71%	71%	71%	71%
Net PM ₁₀ Emissions (tons/day)	0.65	0.48	0.23	0.22

Table 18 summarizes the net PM_{10} emissions from the above sources (as identified in Tables 13, 15, 16 and 17) and compares them against the emissions budget established by the PM_{10} Maintenance Plan (Table 2). Table 18 reveals that all RTP years have forecast PM_{10} emissions below budget and therefore achieve conformity.

Source	2025	2030	2040	2050		
Paved Road Dust	38.67	43.33	48.68	48.84		
Vehicle Emissions	0.34	0.26	0.19	0.17		
Highway Construction	1.33	0.98	0.46	0.45		
Windblown Construction Dust	0.65	0.48	0.23	0.22		
Total PM ₁₀ Mobile Source Emissions	40.99	43.95	49.56	49.68		
PM ₁₀ Budget	141.41	141.41	141.41	141.41		
Conformity Requirement	Satisfied	Satisfied	Satisfied	Satisfied		

Table 18: Total PM₁₀ Mobile Source Emissions and Budget (Tons/Day) for RTP Years

Carbon Monoxide

MOVES4 is run for both January and July to capture the highest emissions. Although the CO emission rates are usually higher in winter (January), the activity levels are higher in summer (July), and higher total CO emissions are experienced in July. For this RTP conformity analysis, both months' CO emissions are reviewed and the higher of the two (July) are reported. Table 15 shows the CO emissions for each of the RTP years. As indicated previously, the CO maintenance plan is a Limited Maintenance Plan and therefore this RTP does not require a regional emissions analysis for conformity determination. Therefore, there is no emissions budget. For reference, the previous CO emissions budget was 704 tons per day¹⁰. Table 19 reveals that all RTP plan years are below this previous budget. Furthermore, the forecast emissions

¹⁰ Clark County Carbon Monoxide Maintenance SIP, September 2010.

decrease over time which supports the LMP designation requirement that it is unreasonable to expect that such an area will experience so much growth in the 10-year period of the LMP that a violation of the CO NAAQS would result.

Year	CO (tons/day) Emissions	CO (tons/day) Emissions Budget
2025	210.19	N/A
2030	168.52	N/A
2040	102.14	N/A
2050	83.03	N/A

Table 19: Mobile	Source	CO Emissions	for HA	212
------------------	--------	---------------------	--------	-----

Note: As a point of reference, the previous CO emissions budget was 704 tons per day.

7. TRANSPORTATION CONTROL MEASURES

Background

A second component of a conformity determination includes a progress assessment of the Transportation Control Measures (TCMs) implementation. These measures are intended to reduce pollutant emissions or concentrations from transportation sources by reducing vehicle use. As required by 23 CFR, Part 450.324, n(3), in non-attainment areas, the TIP document must describe the progress in implementing any required TCMs, including any reasons for significant delays in the planned implementation and strategies for ensuring their advancement at the earliest possible time. As part of the conformity process, MPOs in non-attainment areas must certify that TCMs identified in the SIPs are either programmed or are being implemented on schedule and that no Federal funds are being diverted from these projects in such a way as to delay their timely implementation.

Statement of TCM Progress and TCM Certification

Clark County 2012 PM₁₀ SIP and Maintenance Plan proposes no changes to 2001 emission reductions control measures.¹¹ Control measures from 2001 PM₁₀ SIP are still referenced below. Table 20 copied from the CO *Redesignation Request and Maintenance Plan* (Clark County DES, 2008) shows the previously adopted control measures.

Control Measure	Adoption Year
Oxygenated Gasoline Program	1991/1995
CBG Wintertime Fuels Program	1999
Reduced RVP Gasoline Program	1995
Motor Vehicle I/M Program	1978
TCM/TDM Program	1999
Alternative Fuels for Government Fleets Program	1981

Table 20: Transportation Control Measures Adopted for Clark County CO SIP

 $^{^{11}}$ Clark County is currently developing their Second PM_{10} Maintenance Plan for 2024-2034 for EPA review. It will not propose any changes to the emissions reduction controls referenced in the 2001 PM_{10} SIP. Rather, it will point out that some of the rules have been modified.

As stated in the 2019 10-Year CO Limited Maintenance Plan, CCDES will continue to rely on the permanent and enforceable emission reduction control measures identified in the 2008 CO maintenance plan including: Federal Motor Vehicle Emissions Control Program (FMVECP), State Vehicle I/M Program, Oxygenated Gasoline Program, and State Technician Training and Certification Program. The Las Vegas Valley attainment of the CO NAAQS is attributed to the development and implementation of these control measures and will the area maintain the standard through the second 10-year maintenance period ending in 2030. CCDES also retained the Reduced RVP Gasoline Program (a maximum RVP of 9 psi) contingency measure from the 2008 CO maintenance plan.

In 1999, the RTC implemented the Club Ride Commuter Services program that includes employer-based commuter incentive programs, telecommuting incentives, and area-wide ridesharing. This program is referenced in both the 2000 CO SIP and the 2005 CO SIP revision. This on-going, voluntary program, while no longer used for numeric emission reduction credit, continues to play an important role in improving air quality.

Table 21 summarizes the adopted mobile source TCMs, excluding the emission reduction credits based on the recent PM_{10} SIP revision, and provides the present status of TCMs from both the CO and PM_{10} SIPs.

Carbon Monoxide							
Control Measures from 2000 CO SIP and 2006 CO SIP Revision	Emission Reduction	Status					
Voluntary Transportation Control Measure/Travel Demand Management	0%	Ongoing. See the following for details: https://www.rtcsnv.com/ways-to-travel/club-ride/.					
Alternative Fuels Program for Government Fleets	0%	Ongoing; local government and transit authority committed to alternative fuels program					
Previously Adopted Enforceable Control Measure	Adoption Date	Status					
Motor Vehicle Inspection & Maintenance Program	1978	Ongoing					
Fleet Over	1967	Ongoing					
Particulate Matter 10 Microns or Less (PM10)							
Control Measures from 2001 PM ₁₀ SIP		Status					
Paving of Unpaved Roads	Ongoing contracts with member entities for paving; funds programmed into the TIP.						
Stabilize Narrow Roadway Shoulders	Approved and programmed into the TIP.						
Transportation Construction - Rules 90-94 ¹²	Ongoing; all transportation construction projects must conform. All transportation construction contracts, regardless of funds source, include the requirement to conform to Rules 90-94 concerning fugitive dust.						

Table 21: Status of Adopted Mobile Source Transportation Control Measures

Source: Regional Transportation Commission staff.

¹² Clark County Air Quality Regulations, Amended June 7, 2022.

To achieve attainment of the 1997 8-hour ozone NAAQS, CCDES implemented emissions control measures that lead to a permanent and enforceable improvement in air quality. As outlined in the 2011 Maintenance Plan, these emissions reduction control measures included:

- 1. Federal Tier 2 vehicle emissions standards (65 FR 6822).
- 2. Federal highway diesel rule (66 FR 5001).
- 3. Federal large nonroad diesel engines rule (69 FR 38958).
- 4. Nonroad spark-ignition engines and recreational engines standards (65 FR 76789).
- 5. Federal nonroad spark-ignition engines and equipment standards (73 FR 59034).
- 6. Nevada vehicle inspection and maintenance (I/M) program (Nevada Revised Statutes (NRS) 445B and Nevada Administrative Code (NAC) 445B).
- 7. Clark County stationary point and nonpoint source air quality regulations (AQRs). (DAQEM 2011)

These emissions control measures will remain in place in the maintenance area through the second maintenance period. Recently, however, the State of Nevada's 81st Legislative Session (which concluded on June 1, 2021) passed Assembly Bill 349 (AB 349) affecting the I/M program. Clark County Chapter 445B in the NRS and the NAC set forth the regulations governing motor vehicles in Clark County. Adopted in 1978 and administered by the Nevada Department of Motor Vehicles, these regulations establish annual testing procedures for 1968 or newer gasoline-powered vehicles, regardless of size, and for diesel-powered vehicles with a manufacturer's gross vehicle weight rating of up to 10,000 pounds.

8. CONCLUSION

An air quality conformity analysis is performed for this RTP following current SIPs for Clark County. This analysis demonstrates that the anticipated levels of atmospheric pollution which will result from planned and programmed transportation projects will be less than the relevant budgets defined in the SIPs. The ozone and PM10 budgets developed by the Clark County DES and established in the Maintenance Plan are used in the conformity findings for this RTP. Tables 22 and 23 summarize the findings of this analysis.

Year	NO _x (tons/day)		Operformity	VOC (tons/day)		Ocofermity	
	Year	Emissions	Emissions Budget	Requirement	Emissions	Emissions Budget	Requirement
2025	14.65	26.77	Satisfied	13.50	20.92	Satisfied	
2030	9.05	26.77	Satisfied	10.73	20.92	Satisfied	
2040	4.73	23.35	Satisfied	8.58	15.51	Satisfied	
2050	4.12	23.35	Satisfied	7.32	15.51	Satisfied	

Table 22: Summary of Findings of Conformity Analysis for Ozone

Table 23: Summary of Findings of Conformity Analysis for PM10

Source	2025	2030	2040	2050
Paved Road Dust	38.67	43.33	48.68	48.84
Vehicle Emissions	0.34	0.26	0.19	0.17
Highway Construction	1.33	0.98	0.46	0.45
Windblown Construction Dust	0.65	0.48	0.23	0.22
Total PM10 Mobile Source Emissions	40.99	43.95	49.56	49.68
PM ₁₀ Budget	141.41	141.41	141.41	141.41
Conformity Requirement	Satisfied	Satisfied	Satisfied	Satisfied

In addition, carbon monoxide, by virtue of Clark County being in an LMP, does not have a specific emissions budget. Still, this analysis demonstrates forecast CO emissions are well below prior emissions budgets and decreasing over time—from 31 percent of the previous budget in 2025 to 12 percent of that budget by 2050. This decrease further supports the LMP designation.

Finally, this conformity analysis provides a progress assessment of the Transportation Control Measures (TCMs) implementation, stating the TCMs are on-going and being implemented.
APPENDIX 1: NON-EXEMPT PROJECT LIST

			Fiscal
Non-Exempt Project Name	Project Detail	Agency	Year
Clark County 215, Cheyenne to Hualapai			
Widening	Clark County 215, Cheyenne to Hualapai Widening	Clark County	2025
Alexander Road Overpass Widening at	Widen the existing Alexander Road Overpass at US95 to 4 lanes with		
US95	sidewalks and bicycle lanes between Tenaya Way and Rainbow Boulevard.	Las Vegas	2025
	From Cheyenne Avenue to Pecos Road. Design and construction to		
	widen/infill/rehabilitate the existing pavement, upgrade the streetlights to		
Civic Center Drive/Alexander Road	LED, signs, striping, ADA upgrades, and other miscellaneous roadway	North Las	
Project	improvements as needed.	Vegas	2025
	Pavement replacement / rehabilitation, localized drainage improvements,		
	intersection modifications, turning lanes, ADA upgrades, streetlight	North Las	2025 /
North 5th	upgrades, and the addition of a side path for bicyclists and pedestrians.	Vegas	2027
Clark County 215, US 95 to Decatur			
Widening	Clark County 215, US 95 to Decatur Widening	Clark County	2026
		Clark County	
	Provide seamless connection between commercial terminals by	Department of	
T3 to T1 Flyover	decoupling from through traffic	Aviation	2026
	Perform final design for NEON Phase 2, right-of-way acquisition services,		
	and update the NEPA document. NEON Phase 2 is to construct the I-15 NB		
IR15, Las Vegas, Ph2 - NB CD to US95N	collector distributor road between I-15 N and US-95 N as well as		
& Sahara Interchange reconstruct	reconstruct the Sahara Interchange.	NDOT	2026
		Clark County	
		Department of	
SNSA Connection to Jean		Aviation	2027
Horizon DDI Operational Improvements	Upgrades to current DDI to improved traffic flow and capacity	Henderson	2027
I-15 NB CL68.5 to CL69.7 Truck			
Climbing Lane (North of Apex)	I-15 NB CL68.5 to CL69.7 Truck Climbing Lane (North of Apex)	NDOT	2027
Sahara Avenue, from Durango Drive to			
Decatur Boulevard	Reconstruct / Rehabilitate / Resurface (3R)	Clark County	2027

Non-Exempt Project Name	Project Detail	Δσεηςγ	Fiscal Year
		Agency	2027 /
Gilespie - Volunteer to Via Inspirada	Upgrade and creation of roadway, sidewalks, bike lanes.	Henderson	2028
		Clark County	2027 /
		Department of	2030-
SNSA Expressway Interchange at I-15		Aviation	2035
I 15 CONSTRUCT NEW INTERCHANGE			
AT BERMUDA/Via Nobila	I 15 CONSTRUCT NEW INTERCHANGE AT BERMUDA/Via Nobila	NDOT	2029
I-15 SB CL64.4 to CL66.1 Truck			
Climbing Lane (Apex SB)	I-15 SB CL64.4 to CL66.1 Truck Climbing Lane (Apex SB)	NDOT	2029
		Clark County	2029 /
		Department of	2030-
SNSA Expressway to I-15		Aviation	2035
Tropicana & University Center Dr. Grade			2030-
Seperation	Tropicana & University Center Dr. Grade Seperation	Clark County	2035
Clark County 215, Charleston to			2030-
Cheyenne Widening	Clark County 215, Charleston to Cheyenne Widening	Clark County	2035
	Complete street improvements including pedestrian paths, bicycle		
	facilities, and high capacity transit along Rancho Drive between Mesquite		
Rancho Drive Phase 1 Improvements,	Avenue and Coran Lane. Project will add a bus/bike lane in each direction		2030-
Mesquite Avenue to Dune Drive	per the RTC OnBoard study.	Las Vegas	2035
Charleston Boulevard Underpass	Reconstruct/Rehabilitate the Charleston Boulevard Underpass and		
Reconstruction, Grand Central Parkway	roadway to better accommodate vehicular, pedestrian, and bicycle traffic		2030-
to Art Way	between Grand Central Parkway and Art Way.	Las Vegas	2035
			2030-
Vegas Dr @US 95	widen 2 to 4 lanes	Las Vegas	2035
I 15, S. PEBBLE RD. OVERPASS -			2030-
RECONSTRUCT OVERPASS	115, S. PEBBLE RD. OVERPASS - RECONSTRUCT OVERPASS	NDOT	2035
I-515/ US-95 from US-95 Ranch Blvd to			
Mojave RD I-515; Mileposts US95 76.75	I-515/ US-95 from US-95 Ranch Blvd to Mojave RD I-515; Mileposts US95		2030-
to I-515 72.77(DAP)	76.75 to I-515 72.77(DAP)	NDOT	2035

			Fiscal
Non-Exempt Project Name	Project Detail	Agency	Year
	Design, right of way acquisition, and construction necessary to improve		
	Carey Avenue between Revere Street and Pecos Road. Improvements		
	include; pavement replacement/rehabilitation, localized drainage		
	improvements, intersection modifications, ADA upgrades, streetlight	North Las	2030-
Carey Avenue Roadway Improvements	upgrades, and the addition of a bike lane.	Vegas	2035
		Clark County	
Single Point Urban lintersection (SPUI)	Facilitate one-way directional traffic pattern for public vehicular circulation	Department of	2030-
Roadway Improvement	around airport campus	Aviation	2035
			2030-
			2035/
Casa del Sol - St Rose Parkway to Via			2036-
Nobila	Creation of roadway, sidewalks, bike lanes.	Henderson	2040
	Complete street improvements including pedestrian paths, bicycle		2030-
	facilities, and high capacity transit along Rancho Drive between Coran		2035/
Rancho Drive Phase 2 Improvements,	Lane to Decatur Blvd. Project will add a bus/bike lane in each direction per		2036-
Dune Drive to Decatur Boulevard	the RTC OnBoard study.	Las Vegas	2040
	Construct interim Sheep Mountain Parkway roadway and intersection		
	improvements between Shaumber and Moccasin Rd. Improvements		
Sheep Mountain Parkway Roadway	include 4-lanes south of Grand Teton and 2-lanes to the north. To include		2036-
Improvements	all-way stop and/or roundabout improvements at the intersections.	Las Vegas	2040
	Local improvements part of Charleston Boulevard High Capacity Transit		
	project. Rainbow Blvd to Rancho Dr. The RTC to extend the center running		2036-
	transit cross section following the On Board Master Plan. Upgrade ITS.		2040 /
Charleston Boulevard High Capacity	upgrade storm drain system, traffic signals, sidewalks, street trees, bicycle		2046-
Transit Project - Local Improvements	facilities, streetlighting and ADA ramps.	Las Vegas	2050
	Complete street improvements including pedestrian paths, bicycle	Ŭ	
Rancho Drive Phase 3 Improvements,	facilities, and high capacity transit along Rancho Drive between Decatur		
Decatur Boulevard to Rainbow	Blvd to Rainbow Blvd. Project will add a bus/bike lane in each direction per		2041-
Boulevard	the RTC OnBoard study.	Las Vegas	2045
	Local roadway improvements in connection with the NDOT Downtown		
	Access Project. NDOT will be reconstructing portions of US95/I-515		
Downtown Access Project - Local	between Rancho Dr and Mojave Rd to address aging infrastructure. Local		
Roadway Connections (US95/I-515,	roadway improvements will be constructed through the new freeway and		2041-
Rancho Drive to Mojave Road)	adjacent to the project limits.	Las Vegas	2045

			Fiscal
Non-Exempt Project Name	Project Detail	Agency	Year
I 15 RECONSTRUCT SLOAN/Via			2041-
Inspirada Interchange	I 15 RECONSTRUCT SLOAN/Via Inspirada Interchange	NDOT	2045
	Design, right-of-way and construction of the Martin L. King/Dean Martin		
	two-way frontage road along the west side of I-15 between Oakey		
	Boulevard and Twain Avenue. Project will improve connectivity and local		2041-
Martin L. King Boulevard/Dean Martin	access within the resort corridor area. Project was identified in the RTC		2045 /
Drive Connector, Oakey Boulevard to	Transportation Investment Business Plan (TIBP) and being evaluated as a		2046-
Twain Avenue	part of the I-15 Central Corridor EIS study.	Las Vegas	2050
Clark County 215, Revere to Decatur			2046-
Widening	Clark County 215, Revere to Decatur Widening	Clark County	2050
	Design, right of way acquisition, and construction of a grade Separation at		
	Cheyenne and Losee. Improvements include; roadway modifications,	North Las	2046-
Cheyenne and Losee Grade Separation	grade separation, signalization, lighting, and utility relocations.	Vegas	2050
	Build a Bus Rapid Transit project on a 7.6- mile segment of Boulder		
	Highway corridor. This project will include the demolition and removal of		
	current infrastructure, and construction of new multimodal infrastructure		
	that completes Reimagine Boulder Highway. The final concept will		
	transform the northern segment of the corridor, aligning it with the		
	southern segment (City of Henderson), by adding center-running BRT		
Boulder Highway High Capacity Transit	service, tree-lined roadways and sidewalks, and designated bicycle and		
Project	pedestrian realms.	RTC	Unfunded

APPENDIX 2: EXEMPT PROJECT LIST

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Advanced Intersection Analytics (Regional Program)	Region wide intersection analytics for vehicle ADT and turning movement volume and classification, safety analytics for red light running, speeding, near misses, etc.	Various	RTC	2027-2050
Airport Connector Tunnel Repairs	Resurface public roadway following water leakage corrective action	Airport Connector Tunnel	Clark County Department of Aviation	2030-2040
Beltway Trail	Bike & Ped Improvements/Enhance Multimodal Connectivity	CC-215 to Spencer Street	Clark County	2028
Beltway Trail Bridges East: Windmill	Beltway Trail Bridges East: Windmill	Various Locations	Clark County	2026
Beltway Trail Bridges West: Flamingo, Sahara	Beltway Trail Bridges West	At Flamingo Rd and at Sahara Ave	Clark County	2050-2035
Bonanza Road Complete Streets, Bruce Street to Nellis Boulevard	Complete street improvements along Bonanza Road between Bruce Street to Nellis Boulevard to improve multi-modal access to schools and local businesses. Improvements to include mid-block pedestrian crossings, sidewalk infill, street trees, bike lanes, enhanced lighting, and ADA upgrades.	Between Bruce Street to Nellis Boulevard	Las Vegas	2046-2050
Bonanza Road Railroad Undercrossing	Reconstruction of existing railroad undercrossing at Bonanza Road to better accommodate vehicular and pedestrian traffic. Bridge was constructed in 1936.	Railroad undercrossing at Bonanza Road	Las Vegas	2041-2050

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Boulder Highway High Capacity	Funding is only for planning and technical studies	Charleston Blvd to Tulip	RTC	2030-2040
Transit Project	for Boulder Highway High Capacity Transit Project	Falls Dr		
	is to build a Bus Rapid Transit project on a 7.6-mile			
	segment of Boulder Highway corridor. This project			
	will include the demolition and removal of current			
	infrastructure, and construction of new multimodal			
	infrastructure that completes Reimagine Boulder			
	Highway. The final concept will transform the			
	northern segment of the corridor, aligning it with			
	the southern segment (City of Henderson), by			
	adding center-running BRT service, tree-lined			
	roadways and sidewalks, and designated bicycle			
	and pedestrian realms.			
Bruce Street Complete Streets	Multi-modal improvements along Bruce Street	Bonanza Road to Owens	Las Vegas	2030-2025
Improvements, Bonanza to	between Bonanza Road to Owens Avenue to	Avenue		
Owens - Segment B	improve access to adjacent schools and local			
	businesses. Improvements to include mid-block			
	pedestrian crossings, sidewalk infill, street trees,			
	bike lanes, enhanced lighting, and onstreet			
	parking. Project improvements taken from Bruce			
	Street UPWP study.			
Bruce Street Complete Streets	Multi-modal improvements along Bruce Street	Bonanza Road to Owens	Las Vegas	2036-2040
Improvements, Bonanza to	between Bonanza Road to Owens Avenue to	Avenue		
Owens - Segment B	improve access to adjacent schools and local			
	businesses. Improvements to include mid-block			
	pedestrian crossings, sidewalk infill, street trees,			
	bike lanes, enhanced lighting, and onstreet			
	parking. Project improvements taken from Bruce			
	Street UPWP study.			
Bruce Street Complete Streets	Multi-modal improvements along Bruce Street	Charleston Boulevard to	Las Vegas	2030-2035
Improvements, Charleston to	between Charleston Boulevard to Stewart Avenue	Stewart Avenue		
Stewart - Segment A	to improve access to Hollingsworth Elementary			
	and local businesses. Improvements to include			
	mid-block pedestrian crossings, sidewalk infill,			
	street trees, bike lanes, enhanced lighting, and			
Bruce Street Complete Streets Improvements, Charleston to Stewart - Segment A	Street UPWP study. Multi-modal improvements along Bruce Street between Charleston Boulevard to Stewart Avenue to improve access to Hollingsworth Elementary and local businesses. Improvements to include mid-block pedestrian crossings, sidewalk infill, street trees, bike lanes, enhanced lighting, and	Charleston Boulevard to Stewart Avenue	Las Vegas	2030-2035

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
	onstreet parking. Project improvements taken from Bruce Street UPWP study.			
Bruce Street Complete Streets, Bonanza Road to Owens Avenue	The scope of the project is to provide for design and NEPA of complete streets improvements along Bruce Street between Bonanza Road and Owens Avenue to improve bicycle/pedestrian comfort and safety.	From Bonanza Road to Owens Avenue of Distance (mile) 1.0	Las Vegas	2025
Capital Cost of Contracting (Preventive Maintenance)	Preventive Maintenance Capital Assistance under the capital cost of contracting policy. Service contract where contractor provides maintenance and transit service and recipient provides vehicles is eligible for 80% federal share of 40% of the contract.	Not Location Specific	RTC	2025
CC 215 - Beltway Bike Lanes - Jerry Tarkanian Way	CC 215 - Beltway Bike Lanes - Jerry Tarkanian Way	Tropicana Ave to Sobb Ave	Clark County	2036-2040
CC215 Beltway Trail Bridges at Summerlin Parkway	Provide trail bridges to the existing CC215 Beltway Trail over Sunset Run Drive and Sky Vista Drive. Includes trail path connections to the existing trail.	CC215 Beltway from Sunset Run Drive to Sky Vista Drive of Distance (mile) 0.1	Las Vegas	2025
CC215 Beltway Trail Bridges Grand Canyon	Design and construct trail bridges over Lake Mead Blvd, Grand Canyon and Torrey Pines for the CC215 Beltway Multiuse Trail. Bridges will increase safety and usability along the Beltway Trail.	Trail bridges over Lake Mead Blvd, Grand Canyon and Torrey Pines	Las Vegas	2041-2050
Centennial Parkway Bridge	Design and right of way acquisition for new roadway, grade separation of the railroad tracks, traffic signal, lighting and shared use path for bicyclists and pedestrians.	Centennial Parkway between Lamb Boulevard and North Range Road	North Las Vegas	2030-2035

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Charleston Blvd SR 159 Urban	Includes permanent detection, CCTV, VSL, and		Nevada Department of	2027
Lite - Permanent Full = 5.425	side mounted DMS. ATM is not required, but speed		Transportation	
Mile Corridor	management is needed, and permanent detection			
	is valuable and achievable for corridor			
	management for Charleston Blvd (SR 159)			
	between I 15 and Nellis Blvd (SR 612) to address			
	bottlenecks and congestion. Project segment			
	includes 25 signals. Project to keep signals, CCTV,			
	and detection where applicable along corridor and			
	only includes nominal values for those devices if			
	additions are required for implementation. This			
	project concept includes side mounted DMS and			
	VSL every 3 miles. Devices should typically be			
	located midblock where these devices do not			
	already exist. CCTV and vehicle detection devices			
	should also be placed every mile with CV devices			
	every 10 miles. Where power is available,			
	connection to power is desired. Solar powered			
	devices may be required if no connection to power			
	is readily available.			
Charleston Boulevard	Reconstruct/Rehabilitate the Charleston	From Grand Central	Las Vegas	2025
Underpass Reconstruction	Boulevard Underpass to better accommodate	Parkway to Art Way of		
(aka Las Vegas - Charleston	vehicular and pedestrian traffic between Grand	Distance (mile) 0.4		
Boulevard Underpass)	Central Parkway and Art Way.			

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Cheyenne Avenue between	Construct 10 bus turnouts along Cheyenne Avenue	Primary Crossstreet:	Las Vegas	2025
Hualapai Way and Jones	between Hualapai Way and Jones Boulevard.	Cheyenne Avenue,		
Boulevard	Cheyenne/Jones Westbound, Cheyenne/Torrey	Secondary Crossstreet:		
	Pines Westbound, Cheyenne/Rainbow Eastbound,	Jones (WB), From		
	Cheyenne/Tenaya Westbound, Cheyenne/Buffalo	Cheyenne To Torrey Pines		
	Westbound & Eastbound, Cheyenne/Cimarron	(WB) , From Cheyenne To		
	Eastbound, Cheyenne/Soaring Gulls Westbound,	Rainbow (EB) , From		
	Cheyenne/Durango Eastbound, and	Cheyenne To Tenaya		
	Cheyenne/Grand Canyon Westbound	(WB) , From Cheyenne To		
		Buffalo (WB & EB) , From		
		Cheyenne To Cimarron		
		(EB) , From Cheyenne To		
		Soaring Gulls (WB) , From		
		Cheyenne To Durango		
		(EB) , From Cheyenne To		
		Grand Canyon (WB)		
Cimarron Bike Path – Shared	Cimarron Bike Path – Shared use trail		Clark County	2030-2035
use trail				
City of Las Vegas ITS Master	Citywide fiber optic communications and	Oakey Boulevard,	Las Vegas	2041-2045
Plan Upgrades	intelligent transportation system (ITS)	Durango to Rancho;		
	improvements for monitoring and managing traffic	Centennial Center Blvd,		
	conditions. Upgrades on Oakey Boulevard,	Hualapai to Hub 9;		
	Durango to Rancho; Centennial Center Blvd,	Bonanza Road, Hualapai		
	Hualapai to Hub 9; Bonanza Road, Hualapai to	to Pecos; Gowan Road,		
	Pecos; Gowan Road, Tenaya to Decatur; and	Tenaya to Decatur; and		
	Owens Avenue, Eastern to Nellis. Corridors taken	Owens Avenue, Eastern		
	from CLV ITS Master Plan.	to Nellis		

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
City of Las Vegas Pedestrian	Pedestrian safety improvements at MLK Blvd and	MLK Blvd and Balzar Ave,	Las Vegas	2036-2040
Safety Improvements	Balzar Ave, Main St and Foremaster Ln, Rainbow	Main St and Foremaster		
	Blvd and Peak Dr, Bonanza Rd and 23rd St,	Ln, Rainbow Blvd and		
	Charleston Blvd and 13th and Buffalo Dr and Del	Peak Dr, Bonanza Rd and		
	Rey Ave. Locations are on the City's High Injury	23rd St, Charleston Blvd		
	Network and are adjacent to roadways with high	and 13th and Buffalo Dr		
	vehicular and pedestrian traffic. Will use FHWA	and Del Rey Ave		
	proven countermeasures in the design of the			
	improvements.			
City of Las Vegas Safe Routes	Safe Routes to School improvements around Matt	Various	Las Vegas	2030-2035
to School Improvements	Kelly Elementary (Doolittle between J and Weaver),			
	Paul Culley Elementary (Saylor Way and Carmen			
	Blvd), and Fong Elementary (James Bilbray and			
	Torrey Pines). Improvements include medians for U			
	turn prevention, missing sidewalk, mid-block			
	crossings, school flashers, ADA upgrades etc.			

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
City of Las Vegas Vision Zero	Implement Vision Zero improvements throughout	Alignments include Valley	Las Vegas	2027-2035
Improvements	the City of Las Vegas on High Injury Network	View Blvd, Charleston		
	roadways. Adopted countermeasures for reducing	Blvd to Desert Inn Road;		
	fatalities: signage, striping, enhanced pedestrian &	Bonanza Road, Lamb		
	bike facilities, median island modifications,	Boulevard to Nellis		
	ADA/PROWAG compliant ramps, traffic signal &	Boulevard; Eastern		
	streetlight upgrades, pavement rehabilitation, etc.	Avenue, US 95 to Owens		
		Avenue; Industrial Road,		
		Sahara Avenue to		
		Wyoming Avenue; Lamb		
		Boulevard, Sherrill		
		Avenue to Owens		
		Avenue; Pecos Road,		
		Charleston Boulevard to		
		Owens Avenue;		
		Pennwood Avenue,		
		Decatur Boulevard to		
		Valley View Boulevard;		
		Torrey Pines Drive,		
		Charleston Boulevard to		
		US 95; and		
		Alexander/Hualapai,		
		Cheyenne to Cimarron.		

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
City of Las Vegas Vision Zero	Implement Vision Zero improvements throughout	Alignments include Valley	Las Vegas	2028
Improvements	the City of Las Vegas on High Injury Network	View Blvd, Charleston		
	roadways. Adopted countermeasures for reducing	Blvd to Desert Inn Road;		
	fatalities: signage, striping, enhanced pedestrian &	Bonanza Road, Lamb		
	bike facilities, median island modifications,	Boulevard to Nellis		
	ADA/PROWAG compliant ramps, traffic signal &	Boulevard; Eastern		
	streetlight upgrades, pavement rehabilitation, etc.	Avenue, US 95 to Owens		
		Avenue; Industrial Road,		
		Sahara Avenue to		
		Wyoming Avenue; Lamb		
		Boulevard, Sherrill		
		Avenue to Owens		
		Avenue; Pecos Road,		
		Charleston Boulevard to		
		Owens Avenue;		
		Pennwood Avenue,		
		Decatur Boulevard to		
		Valley View Boulevard;		
		Torrey Pines Drive,		
		Charleston Boulevard to		
		US 95; and		
		Alexander/Hualapai,		
		Cheyenne to Cimarron.		

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
City of Las Vegas Vision Zero	Implement Vision Zero improvements throughout	Alignments include Valley	Las Vegas	2028
Improvements	the City of Las Vegas on High Injury Network	View Blvd, Charleston		
	roadways. Adopted countermeasures for reducing	Blvd to Desert Inn Road;		
	fatalities: signage, striping, enhanced pedestrian &	Bonanza Road, Lamb		
	bike facilities, median island modifications,	Boulevard to Nellis		
	ADA/PROWAG compliant ramps, traffic signal &	Boulevard; Eastern		
	streetlight upgrades, pavement rehabilitation, etc.	Avenue, US 95 to Owens		
		Avenue; Industrial Road,		
		Sahara Avenue to		
		Wyoming Avenue; Lamb		
		Boulevard, Sherrill		
		Avenue to Owens		
		Avenue; Pecos Road,		
		Charleston Boulevard to		
		Owens Avenue;		
		Pennwood Avenue,		
		Decatur Boulevard to		
		Valley View Boulevard;		
		Torrey Pines Drive,		
		Charleston Boulevard to		
		US 95; and		
		Alexander/Hualapai,		
		Cheyenne to Cimarron.		

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
City of Las Vegas Vision Zero	Implement Vision Zero improvements throughout	From Rainbow Blvd to	Las Vegas	2026
Improvements	the City of Las Vegas on High Injury Network	Westwind Rd of Distance		
	roadways. Improvements to include adopted	(mile) 1.4, At Pennwood		
	countermeasures for reducing fatalities: signage,	Avenue From Decatur		
	striping, enhanced pedestrian & bike facilities,	Boulevard To Valley View		
	median island modifications, ADA/PROWAG	Boulevard of Distance (
	compliant ramps, traffic signal & streetlight	pi.mile) 1 , At Eastern		
	upgrades, pavement rehabilitation, etc. Corridors	Avenue From US95 To		
	to include: Charleston - Rainbow to Westwind,	Owens Avenue of		
	Pennwood - Decatur to Valley View, Eastern - US	Distance (pi.mile) 1.4 , At		
	95 to Owens, Lamb - Sherrill to Owens, Pecos -	Lamb Boulevard From		
	Charleston to Owens, Torrey Pines - Charleston to	Sherrill Avenue To Owens		
	US 95, Bonanza - Lamb to Nellis, and Industrial -	Avenue of Distance (
	Sahara to Wyoming.	pi.mile) 1.9 , At Pecos		
		Road From Charleston		
		Boulevard To Owens		
		Avenue of Distance (
		pi.mile) 2.1 , At Torrey		
		Pines Drive From		
		Charleston Boulevard To		
		US95 of Distance (
		pi.mile) 1 , At Bonanza		
		Road From Lamb		
		Boulevard To Nellis		
		Boulevard of Distance (
		pi.mile) 1 , At Industrial		
		Road From Sahara		
		Avenue To Wyoming		
		Avenue of Distance (
		pi.mile) .7		
City Wide Pedestrian Safety	Install, Improve, and Upgrade RRFB's at 36	Various	Henderson	2030-2035
Improvements and Upgrades	locations			
Citywide Bus Turnouts	Bus turnouts on High Injury Network roadways to	Various	Las Vegas	2036-2045
	improve safety. Part of the City's Vision Zero Action			
	Plan.			

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Citywide Bus Turnouts	Bus turnouts on High Injury Network roadways to improve safety. Part of the City's Vision Zero Action	Various	Las Vegas	2041-2045
Citywide Electric Vehicle Charging Stations	Install electric vehicle charging stations at City of Henderson owned facilities for both public and fleet charging	Locations include: Black Mountain Recreation Center, City Hall Basic Parking Lot, City Hall Parking Garge, Heritage Park, Justice Facility Parking Garage, MultiGen Center Parking Lot, Silver Springs Recreation Center, and Whitney Ranch Recreation Center.	Henderson	2027
City-Wide Traffic Signal Improvements	Construct new traffic signals and intersection improvements. Improvements will include traffic signal system components, enhanced lighting, curb and gutter, sidewalk and ADA upgrades, medians, pedestrian and bicycle safety upgrades, ITS infrastructure, signage, and striping modifications.	Lake Mead/Hillpointe, Gowan/Cimarron, Ann/Shaumber, and Harris/Lamb.	Las Vegas	2027
City-Wide Traffic Signal Improvements	Construct new traffic signals and intersection improvements at Lake Mead/Hillpointe, Gowan/Cimarron, Ann/Shaumber, and Harris/Lamb. Improvements will include traffic signal system components, enhanced lighting, curb and gutter, sidewalk and ADA upgrades, medians, pedestrian and bicycle safety upgrades, ITS infrastructure, signage, and striping modifications.	Primary Crossstreet: Lake Mead Boulevard, Secondary Crossstreet: Hillpointe Road, From Gowan Road To Cimarron Road , From Ann Road To Shaumber Road , From Harris Avenue To Lamb Boulevard	Las Vegas	2025
Civic Center Drive	Pavement replacement/rehabilitation, localized drainage improvements, intersection modifications, turning lanes, ADA upgrades, streetlight upgrades, sidewalk, and a bicycle lane. Design is currently under 232A-FTI2	Civic Center Drive between Carey and Cheyenne	North Las Vegas	2027

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Civic Center Drive	Pavement replacement/rehabilitation, localized drainage improvements, intersection modifications, turning lanes, ADA upgrades, streetlight upgrades, sidewalk, and a bicycle lane. Design is currently under 232A-FTI2	Civic Center Drive between Carey and Cheyenne	North Las Vegas	2027
Clark County School District Safe Routes to School	Safe Routes to School Program	Various	Clark County School District	2027-2050
Clayton Street Pedestrian Bridge	Design, right of way acquisition, and construction. Improvements include; new bridge for pedestrian and bicyclists, lighting and connections to existing pathways.	Clayton Street pedestrian bridge across the CC-215	North Las Vegas	2027
Clean Diesel Streep Sweepers	Clean Diesel Streep Sweepers	Not Location Specific	Clark County	2025
Clean Diesel Street Sweepers	Purchase Clean Diesel Street Sweepers	N/A	Clark County	2028
Clean Diesel Street Sweepers	Clean Diesel Street Sweepers	Not Location Specific	Clark County	2026
Club Ride/College Pass Program	Regional Transportation Commission Club Ride program to encourage alternate modes of travel and reduce roadway congestion in the region.	Not Location Specific	RTC	2025-2026
Club Ride/College Pass Program	Regional Transportation Commission Club Ride program to encourage alternate modes of travel and reduce roadway congestion in the region.	Not Location Specific	RTC	2027-2040
CLV Safe Routes to School Program	The project consists of internal City of Las Vegas labor to support our Safe Routes to School Program to encourage safe walking and bicycling to and from schools. Tasks may include in-house study and design for school-related transportation improvements, school and community workshops and correspondence, bicycle and pedestrian safety events, and development of safety	Various	Las Vegas	2027-2050

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
	curriculum for elementary and middle school classrooms.			
CLV Safe Routes to School	The project consists of internal City of Las Vegas	Various	Las Vegas	2028
Program	labor to support our Safe Routes to School Program to encourage safe walking and bicycling to and from schools. Tasks may include in-house study and design for school-related transportation improvements, school and community workshops and correspondence, bicycle and pedestrian safety events, and development of safety curriculum for elementary and middle school classrooms.			
Desert Inn Road 3R	Pavement Preservation	W. Desert Inn Rd from Durango Drive to Valley View Blvd	Clark County	2029
Eastern Ave Improvements	Roadway Rehabilitation	Silverado Ranch to I-215	Henderson	2029
EV Charging Infrastructure on County-Owned Property	The installation of electric vehicle charging infrastructure will support the County's current plan to increase the number of electric vehicles to be included in its fleet as well as the uptick in privately-owned electric vehicles.	Not Location Specific	Clark County Department of Air Quality	2026
EV Charging Upgrade at Moapa	EV Charging Upgrade at Moapa	Not Location Specific	Nevada Department of Transportation	2025

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
EV Charging with NV Energy Partnership	Construct New EV Charging at Jean/ Primm	Not Location Specific	Nevada Department of Transportation	2025
Fixed Route Replacement Vehicles	Fixed Route Replacement Vehicles with a goal of obtaining zero emission vehicles to reduce greenhouse gas emissions and carbon pollutants for the region	Not Location Specific	RTC	2027-2040
Fixed Route Replacement Vehicles	Fixed Route Replacement Vehicles with a goal of obtaining zero emission vehicles to reduce greenhouse gas emissions and carbon pollutants for the region	Not Location Specific	RTC	2036-2040
Flamingo 3R Hualapai to I-15	Flamingo 3R Hualapai to I-15	Hualapai to I-15	Clark County	2036-2040
Algn Injury Network Streetlight Safety Upgrades	Conversion of existing high pressure sodium (HPS) and first generation light emitting diode(LED) streetlight luminaires to more resilient and energy efficient Next Generation LED luminaires along several of the City's High Injury Network corridors where traffic fatalities and serious injuries are heavily concentrated. Project limits include: Sahara Avenue from Durango Drive to Boulder Highway; Buffalo Drive from Sahara Avenue to Lone Mountain Road; Rainbow Boulevard from Rancho Drive to Sahara Avenue; Rancho Drive from US-95 to Mesquite Avenue; Decatur Boulevard from Ann Road to Cheyenne Avenue; Las Vegas Wash Trail from Owens Avenue to Charleston Boulevard and the area bounded by Summerlin Pkwy., Charleston Blvd., Rampart Blvd., and CC-215.	From Durango Drive to Boulder Highway of Distance (mile) 10.0, At Buffalo Drive From Sahara Avenue To Lone Mountain Road of Distance (pi.mile) 7.2, At Rainbow Boulevard From Rancho Drive To Sahara Avenue of Distance (pi.mile) 7.2, At Rancho Drive From US95 To Mesquite Avenue of Distance (pi.mile) 7, At Decatur Boulevard From Ann Road To Cheyenne Avenue of Distance (pi.mile) 3.1, At Las Vegas Wash Trail From Owens	Las vegas	2025
		Avenue To Charleston Boulevard of Distance (pi.mile) 2.9		

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Historic Westside Complete Streets	Complete street improvements including; new bike lanes, pavement reconstruction, widened sidewalk, enhanced transit stops, enhanced streetlighting, street trees and other pedestrian enhancements.	Washington Avenue, Martin L. King Blvd to I-15 and H Street, Bonanza Rd to Owens Ave.	Las Vegas	2028
Historic Westside Complete Streets	Complete street improvements including; new bike lanes, pavement reconstruction, widened sidewalk, enhanced transit stops, enhanced streetlighting, street trees and other pedestrian enhancements.	Washington Avenue, Martin L. King Blvd to I-15 and H Street, Bonanza Rd to Owens Ave.	Las Vegas	2028
Historic Westside Complete Streets	Complete street improvements including; new bike lanes, pavement reconstruction, widened sidewalk, enhanced transit stops, enhanced streetlighting, street trees and other pedestrian enhancements.	Washington Avenue, Martin L. King Blvd to I-15 and H Street, Bonanza Rd to Owens Ave.	Las Vegas	2027-2028
Hollywood Blvd Bike Lane – South	Hollywood Blvd Bike Lane – South		Clark County	2036-2050
I 15 Truck Climbing Lane	I15 CL 89.9 to CL 91.1 NB Truck Climbing Lane	From CL MP 89.9 to CL MP 91.1 of Distance (mile) 1.2 Milepost begins at 89.9 ends at 91.1	Nevada Department of Transportation	2028
I 15 Truck Climbing Lane	I 15 CL 90.8 to CL 89.7 SB Truck Climbing Lane	From CL MP 89.7 to CL MP 90.8 of Distance (mile) 1.1 Milepost begins at 89.7 ends at 90.8	Nevada Department of Transportation	2028
I 15, ADA IMPROVEMENTS, SIGNAGE REPLACEMENT / UPGRADE, LIGHTING IMPROVEMENTS, Package 2	ADA IMPROVEMENTS, SIGNAGE REPLACEMENT / UPGRADE, LIGHTING IMPROVEMENTS	From MP CL 50.1 to MP CL 50.67 of Distance (mile) 0.57 Milepost begins at 50.1 ends at 50.67, At SR 610 From MP CL 0 To MP CL 2.02 of Distance (pi.mile) 2.02 Begin: 0 End: 2.02	Nevada Department of Transportation	2026

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
I 215 Expansion Henderson (Stephine to Windmill)	I 215 Expansion Henderson (Stephine to Windmill)	Stephine to Windmill	Nevada Department of Transportation	2030-2050
I 215, Las Vegas, South of the Windmill Interchange to South Valley View Blvd - Preservation	1" Cold Mill, 1" Asphalt Rubber Overlay on Existing Asphalt Pavement Roadway.	From CL MP 7.9 to CL MP 10.9 of Distance (mile) 3 Milepost begins at 7.9 ends at 10.9	Nevada Department of Transportation	2025
I-11 Interchange at Nevada State/Wagonwheel Drive	Corridor study for new interchange and access roadways to the Nevada State College/Wagonwheel from I-11	I-11 Interchange at Nevada State/Wagonwheel Drive	Henderson	2027
I-11 PEL study recommendations Future Phases	I-11 PEL study recommendations Future Phases	I-11 Corridor	Nevada Department of Transportation	2030-2050
I-15 / Apex Area Interchange Preliminary Study	Preliminary study to investigate the purpose and need for a new interchange along the I-15 corridor in addition to the existing interchange at Apex to address growth, economic development, and relieve future congestion. Study will include items such as traffic projections, conceptual design, Pre- NEPA, etc.	New interchange at Apex	North Las Vegas	2027
I-15 Central Corridor (Flamingo to Sahara) - active study	I-15 Central Corridor (Flamingo to Sahara) - active study	Flamingo to Sahara	Nevada Department of Transportation	2030-2035
I-15 MP84 54 TP Spaces	I-15 MP84 54 TP Spaces	I-15 MP84	Nevada Department of Transportation	2030-2035
I-15 MP88 26 TP Spaces	I-15 MP88 26 TP Spaces	I-15 MP88	Nevada Department of Transportation	2030-2035
I-15 Stateline to Sloan Feasibility Study	I-15 Stateline to Sloan Feasibility Study	Stateline to Sloan	Nevada Department of Transportation	2030-2050
I-15/215 Interchange Signalization - Centennial Parkway/215.	Design and construction of traffic signals at the various intersections within the interchange.	Various intersections	North Las Vegas	2027-2029

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
I-215 Interchange at Eastern Avenue	Corridor study for new interchange at Eastern Avenue and the 215	New interchange at Eastern Avenue and the 215	Henderson	2030-2035
I-515 TRAIL	Bike & Ped Improvements/Enhance Multimodal Connectivity	Charleston Blvd to Sahara Ave	Clark County	2028
I-515/Sahara Interchange Study	Feasibility Study for a new interchange at the I-515 at Sahara To address the needs for I-515 Freeway serving Sunrise Manor residents and businesses and accessing the Southern Nevada Freeway system, the study will evaluate the feasibility of adding a new interchange	I-515/Sahara Interchange	Clark County	2025
I-80, I-15, Truck Parking Availability System (TPAS) Multiple Locations	I-80, I-15, Truck Parking Availability System (TPAS) Multiple Locations	Various	Nevada Department of Transportation	2028-2029
IR 15, CL, from Garnet Interchange to South of Valley of Fire Interchange - Preservation- CON	2.75" Cold Mill, 2" Dense Grade with 0.75" Open Grade and Full Depth Patching in Spot Locations.	From CL MP 64.6 to CL MP 75.6 of Distance (mile) 11 Milepost begins at 64.6 ends at 75.6	Nevada Department of Transportation	2026
Jones Boulevard 3R	Jones Boulevard 3R	Sahara Ave to Tropicana Ave	Clark County	2041-2045
Jones Boulevard Reconstruction	Jones Boulevard Reconstruction from Tropicana to Sahara	From Tropicana to Sahara of Distance (mile) 3.05	Clark County	2025
Lake Mead Blvd Roadway Improvements	Design	Civic Center Drive to Pecos Ave	North Las Vegas	2027-2028
Lake Mead Boulevard ITS Improvements, Buffalo Drive to Rancho Drive	Construction of Intelligent Transportation System (ITS) communications in Lake Mead Blvd. from Buffalo Dr. to Rancho Dr. Improvements to include conduit, wiring, fiber optic cables, pull boxes, CCTV cameras, operations and maintenance, and other appurtenances necessary to complete the project.	From Buffalo Drive to Rancho Drive of Distance (mile) 4.2	Las Vegas	2025

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Lake Mead Parkway Trail Phase 1	Design and Construction of new trail, landscaping irrigation, lighting, and amenities as appropriate from Taylor to Warm Springs on Lake Mead Parkway.	From to of Distance (mile)	Henderson	2025-2026
Lake Mead SR 546 Corridor	Corridor study of Lake Mead Parkway with grade separation of Boulder Highway and completion of the trail system within the corridor	Boulder Hwy to I-11 Interchange	Henderson	2027
Las Vegas - Next Generation Signal Prioritization	The Next Generation Signal Prioritization project is to implement a cloud-based signal timing optimization system that supports traffic signal preemption for the City of Las Vegas emergency vehicles. The project will be implemented citywide with the goal to decrease emergency response times and transit travel times throughout the City and the region.	Not Location Specific	Las Vegas	2025
Las Vegas Boulevard/Sahara Avenue Pedestrian Bridge	Construct a circular pedestrian bridge at the intersection of Las Vegas Boulevard and Sahara Avenue. The project will improve mobility and safety for all users of this high-volume intersection.	Intersection of Las Vegas Boulevard and Sahara Avenue	Las Vegas	2041-2045
Las Vegas Boulevard/Sahara Avenue Pedestrian Bridge	Construct a circular pedestrian bridge at the intersection of Las Vegas Boulevard and Sahara Avenue. The project will improve mobility and safety for all users of this high-volume intersection.	Intersection of Las Vegas Boulevard and Sahara Avenue	Las Vegas	2041-2045

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Las Vegas Median Island and	The project consists of the construction of median	Primary Crossstreet:	Las Vegas	2025
Speed Cushion Improvements	island improvements that includes the installation	Dorrell Lane, Secondary		
	of concrete median curbing for access	Crossstreet: Fort Apache		
	management and u-turn prevention with	Road, At Cielo Vista		
	associated signing and markings. Locations are as	Avenue From Pueblo		
	follows: Dorrell Ln at Fort Apache Rd, Cielo Vista	Vista Drive To Biscayne		
	Ave from Pueblo Vista Dr to Biscayne Hills Wy,	Hills Way of Distance (
	Oxford Cross Dr from Anasazi Dr to Crestdale Ln,	pi.mile) .1 , At Oxford		
	Rebecca Rd from Azure Dr to Tropical Pkwy, Sahara	Cross Drive From Anasazi		
	Ave and Santa Paula Dr, Stewart Ave from Las	Drive To Crestdale Lane		
	Vegas Wash to Nellis Blvd, Whispering Sand Dr	of Distance (pi.mile) .2 ,		
	from Bradley Rd to Ceddoa Dawn St, Brent Ln from	At Rebecca Road From		
	Tee Pee Ln to Skye Canyon Park Dr, Corbett St from	Azure Drive To Tropical		
	N. Leon Ave to Bradley Rd, El Campo Grand Ave	Parkway of Distance (
	from N. Leon Ave to Bradley Rd, Echelon Point Dr	pi.mile) .2 , From Sahara		
	from Grand Canyon Dr to Tee Pee Ln, Bullring Ln	Avenue To Santa Paula		
	from Bradley Rd to White Meadow St, Azure Dr	Drive , At Stewart Avenue		
	from Serene Dr to Rebecca Rd, J St from Lake Mead	From Las Vegas Wash To		
	Blvd to Jimmy Ave, Fire Mesa St from Trinity Peak	Nellis Boulevard of		
	Av. to Peak Dr, Donald Nelson Ave from Topaz	Distance (pi.mile) .1 , At		
	Creek St to Jensen St, Whispering Sands Dr from	Whispering Sand Drive		
	Buffalo Dr to Gracious Orchard St. The project also	From Bradley Road To		
	includes the construction of asphalt speed	Ceddoa Dawn Street of		
	cushions and striping for traffic calming on the	Distance (pi.mile) .4 , At		
	following alignments: O'Bannon Dr from Durango	Brent Lane From Tee Pee		
	Dr to Rainbow Blvd (23), Via Olivero Ave from	Lane To Skye Canyon		
	Durango Dr to Rainbow Blvd (23) and Tenaya Wy	Park Drive of Distance (
	from Del Rey Ave to Sahara Ave (5).	pi.mile) .2 , At O'Bannon		
		Drive From Durango Drive		
		To Rainbow Boulevard of		
		Distance (pi.mile) 2 , At		
		Corbett Street From		
		North Leon Avenue To		
		Bradley Road of Distance		
		(pi.mile) .2 , At El Campo		
		Grand Avenue From		

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
		North Leon Avenue To		
		Bradley Road of Distance		
		(pi.mile) .3 , At Echelon		
		Point Drive From Grand		
		Canyon Drive To Tee Pee		
		Lane of Distance (
		pi.mile) .2 , At Bullring		
		Lane From Bradley Road		
		To White Meadow Street		
		of Distance (pi.mile) .2 ,		
		At Azure Drive From		
		Serene Drive To Rebecca		
		Road of Distance (
		pi.mile) .1 , At Via Olivero		
		Avenue From Durango		
		Drive To Rainbow		
		Boulevard of Distance (
		pi.mile) 2 , At J Street		
		From Lake Mead		
		Boulevard To Jimmy		
		Avenue of Distance (
		pi.mile) .2 , At Fire Mesa		
		Street From Trinity Peak		
		Avenue To Peak Drive of		
		Distance (pi.mile) .1 , At		
		Donald Nelson Avenue		
		From Topaz Creek To		
		Jensen Street of Distance		
		(pi.mile) .2 , At		
		Whispering Sands Drive		
		From Buffalo Drive To		
		Gracious Orchard Street		
		of Distance (pi.mile) .4		

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Las Vegas Smarter and Safer Way to Cross - FY23 SMART Grant	This USDOT SMART Grant pilot project is located within Downtown Las Vegas and includes (1) the installation of passive pedestrian detection systems at intersections to detect pedestrians queued at and crossing in marked crosswalks, (2) adjusting traffic signal timings and unprotected crossing flasher durations in real time based on pedestrian volumes and speed, and (3) the installation of a user-adaptive traffic signal system to adjust traffic signal timings along intersecting streets.	From Main Street to Las Vegas Boulevard of Distance (mile) .4, At Las Vegas Boulevard From Ogden Avenue To Carson Avenue of Distance (pi.mile) .2, At Carson Avenue From Main Street To Las Vegas Boulevard of Distance (pi.mile) .4, At Main Street From Ogden Avenue To Carson Avenue of Distance (pi.mile) .2	Las Vegas	
LED Street Light Upgrades	This project will upgrade all High Pressure Sodium (HPS) streetlights fixtures to Light Emitting Diode (LED) fixtures.	Not Location Specific	North Las Vegas	2025-2026
Lower Las Vegas Wash Trail and Bridges	Design, right of way acquisition and construction of two pedestrian bridges on the Lower Las Vegas Wash Trail at 5th street and Craig Road. Improvements include; new pedestrian bridges, lighting, connections to existing trail, utility relocations. Project will provide connection to existing trail.	Lower Las Vegas Wash Trail at 5th street and Craig Road	North Las Vegas	2036-2040
Lower Pittman Wash Trail Segment 2	Lower Pittman Wash Channel including cantilever trail, trail bridges, signage, landscaping, amenities and intersection improvements. This trail connects the existing Pittman Wash Trail, the under construction UPRR trail to schools, rec centers, sports complexes, employment centers, and shopping.	Existing Pittman Wash Trail to proposed UPRR Trail	Henderson	2030-2035

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Lower Pittman Wash Trail Segment 3 - Warm Springs to Galleria (PE) and (CON)	Construction trail segment	Lower Pittman Wash Trail Segment 3 from Warm Springs Road (adjacent to the channel) to Galleria Drive (adjacent to the chaqnnel) of Distance (mile) N/A	Henderson	2025
Lower Pittman Wash Trail Segment Phase I	Lower Pittman Wash Channel including cantilever trail, trail bridges, signage, landscaping, amenities and intersection improvements. This trail connects the existing Pittman Wash Trail, the under construction UPRR trail to schools, rec centers, sports complexes, employment centers, and shopping.	Existing Pittman Wash Trail to proposed UPRR Trail	Henderson	2046-2050
McLeod Bike Path	Bike Path	Pecos-McLeod Interconnect to Sunset Rd	Clark County	2027
Michael Way and Meadows Lane Bikeway Trail, Vegas Drive to Valley View Boulevard	Design and construction of buffered bike lane improvements on Michael Way and Meadows Lane between Vegas Drive and Valley View Boulevard. Project also includes new bike and pedestrian bridge over US95 with connections to Bonanza Trail.	Michael Way and Meadows Lane between Vegas Drive and Valley View Boulevard	Las Vegas	2041-2045
NDOT FRI2 Bond Repayments	Repayments of the FRI2 Bonds	Not Location Specific	Nevada Department of Transportation	2025-2029
Needles Hwy 3R	Needles Hwy 3R		Clark County	2041-2045
North 5th Street	Pavement replacement/rehabilitation, localized drainage improvements, intersection modifications, turning lanes, ADA upgrades, streetlight upgrades, and the addition of a side path for bicyclists and pedestians. Design is currently under 149G-FTI2	North 5th Street between Cheyenne and Lone Mountain	North Las Vegas	2027

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
North 5th Street	Pavement replacement/rehabilitation, localized drainage improvements, intersection modifications, turning lanes, ADA upgrades, streetlight upgrades, and the addition of a side path for bicyclists and pedestians. Design is currently under 149G-FTI2	North 5th Street between Cheyenne and Lone Mountain	North Las Vegas	2027
North 5th Street	Pavement replacement/rehabilitation, localized drainage improvements, intersection modifications, turning lanes, ADA upgrades, streetlight upgrades, and the addition of a side path for bicyclists and pedestians. Design is currently under 149G-FTI2	North 5th Street between Cheyenne and Lone Mountain	North Las Vegas	2027
Owens Avenue Undercrossing	This project includes reconstruction of an existing railroad undercrossing at Owens Avenue. The bridge was constructed in 1970.	Railroad undercrossing at Owens Avenue	Las Vegas	2041-2050
Paratransit Replacement Vehicles	Paratransit Replacement Vehicles with a goal of obtaining zero emission vehicles to reduce greenhouse gas emissions and carbon pollutants for the region	Not Location Specific	RTC	2027-2035
Passing/ Climbing Lane Recommendations	Passing/ Climbing Lane Recommendations	Various	Nevada Department of Transportation	2029-2050
Pebble 3R LVB to Pecos	Pebble 3R LVB to Pecos	Las Vegas Boulevard to Pecos	Clark County	2036-2045
Pecos 3R Desert Inn to Sunset	Pecos 3R Desert Inn to Sunset	Desert Inn to Sunset	Clark County	2041-2045
Pedestrian Flasher Various Locations	Pedestrian Flasher Various Locations	Various	Clark County	2036-2050
Preservation Program	Preservation Program on various NDOT facilities in Clark County	Various	Nevada Department of Transportation	2029-2050
Rainbow Blvd	3R Reconstruct/Rehab/Resurface	Blue Diamond Road to CC-215	Clark County	2027

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Rainbow Blvd ADA	2-3/4 inch coldmill with 2 inch plantmix	From West Tropicana	Nevada Department of	2025
	bituminous surface with open graded surface.	Avenue to Westcliff Drive	Transportation	
	Patching, signal replacement, sign panel	of Distance (mile) 5.5		
	replacement, and ADA improvements.	Milepost begins at 0 ends		
		at 5.5		
Rancho Dr (SR 599) Urban Lite	Includes permanent detection, CCTV, VSL, side	CC 215 to US 95	Nevada Department of	2027
- Permanent Full = 9.25 Mile	mounted DMS, and continuous fiber		Transportation	
Corridor	communications. ATM is not required, but speed			
	management is needed, and permanent detection			
	is valuable and achievable for corridor			
	management for Rancho Dr (SR 599) from CC 215			
	to US 95 to address bottlenecks and level of travel			
	time reliability. This concept also includes 1			
	location for WWD ramp detection deployment as			
	recommended by the WWD study. Project segment			
	includes 19 signals. Project to keep signals and			
	CCTV where applicable along corridor and only			
	includes nominal values for those devices if			
	additions are required for implementation. This			
	project concept includes side mounted DMS and			
	VSL every 3 miles. Devices should typically be			
	located midblock where these devices do not			
	already exist. CCTV and vehicle detection devices			
	should also be placed every mile with CV devices			
	every 10 miles. Where power is available,			
	connection to power is desired. Solar powered			
	devices may be required if no connection to power			
	is readily available. There is existing fiber along			
	approximately 2.15 miles of this corridor that			
	should be connected to with new infrastructure, as			
	labeled "Duct Available - Fiber Available" in the			
	GeoHub. This project recommends new fiber on			
	one side of the roadway for the remaining miles			
	where the GeoHub labels the corridor "Opportunity			
	Route - Joint Construction". As Nevada deploys			
	broadband statewide, it should include stubouts			

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
	and pull box infrastructure to be able to connect			
	between station locations, as needed.			
Rancho Drive Complete	Complete street improvements include:	Rancho Drive - Mesquite	Las Vegas	2029
Streets, Mesquite Avenue to	reconstruct roadway pavement, with bike lanes,	to Sahara		
Charleston Boulevard	bus turnouts, street trees, widened sidewalks, ITS			
	upgrades, traffic signal improvements, and ADA			
	enhancements.			

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Rancho Drive Complete	Complete street improvements include:	Rancho Drive - Mesquite	Las Vegas	2029
Streets, Mesquite Avenue to	reconstruct roadway pavement, with bike lanes,	to Sahara		
Charleston Boulevard	bus turnouts, street trees, widened sidewalks, ITS			
	upgrades, traffic signal improvements, and ADA			
	enhancements.			
Rancho Drive Complete	Complete street improvements include:	Rancho Drive - Mesquite	Las Vegas	2029
Streets, Mesquite Avenue to	reconstruct roadway pavement, with bike lanes,	to Sahara		
Charleston Boulevard	bus turnouts, street trees, widened sidewalks, ITS			
	upgrades, traffic signal improvements, and ADA			
	enhancements.			
Rancho Drive Complete	Complete street improvements include:	Rancho Drive - Mesquite	Las Vegas	2029
Streets, Mesquite Avenue to	reconstruct roadway pavement, with bike lanes,	to Sahara		
Charleston Boulevard	bus turnouts, street trees, widened sidewalks, IIS			
	upgrades, traffic signal improvements, and ADA			
	ennancements.			0005
Rancho Drive Improvements,	Complete street improvements including	From Coran Lane to	Las vegas	2025
Coran Lane to Decatur	Peneba Drive between Ceren Lene and Depetur	Decatur Boulevard of		
Boulevard	Rancho Drive between Coran Lane and Decatur	Distance (mile) 1.2		
	direction			
Pancho Drivo Improvomento	Complete street improvements including	From Mosquito Avonuo to	LacVorac	2025
Mancho Drive Improvements,	nedestrian, bicycle, and high canacity transit along	Coran Lane of Distance	Las vegas	2023
	Bancho Drive between Mesquite Avenue and Coran	(mile) 1 9		
Lanc	Lane. Project will add a bus/bike lane in each	(11110) 1.0		
	direction			
Beconnecting the Historic	Complete street improvements Project	Bonanza Road between	Las Vegas	2029
Westside, Bonanza Road & F	improvements to include new payement, widened	Martin L. King Jr. Blvd and	200 10500	2020
Street	sidewalks, bike lanes, enhanced streetlighting.	D Street and F Street		
	street trees and landscaping, wayfinding signage.	between Washington Ave		
	and other pedestrian safety improvements. Project	and Owens Ave.		
	was awarded Reconnecting Community funding for	-		
	PE and NEPA.			

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Red Rock Legacy Trail Phase 1B	Multi-Use Bike + Pedestrian Path	Summerlin Trailhead to Visitor Center Underpass & Bonnie Springs Road to Special Recreation Use Permit Area Trailhead	Clark County	2029, 2041- 2045
Red Rock Legacy Trail Phase 1B	Multi-Use Bike + Pedestrian Path	Summerlin Trailhead to Visitor Center Underpass & Bonnie Springs Road to Special Recreation Use Permit Area Trailhead	Clark County	2029
Red Rock Legacy Trail Phase 5	Construct 5.3 miles of separated shared-use path	Hualapai Road/SR 160 to the Village of Blue Diamond in Red Rock Canyon	Clark County	2029
Regenerative Street Sweepers	Purchase of three regenerative street sweepers	N/A	North Las Vegas	2029
Regenerative Sweeper	Purchase of one new regenerative street sweeper.	Not Location Specific	Henderson	2025
RTC Bike Share Program	The RTC Bike Share program provides a docked bike share system throughout downtown Las Vegas. Currently RTC Bike Share is sized at 25 stations and an on-street bike fleet of over 100 bikes.	Various	RTC	2027-2029
RTC Non-revenue electric vehicles	New non-revenue zero emission vehicles to replace existing gas/diesel fueled vehicles.	Not Location Specific	RTC	2026
RTC Transit Fleet Buses	Acquire (215) buses for fixed-route bus replacement program	Not Location Specific	RTC	2025
RTC Transit Improvements, Repairs & Maintenance, Equipment	RTC Transit Improvements to include new bus shelters and equipment to preserve and improve the conditions and performance of the transit system.	Not Location Specific	RTC	2025

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
RTC Transit Improvements, Repairs & Maintenance, Equipment	RTC Transit Improvements to include new bus shelters and equipment to preserve and improve the conditions and performance of the transit system.	Not Location Specific	RTC	2027-2050
Safe Routes to School Coordinator	Continue funding of the SRTS Coordinator position and program at the Clark County School District.	Not Location Specific	Clark County School District	2025-2026
SAFEConnect: Safe Actions Fostering Equitable Connectedness in East Las Vegas (FY23 Safe Streets for All Grant)	This USDOT Safe Streets for All (SS4A) grant project consists of (1) school safety and demonstration project at Hollingsworth STEAM Academy, (2) supplemental planning for a Community-wide lighting assessment for the East Las Vegas Neighborhood Revitalization Strategy Area (NRSA), (3) walk audits at eight schools, parks, and senior centers, and (4) high impact safety improvements along Charleston Boulevard, Fremont Street, Eastern Avenue, and at Sunrise Elementary/Roy Martin Middle Schools.	From Bruce Street to Mojave Road of Distance (mile) 1.1, At Fremont Street From Maryland Parkway To Atlantic Street of Distance (pi.mile) 1.2, At Eastern Avenue From Cedar Avenue To St Louis Avenue of Distance (pi.mile) 1.6, At Bruce Street From Sunrise Avenue To Ogden Avenue of Distance (pi.mile) .1, At Ogden Avenue From Bruce Street To 20th Street of Distance (pi.mile) .2, At Sunrise Avenue From Bruce Street To 20th Street of Distance (pi.mile) .2, At 20th Street From Sunrise Avenue To Ogden Avenue of Distance (pi.mile) .2, At	Las Vegas	2025-2027
Sahara Ave	3R Reconstruct/Rehab/Resurface	Durango Drive to Decatur Blvd	Clark County	2027
Sahara Interchange at I-515	Sahara Interchange at I-515	Sahara Interchange at I- 516	Clark County	2030-2045

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
School Flasher Various Locations	School Flasher Various Locations	Various	Clark County	2030-2050
Smog-Free Clark County	County-wide Vehicle Repair Pilot Program to improve the air quality across the valley by providing financial assistance for emissions- related vehicle repairs, focusing on low-income residents with the most polluting cars.	Not Location Specific	Clark County Department of Air Quality	2026
SNSA Expressway Interchange PE and ROW	New interchange	SNSA Expressway Interchange at I-15	Clark County Department of Aviation	2027
Spencer Greenway Trail	Spencer Greenway Trail	Spencer Greenway Trail	Clark County	2041-2045
Spencer Greenway Trail	Spencer Greenway Trail	Not Location Specific	Clark County	2025
Spencer Greenway Trail, Charleston Boulevard to Sahara Avenue (CLV Portion)	Multi-use trail within NV Energy right-of-way to connect Downtown to UNLV. Project to include paved trail, lighting, and other amenities.	NV Energy right-of-way to connect Downtown to UNLV	Las Vegas	2030-2040
Spring Mountain, Rainbow to the I15	Preliminary design for complete streets and maintenance	Spring Mountain, Rainbow to the 115	Clark County	2036-2040
SR 147 Lake Mead Blvd Preservation and ADA Improvements	PAVEMENT PRESERVATION INCLUDING SIGN AND STRIPING REPLACEMENT, LIGHTING, TRAFFIC SIGNALS, ADA, AND SAFETY IMPROVEMENTS	Primary Interchange: N. Pecos Road, Secondary Interchange: 2.494 Miles East of Urban Limit	Nevada Department of Transportation	2028
SR 159 Charleston Blvd 3R, from Boulder Hwy to Nellis Blvd	Mill and overlay with hydraulic, SLI, ADA, and pedestrian safety improvements.	From CL MP 28.1 to CL MP 31 of Distance (mile) 2.9 Milepost begins at 28.1 ends at 31	Nevada Department of Transportation	2027
SR 159, Las Vegas, from SR 160 to IR 215 - Preservation	2" Cold Mill, 2" Dense Grade with 0.75" Open Grade Overlay and Various Patching Locations	From SR 160 to I 215 of Distance (mile) 15.5 Milepost begins at 0 ends at 15.5	Nevada Department of Transportation	2027
SR 160/159 Corridor Study	SR 160/159 Corridor Study	SR 160/159 Corridor	Nevada Department of Transportation	2029-2050

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
SR 164 Nipton Road, Searchlight, From CA/NV Stateline to Searchlight	Pavement Improvement 2" Mill, 2" PBS + OG	From CA/NV STATELINE to SEARCHLIGHT of Distance (mile) 18.55 Milepost begins at 0 ends at 18.55	Nevada Department of Transportation	2028
SR 168 COYOTE SPRINGS	Pavement Improvement 2" Mill, 2" PBS + OG	From US 93 to I 15 of Distance (mile) 24.76 Milepost begins at 0 ends at 24.76	Nevada Department of Transportation	2028
SR 562 Sunset and SR 171 Mill and Overlay	ON SR 562, 2-3/4 INCH COLDMILL WITH 2 INCH PLANTMIX BITUMINOUS SURFACE WITH OPEN GRADED SURFACE. ON SR 171, NEX-GEN GROOVE AND GRIND (SOUTHBOUND ONLY)	From Las Vegas Blvd to Annie Oakley of Distance (mile) 3.17 Milepost begins at 25.35 ends at 28.52, At SR 171 From CL MP 0.00 To CL MP 0.64 of Distance (pi.mile) .64 Begin: 0 End: .64	Nevada Department of Transportation	2025
SR 573 Craig Road Pavement Preservation and ADA Improvements Project	Pavement Preservation and ADA Improvements	From Rainbow Blvd. to Las Vegas Blvd. of Distance (mile) 5.5 Milepost begins at .3 ends at 5.8	Nevada Department of Transportation	2027
SR 579 - Bonanza Rd Preservation	SR 579 - Bonanza Rd Preservation	From CL MP 0.0 to CL MP 2.2 of Distance (mile) 2.2 Milepost begins at 0 ends at 2.2	Nevada Department of Transportation	2026
SR 582 - Boulder Hwy Preservation	SR 582 - Boulder Hwy Preservation	From CL MP 8.5 to CL MP 15.4 of Distance (mile) 6.9 Milepost begins at 8.5 ends at 15.4	Nevada Department of Transportation	2027
SR 592 Flamingo Ave, Las Vegas, From Arville Street to IR 15	Pavement Improvement 2.75" Mill, 2" PBS + OG	From ARVILLE ST to I 15 of Distance (mile) 1.14 Milepost begins at 2.44 ends at 3.58	Nevada Department of Transportation	2028

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
SR 592 Flamingo Rd Safety Management Plan	SR 592 Flamingo Rd Safety Management Plan	Flamingo Rd Corridor	Nevada Department of Transportation	2030-2050
SR 596 Jones Blvd, Las Vegas, From Sahara to US 95 Interchange	Mill and Fill, Roadbed Modification #2 Lane Oakey to US95, ADA upgrades	From Sahara to US 95 of Distance (mile) 2.2 Milepost begins at 3 ends at 5.2	Nevada Department of Transportation	2026
SR574 Cheyenne Ave, from US95 to MLK	Pavement Preservation	From US 95 to MLK of Distance (mile) 5 Milepost begins at 0 ends at 5	Nevada Department of Transportation	2028
St Rose Parkway SR146 and Eastern Avenue Intersection Improvements (CON)	Intersection operational improvements including crosswalks, sidewalks, and ADA	Primary Crossstreet: St Rose Parkway, Secondary Crossstreet: Eastern Avenue	Henderson	2025
St Rose Parkway Trail North Side (PE) and (CON)	Design and construct St Rose Trail	St Rose Parkway Trail (north side) from Eastern to Las Vegas Boulevard of Distance (mile) N/A	Henderson	2025
St Rose/215 System to System Interchange	Corridor study to upgrade the current off ramps into a system to system interchange	St. Rose Pkwy @ I-215 Interchange	Henderson	2029
St. Rose Pkwy Ped Bridge	Construction of a new pedestrian bridge across St. Rose Parkway near Jeffreys Street with construction of a new trail along St. Rose Parkway. This will connect the bridge location to the existing trail near Eastern Avenue. Improvements include pedestrian bridge, trail, lighting, landscaping, striping, amenities and ADA improvements as appropriate.		Henderson	2026
Statz Street and CC-215 Bridge	Construct Bike and Pedestrian crossing.	Statz Street and CC-215 Bridge	North Las Vegas	2046-2050
Stewart Avenue Bicycle and Pedestrian Improvements, 6th Street to Nellis Boulevard	Project includes protected bike lanes, widened sidewalk, pavement overlay, enhanced transit stops, enhanced lighting, street trees and median	From 6th Street to Nellis Boulevard of Distance (mile) 4.3	Las Vegas	2025-2026

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
	landscaping along Stewart Avenue from 6th Street to Nellis Boulevard.			
Street Lighting Retrofit - Phase 1	Replacement/Retrofit of streetlight poles and luminaries with upgraded and more efficient lighting in the neighborhoods surrounding downtown Henderson.	Various	Henderson	2025
Sunset Road 3R	Sunset Road 3R	Decatur Blvd to Las Vegas Blvd	Clark County	2030-2035
Tonopah Avenue Roadway Improvements	Design, right of way acquisition, and construction. Improvements include; pavement replacement/rehabilitation, signage, striping and streetlight upgrades.	Tonopah Avenue between Las Vegas Boulevard and Pecos Road	North Las Vegas	2027-2028
Upper Las Vegas Wash Trail Connection to 215 Beltway Trail	Design, right of way acquisition, and construction of a connection of the Upper Las Vegas Beltway Trail to the 215 Beltway Trail at N. 5th Street. Improvements include; trail and lighting.	Connection of the Upper Las Vegas Beltway Trail to the 215 Beltway Trail at N. 5th Street	North Las Vegas	2030-2035
Upper Las Vegas Wash Trail Crossing Improvements - Anne Rd	Design, right of way acquisition, and construction of roadway crossings along the Tropical Parkway. Improvements include; trail connections, widening, center pedestrian refuge islands, RRFB's or pedestrian hybrid beacons as warranted.	Roadway crossings along the Tropical Parkway	North Las Vegas	2030-2035
US 93, Boulder, Veterans Memorial to Railroad Pass Itg; SR 173, Boulder, I 11 to US 93	2" Cold Mill, 2" Dense Grade with 0.75" Open Grade	From Veterans Hwy to Railroad Pass of Distance (mile) 2 Milepost begins at 6.6 ends at 8.6, At SR 173 From I 11 To US 95 of Distance (pi.mile) 1.1 Begin: 0 End: 1.1	Nevada Department of Transportation	2027
US 95, Clark County, South of the I-11 Interchange- Preservation	Mill and overlay with patching	From 37.85 to 55.15 of Distance (mile) 17.3 Milepost begins at 37.9 ends at 55.2	Nevada Department of Transportation	2025
Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
---------------------------------	-------------------------------------------------------	--------------------------	----------------------	-------------
US 95, Indian Springs, from	2" Cold Mill, 2" Dense Grade with 0.75" Open	From 93.72 to 121.89 of	Nevada Department of	2026
North of SR 157 to Indian	Grade	Distance (mile) 28.2	Transportation	
Springs		Milepost begins at 93.7		
		ends at 121.9		
US 95, Las Vegas, Martin L King	Mill and Overlay	From CL 76.9 to CL 85.8	Nevada Department of	2025
Blvd to W. Lake Mead Blvd		of Distance (mile) 8.86	Transportation	
Preservation		Milepost begins at 76.94		
		ends at 85.8		0005
Valley View Boulevard	Construction of targeted safety improvements	From Charleston	Las vegas	2025
Improvements	Reulevard and Desort Inn Read Improvements	Bouelvaru to Desert IIII		
Improvements	boulevalu and Desert IIII Road. Improvements			
	nedestrian hybrid beacons at El Conlon Avenue	2.0		
	and Sycamore Drive nedestrian flasher at El			
	Camino Avenue, pedestrian median refuge islands			
	upgraded streetlighting improvements, and			
	improved traffic signal operations.			
Various Residential Streets	At various locations upgrade of existing street	Not Location Specific	Clark County	2026
	lighting to LED.			
Vegas Valley Rim Trail	Construct multi-use trail	I-15 to Blue Diamond	Clark County	2046-2050
Connections phase 2		Drive		
Via Inspirada Trail	This is an extension of the limits of the existing	Volunteer to the new	Henderson	2046-2050
	project to account for added development that has	developments in		
	occurred in the area. Design of trail system to	Inspirada to the South		
	connect bicycle infrastructure in Volunteer to the			
	new developments in Inspirada to the South.			
Via Inspirada Trail and City-	Construct trail along Via Inspirada and City-Wide	Via Inspirada Trail from	Henderson	2025
Wide Bike Lane Improvements	Bike Lane/trail crossing improvements including	Bicentennial Pkwy to		
	striping, flashing beacons, roadway, median and	Executive		
	sidewalk modifications as necessary. A pedestrian	Airport/Volunteer of		
	bridge will also be installed linking the I-215 Trail	Distance (mile) N/A		
	and Dos Escuelas Park near Desert Shadow Trail.			

Exempt Project Name	Project Detail	Project Limits	Project Agency	Fiscal Year
Via Inspirada Trail Grade	Grade Separation to connect the southern	Grade Separation to	Henderson	2041-2045
Separation	Inspirada parks/trails to the Via Inspirada Trail.	connect the southern		
	Cumulative Park is south of Via Inspirada and will	Inspirada parks/trails to		
	be under construction. Attessa Park is north if Via	the Via Inspirada Trail		
	Inspirada and is under construction now. This			
	grade separation will allow connectivity between			
	these destinations.			
Via Nobila Trail Phase 1 Bridge	Construct 1 trail bridge	Bridge #: New Bridge	Henderson	2025
Via Nobila Trail Segment II	Design of bike and ped trail to connect the	Inspirada Community to	Henderson	2041-2045
	Inspirada Community with new West Henderson	Las Vegas Blvd		
	businesses that are under construction and			
	provide a route to Las Vegas Blvd.			
Via Nobila Trail Segment Phase	Grade separated crossing of Via Inspirada at Via	Grade separated crossing	Henderson	2041-2045
Ш	Nobila connecting the Via Nobila Trail, Via	of Via Inspirada at Via		
	Inspirada Trail, Capriola Park, and the existing	Nobila		
	homes in Inspirada.			
Warm Springs 3R I15 to Pecos	Warm Springs 3R I15 to Pecos	Warm Springs 3R I15 to	Clark County	2046-2050
		Pecos		
West Charleston Boulevard	Construct five (5) bus turnouts/right turn lanes on	Primary Crossstreet:	Las Vegas	2025
Bus Turnouts	Charleston Boulevard at the following locations:	Charleston Blvd,		
	EB west of Merialdo Avenue; WB east of Cimarron	Secondary Crossstreet:		
	Road; WB east of Antelope Way; EB west of	Campbell Dr		
	Campbell Drive; and WB east of Campbell Drive.			
Warm Springs 3R I15 to Pecos West Charleston Boulevard Bus Turnouts	Grade separated crossing of via inspirada at ViaNobila connecting the Via Nobila Trail, ViaInspirada Trail, Capriola Park, and the existinghomes in Inspirada.Warm Springs 3R I15 to PecosConstruct five (5) bus turnouts/right turn lanes onCharleston Boulevard at the following locations:EB west of Merialdo Avenue; WB east of CimarronRoad; WB east of Antelope Way; EB west ofCampbell Drive; and WB east of Campbell Drive.	of Via Inspirada at Via Nobila Warm Springs 3R I15 to Pecos Primary Crossstreet: Charleston Blvd, Secondary Crossstreet: Campbell Dr	Clark County Las Vegas	2041-2045 2046-2050 2025