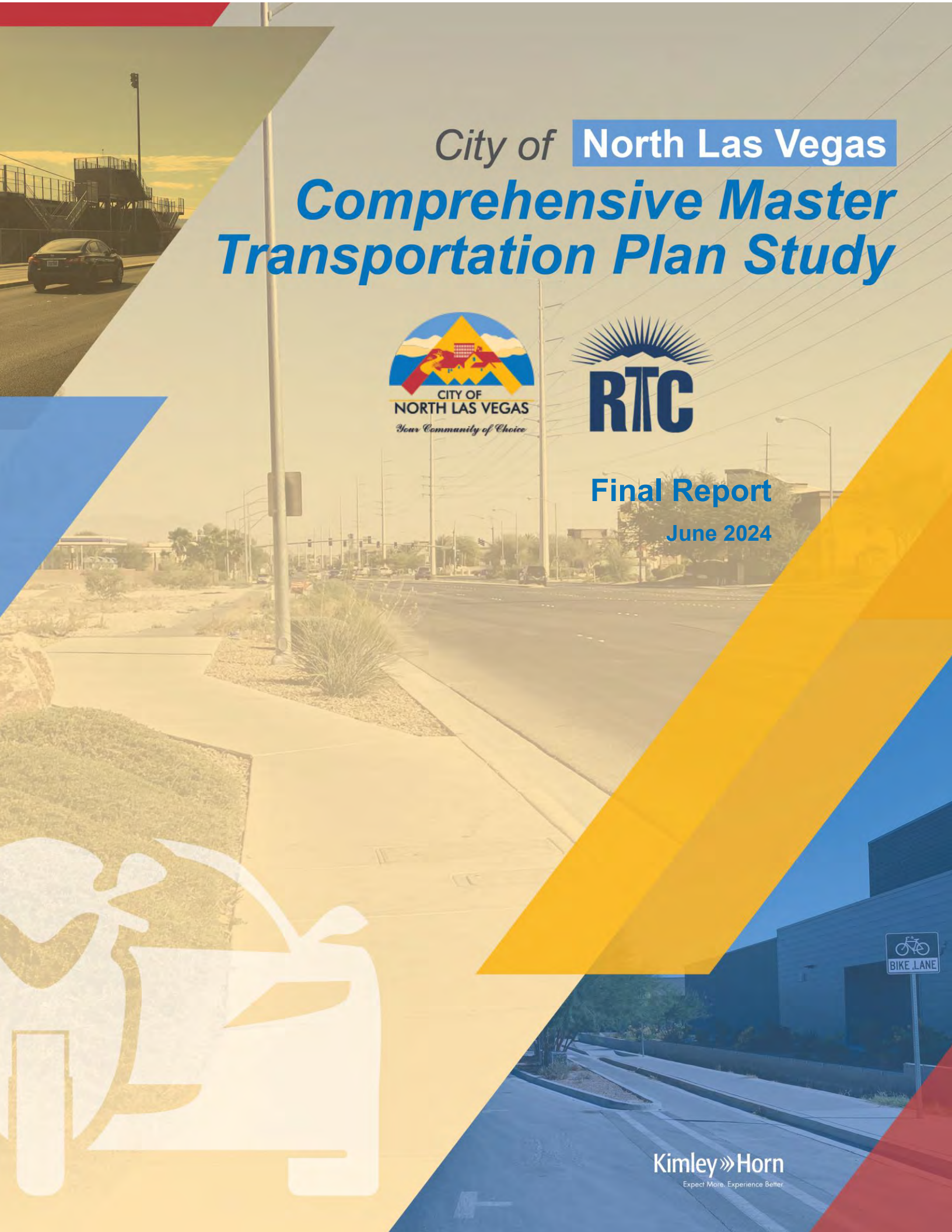


City of North Las Vegas
Comprehensive Master Transportation Plan Study

CITY OF NORTH LAS VEGAS
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RTC

Final Report

June 2024

Kimley»Horn
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FINAL REPORT

CITY OF NORTH LAS VEGAS COMPREHENSIVE MASTER TRANSPORTATION PLAN STUDY

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EXECUTIVE SUMMARY

Project Overview

The purpose of the City of North Las Vegas *Comprehensive Master Transportation Plan Study* (*Comprehensive Master Transportation Plan*) is to analyze the existing street network in relation to existing and future traffic volumes and land uses and conduct research to inform updates to the Master Plan of Streets and Highways (MPSH). Updates to the MPSH include recommended changes to the City's MPSH map and alternative cross sections with complete street elements.

Study Goals

Goals for the *Comprehensive Master Transportation Plan* include:

- Update functional classification for roadways
- Develop typical cross sections for each right-of-way (ROW) width that complement the surrounding land uses
- Incorporate elements of the City's Complete Streets Policy
- Update the existing network of truck routes
- Address the existing and future roadway network in the Apex Industrial Area
- Incorporate amendments to the MPSH

Review of Existing Conditions

The *Comprehensive Master Transportation Plan* gathered input through the following methods:

- Review of local policies, plans, and studies relevant to the study's purpose and goals
- Collection of AM and PM peak-hour turning movement volumes
- Daily directional counts with vehicle classifications
- Analysis of existing and future 2040 AADT
- Review of the City's roadway functional classification
- Analysis of equity and environmental justice
- Review of the City's Land Use Plan

Stakeholder engagement included three Technical Advisory Committee (TAC) meetings, two Stakeholder Workshops, and interactive comment maps.

Study Area

The study area includes all roadways within the City that are functionally classified as collector, arterial, or super arterial by the City (roads that are 60-ft ROW and larger). The study area is defined by the existing MPSH shown in **Figure 1** in the main report.

Recommendations

The study recommends updates to the City's MPSH map, alternative cross sections with complete street elements (refer to **Section 4** of the main report), and truck route changes ranging from truck route removal to the addition of new truck routes. **Table ES-1** shows recommended changes to the existing MPSH, **Table ES-2** shows roadways for possible reconfiguration, and **Table ES-3** shows the proposed truck route changes. The new MPSH map incorporating all the recommendations is shown in **Figure ES-1**.

Table ES-1 – Recommended Changes to Existing MPSH

Street Name	From	To	Proposed Change
Belmont Street	Lake Mead Boulevard	Webb Avenue	Remove Segment from MPSH due to existing 52' ROW
Elkhorn Road	Statz Street	Nellis Boulevard	Remove Segment
Tule Springs Monument	Various	Various	Remove linework within Tule Springs Monument.
UNLV North Campus	Various	Various	Remove everything within the Pecos, Lamb, CC-215, and Moccasin Road Boundary
The Villages at Tule Springs	Various	Various	Reconfigure to match proposed alignments from Village at Tule Springs Plan Elkhorn Road (Realignment) Tule Springs Parkway (New) Revere Street (Remove) Whispering Sands Road (Removed) Rivanna Street (Remove)
Deer Springs Way	Statz Street	Pecos Road	Add 100' ROW line within the Deer Springs District Job Creation Zone

Table ES-2 – Roadways for Possible Reconfiguration

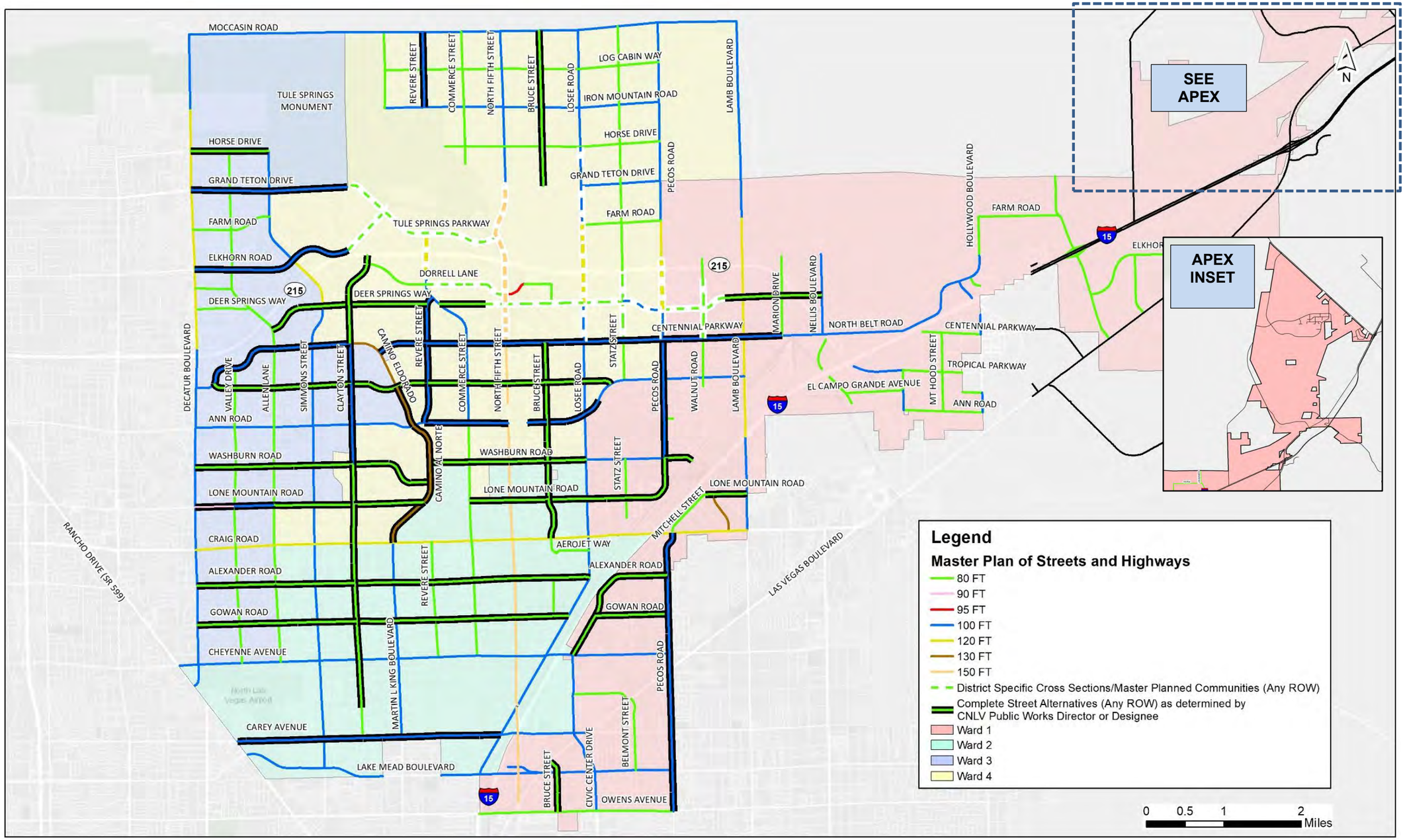
Street Name	ROW (FT)	From	To	RTC TDM 2040 ADT	Proposed Change
Dorrell Lane	80	Revere Street	North 5th Street	22,119	Two lanes in each direction, bike lanes, a detached sidewalk, and a raised median
Deer Springs Way	80	Aviary Way	Revere Street	2,104 - 8,755	80' ROW - 3 Lanes with Curb Level Separated Bike Lanes
Centennial Parkway	100	Tropical Parkway	Losee Road	6,300 – 16,983	100' ROW - 5 Lanes Curb Separated Bike Lane
Ann Road	100	Decatur Boulevard	Tropical Way	4,711 – 21,050	100' ROW - 5 Lanes with Curb Level Separated Bike Lanes
Alexander Road	80	Decatur Boulevard	Pecos Road	1,751 – 7,197	80' ROW - 3 Lanes Curb Level Separated Bike Lanes
Commerce Street	100	Elkhorn Road	Ann Road	15,676 – 20,482	100' ROW - 5 Lanes with Curb Level Separated Bike Lanes and Raised Medians for Access Management

Table ES-2 – Roadways for Possible Reconfiguration (continued)

Street Name	ROW (FT)	From	To	RTC TDM 2040 ADT	Proposed Change
Gowan Road	80	Decatur Boulevard	Losee Road	685 – 10,163	80' ROW - 3 Lanes Curb Level Separated Bike Lanes
Carey Avenue	100	Losee Road	North 5th Street	11,820 - 16,459	100' ROW - 5 Lanes with Curb Level Separated Bike Lanes, maintain raised medians
Civic Center Drive	80	Cheyenne Avenue	Branson Avenue	1,227 – 7,966	80' ROW - 3 Lanes with Curb Level Separated Bike Lanes
Pecos Road	100	Owens Avenue	Craig Road	17,318 – 28,456	100' ROW - 5 Lanes with Curb Level Separated Bike Lanes and Raised Medians for Access Management
Pecos Road	80	Lone Mountain Road	Washburn Road	6,779	80' ROW - 3 Lanes with Curb Level Separated Bike Lanes
Pecos Road	100	Washburn Road	Centennial Parkway	8,640	100' ROW - 5 Lanes with Curb Level Separated Bike Lanes and Raised Medians for Access Management

Table ES-3 – Proposed Truck Route Changes

Truck Route	From	To	Proposed Change
Losee Road	Washburn Road	Moccasin Road	Truck Route Removal
Pecos Road	Washburn Road	Northern City Boundary	Truck Route Removal
Lamb Boulevard	CC-215	Northern City Boundary	Truck Route Removal
Range Road	CC-215	Las Vegas Boulevard	New Truck Route
Donovan Way	Southern City Boundary	Tropical Parkway	New Truck Route
Tropical Parkway	Donovan Way	Range Road	New Truck Route
Civic Center Drive	Cheyenne Avenue	Alexander Road	New Truck Route
North 5th Street	Brooks Avenue	Cheyenne Avenue	New Truck Route
MLK Boulevard	Carey Avenue	Cheyenne Avenue	Truck Route Removal
Carey Avenue	Rancho Drive	Las Vegas Boulevard	Truck Route Removal
Civic Center Drive	Owens Avenue	Carey Avenue	Truck Route Removal
Owens Avenue	I-15	Las Vegas Boulevard	Truck Route Removal



Note: City Ward boundaries as of 2020.

Figure ES-1– Recommended MPSH Map (Citywide)

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List of Abbreviations

AADT	Annual Average Daily Traffic
ACS	American Community Survey
ADT	Average Daily Traffic
CCAAM	Clark County Area Access Management
CCAUSD	Clark County Area Uniform Standard Drawings
CCSD	Clark County School District

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FAST	Freeway and Arterial System of Transportation
FHWA	Federal Highway Administration
FPL	Federal Poverty Line
ITE	Institute of Transportation Engineers
MAPA	Metropolitan Area Planning Agency
MassDOT	Massachusetts Department of Transportation
MPO	Metropolitan Planning Organization
MPSH	Master Plan of Streets and Highways
NCTCOG	North Central Texas Council of Governments
NDOT	Nevada Department of Transportation
NEPA	National Environmental Policy Act
ODOT	Oregon Department of Transportation
PBOT	Portland Bureau of Transportation
ROW	Right-of-Way
RTC	Regional Transportation Commission of Southern Nevada
RTP	Regional Transportation Plan
TAC	Technical Advisory Committee
TDM	Travel Demand Model
USDOT	U.S. Department of Transportation

1 INTRODUCTION

The Regional Transportation Commission of Southern Nevada (RTC), in conjunction with the City of North Las Vegas (City), authorized the City of North Las Vegas *Comprehensive Master Transportation Plan Study* (*Comprehensive Master Transportation Plan*). The study includes an analysis of the street network that evaluated existing and future traffic volumes and land uses and conducted research to inform updates to the Master Plan of Streets and Highways (MPSH). Updates to the MPSH include recommended changes to the City's MPSH map and alternative cross sections with complete street elements. The network analysis identified roadway segments for right-sizing based on the existing and future roadway network conditions. Roadway right-sizing involves repurposing vehicle travel lanes for other uses incorporating complete street elements such as bicycle lanes, on-street parking, and wider pedestrian walkways to provide a safe and inviting environment for all modes of travel.

1.1 Study Goals

Goals for the *Comprehensive Master Transportation Plan* include:

- Update functional classification for roadways
- Develop typical cross sections for each right-of-way (ROW) width that complement the surrounding land uses
- Incorporate elements of the City's Complete Streets Policy
- Update the existing network of truck routes
- Address the existing and future roadway network in the Apex Industrial Area
- Incorporate amendments to the MPSH

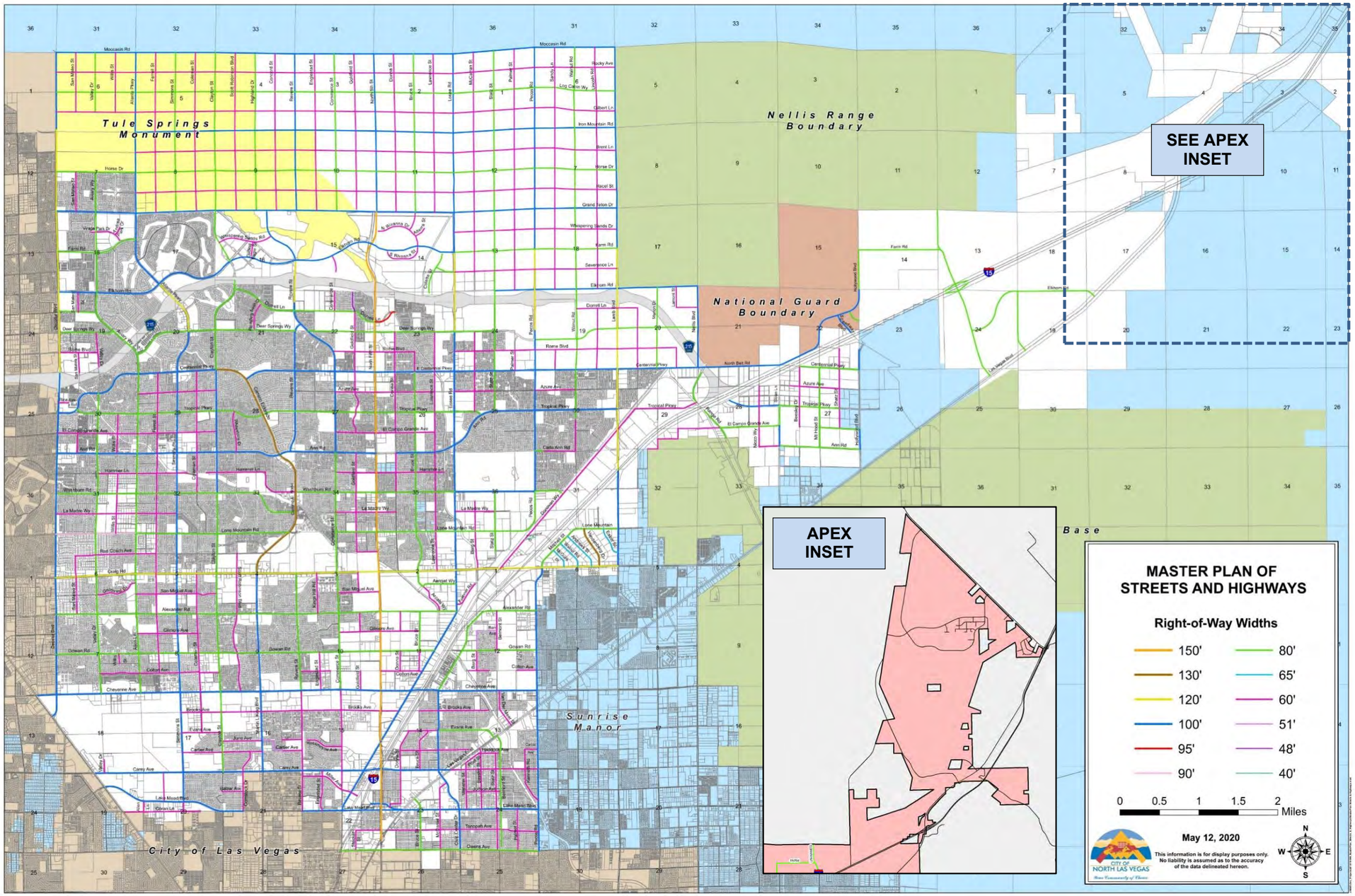
1.2 Study Area

The study area includes all roadways within the City that are functionally classified as collector, arterial, or super arterial by the City (roads that are 60-ft ROW and larger). The study area is defined by the existing MPSH shown in **Figures 1** through **6**.

1.3 Study Process

The following tasks were completed to accomplish the Study Goals:

- Engaged key stakeholders throughout the project
- Conducted research on existing policies, plans, and studies
- Conducted peak-hour turning movement counts and 24-hour bidirectional counts. Compared against the RTC's 2020 and 2040 Travel Demand Model (TDM).
- Reviewed existing functional classification
- Determined methodology for equity and environmental justice analysis
- Analyzed equity and environmental justice for the study area
- Provided access management recommendations in alternative cross sections
- Gathered and reviewed RTC transit routes
- Reviewed existing truck routes
- Updated the MPSH roadway network



Source: City of North Las Vegas

Figure 1 – Existing Master Plan of Streets and Highways (May 12, 2020)

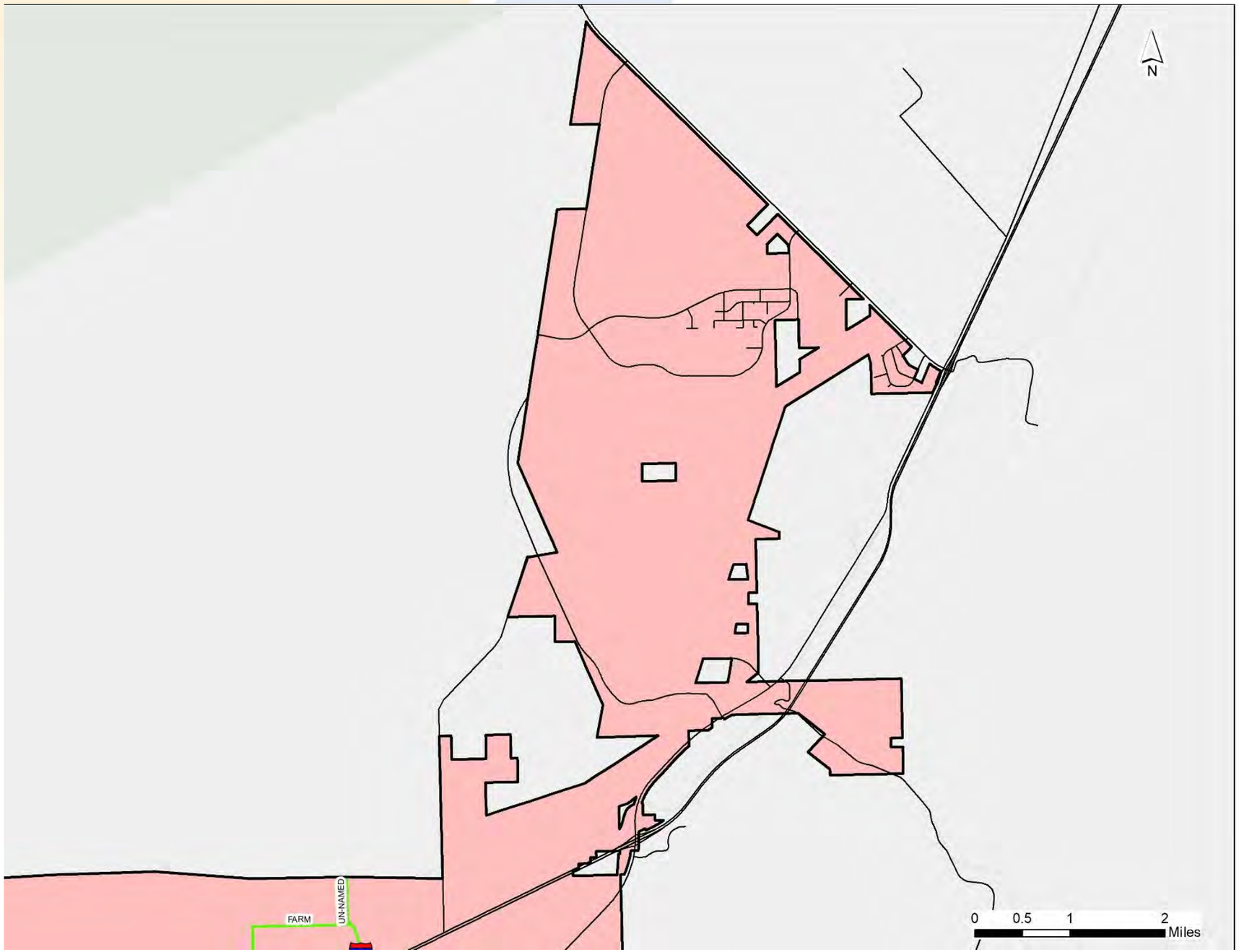


Figure 2 – Existing Master Plan of Streets and Highways (Ward 1 – APEX, May 12, 2020)

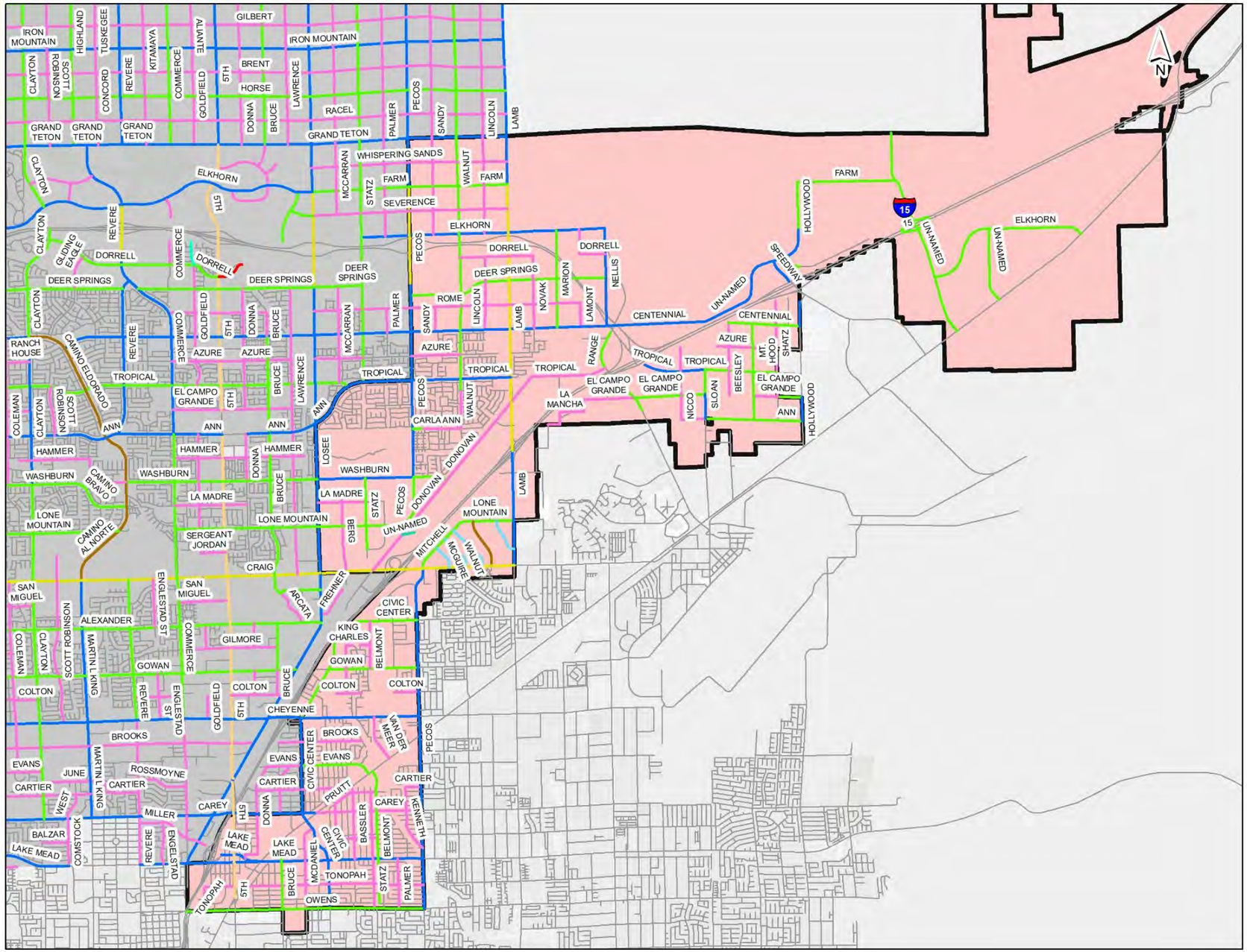


Figure 3 – Existing Master Plan of Streets and Highways (Ward 1, May 12, 2020)

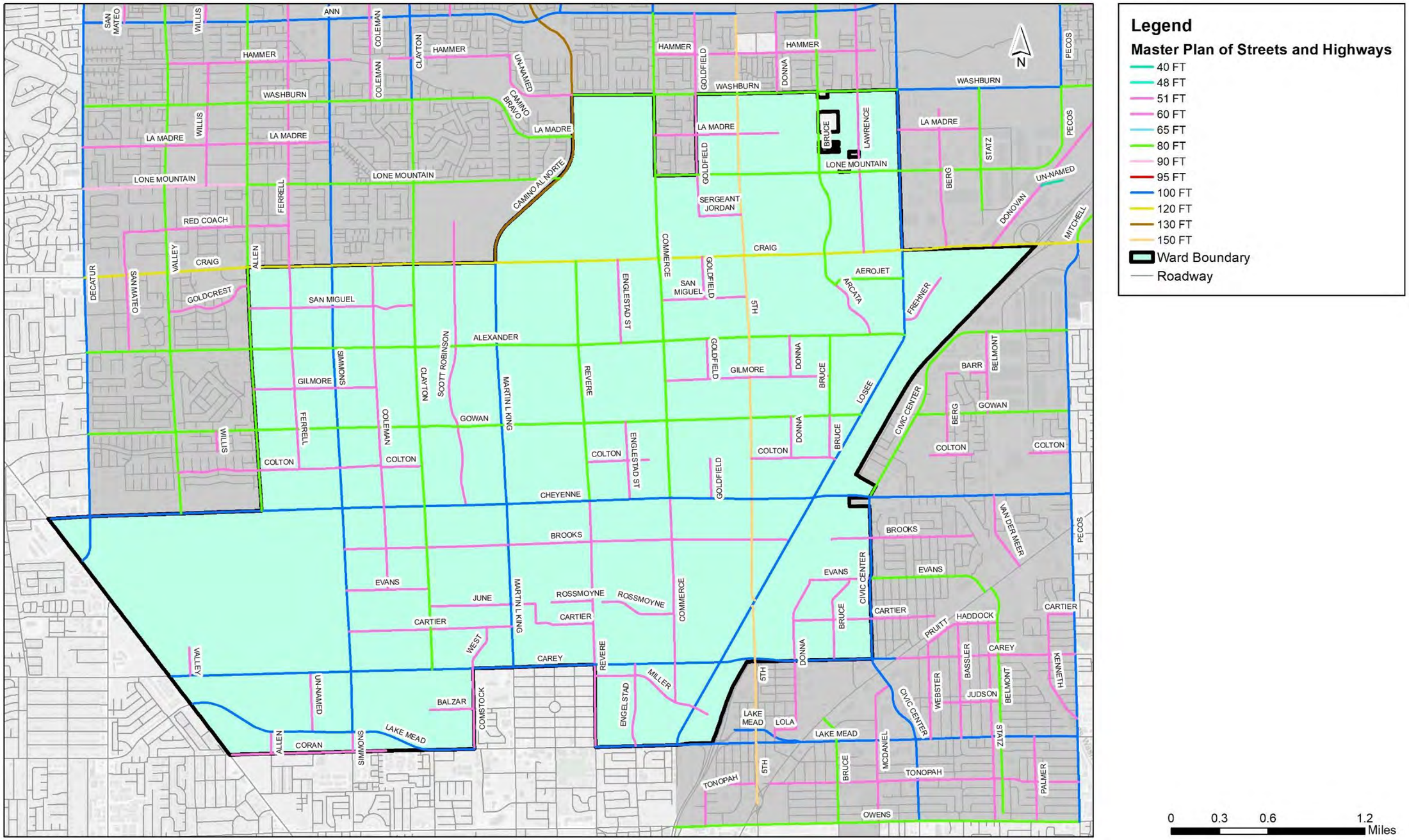
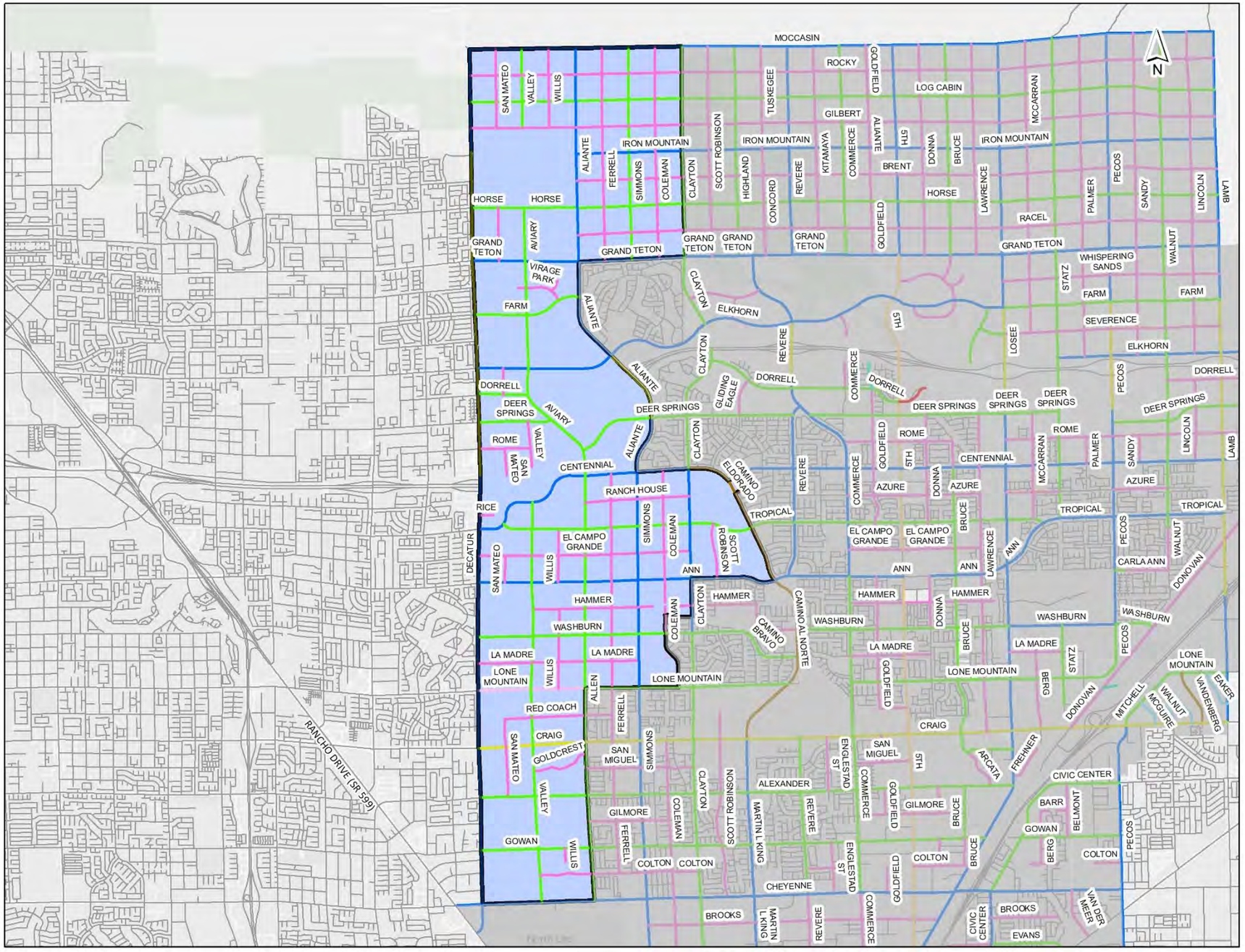


Figure 4 – Existing Master Plan of Streets and Highways (Ward 2, May 12, 2020)



Legend

Master Plan of Streets and Highways

- 40 FT
- 48 FT
- 51 FT
- 60 FT
- 65 FT
- 80 FT
- 90 FT
- 95 FT
- 100 FT
- 120 FT
- 130 FT
- 150 FT
- Ward Boundary
- Roadway

Figure 5 – Existing Master Plan of Streets and Highways (Ward 3, May 12, 2020)

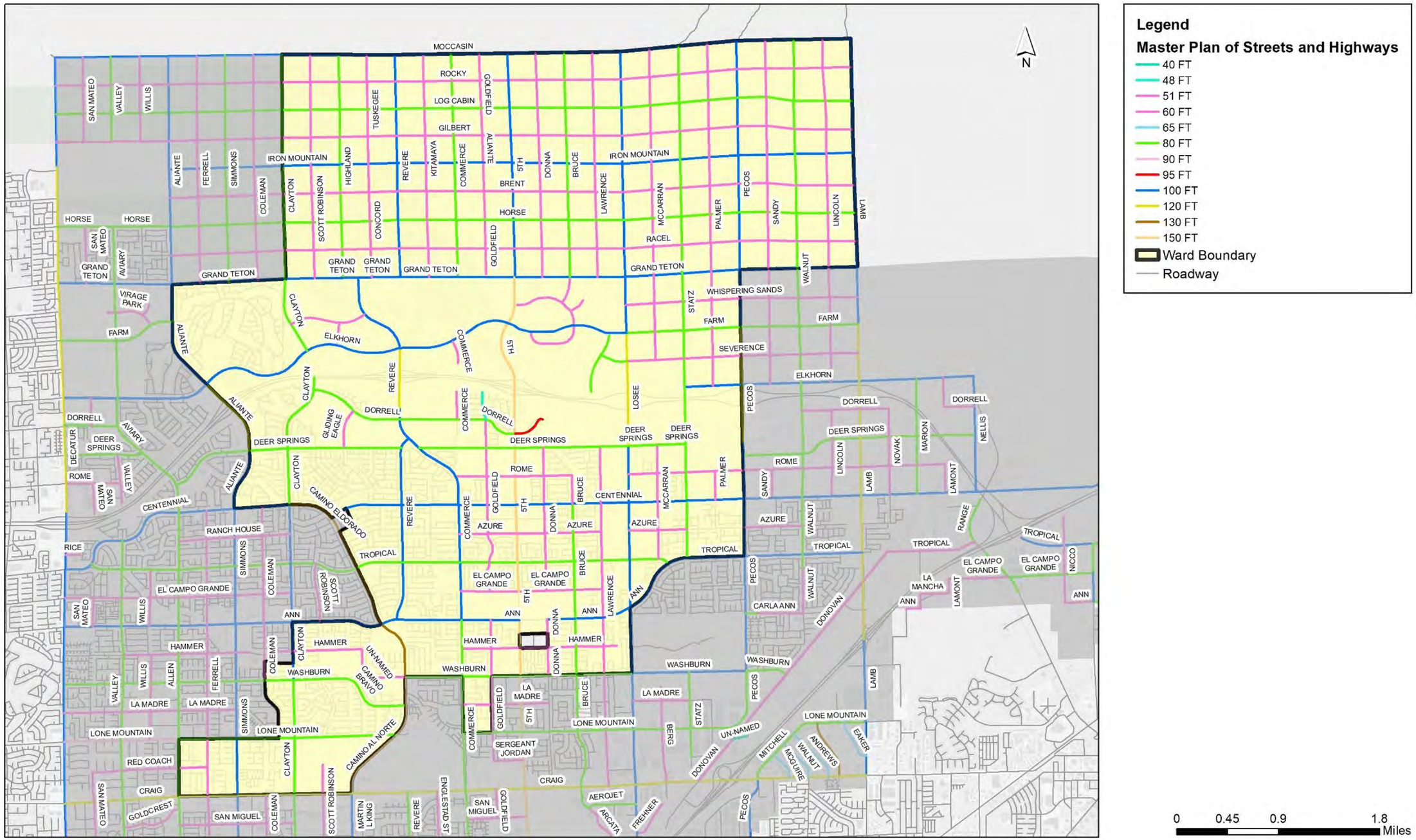


Figure 6 – Existing Master Plan of Streets and Highways (Ward 4, May 12, 2020)

2 STAKEHOLDER ENGAGEMENT

Stakeholder engagement for the *Comprehensive Master Transportation Plan* included coordination with two key groups, the Technical Advisory Committee (TAC) and Stakeholders. The TAC membership included City Staff and representatives from the Planning Commission, City of Las Vegas, University of Nevada Las Vegas (UNLV), Clark County School District (CCSD), Nevada Department of Transportation (NDOT), RTC, and RTC Freeway and Arterial System of Transportation (FAST). Stakeholders included representatives from the City Council, Nellis Air Force Base, community groups, trucking companies, and other local businesses.

2.1 Meetings

The following virtual meetings were held with the TAC and stakeholders to gather input for the study:

- **TAC Meeting #1**: Conducted on March 24, 2021, TAC Meeting #1 served as the kick-off meeting for the TAC. A review of project objectives and goals and an overview of the project tasks were provided. Discussion on who should be part of the stakeholder group occurred.
- **TAC Meeting #2**: Conducted on August 31, 2021, TAC Meeting #2 presented key findings from the review of existing studies, summarized existing conditions, provided a Land Use Analysis, provided an overview of the Environmental Justice Analysis methodologies being considered, and discussed the current truck routes within the City. Discussion on how stakeholders were to be engaged during the first Stakeholder Workshop also occurred.
- **Stakeholder Workshop #1**: On September 16, 2021, Stakeholder Workshop #1 presented the material discussed during TAC Meeting #2 to the stakeholder group. An interactive map was used to gather stakeholder comments associated with areas of concern during the workshop (**Figure 7**). A two-week period from the Stakeholder Workshop allowed both the Stakeholder Group and the TAC to provide comments within the interactive map.
- **TAC Meeting #3**: Conducted on January 26, 2022, TAC Meeting #3 presented the network analysis and findings along with preliminary recommendations for proposed truck routes, changes to the MPSH, and proposed cross section alternatives along with identified corridors where these alternatives could be implemented.
- **Stakeholder Workshop #2**: Conducted on February 2, 2022, Stakeholder Workshop #2 presented updated material from TAC Meeting #3. An interactive map was created for this workshop to display the preliminary recommendations to the group (**Figure 8**). A two-week period from the Stakeholder Workshop allowed the Stakeholder Group and the TAC to provide any final comments for the project.

2.2 Interactive Comment Maps

All TAC and stakeholder workshops were held virtually. Interactive maps were developed using the ArcGIS Online platform to engage stakeholders in a virtual setting and were accessible during and after the workshops. The comment map prepared for Workshop #1 included a study area map and allowed stakeholders to comment on specific areas or corridors. The interactive map for Workshop #2 included more project details, such as:

- Existing MPSH
- Existing and Proposed Bike and Pedestrian Facilities
- Areas of Equity Need
- Apex Street Network
- Proposed MPSH Updates
- Existing and Proposed Truck Routes

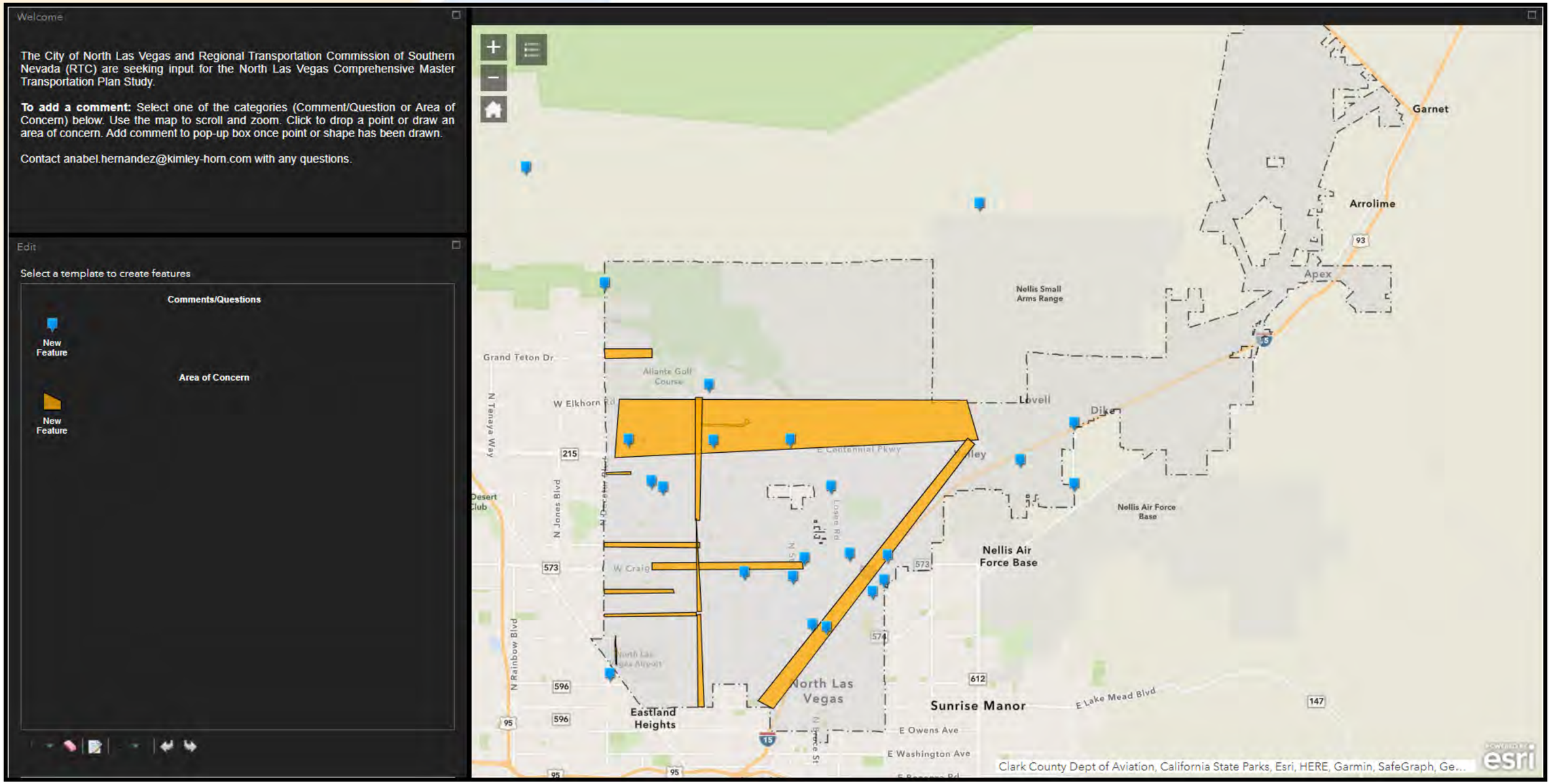


Figure 7 – Interactive Map for Stakeholder Workshop #1

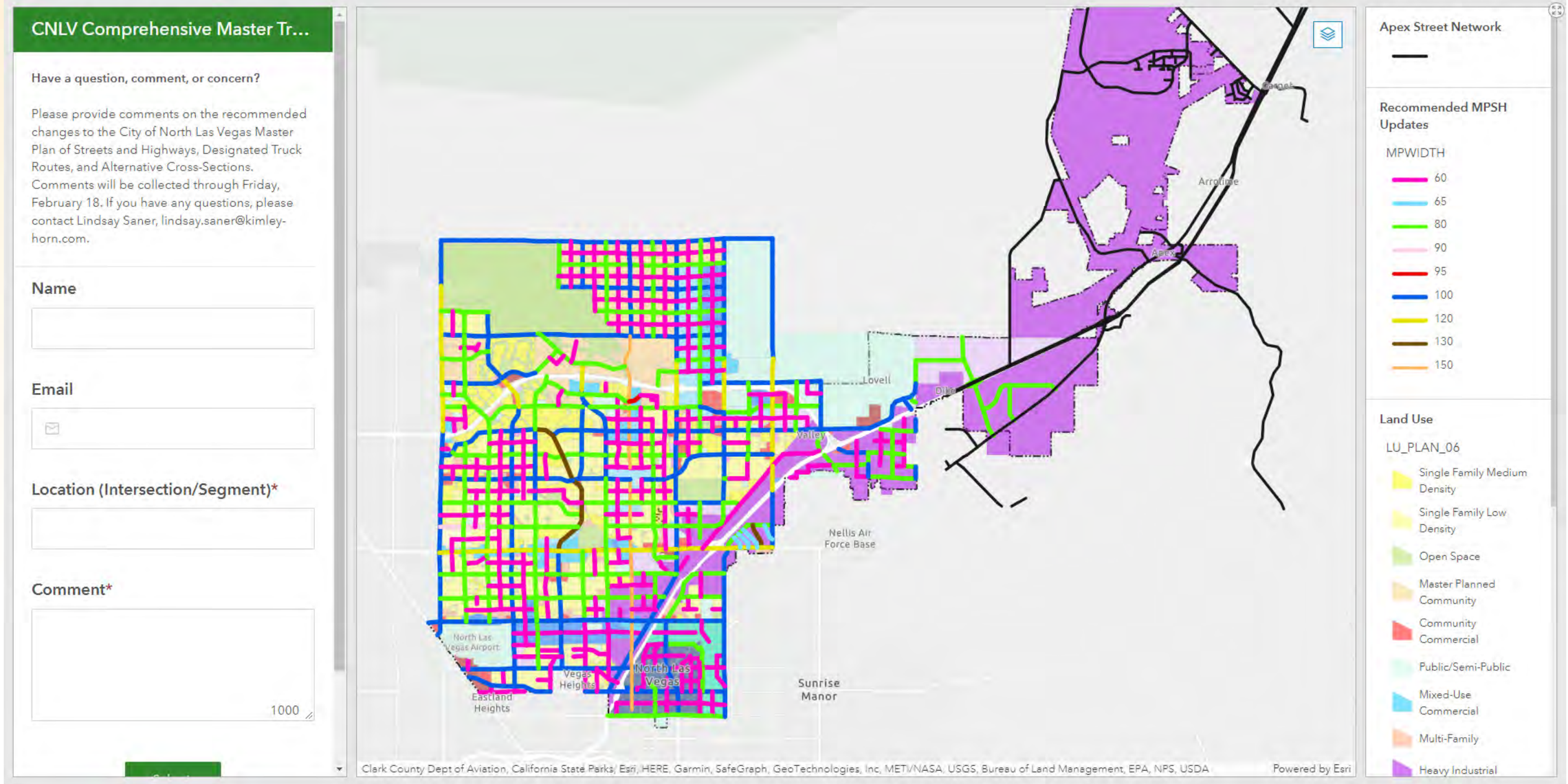


Figure 8 – Interactive Map for Stakeholder Workshop #2

3 EXISTING CONDITIONS

Planning efforts within the City and regionally focusing on multimodal mobility and complete street elements were reviewed and summarized. The Existing Conditions analysis included the review of policies, plans, and studies relevant to the study's purpose and goals; collection of AM and PM peak-hour turning movement volumes, daily directional counts with vehicle classifications; analysis of existing and future 2040 AADT; review of the City's roadway functional classifications; analysis of equity and environmental justice; and review of the City's Land Use Plan. Key elements and recommendations from these efforts were summarized to support this study's Land Use Analysis and Network Analysis.

3.1 Review of Policies, Plans, and Studies



Previous planning efforts support the development of complete street elements on the City's streets, which provide a walkable, safe, and comfortable street network within the City and prioritize pedestrian accessibility and bicycle network connectivity. Key findings from the following documents were incorporated into the Land Use (**Section 3.5**), alternative cross sections (**Section 4**), and Network Analysis (**Section 6**):

- 2021-2024 Transportation Improvement Program (TIP)
- Access 2050 Regional Transportation Plan
- Clark County Access Management Guidelines (2011)
- Deer Springs District Livable Centers Study (2019)
- NDOT Access Management System and Standards (2017)
- NDOT One Nevada Transportation Plan (Revised 2020)
- North Las Vegas Citywide Pedestrian and Bicycle Plan (2019)
- North Las Vegas Complete Street Corridor Ranking Study (2015)
- North Las Vegas Complete Streets Policy (2017)
- North Las Vegas Comprehensive Master Plan (amended in 2011, 2014, 2017, 2019, 2022))
- North Las Vegas Downtown Master Plan and Investment Study (2009)
- North Las Vegas Downtown Complete Streets Master Plan (2020)
- North Las Vegas Downtown Implementation Strategies Report (2014)
- Southern Nevada Strong Downtown North Las Vegas Opportunity Site 5-year Progress Report (2020)
- North Fifth Street Transit Supportive Concept Plan (2006)
- North Las Vegas Land Use Master Plan (2021)
- North Las Vegas Truck Route Map (2018)
- Northeast Valley Transportation Network Study (2018)
- RTC's Complete Streets Guidelines for Livable Communities (2013)
- RTC's On Board Mobility Plan (2020)
- Traffic Study for Apex Industrial Park (2008)
- Truck Arterial Route Study – Losee Corridor (2017)
- Conceptual Land Use Plan for the Village at Tule Springs (2018)

A detailed summary of all studies reviewed for this project is found in **Appendix A**.

3.2 Roadway Functional Classifications

The City's roadway functional classifications were reviewed and compared to definitions provided by FHWA, NDOT, and other local agencies. Roadway functional classifications define the role of a roadway within the transportation network and set design and performance benchmarks. The following sections review roadway functional classification methodologies and how they compare to the functional classification system.

3.2.1 Existing City Functional Classification Definition

The *Municipal Code Title 16 Section 04.170* provides the following definitions:

- **Residential roadway:** a street that provides access to residential areas only
- **Minor collector:** a street that collects residential traffic and/or may service commercial facilities
- **Major collector:** a street that serves as a destination roadway and/or may service commercial/light industrial facilities
- **Minor arterial:** a street that serves as a destination roadway and/or may service commercial/light industrial facilities
- **Major arterial:** a street that serves as a destination roadway and/or may service commercial/light industrial facilities

Major collectors, minor arterials, and major arterials have the same definition in the *City of North Las Vegas Municipal Code,* even though these vary in width. Furthermore, in the *Municipal Code Title 17*, the City classifies its roadways into four categories based on ROW width, as shown in **Table 1**. Additional details about the roadway functional classifications are found in **Appendix B**.

Table 1 – City Functional Classification Definitions by ROW

Functional Classification	ROW
Major Arterials	> 90'
Minor Arterials	80' - 90'
Collectors	60'
Locals*	< 60'

**Note: Local streets are assumed to have a ROW width of less than 60 feet.*

3.3 Existing Traffic Volumes

To understand the current volumes on City streets and inform recommendations for updates to the MPSH and typical cross sections, the project team identified data collection locations, considering the following criteria:

- Intersections of collector and arterial streets (80-ft ROW and larger)
- Locations distributed across the four City Wards
- Avoid intersections where count data has been collected
- Intersections that have a variety of surrounding land uses
- Intersections near attractors such as schools, hospitals, and libraries
- Intersections along existing or planned bicycle and pedestrian facilities based on the *North Las Vegas Citywide Bicycle and Pedestrian Plan*

Data collection for the *Comprehensive Master Transportation Plan* included AM and PM peak-hour turning movement counts at 10 intersections and 24-hour bidirectional counts at 20 mid-block locations near the 10 study intersections.

The intersections and mid-block locations selected are summarized in **Tables 2** and **3**, respectively, and shown in **Figure 9**. The data collection at the 10 intersections and 20 mid-block locations occurred in April and May 2021. Volumes during this time were relatively normal; therefore, no COVID factors were applied. Detailed analysis of the data collection is found in **Appendix C**.

Table 2 – Intersection Turning Movement Count Locations

Intersection Number	Intersection	Count Date
1	Simmons Street and Alexander Road	Wednesday, April 28, 2021
2	Craig Road and Valley Drive	Wednesday, April 28, 2021
3	Simmons Street and Ann Road	Wednesday, April 28, 2021
4	Elkhorn Road and Aliante Parkway	Thursday, April 29, 2021
5	Deer Springs Way and Commerce Street	Thursday, April 29, 2021
6	Deer Springs Way and North 5th Street	Thursday, April 29, 2021
7	Washburn Road and Losee Road	Tuesday, May 4, 2021
8	Craig Road and North 5th Street	Tuesday, May 4, 2020
9	Lake Mead Boulevard and Bruce Street	Tuesday, May 4, 2021
10	Civic Center Drive and Lake Mead Boulevard	Wednesday, May 5, 2021

Table 3 – 24-Hour Bidirectional Mid-Block Locations

Mid-Block Number	Mid-Block	Count Date
1	Alexander Road, west of Simmons Street	Wednesday, May 19, 2021
2	Aliante Parkway, north of Elkhorn Road	Tuesday, May 11, 2021
3	Ann Road, east of Simmons Street	Tuesday, May 11, 2021
4	Bruce Street between Hickey Avenue and Flower Avenue	Tuesday, May 18, 2021
5	Civic Center Drive between Lake Mead Boulevard and Perliter Avenue	Wednesday, May 19, 2021
6	Commerce Street, south of Deer Springs Way	Tuesday, May 11, 2021
7	Craig Road between Valley Drive and Allen Lane	Wednesday, May 12, 2021
8	Craig Road, west of North 5th Street	Wednesday, May 19, 2021
9	Deer Springs Way, east of North 5th Street	Tuesday, May 11, 2021
10	Deer Springs Way, west of Clayton Street	Tuesday, May 11, 2021
11	Elkhorn Road, west of Aliante Parkway	Tuesday, May 11, 2021
12	Lake Mead Boulevard, west of Brand Street	Wednesday, May 19, 2021
13	Lake Mead Boulevard, west of Bangle Street	Tuesday, May 18, 2021
14	Losee Road, south of Washburn Road	Tuesday, May 18, 2021
15	North 5th Street, north of Craig Road	Wednesday, May 5, 2021
16	North 5th Street, north of Dorrell Lane	Wednesday, May 12, 2021
17	Simmons Street, north of Alexander Road	Wednesday, May 12, 2021
18	Simmons Street, north of Ann Road	Tuesday, May 11, 2021
19	Valley Drive, north of Craig Road	Tuesday, May 18, 2021
20	Washburn Road between Lawrence Street and Teal Petals Street	Tuesday, May 18, 2021

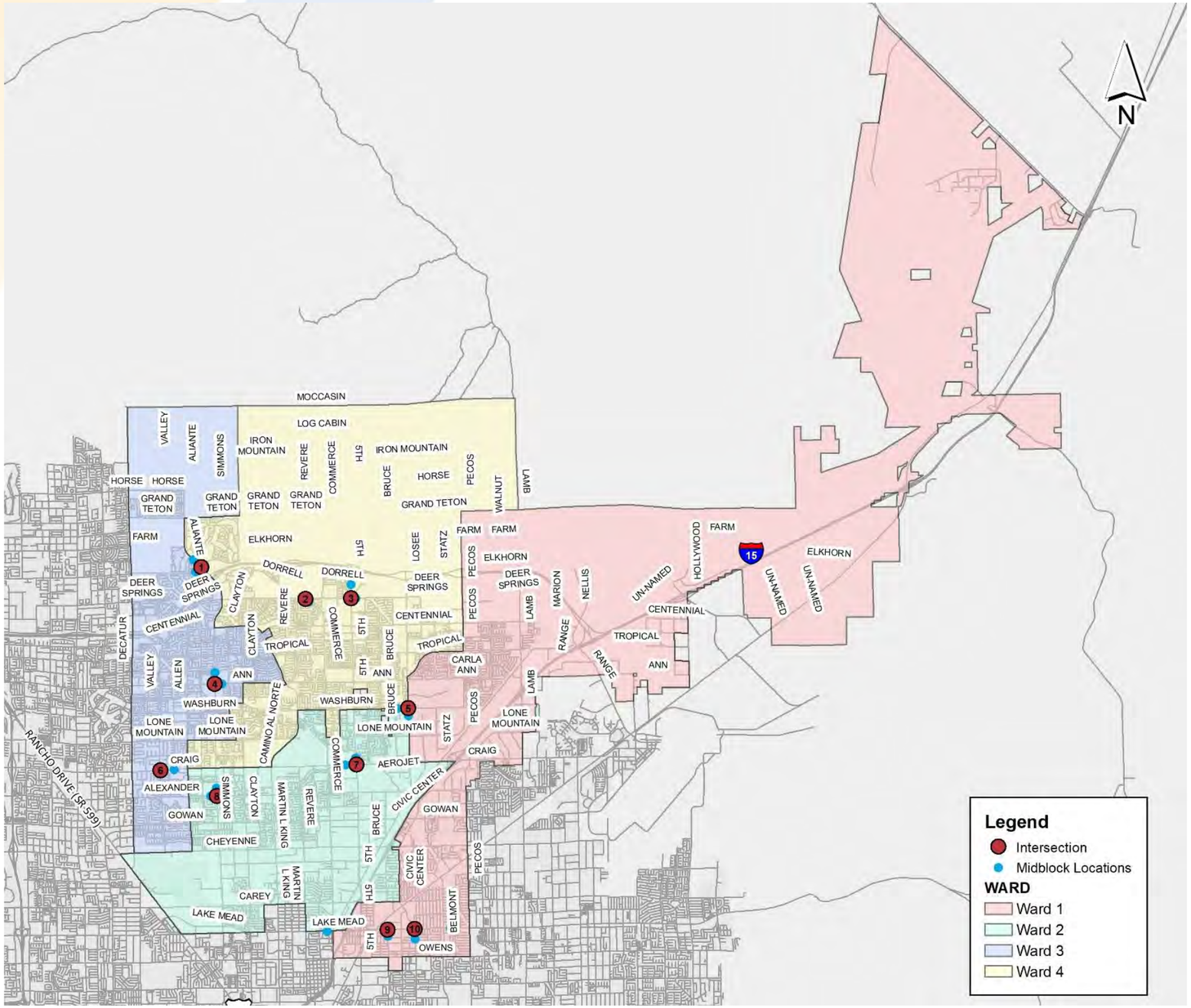


Figure 9 – Traffic Volume Data Collection Locations

3.3.1 Comparison to RTC Travel Demand Model Values

The bi-directional counts at the 20 mid-block locations were reviewed against the RTC's Travel Demand Model (TDM) based on their 2020 and 2040 estimates. The ADTs collected at the 20 locations were adjusted using weekday and monthly adjustment factors using three (3) NDOT permanent count stations within the City to estimate the Annual Average Daily Traffic (AADT). Adjusted AADTs were compared to the RTC's 2020 and 2040 TDM values. The comparison determined that some locations have higher volumes in 2021 than estimated for 2040. These locations were assumed to keep increasing through 2040; therefore, roadway reconfiguration was not recommended where operations/capacity would be impacted. In other instances, the 2021 volumes were lower than the estimated 2020 RTC TDM values. Some examples of roadways with different 2021 daily volumes than estimated in the RTC TDM model include:

- Craig Road (W of N 5th Street): 2021 AADT (41,000) almost twice the RTC TDM 2020 and 2040 (29,000 and 27,500).
- Aliante Parkway: estimated 2020 and 2040 TDM (26,000 and 29,000) are more than twice the 2021 AADT (12,500).

3.4 Equity and Environmental Justice Analysis

Historically, the US Department of Transportation (USDOT) and FHWA have focused on equity through guidance on environmental justice, which the FHWA defines as "the fair treatment and meaningful involvement of all people, regardless of race, ethnicity, income, national origin, or education level with respect to the development, implementation and enforcement of environmental laws, regulations, and policies."[1]

Federal laws and regulations address environmental justice and equity primarily through Title VI of the Civil Rights Act and Executive Order 12898. USDOT and FHWA have issued guidance on incorporating Title VI of the Civil Rights Act and Executive Order 12898 into the transportation decision-making process in DOT Order 5610.2(a) and FHWA Order 6640.23A, which directs Federal recipients to address disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.

3.4.1 Approaches to Defining Areas of Equity Need in Nevada

Equity populations are defined in Southern Nevada in a few ways (detailed information is found in **Appendix D**). When identifying areas of equity need, a useful tool is the RTC's Southern Nevada Community Data App map, which displays key demographic data in Clark County, including total population, population density, race and ethnicity, percent of the population foreign-born, percent 65 years of age and older, percent 17 years of age and younger, disability status, Limited English Proficiency, household income, poverty status, households receiving food stamps/SNAP, rent-burdened households, health insurance coverage, and other demographic characteristics. App users can also see the change in the demographic data over the past five years.[2]

[1]https://www.transportation.gov/transportation-policy/environmental-justice/environmental-justice-strategy
[2]https://www.arcgis.com/apps/webappviewer/index.html?id=67cbdac3638d460faa8f5b6be9aafee3

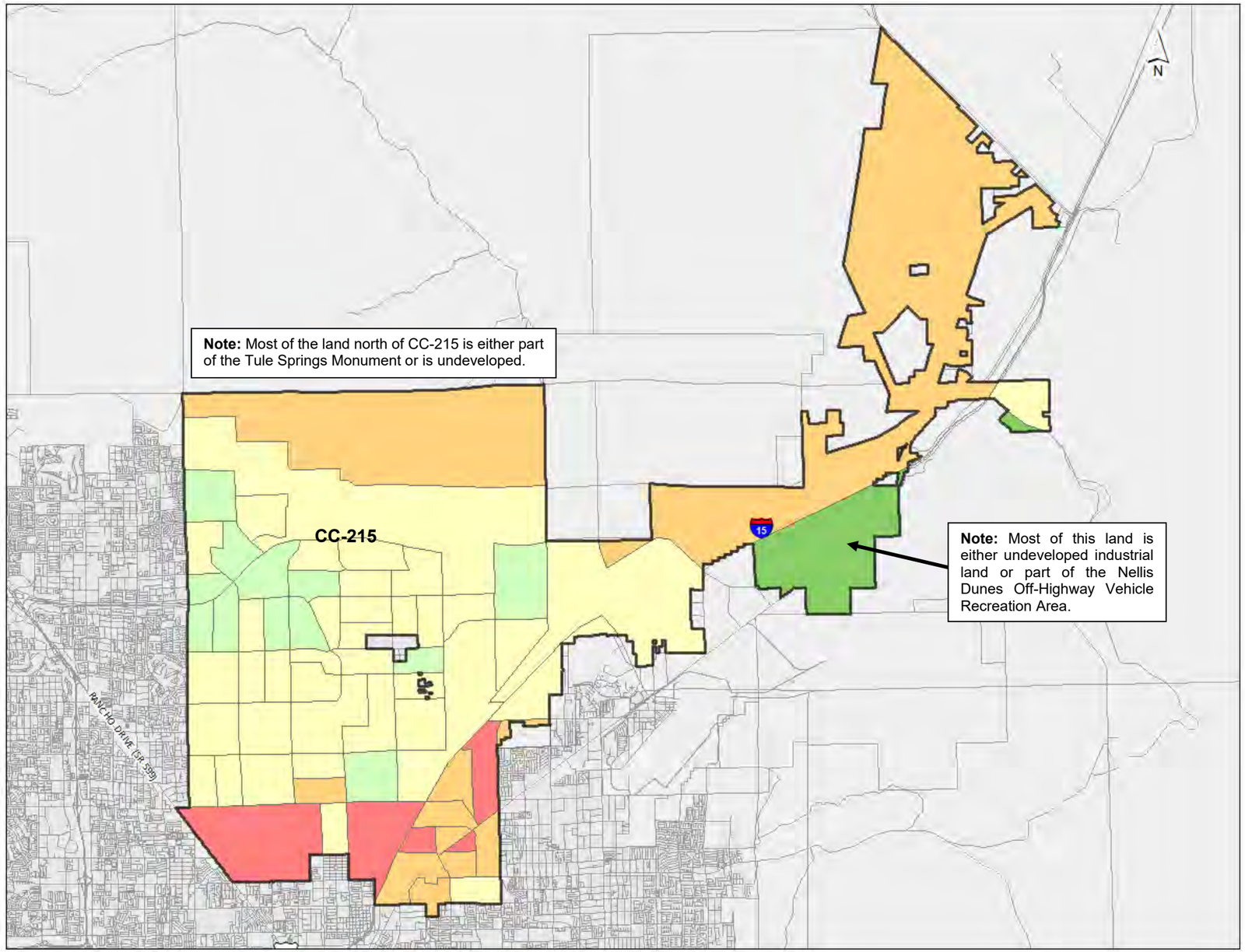
In January 2021, the RTC adopted the *ACCESS 2050: Regional Transportation Plan*. This plan identifies Equity Focus Areas (referred to as Areas of Equity Need for this study) by assigning a composite score to census tracts based on the tract's calculated percentile for key demographic characteristics. Higher scores indicate a higher need based on demographic characteristics and the use of non-vehicular modes of transportation. The identification of Equity Focus Areas was initially developed for the 2017 Regional Bicycle and Pedestrian Plan. Equity Focus Areas highlight the needs of zero-car households or households that may have a greater need for alternative forms of transportation.

At a statewide level, an equity analysis approach used by NDOT in the *One Nevada Transportation Plan* followed the Federal guidance emphasizing impacts on minority and low-income populations. The analysis was based on a threshold analysis of minority and low-income communities at the census tract level. The census tract level of geography was selected for its usefulness in providing insight at both a project scale and a regional level. An Area of Equity Need is any census tract that meets either low-income or minority-status criteria.

3.4.2 Equity and Environmental Justice Methodology for North Las Vegas

The methodology described in the RTC's *ACCESS 2050: Regional Transportation Plan* was deemed the appropriate methodology for consistency within the region, Areas of Equity Need are assigned a composite score to census tracts based on the tract's calculated percentile for key demographic characteristics. All 65 populated census tracts within the City were evaluated as part of the equity analysis. The US Census Bureau, in its American Community Survey (ACS) program, estimates the number of individuals who meet key demographic characteristics. The 2016-2020 ACS 5-Year Estimates were used.

Most of the Areas of Equity Need (areas with a composite score greater than or equal to 20) are within the southern portions of the City, in undeveloped areas along the northern boundary that are generally planned for mixed-use development or employment districts. Areas in the northern portion of the City and within Apex are not considered Areas of Equity Need as most are undeveloped. Areas of Equity Need generally have younger populations relative to the rest of the Las Vegas Valley and are home to more people of color. They also have a higher population with limited English proficiency, and their incomes fall below federal poverty guidelines compared to the rest of the region. The map showing the results of the Equity Analysis is shown in **Figure 10**.



- **High Score**: Tracts that scored higher have a higher identified need and typically represent low-income, minority neighborhoods who rely more heavily on bicycling, walking, or transit as their primary form of transportation.
- **Low Score**: Areas with lower scores generally represent more affluent neighborhoods, where access to an automobile is more readily available and where poverty levels are low.

Figure 10 – Equity Analysis Results for Census Tracts in the City of North Las Vegas

3.5 Land Use Analysis

Understanding the City's current and future land use needs is important for developing recommendations that will shape the City's future street network for inclusion in the MPSH update. The land use analysis was developed through a review of background documents, including citywide plans and policies, and sub-areas to understand the vision and recommendations for specific areas within the City that are expected to change or transform. This review combined with an analysis of existing land use and built form, such as block patterns, zoning, density, mixture of uses, and proximity to schools, provided a thorough understanding of the land use context of the City of North Las Vegas—both current and future.

The plans most relevant to the land use analysis include the following:

- Comprehensive Master Plan (amended in 2011, 2014, 2017, 2019, 2022)
- Deer Springs District Livable Centers Study (2019)
- North Las Vegas Downtown Master Plan and Investment Study (2009)
- North Fifth Street Transit Supportive Concept Plan (2006)

A complete summary of these documents is provided in **Appendix A**.

The Land Use Analysis determined that 32% of the City is categorized as residential, 28% as industrial, and 40% as a mix of various land uses, including commercial, parks/open space, and mixed-use. Four main categories were created to determine the land use context based on the predominant land use, built form, and degree of expected change. The four categories are residential, redevelopment, employment/industrial, and Areas of Equity Need. Land use analysis information is included in **Appendix E.**

3.5.1 Residential

The majority of the City's residential development single-family developments are characterized by suburban-style homes inside walled subdivisions. Single-family neighborhoods are split into four broad land use categories: Ranch Estates, Single-Family Low, Single-Family Medium, and Master Planned Community. (See **Figure 11)** Ranch Estates makes up a small portion of North Las Vegas's residential area, and it is characterized by its large lots. Master Planned Communities contain a mix of larger lot single-family, compact lot single-family, and relatively low-density multi-family developments. Many Single-Family Low and Single-Family Medium areas are similar in character, block pattern, and scale. The block pattern in these areas is irregular, often terminating in cul-de-sacs. Multifamily areas, such as apartments or condominiums, have larger buildings up to four stories tall, with internal vehicular circulation and parking.

A primary goal of updated streetscapes in the existing residential areas is to ensure "Safe Routes to Schools," especially in those areas identified as Areas of Equity Need. An additional goal is to identify locations that warrant the removal of vehicular traffic lanes to accommodate wider sidewalks, expanded landscaping/tree lawns, and bike facilities to encourage a more diverse mix of transportation options within the Neighborhood and City.

Ranch Estates	Master Planned Communities	Single-Family Low	Single-family Medium	Multi-Family



Figure 11 – Residential Land Uses

3.5.2 Redevelopment/Development Districts

Redevelopment/Development Districts including Downtown, Deer Springs Livable Center, and the North 5th Street Transit Corridor are anticipated to be high-activity areas. They each have a sub-area plan that provides recommendations to guide the transformations of the sub-areas, including the street network. Plans include targeted changes to future land use, built form, and streetscapes to support the future vision. These changes will take time to implement, and this evolution was considered as part of the land use analysis. Future street cross sections will be applied to these areas as streetscapes are rebuilt as part of redevelopment/development projects.

3.5.3 Employment/Industrial Areas

The Employment Districts include the industrial and primary employment corridors within the City. These corridors include Cheyenne Avenue, Craig Road, the industrial corridor along Interstate 15, and the Apex Industrial Park. The Cheyenne Technology Corridor is the result of a targeted economic development strategy to encourage and support employment activity along this corridor. Recent development along Craig Road between North 5th Street and the I-15 corridor has been a mix of commercial and industrial developments. The industrial area along the I-15 corridor has been developing primarily with office/warehouse and distribution centers. Apex industrial area has begun developing heavy industrial uses.

3.5.4 Areas of Equity Need

Areas of Equity Need have been identified through the use of the community-wide data made available through the RTC's Planning Map Resources. The RTC MPO produces geographic data resources to help support the development of transportation studies in Southern Nevada. Areas of Equity Need are an important component in the transportation planning process. Identifying the locations of the areas helps ensure equitable access to affordable and reliable transportation options. Referencing the orange and red areas located in the southern portion of the City shown in **Figure 10**, the Areas of Equity Need were overlayed on the maps summarizing the land use analysis. The Areas of Equity Need layer was included on the residential areas map and the Safe Routes to Schools Map to represent those areas for consideration in this analysis.

Existing land uses, current and future bike facilities based on the Citywide *Pedestrian and Bike Plan*, schools, Areas of Equity Need, and development districts/activity areas were mapped to illustrate the existing conditions as shown in **Figure 12** through **Figure 14**. The detailed Land Use Analysis is provided in **Appendix E**.

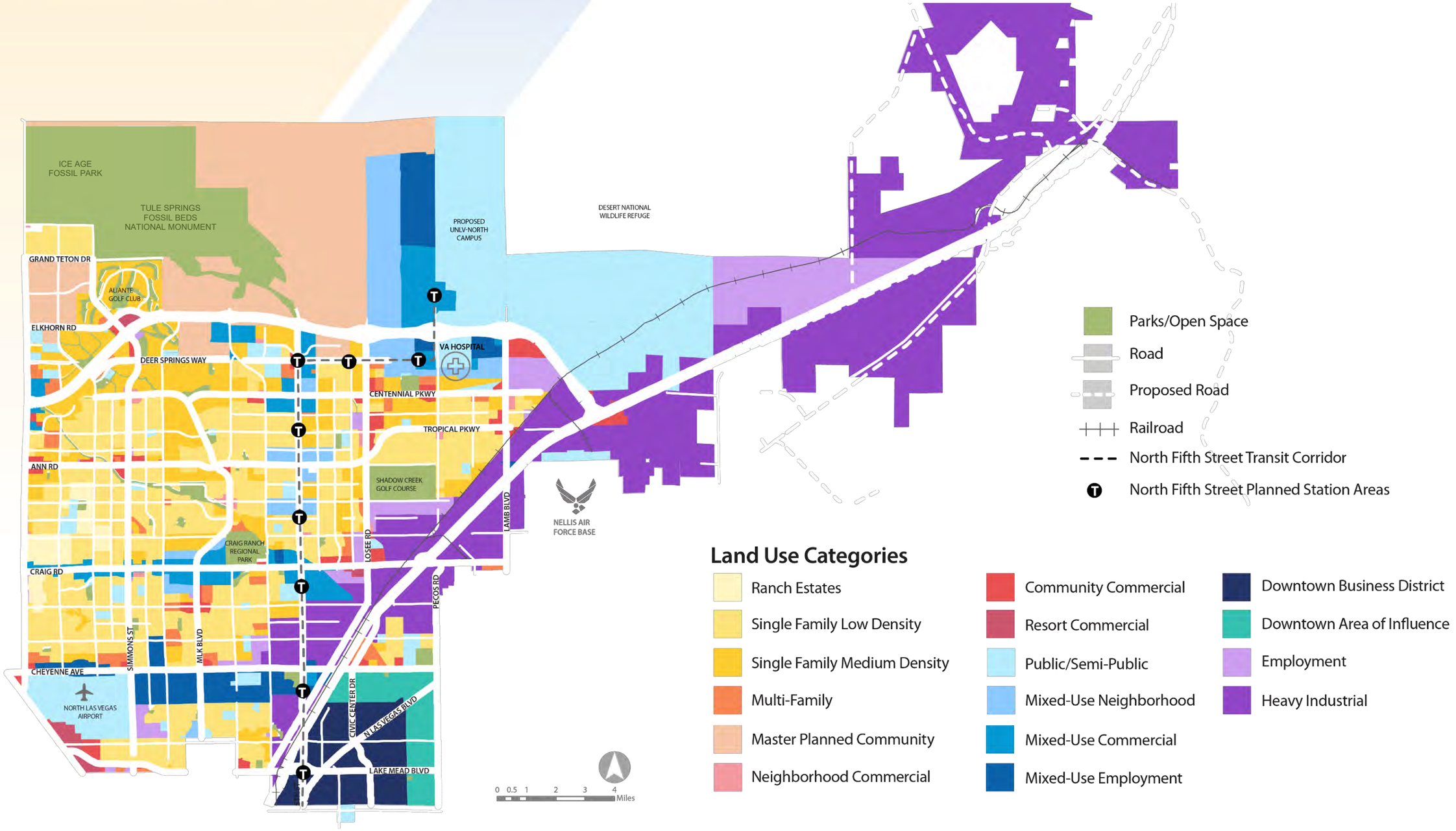


Figure 12 – Existing Land Use

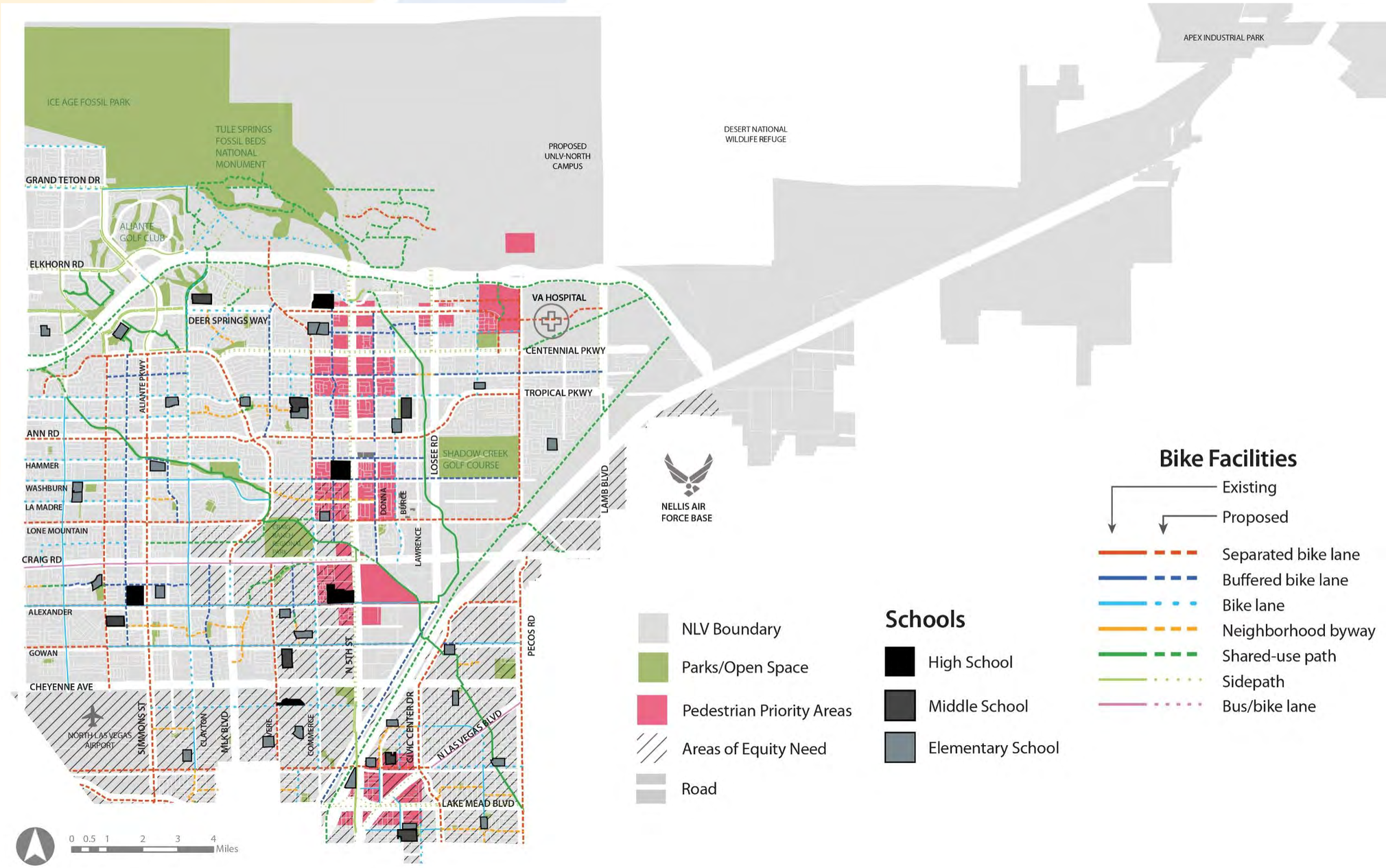


Figure 13 – Current and Future Bike Facilities and Schools

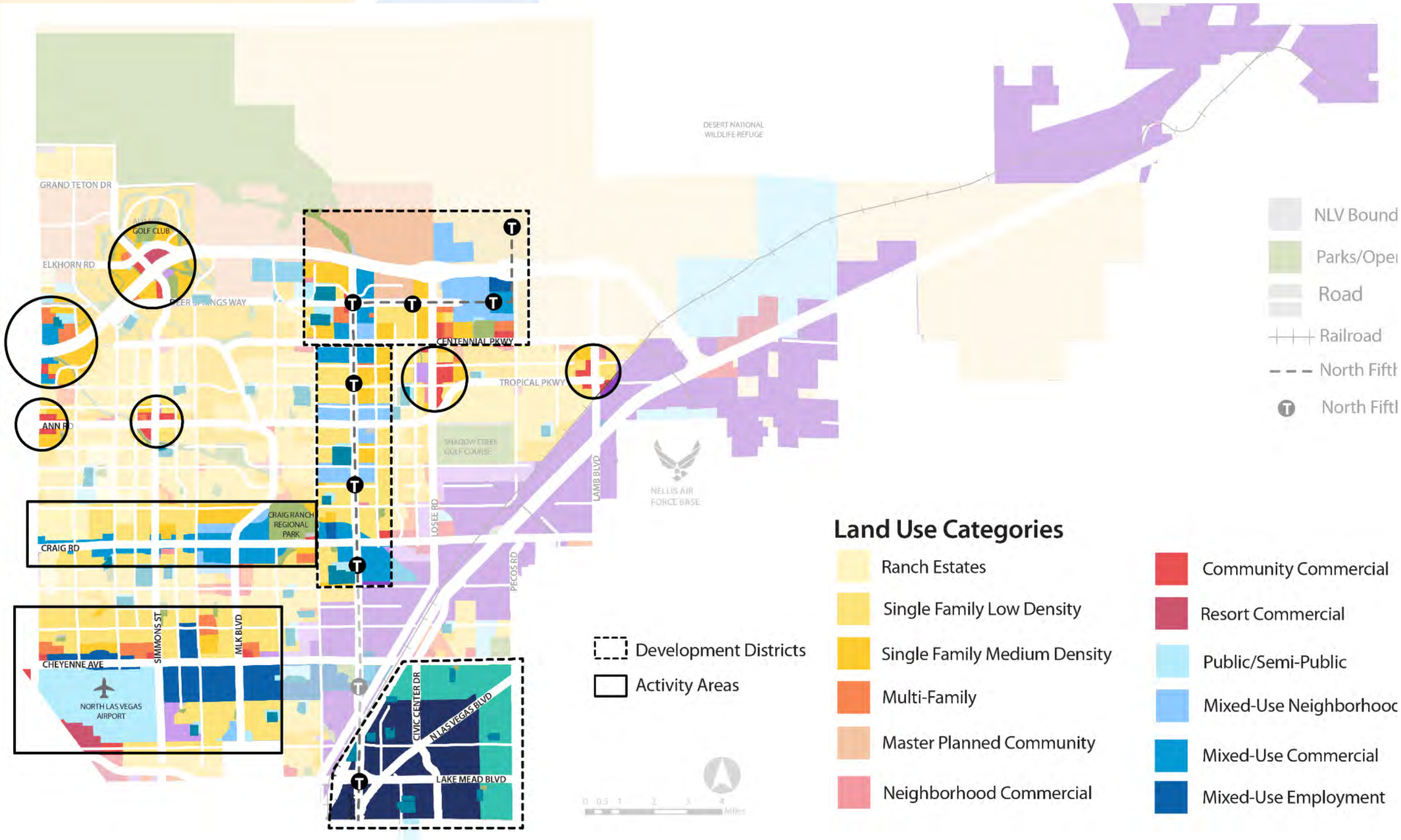


Figure 14 – Activity and Redevelopment District Areas

4 Alternative Cross Sections for Complete Streets

Much of the City's existing street network, similar to most arterial roadways across the Las Vegas Valley, was planned, designed, and constructed for the passenger vehicle. Historically, typical cross sections had narrow sidewalks, wide, unobstructed pavement widths, and wide travel lanes that encouraged vehicles to travel at higher speeds. These conditions make roadways uninviting for vulnerable road users such as bicyclists and pedestrians.

Recommended cross sections from the *North Las Vegas Citywide Pedestrian and Bicycle Plan* (*Pedestrian and Bicycle Plan*) were the basis for the development of context-sensitive alternatives with complete street elements for this study to provide a walkable, safe, and comfortable street network for all road users. The proposed typical cross sections incorporate complete street elements to accommodate and encourage active transportation along the City's roadways. Complete street elements improve community health, quality of life, and quality of the environment and provide economic growth. The proposed cross sections incorporate bicycle facilities and enhanced pedestrian walkways to make the City's street network more welcoming for all users.

The following subsections describe the details for alternative cross sections for 60', 80', and 100' ROW streets. Additional ROW for intersections (right turn lanes) and raised medians will be required. The existing (typical) cross section for each ROW is provided for reference.

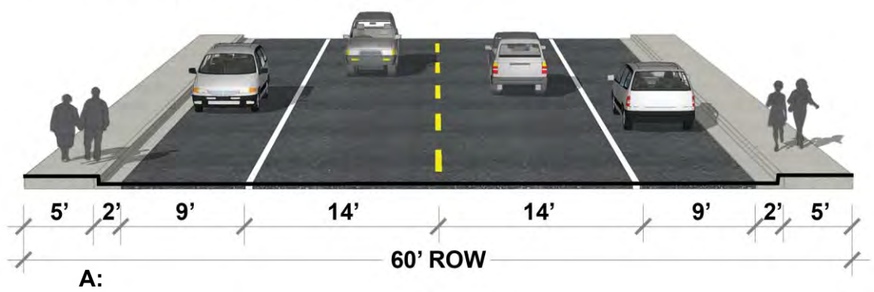
4.1.1 60' ROW Cross Sections

The existing typical cross section with on-street parking for the 60' ROW (**Figure 15**) does not provide separate facilities for bicyclists. Bicyclists share the road with fast-moving vehicles. Pedestrians can experience accessibility issues along sidewalks as many of the sidewalks in the City are standard five-foot sidewalks and can have various forms of obstructions, such as utility poles located within the sidewalk.

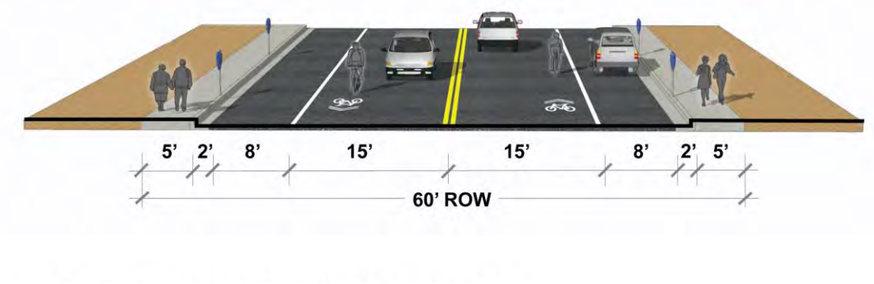
Alternatives A-D provide options to accommodate all road users. The following provides key highlights for each alternative:

- **Alternative A: 60' Neighborhood Byway** provides wider travel lanes for bicycles and vehicles to share the road.
- **Alternative B: 60' Bike Lanes, Fronting Land Uses**, provides 11-foot vehicle travel lanes, allowing room for bike lanes in each direction while maintaining on-street parking on both sides.
- **Alternative C: 60' Buffered Bike Lanes, Fronting Land Uses on One Side**, provides narrow vehicle travel lanes, allowing for slower speeds and room for buffered bike lanes in each direction with on-street parking on one side of the street. The sidewalks are also widened to six feet (6').
- **Alternative D: 60' Buffered Bike Lanes (No On-Street Parking)** provides 13' vehicle travel lanes with buffered bike lanes in each direction.

60' Existing with On-Street Parking



Alternative A: 60' Neighborhood Byway

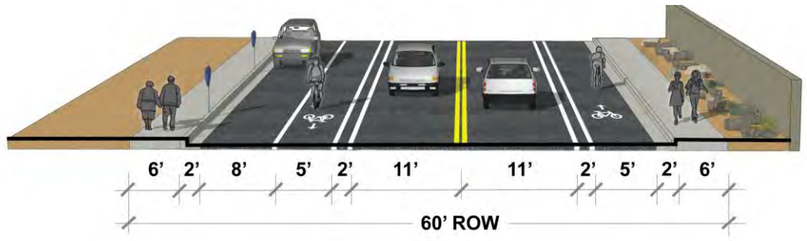


Alternative B: 60' Bike Lanes, Fronting Land Uses



Figure 15 – 60' ROW Cross Sections

Alternative C: 60’ Buffered Bike Lanes, Fronting Land Uses on One Side



Alternative D: 60’ Buffered Bike Lanes (No On-Street Parking)

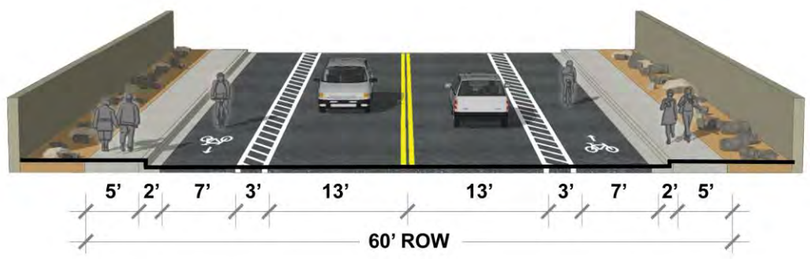


Figure 15 – 60’ ROW Cross Sections (continued)

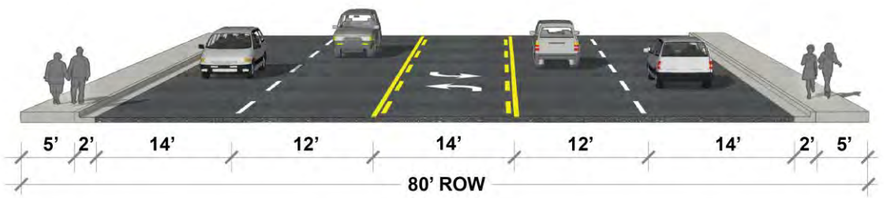
4.1.2 80’ ROW Cross Sections

The existing typical cross section for the 80’ ROW (**Figure 16**) does not provide dedicated facilities for bicyclists. A wide pavement width may promote higher speeds. Bicyclists along these roadways must share the road with faster-moving vehicles, and pedestrians can experience accessibility issues along sidewalks where obstructions in the walkway exist.

The proposed alternatives provide various options to accommodate all road users along 80’ ROW streets, as highlighted below:

- **Alternative A: 80’ Buffered Bike Lanes**, reduces travel lanes from two lanes each direction to one lane each direction with a two-way left turn lane (TWLTL), allowing space for buffered bicycle lanes and a wider sidewalk with perimeter landscaping providing an additional buffer between the street and the sidewalk.
- **Alternative B: 80’ Street Level Separated Bike Lanes**, reduces travel lanes from two lanes each direction to one lane each direction with a TWLTL, allowing space for separated bicycle lanes and a wider sidewalk with perimeter landscaping.
- **Alternative C: 80’ Curb Level Separated Bike Lanes**, reduces travel lanes from two lanes each direction to one lane each direction with a TWLTL, relocating the curb and allowing bicycle facilities to be at curb level, separating them from vehicular traffic.

80’ - Existing Typical



Alternative A: 80’ Buffered Bike Lanes

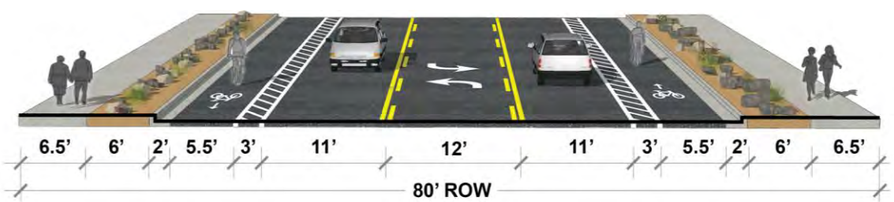
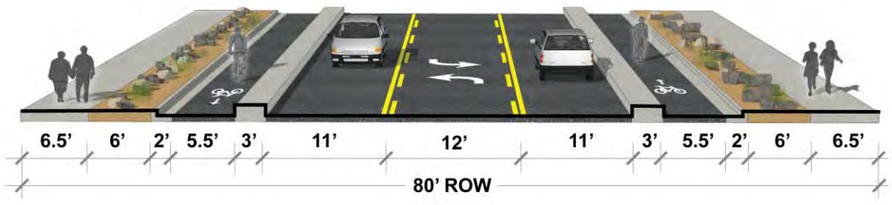


Figure 16 – 80’ ROW Cross Sections

Alternative B: 80’ Street Level Separated Bike Lanes



Alternative C: 80’ Curb Level Separated Bike Lanes

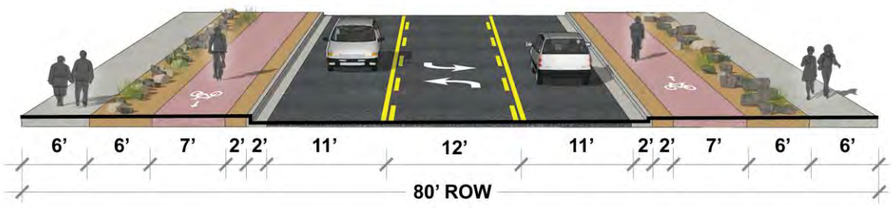


Figure 16 – 80’ ROW Cross Sections (continued)

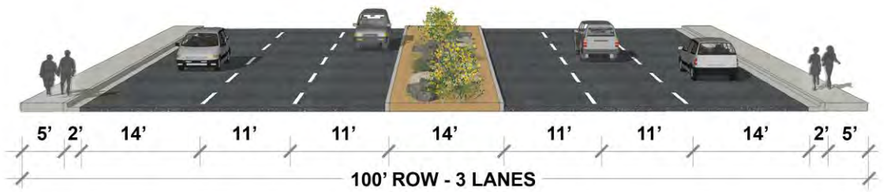
4.1.3 100’ ROW Cross Sections

The existing typical cross section for the 100’ ROW (**Figure 17**) includes wide pavement width, typically three lanes in each direction, and often has the minimum five-foot sidewalk and few if any, obstructions. With no defined bike lane, bicyclists must share the road with fast-moving vehicles. Pedestrians can experience accessibility issues along sidewalks due to various obstructions (utility poles, streetlights, fire hydrants) along pedestrian walkways.

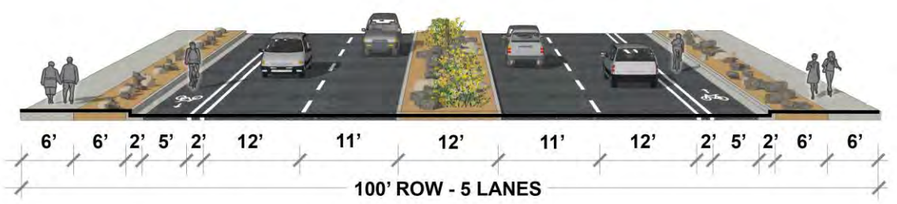
The proposed alternatives provide various options to accommodate all road users. The following provides key highlights for each alternative.

- **Alternative A: 100’ Buffered Bike Lanes (5 Lane)**, reduces travel lanes from three (3) lanes each direction to two (2) lanes each direction with a raised median/left-turn lane, allowing space for striped buffered bike lanes and wider sidewalk with perimeter landscaping providing an additional buffer between the street and the sidewalk.
- **Alternative B: 100’ Street Level Separated Bike Lanes (5 Lane)**, reduces travel lanes from three (3) lanes each direction to two (2) lanes each direction with a raised median/left-turn lane, allowing space for separated bike lanes and a wider sidewalk with perimeter landscaping.
- **Alternative C: 100’ Curb Level Separated Bike Lanes (5 Lane)**, reduces travel lanes from three (3) lanes in each direction to two (2) lanes in each direction with a raised median/left-turn lane, and relocating the curb, allowing bicycle facilities to be at curb level separating them from vehicular traffic.
- **Alternative D: 100’ Buffered Bike Lanes (3 Lane)**, reduces travel lanes from three (3) lanes each direction to one (1) lane each direction with a TWLTL, allowing space for on-street parking on both sides, striped bike lanes, and a wider sidewalk with perimeter landscaping providing an additional buffer between the street and the sidewalk.
- **Alternative E: 100’ Street Level Separated Bike Lanes (3 Lane)**, reduces travel lanes from three (3) lanes each direction to one (1) lane each direction with a TWLTL, allowing space for on-street parking on both sides, separated bike lanes, and a wider sidewalk with perimeter landscaping providing an additional buffer between the street and the sidewalk.
- **Alternative F: 100’ Curb Level Separated Bike Lanes (3 Lane)**, reduces travel lanes from three (3) lanes each direction to one (1) lane each direction with a TWLTL, relocating the curb allowing bicycle facilities to be at the curb level separating them from vehicular traffic.

100’ - Existing Typical



Alternative A: 100’ Buffered Bike Lanes (5 Lane)



Alternative B: 100’ Street Level Separated Bike Lanes (5 Lane)

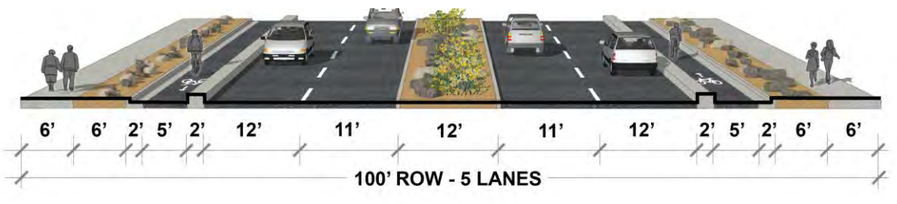
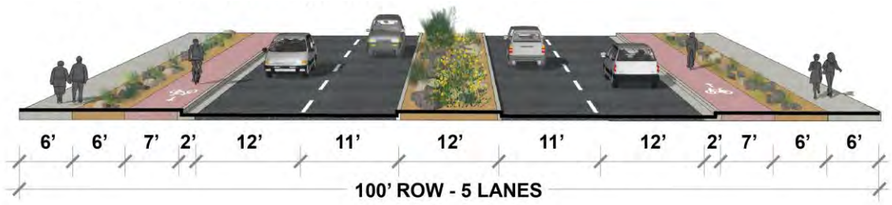
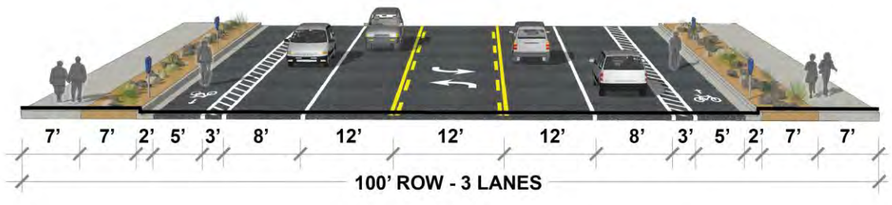


Figure 17 – 100’ ROW Cross Sections

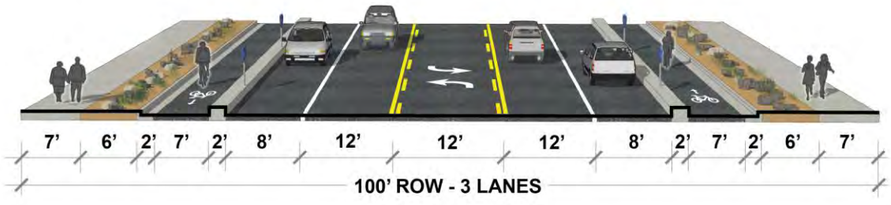
Alternative C: 100’ Curb Level Separated Bike Lanes (5 Lane)



Alternative D: 100’ Buffered Bike Lanes (3 Lane)



Alternative E: 100’ Street Level Separated Bike Lanes (3 Lane)



Alternative F: 100’ Curb Level Separated Bike Lanes (3 Lane)

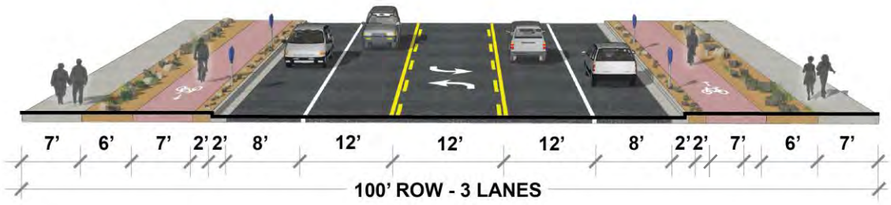


Figure 17 – 100’ ROW Cross Sections (continued)

5 TRUCK ROUTES

Southern Nevada is a growing freight distribution hub due to its proximity to two of the largest ports in the United States: Port of Los Angeles and Port of Long Beach (which combined handled over 11 million twenty-foot equivalent units of loaded cargo in 2020). The City is home to a large share of those distribution facilities. Some of the highest concentrations of warehouse space are in North Las Vegas.

A vital part of the freight network is the interface between different modes. Transferring goods between trains, trucks, planes, and pipes takes place at intermodal facilities. Except for the Moapa Transload facility, all other rail and pipeline intermodal facilities are concentrated in or adjacent to the City. Preserving a network of truck routes with appropriate design considerations will facilitate truck access, mobility, and safety, strengthening the City's position as a preferred location for distribution facilities and the growing freight logistics industry.

5.1 Truck Route Designation

The reasons for establishing truck routes are articulated best by the Ontario Trucking Association. A truck route system may:

- Help trucks avoid inappropriate residential streets
- Reduce traffic congestion throughout the municipality and the region
- Increase logistics options that will benefit businesses, transportation providers, and consumers
- Improve the economic competitiveness and attractiveness of industrial sites at major distribution points
- Provide a major benefit to the municipality's economy

5.2 Current City Truck Route Code

The North Las Vegas Code of Ordinances defines truck routes and trucks as follows:

> "'Official truck route system' means that system of streets and roads through the City which shall be used by trucks and other motor vehicles which weigh more than six thousand (6,000) pounds; said system being intended to coincide with routes in adjoining jurisdictions."
>
> "'Truck' means all trucks, tractors, trailer-trucks, tractor-trailers, and other motor vehicles which weigh in and of themselves in excess of six thousand (6,000) pounds."[3]

The Code prohibits trucks from traveling on any road not designated in the official truck route system except for certain conditions defined in the Code, which primarily includes those roads needed to pick up or drop off a load. In short, the official truck route system defines routes for through truck traffic.

[3] https://library.municode.com/nv/north_las_vegas/codes/code_of_ordinances?nodeId=TIT10VETR_CH10.44TRRO

5.3 Proposed Changes to the City Truck Route Code

Rather than defining trucks as all trucks, tractors, trailer-trucks, tractor-trailers, and other motor vehicles which weigh in excess of 6,000 pounds, it may be more appropriate to define them as Class 8 Trucks or larger, following the FHWA's Vehicle Category Classification (**Figure 18**). This is a more accurate definition of the type of vehicle that truck routes are intended for. In addition, pick-up trucks and SUVs, not intended to be restricted by truck routes, now include a long list of models that weigh over 6,000 pounds.

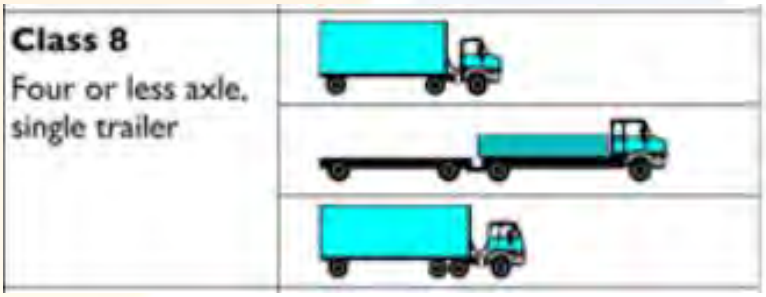


Figure 18 – Class 8 FHWA Vehicle Category Classification

5.4 Proposed Changes to the Official Truck Route System

Several criteria were used to identify changes to the truck routes.

- As a through route for class 8 and above trucks, truck routes should include streets that provide continuous routes across the City and neighboring jurisdictions and be appropriate for truck access.
- Truck routes should provide access to major industrial centers, freight intermodal facilities, and the Interstate Highway System—the preferred travel corridors for almost all truck drivers and trucking companies.
- Routes with high truck volumes indicate those frequently in use by trucks now. This was determined using 2019 NDOT vehicle classification count data.
- Routes that pass through residential areas and do not serve one of the above criteria were eliminated.
- Comments and feedback from a focus group with truck companies.

The proposed changes to the existing truck route map are summarized in **Table 4**. Detailed Truck Route information and map are found in **Appendix F**.

Table 4 – Proposed Truck Route Changes

Truck Route	From	To	Proposed Change
Losee Road	Washburn Road	Moccasin Road	Truck Route Removal
Pecos Road	Washburn Road	Northern City Boundary	Truck Route Removal
Lamb Boulevard	CC-215	Northern City Boundary	Truck Route Removal
Range Road	CC-215	Las Vegas Boulevard	New Truck Route
Donovan Way	Southern City Boundary	Tropical Parkway	New Truck Route
Tropical Parkway	Donovan Way	Range Road	New Truck Route
Civic Center Drive	Cheyenne Avenue	Alexander Road	New Truck Route
North 5th Street	Brooks Avenue	Cheyenne Avenue	New Truck Route
MLK Boulevard	Carey Avenue	Cheyenne Avenue	Truck Route Removal
Carey Avenue	Rancho Drive	Las Vegas Boulevard	Truck Route Removal
Civic Center Drive	Owens Avenue	Carey Avenue	Truck Route Removal
Owens Avenue	I-15	Las Vegas Boulevard	Truck Route Removal

6 NETWORK ANALYSIS

The Network Analysis combined the key findings and recommendations from the review of existing studies, existing and proposed transit routes, data collection, Land Use Analysis, and Equity Analysis to identify roadway segments (on streets with 80' ROW and above) that have the potential for roadway right sizing and complete streets elements.

It should be noted that the analysis did not include specific recommendations for roadways smaller than 80' ROW, as these roadways tend to have a wider variety of roadway characteristics. Practitioners should use the 60' ROW cross sections presented in **Section 4.1.1** as roadway reconstruction and new development occurs.

6.1 Roadway Network Analysis

Recommendations from other study efforts as part of the Network Analysis included the *Pedestrian and Bicycle Plan* (2019) and the *Southern Nevada Regional Walkability Plan Final Draft* (2022). Bicycle facility recommendations from the *Pedestrian and Bicycle Plan* (**Figure 19**) include bus/bike lanes, side paths, shared-use paths, neighborhood byways, bike lanes, buffered bike lanes, and separated bike lanes. The feasibility of the recommendations in **Figure 19** was reviewed for potential conflicts, existing and proposed adjacent land uses, and the 2040 AADT for each street segment.

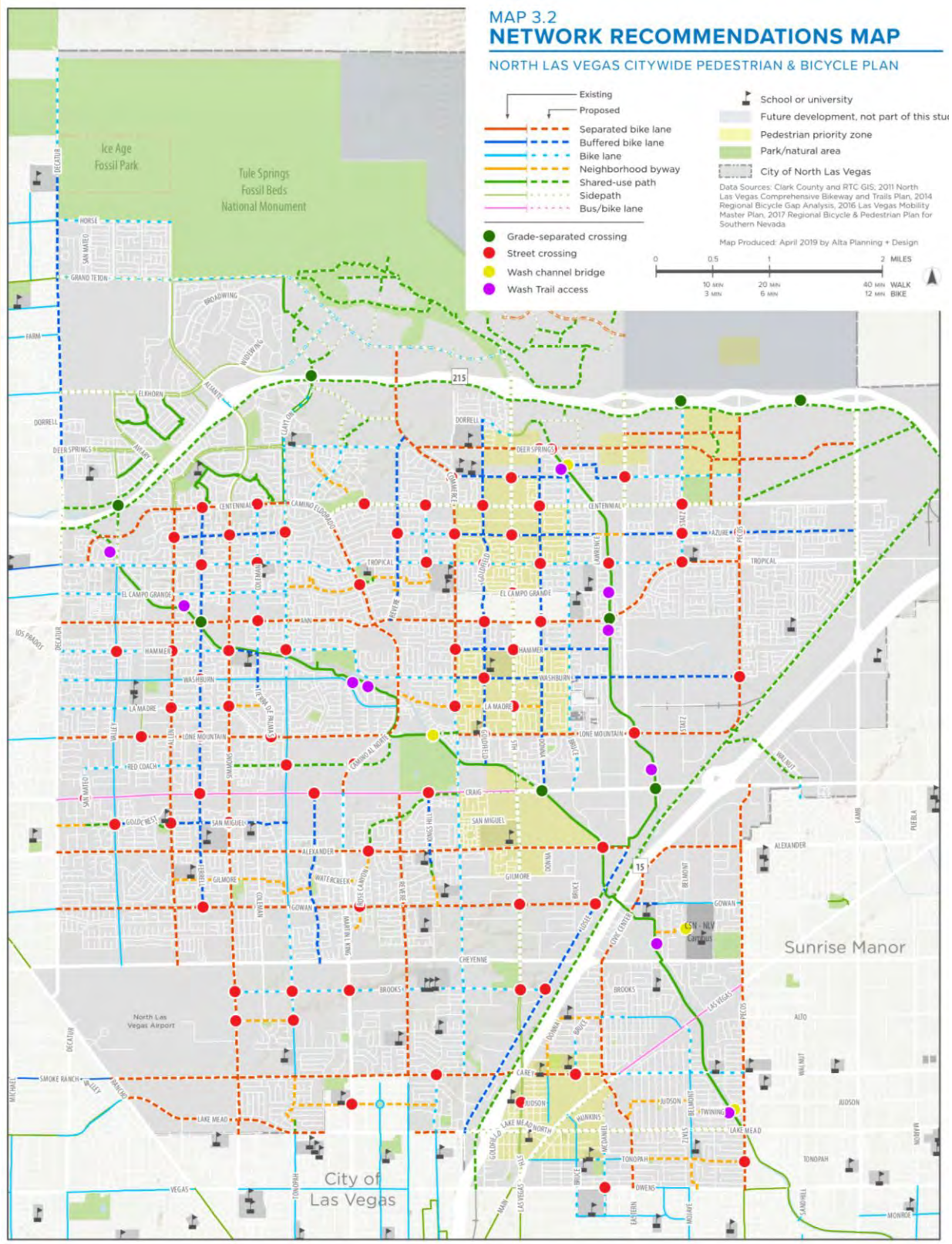
When comparing the *Pedestrian and Bicycle Plan* recommendations, some segments were identified for future bicycle and pedestrian improvements where the current or future 2040 AADT is too high to justify reducing the number of travel lanes. The network analysis matrix identifies the street segments with AADTs that are too high to reduce the number of lanes. Future ROW acquisitions would be required to accommodate the *Pedestrian and Bicycle Plan* recommendations for those street segments.

Preliminary recommendations from the *Southern Nevada Regional Walkability Plan* (**Figure 20**) for areas identified as "Priority Pedestrian Zones," "Priority Pedestrian Networks," and "Priority Corridors" within the City of North Las Vegas were considered in the analysis of those areas/corridors. These areas were identified as focus areas where pedestrian demand is high or expected to be high. The other elements examined as part of the network analysis to determine the appropriate cross section alternative for each roadway segment include:

- **Existing ROW:** The Clark County GIS Management Office (GISMO) interactive map (https://gisgate.co.clark.nv.us/openweb/?@782884,26762114,6) along with assessor parcel maps were used to verify the ROW along the roadways. There were some instances where the ROW differed between the existing MPSH ROW and the ROW shown in GISMO.
  - Belmont Street from Lake Mead Boulevard to Webb Avenue: Listed as 80' ROW in the existing MPSH but has an existing 52' ROW.
- **Existing Lane Configurations:** Aerial and street views of roadways were used to confirm the existing lane configurations on City streets. Understanding existing infrastructure and potential limitations to implementing complete street amenities, such as existing structures, inconsistent ROW widths, and utility conflicts, were critical factors in the analysis and the resulting recommendations.
- **ADT (Existing and 2040):** The 2040 RTC TDM volumes for each street segment were evaluated to determine if the number of existing (and future) travel lanes was adequate to support daily traffic volumes. A threshold of 15,000 ADT (bi-directional) for one lane in each direction was used[4]. If a four-lane roadway is anticipated to carry less than 15,000 ADT, it could potentially be right-sized to provide one lane of travel in each direction and repurposed to support bike lanes and wider sidewalks.
- **Adjacent Land Uses:** The Land Use Master Plan was reviewed to determine which areas will demand higher bicycle and pedestrian facilities. High-demand areas include residential, schools, parks, and commercial developments.
- **Transit Routes:** The existing RTC transit route map and proposed transit routes from the RTC's *On Board Mobility Plan* were reviewed to consider the appropriate complete street elements along existing and future transit routes.
- **Truck Routes:** Recommendations for the City's truck routes (from **Section 5**) were considered in the Network Analysis, with the intent to separate multimodal and truck corridors.
- **Areas of Equity Need:** Understanding Areas of Equity Need was necessary for the study as these areas are home to residents who are more likely to walk, bike, or use transit as their primary mode of transportation.
- **Access Management:** Access management is essential for balancing roadway efficiency with the population's ability to access and use roadways. Access management has improved traffic movement, reduced crashes, and reduced vehicle conflicts. *Clark County Area Access Management (CCAAM)* or the NDOT *2017 Access Management System and Standards* should be considered on City Streets with high densities of side streets and access drives.

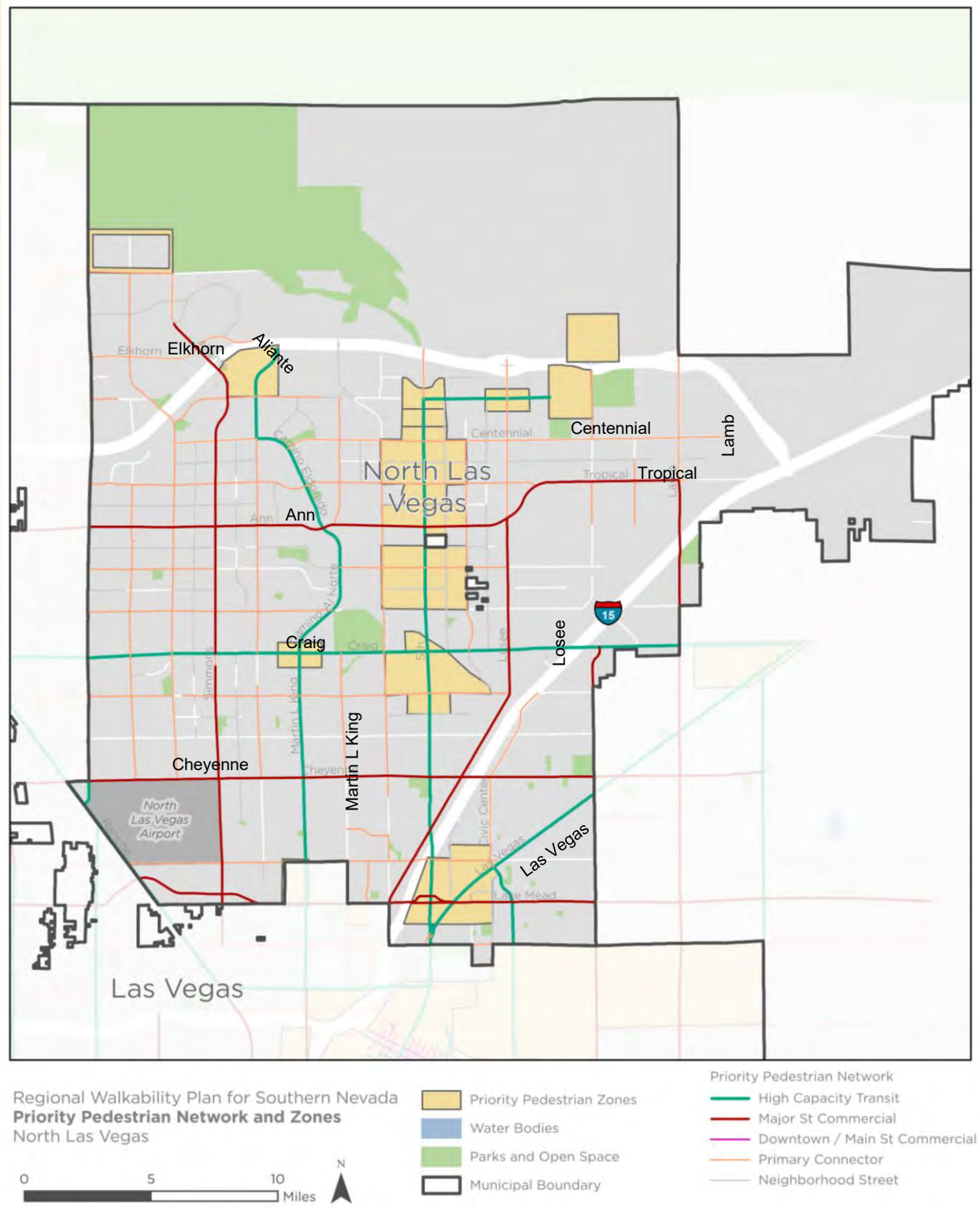
The detailed Network Analysis matrix is in **Appendix G**.

[4] *FHWA, "Road Diet FAQ" U.S. Department of Transportation Federal Highway Administration. https://safety.fhwa.dot.gov/road_diets/resources/pdf/fhwasa17021.pdf (accessed October 9, 2019, for this report)*



North Las Vegas Citywide Pedestrian and Bicycle Plan, 2019

Figure 19 – City Citywide Pedestrian and Bicycle Plan Recommendations

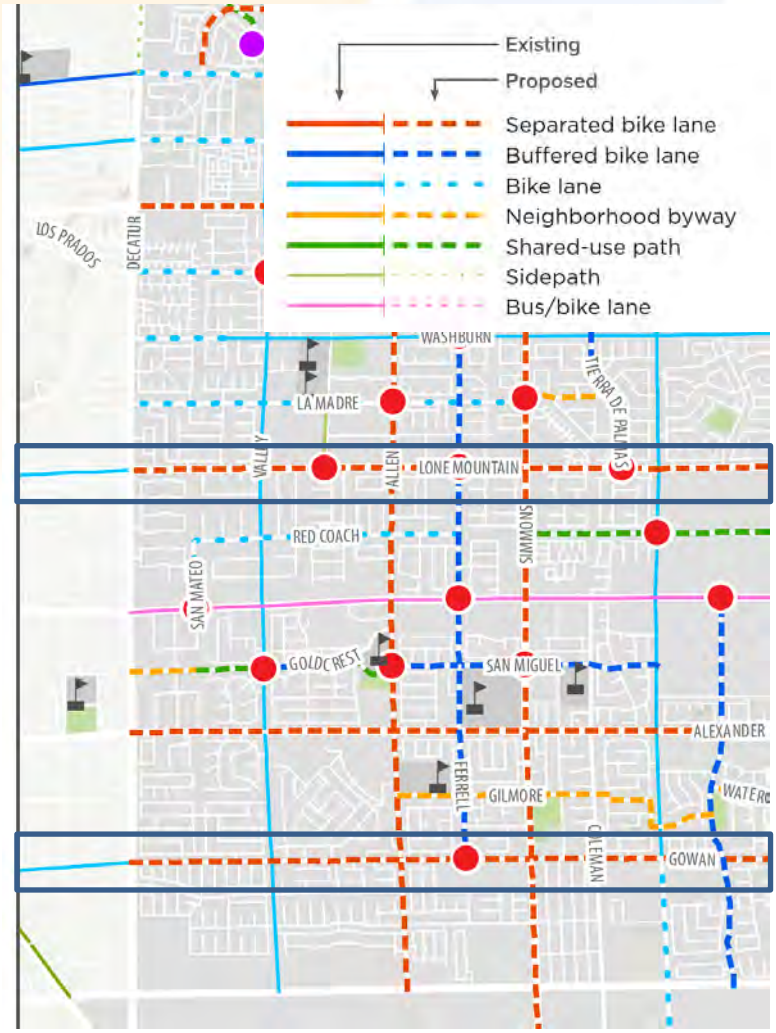


Southern Nevada Regional Walkability Plan, April 2022

Figure 20 – Priority Pedestrian Network (Regional Walkability Plan)

6.2 Coordination with Neighboring Jurisdictions

As the City redevelops the street network to accommodate bicyclists and pedestrians, coordination with the neighboring jurisdictions of the City of Las Vegas and Clark County will be critical to providing connected multimodal facilities for all road users. Examples of City streets requiring coordination include Lone Mountain Road and Gowan Road (**Figure 21**). North Las Vegas recommends separated bike lanes, which would have to transition to bike lanes in the City of Las Vegas west of Decatur Boulevard.



North Las Vegas Citywide Pedestrian and Bicycle Plan, 2019

Figure 21 – Recommended Coordination on Future Complete Street Improvements

7 RECOMMENDATIONS

Recommendations for implementation into the MPSH and truck routes are summarized in the following sections.

7.1 Changes to MPSH

The existing MPSH was reviewed, and several changes were identified based on the current roadway infrastructure and known future development. This review resulted in recommended changes to the MPSH map, which include the following:

- **Change segment ROW width:** The ROW widths identified on the existing MPSH map were verified using the Clark County GISMO interactive map. Several street segments' ROW width colors did not match the interactive map. The ROW width colors were updated to be consistent with the ROWs identified on GISMO.
- **Removal of Roadway Gridlines:** It was determined that updates to the MPSH include removing roadway gridlines within the Tule Springs Monument Boundary limits in the northwest part of the City and within the proposed UNLV North Campus boundary limits.
- **Master Planned Communities/Districts:** Update the MPSH map to include future roadways within the Village at Tule Springs and the Deer Springs District (from the *Deer Springs District Livable Center* study from 2020).
- **Apex:** Future alignments for proposed Apex roadways were added to the MPSH map; however, ROW and cross sections were unavailable. The City should continue to work with Apex to obtain ROW information for the proposed road network.

A summary of recommended changes to the existing MPSH map is provided in **Table 5**; details on the recommended changes are included in **Appendix H**.

Table 5 – Recommended Changes to Existing MPSH

Street Name	From	To	Proposed Change
Belmont Street	Lake Mead Boulevard	Webb Avenue	Remove Segment from MPSH due to existing 52' ROW
Elkhorn Road	Statz Street	Nellis Boulevard	Remove Segment
Tule Springs Monument	Various	Various	Remove linework within Tule Springs Monument.
UNLV North Campus	Various	Various	Remove everything within the Pecos, Lamb, CC-215, and Moccasin Road Boundary
The Villages at Tule Springs	Various	Various	Reconfigure to match proposed alignments from Village at Tule Springs Plan Elkhorn Road (Realignment) Tule Springs Parkway (New) Revere Street (Remove) Whispering Sands Road (Removed) Rivanna Street (Remove)
Deer Springs Way	Statz Street	Pecos Road	Add 100' ROW line within the Deer Springs District Job Creation Zone

Table 5 – Recommended Changes to Existing MPSH (continued)

Street Name	From	To	Proposed Change
Pecos Road	Deer Springs Way	Farm Road	Add 120' ROW line within Deer Springs District
Dorrell Lane	West of Plainview Hills Street	Seeds Fate Street	Add 60' ROW line within Deer Springs District
Seeds Fate Street	Dorrell Lane	Deer Springs Way	Add 60' ROW line within Deer Springs District

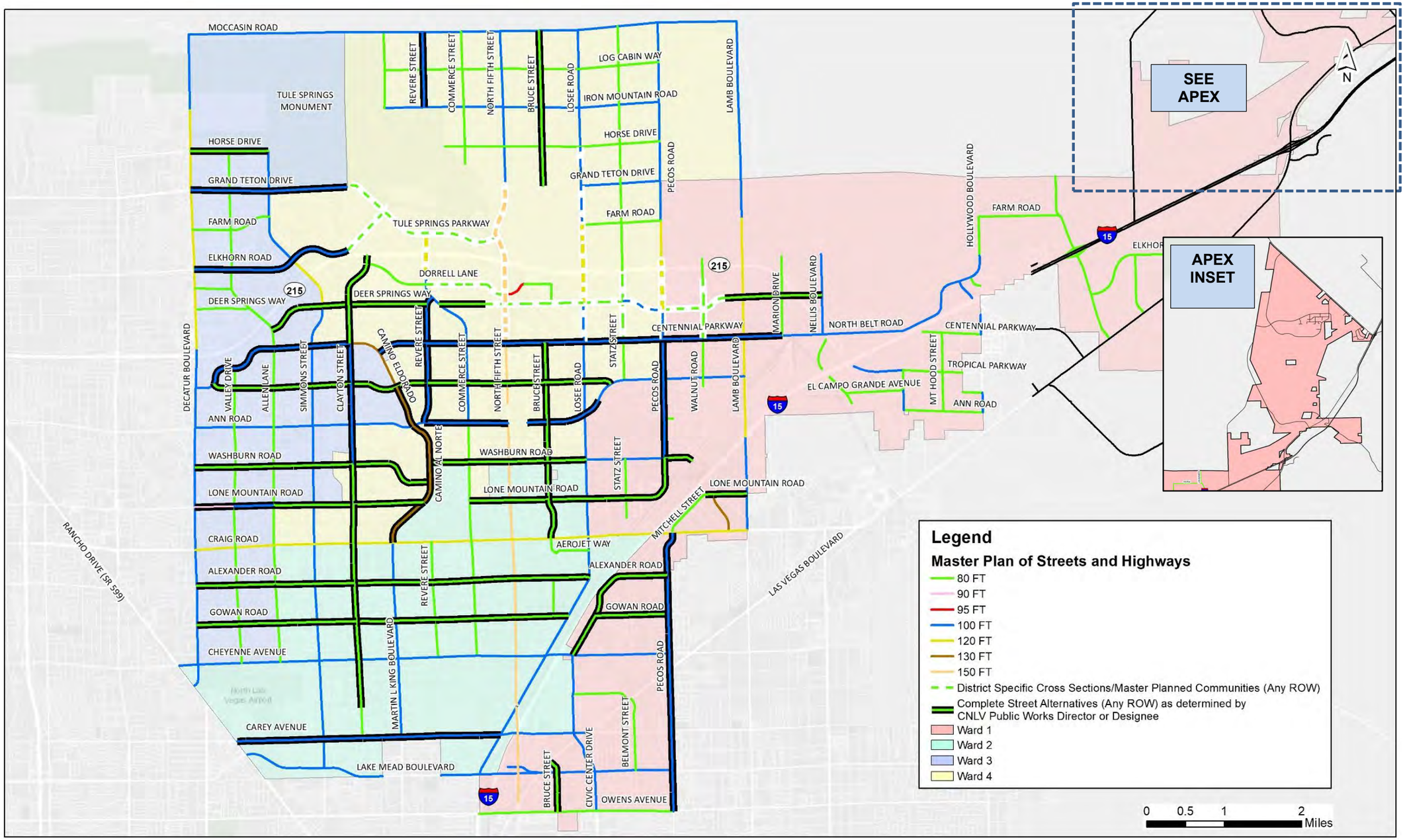
7.2 Recommended Roadway Segments for Alternative Cross Sections

Good candidates for roadway right-sizing and alternative complete streets cross sections were assigned a specific alternative cross section from **Section 4** based on the surrounding land use, recommendations from other studies, daily traffic volumes, and existing infrastructure. These roadways are summarized in **Table 6**.

In some cases where reducing the number of lanes was not feasible, recommendations for bike lanes or other treatments were indicated. The new MPSH map incorporating all the recommendations above is shown in **Figures 22** through **26**.

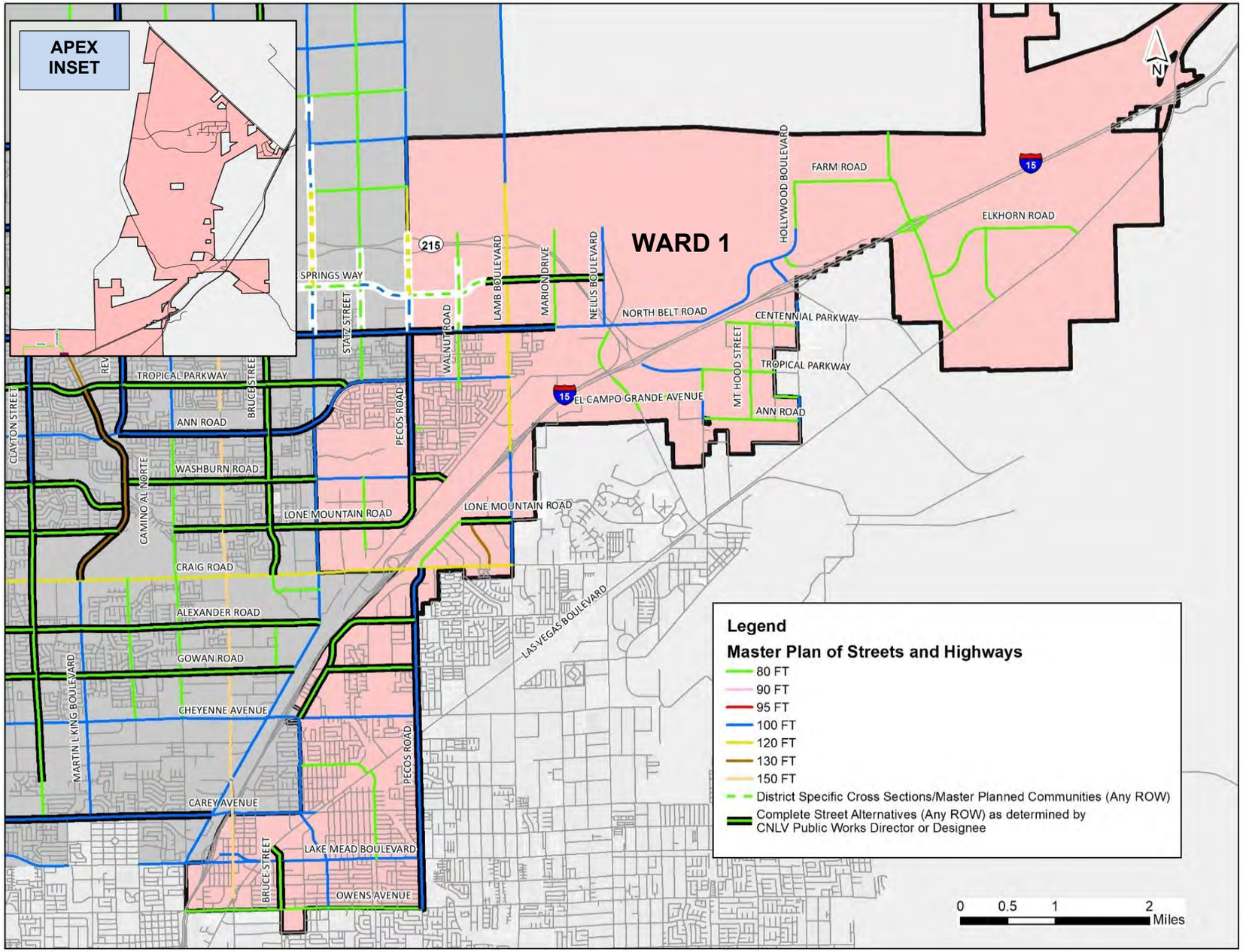
Table 6 –Roadways for Possible Reconfiguration

Street Name	ROW (FT)	From	To	RTC TDM 2040 ADT	Proposed Change
Dorrell Lane	80	Revere Street	North 5th Street	22,119	Two lanes in each direction, bike lanes, a detached sidewalk, and a raised median
Deer Springs Way	80	Aviary Way	Revere Street	2,104 - 8,755	80' ROW - 3 Lanes with Curb Level Separated Bike Lanes
Centennial Parkway	100	Tropical Parkway	Losee Road	6,300 – 16,983	100' ROW - 5 Lanes Curb Separated Bike Lane
Ann Road	100	Decatur Boulevard	Tropical Way	4,711 – 21,050	100' ROW - 5 Lanes with Curb Level Separated Bike Lanes
Alexander Road	80	Decatur Boulevard	Pecos Road	1,751 – 7,197	80' ROW - 3 Lanes Curb Level Separated Bike Lanes
Commerce Street	100	Elkhorn Road	Ann Road	15,676 – 20,482	100' ROW - 5 Lanes with Curb Level Separated Bike Lanes and Raised Medians for Access Management
Gowan Road	80	Decatur Boulevard	Losee Road	685 – 10,163	80' ROW - 3 Lanes Curb Level Separated Bike Lanes
Carey Avenue	100	Losee Road	North 5th Street	11,820 - 16,459	100' ROW - 5 Lanes with Curb Level Separated Bike Lanes, maintain raised medians
Civic Center Drive	80	Cheyenne Avenue	Branson Avenue	1,227 – 7,966	80' ROW - 3 Lanes with Curb Level Separated Bike Lanes
Pecos Road	100	Owens Avenue	Craig Road	17,318 – 28,456	100' ROW - 5 Lanes with Curb Level Separated Bike Lanes and Raised Medians for Access Management
Pecos Road	80	Lone Mountain Road	Washburn Road	6,779	80' ROW - 3 Lanes with Curb Level Separated Bike Lanes
Pecos Road	100	Washburn Road	Centennial Parkway	8,640	100' ROW - 5 Lanes with Curb Level Separated Bike Lanes and Raised Medians for Access Management



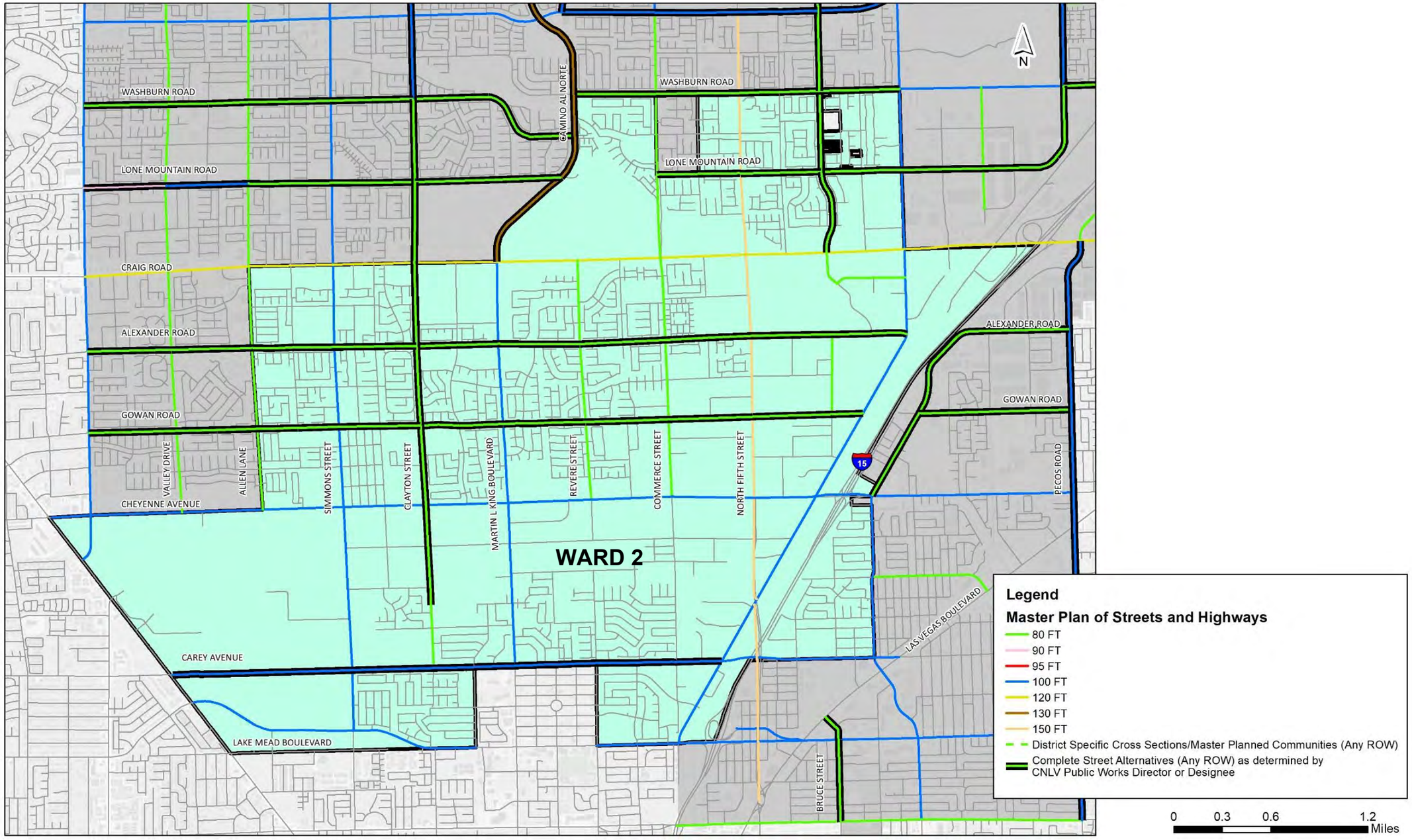
Note: City Ward boundaries as of 2020.

Figure 22 – Recommended MPSH Map (Citywide)



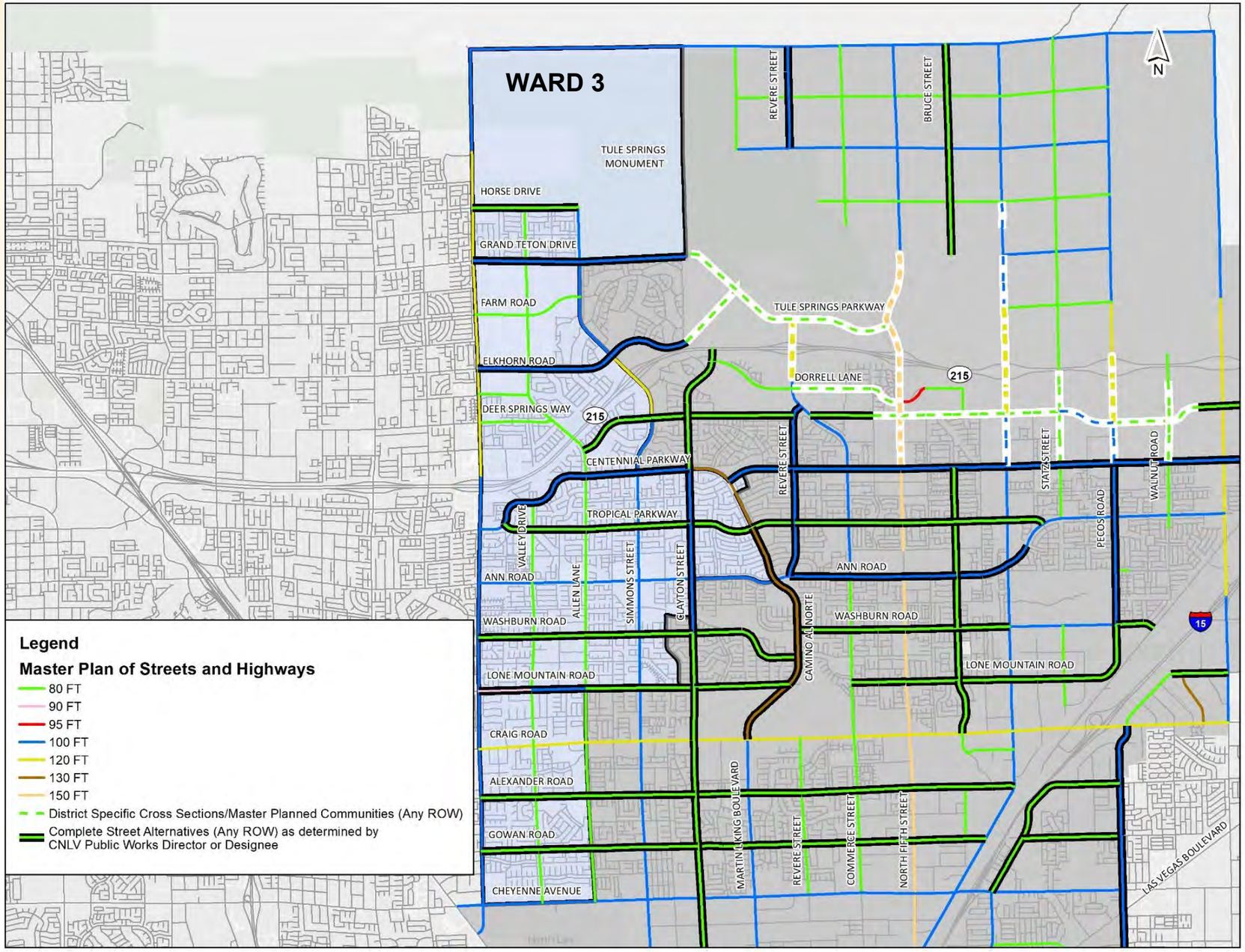
Note: City Ward boundaries as of 2020.

Figure 23 – Recommended MPSH Map (Ward 1)



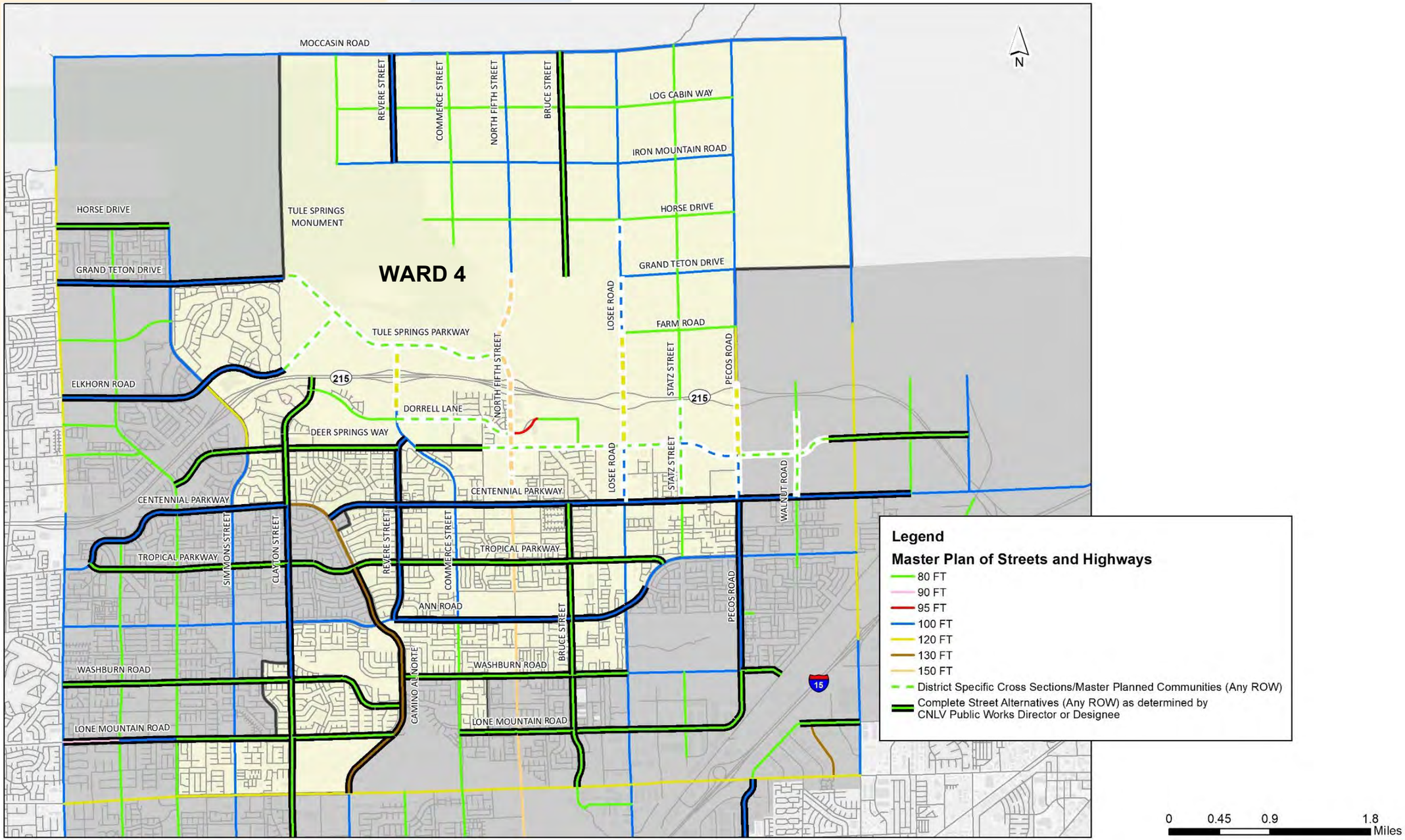
Note: City Ward boundaries as of 2020.

Figure 24 – Recommended MPSH Map (Ward 2)



Note: City Ward boundaries as of 2020.

Figure 25 – Recommended MPSH Map (Ward 3)



Note: City Ward boundaries as of 2020.

Figure 26 – Recommended MPSH Map (Ward 4)

7.3 Final Truck Routes

The recommended truck route changes from removal to the addition of new truck routes are summarized in **Table 7** and **Figure 27** and were based on the criteria described in **Section 5,** which include:

- As a through route for class 8 and above trucks, truck routes should include streets that provide continuous routes across the City and neighboring jurisdictions and be appropriate for truck access.
- Truck routes should provide access to major industrial centers, freight intermodal facilities, and the Interstate Highway System—the preferred travel corridors for almost all truck drivers and trucking companies.
- Routes with high truck volumes indicate those frequently in use by trucks now. This was determined using 2019 NDOT vehicle classification count data.
- Routes that pass through residential areas and do not serve one of the above criteria were eliminated.
- Comments and feedback from a focus group with truck companies.

Table 7 – Proposed Truck Route Changes

Truck Route	From	To	Proposed Change
Losee Road	Washburn Road	Moccasin Road	Truck Route Removal
Pecos Road	Washburn Road	Northern City Boundary	Truck Route Removal
Lamb Boulevard	CC-215	Northern City Boundary	Truck Route Removal
Range Road	CC-215	Las Vegas Boulevard	New Truck Route
Donovan Way	Southern City Boundary	Tropical Parkway	New Truck Route
Tropical Parkway	Donovan Way	Range Road	New Truck Route
Civic Center Drive	Cheyenne Avenue	Alexander Road	New Truck Route
North 5th Street	Brooks Avenue	Cheyenne Avenue	New Truck Route
MLK Boulevard	Carey Avenue	Cheyenne Avenue	Truck Route Removal
Carey Avenue	Rancho Drive	Las Vegas Boulevard	Truck Route Removal
Civic Center Drive	Owens Avenue	Carey Avenue	Truck Route Removal
Owens Avenue	I-15	Las Vegas Boulevard	Truck Route Removal

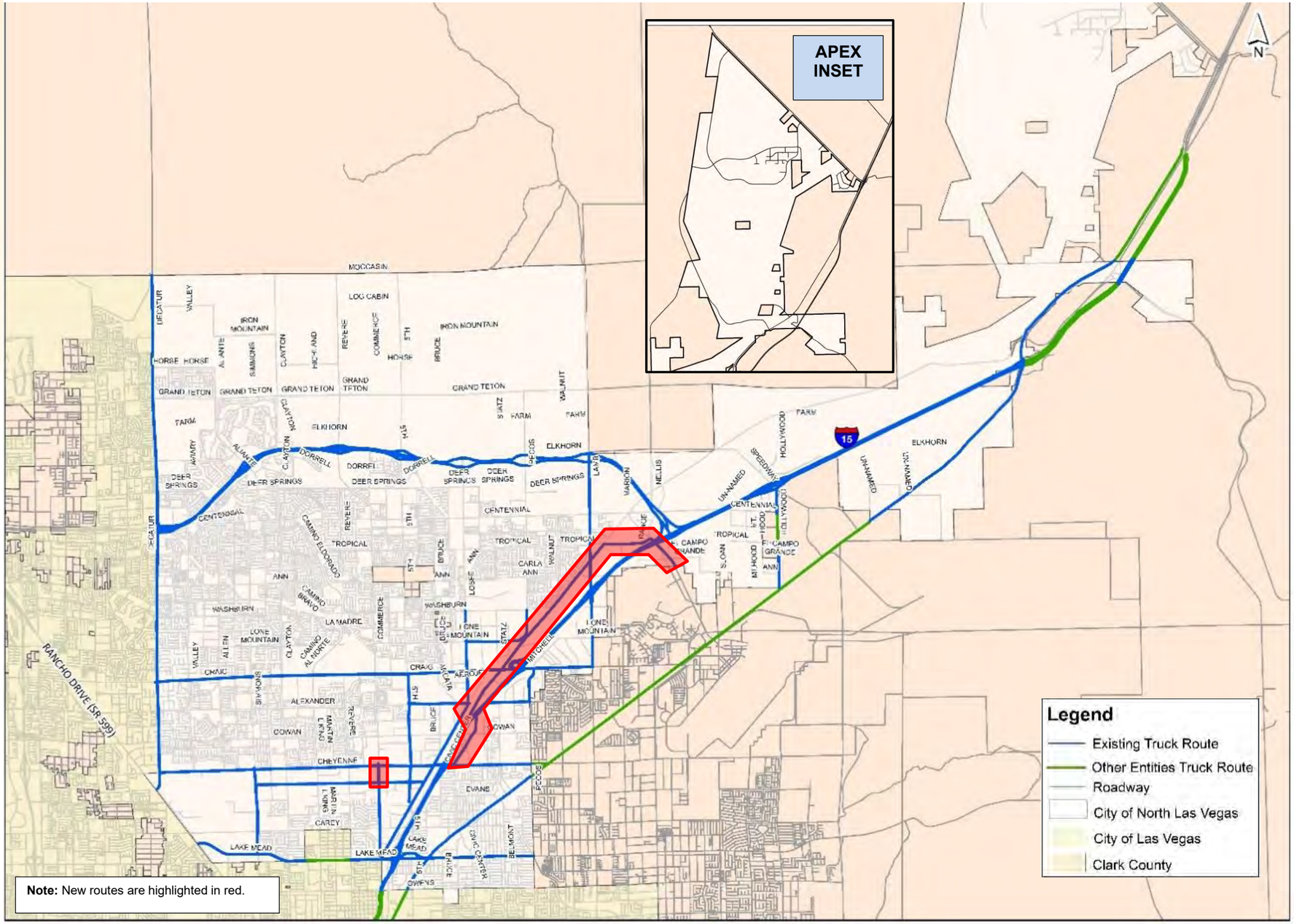


Figure 27 – Recommended Truck Route Map

8 IMPLEMENTATION/NEXT STEPS

The City Council will adopt the study results and amend the City's Comprehensive Plan. Once adopted, future private and public projects should follow this study's recommendations to provide complete street elements as future development continues. As the City redevelops the street network to accommodate bicyclists and pedestrians, coordination with the neighboring jurisdictions of the City of Las Vegas and Clark County will be critical to providing connected multimodal facilities for all road users.

APPENDIX A

BACKGROUND STUDIES SUMMARY

MEMORANDUM

To: *Lindsay Saner, Kimley-Horn*

From: *Samantha Suter, Metta Urban Design*

Date: *June 1, 2021*

RE: *Summary of Policies, Plans, and Studies related to Land Use and Built Form*

This memo summarizes Metta Urban Design's review of background documents, policies, plans, and studies as part of the Comprehensive Master Transportation Plan Study for the City of North Las Vegas (CMTPS). The content provided in this memo will be further distilled and integrated into the Final Report.

This memo provides an overview of known policies, plans, and studies for the City of North Las Vegas, and will inform the land use and built form perspective of the CMTPS. All documents listed below were reviewed, and below is a summary of recommendations and policies most relevant to the land use and built form perspective.

Policies, Plans and Studies that are summarized in this memo:

1. 2021-2024 Transportation Improvement Program (TIP)
2. Access 2050 Regional Transportation Plan
3. Clark County Access Management Guidelines (2011)
4. Deer Springs District Livable Centers Study (2019)
5. NDOT Access Management System and Standards (2017)
6. NDOT One Nevada Transportation Plan (Revised 2020)
7. North Las Vegas Citywide Pedestrian and Bicycle Plan (2019)
8. North Las Vegas Complete Street Corridor Ranking Study (2015)
9. North Las Vegas Complete Streets Policy (2017)
10. North Las Vegas Comprehensive Master Plan (amended in 2011, 2014, 2017)
11. North Las Vegas Downtown Master Plan and Investment Study (2009)*
12. North Las Vegas Downtown Complete Streets Master Plan (2020)
13. North Las Vegas Downtown Implementation Strategies Report (2014)*
14. Downtown North Las Vegas SNS Opportunity Site 5-year Progress Report (2020)*
15. North Las Vegas Land Use Master Plan (2021)
16. North Las Vegas Truck Route Map (2018)
17. Northeast Valley Transportation Network Study (2018)
18. RTC's Complete Streets Guidelines for Livable Communities (2013)
19. RTC's On Board Mobility Plan (2020)
20. Traffic Study for Apex Industrial Park (2008)
21. Truck Arterial Route Study – Losee Corridor (2017)
22. Conceptual Land Use Plan for the Village at Tule Springs (2018)

**Documents with an asterisk were not included on the list of existing policies, plans, and studies but were reviewed based on their relevance to the study area's land use.*

Study Name: 2021-2024 Transportation Improvement Program (TIP)
Completion Date: December 2020
Consultant: N/A
Project Extent: RTC
Summary: The 2021-2024 Transportation Improvement Program (TIP) provides a list of approved transportation projects that are planned to receive funding over the next four years. Projects in the City of North Las Vegas include:

- Pedestrian Upgrades at Guy E.S. Cram M.S. and Fitzgerald E. S.
- Pedestrian and bicycle improvements at various locations
- North 5th Street Signalization Project
- Intersection Video Detection Phase II
- Cheyenne Avenue and Martin L King Improvements
- North 5th Street and Cheyenne Avenue Intersection Improvements
- Lake Mead Couplet Roadway Improvement Project

Study Name: *Access 2050 Regional Transportation Plan*
Completion Date: January 2021
Consultant: N/A
Project Extent: RTC
Summary: *Access 2050 Regional Transportation Plan* (*Access 2050*), updated every four (4) years, is a federally-required comprehensive and long-range plan detailing transportation investments needed now and in the future. The purpose of the plan is to determine how to best utilize federal funds throughout the Southern Nevada region to improve safety, manage congestion, enhance multimodal connectivity, and maintain current infrastructure. The goals of *Access 2050* are to:

- Strengthen the regional economic competitiveness
- Maintain and enhance the quality of life for Southern Nevadans
- Ensure sustainable use of infrastructure and resources

Access 2050 acknowledges the benefit that transportation investments have on the community and the symbiotic relationship between economic, land use development, and transportation infrastructure. It mentions creating a regional Transit-Oriented Development Joint Development agreement process to encourage infill redevelopment and property rehabilitation, matches land use and transportation plans with regional economic development plans, and helps create mixed-income TOD. Key strategies of *Access 2050* should be considered when developing recommendations for the *City of North Las Vegas Comprehensive Master Transportation Plan Study*, including improving safety, managing congestion, enhancing multimodal connectivity, maintaining current infrastructure, promoting economic development, and focusing on environmental justice and equity.

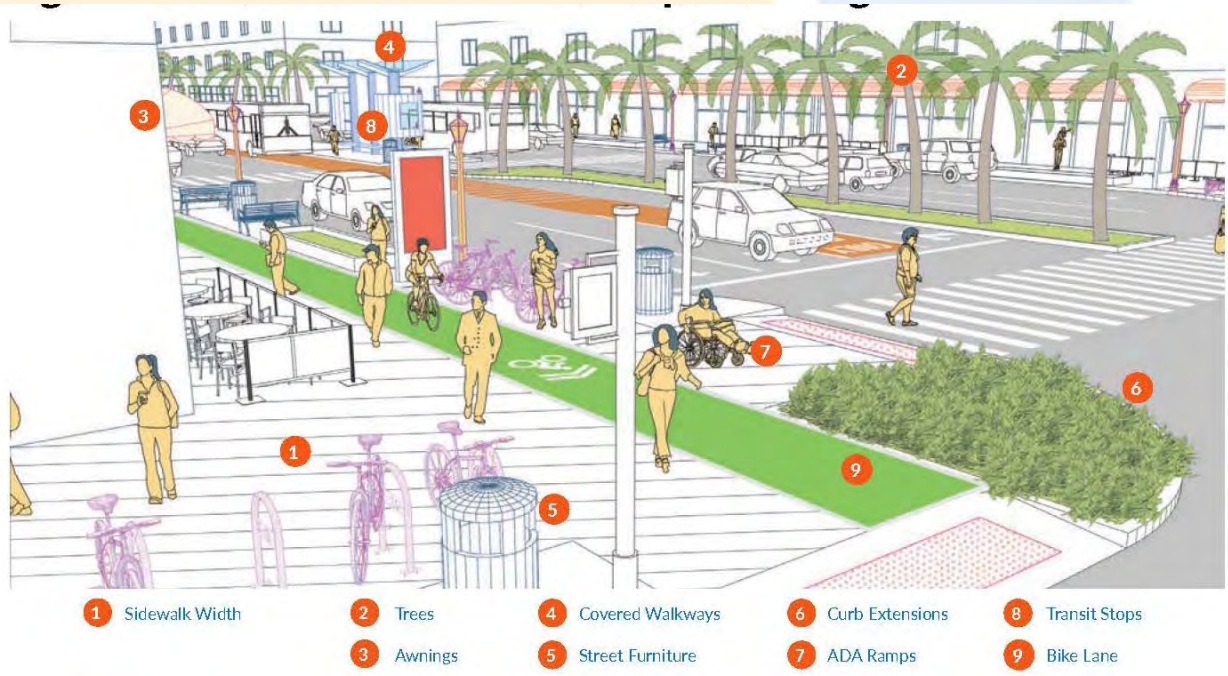
Study Name: *Clark County Area Access Management Guidelines*
Completion Date: March 2011
Consultant: Kimley-Horn and Associates
Project Extent: Clark County
Summary: The *Clark County Area Access Management* (*CCAAM*) document, completed in 2011, provides information on standards and policies to encourage a unified approach for implementing consistent access management measures across the suburban and urban areas of Clark County, Nevada. The standards in the *CCAAM* document can help improve safety, traffic operations, economics, and land use. Access management policies along with supporting land development regulations protects the public investment in the roadway infrastructure and allows for an increased level of sustainability in private land development. The standards in the *CCAAM* document will be used to evaluate recommendations for the *CMTPS*.

Study Name: *Deer Springs District Livable Centers Study* (2019)
Completion Date: January 15, 2020
Consultant: Asakura Robinson, Kimley-Horn, Ericka Aviles Consulting
Project Extent: Commerce Street, Walnut Road, Centennial Parkway, and the Bruce Woodbury Beltway
Summary: The *Deer Springs District Livable Center Study* (*DSD Study*) was completed in January 2020 to foster multimodal access and connectivity, a mix of uses, a diversity of housing options, and a sense of place. The DSD Study area contains a broad mix of land uses, several future station areas, major trail and open space opportunities, and a congressionally designated Job Creation Zone. The mixed land uses along with other key elements mentioned will be considered when recommending changes to the *Master Plan of Streets and Highways* (*MPSH*) as part of the *CMTPS*.

The Deer Springs District is currently undeveloped. This provides a unique opportunity for the area to develop as a connected, walkable, and transit supportive area that has a variety of housing options, vibrant commercial areas, and plenty of open space. The DSD Study recommended that core areas within the District be developed as town centers to allow for mix uses with pedestrian amenities. The plan proposes the Job Creation Zone to become a technology, research, and healthcare campus with services, green space, and amenities.

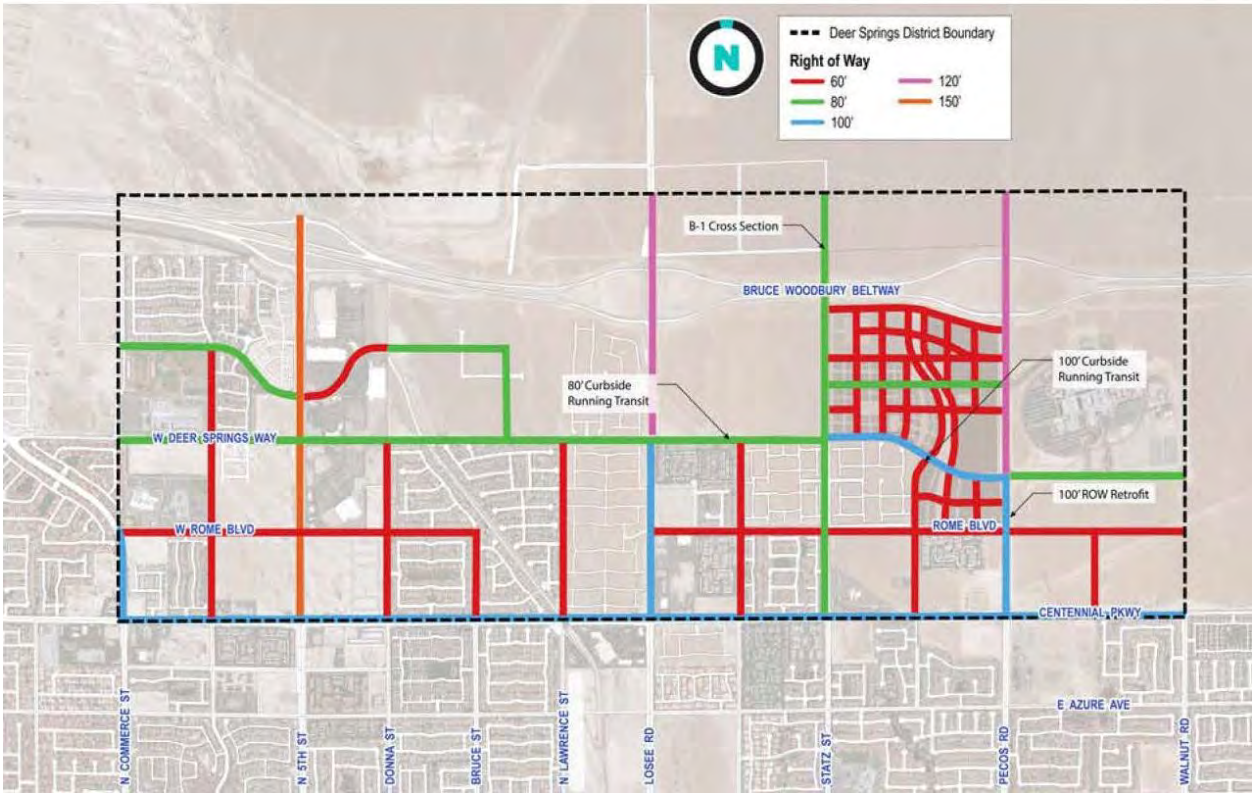
The DSD Study includes a “transit toolkit” which provides recommendations for adopting bus rapid transit (BRT) and provides recommendations for a pedestrian realm (**Figure 1**); a conceptual street network (**Figure 2**); trail and bicycle facilities; and conceptual streetscapes by right-of-way (ROW), including for the Job Creation Zone (**Figure 3**). Key elements from the *DSD Study,* such as proposed land uses and other transportation elements, will be considered when updating the *MPSH* as part of the *CMTPS* to ensure the recommendations from the Deer Springs District can be implemented in the future.

Figure 1: Pedestrian Realm Conceptual Design



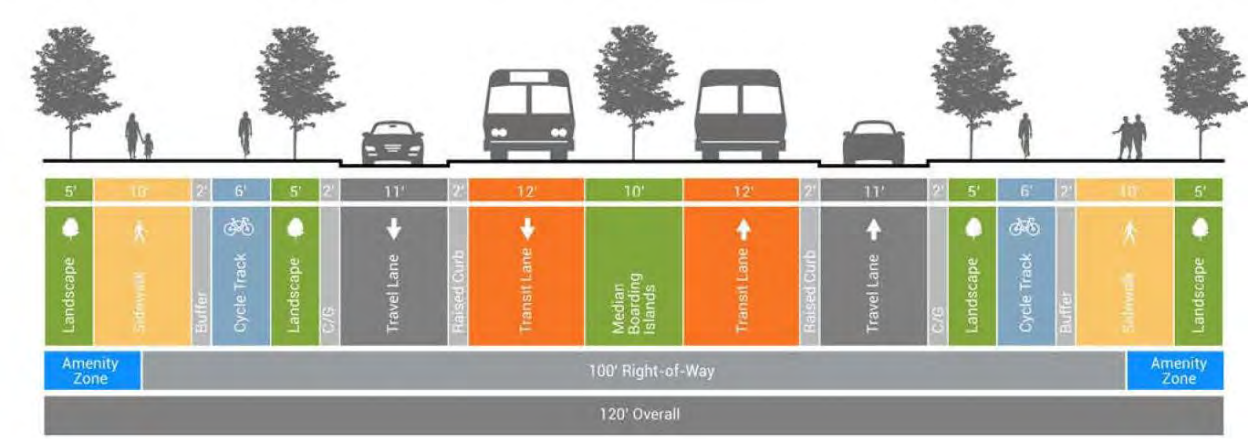
Source: Deer Springs Livable Centers Study

Figure 2: Deer Springs District Conceptual Street Network



Source: Deer Springs Livable Centers Study

Figure 3: Conceptual Streetscape for 100' ROW within the Job Creation Zone



Source: Deer Springs Livable Centers Study

Study Name: *NDOT Access Management System and Standards*
Completion Date: November 2017
Summary: The purpose of the *NDOT Access Management System and Standards* is to regulate access onto state roadways in order to protect the health, safety, and welfare of the public; to improve traffic operations for the movement of people and goods; and to preserve the planned function of state roadways.

In North Las Vegas, Craig Road, Cheyenne Avenue, Lake Mead Boulevard, and Lamb Boulevard are State Routes and must comply with NDOT access management standards. According to the standards, principal arterials serve major centers of metropolitan areas, provide a high degree of mobility, and should allow for speeds of 50 to 55 mph in suburban areas. Minor arterials serve smaller areas and carry medium to high traffic volumes at medium speeds over medium distances. These roads should allow for speeds of 50 to 55 mph in suburban areas. The *NDOT Access Management System and Standards* also provides design guidance relating to sight distance, medians, and driveways.

Recommendations for the *CMTPS* must consider the need for State Routes to comply with NDOT design standards.

Study Name: *NDOT One Nevada Transportation Plan*
Completion Date: November 2018 (Revised 2020)
Summary: Nevada's transportation vision is for a safe and connected multimodal transportation system that links Nevadans and supports the state's economic vitality. The goals of the plan are to enhance safety, preserve infrastructure, optimize mobility, transform economies, foster sustainability, and connect communities.

Study Name: *North Las Vegas Citywide Pedestrian and Bicycle Plan* (2019)
Completion Date: December 2019
Consultant: Alta and Purdue Marion & Associates
Project Extent: City of North Las Vegas
Summary: Recommendations in the *North Las Vegas Citywide Pedestrian & Bicycle Plan* (*CNLV Ped and Bike Plan*) aim to encourage and accommodate active transportation users, whether it is on foot, bike, wheelchair, or any other means, to improve community health, quality of the environment, equity, economic growth, and quality of life. The goals of this plan are to accommodate a variety of transportation choices, develop active transportation facilities that are safe and comfortable for people of all ages and abilities, leverage the City's Complete Streets Policy, use programs to encourage active transportation, and prioritize access for vulnerable groups, like minorities, low-income, older adults, and children.

The *CNLV Ped and Bike Plan* recommends complete streets cross sections that include features such as bikeways and enhanced pedestrian infrastructure will raise the design standard for multimodal street design for future development and provide standards for street retrofits. **Figure 4** illustrates a proposed section for a 3-lane street in a 100' ROW that includes on-street parking and separated sidewalks and bicycle lanes. More cross sections are included in **Attachments A-C**. The cross sections will be considered in the development of the *CMTPS* recommendations.

Figure 4: Proposed Cross Section for a 3-Lane Road with Separated Sidewalks and Bike Lanes in a 100' ROW

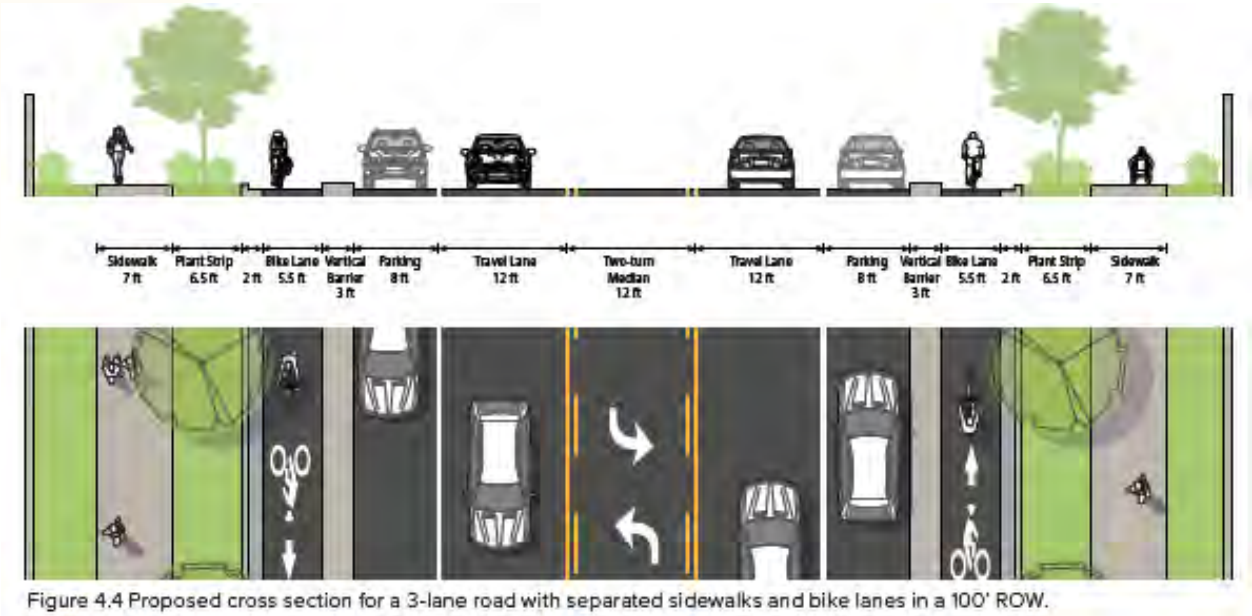
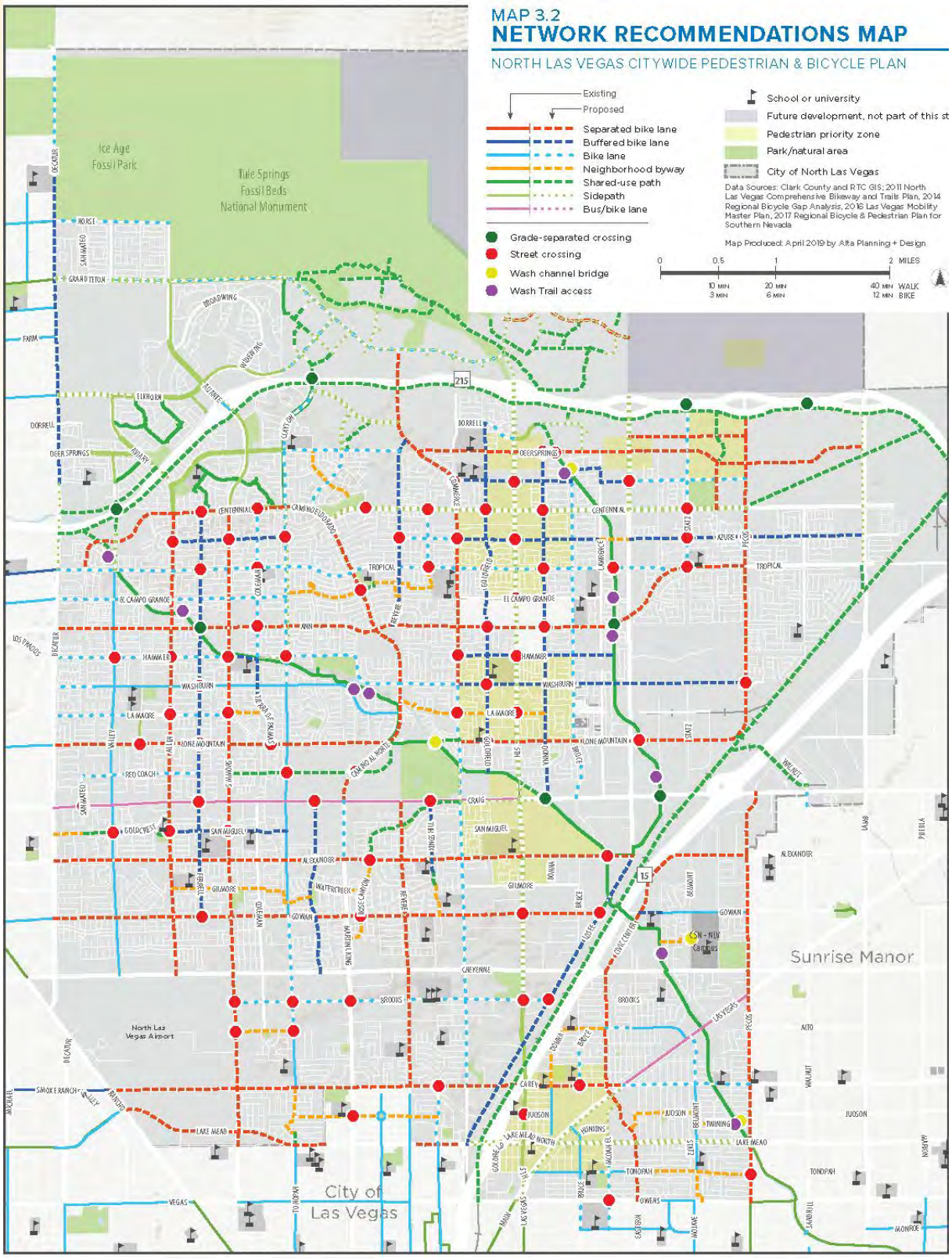


Figure 4.4 Proposed cross section for a 3-lane road with separated sidewalks and bike lanes in a 100' ROW.

Source: North Las Vegas Citywide Pedestrian & Bicycle Plan

Other plan recommendations include implementing a unified wayfinding and branding system; allowing bicycles on sidewalks except in pedestrian priority areas; establishing pedestrian priority zones near commercial, employment, and transit centers; and identifying new crossings. See **Figure 5** for the complete network of plan recommendations. These recommendations will be incorporated into the *CMTPS*.

Figure 5: Network Recommendations Map

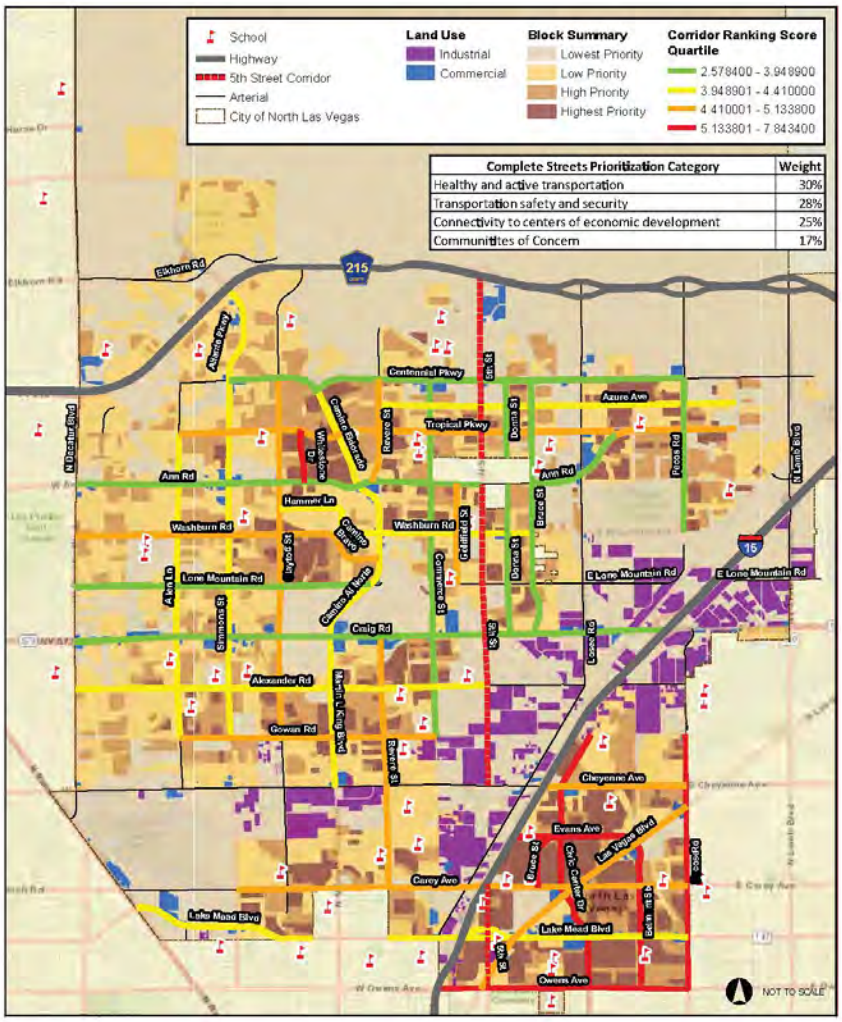


Source: North Las Vegas Citywide Pedestrian & Bicycle Plan

Study Name: *North Las Vegas Complete Street Corridor Ranking Study*
Completion Date: August 2015
Consultant: Atkins
Project Extent: City of North Las Vegas
Summary: The *City of North Las Vegas Complete Streets Corridor Ranking Study* (*CNLV Complete Street Ranking Study),* completed in 2015, was used to identify areas where complete streets are needed the most to create a multimodal transportation network serving all destinations, modes of transportation, and all roadway users. The City's goal through the *CNLV Complete Street Ranking Study* was to make the City of North Las Vegas a more sustainable community by creating a safe and inviting experience for all transportation users.

Integrating strategic connections between current and future land uses with transportation investments ensures the City will continue to meet the needs of its residents. The *CNLV Complete Street Ranking* Study provides a process for analyzing corridors based on land use context, and these recommendations will be incorporated into the *CMTPS*. The map shown in **Figure 6** identifies the complete streets ranking resulting from the *CNLV Complete Street Ranking Study*.

Figure 6: Corridor Ranking Map



Source: City of North Las Vegas Complete Streets Corridor Ranking Study

Study Name: *North Las Vegas Complete Streets Policy*
Completion Date: 2017
Consultant: N/A
Project Extent: City of North Las Vegas
Summary: The *City of North Las Vegas Complete Streets Policy* (*NLV Complete Streets Policy*) was developed to support the City's Mission Statement to create and sustain "Your Community of Choice" for its residents, visitors, and businesses. The City is committed to being a balanced and well-planned community that provides quality municipal services, education, housing, recreation and leisure opportunities, economic vitality, security, public safety, strong community partnerships, civic pride for a culturally rich, active, and diverse population.

The *NLV Complete Streets Policy* recognizes that road users consist of various transportation modes including, but not limited to motorists, pedestrians, bicyclists, public transportation users, school bus riders, motorcyclists, delivery and service personnel, freight haulers, emergency responders, and adjacent land owners. It is understood that users include both residents and visitors of all ages, abilities, and income levels.

Complete Streets solutions should be developed to fit within the context of the community and those solutions should be flexible so that the needs of the roadway can be met. Flexibility must be retained when designing various elements of a Complete Streets project, realizing that not all standards lend themselves to a "one-size-fits-all" approach. Innovative practices should be researched and considered where appropriate. Public input should be sought from residents and non-residents that will be directly affected by a proposed project. Understanding that the underlying concept behind Complete Streets is to design for the needs of the users of the roadway, a design that might be appropriate for one location of the City may not be appropriate in a different location of the City. Consideration should always be given to the development of a complete transportation network when implementing Complete Street projects.

The *NLV Complete Streets Policy* is an integral part of everyday transportation decision-making practices and processes. To assist with the implementation of this policy, the City will update the *Master Plan of Streets and Highways* (*MPSH*) to include street areas of emphasis in an effort to develop a complete transportation network and update the City's design and development codes to include Complete Street design elements and cross-sections based on a roadway's designated areas of emphasis.

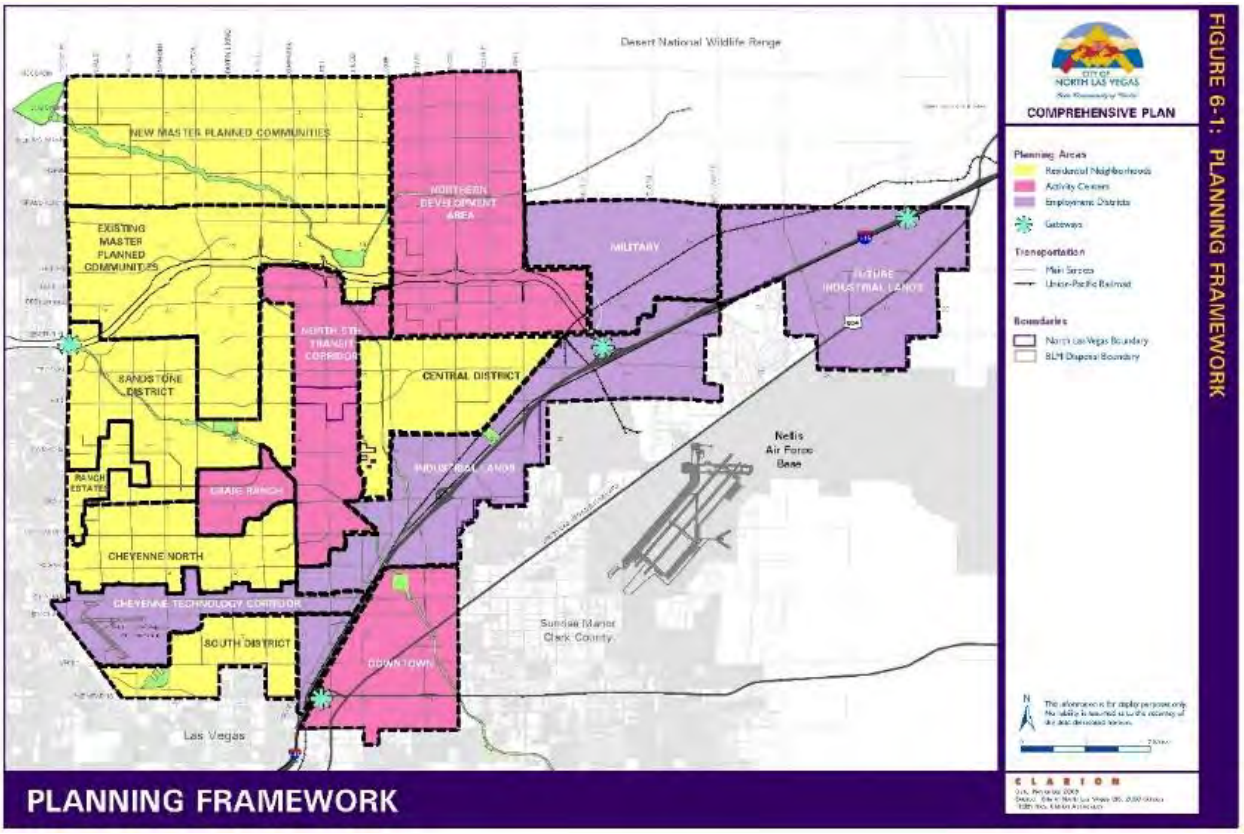
Study Name: North Las Vegas Comprehensive Master Plan
Completion Date: November 2006 (Amended 2011, 2014, 2017, 2020)
Consultant: Clarion Associates
Project Extent: City of North Las Vegas
Summary: The *City of North Las Vegas Comprehensive Master Plan* (*CNLV Master Plan*) was originally published in 2006 and amended most recently in 2020. The *CNLV Master Plan* contains policies for the City of North Las Vegas to follow over the next 20 years. The City of North Las Vegas aims to be the "Community of Choice" for residents by having people-centered, amenity-oriented design.

Major actions provided in the *CNLV Master Plan* are related to land use, housing, neighborhoods, parks, trails, open spaces, transportation, mobility, public facilities and services, community character and design, and economic development. Guiding principles for future City projects include:

1. Quality Housing Development and Cohesive Neighborhood Communities
2. Thriving and Attractive Commercial and Business Centers
3. Integrated Multi-Modal Transportation System
4. Balanced Land Use Mix
5. Pivotal Centers for Development and Redevelopment
6. Diverse Economic Base
7. Community Services, Amenities, and Environment
8. Safe and Livable Community
9. Community Spirit, Relationships, and Pride
10. Fiscal Policies and Management

The plan provides guidance for specific planning areas, as shown in **Figure 7**. A larger version of this map is provided in **Attachment D**. Specific policies focus development in villages and centers to create connected, cohesive neighborhoods, mixed-use, and employment areas, each with their own unique identity and amenities. Neighborhoods should be connected by trails and open space and be served by commercial neighborhood centers. Activity centers should have a mix of uses, a variety of housing, complete streets, active street fronts, and comfortable pedestrian environments. Employment centers should promote live-work opportunities and nearby amenities for employees.

Figure 7: Planning Framework

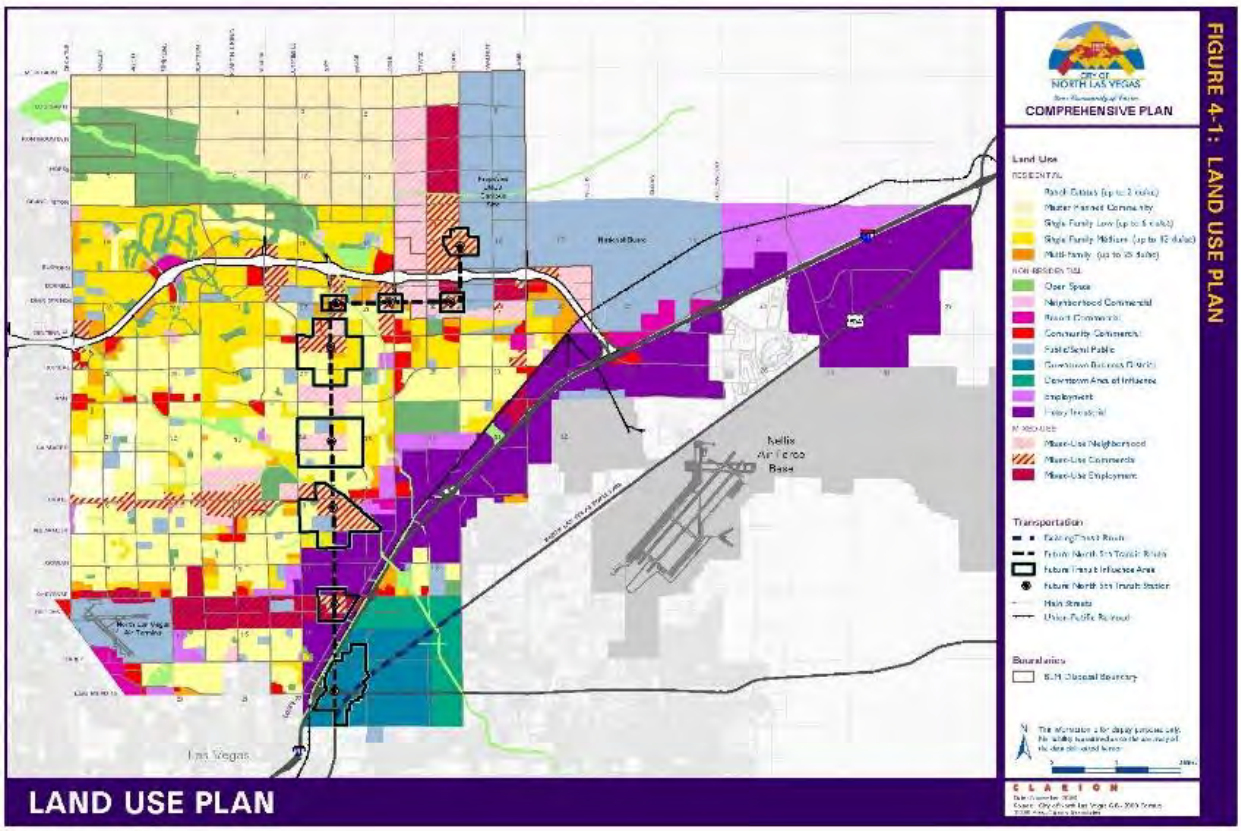


Source: City of North Las Vegas Comprehensive Master Plan

The Land Use Plan provides specific guidance for the following land use categories, as seen in **Figure 8.** A larger version of this map is provided in **Attachment E**.

- Ranch Estates
- Master Planned Community
- Single-Family Low
- Single-Family Medium
- Multi-Family
- Neighborhood Commercial
- Community Commercial
- Resort Commercial
- Public/Semi Public
- Parks and Open Space
- Employment
- Heavy Industrial
- Mixed-Use Neighborhood
- Mixed-Use Commercial
- Mixed-Use Employment

Figure 8: Land Use Plan Map



Source: City of North Las Vegas Comprehensive Master Plan

The *CNLV Master Plan* also has the goal of creating an integrated multi-modal transportation system to provide a variety of travel options so that residents can easily travel throughout the City of North Las Vegas. The plan defines principles for designing pedestrian-friendly places including:

- Appropriate use mix and density
- Buildings designed for people, not cars
- Well-planned parking and access
- Amenities for safety, comfort, and aesthetics
- Connected streets, trails, and sidewalks

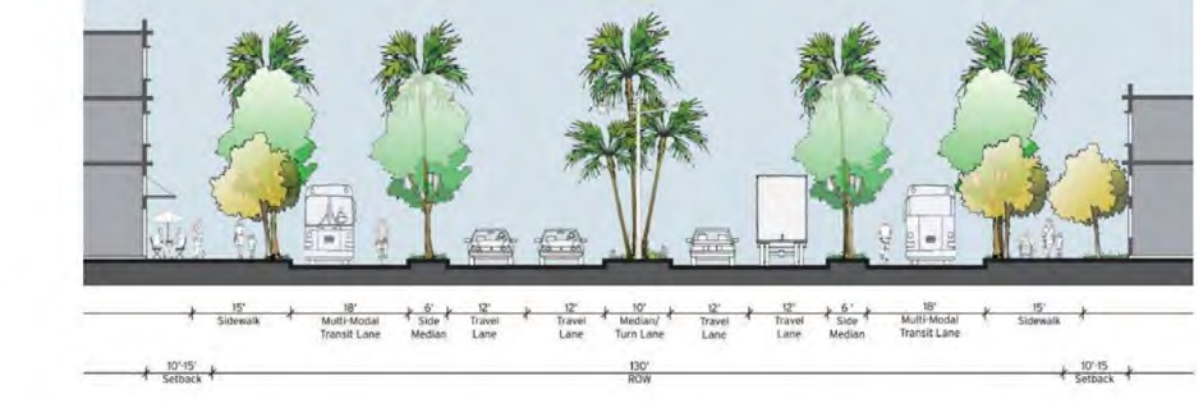
Study Name: *North Las Vegas Downtown Master Plan and Investment Strategy*
Completion Date: February 2009
Consultant: MIG
Project Extent: I-15 to the west, Pecos Road to the east, Cheyenne Avenue to the north, and Owens Avenue to the south
Summary: The *Downtown Master Plan and Investment Strategy* (*DT Master Plan*), completed in 2009, focused on public and private investment in Downtown North Las Vegas to capitalize on existing and planned projects.

The vision is for downtown is to be a fully redeveloped community focal point with imaginative street patterns, an array of land and streetscapes, and pedestrian amenities, like street furniture, signage, decorative lighting, and direct access to businesses from the sidewalk, and to become an area that is attractive, a destination, walkable, and has a recognizable and unique brand. The goals of the *DT Master Plan* are to make downtown inviting and safe for all, to reestablish a cultural center with art and music, and improve economic vitality, among others. The *DT Master Plan* makes recommendations based on land use, opportunity sites, and supporting strategies. Streetscape sections are presented in the *DT Master Plan* for key streets and are summarized here.

- **North Las Vegas Boulevard** is planned as a “signature street” and multi-way boulevard, designed in two segments:
    - Northern section - between Bruce Street and Carey Avenue; recommendations include mid-block crossings along blocks greater than 300’, buildings should have a front setback between 10-20’ to accommodate streetscape amenities, café seating, etc.
    - Southern section - between North 5th Street and Bruce Street; more narrow than northern section, 80’ ROW, buildings with a front setback between 10-25’ to accommodate amenities
- **Lake Mead Boulevard** will continue to support high traffic volumes but have safer pedestrian crossings as an office corridor (subsequently deemed not feasible as a Complete Street)
- **McDaniel Street** is a planned pedestrian priority area with potential to be a traditional main street
- **5th Street** is planned to be a transit corridor, functioning as a super arterial and regional connector

- **Judson Avenue** is a primary east-west connection (subsequently deemed not feasible as a Complete Street)

Figure 9: North Las Vegas Boulevard Concept Design (Northern Segment)

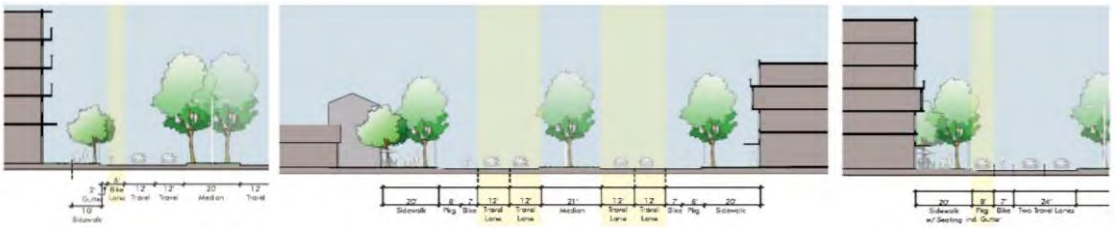


Source: Downtown Master Plan and Investment Strategy

Other mobility recommendations include installing bike facilities, expanding pedestrian safety, and installing the future transit line on North 5th Street and the following streetscape standards.

- Minimum 12' travel lanes
- Bicycle lanes adjacent to parking lanes are 7' wide; adjacent to curbs are 6' wide
- 8' wide parking lanes
- For non-arterial roads, provide on-street parking
- Discourage delivery truck parking within on-street parking
- At least 8' wide sidewalks, at least 10' wide sidewalks along arterial and collector streets; sidewalks on both sides of the street
    - McDaniel Street, adjacent to City Hall should have widened sidewalks
- Minimum of 5' wide, unobstructed path for American Disabilities Act (ADA) access

Figure 10: Typical Streetscape Standards by Mode



Source: Downtown Master Plan and Investment Strategy

Study Name: *North Las Vegas Downtown Complete Streets Master Plan* (2020)
Completion Date: July 17, 2020
Consultant: WSP
Project Extent: Cheyenne Avenue to the north, Pecos Road to the east, Owens Avenue to the south, and I-15 to the west.
Summary: The *North Las Vegas Downtown Complete Streets Master Plan* (*NLV DT CS Master Plan*) was completed in July 2020 to address mobility challenges related to automobile-centered street design. This plan addresses pedestrian and bicycle safety and a lack of downtown mobility options by establishing a network of Complete Streets, creating Placemaking Opportunity Districts (PODs), and identifying priority corridors.

The Downtown area contains residential, civic, and commercial use, and the plan focuses on connecting these uses by creating PODs, which are smaller areas adjacent to the civic core in which improvements are focused and pedestrian travel is prioritized. The PODs are defined by the non-residential areas within the City core and include Downtown's largest employers and destinations.

The plan also introduces street typologies, which vary based on surrounding context and level of traffic stress. An example street typology cross section is shown in **Figure 11**.

Figure 11: Type 2 Cross Section – Residential Bicycle Boulevard



Source: North Las Vegas Downtown Complete Streets Master Plan

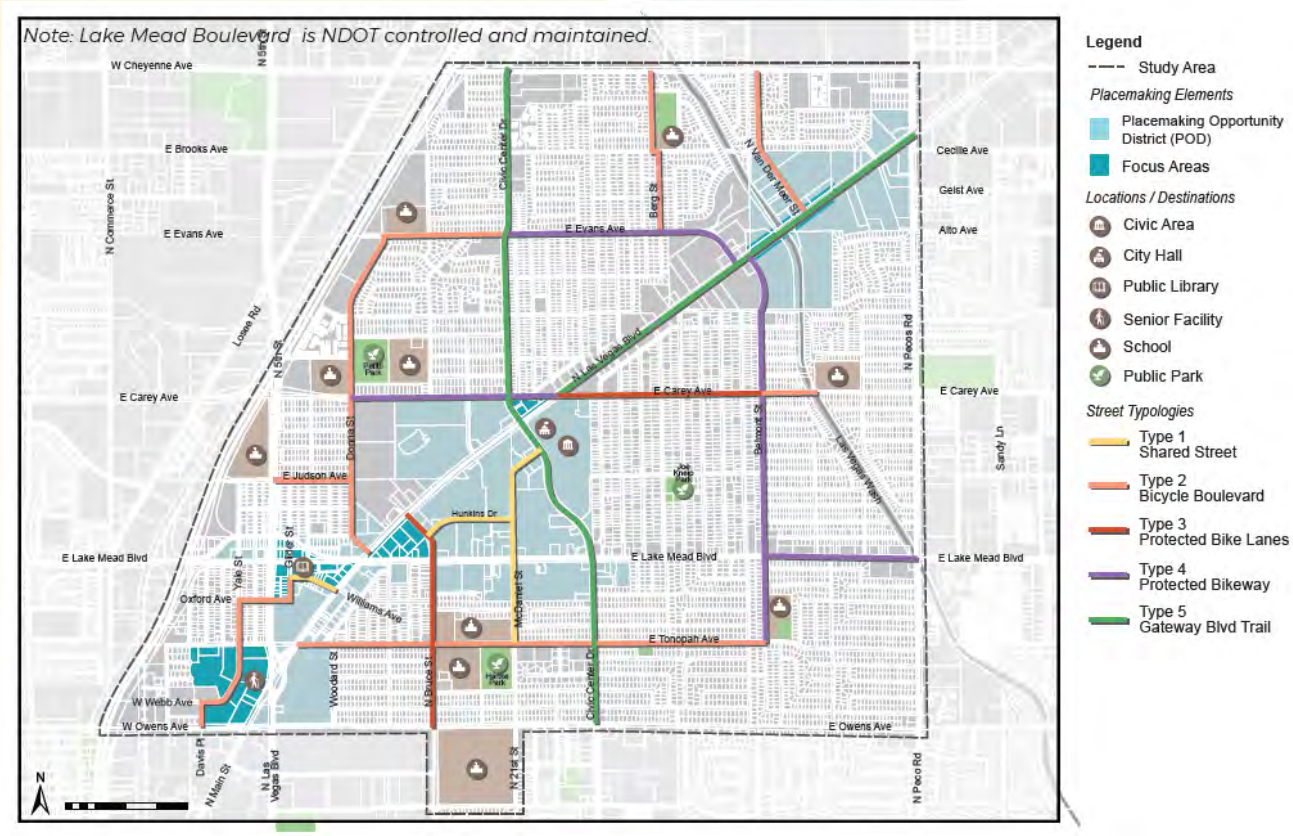
The typologies will be applied to priority corridors Downtown and customized to fit the exact land use and transportation context at the block level. The priority corridors and a summary of their recommendations are as follows:

- **North Bruce Street –** four priority crossings, protected bike lanes, improve sidewalks and on-street parking, protected intersections south of East Lake Mead Boulevard
- **East Carey Avenue –** seven priority crossings identified, will be broken into three segments with different street typologies depending on context
- **Civic Center Drive –** five priority crossings, protected center-running bike lanes, expanded sidewalks, additional signalization and signal optimization needed
- **North McDaniel Street –** two priority crossings, expanded sidewalks, landscaped areas, street parking, mid-block crossings, corner bump-outs, special consideration for crossing at East Lake Mead Boulevard

- **North Van Der Meer Street –** two priority crossings, expanded sidewalks and landscaping, street-parking, low traffic stress, mid-block crossing
- **Glider/Oxford/Yale/Webb/David –** six priority crossings, multiple street segments form a chain of slow streets, expanded sidewalks, intersection bump-outs, mid-block crossings

Figure 12 shows the location of PODs and streetscape recommendations.

Figure 12: Complete Streets Master Plan Typologies



Source: North Las Vegas Downtown Complete Streets Master Plan

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Study Name: *Downtown North Las Vegas Implementation Strategies Report*
Completion Date: December 2014
Author: Southern Nevada Strong
Project Extent: Opportunity site initially focused on the Lake Mead Island (I-15 to the west, Las Vegas Boulevard to the east and Lake Mead Boulevard to the north and south); analysis includes the entire Downtown North Las Vegas area (I-15 to the west, Pecos Road to the east, Cheyenne Avenue to the north, and Owens Avenue to the south)
Summary: The *Downtown North Las Vegas Implementation Strategies Report's (DTNLV Report)* purpose is to identify projects, policies and programs that can then be used short term to support and develop future developments. The study area is shown in **Figure 13**.

Figure 13: Study Area Map and Opportunity Site



Source: Downtown North Las Vegas Implementation Strategies Report

The *DTNLV Report* identifies potential for future infill development, noting several vacant parcels within the downtown area, and it identifies the need for pedestrian and bicycle safety improvements, including buffered sidewalks and more comfortable crosswalks. The transportation related action items identified in the *DTNLV Report* (shown in **Figure 14**) will be considered when recommending changes to the *MPSH* as part of the *CMTPS*.

Specific transportation related recommendations include:

- **Las Vegas Boulevard** – redevelop with medians; wider, detached sidewalks; landscape buffers; and marking crossings
- **Lake Mead Boulevard** – improve targeted intersections
- **New pedestrian and bicycle connections** throughout Downtown

- **Safety improvements related to intersections**
  - Lake Mead Boulevard at McDaniel Street
  - Lake Mead Boulevard at Bruce Street
  - McDaniel Street at Hunkins Drive
  - Mid-block crossing of Las Vegas Boulevard between Lake Mead Boulevard and Civic Center Drive

Figure 14: Downtown North Las Vegas Actions Overview

TABLE 1: DOWNTOWN NORTH LAS VEGAS—ACTIONS OVERVIEW

PRIMARY ACTIONS	ACTION	POSSIBLE LEAD ROLE	POSSIBLE PARTNERS	CAPITAL FUNDS REQ'D	TIMELINE
Improve safety for all transportation modes	Implement the transportation recommendations included in the *Downtown North Las Vegas Major Corridors Study* and the *Downtown Master Plan*.	NLV	NDOT, RTC	$6M	Ongoing
	Design and construct short-term pedestrian crossing safety improvements/ streetscape enhancement on Lake Mead at McDaniel, Lake Mead at Bruce, McDaniel at Hunkins, as well as at least one mid-block crossing of Las Vegas Boulevard between Lake Mead and Civic Center Drive.	NLV	NDOT, Agora, North Vista Hospital	$50-250K	6 months-2 years
	Focus short-term landscaping and street furniture investments on the area bounded by Las Vegas Boulevard, Civic Center Drive and Lake Mead Boulevard, with an emphasis on McDaniel and Lake Mead Boulevard near Civic Center Shopping Center and North Vista Hospital. Improvements should focus on shade and other features (public sculptures, murals, benches, utility box wraps, intersection painting) to improve pedestrian experience, and make walking distances and climatic conditions acceptable.	NLV (RDA), NDOT	RTC, North Vista, other private property owners, sponsors	$50K-$1M	6 months-2 years
	Expand City of NLV and RTC partnership linking sidewalk improvements with transit stop improvements.	NLV, RTC	N/A	$75K-$1M	Ongoing

Source: Downtown North Las Vegas Implementation Strategies Report

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Study Name: *Downtown North Las Vegas SNS Opportunity Site 5-year Progress Report*
Completion Date: November 2020
Project Extent: I-15 to the west, Pecos Road to the east, Cheyenne Avenue to the north, and Owens Avenue to the south
Summary: The *Downtown North Las Vegas SNS Opportunity Site 5-year Progress Report* (*DTNLV 5-year Progress Report*) builds off the *North Las Vegas Downtown Implementation*

Strategies Report described above and provides an update and analysis of the progress that has been made since the plan adoption.

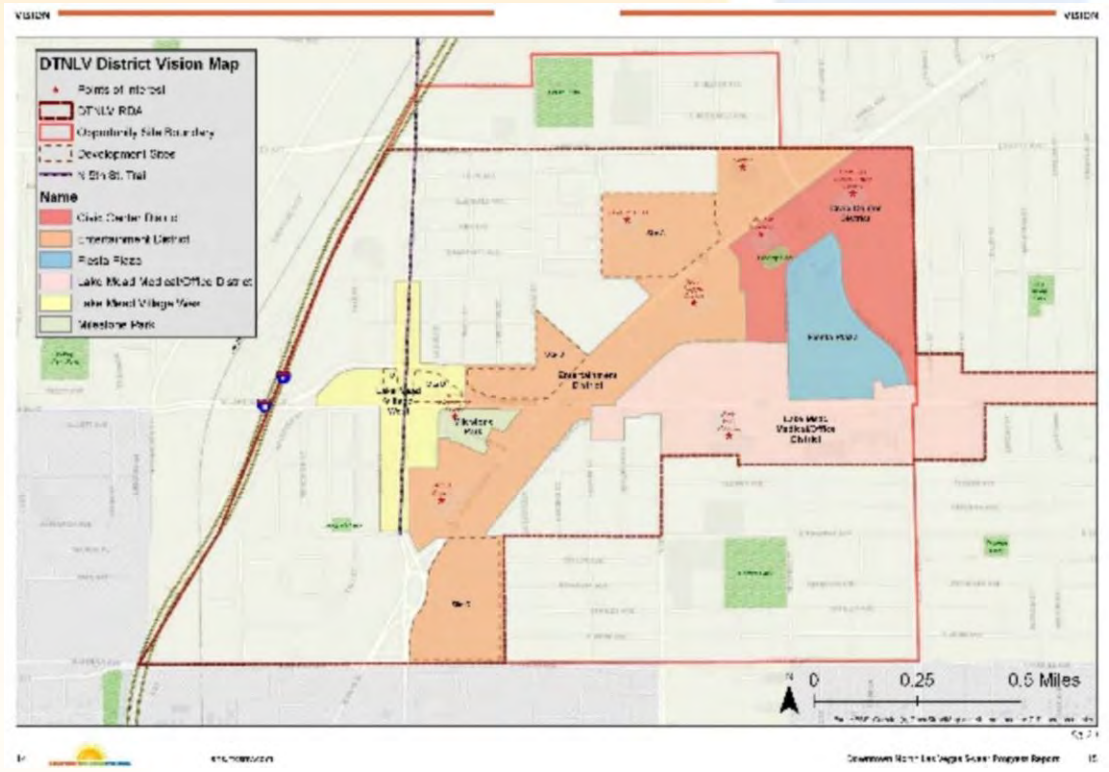
The *DTNLV 5-year Report* found that 60% of the implementation strategies identified in the 2014 plan are either on track or complete. The City has acquired 25 key land parcels in the downtown redevelopment area and Complete Streets upgrades are currently underway.

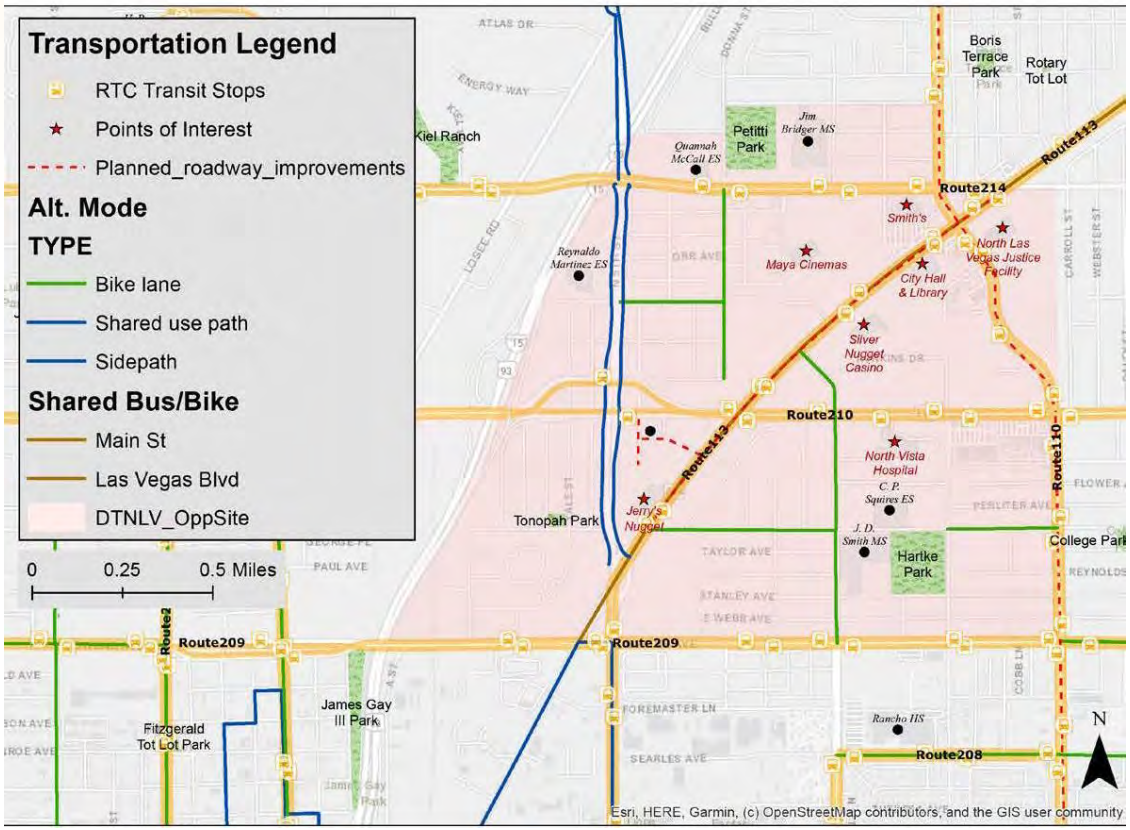
The *DTNLV 5-year Report* acknowledges that "transforming DTNLV's streetscapes into vibrant, shared-use thoroughfares is the foundation for creating a thriving downtown center and for achieving the DTNLV vision," and it specifies widening sidewalks, reducing building setbacks, adding bike lanes, improving the landscaping, and adding amenities and signage as key streetscape improvement strategies. However, Complete Street upgrades along Lake Mead Boulevard and Carey Avenue were found to be not feasible to implement due to the existing street widths and existing traffic volumes. East-west movement and connectivity continues to pose a challenge for alternative modes of transportation, and recommendations from the *Complete Streets Master Plan* should be applied to downtown. The *DTNLV 5-year Report* acknowledges the importance of prioritizing streetscape improvements surrounding schools, consistent with the Safe Routes to Schools program, and along corridors identified for Complete Streets.

The *DTNLV 5-year Report* reviewed past studies and identified that downtown streetscape improvements were addressed in several plans, and the following streets were identified and prioritized for improvements:

- **Las Vegas Boulevard** – install median, widen sidewalks, add landscape buffers, re-design cross section, add multimodal transit lanes, enhance pedestrian crossings
- **North Fifth Street** – implement transit supportive concepts; Complete Streets improvements constructed include shared-use, buffered sidewalks on both sides of the streets; and high-capacity transit
- **McDaniel Street** – create pedestrian friendly streetscape, widen sidewalks, on-street parking, enhanced crossings; improvements currently underway
- **Judson Street** – explore feasibility of a linear park for east-west connectivity
- **Bruce Street** – implement Complete Streets policies; study recently complete and safety improvements have been identified for future work
- **Hunkins Drive and Civic Center Drive** - planned to receive Complete Streets improvements

Figure 15 and 16: Downtown North Las Vegas Areas (top) and Transportation Network (bottom)





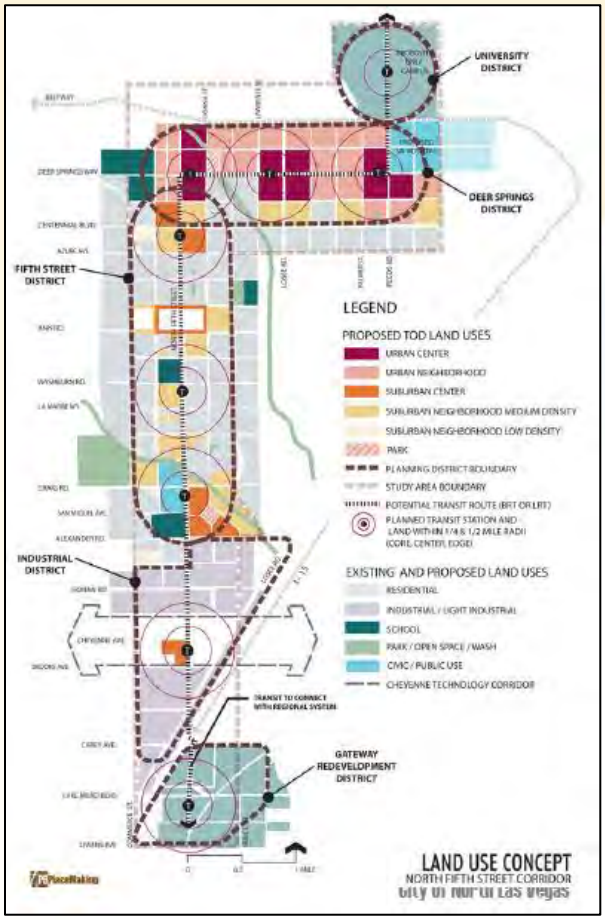
Source: Downtown North Las Vegas SNS Opportunity Site 5-year Progress Report

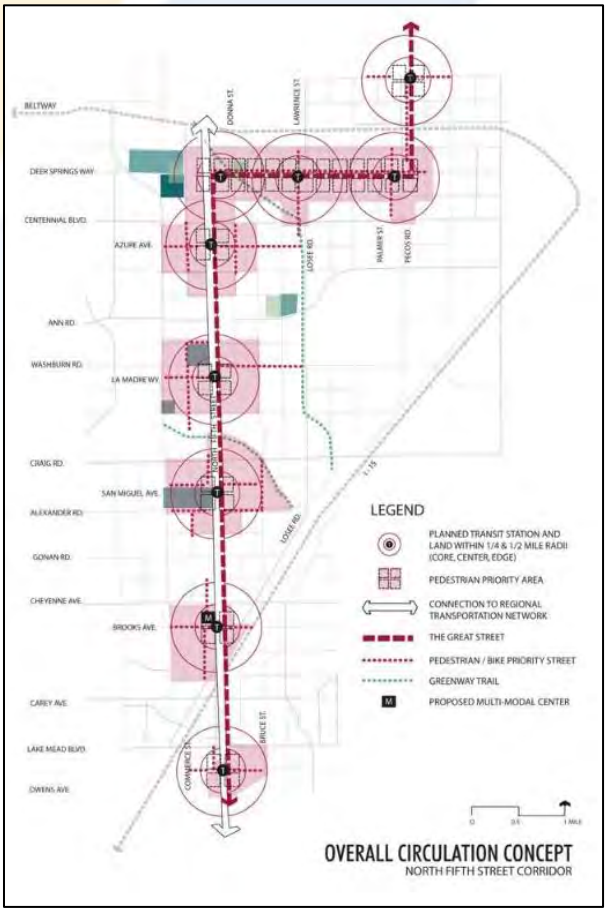
Study Name: *North Fifth Street Transit Supportive Concept Plan*
Completion Date: April 19, 2006
Consultant: PB Placemaking
Project Extent: Seven-mile corridor from the northern Beltway south to downtown and the southern city limits at Owens Avenue. The east-west limits of the corridor study area extend one-half mile on either side of North Fifth Street. From Deer Springs, the east-west segment extends a mile on either side.
Summary: The *North Fifth Street Transit Supportive Concept Plan* (*North Fifth Street Plan*) links transportation investments with land use, creates a long-term vision and strategy for North Fifth Street, Deer Springs Way, and Pecos Road, and sets the course for compact, pedestrian friendly, mixed use development.

The *North Fifth Street Plan* describes a vision with five distinct planning districts. Each area will have its own identity and be a center of transit-oriented development, and specific vision for each district is described here:

- **University District** – A new campus for UNLV integrates transit and mixed-use development that complements the corridor
- **Deer Springs District** – With the most intense mixed-use development in the corridor, the Deer Springs District would become a distinctive and highly attractive regional destination
- **North Fifth Street District** – The North Fifth District would feature high-quality mixed-use infill and other development designed to create “village” centers that complement existing residential neighborhoods.
- **Industrial District** – The Industrial District preserves access for existing industrial land uses and creates opportunities for future development of transit-compatible mixed-use projects and facilities to serve the Cheyenne Technology Corridor.
- **Gateway Redevelopment District** - Already designated a Redevelopment Area, the Gateway District is ripe with opportunities for urban redevelopment and infill that take advantage of future transit investments and provide residents with greater mobility

Figure 17 and 18: N 5th Corridor Land Use Concept (left) and Circulation Concept (right)

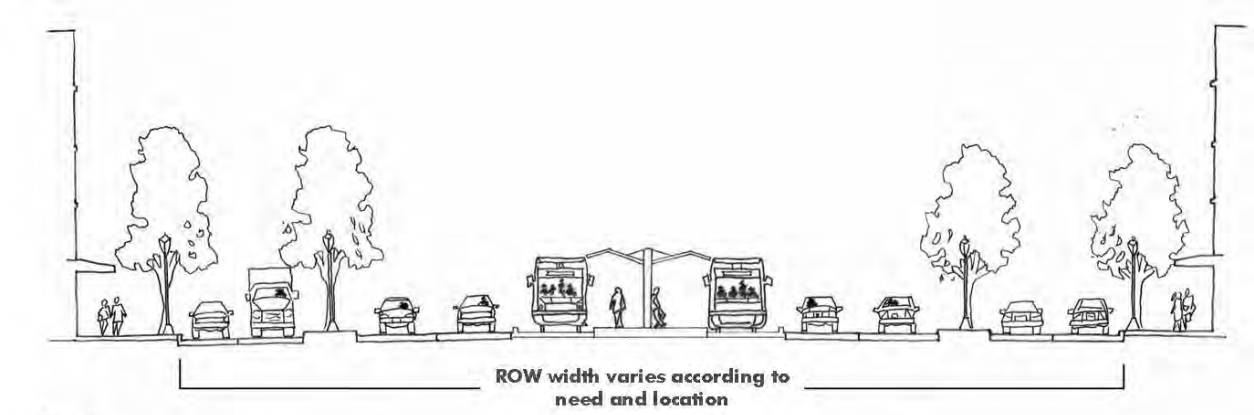




Source: North Fifth Street Transit Supportive Concept Plan

Larger versions of **Figure 17** and **Figure 18** are provided in **Attachment F** and **Attachment G**. The *North Fifth Street Plan* will employ the "core-center-edge" strategy to appropriately transition use and density out from the station and into the lower density surrounding neighborhoods. Each station area will feature higher density, a variety of housing types, pedestrian amenities, and neighborhood services. The *North Fifth Street Plan* recommends a form-based code as a way to implement TOD, and it makes several specific urban design recommendations, including building setbacks, streetscape designs (including sidewalk and intersection details), pedestrian orientation design, vertically mixed uses, and other form-based code standards for each land use. The *North Fifth Street Plan* also includes multiple streetscape recommendations for North Fifth Street based on varying ROW widths and land use context. See **Figure 19** below for an example conceptual streetscape.

Figure 19: Conceptual Street Design for North Fifth Street Neighborhood Land Use Context



Source: North Fifth Street Transit Supportive Concept Plan

The *North Fifth Street Plan* recommends a three segment "great street." The segments are North Fifth Street, Deer Springs, and Pecos Road. The plan provides proposed street cross sections for each segment type. It also recommends a corridor circulation strategy (**Figure 20**) that identifies pedestrian priority areas.

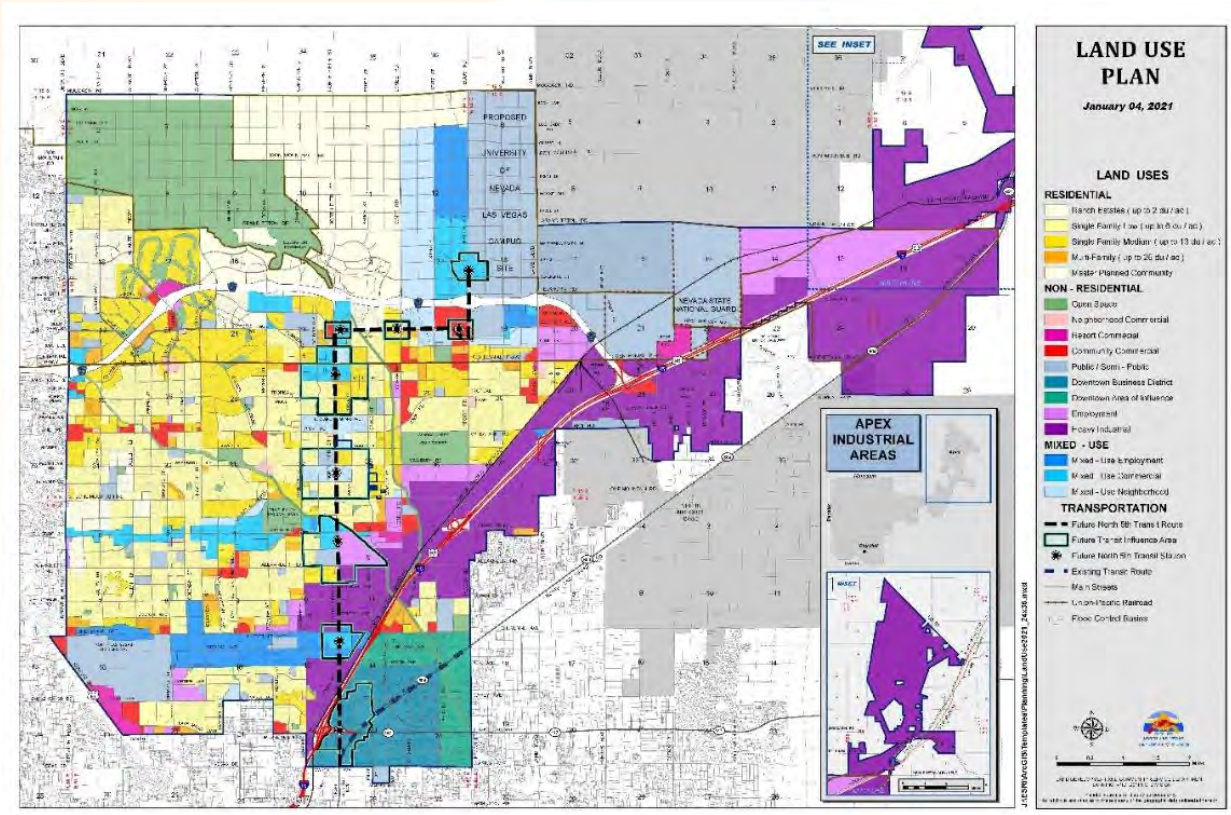
Figure 20: Circulation Strategy for North Fifth Districts

Summary: Components of the Circulation Strategy in each North Fifth Street Corridor Concept Plan District					
Component of the Circulation Concept	**UNLV District**	**Deer Springs District**	**North Fifth District**	**Industrial District**	**Gateway Redevelopment District**
Preferred Transit Route	Station located at the "front door" of the proposed UNLV campus	Stations located adjacent to Donna St., Losee Rd. and Pecos Rd.	Stations located adjacent to Azure Ave., Washburn Rd., and San Miguel Ave.	Station located adjacent to Brooks Ave.	Station located in Lake Mead couplet
Pedestrian Priority Area	Standard for station area	Standard for station areas	Standard for station areas	To be compatible with truck and freight circulation	Standard for station area
Pedestrian/Bike Priority Street	Connects neighborhoods east and west of Pecos Road to transit facility	Connects neighborhoods north and south of Deer Springs to transit facilities, links to greenway trail and future school	Connects neighborhoods east and west of N. Fifth St. to transit facilities, links with Mojave HS and Canyon Springs High School	Connects pedestrians to employment uses east and west of N. Fifth St. to transit facility	Connects neighborhoods east and west of N. Fifth St to transit facility, links with Reynaldo Martinez Elementary School and McCall Elementary School
North Fifth Great Street			Central through lanes parallel each side with pedestrian-oriented local access streets, transit, and on-street parking	Central through lanes with transit parallel each side with local access lanes to industrial uses	Central through lanes parallel each side with pedestrian-oriented local access streets, transit, and on-street parking
Deer Springs Great Street		Pedestrian-oriented ROW with center running transit and travel lane on either side, with bike lanes and on-street parking			
Pecos Road Great Street	Pedestrian-oriented ROW with center running transit and travel lane on either side, with bike lanes, and on-street parking				

Source: North Fifth Street Transit Supportive Concept Plan

Study Name: *North Las Vegas Land Use Master Plan*
Completion Date: January 2021
Consultant: N/A
Project Extent: City of North Las Vegas
Summary: The *City of North Las Vegas Land Use Plan (Land Use Plan)* provides land use policy for the City and designates residential, non-residential, or mixed-use, as shown below. The *Land Use Plan* will be a starting point to provide context sensitive streetscape recommendations as part of the *CMTPS*.

Figure 21: Land Use Plan



Source: North Las Vegas Land Use Master Plan

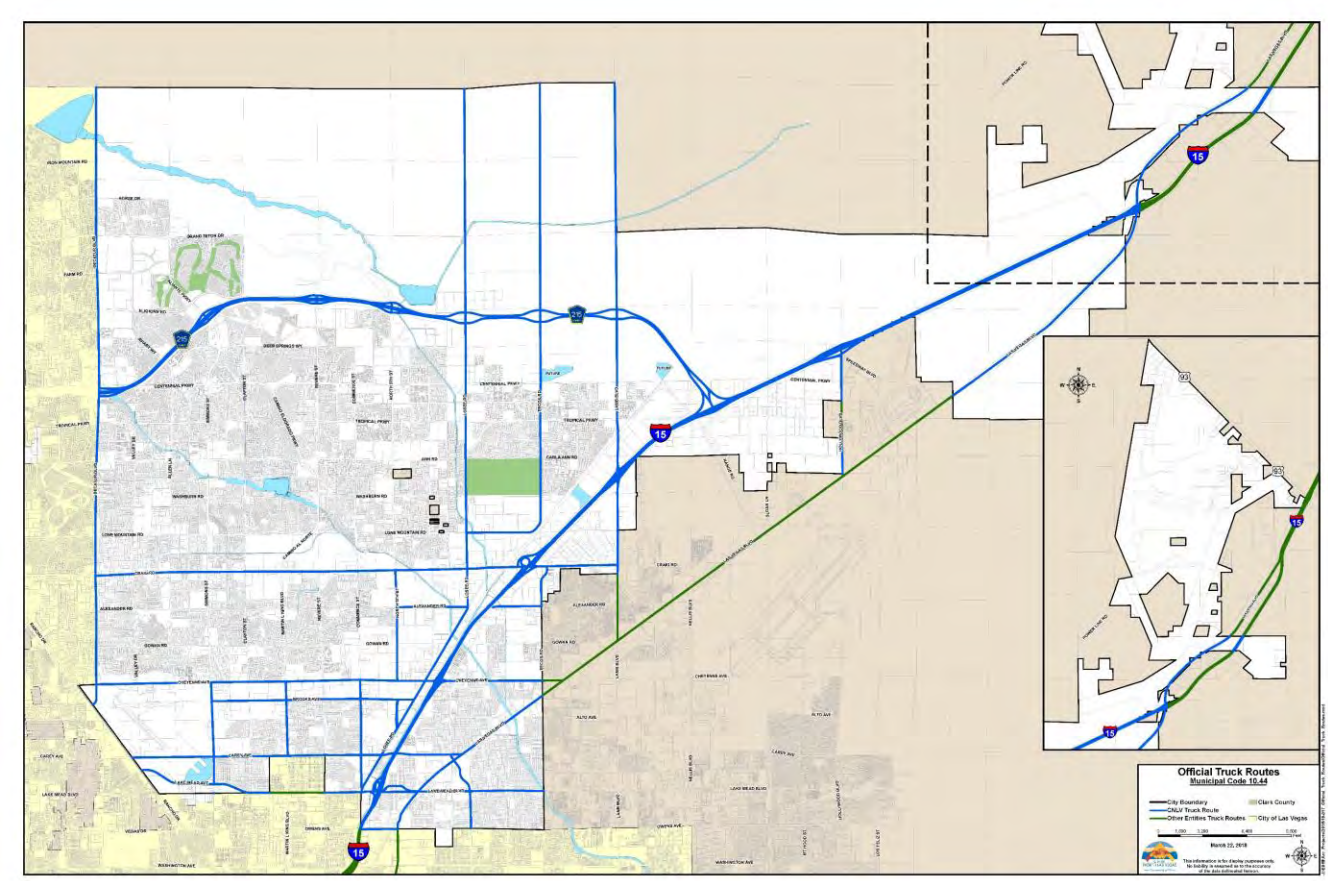
A larger version of **Figure 21** is provided in **Attachment H**.

Study Name: North Las Vegas Truck Route Map
Completion Date: March 2018
Consultant: N/A
Project Extent: City of North Las Vegas
Summary: The City of North Las Vegas Truck Route Map identifies the following truck routes:

- I-15 and 215
- Craig Road
- Alexander Road between N 5th Street and Pecos Road
- Cheyenne Avenue
- Las Vegas Boulevard
- Brooks Avenue between Simmons Street and Losee Road
- Carey Avenue
- Lake Mead Avenue and Lake Mead Boulevard
- Owens Avenue
- Decatur Boulevard
- Simmons Street between Cheyenne Avenue and Lake Mead Boulevard
- MLK Boulevard between Cheyenne Avenue and Carey
- Commerce Street between Cheyenne Avenue and Lake Mead Boulevard
- N 5th Street between Craig Road and Cheyenne Avenue, and between Brooks Avenue and Losee Road
- Losee Road
- Pecos Road north of Alexander Road
- Lamb Boulevard

The existing truck routes identified in the map will be a starting point in updating the City's truck routes as part of the *CMTPS*.

Figure 22: City of North Las Vegas Truck Routes



Source: North Las Vegas Truck Routes Map

Study Name: *Northeast Valley Transportation Network Study*
Completion Date: November 2018
Consultant: Wood Rodgers
Project Extent: Lake Mead Boulevard to the south and Lamb Boulevard to the west and includes Nellis Air Force Base and APEX Industrial Park
Summary: The *Northeast Valley Transportation Network Study (NE Valley Study)* was prepared for the RTC in 2018. The purpose of the *Northeast Valley Study* was to analyze the current conditions of the transportation network within the Northeast Valley to plan for future mitigations required due to the expected growth to future industrial park and warehouse developments and the Nellis Base expansion. The study has a goal of Connecting Land Use with the transportation system by ensuring the identified functional class, ROW, design, capacity, and level-of service of transportation facilities are consistent in supporting existing and future land use development patterns, and study recommendations include intersection improvements, including specific turning lane dimensions, signal timing, multimodal improvements, new connection opportunities, and implementation strategies, including funding and scheduling of improvements. Specific intersections that were identified to be reconstructed include:

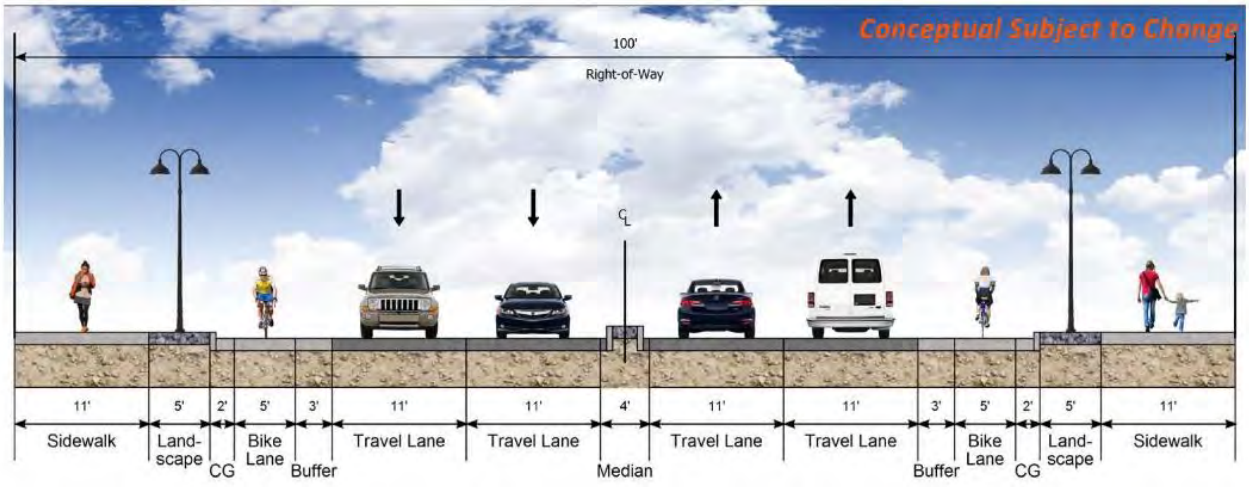
- Lamb Boulevard and Lake Mead Boulevard
- Craig Road and Las Vegas Boulevard
- Lamb Boulevard and I-15 Ramps
- Lamb Boulevard and Centennial Parkway

- Lamb Boulevard and CC-215 Westbound
- Speedway Boulevard and I-15 Southbound

The study presents multiple conceptual cross sections for the following streets:

- Lamb Boulevard
- Nellis Boulevard
- Cheyenne Avenue
- Las Vegas Boulevard
- Craig Road
- Tropical Parkway **(Figure 23)**
- Centennial Parkway
- Speedway Boulevard

Figure 23: Tropical Parkway Conceptual Street Design



Source: Northeast Valley Transportation Network Study

Study Name: RTC's *Complete Streets Design Guidelines for Livable Communities*
Completion Date: March 2013
Consultant: Ryan Snyder Associates
Summary: The *Complete Streets Design Guidelines for Livable Communities* (*CS Design Guide*) was completed in 2013 as a guide for Southern Nevada communities to use in planning and design of Complete Streets projects that incorporate and address the needs of all road users. The *CS Design Guide* provides information on the impacts of complete streets on the economy, equity, environmental sustainability, and aesthetics. The *CS Design Guide* is aimed at providing more livable communities with the health of the residents in mind. The *CS Design Guide* describes how street types vary by land use as described in the tables below (**Figure 24** and **Figure 25**).

Figure 24: Common Street Types Table

Street Type	Description	Comment
Low and High-Speed Boulevards* (conventionally arterials)	Traverses and connects districts and cities; regional in nature; primary a longer distance route for all vehicles including transit	Often has a planted or raised median
Avenue* (conventionally collectors)	Traverses and connects districts, links streets with boulevards. For all vehicles including transit.	May or may not have a median
Street* (conventionally local streets)	Serves neighborhood, connects to adjoining neighborhoods; serves local function for vehicles and transit	
Alley/Lane	Link between streets; allows access to garages	Narrow and without sidewalks

*May have segments with specialized functions and features such as a Main Street segment.

Source: The Complete Streets Design Guidelines for Livable Communities

Figure 25: Special Street Types Table

Street Type	Description	Comment
Main Street	Slower vehicle speeds, favors pedestrians most, contains the highest level of streetscape features, typically dominated by retail and other commercial uses	Functions differently than other streets in that it is a destination
Drive	Located between an urbanized neighborhood and park or waterway	
Transit Mall	The traveled way is for exclusive use by buses or trains, typically dominated by retail and other commercial uses	Excellent pedestrian access to and along the transit mall is critical. Bicycle access may be supported.
Bike Boulevard	A through street for bicycles, but short distance travel for motor vehicles	Usually a local street with low traffic volumes
Festival Street	Contains traffic calming, flush curbs, and streetscape features that allow for easy conversion to public uses such as farmers' markets and music events	Has a social significance of a neutral public area for gathering
Shared Space	Slow, curbless street where pedestrians, motor vehicles, and bicyclists share space	May support café seating, play areas, and other uses

Source: The Complete Streets Design Guidelines for Livable Communities

The *CS Design Guide* presents specific design criteria for sidewalks based on land use contexts to provide safe and convenient passage for pedestrians. **Figure 26** provides specific minimum requirements for the four sidewalk zones (frontage, pedestrian, amenity, curb) according to combinations of land use contexts. The complete street design criteria presented in the CS Design Guide will be used in the development of the typical cross sections as part of the *CMTPS*.

Figure 26: Sidewalk Zone Widths for Each Land Use Context

	Boulevard	Avenue	Street
Low / Medium-Low Density Residential	Not applicable	Frontage: 18", 6'-8' at bus stops Pedestrian: 5' Amenity: 4', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 11'	Frontage: 18" Pedestrian: 5' Amenity: 4' Curb: 6" Min. Width: 11'
Med / High Density Residential	Frontage: 18" Pedestrian: 6' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 13'	Frontage: 18", 6'-8' at bus stops Pedestrian: 6' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 13'	Frontage: 18", 6'-8' at bus stops Pedestrian: 6' Amenity: 4', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 12'
Neighborhood Commercial	Not applicable	Frontage: 18", 6'-8' at bus stops Pedestrian: 6' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 13'	Frontage: 18", 6'-8' at bus stops Pedestrian: 6' Amenity: 4', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 12'
General Commercial	Frontage: 18", 6'-8' at bus stops Pedestrian: 6' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 13'	Frontage: 18", 6'-8' at bus stops Pedestrian: 6' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 13'	Not applicable
Mixed / Multi-use	Frontage: 30", 8' with cafe seating Pedestrian: 6' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 14'	Frontage: 30", 8' with cafe seating or bus stops Pedestrian: 6' Amenity: 4', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 13'	Frontage: 18" Pedestrian: 6' Amenity: 4' Curb: 6" Min. Width: 12'
Industrial	Frontage: 18" Pedestrian: 5' Amenity: 5' Curb: 18" Min. Width: 13'	Frontage: 18" Pedestrian: 5' Amenity: 4' Curb: 18" Min. Width: 12'	Frontage: 18" Pedestrian: 5' Amenity: 4' Curb: 18" Min. Width: 12'

Downtown Core / Main Street	Frontage: 30", 8' with cafe seating or bus stops Pedestrian: 6' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 14'	Frontage: 30", 8' with cafe seating or bus stops Pedestrian: 6' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 14'	Frontage: 30", 8' with cafe seating or bus stops Pedestrian: 6' Amenity: 5' Curb: 6" Min. Width: 14'
Transit-Oriented Districts	Frontage: 30", 6'-8' at bus stops Pedestrian: 8' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 16'	Frontage: 30", 6'-8' at bus stops Pedestrian: 8' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 16'	Frontage: 18", 6'-8' at bus stops Pedestrian: 6' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 13'
Office Park	Frontage: 18" Pedestrian: 5' Amenity: 5' Curb: 6" Min. Width: 12'	Frontage: 18" Pedestrian: 5' Amenity: 5' Curb: 6" Min. Width: 12'	Not applicable
Public Facilities	Frontage: 30" Pedestrian: 8' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 16'	Frontage: 30" Pedestrian: 8' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 16'	Frontage: 18" Pedestrian: 6' Amenity: 5', 6'-8' at bus stops and where large trees are desired Curb: 6" Min. Width: 13'

Source: The Complete Streets Design Guidelines for Livable Communities

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Study Name: *On Board Mobility Plan* (2020)
Completion Date: July 2020
Consultant: Nelson\Nygaard Consulting Associates, Accretive Consulting, EBP, Fehr & Peers, MIG, Purdue Marion, Stantec
Project Extent: RTC
Summary: The *On Board Mobility Plan* provides a roadmap for mobility improvements by establishing eight "big moves" and proposing flexible, adaptable strategies designed to diversify and expand regional travel opportunities. This plan is built around a proposed High Capacity Transit (HCT) network that links residential areas with employment, education facilities, medical services, and major recreational destinations.

The North Fifth Street Transit Corridor is a proposed light rail transit or bus rapid transit project in North Las Vegas. North Fifth Street is planned to run from Downtown to the proposed UNLV-North campus. The City has identified North Fifth Street as the highest priority transit line and the primary commercial corridor in the City. The estimated timing for completion is 6-10 years.

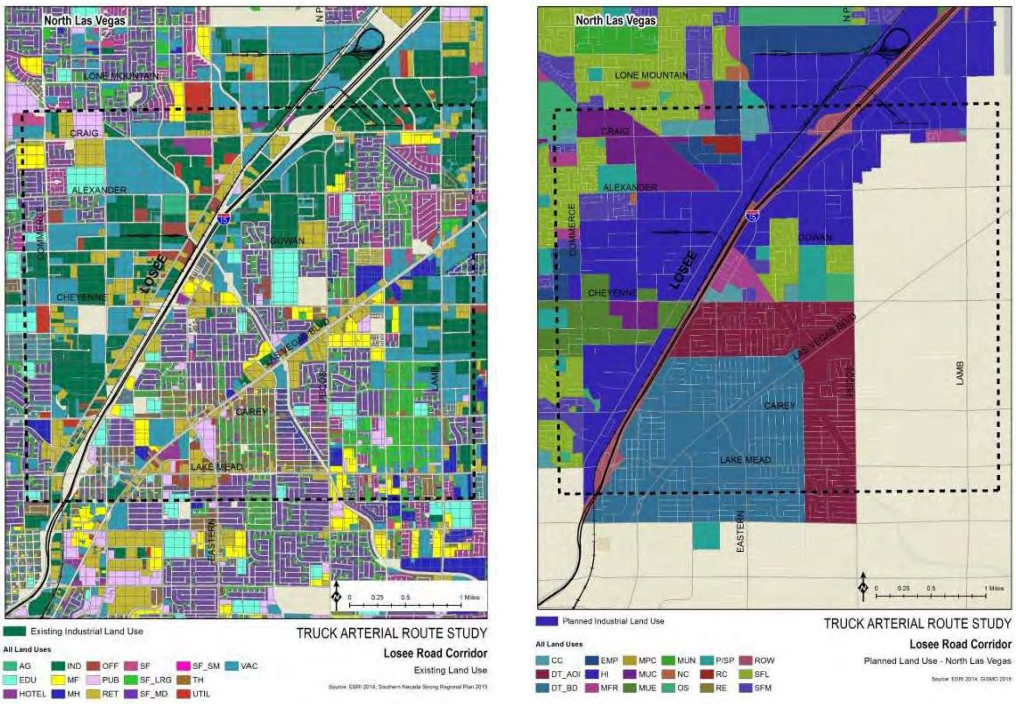
Challenges include thin, auto-mobile oriented development along the corridor and a need for significant new development to produce base levels of ridership needed for certain funding sources. Additionally, North Fifth Street is relatively narrow in width, making it difficult to dedicate the necessary ROW for transit travel.

Study Name: *Truck Arterial Route Study – Losee Corridor*
Completion Date: June 2017
Consultant: CH2M
Project Extents: Losee Road Corridor bounded on the north and south by Craig Road and Lake Mead Boulevard, and on the west and east by Commerce Street and Lamb Boulevard
Summary:
The *Truck Arterial Route Study* completed in 2017 assessed and identified various safety, operational, capacity, geometric, and weight requirements of key first and last mile arterial truck routes. Within the Losee Road corridor, west of I-15, existing land use consists primarily of industrial, commercial office, and retail uses. There are also areas of tourist commercial at Craig Road/Losee Road and at Cheyenne Avenue just west of Losee Road, and medium and high-density housing on Commerce Street near its intersections with Craig Road and Alexander Avenue. Planned land use for existing vacant parcels within the corridor include heavy industrial and commercial uses to the west of Losee Road along with some pockets of planned residential use. To the east of Losee Road, planned uses include downtown business district, business and design research park, and industrial uses. There are also identified rural neighborhood preservation areas and other planned residential uses.

First and last mile truck routes identified as part of the study include:

- Primary truck routes include Craig Road, Cheyenne Avenue, Lake Mead Boulevard, and Lamb Boulevard
- Secondary routes include Commerce Drive, 5th Street, Losee Road, and Pecos Road.

Figures 27 and 28: Existing and Planned Land Uses within the Losee Road Corridor



Source: Truck Arterial Route Study

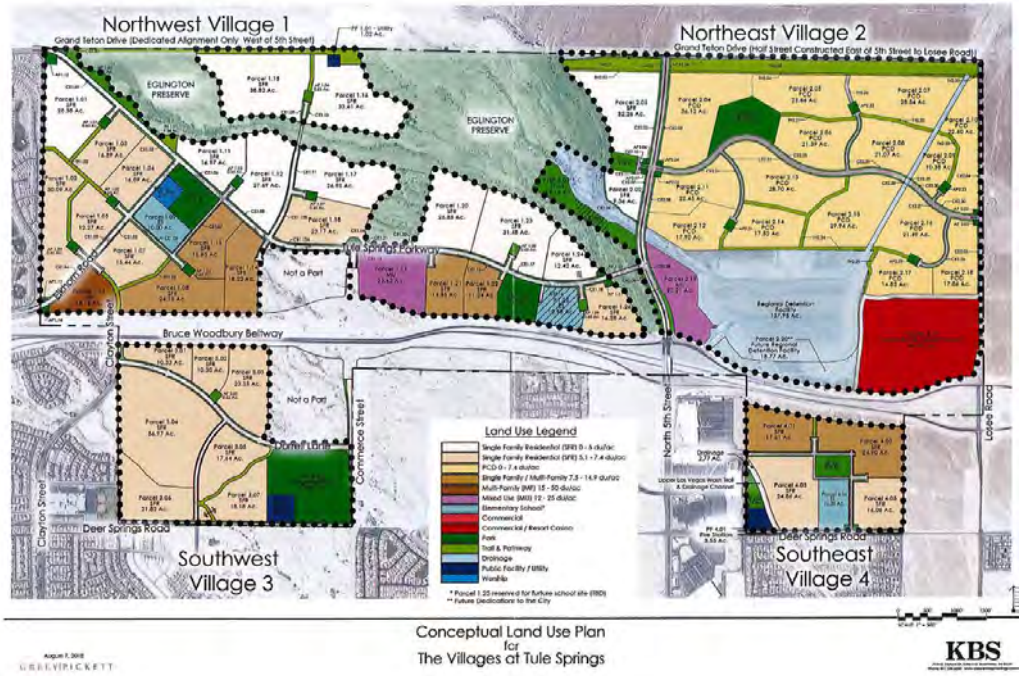
Study Name: *Traffic Study for Apex Industrial Park*
Completion Date: September 2008
Consultant: Lochsa Engineering
Project Extent: The north eastern portion of the City of North Las Vegas, consists of 22 separate subdivisions on both sides of I-15, south of US 93.
Summary: *Traffic Study for Apex Industrial Park* anticipates a mixture of light industrial uses and warehouses in future developments. At the time of the study, the area was currently vacant, and planned uses consist of 22 subdivisions with multiple parcels.

The following streetscape design details are anticipated for future buildout:

- **Grand Valley Parkway** – north-south minor arterial, 80' ROW, with two lanes in each direction
- **Apex Power Parkway** – north-south arterial roadway, 100' ROW, three lanes in each direction, on-street parking is prohibited
- **US 93** - east-west roadway, one lane in each direction, 70 miles per hour speed limit, on-street parking is prohibited
- **Apex Power Parkway** - north-south roadway, 100' ROW, three lanes in each direction
- **SR 604** – north-south roadway, one lane each direction

Title: Conceptual Land Use Plan for the Villages at Tule Springs
Consultant: Greey Pickett
Date: August 7, 2018
Summary: The Conceptual Land Use Plan for the Villages at Tule Springs (CLUPVTS) applies to the Villages at Tule Springs, which is a master planned community along the Bruce Woodbury Beltway, in the northern portion of North Las Vegas. The CLUPVTS defines land use for the community, most of which will be single family residential with pockets of multi-famillly residential, civic uses, and a commercial parcel at Losee Road (see **Figure 29**).

Figures 29 : The Village at Tule Springs

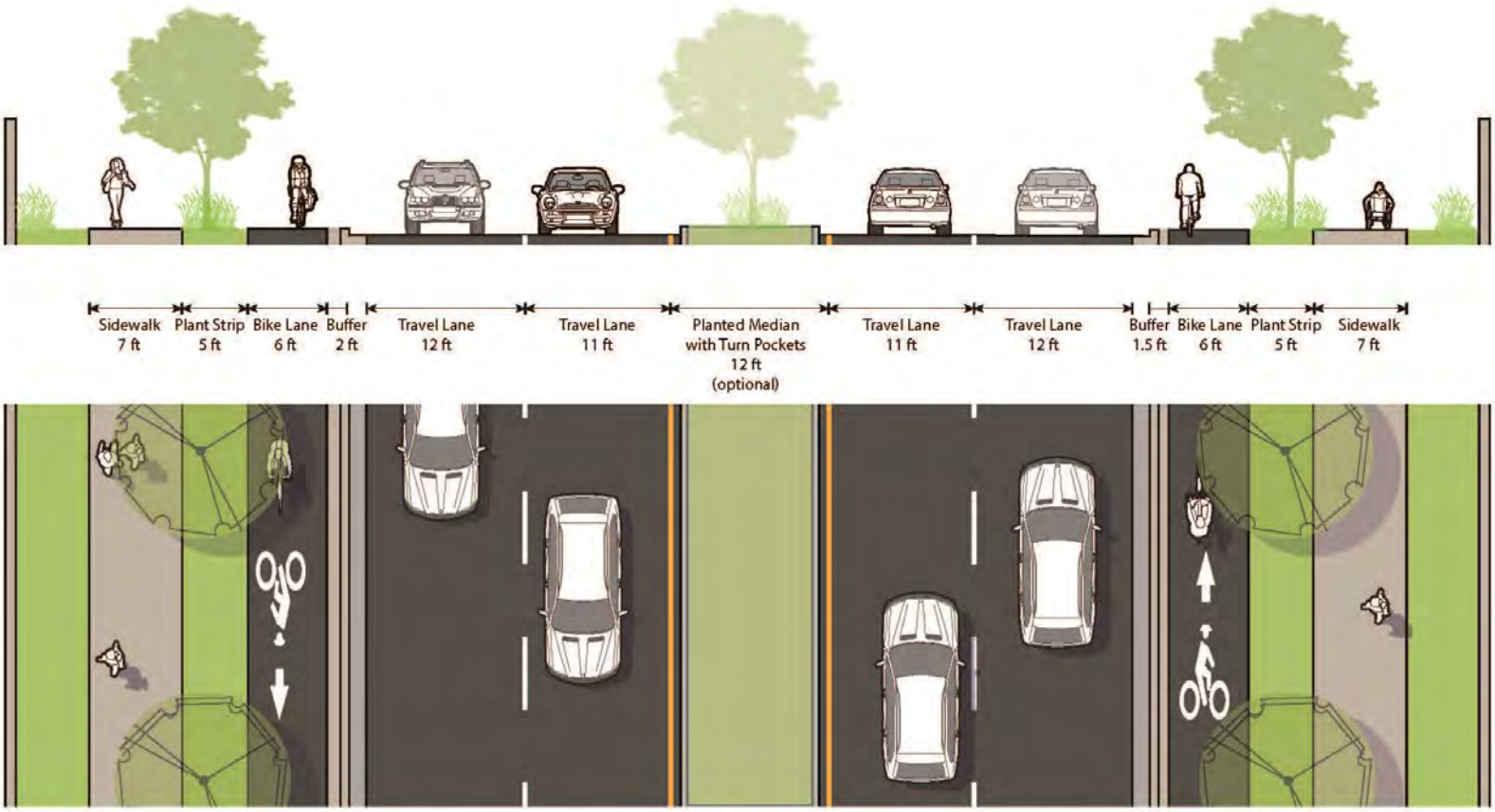


The CLUPVTS includes cross sections for trails, including a typical 60' section and a cross section for Private Trail Corridors. Other cross sections include specific sections for Grand Teton Trail corridor and the Upper Las Vegas Wash Trail and Drainage Channel. The CMTPS will incorporate the cross sections for the trails from the CLUPVTS.

ATTACHMENTS

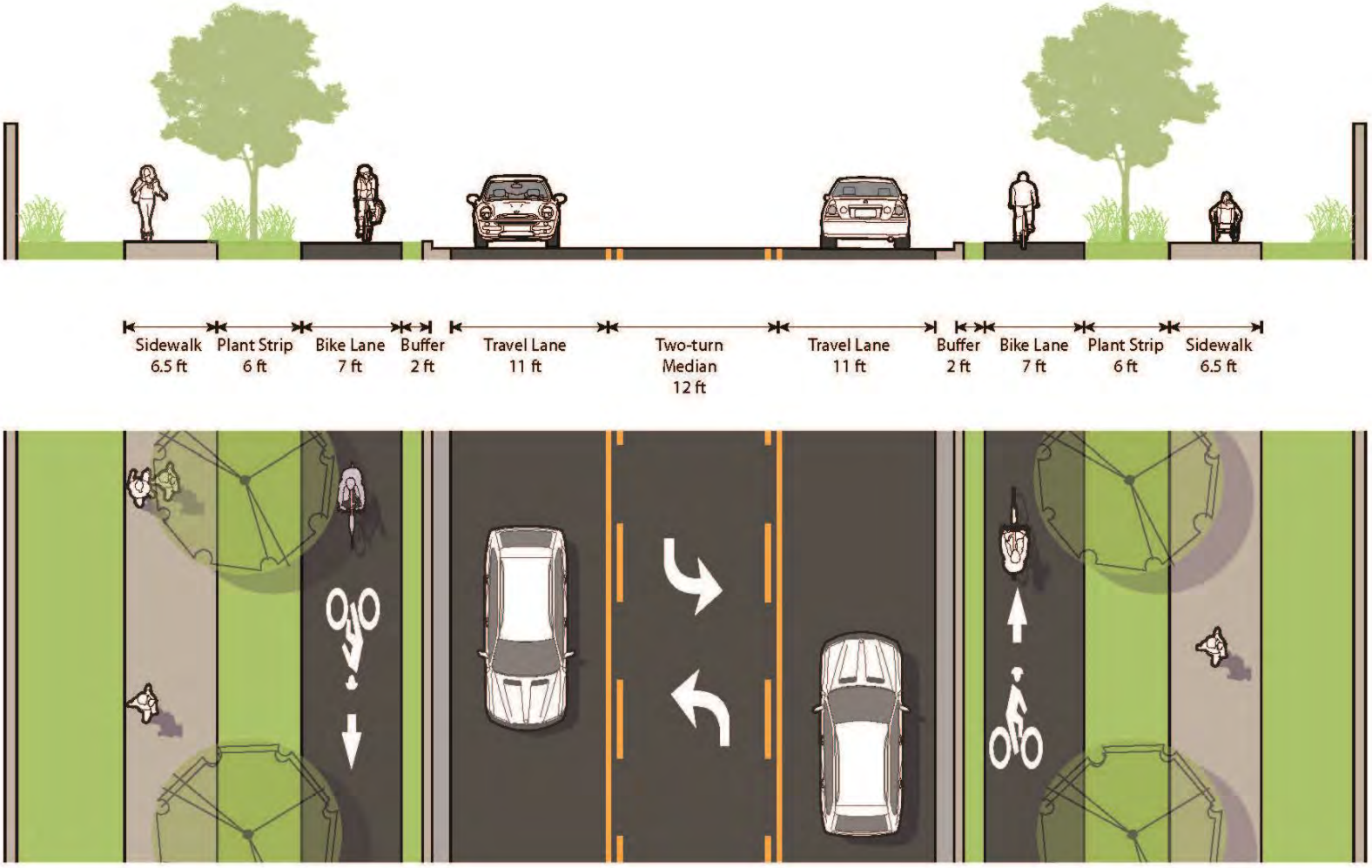
Attachment A	Proposed Cross Section for 5-Lane Road with Separated Sidewalks and Bike Lanes in a 100’ ROW
Attachment B	Proposed Cross Section for 3-Lane Road with Separated Sidewalks and Bike Lanes in an 80’ ROW
Attachment C	Proposed Cross Section for 3-Lane Road with Attached Sidewalks and Bike Lanes in a 60’ ROW
Attachment D	Planning Framework
Attachment E	Land Use Plan Map
Attachment F	North Fifth Corridor Land Use Concept
Attachment G	North Fifth Corridor Circulation Concept
Attachment H	Land Use Plan

Attachment A: Proposed Cross Section for 5-Lane Road with Separated Sidewalks and Bike Lanes in a 100'ROW



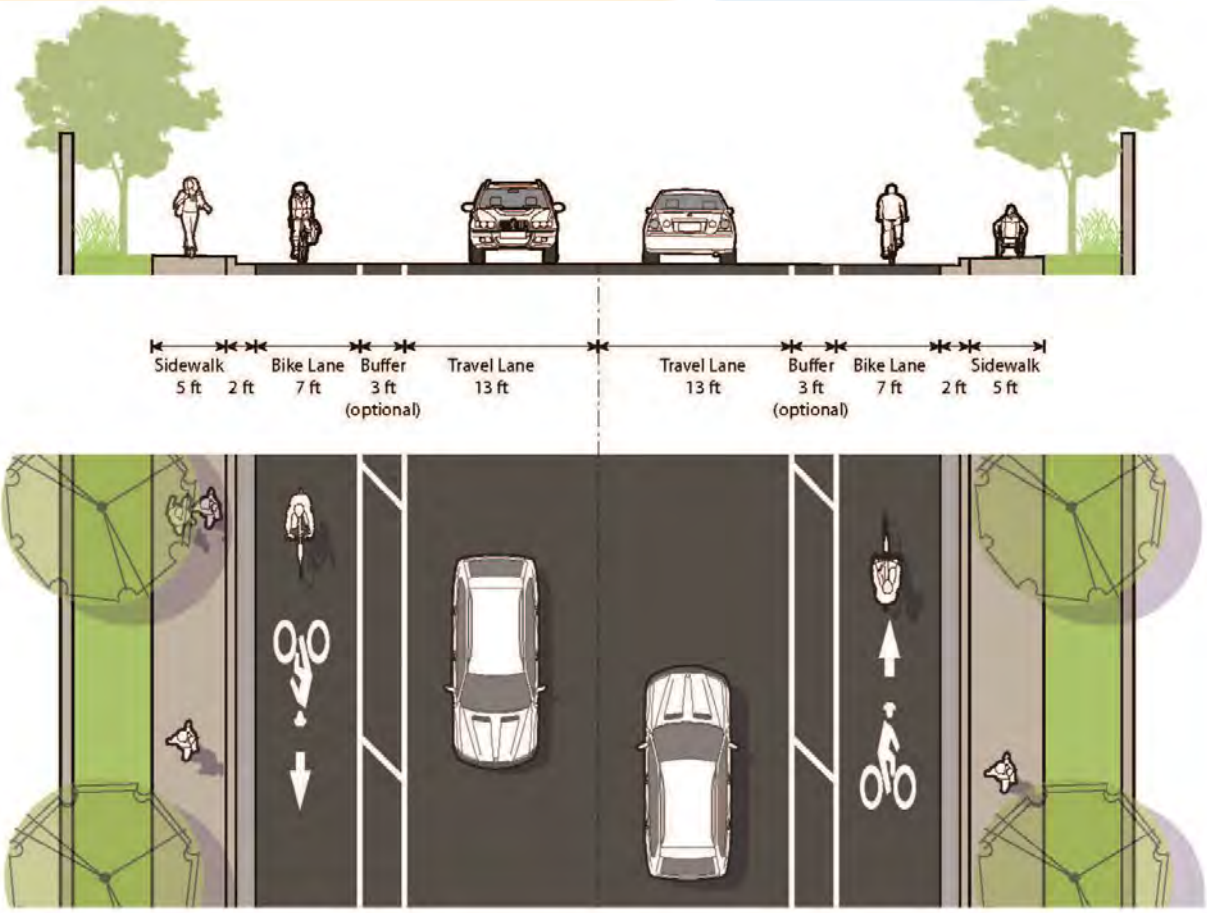
Source: North Las Vegas Citywide Pedestrian & Bicycle Plan

Attachment B: Proposed Cross Section for 3-Lane Road with Separated Sidewalks and Bike Lanes in an 80'ROW



Source: North Las Vegas Citywide Pedestrian & Bicycle Plan

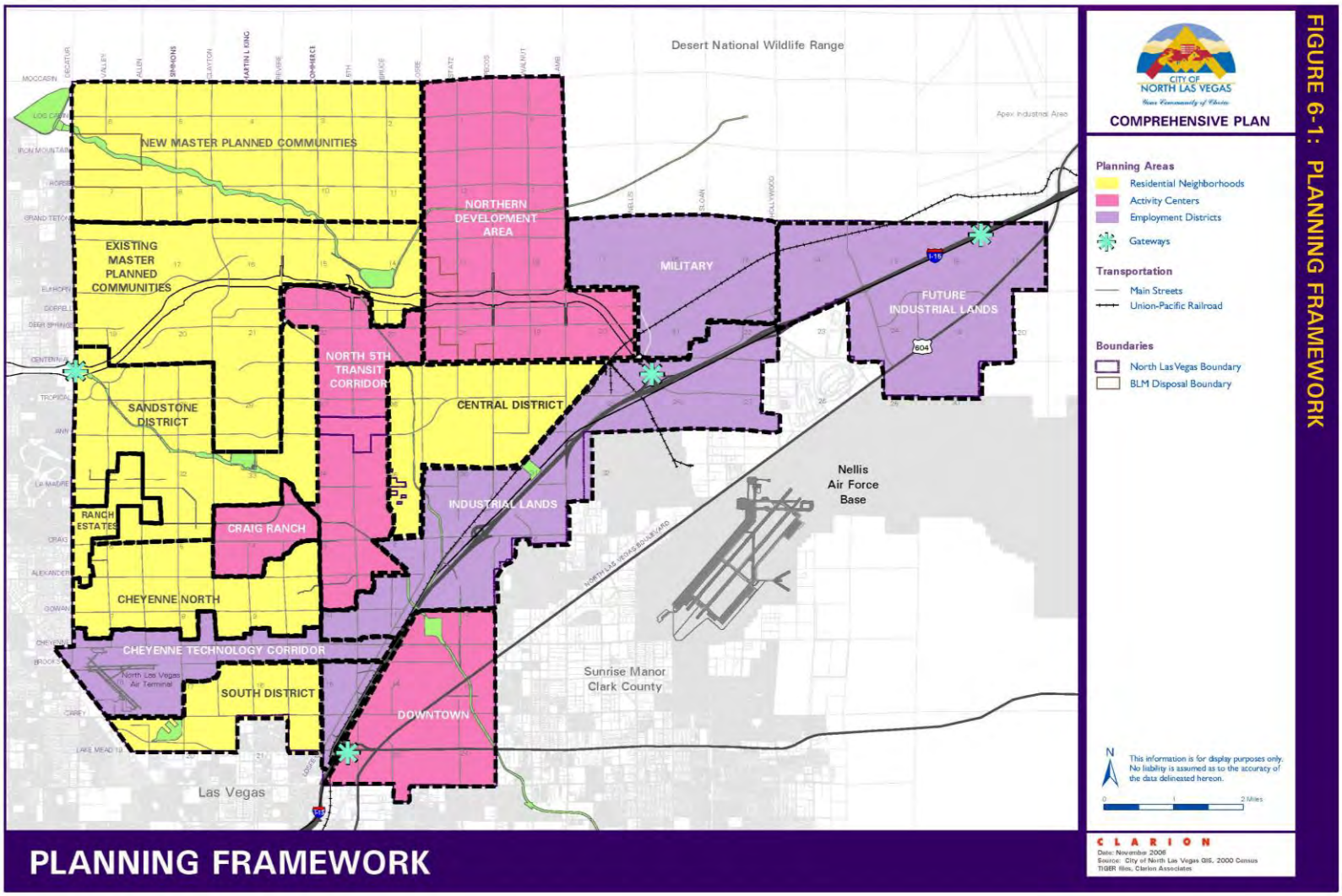
Attachment C: Proposed Cross Section for 3-Lane Road with Attached Sidewalks and Bike Lanes in a 60'ROW



*Striped buffers over 2 feet in width should include a diagonal or chevron hatch to avoid appearing as a separate lane.

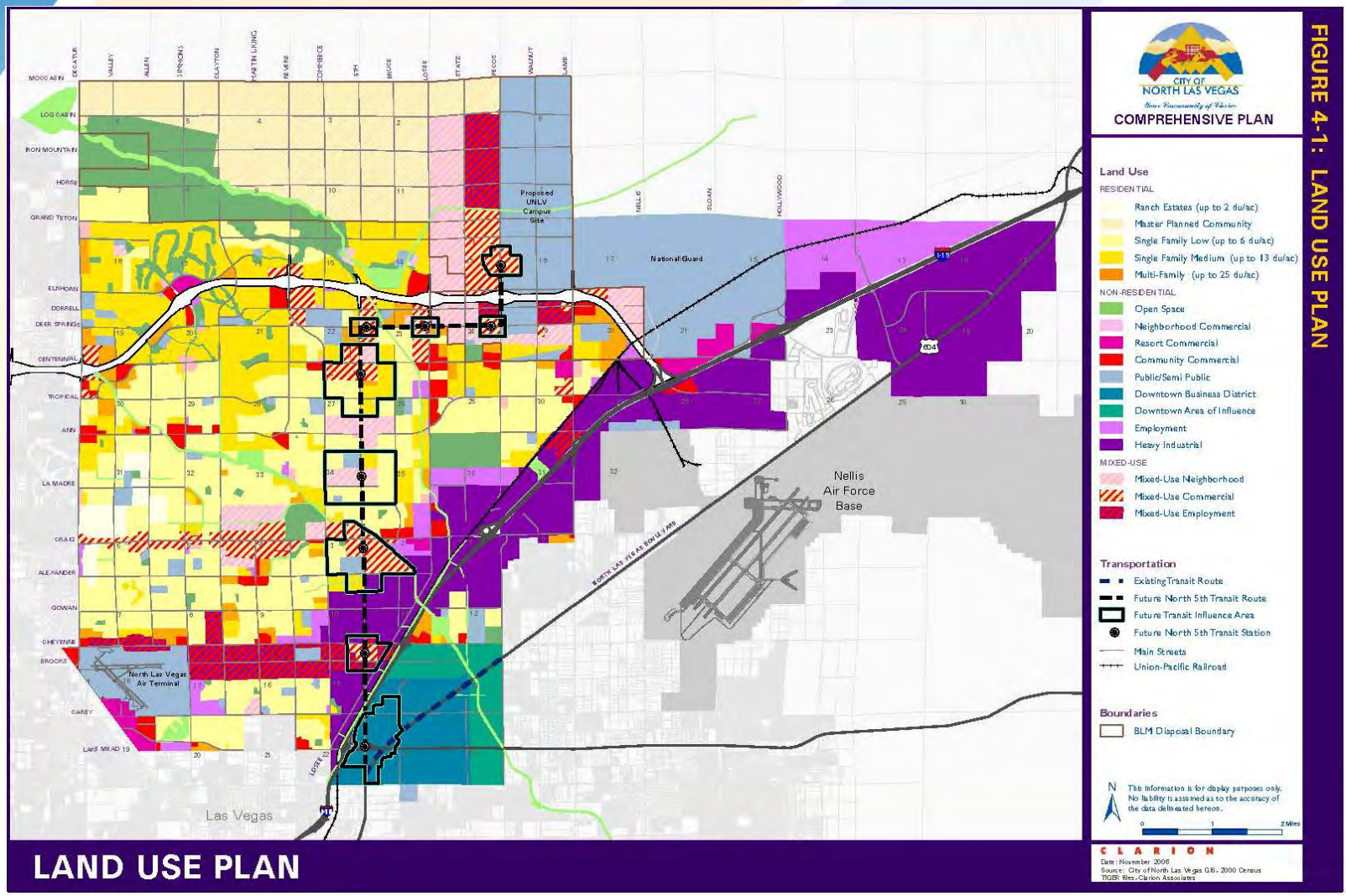
Source: North Las Vegas Citywide Pedestrian & Bicycle Plan

Attachment D: Planning Framework



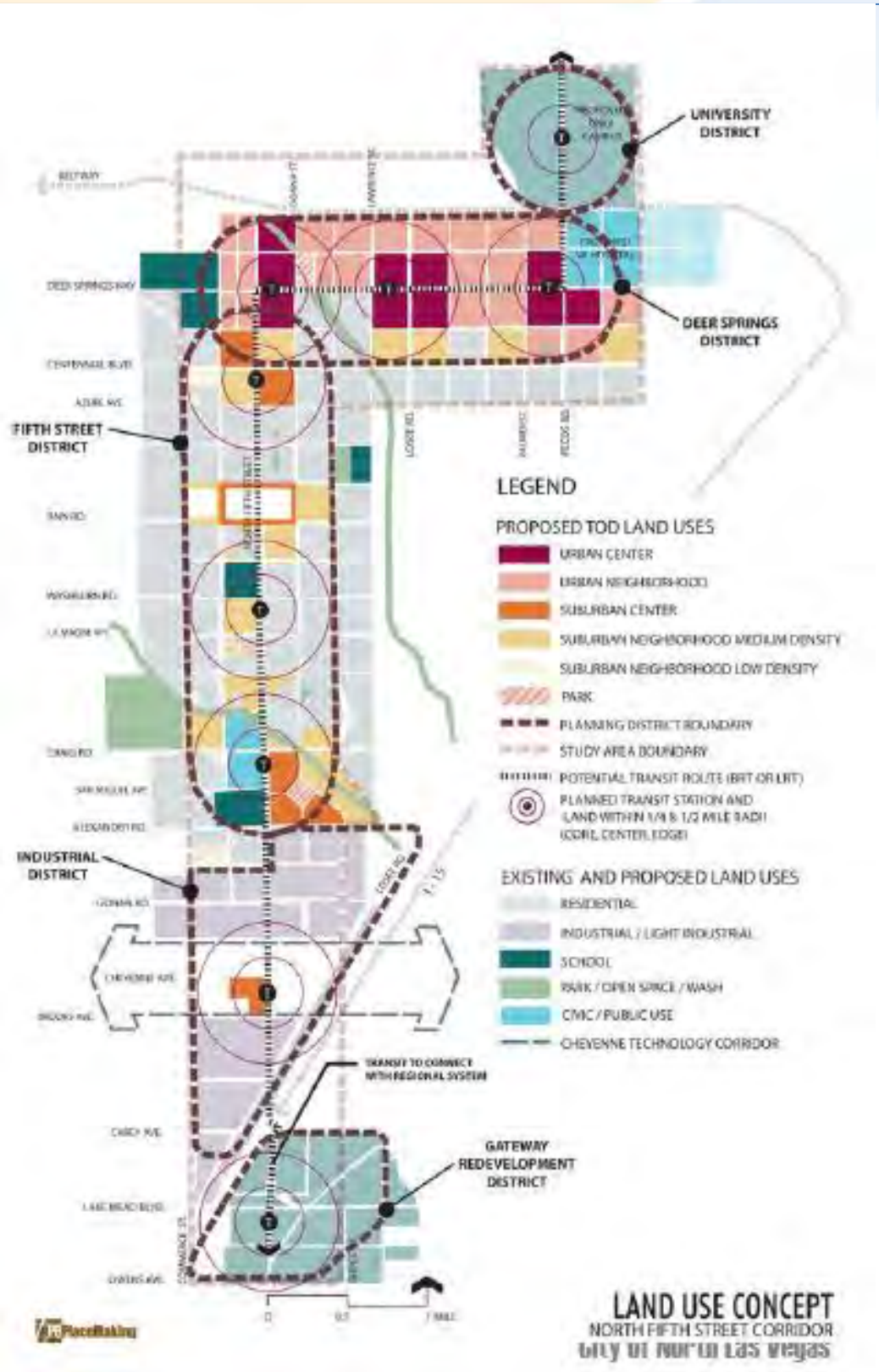
Source: City of North Las Vegas Comprehensive Master Plan

Attachment E: Land Use Plan Map



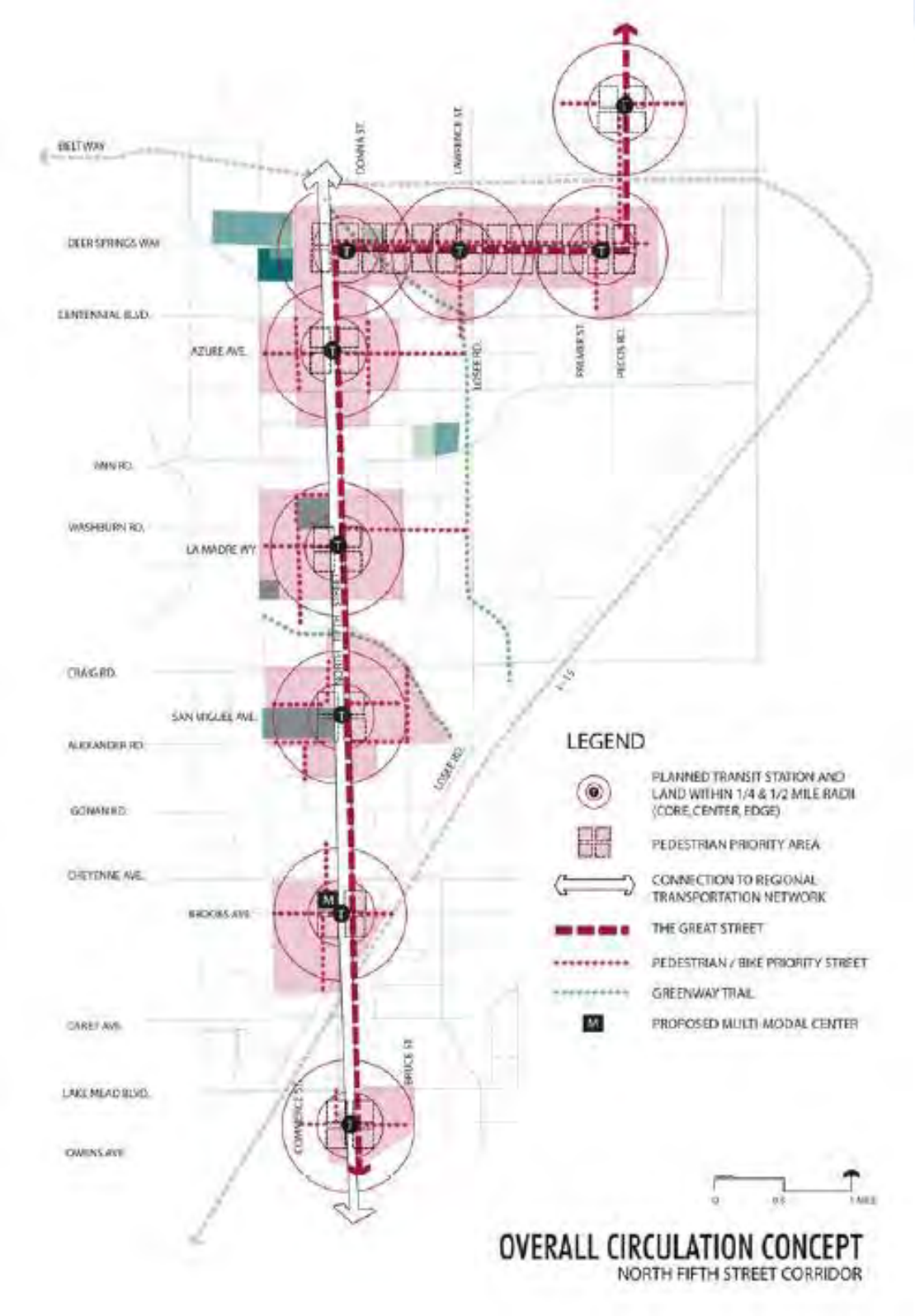
Source: City of North Las Vegas Comprehensive Master Plan

Attachment F: North Fifth Corridor Land Use Concept



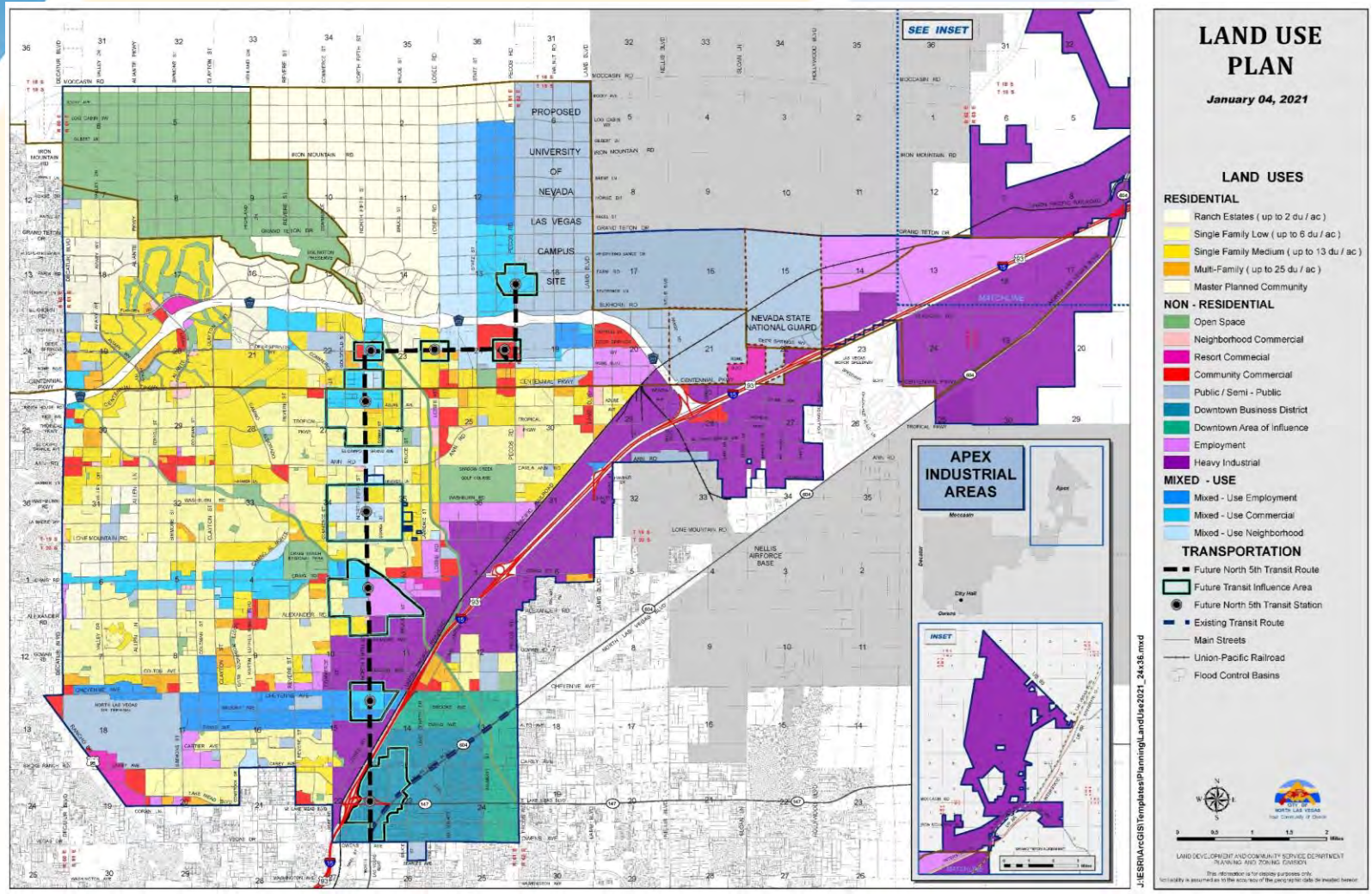
Source: North Fifth Street Transit Supportive Concept Plan

Attachment G: North Fifth Corridor Circulation Concept



Source: North Fifth Street Transit Supportive Concept Plan

Attachment H: Land Use Plan



Source: North Las Vegas Land Use Master Plan

APPENDIX B

FUNCTIONAL CLASSIFICATION MEMORANDUM

MEMORANDUM

To: *RTC of Southern Nevada and City of North Las Vegas*

From: *Lindsay Saner, Kimley-Horn*

Date: *November 19, 2021*

RE: *Review of Functional Classification Methodologies*

Overview/Background

As part of the City of North Las Vegas (CNLV) Comprehensive Master Transportation Plan Study, Kimley-Horn was tasked with reviewing functional classifications for City streets and recommending the methodology to be incorporated into the updated Master Plan of Streets and Highways (MPSH).

Review of the current functional classifications by CNLV and the Nevada Department of Transportation (NDOT) for City streets resulted in different classifications for a number of roadway segments between CNLV and NDOT. Several roadways classified by CNLV as "arterial (major or minor)" are classified by NDOT as "minor collector". The roadway segments, right-of-way (ROW), and functional classifications are summarized in **Table 1**. Functional classifications from CNLV and NDOT are included in **Attachment A**.

Table 1 – CNLV and NDOT Functional Classifications for CNLV Roadway Segments

Roadway Segment	ROW	CNLV Functional Classification	NDOT Functional Classification
Simmons Street, between Ann Road and Lake Mead Boulevard	100'	Major Arterial	Minor Collector
Washburn Road, between Decatur Boulevard and Camino Bravo	80'	Minor Arterial	Minor Collector
Lone Mountain Road, between Commerce Street and Losee Road	80'	Minor Arterial	Minor Collector
Clayton Street, between Washburn Road and Cheyenne Avenue	80'	Minor Arterial	Minor Collector
Gowan Road, between Decatur Boulevard and Commerce Street	80'	Minor Arterial	Minor Collector

The purpose of this memorandum is to provide a summary of the functional classification methodologies for streets and highways for CNLV, other local jurisdictions in Southern Nevada (Regional Transportation Commission of Southern Nevada [RTC], Clark County, City of Las Vegas [CLV], and City of Henderson [COH]), NDOT, and the Federal Highway Administration (FHWA).

The results of this summary are to be utilized to determine the functional classification methodology for the update to the CNLV MPSH as part of the City's Comprehensive Master Transportation Plan Study (CMTPS).

Review of Functional Classification Methodologies

Functional classification is used to understand the role of a roadway within the transportation network and to set design and performance benchmarks. The following subsections provide a

summary of the functional classification methodologies for local, state, and federal agencies including: FHWA, NDOT, RTC, Clark County, CNLV, CLV, and COH.

Federal Highway Administration

Per the FHWA *Highway Functional Classification Concepts, Criteria, and Procedures* (excerpts included in **Attachment B**), functional classification guidelines are based on the characteristics and functions of a roadway, as opposed to ROW width. Roadways are classified into three (3) main categories: arterials, collectors, and locals. Roadways that provide a high level of mobility are classified as arterials, roadways that provide a high level of access are classified as locals, and roadways that provide a balance between mobility and access are classified as collectors.

For federal functional classification purposes, the three (3) main categories are divided into seven (7) subclassifications:

- Arterials
  - Interstates: the highest classification of arterials that are designed and constructed with mobility and long-distance travel in mind
  - Other freeways & expressways: roadways that look similar to interstates, have directional travel lanes typically separated by some type of physical barrier, and have limited access via on- and off-ramp locations or a limited number of at-grade intersections
  - Other principal arterials: roadways that serve major centers of metropolitan areas and that provide a high degree of mobility both in urban and rural areas
  - Minor arterials: roadways that provide service for trips of moderate length, serve geographic areas that are smaller than their higher arterial counterparts, and offer connectivity to the higher arterial system
- Collectors
  - Major collectors: roadways that gather traffic from local roads, funnel vehicles to the arterial network, and are longer in length with lower connecting driveway densities, higher speeds, and higher traffic volumes compared to minor collectors
  - Minor collectors: roadways that gather traffic from local roads, funnel vehicles to the arterial network, and are shorter in length with higher connecting driveway densities, lower speeds, and lower traffic volumes compared to major collectors
- Locals
  - Local roads: roadways that are not intended for use in long distance travel due to their provision of direct access to adjacent land

The FHWA guidelines also provide ranges for lane width, shoulder width, annual average daily traffic (AADT), divided/undivided status, access control, and access points per mile by functional classification category in order to help transportation planners classify roadways that may borderline two categories, as shown in **Attachment B**.

Nevada Department of Transportation

NDOT's *Functional Classification Process and Procedures,* included in **Attachment C,** states that NDOT's procedure to determine the functional classification of roadways follows the concepts and procedures outlines in FHWA's *Highway Functional Classification Concepts, Criteria, and Procedures* (**Attachment B**).

Regional Transportation Commission of Southern Nevada

The RTC Uniform Standard Specifications and Drawings (USSD) provide cross sections of roadways by functional classification. These cross sections by functional classification have been adopted by local Southern Nevada jurisdictions including Boulder City, Clark County, COH, CLV, Mesquite, and CNLV, with some exceptions. The functional classifications by ROW are summarized in **Table 2**. The roadway cross sections provided in RTC's USSD are found in **Attachment D**.

Table 2 – RTC Functional Classification Definitions by ROW

Functional Classification	ROW
Arterials	106' - 114'
Primary Arterials	106'
Collectors	60' - 90'
Locals	< 60'

Clark County

Per the Clark County *Comprehensive Master Plan Transportation Element* (excerpts included in **Attachment E**), roadways are classified into the following four (4) categories:

- Freeways: divided high-speed roads with grade separated interchanges at arterial roadway crossings that have two (2) or more lanes in each direction
- Arterials: roadways that connect and gather traffic from collectors and local streets and provide access to and between commercial activity centers and residential areas
- Collectors: streets that gather traffic from arterials, as well as direct traffic from arterial streets to activity centers and residential areas by conveying traffic to their ultimate destinations or to local streets
- Locals: carry local traffic to collector and arterial roadways with two (2) travel lanes

Functional classification definitions for Clark County by ROW are summarized in **Table 3**.

Table 3 – Clark County Functional Classification Definitions by ROW

Functional Classification	ROW
Freeways	350'
Arterials	100' - 120'
Collectors	60' - 80'
Locals	≤ 60'

City of North Las Vegas

According to *CNLV Municipal Code Title 17*, CNLV classifies its roadways into four (4) categories based on ROW width, as shown in **Table 4**.

Table 4 – CNLV Functional Classification Definitions by ROW

Functional Classification	ROW
Major Arterials	> 90’
Minor Arterials	80’ - 90’
Collectors	60’
Locals*	< 60’

*Note: *It is assumed that local streets have a ROW width less than 60 feet.*

CNLV Municipal Code 16.04.170 provides the following definitions:

- Residential roadway: a street that provides access to residential areas only
- Minor collector: a street that collects residential traffic and/or may service commercial facilities
- Major collector: a street that serves as a destination roadway and/or may service commercial/light industrial facilities
- Minor arterial: a street that serves as a destination roadway and/or may service commercial/light industrial facilities
- Major arterial: a street that serves as a destination roadway and/or may service commercial/light industrial facilities

It should be noted that major collectors, minor arterials, and major arterials have the same definition. Table 17.24.040-1 from the City’s Municipal Code is provided in **Attachment F**.

City of Las Vegas

One of the outcomes of the CLV’s *2050 Master Plan* is for the layered complete streets network to be incorporated into the City’s Planned Streets and Highways Map. CLV uses five (5) primary roadway classifications per the Planned Streets and Highways Map (revised May 19, 2021), as summarized in **Table 5**. Functional classification definitions for the City of Las Vegas are included in **Attachment G**.

Table 5 – CLV Functional Classification Definitions by ROW

Functional Classification	ROW
Freeways/Expressways	> 150’
Primary Arterials	100’ - 120’
Collectors	40’, 45’, 60’, 80’
Frontage Streets	70’
Locals	< 60’*

*Note: *It is assumed that local streets have a ROW width less than 60 feet.*

City of Henderson

The COH Development Code classifies roadways into the four (4) categories shown in **Table 6**, as defined by minimum ROW width. City of Henderson information is included in **Attachment H**.

Table 6 – CNLV Functional Classification Definitions by ROW

Functional Classification	ROW
Major Arterials	> 182’
Minor Arterials	> 158’
Major Collectors	> 122’
Minor Collectors	> 87’

Summary of Findings

A summary of findings is presented in **Table 7**.

Table 7 – Agency Roadway Functional Classifications

Functional Classification		FHWA/ NDOT	RTC	Clark County	CNLV	CLV	COH
Local	Local Street	-	< 60’	≤ 60’	< 60’	-	-
Collector	Frontage Street	-	-	-	-	70’	-
	Collector	-	60’ - 90’	60’ - 80’	60’	40’, 45’, 60’, 80’	-
	Minor Collector	-	60’	-	-	-	> 87’
	Major Collector	-	80’	-	-	-	> 122’
Arterial	Arterial	-	106’ - 114’	100’ -120’	-	-	-
	Minor Arterial	-	-	-	80’ – 90’	-	-
	Major Arterial	-	-	-	≥ 90’	-	> 158’
	Primary Arterial	-	106’	-	-	100’ – 120’	> 182’
	Freeways/Expressways	-	-	350’	-	≥ 150’	-

Recommendations

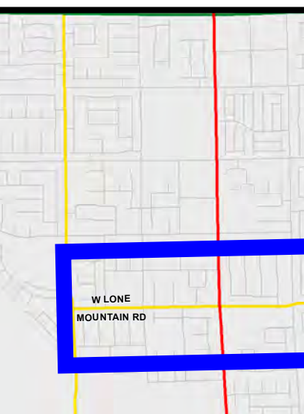
The CNLV currently defines functional classifications by the function of the roadway, primarily as it relates to and connects to different land uses. Based on the findings of the functional classification system review, it is recommended that CNLV evaluate their current classification system to ensure that the classifications reflect the functions and characteristics of City roadways both in terms of access and mobility, consistent with the three (3) overarching categories and definitions used by NDOT and FHWA: arterials, collectors, and locals. Furthermore, it is recommended that CNLV update its Code of Ordinances definitions for functional classifications to reflect the differences between classifications since the current definitions for major collectors, minor arterials, and major arterials are the same.

Attachments:

Attachment A – CNLV and NDOT Functional Classification of Specific Roadway Segments
Attachment B – FHWA Highway Functional Classification Concepts, Criteria, and Procedures
Attachment C – NDOT Functional Classification Process and Procedures
Attachment D – RTC Uniform Standard Drawings for Public Works Construction
Attachment E – Clark County Comprehensive Master Plan Transportation Element
Attachment F – CNLV Code of Ordinances
Attachment G – CLV Planned Streets and Highways Map
Attachment H – COH Development Code

ATTACHMENT A

CNLV AND NDOT FUNCTIONAL CLASSIFICATION OF SPECIFIC ROADWAY SEGMENTS



2014

PREPARED BY
THE NEVADA DEPARTMENT OF TRANSPORTATION

Existing	Proposed Unbuilt	
		1 Interstates
		2 Other Freeways and Expressways
		3 Other Principal Arterials
		4 Minor Arterials
		5 Major Collectors
		6 Minor Collectors
		7 Local Roads
		Urban Limits
		State Line
		County Lines

0 0.275 0.55 1.1 1.65 2.2 Miles

ROADWAY FUNCTIONAL CLASSIFICATION

B3

CLARK COUNTY, NEVADA



2014

PREPARED BY
THE NEVADA DEPARTMENT OF TRANSPORTATION

Existing	Proposed Unbuilt	
		1 Interstates
		2 Other Freeways and Expressways
		3 Other Principal Arterials
		4 Minor Arterials
		5 Major Collectors
		6 Minor Collectors
		7 Local Roads
		Urban Limits
		State Line
		County Lines

Miles
0 0.275 0.55 1.1 1.65 2.2

ROADWAY FUNCTIONAL CLASSIFICATION

B2

CLARK COUNTY, NEVADA

TABLE 17.24.040-1: DRIVEWAY SPACING

	60' ROW Collector Streets		80'- 90' ROW Minor Arterial Streets		90'+ ROW Major Arterial Streets	
	Residential Districts [1]	Business Districts [1]	Residential Districts [1]	Business Districts [1]	Residential Districts [1]	Business Districts [1]
Minimum Spacing - Partial Access [2]	60 feet	80 feet	80 feet	150 feet	100 feet	150 feet
Minimum Spacing - Full Access [3]	200 feet	200 feet	200 feet	200 feet	200 feet [4]	200 feet [4]

NOTES:

[1] For the purposes of this table, residential districts shall include the O-L, R-E, R-EL, R-1, R-2, R-3, R-4, R-A/R-2, R-A/ R-3, R-A/R-4, and R-CL Districts. Business districts shall include all other zoning districts not included as a residential district.

[2] Partial access includes right turn in and out only.

[3] Full access allows all turn movements, in and out.

[4] Only at median openings; Median openings only allowed at 660 foot intervals on major arterials.

Tule Springs Monument

Nellis Range Boundary

National Guard Boundary

Nellis Air Force Base

Sunrise Manor

City of Las Vegas

MASTER PLAN OF STREETS AND HIGHWAYS

Right-of-Way Widths

150'	80'
130'	65'
120'	60'
100'	51'
95'	48'
90'	40'

0 0.5 1 1.5 2 Miles

May 12, 2020

This information is for display purposes only. No liability is assumed as to the accuracy of the data delineated hereon.

CITY OF NORTH LAS VEGAS
Your Community of Choice

N
W E
S

ATTACHMENT B

FHWA HIGHWAY FUNCTIONAL CLASSIFICATION CONCEPTS, CRITERIA, AND PROCEDURES

U.S. Department of Transportation
Federal Highway Administration

Highway Functional Classification Concepts, Criteria and Procedures



2013 Edition

For nomenclature purposes, those roadways that provide a high level of mobility are called "Arterials"; those that provide a high level of accessibility are called "Locals"; and those that provide a more balanced blend of mobility and access are called "Collectors."

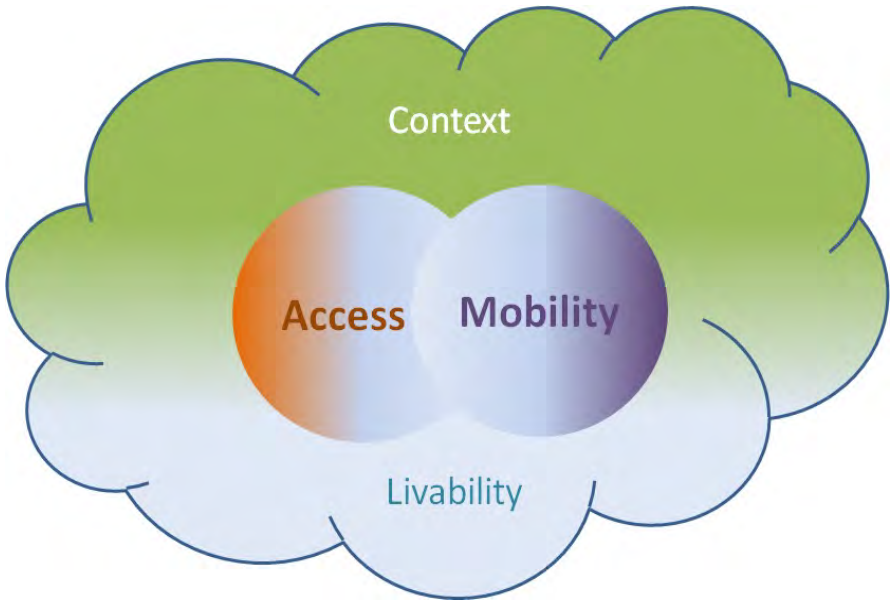
Figure 2-4: Aerial View of Eisenhower Street in Carrollton, TX



Source: Google Earth Pro, June 28, 2012

The relationship between mobility and land access is illustrated in **Figure 2-5**. Arterials provide mostly mobility; Locals provide mostly land access; and Collectors strike a balance between the two. Context Sensitivity and Livability form the environment through which Mobility and Access should be considered. These concepts are discussed in greater detail in Chapter 5.

Figure 2-5: Illustration of Access-Mobility Dynamic



Source: FHWA

While most roadways offer both "access to property" and "travel mobility" services, it is the roadway's primary purpose that defines the classification category to which a given roadway belongs.[2]

[2] The use of the term "Local" roadway in the context of functional classification is separate from the use of the term in a jurisdictional context. While it is true that roadways functionally classified as "Local" are often under the jurisdiction of a "local" entity (i.e., incorporated city), Local Roads are not always under local jurisdiction. Other roadway classifications, including Arterials, may also be under the jurisdiction of a local (i.e., non-state) entity.

SECTION 3. CRITERIA

3.1 Definitions and Characteristics

The previous section provided a general overview of the functional classification categories of Arterial, Collector and Local. For Federal functional classification purposes, this section breaks these categories down further to stratify the range of mobility and access functions that roadways serve. Additionally, the physical layout and the official designation of some roadways dictate the classification of certain roadways.

Access control is a key factor in the realm of functional classification. All Interstates are "limited access" or "controlled access" roadways. The use of the word "access" in this context refers to the ability to access the roadway and not the abutting land use—these roadways provide no "access" to abutting land uses. Access to these roadways is controlled or limited to maximize mobility by eliminating conflicts with driveways and at-grade intersections that would otherwise hinder travel speed. Access to these roadways is limited to a set of controlled locations at entrance and exit ramps. Travelers use a much lower functionally classified roadway to reach their destination.

3.1.1 Interstates

Interstates are the highest classification of Arterials and were designed and constructed with mobility and long-distance travel in mind. (**Figure 3-1**) Since their inception in the 1950's, the Interstate System has provided a superior network of limited access, divided highways offering high levels of mobility while linking the major urban areas of the United States.

Figure 3-1: Example of Interstate



Source: CDM Smith

Determining the functional classification designation of many roadways can be somewhat subjective, but with the Interstate category of Arterials, there is no ambiguity. Roadways in this functional classification category are officially designated as Interstates by the Secretary of Transportation, and all routes that comprise the Dwight D. Eisenhower National System of Interstate and Defense Highways belong to the Interstate functional classification category and are considered Principal Arterials.

3.1.2 Other Freeways & Expressways

Roadways in this functional classification category look very similar to Interstates. While there can be regional differences in the use of the terms 'freeway' and 'expressway', for the purpose of functional classification the roads in this classification have directional travel lanes are usually separated by some type of physical barrier, and their access and egress points are limited to on- and off-ramp locations or a very limited number of at-grade intersections. Like Interstates, these roadways are designed and constructed to maximize their mobility function, and abutting land uses are not directly served by them.

3.1.3 Other Principal Arterials

Figure 3-2: Example of Other Principal Arterial



Source: CDM Smith

These roadways serve major centers of metropolitan areas, provide a high degree of mobility and can also provide mobility through rural areas. Unlike their access-controlled counterparts, abutting land uses can be served directly. Forms of access for Other Principal Arterial roadways include driveways to specific parcels and at-grade intersections with other roadways. (**Figure 3-2**) For the most part, roadways that fall into the top three functional classification categories (Interstate, Other Freeways & Expressways and Other Principal Arterials) provide similar service in both urban and rural areas. The primary difference is that there are usually multiple Arterial routes serving a particular urban area, radiating out from the urban center to serve the surrounding region. In contrast, an expanse of a rural area of equal size would be served by a single Arterial.

Table 3-1 presents a few key differences between the character of service that urban and rural Arterials provide.

Table 3-1: Characteristics of Urban and Rural Arterials

Urban	Rural
• Serve major activity centers, highest traffic volume corridors and longest trip demands • Carry high proportion of total urban travel on minimum of mileage • Interconnect and provide continuity for major rural corridors to accommodate trips entering and leaving urban area and movements through the urban area • Serve demand for intra-area travel between the central business district and outlying residential areas	• Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel • Connect all or nearly all Urbanized Areas and a large majority of Urban Clusters with 25,000 and over population • Provide an integrated network of continuous routes without stub connections (dead ends)

3.1.4 Minor Arterials

Figure 3-3: Example of Urban Minor Arterial



Source: Unsourced photo

Minor Arterials provide service for trips of moderate length, serve geographic areas that are smaller than their higher Arterial counterparts and offer connectivity to the higher Arterial system. In an urban context, they interconnect and augment the higher Arterial system, provide intra-community continuity and may carry local bus routes. **(Figure 3-3)**

In rural settings, Minor Arterials should be identified and spaced at intervals consistent with population density, so that all developed areas are within a reasonable distance of a higher level Arterial. Additionally, Minor Arterials in rural areas are typically designed to provide relatively high overall travel speeds, with minimum interference to through movement. The spacing of Minor Arterial streets may typically vary from 1/8- to 1/2-mile in the central business district (CBD) and 2 to 3 miles in the suburban fringes. Normally, the spacing should not exceed 1 mile in fully developed areas (see **Table 3-2**).

Table 3-2: Characteristics of Urban and Rural Minor Arterials

Urban	Rural
• Interconnect and augment the higher-level Arterials • Serve trips of moderate length at a somewhat lower level of travel mobility than Principal Arterials • Distribute traffic to smaller geographic areas than those served by higher-level Arterials • Provide more land access than Principal Arterials without penetrating identifiable neighborhoods • Provide urban connections for Rural Collectors	• Link cities and larger towns (and other major destinations such as resorts capable of attracting travel over long distances) and form an integrated network providing interstate and inter-county service • Be spaced at intervals, consistent with population density, so that all developed areas within the State are within a reasonable distance of an Arterial roadway • Provide service to corridors with trip lengths and travel density greater than those served by Rural Collectors and Local Roads and with relatively high travel speeds and minimum interference to through movement

3.1.5 Major and Minor Collectors

Collectors serve a critical role in the roadway network by gathering traffic from Local Roads and funneling them to the Arterial network. Within the context of functional classification, Collectors are broken down into two categories: Major Collectors and Minor Collectors. Until recently, this division was considered only in the rural environment. Currently, all Collectors, regardless of whether they are within a rural area or an urban area, may be sub-stratified into *major* and *minor* categories. The determination of whether a given Collector is a Major or a Minor Collector is frequently one of the biggest challenges in functionally classifying a roadway network.

In the rural environment, Collectors generally serve primarily intra-county travel (rather than statewide) and constitute those routes on which (independent of traffic volume) predominant travel distances are shorter than on Arterial routes. Consequently, more moderate speeds may be posted.

The distinctions between Major Collectors and Minor Collectors are often subtle. Generally, Major Collector routes are longer in length; have lower connecting driveway densities; have higher speed limits; are spaced at greater intervals; have higher annual average traffic volumes; and may have more travel lanes than their

Minor Collector counterparts. Careful consideration should be given to these factors when assigning a Major or Minor Collector designation. In rural areas, AADT and spacing may be the most significant designation factors. Since Major Collectors offer more mobility and Minor Collectors offer more access, it is beneficial to reexamine these two fundamental concepts of functional classification. Overall, the total mileage of Major Collectors is typically lower than the total mileage of Minor Collectors, while the total Collector mileage is typically one-third of the Local roadway network (see **Table 3-3**).

Table 3-3: Characteristics of Major and Minor Collectors (Urban and Rural)

MAJOR COLLECTORS	
Urban	**Rural**
• Serve both land access and traffic circulation in higher density residential, and commercial/industrial areas • Penetrate residential neighborhoods, often for significant distances • Distribute and channel trips between Local Roads and Arterials, usually over a distance of greater than three-quarters of a mile • Operating characteristics include higher speeds and more signalized intersections	• Provide service to any county seat not on an Arterial route, to the larger towns not directly served by the higher systems and to other traffic generators of equivalent intra-county importance such as consolidated schools, shipping points, county parks and important mining and agricultural areas • Link these places with nearby larger towns and cities or with Arterial routes • Serve the most important intra-county travel corridors
MINOR COLLECTORS	
Urban	**Rural**
• Serve both land access and traffic circulation in lower density residential and commercial/industrial areas • Penetrate residential neighborhoods, often only for a short distance • Distribute and channel trips between Local Roads and Arterials, usually over a distance of less than three-quarters of a mile • Operating characteristics include lower speeds and fewer signalized intersections	• Be spaced at intervals, consistent with population density, to collect traffic from Local Roads and bring all developed areas within reasonable distance of a Collector • Provide service to smaller communities not served by a higher class facility • Link locally important traffic generators with their rural hinterlands

3.1.6 Local Roads

Locally classified roads account for the largest percentage of all roadways in terms of mileage. They are not intended for use in long distance travel, except at the origin or destination end of the trip, due to their provision of direct access to abutting land. Bus routes generally do not run on Local Roads. They are often designed to discourage through traffic. As public roads, they should be accessible for public use throughout the year.

3.4 Final Considerations

In many instances, assigning a functional classification to a roadway is straightforward, especially for Interstates and Locals. However, there is flexibility when deciding between adjacent classifications. For example, deciding whether a given roadway acts as a Minor Arterial or Major Collector can be subject to debate. Deciding between a Major Collector and Minor Collector assignment can be even more challenging.

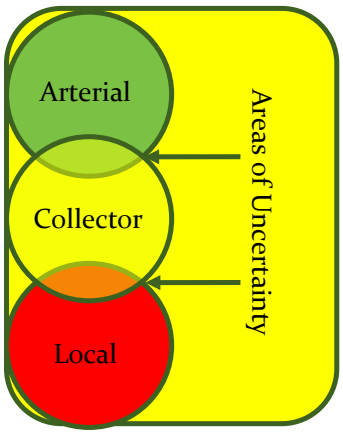
To assist transportation planners responsible for determining the functional classification of roadways, this guidebook offers a helpful tool that can make the classification process of classifying "borderline" roadways a bit easier. **Table 3-5** illustrates the range of lane width, shoulder width, AADTs, divided/undivided status, access control and access points per mile by functional classification categories.

Table 3-5 also presents guidelines for mileage and VMT ranges for Federal functional classifications of roads. These guidelines are based on an analysis of 2008 HPMS data and are adjusted to represent reasonable ranges. The table presents mileage and VMT extents for rural states, urban states and all states. For this purpose rural states are defined as having 75 percent or less of their population in urban areas. Research determined this was a natural breakpoint that approximated the geographic difference between the States.

As expected, Interstates account for the lowest portion of total system miles, but the greatest portion of travel. Conversely, Local Roads comprise the greatest portion of system mileage with Collectors carrying the lowest percentage of travel volume. Therefore, as a primary consideration in functional classification, planners and engineers can use mileage as a guideline. Where roadway systems significantly deviate from these ranges, State DOTs should consider adjusting their roadway assignments during the functional classification review process and at least every 10 years as part of the response to Census defined Urban Boundary changes. FHWA intends to review these guideline ranges for mileage and VMT periodically.

Lastly, as a result of variances within the functional classification system, the guidelines have overlapping ranges of values. This allows greater flexibility in determining functional classification (see **Figure 3-8**).

Figure 3-8: Classification Overlap



Source: FHWA

Table 3-5: VMT and Mileage Guidelines by Functional Classifications - Arterials

	Arterials			
	Interstate	**Other Freeways & Expressway**	**Other Principal Arterial**	**Minor Arterial**
Typical Characteristics				
Lane Width	12 feet	11 - 12 feet	11 - 12 feet	10 feet - 12 feet
Inside Shoulder Width	4 feet - 12 feet	0 feet - 6 feet	0 feet	0 feet
Outside Shoulder Width	10 feet - 12 feet	8 feet - 12 feet	8 feet - 12 feet	4 feet - 8 feet
AADT[1] (Rural)	12,000 - 34,000	4,000 - 18,500[2]	2,000 - 8,500[2]	1,500 - 6,000
AADT[1] (Urban)	35,000 - 129,000	13,000 - 55,000[2]	7,000 – 27,000[2]	3,000 - 14,000
Divided/Undivided	Divided	Undivided/Divided	Undivided/Divided	Undivided
Access	Fully Controlled	Partially/Fully Controlled	Partially/Uncontrolled	Uncontrolled
Mileage/VMT Extent (Percentage Ranges)[1]				
Rural System				
Mileage Extent for Rural States[2]	1% - 3%	0% - 2%	2% - 6%	2% - 6%
Mileage Extent for Urban States	1% - 2%	0% - 2%	2% - 5%	3% - 7%
Mileage Extent for All States	1% - 2%	0% - 2%	2% - 6%	3% - 7%
VMT Extent for Rural States[2]	18% - 38%	0% - 7%	15% - 31%	9% - 20%
VMT Extent for Urban States	18% - 34%	0% - 8%	12% - 29%	12% - 19%
VMT Extent for All States	20% - 38%	0% - 8%	14% - 30%	11% - 20%
Urban System				
Mileage Extent for Rural States[2]	1% - 3%	0% - 2%	4% - 9%	7% - 14%
Mileage Extent for Urban States	1% - 2%	0% - 2%	4% - 5%	7% - 12%
Mileage Extent for All States	1% - 3%	0% - 2%	4% - 5%	7% - 14%
VMT Extent for Rural States[2]	17% - 31%	0% - 12%	16% - 33%	14% - 27%
VMT Extent for Urban States	17% - 30%	3% - 18%	17% - 29%	15% - 22%
VMT Extent for All States	17% - 31%	0% - 17%	16% - 31%	14% - 25%
Qualitative Description (Urban)	• Serve major activity centers, highest traffic volume corridors, and longest trip demands • Carry high proportion of total urban travel on minimum of mileage • Interconnect and provide continuity for major rural corridors to accommodate trips entering and leaving urban area and movements through the urban area • Serve demand for intra-area travel between the central business district and outlying residential areas			• Interconnect with and augment the principal arterials • Serve trips of moderate length at a somewhat lower level of travel mobility than principal arterials • Distribute traffic to smaller geographic areas than those served by principal arterials • Provide more land access than principal arterials without penetrating identifiable neighborhoods • Provide urban connections for rural collectors
Qualitative Description (Rural)	• Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel • Serve all or nearly all urbanized areas and a large majority of urban clusters areas with 25,000 and over population • Provide an integrated network of continuous routes without stub connections (dead ends)			• Link cities and larger towns (and other major destinations such as resorts capable of attracting travel over long distances) and form an integrated network providing interstate and inter-county service • Spaced at intervals, consistent with population density, so that all developed areas within the State are within a reasonable distance of an arterial roadway Provide service to corridors with trip lengths and travel density greater than those served by rural collectors and local roads and with relatively high travel speeds and minimum interference to through movement

1- *Ranges in this table are derived from 2011 HPMS data.*

2- *For this table, Rural States are defined as those with a maximum of 75 percent of their population in urban centers.*

Table 3-6: VMT and Mileage Guidelines by Functional Classifications – Collectors and Locals

	Collectors		Local
	Major Collector[2]	Minor Collector[2]	
Typical Characteristics			
Lane Width	10 feet - 12 feet	10 - 11 feet	8 feet - 10 feet
Inside Shoulder Width	0 feet	0 feet	0 feet
Outside Shoulder Width	1 feet - 6 feet	1 feet - 4 feet	0 feet - 2 feet
AADT[1] (Rural)	300 - 2,600	150 - 1,110	15 - 400
AADT[1] (Urban)	1,100 - 6,300[2]		80 - 700
Divided/Undivided	Undivided	Undivided	Undivided
Access	Uncontrolled	Uncontrolled	Uncontrolled
Mileage/VMT Extent (Percentage Ranges)[1]			
Rural System			
Mileage Extent for Rural States[3]	8% - 19%	3% - 15%	62% - 74%
Mileage Extent for Urban States	10% - 17%	5% - 13%	66% - 74%
Mileage Extent for All States	9% - 19%	4% - 15%	64% - 75%
VMT Extent for Rural States[3]	10% - 23%	1% - 8%	8% - 23%
VMT Extent for Urban States	12% - 24%	3% - 10%	7% - 20%
VMT Extent for All States	12% - 23%	2% - 9%	8% - 23%
Urban System			
Mileage Extent for Rural States[3]	3% - 16%	3% - 16%[2]	62% - 74%
Mileage Extent for Urban States	7% - 13%	7% - 13%[2]	67% - 76%
Mileage Extent for All States	7% - 15%	7% - 15%[2]	63% - 75%
VMT Extent for Rural States[3]	2% - 13%	2% - 12%[2]	9% - 25%
VMT Extent for Urban States	7% - 13%	7% - 13%[2]	6% - 24%
VMT Extent for All States	5% - 13%	5% - 13%[2]	6% - 25%
Qualitative Description (Urban)	• Serve both land access and traffic circulation in higher density residential, and commercial/industrial areas • Penetrate residential neighborhoods, often for significant distances • Distribute and channel trips between local streets and arterials, usually over a distance of greater than three-quarters of a mile	• Serve both land access and traffic circulation in lower density residential, and commercial/industrial areas • Penetrate residential neighborhoods, often only for a short distance • Distribute and channel trips between local streets and arterials, usually over a distance of less than three-quarters of a mile	• Provide direct access to adjacent land • Provide access to higher systems • Carry no through traffic movement
Qualitative Description (Rural)	• Provide service to any county seat not on an arterial route, to the larger towns not directly served by the higher systems, and to other traffic generators of equivalent intra-county importance such as consolidated schools, shipping points, county parks, important mining and agricultural areas • Link these places with nearby larger towns and cities or with arterial routes • Serve the most important intra-county travel corridors	• Be spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within reasonable distance of a minor collector • Provide service to smaller communities not served by a higher class facility • Link locally important traffic generators with their rural hinterlands	• Serve primarily to provide access to adjacent land • Provide service to travel over short distances as compared to higher classification categories • Constitute the mileage not classified as part of the arterial and collectors systems

1- *Ranges in this table are derived from 2011 HPMS data.*

2- *Information for Urban Major and Minor Collectors is approximate, based on a small number of States reporting.*

3- *For this table, Rural States are defined as those with a maximum of 75 percent of their population in urban centers.*

ATTACHMENT C

NDOT FUNCTIONAL CLASSIFICATION PROCESS AND PROCEDURES

Nevada Department of Transportation

Roadway Systems \ Planning Division

Functional Classification Process and Procedures

Authority:

Code of Federal Regulations (CFR) Title 23 part 470 establishes the policy and procedures relating to the identification of Federal-aid highways, the Functional Classification of roads and streets, the designation of urban area boundaries, and the designation of routes on the Federal-aid highway systems. This is available via the internet at http://www.gpoaccess.gov/cfr/index.html search for "Title 23 part 470".

The Department incorporates by reference Federal Highway Administration (FHWA) "*Highway Functional Classification - Concepts, Criteria, and Procedures*" (U.S. Department of Transportation, Edition 2013). The publication will be referred to as "FHWA's Functional Classification Guidelines" and is available via the Internet at http://www.fhwa.dot.gov/planning/fctoc.htm.

Procedure to determine Functional Classification of Roads:

The Department's procedure to determine the Functional Classification for roadways will follow the concepts and procedures identified in FHWA's Functional Classification Guidelines.

The schedule to update the Functionally Classified Road System is based on the U.S. Census, with a major 10-year update initiated after the release of census data. There will also be a mid-census review and an opportunity for annual adjustments.

1. The major, or decennial update, begins after the US Census Bureau releases information on urban and urbanized areas based on population and population density. This is historically completed about three years after the census count.

   Boundaries for small urban and urbanized areas are initially determined by the Census Bureau. They are then adjusted to fit local conditions, in consultation with and approval by the Department and the appropriate local authorities responsible for transportation.

   Roadway Functional Classifications are then determined by the Department, using the same consultation process. The recommended Functional Classification changes are forwarded, upon approval by the Department and the appropriate local authority, to the local Federal

Highway Administration Division Office for review, approval, and adoption as the Functionally Classified Highway System for the state.

2. The mid-census review is initiated by the Department approximately five years after the major update has been completed and follows the same process as the decennial update. Changes to urban boundaries and related rural or urban classifications are not considered in this review.

3. The Department will consider proposals to make changes to the Functional Classification of roadways in the interim of regularly scheduled reviews. This adjustment considers routes that experienced changes that were unforeseen during the regular system-wide review process, and are of a time-sensitive nature that precludes waiting for the next regular review. This adjustment is for minor revisions only and will not consider boundary, or urban-rural classification changes.

Initiating a change to the Functional Classified Road System:

An interim request to consider proposed changes to the Functional Classification of an existing roadway may be initiated by an official of the local transportation agency responsible for the route. Requests are to be forwarded to the Nevada Department of Transportation (NDOT), Planning\Roadway Systems Division Chief with a detailed explanation and justification of the requested change in consideration of FHWA's Functional Classification Guidelines.

NDOT's Planning\Roadway System's Division staff will initiate the review process with appropriate local entities, upon receipt of a formal request for change, or as part of regularly scheduled review processes as outlined above.

The "Review":

NDOT's staff initiate's the review process by contacting the local agency and scheduling a meeting. This meeting is to cooperatively establish the expectations, and goals of the review.

NDOT staff will present:

- Current approved Functional Classification maps.
- FHWA's Functional Classification Guidelines.
- Present an overview of the concepts, criteria and procedures provided in the guideline document.
- Answer questions and provide guidance.

NDOT staff will typically request from the local agencies:

- Their version of their Function Classification in consideration of the FHWA Functional Classification Guidelines in map and tabular format. This will include changes, amendments, and proposed additions or deletions from the current approved system.

- Justification of the proposed change(s) including how they significantly meet the criteria in consideration of the entire local entities jurisdiction (County, Urbanized area, Etc.) and in accordance with FHWA's Functional Classification Guidelines.

Upon receipt of first draft information from the local agency, NDOT staff begins in-house review of the "first draft" information and provides feedback, comments, and further action items as necessary. In addition, NDOT staff will conduct field review of proposed changes as needed. Both parties will work towards a final draft until all issues are resolved.

Once a "final draft" is established, NDOT will create a preliminary version of the proposed Functional Classification map(s) through our Location Division\Cartography section. This "final draft" is presented to the appropriate governing board or commission for their official approval, signature by the NDOT Planning Division - Roadway Systems Division Chief, and subsequently the FHWA office for official approval.

The final approved map document will then be published and adopted as official.

For further information or inquiries, please contact Nicholas Bacon, Federal Systems Manager at (775) 888 7387 or George Barkdull, Planner at (775) 888-7109, 1263 S. Stewart St, Carson City, NV 89712

ATTACHMENT D

RTC UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION

FOREWORD

UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS' CONSTRUCTION, OFFSITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA

The following participating entities of the Clark County, Nevada area have adopted these standard drawings.

CITY OF LAS VEGAS
Adopted by City Council action ..... November 4, 1987

CITY OF HENDERSON
Adopted by City Council action ..... October 20, 1987

CITY OF NORTH LAS VEGAS
Adopted by City Council action ..... November 4, 1987

CITY OF BOULDER CITY
Adopted by City Council action ..... January 26, 1988

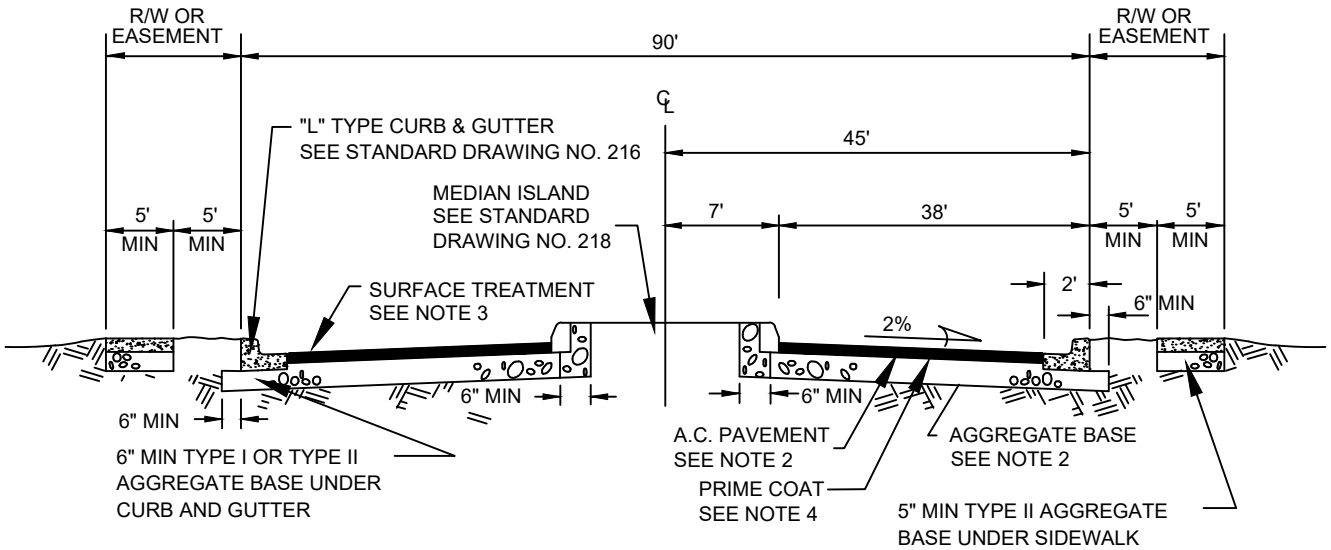
CITY OF MESQUITE
Adopted by City Council action ..... January 26, 1988

CLARK COUNTY
Adopted by Board action ..... April 1998

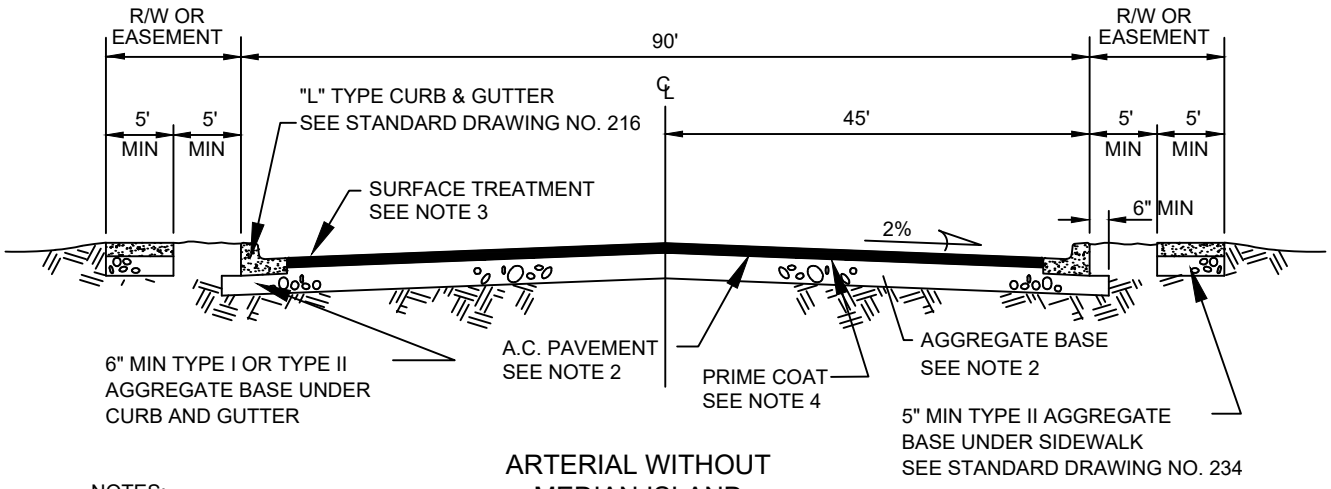
REGIONAL STREET AND HIGHWAY COMMISSION
Adopted by Commission Action..... October 8, 1987

The Uniform Standard Drawings for Public Works Construction may be revised by issuance of revisions or supplements to correct errors and omissions found in these drawings and to reflect advanced thinking and the changing technology of the construction industry. Each revision will supersede any previous pertinent drawing. Upon approval by the RTC, revisions will become effective and be posted on the RTC web-site, www.rtcsnv.com, by the first day of the month of January and July.

To implement this end a Specifications Committee has been established as a permanent organization to continually study and recommend changes to the standard drawings. Interested parties may address suggested changes and questions to the Regional Transportation Commission, 600 South Grand Central Parkway, Suite 350, Las Vegas, Nevada, 89106-4512.



ARTERIAL WITH MEDIAN ISLAND



ARTERIAL WITHOUT MEDIAN ISLAND

NOTES:

1. FINAL A.C. PAVEMENT SURFACE SHALL BE 1/2" MAXIMUM ABOVE LIP OF GUTTER. PAVEMENT SHALL BE FLUSH WITH LIP AT SIDEWALK RAMPS.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING 200.
3. THE FINAL A.C. PAVEMENT SURFACE MATERIAL REQUIREMENTS ARE:

JURISDICTION	A.C. PAVEMENT SURFACE MATERIAL
CLV	1-INCH UTACS
CC, MES, BC	FOG SEAL
NLV, HEN	FOG SEAL AND/OR OPEN GRADE

(B)(H)(L)(M) 4. PRIME COAT IS NOT REQUIRED IN LAS VEGAS, HENDERSON, MESQUITE, AND BOULDER CITY WHEN A.C. THICKNESS IS >=5 IN.

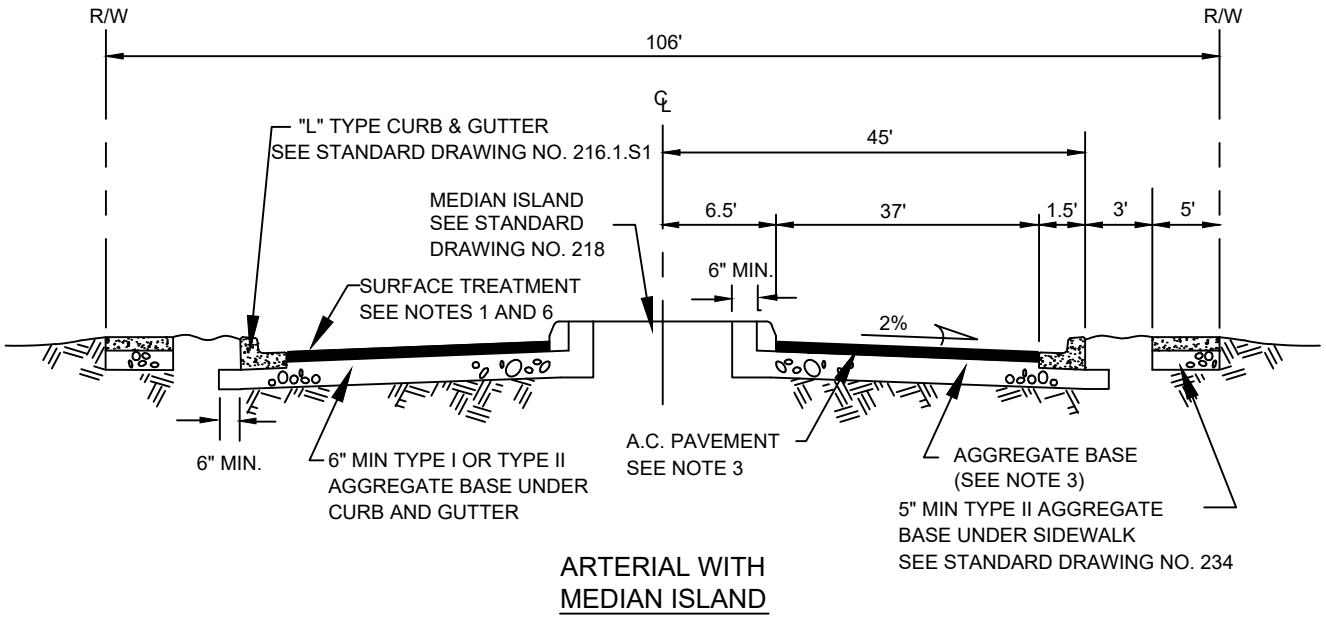
AGENCY APPROVED	(B)	C	(H)	(L)	(M)	N

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
403	OPEN GRADE
413	BITUMINOUS GAP GRADED PAVEMENT
501	CONCRETE

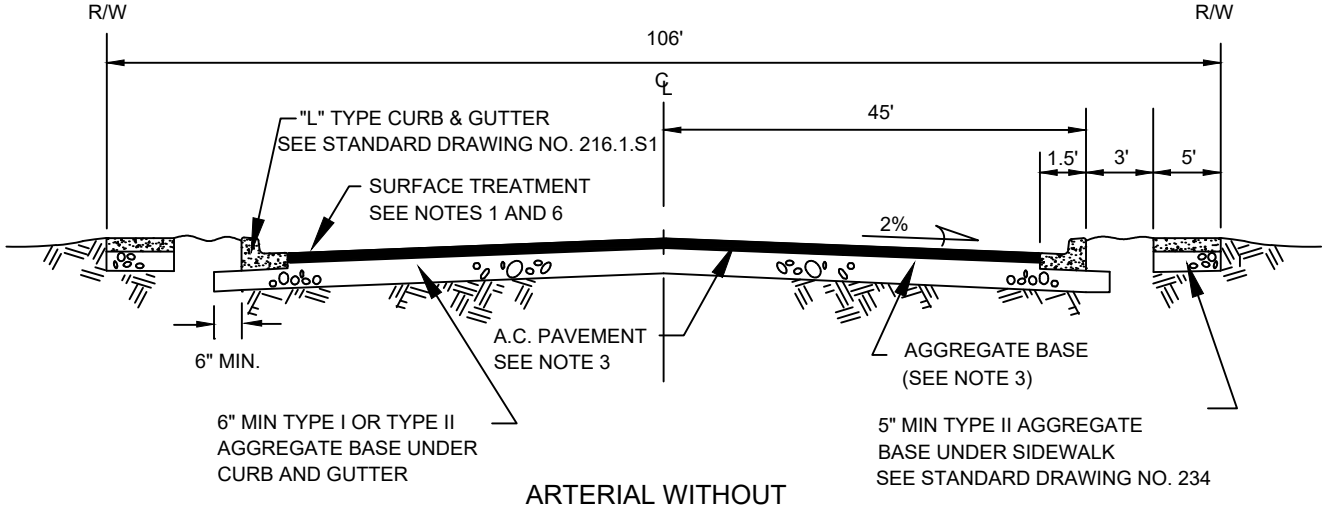
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

ARTERIAL
URBAN AREA STREET SECTIONS

DATE 07-01-14 | DWG. NO. 202



ARTERIAL WITH
MEDIAN ISLAND



ARTERIAL WITHOUT
MEDIAN ISLAND

NOTES:

1. FINAL A.C. PAVEMENT SURFACE (INCLUDING UTACS OR OPEN GRADE) SHALL BE 3/4" MAXIMUM ABOVE LIP OF GUTTER. PAVEMENT SHALL BE FLUSH WITH LIP AT SIDEWALK RAMPS.
2. DENSE GRADE SHALL BE FLUSH WITH LIP OF GUTTER.
3. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NO. 200.
4. THIS STANDARD IS AN ALTERNATE STREET SECTION TO BE USED AT LOCATIONS DETERMINED BY EACH LOCAL JURISDICITON. NO ABOVE GROUND OBJECTS SHALL BE PLACED WITHIN THE 5 FOOT SIDEWALK.
5. UNDERGROUND DRY UTILITIES SHALL BE PLACED IN A UTILITY CORRIDOR UNDER THE SIDEWALK.
6. OVERLAY 1" UTACS UNLESS OTHERWISE REQUIRED BY THE ENTITY.

AGENCY APPROVED				L		

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
403	OPEN GRADE
501	CONCRETE
.	

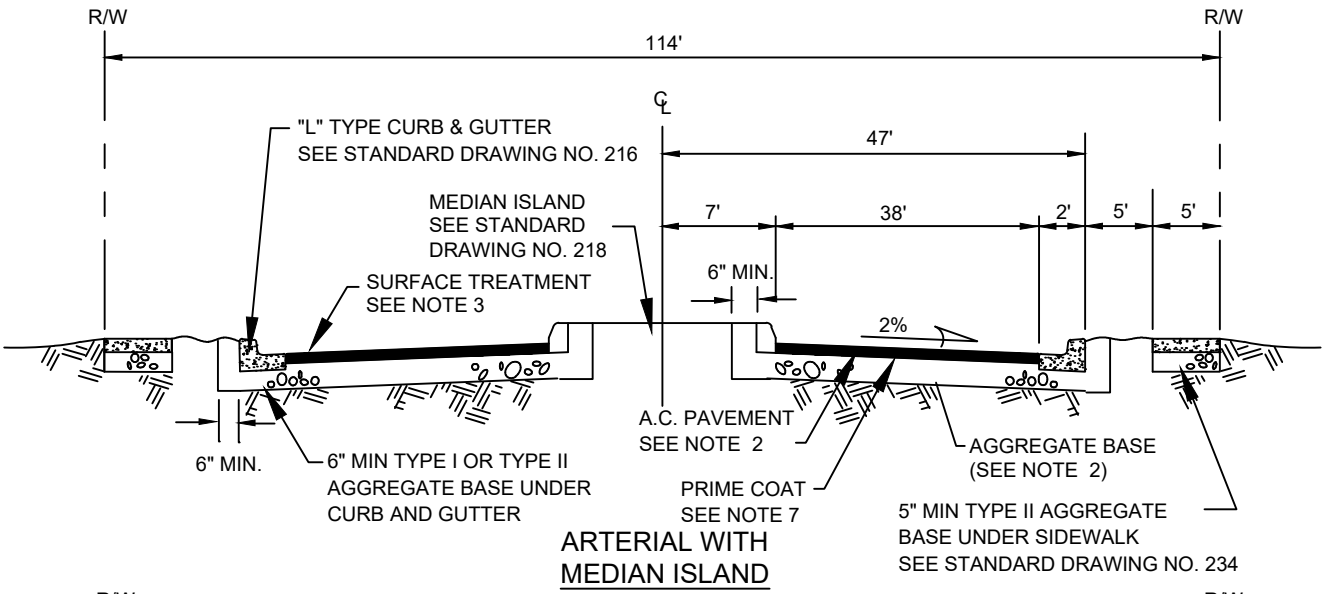
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

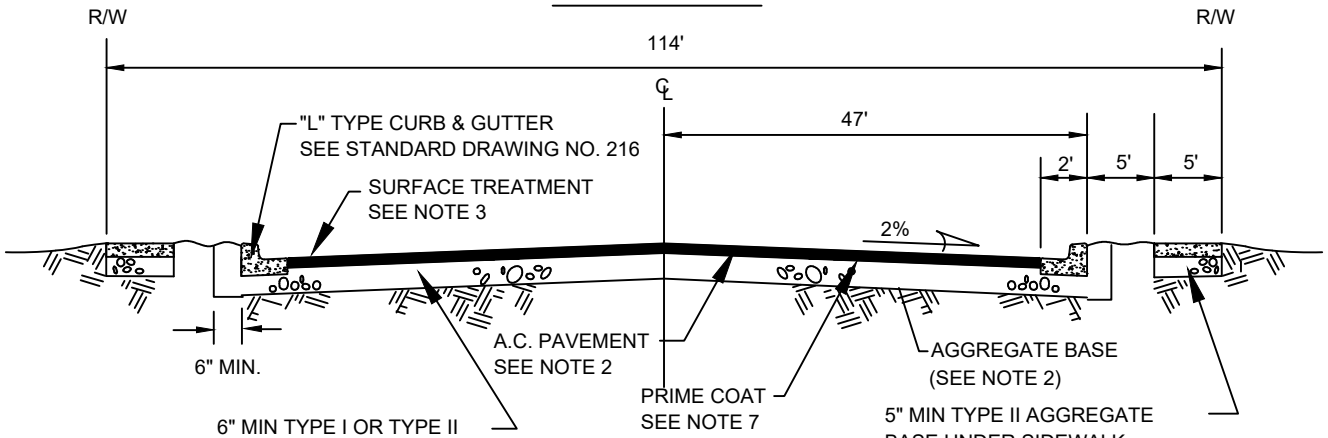
PRIMARY ARTERIAL

COMPLETE STREET ALTERNATIVE

DATE 07-01/12	DWG. NO. 203.1.S1	



ARTERIAL WITH MEDIAN ISLAND



ARTERIAL WITHOUT MEDIAN ISLAND

NOTES:

1. FINAL A.C. PAVEMENT SURFACE SHALL BE 1/2" MAXIMUM ABOVE LIP OF GUTTER. PAVEMENT SHALL BE FLUSH WITH LIP AT SIDEWALK RAMPS.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NO. 200.
3. THE FINAL A.C. PAVEMENT SURFACE MATERIAL REQUIREMENTS ARE:

JURISDICTION	A.C. PAVEMENT SURFACE MATERIAL
CLV	1-INCH UTACS
CC, MES, BC	FOG SEAL
NLV, HEN	FOG SEAL AND/OR OPEN GRADE

4. THIS STANDARD IS AN ALTERNATE STREET SECTION TO BE USED AT LOCATIONS DETERMINED BY EACH LOCAL JURISDICTION. NO ABOVE GROUND OBJECTS SHALL BE PLACED WITHIN THE 5 FOOT SIDEWALK.
5. UNDERGROUND DRY UTILITIES SHOULD BE PLACED IN A UTILITY CORRIDOR UNDER THE SIDEWALK.
6. INCREASE PAVEMENT WIDTH BY 11 FEET ON EACH SIDE OF ROADWAY FOR AN 8 LANE CROSS SECTION.
7. (B)(H)(L)(M) PRIME COAT IS NOT REQUIRED IN LAS VEGAS, HENDERSON, MESQUITE, AND BOULDER CITY WHEN A.C. THICKNESS IS >=5 IN.

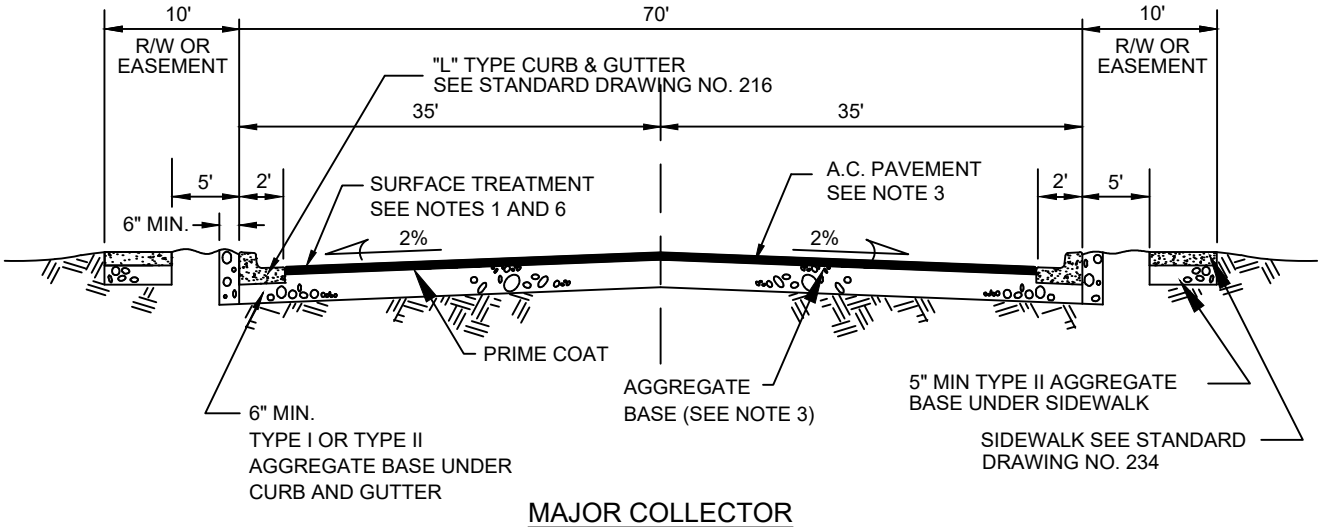
AGENCY APPROVED	(B)	C	(H)	(L)	(M)	N

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
403	OPEN GRADE
413	BITUMINOUS GAP GRADED PAVEMENT
501	CONCRETE
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

ARTERIAL
ALTERNATE URBAN AREA STREET SECTIONS WITH OFFSET SIDEWALK

DATE 07-01-14 | DWG. NO. 203



MAJOR COLLECTOR

NOTES:

1. A.C. PAVEMENT TO BE 1/2" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION. PAVEMENT SHALL BE FLUSH WITH LIP AT SIDEWALK RAMPS.
2. THE GRADE BREAK OCCURING IN THE CROSS SECTION SHALL FALL BETWEEN DRIVING LANES.
3. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NOS. 200 AND 200.1.
4. THIS STANDARD IS AN ALTERNATE STREET SECTION TO BE USED AT LOCATIONS DETERMINED BY EACH LOCAL JURISDICITON. NO ABOVE GROUND OBJECTS SHALL BE PLACED WITHIN THE 5 FOOT SIDEWALK.
5. UNDERGROUND DRY UTILITIES SHOULD BE PLACED IN A UTILITY CORRIDOR UNDER THE SIDEWALK.
6. THE FINAL A.C. PAVEMENT SURFACE MATERIAL REQUIREMENTS ARE:

JURISDICTION	A.C. PAVEMENT SURFACE MATERIAL
CLV	1-INCH UTACS
CC	FOG SEAL
NLV, HEN	FOG SEAL AND/OR OPEN GRADE

(B)(H)(L)(M) 7. PRIME COAT IS NOT REQUIRED IN LAS VEGAS, HENDERSON, MESQUITE, OR BOULDER CITY WHEN A.C. THICKNESS >=5 IN.

AGENCY APPROVED	(B)	C	(H)	(L)	(M)	N

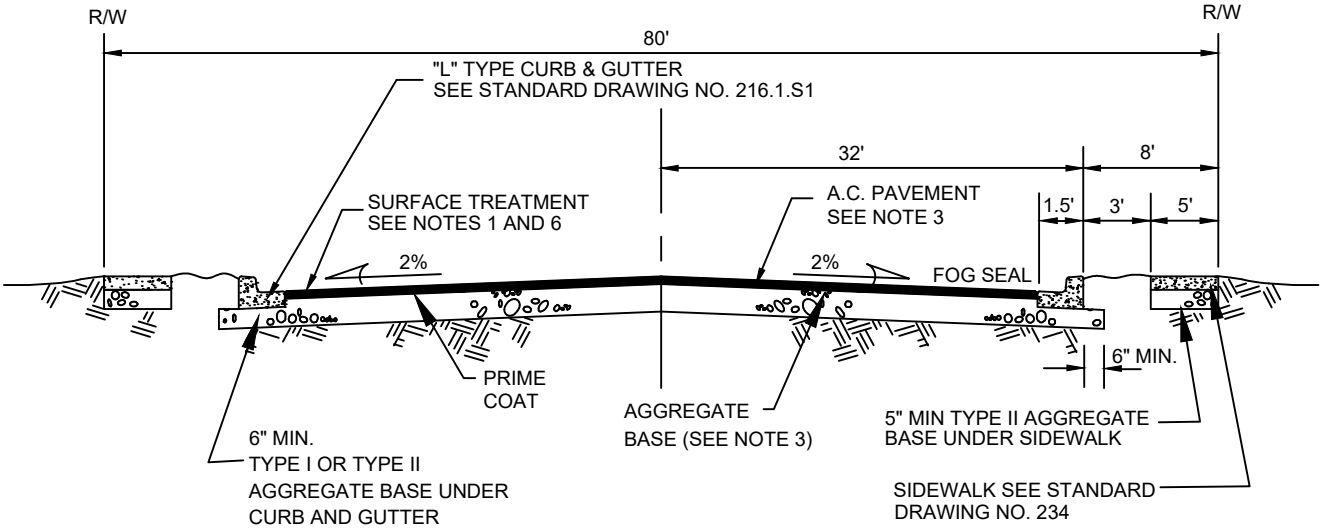
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
413	BITUMINOUS GAP GRADED PAVEMENT
501	CONCRETE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

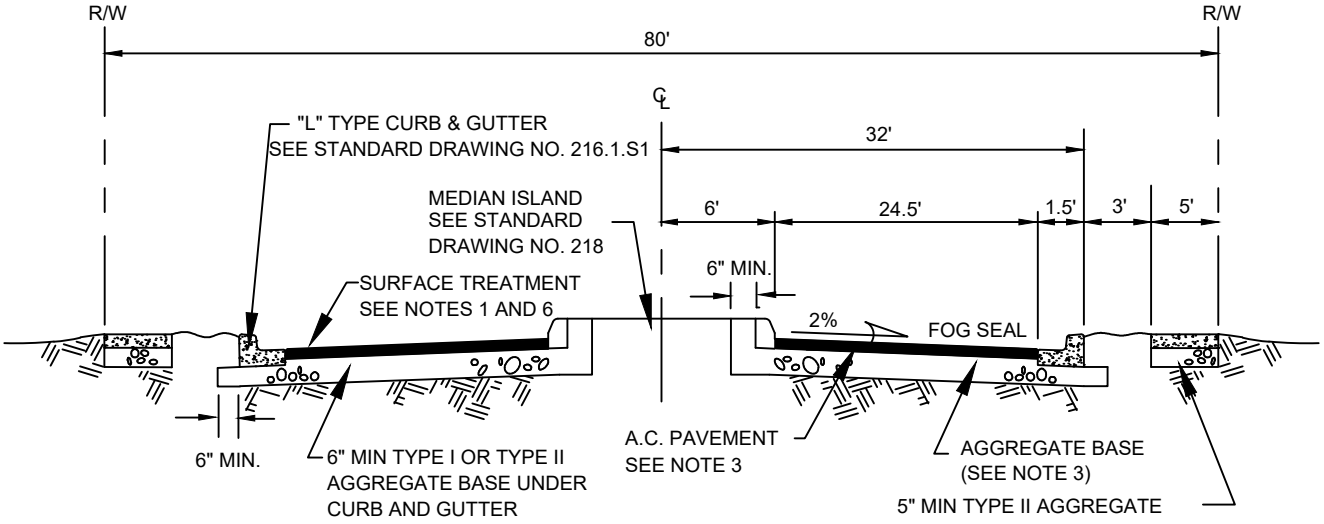
SUPPLEMENTAL DRAWING

COLLECTOR
ALTERNATE URBAN AREA STREET SECTIONS WITH OFFSET SIDEWALK

DATE 07-01-14 | DWG. NO. 205.1.S1



MAJOR COLLECTOR WITHOUT
MEDIAN ISLAND



MAJOR COLLECTOR WITH
MEDIAN ISLAND

NOTES:

1. A.C. PAVEMENT TO BE 1/2" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION. PAVEMENT SHALL BE FLUSH WITH LIP AT SIDEWALK RAMPS.
2. THE GRADE BREAK OCCURING IN THE CROSS SECTION SHALL FALL BETWEEN DRIVING LANES.
3. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NOS. 200 AND 200.1.
4. THIS STANDARD IS AN ALTERNATE STREET SECTION TO BE USED AT LOCATIONS DETERMINED BY EACH LOCAL JURISDICITON. NO ABOVE GROUND OBJECTS SHALL BE PLACED WITHIN THE 5 FOOT SIDEWALK.
5. UNDERGROUND DRY UTILITIES SHOULD BE PLACED IN A UTILITY CORRIDOR UNDER THE SIDEWALK.
6. OVERLAY 1" UTACS UNLESS OTHERWISE REQUIRED BY THE ENTITY.

AGENCY APPROVED				L		

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
501	CONCRETE
.	

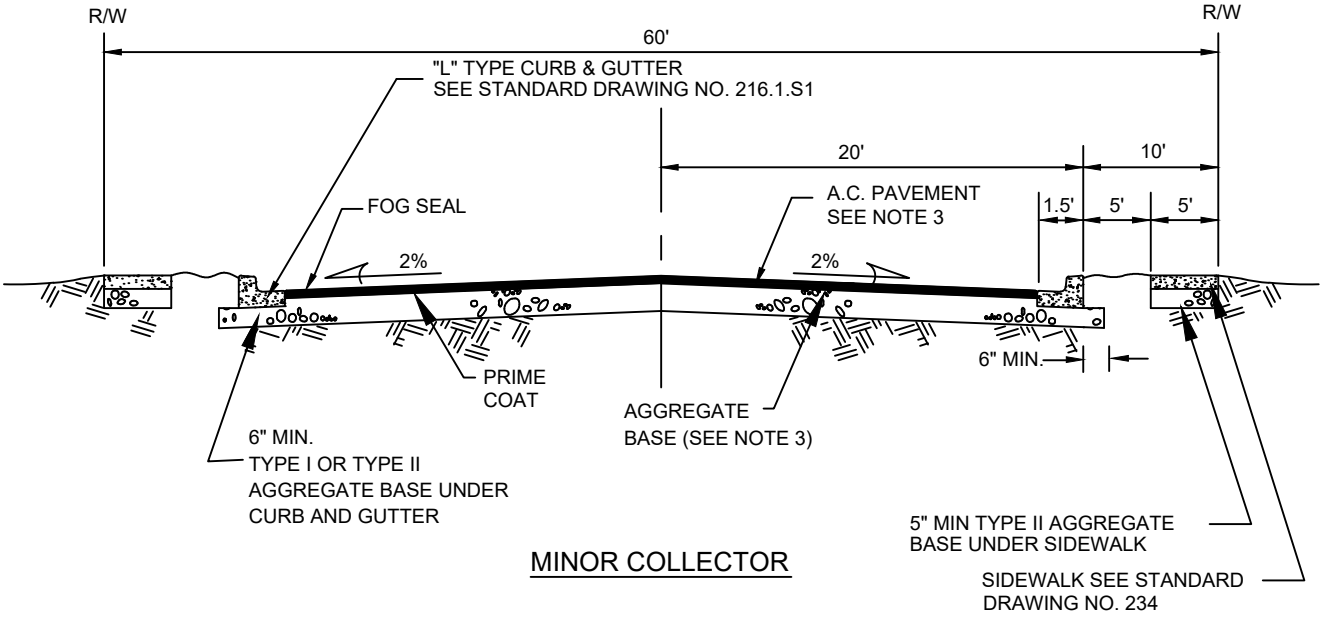
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

MAJOR COLLECTOR

COMPLETE STREET ALTERNATIVE

DATE 07-01/12	DWG. NO. 205.2.S1	



MINOR COLLECTOR

NOTES:

1. A.C. PAVEMENT TO BE 1/2" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION. PAVEMENT SHALL BE FLUSH WITH LIP AT SIDEWALK RAMPS.
2. THE GRADE BREAK OCCURING IN THE CROSS SECTION SHALL FALL BETWEEN DRIVING LANES.
3. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NOS. 200 AND 200.1.
4. THIS STANDARD IS COMPLETE STREET ALTERNATE STREET SECTION TO BE USED AT LOCATIONS DETERMINED BY EACH LOCAL JURISDICITON. NO ABOVE GROUND OBJECTS SHALL BE PLACED WITHIN THE 5 FOOT SIDEWALK.
5. UNDERGROUND DRY UTILITIES SHALL BE PLACED IN A UTILITY CORRIDOR UNDER THE SIDEWALK.

AGENCY APPROVED					L		

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
501	CONCRETE
-	

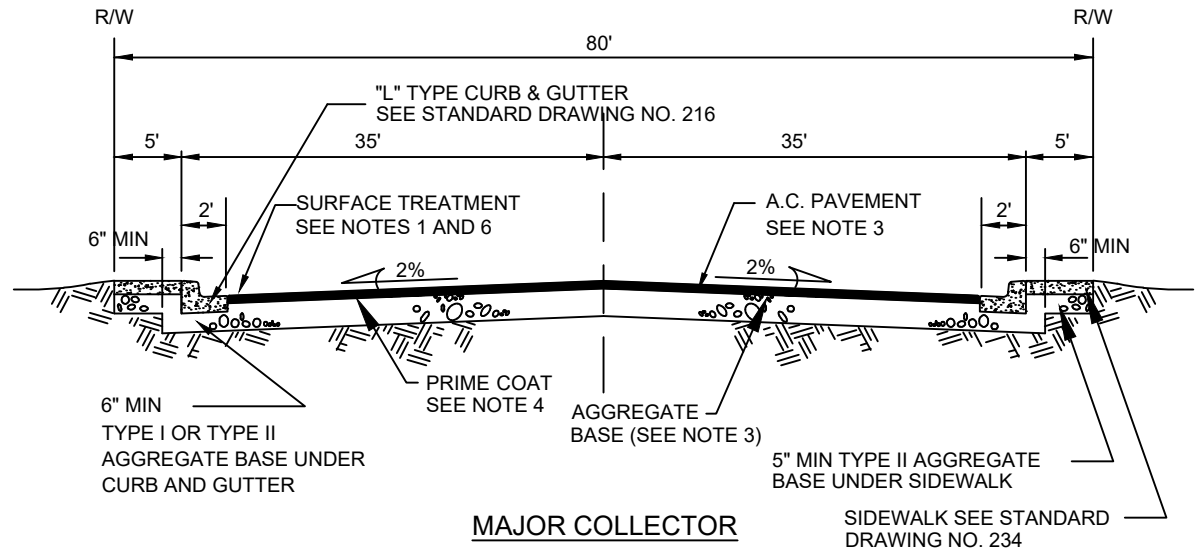
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

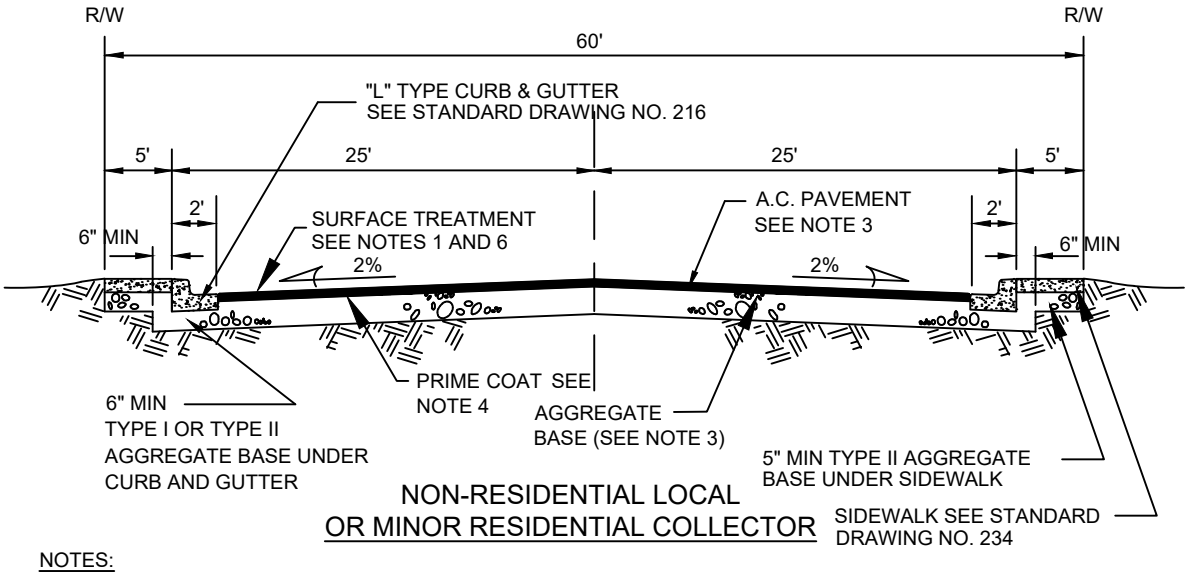
MINOR COLLECTOR

COMPLETE STREET ALTERNATIVE

DATE 07-01-12 | DWG. NO. 205.3.S1



MAJOR COLLECTOR



NON-RESIDENTIAL LOCAL
OR MINOR RESIDENTIAL COLLECTOR

NOTES:

1. A.C. PAVEMENT TO BE 1/2" MAXIMUM ABOVE LIP OF GUTTER AFTER COMPACTION. PAVEMENT SHALL BE FLUSH WITH LIP AT SIDEWALK RAMPS.
2. THE GRADE BREAK OCCURING IN THE CROSS SECTION SHALL FALL BETWEEN DRIVING LANES.
3. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NOS. 200 AND 200.1.
4. (L) (B) (H) (M) PRIME COAT IS NOT REQUIRED IN LAS VEGAS, HENDERSON, MESQUITE OR BOULDER CITY WHEN A.C. THICKNESS >= 5 IN.
5. (B) (H) (M) 4 INCH MINIMUM THICKNESS REQUIRED IN HENDERSON, MESQUITE AND BOULDER CITY.
6. THE FINAL A.C. PAVEMENT SURFACE MATERIAL REQUIREMENTS ARE:

JURISDICTION	A.C. PAVEMENT SURFACE MATERIAL
CLV	1-INCH UTACS (80-FT OR GREATER)
CC, MES, BC	FOG SEAL
NLV, HEN	FOG SEAL AND/OR OPEN GRADE

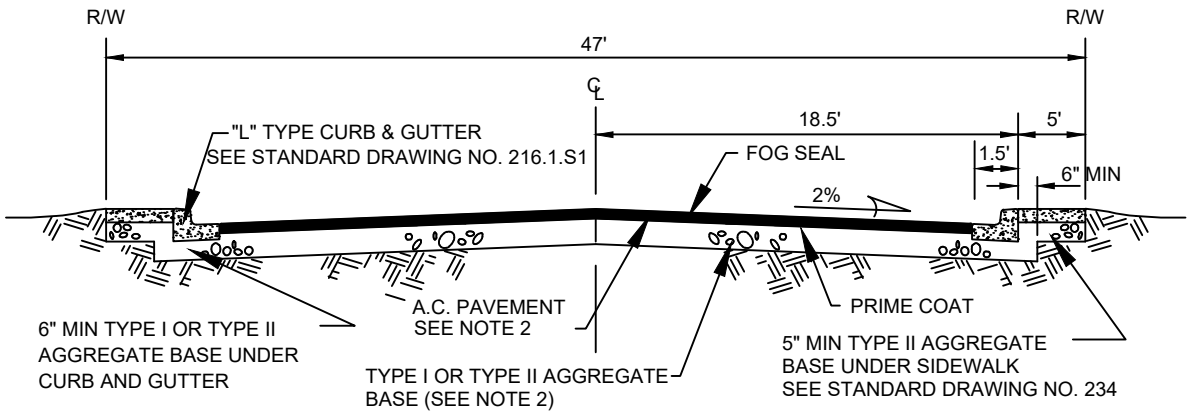
AGENCY APPROVED	(B)	C	(H)	(L)	(M)	N

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
413	BITUMINOUS GAP GRADED PAVEMENT
501	CONCRETE

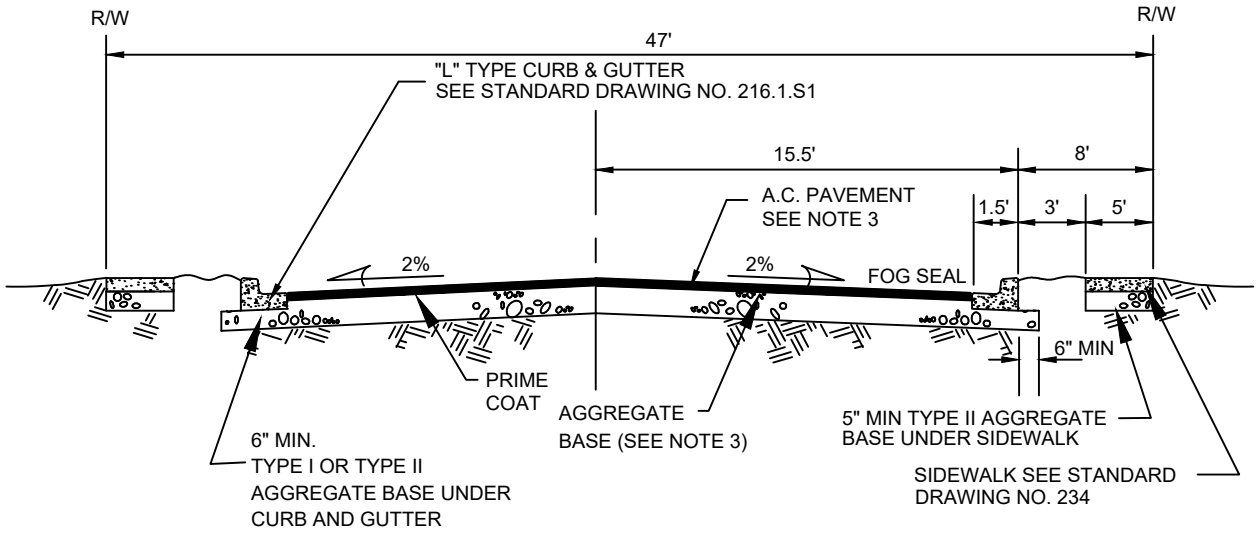
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

COLLECTOR
URBAN AREA STREET SECTIONS
WITH CURBSIDE SIDEWALK

DATE 07-01-14 | DWG. NO. 205



RESIDENTIAL TWO-WAY LOCAL OR CUL-DE-SAC
(LOTS 40' WIDE OR LESS)



RESIDENTIAL TWO-WAY LOCAL OR CUL-DE-SAC
(LOTS GREATER THAN 40' WIDE - SEE NOTE 3)

NOTES:

1. FINAL A.C. PAVEMENT SURFACE SHALL BE 1/4" MAXIMUM ABOVE LIP OF GUTTER. PAVEMENT SHALL BE FLUSH WITH LIP AT SIDEWALK RAMPS.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NO. 200.1.
3. HOMES ADJACENT TO THIS STREET SECTION MAY REQUIRE SPRINKLERS PER ENTITY FIRE CODE.

AGENCY APPROVED				L		

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
501	CONCRETE
.	

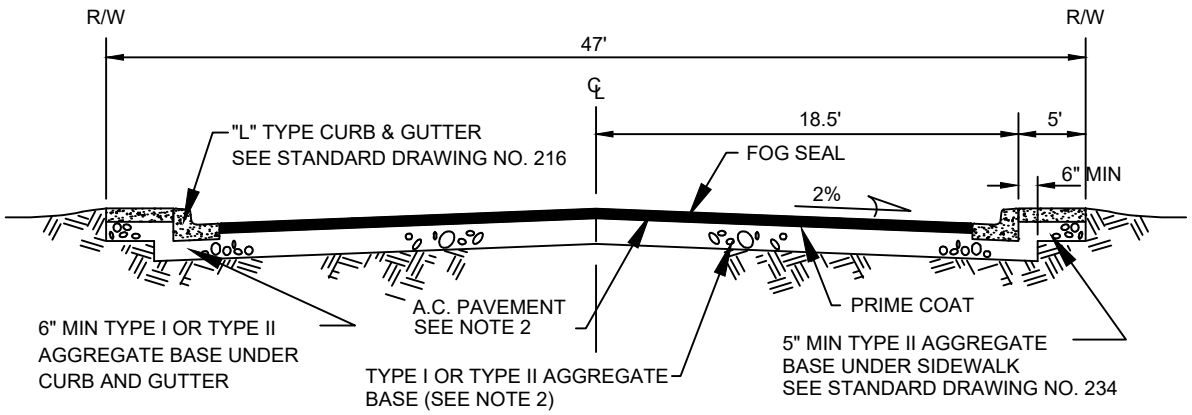
UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

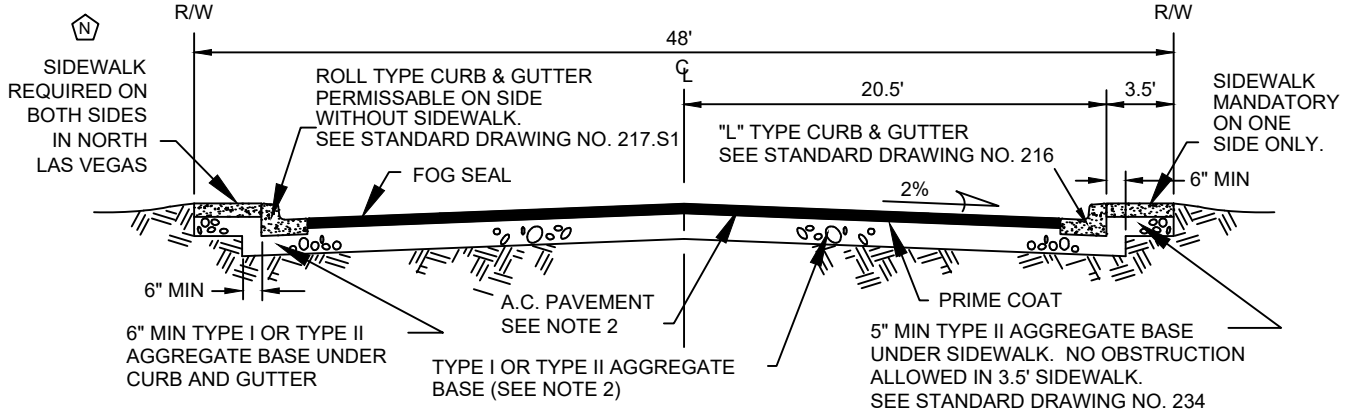
LOCAL RESIDENTIAL

COMPLETE STREET ALTERNATIVES

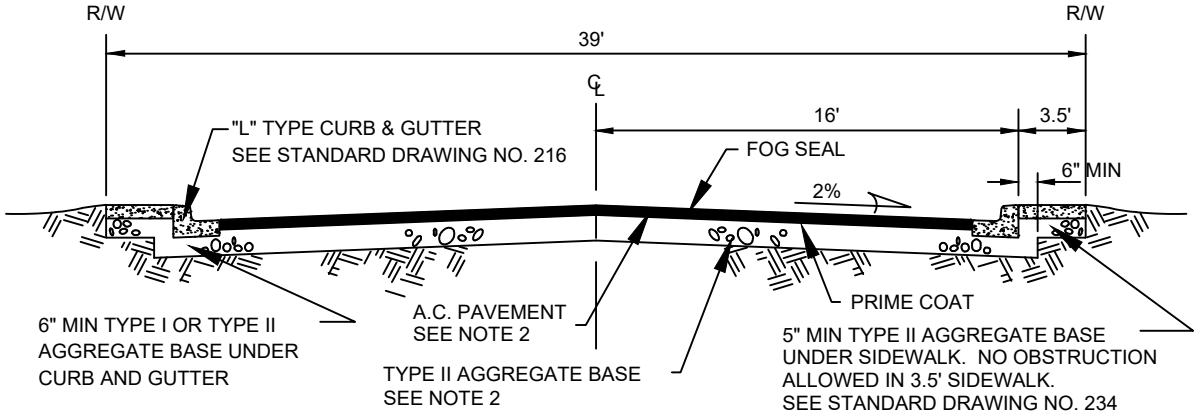
DATE 07-01-12 | DWG. NO. 206.1.S1



RESIDENTIAL TWO-WAY LOCAL OR CUL-DE-SAC
(OPTION "A")



RESIDENTIAL TWO-WAY LOCAL, CUL-DE-SAC (OPTION "B")
(NOT ALLOWED IN CLV)



RESIDENTIAL ONE-WAY (NOT ALLOWED IN CLV)

NOTES:

1. FINAL A.C. PAVEMENT SURFACE SHALL BE 1/4" MAXIMUM ABOVE LIP OF GUTTER. PAVEMENT SHALL BE FLUSH WITH LIP AT SIDEWALK RAMPS.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NO. 200.1.
3. RESIDENTIAL ONE-WAY STREET SHALL NOT EXCEED ONE THOUSAND FEET OR TWENTY RESIDENTIAL LOTS IN LENGTH WHICHEVER IS LESS.

AGENCY APPROVED		C		L		Ⓝ

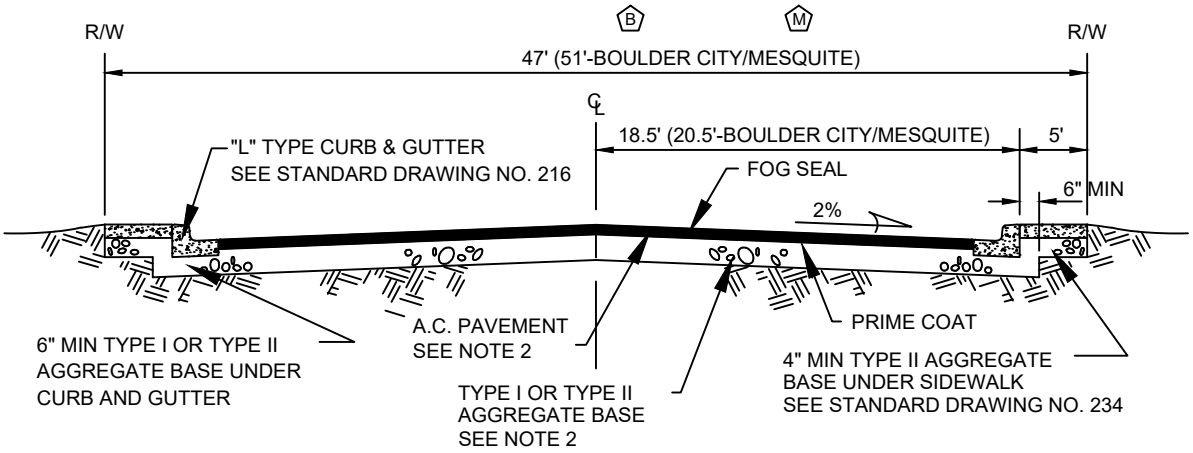
SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
501	CONCRETE
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

LOCAL RESIDENTIAL URBAN AREA STREET SECTIONS

DATE 11-10-04	DWG. NO. 206.S1	



NOTES:

1. FINAL A.C. PAVEMENT SURFACE SHALL BE 1/4" MAXIMUM ABOVE LIP OF GUTTER. PAVEMENT SHALL BE FLUSH WITH LIP AT SIDEWALK RAMPS.
2. STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 401 AND STANDARD DRAWING NO. 200.1.

AGENCY APPROVED	B		H		M	

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
401	BITUMINOUS PAVEMENT
406	PRIME COAT
407	FOG SEAL
501	CONCRETE
.	

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

SUPPLEMENTAL DRAWING

LOCAL RESIDENTIAL URBAN AREA STREET SECTION

DATE 11-10-04	DWG. NO. 206.S2	

ATTACHMENT E

CLARK COUNTY COMPREHENSIVE MASTER PLAN TRANSPORTATION ELEMENT

CLARK COUNTY, NEVADA

COMPREHENSIVE MASTER PLAN TRANSPORTATION ELEMENT 2019



Adopted by the Planning Commission on June 4, 2019

Adopted by the Board of County Commissioners on August 7, 2019

CLARK COUNTY DEPARTMENT OF COMPREHENSIVE PLANNING
500 S. Grand Central Parkway, PO Box 551744, Las Vegas, Nevada 89155-1744
Phone: 702-455-4314 Fax: 702-455-3271 www.clarkcountynv.gov

Passenger Train Service: Amtrak discontinued passenger service to Las Vegas in 1997. Early discussions and planning were underway in 2016 to provide high-speed rail service between Las Vegas and Victorville, California with possible tie in to Palmdale, Burbank, Los Angeles and Anaheim.

Bus Service: The two major bus carriers in Southern Nevada are Greyhound and Tufesa Bus Lines. Greyhound operates a station in downtown Las Vegas on Main Street at the Plaza Hotel. Tufesa has a station on Martin Luther King Boulevard just south of U.S. 95. Both companies provide regular service to destinations in the western region. Greyhound also provides service nationwide and Tufesa provides service into Mexico. There are also a variety of bus tour services that carry visitors to and from Las Vegas.

Roadway Classifications and Design Standards

New streets are built in accordance with Federal, State, and Local standards. The functional classification system for unincorporated Clark County is found in the Clark County Supplement to Uniform Standards Drawings for Public Works' Construction, Off-Site Improvements, Clark County Area, Nevada.[3]

It is important to note that the functional classification of roads identified as local, collector and arterial roadways may change over time as activity centers shift, area traffic volumes change, and the transportation system matures. The types of streets used in the network are described in complete street type design standards. The types differ in terms of their network continuity, cross-section design, and adjoining land use. The individual streets themselves will change in character depending on their immediate land use context.[4]

Freeways: Freeways in Clark County are divided high-speed roads with grade separated interchanges at arterial roadway crossings and have two or more lanes in each direction with an average right-of-way width of 350 feet.

Arterial Roadways and Limited Access Arterials: Arterial roadways connect and gather traffic from collectors and local streets and provide access to and between commercial activity centers and residential areas. Rights-of-way are typically 100 to 120 feet in width.[3]

Exceptions include the right-of-way width for Las Vegas Boulevard South between Sahara Avenue (City of Las Vegas boundary) and St. Rose Parkway at 200 feet and from St. Rose Parkway to the California State Line at 300 feet. This additional right-of-way may be needed to accommodate future transit improvements, future road improvements, and pedestrian realm widening to provide vehicle and transit access and utility service to the proposed Southern Nevada Supplemental Airport.

Limited Access Arterials (presently the Desert Inn Super Arterial and a portion of Frank Sinatra Drive) function similar to freeways with restricted access, but are County constructed and maintained with average right of way width of 120 feet.

Collector Streets: Collector streets gather traffic from arterials, as well as direct traffic from arterial streets to activity centers and residential areas by conveying traffic to their ultimate destinations or to local streets. Collector streets can be critical to regional commuting, although the traffic volume on a collector street may vary depending on the location of the road and nearby land uses. Rights-of-way are typically 60 to 80 feet in width and have a minimum of 4 travel lanes with medians and/or a two way left turn lane.

Local Streets: The function of the local street is to carry local traffic to collector and arterial roadways. Local streets typically have right-of-way widths of 60 feet or less with 2 travel lanes.

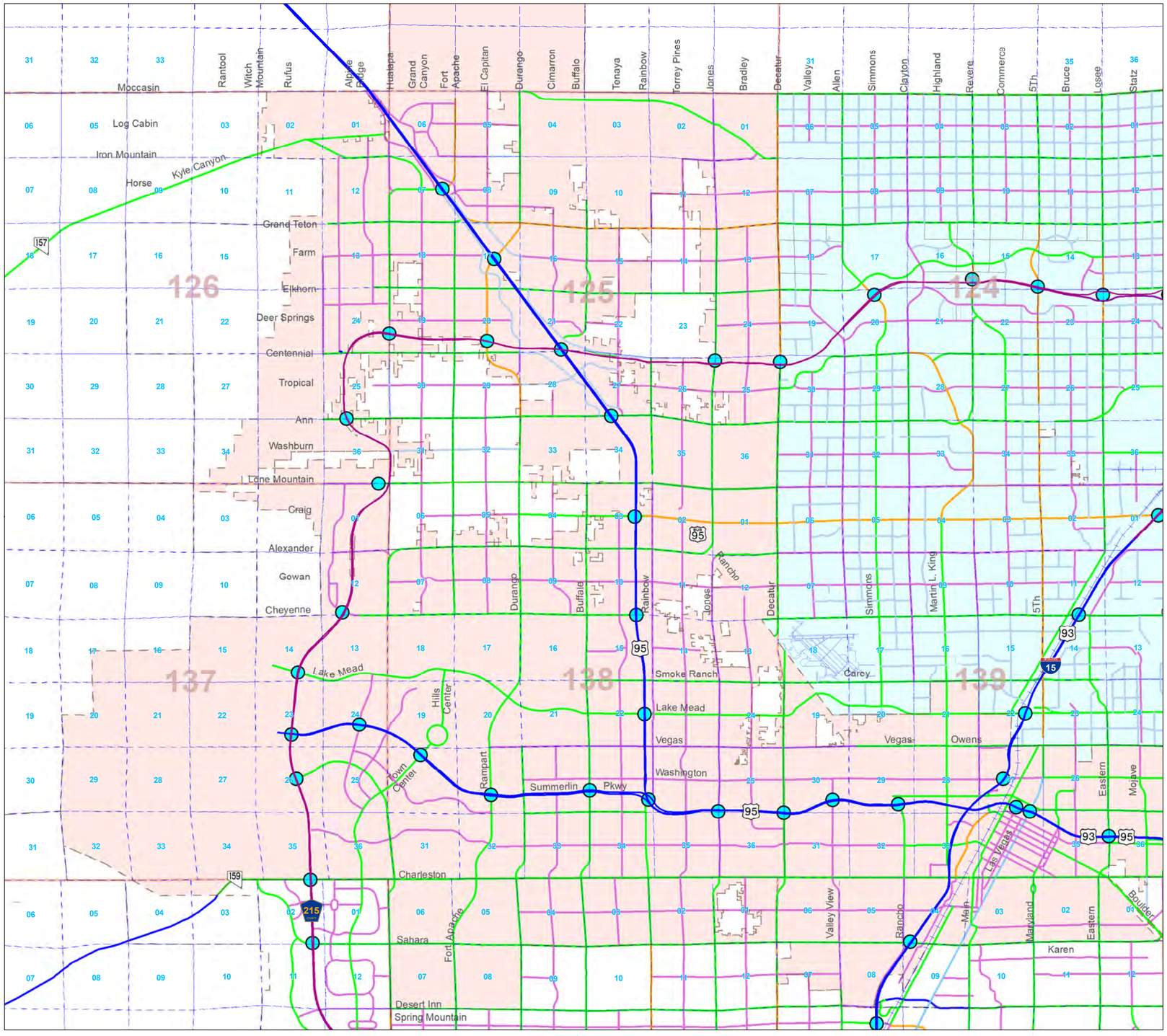
The County has approved a "Minimum Road Design Standards for Non-Urban Roadways" manual that defines "non-urban areas" and specifies standards for road improvements in these areas of Clark County. The use of these standards is intended to provide for the desired needs of outlying communities as well as Rural Neighborhood Preservation (RNP) areas in the Las Vegas Valley. When used in urban areas, the area must be in an RNP and where the minimum lot size is 18,000 square feet.

Dedication of Rights-of-Way/Building Setback Lines: Clark County requires dedicated rights-of-way for all types of transportation. A right-of-way is the total width of the linear segment of land required for the road paving, curb & gutter, sidewalks, bus turnouts and shelters, streetlights, traffic control devices, placement of utilities, and drainage, as well as ancillary uses such as elements of an approved non-motorized system on appropriately classified roadways. The development process provides for the dedication of transportation-related rights-of-way and is the basis for creation of Building Setback Lines along those rights-of way.

Rights-of-Way/Building Setback Lines and improvements are described by ordinance in the Clark County Unified Development Code, Title 30. Preservation of rights-of-way is important as land uses can change, and other alternate modes of transportation may have rights-of-way needs in the future. Chapter 30.52 entitled, "Off-Site Development Requirements", sets forth the requirements for the dedication of rights-of-way, provision of utilities, street improvement requirements and drainage improvements within public rights-of-way or private streets whenever land is subdivided or developed within various districts. Section 30.52.030 specifically addresses when dedication of rights-of-way are required for development.

Transportation Element

Map 1.1
Las Vegas Valley - Northwest
Clark County, Nevada



- Beltway
- Las Vegas Blvd (300+ ft R-O-W)
- Las Vegas Blvd (200+ ft R-O-W)
- Interstates/State Hwys (per NDOT)
- Arterials (120+ ft R-O-W)
- Arterials (100+ ft R-O-W)
- Collectors (80+ ft R-O-W)
- Collectors (60+ ft R-O-W)
- Local Streets (R-O-W Varies)
- Railroads
- Interchanges

Boulder City | Las Vegas | Mesquite
Henderson | North Las Vegas | Nellis AFB

Place Boundaries

Notes:

1. Street designations shown within incorporated city boundaries are for information only and may not be accurate.

2. For detailed right-of-way information see: "Uniform Standard Drawings for Public Works Construction of Offsite Improvements, Clark County Area, Nevada."

3. If not shown, the following minimum right-of-way widths shall be required on all grid line streets:

Township and Range Lines	120 foot right-of-way width
Section Lines	100 foot right-of-way width
Quarter Section Lines	80 foot right-of-way width

In addition to these requirements, minimum right-of-way requirements for new development shall be required as shown on the Standard Drawings for the various functionally classified streets shown on this map and shall apply to non-grid line streets and highways, curvilinear alignments, tangential alignments, special design configurations and off-grid jogs and segments of grid line streets and highways.

4. Right-of-way widths may be wider at intersections than as shown on map.

5. Classification of proposed streets as collector or arterial roadways shall be determined by the County Engineer and may have greater or less right-of-way widths than shown.

6. Right-of-way in incorporated cities is general and for informational use only. Consult the individual plans of each city for specific right-of-way requirements

0 3,900 7,800 11,700 15,600

Scale in Feet

Map created on: November 21, 2019

This information is for display purposes only.
No liability is assumed as to the accuracy of the data delineated hereon.

Comprehensive Planning
REGIONAL PLANNING

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Transportation Element

Map 1.2
Las Vegas Valley - Northeast
Clark County, Nevada

- Beltway
- Las Vegas Blvd (300+ ft R-O-W)
- Las Vegas Blvd (200+ ft R-O-W)
- Interstates/State Hwys (per NDOT)
- Arterials (120+ ft R-O-W)
- Arterials (100+ ft R-O-W)
- Collectors (80+ ft R-O-W)
- Collectors (60+ ft R-O-W)
- Local Streets (R-O-W Varies)
- Railroads
- Interchanges

Boulder City | Las Vegas | Mesquite
Henderson | North Las Vegas | Nellis AFB

Place Boundaries

Notes:

1. Street designations shown within incorporated city boundaries are for information only and may not be accurate.

2. For detailed right-of-way information see: "Uniform Standard Drawings for Public Works Construction of Offsite Improvements, Clark County Area, Nevada."

3. If not shown, the following minimum right-of-way widths shall be required on all grid line streets:

Township and Range Lines	120 foot right-of-way width
Section Lines	100 foot right-of-way width
Quarter Section Lines	80 foot right-of-way width

In addition to these requirements, minimum right-of-way requirements for new development shall be required as shown on the Standard Drawings for the various functionally classified streets shown on this map and shall apply to non-grid line streets and highways, curvilinear alignments, tangential alignments, special design configurations and off-grid jogs and segments of grid line streets and highways.

4. Right-of-way widths may be wider at intersections than as shown on map.

5. Classification of proposed streets as collector or arterial roadways shall be determined by the County Engineer and may have greater or less right-of-way widths than shown.

6. Right-of-way in incorporated cities is general and for informational use only. Consult the individual plans of each city for specific right-of-way requirements

0 3,900 7,800 11,700 15,600

Scale in Feet

Map created on: November 21, 2019

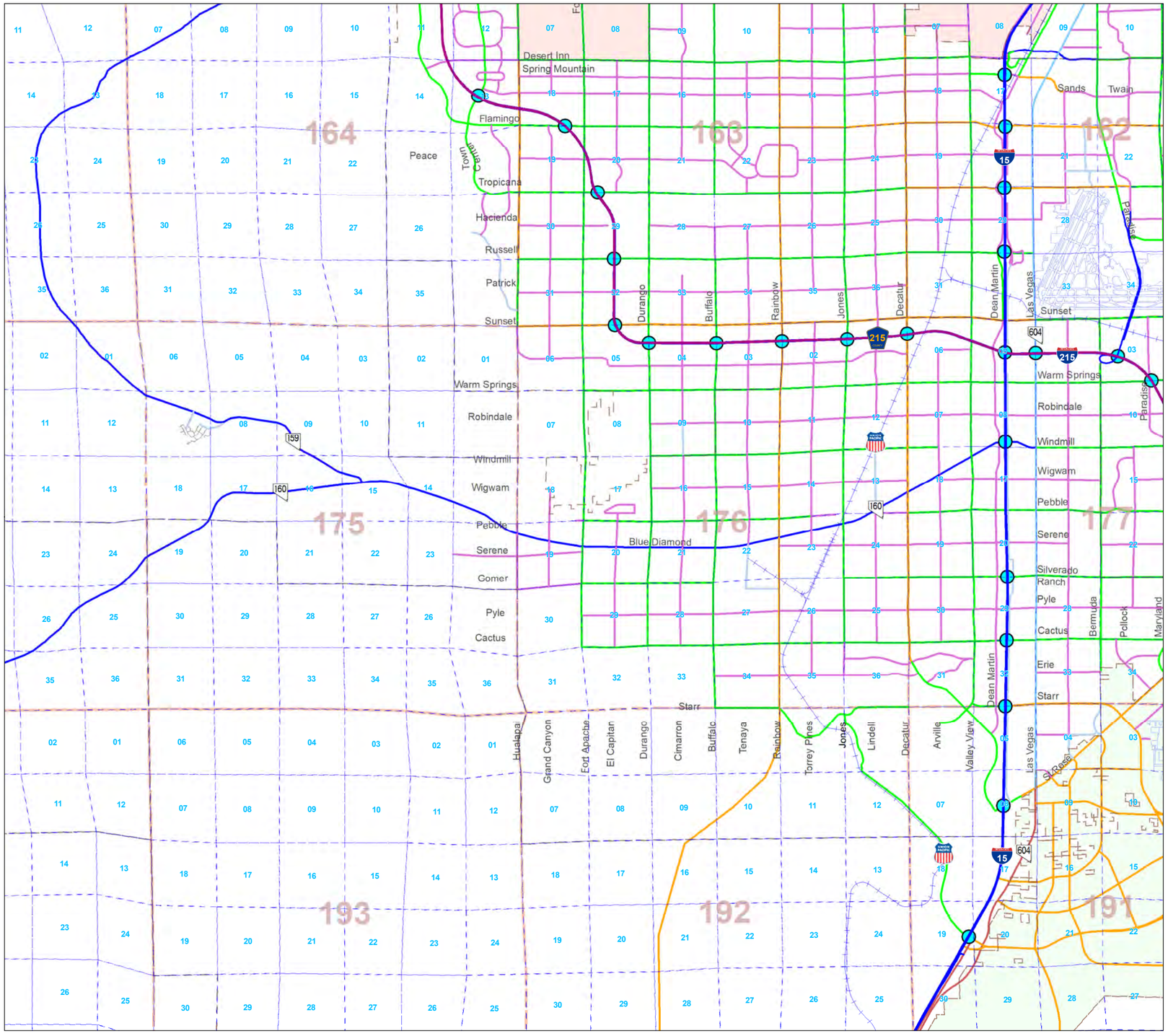
This information is for display purposes only.
No liability is assumed as to the accuracy of the data delineated hereon.

Comprehensive Planning
REGIONAL PLANNING

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Transportation Element

Map 1.3
Las Vegas Valley - Southwest
Clark County, Nevada



- Beltway
- Las Vegas Blvd (300+ ft R-O-W)
- Las Vegas Blvd (200+ ft R-O-W)
- Interstates/State Hwys (per NDOT)
- Arterials (120+ ft R-O-W)
- Arterials (100+ ft R-O-W)
- Collectors (80+ ft R-O-W)
- Collectors (60+ ft R-O-W)
- Local Streets (R-O-W Varies)
- Railroads
- Interchanges

Boulder City | Las Vegas | Mesquite
Henderson | North Las Vegas | Nellis AFB

Place Boundaries

Notes:

1. Street designations shown within incorporated city boundaries are for information only and may not be accurate.

2. For detailed right-of-way information see: "Uniform Standard Drawings for Public Works Construction of Offsite Improvements, Clark County Area, Nevada."

3. If not shown, the following minimum right-of-way widths shall be required on all grid line streets:

Township and Range Lines	120 foot right-of-way width
Section Lines	100 foot right-of-way width
Quarter Section Lines	80 foot right-of-way width

In addition to these requirements, minimum right-of-way requirements for new development shall be required as shown on the Standard Drawings for the various functionally classified streets shown on this map and shall apply to non-grid line streets and highways, curvilinear alignments, tangential alignments, special design configurations and off-grid jogs and segments of grid line streets and highways.

4. Right-of-way widths may be wider at intersections than as shown on map.

5. Classification of proposed streets as collector or arterial roadways shall be determined by the County Engineer and may have greater or less right-of-way widths than shown.

6. Right-of-way in incorporated cities is general and for informational use only. Consult the individual plans of each city for specific right-of-way requirements

0 3,900 7,800 11,700 15,600

Scale in Feet

Map created on: November 21, 2019

This information is for display purposes only.
No liability is assumed as to the accuracy of the data delineated hereon.

Comprehensive Planning
REGIONAL PLANNING

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Transportation Element

Map 1.4
Las Vegas Valley - Southeast
Clark County, Nevada

- Beltway
- Las Vegas Blvd (300+ ft R-O-W)
- Las Vegas Blvd (200+ ft R-O-W)
- Interstates/State Hwys (per NDOT)
- Arterials (120+ ft R-O-W)
- Arterials (100+ ft R-O-W)
- Collectors (80+ ft R-O-W)
- Collectors (60+ ft R-O-W)
- Local Streets (R-O-W Varies)
- Railroads
- Interchanges

Boulder City | Las Vegas | Mesquite
Henderson | North Las Vegas | Nellis AFB

Place Boundaries

Notes:

1. Street designations shown within incorporated city boundaries are for information only and may not be accurate.

2. For detailed right-of-way information see: "Uniform Standard Drawings for Public Works Construction of Offsite Improvements, Clark County Area, Nevada."

3. If not shown, the following minimum right-of-way widths shall be required on all grid line streets:

Township and Range Lines	120 foot right-of-way width
Section Lines	100 foot right-of-way width
Quarter Section Lines	80 foot right-of-way width

In addition to these requirements, minimum right-of-way requirements for new development shall be required as shown on the Standard Drawings for the various functionally classified streets shown on this map and shall apply to non-grid line streets and highways, curvilinear alignments, tangential alignments, special design configurations and off-grid jogs and segments of grid line streets and highways.

4. Right-of-way widths may be wider at intersections than as shown on map.

5. Classification of proposed streets as collector or arterial roadways shall be determined by the County Engineer and may have greater or less right-of-way widths than shown.

6. Right-of-way in incorporated cities is general and for informational use only. Consult the individual plans of each city for specific right-of-way requirements

0 3,900 7,800 11,700 15,600

Scale in Feet

Map created on: November 21, 2019

This information is for display purposes only.
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Comprehensive Planning
REGIONAL PLANNING

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ATTACHMENT F

CNLV CODE OF ORDINANCES

TABLE 17.24.040-1: DRIVEWAY SPACING

	60' ROW Collector Streets		80'- 90' ROW Minor Arterial Streets		90'+ ROW Major Arterial Streets	
	Residential Districts [1]	Business Districts [1]	Residential Districts [1]	Business Districts [1]	Residential Districts [1]	Business Districts [1]
Minimum Spacing - Partial Access [2]	60 feet	80 feet	80 feet	150 feet	100 feet	150 feet
Minimum Spacing - Full Access [3]	200 feet	200 feet	200 feet	200 feet	200 feet [4]	200 feet [4]

NOTES:

[1] For the purposes of this table, residential districts shall include the O-L, R-E, R-EL, R-1, R-2, R-3, R-4, R-A/R-2, R-A/ R-3, R-A/R-4, and R-CL Districts. Business districts shall include all other zoning districts not included as a residential district.

[2] Partial access includes right turn in and out only.

[3] Full access allows all turn movements, in and out.

[4] Only at median openings; Median openings only allowed at 660 foot intervals on major arterials.

ATTACHMENT G

CLV PLANNED STREETS AND HIGHWAYS MAP

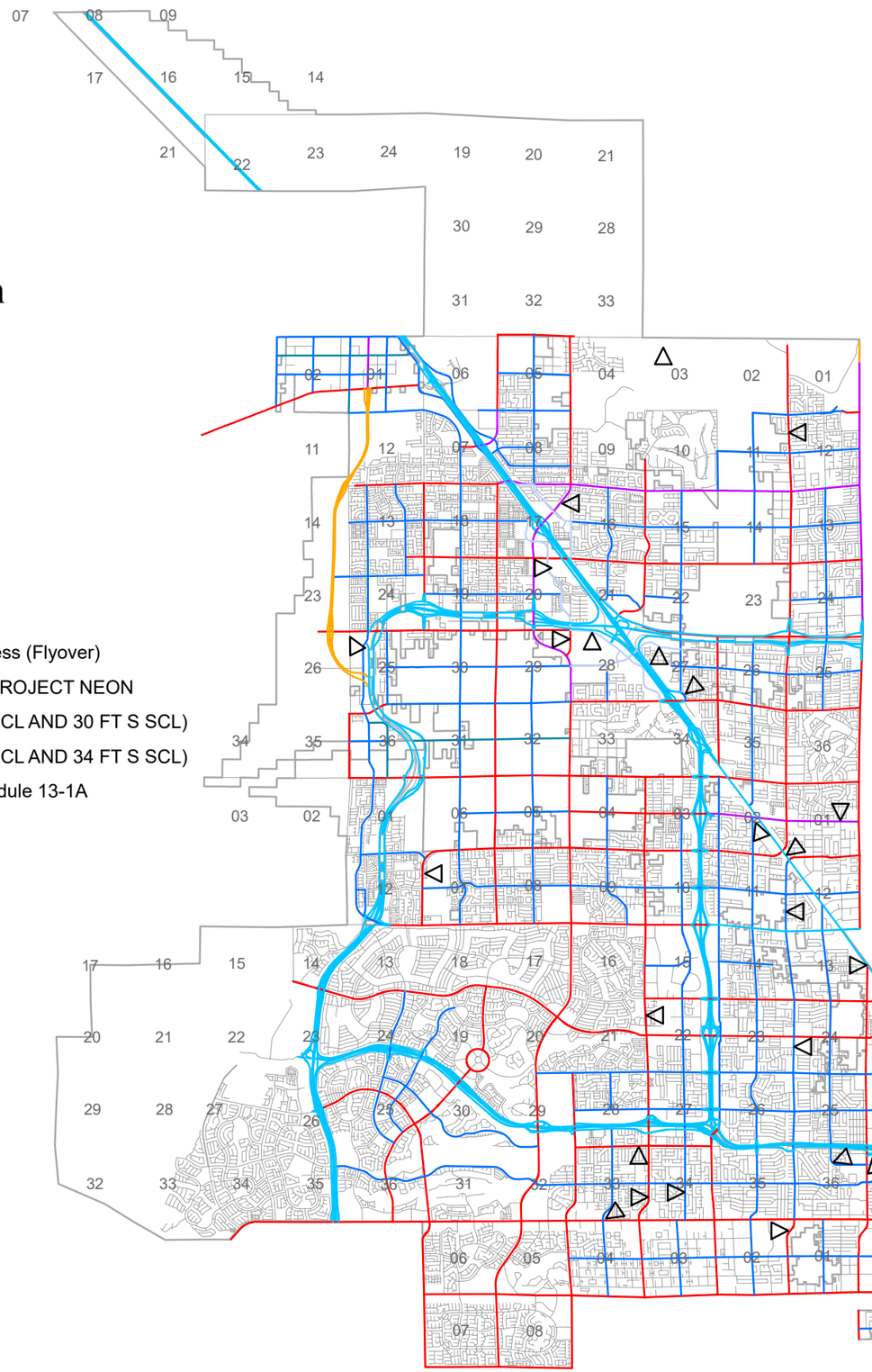
City of Las Vegas

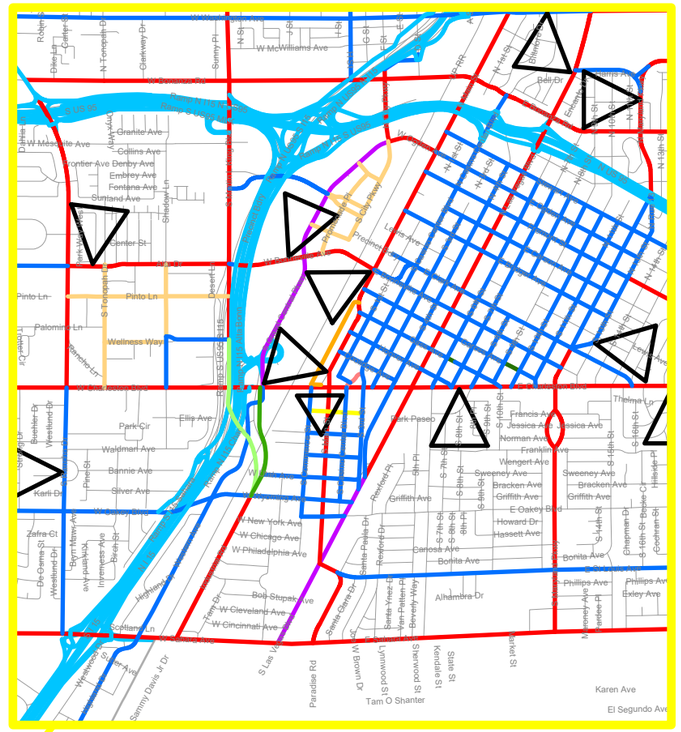
Planned Streets and Highways

Revised: 21-0075-GPA1 May 19, 2021

Street Classification

- Primary Arterial (120 ft)
- Primary Arterial (100 ft)
- Collector (40 ft)
- Collector (45 ft)
- Collector (60 ft)
- Collector (80 ft)
- Frontage Streets (70 ft)
- Freeway - Proposed
- Freeway / Expressway (150 ft. +)
- Primary Arterial with Limited Access (Flyover)
- Special Design Road - NDOT's PROJECT NEON
- Special Design Road (40 FT N SCL AND 30 FT S SCL)
- Special Design Road (40 FT N SCL AND 34 FT S SCL)
- Special Design Road - See Schedule 13-1A





Las Vegas Blvd. ROW Widths

	ROW	W/E
Bonanza Rd. to Owens Ave.	100'	50'/50'
Mesquite Ave. to Bonanza Rd.	100'	55'/45'
Stewart Ave. to Mesquite Ave.	Transition	45' to 55' / 45'
Charleston Blvd. to Stewart Ave.	90'	45'/45'
4th Street to Charleston Blvd.	100'	50'/50'
Sahara to 4th Street	120'	60'/60'

Right-of-way widths shown are minimums
Additional rights-of-way at major intersections shall also be required in accordance with Standard Drawings # 201.1 and # 234.1-2.

SOURCE: City of Las Vegas, Department of Planning

GIS maps are normally produced only to meet the needs of the City. Due to continuous development activity this map is for reference only.

Geographic Information System

Department of Planning
702-229-6301

Printed: Thursday, May 20, 2021

Document Path: T:\advplan\projects\projectsGIS\MPSH\ArcGISPro_PSH\PSH.aprx

Public Works Schedule 13-1A

Special Designs

Street name	Location	Width	Right-of-Way split	Reference
Alexander Road	approximately 400' west of the Hualapai Centerline to approximately 1700' East of the Hualapai Centerline	100'	special design	MSH-7-98
Alexander Road/Jones Boulevard	Intersection	special design	special design	115-356
Alta	Martin L. King Boulevard to Rancho Drive	100'	N 60'/40' S	MSH-7-98
Alta Drive	Highland Drive to Railroad property			
Azure	US 95 to Tenaya	90'	N 45'/45' S	MSH-7-98
Buffalo Drive	Washington Avenue to Cheyenne Avenue	special design	special design	115-383
Buffalo Drive	Charleston Boulevard to Alta Drive	special design	special design	115-281
Charleston Boulevard	Main Street to Eastern Avenue	special design	special design	115-338
Charleston Boulevard/Cimarron Road	Intersection	special design	special design	115-372A
Craig Road	US 95 to Decatur	150', 120'	Equal	MSH-3453
Craig Road	Jones Boulevard to Decatur Boulevard	special design	special design	107-v959
Craig Road	Torrey Pines Drive to Rancho Drive	special design	special design	115-368
Decatur Boulevard	Alta Drive to US95	120'	W 70'/50' E	115-250
Decatur Boulevard	US95 to Bonanza Road	125'	W 70'/55' E	115-250
Decatur Boulevard	Bonanza Road to Vegas Drive	120'	W 70'/50' E	115-250
Decatur Boulevard	Charleston Boulevard to Alta Drive	120'	W 80'/40' E	115-250
Decatur Boulevard/Rancho Drive	Intersection	special design	special design	113-121
Eastern Avenue	Charleston Boulevard to Stewart Avenue	special design	special design	115-181 &115-143
Eastern Avenue	St. Louis to Ballard Drive	100'	W 40'/E 60'	115-332
Fremont Street	Main Street to Ninth Street	80'	W 40'/40' E	*Ord. 2231
Fremont Street	Ninth Street to Seventeenth Street	90'	W 45'/45' E	*Ord. 2231
Grand Montecito Parkway	Durango Drive to Centennial Parkway	90'	W 50'/40' E	MSH13509
Grand Montecito Parkway	Centennial Parkway to Elkhorn Road	90'	W 45'/45' E	MSH-1-00
Grand Montecito Parkway	Elkhorn Road to Durango Drive	90'	W 45'/45' E	MSH-2-00

Street name	Location	width	Right-of-Way split	Reference
Harrison Avenue	H Street to 1-15	70'	Equal	115-226
Hualapai Way	Curves to the East into Alexander road approximately 1800' south of the Alexander Road Centerline	100'	special design	MSH-7-98
Jones Boulevard	Grand Teton to North City limit	90'	W 50'/40' E	MSH 3453
Jones Boulevard	Approximately 500' North of Doe Avenue to Charleston Boulevard	special design	special design	115-175
Jones Boulevard	Vegas Drive to Rancho Drive	special design	special design	115-364A
Las Vegas Boulevard	Sahara to 4th Street	120'	W 60'/ 60' E	MSH-29429
Las Vegas Boulevard	4th Street to Charleston Boulevard	100'	W 50'/ 50' E	MSH-29429
Las Vegas Boulevard	Charleston Boulevard to Stewart Avenue	90'	W 45'/45' E	*Ord. 2231
Las Vegas Boulevard	Stewart Avenue to Mesquite Avenue	transition	W varies/45' E	*Ord. 2231
Las Vegas Boulevard	Mesquite Avenue to Bonanza Road	100'	W 55'/45' E	*Ord. 2231
Lone Mountain Road	CC215 Beltway to Puli Road	100’	N 60’/S 40’	GPA 53055
Main Street	approximately 180' south of Stewart Avenue south r/w line to approximately 160' north of Bridger Avenue north r/w line	88'	W 48'/40' E	*Ord. 2231
Main Street	approximately 160' north of Bridger Avenue north r/w line to Las Vegas Boulevard South	90'	W 45'/45' E	*Ord. 2231
Marion Drive	Charleston Boulevard to Stewart Avenue	70'	W 40'/30' E	115-362
Maryland Parkway/ 13th Street	Stewart Avenue to Mesquite Avenue	special design	special design	115-304
Michael Way	curve east into Meadows Lane	80'	Equal	115-101
Moccasin Road	Kyle Canyon Road to Thom Boulevard	100'	N 50'/50' S	MSH-1-99, MSH-6-02
Owens Avenue	Martin L. King Boulevard to H Street	100'	Equal	115-226
Owens Avenue	H Street to 1-15	50'	N 24.5'/25.5' S	115-226
Owens Avenue	Main Street to Las Vegas Boulevard North	80'	Equal	107-v532
Puli Road	Lone Mountain Road to Ann Road	106’	106’ W of Centerline	GPA 76710, GPA 78348
Rancho Drive	Vegas Drive to US 95	125', 200'	Equal	MSH-3453

Street name	Location	width	Right-of-Way split	Reference
Rancho Drive	Sahara Avenue to Charleston Boulevard	special design	special design	115-307
Sheep Mountain Parkway	CC215 to Kyle Canyon Road	special design	special design	MSH 3453, MSH 13365, MSH 21013, GPA 41958, GPA 64013
Tropical Parkway	Cimarron to US 95	90'	N 45'/45' S	MSH-7-98
Valley View	Charleston Boulevard to Desert Inn Road	special design	special design	115-345
Vegas Drive	Rancho Drive to Martin Luther King Boulevard	100'	Equal	115-226
Washington Avenue	Main Street to Las Vegas Boulevard North	special design	special design	107-v882
Westcliff Drive	Rainbow Boulevard to Durango Drive	100'	N 60'/40' S	107-v957

**(Ord. 2231 § 2 (part), 1981: prior code § 9-11-8(A)(1, 2, 3))*

ATTACHMENT H

COH DEVELOPMENT CODE

Appendix B: Master Transportation Plan Summary Table

R=Required ●=As Approved by Public Works Department -=Not Recommended

Δ=Refer to Master Bicycle & Trails Plan *=Refer to RTC Transit Guide & System Map

		Minor Collector	Major Collector	Minor Arterial	Major Arterial
	Expected ADT	≤ 10k	10k - 25k	25k - 40k	≥ 40k
	Minimum Total Width	87 ft.	122 ft.	158 ft.	182 ft.
	Minimum Dedicated Width {1}{2}{4} (includes 5 ft. minimum back of curb)	61 ft.	86 ft.	108 ft.	132 ft.
Roadway	**Minimum Roadway Width** (back of curb to back of curb)	51 ft.	76 ft.	98 ft.	122 ft.
	Travel Lanes	2	4	6	8
	Lane Width	11 ft.	11 ft.	11 ft.	11 ft.
	Curb & Pan	2 ft.	2 ft.	2 ft.	2 ft.
	On-Street Parking	6.5 ft.	●	●	●
	Dedicated Transit Facilities	*	*	*	*
	Minimum Bicycle Lane Width (includes buffer width)	≥ 6 ft.	≥ 8 ft.	≥ 8 ft.	≥ 8 ft.
	Buffered Bicycle Lane	–	R	R	R
	Buffer Width	–	≥ 3 ft.	≥ 3 ft.	≥ 3 ft.
	Minimum Center Median Width	– {3}	≥ 12 ft.	≥ 12 ft.	≥ 14 ft.
	Raised Median	–	R	R	R
Pedestrian & Amenity Zone	**Minimum Width (per side)**	≥ 18 ft.	≥ 23 ft.	≥ 30 ft.	≥ 30 ft.
	Curb to Walkway Amenity/Planting Width {4}	≥ 5 ft.	≥ 5 ft.	≥ 5 ft.	≥ 5 ft.
	Walkway Width	≥ 6 ft. {3}	≥ 6 ft. {3}	≥ 10 ft.	≥ 10 ft.
	Back of Walkway Amenity/Planting Width {5}	≥ 7 ft.	≥ 12 ft.	≥ 15 ft.	≥ 15 ft.
	Detached Multi-Use Path {6}	Δ	Δ	Δ	Δ

{1} Additional right-of-way may be required based upon findings of a traffic impact study and/or the civil improvement plans.

{2} Applicant shall dedicate and construct additional right-of-way as depicted in Regional Transportation Commission of Southern Nevada Uniform Standard Drawing Number 201.1 at any intersection of a Major Collector and Minor Arterial or larger roadway as per the City of Henderson's Master Transportation Plan. Additional right-of-way may be required based on findings of a traffic impact study and/or the civil improvement plans. This additional right-of-way does not impact Pedestrian & Amenity Zone requirements.

{3} Minimum 8 ft. required adjacent to all schools.

{4} Minimum 5 feet of right-of-way back-of-curb shall be dedicated and privately maintained. This right-of-way width shall be landscaped unless otherwise approved by the Community Development and Services Director.

{5} For any street not listed on the Master Transportation Plan a minimum 7 feet of landscaping is required back of walkway.

{6} Applicant may use additional walkway width constructed to satisfy requirements of Master Bicycle & Trail Plan to offset a portion of back of walkway amenity/planting width requirement.

APPENDIX C

DATA COLLECTION MEMORANDUM

MEMORANDUM

To: *RTC of Southern Nevada and City of North Las Vegas*

From: *Lindsay Saner, Kimley-Horn*

Date: *July 15, 2021*

RE: *Data Collection Methodology and Traffic Counts Summary*

The Comprehensive Master Transportation Plan Study will update the functional classifications for the City of North Las Vegas, providing typical cross-sections that compliment the surrounding land uses while incorporating complete street elements. Existing conditions, including peak hour volumes and daily traffic volumes on corridors and at intersections within the City's street network will provide an understanding of the functional classifications and typical cross-sections appropriate for the collected traffic volumes. This memorandum provides a summary of the methodology used to select the key intersections for data collection and to present the findings.

Data Collection Methodology

For this study, the data collection plan included peak hour turning movement volumes at 10 intersections and 24-hour bidirectional counts at 20 mid-block locations in proximity to the 10 study intersections. To determine the locations for the intersection counts, the following criteria were considered:

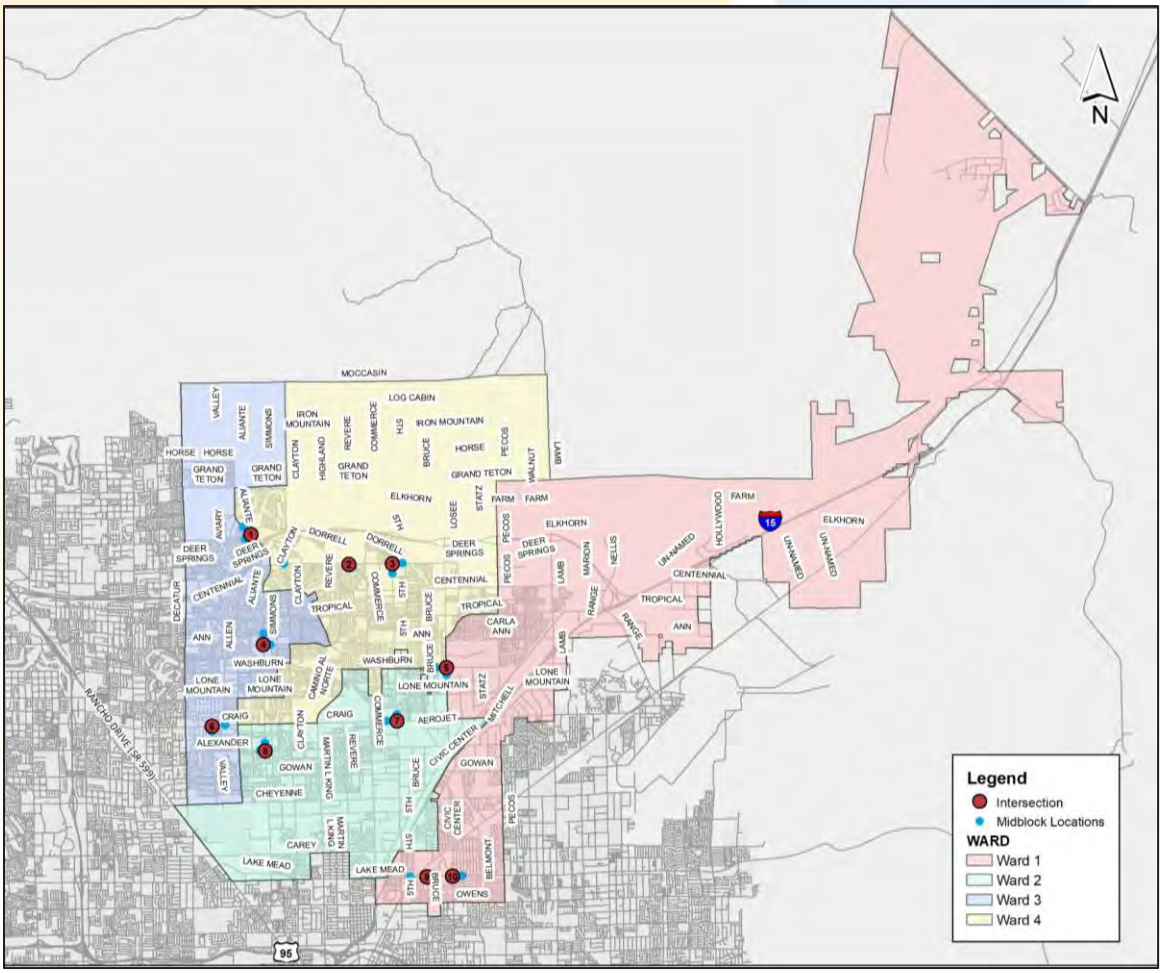
- Intersections of collector and arterial streets (80-ft right-of-way and larger)
- Distributed across the City's four Wards
- Avoid intersections where count data has been collected
- Intersections that have a variety of surrounding land uses
- Intersections near attractors such as schools, hospitals, and libraries.
- Intersections along existing or planned bicycle and pedestrian facilities based on the North Las Vegas Citywide Bicycle and Pedestrian Plan.

Based on this criteria, the project team selected the following intersections for this study:

- Simmons Street and Alexander Road
- Craig Road and Valley Drive
- Simmons Street and Ann Road
- Elkhorn Road and Aliante Parkway
- Deer Springs Way and Commerce Street
- Deer Springs Way and North 5th Street
- Washburn Road and Losee Road
- Craig Road and North 5th Street
- Lake Mead Boulevard and Bruce Street
- Civic Center Drive and Lake Mead Boulevard

For the intersections listed above, peak hour turning movement counts were collected during the AM peak hours (7:00am – 9:00am) and the PM peak hours(4:00pm – 6:00pm). Twenty-four hour bidirectional counts were collected at 20 mid-block locations identified by the project team. Counts were collected within the City on a typical Tuesday, Wednesday, or Thursday per Institute of Transportation Engineers' (ITE) guidelines. The 10 intersections selected for data collection are shown in **Figure 1**.

Figure 1 – Vicinity Map



Intersection Turning Movement Counts

Intersection peak hour turning movement counts were collected from Wednesday, April 28, 2021 to Wednesday, May 5, 2021. The selected intersections and dates of the data collection are summarized in **Table** 1.

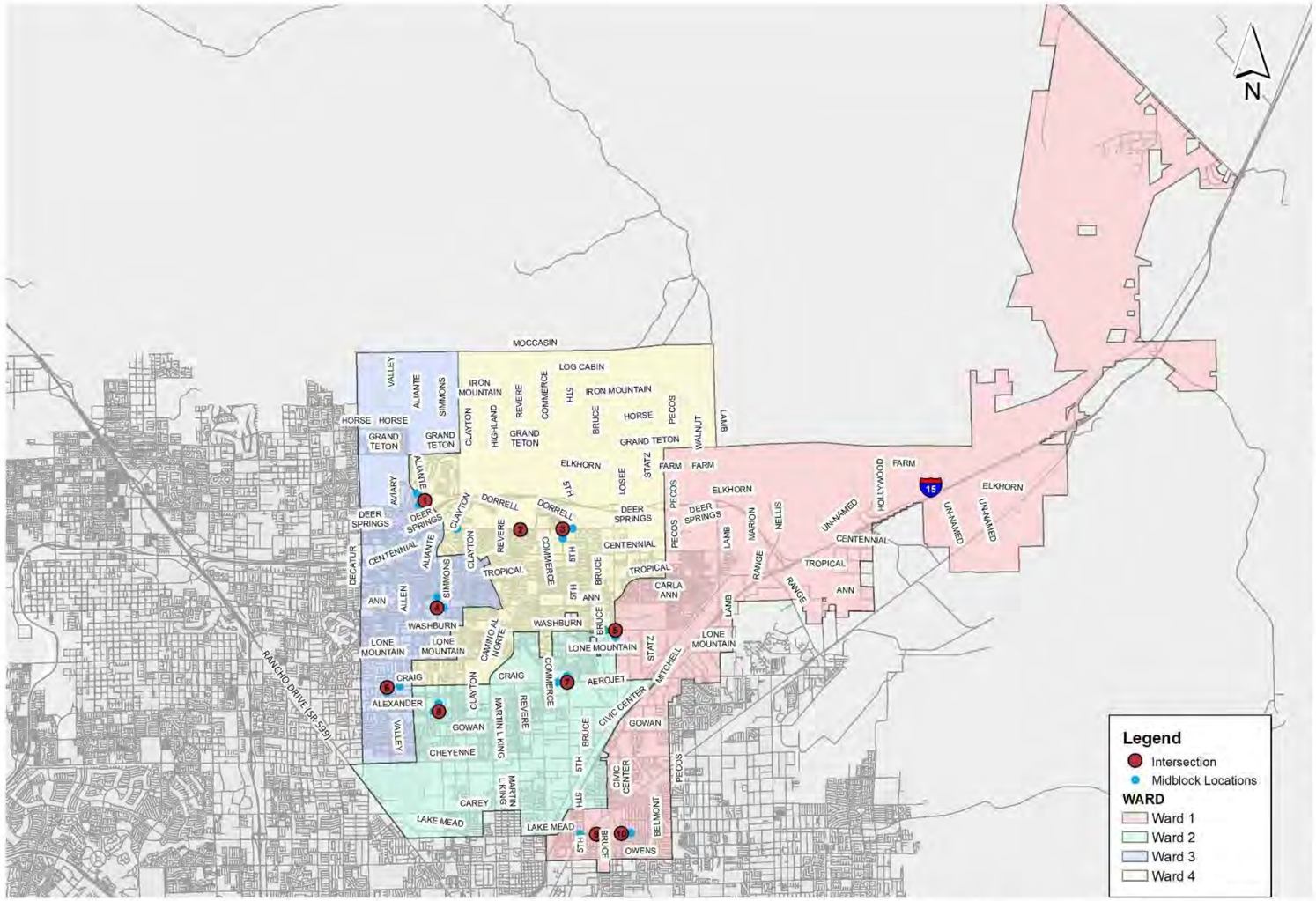
Table 1 – Intersection Turning Movement Count Locations

Intersection Number	Intersection	Count Date
1	Simmons Street and Alexander Road	Wednesday, April 28, 2021
2	Craig Road and Valley Drive	Wednesday, April 28, 2021
3	Simmons Street and Ann Road	Wednesday, April 28, 2021
4	Elkhorn Road and Aliante Parkway	Thursday, April 29, 2021
5	Deer Springs Way and Commerce Street	Thursday, April 29, 2021
6	Deer Springs Way and North 5th Street	Thursday, April 29, 2021
7	Washburn Road and Losee Road	Tuesday, May 4, 2021
8	Craig Road and North 5th Street	Tuesday, May 4, 2020
9	Lake Mead Boulevard and Bruce Street	Tuesday, May 4, 2021
10	Civic Center Drive and Lake Mead Boulevard	Wednesday, May 5, 2021

A site visit was conducted at each intersection and mid-block location to record the lane configurations and intersection control at each intersection. This information was used to determine the functional classifications and develop cross section alternatives for the network analysis.

The lane configurations and intersection control for the 10 study intersections are provided in **Figure 2**. The AM and PM peak hour turning movement counts are presented in **Figure 3**. Intersection turning movement counts and vehicle classification distribution are provided in **Attachment A**.

Figure 2 – Existing Lane Configuration and Control



NOTES:
*The lane configurations at intersections 3 and 7 were impacted due to construction at the time when the data was collected. The lane configurations in this exhibit show the lane configuration during the time of data collection (3A and 7A) and the updated lane configuration (3B and 7B).

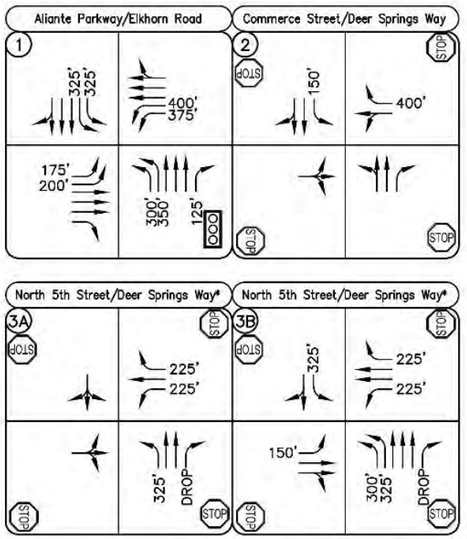
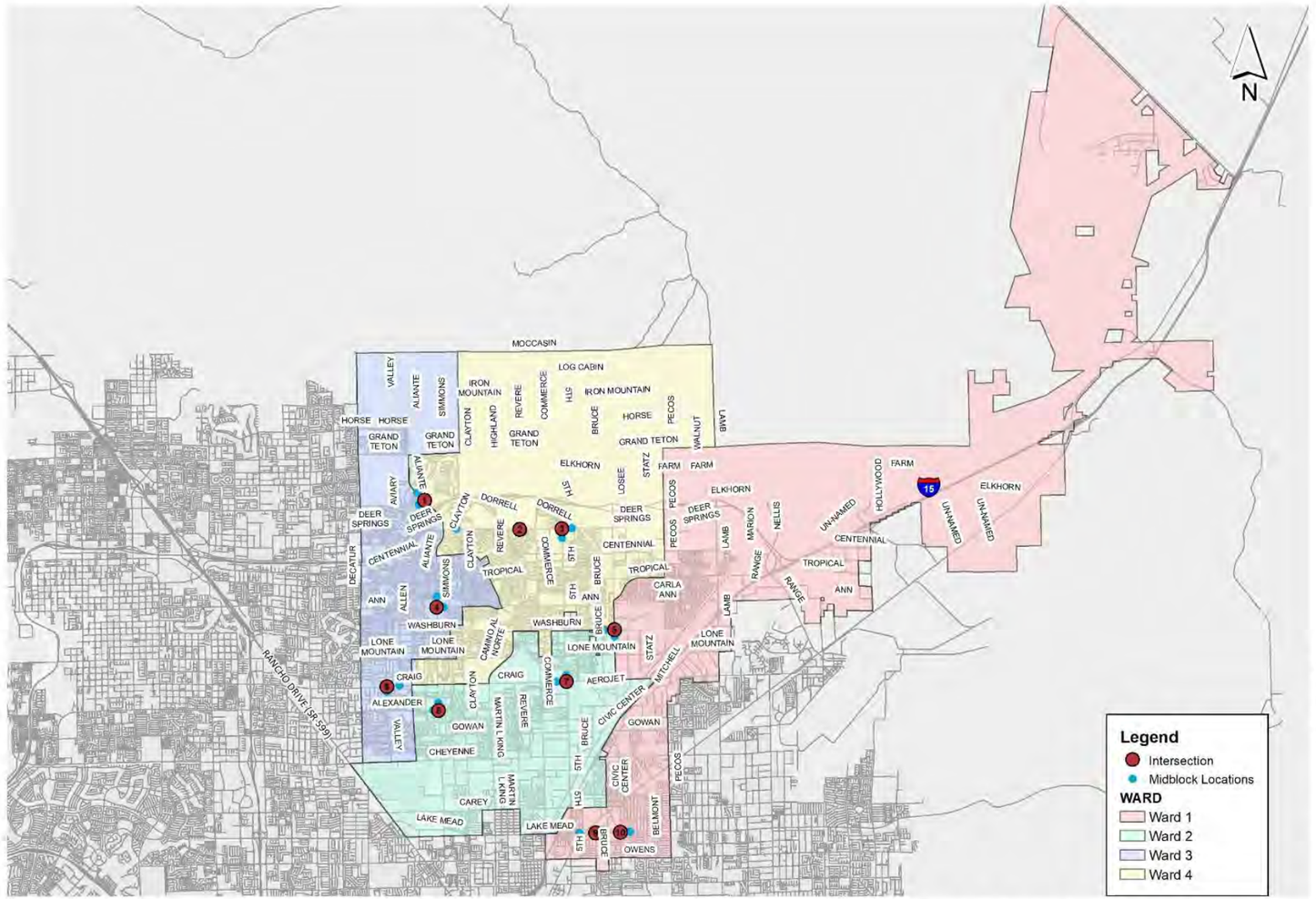


Figure 3 – AM and PM Peak Hour Turning Movements



Alante Parkway/Elkhorn Road	Commerce Street/Deer Springs Way
Thursday, April 29, 2021 7:15–8:15 AM, 4:00–5:00 PM	Thursday, April 29, 2021 7:00–8:00 AM, 4:15–5:15 PM
1	2
↖ 20(36) ↓ 474(375) ↙ 7(23)	↑ 191(322) ↙ 80(91)
↖ 2(17) ← 13(55) ↖ 95(152)	↖ 64(83) ↖ 23(39)
20(48) ↗ 17(47) → 365(284) ↘	166(419) ↑ 228(624) ↗ 82(155)
	248(194) → 27(27)

Deer Springs Way/North 5th Street	Simmons Street/Ann Road	Losee Road/Washburn Road	Valley Drive/Craig Road	North 5th Street/Craig Road	Simmons Street/Alexander Road	Bruce Street/Lake Mead Boulevard	Civic Center Drive/Lake Mead Boulevard
Thursday, April 29, 2021 7:00–8:00 AM, 4:15–5:15 PM	Wednesday, April 28, 2021 8:00–9:00 AM, 4:45–5:45 PM	Tuesday, May 4, 2021 7:15–8:15 AM, 4:15–5:15 PM	Wednesday, April 28, 2021 7:15–8:15 AM, 5:00–6:00 PM	Tuesday, May 4, 2021 7:15–8:15 AM, 4:15–5:15 PM	Wednesday, April 28, 2021 7:00–8:00 AM, 4:30–5:30 PM	Tuesday, May 4, 2021 7:00–8:00 AM, 4:00–5:00 PM	Wednesday, May 5, 2021 7:15–8:15 AM, 4:15–5:15 PM
3	4	5	6	7	8	9	10
↖ 18(22) ↓ 209(417) ↙ 29(84)	↖ 99(136) ↓ 372(446) ↙ 88(151)	↖ 56(88) ↓ 1016(742) ↙ 49(31)	↖ 65(61) ↓ 44(51) ↙ 39(41)	↖ 84(89) ↓ 277(227) ↙ 184(139)	↖ 27(18) ↓ 578(516) ↙ 18(72)	↖ 25(54) ↓ 81(121) ↙ 27(82)	↖ 31(56) ↓ 296(610) ↙ 72(207)
↖ 38(75) ← 15(27) ↖ 15(78)	↖ 63(104) ← 507(562) ↖ 120(152)	↖ 18(30) ← 60(91) ↖ 124(93)	↖ 45(56) ← 904(1182) ↖ 17(36)	↖ 115(213) ← 779(1503) ↖ 57(55)	↖ 50(96) ← 117(183) ↖ 42(53)	↖ 36(86) ← 1625(1428) ↖ 67(89)	↖ 97(95) ← 1467(1257) ↖ 148(235)
29(22) ↗ 19(49) → 24(19) ↘	111(240) ↗ 261(666) → 106(137) ↘	52(95) ↗ 66(95) → 125(87) ↘	22(37) ↗ 739(1245) → 18(81) ↘	46(110) ↗ 991(1201) → 64(58) ↘	17(15) ↗ 85(136) → 37(28) ↘	31(56) ↗ 874(1515) → 109(85) ↘	24(75) ↗ 713(1421) → 79(128) ↘
↖ 33(44) ↑ 387(448) ↗ 32(102)	↖ 111(163) ↑ 281(495) ↗ 67(105)	↖ 74(145) ↑ 543(1273) ↗ 72(119)	↖ 36(52) ↑ 55(86) ↗ 43(60)	↖ 37(43) ↑ 142(306) ↗ 42(42)	↖ 13(26) ↑ 332(803) ↗ 30(56)	↖ 111(127) ↑ 81(125) ↗ 55(83)	↖ 135(235) ↑ 305(557) ↗ 73(226)

24-Hour Mid-Block Bidirectional Counts

The 24-hour bidirectional counts were collected at 20 locations, which were determined to be on each cross street at the 10 study intersections. The 24-hour bidirectional counts were collected from Wednesday, May 5, 2021 to Wednesday, May 19, 2021. The locations and the dates the data was collected are summarized in **Table 2**. The 24-hour traffic volumes, or average daily traffic (ADT), is presented in **Table 3.**

Table 2 – 24-Hour Bidirectional Mid-Block Locations

Mid-Block Number	Mid-Block	Count Date
1	Alexander Road west of Simmons Street	Wednesday, May 19, 2021
2	Aliante Parkway north of Elkhorn Road	Tuesday, May 11, 2021
3	Ann Road east of Simmons Street	Tuesday, May 11, 2021
4	Bruce Street between Hickey Avenue and Flower Avenue	Tuesday, May 18, 2021
5	Civic Center Drive between Lake Mead Boulevard and Perliter Avenue	Wednesday, May 19, 2021
6	Commerce Street south of Deer Springs Way	Tuesday, May 11, 2021
7	Craig Road between Valley Drive and Allen Lane	Wednesday, May 12, 2021
8	Craig Road west of North 5th Street	Wednesday, May 19, 2021
9	Deer Springs Way east of North 5th Street	Tuesday, May 11, 2021
10	Deer Springs Way west of Clayton Street	Tuesday, May 11, 2021
11	Elkhorn Road west of Aliante Parkway	Tuesday, May 11, 2021
12	Lake Mead Boulevard east of Daley Street	Wednesday, May 19, 2021
13	Lake Mead Boulevard west of Bangle Street	Tuesday, May 18, 2021
14	Losee Road south of Washburn Road	Tuesday, May 18, 2021
15	North 5th Street north of Craig Road	Wednesday, May 5, 2021
16	North 5th Street north of Deer Springs Way	Wednesday, May 12, 2021
17	Simmons Street north of Alexander Road	Wednesday, May 12, 2021
18	Simmons Street north of Ann Road	Tuesday, May 11, 2021
19	Valley Drive north of Craig Road	Tuesday, May 18, 2021
20	Washburn Road between Lawrence Street and Teal Petals Street	Tuesday, May 18, 2021

Annual Average Daily Traffic

To estimate Annual Average Daily Traffic (AADTs), the ADTs collected for the 20 mid-block locations were adjusted using weekday and monthly adjustment factors from the following three (3) Nevada Department of Transportation (NDOT) permanent count stations within the City of North Las Vegas:

- 0031120 I-15 1.5 miles north of Apex Interchange Exit 58
- 0031230 I-15 0.7 miles north of Lake Mead (SR 147) Interchange Exit 45
- 0035300 Craig Road 715 feet west of Lawrence Street

The weekday adjustment factor used was 1.00 and the monthly adjustment factor was 0.96. The adjusted AADTs were then compared to the RTC's 2020 and 2040 TDMs.

The results of the AADT comparison to the RTC TDM 2020 and 2040 include:

- Aliante Parkway: 2020 and 2040 TMD (26,000 and 29,000) are almost twice the estimated 2021 AADT (12,500).
- Craig Road (W of N 5th Street): 2021 AADT almost twice the RTC TDM 2020 and 2040.
- The network analysis will further analyze potential factors for the discrepancies in the estimated 2021 AADTs and the 2020 and 2040 TDM volumes.

Right-of-way (ROW) from the Master Plan of Streets and Highways, functional road classifications and typical AADT by functional road classification are presented in **Table 3**. Bidirectional count data sheets are provided in **Attachment B**.

Table 3 – Mid-Block Location Data Collection Summary

Mid-Block Number	Mid-Block	ADT	2021 AADT[1]	RTC TDM 2020[2]	RTC TDM 2040[2]	Right-of-Way (FT)	Roadway Classification	Typical AADT by Roadway Classification[3]
1	Alexander Road west of Simmons Street	4,631	4,500	4,347	6,296	80	Minor Collector	1,100 - 6,300
2	Aliante Parkway north of Elkhorn Road	12,854	12,500	26,547	29,032	100	Minor Arterial	3,000 - 14,000
3	Ann Road east of Simmons Street	21,401	20,500	13,142	15,251	100	Minor Arterial	3,000 - 14,000
4	Bruce Street between Hickey Avenue and Flower Avenue	7,595	7,300	2,347	2,130	80	Minor Collector	1,100 - 6,300
5	Civic Center Drive between Lake Mead Boulevard and Perliter Avenue	24,495	23,500	31,397	37,435	100	Other Principal Arterial	7,000 - 27,000
6	Commerce Street south of Deer Springs Way	7,364	7,100	916	20,237	100	Minor Collector	1,100 - 6,300
7	Craig Road between Valley Drive and Allen Lane	33,265	32,000	24,731	29,227	120	Other Principal Arterial	7,000 - 27,000
8	Craig Road west of North 5th Street	42,440	41,000	28,777	27,483	120	Other Principal Arterial	7,000 - 27,000
9	Deer Springs Way east of North 5th Street	3,922	3,800	256	1,395	80	Collector	1,100 - 6,300
10	Deer Springs Way west of Clayton Street	9,665	9,300	8,232	5,907	80	Collector	1,100 - 6,300
11	Elkhorn Road west of Aliante Parkway	9,324	9,000	5,317	8,370	100	Collector	1,100 - 6,300
12	Lake Mead Boulevard east of Daley Street	44,420	43,000	40,604	38,647	100	Minor Arterial	3,000 - 14,000
13	Lake Mead Boulevard west of Bangle Street	20,613	20,000	22,560	26,849	100	Other Principal Arterial	7,000 - 27,000
14	Losee Road south of Washburn Road	31,086	30,000	33,884	49,080	100	Minor Arterial	3,000 - 14,000
15	North 5th Street north of Craig Road	15,077	14,500	22,233	39,205	150	Other Principal Arterial	7,000 - 27,000
16	North 5th Street north of Deer Springs Way	15,868	15,500	10,724	26,897	150	Other Principal Arterial	7,000 - 27,000
17	Simmons Street north of Alexander Road	15,241	14,700	15,717	23,047	100	Minor Collector	1,100 - 6,300
18	Simmons Street north of Ann Road	17,807	17,000	12,267	19,370	100	Minor Arterial	3,000 - 14,000
19	Valley Drive north of Craig Road	3,929	3,800	1,714	4,432	80	Collector	1,100 - 6,300
20	Washburn Road between Lawrence Street and Teal Petals Street	7,544	7,300	7,764	7,835	80	Collector	1,100 - 6,300

Source:
(1) NDOT Traffic Forecasting Guidelines Rounding Methodology, August 2012, https://www.dot.nv.gov/home/showdocument?id=4506
(2) RTC Travel Demand Model obtained February 2020
(3) FHWA Highway Functional Classification Concepts, Criteria and Procedures, 2013 Edition, https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf

Vehicle Classification

The 20 mid-block locations were compared against available vehicle classification information from NDOT's *2019 Vehicle Classification Distribution Report* (provided in **Attachment C**). It was determined that only two (2) mid-block locations, locations 7 and 8 on Craig Road (SR 573), align with available NDOT data. The 2021 AADT and truck percentage for both mid-block locations are summarized in **Table 4** along with the available NDOT vehicle classification data (NDOT count stations 0031617 and 0035300). The locations of the NDOT count stations used are as follows:

- 0031617 Craig Road, 240 feet west of Home Depot Road
- 0035300 Craig Road 715 feet west of Lawrence Street

Table 4 – AADT and NDOT Vehicle Classification Comparison for SR 573

Mid-Block Location	Mid-Block Location	2021 AADT	NDOT AADT*	Truck AADT (NDOT)	% Trucks (Counts)	% Trucks (NDOT)
7	Craig Rd between Valley Dr and Allen Ln	31,000	47,500	1,276	1.8%	2.7%
8	Craig Rd west of N 5th St	40,000			2.7%	2.7%

Source: NDOT Traffic Records Information Access
** The average of station 0031617 and station 0035300*

The truck percentage at mid-block location 8 is the same as was recorded in the NDOT *2019 Vehicle Classification Distribution Report* (2.7%). Mid-block location 7 was observed to have less trucks than reported in the *2019 Vehicle Classification Distribution Report,* which may be impacted by the residential land uses in the surrounding area. Vehicle classification calculations are provided in **Attachment C**.

Attachments:
Attachment A – Intersection Turning Movement Count Data
Attachment B – Mid-Block Location 24-Hour Bidirectional Count Data
Attachment C – Vehicle Classification Calculations

ATTACHMENT A

INTERSECTION TURNING MOVEMENT COUNT DATA

Aliante Pkwy/Elkhorn Rd - TMC

Thu Apr 29, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831281, Location: 36.292623, -115.183768

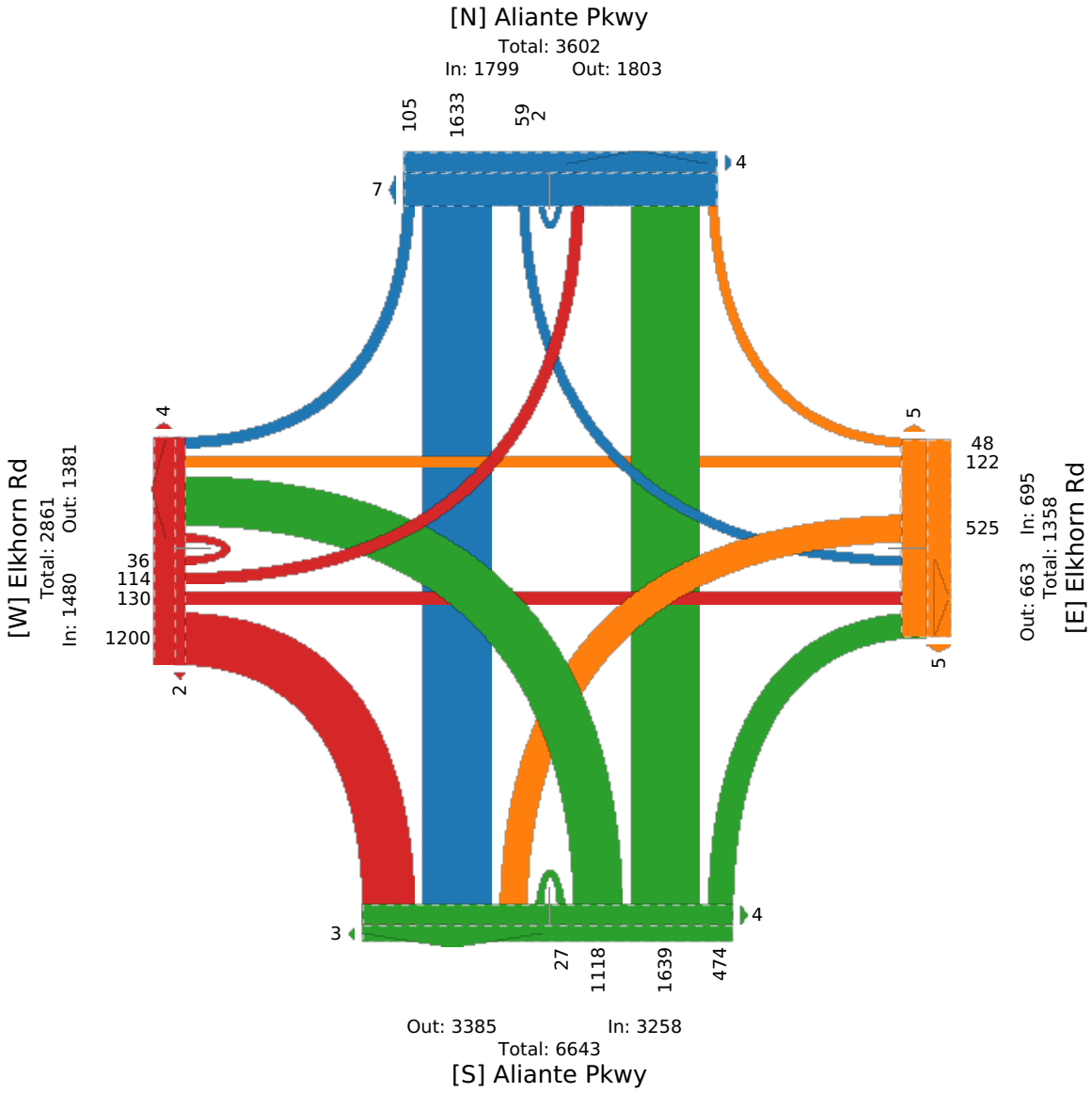
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Aliante Pkwy						Aliante Pkwy						Elkhorn Rd						Elkhorn Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-29 7:00AM	34	37	13	0	**84**	0	1	119	4	0	**124**	2	3	2	98	1	**104**	0	25	3	3	0	**31**	1	**343**
7:15AM	42	39	17	1	**99**	0	1	123	5	0	**129**	0	1	0	100	2	**103**	2	18	1	0	0	**19**	0	**350**
7:30AM	47	57	24	1	**129**	0	3	124	6	0	**133**	2	5	5	92	0	**102**	0	20	5	0	0	**25**	0	**389**
7:45AM	37	70	23	1	**131**	1	2	129	7	0	**138**	2	4	6	90	2	**102**	0	22	4	1	0	**27**	0	**398**
Hourly Total	160	203	77	3	**443**	1	7	495	22	0	**524**	6	13	13	380	5	**411**	2	85	13	4	0	**102**	1	**1480**
8:00AM	37	62	18	0	**117**	0	1	98	2	0	**101**	0	3	6	83	3	**95**	0	35	3	1	0	**39**	1	**352**
8:15AM	46	52	24	1	**123**	0	3	87	4	0	**94**	2	5	6	65	1	**77**	0	34	3	2	0	**39**	2	**333**
8:30AM	41	67	25	0	**133**	3	3	100	13	0	**116**	0	9	6	79	1	**95**	2	36	2	4	0	**42**	0	**386**
8:45AM	38	69	29	2	**138**	1	2	95	5	0	**102**	1	7	12	63	3	**85**	0	35	5	1	0	**41**	0	**366**
Hourly Total	162	250	96	3	**511**	4	9	380	24	0	**413**	3	24	30	290	8	**352**	2	140	13	8	0	**161**	3	**1437**
4:00PM	84	166	41	1	**292**	1	5	98	8	0	**111**	0	8	14	59	5	**86**	0	47	17	5	0	**69**	0	**558**
4:15PM	107	143	39	2	**291**	0	7	95	4	0	**106**	0	7	10	64	2	**83**	0	44	12	4	0	**60**	1	**540**
4:30PM	119	145	39	3	**306**	0	4	87	10	0	**101**	0	5	11	75	7	**98**	0	29	9	3	0	**41**	3	**546**
4:45PM	98	170	36	5	**309**	0	6	95	14	1	**116**	0	13	12	86	1	**112**	1	32	17	5	0	**54**	0	**591**
Hourly Total	408	624	155	11	**1198**	1	22	375	36	1	**434**	0	33	47	284	15	**379**	1	152	55	17	0	**224**	4	**2235**
5:00PM	110	143	36	3	**292**	0	5	99	5	0	**109**	1	12	8	51	3	**74**	1	39	13	5	0	**57**	0	**532**
5:15PM	93	140	40	2	**275**	1	4	106	7	0	**117**	0	12	8	78	1	**99**	0	34	14	6	0	**54**	0	**545**
5:30PM	90	133	33	1	**257**	0	6	81	4	0	**91**	1	11	15	54	4	**84**	0	33	8	2	0	**43**	2	**475**
5:45PM	95	146	37	4	**282**	0	6	97	7	1	**111**	0	9	9	63	0	**81**	0	42	6	6	0	**54**	0	**528**
Hourly Total	388	562	146	10	**1106**	1	21	383	23	1	**428**	2	44	40	246	8	**338**	1	148	41	19	0	**208**	2	**2080**
Total	1118	1639	474	27	**3258**	7	59	1633	105	2	**1799**	11	114	130	1200	36	**1480**	6	525	122	48	0	**695**	10	**7232**
% Approach	34.3%	50.3%	14.5%	0.8%	**-**	-	3.3%	90.8%	5.8%	0.1%	**-**	-	7.7%	8.8%	81.1%	2.4%	**-**	-	75.5%	17.6%	6.9%	0%	**-**	-	-
% Total	15.5%	22.7%	6.6%	0.4%	**45.0%**	-	0.8%	22.6%	1.5%	0%	**24.9%**	-	1.6%	1.8%	16.6%	0.5%	**20.5%**	-	7.3%	1.7%	0.7%	0%	**9.6%**	-	-
Lights	1098	1610	459	26	**3193**	-	58	1598	101	2	**1759**	-	109	129	1175	36	**1449**	-	510	120	47	0	**677**	-	7078
% Lights	98.2%	98.2%	96.8%	96.3%	**98.0%**	-	98.3%	97.9%	96.2%	100%	**97.8%**	-	95.6%	99.2%	97.9%	100%	**97.9%**	-	97.1%	98.4%	97.9%	0%	**97.4%**	-	97.9%
Single-Unit Trucks	16	18	6	0	**40**	-	1	22	0	0	**23**	-	2	0	14	0	**16**	-	9	1	0	0	**10**	-	89
% Single-Unit Trucks	1.4%	1.1%	1.3%	0%	**1.2%**	-	1.7%	1.3%	0%	0%	**1.3%**	-	1.8%	0%	1.2%	0%	**1.1%**	-	1.7%	0.8%	0%	0%	**1.4%**	-	1.2%
Articulated Trucks	2	3	2	1	**8**	-	0	8	0	0	**8**	-	0	0	3	0	**3**	-	2	0	1	0	**3**	-	22
% Articulated Trucks	0.2%	0.2%	0.4%	3.7%	**0.2%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0%	0.3%	0%	**0.2%**	-	0.4%	0%	2.1%	0%	**0.4%**	-	0.3%
Buses	2	7	6	0	**15**	-	0	5	4	0	**9**	-	2	0	8	0	**10**	-	1	0	0	0	**1**	-	35
% Buses	0.2%	0.4%	1.3%	0%	**0.5%**	-	0%	0.3%	3.8%	0%	**0.5%**	-	1.8%	0%	0.7%	0%	**0.7%**	-	0.2%	0%	0%	0%	**0.1%**	-	0.5%
Bicycles on Road	0	1	1	0	**2**	-	0	0	0	0	**0**	-	1	1	0	0	**2**	-	3	1	0	0	**4**	-	8
% Bicycles on Road	0%	0.1%	0.2%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.9%	0.8%	0%	0%	**0.1%**	-	0.6%	0.8%	0%	0%	**0.6%**	-	0.1%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	11	-	-	-	-	-	6	-	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	71.4%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	90.0%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	28.6%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	10.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Aliante Pkwy/Elkhorn Rd - TMC
Thu Apr 29, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831281, Location: 36.292623, -115.183768

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767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Aliante Pkwy/Elkhorn Rd - TMC

Thu Apr 29, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831281, Location: 36.292623, -115.183768

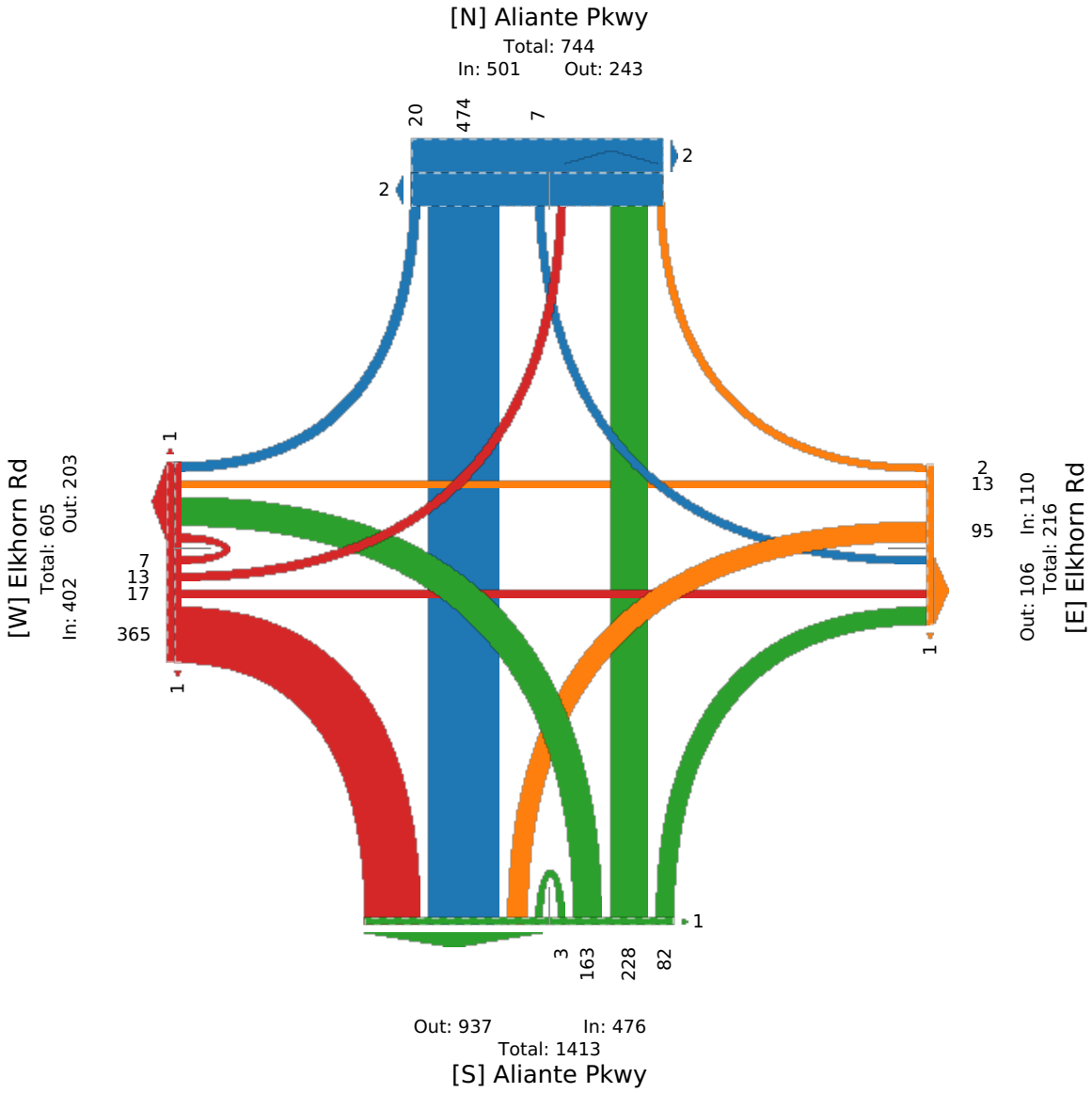
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767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Aliante Pkwy						Aliante Pkwy						Elkhorn Rd						Elkhorn Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-29 7:15AM	42	39	17	1	**99**	0	1	123	5	0	**129**	0	1	0	100	2	**103**	2	18	1	0	0	**19**	0	**350**
7:30AM	47	57	24	1	**129**	0	3	124	6	0	**133**	2	5	5	92	0	**102**	0	20	5	0	0	**25**	0	**389**
7:45AM	37	70	23	1	**131**	1	2	129	7	0	**138**	2	4	6	90	2	**102**	0	22	4	1	0	**27**	0	**398**
8:00AM	37	62	18	0	**117**	0	1	98	2	0	**101**	0	3	6	83	3	**95**	0	35	3	1	0	**39**	1	**352**
Total	163	228	82	3	**476**	1	7	474	20	0	**501**	4	13	17	365	7	**402**	2	95	13	2	0	**110**	1	**1489**
% Approach	34.2%	47.9%	17.2%	0.6%	**-**	-	1.4%	94.6%	4.0%	0%	**-**	-	3.2%	4.2%	90.8%	1.7%	**-**	-	86.4%	11.8%	1.8%	0%	**-**	-	-
% Total	10.9%	15.3%	5.5%	0.2%	**32.0%**	-	0.5%	31.8%	1.3%	0%	**33.6%**	-	0.9%	1.1%	24.5%	0.5%	**27.0%**	-	6.4%	0.9%	0.1%	0%	**7.4%**	-	-
PHF	0.867	0.811	0.854	0.750	**0.906**	-	0.583	0.919	0.714	-	**0.908**	-	0.600	0.667	0.913	0.583	**0.971**	-	0.679	0.600	0.500	-	**0.699**	-	0.940
Lights	159	215	77	2	**453**	-	6	465	19	0	**490**	-	12	16	356	7	**391**	-	90	12	2	0	**104**	-	1438
% Lights	97.5%	94.3%	93.9%	66.7%	**95.2%**	-	85.7%	98.1%	95.0%	0%	**97.8%**	-	92.3%	94.1%	97.5%	100%	**97.3%**	-	94.7%	92.3%	100%	0%	**94.5%**	-	96.6%
Single-Unit Trucks	3	6	2	0	**11**	-	1	5	0	0	**6**	-	0	0	3	0	**3**	-	3	0	0	0	**3**	-	23
% Single-Unit Trucks	1.8%	2.6%	2.4%	0%	**2.3%**	-	14.3%	1.1%	0%	0%	**1.2%**	-	0%	0%	0.8%	0%	**0.7%**	-	3.2%	0%	0%	0%	**2.7%**	-	1.5%
Articulated Trucks	1	2	2	1	**6**	-	0	4	0	0	**4**	-	0	0	2	0	**2**	-	1	0	0	0	**1**	-	13
% Articulated Trucks	0.6%	0.9%	2.4%	33.3%	**1.3%**	-	0%	0.8%	0%	0%	**0.8%**	-	0%	0%	0.5%	0%	**0.5%**	-	1.1%	0%	0%	0%	**0.9%**	-	0.9%
Buses	0	4	1	0	**5**	-	0	0	1	0	**1**	-	0	0	4	0	**4**	-	1	0	0	0	**1**	-	11
% Buses	0%	1.8%	1.2%	0%	**1.1%**	-	0%	0%	5.0%	0%	**0.2%**	-	0%	0%	1.1%	0%	**1.0%**	-	1.1%	0%	0%	0%	**0.9%**	-	0.7%
Bicycles on Road	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1	1	0	0	**2**	-	0	1	0	0	**1**	-	4
% Bicycles on Road	0%	0.4%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	7.7%	5.9%	0%	0%	**0.5%**	-	0%	7.7%	0%	0%	**0.9%**	-	0.3%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Aliante Pkwy/Elkhorn Rd - TMC
Thu Apr 29, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831281, Location: 36.292623, -115.183768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Aliante Pkwy/Elkhorn Rd - TMC

Thu Apr 29, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831281, Location: 36.292623, -115.183768

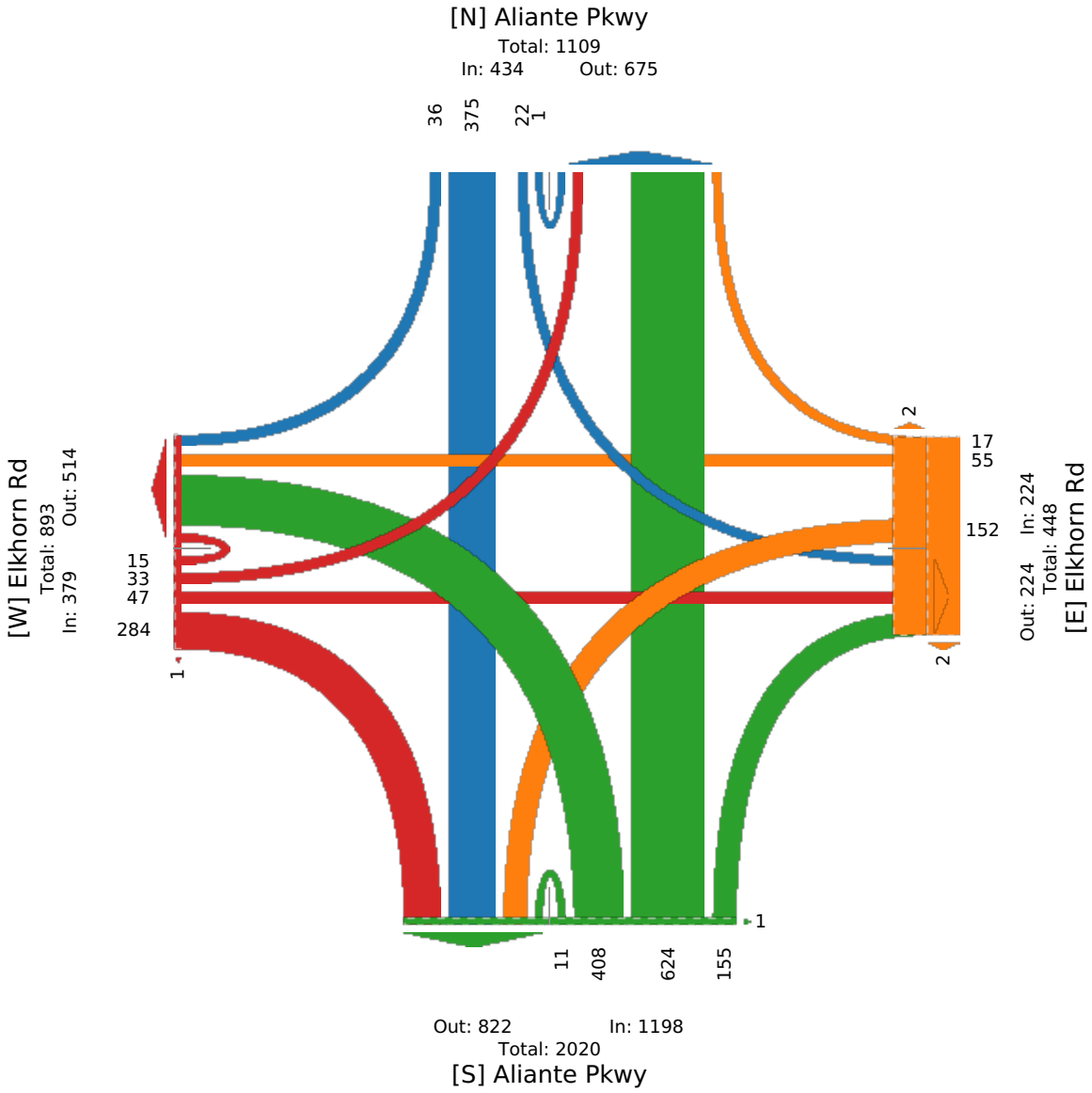
Provided by: Kimley-Horn and Associates, Inc.
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Saint Paul, MN, 55114, US

Leg	Aliante Pkwy						Aliante Pkwy						Elkhorn Rd						Elkhorn Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-29 4:00PM	84	166	41	1	**292**	1	5	98	8	0	**111**	0	8	14	59	5	**86**	0	47	17	5	0	**69**	0	**558**
4:15PM	107	143	39	2	**291**	0	7	95	4	0	**106**	0	7	10	64	2	**83**	0	44	12	4	0	**60**	1	**540**
4:30PM	119	145	39	3	**306**	0	4	87	10	0	**101**	0	5	11	75	7	**98**	0	29	9	3	0	**41**	3	**546**
4:45PM	98	170	36	5	**309**	0	6	95	14	1	**116**	0	13	12	86	1	**112**	1	32	17	5	0	**54**	0	**591**
Total	408	624	155	11	**1198**	1	22	375	36	1	**434**	0	33	47	284	15	**379**	1	152	55	17	0	**224**	4	**2235**
% Approach	34.1%	52.1%	12.9%	0.9%	**-**	-	5.1%	86.4%	8.3%	0.2%	**-**	-	8.7%	12.4%	74.9%	4.0%	**-**	-	67.9%	24.6%	7.6%	0%	**-**	-	-
% Total	18.3%	27.9%	6.9%	0.5%	**53.6%**	-	1.0%	16.8%	1.6%	0%	**19.4%**	-	1.5%	2.1%	12.7%	0.7%	**17.0%**	-	6.8%	2.5%	0.8%	0%	**10.0%**	-	-
PHF	0.857	0.918	0.945	0.550	**0.969**	-	0.786	0.957	0.643	0.250	**0.935**	-	0.635	0.839	0.826	0.536	**0.846**	-	0.809	0.809	0.850	-	**0.812**	-	0.945
Lights	405	620	154	11	**1190**	-	22	368	36	1	**427**	-	33	47	279	15	**374**	-	150	54	17	0	**221**	-	2212
% Lights	99.3%	99.4%	99.4%	100%	**99.3%**	-	100%	98.1%	100%	100%	**98.4%**	-	100%	100%	98.2%	100%	**98.7%**	-	98.7%	98.2%	100%	0%	**98.7%**	-	99.0%
Single-Unit Trucks	2	4	0	0	**6**	-	0	6	0	0	**6**	-	0	0	4	0	**4**	-	2	1	0	0	**3**	-	19
% Single-Unit Trucks	0.5%	0.6%	0%	0%	**0.5%**	-	0%	1.6%	0%	0%	**1.4%**	-	0%	0%	1.4%	0%	**1.1%**	-	1.3%	1.8%	0%	0%	**1.3%**	-	0.9%
Articulated Trucks	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0.2%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.4%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	0	1	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Buses	0%	0%	0.6%	0%	**0.1%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	75.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	25.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Aliante Pkwy/Elkhorn Rd - TMC
Thu Apr 29, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831281, Location: 36.292623, -115.183768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Commerce St/Deer Springs Way - TMC

Thu Apr 29, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831282, Location: 36.283748, -115.149878

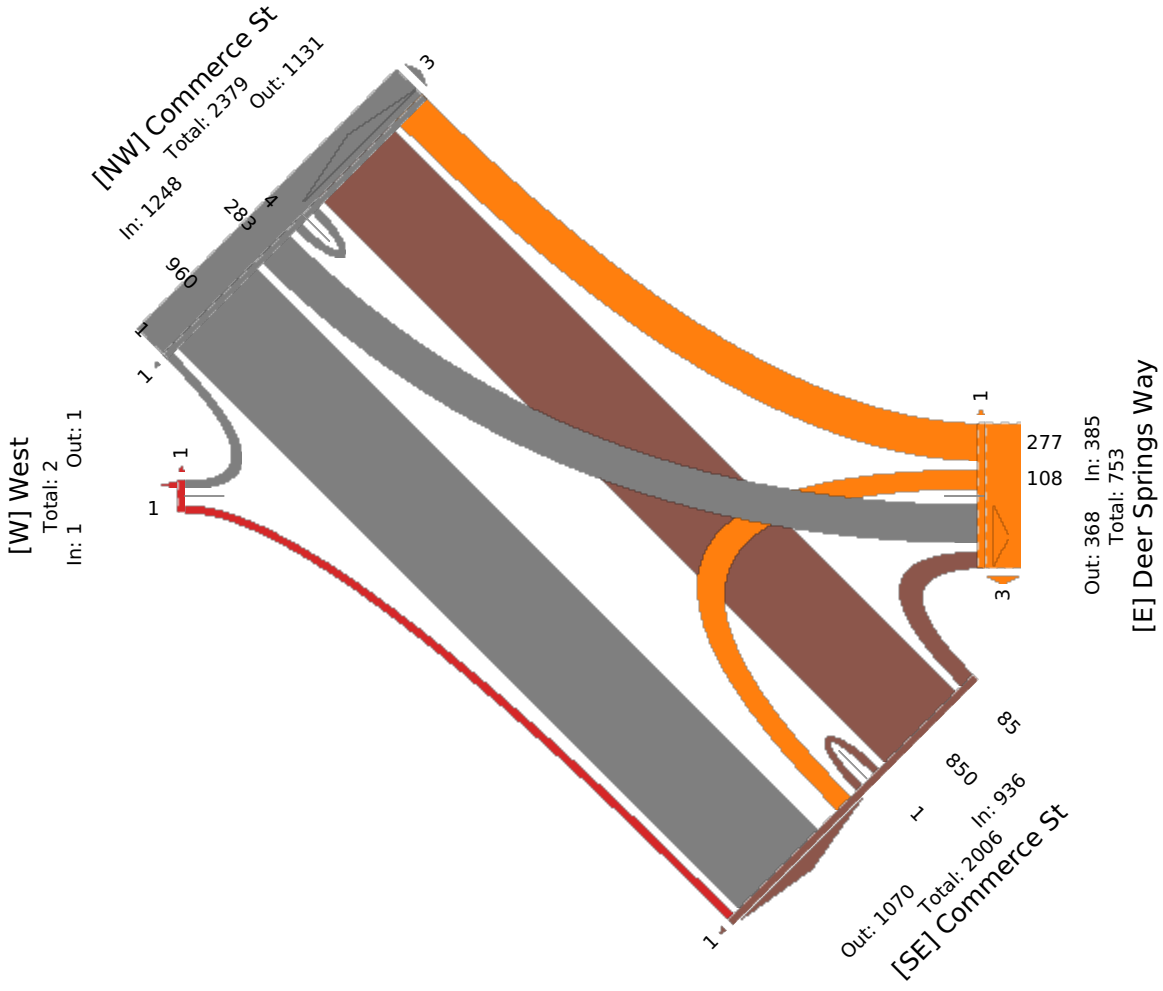
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	West						Deer Springs Way						Commerce St						Commerce St						
Direction	Eastbound						Westbound						Northwestbound						Southeastbound						
Time	HL	T	BR	U	**App**	Ped*	HL	T	BR	U	**App**	Ped*	BL	T	HR	U	**App**	Ped*	BL	T	HR	U	**App**	Ped*	**Int**
2021-04-29 7:00AM	0	0	0	0	**0**	0	10	0	16	0	**26**	0	0	47	2	0	**49**	0	20	38	0	0	**58**	0	**133**
7:15AM	0	0	0	0	**0**	0	3	0	9	0	**12**	1	0	63	5	0	**68**	0	9	53	0	0	**62**	1	**142**
7:30AM	0	0	0	0	**0**	1	4	0	12	0	**16**	2	0	59	12	0	**71**	0	26	50	0	0	**76**	2	**163**
7:45AM	0	0	0	0	**0**	0	6	0	27	0	**33**	1	0	79	8	0	**87**	0	25	50	0	0	**75**	1	**195**
Hourly Total	0	0	0	0	**0**	1	23	0	64	0	**87**	4	0	248	27	0	**275**	0	80	191	0	0	**271**	4	**633**
8:00AM	0	0	0	0	**0**	0	1	0	15	0	**16**	0	0	47	3	0	**50**	0	16	45	0	0	**61**	0	**127**
8:15AM	0	0	0	0	**0**	0	1	0	10	0	**11**	0	0	49	4	0	**53**	0	10	44	0	0	**54**	0	**118**
8:30AM	0	0	0	0	**0**	0	2	0	13	0	**15**	0	0	52	2	0	**54**	0	8	35	0	0	**43**	0	**112**
8:45AM	0	0	0	0	**0**	0	6	0	12	0	**18**	0	0	56	1	0	**57**	0	9	45	0	0	**54**	0	**129**
Hourly Total	0	0	0	0	**0**	0	10	0	50	0	**60**	0	0	204	10	0	**214**	0	43	169	0	0	**212**	0	**486**
4:00PM	0	0	0	0	**0**	0	4	0	21	0	**25**	0	0	46	3	0	**49**	0	14	83	0	0	**97**	0	**171**
4:15PM	0	0	0	0	**0**	0	8	0	23	0	**31**	0	0	49	4	0	**53**	0	26	83	0	2	**111**	0	**195**
4:30PM	0	0	0	0	**0**	0	11	0	23	0	**34**	0	0	46	7	0	**53**	0	27	86	0	2	**115**	0	**202**
4:45PM	0	0	0	0	**0**	0	10	0	19	0	**29**	0	0	54	10	1	**65**	1	15	75	0	0	**90**	0	**184**
Hourly Total	0	0	0	0	**0**	0	33	0	86	0	**119**	0	0	195	24	1	**220**	1	82	327	0	4	**413**	0	**752**
5:00PM	0	0	0	0	**0**	0	10	0	18	0	**28**	0	0	44	6	0	**50**	0	19	78	0	0	**97**	0	**175**
5:15PM	0	0	1	0	**1**	0	14	0	16	0	**30**	0	0	50	3	0	**53**	0	18	62	1	0	**81**	0	**165**
5:30PM	0	0	0	0	**0**	0	7	0	21	0	**28**	0	0	58	7	0	**65**	0	20	64	0	0	**84**	0	**177**
5:45PM	0	0	0	0	**0**	0	11	0	22	0	**33**	0	0	51	8	0	**59**	0	21	69	0	0	**90**	0	**182**
Hourly Total	0	0	1	0	**1**	0	42	0	77	0	**119**	0	0	203	24	0	**227**	0	78	273	1	0	**352**	0	**699**
Total	0	0	1	0	**1**	1	108	0	277	0	**385**	4	0	850	85	1	**936**	1	283	960	1	4	**1248**	4	**2570**
% Approach	0%	0%	100%	0%	**-**	-	28.1%	0%	71.9%	0%	**-**	-	0%	90.8%	9.1%	0.1%	**-**	-	22.7%	76.9%	0.1%	0.3%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	4.2%	0%	10.8%	0%	**15.0%**	-	0%	33.1%	3.3%	0%	**36.4%**	-	11.0%	37.4%	0%	0.2%	**48.6%**	-	-
Lights	0	0	1	0	**1**	-	103	0	267	0	**370**	-	0	834	83	1	**918**	-	279	937	1	4	**1221**	-	2510
% Lights	0%	0%	100%	0%	**100%**	-	95.4%	0%	96.4%	0%	**96.1%**	-	0%	98.1%	97.6%	100%	**98.1%**	-	98.6%	97.6%	100%	100%	**97.8%**	-	97.7%
Single-Unit Trucks	0	0	0	0	**0**	-	0	0	3	0	**3**	-	0	8	0	0	**8**	-	1	9	0	0	**10**	-	21
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	1.1%	0%	**0.8%**	-	0%	0.9%	0%	0%	**0.9%**	-	0.4%	0.9%	0%	0%	**0.8%**	-	0.8%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	4	0	0	**4**	-	6
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0.4%	0%	0%	**0.3%**	-	0.2%
Buses	0	0	0	0	**0**	-	5	0	4	0	**9**	-	0	6	1	0	**7**	-	0	8	0	0	**8**	-	24
% Buses	0%	0%	0%	0%	**0%**	-	4.6%	0%	1.4%	0%	**2.3%**	-	0%	0.7%	1.2%	0%	**0.7%**	-	0%	0.8%	0%	0%	**0.6%**	-	0.9%
Bicycles on Road	0	0	0	0	**0**	-	0	0	3	0	**3**	-	0	0	1	0	**1**	-	3	2	0	0	**5**	-	9
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	1.1%	0%	**0.8%**	-	0%	0%	1.2%	0%	**0.1%**	-	1.1%	0.2%	0%	0%	**0.4%**	-	0.4%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	25.0%	-	-	-	-	-	100%	-	-	-	-	-	25.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	75.0%	-	-	-	-	-	0%	-	-	-	-	-	75.0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, T: Thru, U: U-Turn

Commerce St/Deer Springs Way - TMC
Thu Apr 29, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831282, Location: 36.283748, -115.149878

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US


[NW] Commerce St
Total: 2379
In: 1248
Out: 1131
[W] West
Total: 2
In: 1
Out: 1
[E] Deer Springs Way
Total: 753
In: 385
Out: 368
[SE] Commerce St
Total: 2006
In: 936
Out: 1070
277
108
3
1
1
1

Commerce St/Deer Springs Way - TMC

Thu Apr 29, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831282, Location: 36.283748, -115.149878

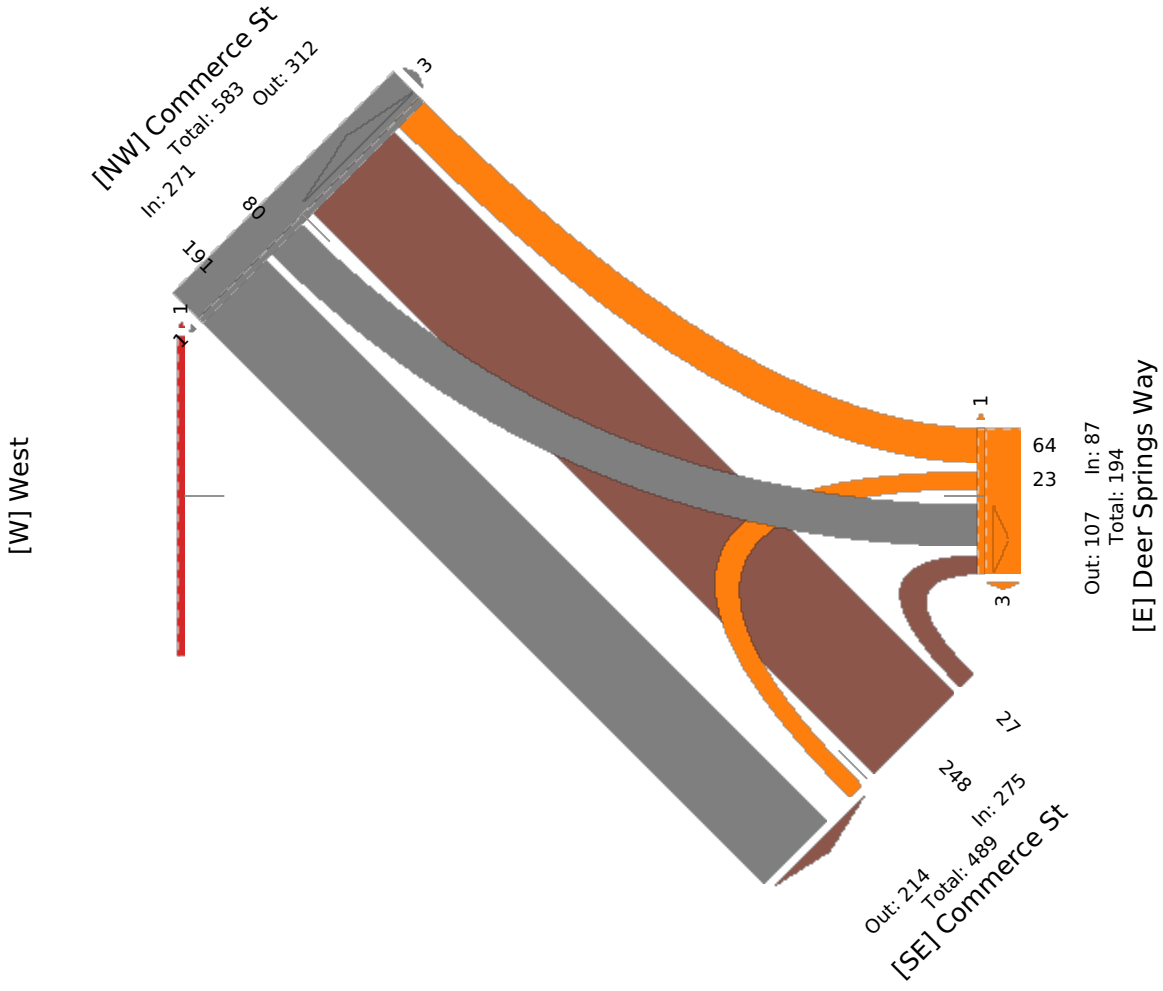
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	West						Deer Springs Way						Commerce St						Commerce St						
Direction	Eastbound						Westbound						Northwestbound						Southeastbound						
Time	HL	T	BR	U	**App**	Ped*	HL	T	BR	U	**App**	Ped*	BL	T	HR	U	**App**	Ped*	BL	T	HR	U	**App**	Ped*	**Int**
2021-04-29 7:00AM	0	0	0	0	**0**	0	10	0	16	0	**26**	0	0	47	2	0	**49**	0	20	38	0	0	**58**	0	**133**
7:15AM	0	0	0	0	**0**	0	3	0	9	0	**12**	1	0	63	5	0	**68**	0	9	53	0	0	**62**	1	**142**
7:30AM	0	0	0	0	**0**	1	4	0	12	0	**16**	2	0	59	12	0	**71**	0	26	50	0	0	**76**	2	**163**
7:45AM	0	0	0	0	**0**	0	6	0	27	0	**33**	1	0	79	8	0	**87**	0	25	50	0	0	**75**	1	**195**
Total	0	0	0	0	**0**	1	23	0	64	0	**87**	4	0	248	27	0	**275**	0	80	191	0	0	**271**	4	**633**
% Approach	0%	0%	0%	0%	**-**	-	26.4%	0%	73.6%	0%	**-**	-	0%	90.2%	9.8%	0%	**-**	-	29.5%	70.5%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	3.6%	0%	10.1%	0%	**13.7%**	-	0%	39.2%	4.3%	0%	**43.4%**	-	12.6%	30.2%	0%	0%	**42.8%**	-	-
PHF	-	-	-	-	**-**	-	0.575	-	0.583	-	**0.652**	-	-	0.785	0.591	-	**0.787**	-	0.770	0.901	-	-	**0.893**	-	0.805
Lights	0	0	0	0	**0**	-	19	0	59	0	**78**	-	0	241	25	0	**266**	-	77	183	0	0	**260**	-	604
% Lights	0%	0%	0%	0%	**-**	-	82.6%	0%	92.2%	0%	**89.7%**	-	0%	97.2%	92.6%	0%	**96.7%**	-	96.3%	95.8%	0%	0%	**95.9%**	-	95.4%
Single-Unit Trucks	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	3	0	0	**3**	-	0	3	0	0	**3**	-	7
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	0%	1.6%	0%	**1.1%**	-	0%	1.2%	0%	0%	**1.1%**	-	0%	1.6%	0%	0%	**1.1%**	-	1.1%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	3
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.4%**	-	0%	1.0%	0%	0%	**0.7%**	-	0.5%
Buses	0	0	0	0	**0**	-	4	0	3	0	**7**	-	0	3	1	0	**4**	-	0	3	0	0	**3**	-	14
% Buses	0%	0%	0%	0%	**-**	-	17.4%	0%	4.7%	0%	**8.0%**	-	0%	1.2%	3.7%	0%	**1.5%**	-	0%	1.6%	0%	0%	**1.1%**	-	2.2%
Bicycles on Road	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	1	0	**1**	-	3	0	0	0	**3**	-	5
% Bicycles on Road	0%	0%	0%	0%	**-**	-	0%	0%	1.6%	0%	**1.1%**	-	0%	0%	3.7%	0%	**0.4%**	-	3.8%	0%	0%	0%	**1.1%**	-	0.8%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	25.0%	-	-	-	-	-	-	-	-	-	-	-	25.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	75.0%	-	-	-	-	-	-	-	-	-	-	-	75.0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, T: Thru, U: U-Turn

Commerce St/Deer Springs Way - TMC
Thu Apr 29, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831282, Location: 36.283748, -115.149878

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Commerce St/Deer Springs Way - TMC

Thu Apr 29, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831282, Location: 36.283748, -115.149878

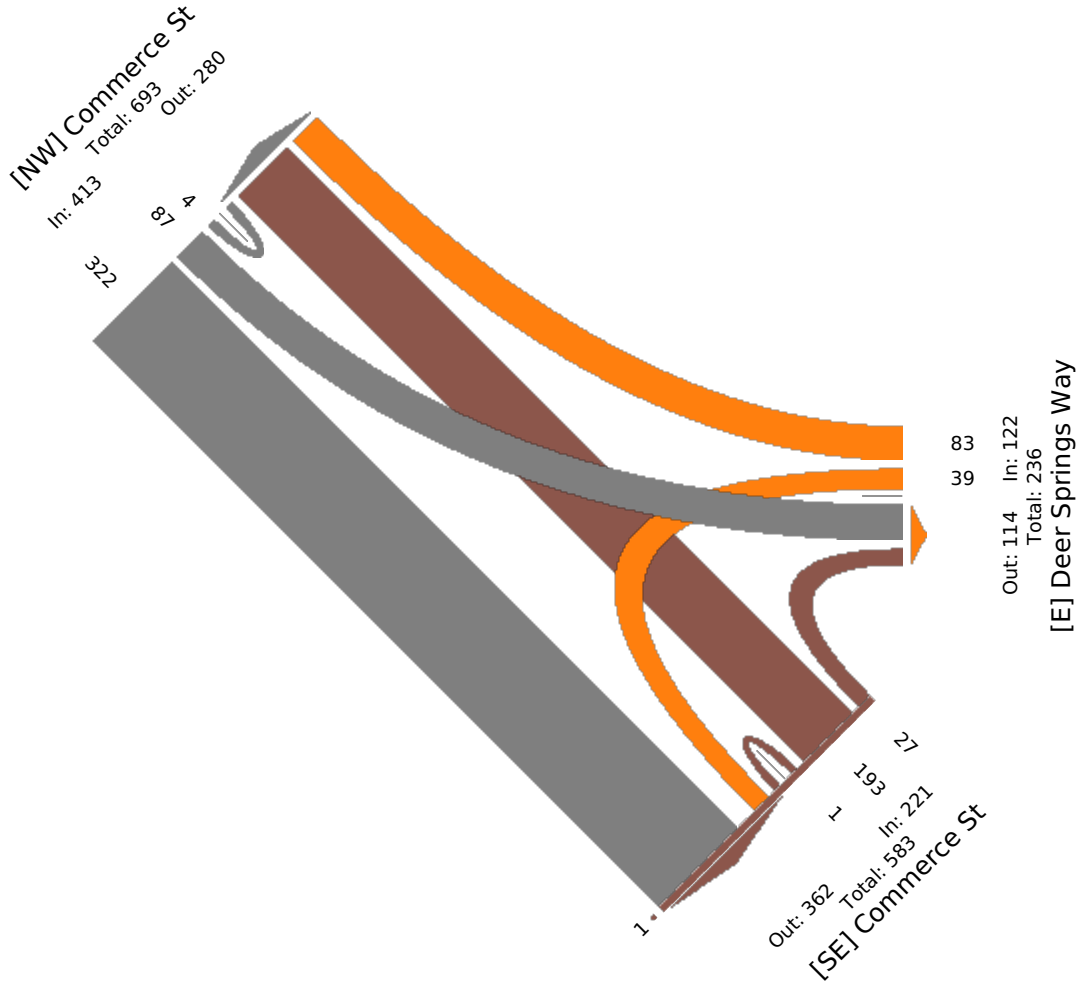
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	West						Deer Springs Way						Commerce St						Commerce St						
Direction	Eastbound						Westbound						Northwestbound						Southeastbound						
Time	HL	T	BR	U	**App**	Ped*	HL	T	BR	U	**App**	Ped*	BL	T	HR	U	**App**	Ped*	BL	T	HR	U	**App**	Ped*	**Int**
2021-04-29 4:15PM	0	0	0	0	**0**	0	8	0	23	0	**31**	0	0	49	4	0	**53**	0	26	83	0	2	**111**	0	**195**
4:30PM	0	0	0	0	**0**	0	11	0	23	0	**34**	0	0	46	7	0	**53**	0	27	86	0	2	**115**	0	**202**
4:45PM	0	0	0	0	**0**	0	10	0	19	0	**29**	0	0	54	10	1	**65**	1	15	75	0	0	**90**	0	**184**
5:00PM	0	0	0	0	**0**	0	10	0	18	0	**28**	0	0	44	6	0	**50**	0	19	78	0	0	**97**	0	**175**
Total	0	0	0	0	**0**	0	39	0	83	0	**122**	0	0	193	27	1	**221**	1	87	322	0	4	**413**	0	**756**
% Approach	0%	0%	0%	0%	**-**	-	32.0%	0%	68.0%	0%	**-**	-	0%	87.3%	12.2%	0.5%	**-**	-	21.1%	78.0%	0%	1.0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	5.2%	0%	11.0%	0%	**16.1%**	-	0%	25.5%	3.6%	0.1%	**29.2%**	-	11.5%	42.6%	0%	0.5%	**54.6%**	-	-
PHF	-	-	-	-	**-**	-	0.886	-	0.902	-	**0.897**	-	-	0.894	0.675	0.250	**0.850**	-	0.806	0.936	-	0.500	**0.898**	-	0.936
Lights	0	0	0	0	**0**	-	39	0	83	0	**122**	-	0	193	27	1	**221**	-	87	318	0	4	**409**	-	752
% Lights	0%	0%	0%	0%	**-**	-	100%	0%	100%	0%	**100%**	-	0%	100%	100%	100%	**100%**	-	100%	98.8%	0%	100%	**99.0%**	-	99.5%
Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	2
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.6%	0%	0%	**0.5%**	-	0.3%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0.1%
Buses	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Buses	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0.1%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, T: Thru, U: U-Turn

Commerce St/Deer Springs Way - TMC
Thu Apr 29, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831282, Location: 36.283748, -115.149878

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Deer Springs Way/N 5th St - TMC

Thu Apr 29, 2021
Full Length (7 AM-9 AM, 4 PM-5 PM, 5 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831283, Location: 36.283672, -115.134911

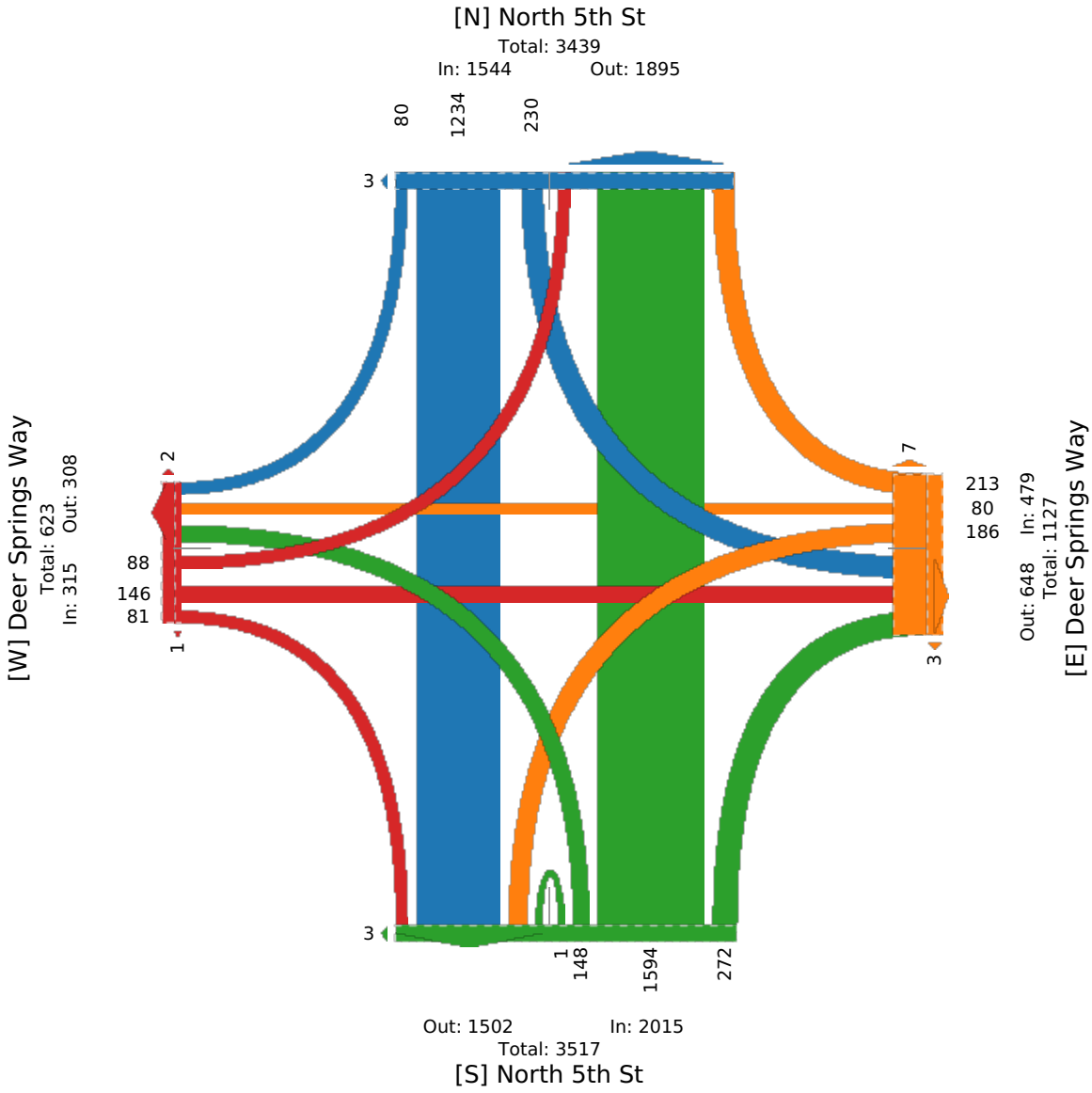
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	North 5th St						North 5th St						Deer Springs Way						Deer Springs Way						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-04-29 7:00AM	14	92	4	0	**110**	1	5	51	9	0	**65**	1	9	4	9	0	**22**	1	3	5	5	0	**13**	1	**210**
7:15AM	5	94	6	0	**105**	0	9	62	0	0	**71**	0	8	1	6	0	**15**	0	5	3	9	0	**17**	1	**208**
7:30AM	6	102	13	0	**121**	0	5	48	6	0	**59**	0	5	6	6	0	**17**	0	5	3	14	0	**22**	1	**219**
7:45AM	8	99	9	0	**116**	0	10	48	3	0	**61**	1	7	8	3	0	**18**	0	2	4	10	0	**16**	1	**211**
Hourly Total	33	387	32	0	**452**	1	29	209	18	0	**256**	2	29	19	24	0	**72**	1	15	15	38	0	**68**	4	**848**
8:00AM	5	82	8	1	**96**	0	7	56	4	0	**67**	0	4	8	5	0	**17**	0	6	4	8	0	**18**	0	**198**
8:15AM	7	81	12	0	**100**	0	6	43	5	0	**54**	0	6	5	4	0	**15**	0	3	3	7	0	**13**	2	**182**
8:30AM	7	100	16	0	**123**	0	10	47	4	0	**61**	0	3	6	6	0	**15**	0	9	2	9	0	**20**	0	**219**
8:45AM	5	69	8	0	**82**	0	10	50	5	0	**65**	0	4	4	5	0	**13**	0	9	0	12	0	**21**	0	**181**
Hourly Total	24	332	44	1	**401**	0	33	196	18	0	**247**	0	17	23	20	0	**60**	0	27	9	36	0	**72**	2	**780**
4:00PM	12	112	20	0	**144**	0	18	104	9	0	**131**	0	4	12	6	0	**22**	0	14	3	21	0	**38**	0	**335**
4:15PM	12	113	26	0	**151**	0	19	87	9	0	**115**	0	8	13	5	0	**26**	1	17	7	16	0	**40**	1	**332**
4:30PM	12	97	21	0	**130**	0	26	115	4	0	**145**	0	3	17	4	0	**24**	0	20	7	19	0	**46**	0	**345**
4:45PM	7	122	31	0	**160**	2	21	110	4	0	**135**	0	5	11	3	0	**19**	1	24	9	17	0	**50**	1	**364**
Hourly Total	43	444	98	0	**585**	2	84	416	26	0	**526**	0	20	53	18	0	**91**	2	75	26	73	0	**174**	2	**1376**
5:00PM	13	116	24	0	**153**	0	18	105	5	0	**128**	1	6	8	7	0	**21**	0	17	4	23	0	**44**	1	**346**
5:15PM	9	96	20	0	**125**	0	15	120	4	0	**139**	0	5	6	5	0	**16**	0	13	8	11	0	**32**	0	**312**
5:30PM	16	119	22	0	**157**	0	27	97	3	0	**127**	0	4	17	5	0	**26**	0	21	7	16	0	**44**	0	**354**
5:45PM	10	100	32	0	**142**	0	24	91	6	0	**121**	0	7	20	2	0	**29**	0	18	11	16	0	**45**	1	**337**
Hourly Total	48	431	98	0	**577**	0	84	413	18	0	**515**	1	22	51	19	0	**92**	0	69	30	66	0	**165**	2	**1349**
Total	148	1594	272	1	**2015**	3	230	1234	80	0	**1544**	3	88	146	81	0	**315**	3	186	80	213	0	**479**	10	**4353**
% Approach	7.3%	79.1%	13.5%	0%	**-**	-	14.9%	79.9%	5.2%	0%	**-**	-	27.9%	46.3%	25.7%	0%	**-**	-	38.8%	16.7%	44.5%	0%	**-**	-	-
% Total	3.4%	36.6%	6.2%	0%	**46.3%**	-	5.3%	28.3%	1.8%	0%	**35.5%**	-	2.0%	3.4%	1.9%	0%	**7.2%**	-	4.3%	1.8%	4.9%	0%	**11.0%**	-	-
Lights	144	1549	254	1	**1948**	-	227	1179	73	0	**1479**	-	84	143	79	0	**306**	-	184	78	207	0	**469**	-	4202
% Lights	97.3%	97.2%	93.4%	100%	**96.7%**	-	98.7%	95.5%	91.3%	0%	**95.8%**	-	95.5%	97.9%	97.5%	0%	**97.1%**	-	98.9%	97.5%	97.2%	0%	**97.9%**	-	96.5%
Single-Unit Trucks	2	20	8	0	**30**	-	2	23	6	0	**31**	-	4	2	0	0	**6**	-	2	0	2	0	**4**	-	71
% Single-Unit Trucks	1.4%	1.3%	2.9%	0%	**1.5%**	-	0.9%	1.9%	7.5%	0%	**2.0%**	-	4.5%	1.4%	0%	0%	**1.9%**	-	1.1%	0%	0.9%	0%	**0.8%**	-	1.6%
Articulated Trucks	0	23	1	0	**24**	-	0	18	0	0	**18**	-	0	0	0	0	**0**	-	0	0	3	0	**3**	-	45
% Articulated Trucks	0%	1.4%	0.4%	0%	**1.2%**	-	0%	1.5%	0%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	1.4%	0%	**0.6%**	-	1.0%
Buses	2	2	8	0	**12**	-	1	14	1	0	**16**	-	0	0	2	0	**2**	-	0	1	1	0	**2**	-	32
% Buses	1.4%	0.1%	2.9%	0%	**0.6%**	-	0.4%	1.1%	1.3%	0%	**1.0%**	-	0%	0%	2.5%	0%	**0.6%**	-	0%	1.3%	0.5%	0%	**0.4%**	-	0.7%
Bicycles on Road	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	3
% Bicycles on Road	0%	0%	0.4%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.7%	0%	0%	**0.3%**	-	0%	1.3%	0%	0%	**0.2%**	-	0.1%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	10	
% Pedestrians	-	-	-	-	-	66.7%	-	-	-	-	-	66.7%	-	-	-	-	-	33.3%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	33.3%	-	-	-	-	-	33.3%	-	-	-	-	-	66.7%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Deer Springs Way/N 5th St - TMC
Thu Apr 29, 2021
Full Length (7 AM-9 AM, 4 PM-5 PM, 5 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831283, Location: 36.283672, -115.134911

Provided by: Kimley-Horn and Associates, Inc.
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Deer Springs Way/N 5th St - TMC

Thu Apr 29, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831283, Location: 36.283672, -115.134911

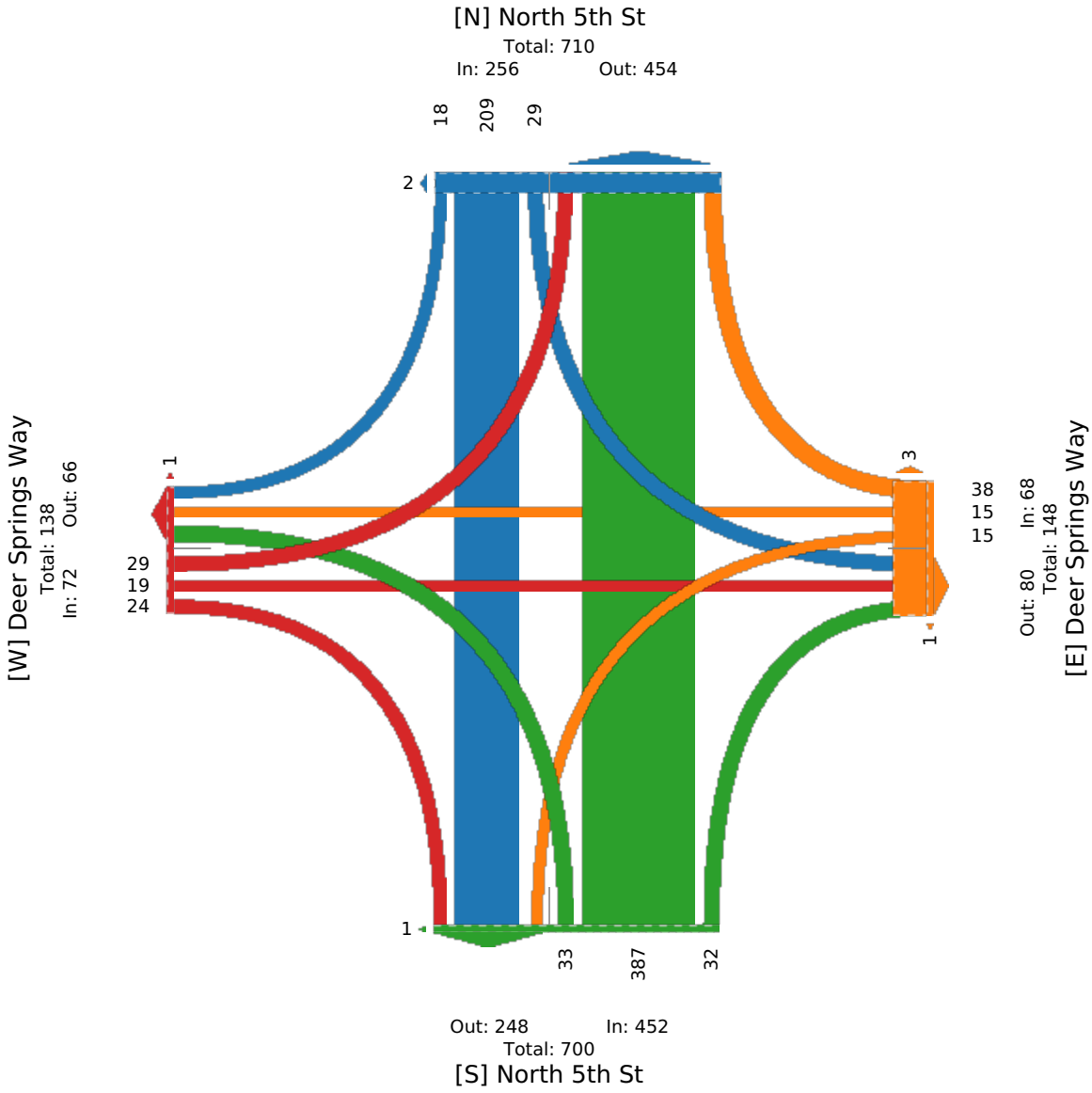
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	North 5th St						North 5th St						Deer Springs Way						Deer Springs Way						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-29 7:00AM	14	92	4	0	**110**	1	5	51	9	0	**65**	1	9	4	9	0	**22**	1	3	5	5	0	**13**	1	**210**
7:15AM	5	94	6	0	**105**	0	9	62	0	0	**71**	0	8	1	6	0	**15**	0	5	3	9	0	**17**	1	**208**
7:30AM	6	102	13	0	**121**	0	5	48	6	0	**59**	0	5	6	6	0	**17**	0	5	3	14	0	**22**	1	**219**
7:45AM	8	99	9	0	**116**	0	10	48	3	0	**61**	1	7	8	3	0	**18**	0	2	4	10	0	**16**	1	**211**
Total	33	387	32	0	**452**	1	29	209	18	0	**256**	2	29	19	24	0	**72**	1	15	15	38	0	**68**	4	**848**
% Approach	7.3%	85.6%	7.1%	0%	**-**	-	11.3%	81.6%	7.0%	0%	**-**	-	40.3%	26.4%	33.3%	0%	**-**	-	22.1%	22.1%	55.9%	0%	**-**	-	-
% Total	3.9%	45.6%	3.8%	0%	**53.3%**	-	3.4%	24.6%	2.1%	0%	**30.2%**	-	3.4%	2.2%	2.8%	0%	**8.5%**	-	1.8%	1.8%	4.5%	0%	**8.0%**	-	-
PHF	0.589	0.949	0.596	-	**0.932**	-	0.725	0.843	0.500	-	**0.901**	-	0.806	0.594	0.667	-	**0.818**	-	0.750	0.750	0.679	-	**0.773**	-	0.967
Lights	31	368	26	0	**425**	-	28	189	15	0	**232**	-	27	19	22	0	**68**	-	14	14	35	0	**63**	-	788
% Lights	93.9%	95.1%	81.3%	0%	**94.0%**	-	96.6%	90.4%	83.3%	0%	**90.6%**	-	93.1%	100%	91.7%	0%	**94.4%**	-	93.3%	93.3%	92.1%	0%	**92.6%**	-	92.9%
Single-Unit Trucks	0	7	2	0	**9**	-	0	6	3	0	**9**	-	2	0	0	0	**2**	-	1	0	2	0	**3**	-	23
% Single-Unit Trucks	0%	1.8%	6.3%	0%	**2.0%**	-	0%	2.9%	16.7%	0%	**3.5%**	-	6.9%	0%	0%	0%	**2.8%**	-	6.7%	0%	5.3%	0%	**4.4%**	-	2.7%
Articulated Trucks	0	11	1	0	**12**	-	0	8	0	0	**8**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	21
% Articulated Trucks	0%	2.8%	3.1%	0%	**2.7%**	-	0%	3.8%	0%	0%	**3.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	2.6%	0%	**1.5%**	-	2.5%
Buses	2	1	2	0	**5**	-	1	6	0	0	**7**	-	0	0	2	0	**2**	-	0	1	0	0	**1**	-	15
% Buses	6.1%	0.3%	6.3%	0%	**1.1%**	-	3.4%	2.9%	0%	0%	**2.7%**	-	0%	0%	8.3%	0%	**2.8%**	-	0%	6.7%	0%	0%	**1.5%**	-	1.8%
Bicycles on Road	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	3.1%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Deer Springs Way/N 5th St - TMC
Thu Apr 29, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831283, Location: 36.283672, -115.134911

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Deer Springs Way/N 5th St - TMC

Thu Apr 29, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831283, Location: 36.283672, -115.134911

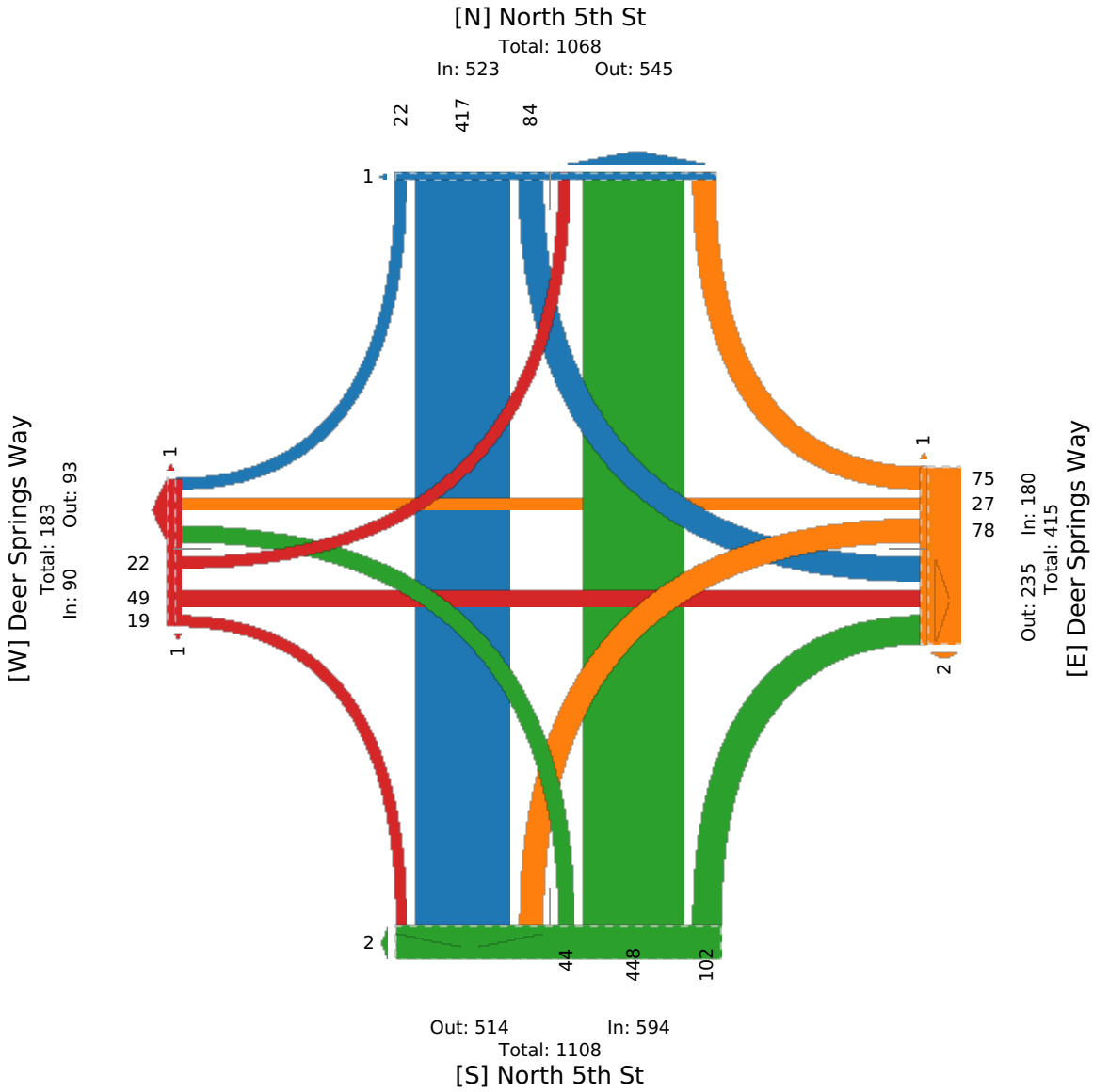
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	North 5th St						North 5th St						Deer Springs Way						Deer Springs Way						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-29 4:15PM	12	113	26	0	**151**	0	19	87	9	0	**115**	0	8	13	5	0	**26**	1	17	7	16	0	**40**	1	**332**
4:30PM	12	97	21	0	**130**	0	26	115	4	0	**145**	0	3	17	4	0	**24**	0	20	7	19	0	**46**	0	**345**
4:45PM	7	122	31	0	**160**	2	21	110	4	0	**135**	0	5	11	3	0	**19**	1	24	9	17	0	**50**	1	**364**
5:00PM	13	116	24	0	**153**	0	18	105	5	0	**128**	1	6	8	7	0	**21**	0	17	4	23	0	**44**	1	**346**
Total	44	448	102	0	**594**	2	84	417	22	0	**523**	1	22	49	19	0	**90**	2	78	27	75	0	**180**	3	**1387**
% Approach	7.4%	75.4%	17.2%	0%	**-**	-	16.1%	79.7%	4.2%	0%	**-**	-	24.4%	54.4%	21.1%	0%	**-**	-	43.3%	15.0%	41.7%	0%	**-**	-	-
% Total	3.2%	32.3%	7.4%	0%	**42.8%**	-	6.1%	30.1%	1.6%	0%	**37.7%**	-	1.6%	3.5%	1.4%	0%	**6.5%**	-	5.6%	1.9%	5.4%	0%	**13.0%**	-	-
PHF	0.846	0.918	0.823	-	**0.928**	-	0.808	0.907	0.611	-	**0.902**	-	0.688	0.721	0.679	-	**0.865**	-	0.813	0.750	0.815	-	**0.900**	-	0.953
Lights	44	448	100	0	**592**	-	83	408	22	0	**513**	-	22	49	19	0	**90**	-	78	27	75	0	**180**	-	1375
% Lights	100%	100%	98.0%	0%	**99.7%**	-	98.8%	97.8%	100%	0%	**98.1%**	-	100%	100%	100%	0%	**100%**	-	100%	100%	100%	0%	**100%**	-	99.1%
Single-Unit Trucks	0	0	0	0	**0**	-	1	5	0	0	**6**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	6
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	1.2%	1.2%	0%	0%	**1.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Articulated Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	0	2	0	**2**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Buses	0%	0%	2.0%	0%	**0.3%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Deer Springs Way/N 5th St - TMC
Thu Apr 29, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831283, Location: 36.283672, -115.134911

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St/Ann Rd - TMC

Wed Apr 28, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831280, Location: 36.261594, -115.179946

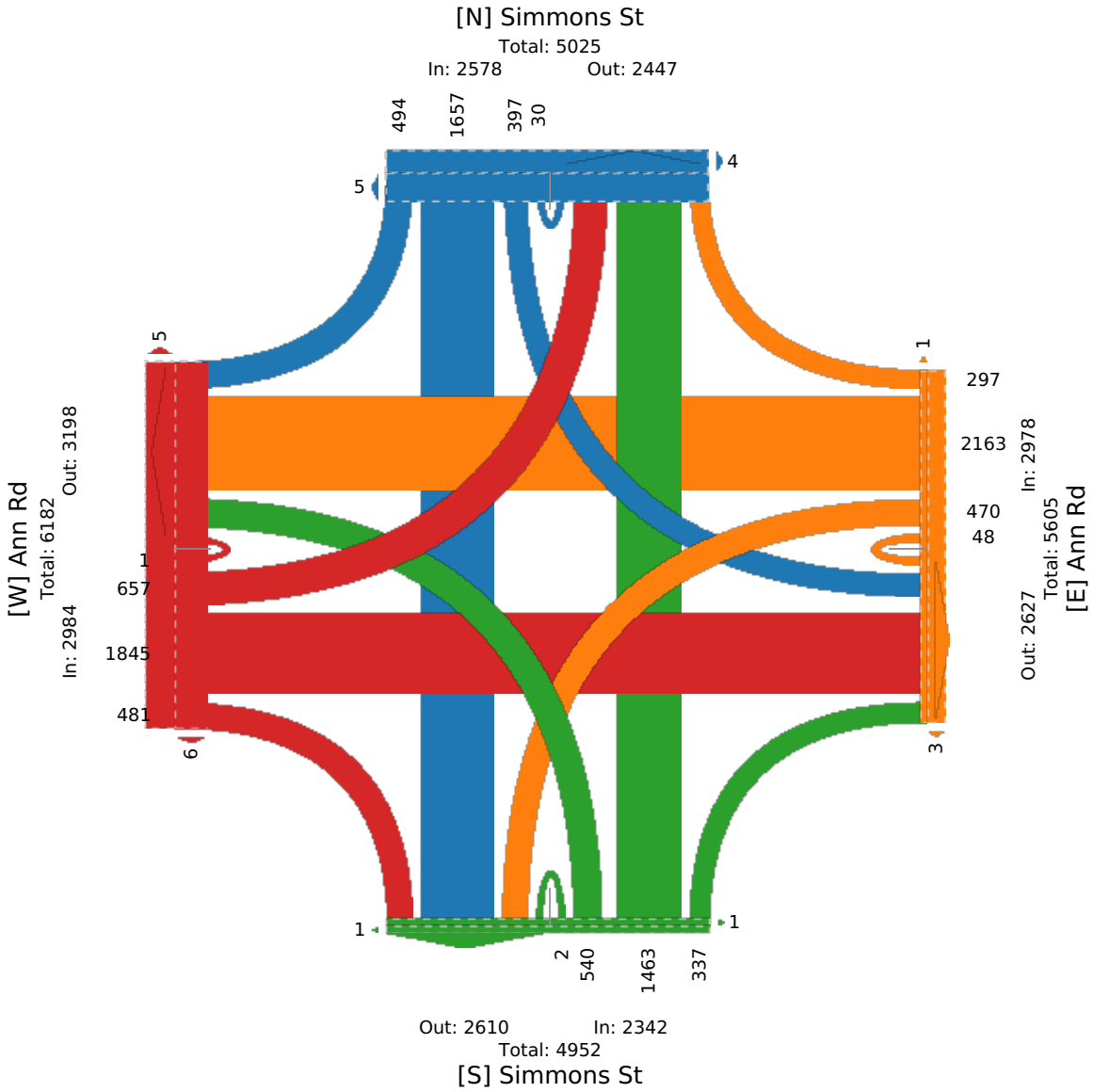
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Simmons St						Simmons St						Ann Rd						Ann Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-28 7:00AM	12	43	10	0	**65**	0	17	99	18	0	**134**	0	23	61	29	0	**113**	0	16	104	8	2	**130**	0	**442**
7:15AM	33	48	15	0	**96**	0	19	90	30	0	**139**	0	12	77	28	1	**118**	0	20	125	15	3	**163**	0	**516**
7:30AM	24	61	9	0	**94**	0	16	90	23	1	**130**	0	28	62	17	0	**107**	0	23	154	10	1	**188**	0	**519**
7:45AM	43	66	20	0	**129**	0	17	103	33	0	**153**	0	25	80	22	0	**127**	0	27	127	10	0	**164**	0	**573**
Hourly Total	112	218	54	0	**384**	0	69	382	104	1	**556**	0	88	280	96	1	**465**	0	86	510	43	6	**645**	0	**2050**
8:00AM	25	65	11	0	**101**	0	17	97	25	3	**142**	0	36	65	32	0	**133**	1	28	128	13	1	**170**	0	**546**
8:15AM	29	63	17	0	**109**	0	24	95	28	2	**149**	0	15	56	25	0	**96**	0	24	102	16	0	**142**	1	**496**
8:30AM	27	80	12	0	**119**	0	21	77	23	3	**124**	2	25	69	22	0	**116**	2	28	134	20	0	**182**	0	**541**
8:45AM	30	73	27	0	**130**	1	15	103	23	3	**144**	2	35	71	27	0	**133**	1	38	143	14	1	**196**	1	**603**
Hourly Total	111	281	67	0	**459**	1	77	372	99	11	**559**	4	111	261	106	0	**478**	4	118	507	63	2	**690**	2	**2186**
4:00PM	35	121	24	0	**180**	0	34	124	36	0	**194**	0	60	158	43	0	**261**	0	31	131	15	5	**182**	0	**817**
4:15PM	47	124	27	1	**199**	1	27	96	45	3	**171**	1	53	166	27	0	**246**	0	24	158	23	5	**210**	1	**826**
4:30PM	31	119	30	0	**180**	0	22	113	30	3	**168**	1	49	153	36	0	**238**	5	39	149	20	4	**212**	0	**798**
4:45PM	40	141	27	1	**209**	0	30	119	43	0	**192**	0	59	168	24	0	**251**	1	27	135	33	7	**202**	1	**854**
Hourly Total	153	505	108	2	**768**	1	113	452	154	6	**725**	2	221	645	130	0	**996**	6	121	573	91	21	**806**	2	**3295**
5:00PM	44	121	21	0	**186**	0	39	110	25	1	**175**	0	54	161	44	0	**259**	1	36	139	28	5	**208**	0	**828**
5:15PM	42	102	27	0	**171**	0	33	119	31	4	**187**	2	66	179	38	0	**283**	0	31	147	21	5	**204**	0	**845**
5:30PM	36	131	30	0	**197**	0	39	98	37	5	**179**	1	61	158	31	0	**250**	0	35	141	22	6	**204**	0	**830**
5:45PM	42	105	30	0	**177**	0	27	124	44	2	**197**	0	56	161	36	0	**253**	0	43	146	29	3	**221**	0	**848**
Hourly Total	164	459	108	0	**731**	0	138	451	137	12	**738**	3	237	659	149	0	**1045**	1	145	573	100	19	**837**	0	**3351**
Total	540	1463	337	2	**2342**	2	397	1657	494	30	**2578**	9	657	1845	481	1	**2984**	11	470	2163	297	48	**2978**	4	**10882**
% Approach	23.1%	62.5%	14.4%	0.1%	**-**	-	15.4%	64.3%	19.2%	1.2%	**-**	-	22.0%	61.8%	16.1%	0%	**-**	-	15.8%	72.6%	10.0%	1.6%	**-**	-	-
% Total	5.0%	13.4%	3.1%	0%	**21.5%**	-	3.6%	15.2%	4.5%	0.3%	**23.7%**	-	6.0%	17.0%	4.4%	0%	**27.4%**	-	4.3%	19.9%	2.7%	0.4%	**27.4%**	-	-
Lights	529	1426	329	2	**2286**	-	391	1627	486	30	**2534**	-	648	1814	466	1	**2929**	-	454	2121	289	48	**2912**	-	10661
% Lights	98.0%	97.5%	97.6%	100%	**97.6%**	-	98.5%	98.2%	98.4%	100%	**98.3%**	-	98.6%	98.3%	96.9%	100%	**98.2%**	-	96.6%	98.1%	97.3%	100%	**97.8%**	-	98.0%
Single-Unit Trucks	3	13	4	0	**20**	-	6	12	3	0	**21**	-	5	23	7	0	**35**	-	7	29	6	0	**42**	-	118
% Single-Unit Trucks	0.6%	0.9%	1.2%	0%	**0.9%**	-	1.5%	0.7%	0.6%	0%	**0.8%**	-	0.8%	1.2%	1.5%	0%	**1.2%**	-	1.5%	1.3%	2.0%	0%	**1.4%**	-	1.1%
Articulated Trucks	0	3	3	0	**6**	-	0	2	0	0	**2**	-	2	3	2	0	**7**	-	3	5	1	0	**9**	-	24
% Articulated Trucks	0%	0.2%	0.9%	0%	**0.3%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.3%	0.2%	0.4%	0%	**0.2%**	-	0.6%	0.2%	0.3%	0%	**0.3%**	-	0.2%
Buses	8	21	1	0	**30**	-	0	16	4	0	**20**	-	2	5	6	0	**13**	-	6	8	1	0	**15**	-	78
% Buses	1.5%	1.4%	0.3%	0%	**1.3%**	-	0%	1.0%	0.8%	0%	**0.8%**	-	0.3%	0.3%	1.2%	0%	**0.4%**	-	1.3%	0.4%	0.3%	0%	**0.5%**	-	0.7%
Bicycles on Road	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0.2%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	9	-	-	-	-	-	11	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Simmons St/Ann Rd - TMC
Wed Apr 28, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831280, Location: 36.261594, -115.179946

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St/Ann Rd - TMC

Wed Apr 28, 2021
AM Peak (8 AM - 9 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831280, Location: 36.261594, -115.179946

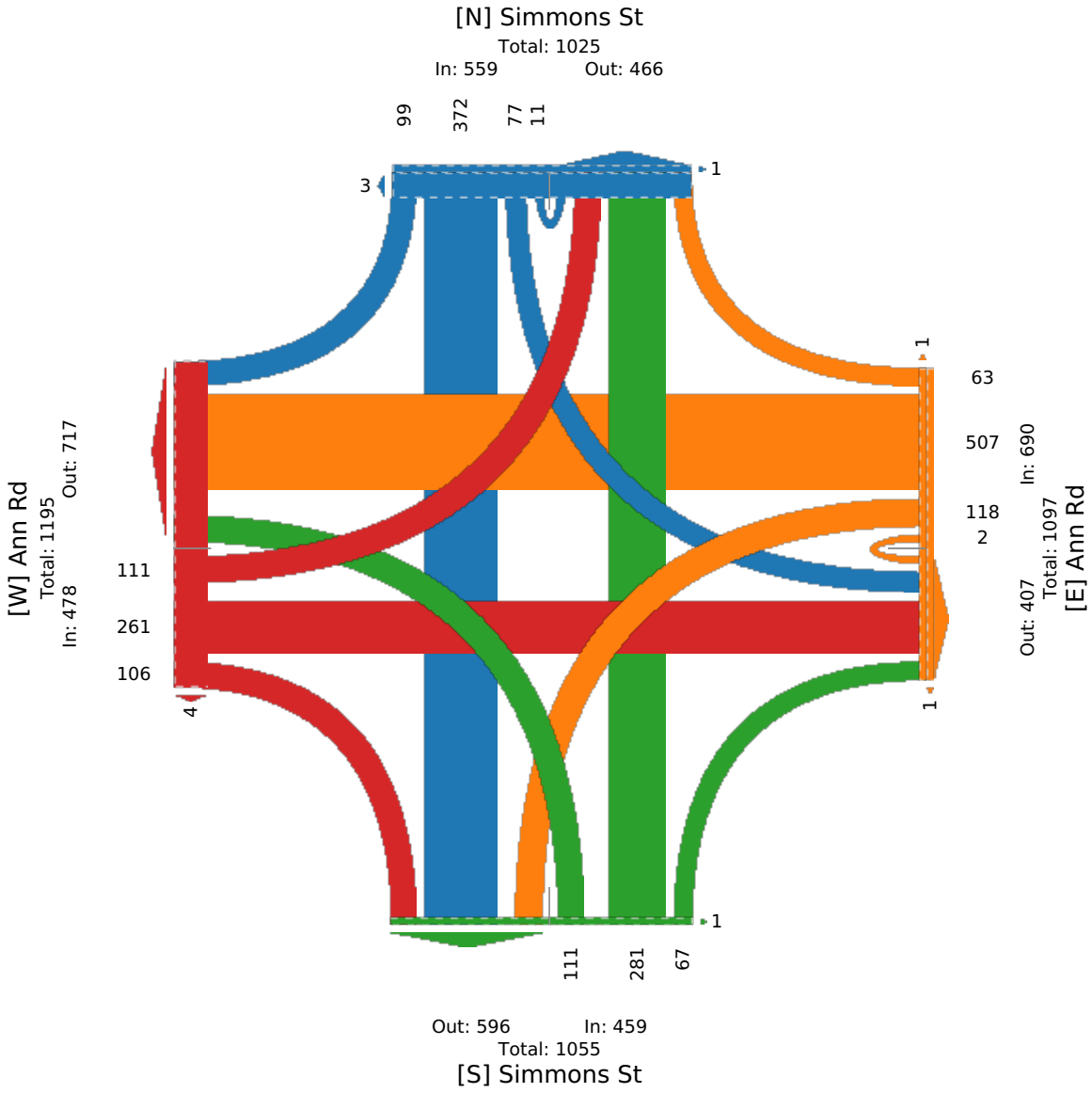
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Simmons St						Simmons St						Ann Rd						Ann Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-28 8:00AM	25	65	11	0	**101**	0	17	97	25	3	**142**	0	36	65	32	0	**133**	1	28	128	13	1	**170**	0	**546**
8:15AM	29	63	17	0	**109**	0	24	95	28	2	**149**	0	15	56	25	0	**96**	0	24	102	16	0	**142**	1	**496**
8:30AM	27	80	12	0	**119**	0	21	77	23	3	**124**	2	25	69	22	0	**116**	2	28	134	20	0	**182**	0	**541**
8:45AM	30	73	27	0	**130**	1	15	103	23	3	**144**	2	35	71	27	0	**133**	1	38	143	14	1	**196**	1	**603**
Total	111	281	67	0	**459**	1	77	372	99	11	**559**	4	111	261	106	0	**478**	4	118	507	63	2	**690**	2	**2186**
% Approach	24.2%	61.2%	14.6%	0%	**-**	-	13.8%	66.5%	17.7%	2.0%	**-**	-	23.2%	54.6%	22.2%	0%	**-**	-	17.1%	73.5%	9.1%	0.3%	**-**	-	-
% Total	5.1%	12.9%	3.1%	0%	**21.0%**	-	3.5%	17.0%	4.5%	0.5%	**25.6%**	-	5.1%	11.9%	4.8%	0%	**21.9%**	-	5.4%	23.2%	2.9%	0.1%	**31.6%**	-	-
PHF	0.925	0.878	0.620	-	**0.883**	-	0.802	0.903	0.884	0.917	**0.938**	-	0.771	0.919	0.828	-	**0.898**	-	0.776	0.886	0.788	0.500	**0.880**	-	0.906
Lights	108	272	62	0	**442**	-	74	365	97	11	**547**	-	107	252	103	0	**462**	-	110	493	61	2	**666**	-	2117
% Lights	97.3%	96.8%	92.5%	0%	**96.3%**	-	96.1%	98.1%	98.0%	100%	**97.9%**	-	96.4%	96.6%	97.2%	0%	**96.7%**	-	93.2%	97.2%	96.8%	100%	**96.5%**	-	96.8%
Single-Unit Trucks	1	2	2	0	**5**	-	3	5	1	0	**9**	-	2	7	3	0	**12**	-	4	8	2	0	**14**	-	40
% Single-Unit Trucks	0.9%	0.7%	3.0%	0%	**1.1%**	-	3.9%	1.3%	1.0%	0%	**1.6%**	-	1.8%	2.7%	2.8%	0%	**2.5%**	-	3.4%	1.6%	3.2%	0%	**2.0%**	-	1.8%
Articulated Trucks	0	1	3	0	**4**	-	0	1	0	0	**1**	-	1	1	0	0	**2**	-	3	2	0	0	**5**	-	12
% Articulated Trucks	0%	0.4%	4.5%	0%	**0.9%**	-	0%	0.3%	0%	0%	**0.2%**	-	0.9%	0.4%	0%	0%	**0.4%**	-	2.5%	0.4%	0%	0%	**0.7%**	-	0.5%
Buses	2	6	0	0	**8**	-	0	1	1	0	**2**	-	1	1	0	0	**2**	-	1	4	0	0	**5**	-	17
% Buses	1.8%	2.1%	0%	0%	**1.7%**	-	0%	0.3%	1.0%	0%	**0.4%**	-	0.9%	0.4%	0%	0%	**0.4%**	-	0.8%	0.8%	0%	0%	**0.7%**	-	0.8%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	4	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Simmons St/Ann Rd - TMC
Wed Apr 28, 2021
AM Peak (8 AM - 9 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831280, Location: 36.261594, -115.179946

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St/Ann Rd - TMC

Wed Apr 28, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831280, Location: 36.261594, -115.179946

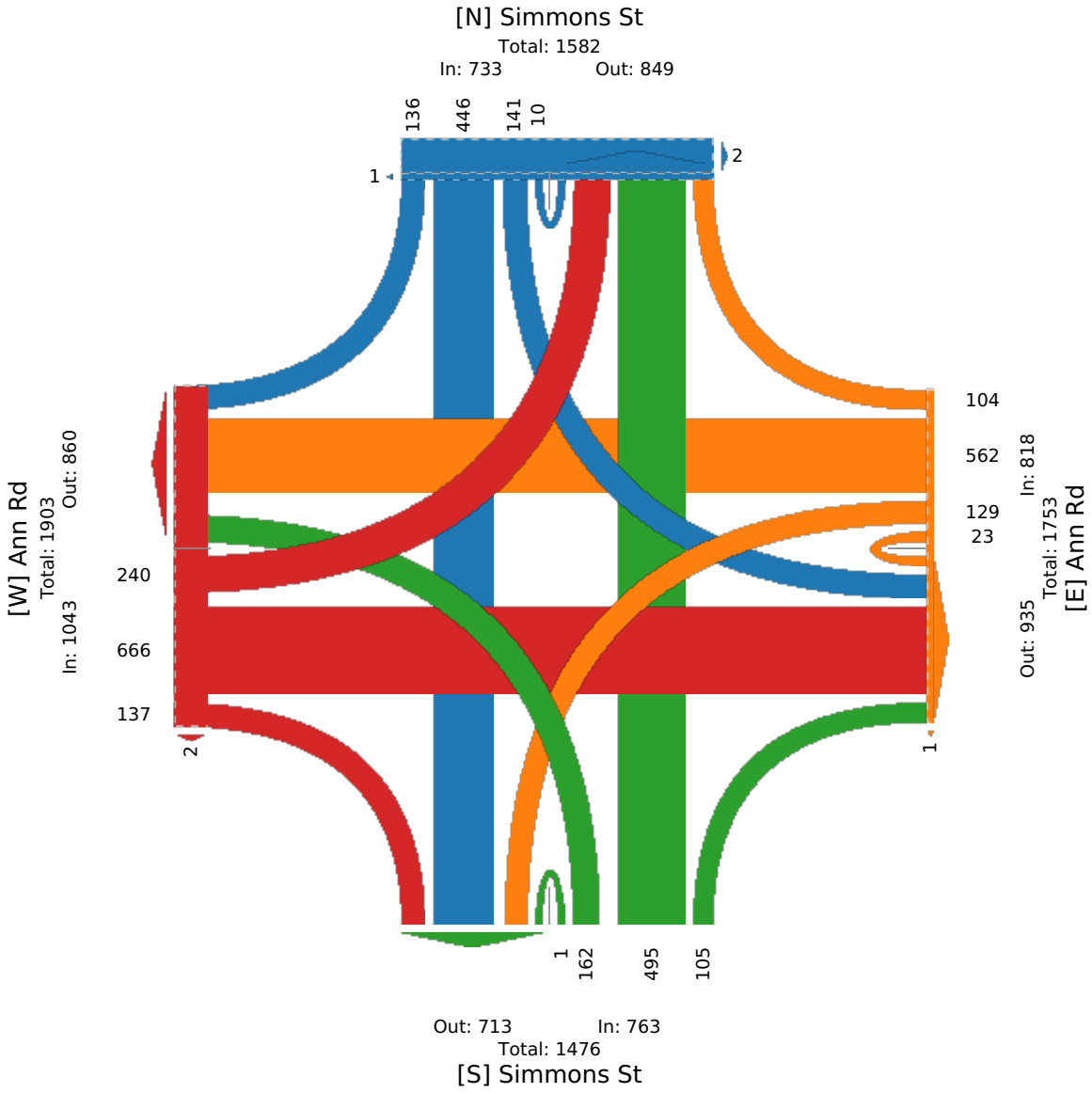
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Simmons St						Simmons St						Ann Rd						Ann Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-28 4:45PM	40	141	27	1	**209**	0	30	119	43	0	**192**	0	59	168	24	0	**251**	1	27	135	33	7	**202**	1	**854**
5:00PM	44	121	21	0	**186**	0	39	110	25	1	**175**	0	54	161	44	0	**259**	1	36	139	28	5	**208**	0	**828**
5:15PM	42	102	27	0	**171**	0	33	119	31	4	**187**	2	66	179	38	0	**283**	0	31	147	21	5	**204**	0	**845**
5:30PM	36	131	30	0	**197**	0	39	98	37	5	**179**	1	61	158	31	0	**250**	0	35	141	22	6	**204**	0	**830**
Total	162	495	105	1	**763**	0	141	446	136	10	**733**	3	240	666	137	0	**1043**	2	129	562	104	23	**818**	1	**3357**
% Approach	21.2%	64.9%	13.8%	0.1%	**-**	-	19.2%	60.8%	18.6%	1.4%	**-**	-	23.0%	63.9%	13.1%	0%	**-**	-	15.8%	68.7%	12.7%	2.8%	**-**	-	-
% Total	4.8%	14.7%	3.1%	0%	**22.7%**	-	4.2%	13.3%	4.1%	0.3%	**21.8%**	-	7.1%	19.8%	4.1%	0%	**31.1%**	-	3.8%	16.7%	3.1%	0.7%	**24.4%**	-	-
PHF	0.920	0.878	0.875	0.250	**0.913**	-	0.904	0.937	0.791	0.500	**0.954**	-	0.909	0.930	0.778	-	**0.921**	-	0.896	0.956	0.788	0.821	**0.983**	-	0.983
Lights	160	486	104	1	**751**	-	140	440	136	10	**726**	-	240	660	136	0	**1036**	-	127	559	102	23	**811**	-	3324
% Lights	98.8%	98.2%	99.0%	100%	**98.4%**	-	99.3%	98.7%	100%	100%	**99.0%**	-	100%	99.1%	99.3%	0%	**99.3%**	-	98.4%	99.5%	98.1%	100%	**99.1%**	-	99.0%
Single-Unit Trucks	1	4	0	0	**5**	-	1	2	0	0	**3**	-	0	3	0	0	**3**	-	1	2	1	0	**4**	-	15
% Single-Unit Trucks	0.6%	0.8%	0%	0%	**0.7%**	-	0.7%	0.4%	0%	0%	**0.4%**	-	0%	0.5%	0%	0%	**0.3%**	-	0.8%	0.4%	1.0%	0%	**0.5%**	-	0.4%
Articulated Trucks	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	1	1	0	**2**	-	5
% Articulated Trucks	0%	0.2%	0%	0%	**0.1%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0.2%	1.0%	0%	**0.2%**	-	0.1%
Buses	1	4	1	0	**6**	-	0	3	0	0	**3**	-	0	2	1	0	**3**	-	1	0	0	0	**1**	-	13
% Buses	0.6%	0.8%	1.0%	0%	**0.8%**	-	0%	0.7%	0%	0%	**0.4%**	-	0%	0.3%	0.7%	0%	**0.3%**	-	0.8%	0%	0%	0%	**0.1%**	-	0.4%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Simmons St/Ann Rd - TMC
Wed Apr 28, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831280, Location: 36.261594, -115.179946

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Washburn Rd/Losee Rd - TMC

Tue May 4, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831284, Location: 36.254255, -115.116938

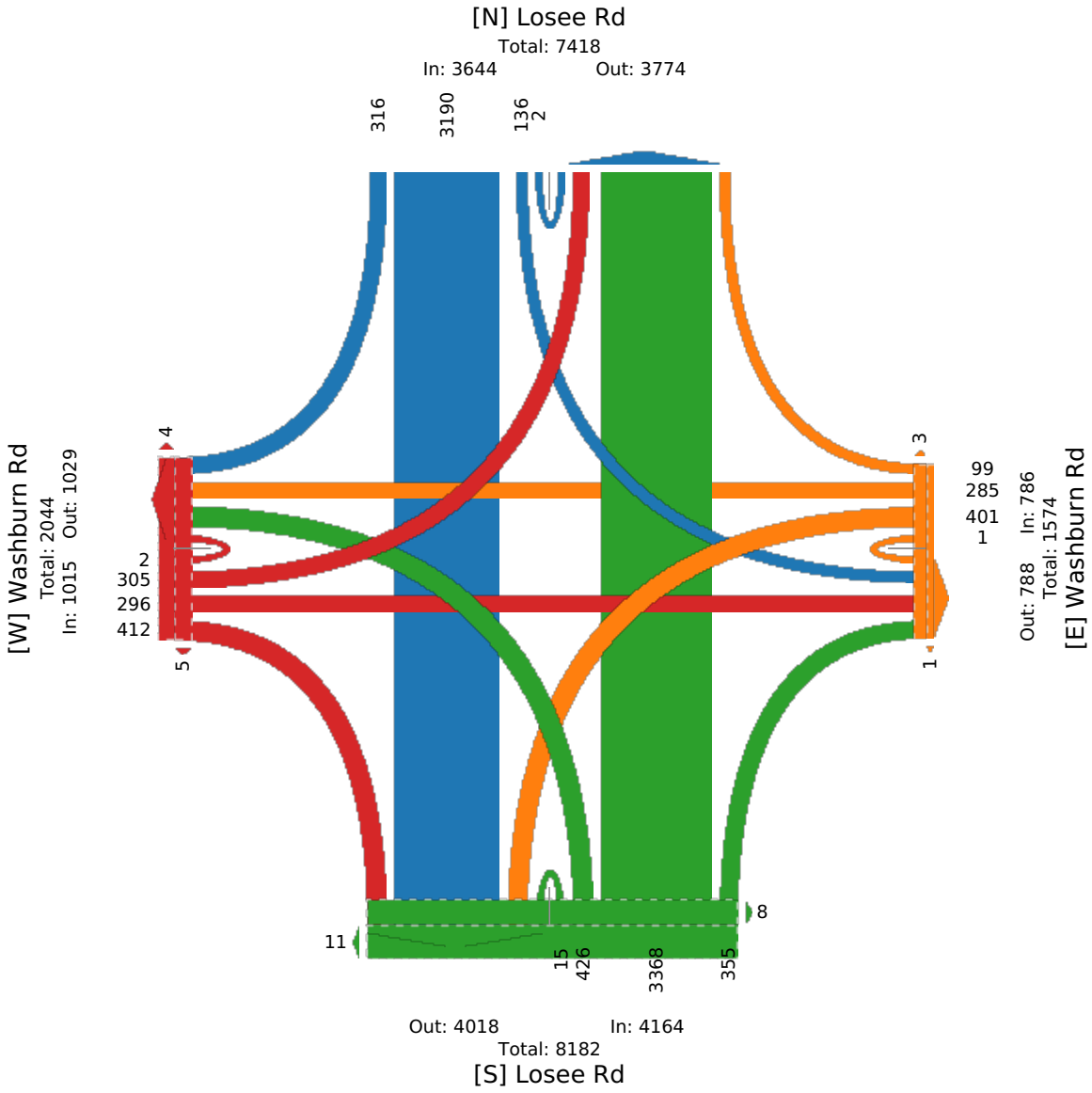
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Losee Rd						Losee Rd						Washburn Rd						Washburn Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-05-04 7:00AM	13	90	14	1	**118**	2	14	228	11	0	**253**	0	15	9	28	0	**52**	0	25	16	6	0	**47**	2	**470**
7:15AM	10	113	11	1	**135**	0	17	303	15	0	**335**	0	16	18	40	0	**74**	0	29	22	5	0	**56**	0	**600**
7:30AM	18	126	20	0	**164**	0	9	251	11	0	**271**	0	17	21	45	0	**83**	4	42	16	7	0	**65**	0	**583**
7:45AM	22	159	23	0	**204**	0	16	256	13	0	**285**	0	12	18	22	0	**52**	0	35	17	3	0	**55**	0	**596**
Hourly Total	63	488	68	2	**621**	2	56	1038	50	0	**1144**	0	60	66	135	0	**261**	4	131	71	21	0	**223**	2	**2249**
8:00AM	22	145	18	1	**186**	0	7	206	17	0	**230**	0	7	9	18	0	**34**	1	18	5	3	0	**26**	0	**476**
8:15AM	11	139	9	0	**159**	0	8	200	18	0	**226**	0	15	10	30	0	**55**	0	16	12	2	0	**30**	1	**470**
8:30AM	16	109	21	2	**148**	0	6	162	17	0	**185**	0	15	11	30	0	**56**	0	20	13	3	0	**36**	0	**425**
8:45AM	15	128	13	0	**156**	1	5	154	17	0	**176**	0	20	16	12	0	**48**	0	35	20	5	0	**60**	1	**440**
Hourly Total	64	521	61	3	**649**	1	26	722	69	0	**817**	0	57	46	90	0	**193**	1	89	50	13	0	**152**	2	**1811**
4:00PM	39	298	21	0	**358**	5	12	163	25	0	**200**	0	20	27	26	0	**73**	2	24	21	16	0	**61**	0	**692**
4:15PM	44	340	20	2	**406**	1	11	206	29	0	**246**	0	29	23	24	0	**76**	0	18	24	6	0	**48**	0	**776**
4:30PM	29	298	40	0	**367**	0	4	180	21	0	**205**	0	14	25	17	0	**56**	1	17	18	9	0	**44**	0	**672**
4:45PM	28	334	28	1	**391**	3	7	188	27	1	**223**	0	29	25	22	0	**76**	0	26	24	8	0	**58**	0	**748**
Hourly Total	140	1270	109	3	**1522**	9	34	737	102	1	**874**	0	92	100	89	0	**281**	3	85	87	39	0	**211**	0	**2888**
5:00PM	40	301	31	1	**373**	2	8	168	11	0	**187**	0	23	22	24	0	**69**	1	32	25	7	0	**64**	0	**693**
5:15PM	42	286	33	5	**366**	3	6	157	26	0	**189**	0	29	16	26	1	**72**	0	19	16	11	0	**46**	0	**673**
5:30PM	36	243	33	0	**312**	2	3	180	35	1	**219**	0	27	19	26	1	**73**	0	22	18	5	1	**46**	0	**650**
5:45PM	41	259	20	1	**321**	0	3	188	23	0	**214**	0	17	27	22	0	**66**	0	23	18	3	0	**44**	0	**645**
Hourly Total	159	1089	117	7	**1372**	7	20	693	95	1	**809**	0	96	84	98	2	**280**	1	96	77	26	1	**200**	0	**2661**
Total	426	3368	355	15	**4164**	19	136	3190	316	2	**3644**	0	305	296	412	2	**1015**	9	401	285	99	1	**786**	4	**9609**
% Approach	10.2%	80.9%	8.5%	0.4%	**-**	-	3.7%	87.5%	8.7%	0.1%	**-**	-	30.0%	29.2%	40.6%	0.2%	**-**	-	51.0%	36.3%	12.6%	0.1%	**-**	-	-
% Total	4.4%	35.1%	3.7%	0.2%	**43.3%**	-	1.4%	33.2%	3.3%	0%	**37.9%**	-	3.2%	3.1%	4.3%	0%	**10.6%**	-	4.2%	3.0%	1.0%	0%	**8.2%**	-	-
Lights	416	3272	341	15	**4044**	-	128	3102	308	2	**3540**	-	295	291	400	1	**987**	-	388	279	93	1	**761**	-	9332
% Lights	97.7%	97.1%	96.1%	100%	**97.1%**	-	94.1%	97.2%	97.5%	100%	**97.1%**	-	96.7%	98.3%	97.1%	50.0%	**97.2%**	-	96.8%	97.9%	93.9%	100%	**96.8%**	-	97.1%
Single-Unit Trucks	7	58	9	0	**74**	-	5	55	3	0	**63**	-	3	3	6	1	**13**	-	9	2	4	0	**15**	-	165
% Single-Unit Trucks	1.6%	1.7%	2.5%	0%	**1.8%**	-	3.7%	1.7%	0.9%	0%	**1.7%**	-	1.0%	1.0%	1.5%	50.0%	**1.3%**	-	2.2%	0.7%	4.0%	0%	**1.9%**	-	1.7%
Articulated Trucks	1	20	2	0	**23**	-	2	19	0	0	**21**	-	2	0	2	0	**4**	-	2	0	1	0	**3**	-	51
% Articulated Trucks	0.2%	0.6%	0.6%	0%	**0.6%**	-	1.5%	0.6%	0%	0%	**0.6%**	-	0.7%	0%	0.5%	0%	**0.4%**	-	0.5%	0%	1.0%	0%	**0.4%**	-	0.5%
Buses	2	18	3	0	**23**	-	1	14	5	0	**20**	-	5	2	3	0	**10**	-	1	4	1	0	**6**	-	59
% Buses	0.5%	0.5%	0.8%	0%	**0.6%**	-	0.7%	0.4%	1.6%	0%	**0.5%**	-	1.6%	0.7%	0.7%	0%	**1.0%**	-	0.2%	1.4%	1.0%	0%	**0.8%**	-	0.6%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	1	0	0	0	**1**	-	2
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.2%	0%	**0.1%**	-	0.2%	0%	0%	0%	**0.1%**	-	0%
Pedestrians	-	-	-	-	-	17	-	-	-	-	-	0	-	-	-	-	-	8	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	89.5%	-	-	-	-	-	-	-	-	-	-	-	88.9%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	10.5%	-	-	-	-	-	-	-	-	-	-	-	11.1%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Washburn Rd/Losee Rd - TMC
Tue May 4, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831284, Location: 36.254255, -115.116938

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Washburn Rd/Losee Rd - TMC

Tue May 4, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831284, Location: 36.254255, -115.116938

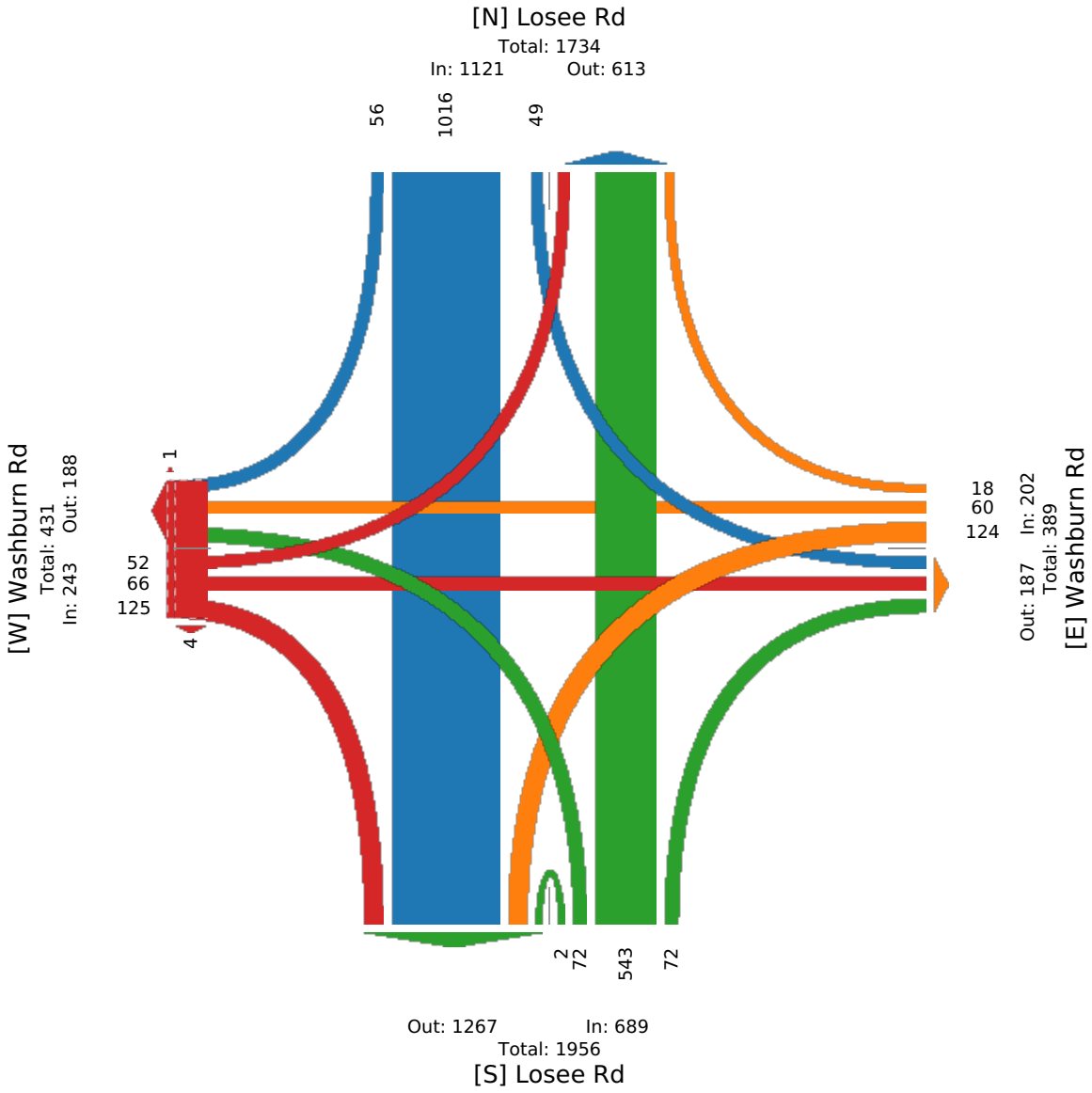
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Losee Rd						Losee Rd						Washburn Rd						Washburn Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-05-04 7:15AM	10	113	11	1	**135**	0	17	303	15	0	**335**	0	16	18	40	0	**74**	0	29	22	5	0	**56**	0	**600**
7:30AM	18	126	20	0	**164**	0	9	251	11	0	**271**	0	17	21	45	0	**83**	4	42	16	7	0	**65**	0	**583**
7:45AM	22	159	23	0	**204**	0	16	256	13	0	**285**	0	12	18	22	0	**52**	0	35	17	3	0	**55**	0	**596**
8:00AM	22	145	18	1	**186**	0	7	206	17	0	**230**	0	7	9	18	0	**34**	1	18	5	3	0	**26**	0	**476**
Total	72	543	72	2	**689**	0	49	1016	56	0	**1121**	0	52	66	125	0	**243**	5	124	60	18	0	**202**	0	**2255**
% Approach	10.4%	78.8%	10.4%	0.3%	**-**	-	4.4%	90.6%	5.0%	0%	**-**	-	21.4%	27.2%	51.4%	0%	**-**	-	61.4%	29.7%	8.9%	0%	**-**	-	-
% Total	3.2%	24.1%	3.2%	0.1%	**30.6%**	-	2.2%	45.1%	2.5%	0%	**49.7%**	-	2.3%	2.9%	5.5%	0%	**10.8%**	-	5.5%	2.7%	0.8%	0%	**9.0%**	-	-
PHF	0.818	0.854	0.783	0.500	**0.844**	-	0.721	0.838	0.824	-	**0.837**	-	0.765	0.786	0.694	-	**0.732**	-	0.738	0.682	0.643	-	**0.777**	-	0.940
Lights	65	509	66	2	**642**	-	48	998	56	0	**1102**	-	50	63	120	0	**233**	-	119	58	16	0	**193**	-	2170
% Lights	90.3%	93.7%	91.7%	100%	**93.2%**	-	98.0%	98.2%	100%	0%	**98.3%**	-	96.2%	95.5%	96.0%	0%	**95.9%**	-	96.0%	96.7%	88.9%	0%	**95.5%**	-	96.2%
Single-Unit Trucks	5	23	3	0	**31**	-	0	6	0	0	**6**	-	0	2	2	0	**4**	-	4	0	0	0	**4**	-	45
% Single-Unit Trucks	6.9%	4.2%	4.2%	0%	**4.5%**	-	0%	0.6%	0%	0%	**0.5%**	-	0%	3.0%	1.6%	0%	**1.6%**	-	3.2%	0%	0%	0%	**2.0%**	-	2.0%
Articulated Trucks	0	6	1	0	**7**	-	0	6	0	0	**6**	-	1	0	1	0	**2**	-	1	0	1	0	**2**	-	17
% Articulated Trucks	0%	1.1%	1.4%	0%	**1.0%**	-	0%	0.6%	0%	0%	**0.5%**	-	1.9%	0%	0.8%	0%	**0.8%**	-	0.8%	0%	5.6%	0%	**1.0%**	-	0.8%
Buses	2	5	2	0	**9**	-	1	6	0	0	**7**	-	1	1	2	0	**4**	-	0	2	1	0	**3**	-	23
% Buses	2.8%	0.9%	2.8%	0%	**1.3%**	-	2.0%	0.6%	0%	0%	**0.6%**	-	1.9%	1.5%	1.6%	0%	**1.6%**	-	0%	3.3%	5.6%	0%	**1.5%**	-	1.0%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Washburn Rd/Losee Rd - TMC
Tue May 4, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831284, Location: 36.254255, -115.116938

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Washburn Rd/Losee Rd - TMC

Tue May 4, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831284, Location: 36.254255, -115.116938

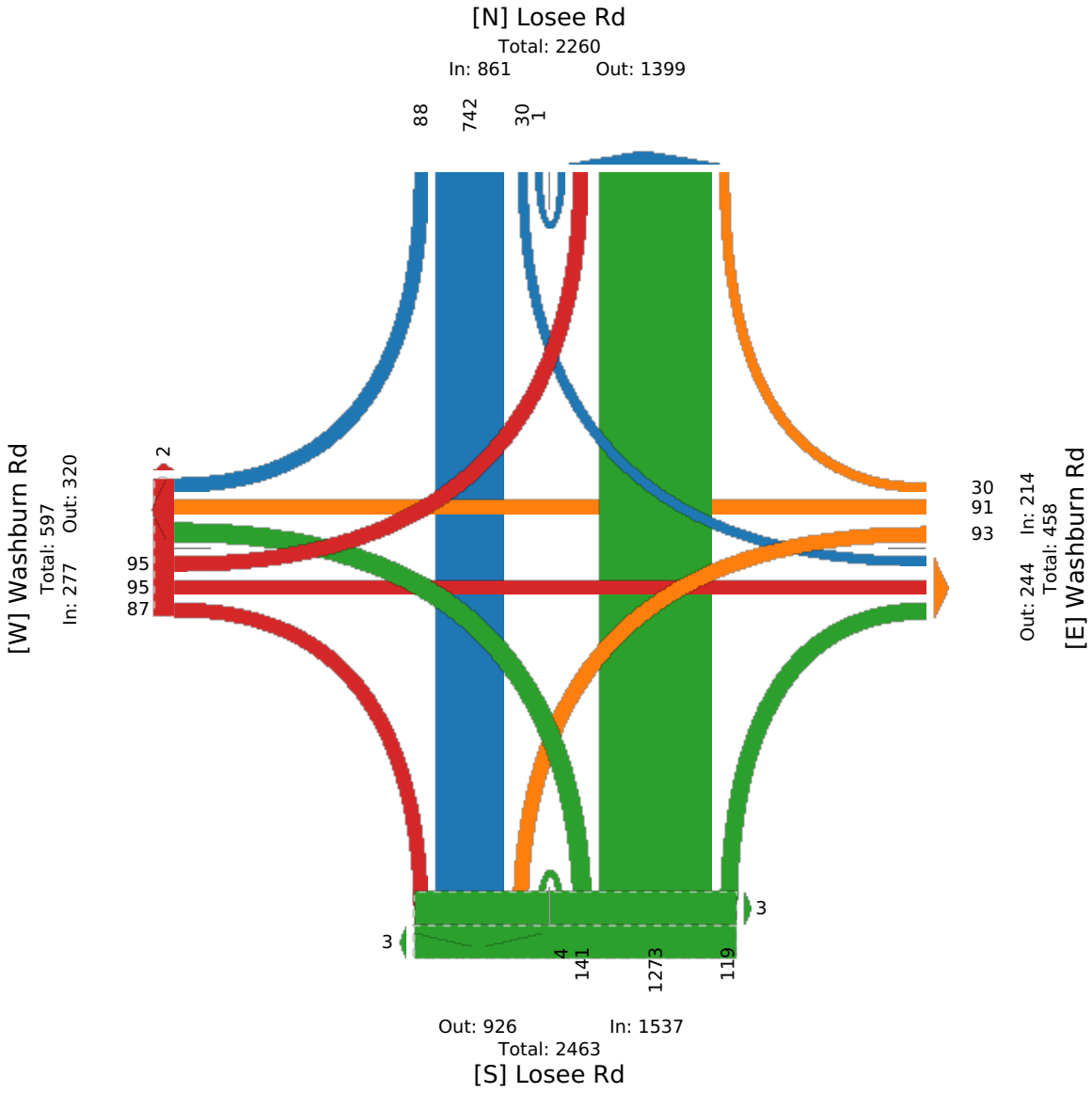
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Losee Rd						Losee Rd						Washburn Rd						Washburn Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-05-04 4:15PM	44	340	20	2	**406**	1	11	206	29	0	**246**	0	29	23	24	0	**76**	0	18	24	6	0	**48**	0	**776**
4:30PM	29	298	40	0	**367**	0	4	180	21	0	**205**	0	14	25	17	0	**56**	1	17	18	9	0	**44**	0	**672**
4:45PM	28	334	28	1	**391**	3	7	188	27	1	**223**	0	29	25	22	0	**76**	0	26	24	8	0	**58**	0	**748**
5:00PM	40	301	31	1	**373**	2	8	168	11	0	**187**	0	23	22	24	0	**69**	1	32	25	7	0	**64**	0	**693**
Total	141	1273	119	4	**1537**	6	30	742	88	1	**861**	0	95	95	87	0	**277**	2	93	91	30	0	**214**	0	**2889**
% Approach	9.2%	82.8%	7.7%	0.3%	**-**	-	3.5%	86.2%	10.2%	0.1%	**-**	-	34.3%	34.3%	31.4%	0%	**-**	-	43.5%	42.5%	14.0%	0%	**-**	-	-
% Total	4.9%	44.1%	4.1%	0.1%	**53.2%**	-	1.0%	25.7%	3.0%	0%	**29.8%**	-	3.3%	3.3%	3.0%	0%	**9.6%**	-	3.2%	3.1%	1.0%	0%	**7.4%**	-	-
PHF	0.801	0.936	0.744	0.500	**0.946**	-	0.682	0.900	0.759	0.250	**0.875**	-	0.819	0.950	0.906	-	**0.911**	-	0.727	0.910	0.833	-	**0.836**	-	0.931
Lights	140	1256	116	4	**1516**	-	27	707	87	1	**822**	-	94	95	84	0	**273**	-	91	90	29	0	**210**	-	2821
% Lights	99.3%	98.7%	97.5%	100%	**98.6%**	-	90.0%	95.3%	98.9%	100%	**95.5%**	-	98.9%	100%	96.6%	0%	**98.6%**	-	97.8%	98.9%	96.7%	0%	**98.1%**	-	97.6%
Single-Unit Trucks	1	12	3	0	**16**	-	2	29	1	0	**32**	-	0	0	3	0	**3**	-	1	1	1	0	**3**	-	54
% Single-Unit Trucks	0.7%	0.9%	2.5%	0%	**1.0%**	-	6.7%	3.9%	1.1%	0%	**3.7%**	-	0%	0%	3.4%	0%	**1.1%**	-	1.1%	1.1%	3.3%	0%	**1.4%**	-	1.9%
Articulated Trucks	0	0	0	0	**0**	-	1	4	0	0	**5**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	6
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	3.3%	0.5%	0%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	1.1%	0%	0%	0%	**0.5%**	-	0.2%
Buses	0	5	0	0	**5**	-	0	2	0	0	**2**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	8
% Buses	0%	0.4%	0%	0%	**0.3%**	-	0%	0.3%	0%	0%	**0.2%**	-	1.1%	0%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Washburn Rd/Losee Rd - TMC
Tue May 4, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831284, Location: 36.254255, -115.116938

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Valley Dr/Craig Rd - TMC

Wed Apr 28, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831278, Location: 36.239097, -115.198384

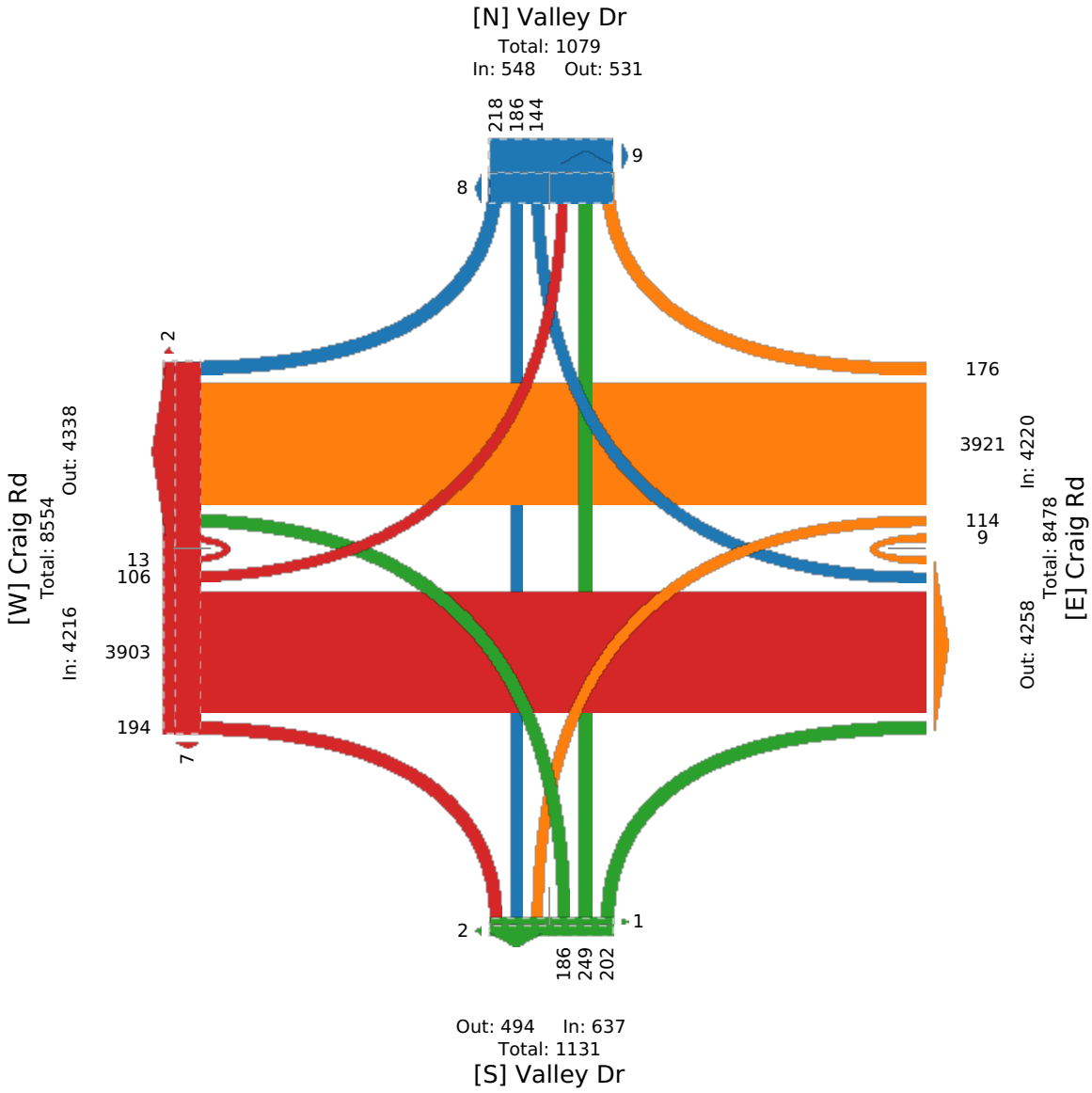
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Valley Dr						Valley Dr						Craig Rd						Craig Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-28 7:00AM	5	11	12	0	**28**	0	5	7	13	0	**25**	0	5	155	3	1	**164**	1	2	180	4	0	**186**	0	**403**
7:15AM	11	10	9	0	**30**	0	8	6	18	0	**32**	2	3	172	5	0	**180**	0	3	226	12	0	**241**	0	**483**
7:30AM	7	17	12	0	**36**	0	10	12	11	0	**33**	0	1	180	4	0	**185**	1	3	247	10	0	**260**	0	**514**
7:45AM	12	19	10	0	**41**	0	11	17	21	0	**49**	0	9	224	6	0	**239**	0	2	228	14	0	**244**	0	**573**
Hourly Total	35	57	43	0	**135**	0	34	42	63	0	**139**	2	18	731	18	1	**768**	2	10	881	40	0	**931**	0	**1973**
8:00AM	6	9	12	0	**27**	0	10	9	15	0	**34**	0	7	163	3	2	**175**	0	9	203	9	0	**221**	0	**457**
8:15AM	18	13	12	0	**43**	0	5	8	9	0	**22**	3	5	185	8	0	**198**	2	4	195	2	1	**202**	0	**465**
8:30AM	10	9	16	0	**35**	0	2	7	9	0	**18**	1	5	186	6	1	**198**	0	10	195	3	0	**208**	0	**459**
8:45AM	12	9	6	0	**27**	0	6	7	8	0	**21**	1	5	182	6	1	**194**	0	12	190	5	0	**207**	0	**449**
Hourly Total	46	40	46	0	**132**	0	23	31	41	0	**95**	5	22	716	23	4	**765**	2	35	783	19	1	**838**	0	**1830**
4:00PM	21	20	14	0	**55**	1	15	22	16	0	**53**	2	8	332	11	0	**351**	0	11	256	14	1	**282**	0	**741**
4:15PM	10	18	18	0	**46**	0	10	19	10	0	**39**	3	7	285	22	2	**316**	0	7	255	12	0	**274**	0	**675**
4:30PM	12	14	8	0	**34**	0	8	10	9	0	**27**	2	7	289	18	1	**315**	1	13	319	22	1	**355**	0	**731**
4:45PM	10	14	13	0	**37**	1	13	11	18	0	**42**	0	11	303	21	1	**336**	0	7	245	13	1	**266**	0	**681**
Hourly Total	53	66	53	0	**172**	2	46	62	53	0	**161**	7	33	1209	72	4	**1318**	1	38	1075	61	3	**1177**	0	**2828**
5:00PM	15	21	13	0	**49**	0	12	19	18	0	**49**	0	8	302	20	2	**332**	0	7	290	17	1	**315**	0	**745**
5:15PM	17	21	17	0	**55**	0	11	11	14	0	**36**	1	8	321	14	0	**343**	1	6	288	14	1	**309**	0	**743**
5:30PM	6	23	12	0	**41**	1	10	11	13	0	**34**	1	10	329	27	0	**366**	1	9	319	13	1	**342**	0	**783**
5:45PM	14	21	18	0	**53**	0	8	10	16	0	**34**	1	7	293	20	2	**322**	2	9	285	12	2	**308**	0	**717**
Hourly Total	52	86	60	0	**198**	1	41	51	61	0	**153**	3	33	1245	81	4	**1363**	4	31	1182	56	5	**1274**	0	**2988**
6:00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	2	0	0	**2**	0	0	0	0	0	**0**	0	**2**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	2	0	0	**2**	0	0	0	0	0	**0**	0	**2**
Total	186	249	202	0	**637**	3	144	186	218	0	**548**	17	106	3903	194	13	**4216**	9	114	3921	176	9	**4220**	0	**9621**
% Approach	29.2%	39.1%	31.7%	0%	**-**	-	26.3%	33.9%	39.8%	0%	**-**	-	2.5%	92.6%	4.6%	0.3%	**-**	-	2.7%	92.9%	4.2%	0.2%	**-**	-	-
% Total	1.9%	2.6%	2.1%	0%	**6.6%**	-	1.5%	1.9%	2.3%	0%	**5.7%**	-	1.1%	40.6%	2.0%	0.1%	**43.8%**	-	1.2%	40.8%	1.8%	0.1%	**43.9%**	-	-
Lights	182	240	199	0	**621**	-	139	182	216	0	**537**	-	94	3837	194	13	**4138**	-	112	3821	172	9	**4114**	-	9410
% Lights	97.8%	96.4%	98.5%	0%	**97.5%**	-	96.5%	97.8%	99.1%	0%	**98.0%**	-	88.7%	98.3%	100%	100%	**98.1%**	-	98.2%	97.4%	97.7%	100%	**97.5%**	-	97.8%
Single-Unit Trucks	2	3	1	0	**6**	-	1	2	1	0	**4**	-	3	26	0	0	**29**	-	0	50	1	0	**51**	-	90
% Single-Unit Trucks	1.1%	1.2%	0.5%	0%	**0.9%**	-	0.7%	1.1%	0.5%	0%	**0.7%**	-	2.8%	0.7%	0%	0%	**0.7%**	-	0%	1.3%	0.6%	0%	**1.2%**	-	0.9%
Articulated Trucks	0	1	0	0	**1**	-	0	0	1	0	**1**	-	0	12	0	0	**12**	-	1	19	0	0	**20**	-	34
% Articulated Trucks	0%	0.4%	0%	0%	**0.2%**	-	0%	0%	0.5%	0%	**0.2%**	-	0%	0.3%	0%	0%	**0.3%**	-	0.9%	0.5%	0%	0%	**0.5%**	-	0.4%
Buses	2	5	1	0	**8**	-	4	1	0	0	**5**	-	9	27	0	0	**36**	-	1	30	2	0	**33**	-	82
% Buses	1.1%	2.0%	0.5%	0%	**1.3%**	-	2.8%	0.5%	0%	0%	**0.9%**	-	8.5%	0.7%	0%	0%	**0.9%**	-	0.9%	0.8%	1.1%	0%	**0.8%**	-	0.9%
Bicycles on Road	0	0	1	0	**1**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	1	1	0	**2**	-	5
% Bicycles on Road	0%	0%	0.5%	0%	**0.2%**	-	0%	0.5%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.6%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	16	-	-	-	-	-	6	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	94.1%	-	-	-	-	-	66.7%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	5.9%	-	-	-	-	-	33.3%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Valley Dr/Craig Rd - TMC
Wed Apr 28, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831278, Location: 36.239097, -115.198384

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Valley Dr/Craig Rd - TMC

Wed Apr 28, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831278, Location: 36.239097, -115.198384

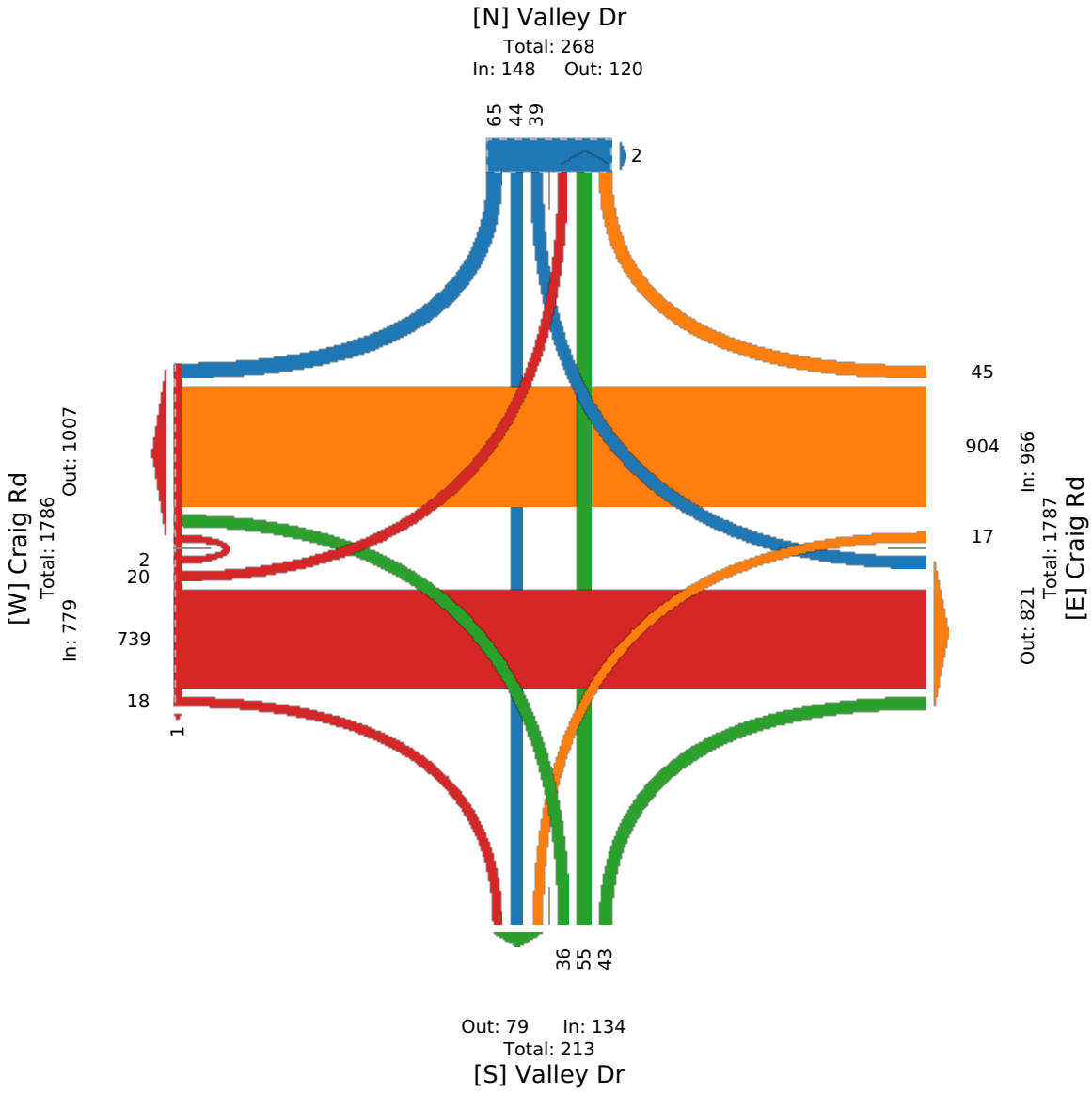
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Valley Dr						Valley Dr						Craig Rd						Craig Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-28 7:15AM	11	10	9	0	**30**	0	8	6	18	0	**32**	2	3	172	5	0	**180**	0	3	226	12	0	**241**	0	**483**
7:30AM	7	17	12	0	**36**	0	10	12	11	0	**33**	0	1	180	4	0	**185**	1	3	247	10	0	**260**	0	**514**
7:45AM	12	19	10	0	**41**	0	11	17	21	0	**49**	0	9	224	6	0	**239**	0	2	228	14	0	**244**	0	**573**
8:00AM	6	9	12	0	**27**	0	10	9	15	0	**34**	0	7	163	3	2	**175**	0	9	203	9	0	**221**	0	**457**
Total	36	55	43	0	**134**	0	39	44	65	0	**148**	2	20	739	18	2	**779**	1	17	904	45	0	**966**	0	**2027**
% Approach	26.9%	41.0%	32.1%	0%	**-**	-	26.4%	29.7%	43.9%	0%	**-**	-	2.6%	94.9%	2.3%	0.3%	**-**	-	1.8%	93.6%	4.7%	0%	**-**	-	-
% Total	1.8%	2.7%	2.1%	0%	**6.6%**	-	1.9%	2.2%	3.2%	0%	**7.3%**	-	1.0%	36.5%	0.9%	0.1%	**38.4%**	-	0.8%	44.6%	2.2%	0%	**47.7%**	-	-
PHF	0.750	0.724	0.875	-	**0.811**	-	0.886	0.647	0.774	-	**0.755**	-	0.556	0.825	0.750	0.250	**0.815**	-	0.472	0.915	0.804	-	**0.929**	-	0.884
Lights	35	54	42	0	**131**	-	39	44	64	0	**147**	-	17	718	18	2	**755**	-	17	859	44	0	**920**	-	1953
% Lights	97.2%	98.2%	97.7%	0%	**97.8%**	-	100%	100%	98.5%	0%	**99.3%**	-	85.0%	97.2%	100%	100%	**96.9%**	-	100%	95.0%	97.8%	0%	**95.2%**	-	96.3%
Single-Unit Trucks	1	0	0	0	**1**	-	0	0	1	0	**1**	-	0	10	0	0	**10**	-	0	25	0	0	**25**	-	37
% Single-Unit Trucks	2.8%	0%	0%	0%	**0.7%**	-	0%	0%	1.5%	0%	**0.7%**	-	0%	1.4%	0%	0%	**1.3%**	-	0%	2.8%	0%	0%	**2.6%**	-	1.8%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	4	0	0	**4**	-	0	9	0	0	**9**	-	13
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.5%**	-	0%	1.0%	0%	0%	**0.9%**	-	0.6%
Buses	0	1	0	0	**1**	-	0	0	0	0	**0**	-	3	7	0	0	**10**	-	0	11	1	0	**12**	-	23
% Buses	0%	1.8%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	15.0%	0.9%	0%	0%	**1.3%**	-	0%	1.2%	2.2%	0%	**1.2%**	-	1.1%
Bicycles on Road	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	2.3%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Valley Dr/Craig Rd - TMC
Wed Apr 28, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831278, Location: 36.239097, -115.198384

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Valley Dr/Craig Rd - TMC

Wed Apr 28, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831278, Location: 36.239097, -115.198384

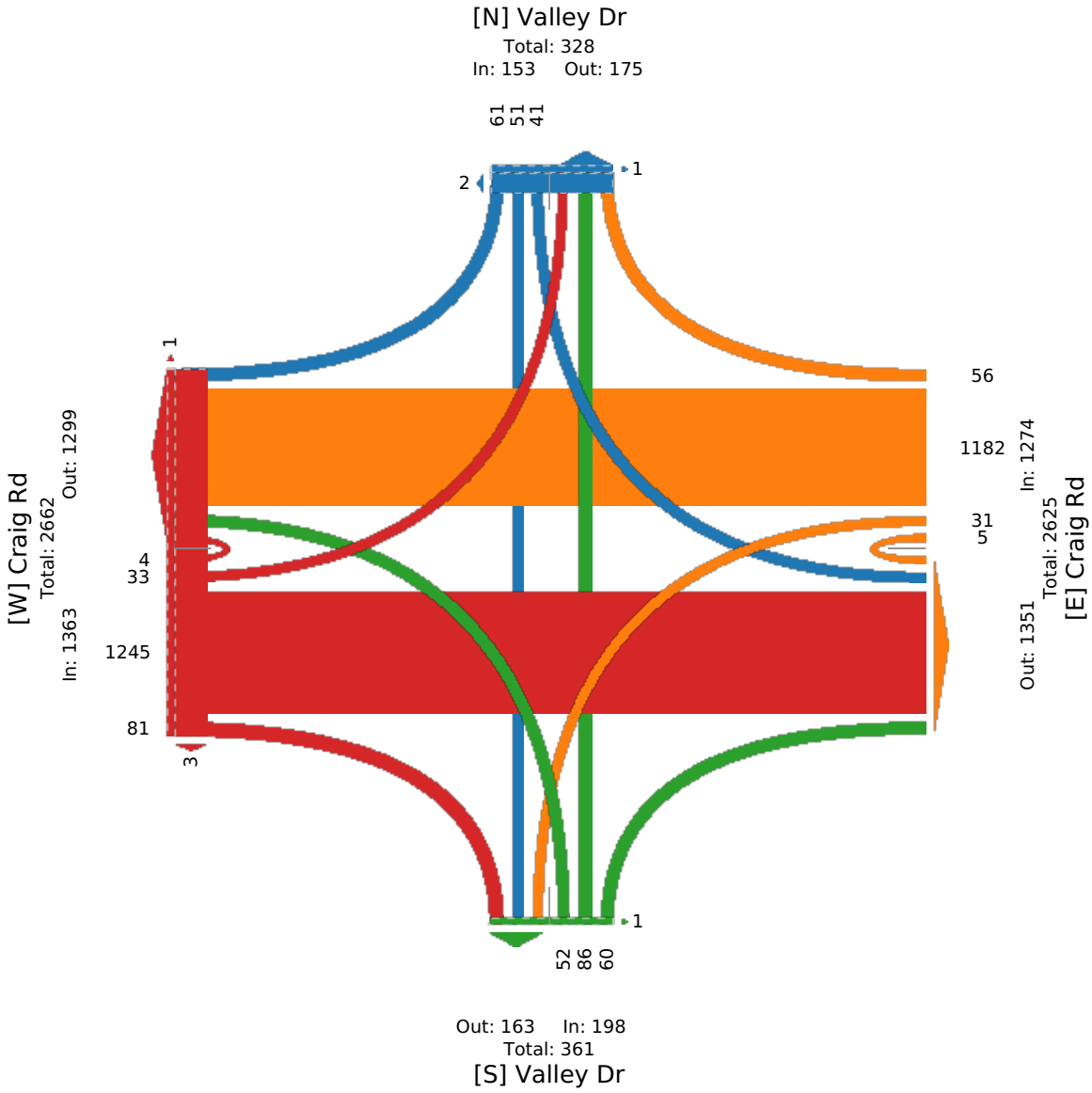
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Valley Dr						Valley Dr						Craig Rd						Craig Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-28 5:00PM	15	21	13	0	**49**	0	12	19	18	0	**49**	0	8	302	20	2	**332**	0	7	290	17	1	**315**	0	**745**
5:15PM	17	21	17	0	**55**	0	11	11	14	0	**36**	1	8	321	14	0	**343**	1	6	288	14	1	**309**	0	**743**
5:30PM	6	23	12	0	**41**	1	10	11	13	0	**34**	1	10	329	27	0	**366**	1	9	319	13	1	**342**	0	**783**
5:45PM	14	21	18	0	**53**	0	8	10	16	0	**34**	1	7	293	20	2	**322**	2	9	285	12	2	**308**	0	**717**
Total	52	86	60	0	**198**	1	41	51	61	0	**153**	3	33	1245	81	4	**1363**	4	31	1182	56	5	**1274**	0	**2988**
% Approach	26.3%	43.4%	30.3%	0%	**-**	-	26.8%	33.3%	39.9%	0%	**-**	-	2.4%	91.3%	5.9%	0.3%	**-**	-	2.4%	92.8%	4.4%	0.4%	**-**	-	-
% Total	1.7%	2.9%	2.0%	0%	**6.6%**	-	1.4%	1.7%	2.0%	0%	**5.1%**	-	1.1%	41.7%	2.7%	0.1%	**45.6%**	-	1.0%	39.6%	1.9%	0.2%	**42.6%**	-	-
PHF	0.765	0.935	0.833	-	**0.900**	-	0.854	0.671	0.847	-	**0.781**	-	0.825	0.946	0.750	0.500	**0.931**	-	0.861	0.926	0.809	0.625	**0.931**	-	0.954
Lights	51	85	60	0	**196**	-	39	50	60	0	**149**	-	30	1239	81	4	**1354**	-	31	1163	54	5	**1253**	-	2952
% Lights	98.1%	98.8%	100%	0%	**99.0%**	-	95.1%	98.0%	98.4%	0%	**97.4%**	-	90.9%	99.5%	100%	100%	**99.3%**	-	100%	98.4%	96.4%	100%	**98.4%**	-	98.8%
Single-Unit Trucks	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	0	7	0	0	**7**	-	10
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	2.0%	0%	0%	**0.7%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0.6%	0%	0%	**0.5%**	-	0.3%
Articulated Trucks	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	4	0	0	**4**	-	5
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	1.6%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0.2%
Buses	1	1	0	0	**2**	-	2	0	0	0	**2**	-	3	4	0	0	**7**	-	0	8	1	0	**9**	-	20
% Buses	1.9%	1.2%	0%	0%	**1.0%**	-	4.9%	0%	0%	0%	**1.3%**	-	9.1%	0.3%	0%	0%	**0.5%**	-	0%	0.7%	1.8%	0%	**0.7%**	-	0.7%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	1.8%	0%	**0.1%**	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Valley Dr/Craig Rd - TMC
Wed Apr 28, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831278, Location: 36.239097, -115.198384

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Craig Rd/N 5th St - TMC

Tue May 4, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831285, Location: 36.239587, -115.134346

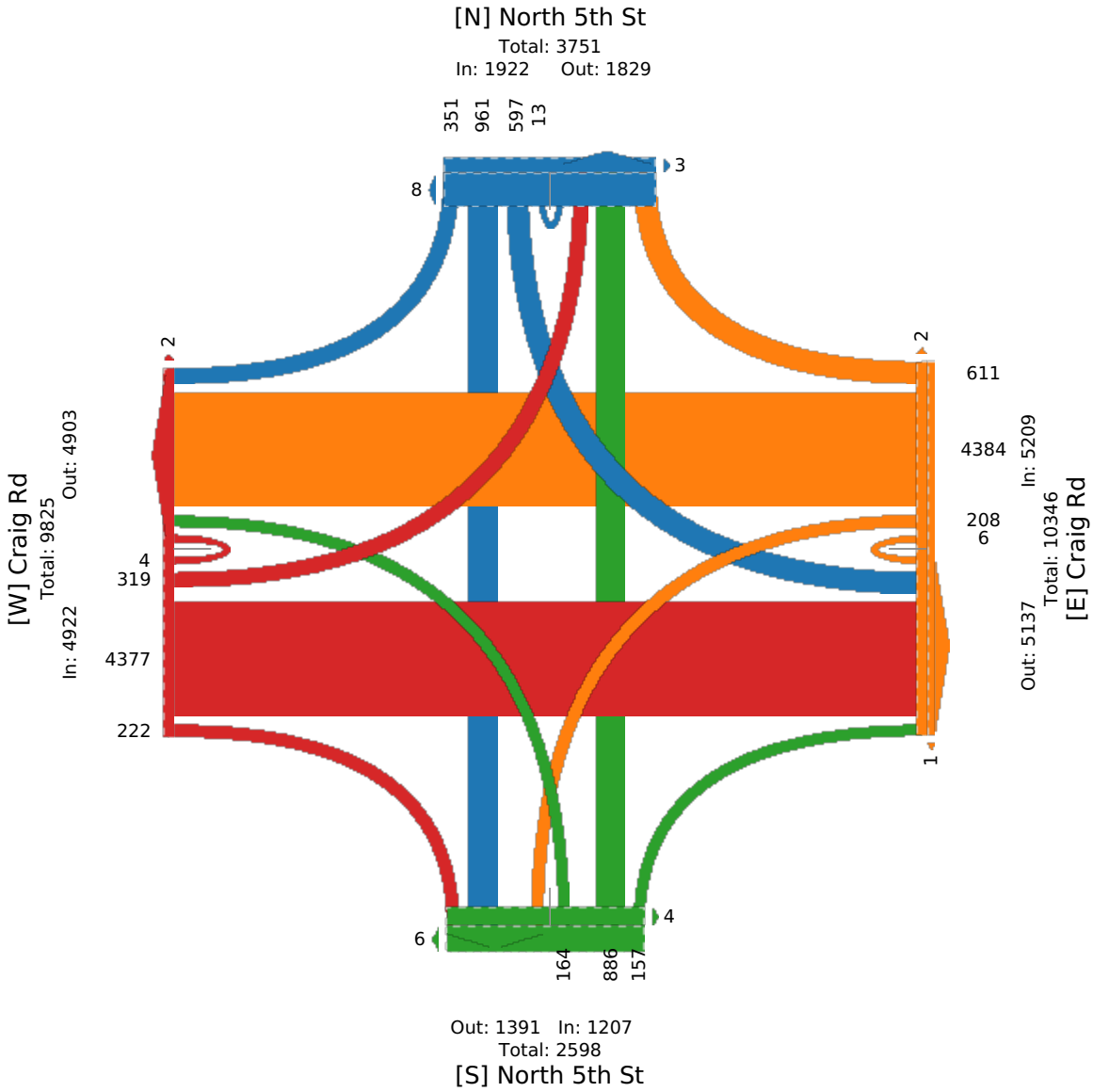
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	North 5th St						North 5th St						Craig Rd						Craig Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-05-04 7:00AM	10	29	5	0	**44**	0	42	70	16	3	**131**	0	13	255	7	0	**275**	0	19	169	20	0	**208**	0	**658**
7:15AM	12	36	16	0	**64**	2	47	73	21	1	**142**	0	8	266	16	0	**290**	0	10	183	32	0	**225**	0	**721**
7:30AM	9	32	11	0	**52**	2	49	76	13	1	**139**	0	15	253	15	0	**283**	0	16	187	28	0	**231**	0	**705**
7:45AM	8	35	2	0	**45**	0	44	82	25	0	**151**	1	11	254	17	0	**282**	0	13	207	28	2	**250**	0	**728**
Hourly Total	39	132	34	0	**205**	4	182	301	75	5	**563**	1	47	1028	55	0	**1130**	0	58	746	108	2	**914**	0	**2812**
8:00AM	8	39	13	0	**60**	2	42	46	25	0	**113**	1	12	218	16	0	**246**	0	16	202	27	0	**245**	0	**664**
8:15AM	14	36	9	0	**59**	0	44	81	18	0	**143**	2	11	211	8	0	**230**	0	10	161	30	0	**201**	1	**633**
8:30AM	5	41	6	0	**52**	1	36	64	23	0	**123**	0	11	248	15	0	**274**	0	16	237	31	0	**284**	0	**733**
8:45AM	6	35	10	0	**51**	1	38	48	27	2	**115**	1	19	190	13	0	**222**	0	12	200	19	0	**231**	1	**619**
Hourly Total	33	151	38	0	**222**	4	160	239	93	2	**494**	4	53	867	52	0	**972**	0	54	800	107	0	**961**	2	**2649**
4:00PM	11	75	15	0	**101**	0	30	58	27	1	**116**	0	22	287	16	0	**325**	0	15	325	38	0	**378**	1	**920**
4:15PM	16	72	12	0	**100**	0	29	54	27	1	**111**	0	31	287	15	0	**333**	0	13	369	68	2	**452**	0	**996**
4:30PM	4	74	12	0	**90**	0	39	53	23	0	**115**	3	27	281	18	3	**329**	0	14	411	42	0	**467**	0	**1001**
4:45PM	6	92	9	0	**107**	0	34	58	26	1	**119**	0	23	341	11	0	**375**	0	9	367	41	0	**417**	0	**1018**
Hourly Total	37	313	48	0	**398**	0	132	223	103	3	**461**	3	103	1196	60	3	**1362**	0	51	1472	189	2	**1714**	1	**3935**
5:00PM	17	68	9	0	**94**	0	34	62	13	1	**110**	2	26	292	14	0	**332**	1	16	356	62	1	**435**	0	**971**
5:15PM	10	80	9	0	**99**	1	28	37	27	0	**92**	0	33	346	14	0	**393**	1	6	352	49	1	**408**	0	**992**
5:30PM	14	70	12	0	**96**	1	28	45	27	2	**102**	1	32	315	19	1	**367**	0	11	341	55	0	**407**	0	**972**
5:45PM	14	72	7	0	**93**	0	33	54	13	0	**100**	0	25	333	8	0	**366**	0	12	317	41	0	**370**	0	**929**
Hourly Total	55	290	37	0	**382**	2	123	198	80	3	**404**	3	116	1286	55	1	**1458**	2	45	1366	207	2	**1620**	0	**3864**
Total	164	886	157	0	**1207**	10	597	961	351	13	**1922**	11	319	4377	222	4	**4922**	2	208	4384	611	6	**5209**	3	**13260**
% Approach	13.6%	73.4%	13.0%	0%	**-**	-	31.1%	50.0%	18.3%	0.7%	**-**	-	6.5%	88.9%	4.5%	0.1%	**-**	-	4.0%	84.2%	11.7%	0.1%	**-**	-	-
% Total	1.2%	6.7%	1.2%	0%	**9.1%**	-	4.5%	7.2%	2.6%	0.1%	**14.5%**	-	2.4%	33.0%	1.7%	0%	**37.1%**	-	1.6%	33.1%	4.6%	0%	**39.3%**	-	-
Lights	151	847	131	0	**1129**	-	588	918	337	13	**1856**	-	313	4249	215	4	**4781**	-	188	4263	591	6	**5048**	-	12814
% Lights	92.1%	95.6%	83.4%	0%	**93.5%**	-	98.5%	95.5%	96.0%	100%	**96.6%**	-	98.1%	97.1%	96.8%	100%	**97.1%**	-	90.4%	97.2%	96.7%	100%	**96.9%**	-	96.6%
Single-Unit Trucks	9	21	8	0	**38**	-	3	20	6	0	**29**	-	4	78	4	0	**86**	-	9	66	5	0	**80**	-	233
% Single-Unit Trucks	5.5%	2.4%	5.1%	0%	**3.1%**	-	0.5%	2.1%	1.7%	0%	**1.5%**	-	1.3%	1.8%	1.8%	0%	**1.7%**	-	4.3%	1.5%	0.8%	0%	**1.5%**	-	1.8%
Articulated Trucks	2	11	13	0	**26**	-	5	14	4	0	**23**	-	0	26	1	0	**27**	-	9	31	2	0	**42**	-	118
% Articulated Trucks	1.2%	1.2%	8.3%	0%	**2.2%**	-	0.8%	1.5%	1.1%	0%	**1.2%**	-	0%	0.6%	0.5%	0%	**0.5%**	-	4.3%	0.7%	0.3%	0%	**0.8%**	-	0.9%
Buses	2	7	2	0	**11**	-	1	9	3	0	**13**	-	2	22	1	0	**25**	-	2	23	12	0	**37**	-	86
% Buses	1.2%	0.8%	1.3%	0%	**0.9%**	-	0.2%	0.9%	0.9%	0%	**0.7%**	-	0.6%	0.5%	0.5%	0%	**0.5%**	-	1.0%	0.5%	2.0%	0%	**0.7%**	-	0.6%
Bicycles on Road	0	0	3	0	**3**	-	0	0	1	0	**1**	-	0	2	1	0	**3**	-	0	1	1	0	**2**	-	9
% Bicycles on Road	0%	0%	1.9%	0%	**0.2%**	-	0%	0%	0.3%	0%	**0.1%**	-	0%	0%	0.5%	0%	**0.1%**	-	0%	0%	0.2%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	8	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	80.0%	-	-	-	-	-	72.7%	-	-	-	-	-	100%	-	-	-	-	-	33.3%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	20.0%	-	-	-	-	-	27.3%	-	-	-	-	-	0%	-	-	-	-	-	66.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Craig Rd/N 5th St - TMC
Tue May 4, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831285, Location: 36.239587, -115.134346

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
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Craig Rd/N 5th St - TMC

Tue May 4, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831285, Location: 36.239587, -115.134346

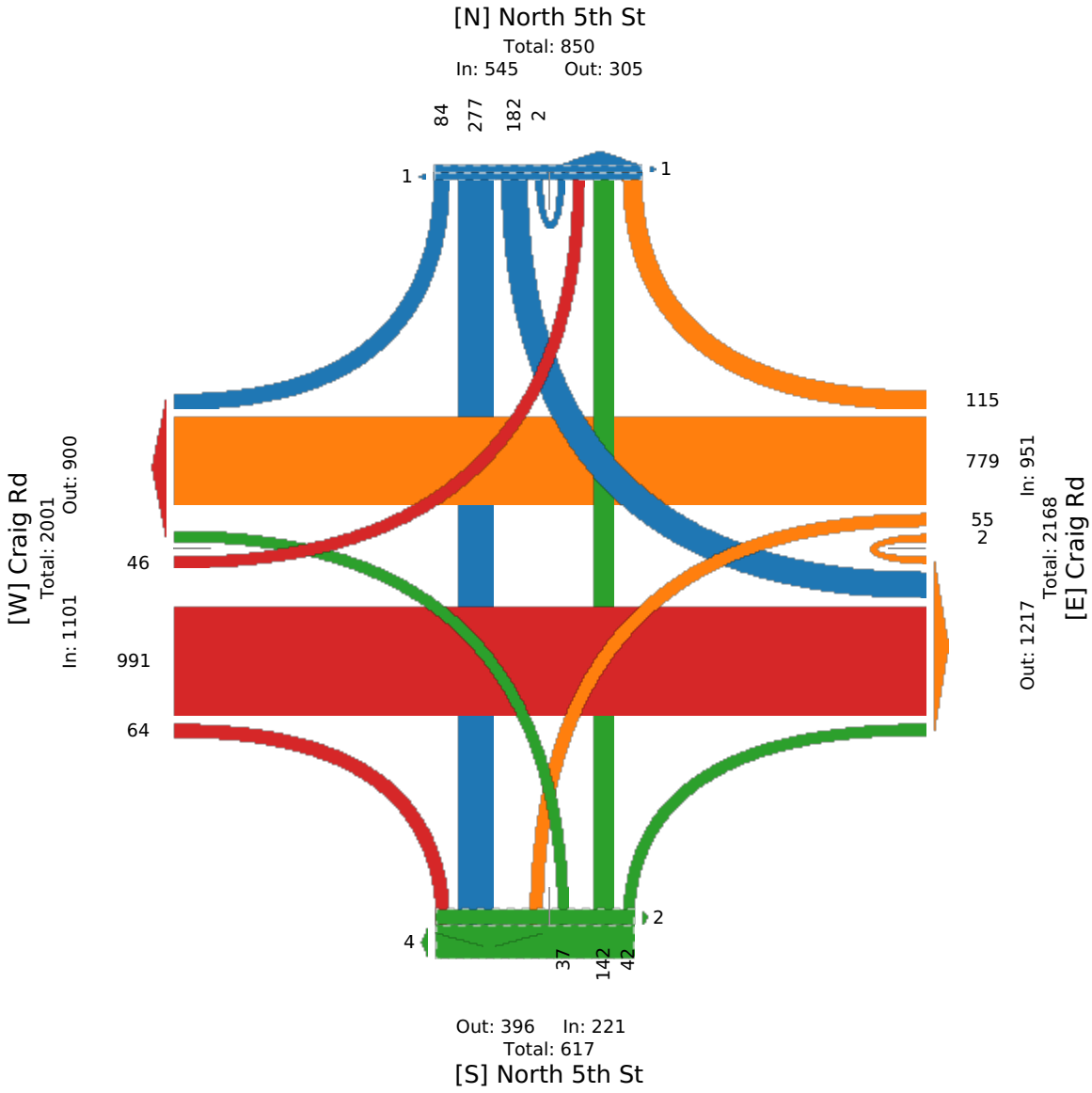
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	North 5th St						North 5th St						Craig Rd						Craig Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-05-04 7:15AM	12	36	16	0	**64**	2	47	73	21	1	**142**	0	8	266	16	0	**290**	0	10	183	32	0	**225**	0	**721**
7:30AM	9	32	11	0	**52**	2	49	76	13	1	**139**	0	15	253	15	0	**283**	0	16	187	28	0	**231**	0	**705**
7:45AM	8	35	2	0	**45**	0	44	82	25	0	**151**	1	11	254	17	0	**282**	0	13	207	28	2	**250**	0	**728**
8:00AM	8	39	13	0	**60**	2	42	46	25	0	**113**	1	12	218	16	0	**246**	0	16	202	27	0	**245**	0	**664**
Total	37	142	42	0	**221**	6	182	277	84	2	**545**	2	46	991	64	0	**1101**	0	55	779	115	2	**951**	0	**2818**
% Approach	16.7%	64.3%	19.0%	0%	**-**	-	33.4%	50.8%	15.4%	0.4%	**-**	-	4.2%	90.0%	5.8%	0%	**-**	-	5.8%	81.9%	12.1%	0.2%	**-**	-	-
% Total	1.3%	5.0%	1.5%	0%	**7.8%**	-	6.5%	9.8%	3.0%	0.1%	**19.3%**	-	1.6%	35.2%	2.3%	0%	**39.1%**	-	2.0%	27.6%	4.1%	0.1%	**33.7%**	-	-
PHF	0.771	0.910	0.641	-	**0.859**	-	0.929	0.845	0.830	0.500	**0.901**	-	0.767	0.931	0.941	-	**0.949**	-	0.859	0.941	0.898	0.250	**0.951**	-	0.967
Lights	31	125	28	0	**184**	-	180	264	81	2	**527**	-	45	957	62	0	**1064**	-	48	729	107	2	**886**	-	2661
% Lights	83.8%	88.0%	66.7%	0%	**83.3%**	-	98.9%	95.3%	96.4%	100%	**96.7%**	-	97.8%	96.6%	96.9%	0%	**96.6%**	-	87.3%	93.6%	93.0%	100%	**93.2%**	-	94.4%
Single-Unit Trucks	5	8	3	0	**16**	-	1	3	2	0	**6**	-	1	18	1	0	**20**	-	2	31	3	0	**36**	-	78
% Single-Unit Trucks	13.5%	5.6%	7.1%	0%	**7.2%**	-	0.5%	1.1%	2.4%	0%	**1.1%**	-	2.2%	1.8%	1.6%	0%	**1.8%**	-	3.6%	4.0%	2.6%	0%	**3.8%**	-	2.8%
Articulated Trucks	0	8	8	0	**16**	-	0	8	0	0	**8**	-	0	6	0	0	**6**	-	4	12	1	0	**17**	-	47
% Articulated Trucks	0%	5.6%	19.0%	0%	**7.2%**	-	0%	2.9%	0%	0%	**1.5%**	-	0%	0.6%	0%	0%	**0.5%**	-	7.3%	1.5%	0.9%	0%	**1.8%**	-	1.7%
Buses	1	1	2	0	**4**	-	1	2	0	0	**3**	-	0	10	1	0	**11**	-	1	7	4	0	**12**	-	30
% Buses	2.7%	0.7%	4.8%	0%	**1.8%**	-	0.5%	0.7%	0%	0%	**0.6%**	-	0%	1.0%	1.6%	0%	**1.0%**	-	1.8%	0.9%	3.5%	0%	**1.3%**	-	1.1%
Bicycles on Road	0	0	1	0	**1**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Bicycles on Road	0%	0%	2.4%	0%	**0.5%**	-	0%	0%	1.2%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Craig Rd/N 5th St - TMC
Tue May 4, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831285, Location: 36.239587, -115.134346

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Craig Rd/N 5th St - TMC

Tue May 4, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831285, Location: 36.239587, -115.134346

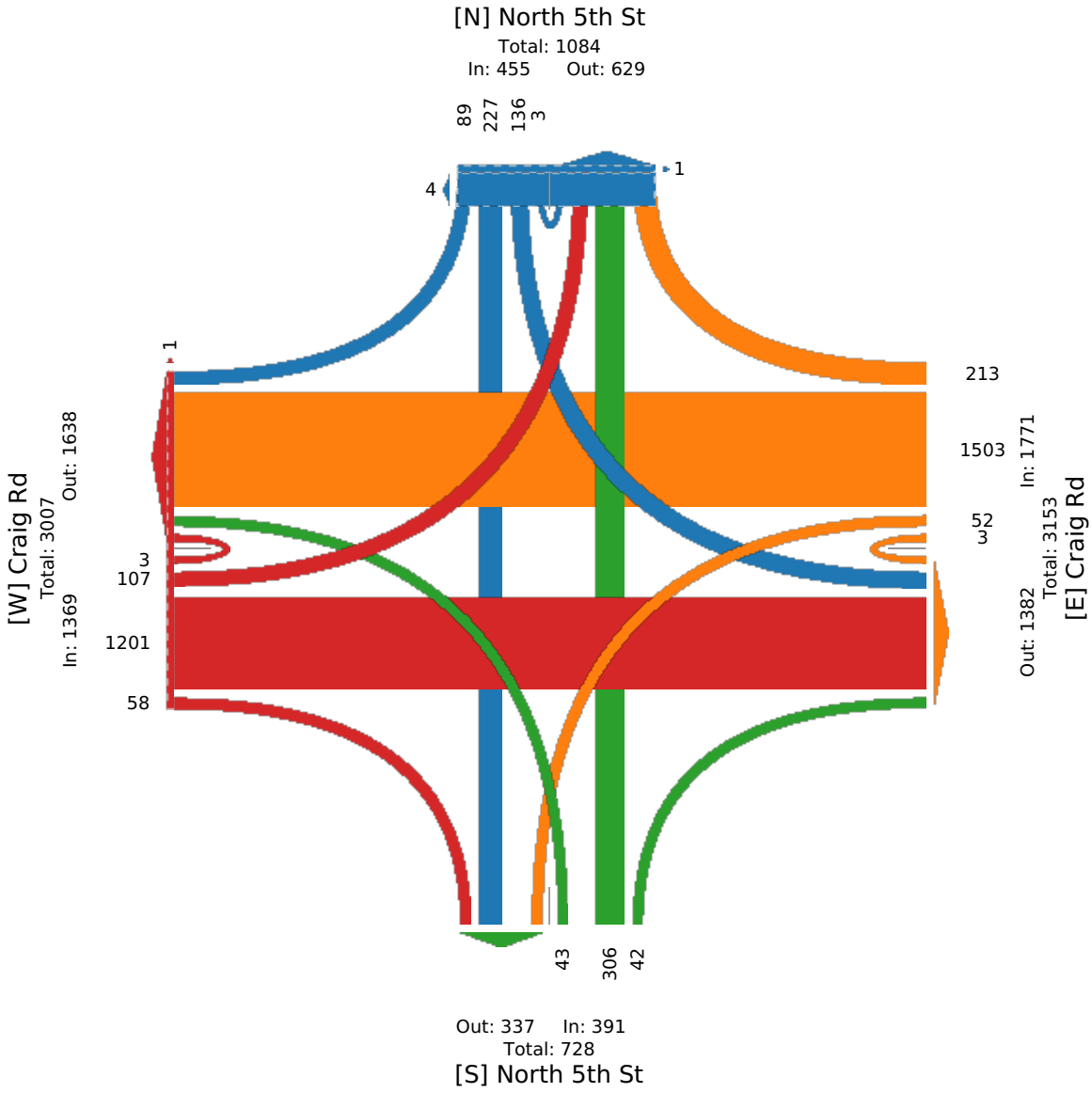
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	North 5th St						North 5th St						Craig Rd						Craig Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-05-04 4:15PM	16	72	12	0	**100**	0	29	54	27	1	**111**	0	31	287	15	0	**333**	0	13	369	68	2	**452**	0	**996**
4:30PM	4	74	12	0	**90**	0	39	53	23	0	**115**	3	27	281	18	3	**329**	0	14	411	42	0	**467**	0	**1001**
4:45PM	6	92	9	0	**107**	0	34	58	26	1	**119**	0	23	341	11	0	**375**	0	9	367	41	0	**417**	0	**1018**
5:00PM	17	68	9	0	**94**	0	34	62	13	1	**110**	2	26	292	14	0	**332**	1	16	356	62	1	**435**	0	**971**
Total	43	306	42	0	**391**	0	136	227	89	3	**455**	5	107	1201	58	3	**1369**	1	52	1503	213	3	**1771**	0	**3986**
% Approach	11.0%	78.3%	10.7%	0%	**-**	-	29.9%	49.9%	19.6%	0.7%	**-**	-	7.8%	87.7%	4.2%	0.2%	**-**	-	2.9%	84.9%	12.0%	0.2%	**-**	-	-
% Total	1.1%	7.7%	1.1%	0%	**9.8%**	-	3.4%	5.7%	2.2%	0.1%	**11.4%**	-	2.7%	30.1%	1.5%	0.1%	**34.3%**	-	1.3%	37.7%	5.3%	0.1%	**44.4%**	-	-
PHF	0.632	0.832	0.854	-	**0.911**	-	0.872	0.915	0.824	0.750	**0.956**	-	0.863	0.880	0.806	0.250	**0.912**	-	0.813	0.914	0.783	0.375	**0.948**	-	0.978
Lights	40	299	39	0	**378**	-	132	217	85	3	**437**	-	105	1171	57	3	**1336**	-	49	1488	209	3	**1749**	-	3900
% Lights	93.0%	97.7%	92.9%	0%	**96.7%**	-	97.1%	95.6%	95.5%	100%	**96.0%**	-	98.1%	97.5%	98.3%	100%	**97.6%**	-	94.2%	99.0%	98.1%	100%	**98.8%**	-	97.8%
Single-Unit Trucks	2	5	0	0	**7**	-	2	7	3	0	**12**	-	2	18	1	0	**21**	-	2	7	1	0	**10**	-	50
% Single-Unit Trucks	4.7%	1.6%	0%	0%	**1.8%**	-	1.5%	3.1%	3.4%	0%	**2.6%**	-	1.9%	1.5%	1.7%	0%	**1.5%**	-	3.8%	0.5%	0.5%	0%	**0.6%**	-	1.3%
Articulated Trucks	0	0	2	0	**2**	-	2	1	1	0	**4**	-	0	6	0	0	**6**	-	1	3	1	0	**5**	-	17
% Articulated Trucks	0%	0%	4.8%	0%	**0.5%**	-	1.5%	0.4%	1.1%	0%	**0.9%**	-	0%	0.5%	0%	0%	**0.4%**	-	1.9%	0.2%	0.5%	0%	**0.3%**	-	0.4%
Buses	1	2	0	0	**3**	-	0	2	0	0	**2**	-	0	5	0	0	**5**	-	0	5	2	0	**7**	-	17
% Buses	2.3%	0.7%	0%	0%	**0.8%**	-	0%	0.9%	0%	0%	**0.4%**	-	0%	0.4%	0%	0%	**0.4%**	-	0%	0.3%	0.9%	0%	**0.4%**	-	0.4%
Bicycles on Road	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2
% Bicycles on Road	0%	0%	2.4%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	60.0%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	40.0%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Craig Rd/N 5th St - TMC
Tue May 4, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831285, Location: 36.239587, -115.134346

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St/Alexander Rd - TMC

Wed Apr 28, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831279, Location: 36.232022, -115.180161

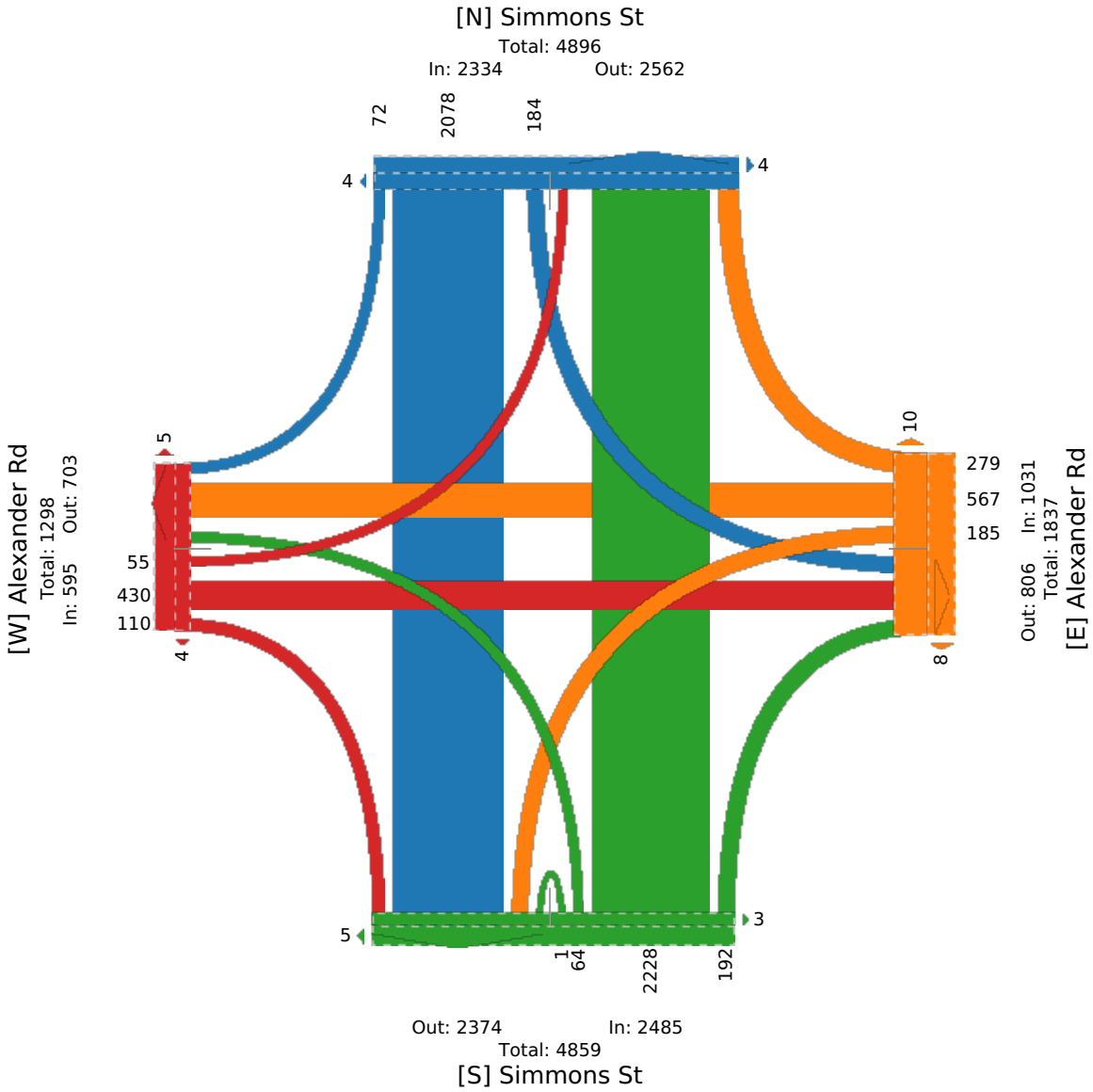
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Simmons St						Simmons St						Alexander Rd						Alexander Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-28 7:00AM	6	65	5	0	**76**	0	6	158	7	0	**171**	1	6	23	12	0	**41**	0	7	29	10	0	**46**	0	**334**
7:15AM	3	82	5	0	**90**	0	3	138	5	0	**146**	1	2	18	7	0	**27**	1	14	26	12	0	**52**	0	**315**
7:30AM	3	92	7	0	**102**	1	8	159	10	0	**177**	0	5	22	5	0	**32**	1	13	22	13	0	**48**	2	**359**
7:45AM	1	93	13	0	**107**	2	1	123	5	0	**129**	1	4	22	13	0	**39**	1	8	40	15	0	**63**	0	**338**
Hourly Total	13	332	30	0	**375**	3	18	578	27	0	**623**	3	17	85	37	0	**139**	3	42	117	50	0	**209**	2	**1346**
8:00AM	1	87	13	0	**101**	0	10	136	3	0	**149**	0	3	16	5	0	**24**	0	7	19	11	0	**37**	0	**311**
8:15AM	2	93	11	1	**107**	0	7	147	1	0	**155**	0	1	17	6	0	**24**	1	8	27	15	0	**50**	0	**336**
8:30AM	3	109	9	0	**121**	0	3	95	2	0	**100**	0	1	20	4	0	**25**	0	9	20	12	0	**41**	0	**287**
8:45AM	4	90	10	0	**104**	1	8	120	1	0	**129**	0	4	26	3	0	**33**	0	9	29	5	0	**43**	2	**309**
Hourly Total	10	379	43	1	**433**	1	28	498	7	0	**533**	0	9	79	18	0	**106**	1	33	95	43	0	**171**	2	**1243**
4:00PM	3	175	20	0	**198**	1	14	138	6	0	**158**	0	3	35	9	0	**47**	1	17	51	28	0	**96**	1	**499**
4:15PM	5	198	12	0	**215**	0	19	111	2	0	**132**	1	6	29	3	0	**38**	1	15	43	21	0	**79**	5	**464**
4:30PM	5	189	21	0	**215**	0	26	107	5	0	**138**	0	2	35	7	0	**44**	0	11	44	20	0	**75**	1	**472**
4:45PM	6	206	9	0	**221**	1	11	142	3	0	**156**	0	1	26	7	0	**34**	2	22	47	29	0	**98**	0	**509**
Hourly Total	19	768	62	0	**849**	2	70	498	16	0	**584**	1	12	125	26	0	**163**	4	65	185	98	0	**348**	7	**1944**
5:00PM	5	194	11	0	**210**	0	13	130	5	0	**148**	0	7	44	8	0	**59**	0	9	45	22	0	**76**	0	**493**
5:15PM	10	214	15	0	**239**	2	22	137	5	0	**164**	1	5	31	6	0	**42**	0	11	47	25	0	**83**	1	**528**
5:30PM	4	156	11	0	**171**	0	13	124	7	0	**144**	0	3	36	6	0	**45**	0	14	39	21	0	**74**	5	**434**
5:45PM	3	185	20	0	**208**	0	20	113	5	0	**138**	3	2	30	9	0	**41**	1	11	39	20	0	**70**	1	**457**
Hourly Total	22	749	57	0	**828**	2	68	504	22	0	**594**	4	17	141	29	0	**187**	1	45	170	88	0	**303**	7	**1912**
Total	64	2228	192	1	**2485**	8	184	2078	72	0	**2334**	8	55	430	110	0	**595**	9	185	567	279	0	**1031**	18	**6445**
% Approach	2.6%	89.7%	7.7%	0%	**-**	-	7.9%	89.0%	3.1%	0%	**-**	-	9.2%	72.3%	18.5%	0%	**-**	-	17.9%	55.0%	27.1%	0%	**-**	-	**-**
% Total	1.0%	34.6%	3.0%	0%	**38.6%**	-	2.9%	32.2%	1.1%	0%	**36.2%**	-	0.9%	6.7%	1.7%	0%	**9.2%**	-	2.9%	8.8%	4.3%	0%	**16.0%**	-	**-**
Lights	59	2180	188	1	**2428**	-	179	2022	71	0	**2272**	-	53	422	104	0	**579**	-	181	559	277	0	**1017**	-	6296
% Lights	92.2%	97.8%	97.9%	100%	**97.7%**	-	97.3%	97.3%	98.6%	0%	**97.3%**	-	96.4%	98.1%	94.5%	0%	**97.3%**	-	97.8%	98.6%	99.3%	0%	**98.6%**	-	97.7%
Single-Unit Trucks	1	25	2	0	**28**	-	0	19	0	0	**19**	-	0	3	1	0	**4**	-	0	4	2	0	**6**	-	57
% Single-Unit Trucks	1.6%	1.1%	1.0%	0%	**1.1%**	-	0%	0.9%	0%	0%	**0.8%**	-	0%	0.7%	0.9%	0%	**0.7%**	-	0%	0.7%	0.7%	0%	**0.6%**	-	0.9%
Articulated Trucks	0	5	0	0	**5**	-	0	4	0	0	**4**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	10
% Articulated Trucks	0%	0.2%	0%	0%	**0.2%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0.9%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses	4	18	2	0	**24**	-	3	32	0	0	**35**	-	2	5	3	0	**10**	-	4	3	0	0	**7**	-	76
% Buses	6.3%	0.8%	1.0%	0%	**1.0%**	-	1.6%	1.5%	0%	0%	**1.5%**	-	3.6%	1.2%	2.7%	0%	**1.7%**	-	2.2%	0.5%	0%	0%	**0.7%**	-	1.2%
Bicycles on Road	0	0	0	0	**0**	-	2	1	1	0	**4**	-	0	0	1	0	**1**	-	0	1	0	0	**1**	-	6
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	1.1%	0%	1.4%	0%	**0.2%**	-	0%	0%	0.9%	0%	**0.2%**	-	0%	0.2%	0%	0%	**0.1%**	-	0.1%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	5	-	-	-	-	-	9	-	-	-	-	-	17	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	62.5%	-	-	-	-	-	100%	-	-	-	-	-	94.4%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	37.5%	-	-	-	-	-	0%	-	-	-	-	-	5.6%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Simmons St/Alexander Rd - TMC
Wed Apr 28, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831279, Location: 36.232022, -115.180161

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St/Alexander Rd - TMC

Wed Apr 28, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831279, Location: 36.232022, -115.180161

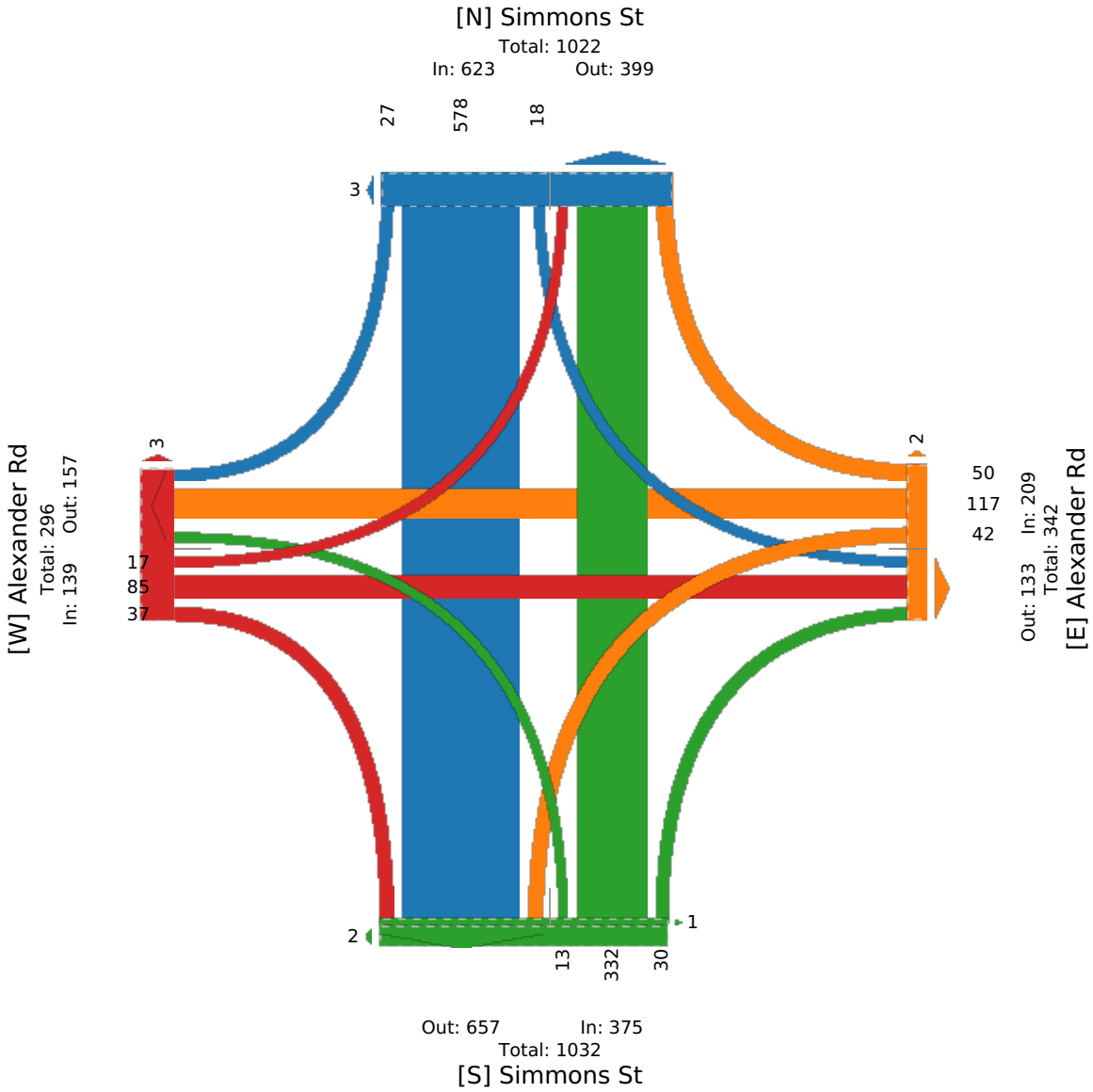
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Simmons St						Simmons St						Alexander Rd						Alexander Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-28 7:00AM	6	65	5	0	**76**	0	6	158	7	0	**171**	1	6	23	12	0	**41**	0	7	29	10	0	**46**	0	**334**
7:15AM	3	82	5	0	**90**	0	3	138	5	0	**146**	1	2	18	7	0	**27**	1	14	26	12	0	**52**	0	**315**
7:30AM	3	92	7	0	**102**	1	8	159	10	0	**177**	0	5	22	5	0	**32**	1	13	22	13	0	**48**	2	**359**
7:45AM	1	93	13	0	**107**	2	1	123	5	0	**129**	1	4	22	13	0	**39**	1	8	40	15	0	**63**	0	**338**
Total	13	332	30	0	**375**	3	18	578	27	0	**623**	3	17	85	37	0	**139**	3	42	117	50	0	**209**	2	**1346**
% Approach	3.5%	88.5%	8.0%	0%	**-**	-	2.9%	92.8%	4.3%	0%	**-**	-	12.2%	61.2%	26.6%	0%	**-**	-	20.1%	56.0%	23.9%	0%	**-**	-	-
% Total	1.0%	24.7%	2.2%	0%	**27.9%**	-	1.3%	42.9%	2.0%	0%	**46.3%**	-	1.3%	6.3%	2.7%	0%	**10.3%**	-	3.1%	8.7%	3.7%	0%	**15.5%**	-	-
PHF	0.542	0.892	0.577	-	**0.876**	-	0.563	0.907	0.650	-	**0.877**	-	0.708	0.924	0.692	-	**0.863**	-	0.750	0.731	0.833	-	**0.829**	-	0.935
Lights	10	318	29	0	**357**	-	16	567	26	0	**609**	-	16	83	33	0	**132**	-	42	113	50	0	**205**	-	1303
% Lights	76.9%	95.8%	96.7%	0%	**95.2%**	-	88.9%	98.1%	96.3%	0%	**97.8%**	-	94.1%	97.6%	89.2%	0%	**95.0%**	-	100%	96.6%	100%	0%	**98.1%**	-	96.8%
Single-Unit Trucks	1	3	0	0	**4**	-	0	2	0	0	**2**	-	0	1	1	0	**2**	-	0	1	0	0	**1**	-	9
% Single-Unit Trucks	7.7%	0.9%	0%	0%	**1.1%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	1.2%	2.7%	0%	**1.4%**	-	0%	0.9%	0%	0%	**0.5%**	-	0.7%
Articulated Trucks	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	2.7%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	2	10	1	0	**13**	-	2	8	0	0	**10**	-	1	1	1	0	**3**	-	0	3	0	0	**3**	-	29
% Buses	15.4%	3.0%	3.3%	0%	**3.5%**	-	11.1%	1.4%	0%	0%	**1.6%**	-	5.9%	1.2%	2.7%	0%	**2.2%**	-	0%	2.6%	0%	0%	**1.4%**	-	2.2%
Bicycles on Road	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	3
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.2%	3.7%	0%	**0.3%**	-	0%	0%	2.7%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Simmons St/Alexander Rd - TMC
Wed Apr 28, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831279, Location: 36.232022, -115.180161

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St/Alexander Rd - TMC

Wed Apr 28, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831279, Location: 36.232022, -115.180161

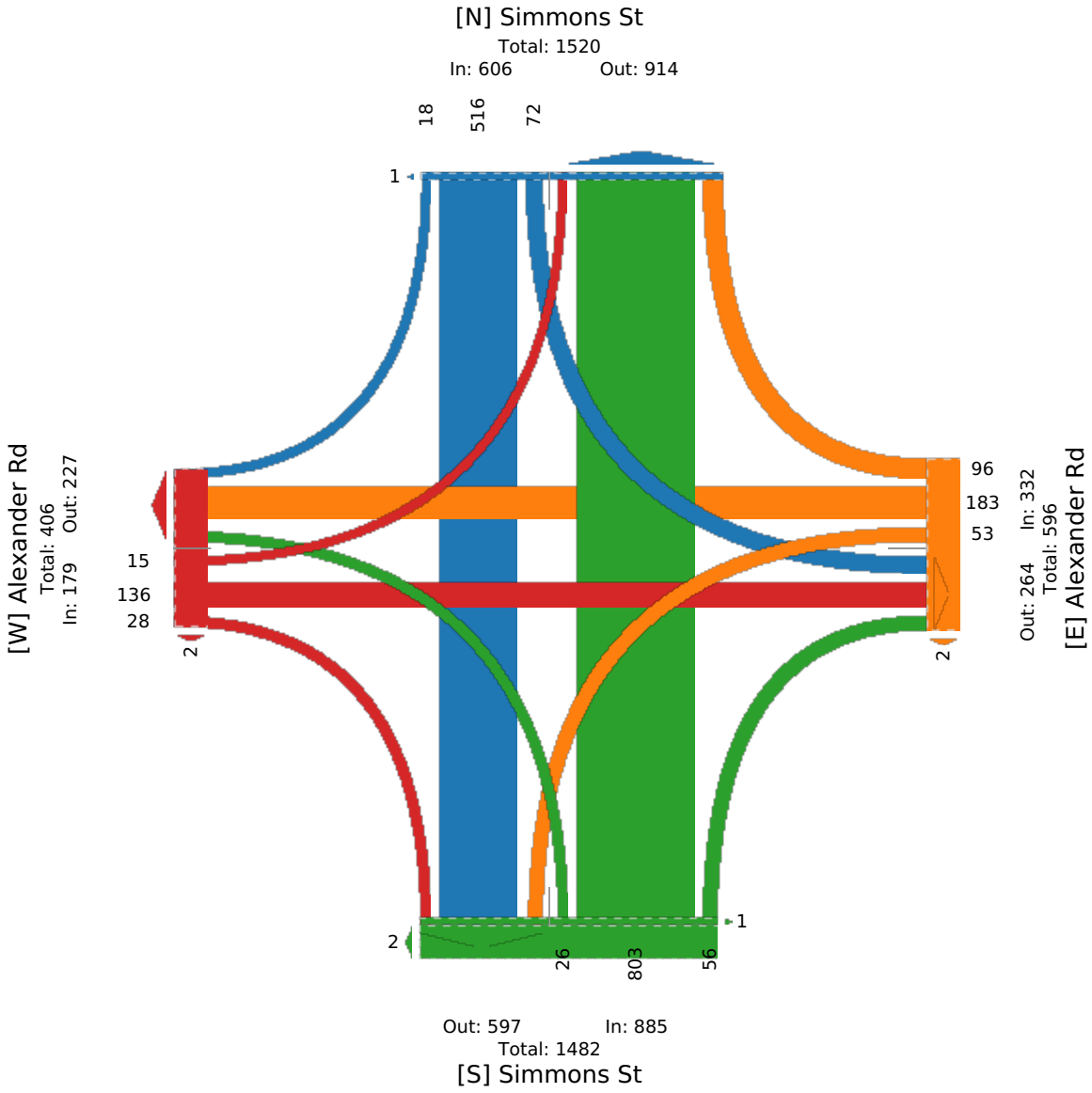
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Simmons St						Simmons St						Alexander Rd						Alexander Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-04-28 4:30PM	5	189	21	0	**215**	0	26	107	5	0	**138**	0	2	35	7	0	**44**	0	11	44	20	0	**75**	1	**472**
4:45PM	6	206	9	0	**221**	1	11	142	3	0	**156**	0	1	26	7	0	**34**	2	22	47	29	0	**98**	0	**509**
5:00PM	5	194	11	0	**210**	0	13	130	5	0	**148**	0	7	44	8	0	**59**	0	9	45	22	0	**76**	0	**493**
5:15PM	10	214	15	0	**239**	2	22	137	5	0	**164**	1	5	31	6	0	**42**	0	11	47	25	0	**83**	1	**528**
Total	26	803	56	0	**885**	3	72	516	18	0	**606**	1	15	136	28	0	**179**	2	53	183	96	0	**332**	2	**2002**
% Approach	2.9%	90.7%	6.3%	0%	**-**	-	11.9%	85.1%	3.0%	0%	**-**	-	8.4%	76.0%	15.6%	0%	**-**	-	16.0%	55.1%	28.9%	0%	**-**	-	-
% Total	1.3%	40.1%	2.8%	0%	**44.2%**	-	3.6%	25.8%	0.9%	0%	**30.3%**	-	0.7%	6.8%	1.4%	0%	**8.9%**	-	2.6%	9.1%	4.8%	0%	**16.6%**	-	-
PHF	0.650	0.938	0.667	-	**0.926**	-	0.692	0.908	0.900	-	**0.924**	-	0.536	0.773	0.875	-	**0.758**	-	0.602	0.973	0.828	-	**0.847**	-	0.948
Lights	26	789	55	0	**870**	-	72	498	18	0	**588**	-	15	136	27	0	**178**	-	51	183	94	0	**328**	-	1964
% Lights	100%	98.3%	98.2%	0%	**98.3%**	-	100%	96.5%	100%	0%	**97.0%**	-	100%	100%	96.4%	0%	**99.4%**	-	96.2%	100%	97.9%	0%	**98.8%**	-	98.1%
Single-Unit Trucks	0	10	1	0	**11**	-	0	5	0	0	**5**	-	0	0	0	0	**0**	-	0	0	2	0	**2**	-	18
% Single-Unit Trucks	0%	1.2%	1.8%	0%	**1.2%**	-	0%	1.0%	0%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	2.1%	0%	**0.6%**	-	0.9%
Articulated Trucks	0	2	0	0	**2**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Articulated Trucks	0%	0.2%	0%	0%	**0.2%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	2	0	0	**2**	-	0	12	0	0	**12**	-	0	0	1	0	**1**	-	2	0	0	0	**2**	-	17
% Buses	0%	0.2%	0%	0%	**0.2%**	-	0%	2.3%	0%	0%	**2.0%**	-	0%	0%	3.6%	0%	**0.6%**	-	3.8%	0%	0%	0%	**0.6%**	-	0.8%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Simmons St/Alexander Rd - TMC
Wed Apr 28, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831279, Location: 36.232022, -115.180161

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Lake Mead Blvd/Bruce St - TMC

Tue May 4, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831286, Location: 36.195749, -115.125102

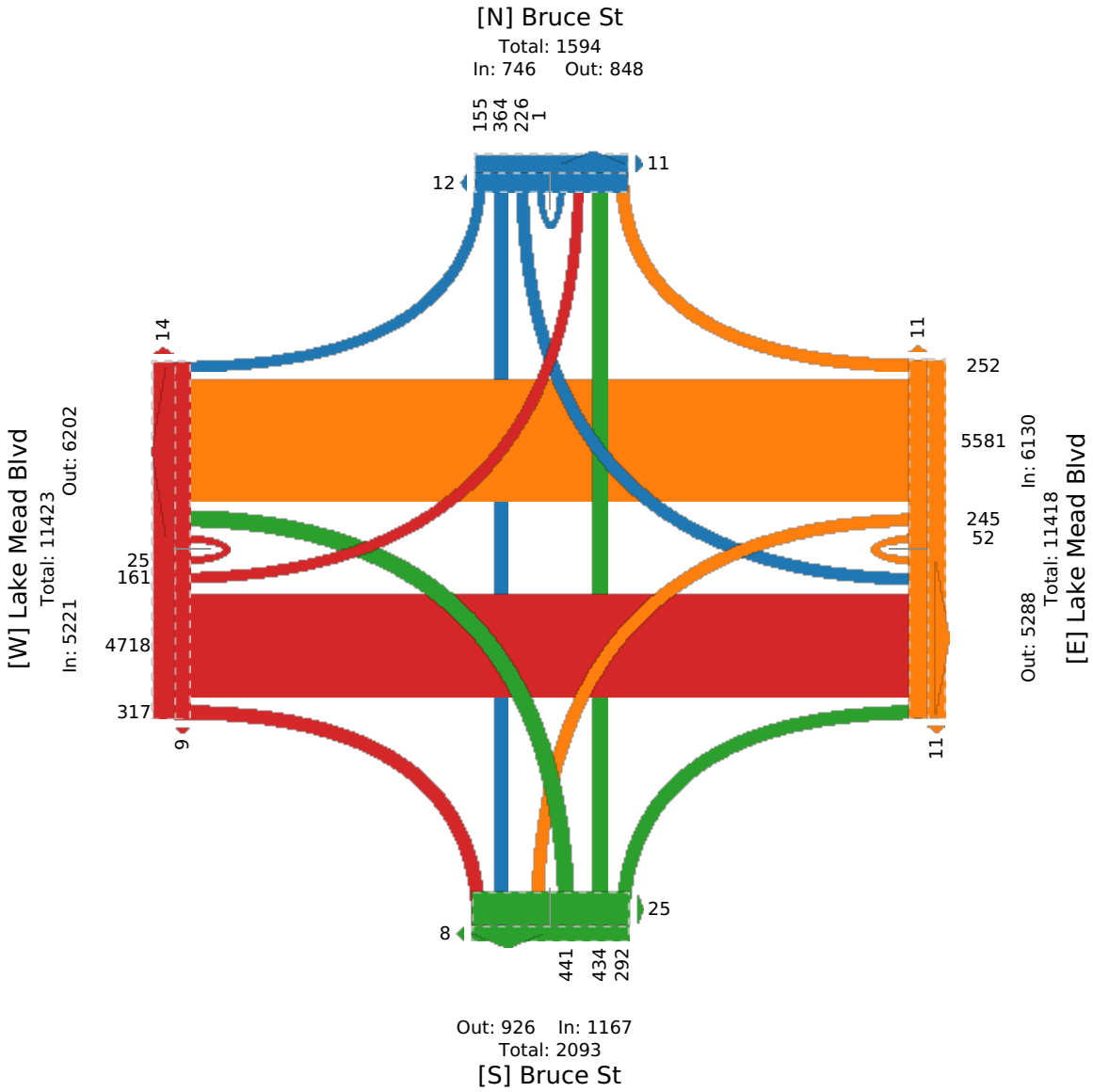
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Bruce St						Bruce St						Lake Mead Blvd						Lake Mead Blvd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-05-04 7:00AM	24	15	7	0	**46**	2	7	16	4	0	**27**	0	7	205	21	0	**233**	3	16	426	6	0	**448**	0	**754**
7:15AM	25	16	12	0	**53**	2	5	19	7	0	**31**	1	5	199	22	0	**226**	1	10	405	9	1	**425**	0	**735**
7:30AM	21	24	10	0	**55**	5	5	27	9	0	**41**	0	6	212	22	3	**243**	0	20	414	9	2	**445**	1	**784**
7:45AM	41	26	26	0	**93**	0	10	19	5	0	**34**	0	9	258	44	1	**312**	2	18	380	12	0	**410**	2	**849**
Hourly Total	111	81	55	0	**247**	9	27	81	25	0	**133**	1	27	874	109	4	**1014**	6	64	1625	36	3	**1728**	3	**3122**
8:00AM	28	15	21	0	**64**	2	11	15	3	0	**29**	2	10	220	15	1	**246**	2	19	304	17	1	**341**	0	**680**
8:15AM	16	17	11	0	**44**	0	11	15	3	0	**29**	4	13	281	9	1	**304**	2	13	309	8	0	**330**	0	**707**
8:30AM	18	13	18	0	**49**	5	11	20	6	1	**38**	3	14	211	18	1	**244**	4	11	331	7	4	**353**	2	**684**
8:45AM	15	21	13	0	**49**	1	17	15	1	0	**33**	0	10	245	10	3	**268**	0	12	328	15	4	**359**	0	**709**
Hourly Total	77	66	63	0	**206**	8	50	65	13	1	**129**	9	47	957	52	6	**1062**	8	55	1272	47	9	**1383**	2	**2780**
4:00PM	29	39	21	0	**89**	2	25	32	18	0	**75**	4	14	395	25	1	**435**	1	16	339	22	5	**382**	7	**981**
4:15PM	34	35	27	0	**96**	2	17	34	8	0	**59**	2	12	352	24	2	**390**	2	22	382	25	7	**436**	1	**981**
4:30PM	37	29	15	0	**81**	2	21	25	19	0	**65**	1	10	402	14	4	**430**	3	14	341	24	5	**384**	0	**960**
4:45PM	27	22	20	0	**69**	0	19	30	9	0	**58**	2	11	366	22	2	**401**	0	11	366	15	9	**401**	1	**929**
Hourly Total	127	125	83	0	**335**	6	82	121	54	0	**257**	9	47	1515	85	9	**1656**	6	63	1428	86	26	**1603**	9	**3851**
5:00PM	29	37	23	0	**89**	4	15	25	20	0	**60**	0	8	341	12	0	**361**	1	18	333	23	6	**380**	1	**890**
5:15PM	30	46	17	0	**93**	3	12	30	14	0	**56**	2	8	372	17	0	**397**	1	8	275	16	0	**299**	4	**845**
5:30PM	36	35	21	0	**92**	1	23	19	17	0	**59**	1	12	321	28	3	**364**	0	13	347	25	3	**388**	2	**903**
5:45PM	31	44	30	0	**105**	2	17	23	12	0	**52**	1	12	338	14	3	**367**	1	24	301	19	5	**349**	1	**873**
Hourly Total	126	162	91	0	**379**	10	67	97	63	0	**227**	4	40	1372	71	6	**1489**	3	63	1256	83	14	**1416**	8	**3511**
Total	441	434	292	0	**1167**	33	226	364	155	1	**746**	23	161	4718	317	25	**5221**	23	245	5581	252	52	**6130**	22	**13264**
% Approach	37.8%	37.2%	25.0%	0%	**-**	-	30.3%	48.8%	20.8%	0.1%	**-**	-	3.1%	90.4%	6.1%	0.5%	**-**	-	4.0%	91.0%	4.1%	0.8%	**-**	-	-
% Total	3.3%	3.3%	2.2%	0%	**8.8%**	-	1.7%	2.7%	1.2%	0%	**5.6%**	-	1.2%	35.6%	2.4%	0.2%	**39.4%**	-	1.8%	42.1%	1.9%	0.4%	**46.2%**	-	-
Lights	428	423	285	0	**1136**	-	222	357	151	1	**731**	-	158	4561	313	25	**5057**	-	241	5374	249	52	**5916**	-	12840
% Lights	97.1%	97.5%	97.6%	0%	**97.3%**	-	98.2%	98.1%	97.4%	100%	**98.0%**	-	98.1%	96.7%	98.7%	100%	**96.9%**	-	98.4%	96.3%	98.8%	100%	**96.5%**	-	96.8%
Single-Unit Trucks	7	8	2	0	**17**	-	4	3	3	0	**10**	-	2	85	1	0	**88**	-	4	112	1	0	**117**	-	232
% Single-Unit Trucks	1.6%	1.8%	0.7%	0%	**1.5%**	-	1.8%	0.8%	1.9%	0%	**1.3%**	-	1.2%	1.8%	0.3%	0%	**1.7%**	-	1.6%	2.0%	0.4%	0%	**1.9%**	-	1.7%
Articulated Trucks	0	1	3	0	**4**	-	0	1	1	0	**2**	-	1	42	2	0	**45**	-	0	54	2	0	**56**	-	107
% Articulated Trucks	0%	0.2%	1.0%	0%	**0.3%**	-	0%	0.3%	0.6%	0%	**0.3%**	-	0.6%	0.9%	0.6%	0%	**0.9%**	-	0%	1.0%	0.8%	0%	**0.9%**	-	0.8%
Buses	6	2	0	0	**8**	-	0	1	0	0	**1**	-	0	30	0	0	**30**	-	0	41	0	0	**41**	-	80
% Buses	1.4%	0.5%	0%	0%	**0.7%**	-	0%	0.3%	0%	0%	**0.1%**	-	0%	0.6%	0%	0%	**0.6%**	-	0%	0.7%	0%	0%	**0.7%**	-	0.6%
Bicycles on Road	0	0	2	0	**2**	-	0	2	0	0	**2**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	5
% Bicycles on Road	0%	0%	0.7%	0%	**0.2%**	-	0%	0.5%	0%	0%	**0.3%**	-	0%	0%	0.3%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	33	-	-	-	-	-	23	-	-	-	-	-	21	-	-	-	-	-	22	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	91.3%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	8.7%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lake Mead Blvd/Bruce St - TMC
Tue May 4, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831286, Location: 36.195749, -115.125102

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Lake Mead Blvd/Bruce St - TMC

Tue May 4, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831286, Location: 36.195749, -115.125102

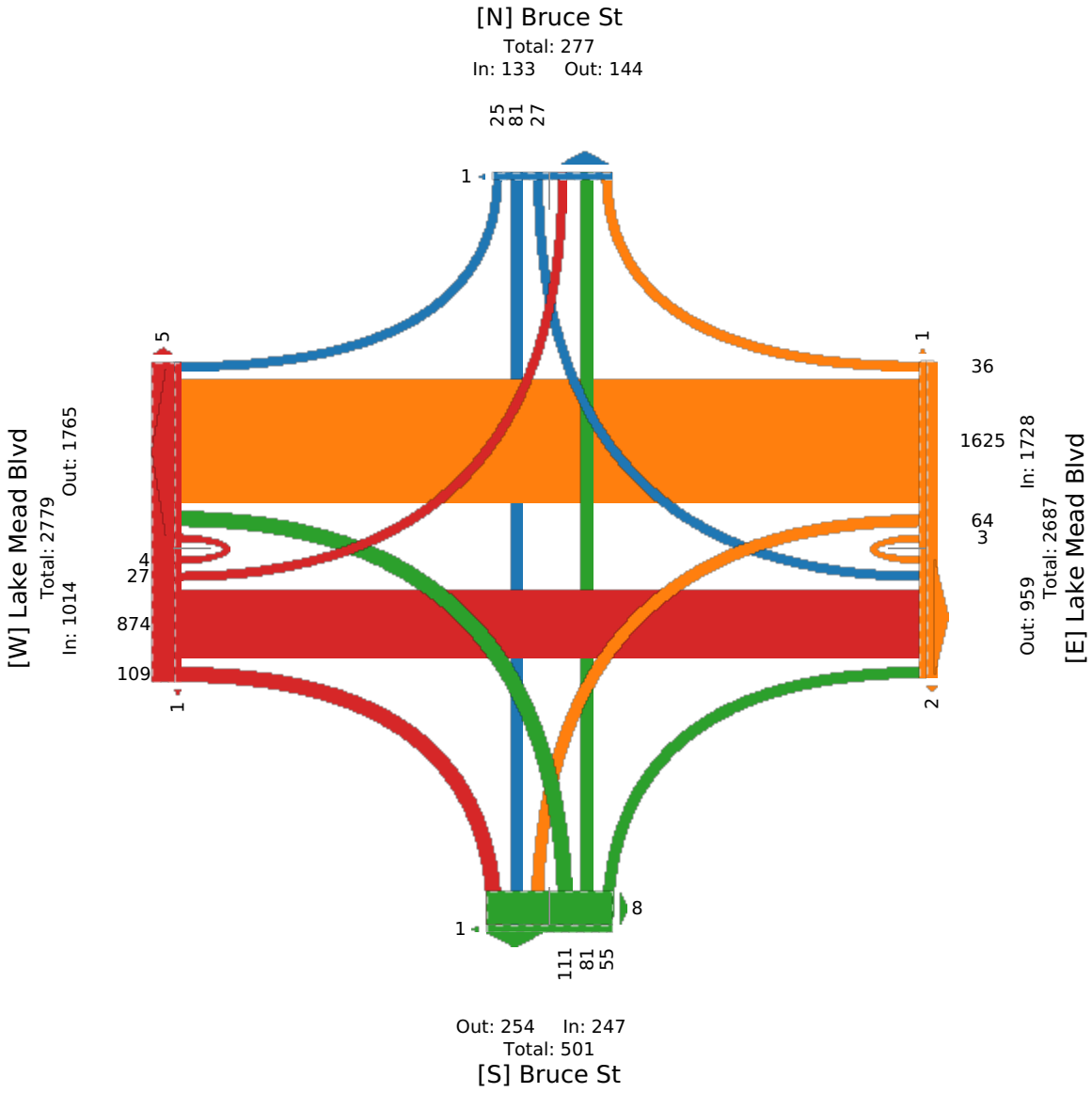
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767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Bruce St						Bruce St						Lake Mead Blvd						Lake Mead Blvd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-05-04 7:00AM	24	15	7	0	**46**	2	7	16	4	0	**27**	0	7	205	21	0	**233**	3	16	426	6	0	**448**	0	**754**
7:15AM	25	16	12	0	**53**	2	5	19	7	0	**31**	1	5	199	22	0	**226**	1	10	405	9	1	**425**	0	**735**
7:30AM	21	24	10	0	**55**	5	5	27	9	0	**41**	0	6	212	22	3	**243**	0	20	414	9	2	**445**	1	**784**
7:45AM	41	26	26	0	**93**	0	10	19	5	0	**34**	0	9	258	44	1	**312**	2	18	380	12	0	**410**	2	**849**
Total	111	81	55	0	**247**	9	27	81	25	0	**133**	1	27	874	109	4	**1014**	6	64	1625	36	3	**1728**	3	**3122**
% Approach	44.9%	32.8%	22.3%	0%	**-**	-	20.3%	60.9%	18.8%	0%	**-**	-	2.7%	86.2%	10.7%	0.4%	**-**	-	3.7%	94.0%	2.1%	0.2%	**-**	-	-
% Total	3.6%	2.6%	1.8%	0%	**7.9%**	-	0.9%	2.6%	0.8%	0%	**4.3%**	-	0.9%	28.0%	3.5%	0.1%	**32.5%**	-	2.0%	52.0%	1.2%	0.1%	**55.3%**	-	-
PHF	0.677	0.779	0.529	-	**0.664**	-	0.675	0.750	0.694	-	**0.811**	-	0.750	0.847	0.619	0.333	**0.813**	-	0.800	0.954	0.750	0.375	**0.964**	-	0.919
Lights	106	76	53	0	**235**	-	26	78	24	0	**128**	-	27	825	107	4	**963**	-	60	1551	35	3	**1649**	-	2975
% Lights	95.5%	93.8%	96.4%	0%	**95.1%**	-	96.3%	96.3%	96.0%	0%	**96.2%**	-	100%	94.4%	98.2%	100%	**95.0%**	-	93.8%	95.4%	97.2%	100%	**95.4%**	-	95.3%
Single-Unit Trucks	4	3	1	0	**8**	-	1	1	0	0	**2**	-	0	22	0	0	**22**	-	4	45	0	0	**49**	-	81
% Single-Unit Trucks	3.6%	3.7%	1.8%	0%	**3.2%**	-	3.7%	1.2%	0%	0%	**1.5%**	-	0%	2.5%	0%	0%	**2.2%**	-	6.3%	2.8%	0%	0%	**2.8%**	-	2.6%
Articulated Trucks	0	1	1	0	**2**	-	0	1	1	0	**2**	-	0	17	2	0	**19**	-	0	18	1	0	**19**	-	42
% Articulated Trucks	0%	1.2%	1.8%	0%	**0.8%**	-	0%	1.2%	4.0%	0%	**1.5%**	-	0%	1.9%	1.8%	0%	**1.9%**	-	0%	1.1%	2.8%	0%	**1.1%**	-	1.3%
Buses	1	1	0	0	**2**	-	0	1	0	0	**1**	-	0	10	0	0	**10**	-	0	11	0	0	**11**	-	24
% Buses	0.9%	1.2%	0%	0%	**0.8%**	-	0%	1.2%	0%	0%	**0.8%**	-	0%	1.1%	0%	0%	**1.0%**	-	0%	0.7%	0%	0%	**0.6%**	-	0.8%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	9	-	-	-	-	-	1	-	-	-	-	-	6	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lake Mead Blvd/Bruce St - TMC
Tue May 4, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831286, Location: 36.195749, -115.125102

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Lake Mead Blvd/Bruce St - TMC

Tue May 4, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831286, Location: 36.195749, -115.125102

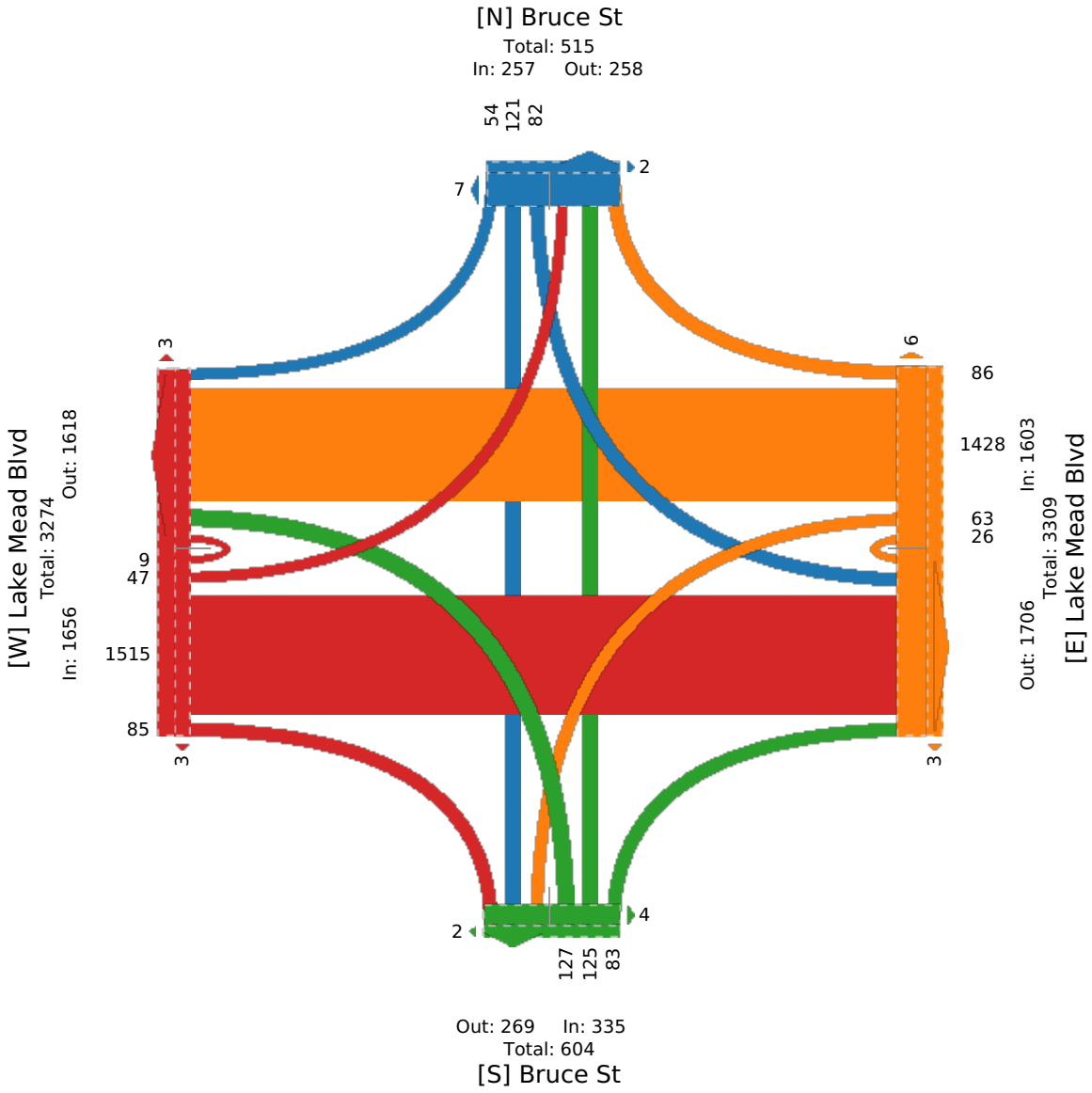
Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg	Bruce St						Bruce St						Lake Mead Blvd						Lake Mead Blvd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-05-04 4:00PM	29	39	21	0	**89**	2	25	32	18	0	**75**	4	14	395	25	1	**435**	1	16	339	22	5	**382**	7	**981**
4:15PM	34	35	27	0	**96**	2	17	34	8	0	**59**	2	12	352	24	2	**390**	2	22	382	25	7	**436**	1	**981**
4:30PM	37	29	15	0	**81**	2	21	25	19	0	**65**	1	10	402	14	4	**430**	3	14	341	24	5	**384**	0	**960**
4:45PM	27	22	20	0	**69**	0	19	30	9	0	**58**	2	11	366	22	2	**401**	0	11	366	15	9	**401**	1	**929**
Total	127	125	83	0	**335**	6	82	121	54	0	**257**	9	47	1515	85	9	**1656**	6	63	1428	86	26	**1603**	9	**3851**
% Approach	37.9%	37.3%	24.8%	0%	**-**	-	31.9%	47.1%	21.0%	0%	**-**	-	2.8%	91.5%	5.1%	0.5%	**-**	-	3.9%	89.1%	5.4%	1.6%	**-**	-	-
% Total	3.3%	3.2%	2.2%	0%	**8.7%**	-	2.1%	3.1%	1.4%	0%	**6.7%**	-	1.2%	39.3%	2.2%	0.2%	**43.0%**	-	1.6%	37.1%	2.2%	0.7%	**41.6%**	-	-
PHF	0.858	0.801	0.769	-	**0.872**	-	0.820	0.882	0.711	-	**0.865**	-	0.839	0.942	0.850	0.563	**0.952**	-	0.716	0.935	0.860	0.722	**0.919**	-	0.981
Lights	125	123	83	0	**331**	-	82	119	53	0	**254**	-	47	1488	85	9	**1629**	-	63	1393	86	26	**1568**	-	3782
% Lights	98.4%	98.4%	100%	0%	**98.8%**	-	100%	98.3%	98.1%	0%	**98.8%**	-	100%	98.2%	100%	100%	**98.4%**	-	100%	97.5%	100%	100%	**97.8%**	-	98.2%
Single-Unit Trucks	1	1	0	0	**2**	-	0	1	1	0	**2**	-	0	17	0	0	**17**	-	0	14	0	0	**14**	-	35
% Single-Unit Trucks	0.8%	0.8%	0%	0%	**0.6%**	-	0%	0.8%	1.9%	0%	**0.8%**	-	0%	1.1%	0%	0%	**1.0%**	-	0%	1.0%	0%	0%	**0.9%**	-	0.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	8	0	0	**8**	-	11
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0.6%	0%	0%	**0.5%**	-	0.3%
Buses	1	1	0	0	**2**	-	0	0	0	0	**0**	-	0	7	0	0	**7**	-	0	13	0	0	**13**	-	22
% Buses	0.8%	0.8%	0%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0.9%	0%	0%	**0.8%**	-	0.6%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.8%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	9	-	-	-	-	-	6	-	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lake Mead Blvd/Bruce St - TMC
Tue May 4, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 831286, Location: 36.195749, -115.125102

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jocelyn.jordan@kimley-horn.com

Count Name: Lake Mead Blvd/Civic Center Dr
Site Code:
Start Date: 05/05/2021

Turning Movement Data

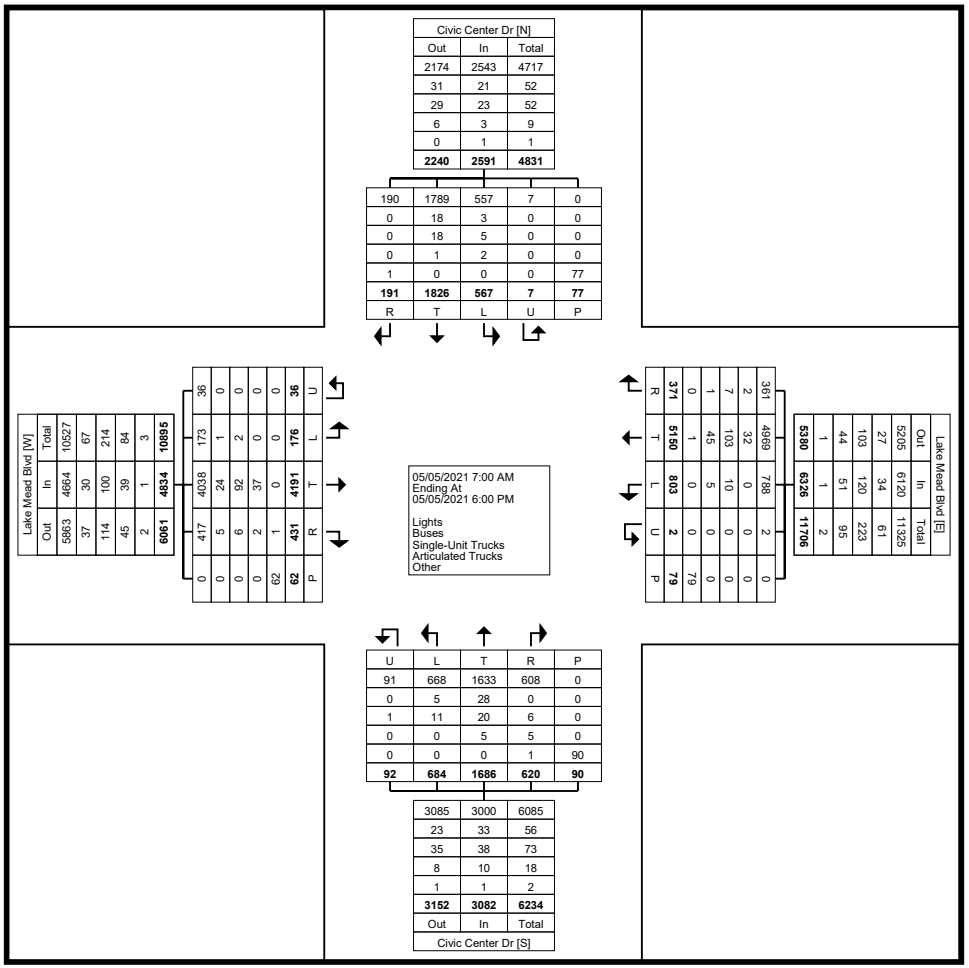
Start Time	Civic Center Dr Southbound						Lake Mead Blvd Westbound						Civic Center Dr Northbound						Lake Mead Blvd Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:00 AM	8	74	11	0	1	93	13	308	31	0	0	352	12	84	34	3	3	133	15	123	2	0	1	140	718
7:15 AM	4	72	19	1	5	96	23	398	42	0	2	463	14	67	26	1	7	108	20	172	5	0	3	197	864
7:30 AM	6	75	11	0	4	92	21	423	35	0	5	479	19	85	45	3	6	152	19	154	3	0	1	176	899
7:45 AM	9	83	24	0	2	116	34	325	40	1	2	400	15	88	31	0	2	134	21	198	5	0	2	224	874
Hourly Total	27	304	65	1	12	397	91	1454	148	1	9	1694	60	324	136	7	18	527	75	647	15	0	7	737	3355
8:00 AM	12	66	17	0	0	95	19	321	30	0	4	370	25	65	28	1	3	119	19	189	11	0	0	219	803
8:15 AM	10	78	28	1	6	117	16	297	33	0	5	346	17	60	45	6	8	128	19	190	9	2	1	220	811
8:30 AM	4	82	23	0	7	109	33	353	52	0	1	438	28	64	28	10	4	130	25	203	8	0	2	236	913
8:45 AM	15	85	36	0	11	136	19	264	53	0	3	336	30	88	52	5	3	175	27	169	9	2	8	207	854
Hourly Total	41	311	104	1	24	457	87	1235	168	0	13	1490	100	277	153	22	18	552	90	751	37	4	11	882	3381
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	23	167	55	1	6	246	19	299	68	1	13	387	50	121	46	14	9	231	51	309	9	6	7	375	1239
4:15 PM	14	165	64	0	6	243	21	362	52	0	3	435	60	112	58	7	4	237	27	388	17	1	5	433	1348
4:30 PM	13	129	43	0	6	185	27	334	76	0	5	437	61	163	51	14	5	289	31	339	15	4	3	389	1300
4:45 PM	16	159	62	1	3	238	28	259	47	0	4	334	46	136	50	6	6	238	34	341	14	6	6	395	1205
Hourly Total	66	620	224	2	21	912	95	1254	243	1	25	1593	217	532	205	41	24	995	143	1377	55	17	21	1592	5092
5:00 PM	13	157	37	0	5	207	19	302	60	0	10	381	59	146	44	5	10	254	36	353	16	2	2	407	1249
5:15 PM	14	158	48	1	7	221	24	322	67	0	12	413	54	134	51	6	4	245	31	345	19	2	13	397	1276
5:30 PM	17	157	56	0	2	230	27	277	42	0	4	346	76	133	40	2	3	251	27	364	16	7	4	414	1241
5:45 PM	13	119	33	2	6	167	28	306	75	0	6	409	54	140	55	9	13	258	29	354	18	4	4	405	1239
Hourly Total	57	591	174	3	20	825	98	1207	244	0	32	1549	243	553	190	22	30	1008	123	1416	69	15	23	1623	5005
Grand Total	191	1826	567	7	77	2591	371	5150	803	2	79	6326	620	1686	684	92	90	3082	431	4191	176	36	62	4834	16833
Approach %	7.4	70.5	21.9	0.3	-	-	5.9	81.4	12.7	0.0	-	-	20.1	54.7	22.2	3.0	-	-	8.9	86.7	3.6	0.7	-	-	-
Total %	1.1	10.8	3.4	0.0	-	15.4	2.2	30.6	4.8	0.0	-	37.6	3.7	10.0	4.1	0.5	-	18.3	2.6	24.9	1.0	0.2	-	28.7	-
Lights	190	1789	557	7	-	2543	361	4969	788	2	-	6120	608	1633	668	91	-	3000	417	4038	173	36	-	4664	16327
% Lights	99.5	98.0	98.2	100.0	-	98.1	97.3	96.5	98.1	100.0	-	96.7	98.1	96.9	97.7	98.9	-	97.3	96.8	96.3	98.3	100.0	-	96.5	97.0
Buses	0	18	3	0	-	21	2	32	0	0	-	34	0	28	5	0	-	33	5	24	1	0	-	30	118
% Buses	0.0	1.0	0.5	0.0	-	0.8	0.5	0.6	0.0	0.0	-	0.5	0.0	1.7	0.7	0.0	-	1.1	1.2	0.6	0.6	0.0	-	0.6	0.7
Single-Unit Trucks	0	18	5	0	-	23	7	103	10	0	-	120	6	20	11	1	-	38	6	92	2	0	-	100	281
% Single-Unit Trucks	0.0	1.0	0.9	0.0	-	0.9	1.9	2.0	1.2	0.0	-	1.9	1.0	1.2	1.6	1.1	-	1.2	1.4	2.2	1.1	0.0	-	2.1	1.7
Articulated Trucks	0	1	2	0	-	3	1	45	5	0	-	51	5	5	0	0	-	10	2	37	0	0	-	39	103
% Articulated Trucks	0.0	0.1	0.4	0.0	-	0.1	0.3	0.9	0.6	0.0	-	0.8	0.8	0.3	0.0	0.0	-	0.3	0.5	0.9	0.0	0.0	-	0.8	0.6
Bicycles on Road	1	0	0	0	-	1	0	1	0	0	-	1	1	0	0	0	-	1	1	0	0	0	-	1	4
% Bicycles on Road	0.5	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.2	0.0	0.0	0.0	-	0.0	0.2	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	5	-	-	-	-	-	6	-	-	-	-	-	4	-	-	-	-	-	2	-	-

% Bicycles on Crosswalk	-	-	-	-	6.5	-	-	-	-	-	7.6	-	-	-	-	-	4.4	-	-	-	-	-	3.2	-	-
Pedestrians	-	-	-	-	72	-	-	-	-	-	73	-	-	-	-	-	86	-	-	-	-	-	60	-	-
% Pedestrians	-	-	-	-	93.5	-	-	-	-	-	92.4	-	-	-	-	-	95.6	-	-	-	-	-	96.8	-	-

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jocelyn.jordan@kimley-horn.com

Count Name: Lake Mead Blvd/Civic Center Dr
Site Code:
Start Date: 05/05/2021



Turning Movement Data Plot

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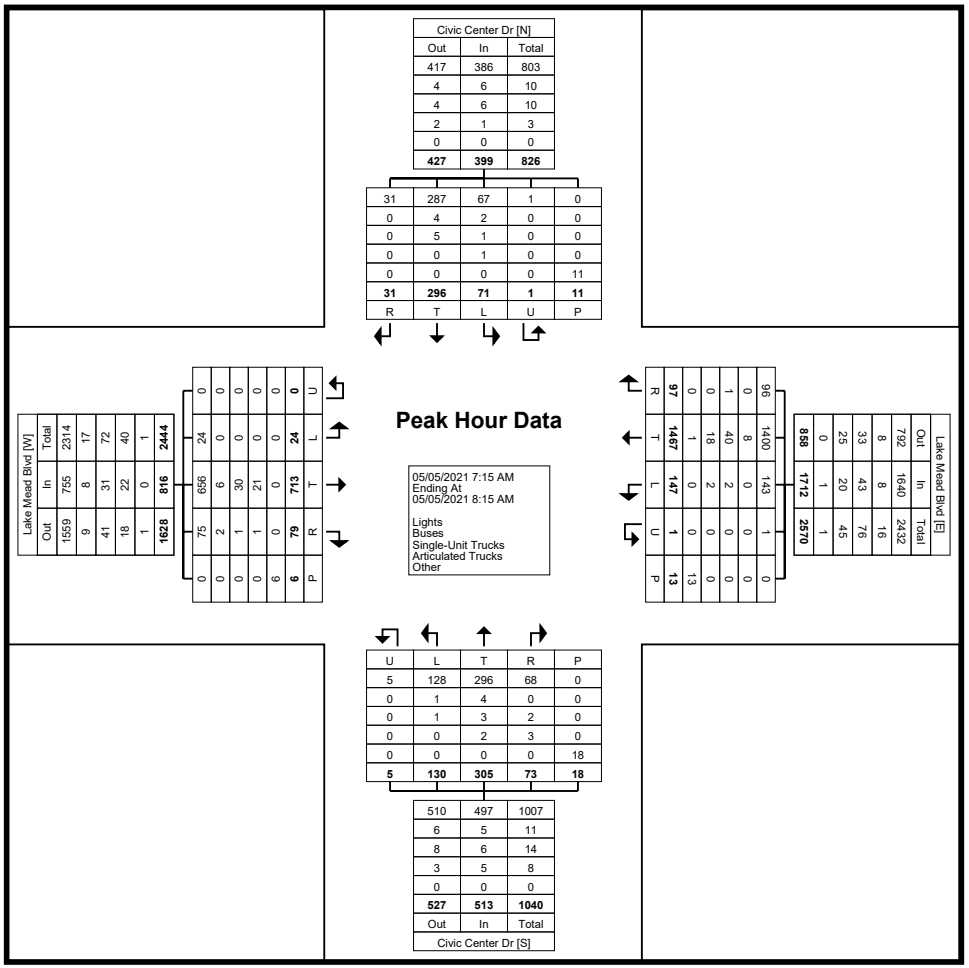
Turning Movement Peak Hour Data (7:15 AM)

Start Time	Civic Center Dr Southbound						Lake Mead Blvd Westbound						Civic Center Dr Northbound						Lake Mead Blvd Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
7:15 AM	4	72	19	1	5	96	23	398	42	0	2	463	14	67	26	1	7	108	20	172	5	0	3	197	864
7:30 AM	6	75	11	0	4	92	21	423	35	0	5	479	19	85	45	3	6	152	19	154	3	0	1	176	899
7:45 AM	9	83	24	0	2	116	34	325	40	1	2	400	15	88	31	0	2	134	21	198	5	0	2	224	874
8:00 AM	12	66	17	0	0	95	19	321	30	0	4	370	25	65	28	1	3	119	19	189	11	0	0	219	803
Total	31	296	71	1	11	399	97	1467	147	1	13	1712	73	305	130	5	18	513	79	713	24	0	6	816	3440
Approach %	7.8	74.2	17.8	0.3	-	-	5.7	85.7	8.6	0.1	-	-	14.2	59.5	25.3	1.0	-	-	9.7	87.4	2.9	0.0	-	-	-
Total %	0.9	8.6	2.1	0.0	-	11.6	2.8	42.6	4.3	0.0	-	49.8	2.1	8.9	3.8	0.1	-	14.9	2.3	20.7	0.7	0.0	-	23.7	-
PHF	0.646	0.892	0.740	0.250	-	0.860	0.713	0.867	0.875	0.250	-	0.894	0.730	0.866	0.722	0.417	-	0.844	0.940	0.900	0.545	0.000	-	0.911	0.957
Lights	31	287	67	1	-	386	96	1400	143	1	-	1640	68	296	128	5	-	497	75	656	24	0	-	755	3278
% Lights	100.0	97.0	94.4	100.0	-	96.7	99.0	95.4	97.3	100.0	-	95.8	93.2	97.0	98.5	100.0	-	96.9	94.9	92.0	100.0	-	-	92.5	95.3
Buses	0	4	2	0	-	6	0	8	0	0	-	8	0	4	1	0	-	5	2	6	0	0	-	8	27
% Buses	0.0	1.4	2.8	0.0	-	1.5	0.0	0.5	0.0	0.0	-	0.5	0.0	1.3	0.8	0.0	-	1.0	2.5	0.8	0.0	-	-	1.0	0.8
Single-Unit Trucks	0	5	1	0	-	6	1	40	2	0	-	43	2	3	1	0	-	6	1	30	0	0	-	31	86
% Single-Unit Trucks	0.0	1.7	1.4	0.0	-	1.5	1.0	2.7	1.4	0.0	-	2.5	2.7	1.0	0.8	0.0	-	1.2	1.3	4.2	0.0	-	-	3.8	2.5
Articulated Trucks	0	0	1	0	-	1	0	18	2	0	-	20	3	2	0	0	-	5	1	21	0	0	-	22	48
% Articulated Trucks	0.0	0.0	1.4	0.0	-	0.3	0.0	1.2	1.4	0.0	-	1.2	4.1	0.7	0.0	0.0	-	1.0	1.3	2.9	0.0	-	-	2.7	1.4
Bicycles on Road	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.1	0.0	0.0	-	0.1	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	18.2	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	9	-	-	-	-	-	13	-	-	-	-	-	18	-	-	-	-	-	6	-	-
% Pedestrians	-	-	-	-	81.8	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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Count Name: Lake Mead Blvd/Civic Center Dr
Site Code:
Start Date: 05/05/2021



Turning Movement Peak Hour Data Plot (7:15 AM)

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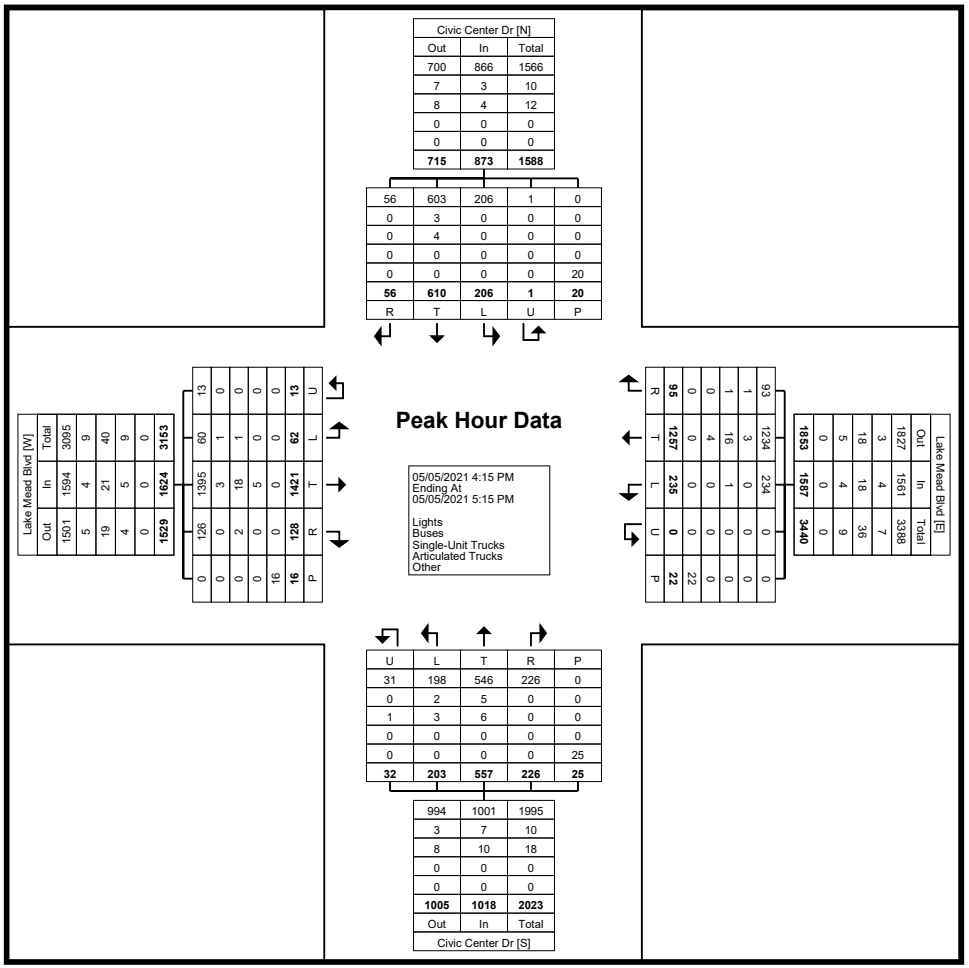
Turning Movement Peak Hour Data (4:15 PM)

Start Time	Civic Center Dr Southbound						Lake Mead Blvd Westbound						Civic Center Dr Northbound						Lake Mead Blvd Eastbound						Int. Total
	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	
4:15 PM	14	165	64	0	6	243	21	362	52	0	3	435	60	112	58	7	4	237	27	388	17	1	5	433	1348
4:30 PM	13	129	43	0	6	185	27	334	76	0	5	437	61	163	51	14	5	289	31	339	15	4	3	389	1300
4:45 PM	16	159	62	1	3	238	28	259	47	0	4	334	46	136	50	6	6	238	34	341	14	6	6	395	1205
5:00 PM	13	157	37	0	5	207	19	302	60	0	10	381	59	146	44	5	10	254	36	353	16	2	2	407	1249
Total	56	610	206	1	20	873	95	1257	235	0	22	1587	226	557	203	32	25	1018	128	1421	62	13	16	1624	5102
Approach %	6.4	69.9	23.6	0.1	-	-	6.0	79.2	14.8	0.0	-	-	22.2	54.7	19.9	3.1	-	-	7.9	87.5	3.8	0.8	-	-	-
Total %	1.1	12.0	4.0	0.0	-	17.1	1.9	24.6	4.6	0.0	-	31.1	4.4	10.9	4.0	0.6	-	20.0	2.5	27.9	1.2	0.3	-	31.8	-
PHF	0.875	0.924	0.805	0.250	-	0.898	0.848	0.868	0.773	0.000	-	0.908	0.926	0.854	0.875	0.571	-	0.881	0.889	0.916	0.912	0.542	-	0.938	0.946
Lights	56	603	206	1	-	866	93	1234	234	0	-	1561	226	546	198	31	-	1001	126	1395	60	13	-	1594	5022
% Lights	100.0	98.9	100.0	100.0	-	99.2	97.9	98.2	99.6	-	-	98.4	100.0	98.0	97.5	96.9	-	98.3	98.4	98.2	96.8	100.0	-	98.2	98.4
Buses	0	3	0	0	-	3	1	3	0	0	-	4	0	5	2	0	-	7	0	3	1	0	-	4	18
% Buses	0.0	0.5	0.0	0.0	-	0.3	1.1	0.2	0.0	-	-	0.3	0.0	0.9	1.0	0.0	-	0.7	0.0	0.2	1.6	0.0	-	0.2	0.4
Single-Unit Trucks	0	4	0	0	-	4	1	16	1	0	-	18	0	6	3	1	-	10	2	18	1	0	-	21	53
% Single-Unit Trucks	0.0	0.7	0.0	0.0	-	0.5	1.1	1.3	0.4	-	-	1.1	0.0	1.1	1.5	3.1	-	1.0	1.6	1.3	1.6	0.0	-	1.3	1.0
Articulated Trucks	0	0	0	0	-	0	0	4	0	0	-	4	0	0	0	0	-	0	0	5	0	0	-	5	9
% Articulated Trucks	0.0	0.0	0.0	0.0	-	0.0	0.0	0.3	0.0	-	-	0.3	0.0	0.0	0.0	0.0	-	0.0	0.0	0.4	0.0	0.0	-	0.3	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	3	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Bicycles on Crosswalk	-	-	-	-	15.0	-	-	-	-	-	18.2	-	-	-	-	-	0.0	-	-	-	-	-	12.5	-	-
Pedestrians	-	-	-	-	17	-	-	-	-	-	18	-	-	-	-	-	25	-	-	-	-	-	14	-	-
% Pedestrians	-	-	-	-	85.0	-	-	-	-	-	81.8	-	-	-	-	-	100.0	-	-	-	-	-	87.5	-	-

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 jocelyn.jordan@kimley-horn.com

Count Name: Lake Mead Blvd/Civic Center Dr
Site Code:
Start Date: 05/05/2021



Turning Movement Peak Hour Data Plot (4:15 PM)

ATTACHMENT B

MID-BLOCK LOCATION 24-HOUR BIDIRECTIONAL COUNT DATA

Alexander Rd west of Simmons St - ATR

Wed May 12, 2021
Full Length (9 AM-9 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840154, Location: 36.232017, -115.182917

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-12 9:00AM	25	**25**	28	**28**	**53**
9:15AM	19	**19**	26	**26**	**45**
9:30AM	32	**32**	32	**32**	**64**
9:45AM	37	**37**	19	**19**	**56**
Hourly Total	113	**113**	105	**105**	**218**
10:00AM	24	**24**	32	**32**	**56**
10:15AM	22	**22**	43	**43**	**65**
10:30AM	30	**30**	37	**37**	**67**
10:45AM	31	**31**	37	**37**	**68**
Hourly Total	107	**107**	149	**149**	**256**
11:00AM	21	**21**	29	**29**	**50**
11:15AM	22	**22**	26	**26**	**48**
11:30AM	31	**31**	39	**39**	**70**
11:45AM	18	**18**	38	**38**	**56**
Hourly Total	92	**92**	132	**132**	**224**
12:00PM	22	**22**	52	**52**	**74**
12:15PM	38	**38**	31	**31**	**69**
12:30PM	44	**44**	46	**46**	**90**
12:45PM	35	**35**	34	**34**	**69**
Hourly Total	139	**139**	163	**163**	**302**
1:00PM	25	**25**	38	**38**	**63**
1:15PM	38	**38**	40	**40**	**78**
1:30PM	30	**30**	41	**41**	**71**
1:45PM	40	**40**	43	**43**	**83**
Hourly Total	133	**133**	162	**162**	**295**
2:00PM	39	**39**	42	**42**	**81**
2:15PM	45	**45**	33	**33**	**78**
2:30PM	40	**40**	47	**47**	**87**
2:45PM	39	**39**	58	**58**	**97**
Hourly Total	163	**163**	180	**180**	**343**
3:00PM	41	**41**	51	**51**	**92**
3:15PM	41	**41**	53	**53**	**94**
3:30PM	42	**42**	45	**45**	**87**
3:45PM	37	**37**	61	**61**	**98**
Hourly Total	161	**161**	210	**210**	**371**
4:00PM	39	**39**	63	**63**	**102**
4:15PM	40	**40**	70	**70**	**110**
4:30PM	29	**29**	58	**58**	**87**
4:45PM	22	**22**	59	**59**	**81**
Hourly Total	130	**130**	250	**250**	**380**
5:00PM	28	**28**	63	**63**	**91**
5:15PM	36	**36**	53	**53**	**89**
5:30PM	42	**42**	58	**58**	**100**
5:45PM	43	**43**	49	**49**	**92**
Hourly Total	149	**149**	223	**223**	**372**
6:00PM	43	**43**	57	**57**	**100**
6:15PM	35	**35**	51	**51**	**86**
6:30PM	35	**35**	42	**42**	**77**
6:45PM	30	**30**	35	**35**	**65**
Hourly Total	143	**143**	185	**185**	**328**
7:00PM	24	**24**	29	**29**	**53**
7:15PM	32	**32**	39	**39**	**71**
7:30PM	35	**35**	36	**36**	**71**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
7:45PM	26	**26**	28	**28**	**54**
Hourly Total	117	**117**	132	**132**	**249**
8:00PM	25	**25**	26	**26**	**51**
8:15PM	19	**19**	27	**27**	**46**
8:30PM	24	**24**	30	**30**	**54**
8:45PM	19	**19**	21	**21**	**40**
Hourly Total	87	**87**	104	**104**	**191**
9:00PM	16	**16**	27	**27**	**43**
9:15PM	25	**25**	21	**21**	**46**
9:30PM	21	**21**	18	**18**	**39**
9:45PM	15	**15**	12	**12**	**27**
Hourly Total	77	**77**	78	**78**	**155**
10:00PM	16	**16**	11	**11**	**27**
10:15PM	10	**10**	20	**20**	**30**
10:30PM	9	**9**	11	**11**	**20**
10:45PM	9	**9**	11	**11**	**20**
Hourly Total	44	**44**	53	**53**	**97**
11:00PM	8	**8**	4	**4**	**12**
11:15PM	5	**5**	7	**7**	**12**
11:30PM	5	**5**	13	**13**	**18**
11:45PM	9	**9**	19	**19**	**28**
Hourly Total	27	**27**	43	**43**	**70**
2021-05-13 12:00AM	6	**6**	5	**5**	**11**
12:15AM	9	**9**	4	**4**	**13**
12:30AM	4	**4**	2	**2**	**6**
12:45AM	4	**4**	0	**0**	**4**
Hourly Total	23	**23**	11	**11**	**34**
1:00AM	1	**1**	5	**5**	**6**
1:15AM	3	**3**	3	**3**	**6**
1:30AM	1	**1**	2	**2**	**3**
1:45AM	2	**2**	3	**3**	**5**
Hourly Total	7	**7**	13	**13**	**20**
2:00AM	4	**4**	0	**0**	**4**
2:15AM	4	**4**	3	**3**	**7**
2:30AM	6	**6**	3	**3**	**9**
2:45AM	5	**5**	3	**3**	**8**
Hourly Total	19	**19**	9	**9**	**28**
3:00AM	1	**1**	0	**0**	**1**
3:15AM	2	**2**	0	**0**	**2**
3:30AM	5	**5**	2	**2**	**7**
3:45AM	6	**6**	2	**2**	**8**
Hourly Total	14	**14**	4	**4**	**18**
4:00AM	4	**4**	3	**3**	**7**
4:15AM	4	**4**	4	**4**	**8**
4:30AM	3	**3**	0	**0**	**3**
4:45AM	6	**6**	1	**1**	**7**
Hourly Total	17	**17**	8	**8**	**25**
5:00AM	8	**8**	2	**2**	**10**
5:15AM	12	**12**	2	**2**	**14**
5:30AM	9	**9**	6	**6**	**15**
5:45AM	10	**10**	8	**8**	**18**
Hourly Total	39	**39**	18	**18**	**57**
6:00AM	20	**20**	13	**13**	**33**
6:15AM	16	**16**	22	**22**	**38**
6:30AM	21	**21**	19	**19**	**40**
6:45AM	24	**24**	40	**40**	**64**
Hourly Total	81	**81**	94	**94**	**175**
7:00AM	28	**28**	33	**33**	**61**
7:15AM	24	**24**	31	**31**	**55**
7:30AM	25	**25**	36	**36**	**61**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
7:45AM	26	**26**	37	**37**	**63**
Hourly Total	103	**103**	137	**137**	**240**
8:00AM	31	**31**	22	**22**	**53**
8:15AM	26	**26**	23	**23**	**49**
8:30AM	24	**24**	22	**22**	**46**
8:45AM	20	**20**	22	**22**	**42**
Hourly Total	101	**101**	89	**89**	**190**
Total	2086	**2086**	2552	**2552**	**4638**
% Approach	100%	**-**	100%	**-**	-
% Total	45.0%	**45.0%**	55.0%	**55.0%**	-
Lights	2031	**2031**	2496	**2496**	4527
% Lights	97.4%	**97.4%**	97.8%	**97.8%**	97.6%
Single-Unit Trucks	25	**25**	23	**23**	48
% Single-Unit Trucks	1.2%	**1.2%**	0.9%	**0.9%**	1.0%
Articulated Trucks	3	**3**	1	**1**	4
% Articulated Trucks	0.1%	**0.1%**	0%	**0%**	0.1%
Buses	21	**21**	31	**31**	52
% Buses	1.0%	**1.0%**	1.2%	**1.2%**	1.1%
Bicycles on Road	6	**6**	1	**1**	7
% Bicycles on Road	0.3%	**0.3%**	0%	**0%**	0.2%

*T: Thru

Alexander Rd west of Simmons St - ATR

Wed May 12, 2021
Full Length (9 AM-9 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840154, Location: 36.232017, -115.182917

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Alexander Rd west of Simmons St - ATR

Wed May 12, 2021
AM Peak (May 12 2021 10AM - 11 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840154, Location: 36.232017, -115.182917

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-12 10:00AM	24	**24**	32	**32**	**56**
10:15AM	22	**22**	43	**43**	**65**
10:30AM	30	**30**	37	**37**	**67**
10:45AM	31	**31**	37	**37**	**68**
Total	107	**107**	149	**149**	**256**
% Approach	100%	**-**	100%	**-**	-
% Total	41.8%	**41.8%**	58.2%	**58.2%**	-
PHF	0.863	**0.863**	0.866	**0.866**	0.941
Lights	103	**103**	145	**145**	248
% Lights	96.3%	**96.3%**	97.3%	**97.3%**	96.9%
Single-Unit Trucks	1	**1**	1	**1**	2
% Single-Unit Trucks	0.9%	**0.9%**	0.7%	**0.7%**	0.8%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	3	**3**	3	**3**	6
% Buses	2.8%	**2.8%**	2.0%	**2.0%**	2.3%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Alexander Rd west of Simmons St - ATR

Wed May 12, 2021
AM Peak (May 12 2021 10AM - 11 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840154, Location: 36.232017, -115.182917

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Alexander Rd west of Simmons St - ATR

Wed May 12, 2021
Midday Peak (May 12 2021 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840154, Location: 36.232017, -115.182917

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-12 12:00PM	22	**22**	52	**52**	**74**
12:15PM	38	**38**	31	**31**	**69**
12:30PM	44	**44**	46	**46**	**90**
12:45PM	35	**35**	34	**34**	**69**
Total	139	**139**	163	**163**	**302**
% Approach	100%	**-**	100%	**-**	-
% Total	46.0%	**46.0%**	54.0%	**54.0%**	-
PHF	0.790	**0.790**	0.784	**0.784**	0.839
Lights	137	**137**	155	**155**	292
% Lights	98.6%	**98.6%**	95.1%	**95.1%**	96.7%
Single-Unit Trucks	1	**1**	4	**4**	5
% Single-Unit Trucks	0.7%	**0.7%**	2.5%	**2.5%**	1.7%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	1	**1**	4	**4**	5
% Buses	0.7%	**0.7%**	2.5%	**2.5%**	1.7%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Alexander Rd west of Simmons St - ATR

Wed May 12, 2021
Midday Peak (May 12 2021 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840154, Location: 36.232017, -115.182917

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Alexander Rd west of Simmons St - ATR

Wed May 12, 2021
PM Peak (May 12 2021 3:30PM - 4:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840154, Location: 36.232017, -115.182917

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-12 3:30PM	42	**42**	45	**45**	**87**
3:45PM	37	**37**	61	**61**	**98**
4:00PM	39	**39**	63	**63**	**102**
4:15PM	40	**40**	70	**70**	**110**
Total	158	**158**	239	**239**	**397**
% Approach	100%	**-**	100%	**-**	-
% Total	39.8%	**39.8%**	60.2%	**60.2%**	-
PHF	0.940	**0.940**	0.854	**0.854**	0.902
Lights	154	**154**	236	**236**	390
% Lights	97.5%	**97.5%**	98.7%	**98.7%**	98.2%
Single-Unit Trucks	4	**4**	2	**2**	6
% Single-Unit Trucks	2.5%	**2.5%**	0.8%	**0.8%**	1.5%
Articulated Trucks	0	**0**	1	**1**	1
% Articulated Trucks	0%	**0%**	0.4%	**0.4%**	0.3%
Buses	0	**0**	0	**0**	0
% Buses	0%	**0%**	0%	**0%**	0%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Alexander Rd west of Simmons St - ATR

Wed May 12, 2021
PM Peak (May 12 2021 3:30PM - 4:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840154, Location: 36.232017, -115.182917

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Aliante Pkwy north of Elkhorn Rd - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840136, Location: 36.29433, -115.185792

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 12:00AM	15	**15**	3	**3**	**18**
12:15AM	18	**18**	8	**8**	**26**
12:30AM	11	**11**	4	**4**	**15**
12:45AM	10	**10**	4	**4**	**14**
Hourly Total	54	**54**	19	**19**	**73**
1:00AM	8	**8**	5	**5**	**13**
1:15AM	7	**7**	2	**2**	**9**
1:30AM	15	**15**	6	**6**	**21**
1:45AM	7	**7**	3	**3**	**10**
Hourly Total	37	**37**	16	**16**	**53**
2:00AM	6	**6**	4	**4**	**10**
2:15AM	9	**9**	3	**3**	**12**
2:30AM	4	**4**	4	**4**	**8**
2:45AM	5	**5**	7	**7**	**12**
Hourly Total	24	**24**	18	**18**	**42**
3:00AM	4	**4**	4	**4**	**8**
3:15AM	9	**9**	11	**11**	**20**
3:30AM	5	**5**	8	**8**	**13**
3:45AM	8	**8**	13	**13**	**21**
Hourly Total	26	**26**	36	**36**	**62**
4:00AM	5	**5**	20	**20**	**25**
4:15AM	9	**9**	13	**13**	**22**
4:30AM	4	**4**	31	**31**	**35**
4:45AM	7	**7**	32	**32**	**39**
Hourly Total	25	**25**	96	**96**	**121**
5:00AM	8	**8**	31	**31**	**39**
5:15AM	14	**14**	59	**59**	**73**
5:30AM	27	**27**	61	**61**	**88**
5:45AM	43	**43**	81	**81**	**124**
Hourly Total	92	**92**	232	**232**	**324**
6:00AM	43	**43**	78	**78**	**121**
6:15AM	75	**75**	107	**107**	**182**
6:30AM	61	**61**	124	**124**	**185**
6:45AM	67	**67**	115	**115**	**182**
Hourly Total	246	**246**	424	**424**	**670**
7:00AM	50	**50**	142	**142**	**192**
7:15AM	53	**53**	143	**143**	**196**
7:30AM	65	**65**	117	**117**	**182**
7:45AM	74	**74**	135	**135**	**209**
Hourly Total	242	**242**	537	**537**	**779**
8:00AM	69	**69**	108	**108**	**177**
8:15AM	55	**55**	108	**108**	**163**
8:30AM	55	**55**	125	**125**	**180**
8:45AM	76	**76**	99	**99**	**175**
Hourly Total	255	**255**	440	**440**	**695**
9:00AM	53	**53**	101	**101**	**154**
9:15AM	72	**72**	109	**109**	**181**
9:30AM	58	**58**	111	**111**	**169**
9:45AM	80	**80**	97	**97**	**177**
Hourly Total	263	**263**	418	**418**	**681**
10:00AM	72	**72**	116	**116**	**188**
10:15AM	71	**71**	106	**106**	**177**
10:30AM	80	**80**	84	**84**	**164**

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
10:45AM	86	**86**	130	**130**	**216**
Hourly Total	309	**309**	436	**436**	**745**
11:00AM	94	**94**	97	**97**	**191**
11:15AM	91	**91**	80	**80**	**171**
11:30AM	92	**92**	110	**110**	**202**
11:45AM	108	**108**	89	**89**	**197**
Hourly Total	385	**385**	376	**376**	**761**
12:00PM	106	**106**	94	**94**	**200**
12:15PM	104	**104**	98	**98**	**202**
12:30PM	92	**92**	101	**101**	**193**
12:45PM	78	**78**	109	**109**	**187**
Hourly Total	380	**380**	402	**402**	**782**
1:00PM	114	**114**	118	**118**	**232**
1:15PM	84	**84**	111	**111**	**195**
1:30PM	89	**89**	98	**98**	**187**
1:45PM	103	**103**	119	**119**	**222**
Hourly Total	390	**390**	446	**446**	**836**
2:00PM	110	**110**	92	**92**	**202**
2:15PM	120	**120**	103	**103**	**223**
2:30PM	105	**105**	133	**133**	**238**
2:45PM	115	**115**	109	**109**	**224**
Hourly Total	450	**450**	437	**437**	**887**
3:00PM	142	**142**	118	**118**	**260**
3:15PM	144	**144**	99	**99**	**243**
3:30PM	123	**123**	119	**119**	**242**
3:45PM	153	**153**	103	**103**	**256**
Hourly Total	562	**562**	439	**439**	**1001**
4:00PM	173	**173**	91	**91**	**264**
4:15PM	145	**145**	92	**92**	**237**
4:30PM	154	**154**	103	**103**	**257**
4:45PM	140	**140**	95	**95**	**235**
Hourly Total	612	**612**	381	**381**	**993**
5:00PM	178	**178**	91	**91**	**269**
5:15PM	129	**129**	101	**101**	**230**
5:30PM	162	**162**	109	**109**	**271**
5:45PM	129	**129**	77	**77**	**206**
Hourly Total	598	**598**	378	**378**	**976**
6:00PM	123	**123**	82	**82**	**205**
6:15PM	113	**113**	74	**74**	**187**
6:30PM	95	**95**	66	**66**	**161**
6:45PM	108	**108**	57	**57**	**165**
Hourly Total	439	**439**	279	**279**	**718**
7:00PM	101	**101**	49	**49**	**150**
7:15PM	87	**87**	49	**49**	**136**
7:30PM	96	**96**	49	**49**	**145**
7:45PM	75	**75**	56	**56**	**131**
Hourly Total	359	**359**	203	**203**	**562**
8:00PM	91	**91**	42	**42**	**133**
8:15PM	71	**71**	47	**47**	**118**
8:30PM	79	**79**	37	**37**	**116**
8:45PM	52	**52**	36	**36**	**88**
Hourly Total	293	**293**	162	**162**	**455**
9:00PM	61	**61**	32	**32**	**93**
9:15PM	51	**51**	30	**30**	**81**
9:30PM	50	**50**	24	**24**	**74**
9:45PM	34	**34**	20	**20**	**54**
Hourly Total	196	**196**	106	**106**	**302**
10:00PM	45	**45**	24	**24**	**69**
10:15PM	32	**32**	22	**22**	**54**
10:30PM	37	**37**	12	**12**	**49**

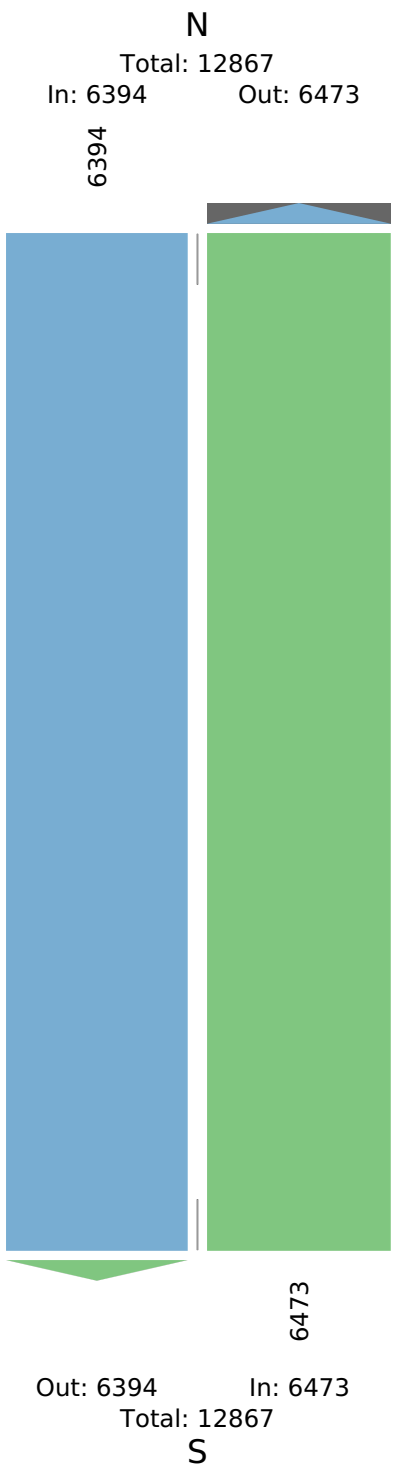
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
10:45PM	26	**26**	15	**15**	**41**
Hourly Total	140	**140**	73	**73**	**213**
11:00PM	24	**24**	13	**13**	**37**
11:15PM	32	**32**	6	**6**	**38**
11:30PM	20	**20**	14	**14**	**34**
11:45PM	20	**20**	7	**7**	**27**
Hourly Total	96	**96**	40	**40**	**136**
Total	6473	**6473**	6394	**6394**	**12867**
% Approach	100%	**-**	100%	**-**	-
% Total	50.3%	**50.3%**	49.7%	**49.7%**	-
Lights	6320	**6320**	6247	**6247**	12567
% Lights	97.6%	**97.6%**	97.7%	**97.7%**	97.7%
Single-Unit Trucks	86	**86**	95	**95**	181
% Single-Unit Trucks	1.3%	**1.3%**	1.5%	**1.5%**	1.4%
Articulated Trucks	35	**35**	32	**32**	67
% Articulated Trucks	0.5%	**0.5%**	0.5%	**0.5%**	0.5%
Buses	23	**23**	16	**16**	39
% Buses	0.4%	**0.4%**	0.3%	**0.3%**	0.3%
Bicycles on Road	9	**9**	4	**4**	13
% Bicycles on Road	0.1%	**0.1%**	0.1%	**0.1%**	0.1%

*T: Thru

Aliante Pkwy north of Elkhorn Rd - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840136, Location: 36.29433, -115.185792

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Aliante Pkwy north of Elkhorn Rd - ATR

Tue May 11, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840136, Location: 36.29433, -115.185792

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

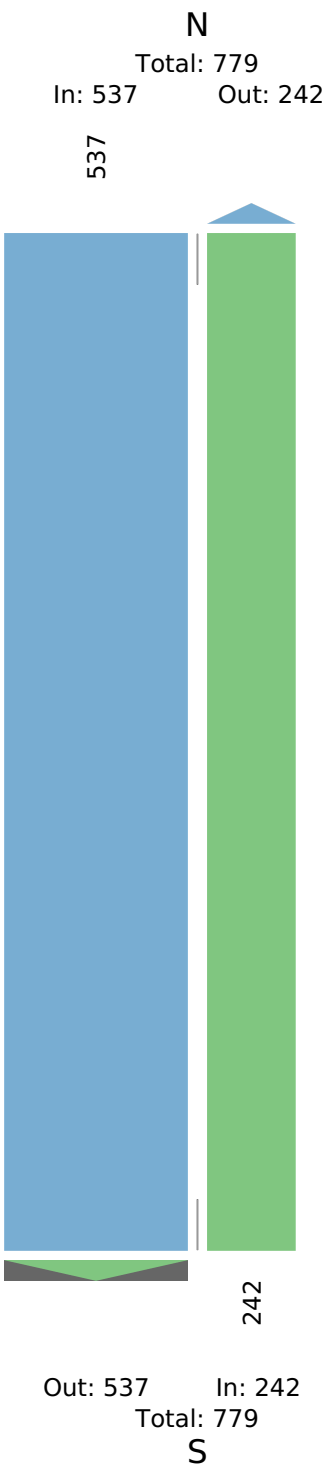
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 7:00AM	50	**50**	142	**142**	**192**
7:15AM	53	**53**	143	**143**	**196**
7:30AM	65	**65**	117	**117**	**182**
7:45AM	74	**74**	135	**135**	**209**
Total	242	**242**	537	**537**	**779**
% Approach	100%	**-**	100%	**-**	-
% Total	31.1%	**31.1%**	68.9%	**68.9%**	-
PHF	0.818	**0.818**	0.937	**0.937**	0.935
Lights	225	**225**	532	**532**	757
% Lights	93.0%	**93.0%**	99.1%	**99.1%**	97.2%
Single-Unit Trucks	10	**10**	3	**3**	13
% Single-Unit Trucks	4.1%	**4.1%**	0.6%	**0.6%**	1.7%
Articulated Trucks	5	**5**	0	**0**	5
% Articulated Trucks	2.1%	**2.1%**	0%	**0%**	0.6%
Buses	2	**2**	1	**1**	3
% Buses	0.8%	**0.8%**	0.2%	**0.2%**	0.4%
Bicycles on Road	0	**0**	1	**1**	1
% Bicycles on Road	0%	**0%**	0.2%	**0.2%**	0.1%

*T: Thru

Aliante Pkwy north of Elkhorn Rd - ATR

Tue May 11, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840136, Location: 36.29433, -115.185792

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Aliante Pkwy north of Elkhorn Rd - ATR

Tue May 11, 2021
Midday Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840136, Location: 36.29433, -115.185792

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

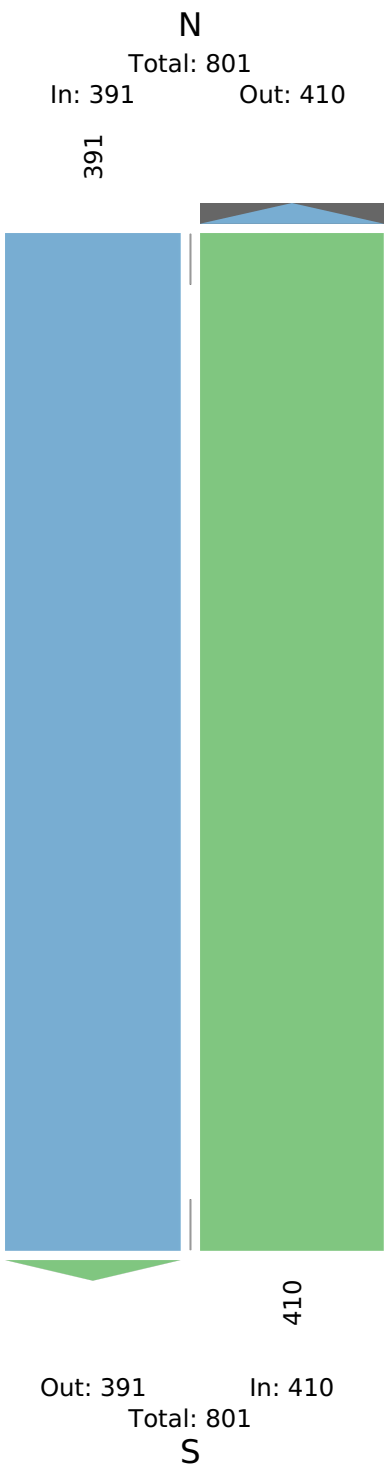
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 11:30AM	92	**92**	110	**110**	**202**
11:45AM	108	**108**	89	**89**	**197**
12:00PM	106	**106**	94	**94**	**200**
12:15PM	104	**104**	98	**98**	**202**
Total	410	**410**	391	**391**	**801**
% Approach	100%	**-**	100%	**-**	-
% Total	51.2%	**51.2%**	48.8%	**48.8%**	-
PHF	0.953	**0.953**	0.889	**0.889**	0.989
Lights	393	**393**	373	**373**	766
% Lights	95.9%	**95.9%**	95.4%	**95.4%**	95.6%
Single-Unit Trucks	12	**12**	12	**12**	24
% Single-Unit Trucks	2.9%	**2.9%**	3.1%	**3.1%**	3.0%
Articulated Trucks	0	**0**	4	**4**	4
% Articulated Trucks	0%	**0%**	1.0%	**1.0%**	0.5%
Buses	3	**3**	2	**2**	5
% Buses	0.7%	**0.7%**	0.5%	**0.5%**	0.6%
Bicycles on Road	2	**2**	0	**0**	2
% Bicycles on Road	0.5%	**0.5%**	0%	**0%**	0.2%

*T: Thru

Aliante Pkwy north of Elkhorn Rd - ATR

Tue May 11, 2021
Midday Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840136, Location: 36.29433, -115.185792

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Aliante Pkwy north of Elkhorn Rd - ATR

Tue May 11, 2021
PM Peak (3:45 PM - 4:45 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840136, Location: 36.29433, -115.185792

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 3:45PM	153	**153**	103	**103**	**256**
4:00PM	173	**173**	91	**91**	**264**
4:15PM	145	**145**	92	**92**	**237**
4:30PM	154	**154**	103	**103**	**257**
Total	625	**625**	389	**389**	**1014**
% Approach	100%	**-**	100%	**-**	-
% Total	61.6%	**61.6%**	38.4%	**38.4%**	-
PHF	0.903	**0.903**	0.942	**0.942**	0.959
Lights	621	**621**	382	**382**	1003
% Lights	99.4%	**99.4%**	98.2%	**98.2%**	98.9%
Single-Unit Trucks	2	**2**	5	**5**	7
% Single-Unit Trucks	0.3%	**0.3%**	1.3%	**1.3%**	0.7%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	2	**2**	1	**1**	3
% Buses	0.3%	**0.3%**	0.3%	**0.3%**	0.3%
Bicycles on Road	0	**0**	1	**1**	1
% Bicycles on Road	0%	**0%**	0.3%	**0.3%**	0.1%

*T: Thru

Aliante Pkwy north of Elkhorn Rd - ATR

Tue May 11, 2021
PM Peak (3:45 PM - 4:45 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840136, Location: 36.29433, -115.185792

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Ann Rd east of Simmons St - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840134, Location: 36.261631, -115.177915

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 12:00AM	40	**40**	35	**35**	**75**
12:15AM	24	**24**	19	**19**	**43**
12:30AM	35	**35**	18	**18**	**53**
12:45AM	24	**24**	18	**18**	**42**
Hourly Total	123	**123**	90	**90**	**213**
1:00AM	15	**15**	16	**16**	**31**
1:15AM	12	**12**	13	**13**	**25**
1:30AM	14	**14**	15	**15**	**29**
1:45AM	12	**12**	9	**9**	**21**
Hourly Total	53	**53**	53	**53**	**106**
2:00AM	8	**8**	11	**11**	**19**
2:15AM	13	**13**	12	**12**	**25**
2:30AM	8	**8**	10	**10**	**18**
2:45AM	6	**6**	10	**10**	**16**
Hourly Total	35	**35**	43	**43**	**78**
3:00AM	10	**10**	13	**13**	**23**
3:15AM	10	**10**	17	**17**	**27**
3:30AM	10	**10**	11	**11**	**21**
3:45AM	14	**14**	18	**18**	**32**
Hourly Total	44	**44**	59	**59**	**103**
4:00AM	11	**11**	18	**18**	**29**
4:15AM	15	**15**	23	**23**	**38**
4:30AM	21	**21**	19	**19**	**40**
4:45AM	20	**20**	48	**48**	**68**
Hourly Total	67	**67**	108	**108**	**175**
5:00AM	25	**25**	33	**33**	**58**
5:15AM	27	**27**	43	**43**	**70**
5:30AM	36	**36**	69	**69**	**105**
5:45AM	37	**37**	67	**67**	**104**
Hourly Total	125	**125**	212	**212**	**337**
6:00AM	48	**48**	78	**78**	**126**
6:15AM	59	**59**	105	**105**	**164**
6:30AM	56	**56**	141	**141**	**197**
6:45AM	89	**89**	124	**124**	**213**
Hourly Total	252	**252**	448	**448**	**700**
7:00AM	86	**86**	147	**147**	**233**
7:15AM	92	**92**	185	**185**	**277**
7:30AM	110	**110**	195	**195**	**305**
7:45AM	132	**132**	170	**170**	**302**
Hourly Total	420	**420**	697	**697**	**1117**
8:00AM	117	**117**	173	**173**	**290**
8:15AM	100	**100**	177	**177**	**277**
8:30AM	103	**103**	160	**160**	**263**
8:45AM	127	**127**	201	**201**	**328**
Hourly Total	447	**447**	711	**711**	**1158**
9:00AM	118	**118**	157	**157**	**275**
9:15AM	118	**118**	129	**129**	**247**
9:30AM	130	**130**	172	**172**	**302**
9:45AM	132	**132**	165	**165**	**297**
Hourly Total	498	**498**	623	**623**	**1121**
10:00AM	116	**116**	138	**138**	**254**
10:15AM	141	**141**	150	**150**	**291**
10:30AM	133	**133**	161	**161**	**294**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
10:45AM	129	**129**	156	**156**	**285**
Hourly Total	519	**519**	605	**605**	**1124**
11:00AM	146	**146**	160	**160**	**306**
11:15AM	171	**171**	169	**169**	**340**
11:30AM	163	**163**	200	**200**	**363**
11:45AM	166	**166**	199	**199**	**365**
Hourly Total	646	**646**	728	**728**	**1374**
12:00PM	153	**153**	187	**187**	**340**
12:15PM	151	**151**	159	**159**	**310**
12:30PM	187	**187**	185	**185**	**372**
12:45PM	189	**189**	172	**172**	**361**
Hourly Total	680	**680**	703	**703**	**1383**
1:00PM	167	**167**	159	**159**	**326**
1:15PM	154	**154**	162	**162**	**316**
1:30PM	151	**151**	172	**172**	**323**
1:45PM	183	**183**	159	**159**	**342**
Hourly Total	655	**655**	652	**652**	**1307**
2:00PM	137	**137**	161	**161**	**298**
2:15PM	210	**210**	194	**194**	**404**
2:30PM	180	**180**	196	**196**	**376**
2:45PM	203	**203**	183	**183**	**386**
Hourly Total	730	**730**	734	**734**	**1464**
3:00PM	215	**215**	191	**191**	**406**
3:15PM	216	**216**	233	**233**	**449**
3:30PM	238	**238**	216	**216**	**454**
3:45PM	214	**214**	208	**208**	**422**
Hourly Total	883	**883**	848	**848**	**1731**
4:00PM	217	**217**	182	**182**	**399**
4:15PM	206	**206**	214	**214**	**420**
4:30PM	210	**210**	218	**218**	**428**
4:45PM	255	**255**	199	**199**	**454**
Hourly Total	888	**888**	813	**813**	**1701**
5:00PM	207	**207**	186	**186**	**393**
5:15PM	249	**249**	187	**187**	**436**
5:30PM	244	**244**	173	**173**	**417**
5:45PM	217	**217**	149	**149**	**366**
Hourly Total	917	**917**	695	**695**	**1612**
6:00PM	190	**190**	168	**168**	**358**
6:15PM	188	**188**	154	**154**	**342**
6:30PM	197	**197**	137	**137**	**334**
6:45PM	171	**171**	124	**124**	**295**
Hourly Total	746	**746**	583	**583**	**1329**
7:00PM	157	**157**	113	**113**	**270**
7:15PM	153	**153**	125	**125**	**278**
7:30PM	136	**136**	136	**136**	**272**
7:45PM	128	**128**	94	**94**	**222**
Hourly Total	574	**574**	468	**468**	**1042**
8:00PM	139	**139**	123	**123**	**262**
8:15PM	128	**128**	97	**97**	**225**
8:30PM	131	**131**	86	**86**	**217**
8:45PM	111	**111**	76	**76**	**187**
Hourly Total	509	**509**	382	**382**	**891**
9:00PM	111	**111**	84	**84**	**195**
9:15PM	99	**99**	62	**62**	**161**
9:30PM	85	**85**	80	**80**	**165**
9:45PM	68	**68**	63	**63**	**131**
Hourly Total	363	**363**	289	**289**	**652**
10:00PM	76	**76**	59	**59**	**135**
10:15PM	74	**74**	48	**48**	**122**
10:30PM	48	**48**	39	**39**	**87**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
10:45PM	57	**57**	38	**38**	**95**
Hourly Total	255	**255**	184	**184**	**439**
11:00PM	38	**38**	28	**28**	**66**
11:15PM	35	**35**	35	**35**	**70**
11:30PM	29	**29**	29	**29**	**58**
11:45PM	28	**28**	30	**30**	**58**
Hourly Total	130	**130**	122	**122**	**252**
Total	10559	**10559**	10850	**10850**	**21409**
% Approach	100%	**-**	100%	**-**	-
% Total	49.3%	**49.3%**	50.7%	**50.7%**	-
Lights	10366	**10366**	10613	**10613**	20979
% Lights	98.2%	**98.2%**	97.8%	**97.8%**	98.0%
Single-Unit Trucks	123	**123**	126	**126**	249
% Single-Unit Trucks	1.2%	**1.2%**	1.2%	**1.2%**	1.2%
Articulated Trucks	26	**26**	42	**42**	68
% Articulated Trucks	0.2%	**0.2%**	0.4%	**0.4%**	0.3%
Buses	41	**41**	64	**64**	105
% Buses	0.4%	**0.4%**	0.6%	**0.6%**	0.5%
Bicycles on Road	3	**3**	5	**5**	8
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Ann Rd east of Simmons St - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840134, Location: 36.261631, -115.177915

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Ann Rd east of Simmons St - ATR

Tue May 11, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840134, Location: 36.261631, -115.177915

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 7:15AM	92	**92**	185	**185**	**277**
7:30AM	110	**110**	195	**195**	**305**
7:45AM	132	**132**	170	**170**	**302**
8:00AM	117	**117**	173	**173**	**290**
Total	451	**451**	723	**723**	**1174**
% Approach	100%	**-**	100%	**-**	-
% Total	38.4%	**38.4%**	61.6%	**61.6%**	-
PHF	0.854	**0.854**	0.927	**0.927**	0.962
Lights	434	**434**	707	**707**	1141
% Lights	96.2%	**96.2%**	97.8%	**97.8%**	97.2%
Single-Unit Trucks	13	**13**	12	**12**	25
% Single-Unit Trucks	2.9%	**2.9%**	1.7%	**1.7%**	2.1%
Articulated Trucks	2	**2**	1	**1**	3
% Articulated Trucks	0.4%	**0.4%**	0.1%	**0.1%**	0.3%
Buses	2	**2**	3	**3**	5
% Buses	0.4%	**0.4%**	0.4%	**0.4%**	0.4%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Ann Rd east of Simmons St - ATR

Tue May 11, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840134, Location: 36.261631, -115.177915

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Ann Rd east of Simmons St - ATR

Tue May 11, 2021
Midday Peak (11:15 AM - 12:15 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840134, Location: 36.261631, -115.177915

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 11:15AM	171	**171**	169	**169**	**340**
11:30AM	163	**163**	200	**200**	**363**
11:45AM	166	**166**	199	**199**	**365**
12:00PM	153	**153**	187	**187**	**340**
Total	653	**653**	755	**755**	**1408**
% Approach	100%	**-**	100%	**-**	-
% Total	46.4%	**46.4%**	53.6%	**53.6%**	-
PHF	0.955	**0.955**	0.943	**0.943**	0.964
Lights	633	**633**	723	**723**	1356
% Lights	96.9%	**96.9%**	95.8%	**95.8%**	96.3%
Single-Unit Trucks	11	**11**	15	**15**	26
% Single-Unit Trucks	1.7%	**1.7%**	2.0%	**2.0%**	1.8%
Articulated Trucks	1	**1**	5	**5**	6
% Articulated Trucks	0.2%	**0.2%**	0.7%	**0.7%**	0.4%
Buses	8	**8**	11	**11**	19
% Buses	1.2%	**1.2%**	1.5%	**1.5%**	1.3%
Bicycles on Road	0	**0**	1	**1**	1
% Bicycles on Road	0%	**0%**	0.1%	**0.1%**	0.1%

*T: Thru

Ann Rd east of Simmons St - ATR

Tue May 11, 2021
Midday Peak (11:15 AM - 12:15 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840134, Location: 36.261631, -115.177915

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Ann Rd east of Simmons St - ATR

Tue May 11, 2021
PM Peak (3 PM - 4 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840134, Location: 36.261631, -115.177915

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 3:00PM	215	**215**	191	**191**	**406**
3:15PM	216	**216**	233	**233**	**449**
3:30PM	238	**238**	216	**216**	**454**
3:45PM	214	**214**	208	**208**	**422**
Total	883	**883**	848	**848**	**1731**
% Approach	100%	**-**	100%	**-**	-
% Total	51.0%	**51.0%**	49.0%	**49.0%**	-
PHF	0.928	**0.928**	0.910	**0.910**	0.953
Lights	873	**873**	828	**828**	1701
% Lights	98.9%	**98.9%**	97.6%	**97.6%**	98.3%
Single-Unit Trucks	7	**7**	5	**5**	12
% Single-Unit Trucks	0.8%	**0.8%**	0.6%	**0.6%**	0.7%
Articulated Trucks	0	**0**	3	**3**	3
% Articulated Trucks	0%	**0%**	0.4%	**0.4%**	0.2%
Buses	3	**3**	12	**12**	15
% Buses	0.3%	**0.3%**	1.4%	**1.4%**	0.9%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Ann Rd east of Simmons St - ATR

Tue May 11, 2021
PM Peak (3 PM - 4 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840134, Location: 36.261631, -115.177915

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Bruce St between Hickey Ave and Flower Ave - ATR

Tue May 18, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840130, Location: 36.193689, -115.125084

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 12:00AM	10	**10**	9	**9**	**19**
12:15AM	16	**16**	12	**12**	**28**
12:30AM	17	**17**	8	**8**	**25**
12:45AM	6	**6**	7	**7**	**13**
Hourly Total	49	**49**	36	**36**	**85**
1:00AM	7	**7**	7	**7**	**14**
1:15AM	5	**5**	6	**6**	**11**
1:30AM	5	**5**	6	**6**	**11**
1:45AM	6	**6**	6	**6**	**12**
Hourly Total	23	**23**	25	**25**	**48**
2:00AM	4	**4**	7	**7**	**11**
2:15AM	4	**4**	2	**2**	**6**
2:30AM	7	**7**	12	**12**	**19**
2:45AM	5	**5**	2	**2**	**7**
Hourly Total	20	**20**	23	**23**	**43**
3:00AM	4	**4**	4	**4**	**8**
3:15AM	6	**6**	6	**6**	**12**
3:30AM	10	**10**	8	**8**	**18**
3:45AM	3	**3**	2	**2**	**5**
Hourly Total	23	**23**	20	**20**	**43**
4:00AM	5	**5**	6	**6**	**11**
4:15AM	10	**10**	12	**12**	**22**
4:30AM	11	**11**	10	**10**	**21**
4:45AM	11	**11**	7	**7**	**18**
Hourly Total	37	**37**	35	**35**	**72**
5:00AM	17	**17**	10	**10**	**27**
5:15AM	16	**16**	15	**15**	**31**
5:30AM	29	**29**	28	**28**	**57**
5:45AM	20	**20**	19	**19**	**39**
Hourly Total	82	**82**	72	**72**	**154**
6:00AM	25	**25**	24	**24**	**49**
6:15AM	32	**32**	35	**35**	**67**
6:30AM	37	**37**	29	**29**	**66**
6:45AM	35	**35**	37	**37**	**72**
Hourly Total	129	**129**	125	**125**	**254**
7:00AM	33	**33**	40	**40**	**73**
7:15AM	35	**35**	52	**52**	**87**
7:30AM	57	**57**	56	**56**	**113**
7:45AM	71	**71**	67	**67**	**138**
Hourly Total	196	**196**	215	**215**	**411**
8:00AM	54	**54**	52	**52**	**106**
8:15AM	48	**48**	48	**48**	**96**
8:30AM	52	**52**	39	**39**	**91**
8:45AM	48	**48**	30	**30**	**78**
Hourly Total	202	**202**	169	**169**	**371**
9:00AM	53	**53**	38	**38**	**91**
9:15AM	49	**49**	34	**34**	**83**
9:30AM	33	**33**	34	**34**	**67**
9:45AM	34	**34**	41	**41**	**75**
Hourly Total	169	**169**	147	**147**	**316**
10:00AM	42	**42**	37	**37**	**79**
10:15AM	47	**47**	43	**43**	**90**
10:30AM	52	**52**	49	**49**	**101**

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
10:45AM	60	**60**	41	**41**	**101**
Hourly Total	201	**201**	170	**170**	**371**
11:00AM	61	**61**	49	**49**	**110**
11:15AM	62	**62**	49	**49**	**111**
11:30AM	78	**78**	47	**47**	**125**
11:45AM	47	**47**	49	**49**	**96**
Hourly Total	248	**248**	194	**194**	**442**
12:00PM	58	**58**	45	**45**	**103**
12:15PM	56	**56**	37	**37**	**93**
12:30PM	59	**59**	33	**33**	**92**
12:45PM	62	**62**	46	**46**	**108**
Hourly Total	235	**235**	161	**161**	**396**
1:00PM	50	**50**	42	**42**	**92**
1:15PM	79	**79**	46	**46**	**125**
1:30PM	65	**65**	49	**49**	**114**
1:45PM	54	**54**	49	**49**	**103**
Hourly Total	248	**248**	186	**186**	**434**
2:00PM	78	**78**	57	**57**	**135**
2:15PM	81	**81**	51	**51**	**132**
2:30PM	84	**84**	57	**57**	**141**
2:45PM	90	**90**	75	**75**	**165**
Hourly Total	333	**333**	240	**240**	**573**
3:00PM	128	**128**	67	**67**	**195**
3:15PM	116	**116**	68	**68**	**184**
3:30PM	91	**91**	66	**66**	**157**
3:45PM	94	**94**	83	**83**	**177**
Hourly Total	429	**429**	284	**284**	**713**
4:00PM	69	**69**	76	**76**	**145**
4:15PM	107	**107**	77	**77**	**184**
4:30PM	71	**71**	69	**69**	**140**
4:45PM	105	**105**	61	**61**	**166**
Hourly Total	352	**352**	283	**283**	**635**
5:00PM	91	**91**	48	**48**	**139**
5:15PM	99	**99**	64	**64**	**163**
5:30PM	90	**90**	63	**63**	**153**
5:45PM	70	**70**	67	**67**	**137**
Hourly Total	350	**350**	242	**242**	**592**
6:00PM	57	**57**	45	**45**	**102**
6:15PM	72	**72**	43	**43**	**115**
6:30PM	77	**77**	56	**56**	**133**
6:45PM	62	**62**	54	**54**	**116**
Hourly Total	268	**268**	198	**198**	**466**
7:00PM	64	**64**	39	**39**	**103**
7:15PM	45	**45**	49	**49**	**94**
7:30PM	32	**32**	47	**47**	**79**
7:45PM	49	**49**	34	**34**	**83**
Hourly Total	190	**190**	169	**169**	**359**
8:00PM	64	**64**	34	**34**	**98**
8:15PM	50	**50**	37	**37**	**87**
8:30PM	35	**35**	36	**36**	**71**
8:45PM	38	**38**	19	**19**	**57**
Hourly Total	187	**187**	126	**126**	**313**
9:00PM	50	**50**	29	**29**	**79**
9:15PM	39	**39**	19	**19**	**58**
9:30PM	34	**34**	23	**23**	**57**
9:45PM	27	**27**	24	**24**	**51**
Hourly Total	150	**150**	95	**95**	**245**
10:00PM	31	**31**	29	**29**	**60**
10:15PM	29	**29**	15	**15**	**44**
10:30PM	28	**28**	17	**17**	**45**

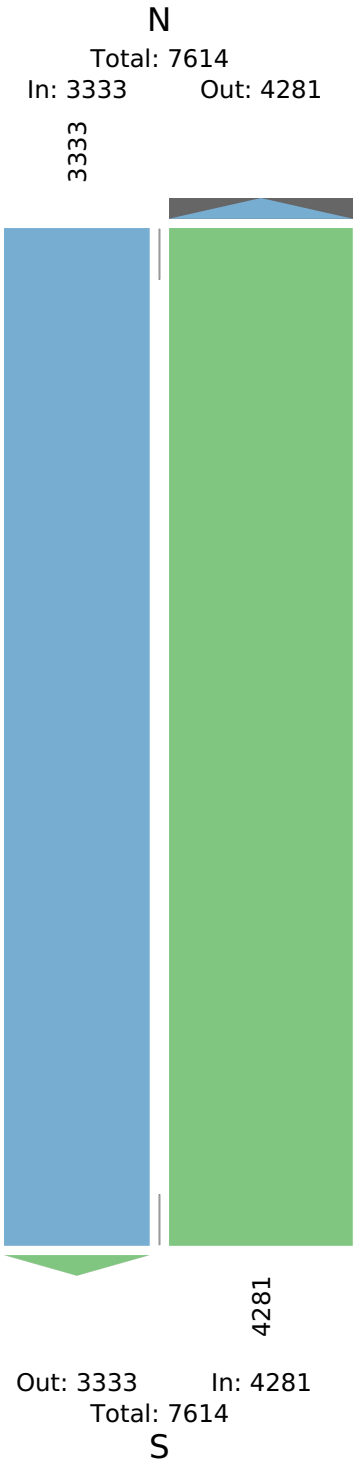
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
10:45PM	16	**16**	11	**11**	**27**
Hourly Total	104	**104**	72	**72**	**176**
11:00PM	13	**13**	14	**14**	**27**
11:15PM	24	**24**	12	**12**	**36**
11:30PM	11	**11**	14	**14**	**25**
11:45PM	8	**8**	6	**6**	**14**
Hourly Total	56	**56**	46	**46**	**102**
Total	4281	**4281**	3333	**3333**	**7614**
% Approach	100%	**-**	100%	**-**	-
% Total	56.2%	**56.2%**	43.8%	**43.8%**	-
Lights	4194	**4194**	3292	**3292**	7486
% Lights	98.0%	**98.0%**	98.8%	**98.8%**	98.3%
Single-Unit Trucks	42	**42**	26	**26**	68
% Single-Unit Trucks	1.0%	**1.0%**	0.8%	**0.8%**	0.9%
Articulated Trucks	9	**9**	3	**3**	12
% Articulated Trucks	0.2%	**0.2%**	0.1%	**0.1%**	0.2%
Buses	22	**22**	7	**7**	29
% Buses	0.5%	**0.5%**	0.2%	**0.2%**	0.4%
Bicycles on Road	14	**14**	5	**5**	19
% Bicycles on Road	0.3%	**0.3%**	0.2%	**0.2%**	0.2%

*T: Thru

Bruce St between Hickey Ave and Flower Ave - ATR

Tue May 18, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840130, Location: 36.193689, -115.125084

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Bruce St between Hickey Ave and Flower Ave - ATR

Tue May 18, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840130, Location: 36.193689, -115.125084

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

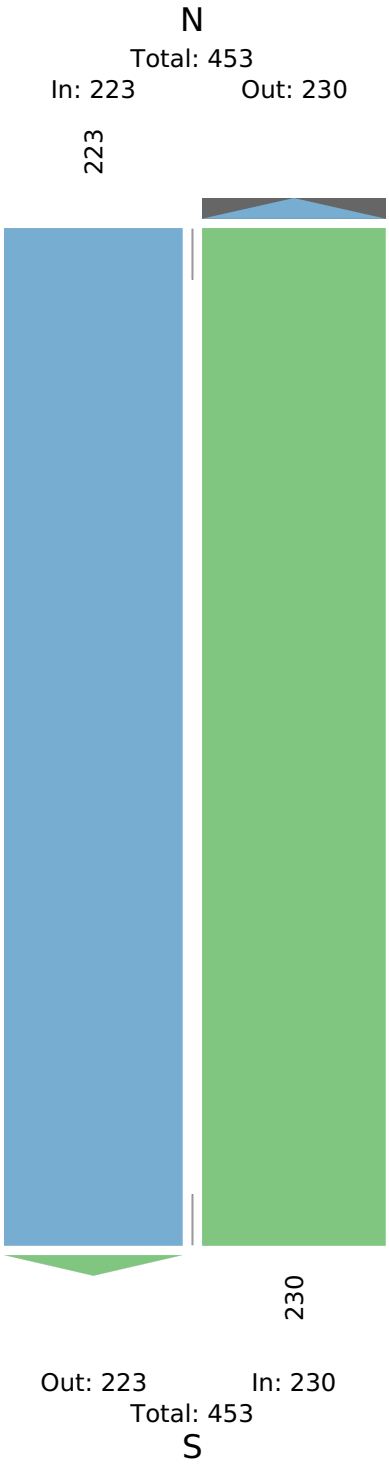
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 7:30AM	57	**57**	56	**56**	**113**
7:45AM	71	**71**	67	**67**	**138**
8:00AM	54	**54**	52	**52**	**106**
8:15AM	48	**48**	48	**48**	**96**
Total	230	**230**	223	**223**	**453**
% Approach	100%	**-**	100%	**-**	-
% Total	50.8%	**50.8%**	49.2%	**49.2%**	-
PHF	0.810	**0.810**	0.832	**0.832**	0.821
Lights	224	**224**	220	**220**	444
% Lights	97.4%	**97.4%**	98.7%	**98.7%**	98.0%
Single-Unit Trucks	2	**2**	3	**3**	5
% Single-Unit Trucks	0.9%	**0.9%**	1.3%	**1.3%**	1.1%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	4	**4**	0	**0**	4
% Buses	1.7%	**1.7%**	0%	**0%**	0.9%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Bruce St between Hickey Ave and Flower Ave - ATR

Tue May 18, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840130, Location: 36.193689, -115.125084

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Bruce St between Hickey Ave and Flower Ave - ATR

Tue May 18, 2021
Midday Peak (11 AM - 12 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840130, Location: 36.193689, -115.125084

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

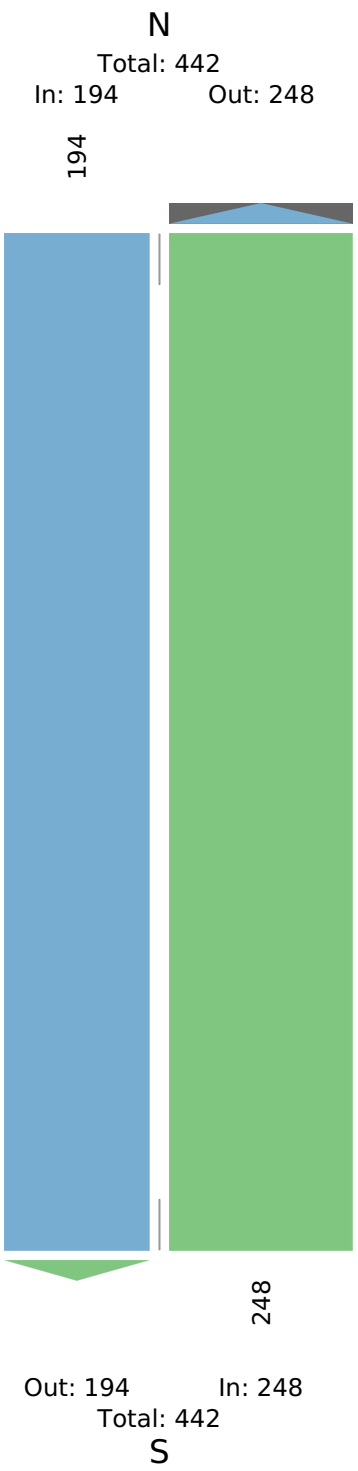
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 11:00AM	61	**61**	49	**49**	**110**
11:15AM	62	**62**	49	**49**	**111**
11:30AM	78	**78**	47	**47**	**125**
11:45AM	47	**47**	49	**49**	**96**
Total	248	**248**	194	**194**	**442**
% Approach	100%	**-**	100%	**-**	-
% Total	56.1%	**56.1%**	43.9%	**43.9%**	-
PHF	0.799	**0.799**	0.990	**0.990**	0.887
Lights	240	**240**	190	**190**	430
% Lights	96.8%	**96.8%**	97.9%	**97.9%**	97.3%
Single-Unit Trucks	4	**4**	2	**2**	6
% Single-Unit Trucks	1.6%	**1.6%**	1.0%	**1.0%**	1.4%
Articulated Trucks	1	**1**	0	**0**	1
% Articulated Trucks	0.4%	**0.4%**	0%	**0%**	0.2%
Buses	1	**1**	2	**2**	3
% Buses	0.4%	**0.4%**	1.0%	**1.0%**	0.7%
Bicycles on Road	2	**2**	0	**0**	2
% Bicycles on Road	0.8%	**0.8%**	0%	**0%**	0.5%

*T: Thru

Bruce St between Hickey Ave and Flower Ave - ATR

Tue May 18, 2021
Midday Peak (11 AM - 12 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840130, Location: 36.193689, -115.125084

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Bruce St between Hickey Ave and Flower Ave - ATR

Tue May 18, 2021
PM Peak (3 PM - 4 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840130, Location: 36.193689, -115.125084

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 3:00PM	128	**128**	67	**67**	**195**
3:15PM	116	**116**	68	**68**	**184**
3:30PM	91	**91**	66	**66**	**157**
3:45PM	94	**94**	83	**83**	**177**
Total	429	**429**	284	**284**	**713**
% Approach	100%	**-**	100%	**-**	-
% Total	60.2%	**60.2%**	39.8%	**39.8%**	-
PHF	0.843	**0.843**	0.855	**0.855**	0.918
Lights	419	**419**	281	**281**	700
% Lights	97.7%	**97.7%**	98.9%	**98.9%**	98.2%
Single-Unit Trucks	7	**7**	1	**1**	8
% Single-Unit Trucks	1.6%	**1.6%**	0.4%	**0.4%**	1.1%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	2	**2**	2	**2**	4
% Buses	0.5%	**0.5%**	0.7%	**0.7%**	0.6%
Bicycles on Road	1	**1**	0	**0**	1
% Bicycles on Road	0.2%	**0.2%**	0%	**0%**	0.1%

*T: Thru

Bruce St between Hickey Ave and Flower Ave - ATR

Tue May 18, 2021
PM Peak (3 PM - 4 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840130, Location: 36.193689, -115.125084

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Civic Center Dr between Lake Mead Blvd and P... - ATR

Wed May 19, 2021
Full Length (9 AM-9 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840157, Location: 36.193112, -115.116225

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 9:00AM	138	**138**	148	**148**	**286**
9:15AM	125	**125**	133	**133**	**258**
9:30AM	135	**135**	138	**138**	**273**
9:45AM	136	**136**	128	**128**	**264**
Hourly Total	534	**534**	547	**547**	**1081**
10:00AM	151	**151**	160	**160**	**311**
10:15AM	149	**149**	164	**164**	**313**
10:30AM	139	**139**	137	**137**	**276**
10:45AM	194	**194**	176	**176**	**370**
Hourly Total	633	**633**	637	**637**	**1270**
11:00AM	190	**190**	138	**138**	**328**
11:15AM	183	**183**	189	**189**	**372**
11:30AM	204	**204**	154	**154**	**358**
11:45AM	160	**160**	158	**158**	**318**
Hourly Total	737	**737**	639	**639**	**1376**
12:00PM	179	**179**	168	**168**	**347**
12:15PM	151	**151**	192	**192**	**343**
12:30PM	173	**173**	175	**175**	**348**
12:45PM	186	**186**	171	**171**	**357**
Hourly Total	689	**689**	706	**706**	**1395**
1:00PM	209	**209**	200	**200**	**409**
1:15PM	208	**208**	188	**188**	**396**
1:30PM	164	**164**	177	**177**	**341**
1:45PM	189	**189**	196	**196**	**385**
Hourly Total	770	**770**	761	**761**	**1531**
2:00PM	189	**189**	167	**167**	**356**
2:15PM	225	**225**	178	**178**	**403**
2:30PM	209	**209**	234	**234**	**443**
2:45PM	223	**223**	228	**228**	**451**
Hourly Total	846	**846**	807	**807**	**1653**
3:00PM	259	**259**	227	**227**	**486**
3:15PM	261	**261**	280	**280**	**541**
3:30PM	252	**252**	241	**241**	**493**
3:45PM	241	**241**	215	**215**	**456**
Hourly Total	1013	**1013**	963	**963**	**1976**
4:00PM	212	**212**	254	**254**	**466**
4:15PM	239	**239**	233	**233**	**472**
4:30PM	251	**251**	270	**270**	**521**
4:45PM	267	**267**	248	**248**	**515**
Hourly Total	969	**969**	1005	**1005**	**1974**
5:00PM	255	**255**	252	**252**	**507**
5:15PM	249	**249**	289	**289**	**538**
5:30PM	217	**217**	247	**247**	**464**
5:45PM	208	**208**	262	**262**	**470**
Hourly Total	929	**929**	1050	**1050**	**1979**
6:00PM	232	**232**	254	**254**	**486**
6:15PM	215	**215**	206	**206**	**421**
6:30PM	177	**177**	212	**212**	**389**
6:45PM	160	**160**	182	**182**	**342**
Hourly Total	784	**784**	854	**854**	**1638**
7:00PM	165	**165**	193	**193**	**358**
7:15PM	136	**136**	174	**174**	**310**
7:30PM	130	**130**	161	**161**	**291**

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
7:45PM	158	**158**	117	**117**	**275**
Hourly Total	589	**589**	645	**645**	**1234**
8:00PM	138	**138**	148	**148**	**286**
8:15PM	152	**152**	127	**127**	**279**
8:30PM	141	**141**	119	**119**	**260**
8:45PM	124	**124**	118	**118**	**242**
Hourly Total	555	**555**	512	**512**	**1067**
9:00PM	111	**111**	117	**117**	**228**
9:15PM	100	**100**	120	**120**	**220**
9:30PM	92	**92**	95	**95**	**187**
9:45PM	95	**95**	98	**98**	**193**
Hourly Total	398	**398**	430	**430**	**828**
10:00PM	77	**77**	82	**82**	**159**
10:15PM	70	**70**	83	**83**	**153**
10:30PM	70	**70**	74	**74**	**144**
10:45PM	46	**46**	76	**76**	**122**
Hourly Total	263	**263**	315	**315**	**578**
11:00PM	62	**62**	47	**47**	**109**
11:15PM	32	**32**	57	**57**	**89**
11:30PM	38	**38**	33	**33**	**71**
11:45PM	36	**36**	36	**36**	**72**
Hourly Total	168	**168**	173	**173**	**341**
2021-05-20 12:00AM	41	**41**	35	**35**	**76**
12:15AM	37	**37**	35	**35**	**72**
12:30AM	24	**24**	35	**35**	**59**
12:45AM	30	**30**	23	**23**	**53**
Hourly Total	132	**132**	128	**128**	**260**
1:00AM	20	**20**	26	**26**	**46**
1:15AM	15	**15**	27	**27**	**42**
1:30AM	22	**22**	22	**22**	**44**
1:45AM	22	**22**	19	**19**	**41**
Hourly Total	79	**79**	94	**94**	**173**
2:00AM	17	**17**	15	**15**	**32**
2:15AM	17	**17**	19	**19**	**36**
2:30AM	17	**17**	27	**27**	**44**
2:45AM	8	**8**	13	**13**	**21**
Hourly Total	59	**59**	74	**74**	**133**
3:00AM	13	**13**	14	**14**	**27**
3:15AM	8	**8**	19	**19**	**27**
3:30AM	17	**17**	24	**24**	**41**
3:45AM	13	**13**	23	**23**	**36**
Hourly Total	51	**51**	80	**80**	**131**
4:00AM	28	**28**	27	**27**	**55**
4:15AM	22	**22**	33	**33**	**55**
4:30AM	36	**36**	33	**33**	**69**
4:45AM	39	**39**	54	**54**	**93**
Hourly Total	125	**125**	147	**147**	**272**
5:00AM	57	**57**	57	**57**	**114**
5:15AM	82	**82**	65	**65**	**147**
5:30AM	88	**88**	113	**113**	**201**
5:45AM	86	**86**	103	**103**	**189**
Hourly Total	313	**313**	338	**338**	**651**
6:00AM	77	**77**	104	**104**	**181**
6:15AM	89	**89**	93	**93**	**182**
6:30AM	122	**122**	118	**118**	**240**
6:45AM	114	**114**	142	**142**	**256**
Hourly Total	402	**402**	457	**457**	**859**
7:00AM	135	**135**	117	**117**	**252**
7:15AM	143	**143**	102	**102**	**245**
7:30AM	148	**148**	128	**128**	**276**

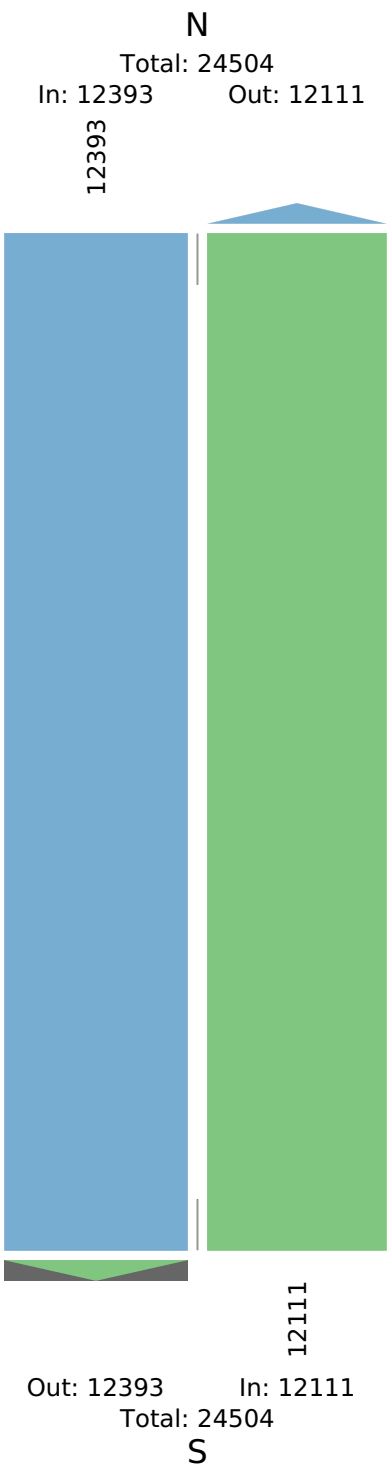
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
7:45AM	140	**140**	161	**161**	**301**
Hourly Total	566	**566**	508	**508**	**1074**
8:00AM	106	**106**	120	**120**	**226**
8:15AM	135	**135**	131	**131**	**266**
8:30AM	139	**139**	136	**136**	**275**
8:45AM	127	**127**	136	**136**	**263**
Hourly Total	507	**507**	523	**523**	**1030**
Total	12111	**12111**	12393	**12393**	**24504**
% Approach	100%	**-**	100%	**-**	-
% Total	49.4%	**49.4%**	50.6%	**50.6%**	-
Lights	11784	**11784**	12036	**12036**	23820
% Lights	97.3%	**97.3%**	97.1%	**97.1%**	97.2%
Single-Unit Trucks	159	**159**	185	**185**	344
% Single-Unit Trucks	1.3%	**1.3%**	1.5%	**1.5%**	1.4%
Articulated Trucks	43	**43**	46	**46**	89
% Articulated Trucks	0.4%	**0.4%**	0.4%	**0.4%**	0.4%
Buses	120	**120**	122	**122**	242
% Buses	1.0%	**1.0%**	1.0%	**1.0%**	1.0%
Bicycles on Road	5	**5**	4	**4**	9
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Civic Center Dr between Lake Mead Blvd and P... - ATR

Wed May 19, 2021
Full Length (9 AM-9 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840157, Location: 36.193112, -115.116225

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Civic Center Dr between Lake Mead Blvd and P... - ATR

Wed May 19, 2021
AM Peak (May 19 2021 10AM - 11 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840157, Location: 36.193112, -115.116225

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

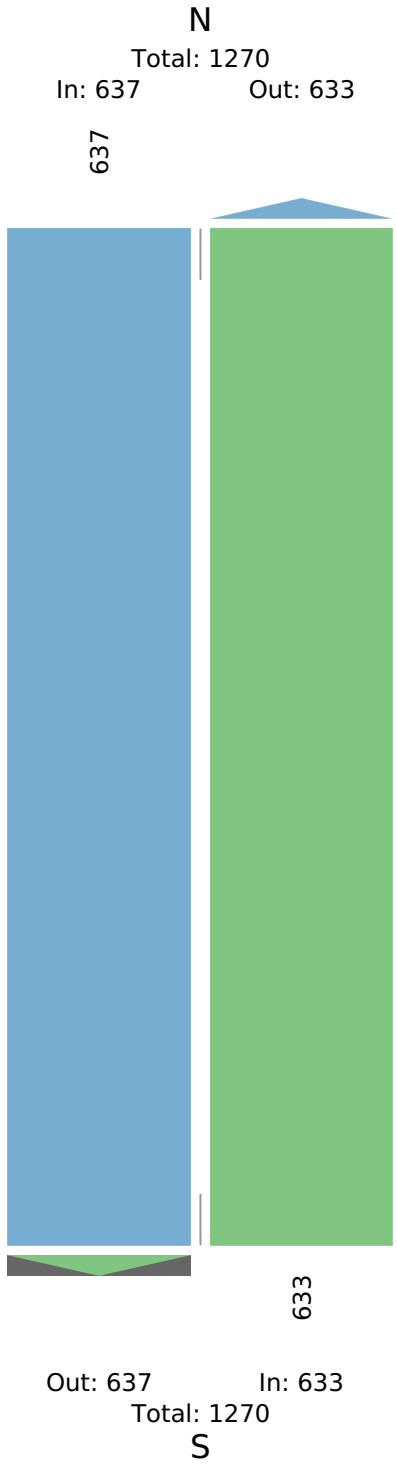
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 10:00AM	151	**151**	160	**160**	**311**
10:15AM	149	**149**	164	**164**	**313**
10:30AM	139	**139**	137	**137**	**276**
10:45AM	194	**194**	176	**176**	**370**
Total	633	**633**	637	**637**	**1270**
% Approach	100%	**-**	100%	**-**	-
% Total	49.8%	**49.8%**	50.2%	**50.2%**	-
PHF	0.816	**0.816**	0.905	**0.905**	0.858
Lights	607	**607**	604	**604**	1211
% Lights	95.9%	**95.9%**	94.8%	**94.8%**	95.4%
Single-Unit Trucks	18	**18**	22	**22**	40
% Single-Unit Trucks	2.8%	**2.8%**	3.5%	**3.5%**	3.1%
Articulated Trucks	3	**3**	3	**3**	6
% Articulated Trucks	0.5%	**0.5%**	0.5%	**0.5%**	0.5%
Buses	5	**5**	8	**8**	13
% Buses	0.8%	**0.8%**	1.3%	**1.3%**	1.0%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Civic Center Dr between Lake Mead Blvd and P... - ATR

Wed May 19, 2021
AM Peak (May 19 2021 10AM - 11 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840157, Location: 36.193112, -115.116225

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Civic Center Dr between Lake Mead Blvd and P... - ATR

Wed May 19, 2021
Midday Peak (May 19 2021 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840157, Location: 36.193112, -115.116225

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 12:00PM	179	**179**	168	**168**	**347**
12:15PM	151	**151**	192	**192**	**343**
12:30PM	173	**173**	175	**175**	**348**
12:45PM	186	**186**	171	**171**	**357**
Total	689	**689**	706	**706**	**1395**
% Approach	100%	**-**	100%	**-**	-
% Total	49.4%	**49.4%**	50.6%	**50.6%**	-
PHF	0.930	**0.930**	0.919	**0.919**	0.979
Lights	666	**666**	686	**686**	1352
% Lights	96.7%	**96.7%**	97.2%	**97.2%**	96.9%
Single-Unit Trucks	10	**10**	12	**12**	22
% Single-Unit Trucks	1.5%	**1.5%**	1.7%	**1.7%**	1.6%
Articulated Trucks	5	**5**	3	**3**	8
% Articulated Trucks	0.7%	**0.7%**	0.4%	**0.4%**	0.6%
Buses	7	**7**	5	**5**	12
% Buses	1.0%	**1.0%**	0.7%	**0.7%**	0.9%
Bicycles on Road	1	**1**	0	**0**	1
% Bicycles on Road	0.1%	**0.1%**	0%	**0%**	0.1%

*T: Thru

Civic Center Dr between Lake Mead Blvd and P... - ATR
Wed May 19, 2021
Midday Peak (May 19 2021 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840157, Location: 36.193112, -115.116225

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Civic Center Dr between Lake Mead Blvd and P... - ATR

Wed May 19, 2021
PM Peak (May 19 2021 4:30PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840157, Location: 36.193112, -115.116225

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

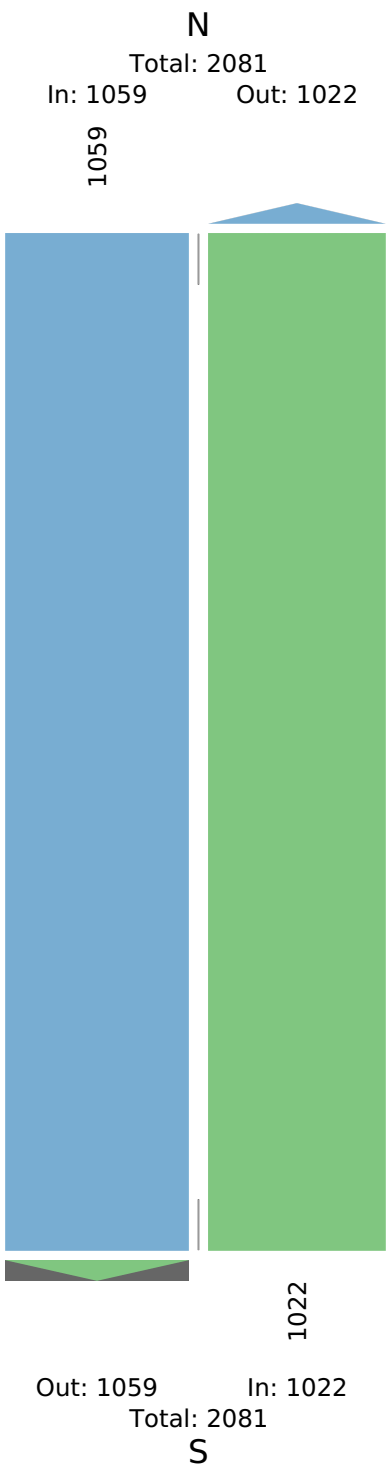
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 4:30PM	251	**251**	270	**270**	**521**
4:45PM	267	**267**	248	**248**	**515**
5:00PM	255	**255**	252	**252**	**507**
5:15PM	249	**249**	289	**289**	**538**
Total	1022	**1022**	1059	**1059**	**2081**
% Approach	100%	**-**	100%	**-**	-
% Total	49.1%	**49.1%**	50.9%	**50.9%**	-
PHF	0.957	**0.957**	0.916	**0.916**	0.967
Lights	1008	**1008**	1038	**1038**	2046
% Lights	98.6%	**98.6%**	98.0%	**98.0%**	98.3%
Single-Unit Trucks	7	**7**	14	**14**	21
% Single-Unit Trucks	0.7%	**0.7%**	1.3%	**1.3%**	1.0%
Articulated Trucks	2	**2**	0	**0**	2
% Articulated Trucks	0.2%	**0.2%**	0%	**0%**	0.1%
Buses	5	**5**	7	**7**	12
% Buses	0.5%	**0.5%**	0.7%	**0.7%**	0.6%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Civic Center Dr between Lake Mead Blvd and P... - ATR

Wed May 19, 2021
PM Peak (May 19 2021 4:30PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840157, Location: 36.193112, -115.116225

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Commerce St south of Deer Springs Way - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840133, Location: 36.282896, -115.148714

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 12:00AM	6	**6**	7	**7**	**13**
12:15AM	7	**7**	16	**16**	**23**
12:30AM	7	**7**	8	**8**	**15**
12:45AM	6	**6**	6	**6**	**12**
Hourly Total	26	**26**	37	**37**	**63**
1:00AM	3	**3**	2	**2**	**5**
1:15AM	5	**5**	5	**5**	**10**
1:30AM	4	**4**	2	**2**	**6**
1:45AM	3	**3**	5	**5**	**8**
Hourly Total	15	**15**	14	**14**	**29**
2:00AM	2	**2**	3	**3**	**5**
2:15AM	4	**4**	0	**0**	**4**
2:30AM	2	**2**	3	**3**	**5**
2:45AM	2	**2**	6	**6**	**8**
Hourly Total	10	**10**	12	**12**	**22**
3:00AM	3	**3**	3	**3**	**6**
3:15AM	4	**4**	4	**4**	**8**
3:30AM	5	**5**	1	**1**	**6**
3:45AM	7	**7**	4	**4**	**11**
Hourly Total	19	**19**	12	**12**	**31**
4:00AM	7	**7**	5	**5**	**12**
4:15AM	10	**10**	6	**6**	**16**
4:30AM	10	**10**	1	**1**	**11**
4:45AM	17	**17**	6	**6**	**23**
Hourly Total	44	**44**	18	**18**	**62**
5:00AM	21	**21**	13	**13**	**34**
5:15AM	23	**23**	7	**7**	**30**
5:30AM	30	**30**	19	**19**	**49**
5:45AM	31	**31**	11	**11**	**42**
Hourly Total	105	**105**	50	**50**	**155**
6:00AM	58	**58**	15	**15**	**73**
6:15AM	48	**48**	28	**28**	**76**
6:30AM	67	**67**	35	**35**	**102**
6:45AM	61	**61**	50	**50**	**111**
Hourly Total	234	**234**	128	**128**	**362**
7:00AM	66	**66**	52	**52**	**118**
7:15AM	71	**71**	45	**45**	**116**
7:30AM	82	**82**	55	**55**	**137**
7:45AM	92	**92**	53	**53**	**145**
Hourly Total	311	**311**	205	**205**	**516**
8:00AM	45	**45**	55	**55**	**100**
8:15AM	49	**49**	50	**50**	**99**
8:30AM	61	**61**	40	**40**	**101**
8:45AM	66	**66**	50	**50**	**116**
Hourly Total	221	**221**	195	**195**	**416**
9:00AM	44	**44**	42	**42**	**86**
9:15AM	26	**26**	28	**28**	**54**
9:30AM	39	**39**	28	**28**	**67**
9:45AM	34	**34**	36	**36**	**70**
Hourly Total	143	**143**	134	**134**	**277**
10:00AM	50	**50**	33	**33**	**83**
10:15AM	49	**49**	35	**35**	**84**
10:30AM	43	**43**	35	**35**	**78**

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
10:45AM	41	**41**	66	**66**	**107**
Hourly Total	183	**183**	169	**169**	**352**
11:00AM	50	**50**	48	**48**	**98**
11:15AM	39	**39**	44	**44**	**83**
11:30AM	60	**60**	49	**49**	**109**
11:45AM	37	**37**	56	**56**	**93**
Hourly Total	186	**186**	197	**197**	**383**
12:00PM	57	**57**	58	**58**	**115**
12:15PM	48	**48**	78	**78**	**126**
12:30PM	64	**64**	50	**50**	**114**
12:45PM	47	**47**	47	**47**	**94**
Hourly Total	216	**216**	233	**233**	**449**
1:00PM	51	**51**	45	**45**	**96**
1:15PM	55	**55**	66	**66**	**121**
1:30PM	40	**40**	44	**44**	**84**
1:45PM	55	**55**	75	**75**	**130**
Hourly Total	201	**201**	230	**230**	**431**
2:00PM	56	**56**	67	**67**	**123**
2:15PM	75	**75**	73	**73**	**148**
2:30PM	61	**61**	56	**56**	**117**
2:45PM	66	**66**	74	**74**	**140**
Hourly Total	258	**258**	270	**270**	**528**
3:00PM	50	**50**	80	**80**	**130**
3:15PM	75	**75**	75	**75**	**150**
3:30PM	81	**81**	79	**79**	**160**
3:45PM	61	**61**	89	**89**	**150**
Hourly Total	267	**267**	323	**323**	**590**
4:00PM	66	**66**	91	**91**	**157**
4:15PM	66	**66**	69	**69**	**135**
4:30PM	69	**69**	77	**77**	**146**
4:45PM	57	**57**	91	**91**	**148**
Hourly Total	258	**258**	328	**328**	**586**
5:00PM	49	**49**	81	**81**	**130**
5:15PM	59	**59**	83	**83**	**142**
5:30PM	62	**62**	90	**90**	**152**
5:45PM	55	**55**	71	**71**	**126**
Hourly Total	225	**225**	325	**325**	**550**
6:00PM	65	**65**	75	**75**	**140**
6:15PM	48	**48**	83	**83**	**131**
6:30PM	46	**46**	69	**69**	**115**
6:45PM	46	**46**	61	**61**	**107**
Hourly Total	205	**205**	288	**288**	**493**
7:00PM	35	**35**	51	**51**	**86**
7:15PM	24	**24**	47	**47**	**71**
7:30PM	41	**41**	56	**56**	**97**
7:45PM	30	**30**	50	**50**	**80**
Hourly Total	130	**130**	204	**204**	**334**
8:00PM	34	**34**	50	**50**	**84**
8:15PM	35	**35**	41	**41**	**76**
8:30PM	30	**30**	34	**34**	**64**
8:45PM	29	**29**	51	**51**	**80**
Hourly Total	128	**128**	176	**176**	**304**
9:00PM	25	**25**	31	**31**	**56**
9:15PM	12	**12**	36	**36**	**48**
9:30PM	28	**28**	36	**36**	**64**
9:45PM	11	**11**	27	**27**	**38**
Hourly Total	76	**76**	130	**130**	**206**
10:00PM	20	**20**	27	**27**	**47**
10:15PM	11	**11**	29	**29**	**40**
10:30PM	17	**17**	17	**17**	**34**

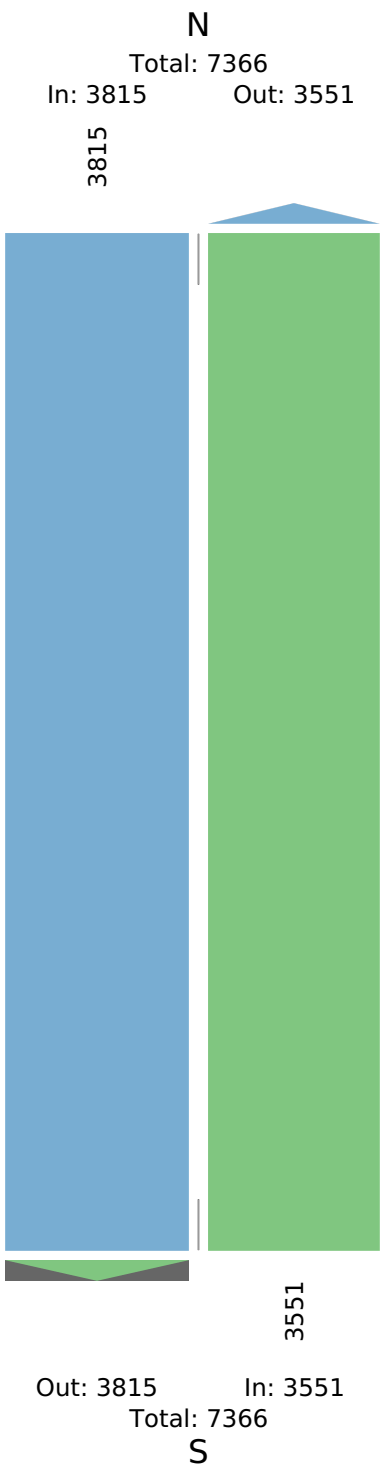
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
10:45PM	7	**7**	21	**21**	**28**
Hourly Total	55	**55**	94	**94**	**149**
11:00PM	7	**7**	11	**11**	**18**
11:15PM	12	**12**	18	**18**	**30**
11:30PM	11	**11**	7	**7**	**18**
11:45PM	5	**5**	7	**7**	**12**
Hourly Total	35	**35**	43	**43**	**78**
Total	3551	**3551**	3815	**3815**	**7366**
% Approach	100%	**-**	100%	**-**	-
% Total	48.2%	**48.2%**	51.8%	**51.8%**	-
Lights	3453	**3453**	3709	**3709**	7162
% Lights	97.2%	**97.2%**	97.2%	**97.2%**	97.2%
Single-Unit Trucks	44	**44**	38	**38**	82
% Single-Unit Trucks	1.2%	**1.2%**	1.0%	**1.0%**	1.1%
Articulated Trucks	12	**12**	11	**11**	23
% Articulated Trucks	0.3%	**0.3%**	0.3%	**0.3%**	0.3%
Buses	40	**40**	57	**57**	97
% Buses	1.1%	**1.1%**	1.5%	**1.5%**	1.3%
Bicycles on Road	2	**2**	0	**0**	2
% Bicycles on Road	0.1%	**0.1%**	0%	**0%**	0%

*T: Thru

Commerce St south of Deer Springs Way - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840133, Location: 36.282896, -115.148714

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Commerce St south of Deer Springs Way - ATR

Tue May 11, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840133, Location: 36.282896, -115.148714

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 7:00AM	66	**66**	52	**52**	**118**
7:15AM	71	**71**	45	**45**	**116**
7:30AM	82	**82**	55	**55**	**137**
7:45AM	92	**92**	53	**53**	**145**
Total	311	**311**	205	**205**	**516**
% Approach	100%	**-**	100%	**-**	-
% Total	60.3%	**60.3%**	39.7%	**39.7%**	-
PHF	0.845	**0.845**	0.932	**0.932**	0.890
Lights	297	**297**	198	**198**	495
% Lights	95.5%	**95.5%**	96.6%	**96.6%**	95.9%
Single-Unit Trucks	5	**5**	1	**1**	6
% Single-Unit Trucks	1.6%	**1.6%**	0.5%	**0.5%**	1.2%
Articulated Trucks	1	**1**	0	**0**	1
% Articulated Trucks	0.3%	**0.3%**	0%	**0%**	0.2%
Buses	8	**8**	6	**6**	14
% Buses	2.6%	**2.6%**	2.9%	**2.9%**	2.7%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Commerce St south of Deer Springs Way - ATR

Tue May 11, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840133, Location: 36.282896, -115.148714

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Commerce St south of Deer Springs Way - ATR

Tue May 11, 2021
Midday Peak (12 PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840133, Location: 36.282896, -115.148714

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

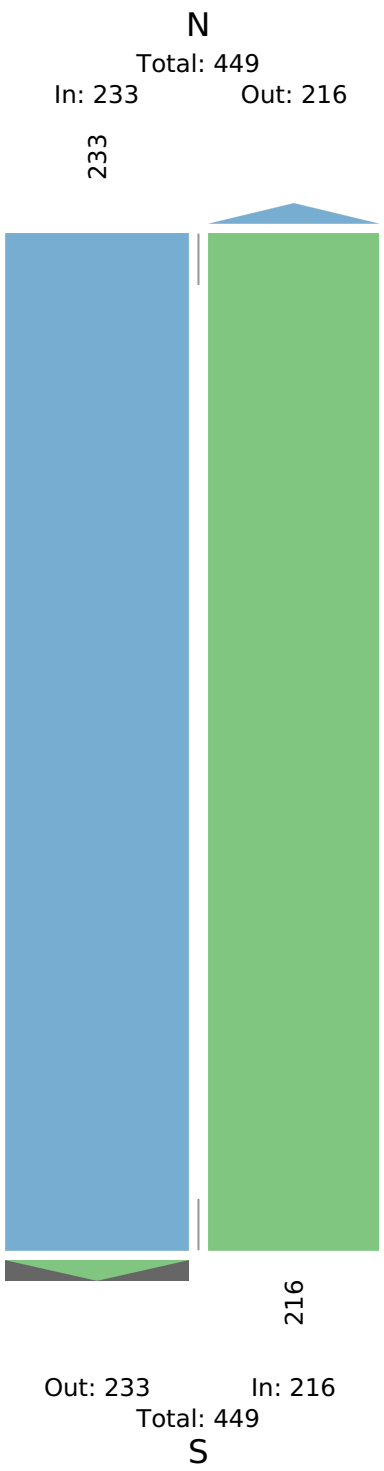
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 12:00PM	57	**57**	58	**58**	**115**
12:15PM	48	**48**	78	**78**	**126**
12:30PM	64	**64**	50	**50**	**114**
12:45PM	47	**47**	47	**47**	**94**
Total	216	**216**	233	**233**	**449**
% Approach	100%	**-**	100%	**-**	-
% Total	48.1%	**48.1%**	51.9%	**51.9%**	-
PHF	0.844	**0.844**	0.747	**0.747**	0.891
Lights	209	**209**	218	**218**	427
% Lights	96.8%	**96.8%**	93.6%	**93.6%**	95.1%
Single-Unit Trucks	4	**4**	7	**7**	11
% Single-Unit Trucks	1.9%	**1.9%**	3.0%	**3.0%**	2.4%
Articulated Trucks	1	**1**	2	**2**	3
% Articulated Trucks	0.5%	**0.5%**	0.9%	**0.9%**	0.7%
Buses	2	**2**	6	**6**	8
% Buses	0.9%	**0.9%**	2.6%	**2.6%**	1.8%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Commerce St south of Deer Springs Way - ATR

Tue May 11, 2021
Midday Peak (12 PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840133, Location: 36.282896, -115.148714

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Commerce St south of Deer Springs Way - ATR

Tue May 11, 2021
PM Peak (3:15 PM - 4:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840133, Location: 36.282896, -115.148714

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 3:15PM	75	**75**	75	**75**	**150**
3:30PM	81	**81**	79	**79**	**160**
3:45PM	61	**61**	89	**89**	**150**
4:00PM	66	**66**	91	**91**	**157**
Total	283	**283**	334	**334**	**617**
% Approach	100%	**-**	100%	**-**	-
% Total	45.9%	**45.9%**	54.1%	**54.1%**	-
PHF	0.873	**0.873**	0.918	**0.918**	0.964
Lights	280	**280**	332	**332**	612
% Lights	98.9%	**98.9%**	99.4%	**99.4%**	99.2%
Single-Unit Trucks	0	**0**	2	**2**	2
% Single-Unit Trucks	0%	**0%**	0.6%	**0.6%**	0.3%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	3	**3**	0	**0**	3
% Buses	1.1%	**1.1%**	0%	**0%**	0.5%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Commerce St south of Deer Springs Way - ATR

Tue May 11, 2021
PM Peak (3:15 PM - 4:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840133, Location: 36.282896, -115.148714

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Craig Rd between Valley Dr and Allen Ln - ATR

Wed May 12, 2021
Full Length (9 AM-9 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840156, Location: 36.239292, -115.193565

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-12 9:00AM	204	**204**	194	**194**	**398**
9:15AM	221	**221**	228	**228**	**449**
9:30AM	215	**215**	213	**213**	**428**
9:45AM	218	**218**	238	**238**	**456**
Hourly Total	858	**858**	873	**873**	**1731**
10:00AM	205	**205**	196	**196**	**401**
10:15AM	208	**208**	260	**260**	**468**
10:30AM	209	**209**	262	**262**	**471**
10:45AM	220	**220**	234	**234**	**454**
Hourly Total	842	**842**	952	**952**	**1794**
11:00AM	213	**213**	241	**241**	**454**
11:15AM	235	**235**	244	**244**	**479**
11:30AM	263	**263**	250	**250**	**513**
11:45AM	242	**242**	254	**254**	**496**
Hourly Total	953	**953**	989	**989**	**1942**
12:00PM	291	**291**	263	**263**	**554**
12:15PM	240	**240**	272	**272**	**512**
12:30PM	250	**250**	298	**298**	**548**
12:45PM	288	**288**	245	**245**	**533**
Hourly Total	1069	**1069**	1078	**1078**	**2147**
1:00PM	263	**263**	235	**235**	**498**
1:15PM	256	**256**	307	**307**	**563**
1:30PM	295	**295**	269	**269**	**564**
1:45PM	247	**247**	285	**285**	**532**
Hourly Total	1061	**1061**	1096	**1096**	**2157**
2:00PM	313	**313**	288	**288**	**601**
2:15PM	295	**295**	276	**276**	**571**
2:30PM	267	**267**	312	**312**	**579**
2:45PM	315	**315**	282	**282**	**597**
Hourly Total	1190	**1190**	1158	**1158**	**2348**
3:00PM	304	**304**	275	**275**	**579**
3:15PM	310	**310**	302	**302**	**612**
3:30PM	329	**329**	310	**310**	**639**
3:45PM	361	**361**	286	**286**	**647**
Hourly Total	1304	**1304**	1173	**1173**	**2477**
4:00PM	315	**315**	289	**289**	**604**
4:15PM	307	**307**	370	**370**	**677**
4:30PM	362	**362**	311	**311**	**673**
4:45PM	340	**340**	293	**293**	**633**
Hourly Total	1324	**1324**	1263	**1263**	**2587**
5:00PM	358	**358**	297	**297**	**655**
5:15PM	400	**400**	336	**336**	**736**
5:30PM	351	**351**	259	**259**	**610**
5:45PM	307	**307**	273	**273**	**580**
Hourly Total	1416	**1416**	1165	**1165**	**2581**
6:00PM	313	**313**	292	**292**	**605**
6:15PM	284	**284**	217	**217**	**501**
6:30PM	256	**256**	234	**234**	**490**
6:45PM	248	**248**	227	**227**	**475**
Hourly Total	1101	**1101**	970	**970**	**2071**
7:00PM	163	**163**	201	**201**	**364**
7:15PM	211	**211**	187	**187**	**398**
7:30PM	237	**237**	175	**175**	**412**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
7:45PM	183	**183**	183	**183**	**366**
Hourly Total	794	**794**	746	**746**	**1540**
8:00PM	232	**232**	185	**185**	**417**
8:15PM	197	**197**	137	**137**	**334**
8:30PM	202	**202**	121	**121**	**323**
8:45PM	200	**200**	132	**132**	**332**
Hourly Total	831	**831**	575	**575**	**1406**
9:00PM	152	**152**	125	**125**	**277**
9:15PM	140	**140**	118	**118**	**258**
9:30PM	134	**134**	104	**104**	**238**
9:45PM	119	**119**	93	**93**	**212**
Hourly Total	545	**545**	440	**440**	**985**
10:00PM	109	**109**	87	**87**	**196**
10:15PM	86	**86**	86	**86**	**172**
10:30PM	74	**74**	86	**86**	**160**
10:45PM	77	**77**	76	**76**	**153**
Hourly Total	346	**346**	335	**335**	**681**
11:00PM	65	**65**	52	**52**	**117**
11:15PM	49	**49**	61	**61**	**110**
11:30PM	44	**44**	59	**59**	**103**
11:45PM	42	**42**	33	**33**	**75**
Hourly Total	200	**200**	205	**205**	**405**
2021-05-13 12:00AM	37	**37**	28	**28**	**65**
12:15AM	36	**36**	32	**32**	**68**
12:30AM	19	**19**	26	**26**	**45**
12:45AM	38	**38**	26	**26**	**64**
Hourly Total	130	**130**	112	**112**	**242**
1:00AM	27	**27**	27	**27**	**54**
1:15AM	20	**20**	21	**21**	**41**
1:30AM	24	**24**	18	**18**	**42**
1:45AM	13	**13**	21	**21**	**34**
Hourly Total	84	**84**	87	**87**	**171**
2:00AM	17	**17**	18	**18**	**35**
2:15AM	11	**11**	27	**27**	**38**
2:30AM	20	**20**	20	**20**	**40**
2:45AM	16	**16**	18	**18**	**34**
Hourly Total	64	**64**	83	**83**	**147**
3:00AM	15	**15**	14	**14**	**29**
3:15AM	15	**15**	18	**18**	**33**
3:30AM	32	**32**	14	**14**	**46**
3:45AM	29	**29**	12	**12**	**41**
Hourly Total	91	**91**	58	**58**	**149**
4:00AM	28	**28**	23	**23**	**51**
4:15AM	40	**40**	21	**21**	**61**
4:30AM	60	**60**	39	**39**	**99**
4:45AM	54	**54**	47	**47**	**101**
Hourly Total	182	**182**	130	**130**	**312**
5:00AM	45	**45**	50	**50**	**95**
5:15AM	78	**78**	78	**78**	**156**
5:30AM	102	**102**	117	**117**	**219**
5:45AM	112	**112**	104	**104**	**216**
Hourly Total	337	**337**	349	**349**	**686**
6:00AM	125	**125**	116	**116**	**241**
6:15AM	140	**140**	182	**182**	**322**
6:30AM	196	**196**	166	**166**	**362**
6:45AM	207	**207**	197	**197**	**404**
Hourly Total	668	**668**	661	**661**	**1329**
7:00AM	162	**162**	191	**191**	**353**
7:15AM	182	**182**	263	**263**	**445**
7:30AM	192	**192**	255	**255**	**447**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
7:45AM	248	**248**	248	**248**	**496**
Hourly Total	784	**784**	957	**957**	**1741**
8:00AM	200	**200**	230	**230**	**430**
8:15AM	211	**211**	218	**218**	**429**
8:30AM	178	**178**	215	**215**	**393**
8:45AM	198	**198**	203	**203**	**401**
Hourly Total	787	**787**	866	**866**	**1653**
Total	16961	**16961**	16321	**16321**	**33282**
% Approach	100%	**-**	100%	**-**	-
% Total	51.0%	**51.0%**	49.0%	**49.0%**	-
Lights	16529	**16529**	15905	**15905**	32434
% Lights	97.5%	**97.5%**	97.5%	**97.5%**	97.5%
Single-Unit Trucks	215	**215**	199	**199**	414
% Single-Unit Trucks	1.3%	**1.3%**	1.2%	**1.2%**	1.2%
Articulated Trucks	93	**93**	88	**88**	181
% Articulated Trucks	0.5%	**0.5%**	0.5%	**0.5%**	0.5%
Buses	117	**117**	119	**119**	236
% Buses	0.7%	**0.7%**	0.7%	**0.7%**	0.7%
Bicycles on Road	7	**7**	10	**10**	17
% Bicycles on Road	0%	**0%**	0.1%	**0.1%**	0.1%

*T: Thru

Craig Rd between Valley Dr and Allen Ln - ATR

Wed May 12, 2021
Full Length (9 AM-9 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840156, Location: 36.239292, -115.193565

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Craig Rd between Valley Dr and Allen Ln - ATR

Wed May 12, 2021
Midday Peak (May 12 2021 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840156, Location: 36.239292, -115.193565

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-12 12:00PM	291	**291**	263	**263**	**554**
12:15PM	240	**240**	272	**272**	**512**
12:30PM	250	**250**	298	**298**	**548**
12:45PM	288	**288**	245	**245**	**533**
Total	1069	**1069**	1078	**1078**	**2147**
% Approach	100%	**-**	100%	**-**	-
% Total	49.8%	**49.8%**	50.2%	**50.2%**	-
PHF	0.918	**0.918**	0.904	**0.904**	0.969
Lights	1034	**1034**	1048	**1048**	2082
% Lights	96.7%	**96.7%**	97.2%	**97.2%**	97.0%
Single-Unit Trucks	21	**21**	14	**14**	35
% Single-Unit Trucks	2.0%	**2.0%**	1.3%	**1.3%**	1.6%
Articulated Trucks	6	**6**	6	**6**	12
% Articulated Trucks	0.6%	**0.6%**	0.6%	**0.6%**	0.6%
Buses	8	**8**	10	**10**	18
% Buses	0.7%	**0.7%**	0.9%	**0.9%**	0.8%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Craig Rd between Valley Dr and Allen Ln - ATR

Wed May 12, 2021
Midday Peak (May 12 2021 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840156, Location: 36.239292, -115.193565

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Craig Rd between Valley Dr and Allen Ln - ATR

Wed May 12, 2021
PM Peak (May 12 2021 4:30PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840156, Location: 36.239292, -115.193565

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-12 4:30PM	362	**362**	311	**311**	**673**
4:45PM	340	**340**	293	**293**	**633**
5:00PM	358	**358**	297	**297**	**655**
5:15PM	400	**400**	336	**336**	**736**
Total	1460	**1460**	1237	**1237**	**2697**
% Approach	100%	**-**	100%	**-**	-
% Total	54.1%	**54.1%**	45.9%	**45.9%**	-
PHF	0.912	**0.912**	0.922	**0.922**	0.916
Lights	1437	**1437**	1218	**1218**	2655
% Lights	98.4%	**98.4%**	98.5%	**98.5%**	98.4%
Single-Unit Trucks	13	**13**	10	**10**	23
% Single-Unit Trucks	0.9%	**0.9%**	0.8%	**0.8%**	0.9%
Articulated Trucks	5	**5**	3	**3**	8
% Articulated Trucks	0.3%	**0.3%**	0.2%	**0.2%**	0.3%
Buses	4	**4**	4	**4**	8
% Buses	0.3%	**0.3%**	0.3%	**0.3%**	0.3%
Bicycles on Road	1	**1**	2	**2**	3
% Bicycles on Road	0.1%	**0.1%**	0.2%	**0.2%**	0.1%

*T: Thru

Craig Rd between Valley Dr and Allen Ln - ATR

Wed May 12, 2021
PM Peak (May 12 2021 4:30PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840156, Location: 36.239292, -115.193565

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Craig Rd between Valley Dr and Allen Ln - ATR

Thu May 13, 2021
AM Peak (May 13 2021 7:15AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840156, Location: 36.239292, -115.193565

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-13 7:15AM	182	**182**	263	**263**	**445**
7:30AM	192	**192**	255	**255**	**447**
7:45AM	248	**248**	248	**248**	**496**
8:00AM	200	**200**	230	**230**	**430**
Total	822	**822**	996	**996**	**1818**
% Approach	100%	**-**	100%	**-**	-
% Total	45.2%	**45.2%**	54.8%	**54.8%**	-
PHF	0.829	**0.829**	0.947	**0.947**	0.916
Lights	800	**800**	968	**968**	1768
% Lights	97.3%	**97.3%**	97.2%	**97.2%**	97.2%
Single-Unit Trucks	6	**6**	15	**15**	21
% Single-Unit Trucks	0.7%	**0.7%**	1.5%	**1.5%**	1.2%
Articulated Trucks	5	**5**	4	**4**	9
% Articulated Trucks	0.6%	**0.6%**	0.4%	**0.4%**	0.5%
Buses	11	**11**	9	**9**	20
% Buses	1.3%	**1.3%**	0.9%	**0.9%**	1.1%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Craig Rd between Valley Dr and Allen Ln - ATR

Thu May 13, 2021
AM Peak (May 13 2021 7:15AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840156, Location: 36.239292, -115.193565

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Craig Rd west of N 5th St - ATR

Wed May 19, 2021
Full Length (9 AM-9 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840151, Location: 36.239627, -115.135768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 9:00AM	258	**258**	230	**230**	**488**
9:15AM	226	**226**	252	**252**	**478**
9:30AM	255	**255**	237	**237**	**492**
9:45AM	243	**243**	291	**291**	**534**
Hourly Total	982	**982**	1010	**1010**	**1992**
10:00AM	261	**261**	240	**240**	**501**
10:15AM	306	**306**	267	**267**	**573**
10:30AM	264	**264**	275	**275**	**539**
10:45AM	308	**308**	320	**320**	**628**
Hourly Total	1139	**1139**	1102	**1102**	**2241**
11:00AM	283	**283**	285	**285**	**568**
11:15AM	357	**357**	306	**306**	**663**
11:30AM	313	**313**	327	**327**	**640**
11:45AM	322	**322**	308	**308**	**630**
Hourly Total	1275	**1275**	1226	**1226**	**2501**
12:00PM	323	**323**	363	**363**	**686**
12:15PM	323	**323**	312	**312**	**635**
12:30PM	346	**346**	359	**359**	**705**
12:45PM	316	**316**	309	**309**	**625**
Hourly Total	1308	**1308**	1343	**1343**	**2651**
1:00PM	347	**347**	310	**310**	**657**
1:15PM	296	**296**	366	**366**	**662**
1:30PM	365	**365**	333	**333**	**698**
1:45PM	326	**326**	345	**345**	**671**
Hourly Total	1334	**1334**	1354	**1354**	**2688**
2:00PM	326	**326**	288	**288**	**614**
2:15PM	312	**312**	328	**328**	**640**
2:30PM	367	**367**	340	**340**	**707**
2:45PM	362	**362**	324	**324**	**686**
Hourly Total	1367	**1367**	1280	**1280**	**2647**
3:00PM	369	**369**	385	**385**	**754**
3:15PM	376	**376**	344	**344**	**720**
3:30PM	323	**323**	381	**381**	**704**
3:45PM	371	**371**	471	**471**	**842**
Hourly Total	1439	**1439**	1581	**1581**	**3020**
4:00PM	303	**303**	370	**370**	**673**
4:15PM	322	**322**	458	**458**	**780**
4:30PM	329	**329**	393	**393**	**722**
4:45PM	299	**299**	398	**398**	**697**
Hourly Total	1253	**1253**	1619	**1619**	**2872**
5:00PM	322	**322**	425	**425**	**747**
5:15PM	340	**340**	417	**417**	**757**
5:30PM	344	**344**	365	**365**	**709**
5:45PM	308	**308**	389	**389**	**697**
Hourly Total	1314	**1314**	1596	**1596**	**2910**
6:00PM	328	**328**	313	**313**	**641**
6:15PM	316	**316**	423	**423**	**739**
6:30PM	370	**370**	355	**355**	**725**
6:45PM	281	**281**	271	**271**	**552**
Hourly Total	1295	**1295**	1362	**1362**	**2657**
7:00PM	282	**282**	276	**276**	**558**
7:15PM	271	**271**	338	**338**	**609**
7:30PM	314	**314**	276	**276**	**590**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
7:45PM	256	**256**	265	**265**	**521**
Hourly Total	1123	**1123**	1155	**1155**	**2278**
8:00PM	250	**250**	234	**234**	**484**
8:15PM	249	**249**	244	**244**	**493**
8:30PM	270	**270**	211	**211**	**481**
8:45PM	207	**207**	211	**211**	**418**
Hourly Total	976	**976**	900	**900**	**1876**
9:00PM	226	**226**	222	**222**	**448**
9:15PM	207	**207**	187	**187**	**394**
9:30PM	179	**179**	125	**125**	**304**
9:45PM	184	**184**	130	**130**	**314**
Hourly Total	796	**796**	664	**664**	**1460**
10:00PM	164	**164**	174	**174**	**338**
10:15PM	133	**133**	117	**117**	**250**
10:30PM	144	**144**	126	**126**	**270**
10:45PM	99	**99**	120	**120**	**219**
Hourly Total	540	**540**	537	**537**	**1077**
11:00PM	102	**102**	110	**110**	**212**
11:15PM	97	**97**	103	**103**	**200**
11:30PM	78	**78**	91	**91**	**169**
11:45PM	76	**76**	105	**105**	**181**
Hourly Total	353	**353**	409	**409**	**762**
2021-05-20 12:00AM	67	**67**	77	**77**	**144**
12:15AM	51	**51**	75	**75**	**126**
12:30AM	49	**49**	61	**61**	**110**
12:45AM	38	**38**	53	**53**	**91**
Hourly Total	205	**205**	266	**266**	**471**
1:00AM	30	**30**	57	**57**	**87**
1:15AM	40	**40**	33	**33**	**73**
1:30AM	26	**26**	50	**50**	**76**
1:45AM	25	**25**	37	**37**	**62**
Hourly Total	121	**121**	177	**177**	**298**
2:00AM	30	**30**	40	**40**	**70**
2:15AM	20	**20**	68	**68**	**88**
2:30AM	28	**28**	29	**29**	**57**
2:45AM	35	**35**	37	**37**	**72**
Hourly Total	113	**113**	174	**174**	**287**
3:00AM	38	**38**	26	**26**	**64**
3:15AM	32	**32**	24	**24**	**56**
3:30AM	73	**73**	25	**25**	**98**
3:45AM	80	**80**	27	**27**	**107**
Hourly Total	223	**223**	102	**102**	**325**
4:00AM	60	**60**	34	**34**	**94**
4:15AM	71	**71**	38	**38**	**109**
4:30AM	109	**109**	46	**46**	**155**
4:45AM	110	**110**	71	**71**	**181**
Hourly Total	350	**350**	189	**189**	**539**
5:00AM	123	**123**	64	**64**	**187**
5:15AM	150	**150**	79	**79**	**229**
5:30AM	226	**226**	125	**125**	**351**
5:45AM	219	**219**	103	**103**	**322**
Hourly Total	718	**718**	371	**371**	**1089**
6:00AM	227	**227**	138	**138**	**365**
6:15AM	241	**241**	150	**150**	**391**
6:30AM	308	**308**	175	**175**	**483**
6:45AM	289	**289**	186	**186**	**475**
Hourly Total	1065	**1065**	649	**649**	**1714**
7:00AM	291	**291**	184	**184**	**475**
7:15AM	291	**291**	251	**251**	**542**
7:30AM	318	**318**	238	**238**	**556**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
7:45AM	336	**336**	246	**246**	**582**
Hourly Total	1236	**1236**	919	**919**	**2155**
8:00AM	246	**246**	271	**271**	**517**
8:15AM	253	**253**	218	**218**	**471**
8:30AM	205	**205**	268	**268**	**473**
8:45AM	243	**243**	231	**231**	**474**
Hourly Total	947	**947**	988	**988**	**1935**
Total	21472	**21472**	20973	**20973**	**42445**
% Approach	100%	**-**	100%	**-**	-
% Total	50.6%	**50.6%**	49.4%	**49.4%**	-
Lights	20802	**20802**	20301	**20301**	41103
% Lights	96.9%	**96.9%**	96.8%	**96.8%**	96.8%
Single-Unit Trucks	374	**374**	367	**367**	741
% Single-Unit Trucks	1.7%	**1.7%**	1.7%	**1.7%**	1.7%
Articulated Trucks	184	**184**	215	**215**	399
% Articulated Trucks	0.9%	**0.9%**	1.0%	**1.0%**	0.9%
Buses	110	**110**	87	**87**	197
% Buses	0.5%	**0.5%**	0.4%	**0.4%**	0.5%
Bicycles on Road	2	**2**	3	**3**	5
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Craig Rd west of N 5th St - ATR
Wed May 19, 2021
Full Length (9 AM-9 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840151, Location: 36.239627, -115.135768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Craig Rd west of N 5th St - ATR

Wed May 19, 2021
AM Peak (May 19 2021 10AM - 11 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840151, Location: 36.239627, -115.135768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 10:00AM	261	**261**	240	**240**	**501**
10:15AM	306	**306**	267	**267**	**573**
10:30AM	264	**264**	275	**275**	**539**
10:45AM	308	**308**	320	**320**	**628**
Total	1139	**1139**	1102	**1102**	**2241**
% Approach	100%	**-**	100%	**-**	-
% Total	50.8%	**50.8%**	49.2%	**49.2%**	-
PHF	0.925	**0.925**	0.861	**0.861**	0.892
Lights	1092	**1092**	1051	**1051**	2143
% Lights	95.9%	**95.9%**	95.4%	**95.4%**	95.6%
Single-Unit Trucks	28	**28**	33	**33**	61
% Single-Unit Trucks	2.5%	**2.5%**	3.0%	**3.0%**	2.7%
Articulated Trucks	10	**10**	14	**14**	24
% Articulated Trucks	0.9%	**0.9%**	1.3%	**1.3%**	1.1%
Buses	9	**9**	4	**4**	13
% Buses	0.8%	**0.8%**	0.4%	**0.4%**	0.6%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Craig Rd west of N 5th St - ATR
Wed May 19, 2021
AM Peak (May 19 2021 10AM - 11 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840151, Location: 36.239627, -115.135768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Craig Rd west of N 5th St - ATR

Wed May 19, 2021
Midday Peak (May 19 2021 11:45AM - 12:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840151, Location: 36.239627, -115.135768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 11:45AM	322	**322**	308	**308**	**630**
12:00PM	323	**323**	363	**363**	**686**
12:15PM	323	**323**	312	**312**	**635**
12:30PM	346	**346**	359	**359**	**705**
Total	1314	**1314**	1342	**1342**	**2656**
% Approach	100%	**-**	100%	**-**	-
% Total	49.5%	**49.5%**	50.5%	**50.5%**	-
PHF	0.949	**0.949**	0.924	**0.924**	0.941
Lights	1261	**1261**	1288	**1288**	2549
% Lights	96.0%	**96.0%**	96.0%	**96.0%**	96.0%
Single-Unit Trucks	35	**35**	33	**33**	68
% Single-Unit Trucks	2.7%	**2.7%**	2.5%	**2.5%**	2.6%
Articulated Trucks	13	**13**	16	**16**	29
% Articulated Trucks	1.0%	**1.0%**	1.2%	**1.2%**	1.1%
Buses	5	**5**	4	**4**	9
% Buses	0.4%	**0.4%**	0.3%	**0.3%**	0.3%
Bicycles on Road	0	**0**	1	**1**	1
% Bicycles on Road	0%	**0%**	0.1%	**0.1%**	0%

*T: Thru

Craig Rd west of N 5th St - ATR

Wed May 19, 2021
Midday Peak (May 19 2021 11:45AM - 12:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840151, Location: 36.239627, -115.135768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Craig Rd west of N 5th St - ATR

Wed May 19, 2021
PM Peak (May 19 2021 3PM - 4 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840151, Location: 36.239627, -115.135768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 3:00PM	369	**369**	385	**385**	**754**
3:15PM	376	**376**	344	**344**	**720**
3:30PM	323	**323**	381	**381**	**704**
3:45PM	371	**371**	471	**471**	**842**
Total	1439	**1439**	1581	**1581**	**3020**
% Approach	100%	**-**	100%	**-**	-
% Total	47.6%	**47.6%**	52.4%	**52.4%**	-
PHF	0.957	**0.957**	0.839	**0.839**	0.897
Lights	1391	**1391**	1545	**1545**	2936
% Lights	96.7%	**96.7%**	97.7%	**97.7%**	97.2%
Single-Unit Trucks	20	**20**	16	**16**	36
% Single-Unit Trucks	1.4%	**1.4%**	1.0%	**1.0%**	1.2%
Articulated Trucks	19	**19**	7	**7**	26
% Articulated Trucks	1.3%	**1.3%**	0.4%	**0.4%**	0.9%
Buses	9	**9**	13	**13**	22
% Buses	0.6%	**0.6%**	0.8%	**0.8%**	0.7%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Craig Rd west of N 5th St - ATR
Wed May 19, 2021
PM Peak (May 19 2021 3PM - 4 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840151, Location: 36.239627, -115.135768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Deer Springs Way east of N. 5th St - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840132, Location: 36.283682, -115.133978

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 12:00AM	4	**4**	1	**1**	**5**
12:15AM	3	**3**	4	**4**	**7**
12:30AM	4	**4**	1	**1**	**5**
12:45AM	2	**2**	3	**3**	**5**
Hourly Total	13	**13**	9	**9**	**22**
1:00AM	3	**3**	1	**1**	**4**
1:15AM	2	**2**	2	**2**	**4**
1:30AM	2	**2**	0	**0**	**2**
1:45AM	1	**1**	0	**0**	**1**
Hourly Total	8	**8**	3	**3**	**11**
2:00AM	3	**3**	3	**3**	**6**
2:15AM	2	**2**	2	**2**	**4**
2:30AM	2	**2**	3	**3**	**5**
2:45AM	1	**1**	0	**0**	**1**
Hourly Total	8	**8**	8	**8**	**16**
3:00AM	1	**1**	1	**1**	**2**
3:15AM	1	**1**	2	**2**	**3**
3:30AM	0	**0**	3	**3**	**3**
3:45AM	3	**3**	3	**3**	**6**
Hourly Total	5	**5**	9	**9**	**14**
4:00AM	0	**0**	0	**0**	**0**
4:15AM	3	**3**	2	**2**	**5**
4:30AM	2	**2**	1	**1**	**3**
4:45AM	4	**4**	2	**2**	**6**
Hourly Total	9	**9**	5	**5**	**14**
5:00AM	1	**1**	4	**4**	5
5:15AM	0	**0**	6	**6**	**6**
5:30AM	5	**5**	1	**1**	**6**
5:45AM	10	**10**	4	**4**	**14**
Hourly Total	16	**16**	15	**15**	**31**
6:00AM	7	**7**	6	**6**	**13**
6:15AM	12	**12**	7	**7**	**19**
6:30AM	16	**16**	12	**12**	**28**
6:45AM	14	**14**	13	**13**	**27**
Hourly Total	49	**49**	38	**38**	**87**
7:00AM	20	**20**	18	**18**	**38**
7:15AM	10	**10**	25	**25**	**35**
7:30AM	20	**20**	15	**15**	**35**
7:45AM	19	**19**	24	**24**	**43**
Hourly Total	69	**69**	82	**82**	**151**
8:00AM	17	**17**	16	**16**	**33**
8:15AM	19	**19**	18	**18**	**37**
8:30AM	12	**12**	24	**24**	**36**
8:45AM	20	**20**	19	**19**	**39**
Hourly Total	68	**68**	77	**77**	**145**
9:00AM	33	**33**	23	**23**	**56**
9:15AM	30	**30**	25	**25**	**55**
9:30AM	28	**28**	18	**18**	**46**
9:45AM	27	**27**	28	**28**	**55**
Hourly Total	118	**118**	94	**94**	**212**
10:00AM	24	**24**	26	**26**	**50**
10:15AM	33	**33**	35	**35**	**68**
10:30AM	30	**30**	34	**34**	**64**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
10:45AM	55	**55**	24	**24**	**79**
Hourly Total	142	**142**	119	**119**	**261**
11:00AM	49	**49**	29	**29**	**78**
11:15AM	41	**41**	29	**29**	**70**
11:30AM	43	**43**	36	**36**	**79**
11:45AM	44	**44**	20	**20**	**64**
Hourly Total	177	**177**	114	**114**	**291**
12:00PM	45	**45**	44	**44**	**89**
12:15PM	33	**33**	36	**36**	**69**
12:30PM	39	**39**	28	**28**	**67**
12:45PM	34	**34**	27	**27**	**61**
Hourly Total	151	**151**	135	**135**	**286**
1:00PM	40	**40**	28	**28**	**68**
1:15PM	37	**37**	35	**35**	**72**
1:30PM	39	**39**	33	**33**	**72**
1:45PM	42	**42**	29	**29**	**71**
Hourly Total	158	**158**	125	**125**	**283**
2:00PM	44	**44**	46	**46**	**90**
2:15PM	42	**42**	28	**28**	**70**
2:30PM	31	**31**	31	**31**	**62**
2:45PM	40	**40**	28	**28**	**68**
Hourly Total	157	**157**	133	**133**	**290**
3:00PM	29	**29**	39	**39**	**68**
3:15PM	54	**54**	38	**38**	**92**
3:30PM	43	**43**	44	**44**	**87**
3:45PM	37	**37**	28	**28**	**65**
Hourly Total	163	**163**	149	**149**	**312**
4:00PM	38	**38**	28	**28**	**66**
4:15PM	32	**32**	36	**36**	**68**
4:30PM	32	**32**	23	**23**	**55**
4:45PM	61	**61**	31	**31**	**92**
Hourly Total	163	**163**	118	**118**	**281**
5:00PM	47	**47**	40	**40**	**87**
5:15PM	43	**43**	32	**32**	**75**
5:30PM	45	**45**	27	**27**	**72**
5:45PM	46	**46**	32	**32**	**78**
Hourly Total	181	**181**	131	**131**	**312**
6:00PM	46	**46**	36	**36**	**82**
6:15PM	36	**36**	37	**37**	**73**
6:30PM	40	**40**	41	**41**	**81**
6:45PM	30	**30**	35	**35**	**65**
Hourly Total	152	**152**	149	**149**	**301**
7:00PM	39	**39**	33	**33**	**72**
7:15PM	45	**45**	29	**29**	**74**
7:30PM	43	**43**	16	**16**	**59**
7:45PM	29	**29**	18	**18**	**47**
Hourly Total	156	**156**	96	**96**	**252**
8:00PM	24	**24**	20	**20**	**44**
8:15PM	25	**25**	19	**19**	**44**
8:30PM	23	**23**	20	**20**	**43**
8:45PM	35	**35**	17	**17**	**52**
Hourly Total	107	**107**	76	**76**	**183**
9:00PM	13	**13**	13	**13**	**26**
9:15PM	18	**18**	9	**9**	**27**
9:30PM	22	**22**	4	**4**	**26**
9:45PM	16	**16**	2	**2**	**18**
Hourly Total	69	**69**	28	**28**	**97**
10:00PM	7	**7**	7	**7**	**14**
10:15PM	9	**9**	6	**6**	**15**
10:30PM	6	**6**	5	**5**	**11**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
10:45PM	5	**5**	4	**4**	**9**
Hourly Total	27	**27**	22	**22**	**49**
11:00PM	5	**5**	1	**1**	**6**
11:15PM	6	**6**	3	**3**	**9**
11:30PM	7	**7**	1	**1**	**8**
11:45PM	5	**5**	5	**5**	**10**
Hourly Total	23	**23**	10	**10**	**33**
Total	2189	**2189**	1745	**1745**	**3934**
% Approach	100%	**-**	100%	**-**	-
% Total	55.6%	**55.6%**	44.4%	**44.4%**	-
Lights	2092	**2092**	1671	**1671**	3763
% Lights	95.6%	**95.6%**	95.8%	**95.8%**	95.7%
Single-Unit Trucks	20	**20**	22	**22**	42
% Single-Unit Trucks	0.9%	**0.9%**	1.3%	**1.3%**	1.1%
Articulated Trucks	13	**13**	42	**42**	55
% Articulated Trucks	0.6%	**0.6%**	2.4%	**2.4%**	1.4%
Buses	57	**57**	5	**5**	62
% Buses	2.6%	**2.6%**	0.3%	**0.3%**	1.6%
Bicycles on Road	7	**7**	5	**5**	12
% Bicycles on Road	0.3%	**0.3%**	0.3%	**0.3%**	0.3%

*T: Thru

Deer Springs Way east of N. 5th St - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840132, Location: 36.283682, -115.133978

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Deer Springs Way east of N. 5th St - ATR

Tue May 11, 2021
AM Peak (10 AM - 11 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840132, Location: 36.283682, -115.133978

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 10:00AM	24	**24**	26	**26**	**50**
10:15AM	33	**33**	35	**35**	**68**
10:30AM	30	**30**	34	**34**	**64**
10:45AM	55	**55**	24	**24**	**79**
Total	142	**142**	119	**119**	**261**
% Approach	100%	**-**	100%	**-**	-
% Total	54.4%	**54.4%**	45.6%	**45.6%**	-
PHF	0.645	**0.645**	0.850	**0.850**	0.826
Lights	136	**136**	117	**117**	253
% Lights	95.8%	**95.8%**	98.3%	**98.3%**	96.9%
Single-Unit Trucks	0	**0**	0	**0**	0
% Single-Unit Trucks	0%	**0%**	0%	**0%**	0%
Articulated Trucks	1	**1**	2	**2**	3
% Articulated Trucks	0.7%	**0.7%**	1.7%	**1.7%**	1.1%
Buses	5	**5**	0	**0**	5
% Buses	3.5%	**3.5%**	0%	**0%**	1.9%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Deer Springs Way east of N. 5th St - ATR

Tue May 11, 2021
AM Peak (10 AM - 11 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840132, Location: 36.283682, -115.133978

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Deer Springs Way east of N. 5th St - ATR

Tue May 11, 2021
Midday Peak (11:15 AM - 12:15 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840132, Location: 36.283682, -115.133978

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 11:15AM	41	**41**	29	**29**	**70**
11:30AM	43	**43**	36	**36**	**79**
11:45AM	44	**44**	20	**20**	**64**
12:00PM	45	**45**	44	**44**	**89**
Total	173	**173**	129	**129**	**302**
% Approach	100%	**-**	100%	**-**	-
% Total	57.3%	**57.3%**	42.7%	**42.7%**	-
PHF	0.961	**0.961**	0.733	**0.733**	0.848
Lights	163	**163**	123	**123**	286
% Lights	94.2%	**94.2%**	95.3%	**95.3%**	94.7%
Single-Unit Trucks	5	**5**	4	**4**	9
% Single-Unit Trucks	2.9%	**2.9%**	3.1%	**3.1%**	3.0%
Articulated Trucks	2	**2**	2	**2**	4
% Articulated Trucks	1.2%	**1.2%**	1.6%	**1.6%**	1.3%
Buses	3	**3**	0	**0**	3
% Buses	1.7%	**1.7%**	0%	**0%**	1.0%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Deer Springs Way east of N. 5th St - ATR

Tue May 11, 2021
Midday Peak (11:15 AM - 12:15 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840132, Location: 36.283682, -115.133978

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Deer Springs Way east of N. 5th St - ATR

Tue May 11, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840132, Location: 36.283682, -115.133978

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 4:45PM	61	**61**	31	**31**	**92**
5:00PM	47	**47**	40	**40**	**87**
5:15PM	43	**43**	32	**32**	**75**
5:30PM	45	**45**	27	**27**	**72**
Total	196	**196**	130	**130**	**326**
% Approach	100%	**-**	100%	**-**	-
% Total	60.1%	**60.1%**	39.9%	**39.9%**	-
PHF	0.803	**0.803**	0.813	**0.813**	0.886
Lights	190	**190**	129	**129**	319
% Lights	96.9%	**96.9%**	99.2%	**99.2%**	97.9%
Single-Unit Trucks	1	**1**	0	**0**	1
% Single-Unit Trucks	0.5%	**0.5%**	0%	**0%**	0.3%
Articulated Trucks	3	**3**	1	**1**	4
% Articulated Trucks	1.5%	**1.5%**	0.8%	**0.8%**	1.2%
Buses	2	**2**	0	**0**	2
% Buses	1.0%	**1.0%**	0%	**0%**	0.6%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Deer Springs Way east of N. 5th St - ATR

Tue May 11, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840132, Location: 36.283682, -115.133978

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Deer Springs Way west of Clayton St - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840137, Location: 36.2842, -115.171474

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 12:00AM	13	**13**	9	**9**	**22**
12:15AM	7	**7**	10	**10**	**17**
12:30AM	5	**5**	6	**6**	**11**
12:45AM	10	**10**	6	**6**	**16**
Hourly Total	35	**35**	31	**31**	**66**
1:00AM	5	**5**	5	**5**	**10**
1:15AM	5	**5**	2	**2**	**7**
1:30AM	3	**3**	1	**1**	**4**
1:45AM	1	**1**	4	**4**	**5**
Hourly Total	14	**14**	12	**12**	**26**
2:00AM	10	**10**	4	**4**	**14**
2:15AM	5	**5**	2	**2**	**7**
2:30AM	1	**1**	5	**5**	**6**
2:45AM	2	**2**	2	**2**	**4**
Hourly Total	18	**18**	13	**13**	**31**
3:00AM	3	**3**	2	**2**	**5**
3:15AM	1	**1**	3	**3**	**4**
3:30AM	1	**1**	4	**4**	**5**
3:45AM	2	**2**	4	**4**	**6**
Hourly Total	7	**7**	13	**13**	**20**
4:00AM	4	**4**	8	**8**	**12**
4:15AM	1	**1**	6	**6**	**7**
4:30AM	4	**4**	14	**14**	**18**
4:45AM	3	**3**	16	**16**	**19**
Hourly Total	12	**12**	44	**44**	**56**
5:00AM	9	**9**	20	**20**	**29**
5:15AM	5	**5**	21	**21**	**26**
5:30AM	4	**4**	27	**27**	**31**
5:45AM	10	**10**	31	**31**	**41**
Hourly Total	28	**28**	99	**99**	**127**
6:00AM	18	**18**	59	**59**	**77**
6:15AM	23	**23**	46	**46**	**69**
6:30AM	32	**32**	62	**62**	**94**
6:45AM	34	**34**	91	**91**	**125**
Hourly Total	107	**107**	258	**258**	**365**
7:00AM	45	**45**	107	**107**	**152**
7:15AM	48	**48**	88	**88**	**136**
7:30AM	76	**76**	122	**122**	**198**
7:45AM	71	**71**	82	**82**	**153**
Hourly Total	240	**240**	399	**399**	**639**
8:00AM	54	**54**	82	**82**	**136**
8:15AM	49	**49**	74	**74**	**123**
8:30AM	38	**38**	75	**75**	**113**
8:45AM	40	**40**	68	**68**	**108**
Hourly Total	181	**181**	299	**299**	**480**
9:00AM	41	**41**	66	**66**	**107**
9:15AM	37	**37**	67	**67**	**104**
9:30AM	38	**38**	57	**57**	**95**
9:45AM	42	**42**	59	**59**	**101**
Hourly Total	158	**158**	249	**249**	**407**
10:00AM	40	**40**	49	**49**	**89**
10:15AM	62	**62**	66	**66**	**128**
10:30AM	59	**59**	72	**72**	**131**

Leg Direction	West Eastbound		East Westbound		
Time	T	App	T	App	Int
10:45AM	57	**57**	95	**95**	**152**
Hourly Total	218	**218**	282	**282**	**500**
11:00AM	65	**65**	58	**58**	**123**
11:15AM	58	**58**	76	**76**	**134**
11:30AM	72	**72**	82	**82**	**154**
11:45AM	54	**54**	93	**93**	**147**
Hourly Total	249	**249**	309	**309**	**558**
12:00PM	92	**92**	81	**81**	**173**
12:15PM	94	**94**	80	**80**	**174**
12:30PM	71	**71**	79	**79**	**150**
12:45PM	76	**76**	70	**70**	**146**
Hourly Total	333	**333**	310	**310**	**643**
1:00PM	56	**56**	68	**68**	**124**
1:15PM	63	**63**	83	**83**	**146**
1:30PM	68	**68**	75	**75**	**143**
1:45PM	69	**69**	87	**87**	**156**
Hourly Total	256	**256**	313	**313**	**569**
2:00PM	103	**103**	89	**89**	**192**
2:15PM	105	**105**	83	**83**	**188**
2:30PM	86	**86**	109	**109**	**195**
2:45PM	107	**107**	90	**90**	**197**
Hourly Total	401	**401**	371	**371**	**772**
3:00PM	90	**90**	115	**115**	**205**
3:15PM	111	**111**	89	**89**	**200**
3:30PM	109	**109**	77	**77**	**186**
3:45PM	97	**97**	94	**94**	**191**
Hourly Total	407	**407**	375	**375**	**782**
4:00PM	107	**107**	82	**82**	**189**
4:15PM	97	**97**	77	**77**	**174**
4:30PM	119	**119**	71	**71**	**190**
4:45PM	114	**114**	74	**74**	**188**
Hourly Total	437	**437**	304	**304**	**741**
5:00PM	116	**116**	81	**81**	**197**
5:15PM	100	**100**	84	**84**	**184**
5:30PM	115	**115**	80	**80**	**195**
5:45PM	106	**106**	80	**80**	**186**
Hourly Total	437	**437**	325	**325**	**762**
6:00PM	113	**113**	90	**90**	**203**
6:15PM	82	**82**	68	**68**	**150**
6:30PM	93	**93**	78	**78**	**171**
6:45PM	79	**79**	79	**79**	**158**
Hourly Total	367	**367**	315	**315**	**682**
7:00PM	93	**93**	49	**49**	**142**
7:15PM	58	**58**	67	**67**	**125**
7:30PM	70	**70**	53	**53**	**123**
7:45PM	93	**93**	44	**44**	**137**
Hourly Total	314	**314**	213	**213**	**527**
8:00PM	66	**66**	46	**46**	**112**
8:15PM	69	**69**	47	**47**	**116**
8:30PM	60	**60**	55	**55**	**115**
8:45PM	41	**41**	39	**39**	**80**
Hourly Total	236	**236**	187	**187**	**423**
9:00PM	46	**46**	22	**22**	**68**
9:15PM	31	**31**	22	**22**	**53**
9:30PM	38	**38**	30	**30**	**68**
9:45PM	32	**32**	13	**13**	**45**
Hourly Total	147	**147**	87	**87**	**234**
10:00PM	35	**35**	22	**22**	**57**
10:15PM	25	**25**	17	**17**	**42**
10:30PM	24	**24**	25	**25**	**49**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
10:45PM	23	**23**	13	**13**	**36**
Hourly Total	107	**107**	77	**77**	**184**
11:00PM	15	**15**	10	**10**	**25**
11:15PM	19	**19**	12	**12**	**31**
11:30PM	15	**15**	11	**11**	**26**
11:45PM	7	**7**	11	**11**	**18**
Hourly Total	56	**56**	44	**44**	**100**
Total	4765	**4765**	4929	**4929**	**9694**
% Approach	100%	**-**	100%	**-**	-
% Total	49.2%	**49.2%**	50.8%	**50.8%**	-
Lights	4684	**4684**	4839	**4839**	9523
% Lights	98.3%	**98.3%**	98.2%	**98.2%**	98.2%
Single-Unit Trucks	38	**38**	39	**39**	77
% Single-Unit Trucks	0.8%	**0.8%**	0.8%	**0.8%**	0.8%
Articulated Trucks	4	**4**	11	**11**	15
% Articulated Trucks	0.1%	**0.1%**	0.2%	**0.2%**	0.2%
Buses	27	**27**	23	**23**	50
% Buses	0.6%	**0.6%**	0.5%	**0.5%**	0.5%
Bicycles on Road	12	**12**	17	**17**	29
% Bicycles on Road	0.3%	**0.3%**	0.3%	**0.3%**	0.3%

*T: Thru

Deer Springs Way west of Clayton St - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840137, Location: 36.2842, -115.171474

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Deer Springs Way west of Clayton St - ATR

Tue May 11, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840137, Location: 36.2842, -115.171474

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 7:00AM	45	**45**	107	**107**	**152**
7:15AM	48	**48**	88	**88**	**136**
7:30AM	76	**76**	122	**122**	**198**
7:45AM	71	**71**	82	**82**	**153**
Total	240	**240**	399	**399**	**639**
% Approach	100%	**-**	100%	**-**	-
% Total	37.6%	**37.6%**	62.4%	**62.4%**	-
PHF	0.786	**0.786**	0.814	**0.814**	0.803
Lights	232	**232**	386	**386**	618
% Lights	96.7%	**96.7%**	96.7%	**96.7%**	96.7%
Single-Unit Trucks	1	**1**	4	**4**	5
% Single-Unit Trucks	0.4%	**0.4%**	1.0%	**1.0%**	0.8%
Articulated Trucks	0	**0**	1	**1**	1
% Articulated Trucks	0%	**0%**	0.3%	**0.3%**	0.2%
Buses	6	**6**	6	**6**	12
% Buses	2.5%	**2.5%**	1.5%	**1.5%**	1.9%
Bicycles on Road	1	**1**	2	**2**	3
% Bicycles on Road	0.4%	**0.4%**	0.5%	**0.5%**	0.5%

*T: Thru

Deer Springs Way west of Clayton St - ATR

Tue May 11, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840137, Location: 36.2842, -115.171474

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Deer Springs Way west of Clayton St - ATR

Tue May 11, 2021
Midday Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840137, Location: 36.2842, -115.171474

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 11:30AM	72	**72**	82	**82**	**154**
11:45AM	54	**54**	93	**93**	**147**
12:00PM	92	**92**	81	**81**	**173**
12:15PM	94	**94**	80	**80**	**174**
Total	312	**312**	336	**336**	**648**
% Approach	100%	**-**	100%	**-**	-
% Total	48.1%	**48.1%**	51.9%	**51.9%**	-
PHF	0.830	**0.830**	0.903	**0.903**	0.931
Lights	303	**303**	328	**328**	631
% Lights	97.1%	**97.1%**	97.6%	**97.6%**	97.4%
Single-Unit Trucks	7	**7**	6	**6**	13
% Single-Unit Trucks	2.2%	**2.2%**	1.8%	**1.8%**	2.0%
Articulated Trucks	1	**1**	0	**0**	1
% Articulated Trucks	0.3%	**0.3%**	0%	**0%**	0.2%
Buses	1	**1**	2	**2**	3
% Buses	0.3%	**0.3%**	0.6%	**0.6%**	0.5%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Deer Springs Way west of Clayton St - ATR

Tue May 11, 2021
Midday Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840137, Location: 36.2842, -115.171474

Provided by: Kimley-Horn and Associates, Inc.
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Saint Paul, MN, 55114, US



Deer Springs Way west of Clayton St - ATR

Tue May 11, 2021
PM Peak (2:30 PM - 3:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840137, Location: 36.2842, -115.171474

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 2:30PM	86	**86**	109	**109**	**195**
2:45PM	107	**107**	90	**90**	**197**
3:00PM	90	**90**	115	**115**	**205**
3:15PM	111	**111**	89	**89**	**200**
Total	394	**394**	403	**403**	**797**
% Approach	100%	**-**	100%	**-**	-
% Total	49.4%	**49.4%**	50.6%	**50.6%**	-
PHF	0.885	**0.885**	0.882	**0.882**	0.974
Lights	389	**389**	396	**396**	785
% Lights	98.7%	**98.7%**	98.3%	**98.3%**	98.5%
Single-Unit Trucks	3	**3**	3	**3**	6
% Single-Unit Trucks	0.8%	**0.8%**	0.7%	**0.7%**	0.8%
Articulated Trucks	0	**0**	1	**1**	1
% Articulated Trucks	0%	**0%**	0.2%	**0.2%**	0.1%
Buses	1	**1**	2	**2**	3
% Buses	0.3%	**0.3%**	0.5%	**0.5%**	0.4%
Bicycles on Road	1	**1**	1	**1**	2
% Bicycles on Road	0.3%	**0.3%**	0.2%	**0.2%**	0.3%

*T: Thru

Deer Springs Way west of Clayton St - ATR

Tue May 11, 2021
PM Peak (2:30 PM - 3:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840137, Location: 36.2842, -115.171474

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Elkhorn Rd west of Aliante Pkwy - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840135, Location: 36.290918, -115.190304

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 12:00AM	8	**8**	5	**5**	**13**
12:15AM	8	**8**	14	**14**	**22**
12:30AM	4	**4**	6	**6**	**10**
12:45AM	4	**4**	5	**5**	**9**
Hourly Total	24	**24**	30	**30**	**54**
1:00AM	2	**2**	6	**6**	**8**
1:15AM	3	**3**	6	**6**	**9**
1:30AM	3	**3**	5	**5**	**8**
1:45AM	0	**0**	8	**8**	**8**
Hourly Total	8	**8**	25	**25**	**33**
2:00AM	4	**4**	3	**3**	**7**
2:15AM	2	**2**	8	**8**	**10**
2:30AM	4	**4**	3	**3**	**7**
2:45AM	3	**3**	2	**2**	**5**
Hourly Total	13	**13**	16	**16**	**29**
3:00AM	6	**6**	4	**4**	**10**
3:15AM	5	**5**	3	**3**	**8**
3:30AM	4	**4**	6	**6**	**10**
3:45AM	3	**3**	5	**5**	**8**
Hourly Total	18	**18**	18	**18**	**36**
4:00AM	11	**11**	4	**4**	**15**
4:15AM	10	**10**	8	**8**	**18**
4:30AM	20	**20**	4	**4**	**24**
4:45AM	12	**12**	8	**8**	**20**
Hourly Total	53	**53**	24	**24**	**77**
5:00AM	13	**13**	8	**8**	**21**
5:15AM	36	**36**	11	**11**	**47**
5:30AM	36	**36**	15	**15**	**51**
5:45AM	43	**43**	26	**26**	**69**
Hourly Total	128	**128**	60	**60**	**188**
6:00AM	53	**53**	37	**37**	**90**
6:15AM	60	**60**	30	**30**	**90**
6:30AM	81	**81**	41	**41**	**122**
6:45AM	76	**76**	52	**52**	**128**
Hourly Total	270	**270**	160	**160**	**430**
7:00AM	87	**87**	55	**55**	**142**
7:15AM	103	**103**	54	**54**	**157**
7:30AM	98	**98**	52	**52**	**150**
7:45AM	96	**96**	48	**48**	**144**
Hourly Total	384	**384**	209	**209**	**593**
8:00AM	55	**55**	47	**47**	**102**
8:15AM	73	**73**	45	**45**	**118**
8:30AM	60	**60**	69	**69**	**129**
8:45AM	93	**93**	49	**49**	**142**
Hourly Total	281	**281**	210	**210**	**491**
9:00AM	64	**64**	49	**49**	**113**
9:15AM	80	**80**	43	**43**	**123**
9:30AM	66	**66**	63	**63**	**129**
9:45AM	62	**62**	53	**53**	**115**
Hourly Total	272	**272**	208	**208**	**480**
10:00AM	68	**68**	70	**70**	**138**
10:15AM	87	**87**	65	**65**	**152**
10:30AM	84	**84**	47	**47**	**131**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
10:45AM	77	**77**	67	**67**	**144**
Hourly Total	316	**316**	249	**249**	**565**
11:00AM	78	**78**	57	**57**	**135**
11:15AM	80	**80**	44	**44**	**124**
11:30AM	81	**81**	72	**72**	**153**
11:45AM	66	**66**	74	**74**	**140**
Hourly Total	305	**305**	247	**247**	**552**
12:00PM	75	**75**	65	**65**	**140**
12:15PM	52	**52**	59	**59**	**111**
12:30PM	81	**81**	76	**76**	**157**
12:45PM	77	**77**	76	**76**	**153**
Hourly Total	285	**285**	276	**276**	**561**
1:00PM	94	**94**	58	**58**	**152**
1:15PM	71	**71**	76	**76**	**147**
1:30PM	81	**81**	81	**81**	**162**
1:45PM	96	**96**	68	**68**	**164**
Hourly Total	342	**342**	283	**283**	**625**
2:00PM	90	**90**	62	**62**	**152**
2:15PM	96	**96**	81	**81**	**177**
2:30PM	95	**95**	86	**86**	**181**
2:45PM	85	**85**	88	**88**	**173**
Hourly Total	366	**366**	317	**317**	**683**
3:00PM	89	**89**	91	**91**	**180**
3:15PM	88	**88**	67	**67**	**155**
3:30PM	101	**101**	111	**111**	**212**
3:45PM	108	**108**	101	**101**	**209**
Hourly Total	386	**386**	370	**370**	**756**
4:00PM	78	**78**	91	**91**	**169**
4:15PM	77	**77**	96	**96**	**173**
4:30PM	73	**73**	100	**100**	**173**
4:45PM	82	**82**	104	**104**	**186**
Hourly Total	310	**310**	391	**391**	**701**
5:00PM	73	**73**	90	**90**	**163**
5:15PM	79	**79**	69	**69**	**148**
5:30PM	73	**73**	88	**88**	**161**
5:45PM	84	**84**	87	**87**	**171**
Hourly Total	309	**309**	334	**334**	**643**
6:00PM	75	**75**	77	**77**	**152**
6:15PM	75	**75**	78	**78**	**153**
6:30PM	62	**62**	66	**66**	**128**
6:45PM	61	**61**	48	**48**	**109**
Hourly Total	273	**273**	269	**269**	**542**
7:00PM	62	**62**	60	**60**	**122**
7:15PM	55	**55**	58	**58**	**113**
7:30PM	49	**49**	41	**41**	**90**
7:45PM	51	**51**	52	**52**	**103**
Hourly Total	217	**217**	211	**211**	**428**
8:00PM	50	**50**	57	**57**	**107**
8:15PM	42	**42**	57	**57**	**99**
8:30PM	38	**38**	51	**51**	**89**
8:45PM	31	**31**	48	**48**	**79**
Hourly Total	161	**161**	213	**213**	**374**
9:00PM	41	**41**	31	**31**	**72**
9:15PM	25	**25**	33	**33**	**58**
9:30PM	22	**22**	22	**22**	**44**
9:45PM	23	**23**	26	**26**	**49**
Hourly Total	111	**111**	112	**112**	**223**
10:00PM	20	**20**	36	**36**	**56**
10:15PM	22	**22**	24	**24**	**46**
10:30PM	15	**15**	26	**26**	**41**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
10:45PM	9	**9**	17	**17**	**26**
Hourly Total	66	**66**	103	**103**	**169**
11:00PM	14	**14**	17	**17**	**31**
11:15PM	10	**10**	15	**15**	**25**
11:30PM	6	**6**	14	**14**	**20**
11:45PM	10	**10**	15	**15**	**25**
Hourly Total	40	**40**	61	**61**	**101**
Total	4938	**4938**	4396	**4396**	**9334**
% Approach	100%	**-**	100%	**-**	-
% Total	52.9%	**52.9%**	47.1%	**47.1%**	-
Lights	4801	**4801**	4281	**4281**	9082
% Lights	97.2%	**97.2%**	97.4%	**97.4%**	97.3%
Single-Unit Trucks	73	**73**	77	**77**	150
% Single-Unit Trucks	1.5%	**1.5%**	1.8%	**1.8%**	1.6%
Articulated Trucks	39	**39**	19	**19**	58
% Articulated Trucks	0.8%	**0.8%**	0.4%	**0.4%**	0.6%
Buses	16	**16**	18	**18**	34
% Buses	0.3%	**0.3%**	0.4%	**0.4%**	0.4%
Bicycles on Road	9	**9**	1	**1**	10
% Bicycles on Road	0.2%	**0.2%**	0%	**0%**	0.1%

*T: Thru

Elkhorn Rd west of Aliante Pkwy - ATR
Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840135, Location: 36.290918, -115.190304

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Elkhorn Rd west of Aliante Pkwy - ATR

Tue May 11, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840135, Location: 36.290918, -115.190304

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 7:00AM	87	**87**	55	**55**	**142**
7:15AM	103	**103**	54	**54**	**157**
7:30AM	98	**98**	52	**52**	**150**
7:45AM	96	**96**	48	**48**	**144**
Total	384	**384**	209	**209**	**593**
% Approach	100%	**-**	100%	**-**	-
% Total	64.8%	**64.8%**	35.2%	**35.2%**	-
PHF	0.932	**0.932**	0.950	**0.950**	0.944
Lights	376	**376**	193	**193**	569
% Lights	97.9%	**97.9%**	92.3%	**92.3%**	96.0%
Single-Unit Trucks	3	**3**	11	**11**	14
% Single-Unit Trucks	0.8%	**0.8%**	5.3%	**5.3%**	2.4%
Articulated Trucks	2	**2**	3	**3**	5
% Articulated Trucks	0.5%	**0.5%**	1.4%	**1.4%**	0.8%
Buses	3	**3**	2	**2**	5
% Buses	0.8%	**0.8%**	1.0%	**1.0%**	0.8%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Elkhorn Rd west of Aliante Pkwy - ATR

Tue May 11, 2021
AM Peak (7 AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840135, Location: 36.290918, -115.190304

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Elkhorn Rd west of Aliante Pkwy - ATR

Tue May 11, 2021
Midday Peak (12 PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840135, Location: 36.290918, -115.190304

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 12:00PM	75	**75**	65	**65**	**140**
12:15PM	52	**52**	59	**59**	**111**
12:30PM	81	**81**	76	**76**	**157**
12:45PM	77	**77**	76	**76**	**153**
Total	285	**285**	276	**276**	**561**
% Approach	100%	**-**	100%	**-**	-
% Total	50.8%	**50.8%**	49.2%	**49.2%**	-
PHF	0.877	**0.877**	0.908	**0.908**	0.892
Lights	277	**277**	268	**268**	545
% Lights	97.2%	**97.2%**	97.1%	**97.1%**	97.1%
Single-Unit Trucks	4	**4**	8	**8**	12
% Single-Unit Trucks	1.4%	**1.4%**	2.9%	**2.9%**	2.1%
Articulated Trucks	3	**3**	0	**0**	3
% Articulated Trucks	1.1%	**1.1%**	0%	**0%**	0.5%
Buses	0	**0**	0	**0**	0
% Buses	0%	**0%**	0%	**0%**	0%
Bicycles on Road	1	**1**	0	**0**	1
% Bicycles on Road	0.4%	**0.4%**	0%	**0%**	0.2%

*T: Thru

Elkhorn Rd west of Aliante Pkwy - ATR

Tue May 11, 2021
Midday Peak (12 PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840135, Location: 36.290918, -115.190304

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767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Elkhorn Rd west of Aliante Pkwy - ATR

Tue May 11, 2021
PM Peak (3:30 PM - 4:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840135, Location: 36.290918, -115.190304

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 3:30PM	101	**101**	111	**111**	**212**
3:45PM	108	**108**	101	**101**	**209**
4:00PM	78	**78**	91	**91**	**169**
4:15PM	77	**77**	96	**96**	**173**
Total	364	**364**	399	**399**	**763**
% Approach	100%	**-**	100%	**-**	-
% Total	47.7%	**47.7%**	52.3%	**52.3%**	-
PHF	0.843	**0.843**	0.899	**0.899**	0.900
Lights	358	**358**	392	**392**	750
% Lights	98.4%	**98.4%**	98.2%	**98.2%**	98.3%
Single-Unit Trucks	4	**4**	5	**5**	9
% Single-Unit Trucks	1.1%	**1.1%**	1.3%	**1.3%**	1.2%
Articulated Trucks	2	**2**	0	**0**	2
% Articulated Trucks	0.5%	**0.5%**	0%	**0%**	0.3%
Buses	0	**0**	2	**2**	2
% Buses	0%	**0%**	0.5%	**0.5%**	0.3%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Elkhorn Rd west of Aliante Pkwy - ATR

Tue May 11, 2021
PM Peak (3:30 PM - 4:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840135, Location: 36.290918, -115.190304

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Lake Mead Blvd east of Daley St - ATR

Wed May 19, 2021
Full Length (9 AM-9 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840153, Location: 36.195847, -115.11385

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 9:00AM	191	**191**	290	**290**	**481**
9:15AM	194	**194**	286	**286**	**480**
9:30AM	189	**189**	321	**321**	**510**
9:45AM	249	**249**	294	**294**	**543**
Hourly Total	823	**823**	1191	**1191**	**2014**
10:00AM	248	**248**	277	**277**	**525**
10:15AM	251	**251**	294	**294**	**545**
10:30AM	264	**264**	309	**309**	**573**
10:45AM	265	**265**	259	**259**	**524**
Hourly Total	1028	**1028**	1139	**1139**	**2167**
11:00AM	239	**239**	318	**318**	**557**
11:15AM	296	**296**	293	**293**	**589**
11:30AM	259	**259**	249	**249**	**508**
11:45AM	293	**293**	273	**273**	**566**
Hourly Total	1087	**1087**	1133	**1133**	**2220**
12:00PM	292	**292**	287	**287**	**579**
12:15PM	280	**280**	330	**330**	**610**
12:30PM	283	**283**	302	**302**	**585**
12:45PM	305	**305**	342	**342**	**647**
Hourly Total	1160	**1160**	1261	**1261**	**2421**
1:00PM	321	**321**	323	**323**	**644**
1:15PM	303	**303**	314	**314**	**617**
1:30PM	345	**345**	314	**314**	**659**
1:45PM	322	**322**	296	**296**	**618**
Hourly Total	1291	**1291**	1247	**1247**	**2538**
2:00PM	360	**360**	367	**367**	**727**
2:15PM	363	**363**	364	**364**	**727**
2:30PM	370	**370**	354	**354**	**724**
2:45PM	430	**430**	341	**341**	**771**
Hourly Total	1523	**1523**	1426	**1426**	**2949**
3:00PM	373	**373**	346	**346**	**719**
3:15PM	423	**423**	376	**376**	**799**
3:30PM	391	**391**	354	**354**	**745**
3:45PM	380	**380**	357	**357**	**737**
Hourly Total	1567	**1567**	1433	**1433**	**3000**
4:00PM	405	**405**	412	**412**	**817**
4:15PM	404	**404**	387	**387**	**791**
4:30PM	372	**372**	341	**341**	**713**
4:45PM	382	**382**	318	**318**	**700**
Hourly Total	1563	**1563**	1458	**1458**	**3021**
5:00PM	362	**362**	362	**362**	**724**
5:15PM	420	**420**	337	**337**	**757**
5:30PM	378	**378**	323	**323**	**701**
5:45PM	370	**370**	333	**333**	**703**
Hourly Total	1530	**1530**	1355	**1355**	**2885**
6:00PM	393	**393**	334	**334**	**727**
6:15PM	395	**395**	307	**307**	**702**
6:30PM	346	**346**	320	**320**	**666**
6:45PM	357	**357**	289	**289**	**646**
Hourly Total	1491	**1491**	1250	**1250**	**2741**
7:00PM	324	**324**	297	**297**	**621**
7:15PM	337	**337**	253	**253**	**590**
7:30PM	273	**273**	274	**274**	**547**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
7:45PM	295	**295**	247	**247**	**542**
Hourly Total	1229	**1229**	1071	**1071**	**2300**
8:00PM	240	**240**	235	**235**	**475**
8:15PM	267	**267**	224	**224**	**491**
8:30PM	270	**270**	224	**224**	**494**
8:45PM	289	**289**	202	**202**	**491**
Hourly Total	1066	**1066**	885	**885**	**1951**
9:00PM	236	**236**	194	**194**	**430**
9:15PM	220	**220**	184	**184**	**404**
9:30PM	225	**225**	181	**181**	**406**
9:45PM	205	**205**	147	**147**	**352**
Hourly Total	886	**886**	706	**706**	**1592**
10:00PM	222	**222**	161	**161**	**383**
10:15PM	193	**193**	149	**149**	**342**
10:30PM	136	**136**	135	**135**	**271**
10:45PM	138	**138**	125	**125**	**263**
Hourly Total	689	**689**	570	**570**	**1259**
11:00PM	140	**140**	82	**82**	**222**
11:15PM	130	**130**	104	**104**	**234**
11:30PM	91	**91**	88	**88**	**179**
11:45PM	107	**107**	63	**63**	**170**
Hourly Total	468	**468**	337	**337**	**805**
2021-05-20 12:00AM	69	**69**	62	**62**	**131**
12:15AM	94	**94**	48	**48**	**142**
12:30AM	96	**96**	62	**62**	**158**
12:45AM	56	**56**	43	**43**	**99**
Hourly Total	315	**315**	215	**215**	**530**
1:00AM	76	**76**	58	**58**	**134**
1:15AM	71	**71**	36	**36**	**107**
1:30AM	49	**49**	25	**25**	**74**
1:45AM	54	**54**	41	**41**	**95**
Hourly Total	250	**250**	160	**160**	**410**
2:00AM	29	**29**	38	**38**	**67**
2:15AM	39	**39**	41	**41**	**80**
2:30AM	38	**38**	50	**50**	**88**
2:45AM	30	**30**	42	**42**	**72**
Hourly Total	136	**136**	171	**171**	**307**
3:00AM	32	**32**	44	**44**	**76**
3:15AM	36	**36**	44	**44**	**80**
3:30AM	36	**36**	71	**71**	**107**
3:45AM	44	**44**	64	**64**	**108**
Hourly Total	148	**148**	223	**223**	**371**
4:00AM	27	**27**	76	**76**	**103**
4:15AM	44	**44**	115	**115**	**159**
4:30AM	69	**69**	129	**129**	**198**
4:45AM	79	**79**	148	**148**	**227**
Hourly Total	219	**219**	468	**468**	**687**
5:00AM	83	**83**	196	**196**	**279**
5:15AM	106	**106**	309	**309**	**415**
5:30AM	119	**119**	273	**273**	**392**
5:45AM	163	**163**	302	**302**	**465**
Hourly Total	471	**471**	1080	**1080**	**1551**
6:00AM	163	**163**	279	**279**	**442**
6:15AM	197	**197**	341	**341**	**538**
6:30AM	158	**158**	360	**360**	**518**
6:45AM	221	**221**	356	**356**	**577**
Hourly Total	739	**739**	1336	**1336**	**2075**
7:00AM	198	**198**	348	**348**	**546**
7:15AM	204	**204**	414	**414**	**618**
7:30AM	213	**213**	433	**433**	**646**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
7:45AM	207	**207**	327	**327**	**534**
Hourly Total	822	**822**	1522	**1522**	**2344**
8:00AM	229	**229**	394	**394**	**623**
8:15AM	209	**209**	330	**330**	**539**
8:30AM	222	**222**	397	**397**	**619**
8:45AM	216	**216**	319	**319**	**535**
Hourly Total	876	**876**	1440	**1440**	**2316**
Total	21377	**21377**	23077	**23077**	**44454**
% Approach	100%	**-**	100%	**-**	-
% Total	48.1%	**48.1%**	51.9%	**51.9%**	-
Lights	20577	**20577**	22301	**22301**	42878
% Lights	96.3%	**96.3%**	96.6%	**96.6%**	96.5%
Single-Unit Trucks	453	**453**	454	**454**	907
% Single-Unit Trucks	2.1%	**2.1%**	2.0%	**2.0%**	2.0%
Articulated Trucks	206	**206**	191	**191**	397
% Articulated Trucks	1.0%	**1.0%**	0.8%	**0.8%**	0.9%
Buses	125	**125**	113	**113**	238
% Buses	0.6%	**0.6%**	0.5%	**0.5%**	0.5%
Bicycles on Road	16	**16**	18	**18**	34
% Bicycles on Road	0.1%	**0.1%**	0.1%	**0.1%**	0.1%

*T: Thru

Lake Mead Blvd east of Daley St - ATR
Wed May 19, 2021
Full Length (9 AM-9 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840153, Location: 36.195847, -115.11385

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Lake Mead Blvd east of Daley St - ATR

Wed May 19, 2021
Midday Peak (May 19 2021 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840153, Location: 36.195847, -115.11385

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 12:00PM	292	**292**	287	**287**	**579**
12:15PM	280	**280**	330	**330**	**610**
12:30PM	283	**283**	302	**302**	**585**
12:45PM	305	**305**	342	**342**	**647**
Total	1160	**1160**	1261	**1261**	**2421**
% Approach	100%	**-**	100%	**-**	-
% Total	47.9%	**47.9%**	52.1%	**52.1%**	-
PHF	0.949	**0.949**	0.923	**0.923**	0.935
Lights	1090	**1090**	1204	**1204**	2294
% Lights	94.0%	**94.0%**	95.5%	**95.5%**	94.8%
Single-Unit Trucks	41	**41**	32	**32**	73
% Single-Unit Trucks	3.5%	**3.5%**	2.5%	**2.5%**	3.0%
Articulated Trucks	21	**21**	16	**16**	37
% Articulated Trucks	1.8%	**1.8%**	1.3%	**1.3%**	1.5%
Buses	6	**6**	7	**7**	13
% Buses	0.5%	**0.5%**	0.6%	**0.6%**	0.5%
Bicycles on Road	2	**2**	2	**2**	4
% Bicycles on Road	0.2%	**0.2%**	0.2%	**0.2%**	0.2%

*T: Thru

Lake Mead Blvd east of Daley St - ATR

Wed May 19, 2021
Midday Peak (May 19 2021 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840153, Location: 36.195847, -115.11385

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Lake Mead Blvd east of Daley St - ATR

Wed May 19, 2021
PM Peak (May 19 2021 3:15PM - 4:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840153, Location: 36.195847, -115.11385

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 3:15PM	423	**423**	376	**376**	**799**
3:30PM	391	**391**	354	**354**	**745**
3:45PM	380	**380**	357	**357**	**737**
4:00PM	405	**405**	412	**412**	**817**
Total	1599	**1599**	1499	**1499**	**3098**
% Approach	100%	**-**	100%	**-**	-
% Total	51.6%	**51.6%**	48.4%	**48.4%**	-
PHF	0.945	**0.945**	0.911	**0.911**	0.949
Lights	1548	**1548**	1460	**1460**	3008
% Lights	96.8%	**96.8%**	97.4%	**97.4%**	97.1%
Single-Unit Trucks	38	**38**	24	**24**	62
% Single-Unit Trucks	2.4%	**2.4%**	1.6%	**1.6%**	2.0%
Articulated Trucks	7	**7**	8	**8**	15
% Articulated Trucks	0.4%	**0.4%**	0.5%	**0.5%**	0.5%
Buses	6	**6**	5	**5**	11
% Buses	0.4%	**0.4%**	0.3%	**0.3%**	0.4%
Bicycles on Road	0	**0**	2	**2**	2
% Bicycles on Road	0%	**0%**	0.1%	**0.1%**	0.1%

*T: Thru

Lake Mead Blvd east of Daley St - ATR

Wed May 19, 2021
PM Peak (May 19 2021 3:15PM - 4:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840153, Location: 36.195847, -115.11385

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Lake Mead Blvd east of Daley St - ATR

Thu May 20, 2021
AM Peak (May 20 2021 7:15AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840153, Location: 36.195847, -115.11385

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-20 7:15AM	204	**204**	414	**414**	**618**
7:30AM	213	**213**	433	**433**	**646**
7:45AM	207	**207**	327	**327**	**534**
8:00AM	229	**229**	394	**394**	**623**
Total	853	**853**	1568	**1568**	**2421**
% Approach	100%	**-**	100%	**-**	-
% Total	35.2%	**35.2%**	64.8%	**64.8%**	-
PHF	0.931	**0.931**	0.905	**0.905**	0.937
Lights	801	**801**	1505	**1505**	2306
% Lights	93.9%	**93.9%**	96.0%	**96.0%**	95.2%
Single-Unit Trucks	31	**31**	40	**40**	71
% Single-Unit Trucks	3.6%	**3.6%**	2.6%	**2.6%**	2.9%
Articulated Trucks	14	**14**	13	**13**	27
% Articulated Trucks	1.6%	**1.6%**	0.8%	**0.8%**	1.1%
Buses	7	**7**	9	**9**	16
% Buses	0.8%	**0.8%**	0.6%	**0.6%**	0.7%
Bicycles on Road	0	**0**	1	**1**	1
% Bicycles on Road	0%	**0%**	0.1%	**0.1%**	0%

*T: Thru

Lake Mead Blvd east of Daley St - ATR

Thu May 20, 2021
AM Peak (May 20 2021 7:15AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840153, Location: 36.195847, -115.11385

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Lake Mead Blvd west of Bangle St - ATR

Tue May 18, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840141, Location: 36.195722, -115.144768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 12:00AM	43	**43**	39	**39**	**82**
12:15AM	33	**33**	23	**23**	**56**
12:30AM	20	**20**	28	**28**	**48**
12:45AM	21	**21**	39	**39**	**60**
Hourly Total	117	**117**	129	**129**	**246**
1:00AM	15	**15**	27	**27**	**42**
1:15AM	22	**22**	20	**20**	**42**
1:30AM	29	**29**	20	**20**	**49**
1:45AM	21	**21**	19	**19**	**40**
Hourly Total	87	**87**	86	**86**	**173**
2:00AM	21	**21**	15	**15**	**36**
2:15AM	16	**16**	22	**22**	**38**
2:30AM	10	**10**	16	**16**	**26**
2:45AM	17	**17**	11	**11**	**28**
Hourly Total	64	**64**	64	**64**	**128**
3:00AM	17	**17**	14	**14**	**31**
3:15AM	12	**12**	18	**18**	**30**
3:30AM	18	**18**	15	**15**	**33**
3:45AM	25	**25**	14	**14**	**39**
Hourly Total	72	**72**	61	**61**	**133**
4:00AM	18	**18**	14	**14**	**32**
4:15AM	25	**25**	17	**17**	**42**
4:30AM	49	**49**	22	**22**	**71**
4:45AM	43	**43**	30	**30**	**73**
Hourly Total	135	**135**	83	**83**	**218**
5:00AM	55	**55**	41	**41**	**96**
5:15AM	78	**78**	60	**60**	**138**
5:30AM	94	**94**	77	**77**	**171**
5:45AM	91	**91**	66	**66**	**157**
Hourly Total	318	**318**	244	**244**	**562**
6:00AM	71	**71**	69	**69**	**140**
6:15AM	98	**98**	75	**75**	**173**
6:30AM	120	**120**	102	**102**	**222**
6:45AM	114	**114**	138	**138**	**252**
Hourly Total	403	**403**	384	**384**	**787**
7:00AM	91	**91**	126	**126**	**217**
7:15AM	107	**107**	138	**138**	**245**
7:30AM	122	**122**	148	**148**	**270**
7:45AM	142	**142**	159	**159**	**301**
Hourly Total	462	**462**	571	**571**	**1033**
8:00AM	111	**111**	148	**148**	**259**
8:15AM	138	**138**	120	**120**	**258**
8:30AM	142	**142**	140	**140**	**282**
8:45AM	125	**125**	127	**127**	**252**
Hourly Total	516	**516**	535	**535**	**1051**
9:00AM	125	**125**	125	**125**	**250**
9:15AM	110	**110**	130	**130**	**240**
9:30AM	132	**132**	132	**132**	**264**
9:45AM	104	**104**	126	**126**	**230**
Hourly Total	471	**471**	513	**513**	**984**
10:00AM	117	**117**	125	**125**	**242**
10:15AM	128	**128**	119	**119**	**247**
10:30AM	120	**120**	145	**145**	**265**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
10:45AM	133	**133**	132	**132**	**265**
Hourly Total	498	**498**	521	**521**	**1019**
11:00AM	123	**123**	132	**132**	**255**
11:15AM	143	**143**	141	**141**	**284**
11:30AM	126	**126**	145	**145**	**271**
11:45AM	137	**137**	140	**140**	**277**
Hourly Total	529	**529**	558	**558**	**1087**
12:00PM	136	**136**	137	**137**	**273**
12:15PM	137	**137**	153	**153**	**290**
12:30PM	163	**163**	159	**159**	**322**
12:45PM	162	**162**	187	**187**	**349**
Hourly Total	598	**598**	636	**636**	**1234**
1:00PM	163	**163**	159	**159**	**322**
1:15PM	147	**147**	181	**181**	**328**
1:30PM	138	**138**	165	**165**	**303**
1:45PM	130	**130**	155	**155**	**285**
Hourly Total	578	**578**	660	**660**	**1238**
2:00PM	148	**148**	174	**174**	**322**
2:15PM	172	**172**	165	**165**	**337**
2:30PM	156	**156**	201	**201**	**357**
2:45PM	172	**172**	215	**215**	**387**
Hourly Total	648	**648**	755	**755**	**1403**
3:00PM	171	**171**	209	**209**	**380**
3:15PM	183	**183**	248	**248**	**431**
3:30PM	162	**162**	199	**199**	**361**
3:45PM	187	**187**	231	**231**	**418**
Hourly Total	703	**703**	887	**887**	**1590**
4:00PM	179	**179**	232	**232**	**411**
4:15PM	156	**156**	212	**212**	**368**
4:30PM	153	**153**	213	**213**	**366**
4:45PM	149	**149**	208	**208**	**357**
Hourly Total	637	**637**	865	**865**	**1502**
5:00PM	175	**175**	195	**195**	**370**
5:15PM	171	**171**	208	**208**	**379**
5:30PM	135	**135**	173	**173**	**308**
5:45PM	169	**169**	216	**216**	**385**
Hourly Total	650	**650**	792	**792**	**1442**
6:00PM	157	**157**	205	**205**	**362**
6:15PM	127	**127**	180	**180**	**307**
6:30PM	142	**142**	190	**190**	**332**
6:45PM	120	**120**	167	**167**	**287**
Hourly Total	546	**546**	742	**742**	**1288**
7:00PM	111	**111**	160	**160**	**271**
7:15PM	120	**120**	133	**133**	**253**
7:30PM	124	**124**	139	**139**	**263**
7:45PM	113	**113**	110	**110**	**223**
Hourly Total	468	**468**	542	**542**	**1010**
8:00PM	114	**114**	96	**96**	**210**
8:15PM	119	**119**	127	**127**	**246**
8:30PM	99	**99**	113	**113**	**212**
8:45PM	126	**126**	108	**108**	**234**
Hourly Total	458	**458**	444	**444**	**902**
9:00PM	90	**90**	96	**96**	**186**
9:15PM	91	**91**	84	**84**	**175**
9:30PM	65	**65**	88	**88**	**153**
9:45PM	79	**79**	73	**73**	**152**
Hourly Total	325	**325**	341	**341**	**666**
10:00PM	70	**70**	71	**71**	**141**
10:15PM	83	**83**	82	**82**	**165**
10:30PM	51	**51**	73	**73**	**124**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
10:45PM	58	**58**	50	**50**	**108**
Hourly Total	262	**262**	276	**276**	**538**
11:00PM	55	**55**	43	**43**	**98**
11:15PM	49	**49**	61	**61**	**110**
11:30PM	38	**38**	58	**58**	**96**
11:45PM	40	**40**	40	**40**	**80**
Hourly Total	182	**182**	202	**202**	**384**
Total	9727	**9727**	10891	**10891**	**20618**
% Approach	100%	**-**	100%	**-**	-
% Total	47.2%	**47.2%**	52.8%	**52.8%**	-
Lights	9380	**9380**	10558	**10558**	19938
% Lights	96.4%	**96.4%**	96.9%	**96.9%**	96.7%
Single-Unit Trucks	163	**163**	162	**162**	325
% Single-Unit Trucks	1.7%	**1.7%**	1.5%	**1.5%**	1.6%
Articulated Trucks	49	**49**	48	**48**	97
% Articulated Trucks	0.5%	**0.5%**	0.4%	**0.4%**	0.5%
Buses	132	**132**	121	**121**	253
% Buses	1.4%	**1.4%**	1.1%	**1.1%**	1.2%
Bicycles on Road	3	**3**	2	**2**	5
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Lake Mead Blvd west of Bangle St - ATR

Tue May 18, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840141, Location: 36.195722, -115.144768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Lake Mead Blvd west of Bangle St - ATR

Tue May 18, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840141, Location: 36.195722, -115.144768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 7:45AM	142	**142**	159	**159**	**301**
8:00AM	111	**111**	148	**148**	**259**
8:15AM	138	**138**	120	**120**	**258**
8:30AM	142	**142**	140	**140**	**282**
Total	533	**533**	567	**567**	**1100**
% Approach	100%	**-**	100%	**-**	-
% Total	48.5%	**48.5%**	51.5%	**51.5%**	-
PHF	0.938	**0.938**	0.892	**0.892**	0.914
Lights	505	**505**	545	**545**	1050
% Lights	94.7%	**94.7%**	96.1%	**96.1%**	95.5%
Single-Unit Trucks	10	**10**	13	**13**	23
% Single-Unit Trucks	1.9%	**1.9%**	2.3%	**2.3%**	2.1%
Articulated Trucks	7	**7**	3	**3**	10
% Articulated Trucks	1.3%	**1.3%**	0.5%	**0.5%**	0.9%
Buses	11	**11**	6	**6**	17
% Buses	2.1%	**2.1%**	1.1%	**1.1%**	1.5%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Lake Mead Blvd west of Bangle St - ATR

Tue May 18, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840141, Location: 36.195722, -115.144768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Lake Mead Blvd west of Bangle St - ATR

Tue May 18, 2021
Midday Peak (12 PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840141, Location: 36.195722, -115.144768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 12:00PM	136	**136**	137	**137**	**273**
12:15PM	137	**137**	153	**153**	**290**
12:30PM	163	**163**	159	**159**	**322**
12:45PM	162	**162**	187	**187**	**349**
Total	598	**598**	636	**636**	**1234**
% Approach	100%	**-**	100%	**-**	-
% Total	48.5%	**48.5%**	51.5%	**51.5%**	-
PHF	0.916	**0.916**	0.850	**0.850**	0.883
Lights	567	**567**	619	**619**	1186
% Lights	94.8%	**94.8%**	97.3%	**97.3%**	96.1%
Single-Unit Trucks	19	**19**	11	**11**	30
% Single-Unit Trucks	3.2%	**3.2%**	1.7%	**1.7%**	2.4%
Articulated Trucks	5	**5**	3	**3**	8
% Articulated Trucks	0.8%	**0.8%**	0.5%	**0.5%**	0.6%
Buses	6	**6**	3	**3**	9
% Buses	1.0%	**1.0%**	0.5%	**0.5%**	0.7%
Bicycles on Road	1	**1**	0	**0**	1
% Bicycles on Road	0.2%	**0.2%**	0%	**0%**	0.1%

*T: Thru

Lake Mead Blvd west of Bangle St - ATR

Tue May 18, 2021
Midday Peak (12 PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840141, Location: 36.195722, -115.144768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Lake Mead Blvd west of Bangle St - ATR

Tue May 18, 2021
PM Peak (3:15 PM - 4:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840141, Location: 36.195722, -115.144768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 3:15PM	183	**183**	248	**248**	**431**
3:30PM	162	**162**	199	**199**	**361**
3:45PM	187	**187**	231	**231**	**418**
4:00PM	179	**179**	232	**232**	**411**
Total	711	**711**	910	**910**	**1621**
% Approach	100%	**-**	100%	**-**	-
% Total	43.9%	**43.9%**	56.1%	**56.1%**	-
PHF	0.954	**0.954**	0.916	**0.916**	0.939
Lights	692	**692**	888	**888**	1580
% Lights	97.3%	**97.3%**	97.6%	**97.6%**	97.5%
Single-Unit Trucks	5	**5**	7	**7**	12
% Single-Unit Trucks	0.7%	**0.7%**	0.8%	**0.8%**	0.7%
Articulated Trucks	0	**0**	5	**5**	5
% Articulated Trucks	0%	**0%**	0.5%	**0.5%**	0.3%
Buses	13	**13**	9	**9**	22
% Buses	1.8%	**1.8%**	1.0%	**1.0%**	1.4%
Bicycles on Road	1	**1**	1	**1**	2
% Bicycles on Road	0.1%	**0.1%**	0.1%	**0.1%**	0.1%

*T: Thru

Lake Mead Blvd west of Bangle St - ATR

Tue May 18, 2021
PM Peak (3:15 PM - 4:15 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840141, Location: 36.195722, -115.144768

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Losee Rd south of Washburn Rd - ATR

Tue May 18, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840131, Location: 36.250282, -115.116908

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 12:00AM	60	**60**	46	**46**	**106**
12:15AM	55	**55**	39	**39**	**94**
12:30AM	53	**53**	49	**49**	**102**
12:45AM	52	**52**	32	**32**	**84**
Hourly Total	220	**220**	166	**166**	**386**
1:00AM	38	**38**	31	**31**	**69**
1:15AM	45	**45**	21	**21**	**66**
1:30AM	35	**35**	32	**32**	**67**
1:45AM	35	**35**	25	**25**	**60**
Hourly Total	153	**153**	109	**109**	**262**
2:00AM	25	**25**	24	**24**	**49**
2:15AM	37	**37**	29	**29**	**66**
2:30AM	26	**26**	31	**31**	**57**
2:45AM	21	**21**	29	**29**	**50**
Hourly Total	109	**109**	113	**113**	**222**
3:00AM	9	**9**	33	**33**	**42**
3:15AM	24	**24**	42	**42**	**66**
3:30AM	25	**25**	58	**58**	**83**
3:45AM	28	**28**	52	**52**	**80**
Hourly Total	86	**86**	185	**185**	**271**
4:00AM	26	**26**	58	**58**	**84**
4:15AM	31	**31**	71	**71**	**102**
4:30AM	32	**32**	85	**85**	**117**
4:45AM	64	**64**	97	**97**	**161**
Hourly Total	153	**153**	311	**311**	**464**
5:00AM	52	**52**	111	**111**	**163**
5:15AM	87	**87**	168	**168**	**255**
5:30AM	99	**99**	200	**200**	**299**
5:45AM	150	**150**	210	**210**	**360**
Hourly Total	388	**388**	689	**689**	**1077**
6:00AM	133	**133**	215	**215**	**348**
6:15AM	129	**129**	251	**251**	**380**
6:30AM	119	**119**	218	**218**	**337**
6:45AM	164	**164**	239	**239**	**403**
Hourly Total	545	**545**	923	**923**	**1468**
7:00AM	100	**100**	239	**239**	**339**
7:15AM	134	**134**	258	**258**	**392**
7:30AM	142	**142**	245	**245**	**387**
7:45AM	190	**190**	236	**236**	**426**
Hourly Total	566	**566**	978	**978**	**1544**
8:00AM	186	**186**	213	**213**	**399**
8:15AM	176	**176**	225	**225**	**401**
8:30AM	160	**160**	230	**230**	**390**
8:45AM	163	**163**	207	**207**	**370**
Hourly Total	685	**685**	875	**875**	**1560**
9:00AM	133	**133**	208	**208**	**341**
9:15AM	182	**182**	200	**200**	**382**
9:30AM	152	**152**	206	**206**	**358**
9:45AM	169	**169**	171	**171**	**340**
Hourly Total	636	**636**	785	**785**	**1421**
10:00AM	141	**141**	223	**223**	**364**
10:15AM	172	**172**	210	**210**	**382**
10:30AM	161	**161**	216	**216**	**377**

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
10:45AM	142	**142**	233	**233**	**375**
Hourly Total	616	**616**	882	**882**	**1498**
11:00AM	147	**147**	215	**215**	**362**
11:15AM	216	**216**	184	**184**	**400**
11:30AM	192	**192**	207	**207**	**399**
11:45AM	230	**230**	191	**191**	**421**
Hourly Total	785	**785**	797	**797**	**1582**
12:00PM	170	**170**	236	**236**	**406**
12:15PM	215	**215**	192	**192**	**407**
12:30PM	212	**212**	236	**236**	**448**
12:45PM	200	**200**	202	**202**	**402**
Hourly Total	797	**797**	866	**866**	**1663**
1:00PM	202	**202**	221	**221**	**423**
1:15PM	202	**202**	209	**209**	**411**
1:30PM	215	**215**	235	**235**	**450**
1:45PM	228	**228**	224	**224**	**452**
Hourly Total	847	**847**	889	**889**	**1736**
2:00PM	206	**206**	243	**243**	**449**
2:15PM	224	**224**	241	**241**	**465**
2:30PM	229	**229**	218	**218**	**447**
2:45PM	228	**228**	226	**226**	**454**
Hourly Total	887	**887**	928	**928**	**1815**
3:00PM	257	**257**	232	**232**	**489**
3:15PM	244	**244**	217	**217**	**461**
3:30PM	297	**297**	215	**215**	**512**
3:45PM	290	**290**	226	**226**	**516**
Hourly Total	1088	**1088**	890	**890**	**1978**
4:00PM	304	**304**	220	**220**	**524**
4:15PM	320	**320**	202	**202**	**522**
4:30PM	312	**312**	213	**213**	**525**
4:45PM	325	**325**	206	**206**	**531**
Hourly Total	1261	**1261**	841	**841**	**2102**
5:00PM	364	**364**	238	**238**	**602**
5:15PM	306	**306**	206	**206**	**512**
5:30PM	341	**341**	243	**243**	**584**
5:45PM	336	**336**	217	**217**	**553**
Hourly Total	1347	**1347**	904	**904**	**2251**
6:00PM	330	**330**	236	**236**	**566**
6:15PM	294	**294**	208	**208**	**502**
6:30PM	296	**296**	217	**217**	**513**
6:45PM	248	**248**	209	**209**	**457**
Hourly Total	1168	**1168**	870	**870**	**2038**
7:00PM	236	**236**	188	**188**	**424**
7:15PM	255	**255**	201	**201**	**456**
7:30PM	248	**248**	201	**201**	**449**
7:45PM	222	**222**	157	**157**	**379**
Hourly Total	961	**961**	747	**747**	**1708**
8:00PM	230	**230**	154	**154**	**384**
8:15PM	219	**219**	154	**154**	**373**
8:30PM	213	**213**	144	**144**	**357**
8:45PM	168	**168**	176	**176**	**344**
Hourly Total	830	**830**	628	**628**	**1458**
9:00PM	161	**161**	148	**148**	**309**
9:15PM	166	**166**	137	**137**	**303**
9:30PM	167	**167**	123	**123**	**290**
9:45PM	128	**128**	109	**109**	**237**
Hourly Total	622	**622**	517	**517**	**1139**
10:00PM	126	**126**	91	**91**	**217**
10:15PM	145	**145**	89	**89**	**234**
10:30PM	133	**133**	78	**78**	**211**

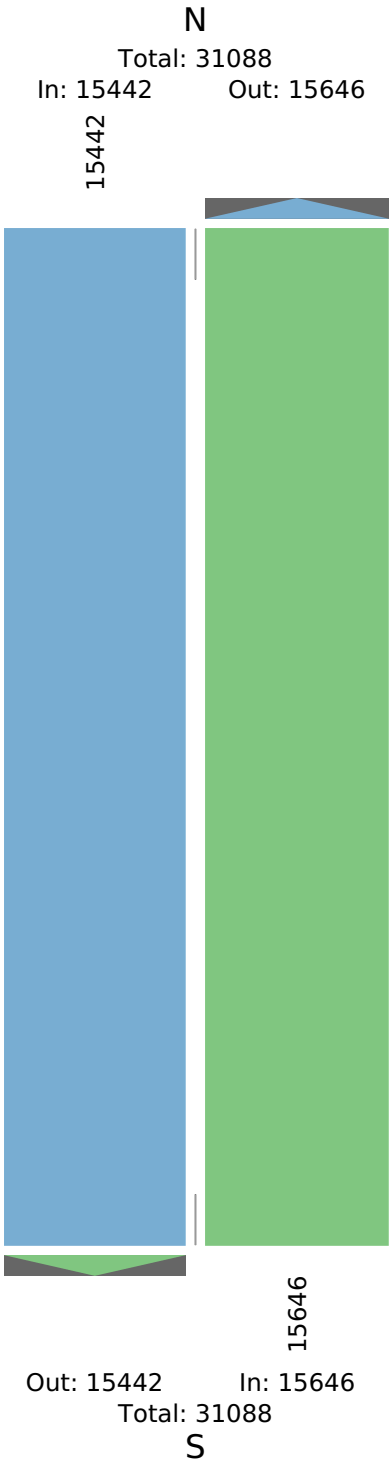
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
10:45PM	125	**125**	58	**58**	**183**
Hourly Total	529	**529**	316	**316**	**845**
11:00PM	104	**104**	63	**63**	**167**
11:15PM	92	**92**	66	**66**	**158**
11:30PM	92	**92**	63	**63**	**155**
11:45PM	79	**79**	41	**41**	**120**
Hourly Total	367	**367**	233	**233**	**600**
Total	15646	**15646**	15442	**15442**	**31088**
% Approach	100%	**-**	100%	**-**	-
% Total	50.3%	**50.3%**	49.7%	**49.7%**	-
Lights	15179	**15179**	14957	**14957**	30136
% Lights	97.0%	**97.0%**	96.9%	**96.9%**	96.9%
Single-Unit Trucks	271	**271**	256	**256**	527
% Single-Unit Trucks	1.7%	**1.7%**	1.7%	**1.7%**	1.7%
Articulated Trucks	108	**108**	134	**134**	242
% Articulated Trucks	0.7%	**0.7%**	0.9%	**0.9%**	0.8%
Buses	86	**86**	95	**95**	181
% Buses	0.5%	**0.5%**	0.6%	**0.6%**	0.6%
Bicycles on Road	2	**2**	0	**0**	2
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Losee Rd south of Washburn Rd - ATR

Tue May 18, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840131, Location: 36.250282, -115.116908

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Losee Rd south of Washburn Rd - ATR

Tue May 18, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840131, Location: 36.250282, -115.116908

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 7:45AM	190	**190**	236	**236**	**426**
8:00AM	186	**186**	213	**213**	**399**
8:15AM	176	**176**	225	**225**	**401**
8:30AM	160	**160**	230	**230**	**390**
Total	712	**712**	904	**904**	**1616**
% Approach	100%	**-**	100%	**-**	-
% Total	44.1%	**44.1%**	55.9%	**55.9%**	-
PHF	0.937	**0.937**	0.958	**0.958**	0.948
Lights	669	**669**	869	**869**	1538
% Lights	94.0%	**94.0%**	96.1%	**96.1%**	95.2%
Single-Unit Trucks	26	**26**	15	**15**	41
% Single-Unit Trucks	3.7%	**3.7%**	1.7%	**1.7%**	2.5%
Articulated Trucks	5	**5**	11	**11**	16
% Articulated Trucks	0.7%	**0.7%**	1.2%	**1.2%**	1.0%
Buses	12	**12**	9	**9**	21
% Buses	1.7%	**1.7%**	1.0%	**1.0%**	1.3%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Losee Rd south of Washburn Rd - ATR

Tue May 18, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840131, Location: 36.250282, -115.116908

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Losee Rd south of Washburn Rd - ATR

Tue May 18, 2021
Midday Peak (11:45 AM - 12:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840131, Location: 36.250282, -115.116908

Provided by: Kimley-Horn and Associates, Inc.
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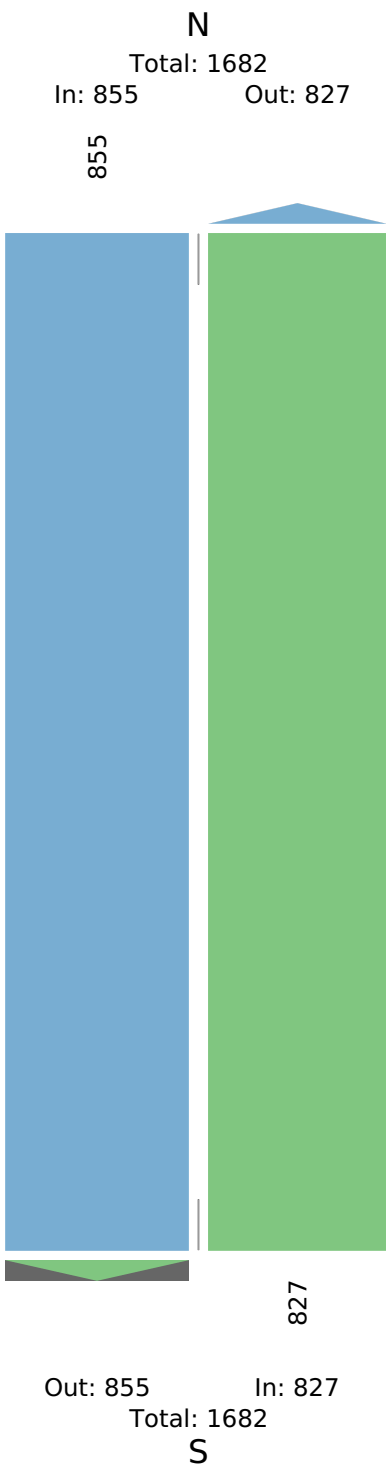
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 11:45AM	230	**230**	191	**191**	**421**
12:00PM	170	**170**	236	**236**	**406**
12:15PM	215	**215**	192	**192**	**407**
12:30PM	212	**212**	236	**236**	**448**
Total	827	**827**	855	**855**	**1682**
% Approach	100%	**-**	100%	**-**	-
% Total	49.2%	**49.2%**	50.8%	**50.8%**	-
PHF	0.899	**0.899**	0.906	**0.906**	0.939
Lights	803	**803**	819	**819**	1622
% Lights	97.1%	**97.1%**	95.8%	**95.8%**	96.4%
Single-Unit Trucks	14	**14**	16	**16**	30
% Single-Unit Trucks	1.7%	**1.7%**	1.9%	**1.9%**	1.8%
Articulated Trucks	6	**6**	7	**7**	13
% Articulated Trucks	0.7%	**0.7%**	0.8%	**0.8%**	0.8%
Buses	4	**4**	13	**13**	17
% Buses	0.5%	**0.5%**	1.5%	**1.5%**	1.0%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Losee Rd south of Washburn Rd - ATR

Tue May 18, 2021
Midday Peak (11:45 AM - 12:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840131, Location: 36.250282, -115.116908

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Losee Rd south of Washburn Rd - ATR

Tue May 18, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840131, Location: 36.250282, -115.116908

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 5:00PM	364	**364**	238	**238**	**602**
5:15PM	306	**306**	206	**206**	**512**
5:30PM	341	**341**	243	**243**	**584**
5:45PM	336	**336**	217	**217**	**553**
Total	1347	**1347**	904	**904**	**2251**
% Approach	100%	**-**	100%	**-**	-
% Total	59.8%	**59.8%**	40.2%	**40.2%**	-
PHF	0.927	**0.927**	0.930	**0.930**	0.936
Lights	1333	**1333**	883	**883**	2216
% Lights	99.0%	**99.0%**	97.7%	**97.7%**	98.4%
Single-Unit Trucks	8	**8**	13	**13**	21
% Single-Unit Trucks	0.6%	**0.6%**	1.4%	**1.4%**	0.9%
Articulated Trucks	2	**2**	5	**5**	7
% Articulated Trucks	0.1%	**0.1%**	0.6%	**0.6%**	0.3%
Buses	3	**3**	3	**3**	6
% Buses	0.2%	**0.2%**	0.3%	**0.3%**	0.3%
Bicycles on Road	1	**1**	0	**0**	1
% Bicycles on Road	0.1%	**0.1%**	0%	**0%**	0%

*T: Thru

Losee Rd south of Washburn Rd - ATR

Tue May 18, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840131, Location: 36.250282, -115.116908

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



N 5th St north of Craig Rd - ATR

Wed May 5, 2021
Full Length (8 PM-8 PM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840150, Location: 36.241089, -115.134395

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-05 8:00PM	68	**68**	69	**69**	**137**
8:15PM	113	**113**	68	**68**	**181**
8:30PM	90	**90**	69	**69**	**159**
8:45PM	90	**90**	56	**56**	**146**
Hourly Total	361	**361**	262	**262**	**623**
9:00PM	73	**73**	71	**71**	**144**
9:15PM	84	**84**	52	**52**	**136**
9:30PM	70	**70**	59	**59**	**129**
9:45PM	59	**59**	44	**44**	**103**
Hourly Total	286	**286**	226	**226**	**512**
10:00PM	72	**72**	49	**49**	**121**
10:15PM	73	**73**	40	**40**	**113**
10:30PM	53	**53**	30	**30**	**83**
10:45PM	56	**56**	24	**24**	**80**
Hourly Total	254	**254**	143	**143**	**397**
11:00PM	32	**32**	41	**41**	**73**
11:15PM	39	**39**	29	**29**	**68**
11:30PM	39	**39**	36	**36**	**75**
11:45PM	38	**38**	25	**25**	**63**
Hourly Total	148	**148**	131	**131**	**279**
2021-05-06 12:00AM	42	**42**	20	**20**	**62**
12:15AM	44	**44**	16	**16**	**60**
12:30AM	32	**32**	15	**15**	**47**
12:45AM	25	**25**	9	**9**	**34**
Hourly Total	143	**143**	60	**60**	**203**
1:00AM	16	**16**	11	**11**	**27**
1:15AM	21	**21**	9	**9**	**30**
1:30AM	16	**16**	13	**13**	**29**
1:45AM	18	**18**	10	**10**	**28**
Hourly Total	71	**71**	43	**43**	**114**
2:00AM	16	**16**	10	**10**	**26**
2:15AM	16	**16**	6	**6**	**22**
2:30AM	15	**15**	10	**10**	**25**
2:45AM	14	**14**	12	**12**	**26**
Hourly Total	61	**61**	38	**38**	**99**
3:00AM	12	**12**	10	**10**	**22**
3:15AM	8	**8**	14	**14**	**22**
3:30AM	23	**23**	23	**23**	**46**
3:45AM	15	**15**	25	**25**	**40**
Hourly Total	58	**58**	72	**72**	**130**
4:00AM	15	**15**	24	**24**	**39**
4:15AM	16	**16**	33	**33**	**49**
4:30AM	14	**14**	43	**43**	**57**
4:45AM	11	**11**	42	**42**	**53**
Hourly Total	56	**56**	142	**142**	**198**
5:00AM	23	**23**	56	**56**	**79**
5:15AM	26	**26**	76	**76**	**102**
5:30AM	38	**38**	73	**73**	**111**
5:45AM	60	**60**	87	**87**	**147**
Hourly Total	147	**147**	292	**292**	**439**
6:00AM	68	**68**	86	**86**	**154**
6:15AM	70	**70**	129	**129**	**199**
6:30AM	76	**76**	140	**140**	**216**

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
6:45AM	69	**69**	134	**134**	**203**
Hourly Total	283	**283**	489	**489**	**772**
7:00AM	76	**76**	138	**138**	**214**
7:15AM	78	**78**	152	**152**	**230**
7:30AM	84	**84**	142	**142**	**226**
7:45AM	79	**79**	159	**159**	**238**
Hourly Total	317	**317**	591	**591**	**908**
8:00AM	69	**69**	128	**128**	**197**
8:15AM	72	**72**	124	**124**	**196**
8:30AM	68	**68**	105	**105**	**173**
8:45AM	98	**98**	134	**134**	**232**
Hourly Total	307	**307**	491	**491**	**798**
9:00AM	69	**69**	94	**94**	**163**
9:15AM	79	**79**	86	**86**	**165**
9:30AM	72	**72**	95	**95**	**167**
9:45AM	72	**72**	102	**102**	**174**
Hourly Total	292	**292**	377	**377**	**669**
10:00AM	78	**78**	86	**86**	**164**
10:15AM	70	**70**	89	**89**	**159**
10:30AM	80	**80**	87	**87**	**167**
10:45AM	86	**86**	92	**92**	**178**
Hourly Total	314	**314**	354	**354**	**668**
11:00AM	89	**89**	98	**98**	**187**
11:15AM	103	**103**	101	**101**	**204**
11:30AM	89	**89**	98	**98**	**187**
11:45AM	92	**92**	100	**100**	**192**
Hourly Total	373	**373**	397	**397**	**770**
12:00PM	106	**106**	105	**105**	**211**
12:15PM	111	**111**	103	**103**	**214**
12:30PM	86	**86**	116	**116**	**202**
12:45PM	105	**105**	83	**83**	**188**
Hourly Total	408	**408**	407	**407**	**815**
1:00PM	100	**100**	95	**95**	**195**
1:15PM	105	**105**	100	**100**	**205**
1:30PM	129	**129**	93	**93**	**222**
1:45PM	99	**99**	102	**102**	**201**
Hourly Total	433	**433**	390	**390**	**823**
2:00PM	99	**99**	87	**87**	**186**
2:15PM	119	**119**	104	**104**	**223**
2:30PM	125	**125**	107	**107**	**232**
2:45PM	150	**150**	112	**112**	**262**
Hourly Total	493	**493**	410	**410**	**903**
3:00PM	148	**148**	126	**126**	**274**
3:15PM	151	**151**	136	**136**	**287**
3:30PM	130	**130**	126	**126**	**256**
3:45PM	143	**143**	126	**126**	**269**
Hourly Total	572	**572**	514	**514**	**1086**
4:00PM	146	**146**	128	**128**	**274**
4:15PM	162	**162**	104	**104**	**266**
4:30PM	153	**153**	90	**90**	**243**
4:45PM	143	**143**	96	**96**	**239**
Hourly Total	604	**604**	418	**418**	**1022**
5:00PM	165	**165**	116	**116**	**281**
5:15PM	163	**163**	119	**119**	**282**
5:30PM	155	**155**	107	**107**	**262**
5:45PM	149	**149**	103	**103**	**252**
Hourly Total	632	**632**	445	**445**	**1077**
6:00PM	138	**138**	98	**98**	**236**
6:15PM	163	**163**	102	**102**	**265**
6:30PM	174	**174**	84	**84**	**258**

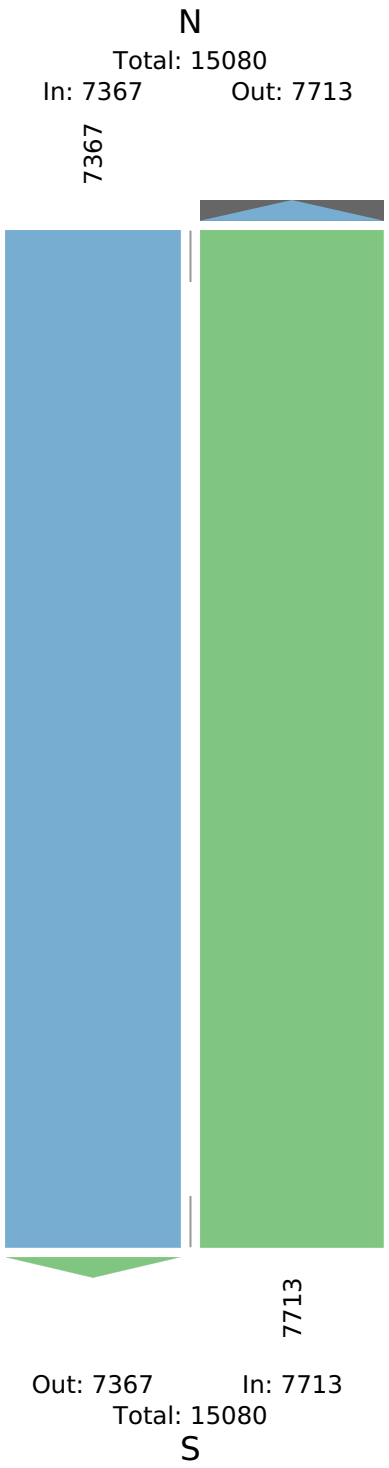
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
6:45PM	148	**148**	85	**85**	**233**
Hourly Total	623	**623**	369	**369**	**992**
7:00PM	125	**125**	87	**87**	**212**
7:15PM	109	**109**	66	**66**	**175**
7:30PM	122	**122**	82	**82**	**204**
7:45PM	121	**121**	71	**71**	**192**
Hourly Total	477	**477**	306	**306**	**783**
Total	7713	**7713**	7367	**7367**	**15080**
% Approach	100%	**-**	100%	**-**	-
% Total	51.1%	**51.1%**	48.9%	**48.9%**	-
Lights	7449	**7449**	7119	**7119**	14568
% Lights	96.6%	**96.6%**	96.6%	**96.6%**	96.6%
Single-Unit Trucks	161	**161**	148	**148**	309
% Single-Unit Trucks	2.1%	**2.1%**	2.0%	**2.0%**	2.0%
Articulated Trucks	40	**40**	43	**43**	83
% Articulated Trucks	0.5%	**0.5%**	0.6%	**0.6%**	0.6%
Buses	60	**60**	57	**57**	117
% Buses	0.8%	**0.8%**	0.8%	**0.8%**	0.8%
Bicycles on Road	3	**3**	0	**0**	3
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

N 5th St north of Craig Rd - ATR

Wed May 5, 2021
Full Length (8 PM-8 PM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840150, Location: 36.241089, -115.134395

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



N 5th St north of Craig Rd - ATR

Thu May 6, 2021
AM Peak (May 06 2021 7AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840150, Location: 36.241089, -115.134395

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-06 7:00AM	76	**76**	138	**138**	**214**
7:15AM	78	**78**	152	**152**	**230**
7:30AM	84	**84**	142	**142**	**226**
7:45AM	79	**79**	159	**159**	**238**
Total	317	**317**	591	**591**	**908**
% Approach	100%	**-**	100%	**-**	-
% Total	34.9%	**34.9%**	65.1%	**65.1%**	-
PHF	0.943	**0.943**	0.929	**0.929**	0.954
Lights	294	**294**	573	**573**	867
% Lights	92.7%	**92.7%**	97.0%	**97.0%**	95.5%
Single-Unit Trucks	12	**12**	8	**8**	20
% Single-Unit Trucks	3.8%	**3.8%**	1.4%	**1.4%**	2.2%
Articulated Trucks	4	**4**	4	**4**	8
% Articulated Trucks	1.3%	**1.3%**	0.7%	**0.7%**	0.9%
Buses	7	**7**	6	**6**	13
% Buses	2.2%	**2.2%**	1.0%	**1.0%**	1.4%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

N 5th St north of Craig Rd - ATR

Thu May 6, 2021
AM Peak (May 06 2021 7AM - 8 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840150, Location: 36.241089, -115.134395

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



N 5th St north of Craig Rd - ATR

Thu May 6, 2021
Midday Peak (May 06 2021 11:45AM - 12:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840150, Location: 36.241089, -115.134395

Provided by: Kimley-Horn and Associates, Inc.
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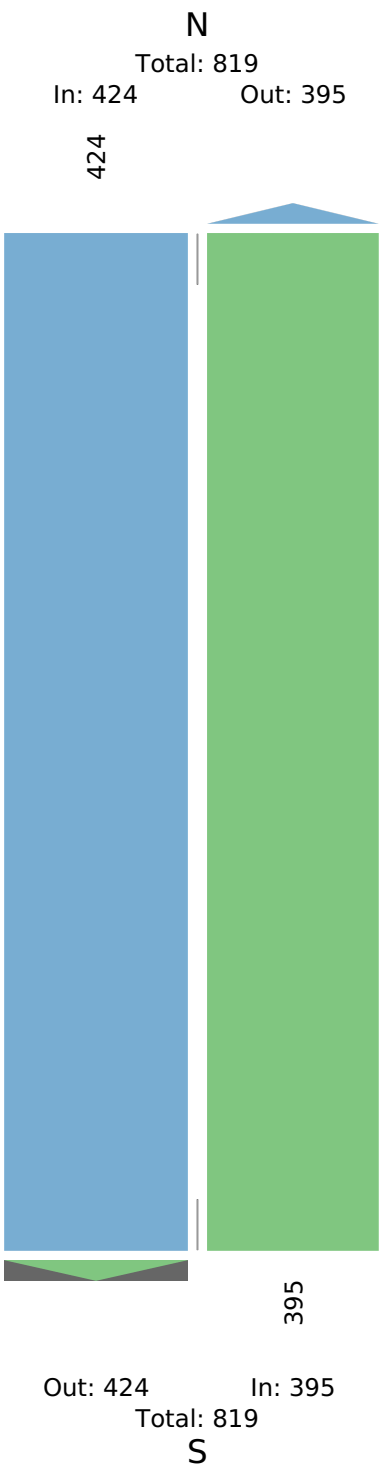
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-06 11:45AM	92	**92**	100	**100**	**192**
12:00PM	106	**106**	105	**105**	**211**
12:15PM	111	**111**	103	**103**	**214**
12:30PM	86	**86**	116	**116**	**202**
Total	395	**395**	424	**424**	**819**
% Approach	100%	**-**	100%	**-**	-
% Total	48.2%	**48.2%**	51.8%	**51.8%**	-
PHF	0.890	**0.890**	0.914	**0.914**	0.957
Lights	360	**360**	383	**383**	743
% Lights	91.1%	**91.1%**	90.3%	**90.3%**	90.7%
Single-Unit Trucks	23	**23**	17	**17**	40
% Single-Unit Trucks	5.8%	**5.8%**	4.0%	**4.0%**	4.9%
Articulated Trucks	7	**7**	4	**4**	11
% Articulated Trucks	1.8%	**1.8%**	0.9%	**0.9%**	1.3%
Buses	5	**5**	20	**20**	25
% Buses	1.3%	**1.3%**	4.7%	**4.7%**	3.1%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

N 5th St north of Craig Rd - ATR

Thu May 6, 2021
Midday Peak (May 06 2021 11:45AM - 12:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840150, Location: 36.241089, -115.134395

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



N 5th St north of Craig Rd - ATR

Thu May 6, 2021
PM Peak (May 06 2021 3PM - 4 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840150, Location: 36.241089, -115.134395

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

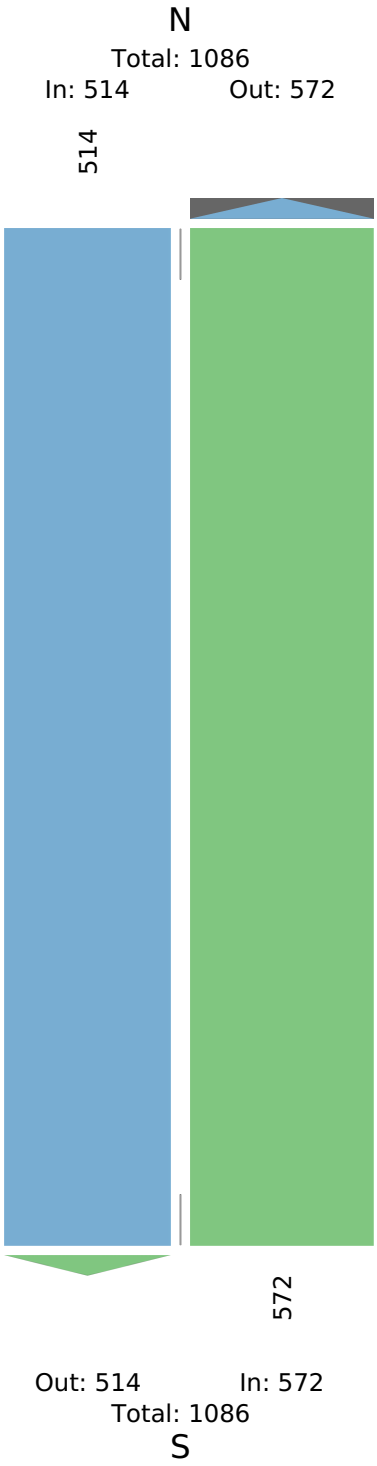
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-06 3:00PM	148	**148**	126	**126**	**274**
3:15PM	151	**151**	136	**136**	**287**
3:30PM	130	**130**	126	**126**	**256**
3:45PM	143	**143**	126	**126**	**269**
Total	572	**572**	514	**514**	**1086**
% Approach	100%	**-**	100%	**-**	-
% Total	52.7%	**52.7%**	47.3%	**47.3%**	-
PHF	0.947	**0.947**	0.945	**0.945**	0.946
Lights	568	**568**	501	**501**	1069
% Lights	99.3%	**99.3%**	97.5%	**97.5%**	98.4%
Single-Unit Trucks	3	**3**	3	**3**	6
% Single-Unit Trucks	0.5%	**0.5%**	0.6%	**0.6%**	0.6%
Articulated Trucks	0	**0**	3	**3**	3
% Articulated Trucks	0%	**0%**	0.6%	**0.6%**	0.3%
Buses	1	**1**	7	**7**	8
% Buses	0.2%	**0.2%**	1.4%	**1.4%**	0.7%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

N 5th St north of Craig Rd - ATR

Thu May 6, 2021
PM Peak (May 06 2021 3PM - 4 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840150, Location: 36.241089, -115.134395

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



N 5th St north of Deer Springs Way - ATR

Wed May 12, 2021
Full Length (9 AM-9 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840152, Location: 36.288268, -115.134899

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-12 9:00AM	105	**105**	85	**85**	**190**
9:15AM	100	**100**	95	**95**	**195**
9:30AM	92	**92**	92	**92**	**184**
9:45AM	92	**92**	109	**109**	**201**
Hourly Total	389	**389**	381	**381**	**770**
10:00AM	122	**122**	107	**107**	**229**
10:15AM	135	**135**	99	**99**	**234**
10:30AM	117	**117**	116	**116**	**233**
10:45AM	112	**112**	97	**97**	**209**
Hourly Total	486	**486**	419	**419**	**905**
11:00AM	118	**118**	127	**127**	**245**
11:15AM	102	**102**	129	**129**	**231**
11:30AM	111	**111**	107	**107**	**218**
11:45AM	112	**112**	128	**128**	**240**
Hourly Total	443	**443**	491	**491**	**934**
12:00PM	119	**119**	137	**137**	**256**
12:15PM	109	**109**	133	**133**	**242**
12:30PM	143	**143**	147	**147**	**290**
12:45PM	122	**122**	139	**139**	**261**
Hourly Total	493	**493**	556	**556**	**1049**
1:00PM	155	**155**	106	**106**	**261**
1:15PM	131	**131**	153	**153**	**284**
1:30PM	126	**126**	120	**120**	**246**
1:45PM	157	**157**	123	**123**	**280**
Hourly Total	569	**569**	502	**502**	**1071**
2:00PM	137	**137**	126	**126**	**263**
2:15PM	143	**143**	137	**137**	**280**
2:30PM	144	**144**	126	**126**	**270**
2:45PM	140	**140**	151	**151**	**291**
Hourly Total	564	**564**	540	**540**	**1104**
3:00PM	138	**138**	149	**149**	**287**
3:15PM	126	**126**	167	**167**	**293**
3:30PM	142	**142**	171	**171**	**313**
3:45PM	133	**133**	159	**159**	**292**
Hourly Total	539	**539**	646	**646**	**1185**
4:00PM	137	**137**	141	**141**	**278**
4:15PM	134	**134**	164	**164**	**298**
4:30PM	128	**128**	163	**163**	**291**
4:45PM	140	**140**	157	**157**	**297**
Hourly Total	539	**539**	625	**625**	**1164**
5:00PM	132	**132**	186	**186**	**318**
5:15PM	134	**134**	167	**167**	**301**
5:30PM	138	**138**	174	**174**	**312**
5:45PM	115	**115**	129	**129**	**244**
Hourly Total	519	**519**	656	**656**	**1175**
6:00PM	150	**150**	141	**141**	**291**
6:15PM	115	**115**	168	**168**	**283**
6:30PM	141	**141**	135	**135**	**276**
6:45PM	110	**110**	124	**124**	**234**
Hourly Total	516	**516**	568	**568**	**1084**
7:00PM	107	**107**	97	**97**	**204**
7:15PM	87	**87**	111	**111**	**198**
7:30PM	81	**81**	104	**104**	**185**

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
7:45PM	71	**71**	106	**106**	**177**
Hourly Total	346	**346**	418	**418**	**764**
8:00PM	80	**80**	100	**100**	**180**
8:15PM	83	**83**	100	**100**	**183**
8:30PM	81	**81**	85	**85**	**166**
8:45PM	76	**76**	70	**70**	**146**
Hourly Total	320	**320**	355	**355**	**675**
9:00PM	45	**45**	70	**70**	**115**
9:15PM	51	**51**	62	**62**	**113**
9:30PM	32	**32**	51	**51**	**83**
9:45PM	40	**40**	49	**49**	**89**
Hourly Total	168	**168**	232	**232**	**400**
10:00PM	36	**36**	35	**35**	**71**
10:15PM	26	**26**	37	**37**	**63**
10:30PM	27	**27**	37	**37**	**64**
10:45PM	24	**24**	39	**39**	**63**
Hourly Total	113	**113**	148	**148**	**261**
11:00PM	25	**25**	37	**37**	**62**
11:15PM	12	**12**	33	**33**	**45**
11:30PM	14	**14**	23	**23**	**37**
11:45PM	6	**6**	17	**17**	**23**
Hourly Total	57	**57**	110	**110**	**167**
2021-05-13 12:00AM	5	**5**	18	**18**	**23**
12:15AM	9	**9**	17	**17**	**26**
12:30AM	10	**10**	19	**19**	**29**
12:45AM	4	**4**	15	**15**	**19**
Hourly Total	28	**28**	69	**69**	**97**
1:00AM	4	**4**	8	**8**	**12**
1:15AM	14	**14**	7	**7**	**21**
1:30AM	7	**7**	10	**10**	**17**
1:45AM	7	**7**	8	**8**	**15**
Hourly Total	32	**32**	33	**33**	**65**
2:00AM	3	**3**	9	**9**	**12**
2:15AM	4	**4**	6	**6**	**10**
2:30AM	10	**10**	4	**4**	**14**
2:45AM	10	**10**	5	**5**	**15**
Hourly Total	27	**27**	24	**24**	**51**
3:00AM	4	**4**	5	**5**	**9**
3:15AM	6	**6**	4	**4**	**10**
3:30AM	8	**8**	6	**6**	**14**
3:45AM	12	**12**	6	**6**	**18**
Hourly Total	30	**30**	21	**21**	**51**
4:00AM	15	**15**	8	**8**	**23**
4:15AM	18	**18**	15	**15**	**33**
4:30AM	23	**23**	26	**26**	**49**
4:45AM	26	**26**	16	**16**	**42**
Hourly Total	82	**82**	65	**65**	**147**
5:00AM	23	**23**	18	**18**	**41**
5:15AM	53	**53**	32	**32**	**85**
5:30AM	67	**67**	29	**29**	**96**
5:45AM	62	**62**	57	**57**	**119**
Hourly Total	205	**205**	136	**136**	**341**
6:00AM	94	**94**	46	**46**	**140**
6:15AM	98	**98**	80	**80**	**178**
6:30AM	110	**110**	85	**85**	**195**
6:45AM	124	**124**	89	**89**	**213**
Hourly Total	426	**426**	300	**300**	**726**
7:00AM	144	**144**	88	**88**	**232**
7:15AM	135	**135**	75	**75**	**210**
7:30AM	143	**143**	86	**86**	**229**

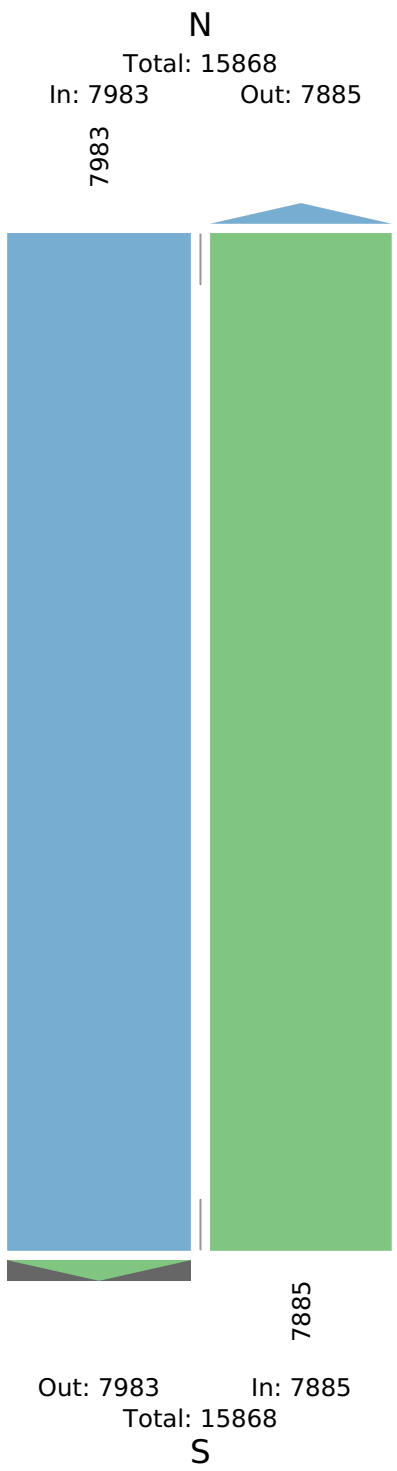
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
7:45AM	136	**136**	84	**84**	**220**
Hourly Total	558	**558**	333	**333**	**891**
8:00AM	121	**121**	95	**95**	**216**
8:15AM	101	**101**	78	**78**	**179**
8:30AM	121	**121**	83	**83**	**204**
8:45AM	93	**93**	99	**99**	**192**
Hourly Total	436	**436**	355	**355**	**791**
Total	7885	**7885**	7983	**7983**	**15868**
% Approach	100%	**-**	100%	**-**	-
% Total	49.7%	**49.7%**	50.3%	**50.3%**	-
Lights	7685	**7685**	7776	**7776**	15461
% Lights	97.5%	**97.5%**	97.4%	**97.4%**	97.4%
Single-Unit Trucks	112	**112**	121	**121**	233
% Single-Unit Trucks	1.4%	**1.4%**	1.5%	**1.5%**	1.5%
Articulated Trucks	70	**70**	72	**72**	142
% Articulated Trucks	0.9%	**0.9%**	0.9%	**0.9%**	0.9%
Buses	18	**18**	14	**14**	32
% Buses	0.2%	**0.2%**	0.2%	**0.2%**	0.2%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

N 5th St north of Deer Springs Way - ATR

Wed May 12, 2021
Full Length (9 AM-9 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840152, Location: 36.288268, -115.134899

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



N 5th St north of Deer Springs Way - ATR

Wed May 12, 2021
AM Peak (May 12 2021 10AM - 11 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840152, Location: 36.288268, -115.134899

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

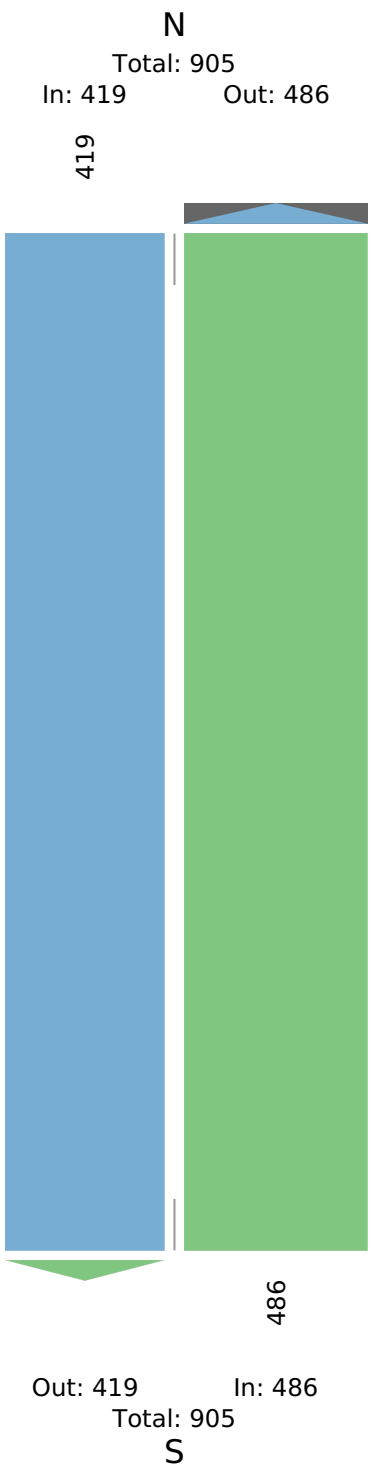
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-12 10:00AM	122	**122**	107	**107**	**229**
10:15AM	135	**135**	99	**99**	**234**
10:30AM	117	**117**	116	**116**	**233**
10:45AM	112	**112**	97	**97**	**209**
Total	486	**486**	419	**419**	**905**
% Approach	100%	**-**	100%	**-**	-
% Total	53.7%	**53.7%**	46.3%	**46.3%**	-
PHF	0.900	**0.900**	0.903	**0.903**	0.967
Lights	468	**468**	399	**399**	867
% Lights	96.3%	**96.3%**	95.2%	**95.2%**	95.8%
Single-Unit Trucks	13	**13**	12	**12**	25
% Single-Unit Trucks	2.7%	**2.7%**	2.9%	**2.9%**	2.8%
Articulated Trucks	5	**5**	7	**7**	12
% Articulated Trucks	1.0%	**1.0%**	1.7%	**1.7%**	1.3%
Buses	0	**0**	1	**1**	1
% Buses	0%	**0%**	0.2%	**0.2%**	0.1%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

N 5th St north of Deer Springs Way - ATR

Wed May 12, 2021
AM Peak (May 12 2021 10AM - 11 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840152, Location: 36.288268, -115.134899

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



N 5th St north of Deer Springs Way - ATR

Wed May 12, 2021
Midday Peak (May 12 2021 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840152, Location: 36.288268, -115.134899

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-12 12:00PM	119	**119**	137	**137**	**256**
12:15PM	109	**109**	133	**133**	**242**
12:30PM	143	**143**	147	**147**	**290**
12:45PM	122	**122**	139	**139**	**261**
Total	493	**493**	556	**556**	**1049**
% Approach	100%	**-**	100%	**-**	-
% Total	47.0%	**47.0%**	53.0%	**53.0%**	-
PHF	0.862	**0.862**	0.946	**0.946**	0.904
Lights	482	**482**	535	**535**	1017
% Lights	97.8%	**97.8%**	96.2%	**96.2%**	96.9%
Single-Unit Trucks	5	**5**	8	**8**	13
% Single-Unit Trucks	1.0%	**1.0%**	1.4%	**1.4%**	1.2%
Articulated Trucks	5	**5**	13	**13**	18
% Articulated Trucks	1.0%	**1.0%**	2.3%	**2.3%**	1.7%
Buses	1	**1**	0	**0**	1
% Buses	0.2%	**0.2%**	0%	**0%**	0.1%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

N 5th St north of Deer Springs Way - ATR

Wed May 12, 2021
Midday Peak (May 12 2021 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840152, Location: 36.288268, -115.134899

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



N 5th St north of Deer Springs Way - ATR

Wed May 12, 2021
PM Peak (May 12 2021 4:45PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840152, Location: 36.288268, -115.134899

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-12 4:45PM	140	**140**	157	**157**	**297**
5:00PM	132	**132**	186	**186**	**318**
5:15PM	134	**134**	167	**167**	**301**
5:30PM	138	**138**	174	**174**	**312**
Total	544	**544**	684	**684**	**1228**
% Approach	100%	**-**	100%	**-**	-
% Total	44.3%	**44.3%**	55.7%	**55.7%**	-
PHF	0.971	**0.971**	0.919	**0.919**	0.965
Lights	540	**540**	680	**680**	1220
% Lights	99.3%	**99.3%**	99.4%	**99.4%**	99.3%
Single-Unit Trucks	0	**0**	2	**2**	2
% Single-Unit Trucks	0%	**0%**	0.3%	**0.3%**	0.2%
Articulated Trucks	2	**2**	1	**1**	3
% Articulated Trucks	0.4%	**0.4%**	0.1%	**0.1%**	0.2%
Buses	2	**2**	1	**1**	3
% Buses	0.4%	**0.4%**	0.1%	**0.1%**	0.2%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

N 5th St north of Deer Springs Way - ATR

Wed May 12, 2021
PM Peak (May 12 2021 4:45PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840152, Location: 36.288268, -115.134899

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St north of Alexander Rd - ATR

Wed May 19, 2021
Full Length (9 AM-4 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840155, Location: 36.234172, -115.18017

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 9:00AM	112	**112**	101	**101**	**213**
9:15AM	103	**103**	123	**123**	**226**
9:30AM	105	**105**	116	**116**	**221**
9:45AM	112	**112**	120	**120**	**232**
Hourly Total	432	**432**	460	**460**	**892**
10:00AM	108	**108**	123	**123**	**231**
10:15AM	110	**110**	117	**117**	**227**
10:30AM	99	**99**	112	**112**	**211**
10:45AM	130	**130**	106	**106**	**236**
Hourly Total	447	**447**	458	**458**	**905**
11:00AM	143	**143**	131	**131**	**274**
11:15AM	116	**116**	128	**128**	**244**
11:30AM	126	**126**	133	**133**	**259**
11:45AM	128	**128**	122	**122**	**250**
Hourly Total	513	**513**	514	**514**	**1027**
12:00PM	135	**135**	132	**132**	**267**
12:15PM	135	**135**	145	**145**	**280**
12:30PM	141	**141**	115	**115**	**256**
12:45PM	143	**143**	126	**126**	**269**
Hourly Total	554	**554**	518	**518**	**1072**
1:00PM	139	**139**	132	**132**	**271**
1:15PM	149	**149**	142	**142**	**291**
1:30PM	165	**165**	125	**125**	**290**
1:45PM	143	**143**	151	**151**	**294**
Hourly Total	596	**596**	550	**550**	**1146**
2:00PM	146	**146**	145	**145**	**291**
2:15PM	149	**149**	124	**124**	**273**
2:30PM	180	**180**	132	**132**	**312**
2:45PM	209	**209**	122	**122**	**331**
Hourly Total	684	**684**	523	**523**	**1207**
3:00PM	159	**159**	157	**157**	**316**
3:15PM	190	**190**	152	**152**	**342**
3:30PM	184	**184**	187	**187**	**371**
3:45PM	192	**192**	129	**129**	**321**
Hourly Total	725	**725**	625	**625**	**1350**
4:00PM	182	**182**	152	**152**	**334**
4:15PM	192	**192**	178	**178**	**370**
4:30PM	221	**221**	146	**146**	**367**
4:45PM	191	**191**	122	**122**	**313**
Hourly Total	786	**786**	598	**598**	**1384**
5:00PM	253	**253**	164	**164**	**417**
5:15PM	223	**223**	135	**135**	**358**
5:30PM	182	**182**	174	**174**	**356**
5:45PM	199	**199**	142	**142**	**341**
Hourly Total	857	**857**	615	**615**	**1472**
6:00PM	167	**167**	121	**121**	**288**
6:15PM	205	**205**	135	**135**	**340**
6:30PM	143	**143**	131	**131**	**274**
6:45PM	146	**146**	112	**112**	**258**
Hourly Total	661	**661**	499	**499**	**1160**
7:00PM	100	**100**	121	**121**	**221**
7:15PM	149	**149**	109	**109**	**258**
7:30PM	143	**143**	92	**92**	**235**

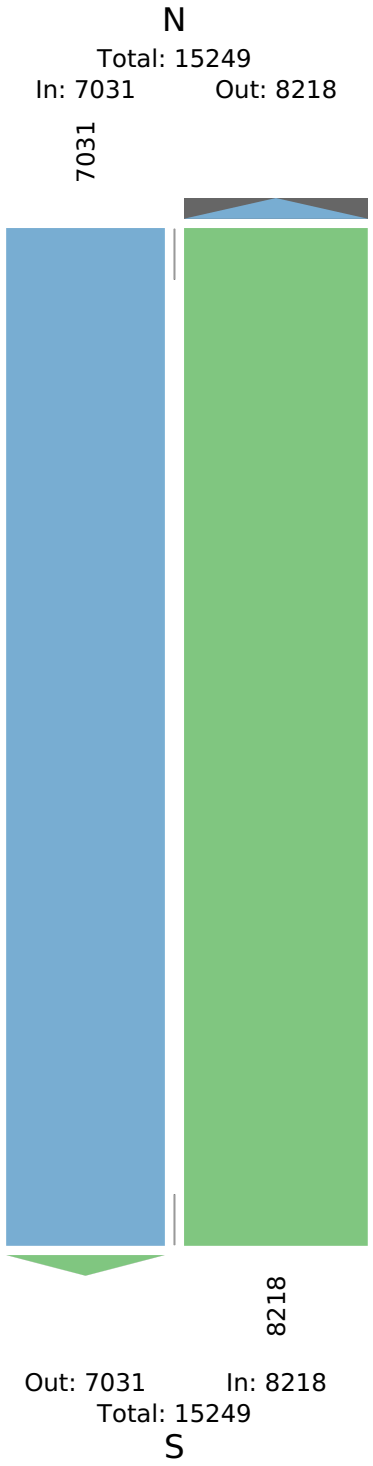
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
7:45PM	114	**114**	101	**101**	**215**
Hourly Total	506	**506**	423	**423**	**929**
8:00PM	104	**104**	93	**93**	**197**
8:15PM	111	**111**	96	**96**	**207**
8:30PM	97	**97**	89	**89**	**186**
8:45PM	110	**110**	78	**78**	**188**
Hourly Total	422	**422**	356	**356**	**778**
9:00PM	78	**78**	67	**67**	**145**
9:15PM	105	**105**	73	**73**	**178**
9:30PM	70	**70**	80	**80**	**150**
9:45PM	68	**68**	68	**68**	**136**
Hourly Total	321	**321**	288	**288**	**609**
10:00PM	76	**76**	62	**62**	**138**
10:15PM	65	**65**	55	**55**	**120**
10:30PM	66	**66**	56	**56**	**122**
10:45PM	65	**65**	36	**36**	**101**
Hourly Total	272	**272**	209	**209**	**481**
11:00PM	49	**49**	39	**39**	**88**
11:15PM	39	**39**	23	**23**	**62**
11:30PM	44	**44**	27	**27**	**71**
11:45PM	26	**26**	19	**19**	**45**
Hourly Total	158	**158**	108	**108**	**266**
2021-05-20 12:00AM	30	**30**	20	**20**	**50**
12:15AM	34	**34**	24	**24**	**58**
12:30AM	27	**27**	16	**16**	**43**
12:45AM	31	**31**	25	**25**	**56**
Hourly Total	122	**122**	85	**85**	**207**
1:00AM	16	**16**	16	**16**	**32**
1:15AM	29	**29**	15	**15**	**44**
1:30AM	10	**10**	15	**15**	**25**
1:45AM	9	**9**	17	**17**	**26**
Hourly Total	64	**64**	63	**63**	**127**
2:00AM	8	**8**	15	**15**	**23**
2:15AM	11	**11**	8	**8**	**19**
2:30AM	16	**16**	13	**13**	**29**
2:45AM	10	**10**	10	**10**	**20**
Hourly Total	45	**45**	46	**46**	**91**
3:00AM	11	**11**	20	**20**	**31**
3:15AM	7	**7**	22	**22**	**29**
3:30AM	14	**14**	23	**23**	**37**
3:45AM	13	**13**	22	**22**	**35**
Hourly Total	45	**45**	87	**87**	**132**
4:00AM	8	**8**	6	**6**	**14**
Hourly Total	8	**8**	6	**6**	**14**
Total	8218	**8218**	7031	**7031**	**15249**
% Approach	100%	**-**	100%	**-**	-
% Total	53.9%	**53.9%**	46.1%	**46.1%**	-
Lights	8064	**8064**	6866	**6866**	14930
% Lights	98.1%	**98.1%**	97.7%	**97.7%**	97.9%
Single-Unit Trucks	68	**68**	70	**70**	138
% Single-Unit Trucks	0.8%	**0.8%**	1.0%	**1.0%**	0.9%
Articulated Trucks	14	**14**	15	**15**	29
% Articulated Trucks	0.2%	**0.2%**	0.2%	**0.2%**	0.2%
Buses	68	**68**	76	**76**	144
% Buses	0.8%	**0.8%**	1.1%	**1.1%**	0.9%
Bicycles on Road	4	**4**	4	**4**	8
% Bicycles on Road	0%	**0%**	0.1%	**0.1%**	0.1%

*T: Thru

Simmons St north of Alexander Rd - ATR

Wed May 19, 2021
Full Length (9 AM-4 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840155, Location: 36.234172, -115.18017

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St north of Alexander Rd - ATR

Wed May 19, 2021
AM Peak (May 19 2021 9:30AM - 10:30 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840155, Location: 36.234172, -115.18017

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 9:30AM	105	**105**	116	**116**	**221**
9:45AM	112	**112**	120	**120**	**232**
10:00AM	108	**108**	123	**123**	**231**
10:15AM	110	**110**	117	**117**	**227**
Total	435	**435**	476	**476**	**911**
% Approach	100%	**-**	100%	**-**	-
% Total	47.7%	**47.7%**	52.3%	**52.3%**	-
PHF	0.971	**0.971**	0.967	**0.967**	0.982
Lights	415	**415**	468	**468**	883
% Lights	95.4%	**95.4%**	98.3%	**98.3%**	96.9%
Single-Unit Trucks	8	**8**	4	**4**	12
% Single-Unit Trucks	1.8%	**1.8%**	0.8%	**0.8%**	1.3%
Articulated Trucks	3	**3**	2	**2**	5
% Articulated Trucks	0.7%	**0.7%**	0.4%	**0.4%**	0.5%
Buses	9	**9**	2	**2**	11
% Buses	2.1%	**2.1%**	0.4%	**0.4%**	1.2%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Simmons St north of Alexander Rd - ATR

Wed May 19, 2021
AM Peak (May 19 2021 9:30AM - 10:30 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840155, Location: 36.234172, -115.18017

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St north of Alexander Rd - ATR

Wed May 19, 2021
Midday Peak (May 19 2021 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840155, Location: 36.234172, -115.18017

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

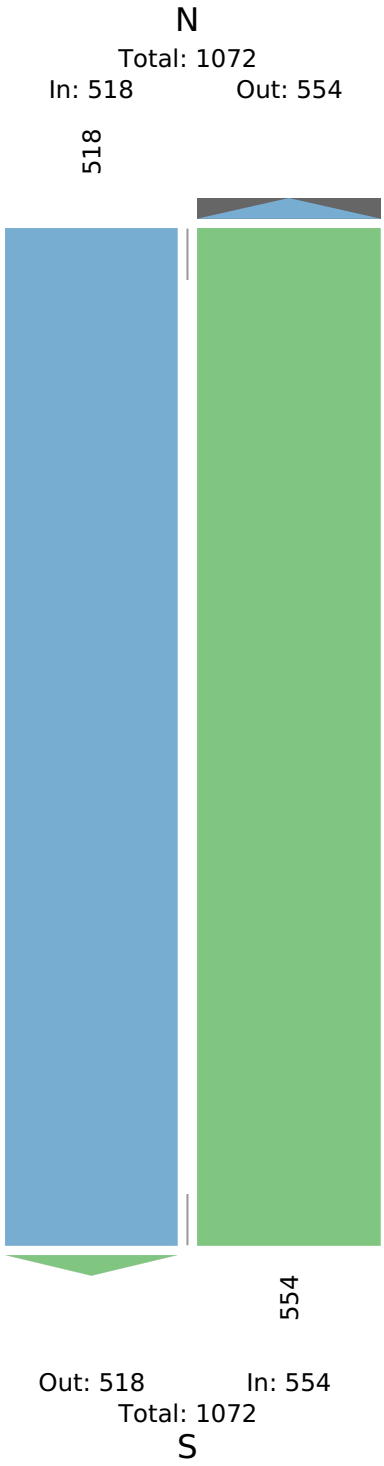
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 12:00PM	135	**135**	132	**132**	**267**
12:15PM	135	**135**	145	**145**	**280**
12:30PM	141	**141**	115	**115**	**256**
12:45PM	143	**143**	126	**126**	**269**
Total	554	**554**	518	**518**	**1072**
% Approach	100%	**-**	100%	**-**	-
% Total	51.7%	**51.7%**	48.3%	**48.3%**	-
PHF	0.969	**0.969**	0.893	**0.893**	0.957
Lights	540	**540**	503	**503**	1043
% Lights	97.5%	**97.5%**	97.1%	**97.1%**	97.3%
Single-Unit Trucks	10	**10**	6	**6**	16
% Single-Unit Trucks	1.8%	**1.8%**	1.2%	**1.2%**	1.5%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	4	**4**	9	**9**	13
% Buses	0.7%	**0.7%**	1.7%	**1.7%**	1.2%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Simmons St north of Alexander Rd - ATR

Wed May 19, 2021
Midday Peak (May 19 2021 12PM - 1 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840155, Location: 36.234172, -115.18017

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St north of Alexander Rd - ATR

Wed May 19, 2021
PM Peak (May 19 2021 5PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840155, Location: 36.234172, -115.18017

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-19 5:00PM	253	**253**	164	**164**	**417**
5:15PM	223	**223**	135	**135**	**358**
5:30PM	182	**182**	174	**174**	**356**
5:45PM	199	**199**	142	**142**	**341**
Total	857	**857**	615	**615**	**1472**
% Approach	100%	**-**	100%	**-**	-
% Total	58.2%	**58.2%**	41.8%	**41.8%**	-
PHF	0.847	**0.847**	0.884	**0.884**	0.882
Lights	854	**854**	599	**599**	1453
% Lights	99.6%	**99.6%**	97.4%	**97.4%**	98.7%
Single-Unit Trucks	1	**1**	6	**6**	7
% Single-Unit Trucks	0.1%	**0.1%**	1.0%	**1.0%**	0.5%
Articulated Trucks	1	**1**	1	**1**	2
% Articulated Trucks	0.1%	**0.1%**	0.2%	**0.2%**	0.1%
Buses	1	**1**	9	**9**	10
% Buses	0.1%	**0.1%**	1.5%	**1.5%**	0.7%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Simmons St north of Alexander Rd - ATR

Wed May 19, 2021
PM Peak (May 19 2021 5PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840155, Location: 36.234172, -115.18017

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St north of Ann Rd - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840138, Location: 36.263209, -115.179854

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 12:00AM	28	**28**	25	**25**	**53**
12:15AM	27	**27**	23	**23**	**50**
12:30AM	24	**24**	17	**17**	**41**
12:45AM	15	**15**	19	**19**	**34**
Hourly Total	94	**94**	84	**84**	**178**
1:00AM	17	**17**	10	**10**	**27**
1:15AM	17	**17**	16	**16**	**33**
1:30AM	18	**18**	13	**13**	**31**
1:45AM	16	**16**	8	**8**	**24**
Hourly Total	68	**68**	47	**47**	**115**
2:00AM	16	**16**	12	**12**	**28**
2:15AM	4	**4**	7	**7**	**11**
2:30AM	11	**11**	16	**16**	**27**
2:45AM	6	**6**	8	**8**	**14**
Hourly Total	37	**37**	43	**43**	**80**
3:00AM	10	**10**	15	**15**	**25**
3:15AM	8	**8**	10	**10**	**18**
3:30AM	7	**7**	15	**15**	**22**
3:45AM	12	**12**	13	**13**	**25**
Hourly Total	37	**37**	53	**53**	**90**
4:00AM	18	**18**	23	**23**	**41**
4:15AM	18	**18**	20	**20**	**38**
4:30AM	14	**14**	18	**18**	**32**
4:45AM	19	**19**	20	**20**	**39**
Hourly Total	69	**69**	81	**81**	**150**
5:00AM	19	**19**	48	**48**	**67**
5:15AM	25	**25**	47	**47**	**72**
5:30AM	37	**37**	58	**58**	**95**
5:45AM	45	**45**	58	**58**	**103**
Hourly Total	126	**126**	211	**211**	**337**
6:00AM	50	**50**	87	**87**	**137**
6:15AM	59	**59**	91	**91**	**150**
6:30AM	78	**78**	126	**126**	**204**
6:45AM	74	**74**	112	**112**	**186**
Hourly Total	261	**261**	416	**416**	**677**
7:00AM	91	**91**	127	**127**	**218**
7:15AM	105	**105**	164	**164**	**269**
7:30AM	106	**106**	125	**125**	**231**
7:45AM	86	**86**	147	**147**	**233**
Hourly Total	388	**388**	563	**563**	**951**
8:00AM	88	**88**	155	**155**	**243**
8:15AM	93	**93**	120	**120**	**213**
8:30AM	110	**110**	136	**136**	**246**
8:45AM	105	**105**	100	**100**	**205**
Hourly Total	396	**396**	511	**511**	**907**
9:00AM	117	**117**	96	**96**	**213**
9:15AM	112	**112**	122	**122**	**234**
9:30AM	105	**105**	132	**132**	**237**
9:45AM	123	**123**	137	**137**	**260**
Hourly Total	457	**457**	487	**487**	**944**
10:00AM	120	**120**	116	**116**	**236**
10:15AM	117	**117**	124	**124**	**241**
10:30AM	131	**131**	124	**124**	**255**

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
10:45AM	145	**145**	143	**143**	**288**
Hourly Total	513	**513**	507	**507**	**1020**
11:00AM	130	**130**	126	**126**	**256**
11:15AM	141	**141**	107	**107**	**248**
11:30AM	127	**127**	123	**123**	**250**
11:45AM	149	**149**	148	**148**	**297**
Hourly Total	547	**547**	504	**504**	**1051**
12:00PM	148	**148**	115	**115**	**263**
12:15PM	140	**140**	156	**156**	**296**
12:30PM	137	**137**	137	**137**	**274**
12:45PM	146	**146**	138	**138**	**284**
Hourly Total	571	**571**	546	**546**	**1117**
1:00PM	168	**168**	129	**129**	**297**
1:15PM	138	**138**	130	**130**	**268**
1:30PM	145	**145**	136	**136**	**281**
1:45PM	152	**152**	149	**149**	**301**
Hourly Total	603	**603**	544	**544**	**1147**
2:00PM	137	**137**	143	**143**	**280**
2:15PM	140	**140**	133	**133**	**273**
2:30PM	142	**142**	179	**179**	**321**
2:45PM	158	**158**	151	**151**	**309**
Hourly Total	577	**577**	606	**606**	**1183**
3:00PM	173	**173**	172	**172**	**345**
3:15PM	190	**190**	149	**149**	**339**
3:30PM	182	**182**	154	**154**	**336**
3:45PM	192	**192**	142	**142**	**334**
Hourly Total	737	**737**	617	**617**	**1354**
4:00PM	186	**186**	159	**159**	**345**
4:15PM	200	**200**	146	**146**	**346**
4:30PM	190	**190**	154	**154**	**344**
4:45PM	182	**182**	161	**161**	**343**
Hourly Total	758	**758**	620	**620**	**1378**
5:00PM	205	**205**	154	**154**	**359**
5:15PM	200	**200**	152	**152**	**352**
5:30PM	198	**198**	133	**133**	**331**
5:45PM	186	**186**	147	**147**	**333**
Hourly Total	789	**789**	586	**586**	**1375**
6:00PM	164	**164**	114	**114**	**278**
6:15PM	147	**147**	120	**120**	**267**
6:30PM	142	**142**	125	**125**	**267**
6:45PM	139	**139**	102	**102**	**241**
Hourly Total	592	**592**	461	**461**	**1053**
7:00PM	94	**94**	114	**114**	**208**
7:15PM	121	**121**	108	**108**	**229**
7:30PM	119	**119**	98	**98**	**217**
7:45PM	109	**109**	105	**105**	**214**
Hourly Total	443	**443**	425	**425**	**868**
8:00PM	116	**116**	75	**75**	**191**
8:15PM	109	**109**	76	**76**	**185**
8:30PM	78	**78**	69	**69**	**147**
8:45PM	80	**80**	67	**67**	**147**
Hourly Total	383	**383**	287	**287**	**670**
9:00PM	72	**72**	63	**63**	**135**
9:15PM	85	**85**	63	**63**	**148**
9:30PM	69	**69**	52	**52**	**121**
9:45PM	71	**71**	61	**61**	**132**
Hourly Total	297	**297**	239	**239**	**536**
10:00PM	60	**60**	47	**47**	**107**
10:15PM	40	**40**	47	**47**	**87**
10:30PM	59	**59**	39	**39**	**98**

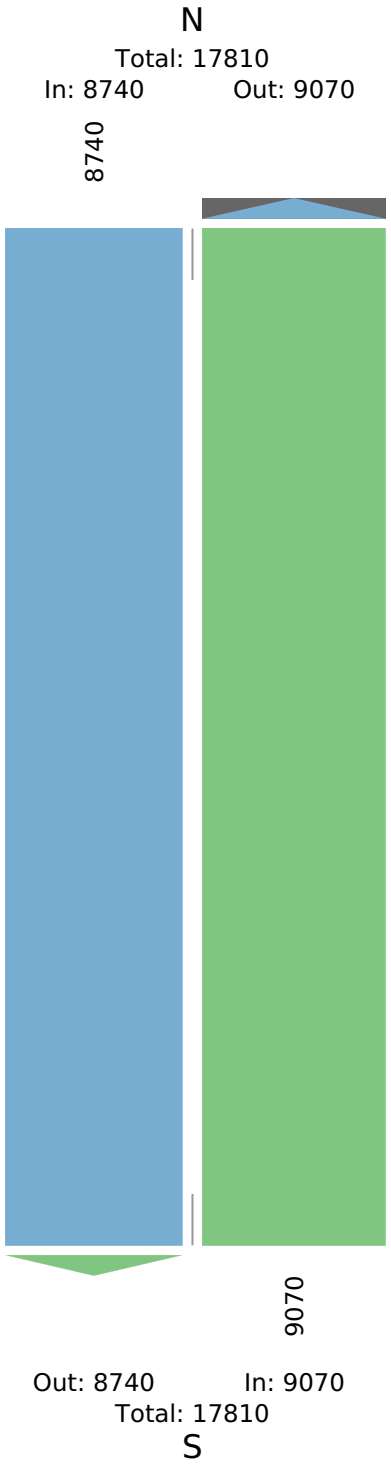
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
10:45PM	43	**43**	45	**45**	**88**
Hourly Total	202	**202**	178	**178**	**380**
11:00PM	25	**25**	40	**40**	**65**
11:15PM	32	**32**	34	**34**	**66**
11:30PM	33	**33**	25	**25**	**58**
11:45PM	35	**35**	25	**25**	**60**
Hourly Total	125	**125**	124	**124**	**249**
Total	9070	**9070**	8740	**8740**	**17810**
% Approach	100%	**-**	100%	**-**	-
% Total	50.9%	**50.9%**	49.1%	**49.1%**	-
Lights	8863	**8863**	8560	**8560**	17423
% Lights	97.7%	**97.7%**	97.9%	**97.9%**	97.8%
Single-Unit Trucks	91	**91**	80	**80**	171
% Single-Unit Trucks	1.0%	**1.0%**	0.9%	**0.9%**	1.0%
Articulated Trucks	30	**30**	28	**28**	58
% Articulated Trucks	0.3%	**0.3%**	0.3%	**0.3%**	0.3%
Buses	86	**86**	69	**69**	155
% Buses	0.9%	**0.9%**	0.8%	**0.8%**	0.9%
Bicycles on Road	0	**0**	3	**3**	3
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Simmons St north of Ann Rd - ATR

Tue May 11, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840138, Location: 36.263209, -115.179854

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St north of Ann Rd - ATR

Tue May 11, 2021
AM Peak (10 AM - 11 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840138, Location: 36.263209, -115.179854

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

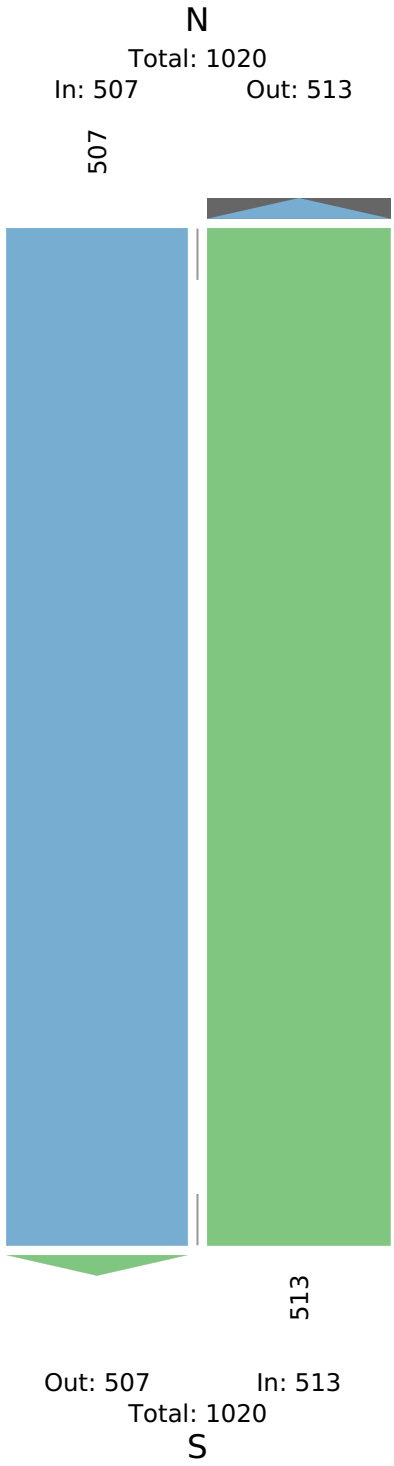
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 10:00AM	120	**120**	116	**116**	**236**
10:15AM	117	**117**	124	**124**	**241**
10:30AM	131	**131**	124	**124**	**255**
10:45AM	145	**145**	143	**143**	**288**
Total	513	**513**	507	**507**	**1020**
% Approach	100%	**-**	100%	**-**	-
% Total	50.3%	**50.3%**	49.7%	**49.7%**	-
PHF	0.884	**0.884**	0.886	**0.886**	0.885
Lights	497	**497**	489	**489**	986
% Lights	96.9%	**96.9%**	96.4%	**96.4%**	96.7%
Single-Unit Trucks	7	**7**	8	**8**	15
% Single-Unit Trucks	1.4%	**1.4%**	1.6%	**1.6%**	1.5%
Articulated Trucks	3	**3**	5	**5**	8
% Articulated Trucks	0.6%	**0.6%**	1.0%	**1.0%**	0.8%
Buses	6	**6**	5	**5**	11
% Buses	1.2%	**1.2%**	1.0%	**1.0%**	1.1%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Simmons St north of Ann Rd - ATR

Tue May 11, 2021
AM Peak (10 AM - 11 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840138, Location: 36.263209, -115.179854

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St north of Ann Rd - ATR

Tue May 11, 2021
Midday Peak (11:45 AM - 12:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840138, Location: 36.263209, -115.179854

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
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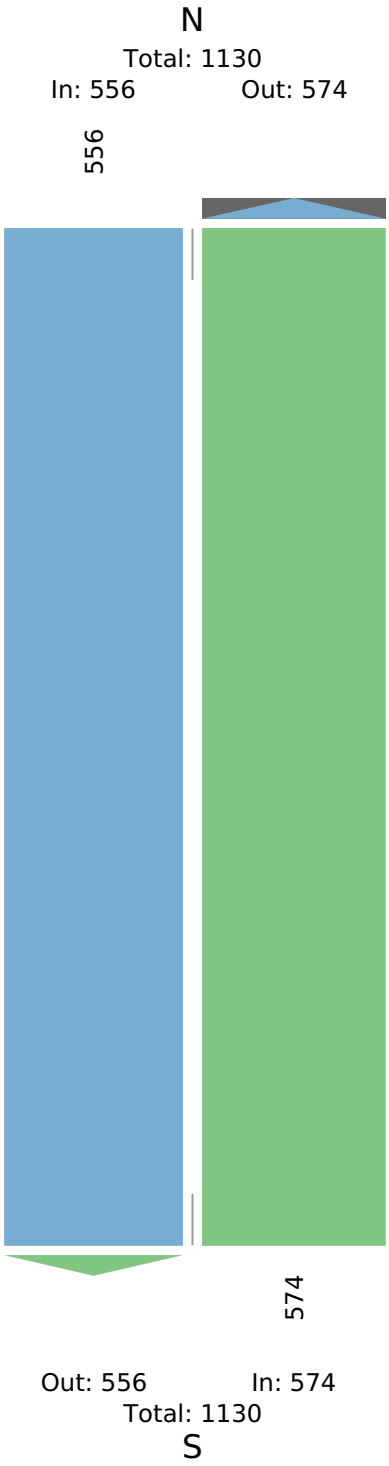
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 11:45AM	149	**149**	148	**148**	**297**
12:00PM	148	**148**	115	**115**	**263**
12:15PM	140	**140**	156	**156**	**296**
12:30PM	137	**137**	137	**137**	**274**
Total	574	**574**	556	**556**	**1130**
% Approach	100%	**-**	100%	**-**	-
% Total	50.8%	**50.8%**	49.2%	**49.2%**	-
PHF	0.963	**0.963**	0.891	**0.891**	0.951
Lights	548	**548**	543	**543**	1091
% Lights	95.5%	**95.5%**	97.7%	**97.7%**	96.5%
Single-Unit Trucks	11	**11**	4	**4**	15
% Single-Unit Trucks	1.9%	**1.9%**	0.7%	**0.7%**	1.3%
Articulated Trucks	3	**3**	2	**2**	5
% Articulated Trucks	0.5%	**0.5%**	0.4%	**0.4%**	0.4%
Buses	12	**12**	7	**7**	19
% Buses	2.1%	**2.1%**	1.3%	**1.3%**	1.7%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Simmons St north of Ann Rd - ATR

Tue May 11, 2021
Midday Peak (11:45 AM - 12:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840138, Location: 36.263209, -115.179854

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Simmons St north of Ann Rd - ATR

Tue May 11, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840138, Location: 36.263209, -115.179854

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

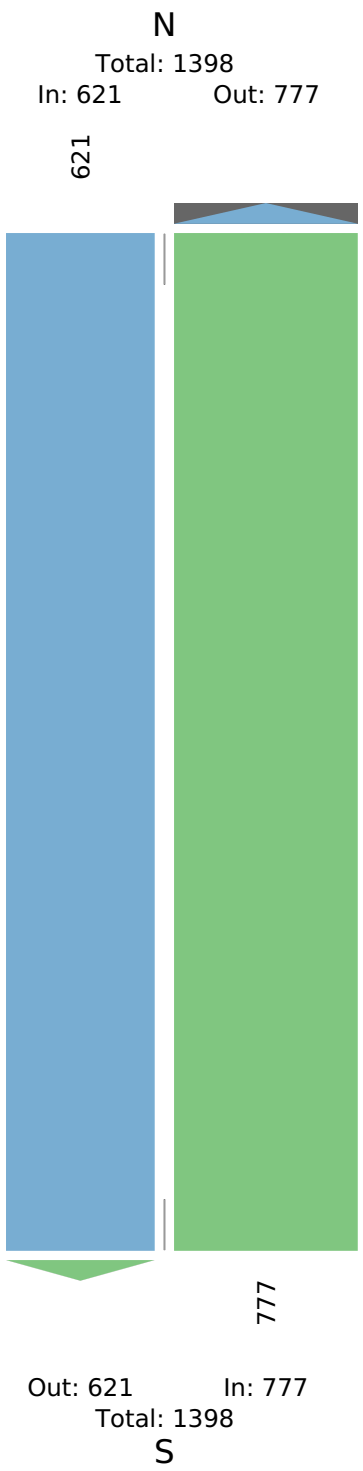
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-11 4:30PM	190	**190**	154	**154**	**344**
4:45PM	182	**182**	161	**161**	**343**
5:00PM	205	**205**	154	**154**	**359**
5:15PM	200	**200**	152	**152**	**352**
Total	777	**777**	621	**621**	**1398**
% Approach	100%	**-**	100%	**-**	-
% Total	55.6%	**55.6%**	44.4%	**44.4%**	-
PHF	0.948	**0.948**	0.964	**0.964**	0.974
Lights	770	**770**	611	**611**	1381
% Lights	99.1%	**99.1%**	98.4%	**98.4%**	98.8%
Single-Unit Trucks	1	**1**	3	**3**	4
% Single-Unit Trucks	0.1%	**0.1%**	0.5%	**0.5%**	0.3%
Articulated Trucks	2	**2**	3	**3**	5
% Articulated Trucks	0.3%	**0.3%**	0.5%	**0.5%**	0.4%
Buses	4	**4**	4	**4**	8
% Buses	0.5%	**0.5%**	0.6%	**0.6%**	0.6%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Simmons St north of Ann Rd - ATR

Tue May 11, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840138, Location: 36.263209, -115.179854

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Valley Dr north of Craig Rd - ATR

Tue May 18, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840139, Location: 36.240541, -115.198431

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 12:00AM	4	**4**	5	**5**	**9**
12:15AM	3	**3**	1	**1**	**4**
12:30AM	5	**5**	1	**1**	**6**
12:45AM	3	**3**	3	**3**	**6**
Hourly Total	15	**15**	10	**10**	**25**
1:00AM	5	**5**	2	**2**	**7**
1:15AM	1	**1**	3	**3**	**4**
1:30AM	4	**4**	3	**3**	**7**
1:45AM	1	**1**	3	**3**	**4**
Hourly Total	11	**11**	11	**11**	**22**
2:00AM	2	**2**	1	**1**	**3**
2:15AM	2	**2**	5	**5**	**7**
2:30AM	5	**5**	3	**3**	**8**
2:45AM	2	**2**	4	**4**	**6**
Hourly Total	11	**11**	13	**13**	**24**
3:00AM	3	**3**	0	**0**	**3**
3:15AM	3	**3**	5	**5**	**8**
3:30AM	0	**0**	2	**2**	**2**
3:45AM	2	**2**	8	**8**	**10**
Hourly Total	8	**8**	15	**15**	**23**
4:00AM	1	**1**	4	**4**	**5**
4:15AM	0	**0**	4	**4**	**4**
4:30AM	2	**2**	9	**9**	**11**
4:45AM	2	**2**	12	**12**	**14**
Hourly Total	5	**5**	29	**29**	**34**
5:00AM	3	**3**	11	**11**	**14**
5:15AM	4	**4**	18	**18**	**22**
5:30AM	2	**2**	16	**16**	**18**
5:45AM	5	**5**	27	**27**	**32**
Hourly Total	14	**14**	72	**72**	**86**
6:00AM	7	**7**	17	**17**	**24**
6:15AM	5	**5**	22	**22**	**27**
6:30AM	10	**10**	32	**32**	**42**
6:45AM	17	**17**	27	**27**	**44**
Hourly Total	39	**39**	98	**98**	**137**
7:00AM	14	**14**	34	**34**	**48**
7:15AM	22	**22**	24	**24**	**46**
7:30AM	28	**28**	51	**51**	**79**
7:45AM	44	**44**	59	**59**	**103**
Hourly Total	108	**108**	168	**168**	**276**
8:00AM	17	**17**	37	**37**	**54**
8:15AM	19	**19**	21	**21**	**40**
8:30AM	20	**20**	21	**21**	**41**
8:45AM	19	**19**	36	**36**	**55**
Hourly Total	75	**75**	115	**115**	**190**
9:00AM	15	**15**	31	**31**	**46**
9:15AM	14	**14**	28	**28**	**42**
9:30AM	13	**13**	24	**24**	**37**
9:45AM	18	**18**	36	**36**	**54**
Hourly Total	60	**60**	119	**119**	**179**
10:00AM	23	**23**	24	**24**	**47**
10:15AM	21	**21**	29	**29**	**50**
10:30AM	24	**24**	28	**28**	**52**

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
10:45AM	25	**25**	27	**27**	**52**
Hourly Total	93	**93**	108	**108**	**201**
11:00AM	22	**22**	23	**23**	**45**
11:15AM	22	**22**	37	**37**	**59**
11:30AM	16	**16**	34	**34**	**50**
11:45AM	38	**38**	25	**25**	**63**
Hourly Total	98	**98**	119	**119**	**217**
12:00PM	31	**31**	24	**24**	**55**
12:15PM	34	**34**	33	**33**	**67**
12:30PM	22	**22**	29	**29**	**51**
12:45PM	24	**24**	14	**14**	**38**
Hourly Total	111	**111**	100	**100**	**211**
1:00PM	23	**23**	27	**27**	**50**
1:15PM	22	**22**	30	**30**	**52**
1:30PM	33	**33**	29	**29**	**62**
1:45PM	22	**22**	32	**32**	**54**
Hourly Total	100	**100**	118	**118**	**218**
2:00PM	23	**23**	26	**26**	**49**
2:15PM	33	**33**	44	**44**	**77**
2:30PM	43	**43**	36	**36**	**79**
2:45PM	32	**32**	30	**30**	**62**
Hourly Total	131	**131**	136	**136**	**267**
3:00PM	35	**35**	51	**51**	**86**
3:15PM	16	**16**	32	**32**	**48**
3:30PM	40	**40**	45	**45**	**85**
3:45PM	31	**31**	40	**40**	**71**
Hourly Total	122	**122**	168	**168**	**290**
4:00PM	48	**48**	34	**34**	**82**
4:15PM	49	**49**	26	**26**	**75**
4:30PM	45	**45**	29	**29**	**74**
4:45PM	36	**36**	33	**33**	**69**
Hourly Total	178	**178**	122	**122**	**300**
5:00PM	48	**48**	46	**46**	**94**
5:15PM	53	**53**	39	**39**	**92**
5:30PM	45	**45**	34	**34**	**79**
5:45PM	39	**39**	39	**39**	**78**
Hourly Total	185	**185**	158	**158**	**343**
6:00PM	39	**39**	38	**38**	**77**
6:15PM	35	**35**	27	**27**	**62**
6:30PM	38	**38**	46	**46**	**84**
6:45PM	23	**23**	27	**27**	**50**
Hourly Total	135	**135**	138	**138**	**273**
7:00PM	28	**28**	26	**26**	**54**
7:15PM	30	**30**	23	**23**	**53**
7:30PM	23	**23**	21	**21**	**44**
7:45PM	22	**22**	19	**19**	**41**
Hourly Total	103	**103**	89	**89**	**192**
8:00PM	21	**21**	28	**28**	**49**
8:15PM	23	**23**	23	**23**	**46**
8:30PM	19	**19**	22	**22**	**41**
8:45PM	30	**30**	24	**24**	**54**
Hourly Total	93	**93**	97	**97**	**190**
9:00PM	26	**26**	14	**14**	**40**
9:15PM	17	**17**	13	**13**	**30**
9:30PM	9	**9**	10	**10**	**19**
9:45PM	11	**11**	4	**4**	**15**
Hourly Total	63	**63**	41	**41**	**104**
10:00PM	10	**10**	13	**13**	**23**
10:15PM	12	**12**	11	**11**	**23**
10:30PM	10	**10**	5	**5**	**15**

Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
10:45PM	11	**11**	9	**9**	**20**
Hourly Total	43	**43**	38	**38**	**81**
11:00PM	15	**15**	9	**9**	**24**
11:15PM	9	**9**	9	**9**	**18**
11:30PM	5	**5**	3	**3**	**8**
11:45PM	3	**3**	3	**3**	**6**
Hourly Total	32	**32**	24	**24**	**56**
Total	1833	**1833**	2106	**2106**	**3939**
% Approach	100%	**-**	100%	**-**	-
% Total	46.5%	**46.5%**	53.5%	**53.5%**	-
Lights	1794	**1794**	2054	**2054**	3848
% Lights	97.9%	**97.9%**	97.5%	**97.5%**	97.7%
Single-Unit Trucks	21	**21**	23	**23**	44
% Single-Unit Trucks	1.1%	**1.1%**	1.1%	**1.1%**	1.1%
Articulated Trucks	6	**6**	3	**3**	9
% Articulated Trucks	0.3%	**0.3%**	0.1%	**0.1%**	0.2%
Buses	8	**8**	20	**20**	28
% Buses	0.4%	**0.4%**	0.9%	**0.9%**	0.7%
Bicycles on Road	4	**4**	6	**6**	10
% Bicycles on Road	0.2%	**0.2%**	0.3%	**0.3%**	0.3%

*T: Thru

Valley Dr north of Craig Rd - ATR

Tue May 18, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840139, Location: 36.240541, -115.198431

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Valley Dr north of Craig Rd - ATR

Tue May 18, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840139, Location: 36.240541, -115.198431

Provided by: Kimley-Horn and Associates, Inc.
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Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 7:15AM	22	**22**	24	**24**	**46**
7:30AM	28	**28**	51	**51**	**79**
7:45AM	44	**44**	59	**59**	**103**
8:00AM	17	**17**	37	**37**	**54**
Total	111	**111**	171	**171**	**282**
% Approach	100%	**-**	100%	**-**	-
% Total	39.4%	**39.4%**	60.6%	**60.6%**	-
PHF	0.631	**0.631**	0.725	**0.725**	0.684
Lights	110	**110**	168	**168**	278
% Lights	99.1%	**99.1%**	98.2%	**98.2%**	98.6%
Single-Unit Trucks	0	**0**	1	**1**	1
% Single-Unit Trucks	0%	**0%**	0.6%	**0.6%**	0.4%
Articulated Trucks	0	**0**	0	**0**	0
% Articulated Trucks	0%	**0%**	0%	**0%**	0%
Buses	1	**1**	2	**2**	3
% Buses	0.9%	**0.9%**	1.2%	**1.2%**	1.1%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Valley Dr north of Craig Rd - ATR

Tue May 18, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840139, Location: 36.240541, -115.198431

Provided by: Kimley-Horn and Associates, Inc.
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Saint Paul, MN, 55114, US



Valley Dr north of Craig Rd - ATR

Tue May 18, 2021
Midday Peak (11:45 AM - 12:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840139, Location: 36.240541, -115.198431

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

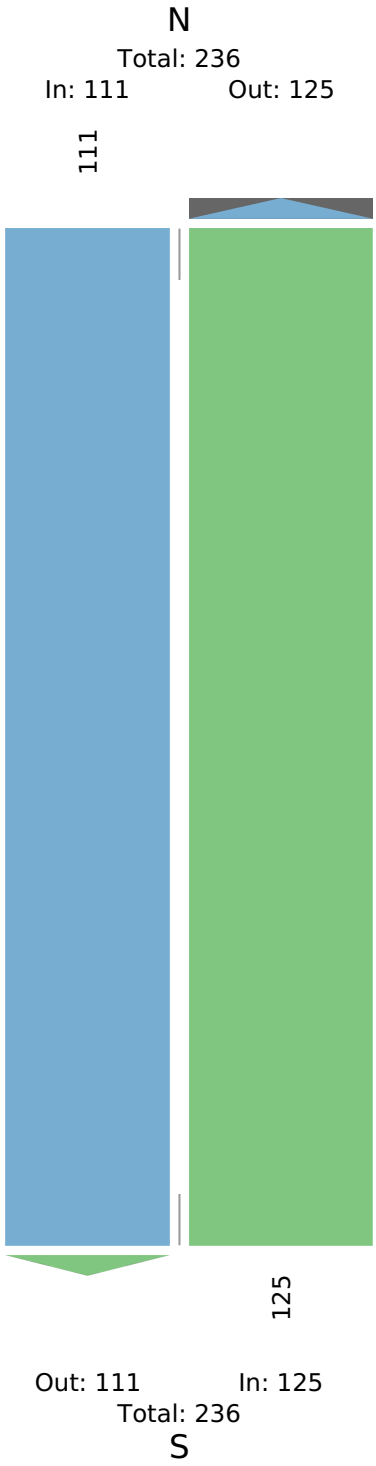
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 11:45AM	38	**38**	25	**25**	**63**
12:00PM	31	**31**	24	**24**	**55**
12:15PM	34	**34**	33	**33**	**67**
12:30PM	22	**22**	29	**29**	**51**
Total	125	**125**	111	**111**	**236**
% Approach	100%	**-**	100%	**-**	-
% Total	53.0%	**53.0%**	47.0%	**47.0%**	-
PHF	0.822	**0.822**	0.841	**0.841**	0.881
Lights	120	**120**	105	**105**	225
% Lights	96.0%	**96.0%**	94.6%	**94.6%**	95.3%
Single-Unit Trucks	1	**1**	1	**1**	2
% Single-Unit Trucks	0.8%	**0.8%**	0.9%	**0.9%**	0.8%
Articulated Trucks	2	**2**	1	**1**	3
% Articulated Trucks	1.6%	**1.6%**	0.9%	**0.9%**	1.3%
Buses	2	**2**	4	**4**	6
% Buses	1.6%	**1.6%**	3.6%	**3.6%**	2.5%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Valley Dr north of Craig Rd - ATR

Tue May 18, 2021
Midday Peak (11:45 AM - 12:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840139, Location: 36.240541, -115.198431

Provided by: Kimley-Horn and Associates, Inc.
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Valley Dr north of Craig Rd - ATR

Tue May 18, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840139, Location: 36.240541, -115.198431

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

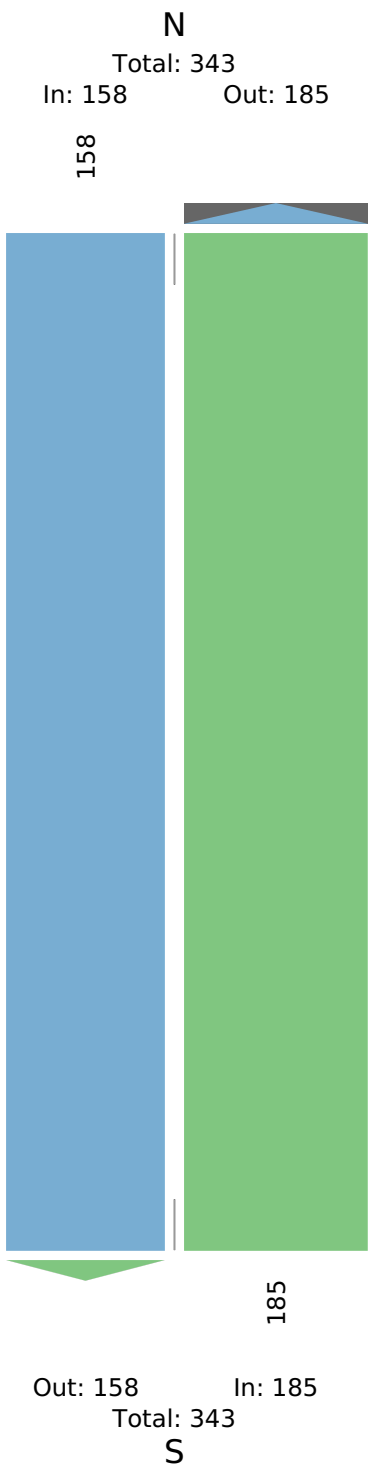
Leg Direction	South Northbound		North Southbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 5:00PM	48	**48**	46	**46**	**94**
5:15PM	53	**53**	39	**39**	**92**
5:30PM	45	**45**	34	**34**	**79**
5:45PM	39	**39**	39	**39**	**78**
Total	185	**185**	158	**158**	**343**
% Approach	100%	**-**	100%	**-**	-
% Total	53.9%	**53.9%**	46.1%	**46.1%**	-
PHF	0.868	**0.868**	0.859	**0.859**	0.919
Lights	183	**183**	156	**156**	339
% Lights	98.9%	**98.9%**	98.7%	**98.7%**	98.8%
Single-Unit Trucks	0	**0**	1	**1**	1
% Single-Unit Trucks	0%	**0%**	0.6%	**0.6%**	0.3%
Articulated Trucks	1	**1**	1	**1**	2
% Articulated Trucks	0.5%	**0.5%**	0.6%	**0.6%**	0.6%
Buses	0	**0**	0	**0**	0
% Buses	0%	**0%**	0%	**0%**	0%
Bicycles on Road	1	**1**	0	**0**	1
% Bicycles on Road	0.5%	**0.5%**	0%	**0%**	0.3%

*T: Thru

Valley Dr north of Craig Rd - ATR

Tue May 18, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840139, Location: 36.240541, -115.198431

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Washburn Rd between Lawerence St and Teal Pe... - ATR

Tue May 18, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840140, Location: 36.254245, -115.120545

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 12:00AM	17	**17**	15	**15**	**32**
12:15AM	9	**9**	11	**11**	**20**
12:30AM	10	**10**	10	**10**	**20**
12:45AM	7	**7**	9	**9**	**16**
Hourly Total	43	**43**	45	**45**	**88**
1:00AM	10	**10**	10	**10**	**20**
1:15AM	2	**2**	5	**5**	**7**
1:30AM	5	**5**	7	**7**	**12**
1:45AM	3	**3**	4	**4**	**7**
Hourly Total	20	**20**	26	**26**	**46**
2:00AM	9	**9**	4	**4**	**13**
2:15AM	4	**4**	6	**6**	**10**
2:30AM	6	**6**	7	**7**	**13**
2:45AM	9	**9**	2	**2**	**11**
Hourly Total	28	**28**	19	**19**	**47**
3:00AM	9	**9**	1	**1**	**10**
3:15AM	3	**3**	3	**3**	**6**
3:30AM	12	**12**	4	**4**	**16**
3:45AM	14	**14**	3	**3**	**17**
Hourly Total	38	**38**	11	**11**	**49**
4:00AM	8	**8**	6	**6**	**14**
4:15AM	13	**13**	6	**6**	**19**
4:30AM	16	**16**	4	**4**	**20**
4:45AM	14	**14**	10	**10**	**24**
Hourly Total	51	**51**	26	**26**	**77**
5:00AM	21	**21**	7	**7**	**28**
5:15AM	32	**32**	14	**14**	**46**
5:30AM	27	**27**	18	**18**	**45**
5:45AM	28	**28**	18	**18**	**46**
Hourly Total	108	**108**	57	**57**	**165**
6:00AM	38	**38**	26	**26**	**64**
6:15AM	48	**48**	21	**21**	**69**
6:30AM	47	**47**	33	**33**	**80**
6:45AM	48	**48**	34	**34**	**82**
Hourly Total	181	**181**	114	**114**	**295**
7:00AM	61	**61**	41	**41**	**102**
7:15AM	47	**47**	41	**41**	**88**
7:30AM	50	**50**	57	**57**	**107**
7:45AM	74	**74**	65	**65**	**139**
Hourly Total	232	**232**	204	**204**	**436**
8:00AM	64	**64**	44	**44**	**108**
8:15AM	49	**49**	43	**43**	**92**
8:30AM	38	**38**	48	**48**	**86**
8:45AM	49	**49**	37	**37**	**86**
Hourly Total	200	**200**	172	**172**	**372**
9:00AM	43	**43**	26	**26**	**69**
9:15AM	48	**48**	43	**43**	**91**
9:30AM	38	**38**	30	**30**	**68**
9:45AM	63	**63**	33	**33**	**96**
Hourly Total	192	**192**	132	**132**	**324**
10:00AM	41	**41**	41	**41**	**82**
10:15AM	34	**34**	50	**50**	**84**
10:30AM	39	**39**	46	**46**	**85**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
10:45AM	49	**49**	46	**46**	**95**
Hourly Total	163	**163**	183	**183**	**346**
11:00AM	47	**47**	46	**46**	**93**
11:15AM	60	**60**	45	**45**	**105**
11:30AM	45	**45**	60	**60**	**105**
11:45AM	54	**54**	50	**50**	**104**
Hourly Total	206	**206**	201	**201**	**407**
12:00PM	58	**58**	58	**58**	**116**
12:15PM	62	**62**	42	**42**	**104**
12:30PM	68	**68**	47	**47**	**115**
12:45PM	51	**51**	33	**33**	**84**
Hourly Total	239	**239**	180	**180**	**419**
1:00PM	50	**50**	42	**42**	**92**
1:15PM	46	**46**	39	**39**	**85**
1:30PM	50	**50**	60	**60**	**110**
1:45PM	70	**70**	52	**52**	**122**
Hourly Total	216	**216**	193	**193**	**409**
2:00PM	74	**74**	54	**54**	**128**
2:15PM	49	**49**	62	**62**	**111**
2:30PM	61	**61**	67	**67**	**128**
2:45PM	58	**58**	86	**86**	**144**
Hourly Total	242	**242**	269	**269**	**511**
3:00PM	54	**54**	80	**80**	**134**
3:15PM	87	**87**	67	**67**	**154**
3:30PM	68	**68**	89	**89**	**157**
3:45PM	72	**72**	65	**65**	**137**
Hourly Total	281	**281**	301	**301**	**582**
4:00PM	64	**64**	66	**66**	**130**
4:15PM	60	**60**	77	**77**	**137**
4:30PM	44	**44**	60	**60**	**104**
4:45PM	80	**80**	83	**83**	**163**
Hourly Total	248	**248**	286	**286**	**534**
5:00PM	70	**70**	74	**74**	**144**
5:15PM	77	**77**	65	**65**	**142**
5:30PM	47	**47**	67	**67**	**114**
5:45PM	62	**62**	81	**81**	**143**
Hourly Total	256	**256**	287	**287**	**543**
6:00PM	68	**68**	87	**87**	**155**
6:15PM	64	**64**	63	**63**	**127**
6:30PM	57	**57**	75	**75**	**132**
6:45PM	57	**57**	61	**61**	**118**
Hourly Total	246	**246**	286	**286**	**532**
7:00PM	45	**45**	53	**53**	**98**
7:15PM	56	**56**	63	**63**	**119**
7:30PM	50	**50**	70	**70**	**120**
7:45PM	51	**51**	44	**44**	**95**
Hourly Total	202	**202**	230	**230**	**432**
8:00PM	49	**49**	35	**35**	**84**
8:15PM	57	**57**	46	**46**	**103**
8:30PM	41	**41**	49	**49**	**90**
8:45PM	54	**54**	31	**31**	**85**
Hourly Total	201	**201**	161	**161**	**362**
9:00PM	44	**44**	37	**37**	**81**
9:15PM	34	**34**	38	**38**	**72**
9:30PM	35	**35**	34	**34**	**69**
9:45PM	28	**28**	31	**31**	**59**
Hourly Total	141	**141**	140	**140**	**281**
10:00PM	37	**37**	16	**16**	**53**
10:15PM	25	**25**	26	**26**	**51**
10:30PM	18	**18**	19	**19**	**37**

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
10:45PM	12	**12**	17	**17**	**29**
Hourly Total	92	**92**	78	**78**	**170**
11:00PM	13	**13**	17	**17**	**30**
11:15PM	17	**17**	22	**22**	**39**
11:30PM	23	**23**	13	**13**	**36**
11:45PM	7	**7**	18	**18**	**25**
Hourly Total	60	**60**	70	**70**	**130**
Total	3886	**3886**	3671	**3671**	**7557**
% Approach	100%	**-**	100%	**-**	-
% Total	51.4%	**51.4%**	48.6%	**48.6%**	-
Lights	3796	**3796**	3604	**3604**	7400
% Lights	97.7%	**97.7%**	98.2%	**98.2%**	97.9%
Single-Unit Trucks	41	**41**	28	**28**	69
% Single-Unit Trucks	1.1%	**1.1%**	0.8%	**0.8%**	0.9%
Articulated Trucks	9	**9**	14	**14**	23
% Articulated Trucks	0.2%	**0.2%**	0.4%	**0.4%**	0.3%
Buses	31	**31**	21	**21**	52
% Buses	0.8%	**0.8%**	0.6%	**0.6%**	0.7%
Bicycles on Road	9	**9**	4	**4**	13
% Bicycles on Road	0.2%	**0.2%**	0.1%	**0.1%**	0.2%

*T: Thru

Washburn Rd between Lawerence St and Teal Pe... - ATR
Tue May 18, 2021
Full Length (12 AM-12 AM (+1))
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840140, Location: 36.254245, -115.120545

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Washburn Rd between Lawerence St and Teal Pe... - ATR

Tue May 18, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840140, Location: 36.254245, -115.120545

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 7:30AM	50	**50**	57	**57**	**107**
7:45AM	74	**74**	65	**65**	**139**
8:00AM	64	**64**	44	**44**	**108**
8:15AM	49	**49**	43	**43**	**92**
Total	237	**237**	209	**209**	**446**
% Approach	100%	**-**	100%	**-**	-
% Total	53.1%	**53.1%**	46.9%	**46.9%**	-
PHF	0.801	**0.801**	0.813	**0.813**	0.806
Lights	234	**234**	196	**196**	430
% Lights	98.7%	**98.7%**	93.8%	**93.8%**	96.4%
Single-Unit Trucks	2	**2**	1	**1**	3
% Single-Unit Trucks	0.8%	**0.8%**	0.5%	**0.5%**	0.7%
Articulated Trucks	0	**0**	2	**2**	2
% Articulated Trucks	0%	**0%**	1.0%	**1.0%**	0.4%
Buses	1	**1**	9	**9**	10
% Buses	0.4%	**0.4%**	4.3%	**4.3%**	2.2%
Bicycles on Road	0	**0**	1	**1**	1
% Bicycles on Road	0%	**0%**	0.5%	**0.5%**	0.2%

*T: Thru

Washburn Rd between Lawerence St and Teal Pe... - ATR
Tue May 18, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840140, Location: 36.254245, -115.120545

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Washburn Rd between Lawerence St and Teal Pe... - ATR

Tue May 18, 2021
Midday Peak (11:45 AM - 12:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840140, Location: 36.254245, -115.120545

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 11:45AM	54	**54**	50	**50**	**104**
12:00PM	58	**58**	58	**58**	**116**
12:15PM	62	**62**	42	**42**	**104**
12:30PM	68	**68**	47	**47**	**115**
Total	242	**242**	197	**197**	**439**
% Approach	100%	**-**	100%	**-**	-
% Total	55.1%	**55.1%**	44.9%	**44.9%**	-
PHF	0.890	**0.890**	0.849	**0.849**	0.946
Lights	226	**226**	195	**195**	421
% Lights	93.4%	**93.4%**	99.0%	**99.0%**	95.9%
Single-Unit Trucks	4	**4**	1	**1**	5
% Single-Unit Trucks	1.7%	**1.7%**	0.5%	**0.5%**	1.1%
Articulated Trucks	1	**1**	1	**1**	2
% Articulated Trucks	0.4%	**0.4%**	0.5%	**0.5%**	0.5%
Buses	11	**11**	0	**0**	11
% Buses	4.5%	**4.5%**	0%	**0%**	2.5%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Washburn Rd between Lawerence St and Teal Pe... - ATR

Tue May 18, 2021
Midday Peak (11:45 AM - 12:45 PM)
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840140, Location: 36.254245, -115.120545

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Washburn Rd between Lawerence St and Teal Pe... - ATR

Tue May 18, 2021
PM Peak (2:45 PM - 3:45 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840140, Location: 36.254245, -115.120545

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	West Eastbound		East Westbound		
Time	T	**App**	T	**App**	**Int**
2021-05-18 2:45PM	58	**58**	86	**86**	**144**
3:00PM	54	**54**	80	**80**	**134**
3:15PM	87	**87**	67	**67**	**154**
3:30PM	68	**68**	89	**89**	**157**
Total	267	**267**	322	**322**	**589**
% Approach	100%	**-**	100%	**-**	-
% Total	45.3%	**45.3%**	54.7%	**54.7%**	-
PHF	0.767	**0.767**	0.904	**0.904**	0.938
Lights	259	**259**	315	**315**	574
% Lights	97.0%	**97.0%**	97.8%	**97.8%**	97.5%
Single-Unit Trucks	3	**3**	3	**3**	6
% Single-Unit Trucks	1.1%	**1.1%**	0.9%	**0.9%**	1.0%
Articulated Trucks	0	**0**	2	**2**	2
% Articulated Trucks	0%	**0%**	0.6%	**0.6%**	0.3%
Buses	5	**5**	2	**2**	7
% Buses	1.9%	**1.9%**	0.6%	**0.6%**	1.2%
Bicycles on Road	0	**0**	0	**0**	0
% Bicycles on Road	0%	**0%**	0%	**0%**	0%

*T: Thru

Washburn Rd between Lawerence St and Teal Pe... - ATR

Tue May 18, 2021
PM Peak (2:45 PM - 3:45 PM) - Overall Peak Hour
All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses, Bicycles on Road)
All Channels
ID: 840140, Location: 36.254245, -115.120545

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
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ATTACHMENT C

VEHICLE CLASSIFICATION CALCULATIONS

CNLV Comprehensive Master Transportation Plan - Vehicle Classification (Truck Percentage) Calculation

Mid-Block Location	Location	2021 AADT	2018 NDOT AADT*	Truck AADT (NDOT)	% Trucks (Counts)	% Trucks (NDOT)
7	Craig Rd between Valley Dr and Allen Ln	31,000	47,500	1,276	1.8%	2.7%
8	Craig Rd west of N 5th St	40,000			2.7%	2.7%

Source: NDOT Traffic Records Information Access

** The average of NDOT stations 0031617 and station 0035300*

Route	Light Trucks			Heavy Trucks						Total
	Single Unit			Semi Trailer			Multi Trailer			
	Bus	2 Ax	3+ Ax	4 Ax	5 Ax	6 Ax	5 Ax	6 Ax	7 Ax	
Craig Road (SR 573)	122	480	165	256	200	11	4	1	37	1276

Source: NDOT 2019 Vehicle Classification Distribution Report

Note: Vehicle classification information for SR 573 is from 2018.

NDOT Station	2018 AADT
0031617	51,000
0035300	44,000
Average	47,500

2019

Vehicle Classification Distribution Report

By Route

Compiled by
Nevada Department of Transportation
Traffic Information Division
1263 S. Stewart St.
Carson City, NV 89712

Printed June
2020

PREFACE

This report presents Vehicle Classification distributions by roadway segment for the majority of the State Maintained Highway System. The roadway segments are considered to be homogeneous in nature with regard to truck volumes. Truck volumes for each segment represented were taken at a point within a segment where traffic volume counts are conducted annually. Multiple Volume count locations may be represented throughout a Vehicle Classification count segment. Therefore truck percent may vary from volume count to volume count. Using the formula below, apply the number of trucks from the Classification count to the Annual Average Daily Traffic (AADT) from the volume count locations (provided in this book) within the truck segment. This will result with the truck percent of the given segment.

*<u>*Example:</u>*

Route	Segment Description						Light Trucks			Heavy Trucks						Data Year
							Single Unit			Semi Trailer			Multi Trailer			
	From	County M. P.		To	County M. P.		Bus	2 Ax	3+ Ax	4 Ax	5 Ax	6 Ax	5 Ax	6 Ax	7 Ax	
IR15	CA / NV state line	CL	0.000	St Rose Pkwy Intchg	CL	27.818	351	689	129	235	4,995	29	321	134	56	2016

The above classification count covers an area that has 4 volume stations within the “From and To” (0031110, 0030840, 0035360 and 0030842).

- Formula: Trucks/AADT = Truck Percentage
- The total number of trucks (Light Trucks + Heavy Trucks) is 6,939
- The AADT for site 0031110 is 44,500 6,939/44,500 = 15.59% Trucks
  0030840 is 47,000 6,939/47,000 = 14.76% Trucks
  0035360 is 49,500 6,939/49,500 = 14.02% Trucks
  0030842 is 50,000 6,939/50,000 = 13.88% Trucks

* *The data used in this example may not current and should not be used in determining the most up to date truck percentages. Please refer to the charts provided in this report for the most recent data.*

The data collection provided is in direct conjunction with the Nevada Department of Transportation, Traffic Information Division's Annual Traffic data collection plan.

Each Segment of roadway is identified by a "Begin and End" point in two different manners.

1. From and To Physical location (example: CA / NV Stateline)
2. County mile point (example : CL 0.00)

Data is collected using one of the following methods:

1. Permanent Continuous Weigh In Motion (WIM) – (up to 365 days per year 24 hours per day)
2. Permanent Continuous Automatic Vehicle Classification (AVC) – (up to 365 day per year 24 hours per day)
3. Short Term AVC – (up to 7 continuous days 24 hours per day)
4. Manual Classification – (24 to 48 continuous hours, [by manual observation])

Vehicle Classification distributions are based on number of axles as defined by the Federal Highway Administration (FHWA).

The “Year of Data” column indicates the last time data was collected in the segment. An “E” in the column indicates that data collection was last done prior to 2015. Therefore the data is estimated based primarily on the adjacent segments data.

Some segments in this report show no data at this time. This is due to adding locations which prior to 2019 were not being collected. This report is expected to be dynamic, it likely will expand in scope as we determine the need for vehicle classification data collection on routes which we have not collected data. We may also determine that consecutive segments of roadway are actually homogeneous, allowing for the elimination of data collection at some sites.

For more detailed information, or for vehicle classification data on routes not covered in this report please contact:

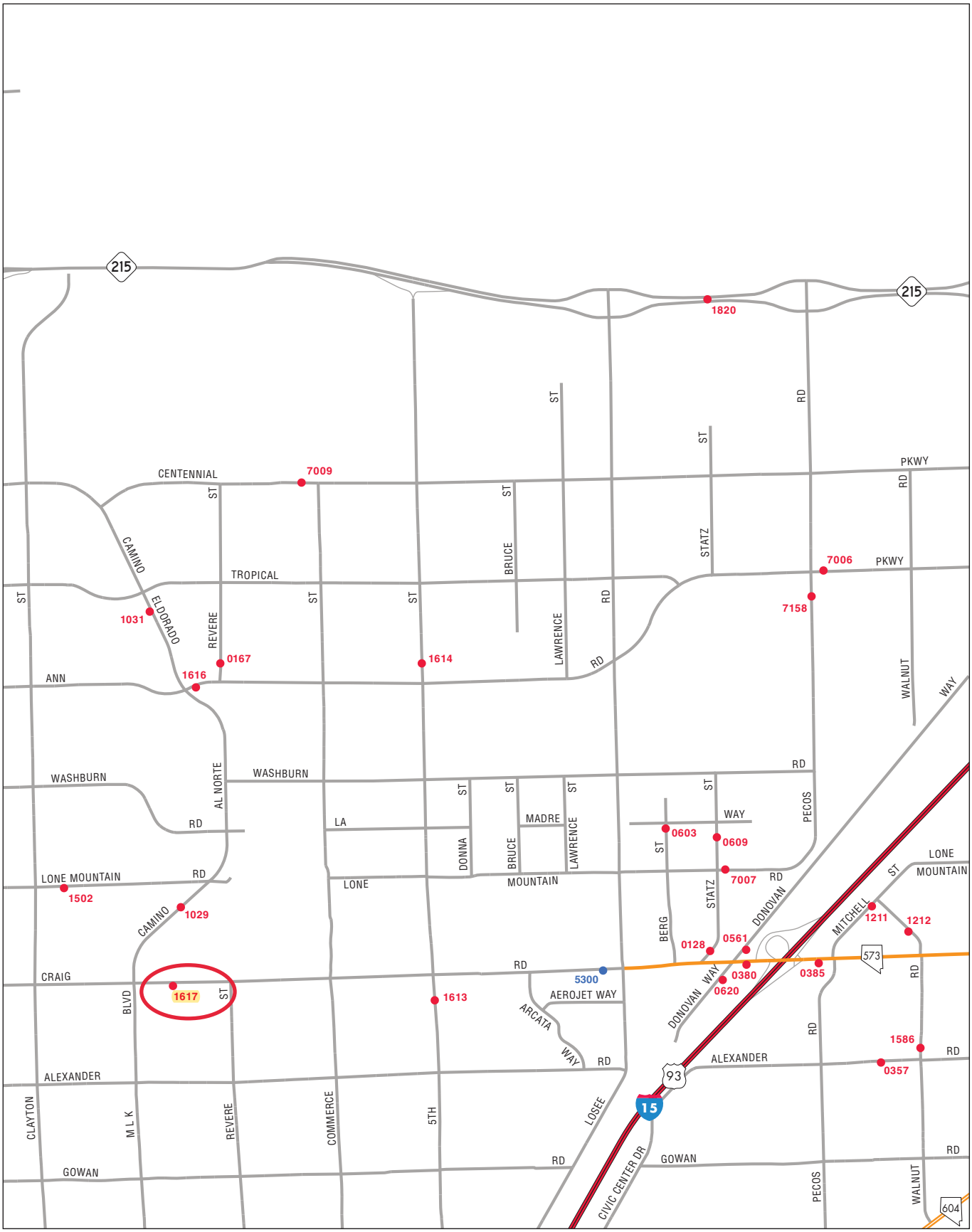
Nevada Department of Transportation,
Traffic Information Division
Vehicle Size and Weight Manager
(775) 888-7536.

STATE OF NEVADA

AVERAGE DAY VEHICLE CLASSIFICATION DISTRIBUTION REPORT

By Route

Route	Segment Description						Light Trucks			Heavy Trucks						Data Year
							Single Unit			Semi Trailer			Multi Trailer			
	From	County	M. P.	To	County	M. P.	Bus	2 Ax	3+ Ax	4 Ax	5 Ax	6 Ax	5 Ax	6 Ax	7 Ax	
SR520	SR529 (S. Carson St.)	CC	0.000	SR530 (William St.)	CC	1.224	25	64	14	10	15	1	2	0	1	2017
SR525	Graves Ln.	CC	2.873	US50	CC	4.105	3	78	26	4	30	1	0	0	8	2019
SR529	US50 (Spooner Jct.)	CC	0.000	Fairview Dr.	CC	1.997	15	147	69	44	64	1	0	2	1	2018
SR529	Fairview Dr.	CC	0.000	SR520 (Stewart St)	CC	0.247	27	147	43	39	50	1	7	4	3	E
SR529	SR520 (Stewart St)	CC	0.247	SR530 (William St.)	CC	0.783	38	147	16	34	36	0	13	6	5	2015
SR529	SR530 (Williams St.)	CC	0.783	SR531 (College Pkwy)	CC	2.879	34	130	18	19	31	0	7	3	4	E
SR529	SR531 (College Pkwy)	CC	2.879	IR580 / US395 (Carson Bypass)	CC	3.399	30	113	20	4	26	0	1	0	2	2018
SR530	SR529 (Carson St.)	CC	0.000	US395 (Carson By-Pass)	CC	1.347	25	895	47	48	36	3	3	1	1	2015
SR531	SR529 (North Carson St)	CC	1.015	Graves Ln.	CC	2.873	3	115	41	2	20	0	0	0	0	2018
SR535	West Urban Limit	EL	0.000	End State Maintained	EL	4.360	105	476	62	63	87	6	11	2	45	2017
SR562	Las Vegas Blvd (SR604)	CL	0.000	Mountain Vista	CL	8.600	365	257	37	56	190	0	3	1	0	2016
SR562	Mountain Vista	CL	8.600	US95	CL	10.906	114	393	124	73	118	320	11	9	16	2017
SR573	SR599 (Rancho Rd.)	CL	0.928	IR15	CL	5.823	122	480	165	256	200	11	4	1	37	2018
SR574	US95 (OK Hwy.)	CL	0.000	MLK Blvd.	CL	4.906	112	809	408	13	119	10	2	0	16	2018
SR574	MLK Blvd	CL	4.906	SR612 (Nellis Blvd.)	CL	10.443	108	905	364	30	539	16	73	3	52	2019
SR579	SR599 (Rancho Rd.)	CL	0.000	SR604 (Las Vegas Blvd.)	CL	2.204	45	294	52	9	64	1	3	1	31	2019
SR579	Las Vegas Blvd. (SR604)	CL	0.000	SR612 (Nellis Blvd.)	CL	4.203	19	320	22	4	24	0	0	0	3	2018
SR582	US95 (Wagonwheel)	CL	0.000	SR612 (Nellis Blvd.)	CL	11.118	195	305	104	165	49	2	6	1	0	2017
SR582	SR612 (Nellis Blvd.)	CL	11.118	Maryland Pkwy	CL	16.420	20	133	78	1	4	0	0	0	1	2019
SR589	Rainbow Blvd.	CL	0.000	Las Vegas Blvd (SR604)	CL	4.787	86	797	69	24	62	2	3	0	25	2019
SR589	SR604 (Las Vegas Blvd.)	CL	4.787	Nellis Blvd. (SR612)	CL	10.018	27	502	35	12	32	4	0	0	12	2018
SR592	Rainbow Blvd.	CL	0.000	SR604 (Las Vegas Blvd.)	CL	3.586	161	246	112	85	68	3	11	2	7	2017
SR592	SR604 (Las Vegas Blvd.)	CL	3.586	SR582 (Boulder Hwy	CL	8.480	58	607	137	6	77	3	4	0	13	2019
SR593	Rainbow	CL	4.560	IR15	CL	10.838	275	225	85	100	90	5	5	5	5	E
SR593	IR15	CL	0.000	IR515	CL	5.656	74	666	64	15	56	4	0	0	5	2019
SR593	IR515	CL	5.656	Boulder Hwy. SR 582	CL	7.415	182	732	123	12	95	5	1	0	15	2019
SR594	Paradise	CL	0.000	Sandhill	CL	10.413	35	344	53	2	22	1	1	0	2	2019
SR594	Sandhill Rd.	CL	10.413	IR515	CL	12.755	47	474	55	4	40	1	0	0	3	2019
SR595	SR160 (Pahrump Valley Rd.)	CL	2.643	SR593 (Tropicana Blvd.)	CL	14.904	87	96	37	9	57	1	3	1	3	E
SR595	SR593 (Tropicana Blvd.)	CL	0.000	Rainbow Blvd. Intchg. (US 95)	CL	5.532	87	1,334	87	45	86	6	0	0	23	2019
SR596	SR593 (Tropicana Av)	CL	0.000	US-95	CL	5.151	33	433	32	8	20	1	0	0	3	2019
SR596	US95	CL	5.151	Rancho Rd	CL	9.208	22	340	36	3	12	0	0	0	1	2019
SR599	US95	CL	0.300	SR574 (Cheyenne Av)	CL	3.880	51	848	48	13	51	1	0	0	6	2019
SR599	SR574 (Cheyenne Av)	CL	3.880	US-95 (Ann / Rancho Rd Intchg.)	CL	6.947	47	417	96	5	34	2	1	0	5	2018
SR604	IR-15	CL	0.000	SR146 Saint Rose Pkwy	CL	15.660	9	27	11	3	31	3	4	0	79	2019
SR604	SR146 Saint Rose Pkwy	CL	15.660	SR593 (Tropicana Ave.)	CL	24.789	90	107	20	9	12	0	1	0	0	2017
SR604	SR593 (Tropicana Ave.)	CL	24.789	SR147 (Lake Mead Blvd)	CL	31.449	370	229	18	115	11	0	3	1	1	2017
SR604	SR147 (Lake Mead Blvd)	CL	31.449	IR15	CL	44.578	47	14	51	7	73	2	0	0	7	2019
SR606	Russell Rd.	CL	3.608	Charleston Blvd	CL	8.453	122	171	33	154	20	0	8	1	1	2017
SR607	SR562 (Sunset Rd)	CL	7.496	SR159 (Charleston Blvd)	CL	13.515	50	808	115	13	59	1	1	0	6	2019
SR607	SR159 (Charleston Blvd)	CL	13.515	SR604 (Las Vegas Blvd)	CL	15.459	54	370	75	7	53	0	0	0	2	2018
SR610	SR159 (Charleston Blvd)	CL	2.044	SR604 (Las Vegas Blvd)	CL	6.627	88	939	172	41	197	8	10	4	51	2019
SR610	SR604 (Las Vegas Blvd)	CL	6.627	IR15	CL	8.997	52	167	235	58	200	14	96	8	102	2017
SR612	SR593 (Tropicana Av)	CL	0.000	Washington Ave	CL	5.631	163	218	75	23	55	1	6	0	2	2019
SR612	Washington Ave	CL	5.631	SR604 Las Vegas Blvd.	CL	9.400	78	447	232	22	292	13	1	0	89	2018



Las Vegas
Urbanized Area

MILES
0 0.5 1

N

Sheet A-3
Clark (003)

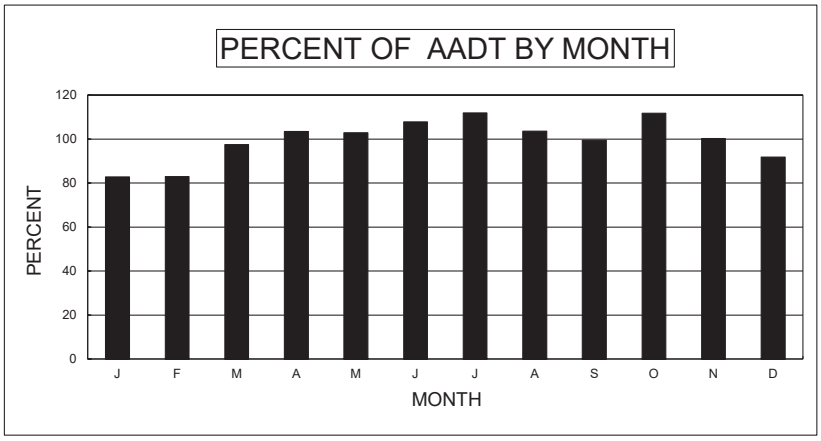
Station	Route Location	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	2015 AADT	2016 AADT	2017 AADT	2018 AADT	2019 AADT
0031607	El Capitan Way, 310ft S of Spring Mountain Rd					3500	4700	3900	3900	4100	4150
0031608	Durango Dr, 150ft N of Reno Ave					26400	23100	23500	33000	35000	30500
0031609	Wyoming Ave, 350ft E of Lamb Blvd				3500	3800	4200	4600	5300	5300	4750
0031610	Warm Springs Rd, 230ft E of Marilissa Ln				26500	27500	27500	32000	33000	29600	34000
0031611	Gibson Rd, 715ft N of Paseo Verde Pkwy					9700	12000	13000	15000	14400	15700
0031612	N 5th St, 500ft N of SR574 (Cheyenne Ave)	11000	11000	11000	8100	11000	11000	14000	19000	19800	18400
0031613	N 5th St, 300ft S of Craig Rd	8100	8100	8000	8000	8000	9300	12000	16000	15800	16500
0031614	5th St, 210ft N of El Campo Grande Ave						10000	10000	12000	11700	13500
0031616	Ann Rd, 325ft E of Camino Al Norte	11000	11000	11000	11000	11000	12500	17000	14000	13600	15800
0031617	Craig Rd, 240ft W of Home Depot Rd						41500	48500	51000	51000	53000
0031618	IR15, S/B off-ramp of the Blue Diamond Intch 'Exit 33' to WB Blue Diamond						18000	19000	20000	20800	21300
0031625	Allen Ln, 750ft S of Ann Rd	4000	4000	4000	4000	4000	5000	5500	4900	5400	5700
0031627	US95, NB off-ramp of Centennial Intch 'Exit 91A' to EB CC215							8500	15000	18700	19600
0031647	Arrowhead Ln, 185ft S of E Mesquite Blvd							1200	1200	1150	1200
0031648	Warm Springs Rd, 430ft W of N Water St							6900	7700	8850	9300
0031649	Warm Springs Rd, 115ft E of Racetrack Rd							250	400	340	340
0031650	Galleria Dr, 165ft S of Calico Ridge Dr							3300	4200	4800	6000
0031651	Via Inspirada, 690ft S of Volunteer Blvd							12000	13000	14000	16000
0031652	Barbara Ln, 265ft W of Gilespie St							3500	3000	2650	2700

Color indicates that the AADT value is estimated

ATR 0031120

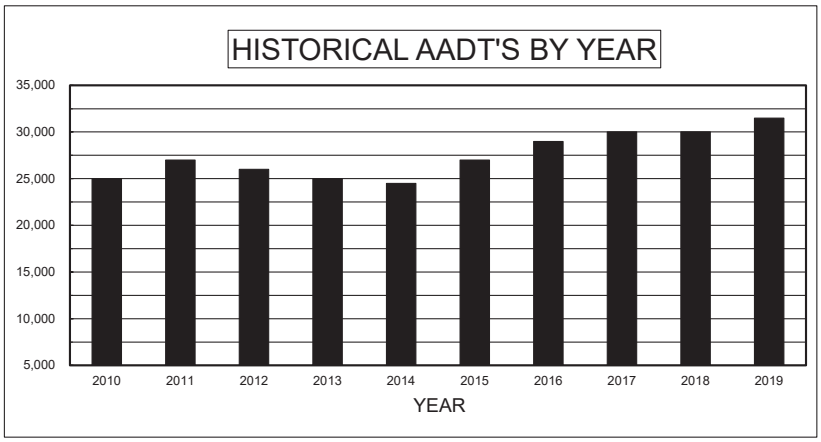
IR15 1.5 mi N of SR604 (Apex Intch 'Exit 58')

MONTHLY PERCENT		
MONTH	MADT	% OF AADT
JANUARY	26,064	82.7%
FEBRUARY	26,116	82.9%
MARCH	30,721	97.5%
APRIL	32,576	103.4%
MAY	32,398	102.9%
JUNE	33,958	107.8%
JULY	35,258	111.9%
AUGUST	32,654	103.7%
SEPTEMBER	31,370	99.6%
OCTOBER	35,180	111.7%
NOVEMBER	31,576	100.2%
DECEMBER	28,930	91.8%



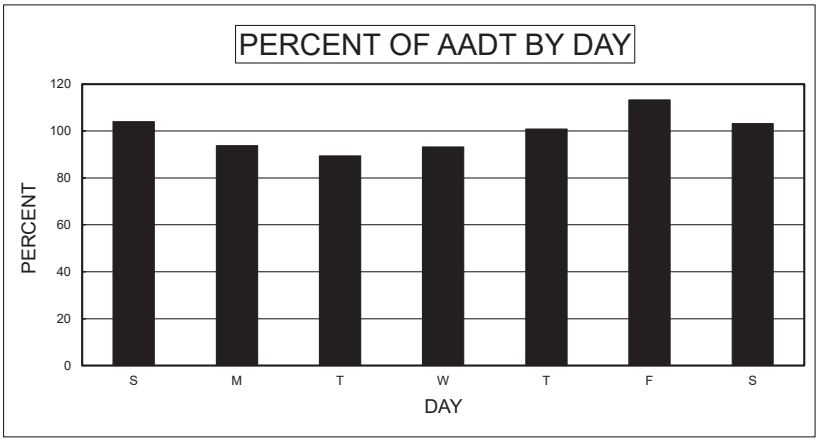
Nov-Dec Estimated

HISTORICAL RECORD		
YEAR	AADT	% OF PREVIOUS YEAR
2019	31,500	105.0%
2018	30,000	100.0%
2017	30,000	103.4%
2016	29,000	107.4%
2015	27,000	110.2%
2014	24,500	98.0%
2013	25,000	96.2%
2012	26,000	96.3%
2011	27,000	108.0%
2010	25,000	104.2%



2012, 2017-2019 Estimated

DAY OF WEEK		
DAY	ADT	% OF AADT
SUN	32,750	104.0%
MON	29,540	93.8%
TUE	28,167	89.4%
WED	29,350	93.2%
THU	31,788	100.9%
FRI	35,701	113.3%
SAT	32,506	103.2%
AVG WEEKDAY	29,711	94.3%
AVG WEEKEND	32,628	103.6%



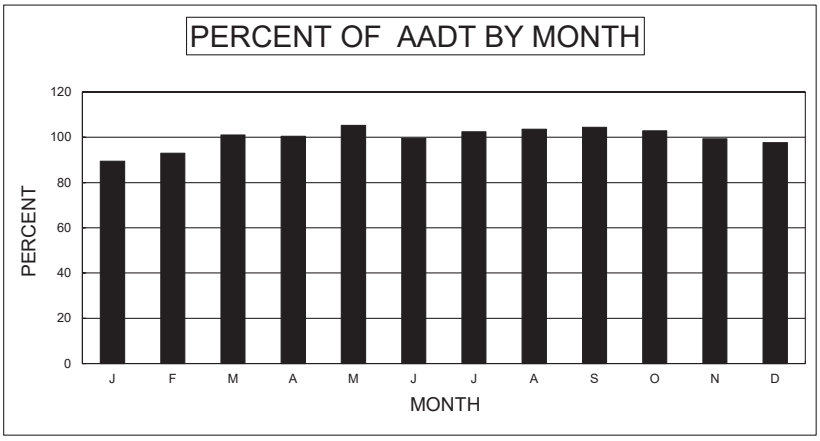
PERCENT DESIGN HOUR VOLUME (DHV) IS OF ANNUAL AVERAGE	11.54%
PERCENT HIGH DIRECTION IS OF DHV	94.78%

ATR 0031230

IR15 .7 mi N of SR147 Lake Mead Intch 'Exit 45'

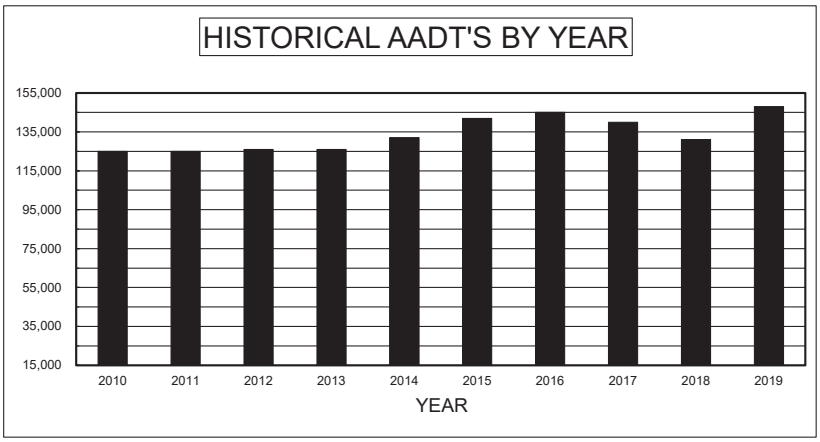
MONTHLY PERCENT

MONTH	MADT	% OF AADT
JANUARY	132,238	89.4%
FEBRUARY	137,611	93.0%
MARCH	149,483	101.0%
APRIL	148,681	100.5%
MAY	155,717	105.2%
JUNE	147,362	99.6%
JULY	151,609	102.4%
AUGUST	153,277	103.6%
SEPTEMBER	154,493	104.4%
OCTOBER	152,181	102.8%
NOVEMBER	146,989	99.3%
DECEMBER	144,538	97.7%



HISTORICAL RECORD

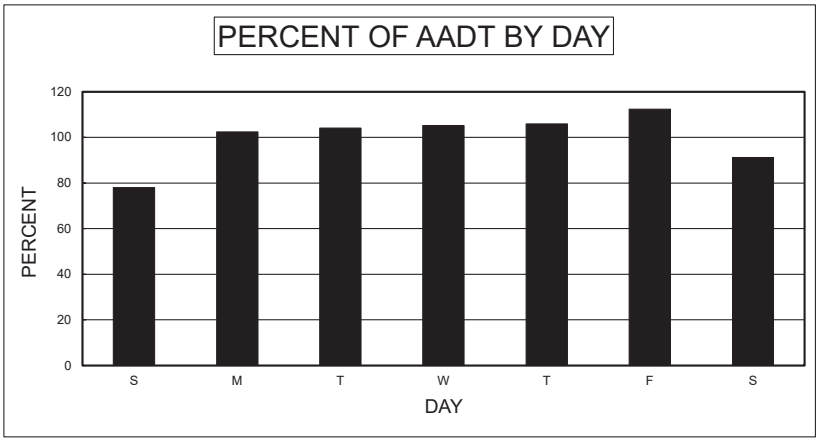
YEAR	AADT	% OF PREVIOUS YEAR
2019	148,000	113.0%
2018	131,000	93.6%
2017	140,000	96.6%
2016	145,000	102.1%
2015	142,000	107.6%
2014	132,000	104.8%
2013	126,000	100.0%
2012	126,000	100.8%
2011	125,000	100.0%
2010	125,000	111.6%



2012 - 2016 ESTIMATED

DAY OF WEEK

DAY	ADT	% OF AADT
SUN	115,491	78.0%
MON	151,571	102.4%
TUE	154,001	104.1%
WED	155,784	105.3%
THU	156,810	106.0%
FRI	166,402	112.4%
SAT	134,878	91.1%
AVG WEEKDAY	154,542	104.4%
AVG WEEKEND	125,185	84.6%

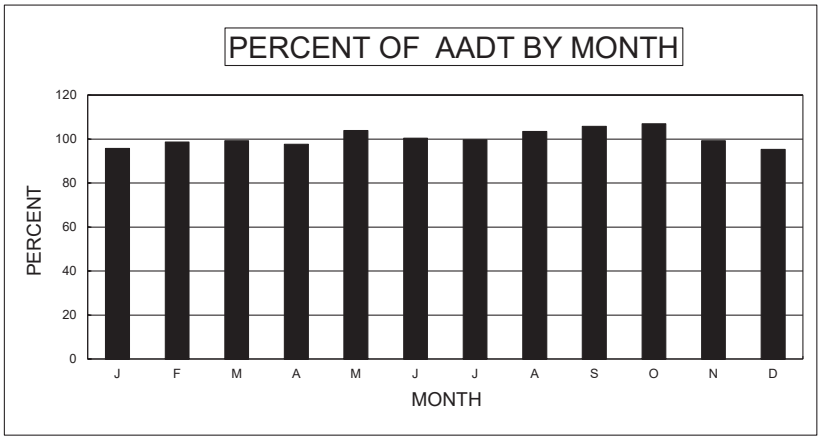


PERCENT DESIGN HOUR VOLUME (DHV) IS OF ANNUAL AVERAGE	7.42%
PERCENT HIGH DIRECTION IS OF DHV	50.80%

ATR 0035300

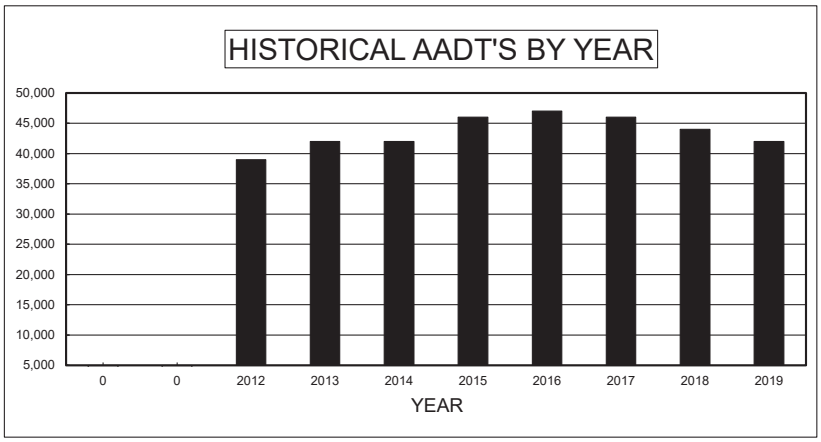
Craig Rd 715ft W of Lawrence St

MONTHLY PERCENT		
MONTH	MADT	% OF AADT
JANUARY	40,240	95.8%
FEBRUARY	41,439	98.7%
MARCH	41,683	99.2%
APRIL	40,988	97.6%
MAY	43,656	103.9%
JUNE	42,189	100.5%
JULY	41,855	99.7%
AUGUST	43,465	103.5%
SEPTEMBER	44,423	105.8%
OCTOBER	44,946	107.0%
NOVEMBER	41,704	99.3%
DECEMBER	40,008	95.3%



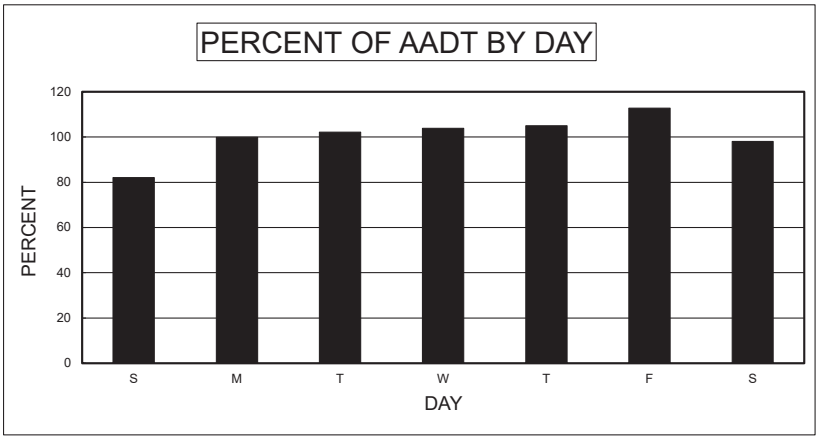
Nov-Dec Estimated

HISTORICAL RECORD		
YEAR	AADT	% OF PREVIOUS YEAR
2019	42,000	95.5%
2018	44,000	95.7%
2017	46,000	97.9%
2016	47,000	102.2%
2015	46,000	109.5%
2014	42,000	100.0%
2013	42,000	107.7%
2012	39,000	-



2016; 2019 ESTIMATED

DAY OF WEEK		
DAY	ADT	% OF AADT
SUN	34,459	82.0%
MON	41,929	99.8%
TUE	42,921	102.2%
WED	43,614	103.8%
THU	44,089	105.0%
FRI	47,328	112.7%
SAT	41,175	98.0%
AVG WEEKDAY	43,138	102.7%
AVG WEEKEND	37,817	90.0%



PERCENT DESIGN HOUR VOLUME (DHV) IS OF ANNUAL AVERAGE	7.92%
PERCENT HIGH DIRECTION IS OF DHV	53.23%

APPENDIX D

AREAS OF EQUITY NEED

DRAFT MEMORANDUM

To: ***RTC of Southern Nevada***

From: ***Dan Andersen and Adrienne Heller, Cambridge Systematics***

Date: ***1/7/22***

RE: ***City of North Las Vegas Comprehensive Master Transportation Plan – Equity Assessment Methodology***

Overview

The City of North Las Vegas Comprehensive Master Transportation Plan aims to update the functional classifications for roadways within the City and will provide typical cross sections for each Right-of-Way width. The typical cross sections will take into account the context of the land uses along each roadway corridor and will incorporate elements from the City's Complete Streets Policy. The study will update the existing network of truck routes as defined within the Municipal Code and address the roadway network within the Apex Industrial Area.

The Comprehensive Master Transportation Plan will reflect the transportation needs of Equity Focus Communities, such as access to transit, employment centers, medical services, shopping districts, etc., and safe bike and pedestrian facilities. Adverse impacts will be avoided, such as bisecting communities and disproportionate environmental impacts.

Federal Guidance and Best Practices Defining Equity Focus Areas

Historically, the US Department of Transportation (USDOT) and Federal Highway Administration (FHWA) have focused on equity through guidance on environmental justice, which the FHWA defines as the fair treatment and meaningful involvement of all people, regardless of race, ethnicity, income, national origin, or education level with respect to the development, implementation and enforcement of environmental laws, regulations, and policies.[1] Addressing environmental justice and equity is addressed in Federal laws and regulations primarily through Title VI of the Civil Rights Act and Executive Order 12898, which provide guidance on both fair treatment and definitions for equity-focused populations:

- Title VI of the Civil Rights Act of 1964 requires that 'no person in the United States shall on the grounds of race, color or national origin, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.'
- The EO 12898 requires Federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental impacts of their programs, policies, and activities on minority and low income populations.

The USDOT and the FHWA have issued guidance on incorporating this executive order into the transportation decision-making process in DOT Order 5610.2(a) and FHWA Order 6640.23A, which directs Federal recipients to address disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.

[1]https://www.transportation.gov/transportation-policy/environmental-justice/environmental-justice-strategy

Federal guidance documents on evaluating impacts to minority and low-income populations, including FHWA's Environmental Justice Reference Guide (2015), generally identifies these populations using a threshold approach. By that approach, all residents living within a defined geographic boundary (e.g., census tract, census block group) are identified as belonging to an equity-focused area provided certain threshold criteria are met.

At the project level, State, regional, and local Federal grant recipients commonly focus on EJ impacts while preparing environmental review documents required under National Environmental Policy Act (NEPA), which is used to identify whether disproportionate and adverse impacts may be experienced by environmental justice populations. Another common equity-focused evaluation includes transit agencies' Title VI Implementation Plans to ensure that program elements include collecting appropriate demographic data (focusing on race, ethnicity, national origin, and Limited English Proficiency), providing training to staff, established procedures for handling complaints, and others.

Building on these practices and considering prevailing guidance, states have increasingly incorporated equity considerations into their planning and prioritization processes, including:

- Caltrans prioritizes statewide Active Transportation Funds for disadvantaged communities based on a threshold criteria applied to the population's median household income, most-disadvantaged status as established by the CalEnviroScreen tool, percentage of public school students receiving free or reduced-price meals, inclusion in the bottom 25th percentile for healthy places per the Healthy Places Index, location within federally recognized tribal lands, or other (defined by applicant).[2]
- The Massachusetts Department of Transportation (MassDOT) conducts an equity analysis on all projects included in the annual Capital Investment Plan, and evaluates whether the distribution of benefits is equitable amongst the population.[3]
- Transportation System Plans required by the Oregon Department of Transportation (ODOT) include criteria-based project evaluations that may include equity. For example, for the City of Portland's Transportation System Plan, the Portland Bureau of Transportation scores projects based on a threshold criterion that includes percentage of the population with minority status, households at or below 80% of median family income, population 17 years of age and under, and population 65 years of age and over.[4]

Similarly, metropolitan planning organizations (MPOs) and local entities are also increasingly incorporating equity considerations into their planning and prioritization processes, including:

- The Omaha-Council Bluffs Metropolitan Area Planning Agency (MAPA) conducts an equity analysis to ensure an equitable distribution of funding relative to the needs of the region and that burdens are not disproportionately distributed;[5]
- The North Texas Council of Governments (NCTCOG) has developed an EJ index to evaluate planning products that include long-range plan investments and toll analysis. For projects in the Active Transportation Project category, projects are evaluated for their

[2]https://catc.ca.gov/-/media/ctc-media/documents/programs/atp/guidelines/2020429-final-amended-adopted-2021-atp-guidelines-a11y.pdf
[3]https://www.foursquareitp.com/wp-content/uploads/2018/02/Performance-Based-Statewide-Project-Prioritization_180129.pdf
[4]https://www.portlandoregon.gov/transportation/article/658506
[5]https://mapacog.org/wp-content/uploads/2020/05/MAPA-Draft-FY2021-TIP-V2-5-28-2020.pdf

impacts on equity (including minority status, persons per square mile, percent below poverty, and percent minority);[6] [7]

- The City of Minneapolis prioritizes capital street projects using a set of quantitative criteria that includes income and minority status (both of which are defined using a threshold criteria) .[8]

At a statewide and regional level, a major focus of equity analyses has historically been on active transportation projects (e.g., bike/ped) and non-vehicular transportation (i.e., transit). In planning documents, the use of equity analyses has varied. Very comprehensive approaches involve a holistic look at all capital improvement spending to ensure that project dollars are spent equitably across all populations and redirecting dollars where necessary (e.g., MassDOT, MAPA). More cities and states are considering equity-focused areas as criteria in project prioritization (e.g., Caltrans, NCTCOG, ODOT). At a minimum, project-level equity analyses can be done in an Environmental Assessment or Environmental Impact Statement required under NEPA.

Approaches to Defining Equity Focus Areas in Nevada

Equity populations are considered in Southern Nevada in a few ways. One notable example is RTC's Southern Nevada Community Data App map, which displays key demographic data in Clark County including total population, population density, race and ethnicity, percent of the population foreign-born, percent 65 years of age and older, percent 17 years of age and younger, disability status, Limited English Proficiency, household income, poverty status, households receiving food stamps/SNAP, rent-burdened households, health insurance coverage, and other demographic characteristics. Users are also able to see the change in these factors over the past five years.[9]

In January 2021, the RTC completed *ACCESS 2050: Regional Transportation Plan*, which identifies equity focus areas by assigning a composite score to census tracts based on the tract's calculated percentile for key demographic characteristics. Higher scores indicate a higher need based on demographic characteristics and use of non-vehicular modes of transportation. This approach was originally developed for the 2017 Regional Bicycle and Pedestrian Plan, and particularly highlights the needs of zero-car households or households that may have greater need for alternative forms of transportation.

Additionally, a Title VI analysis in RTC's *ACCESS 2050: Regional Transportation Plan* also calculates the percentage of RTP projects located in a Title VI census block group (Based on low-income, minority, population over 64 years of age, Limited English Proficiency, and disability status).

At a statewide level, the equity analysis approach used by the Nevada Department of Transportation (NDOT) in the One Nevada Transportation Plan follows the Federal guidance emphasizing impacts to minority and low-income populations. The analysis is based on a threshold analysis of minority and low-income communities at the census tract level. The census tract level of geography was selected for its usefulness in providing insight at both a project-scale and regional level.

[6]https://resources.nctcog.org/trans/sustdev/landuse/step/documents/EJIMap.pdf
[7]https://nctcog.org/trans/involve/ej
[8]https://www2.minneapolismn.gov/media/content-assets/www2-documents/departments/wcmsp-211987.pdf
[9]https://www.arcgis.com/apps/webappviewer/index.html?id=67cbdac3638d460faa8f5b6be9aafee3

An equity focus area is any census tract that meets either the low-income criteria *or* the minority status criteria described below:

- Low-income: A person whose income is defined as 'low income' for the purposes of this analysis has an income that falls below 125 percent of the Federal Poverty Line (FPL). A census tract is identified as 'low income' when 30 percent or more of the estimated population (for whom income status is determined) have incomes that fall below that threshold. American Community Survey - Table C17002: Ratio of Income to Poverty Level was used for all income data.
- Minority status: For this analysis, 'minority status' is assigned to any individual who identifies as an ethnic or racial minority, defined within the census as individuals who identify as Black, Hispanic or Latino, Asian American, American Indian/Alaskan Native, Native Hawaiian or Pacific Islander, or some other race. A census tract is identified as 'high minority' when 80 percent or more of the population (for whom minority status is determined) have minority status. American Community Survey - Table B03002: Hispanic or Latino Origin by Race was used for all minority data.

Recommended Approach for the City of North Las Vegas

It is recommended that the equity analysis for the City's Comprehensive Master Transportation Plan follows the methodology described in the RTC's recent *ACCESS 2050: Regional Transportation Plan*, which identifies equity focus areas by assigning a composite score to census tracts to based on the tract's calculated percentile for key demographic characteristics. These include percentage of the tract population with Limited English Proficiency, population under 18 years of age, population over 64 years of age, people with disability status, low-income households, minority households, and no-vehicle households. Percentile scores are calculated for each census tract's rank within the RTC planning region, and composite scores are calculated by taking the sum of the tract's score for each demographic indicator.

For this analysis, all 65 populated census tracts within the City of North Las Vegas were evaluated. The US Census Bureau, in its American Community Survey (ACS) program, estimates the number of individuals who meet key demographic characteristics. For the City of North Las Vegas Comprehensive Master Transportation Plan Update, the 2016-2020 American Community Survey 5-Year Estimates were used. Demographic characteristics summarized and corresponding tables are identified in Table 1.

Table 1. Equity area counts and source tables

Count	Explanation	Table
People of color	Population that is not white or is of Latino origin	B03002
Limited English Proficiency	Population over the age of 5 who speak English either not at all or not well	B16004
Poverty	Population whose incomes fell below Federal poverty guidelines in the last 12 months	B17020
Zero car households	Households with no car available	B08201
Under the age of 18	Population under the age of 18	B01001
65 years of age and over	Population 65 years of age and over	B01001
Persons with a disability	Population who live with a disability	B18101

Using this criteria, almost all of the equity focus areas identified in the City of North Las Vegas are located in the southern areas of the City of North Las Vegas, in areas that are generally planned for mixed-use development and employment districts (Figure 1).

In general, the area is younger relative to the RTC planning region, and home to a higher percentage of people of color than is true for the rest of the planning region. The area also has a higher population who are classified as having Limited English Proficiency and a higher percentage of population whose incomes fall below federal poverty guidelines than the rest of the region.

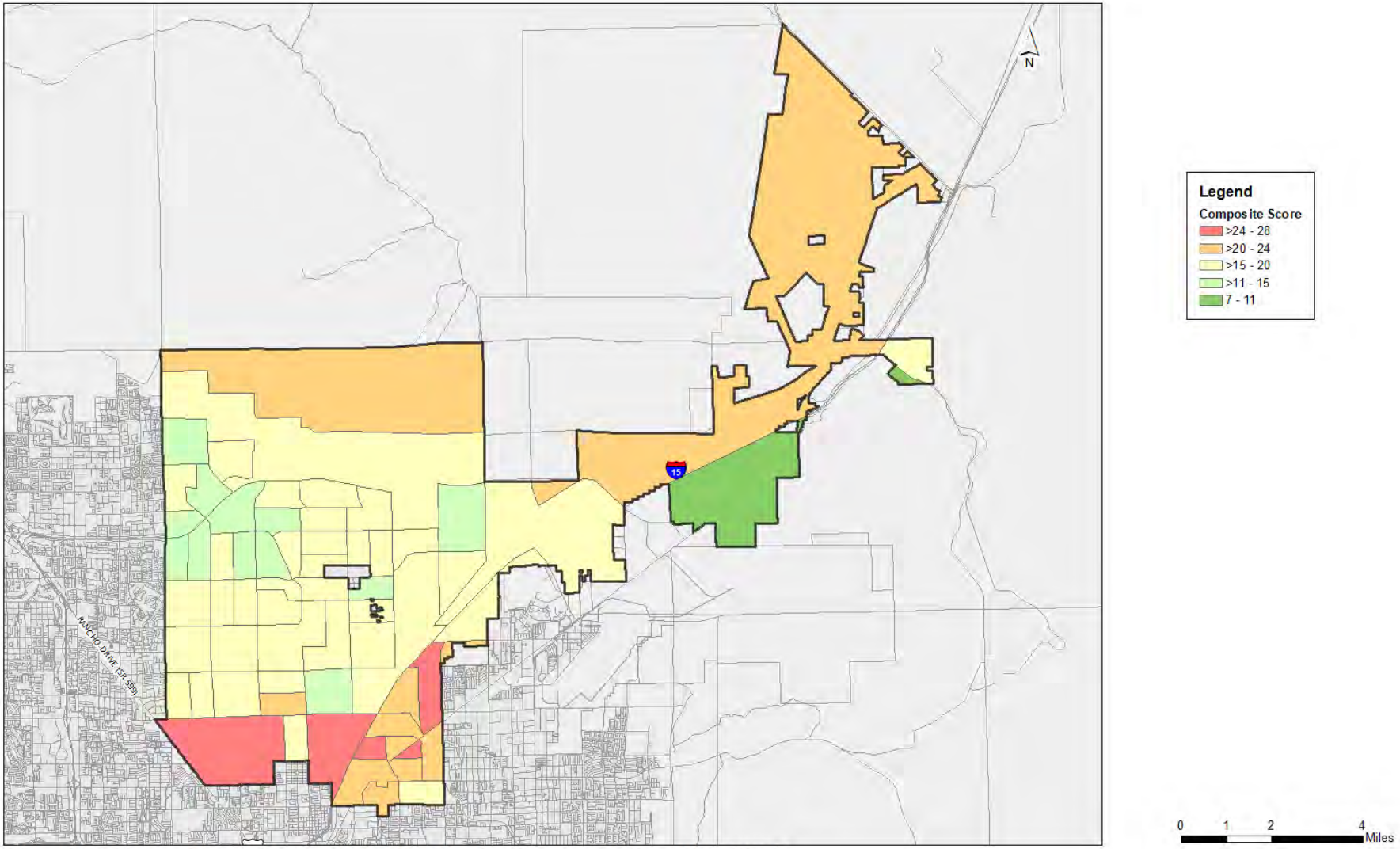


Figure 1. Equity focus area census tracts in the City of North Las Vegas

Table 2. Population and tracts identified within equity focus areas based on equity criteria

GEOID	People of Color		LEP		Poverty		Zero Car		Under 18		65 and over		Disability		Score
	%	quantile	%	quantile	%	quantile	%	quantile	%	quantile	%	quantile	%	quantile	
32003003609	61%	3	5%	3	5%	1	7%	3	32%	3	29%	3	17%	4	20
32003003610	73%	3	6%	3	9%	2	6%	3	25%	1	22%	2	16%	4	18
32003003613	77%	4	5%	3	16%	3	2%	2	31%	3	25%	2	12%	3	20
32003003615	77%	4	5%	3	18%	3	1%	1	40%	4	28%	3	12%	2	20
32003003616	94%	4	11%	4	12%	3	12%	4	35%	4	29%	3	17%	4	26
32003003617	90%	4	7%	3	6%	1	12%	4	19%	1	20%	1	14%	3	17
32003003619	63%	3	1%	1	4%	1	0%	1	35%	4	28%	3	6%	1	14
32003003620	58%	2	0%	1	8%	2	0%	1	35%	4	26%	3	6%	1	14
32003003621	19%	1	0%	1	7%	2	3%	2	35%	4	83%	4	34%	4	18
32003003626	74%	4	3%	2	8%	2	2%	2	32%	3	22%	2	8%	1	16
32003003627	80%	4	3%	2	11%	3	5%	3	33%	3	29%	3	10%	2	20
32003003630	62%	3	1%	2	6%	2	5%	3	31%	3	26%	3	13%	3	19
32003003631	65%	3	0%	1	8%	2	2%	1	35%	4	33%	4	8%	1	16
32003003632	52%	2	1%	1	4%	1	2%	2	32%	3	29%	3	13%	3	15
32003003633	74%	4	4%	3	6%	2	1%	1	31%	3	24%	2	12%	3	18
32003003634	63%	3	3%	2	3%	1	4%	2	35%	4	28%	3	10%	2	17
32003003635	68%	3	4%	3	5%	1	0%	1	29%	2	24%	2	14%	3	15
32003003636	61%	3	3%	3	7%	2	0%	1	37%	4	29%	3	9%	1	17
32003003637	70%	3	2%	2	8%	2	2%	2	34%	3	27%	3	10%	2	17
32003003638	77%	4	4%	3	14%	3	2%	2	31%	3	22%	2	8%	1	18
32003003639	64%	3	3%	3	9%	2	0%	1	35%	4	25%	2	13%	3	18
32003003640	81%	4	5%	3	6%	1	2%	2	33%	3	24%	2	12%	3	18
32003003641	85%	4	3%	2	14%	3	2%	2	36%	4	21%	1	11%	2	18
32003003642	91%	4	5%	3	2%	1	0%	1	30%	2	19%	1	10%	2	14
32003003643	83%	4	4%	3	10%	2	4%	2	29%	2	18%	1	11%	2	16
32003003644	79%	4	3%	3	19%	3	13%	4	34%	3	22%	2	12%	3	22
32003003645	54%	2	2%	2	1%	1	5%	3	27%	2	25%	2	18%	4	16
32003003646	77%	4	6%	3	7%	2	1%	1	37%	4	28%	3	13%	3	20
32003003647	77%	4	2%	2	10%	2	1%	1	35%	4	33%	4	8%	1	18
32003003648	68%	3	4%	3	8%	2	0%	1	34%	4	17%	1	4%	1	15

GEOID	People of Color		LEP		Poverty		Zero Car		Under 18		65 and over		Disability		Score
	%	quantile	%	quantile	%	quantile	%	quantile	%	quantile	%	quantile	%	quantile	
32003003649	85%	4	4%	3	9%	2	0%	1	42%	4	31%	4	5%	1	19
32003003650	70%	3	1%	2	10%	2	0%	1	39%	4	19%	1	6%	1	14
32003003651	60%	3	3%	3	18%	3	8%	3	36%	4	20%	1	12%	2	19
32003003652	81%	4	1%	2	2%	1	5%	3	37%	4	30%	4	7%	1	19
32003003653	64%	3	6%	3	18%	3	0%	1	32%	3	18%	1	11%	2	16
32003003654	83%	4	2%	2	4%	1	1%	1	37%	4	25%	3	11%	2	17
32003003655	77%	4	4%	3	13%	3	2%	2	32%	3	25%	3	5%	1	19
32003003656	68%	3	2%	2	17%	3	1%	1	30%	3	22%	2	11%	2	16
32003003657	81%	4	0%	1	20%	4	4%	2	35%	4	20%	1	10%	2	18
32003003658	78%	4	0%	1	35%	4	0%	1	42%	4	18%	1	0%	1	16
32003003659	91%	4	9%	4	0%	1	0%	1	40%	4	24%	2	5%	1	17
32003003660	72%	3	2%	2	2%	1	0%	1	40%	4	22%	2	10%	2	15
32003003661	66%	3	0%	1	7%	2	6%	3	32%	3	29%	3	6%	1	16
32003003662	51%	2	0%	1	7%	2	0%	1	31%	3	24%	2	13%	3	14
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32003003664	50%	2	0%	1	8%	2	3%	2	35%	4	17%	1	6%	1	13
32003003665	60%	3	0%	1	9%	2	1%	1	27%	2	19%	1	11%	2	12
32003003666	65%	3	3%	3	1%	1	3%	2	28%	2	22%	2	7%	1	14
32003003700	92%	4	9%	4	21%	4	6%	3	33%	3	31%	4	14%	3	25
32003003800	94%	4	17%	4	35%	4	26%	4	42%	4	21%	1	14%	3	24
32003004000	93%	4	26%	4	23%	4	5%	3	34%	3	25%	3	12%	2	23
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32003004200	86%	4	19%	4	29%	4	16%	4	32%	3	25%	3	7%	1	23
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32003004500	96%	4	20%	4	25%	4	8%	3	33%	3	22%	2	9%	2	22
32003004601	90%	4	16%	4	34%	4	22%	4	37%	4	26%	3	8%	1	24
32003004602	94%	4	20%	4	34%	4	15%	4	35%	4	26%	3	12%	3	26
32003004715	88%	4	13%	4	19%	3	6%	3	35%	4	26%	3	10%	2	23

GEOID	People of Color		LEP		Poverty		Zero Car		Under 18		65 and over		Disability		Score
	%	quantile	%	quantile	%	quantile	%	quantile	%	quantile	%	quantile	%	quantile	
32003005613	15%	1	1%	2	6%	2	2%	2	40%	4	39%	4	16%	3	18
32003005902	77%	4	4%	3	21%	4	6%	3	29%	2	30%	4	18%	4	24
32003006001	65%	3	2%	2	33%	4	16%	4	34%	3	20%	1	11%	2	19
32003007802	46%	2	0%	1	0%	1	0%	1	0%	1	0%	1	0%	1	8

Acronyms

FHWA	Federal Highway Administration
MAPA	Omaha-Council Bluffs Metropolitan Area Planning Agency
MassDOT	Massachusetts Department of Transportation
MPO	Metropolitan Planning Organizations
NCTCOG	North Texas Council of Governments
NDOT	Nevada Department of Transportation
NEPA	National Environmental Policy Act
ODOT	Oregon Department of Transportation
RTC	Regional Transportation Commission of Southern Nevada
USDOT	United States Department of Transportation

APPENDIX E

LAND USE ANALYSIS

City of **North Las Vegas**

Comprehensive Master Transportation Plan Study

CITY OF NORTH LAS VEGAS
Your Community of Choice

RTC

Land Use Analysis - 05.12.21

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GOAL OF STUDY:

- Update *Master Plan of Streets and Highways* (MPSH) to be consistent with complete streets policies
- Layer equity analysis, bike/ped plan recommendations, and safe routes to schools
- Review and update Truck Routes

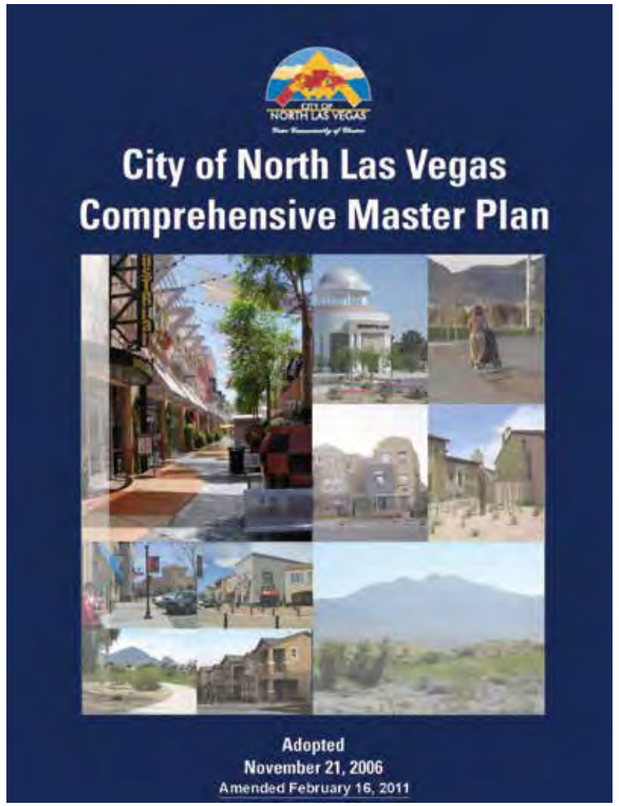
PURPOSE OF THIS DOCUMENT:

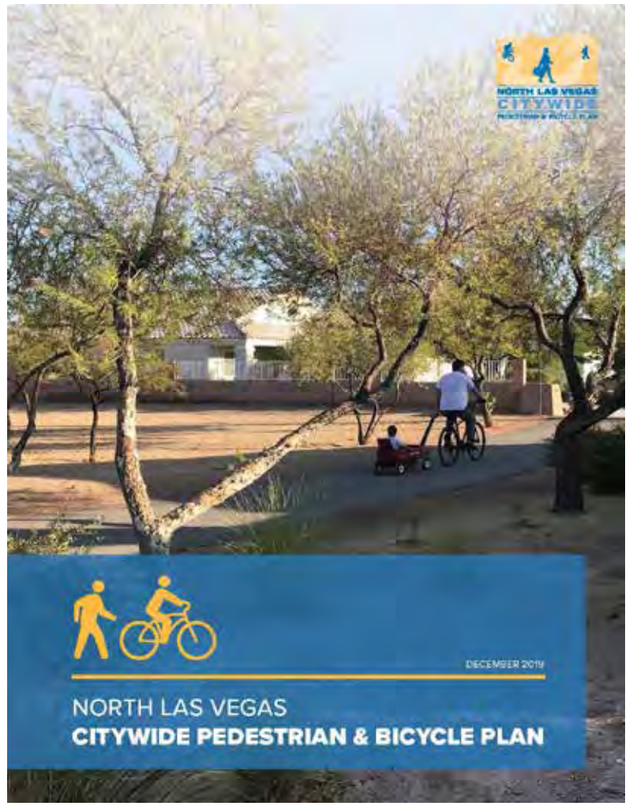
- Verify approach to land use analysis, including next steps
- Identify any gaps in analysis
- Discuss how to engage TAC and/or

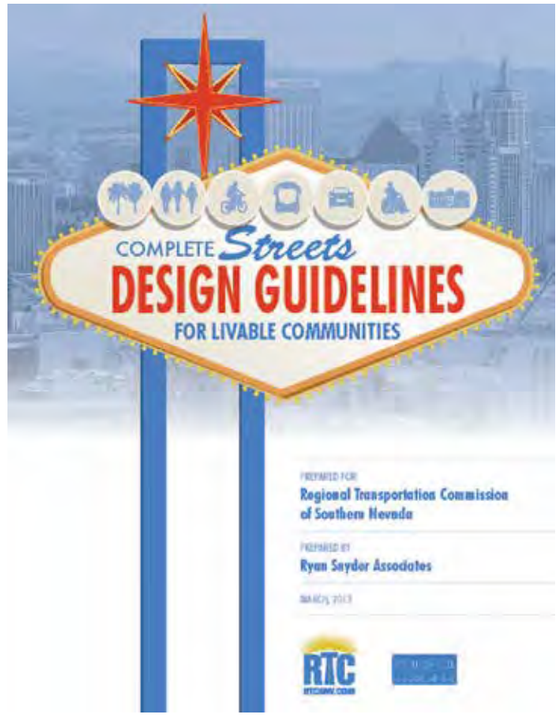


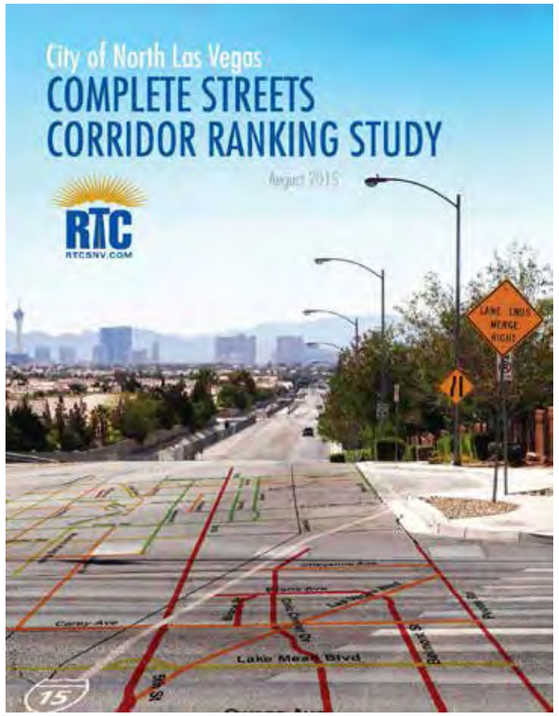
Citywide Plans & Policies

We reviewed background documents to develop our understanding of the Planning Context (see Background Documents Memo). The plans shown on this slide are the primary sources we are pulling from for the citywide land use analysis.







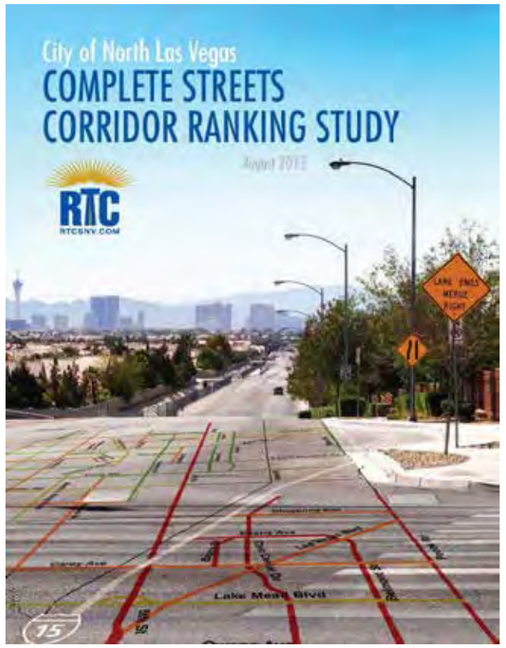


STREETSCAPE VISION:

- Multimodal, Complete Streets
- Safe Routes to Schools
- Thoughtful network of Truck Routes

- Streetscape design specific guidance
  - *Citywide Pedestrian and Bicycle Plan* (NLV)
  - *Complete Streets Design Guidelines* (RTC)

Potential Focus Areas



Detailed tables for each context zone, activity zone, or overlay may need to be created by the City to reflect their priorities.

TABLE 8 **Example of Mode Priority Assignment by Context Zone**

Context zone	Mode Priority			
	A	B	C	D
Urban commercial/mixed use	Walk	Transit	Bike	Auto
Urban residential	Walk	Bike	Auto	Transit
Urban single use	Bike	Auto	Walk	Transit
Suburban commercial	Auto	Transit	Walk	Bike
Suburban mixed use	Walk	Bike	Transit	Auto
Suburban single use	Bike	Auto	Walk	Transit

SOURCE: Active Transportation Alliance

TABLE 7 **Example Context Zone Variations and Activity Overlays to Be Considered**

Primary Context Zone	Context Zone Variation	Activity Overlay
Urban	■ Commercial/mixed use ■ Residential ■ Single use (limited access and separated from corridor; agricultural, open space, industrial, office parks, large residential developments)	■ Pedestrian Priority Areas ■ Entertainment district ■ TOD ■ School Zone ■ Park Zone ■ Green Street
Suburban	■ Commercial ■ Residential ■ Village/mixed use ■ Single use	
Rural	■ Residential/agricultural ■ Mixed use/village	

SOURCE: Adapted from Active Transportation Alliance.

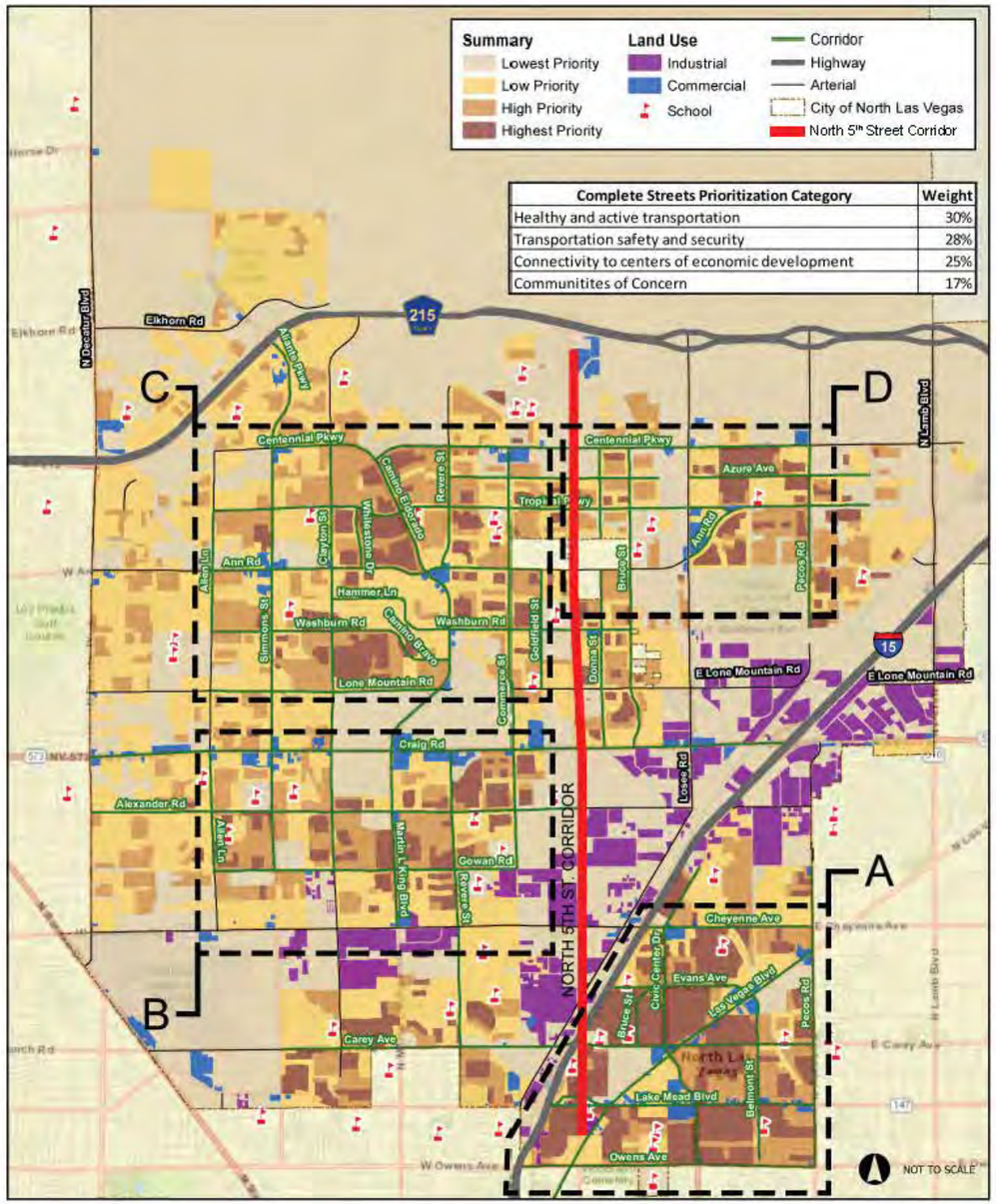
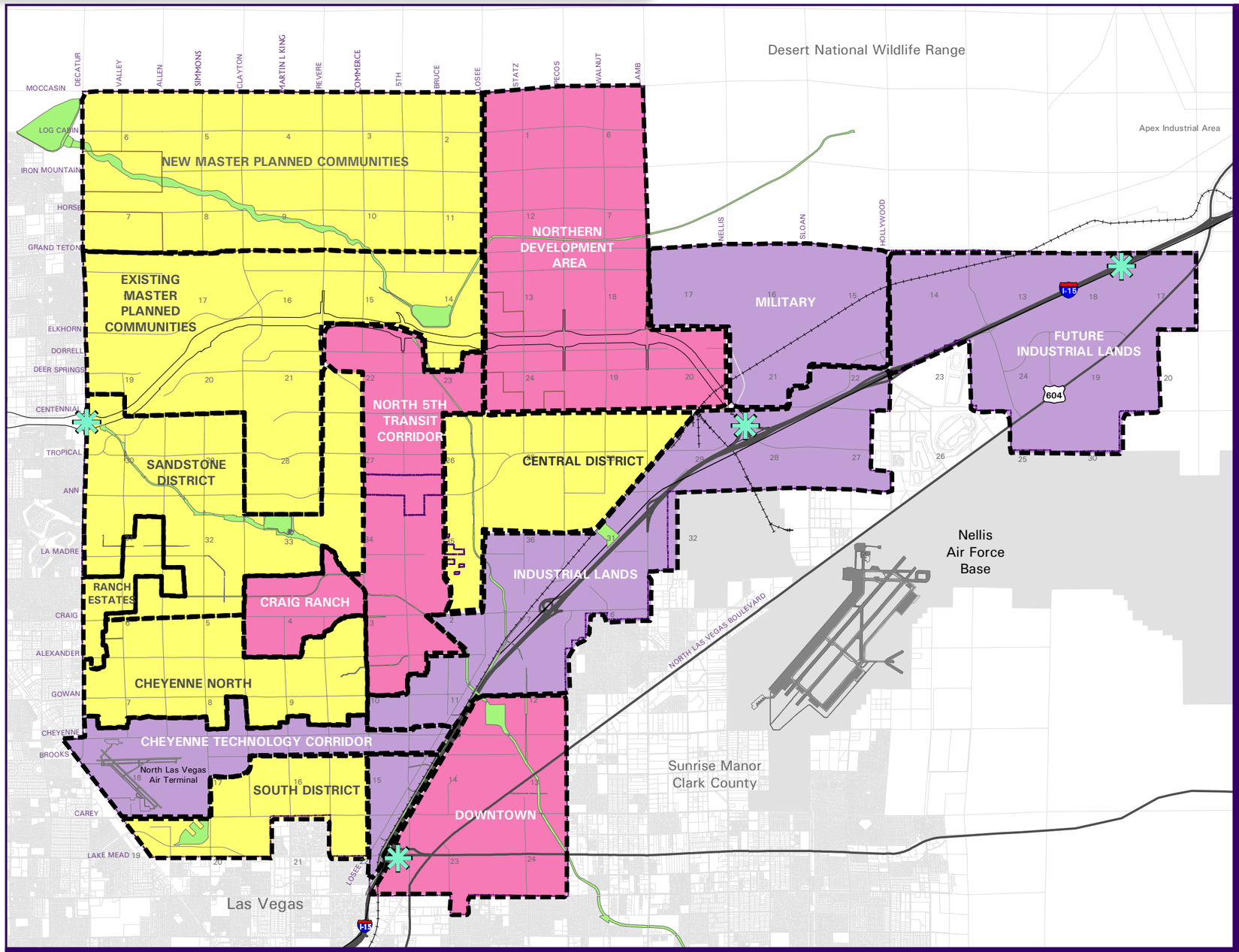


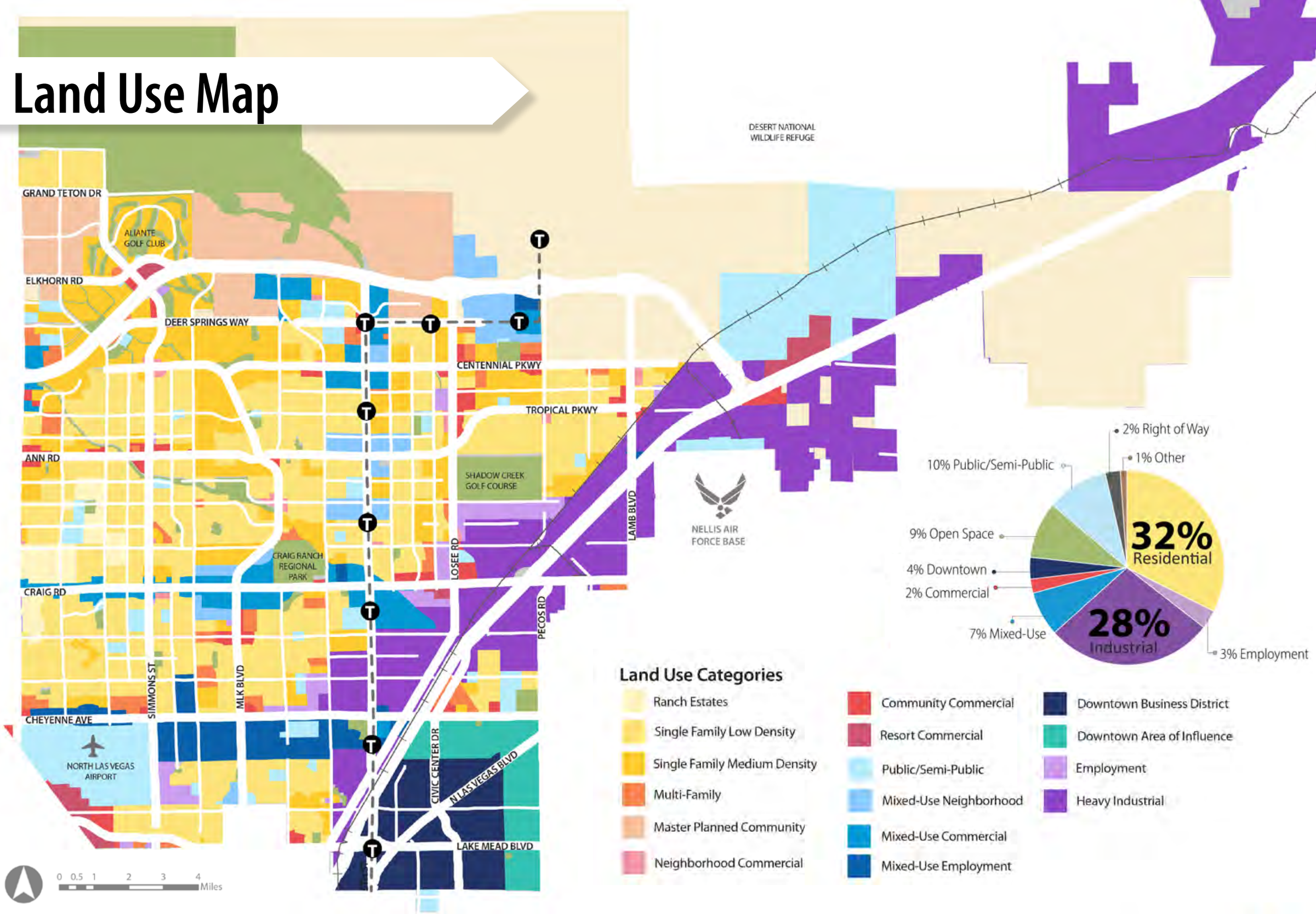
TABLE 6 **Four Major Focus Areas within the City of North Las Vegas**

Focus Areas	Context					
	C-1	C-2	C-3	C-4	C-5	C-6
Focus Area A				■	■	
Focus Area B			■	■		
Focus Area C			■			
Focus Area D	■	■	■			

Potential Focus Areas



Land Use Map



Land Use Categories

- Ranch Estates
- Single Family Low Density
- Single Family Medium Density
- Multi-Family
- Master Planned Community
- Neighborhood Commercial
- Community Commercial
- Resort Commercial
- Public/Semi-Public
- Mixed-Use Neighborhood
- Mixed-Use Commercial
- Mixed-Use Employment
- Downtown Business District
- Downtown Area of Influence
- Employment
- Heavy Industrial

District Specific Plans



LAND USE APPROACH OVERVIEW

- **Residential**
  - Developed areas
  - Master Planned Communities (most are currently vacant)
- **Redevelopment Districts:**
  - Downtown
  - Deer Springs
  - N 5th Transit Corridor
- **Industrial / Employment**
  - Existing corridors
  - Apex Industrial Park
- **Activity / Analysis Overlays**
  - School Zones
  - Commercial Centers / Corridors
  - Equity Analysis







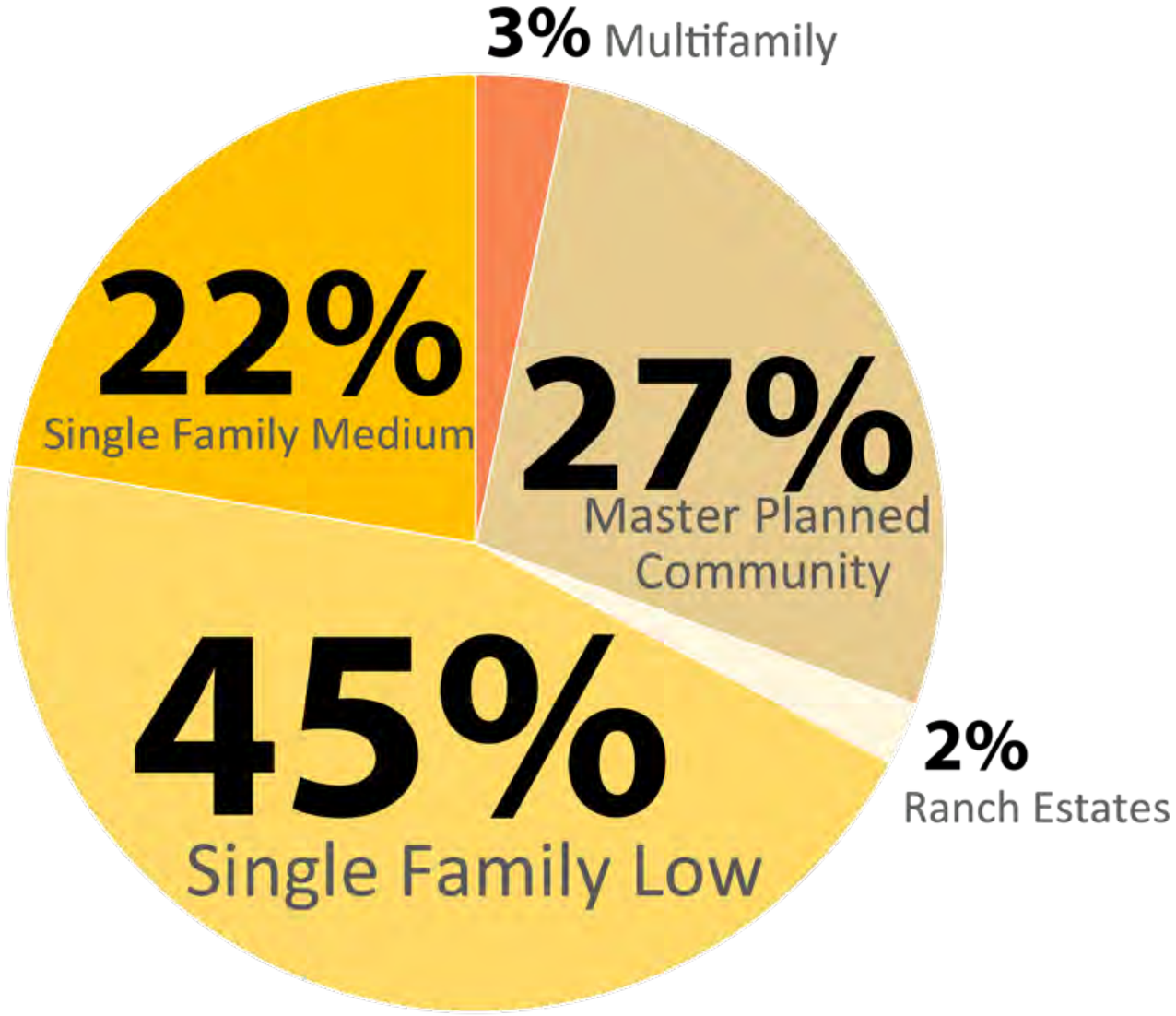
RESIDENTIAL

Residential Land Uses

North Las Vegas is made up of mostly single-family residential land uses. As such, residential land uses will require deep consideration as part of the CMTPS.

Residential areas in North Las Vegas are mostly built out with constrained right-of-ways, with the exception of Master Planned Community, which makes up 27% of the area identified as residential land uses. Connecting houses to schools, as part of the **Safe Routes to Schools Program**, is a priority of the CMTPS, as well as prioritizing the areas of the city that have been identified as high need based on the equity analysis.

The following pages present patterns in the built form, architectural style, and block patterns for each residential land use, as well as a map that overlays areas of high need, pedestrian priority areas.



~70% of residential areas in North Las Vegas are single family land uses.

*Single family includes S-F Low, S-F Medium, and Ranch Estates (RE)

Residential Land Uses

The architectural style and built patterns for North Las Vegas's residential areas vary by development. Ranch Estates (below left) makes up a small portion of North Las Vegas's residential area, and it is characterized by its large lots. Master Planned Communities are either relatively new or currently undeveloped. Many Single-Family Low and Single-Family Medium areas are similar in character, block pattern, and scale, and the block pattern is irregular, often terminating in cul-de-sacs. Multifamily areas, such as apartments or condominiums (below right), have larger buildings up to 4-stories tall, with internal vehicular circulation and parking. Many residential areas throughout the city are separated from arterials by walls.

RANCH ESTATES





Density **2** du/acre

Min. Lot Width **80'-90'**

Building Forms:
- single-family dwelling

2% of residential area

MASTER PLANNED COMMUNITIES





Density and Min. Lot Width **Variable**

Building Forms:
Most MPC is currently vacant land. Development of these areas must meet design guidelines in Master Plan, resulting in well designed, complete streets.

27% of residential area

SINGLE-FAMILY LOW





Density **4.5-6** du/acre

Min. Lot Width **50'**

Building Forms:
- single-family dwelling
- 2-, 3-, and 4-family dwellings
- Townhouse cluster

45% of residential area

SINGLE-FAMILY MEDIUM





Density **6-13** du/acre

Min. Lot Width **40'**

Building Forms:
- single-family dwelling
- 2-, 3-, and 4-family dwellings
- Townhouse cluster

22% of residential area

MULTI-FAMILY





Density **25** du/acre

Min. Lot Width **60'**

Building Forms:
- Townhouse cluster
- Apartment buildings
- Condominiums

3% of residential area

Mid-century ranches









Spanish Style 1 and 2 stories







Apartments / Condominiums







The street network in the single family residential areas consists of irregular grids and cul-de-sacs.

Lake Mead Blvd near MLK Blvd



Carey Ave near Civic Center Dr



Some houses have front yards and driveways facing collectors/arterials. This development pattern is often found in areas of high inequity.



Residential Land Uses

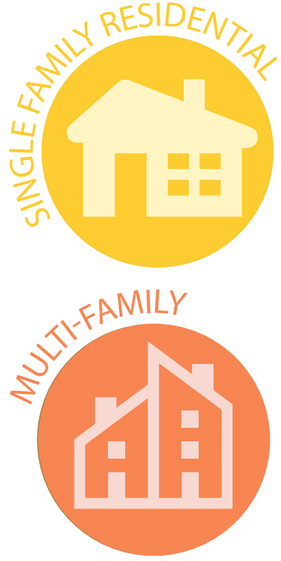


Land Use Categories

- Ranch Estates
- Single Family Low Density
- Single Family Medium Density
- Multi-Family
- Master Planned Community

Downtown Redevelopment Area Zoning Categories

- Single Family Low (R1)
- R-A Downtown Core (DC)
- R-A Single Family Medium (R-2)
- R-A Multifamily Residential (R-3)



RESIDENTIAL - 100' ROW, 5-6 LANES



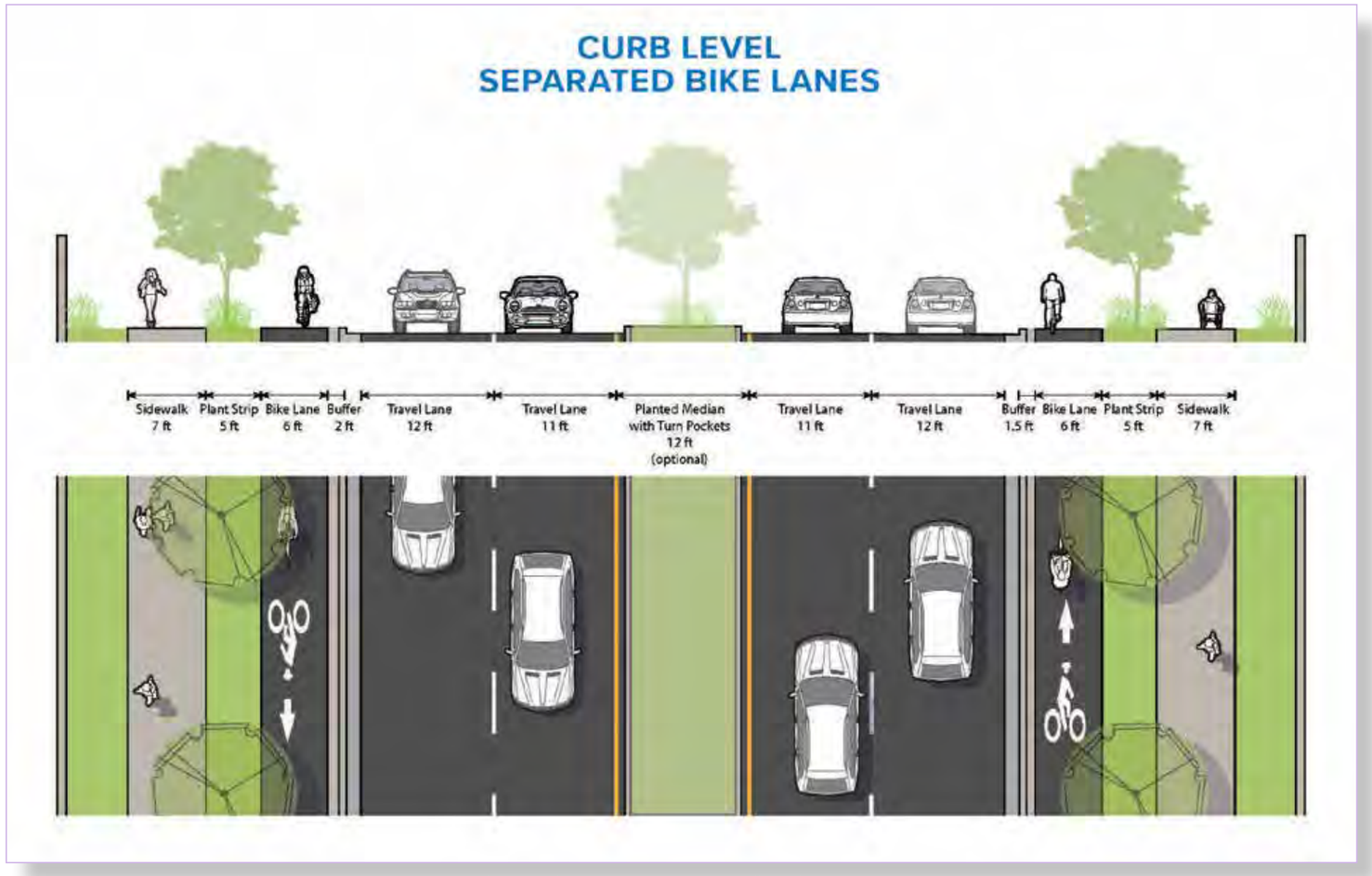




1 - SIMMONS ST. No buffer between sidewalk and vehicle lanes. Large landscape buffer with wall.

2 - MLK BLVD. Center median with landscaping. Trees give a sense of enclosure and human scale. Narrow sidewalks adjacent to walls with light poles and utilities. Challenging pedestrian experience.

3 - TROPICAL PKWY. Detached sidewalk with landscape buffer on each side. Comfortable pedestrian experience.



From North Las Vegas Citywide Pedestrian & Bicycle Plan

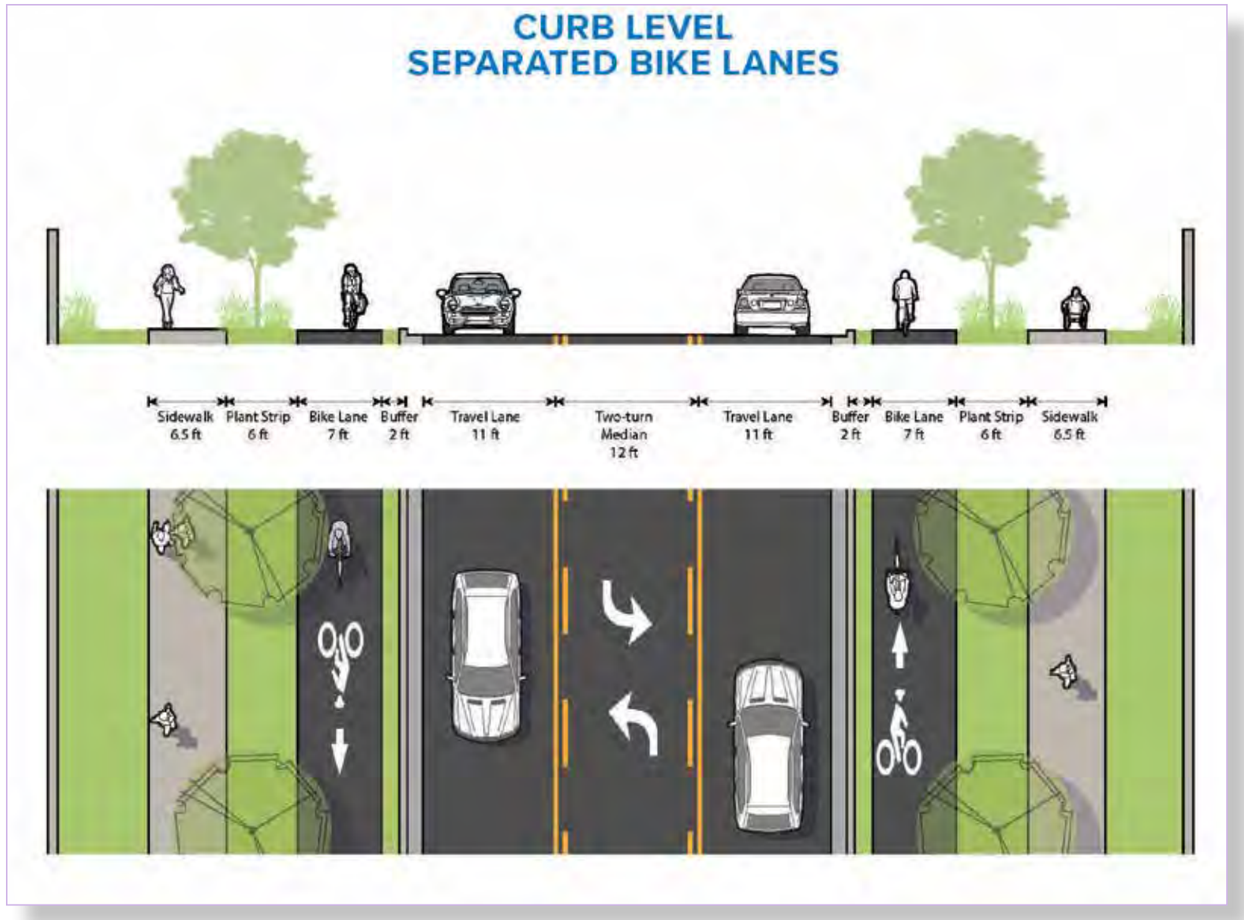
RESIDENTIAL - 80' ROW



VALLEY DR. 3 lanes, Bike Lanes, on-street parking



ALLEN LN. 5 lanes, with attached sidewalks. Landscape buffer between sidewalk and wall on one side.



From North Las Vegas Citywide Pedestrian & Bicycle Plan

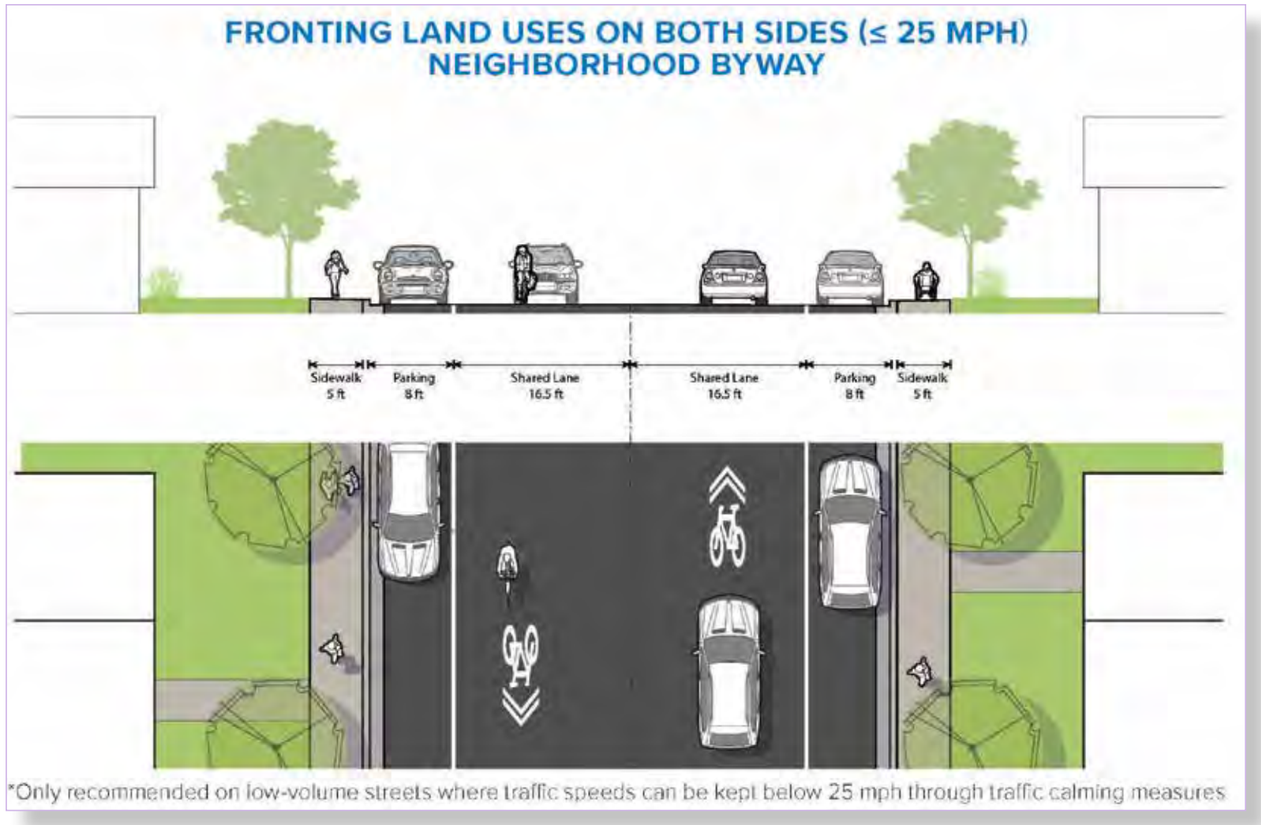
RESIDENTIAL - 60' ROW



TONOPAH AVE. 2 lanes, on-street parking, attached sidewalks



FERRELL ST. Attached sidewalks, combination of privacy walls and driveways facing the street



From North Las Vegas Citywide Pedestrian & Bicycle Plan

Ensuring students can get to school safely is a priority of the CMTPS.

As per the Safe Routes to Schools (SRTS) Program, the requirements for a safe route to school vary by the age of the student, as illustrated in the graphic to the right.

The *City of North Las Vegas Pedestrian and Bicycle Master Plan* has outlined an extensive network that will connect residential areas to schools. The Safe Routes to Schools Map on the following page shows which areas of the City have been identified as High Need in terms of equity analysis, and routes in these areas should be prioritized to ensure city resources are allocated in a way that benefits those most in need.

KINDERGARTEN / LOWER ELEMENTARY



1/2 MILE

Walkshed

Students usually walk to school with a parent or guardian.

UPPER ELEMENTARY / MIDDLE SCHOOL



1 MILE

Walk and Bikeshed

Students often begin walking and biking by themselves around 5th grade.

Most bicyclists use bike lanes.

HIGH SCHOOL / COLLEGES



>1 MILE

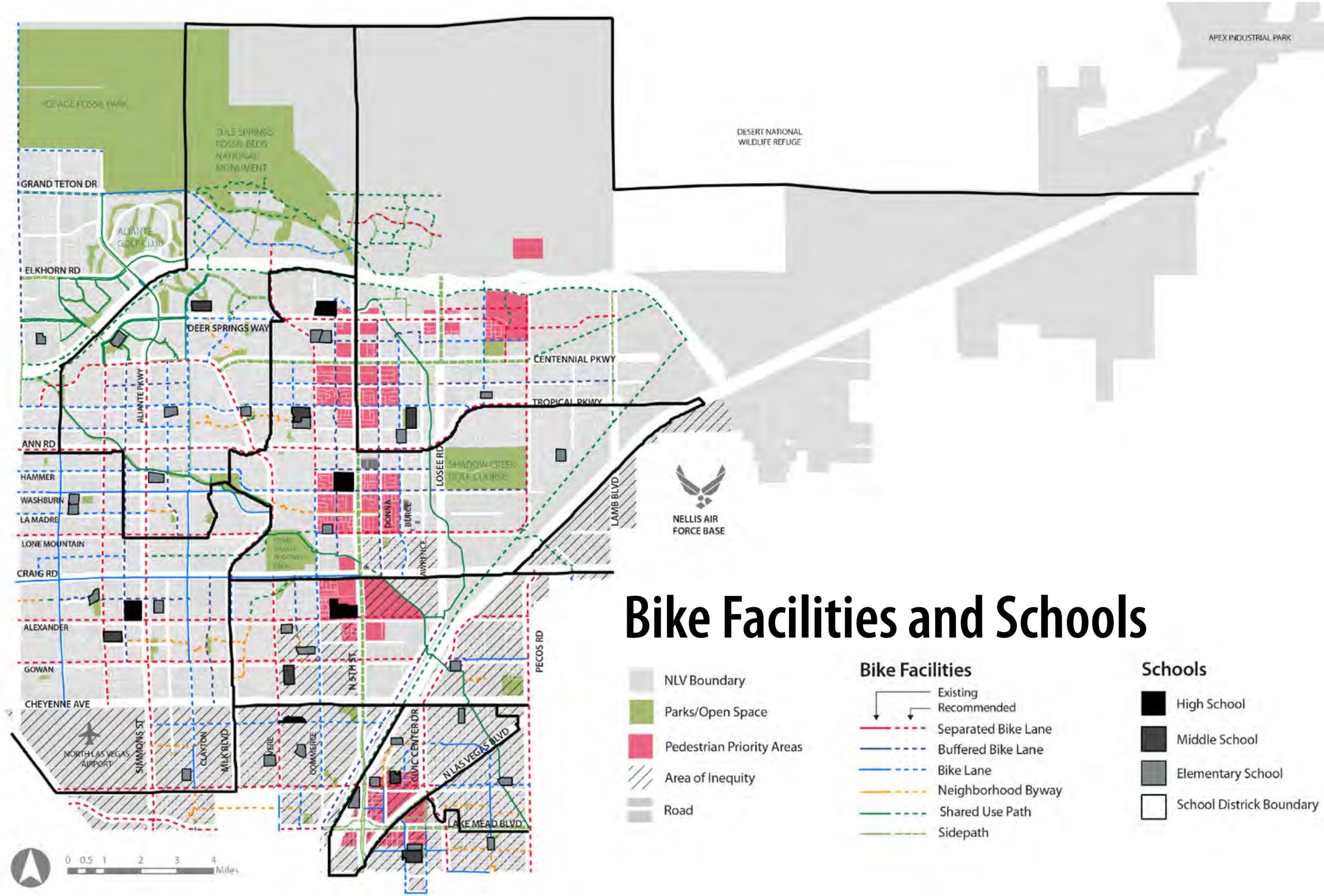
Walk and Bikeshed

Students may used shared bike facilities and may be comfortable walking more than a mile to school.



SAFE ROUTES TO SCHOOLS

Bike Facilities and Schools



Bike Facilities

- Existing
- Recommended
- Separated Bike Lane
- Buffered Bike Lane
- Bike Lane
- Neighborhood Byway
- Shared Use Path
- Sidepath

Schools

- High School
- Middle School
- Elementary School
- School Districk Boundary

- NLV Boundary
- Parks/Open Space
- Pedestrian Priority Areas
- Area of Inequity
- Road

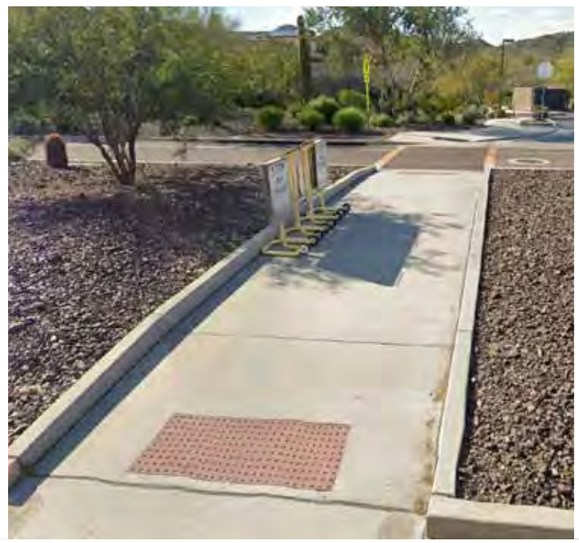
SRTS Design Recommendations













SIDEWALKS

Sidewalks should be **buffered** by a **planting strip, parking lane, or bike lane.**

Sidewalks should be **5 or 6' minimum. Without a buffer**, sidewalks should be at least **8' wide.**

UNIVERSAL ACCESS

Two curb perpendicular curb ramps (vs. one diagonal ramp) should be present whenever possible.

DRIVEWAYS

Driveways should be **wing-type.**

Driveways should continue at **same level as sidewalk.**

BIKE LANES

Bike lanes may be painted on **low traffic residential streets.**

Bike lanes should be at least **5' wide** next to a parking lane and **4' wide** next to a curb.

CROSSWALKS

Crosswalks should be **at 10' to 15' feet wide** in school areas.

Crossing distance should be minimzed by using **crossing islands, curb extensions**, or other design features.

Streetscape Design Recommendations for Residential Land Uses

RESIDENTIAL STREET TYPES:

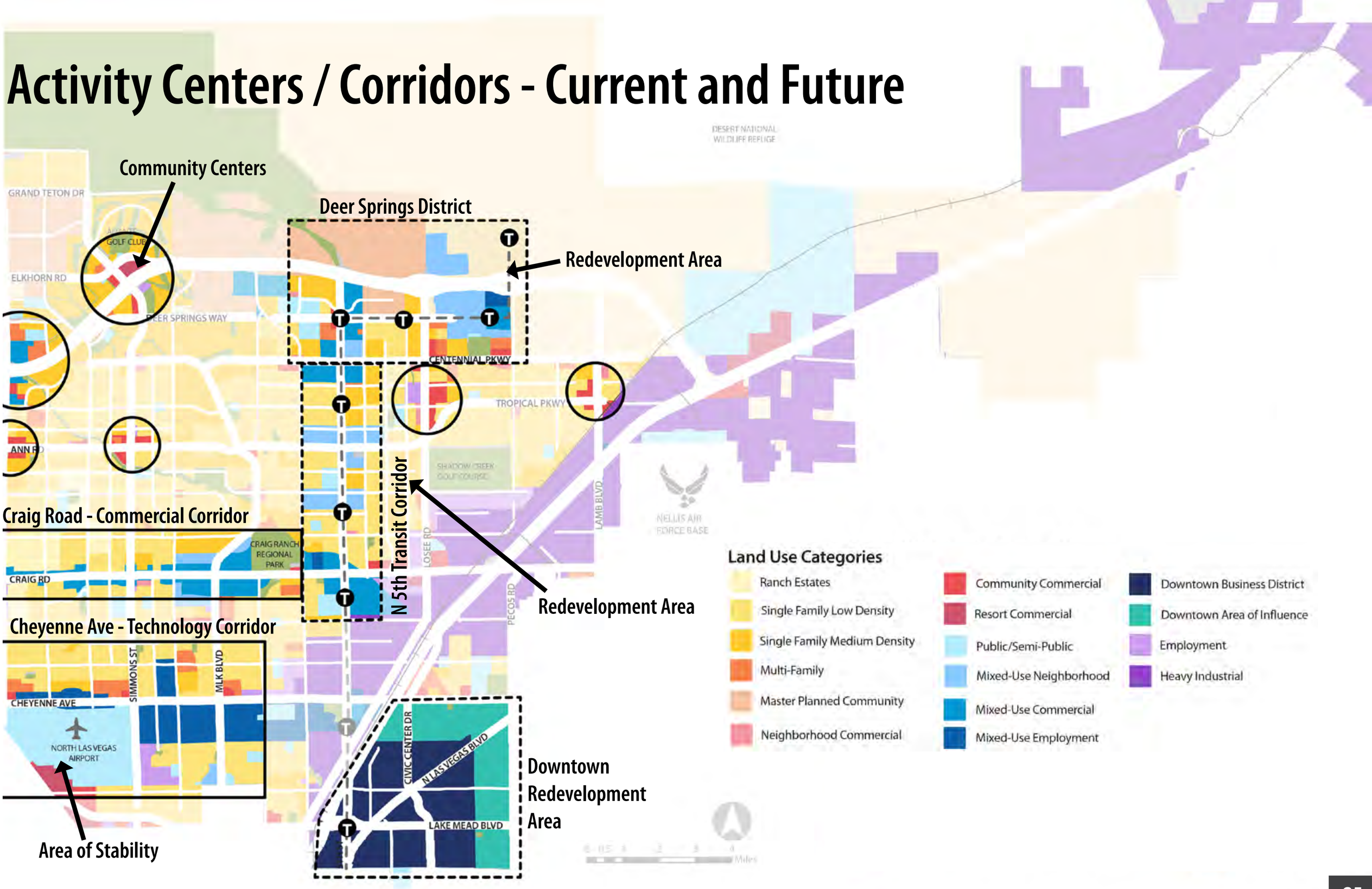
- local, collector, arterials
- Identify which streets can be reduced from current number of lanes

CONSIDERATIONS:

- Activity overlay for school zones
- Focus on areas of High Inequity
- New streets as part of future Master Planned Communities have specific design recommendations in the NLV Master Plan
- Engage Safe Routes to Schools program, and other specific stakeholder groups

ACTIVITY CENTERS

Activity Centers / Corridors - Current and Future



Downtown Redevelopment Area









*Add Downtown Streets Corridor Study

Downtown NLV 5-year Progress Report (2020)

Vision set forth in the *Downtown Master Plan* (2009) is still relevant:

> "Create a safe, mixed-use, connected, walkable community that supports local businesses and offers a variety of family-friendly amenities."

3 areas to focus implementation:

1. Invest in downtown district placemaking
2. **Improve downtown streetscapes**
3. Promote downtown catalytic development opportunities

Progress and recommendations for improving downtown streetscapes are shown on the following page.

Main Corridors in Downtown

- Las Vegas Boulevard
- Lake Mead Boulevard
- North Fifth Street
- McDaniel Street
- Judson Street







PROGRESS

Improve safety for all transportation modes Sub-actions	Complete	On Track	Not Started	No Longer Relevant
Implement transportation recommendations included in the *Downtown North Las Vegas Major Corridors Study* and the *Downtown Master Plan* (and *North Las Vegas Comprehensive Trails and Bikeways Master Plan*).				
Las Vegas Blvd - install medians, widen sidewalks, add landscape buffers, re-design roadway cross section, add multi-modal transit lanes, enhance ped crossings and provide mid-block.		●		
Lake Mead Blvd - widen sidewalks, increase setbacks at key intersections to create plaza-like intersections, enhance ped crossings and add mid-block crossings.				●
North Fifth Street - implement *North Fifth Street Transit Supportive Concepts*		●		
McDaniel Street - Create a ped friendly atmosphere, widen sidewalks, allow for on-street parking, enhance ped crossings.		●		
Carey Ave - Implement Complete Streets policies				●
Bruce St - Implement Complete Streets policies			●	
Design and construct short-term pedestrian crossing safety improvements and streetscape enhancements.				
At least one mid-block crossing on **Las Vegas Blvd between Lake Mead and Civic Center Drive;**	●			
Lake Mead Blvd @ McDaniel;				●
Lake Mead @ Bruce;				●
McDaniel @ Hunkins.		●		
Focus short-term landscaping and street furniture investments on the area bounded by LV Blvd, Civic Center Drive and Lake Mead Blvd, with an emphasis on McDaniel and Lake Mead Blvd near Civic Center Shopping Center and North Vista Hospital. Improvements should focus on shade and other features to improve pedestrian experience and make walking distances and climatic conditions acceptable.			●	
Expand CNLV and RTC partnership linking sidewalk improvements with transit stop improvements.		●		

RECOMMENDATIONS

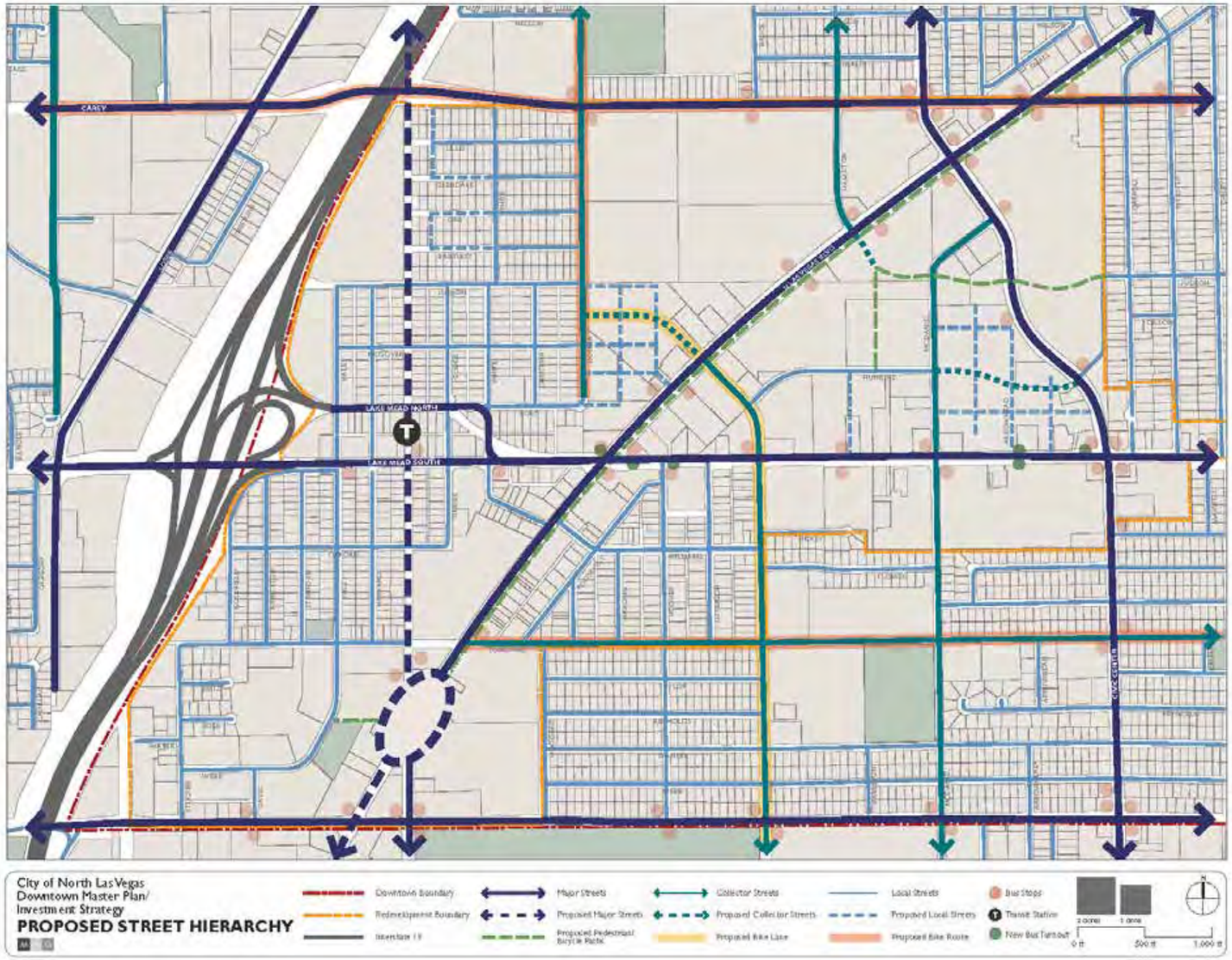
Action 1: Improve safety for all transportation modes
Implement transportation improvements with a focus on improving the built environment for pedestrians, cyclists, and public transportation users.

2015 Implementation Strategies	2020 Updated Strategies (changes to existing strategies)	Recommendations (actionable steps for progressing the 2020 Updated Strategies)
Implement recommended transit improvements	Continue implementing the transportation recommendations in the *Downtown Master Plan* (2009), *Major Downtown Corridor* (2014) study, and the *Citywide Bike and Pedestrian Plan* (2019). Implement the recommendations of the *Bruce Street Corridor Study* (2019).	Potential UPWP projects: · Access management (i.e. driveway consolidation) and parking study · Explore feasibility of a linear park/mixed use trail for east/west connectivity on Judson Ave · Conduct a neighborhood connections/linkages study
	Approve and implement the Downtown Complete Streets Master Plan once it it finalized.	Create ongoing coordination and communication with CNLV public works to discuss goals and strategies and identify alternative solutions when challenges arise (see Action 6).
	Work with Public Works and RTC to complete additional SRTS studies and walk audits, and implement recommendations of future studies.	Coordinate across city departments to identify funding for transportation improvements (i.e. CDBG funding).
Pursue short-term safety improvements	Continue to focus on short-term pedestrian improvements in areas of high priority as identified in the *Major Downtown Corridor Study* (2014) and the *Citywide Pedestrian and Bike Plan* (2019), and in the forthcoming Downtown Complete Streets Master Plan.	Identify grant opportunities for tactical urbanism strategies and ped-comfort type demonstration projects (see potential arts funding sources).
Focus on short-term landscaping and street furniture investments	Improve landscaping and street amenities to increase pedestrian comfort in downtown.	Develop programs for increasing the tree canopy and permeable surface areas.
		Source grants for street furniture and other active transportation elements.
Integrate street and transit improvements with RTC	Work with RTC, Public Works, and other city departments to utilize RTC's UPWP annual call for projects to conduct future transportation and corridor plans and studies.	Potential UPWP projects: · Create a downtown transportation plan · Conduct walk audits for additional elementary schools in the downtown area to identify needed pedestrian improvements

Ped and Bike Plan (2019)

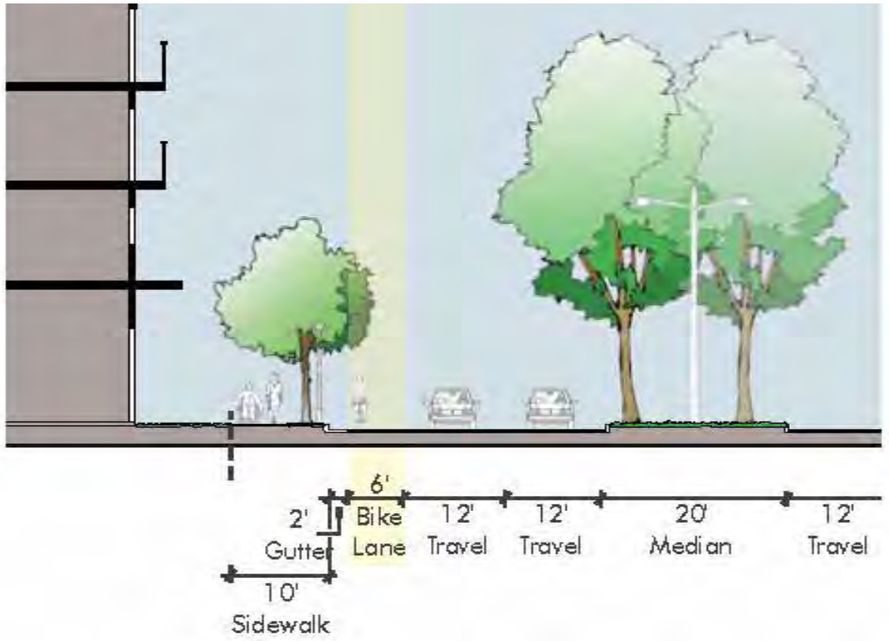


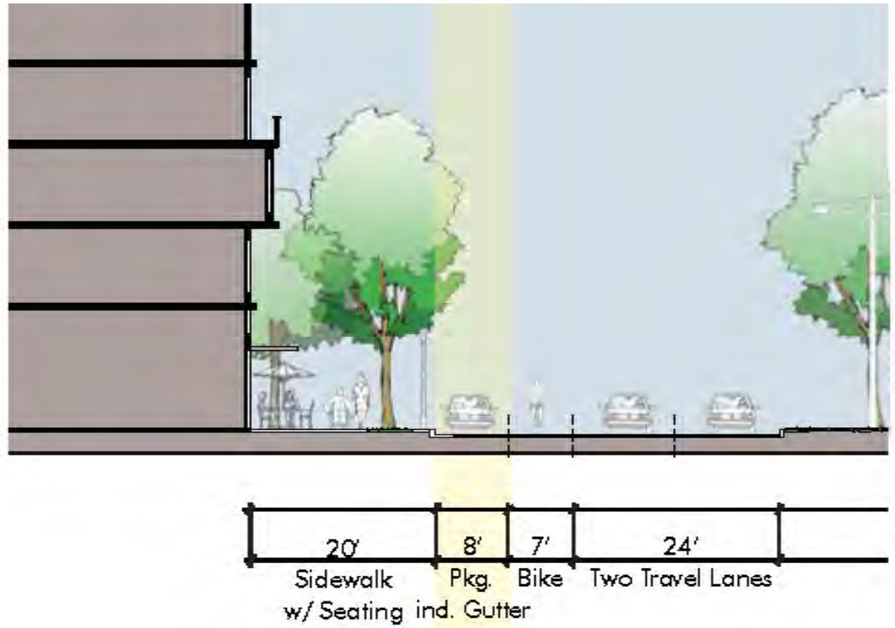
Downtown Master Plan (2009)

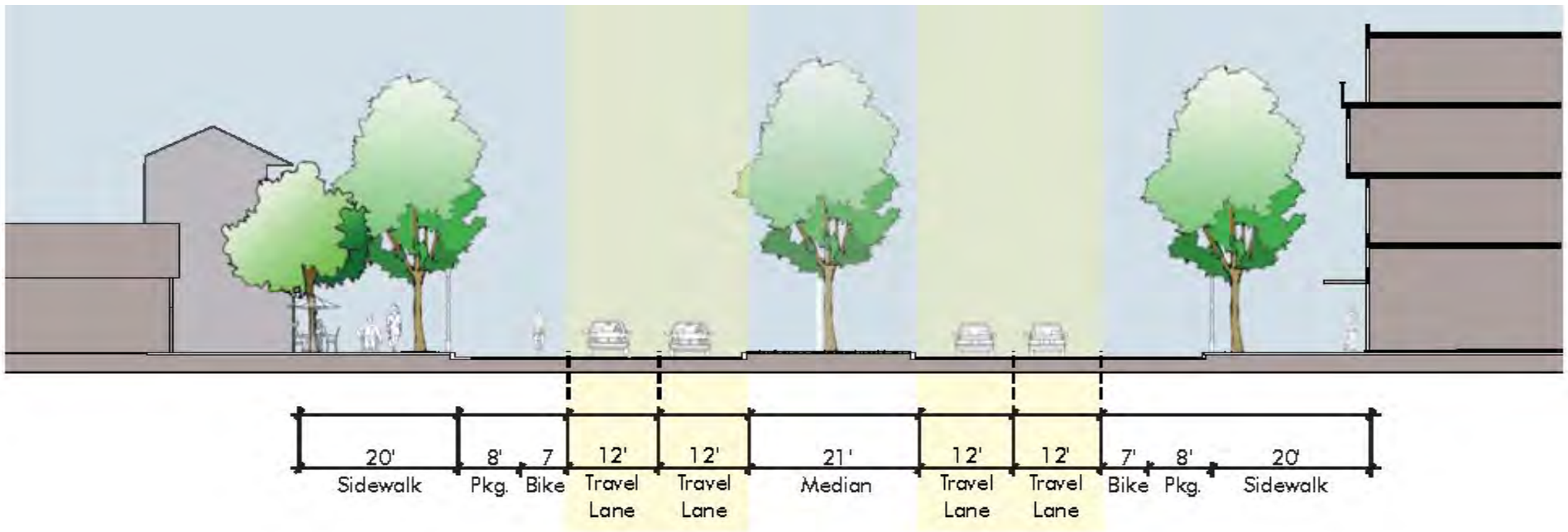


Typical Streetscape Standards

From North Las Vegas Downtown Master Plan & Investment Strategy







North Las Vegas Boulevard - "Signature Street", multi-way boulevard

From North Las Vegas Downtown Master Plan & Investment Strategy



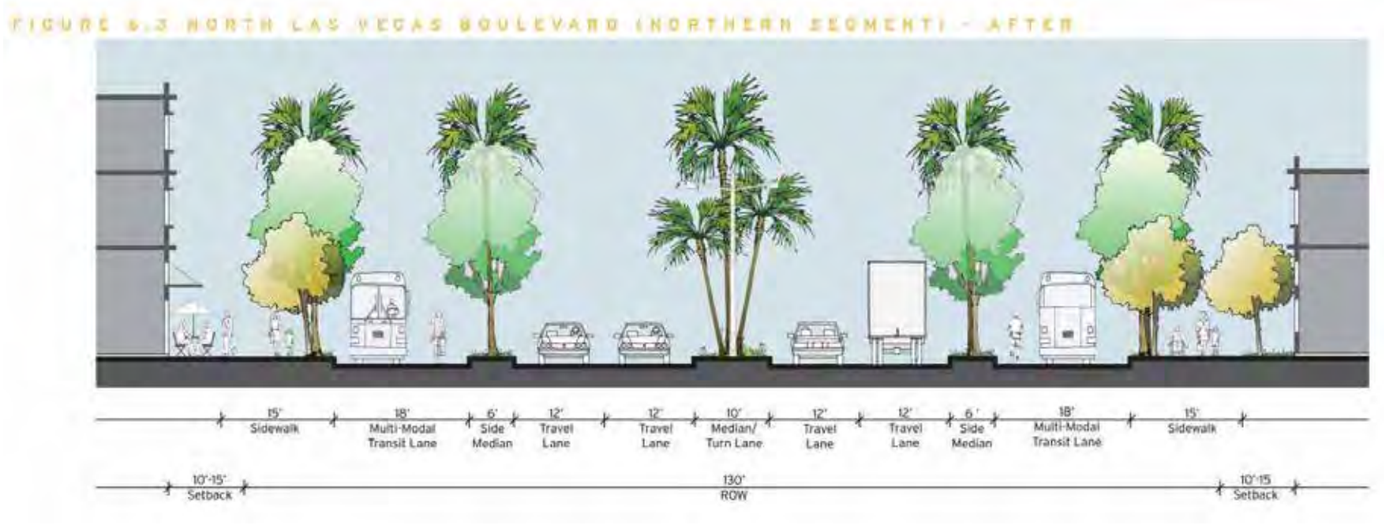
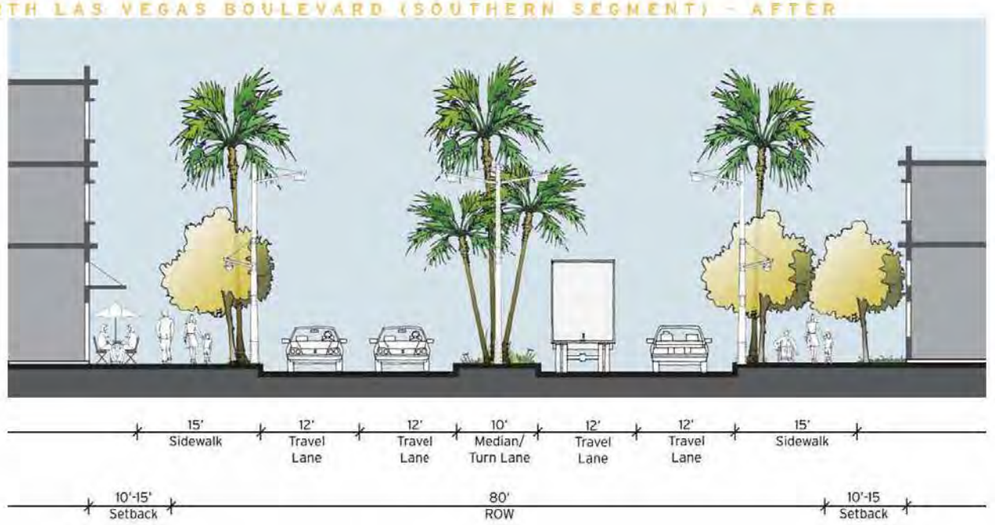


FIGURE 6.5 NORTH LAS VEGAS BOULEVARD (SOUTHERN SEGMENT) - AFTER

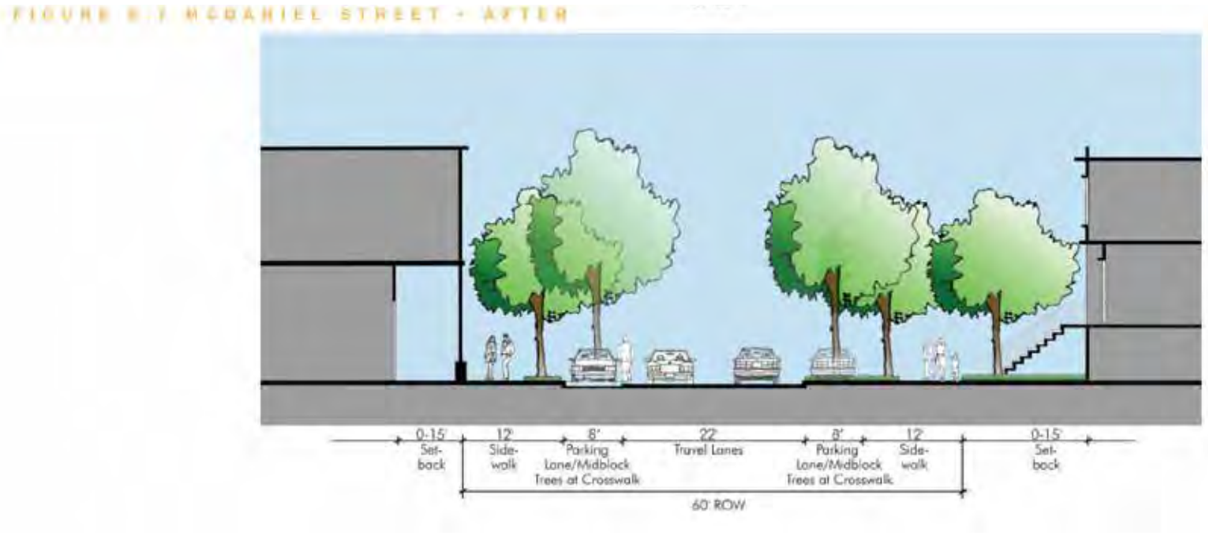




McDaniel Street - "Main Street"

From North Las Vegas Downtown Master Plan & Investment Strategy

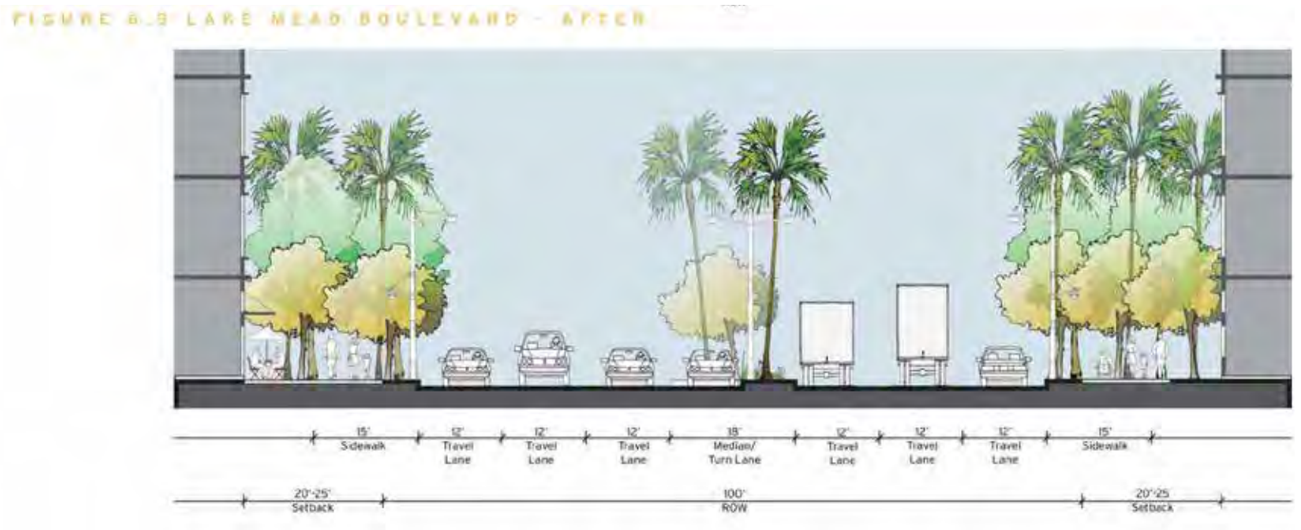




Lake Mead Boulevard - Medical/Office Corridor

From North Las Vegas Downtown Master Plan & Investment Strategy.
Subsequently found "not feasible" as a Complete Street.





North Fifth Street - Transit Corridor

From North Las Vegas Downtown Master Plan & Investment Strategy





Deer Springs District

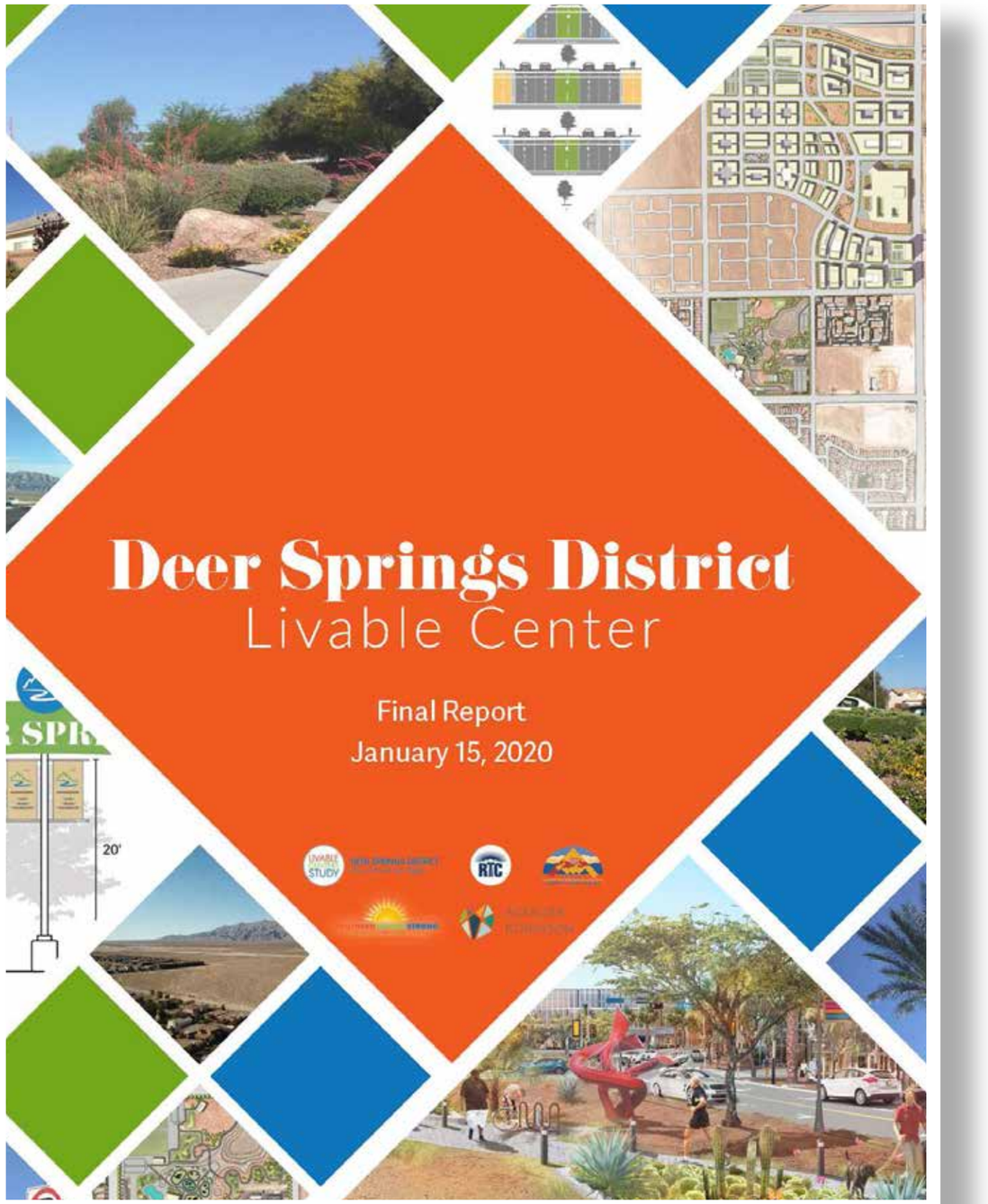
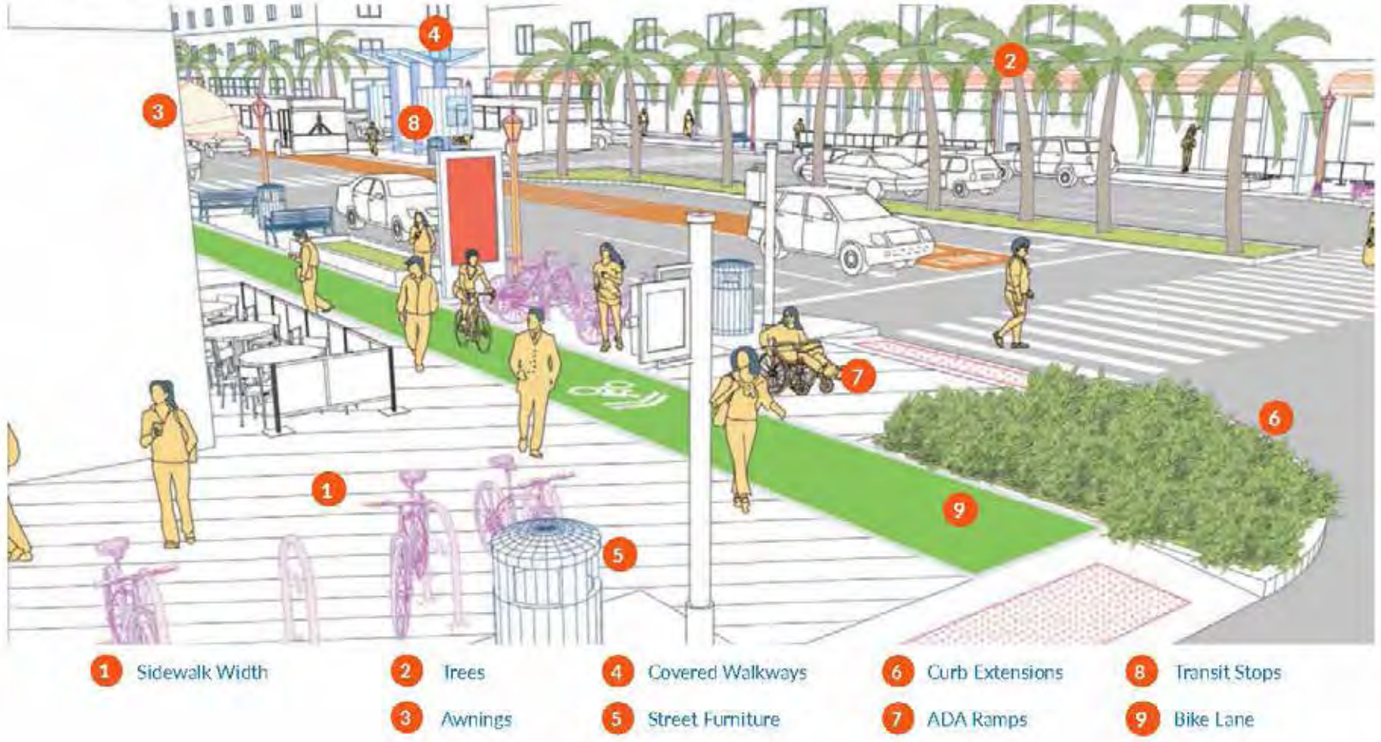


Figure 4.7: Deer Springs District Conceptual Street Network



Both images from Deer Springs Livable Centers Study.

Figure 4.6: Pedestrian Realm Conceptual Design



Proposed 60' ROW Street Concepts

Figure 4.15: Concept 1 (Cycle Track)



Figure 4.16: Concept 2 (Buffered Bike Lane, Wide Sidewalk)

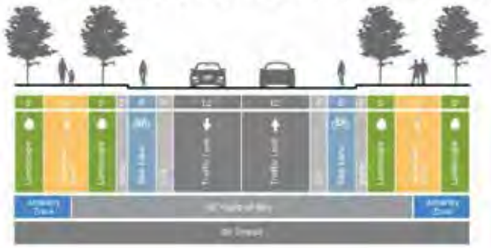
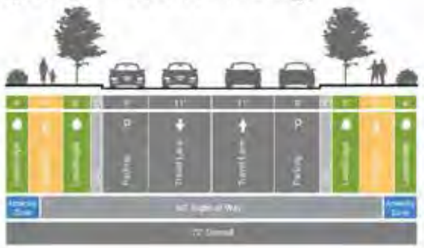


Figure 4.17: Concept 3 (On-street Parking)



Proposed 80' ROW Street Concepts

Figure 4.11: Concept 1 (Wide Median)

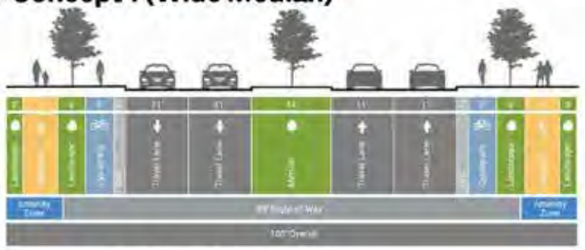


Figure 4.12: Concept 2 (Cycle Track 1)

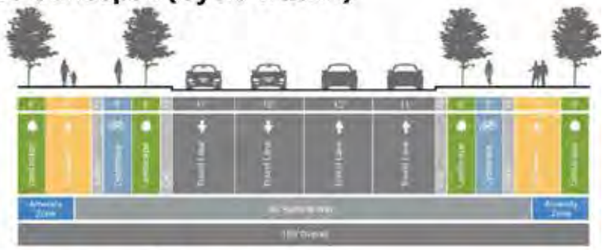


Figure 4.13: Concept 3 (Cycle Track 2)

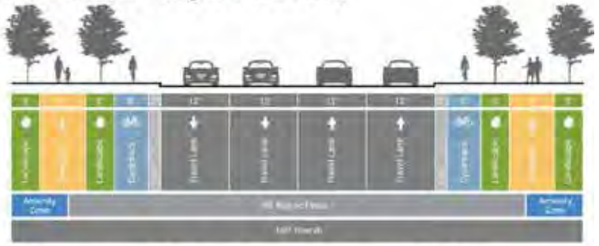
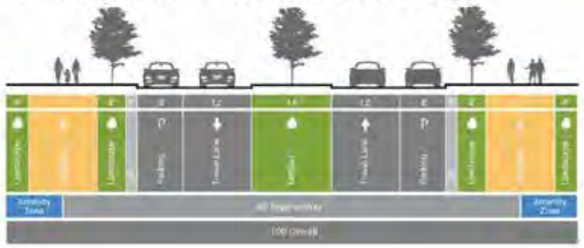


Figure 4.14: Concept 4 (Job Creation Zone Only)



Proposed 100' ROW Street Concepts

Figure 4.8: Concept 1 (Shared Use Path)

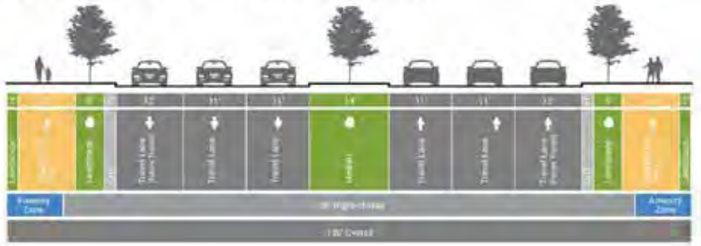


Figure 4.9: Concept 2 (Cycle Track)

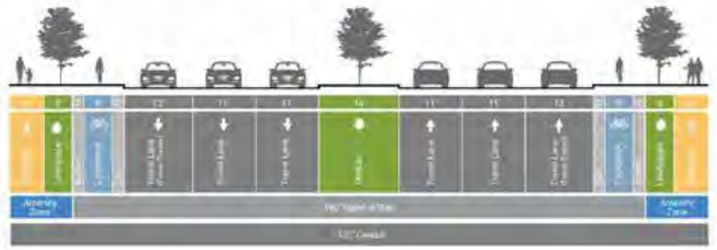


Figure 4.10: Concept 3 (Road Diet)



Images from Deer Springs Livable Centers Study.

Figure 4.20: Job Creation Zone Conceptual Street Network



Figure 4.21: Deer Springs Way Conceptual Streetscape Design



Images from Deer Springs Livable Centers Study.

Proposed Deer Springs Way Street Concept with Curbside Running Transit

Figure 4.22: Concept 1 (Within Job Creation Zone 100' ROW)

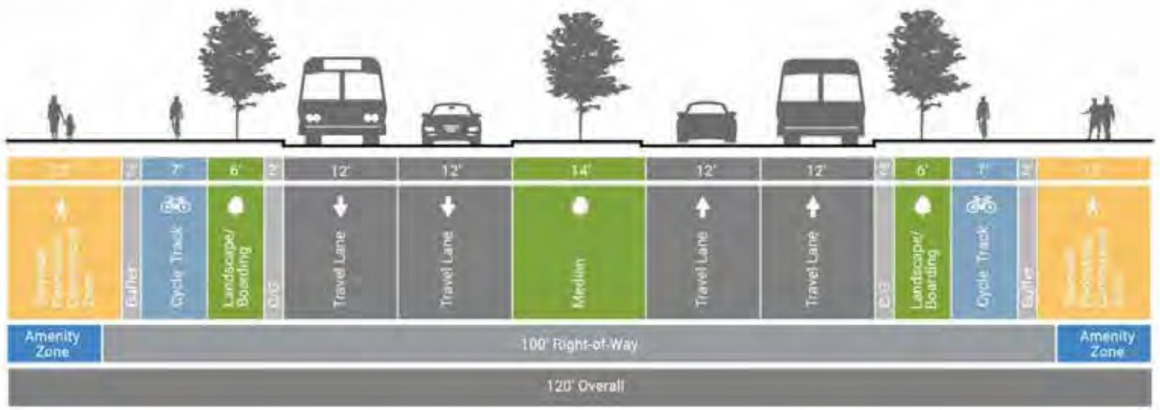
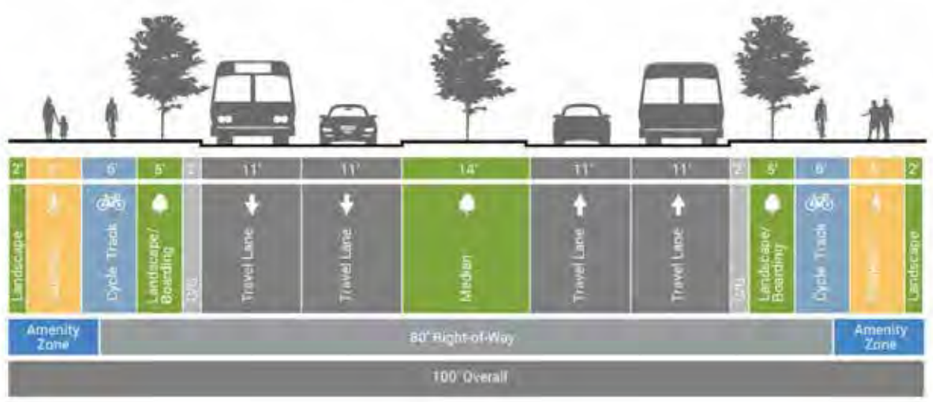


Figure 4.23: Concept 2 (Outside the Job Creation Zone 80' ROW)



Images from Deer Springs Livable Centers Study.

Proposed Deer Springs Way Street Concept with Center Running Transit

Figure 4.24: Concept 3 (Within the Job Creation Zone 100' ROW)

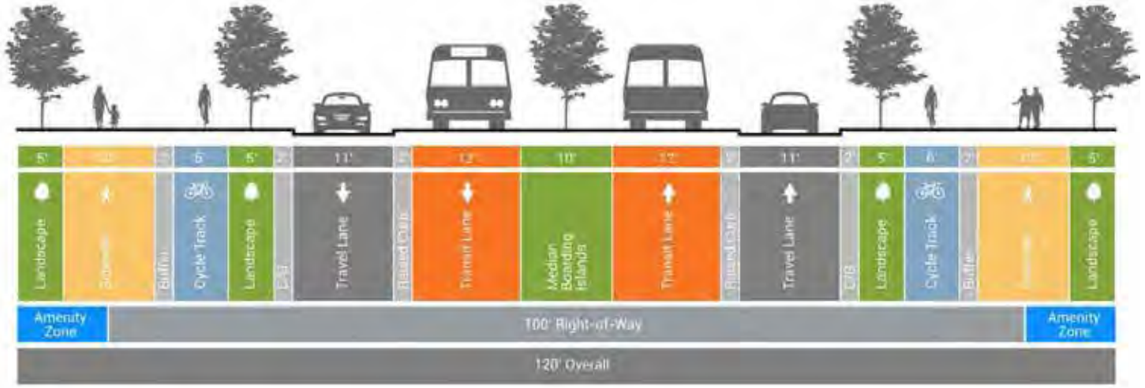
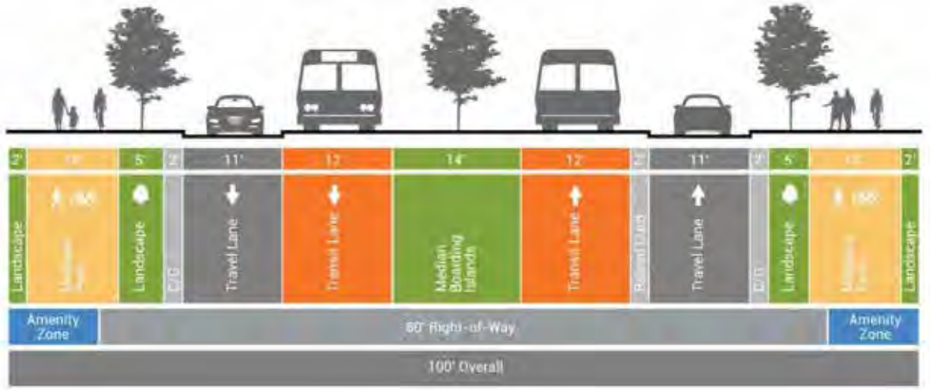
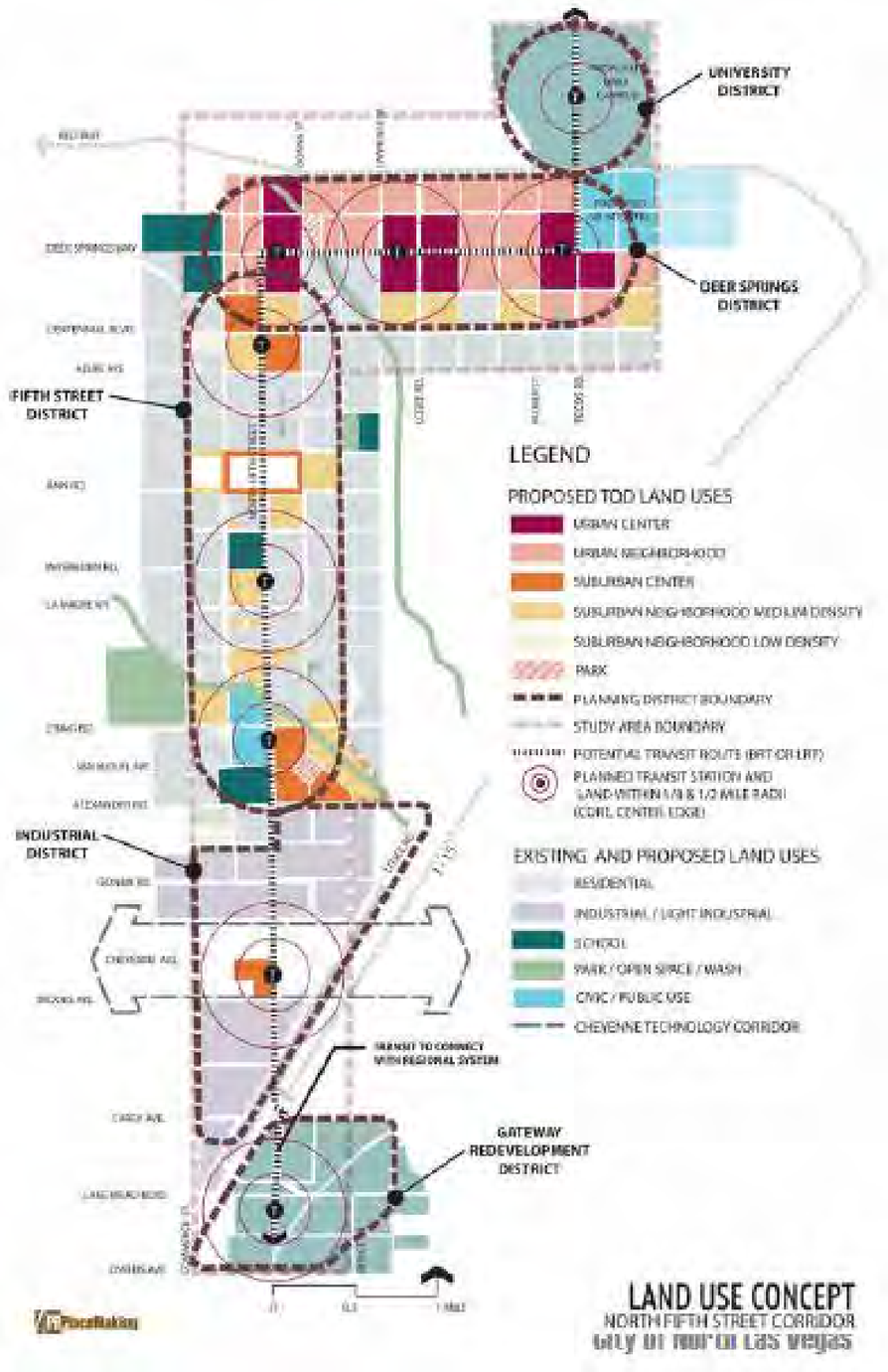


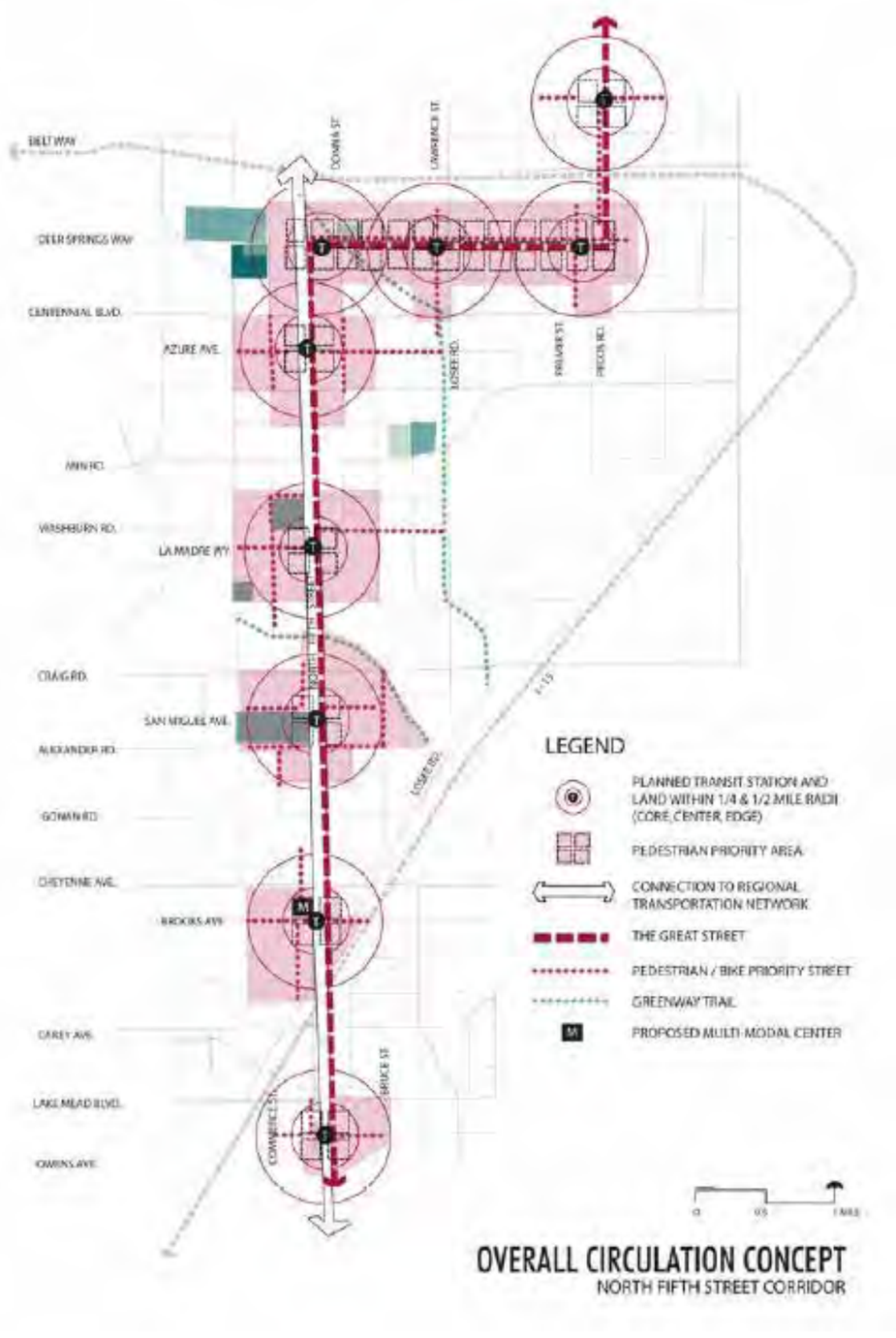
Figure 4.25: Concept 4 (Outside the Job Creation Zone 80' ROW)



North Fifth Street Transit Corridor

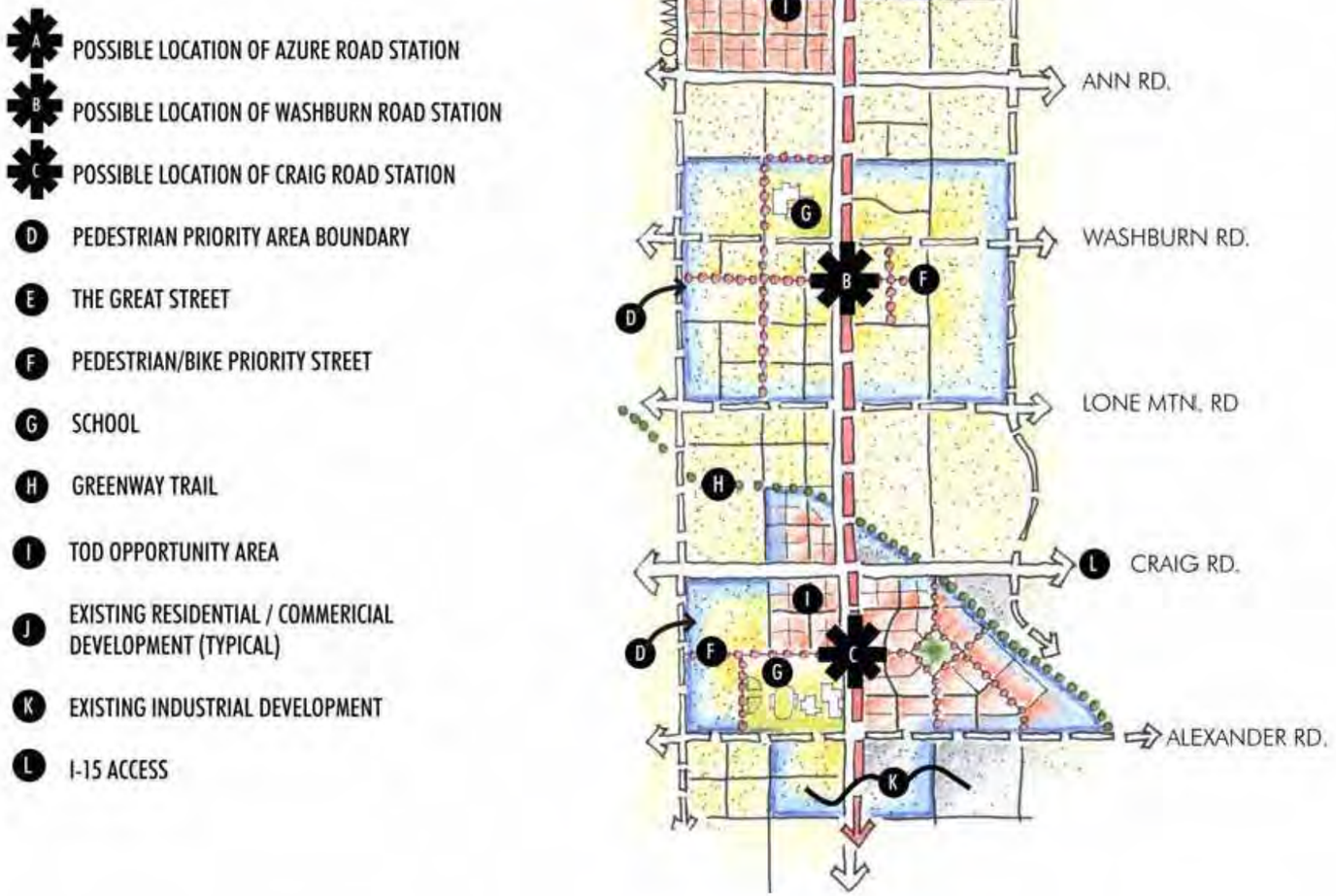






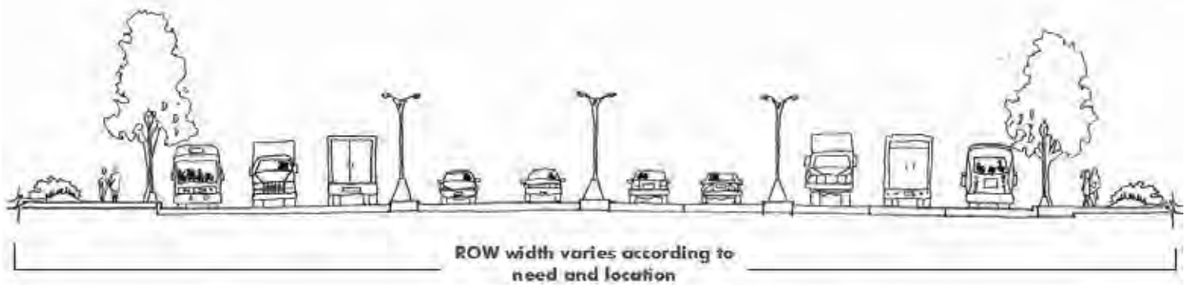
Images from North Fifth Street Transit Supportive Concept Plan

NORTH FIFTH STREET DISTRICT CONCEPT



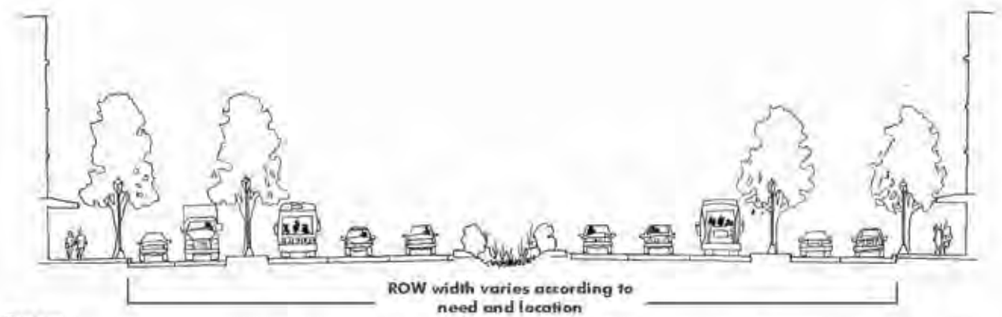
Images from North Fifth Street Transit Supportive Concept Plan

North Fifth Street Street
Conceptual Street Design for Industrial or Neighborhood Land Uses
Cross - Section 'B'



Features:
- Street trees buffer pedestrians from moving traffic
- 10 feet wide sidewalk each side
- Two-way local access lane
- Transit located curbside with local access traffic
- Regional through traffic located in center of right-of-way
- **Additional 20' Building/Landscape Setback required on both sides of ROW**

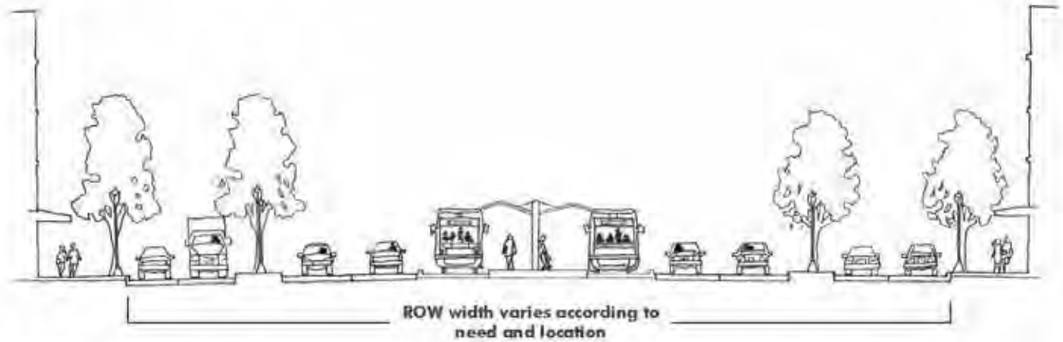
North Fifth Street
Conceptual Street Design For Neighborhood Land Uses
Cross - Section 'C'



Features:
- Sidewalk buffered from moving traffic with landscaped medians
- One-way local access lane with on-street parking
- Transit located curbside adjacent to median
- Regional through traffic located in center of right-of-way with stormwater management swale
- **Additional 20' Building/Landscape Setback required on both sides of ROW**

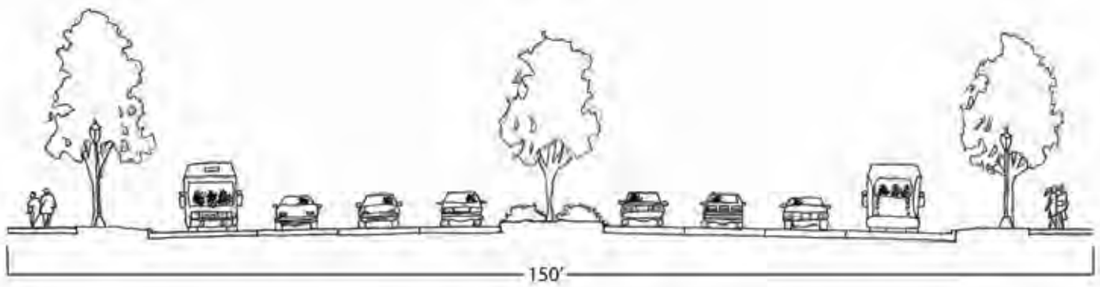
Images from North Fifth Street Transit Supportive Concept Plan

North Fifth Street
Conceptual Street Design For Neighborhood Land Uses
Cross - Section 'D'

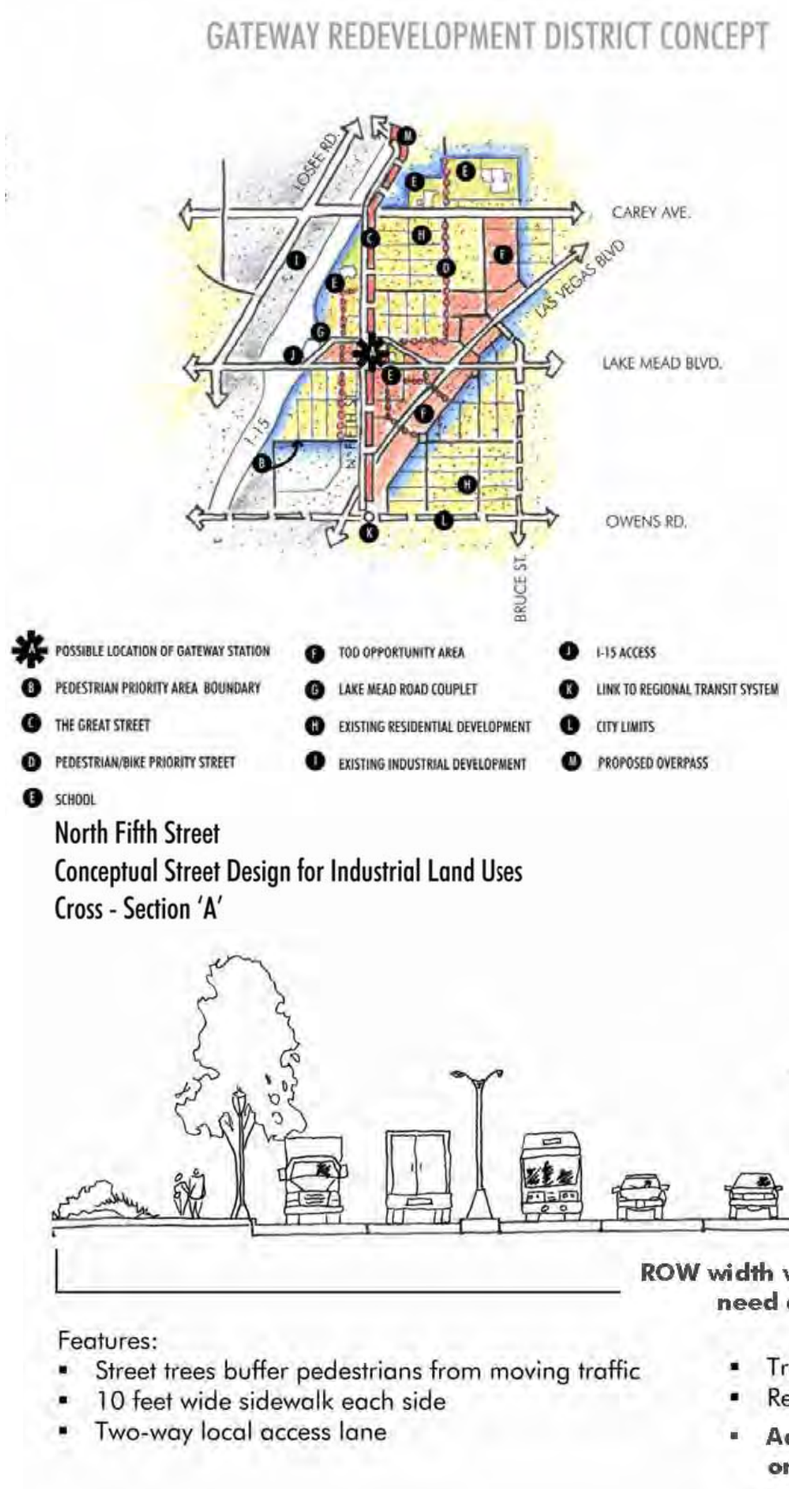


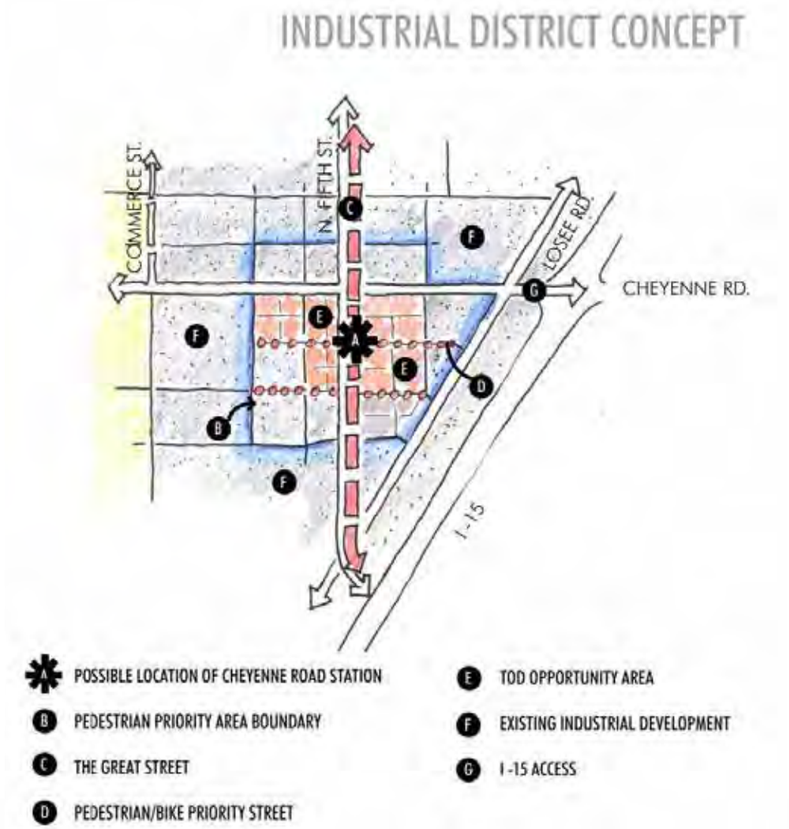
Features:
- Sidewalk buffered from moving traffic with street trees, on-street parking and landscaped medians
- One-way local access lane with on-street parking
- Transit located in center of right-of-way
- Regional through traffic located on either side of transit
- **Additional 20' Building/Landscape Setback required on both sides of ROW**

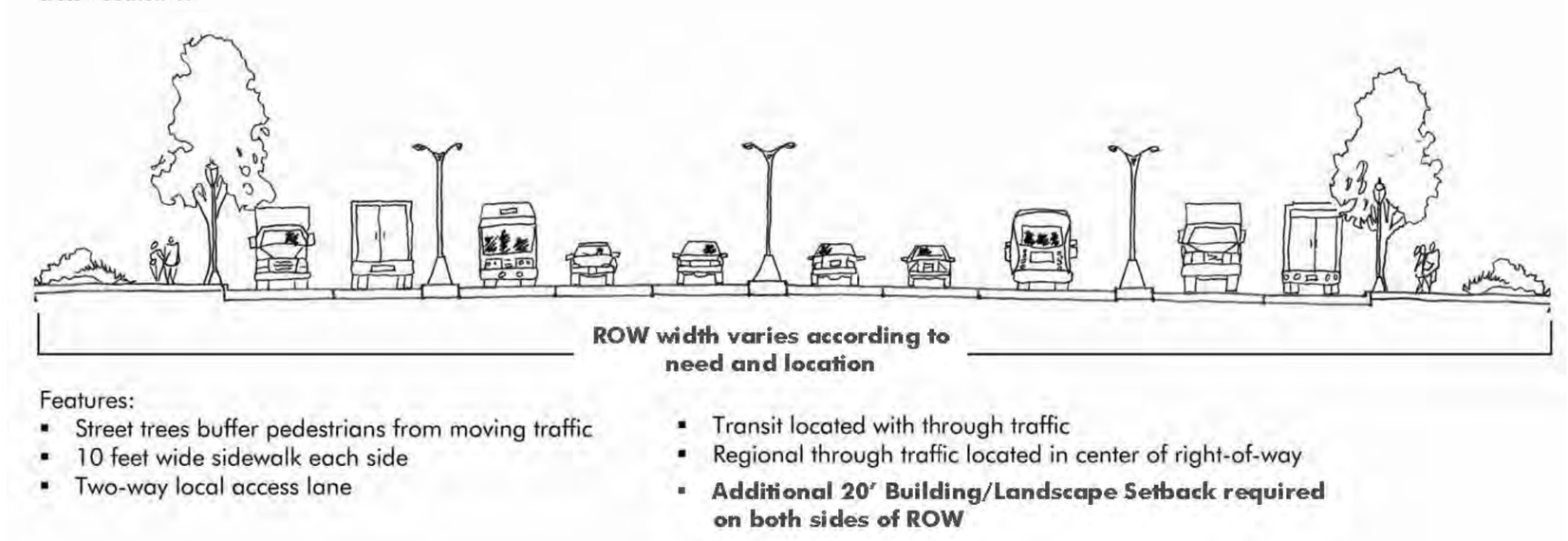
North Fifth Street
Current Approved Standard for Industrial or Neighborhood Land Uses (2006)
Cross - Section 'E'



Features:
- Sidewalk buffered from moving traffic with street trees
- Transit located curbside adjacent to sidewalk
- Regional through traffic located in center of right-of-way
- Improvements located within 150' right-of-way
- **Additional 20' Building/Landscape Setback required on both sides of ROW**

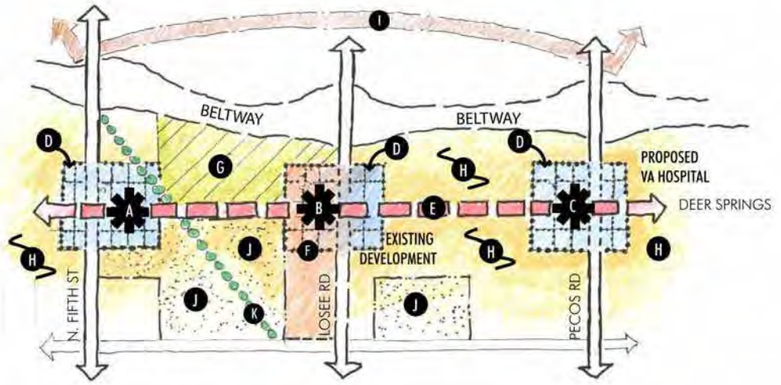






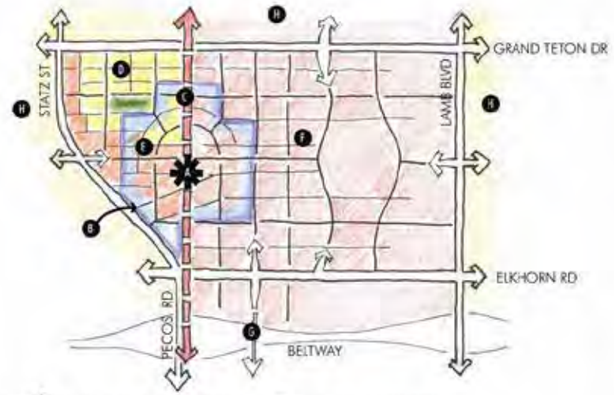
Images from North Fifth Street Transit Supportive Concept Plan

DEER SPRINGS DISTRICT CONCEPT



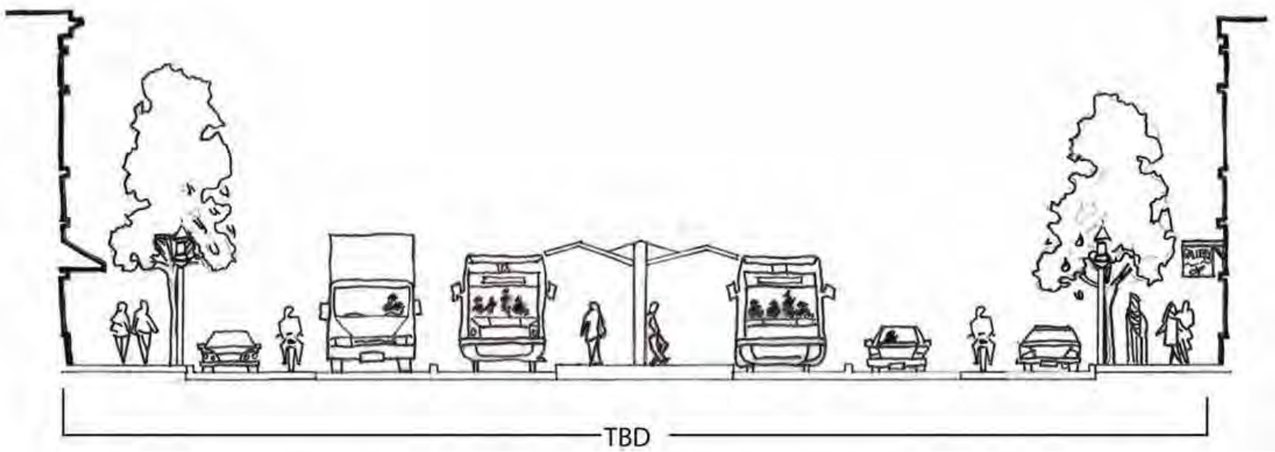
- POSSIBLE LOCATION OF DONNA ST. STATION
- POSSIBLE LOCATION OF DEER SPRINGS CENTER STATION
- POSSIBLE LOCATION OF VA HOSPITAL STATION
- D PEDESTRIAN PRIORITY AREA BOUNDRY
- E THE GREAT STREET
- F REGIONAL MALL
- G BLM DISPOSAL
- H FUTURE NEIGHBORHOODS
- I FUTURE MASTER PLANNED COMMUNITIES
- J EXISTING DEVELOPMENT
- K GREENWAY TRAIL

UNIVERSITY DISTRICT CONCEPT



- POSSIBLE LOCATION OF UNLV STATION
- B PEDESTRIAN PRIORITY AREA BOUNDARY
- C THE GREAT STREET
- D MARKET RATE RESIDENTIAL
- E MIXED - USE NEIGHBORHOOD
- F CAMPUS
- G CONNECTION TO VA HOSPITAL
- H UNDEVELOPED LAND

Deer Springs Way and Pecos Road
Conceptual Street Design For Neighborhood Land Uses
Cross - Section 'F'



Features:

- Sidewalk buffered from moving traffic with street trees and on-street parking
- Transit located in center of right-of-way
- Vehicle and bike lanes for local traffic
- Right-of-way width to be determined

Images from North Fifth Street Transit Supportive Concept Plan

Streetscape Design Recommendations for Activity Centers / Corridors

STREET TYPES:

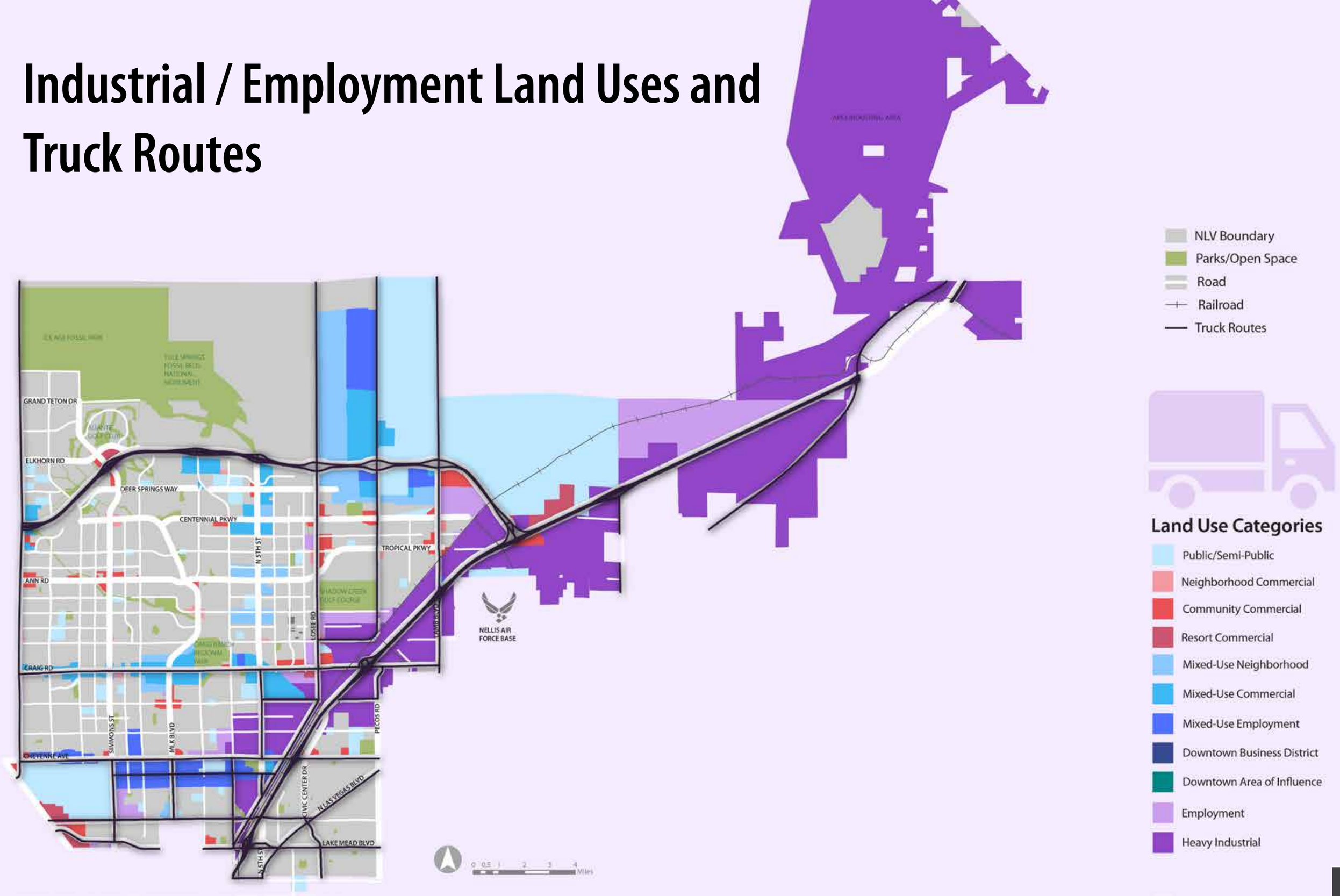
- local, collector, arterials
- Identify Typical streets (especially existing commercial centers)

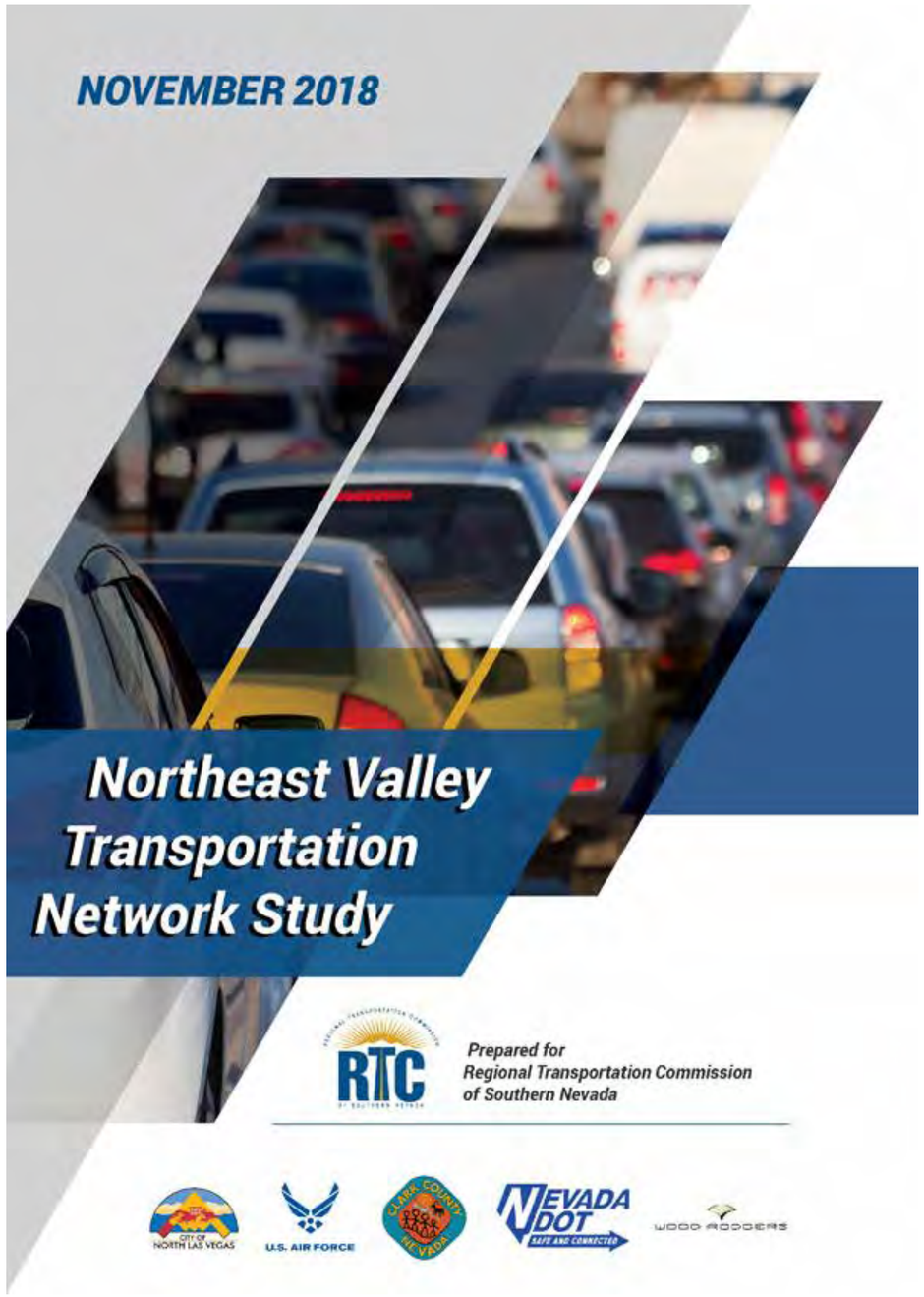
CONSIDERATIONS:

- Verify existing recommendations, ensure policies are still relevant and identify any recent developments
- Plans in place to guide redevelopment, integrate plan recommendations into CMTPS
- Any specific groups to engage?

INDUSTRIAL / EMPLOYMENT

Industrial / Employment Land Uses and Truck Routes





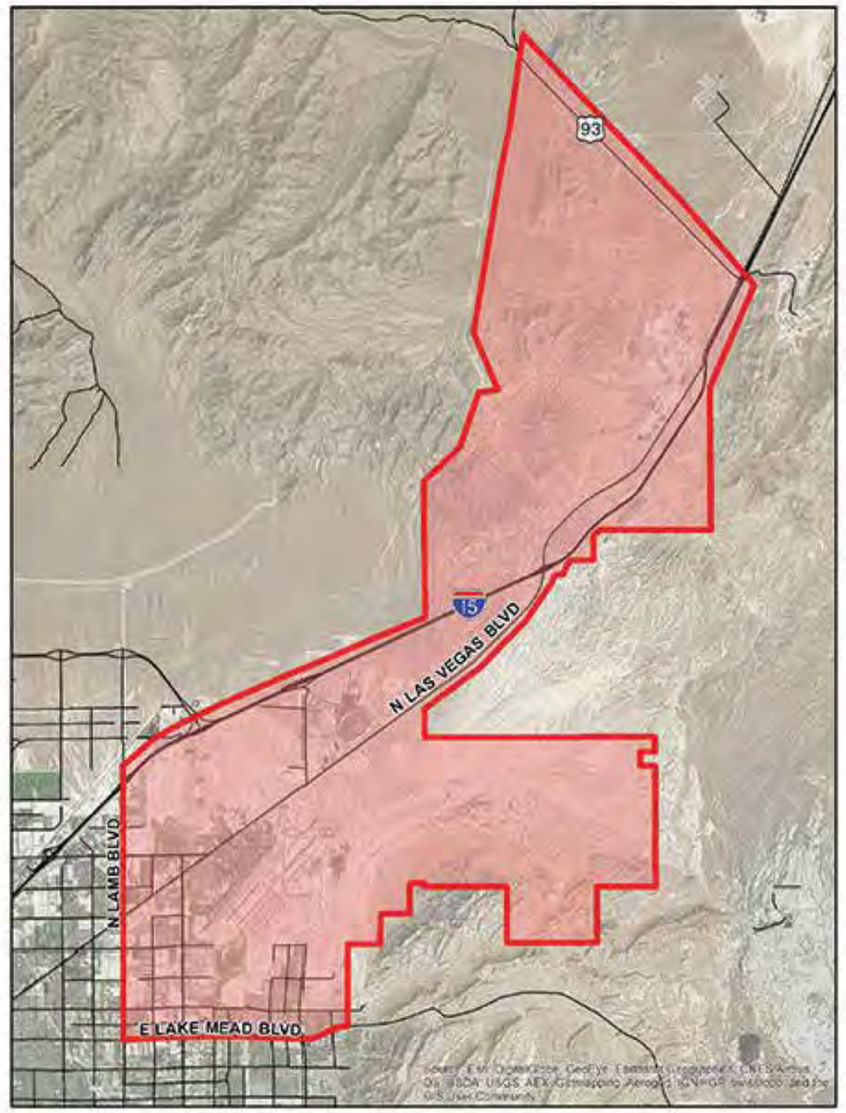


Figure ES-1: Study Area

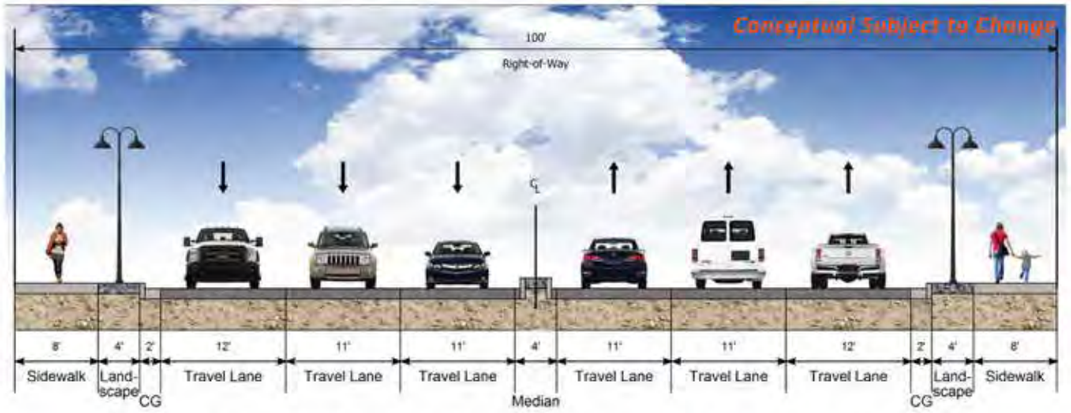


Figure 3-46: Lamb Boulevard - Judson Avenue to Las Vegas Boulevard - Cross Section

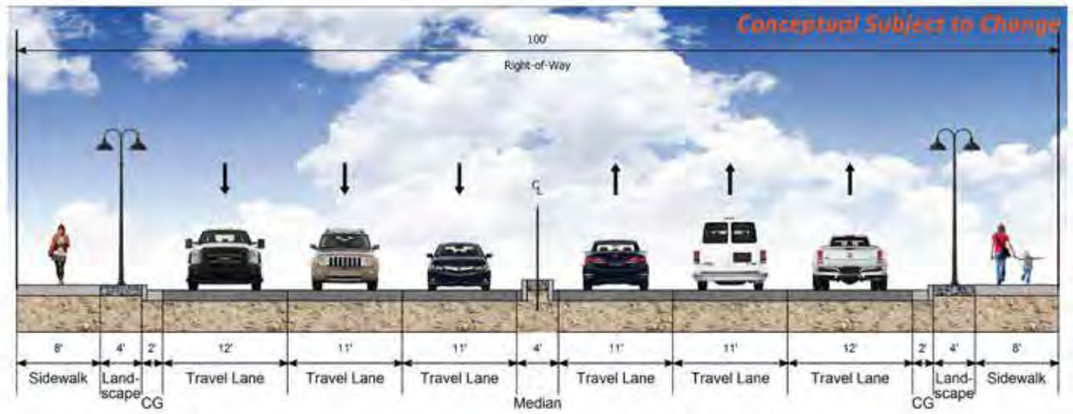


Figure 3-47: Lamb Boulevard - Centennial Parkway to North of CC 215 WB - Cross Section

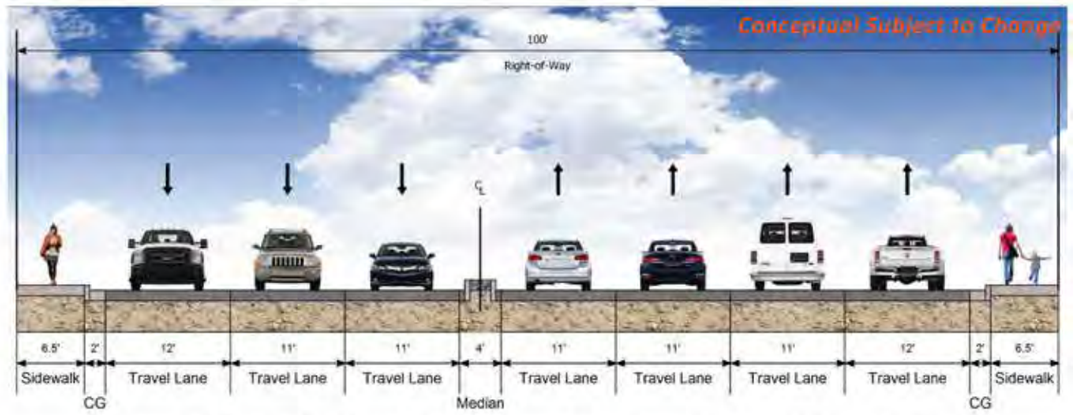


Figure 3-48: Nellis Boulevard - Carey Avenue to Las Vegas Boulevard - Cross Section

Images from Northeast Valley Transportation Network Study

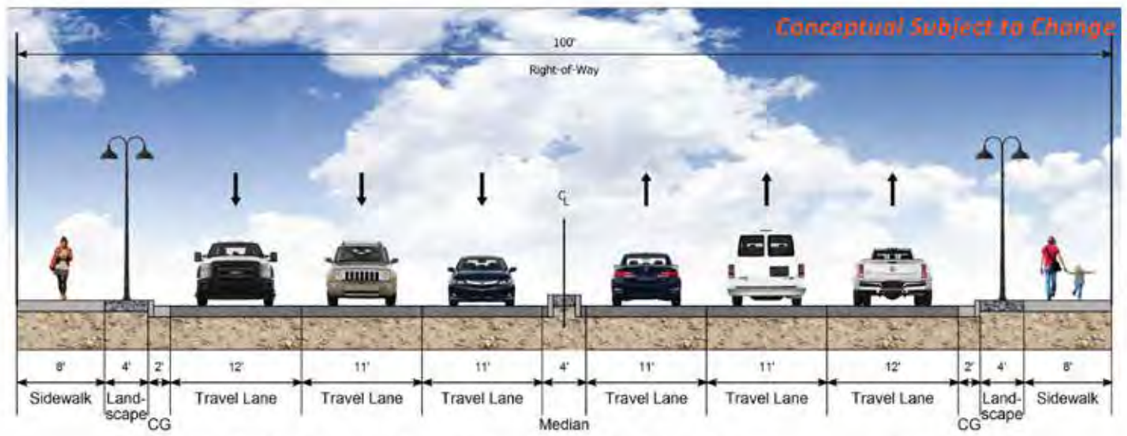


Figure 3-49: Nellis Boulevard - Las Vegas Boulevard to Craig - Cross Section

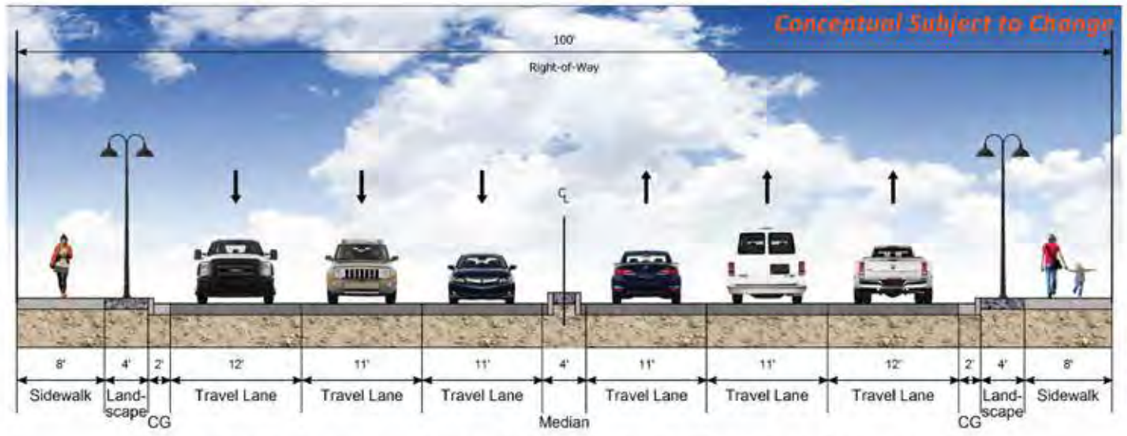


Figure 3-50: Cheyenne Avenue - Lamb Boulevard to Nellis Boulevard - Cross Section

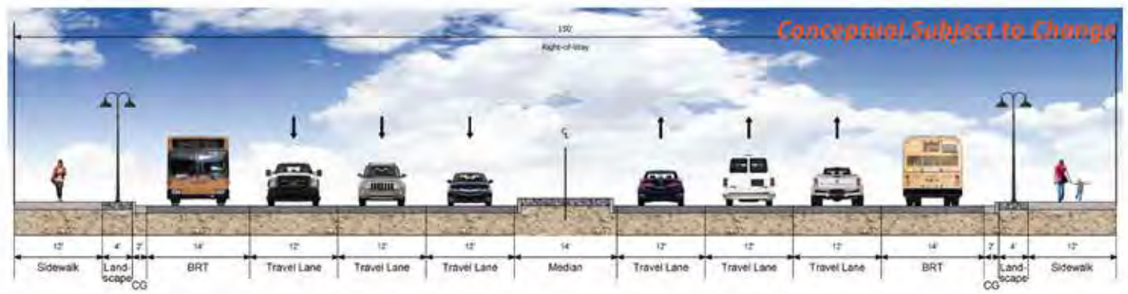


Figure 3-51: Las Vegas Boulevard - Cheyenne Avenue to Northeast of Craig Road - Cross Section

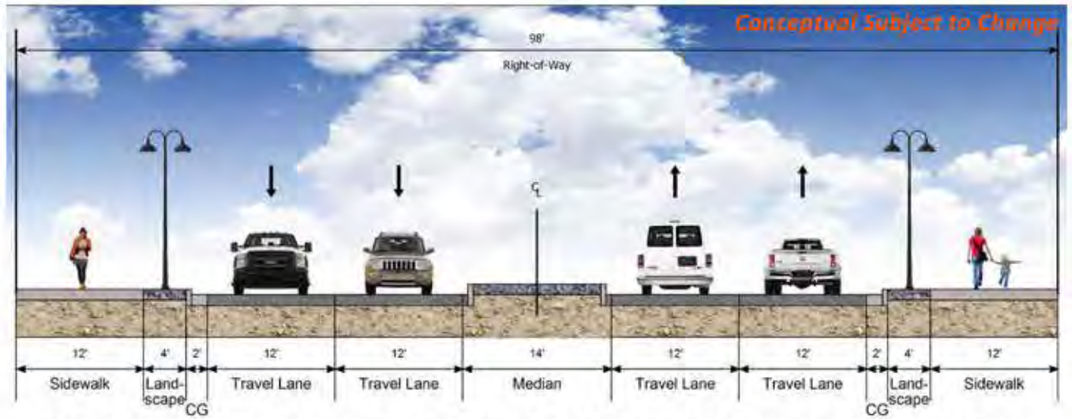


Figure 3-52: Las Vegas Boulevard - South of I-15 NB to North of I-15 SB - Very Large Right of Way (Approximately 350') - Cross Section

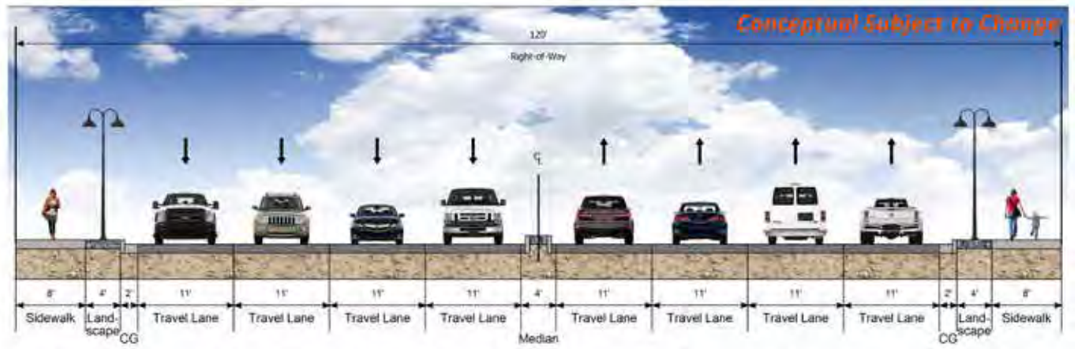


Figure 3-53: Craig Road - West of Lamb Boulevard to Nellis Air Force Base Entrance - Cross Section

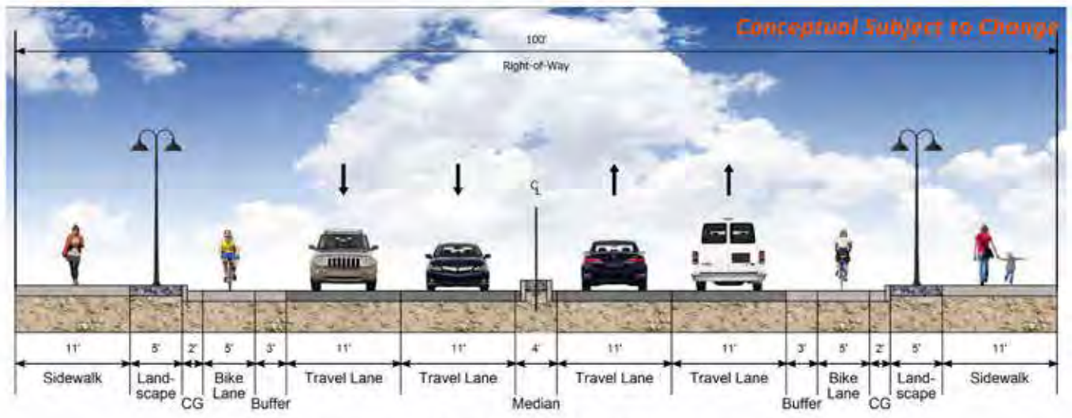


Figure 3-54: Tropical Parkway West of Lamb Boulevard - Cross Section

Images from Northeast Valley Transportation Network Study

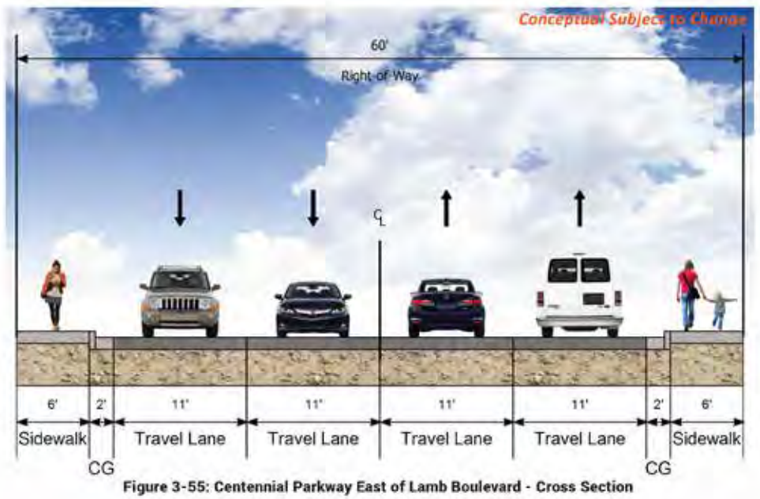


Figure 3-55: Centennial Parkway East of Lamb Boulevard - Cross Section

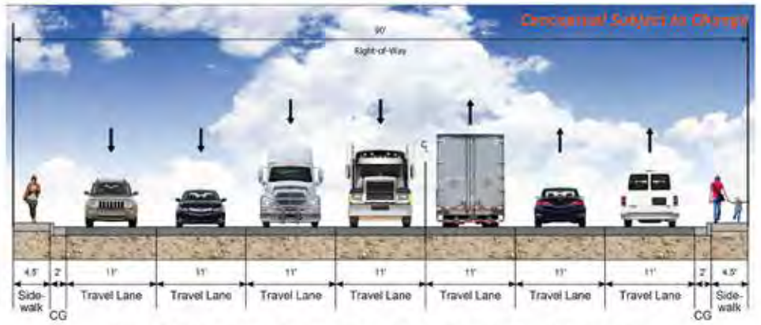


Figure 3-56: Speedway Boulevard - South of I-15 NB Ramps - Cross Section

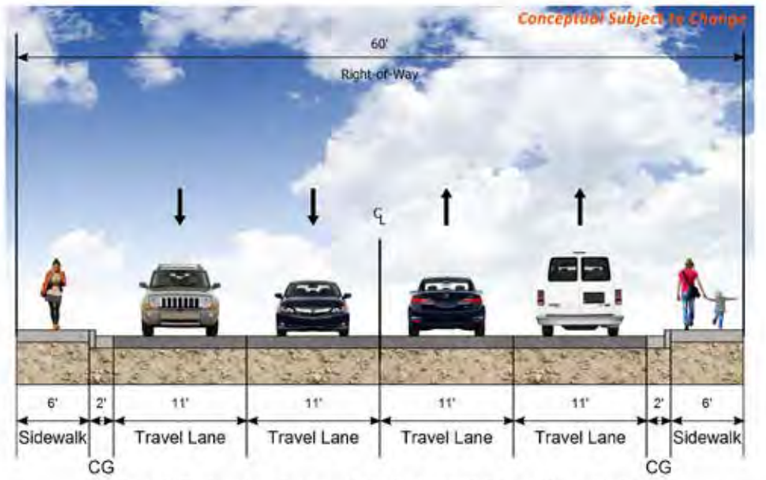


Figure 3-57: Speedway Boulevard - North of I-15 SB Ramps - Cross Section

Streetscape Design Recommendations for Industrial / Employment Areas

STREET TYPES:

- local, collector, arterials
- Identify Typical streets

CONSIDERATIONS:

- Verify existing recommendations, ensure policies are still relevant and identify any recent developments
- Coordinate with Apex Industrial Park, any other stakeholders?

CONCLUSION & NEXT STEPS

Fill out matrix that connects land use categories with street design considerations

- land use + activity overlay + future vision
- mode priority, design elements/considerations

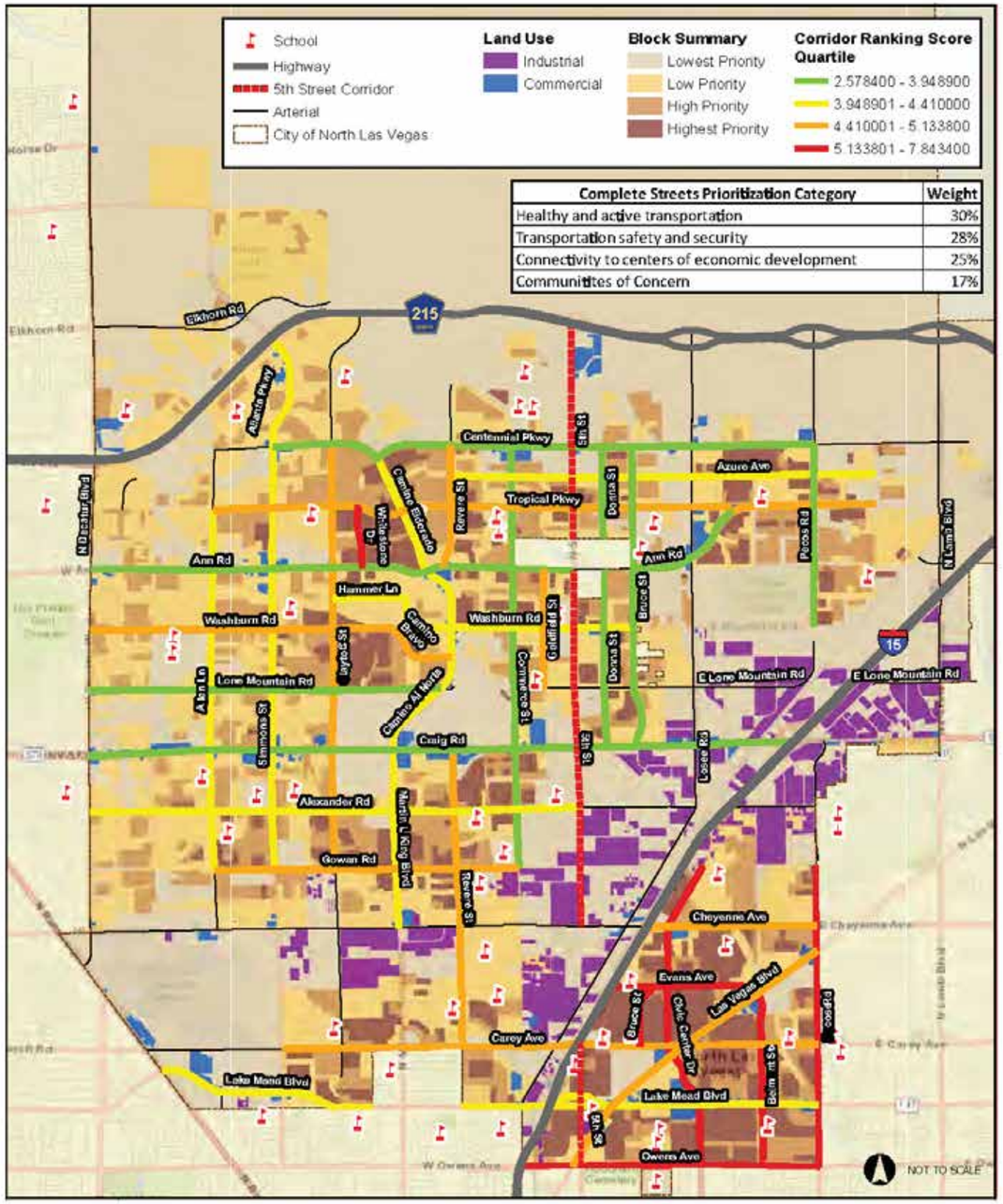
	Existing condition (developed/ undeveloped) / planned vision?	Destinations (schools, centers, etc)	Built Form (buildings relationship to street, setbacks, height)	Parking / driveways / curbside management	Mode Priority	Typical Corridors - street condition
Residential - arterial	existing					
Residential - collector	existing					
Commercial Center - arterial			suburban shopping center	entrances to lots, clearly marked		Craig Road
Deer Springs - arterial / collector?						
Downtown arterial / collector?						
N 5th Transit Corridor?						
Industrial - arterial	existing planned - Apex			entrances to lots, clearly marked		

Add activity overlay - commercial centers, employment centers, schools, parks

Add equity analysis overlay

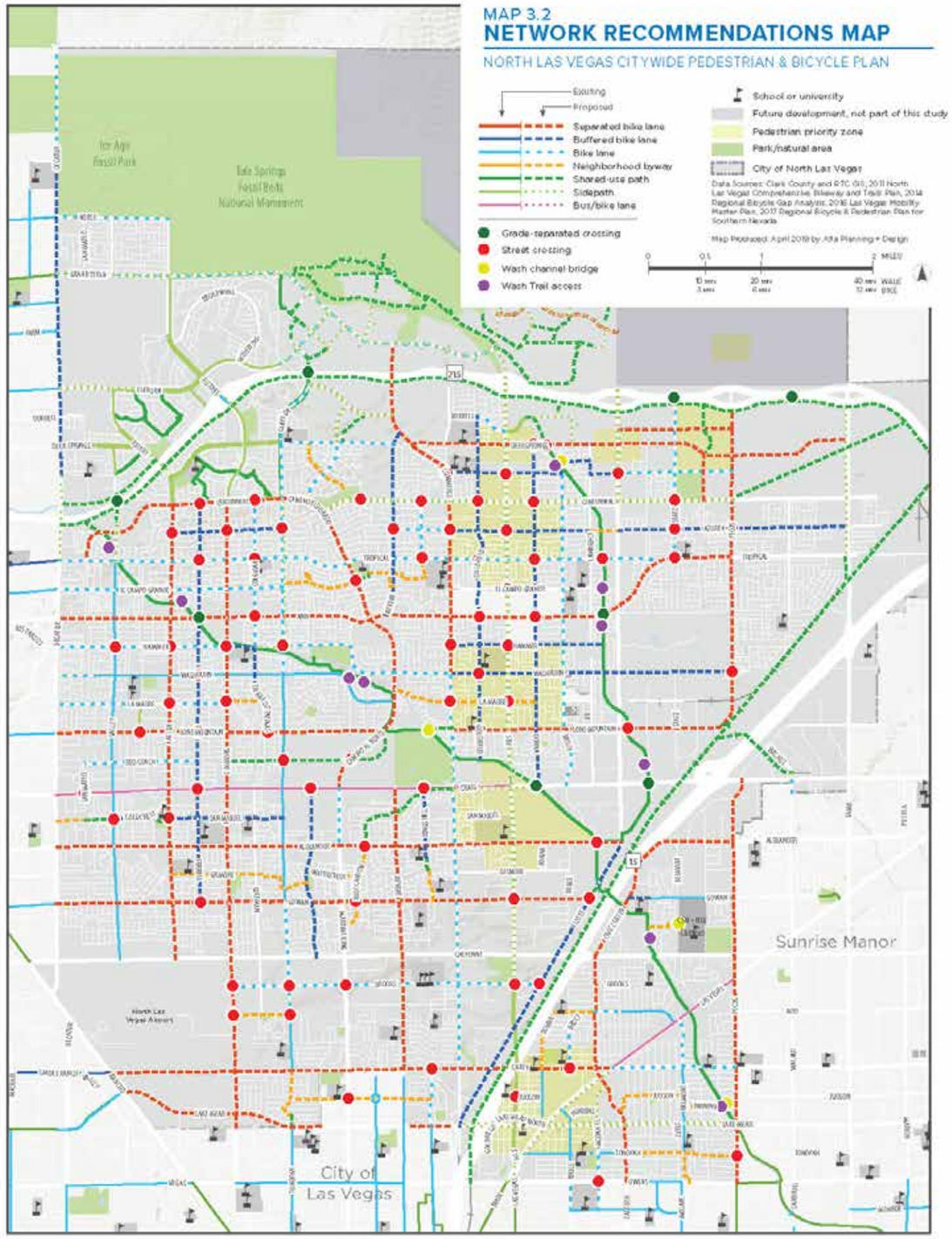
APPENDIX:

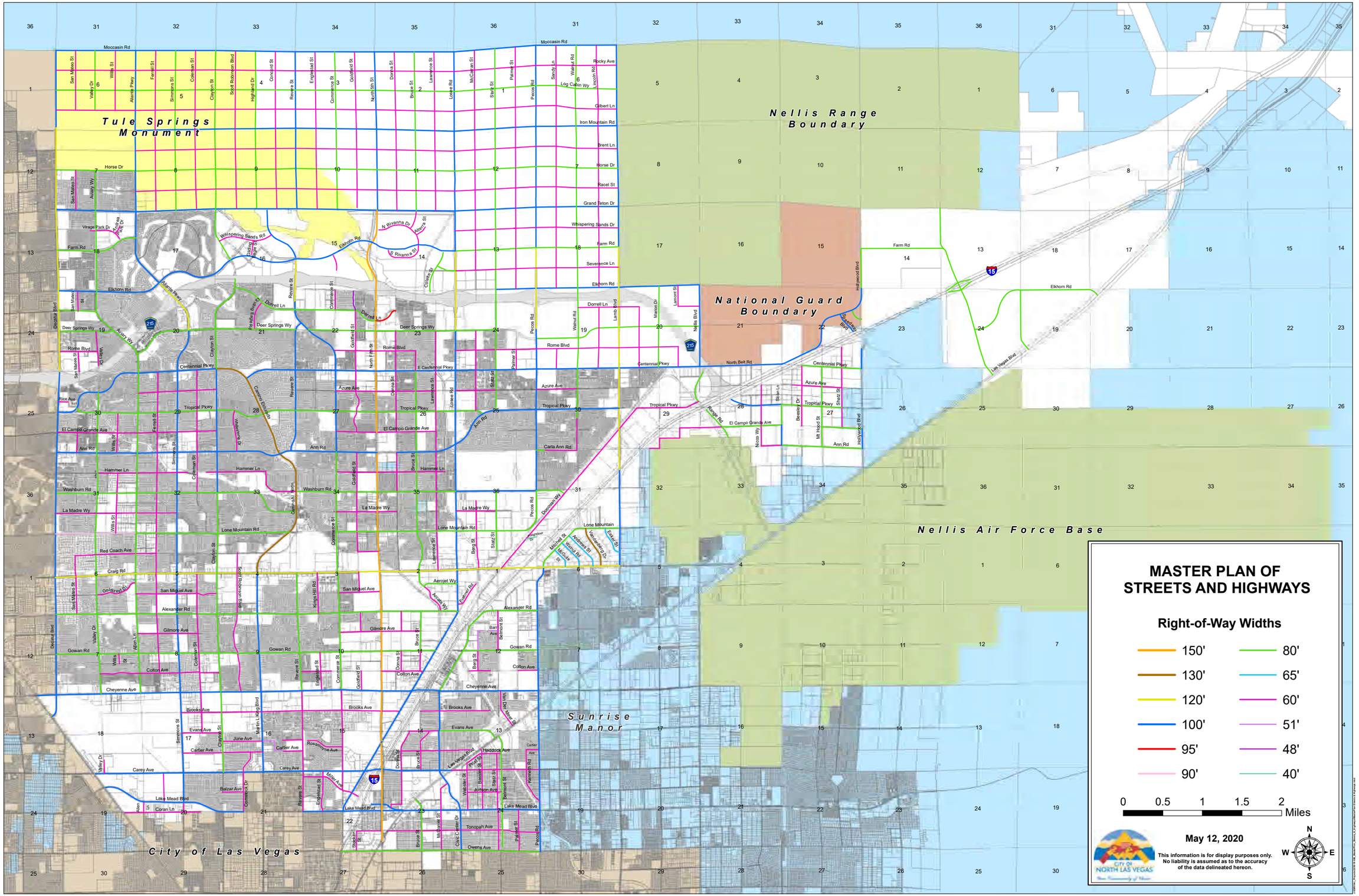
Additional maps and cross sections that will inform the CMTPS.



SOURCE: Clark County, 2014; ESRI, 2014.

FIGURE 17 **CNLV Comprehensive Complete Streets Corridor Ranking**




Tule Springs Monument
Nellis Range Boundary
National Guard Boundary
Nellis Air Force Base
Sunrise Manor
City of Las Vegas
MASTER PLAN OF STREETS AND HIGHWAYS
Right-of-Way Widths
150'
130'
120'
100'
95'
90'
80'
65'
60'
51'
48'
40'
0 0.5 1 1.5 2 Miles
May 12, 2020
This information is for display purposes only. No liability is assumed as to the accuracy of the data delineated hereon.
CITY OF NORTH LAS VEGAS
N
W
E
S
Moccasin Rd
Horse Dr
Elkhorn Rd
Farm Rd
Whispering Sands Rd
Deer Springs Wy
Rome Blvd
Centennial Pkwy
Azure Ave
Tropical Pkwy
El Campo Grande Ave
Ann Rd
Hammer Ln
Washburn Rd
La Madre Wy
Lone Mountain Rd
Red Coach Ave
Craig Rd
San Miguel Ave
Alexander Rd
Gilmore Ave
Gowan Rd
Colton Ave
Cheyenne Ave
Brooks Ave
Evans Ave
Carey Ave
Lake Mead Blvd
Dorrell Ln
North Belt Rd
Rocky Ave
Gilbert Ln
Iron Mountain Rd
Brent Ln
Racel St
Grand Teton Dr
Whispering Sands Dr
Severence Ln
Carla Ann Rd
Aerojet Wy
Lone Mountain
Alexander Rd
Gowan Rd
Colton Ave
Cheyenne Ave
Brooks Ave
Evans Ave
Helddock Ave
Jodson Ave
Tonopah Ave
Owens Ave
Lake Mead Blvd
Carey Ave
Rose Ave
Azure Ave
Tropical Pkwy
El Centennial Pkwy
Rome Blvd
Deer Springs Wy
Dorrell Ln
Farm Rd
Elkhorn Rd
Centennial Pkwy
North Belt Rd
Azure Ave
Tropical Pkwy
El Campo Grande Ave
Ann Rd
Carla Ann Rd
Hammer Ln
Washburn Rd
La Madre Wy
Lone Mountain Rd
Rocky Ave
Gilbert Ln
Iron Mountain Rd
Brent Ln
Racel St
Grand Teton Dr
Whispering Sands Dr
Severence Ln
Elkhorn Rd
Farm Rd
Horse Dr
Moccasin Rd
Tule Springs Monument
Nellis Range Boundary
National Guard Boundary
Nellis Air Force Base
Sunrise Manor
City of Las Vegas

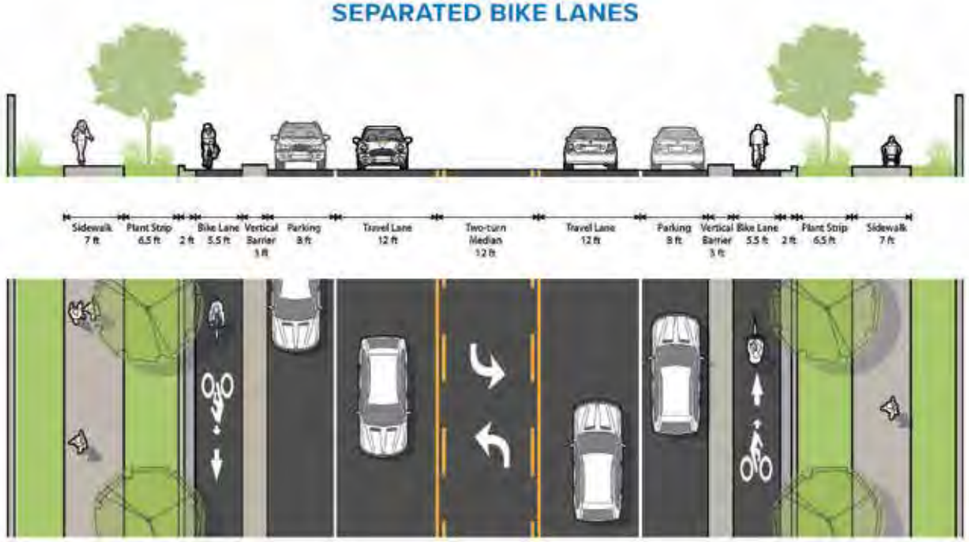
STREET CROSS SECTIONS: 100' ROW - 3 LANES

100' right-of-way streets that can be reduced to three lanes present great opportunities for high-comfort bikeways and an enhanced pedestrian experience while still accommodating on-street parking if needed. The following sections illustrate separated bike lanes (curb level and street level), and buffered bike lanes. While separated bike lanes are preferred on 100' right-of-way streets due to their associated traffic volumes and speeds, buffered bike lanes can be implemented as an interim alternative and can be easily converted to separated bike lanes with the addition of vertical barriers.

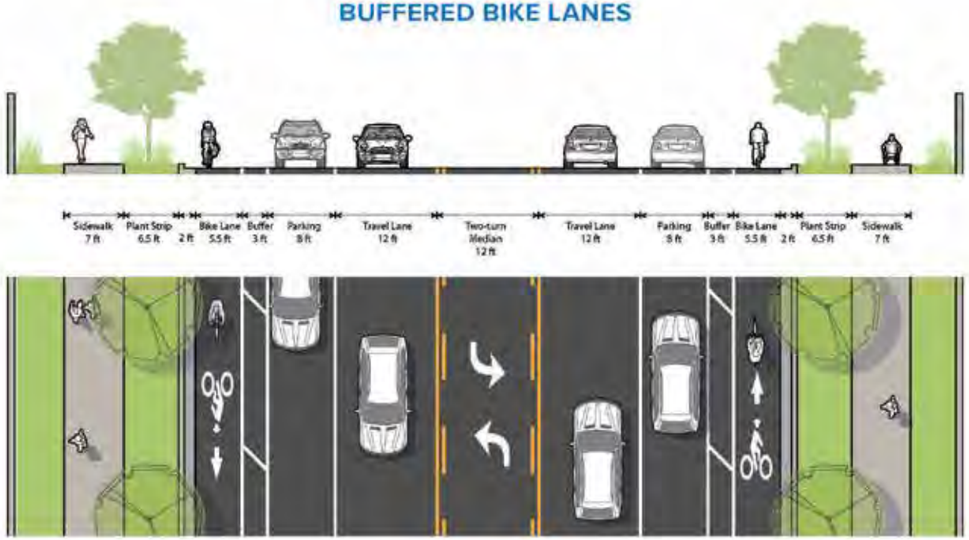
CURB LEVEL SEPARATED BIKE LANES



STREET LEVEL SEPARATED BIKE LANES



BUFFERED BIKE LANES

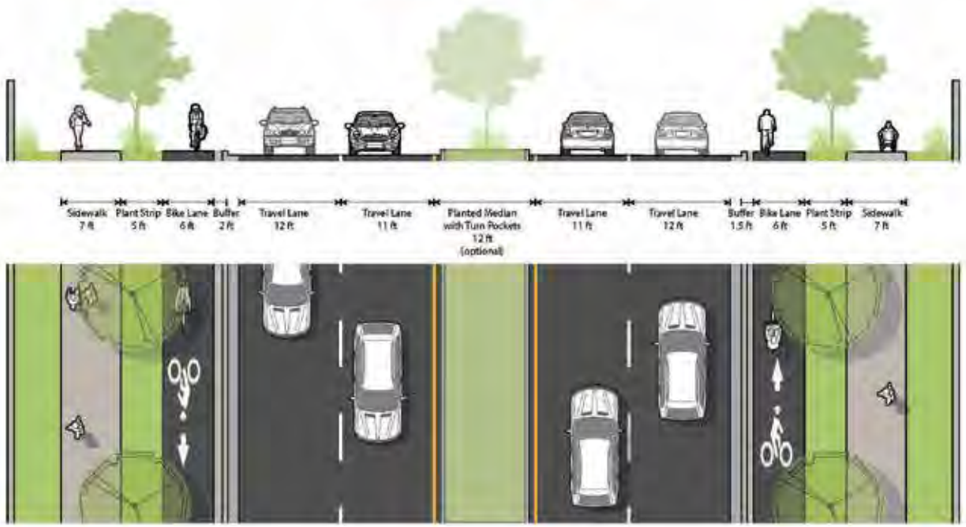


*Striped buffers over 2 feet in width should include a diagonal or chevron hatch to avoid appearing as a separate lane.

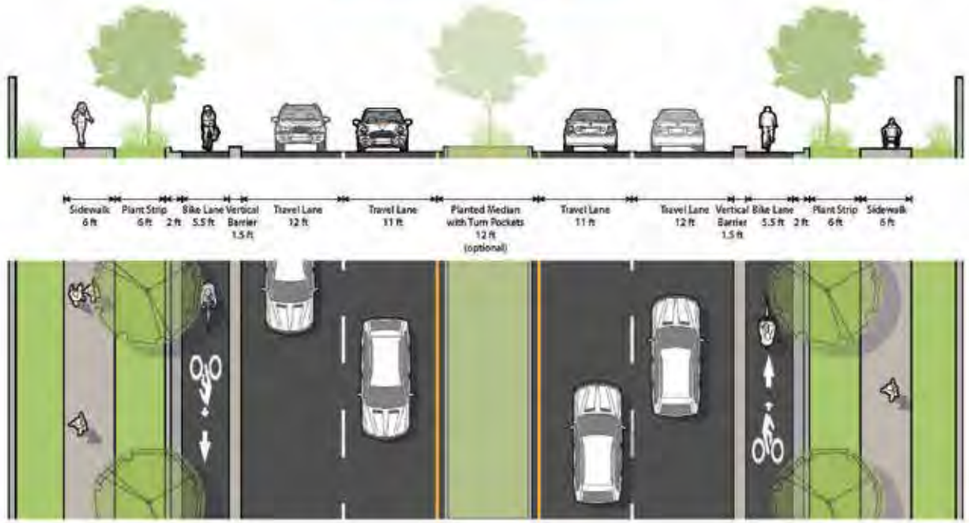
STREET CROSS SECTIONS: 100' ROW - 5 LANES

Even with five lanes for motor traffic, 100' right-of-way streets provide ample space for high comfort pedestrian and bicycle infrastructure. Similar to 100' right-of-way 3-lane streets, the following sections illustrate separated bike lanes (curb level and street level), and buffered bike lanes, but on-street parking is removed. While separated bike lanes are preferred on 100' right-of-way streets due to their associated traffic volumes and speeds, buffered bike lanes can be implemented as an interim alternative and can be easily converted to separated bike lanes with the addition of vertical barriers. In order to soften the streetscape, planted medians with turn pockets at intersections may be implemented instead of TWLTL medians.

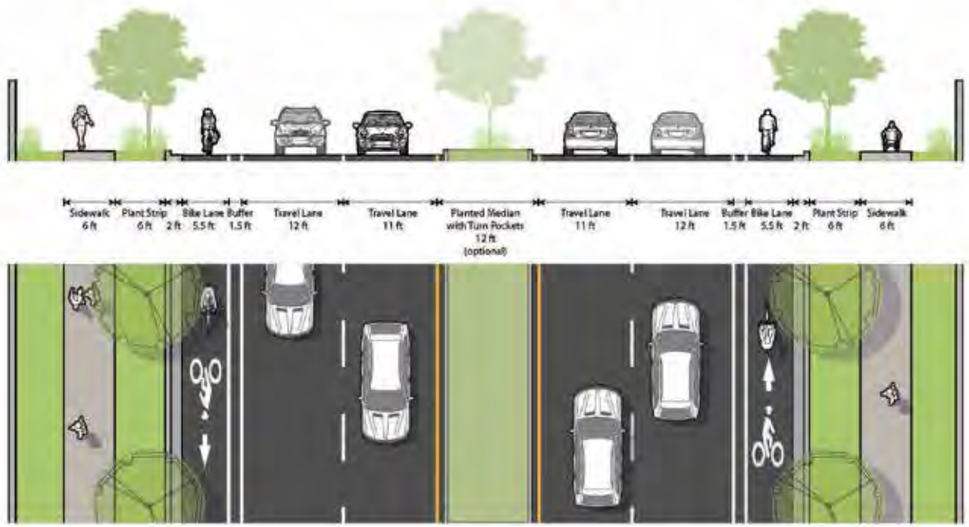
CURB LEVEL SEPARATED BIKE LANES



STREET LEVEL SEPARATED BIKE LANES



BUFFERED BIKE LANES

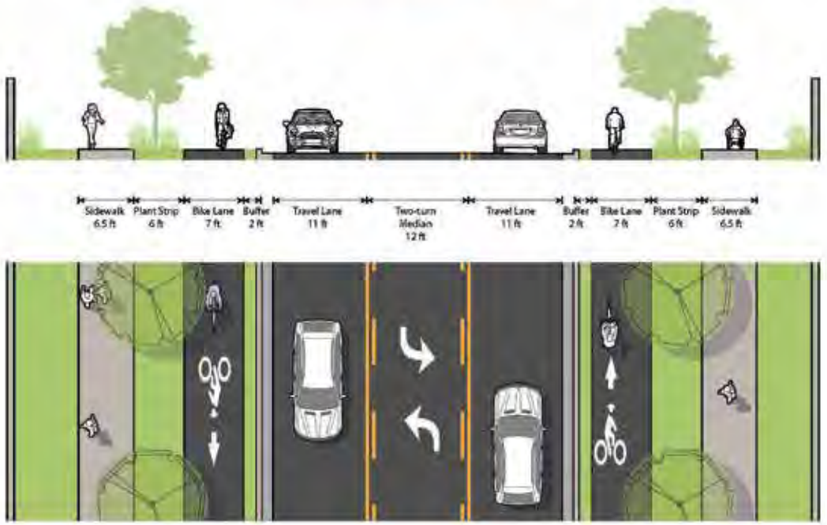


*Striped buffers over 2 feet in width should include a diagonal or chevron hatch to avoid appearing as a separate lane.

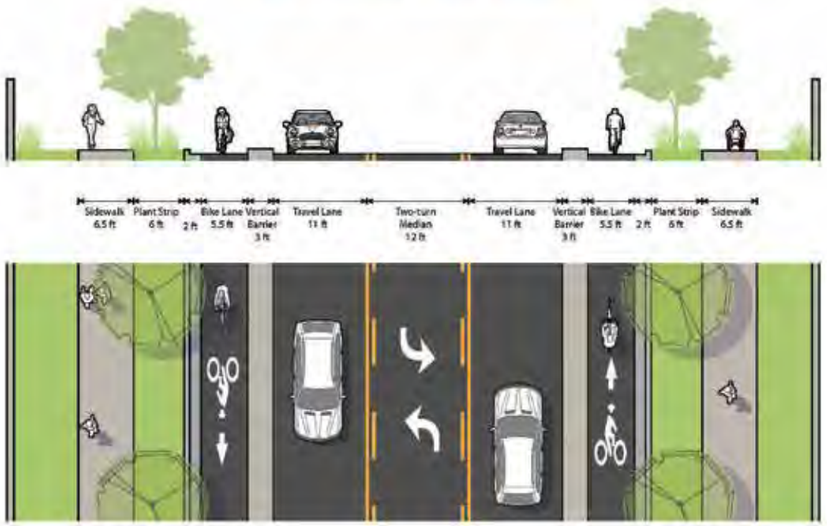
STREET CROSS SECTIONS: 80' ROW - 3 LANES

The following sections illustrate separated bike lanes (curb level and street level), and buffered bike lanes, with no on-street parking. While separated bike lanes are preferred on 80' right-of-way streets due to their associated traffic volumes and speeds, buffered bike lanes can be implemented as an interim alternative and can be easily converted to separated bike lanes with the addition of vertical barriers.

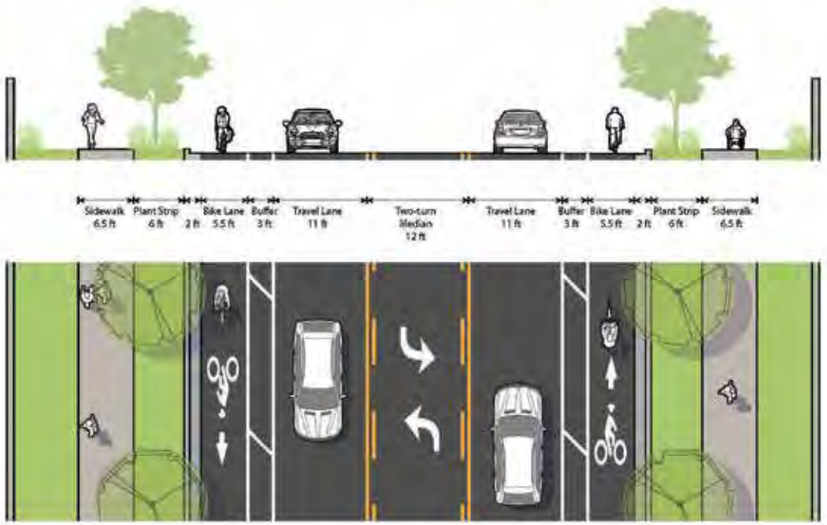
CURB LEVEL SEPARATED BIKE LANES



STREET LEVEL SEPARATED BIKE LANES

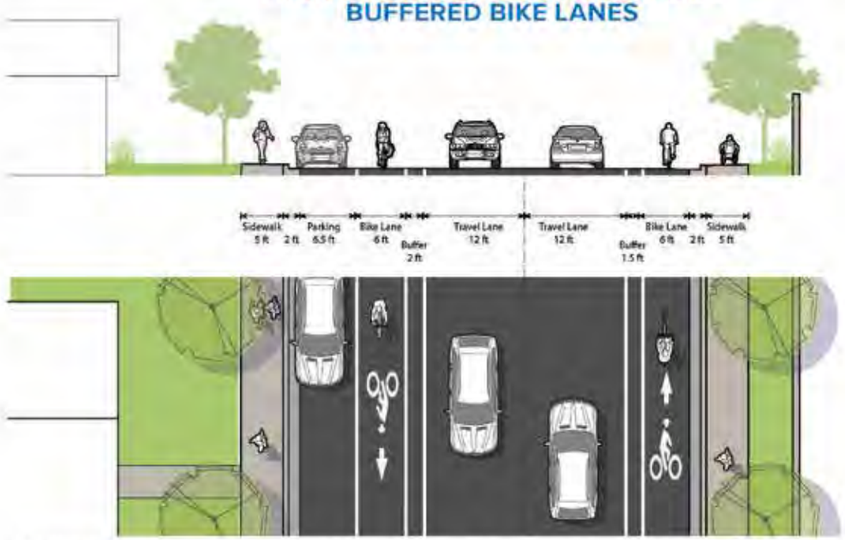


BUFFERED BIKE LANES



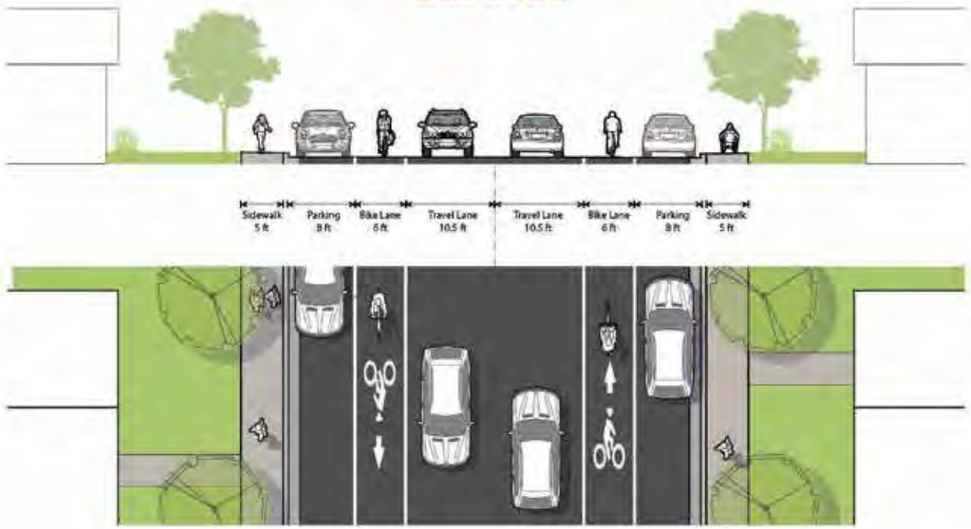
*Striped buffers over 2 feet in width should include a diagonal or chevron hatch to avoid appearing as a separate lane.

FRONTING LAND USES ON ONE SIDE
BUFFERED BIKE LANES

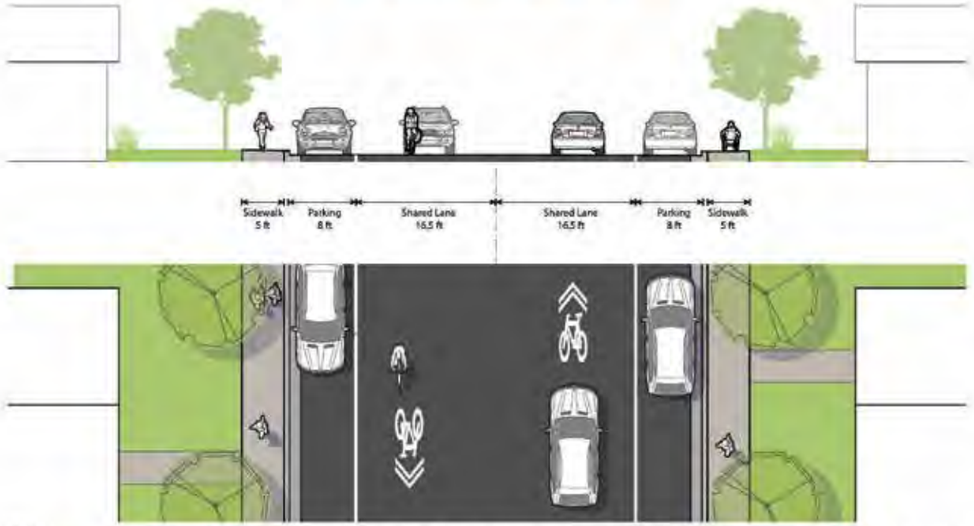


*On-street parking restricted to side with fronting land uses. Buffer widths and locations are flexible. Buffers may be appropriate on both sides of bike lanes adjacent to on-street parking depending on parking turnover and roadway speed. Striped buffers over 2 feet in width should include a diagonal or chevron hatch to avoid appearing as a separate lane.

FRONTING LAND USES ON BOTH SIDES (> 25 MPH)
BIKE LANES



FRONTING LAND USES ON BOTH SIDES (≤ 25 MPH)
NEIGHBORHOOD BYWAY



*Only recommended on low-volume streets where traffic speeds can be kept below 25 mph through traffic calming measures

APPENDIX F

TRUCK ROUTE MEMORANDUM

City of North Las Vegas Truck Route Revisions

Draft

prepared for

Regional Transportation Commission of Southern Nevada

prepared by

Cambridge Systematics, Inc.

February 23, 2022

www.camsys.com

City of North Las Vegas Truck Route Revisions

Draft

prepared for

Regional Transportation Commission of Southern Nevada

prepared by

Cambridge Systematics, Inc.
515 S. Figueroa Street, Suite 1975
Los Angeles, CA 90071

date

February 23, 2022

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1.0 Importance of Freight to the City of North Las Vegas

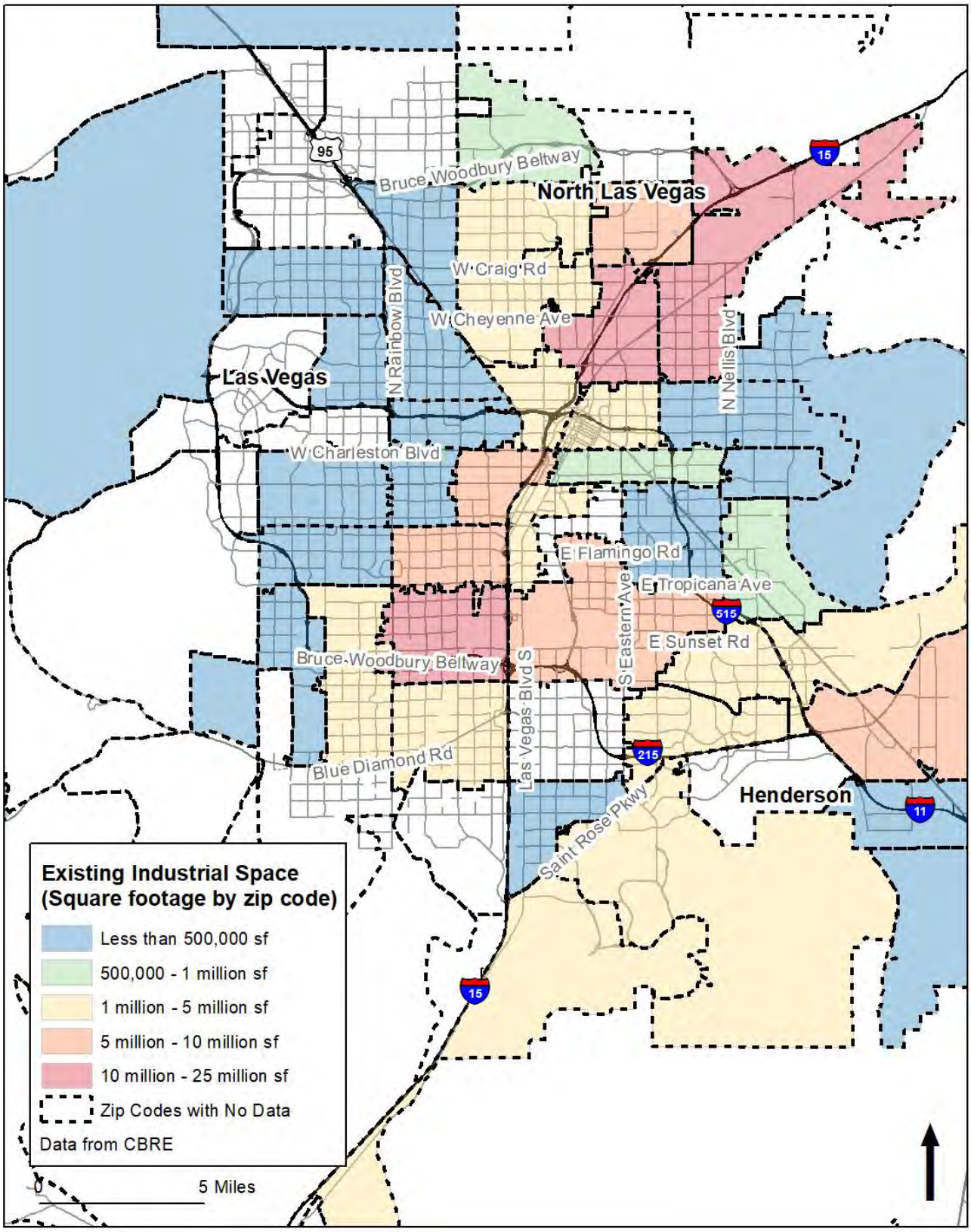
Southern Nevada is growing freight distribution hub in part due to its proximity to two of the largest ports in the United States, the Port of Los Angeles and Port of Long Beach (which combined handled over 11 Million TEUs of loaded cargo in 2020)[1]. The City of North Las Vegas is home to a large share of those distribution facilities. Existing industrial warehouse space by zip code is shown in **Figure 1.1** with red showing the highest concentrations of warehouse space (10 – 25 million square feet), and blue showing the zip codes with less than 500,000 square feet of space. Some of the highest concentrations of warehouse space are in North Las Vegas.

A vital part of the freight network is the interface between different modes. Transferring goods between trains, trucks, planes, and pipes takes place at intermodal facilities. With the exception of the Moapa Transload facility, all other rail and pipeline intermodal facilities are concentrated in or adjacent to the City of North Las Vegas, shown in **Figure 1.2**.

Preserving a network of truck routes with appropriate design considerations will facilitate access, mobility, and safety for trucks, thereby strengthening the City of North Las Vegas' position as a preferred location for distribution facilities and the growing freight logistics industry.

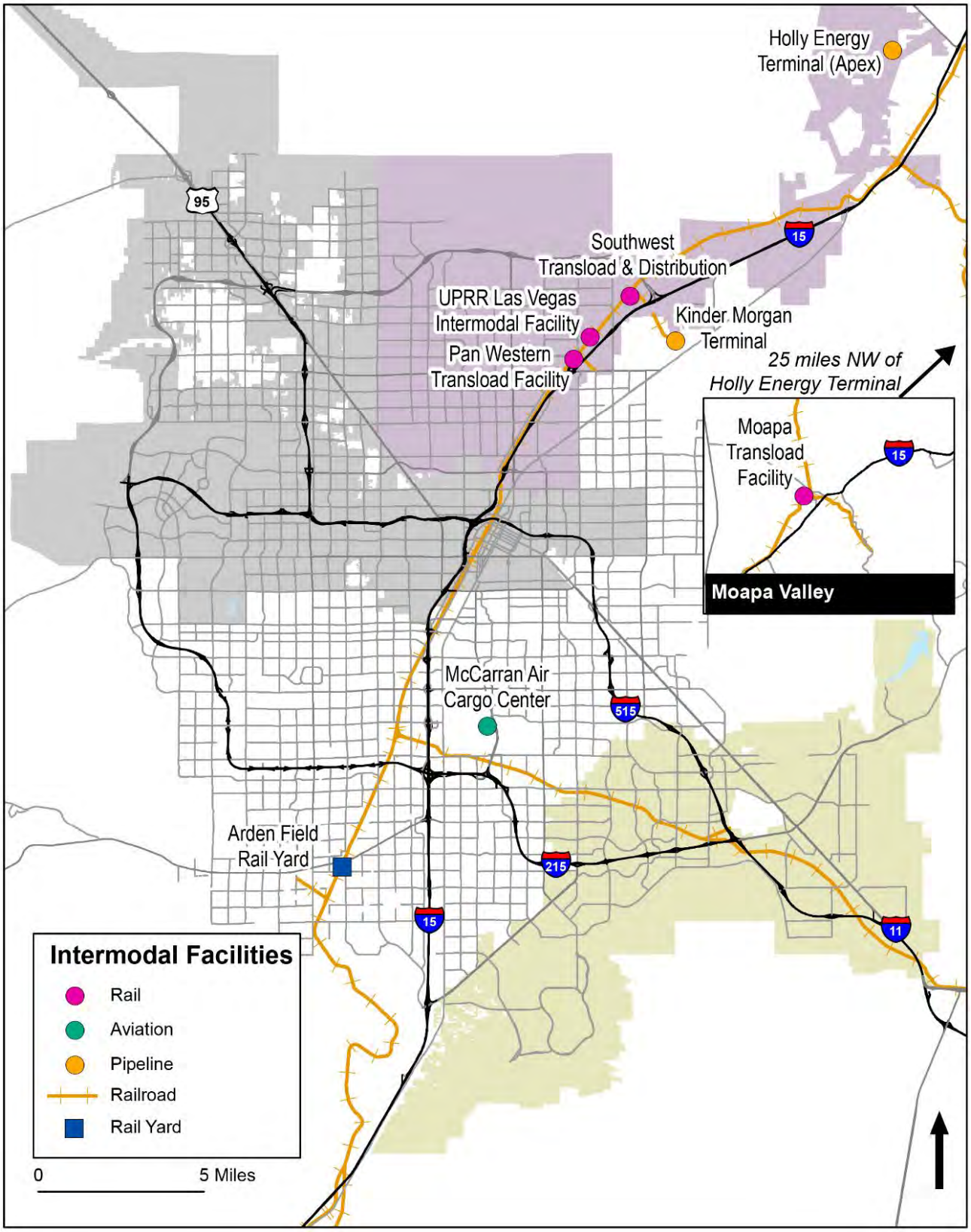
[1] Port of Long Beach Statistics Total Loaded TEUs (Import + Export) 5,474,277 in 2020 https://polb.com/business/port-statistics/#yearly-teus ; Port of Los Angeles Container Statistics, Total Loaded TEUs (Import + Export) 6,358,445 https://www.portoflosangeles.org/business/statistics/container-statistics/historical-teu-statistics-2020

Figure 1.1 Industrial Warehouse Space



Source: CBRE.

Figure 1.2 Intermodal Facilities



2.0 Truck Route Designation

The reasons for establishing truck routes are articulated best by the Ontario Trucking Association.

> "A truck route system may:
>
> - "Help trucks avoid inappropriate residential streets
> - "Reduce traffic congestion throughout the municipality and the region
> - "Increase logistics options that will benefit businesses, transportation providers and consumers
> - "Improve the economic competitiveness and attractiveness of industrial sites at major distribution points
> - "Provide a major benefit to the municipality's economy"[2]

2.1 Current City Truck Route Code

The North Las Vegas Code of Ordinances defines truck routes and trucks as follows:

> "'Official truck route system' means that system of streets and roads through the city which shall be used by trucks and other motor vehicles which weigh in excess of six thousand (6,000) pounds; said system being intended to coincide with routes in adjoining jurisdictions.
>
> "'Truck' means all trucks, tractors, trailer-trucks, tractor-trailers and other motor vehicles which weigh in and of themselves in excess of six thousand (6,000) pounds."[3]

The Code prohibits trucks from traveling on any road not designated in the official truck route system except for certain conditions defined in the Code which primarily includes those roads needed to pick up or drop off a load. In short, the official truck route system defines routes for through truck traffic.

2.2 Proposed Changes to the City Truck Route Code

2.2.1 Definition of Truck

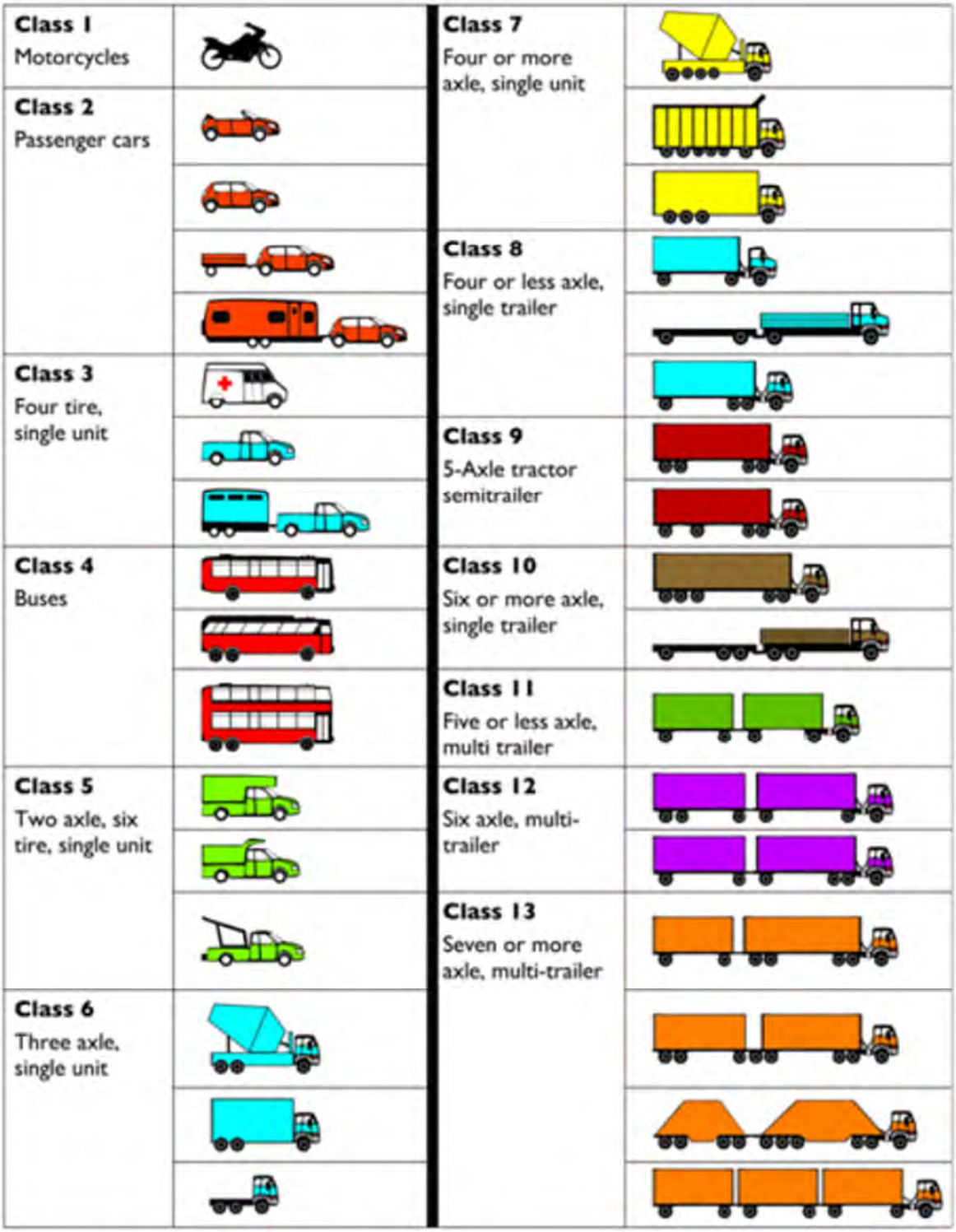
Rather than defining trucks as all trucks, tractors, trailer-trucks, tractor-trailers and other motor vehicles which weigh in excess of 6,000 pounds, it may be more appropriate to define them as Class 8 Trucks or larger, following the Federal Highway Administration's (FHWA) Vehicle Category Classification (see **Figure 2.1**). This is a more accurate definition of the type of vehicle that truck routes are intended for. In addition, pick-up trucks and SUVs, not intended to be restricted by truck routes, now include a long list that weigh over 6,000

[2] Ontario Trucking Association. *Local Truck Routes: A Guide for Municipal Officials*. December 2011. (chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=http%3A%2F%2Fontruck.org%2Fwp-content%2Fuploads%2F2016%2F04%2FOTA-Local-Truck-Routes-A-Guide-FINAL_public.pdf&clen=4069449&chunk=true. Accessed 2/21/2022)

[3] https://library.municode.com/nv/north_las_vegas/codes/code_of_ordinances?nodeId=TIT10VETR_CH10.44TRRO

pounds. Finally, with the advent and rapid growth of ecommerce it is common to see delivery vans, which weigh in excess of 6,000 pounds, rightfully using all streets in the City.

Figure 2.1 FHWA 13 Vehicle Category Classification



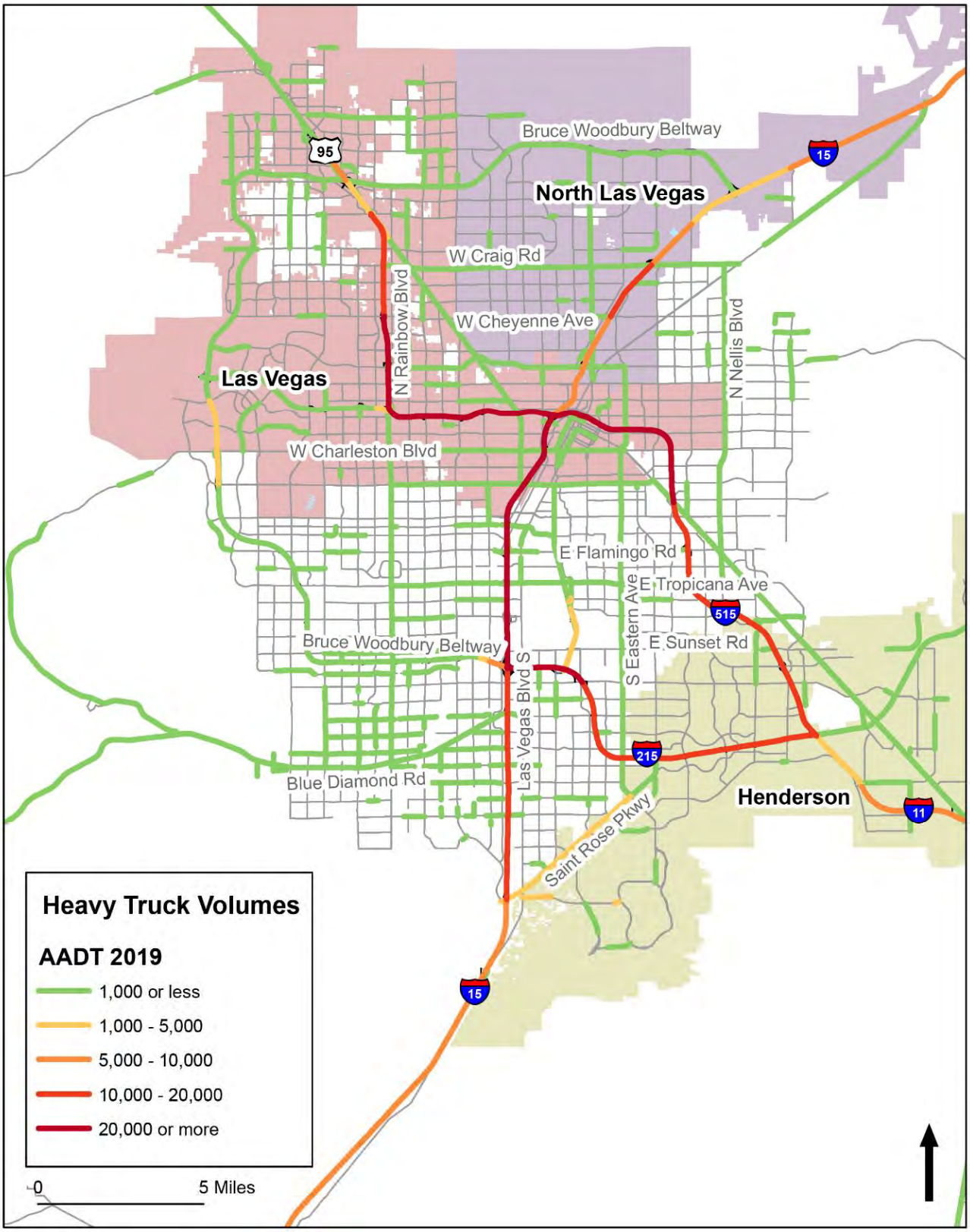
Source: FHWA (https://www.fhwa.dot.gov/policyinformation/tmguide/tmg_2013/vehicle-types.cfm. Accessed 2/21/2022)

2.2.2 Criteria for Redefining the Official Truck Route System

Several criteria were used to identify changes to the truck routes.

- As a through route for class 8 and above trucks, truck routes should include streets that provide continuous routes across the City and neighboring jurisdictions, and that are appropriate for truck access.
- Truck routes should provide access to major industrial centers, freight intermodal facilities, and the Interstate Highway System—the preferred travel corridors for almost all truck drivers and trucking companies.
- Routes with high truck volumes indicate those frequently in use by trucks now. This was determined using 2019 NDOT vehicle classification count data as shown on **Figure 2.2**.
- Routes that pass through residential areas, and that don't serve one of the above criteria, were eliminated.
- A focus group meeting with truck companies, with follow-up interviews and feedback, provided additional information on trucking industry preferences.

Figure 2.2 Truck Volumes in Clark County



Source: NDOT 2019.

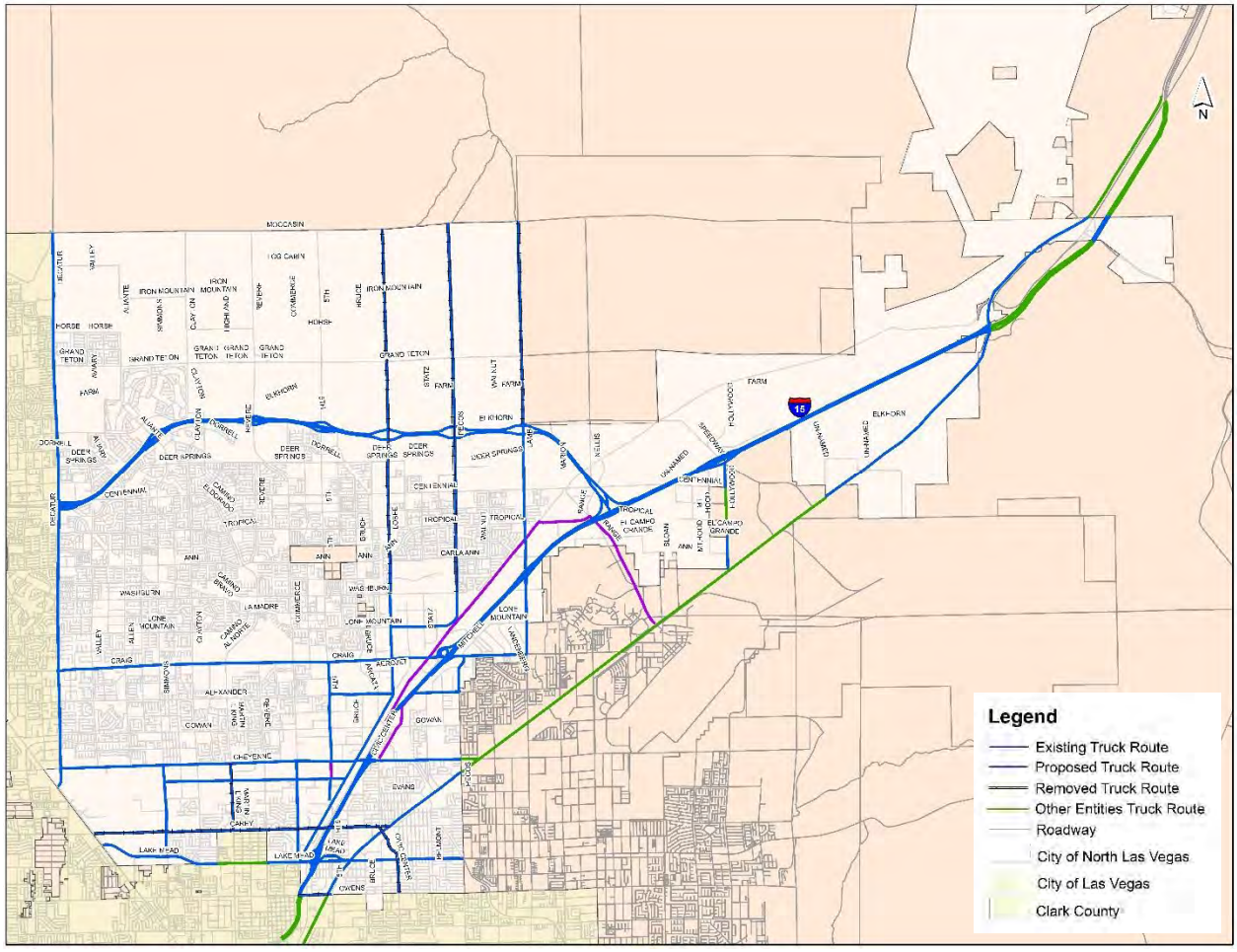
2.3 Proposed Changes to the Official Truck Route System

Proposed changes to the official truck route system are noted below in red text, and on **Figure 2.3**.

- The east/west routes shall consist of the following public rights-of-way:
  - Northern Beltway from the west city limit line to Interstate Highway Fifteen (I-15);
  - Lone Mountain Road from Losee Road to Pecos Road;
  - Craig Road from the west city limit line to the east city limit line;
  - Alexander Road from North 5th street to Losee Road and Civic Center Drive to Pecos Road;
  - Cheyenne Avenue from the west city limit line to the east city limit line;
  - Brooks Avenue from Simmons Street to Losee Road;
  - ~~Carey Avenue from the west city limit line to the Las Vegas Boulevard North~~;
  - Lake Mead Boulevard from the west city limit line to the east city limit line; ~~and~~
  - ~~Owens Avenue from the west city limit line to Las Vegas Boulevard North;~~ and
  - Tropical Parkway from Donovan Way to Range Road.
- The north/south routes shall consist of the following public rights-of-way:
  - Decatur Boulevard from Rancho Drive to the north city limit line;
  - Simmons Street from Lake Mead Boulevard to Cheyenne Avenue;
  - ~~Martin Luther King Boulevard from Carey Avenue to Cheyenne Avenue;~~
  - Commerce Street from ~~Brooks Avenue to~~ Cheyenne Avenue ~~and from Carey Avenue~~ to the southerly terminus of Commerce Avenue;
  - Interstate Highway Fifteen (I-15) from the north city limit line to the south city limit line;
  - North 5th Street from Craig Road to ~~Cheyenne Avenue and from Brooks Avenue to~~ Losee Road;
  - Losee Road from West Lake Mead Boulevard to Washburn Road ~~the north city limit line~~;
  - Pecos Road from Lone Mountain Road to Washburn Road ~~the north city limit line~~ and from Alexander Road to Craig Road;
  - Lamb Boulevard from the Northern Beltway ~~north City limit line~~ to the south City limit line;
  - Hollywood Boulevard from ~~Ann Road~~ Las Vegas Boulevard North to Interstate Highway Fifteen (I-15);

- ~~Civic Center Drive from Carey Avenue to the south City limit line;~~
- Las Vegas Boulevard North from the south City limit line to the north City limit line;
- North Fifth Street from Cheyenne Avenue to Brooks Avenue;
- Donovan Way from its southerly terminus to Tropical Parkway; and
- Range Road from Tropical Parkway to Las Vegas Boulevard North.
- ~~Main Street from the south City limit line to Las Vegas Boulevard North.~~

Figure 2.3 Proposed Changes to Official Truck Routes

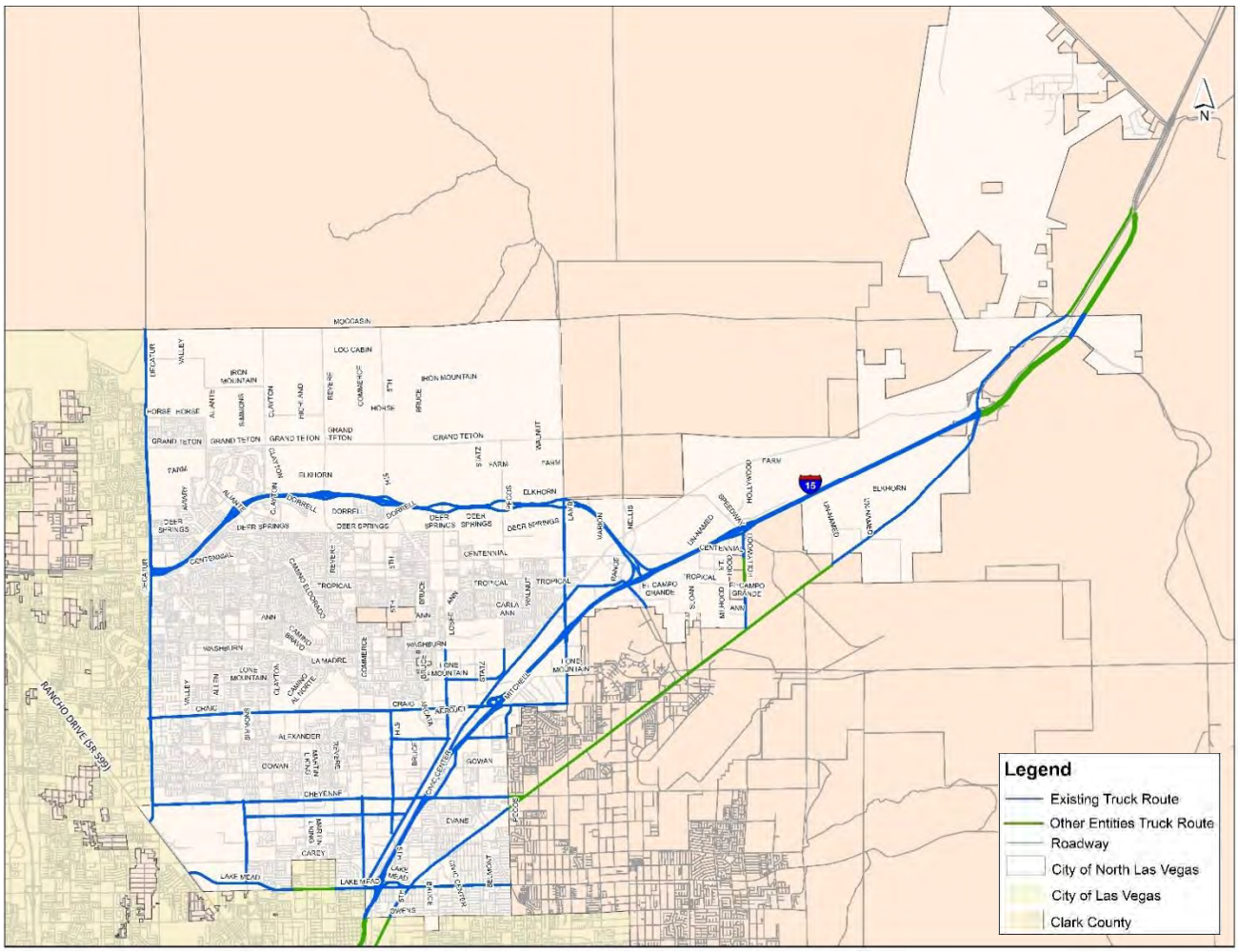


3.0 Revised Truck Route System

The revised Truck Route System, as described above, is presented below with text descriptions and an accompanying map (see **Figure 3.1**).

- The east/west routes shall consist of the following public rights-of-way:
  - Northern Beltway from the west city limit line to Interstate Highway Fifteen (I-15);
  - Lone Mountain Road from Losee Road to Pecos Road;
  - Craig Road from the west city limit line to the east city limit line;
  - Alexander Road from North 5th street to Losee Road and Civic Center Drive to Pecos Road;
  - Cheyenne Avenue from the west city limit line to the east city limit line;
  - Brooks Avenue from Simmons Street to Losee Road;
  - Lake Mead Boulevard from the west city limit line to the east city limit line; and
  - Tropical Parkway from Donovan Way to Range Road.
- The north/south routes shall consist of the following public rights-of-way:
  - Decatur Boulevard from Rancho Drive to the north city limit line;
  - Simmons Street from Lake Mead Boulevard to Cheyenne Avenue;
  - Commerce Street from Cheyenne Avenue to the southerly terminus of Commerce Avenue;
  - Interstate Highway Fifteen (I-15) from the north city limit line to the south city limit line;
  - North 5th Street from Craig Road to Losee Road;
  - Losee Road from West Lake Mead Boulevard to Washburn Road;
  - Pecos Road from Lone Mountain Road to Washburn Road and from Alexander Road to Craig Road;
  - Lamb Boulevard from the Northern Beltway to the south City limit line;
  - Hollywood Boulevard from Las Vegas Boulevard North to Interstate Highway Fifteen (I-15);
  - Las Vegas Boulevard North from the south City limit line to the north City limit line;
  - North Fifth Street from Cheyenne Avenue to Brooks Avenue;
  - Donovan Way from its southerly terminus to Tropical Parkway; and
  - Range Road from Tropical Parkway to Las Vegas Boulevard North.

Figure 3.1 Revised Truck Route System



APPENDIX G

NETWORK ANALYSIS MATRIX

City of North Las Vegas Comprehensive Master Transportation Plan Study
Network Analysis

Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Note: Roadways within the Tule Springs Monument Boundary and the future UNLV North Campus boundary have been removed from the MPSH.														
Moccasin Road	1	Decatur Boulevard	Lamb Boulevard	E/W	100	N/A	Undeveloped	N/A	Open Space/ Future Residential	N/A	No Recommendations	No Recommendations	Undeveloped	Plan for Complete Streets with future development per MPSH
Log Cabin Way	1	Decatur Boulevard	Lamb Boulevard	E/W	80	N/A	Undeveloped	N/A	Open Space/ Future Residential	N/A	No Recommendations	No Recommendations	Undeveloped	Plan for Complete Streets with future development per MPSH
Iron Mountain Road	1	Aliante Parkway	Lamb Boulevard	E/W	100	N/A	Undeveloped	N/A	Open Space/ Future Residential	N/A	No Recommendations	No Recommendations	Undeveloped	Plan for Complete Streets with future development per MPSH
Horse Drive	**1**	**Decatur Boulevard**	**Aliante Parkway**	**E/W**	**80**	**4,159**	**1 lane each direction**	**N/A**	**Residential/Open Space**	**N/A**	**Proposed Bike Lane**	**Pedestrian Priority Zone**	**Half-street completed on south side only**	**80' ROW - Alternative A**
Horse Drive	2	Aliante Parkway	Lamb Boulevard	E/W	80	N/A	Undeveloped	N/A	Residential/Open Space	N/A	No Recommendations	No Recommendations	Half-street completed on south side only	Plan for Complete Streets with future development per MPSH

City of North Las Vegas Comprehensive Master Transportation Plan Study
Network Analysis

Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Grand Teton Drive	1	Decatur Boulevard	Aliante Parkway	E/W	100	11,138	3 lanes each direction, raised medians, and sidewalk on north side with shared use path on south side	N/A	Residential	N/A	Proposed Side path and Bike Lane	Primary Connector; Pedestrian Priority Zone	N/A	100' ROW - Alternative C

City of North Las Vegas Comprehensive Master Transportation Plan Study
Network Analysis

Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Grand Teton Drive	2	Aliante Parkway	Clayton Street	E/W	100	7,278	Undeveloped roadway; shared use path is provided on south side with residential development	N/A	Residential	N/A	Proposed Side path and Bike Lane	No Recommendations	Undeveloped	100' ROW - Alternative C
Farm Road	1	Decatur Boulevard	Aliante Parkway	E/W	80	4,207	2 lanes each direction with raised median, bike lanes and side path each side	N/A	Residential	Park	No Recommendations	Neighborhood Street	N/A	Maintain Existing Cross Section
Elkhorn Road	1	Decatur	Terminus at Village at Tule Springs	E/W	100	8,368	2 lanes each direction with raised median, side path and buffered bike lanes each side	N/A	Public/Residential	DMV Movie Theater	Proposed and Existing Side path	Primary Connector	N/A	100' ROW - Alternative C
Elkhorn Road	2	Terminus at Village at Tule Springs	Tule Springs Parkway	NE/SW	80	1,737	Undeveloped	N/A	Master Planned Community	N/A	Proposed Bike Lane and Side path	Primary Connector	From The Villages at Tule Springs MPSH Modifications, proposed consistent cross section to existing portion of Elkhorn Road.	80' ROW - Alternative C
Elkhorn Road	3	Statz Street	Nellis Boulevard	E/W	100	N/A	Undeveloped	N/A	Mixed-Use/Proposed UNLV Campus	Proposed UNLV Campus	No Recommendations	No Recommendations	N/A	Remove segment from MPSH

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Elkhorn Road	4	Unnamed	Las Vegas Boulevard	E/W	80	N/A	Undeveloped	N/A	Industrial	Employment	No Recommendations	No Recommendations	N/A	N/A

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Dorrell Lane	**1**	**Decatur Boulevard**	**Aviary Way**	**E/W**	**80**	**2,050**	**1 lane each direction with sidewalk**	**N/A**	**Residential/Public**	**DMV**	**No Recommendations**	**No Recommendations**	**ROW in Assessor's Parcel Map shows between 41' ROW.**	**Recommend removing segment as 80' ROW and update to 40' ROW**
Dorrell Lane	2	Clayton Street	Revere Street	E/W	80	N/A	2 lanes each direction with raised medians, side path and bike lanes each side	N/A	Residential	N/A	Proposed Side path	No Recommendations	N/A	Maintain Existing Cross Section
Dorrell Lane	**3**	**Revere Street**	**Commerce Street**	**E/W**	**80**	**N/A**	**1 lane each direction with sidewalk**	**N/A**	**Residential**	**Deer Springs District**	**No Recommendations**	**No Recommendations**	**Half-street completed on south side only; does not connect to Commerce Street at this time**	**Continue 2 lanes each direction with raised median, side path, and bike lanes each side for consistency with adjacent segments**
Dorrell Lane	**4**	**Commerce Street**	**North 5th Street**	**E/W**	**80**	**22,119**	**1 lane each direction with TWLTL and detached sidewalk**	**N/A**	**Residential**	**Deer Springs District High School**	**Proposed Bike Lane**	**Pedestrian Priority Zone**	**No Parking Signs Present on Both Sides**	**Continue 2 lanes each direction with raised median, side path, and bike lanes each side for consistency with adjacent segments**
Dorrell Lane	5	North 5th Street	West of Plainview Hills Street	E/W	95	N/A	2 lanes each direction, sidewalk on north side and side path on south side	105	Residential	Deer Springs District	Existing Side path	Pedestrian Priority Zone	N/A	Maintain Existing Cross Section

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Dorrell Lane	6	West of Plainview Hills Street	Seeds Fate Street	E/W	80	N/A	1 lane each direction with raised median, on-street parking, and side path on each side	N/A	Residential	Deer Springs District	Proposed Side path	No Recommendations	N/A	Maintain Existing Cross Section

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Seeds Fate Street	1	Dorrell Lane	Deer Springs Way	N/S	80	N/A	1 lane each direction with raised median, on-street parking, and side path on each side	N/A	Residential	Deer Springs District	Proposed Side path	No Recommendations	N/A	Maintain Existing Cross Section
Deer Springs Way	**1**	**Aviary Way**	**Aliante Parkway**	**E/W**	**80**	**8,755**	**2 lanes each direction with side path each side and raised median**	**N/A**	**Commercial/Residential**	**N/A**	**Existing Side path**	**Primary Connector**	**Recommended separated bike lane for consistency along corridor.**	**80' ROW - Alternative C**
Deer Springs Way	**2**	**Aliante Parkway**	**Clayton Street**	**E/W**	**80**	**6,549**	**2 lanes each direction with side path each side and raised median**	**N/A**	**Commercial/Residential**	**N/A**	**Existing Side path**	**Primary Connector**	**Recommended separated bike lane for consistency along corridor.**	**80' ROW - Alternative C**
Deer Springs Way	**3**	**Clayton Street**	**Gentle Brook Street**	**E/W**	**80**	**2,104**	**2 lanes each direction with sidewalk on both sides and raised median**	**N/A**	**Residential**	**School**	**Proposed Bike Lane**	**Primary Connector**	**N/A**	**80' ROW - Alternative C**
Deer Springs Way	**4**	**Gentle Brook Street**	**Revere Street**	**E/W**	**80**	**2,104**	**2 lanes each direction with sidewalk on both sides and raised median**	**N/A**	**Residential**	**School**	**Proposed Bike Lane**	**Primary Connector**	**Half-street built between Commerce Street and Legacy High School No Sidewalk across from Legacy High School**	**80' ROW - Alternative C**

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Deer Springs Way	5	Commerce Street	Goldfield Street	E/W	80	476	2 lanes each direction with TWLTL and side path each direction	N/A	Public/Residential	Deer Springs District Hospital	Proposed Separated Bike Lane	No Recommendations	N/A	Refer to Deer Springs Livable Centers Study Recommendations

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Deer Springs Way	6	Goldfield Street	North 5th Street	E/W	80	476	2 lanes each direction with TWLTL and side path each direction	N/A	Residential/Mixed-Use	Deer Springs District	Proposed Separated Bike Lane	Pedestrian Priority Zone	N/A	Refer to Deer Springs Livable Centers Study Recommendations
Deer Springs Way	7	North 5th Street	Losee Road	E/W	80	8,470	2 lanes each direction with TWLTL and detached sidewalk	105	Residential	Deer Springs District	Proposed Separated Bike Lane	Pedestrian Priority Zone	N/A	Refer to Deer Springs Livable Centers Study Recommendations
Deer Springs Way	8	Losee Road	Statz Street	E/W	80	8,470	2 lanes each direction with TWLTL and detached sidewalk	N/A	Mixed-Use	Deer Springs District	Proposed Separated Bike Lane	Pedestrian Priority Zone	N/A	Refer to Deer Springs Livable Centers Study Recommendations
Deer Springs Way	9	Statz Street	Pecos Road	E/W	100	8,470	2 lanes EB and 1 lane WB with TWLTL and sidewalk on south side	N/A	Mixed-Use	Deer Springs District - Job Creation Zone	Proposed Separated Bike Lane	No Recommendations	Half-street completed on south side only	Refer to Deer Springs Livable Centers Study Recommendations
Deer Springs Way	10	Pecos Road	Walnut Road	E/W	80	1,876	1 lane each direction with TWLTL and sidewalk on north side	N/A	Public/Semi-Public	Deer Springs District VA Hospital	Proposed Separated Bike Lane	No Recommendations	Half-street completed on north side only	80' ROW - Alternative C

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Deer Springs Way	11	Walnut Road	Lamb Boulevard	E/W	80	291	Undeveloped	N/A	Mixed-Use	Deer Springs District VA Hospital	Proposed Separated Bike Lane	No Recommendations	Undeveloped	80' ROW - Alternative C

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Deer Springs Way	12	Lamb Boulevard	Nellis Boulevard	E/W	80	N/A	Undeveloped	N/A	Mixed-Use	Deer Springs District VA Hospital	No Recommendations	No Recommendations	Undeveloped	80' ROW - Alternative C
Deer Springs Way	13	Nellis Boulevard	N Belt Road	E/W	80	N/A	Undeveloped	N/A	Industrial	N/A	No Recommendations	No Recommendations	Undeveloped	Plan for Complete Streets with future development per MPSH
Centennial Parkway	1	Tropical Parkway	Clayton Street	E/W	100	9,273	3 lanes each direction with raised median/TWLTL with sidewalk	N/A	Residential/Commercial	Commercial	Proposed Separated Bike Lane	Primary Connector	N/A	100' ROW - Alternative C
Centennial Parkway	2	Camino Eldorado Parkway	Revere Street	E/W	100	6,300	2 lanes each direction with TWLTL and shoulders	N/A	Residential/Commercial	Park	Proposed Separated Bike Lane	Primary Connector	N/A	100' ROW - Alternative C
Centennial Parkway	3	Revere Street	Kitamaya Street	E/W	100	11,695	3 lanes each direction with TWLTL and sidewalk	105	Residential	N/A	Proposed Side path	Primary Connector	N/A	100' ROW - Alternative C

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Centennial Parkway	4	Kitamaya Street	North 5th Street	E/W	100	11,695	3 lanes each direction with raised median and sidewalk **Sidewalk missing from Setting Moon Street to Commerce Street and from Commerce Street to North 5th Street*	105	Residential/Commercial	Deer Springs District Commercial School	Proposed Side path	Primary Connector; Pedestrian Priority Zone - Commerce to Bruce	Sidewalk missing for portions of segment due to unimproved half-streets	100' ROW - Alternative C

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Centennial Parkway	**5**	**North 5th Street**	**Losee Road**	**E/W**	**100**	**11,655**	**3 lanes each direction with raised median and sidewalk **Sidewalk missing on north side between North 5th Street and Donna Street***	**N/A**	**Residential/Commercial**	**Deer Springs District**	**Proposed Side path**	**Primary Connector; Pedestrian Priority Zone - Commerce to Bruce**	**Sidewalk missing for portions of segment due to unimproved half-streets**	**100' ROW - Alternative C**
Centennial Parkway	**6**	**Losee Road**	**Pecos Road**	**E/W**	**100**	**15,288**	**3 lanes each direction with raised median/TWLTL with sidewalk **Sidewalk missing on north side from Losee Road to McCarran Street***	**DVX**	**Residential/Commercial**	**Deer Springs District**	**Proposed Side path**	**Primary Connector**	**Sidewalk missing for portions of segment due to unimproved half-streets**	**100' ROW - Alternative C**
Centennial Parkway	**7**	**Pecos Road**	**Lamb Boulevard**	**E/W**	**100**	**16,983**	**2 lanes each direction with TWLTL and sidewalk on south side only **Sidewalk missing on north side and portion of south side from Pecos Road and Walnut Road***	**N/A**	**Public/Residential/Commercial**	**Deer Springs District**	**No Recommendations**	**Primary Connector**	**Sidewalk missing for portions of segment due to unimproved half-streets**	**100' ROW - Alternative C**
Centennial Parkway	**8**	**Lamb Boulevard**	**Rail Road**	**E/W**	**100**	**N/A**	**1 lane each direction with sidewalk on south side only (terminates at railroad)**	**N/A**	**Employment/Residential**	**Employment**	**No Recommendations**	**Primary Connector**	**Half-street completed on south side only**	**100' ROW - Alternative C**
Centennial Parkway/North Belt Road	9	Rail Road	Hollywood Boulevard	E/W	100	N/A	1 lane each direction with TWLTL with sidewalk (small portion between CC 215 and I-15)	N/A	Industrial	Employment	No Recommendations	No Recommendations	Centennial transitions to North Belt Road. Undeveloped except for small portion from CC 215 to I-15	N/A

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Centennial Parkway	10	Beesley Drive	Hollywood Boulevard	E/W	80	N/A	1 lane each direction with TWLTL and sidewalk *Sidewalk missing on north side along undeveloped half-streets	220	Industrial	Employment	No Recommendations	No Recommendations	Sidewalk missing for portions of segment due to unimproved half-streets	N/A

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Tropical Parkway	1	Decatur Boulevard	Centennial Parkway	E/W	80	7,240	3 lanes in each direction with sidewalk/detached sidewalk/meandering sidewalk and raised medians	N/A	Commercial/Residential	Employment	Proposed Bike Lane	No Recommendations	Inconsistent ROW Dedication - generally 80' ROW	80' ROW - Alternative A
Tropical Parkway	2	Centennial Parkway	Clayton Street	E/W	80	7,240	2 lanes in each direction with TWLTL and sidewalk/meandering sidewalk	N/A	Residential	N/A	Proposed Bike Lane	No Recommendations	N/A	80' ROW - Alternative A
Tropical Parkway	3	Clayton Street	Revere Street	E/W	80	3,679	1-2 lanes in each direction with TWLTL and sidewalk	105 (Camino El Dorado to Revere)	Residential/Public	School	Proposed Bike Lane	No Recommendations	N/A	80' ROW - Alternative A
Tropical Parkway	4	Revere Street	Lawrence Street	E/W	80	7,965	2 lanes in each direction with TWLTL and sidewalk/detached sidewalk/meandering sidewalk	105 (Revere to North 5th)	Residential/Public	School	Proposed Bike Lane	Pedestrian Priority Zone - Commerce to Bruce	N/A	80' ROW - Alternative A
Tropical Parkway	5	Lawrence Street	Ann Road	E/W	80	14,829	2 lanes in each direction with TWLTL and sidewalk/detached sidewalk/meandering sidewalk	N/A	Commercial/Residential	Employment	Proposed Bike Lane	No Recommendations	Portions of the segment only have a half street constructed	80' ROW - Alternative A

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Tropical Parkway	6	Ann Road	Pecos Road	E/W	100	11,530	3 lanes in each direction with sidewalk/detached sidewalk/meandering sidewalk and raised medians	220	Residential/Public	School	Proposed Separated Bike Lane	Major St Commercial	N/A	80' ROW - Alternative A

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Tropical Parkway	**7**	**Pecos Road**	**Lamb Boulevard**	**E/W**	**100**	**25,631**	**3 lanes in each direction with sidewalk/detached sidewalk/meandering sidewalk and raised medians**	**220**	**Residential**	**N/A**	**No Recommendations**	**Major St Commercial**	**Portions of the segment only have a half street constructed**	**80' ROW - Alternative A**
Tropical Parkway	8	CC-215	Sloan Lane	E/W	100	13,827	1-2 lanes in each direction with some sidewalk and raised medians	N/A	Industrial	Employment	No Recommendations	No Recommendations	Inconsistent ROW Dedication	Maintain Existing Cross Section
Tropical Parkway	9	Sloan Lane	Shatz Street	E/W	80	N/A	2 lanes in each direction with some sidewalk and raised medians	220	Industrial	Employment	No Recommendations	No Recommendations	N/A	Maintain Existing Cross Section
Ann Road	1	Decatur	Simmons Street	E/W	100	21,049	3 lanes in each direction with raised medians and sidewalk **Missing sidewalk west of San Mateo Street*	220	Residential/Commercial	Commercial	Proposed Separated Bike Lane	Major St Commercial	Update MPSH line to blue (100' ROW) from Valley Drive to Simmons Street	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Ann Road	2	Simmons Street	Camino Eldorado Parkway	E/W	100	15,256 *Note: 2021 existing AADT was 20,500*	3 lanes in each direction with raised medians and sidewalk	220	Residential/Commercial	Commercial	Proposed Separated Bike Lane	Major St Commercial	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes

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Ann Road	3	Camino Eldorado Parkway	North 5th Street	E/W	100	10,202	3 lanes in each directions with raised medians/TWLTL and sidewalk	220	Residential/Commercial	Commercial	Proposed Separated Bike Lane	Major St Commercial	N/A	100' ROW - Alternative C

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Ann Road	4	North 5th Street	Tropical Way	E/W	100	8,181	3 lanes in each directions with raised medians and sidewalk **Sidewalk missing between North 5th Street and Donna Street*	220	Residential/Commercial	School	Proposed Separated Bike Lane	Major St Commercial	N/A	100' ROW - Alternative C
Washburn Road	1	Decatur Boulevard	Valley Drive	E/W	80	5,938	2 lanes each direction with TWLTL and sidewalk and bike lanes from Waving Flower Drive to Valley Drive	N/A	Residential	School	Proposed/Existing Bike Lane	Primary Connector	N/A	80' ROW - Alternative A
Washburn Road	2	Valley Drive	Allen Lane	E/W	80	5,885	2 lanes in each direction with bike lanes and sidewalk **Asphalt path for a portion east of Valley Road* *Reduces to 1 lane each direction between Styers Street and Willis Street*	N/A	Residential	School Park	Existing Bike Lane	Primary Connector	Sidewalk missing for portion of segment due to unimproved half-street Deteriorated asphalt path east of Valley Drive near Wolfe Elementary School	80' ROW - Alternative A Short Term: Construct sidewalk east of Valley Drive
Washburn Road	3	Allen Lane	Clayton Street	E/W	80	5,514	2 lanes in each direction with TWLTL, bike lanes, and sidewalk	N/A	Residential/Commercial	Church	Existing Bike Lane	Primary Connector	N/A	80' ROW - Alternative A
Washburn Road	4	Clayton Street	Camino Al Norte	E/W	80	3,046	2 lanes in each direction with TWLTL, bike lanes, and sidewalk	N/A	Residential/Commercial	N/A	Existing Bike Lane	Primary Connector	Washburn Road transitions into Cam Bravo/La Madre Way	80' ROW - Alternative A

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Washburn Road	5	Camino Al Norte	North 5th Street	E/W	80	5,424	2 lanes in each direction with TWLTL and sidewalk **Sidewalk missing east of Conway Street and between Eagle Way and North 5th Street*	N/A	Residential/Commercial	Commercial Church School	Proposed Bike Lane and Buffered Bike Lane	Primary Connector; Pedestrian Priority Zone - Commerce to Bruce	Sidewalk missing for portions of segment due to unimproved half-streets	80' ROW - Alternative A

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Washburn Road	6	North 5th Street	Losee Road	E/W	80	9,171	2 lanes in each direction with TWLTL and sidewalk and bike lanes near North 5th Street **Sidewalk missing east of Bruce Street* **Raised median from Teal Petals Street to Losee Road*	N/A	Residential/Commercial	School	Proposed Buffered Bike Lane	Primary Connector	Picnic tables between Lawrence Street and Losee Road along channel	80' ROW - Alternative A
Washburn Road	7	Losee Road	Pecos Road	E/W	100	693	2 lanes in each direction with TWLTL, sidewalk, and approximately 5-foot paved shoulders	N/A	Industrial	Golf Course	Proposed Buffered Bike Lane	No Recommendations	N/A	100' ROW - Alternative D
Washburn Road	8	Pecos Road	Donovan Way	E/W	80	N/A	1 lanes in each direction with sidewalk	N/A	Residential/Industrial	N/A	No Recommendations	No Recommendations	Half-street completed on north side only	80' ROW - Alternative A
Lone Mountain Road	1	Decatur Boulevard	Valley Drive	E/W	90	6,964	2 lanes in each direction with TWLTL and sidewalks **Sidewalk missing along north side of Lone Mountain Road east of Decatur Boulevard*	N/A	Residential	N/A	Proposed Separated Bike Lane	Primary Connector	Sidewalk missing for portions of segment due to unimproved half-streets A separated bike lane is not feasible for consistency with 80'segments	Install bike lanes each direction
Lone Mountain Road	2	Valley Drive	Simmons Street	E/W	100	6,395	2 lanes in each direction with raised median/TWLTL and sidewalk	N/A	Residential	N/A	Proposed Separated Bike Lane	Primary Connector	N/A	100' ROW - Alternative A

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Lone Mountain Road	3	Simmons Street	Camino Al Norte	E/W	80	7,067	2 lanes in each direction with raised median/TWLTL and sidewalk **Sidewalk missing east of Simmons Street*	N/A	Residential	Park	Proposed Separated Bike Lane	Primary Connector	Sidewalk missing for portions of segment due to unimproved half-streets A separated bike lane is not feasible for consistency with adjacent segment	Install bike lanes each direction

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Lone Mountain Road	4	Commerce Street	North 5th Street	E/W	100	11,405	2 lanes in each direction with TWLTL and sidewalk **Sidewalk missing on the north side west of North 5th Street*	N/A	Residential	School	Proposed Separated Bike Lane	Primary Connector	Sidewalk missing for portions of segment due to unimproved half-streets Recommend buffered bike lane for consistency with 80' segments	100' ROW - Alternative A
Lone Mountain Road	5	North 5th Street	Losee Road	E/W	80	4,649	2 lanes in each direction with TWLTL and sidewalk **Sidewalk missing east of Harold Street*	N/A	Residential/Industrial/Commercial	Employment School	Proposed Separated Bike Lane	No Recommendations	Sidewalk missing for portions of segment due to unimproved half-streets A separated bike lane is not feasible for consistency with adjacent segment	80' ROW - Alternative C
Lone Mountain Road	6	Losee Road	Pecos Road	E/W	80	9,203	2 lanes in each direction with TWLTL and sidewalk **Sidewalk missing east of Losee Road*	N/A	Commercial/Industrial	Employment	Proposed Separated Bike Lane	No Recommendations	Sidewalk missing for portions of segment due to unimproved half-streets This is a proposed truck route.	80' ROW - Alternative C
Craig Road	1	Decatur Boulevard	Simmons Street	E/W	120	33,939	3 lanes in each direction with raised median, sidewalk, and bus/bike lanes	219/DVX	Commercial/Residential	Commercial Corridor	Existing Bus/Bike Lane	High Capacity Transit	Small section between Allen Lane and Simmons Street is 150' ROW otherwise 120'	Maintain Existing Cross Section
Craig Road	2	Simmons Street	Martin Luther King Boulevard	E/W	120	50,923	3 lanes in each direction with raised median, sidewalk, and bus/bike lanes	219/DVX	Commercial/Residential	Commercial Corridor	Existing Bus/Bike Lane	High Capacity Transit; Priority Pedestrian Zones	N/A	Maintain Existing Cross Section

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Craig Road	3	Martin Luther King Boulevard	North 5th Street	E/W	120	5,860	3 lanes in each direction with raised median, sidewalk, and bus/bike lanes	219/DVX	Commercial/Residential	Commercial Corridor	Existing Bus/Bike Lane	High Capacity Transit; Priority Pedestrian Zones	Public ROW not dedicated between Goldfield Street and North 5th Street	Maintain Existing Cross Section

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Craig Road	**4**	**North 5th Street**	**Losee Road**	**E/W**	**120**	**28,565**	**3 lanes in each direction with raised median, sidewalk, and wide shoulders**	**219/DVX**	**Mixed-Use**	**N/A**	**No Recommendations**	**High Capacity Transit**	**110' ROW for small segment east of North 5th Street transitions back to 120' ROW moving west towards Losee Road**	**Extend Bus/Bike Lane**
Craig Road	5	Losee Road	Pecos Road	E/W	120	65,090	4 lanes in each direction with raised medians and sidewalks	219/DVX	Industrial	N/A	No Recommendations	High Capacity Transit	N/A	N/A
Craig Road	6	Pecos Road	Lamb Boulevard	E/W	120	35,092	3 lanes in each direction with raised medians and sidewalks **Sidewalks missing on the south side of Craig Road just west of Lamb*	219/DVX	Industrial	N/A	No Recommendations	High Capacity Transit	Sidewalk missing for portions of segment due to unimproved half-streets	N/A
Alexander Road	**1**	**Decatur Boulevard**	**Simmons Street**	**E/W**	**80**	**6,310**	**2 lanes each direction with TWLTL, sidewalks, and bike lanes**	**N/A**	**Residential**	**N/A**	**Proposed Separated Bike Lane**	**Primary Connector**	**N/A**	**80' ROW - Alternative C**
Alexander Road	**2**	**Simmons Street**	**Martin L King Boulevard**	**E/W**	**80**	**6,294**	**2 lanes each direction with TWLTL, sidewalks, and bike lanes**	**N/A**	**Residential**	**Desert Horizon Park**	**Proposed Separated Bike Lane**	**Primary Connector**	**N/A**	**80' ROW - Alternative C**

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Alexander Road	3	Martin L King Boulevard	North 5th Street	E/W	80	7,197	2 lanes each direction with TWLTL, sidewalks, and bike lanes	N/A	Residential/Industrial	School	Proposed Separated Bike Lane	Primary Connector	N/A	80' ROW - Alternative C

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Alexander Road	4	North 5th Street	Losee Road	E/W	80	3,289	2 lanes each direction with TWLTL, sidewalks, and bike lanes	N/A	Industrial	Amazon Warehouse	Proposed Separated Bike Lane	Primary Connector; Priority Pedestrian Zone	N/A	80' ROW - Alternative C
Alexander Road	5	Civic Center Drive	Pecos Road	E/W	80	1,751	2 lanes each direction with TWLTL and sidewalks	N/A	Industrial	N/A	Proposed Separated Bike Lane	No Recommendations	N/A	80' ROW - Alternative C
Gowan Road	1	Decatur Boulevard	Valley Drive	E/W	80	1,812	2 lanes each direction with TWLTL and sidewalks	N/A	Residential	N/A	Proposed Separated Bike Lane	No Recommendations	N/A	80' ROW - Alternative C
Gowan Road	2	Valley Drive	Allen Lane	E/W	80	5,420	2 lanes each direction with TWLTL and sidewalks	N/A	Residential	N/A	Proposed Separated Bike Lane	No Recommendations	N/A	80' ROW - Alternative C
Gowan Road	3	Allen Lane	Martin L King Boulevard	E/W	80	5,420	2 lanes each direction with TWLTL, sidewalks, and bike lanes	N/A	Residential	N/A	Proposed Separated Bike Lane	No Recommendations	N/A	80' ROW - Alternative C

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Gowan Road	4	Martin L King Boulevard	North 5th Street	E/W	80	2,088-10,163	2 lanes each direction with TWLTL, sidewalks, and bike lanes	N/A	Industrial	N/A	Proposed Separated Bike Lane	No Recommendations	N/A	80' ROW - Alternative C

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Gowan Road	5	North 5th Street	Losee Road	E/W	80	685	2 lanes each direction with TWLTL and bike lanes	N/A	Industrial	N/A	Proposed Separated Bike Lane	No Recommendations	N/A	80' ROW - Alternative C
Gowan Road	6	Civic Center Drive	Pecos Road	E/W	80	2,373	2 lanes each direction with TWLTL with on-street parking in some locations	110/111	Industrial	School Community College	Proposed Separated Bike Lane	No Recommendations	N/A	Reduce to 1 lane each direction with buffered bike lanes each direction and on-street parking where it current exists with remaining width for sidewalk
Cheyenne Avenue (SR 574)	1	Rancho Drive	Simmons Street	E/W	100	45,729	3 lanes each direction with raised medians/TWLTL **Some Areas are missing Sidewalk*	218	Commercial/Residential/Public/ Semi-Private	Technology Corridor	No Recommendations	Major St Commercial	Some areas have asphalt path and some are missing sidewalk	Install sidewalk where missing and upgrade sidewalk to be ADA/PROWAG compliant
Cheyenne Avenue (SR 574)	2	Simmons Street	Clayton Street	E/W	100	46,539	3 lanes each direction with raised medians/TWLTL **Some Areas are missing Sidewalk*	218	Mixed-Use Employment/Residential	Technology Corridor	No Recommendations	Major St Commercial	Sidewalk missing for portions of segment due to unimproved half-streets	Install sidewalk where missing and upgrade sidewalk to be ADA/PROWAG compliant
Cheyenne Avenue (SR 574)	3	Clayton Street	Martin Luther King Boulevard	E/W	100	46,539	3 lanes each direction with raised medians/TWLTL **Some areas are missing sidewalk*	218	Mixed-Use Employment/Residential	Technology Corridor	No Recommendations	Major St Commercial	Sidewalk missing for portions of segment due to unimproved half-streets	Install sidewalk where missing and upgrade sidewalk to be ADA/PROWAG compliant

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Cheyenne Avenue (SR 574)	4	Martin Luther King Boulevard	North 5th Street	E/W	100	44,258	3 lanes each direction with raised medians/TWLTL **Some areas are missing sidewalk*	218	Mixed-Use Employment/Residential/Industrial	Technology Corridor (Rancho Drive to Revere Street)	No Recommendations	Major St Commercial	Sidewalk missing for portions of segment due to unimproved half-streets	Install sidewalk where missing and upgrade sidewalk to be ADA/PROWAG compliant; Install raised medians to comply with NDOT Access Management Guidelines

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Cheyenne Avenue (SR 574)	5	North 5th Street	Civic Center Drive	E/W	100	51,667-74,582	3 lanes each direction with raised median and sidewalk **Some areas are missing sidewalk*	218	Industrial/Downtown Area of Influence/Mixed-Use Employment	College	No Recommendations	Major St Commercial	Crossing over I-15 north side	N/A
Cheyenne Avenue (SR 574)	6	Civic Center Drive	Pecos Road	E/W	100	52,048	3 lanes each direction with raised medians/TWLTL and sidewalk 2 lanes westbound in the direction along CSN Campus frontage	111/218	Industrial/Downtown Area of Influence/Mixed-Use Employment	College	No Recommendations	Major St Commercial	N/A	N/A
Carey Avenue	**1**	**Rancho Drive**	**Clayton Street**	**E/W**	**100**	**14,617**	**2 lanes each direction with raised median, shoulders, and sidewalk**	**214**	**Commercial/Residential**	**N/A**	**Proposed Separated Bike Lane**	**Primary Connector**	**N/A**	**100' ROW - Alternative C**
Carey Avenue	**2**	**Clayton Street**	**Revere Street**	**E/W**	**100**	**11,820**	**2 lanes each direction with TWLTL, shoulders/on-street parking, and sidewalk**	**214**	**Commercial/Residential**	**N/A**	**Proposed Separated Bike Lane**	**Primary Connector**	**N/A**	**100' ROW - Alternative C**
Carey Avenue	**3**	**Revere Street**	**Losee Road**	**E/W**	**100**	**12,057**	**2 lanes each direction TWLTL and sidewalk**	**214**	**Residential/Industrial**	**N/A**	**Proposed Separated Bike Lane**	**Primary Connector**	**N/A**	**100' ROW - Alternative C**

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Carey Avenue	4	Losee Road	North 5th Street	E/W	100	16,459	2 lanes each direction with raised median and sidewalk	214	Industrial/Downtown	N/A	Proposed Separated Bike Lane	Primary Connector	Widen bridge over I-15 to provide bicycle connectivity east of Losee Road	100' ROW - Alternative C Short Term: Provide "Share the Road" signage

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Carey Avenue	**5**	**North 5th Street**	**Donna Street**	**E/W**	**100**	**13,000**	**2 lanes each direction with raised median and sidewalk**	**214**	**Residential/Public**	**Downtown and School**	**Proposed Separated Bike Lane**	**Primary Connector; Priority Pedestrian Zone - North 5th to LVB**	**Separated bike lane is not feasible with existing ROW.**	**Refer to the *East Carey Avenue Safety Management Plan***
Carey Avenue	**6**	**Donna Street**	**Hamilton Street**	**E/W**	**100**	**13,000**	**2 lanes each direction with raised median and sidewalk**	**214**	**Residential/Public**	**Downtown and School**	**Proposed Separated Bike Lane**	**Primary Connector; Priority Pedestrian Zone - North 5th to LVB**	**Separated bike lane is not feasible with existing ROW.**	**Refer to the *East Carey Avenue Safety Management Plan***
Carey Avenue	**7**	**Hamilton Street**	**Civic Center Drive**	**E/W**	**100**	**17,000**	**2 lanes each direction with on-street parking on north side, raised median and sidewalk**	**214**	**Residential/Public**	**Downtown and School**	**Proposed Separated Bike Lane**	**Primary Connector; Priority Pedestrian Zone - North 5th to LVB**	**Separated bike lane is not feasible with existing ROW.**	**Refer to the *East Carey Avenue Safety Management Plan***
Carey Avenue	**8**	**Civic Center Drive**	**Las Vegas Boulevard**	**E/W**	**100**	**17,000**	**3 lanes WB and 2 lanes EB with raised median and sidewalk**	**214**	**Commercial**	**N/A**	**Proposed Separated Bike Lane**	**Primary Connector; Priority Pedestrian Zone - North 5th to LVB**	**Separated bike lane is not feasible with existing ROW.**	**Refer to the *East Carey Avenue Safety Management Plan***
Lake Mead Boulevard (SR 147)	1	Decatur Boulevard	Simmons Street	E/W	100	17,772	3 lanes each direction with raised median and sidewalk	210	Residential/Commercial/Industrial	N/A	Proposed Separated Bike Lane	Major St Commercial	N/A	Maintain existing cross section to match adjacent segment with higher ADT

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Lake Mead Boulevard (SR 147)	**2**	**Simmons Street**	**Comstock Drive**	**E/W**	**100**	**36,683**	**3 lanes each direction with TWLTL and sidewalk**	**210/214**	**Residential/Commercial**	**School**	**Proposed Separated Bike Lane**	**Major St Commercial**	**N/A**	**Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes** **Implement access management per NDOT requirements**
Lake Mead Boulevard (SR 147)	**3**	**Revere Street**	**Losee Road**	**E/W**	**100**	**24,936**	**3 lanes each direction with TWLTL and sidewalk**	**210/214**	**Residential/Commercial**	**N/A**	**Proposed Separated Bike Lane**	**Major St Commercial; Priority Pedestrian Zones - Revere to D Street**	**N/A**	**Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes** **Implement access management per NDOT requirements**
Lake Mead Boulevard (SR 147)	4	Losee Road	Las Vegas Boulevard	E/W	100	29,482	3 lanes each direction one way couplet and sidewalk	210	Industrial/Downtown	Downtown	Proposed Side path	Major St Commercial; Priority Pedestrian Zones - I-15 to McDaniel	N/A	Maintain existing cross section to match adjacent segment with higher ADT
Lake Mead Boulevard (SR 147)	5	Las Vegas Boulevard	Civic Center Drive	E/W	100	40,950	3 lanes each direction with raised median	210	Downtown	Downtown	Proposed Side path	Major St Commercial; Priority Pedestrian Zones - I-15 to McDaniel	N/A	Maintain existing cross section to match adjacent segment with higher ADT
Lake Mead Boulevard (SR 147)	6	Civic Center Drive	Pecos Road	E/W	100	41,054	3 lanes each direction with TWLTL	210	Downtown	Downtown	Proposed Side path	Major St Commercial	N/A	Consider NDOT Complete Street Project recommendations

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Owens Avenue	1	I-15	Las Vegas Boulevard	E/W	80	11,069	2 lanes each direction with raised median and sidewalk	209	Downtown Business District/Downtown Area of Influence	Downtown	No Recommendations	Primary Connector	N/A	Maintain Existing Cross Section

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Owens Avenue	2	Las Vegas Boulevard	Woodard Street	E/W	80	19,900	2 lanes each direction with raised median and sidewalk	209	Downtown Business District/Downtown Area of Influence	Downtown Amazon Warehouse	No Recommendations	Primary Connector	N/A	Maintain Existing Cross Section
Owens Avenue	**3**	**Woodard Street**	**Civic Center Drive**	**E/W**	**80**	**21,788**	**2 lanes each direction with on-street parking on north side, sidewalk, and raised median**	**209**	**Downtown Business District/Downtown Area of Influence**	**Downtown**	**No Recommendations**	**Primary Connector; Priority Pedestrian Zone - 21st to Nellis**	**Streetlight poles obstructing pedestrian walkway on the south side of the street**	**Consider relocating streetlight poles or widening sidewalk to comply with ADA/PROWAG.**
Owens Avenue	**4**	**Civic Center Drive**	**Arthur Avenue**	**E/W**	**80**	**19,475**	**2 lanes each direction with on-street parking on north side, sidewalk, and TWLTL**	**209**	**Downtown Business District/Downtown Area of Influence**	**Downtown**	**Existing Bike Lane**	**Primary Connector; Priority Pedestrian Zone - 21st to Nellis**	**Data indicates existing bike lanes, but none are present; Streetlight poles obstructing pedestrian walkway on the south side of the street**	**Install bike lane.** **Consider relocating streetlight poles or widening sidewalk to comply with ADA/PROWAG.**
Owens Avenue	**5**	**Arthur Avenue**	**Mojave Road**	**E/W**	**80**	**21,745**	**2 lanes each direction with on-street parking on north side, bike lane EB, sidewalk, and TWLTL**	**209**	**Downtown Business District/Downtown Area of Influence**	**Downtown**	**Existing Bike Lane**		**Streetlight poles obstructing pedestrian walkway on the south side of the street**	**Consider relocating streetlight poles or widening sidewalk to comply with ADA/PROWAG.**
Owens Avenue	6	Mojave Road	Pecos Road	E/W	80	18,840	2 lanes each direction with on-street parking on north side, sidewalk, and TWLTL	209	Downtown Business District/Downtown Area of Influence	Downtown	No Recommendations	Primary Connector	N/A	Maintain Existing Cross Section

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El Campo Grande Avenue	1	Range Road	Sloan Lane	E/W	80	N/A	1 lane each direction with TWLTL and sidewalk on north side	220	Industrial	Employment	No Recommendations	No Recommendations	Sidewalk missing for portions of segment due to unimproved half-streets and along a portion of developed property	Install sidewalk

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Decatur Boulevard	1	Rancho Drive	Alexander Road	N/S	100	54,113	3 lanes in each direction with raised medians/TWLTL and sidewalks	103	Residential/Commercial/Industrial	Airport	No Recommendations	High Capacity Transit	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Decatur Boulevard	2	Alexander Road	Washburn Road	N/S	100	48,146	3 lanes in each direction with raised medians/TWLTL and sidewalks	103	Residential/Commercial/Industrial	Commercial	No Recommendations	Major St Commercial	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Decatur Boulevard	3	Washburn Road	CC-215	N/S	100	39,444	3 lanes in each direction with raised medians/TWLTL and sidewalks	103	Public/Commercial/Residential	Commercial	Proposed Side Path	Major St Commercial	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Decatur Boulevard	4	CC-215	Rome Boulevard	N/S	120	35,713	4 lanes in each direction with raised medians and sidewalk	103	Public/Commercial/Residential	Commercial	Proposed Side Path	Major St Commercial	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Decatur Boulevard	5	Rome Boulevard	Elkhorn Road	N/S	120	26,893	3 lanes in each direction and bus lane along east side with raised medians and sidewalk **Sidewalk is missing along west side north of Decatur Boulevard*	103	Public/Commercial/Residential	DMV	Proposed Buffered Bike Lane	Major St Commercial	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes and buffered bike lanes are not recommended on a 6-lane roadway

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Decatur Boulevard	6	Elkhorn Road	Horse Drive	N/S	120	23,223	3 lanes in each direction and bus lane along east side with raised medians and sidewalk **Sidewalk is missing along east side near Grand Teton Drive and north of Ironhorse Lodge Avenue*	103	Residential/Public	DMV	Proposed Buffered Bike Lane	Primary Connector - Elkhorn to Grand Teton	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes and buffered bike lanes are not recommended on a 6-lane roadway

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Decatur Boulevard	7	Horse Drive	Iron Mountain Road	N/S	120	5,304	1-2 lanes in each direction with sidewalks	N/A	Residential/Public	School Shooting Range	Proposed Buffered Bike Lane	N/A	Half-street improvements on west side only	Plan for Complete Streets with future development per MPSH
Decatur Boulevard	8	Iron Mountain Road	Moccasin Road	N/S	100	N/A	Undeveloped	N/A	Open Space/ Future Residential	N/A	Proposed Bike Lane	N/A	Undeveloped	Plan for Complete Streets with future development per MPSH
Valley Drive	**1**	**Cheyenne Avenue**	**Gowan Road**	**N/S**	**80**	**7,060**	**2 lanes in each direction with TWLTL, sidewalk, and bike lanes**	**N/A**	**Residential/Commercial**	**Cheyenne Technology Corridor**	**Existing Bike Lane**	**Primary Connector**	**N/A**	**80' ROW - Alternative A**
Valley Drive	2	Gowan Road	Alexander Road	N/S	80	3,810	1 lane in each direction with TWLTL, on-street parking, sidewalks, and bike lanes	N/A	Residential/Commercial	Commercial	Existing Bike Lane	Primary Connector	N/A	Maintain Existing Cross Section
Valley Drive	**3**	**Alexander Road**	**Craig Road**	**N/S**	**80**	**4,607**	**2 lanes in each direction with TWLTL, sidewalks, and bike lanes**	**N/A**	**Residential**	**School**	**Existing Bike Lane**	**Primary Connector**	**N/A**	**80' ROW - Alternative A**

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Valley Drive	4	Craig Road	Lone Mountain	N/S	80	850	1 lane in each direction with TWLTL, on-street parking, sidewalks, and bike lanes	N/A	Residential/Commercial	Commercial	Existing Bike Lane	Primary Connector	Sidewalk missing for portions of segment due to unimproved half-streets	Maintain Existing Cross Section

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Valley Drive	5	Lone Mountain Road	Tropical Way	N/S	80	360	2 lanes in each direction with TWLTL, sidewalk, and bike lanes **Some areas on the east side have asphalt path*	N/A	Residential	School	Existing Bike Lane	Primary Connector	Sidewalk missing for portions of segment due to unimproved half-streets	80' ROW - Alternative A
Valley Drive	6	Tropical Parkway	Centennial Parkway	N/S	80	N/A	2 lanes in each direction with TWLTL, and sidewalk	N/A	Residential	N/A	Proposed Bike Lane	No Recommendation	N/A	80' ROW - Alternative A
Simmons Street	1	Lake Mead Boulevard	Carey Avenue	N/S	100	27,376	2 lanes in each direction with TWLTL, wider shoulders, and sidewalk	119	Commercial/Industrial/Public/Residential	Commercial	Proposed Separated Bike Lane	Major St Commercial	N/A	100' ROW - Alternative C
Simmons Street	2	Carey Avenue	Cheyenne Avenue	N/S	100	24,221	2 lanes in each direction with TWLTL, wider shoulders, and sidewalk	119	Commercial/Industrial/Public/Residential	Commercial	Proposed Separated Bike Lane	Major St Commercial	Sidewalk missing for portions of segment due to unimproved half-streets	100' ROW - Alternative C
Simmons Street	3	Cheyenne Avenue	Craig Road	N/S	100	26,797	2-3 lanes in each direction with raised medians, wide shoulder along the east side, and sidewalk	119	Residential	N/A	Proposed Separated Bike Lane	Major St Commercial	N/A	100' ROW - Alternative C

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Simmons Street	4	Craig Road	Ann Road	N/S	100	38,899	3 lanes in each direction with raised medians/TWLTL and sidewalk	119	Residential	N/A	Proposed Separated Bike Lane	Major St Commercial	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes

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Simmons Street	5	Ann Road	Centennial Parkway	N/S	100	20,442	3 lanes in each direction with raised medians/TWLTL and sidewalk	119	Residential/Commercial	Commercial	Proposed Separated Bike Lane	Major St Commercial	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Aliante Parkway	1	Centennial Parkway	Deer Springs Way	N/S	100	14,796	3 lanes in each direction with raised medians, detached sidewalk, and side path along the east side of the road	119	Residential	N/A	Existing Side path (east side)	N/A	Approximately 100' of pavement width with additional 30' ROW dedicated on each side for total width of 160'.	Maintain existing cross section due to high ADT on adjacent segment which does not allow for a reduction in the number of lanes
Aliante Parkway	2	Deer Springs Way	Elkhorn Road	N/S	120	41,830	3 lanes in each direction with raised medians, sidewalk, and side path along the east side of the road	119	Commercial/Industrial	N/A	Existing Side path (east side)	N/A	Approximately 100' of pavement width with additional 40' ROW dedicated on each side for total width of 180'.	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Aliante Parkway	3	Elkhorn Road	Grand Teton Drive	N/S	100	29,173	3 lanes in each direction with raised medians, detached sidewalk, and side path along the east side of the road	N/A	Residential	N/A	Existing Side path (east side)	N/A	Approximately 90' of pavement width with additional 35' ROW dedicated on each side for total width of 160'.	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Aliante Parkway	**4**	**Grand Teton Drive**	**Horse Drive**	**N/S**	**100**	**3,023**	**3 lanes in each direction with raised medians, detached sidewalk**	**N/A**	**Residential**	**N/A**	**Existing Side path (east side)**	**Primary Connector - Grand Teton to Redhead Drive; Major St Commercial - Redhead Drive to Elkhorn Road**	**Half-street completed on west side only; Approximately 45' of pavement width with additional 30' ROW dedicated on each side for total width of 75'.**	**Continue side path on east side to connect to Alliante Parkway**

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Aliante Parkway	5	Horse Drive	Aliante Parkway	N/S	100	N/A	3 lanes in each direction with raised medians, detached sidewalk	N/A	Open Space/ Future Residential	N/A	Existing Side path (east side)	N/A	Half-street completed on west side only; Approximately 45' of pavement width with additional 30' ROW dedicated on each side for total width of 75'.	Continue side path on east side to connect to Alliante Parkway

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Clayton Street	1	Carey Avenue	Evans Avenue	N/S	80	3,958	1 lane in each direction with sidewalk, TWLTL, on-street parking, and bicycle lanes	N/A	Residential/Industrial	School; Employment	N/A	N/A	N/A	Maintain Existing Cross Section
Clayton Street	**2**	**Evans Avenue**	**Brooks Avenue**	**N/S**	**80**	**3,958**	**2 lanes in each direction with TWLTL and meandering sidewalk**	**N/A**	**Residential**	**Employment**	**Proposed Bike Lane**	**N/A**	**N/A**	**80' ROW - Alternative A**
Clayton Street	**3**	**Brooks Avenue**	**Cheyenne Avenue**	**N/S**	**80**	**3,958**	**2 lanes in each direction with sidewalk and TWLTL**	**N/A**	**Residential/Commercial**	**Employment**	**Proposed Bike Lane**	**N/A**	**Half-street completed on east side only**	**80' ROW - Alternative A**
Clayton Street	**4**	**Cheyenne Avenue**	**Gowan Road**	**N/S**	**80**	**11,928**	**2 lanes in each direction with TWLTL and sidewalk/detached sidewalk**	**N/A**	**Residential/Commercial**	**Employment**	**Proposed Bike Lane**	**Primary Connector**	**N/A**	**80' ROW - Alternative A**
Clayton Street	**5**	**Gowan Road**	**Craig Road**	**N/S**	**80**	**11,928**	**2 lanes in each direction with TWLTL, sidewalk, and bicycle lanes** **Sidewalk missing from Coralie Avenue to San Miguel Avenue as only the west half street is constructed*	**N/A**	**Residential/Commercial**	**Employment**	**Existing Bike Lane**	**Primary Connector - Gowan Road to Coralie Avenue**	**West half street constructed from Coralie Avenue to San Miguel Avenue**	**80' ROW - Alternative A**

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Clayton Street	6	Craig Road	Lone Mountain Road	N/S	80	25,544	2 lanes in each direction with TWLTL, sidewalk, and bike lanes	N/A	Residential/Commercial	Employment	Existing Bike Lane	Primary Connector	Bike lanes are faded	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes; Refresh bike lane markings

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Clayton Street	**7**	**Lone Mountain Road**	**Washburn Road**	**N/S**	**80**	**8,342**	**2 lanes in each direction with TWLTL, sidewalk, and bike lanes**	**N/A**	**Residential**	**Park**	**N/A**	**Primary Connector**	**N/A**	**80' ROW - Alternative A**
Clayton Street	**8**	**Washburn Road**	**Ann Road**	**N/S**	**100**	**10,219**	**2 lanes in each direction with TWLTL and sidewalk**	**N/A**	**Residential**	**N/A**	**Proposed Bike Lane**	**Primary Connector**	**Inconsistent ROW**	**80' ROW - Alternative A**
Clayton Street	**9**	**Ann Road**	**Centennial Parkway**	**N/S**	**100**	**6,362**	**1-2 lanes in each direction with TWLTL and sidewalk/detached sidewalk**	**N/A**	**Residential**	**School**	**Proposed Bike Lane**	**Primary Connector**	**N/A**	**80' ROW - Alternative A**
Clayton Street	**10**	**Centennial Parkway**	**CC-215**	**N/S**	**80**	**6,198**	**2 lanes in each direction with sidewalk/detached sidewalk and raised median**	**N/A**	**Residential**	**School**	**Proposed Bike Lane**	**High Capacity Transit**	**N/A**	**80' ROW - Alternative A**
Highland Drive	1	Moccasin Road	Iron Mountain Road	N/S	80	N/A	Undeveloped	N/A	Open Space/ Future Residential	N/A	N/A	N/A	Undeveloped	Plan for Complete Streets with future development per MPSH

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Revere Street	1	Cheyenne Avenue	Craig Road	N/S	80	6,089	2 lanes in each direction with TWLTL and sidewalk and bike lanes	N/A	Residential/Commercial/ Public/Industrial	Commercial Park	Proposed Separated Bike Lane	Primary Connector	N/A	80' ROW - Alternative C

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Revere Street	**2**	**Ann Road**	**Centennial Parkway**	**N/S**	**100**	**3,307**	**3 lanes in each direction with TWLTL and sidewalk**	**105**	**Residential**	**N/A**	**Proposed Buffered Bike Lane**	**Primary Connector**	**N/A**	**100' ROW - Alternative C**
Revere Street	**3**	**Centennial Parkway**	**Commerce Street**	**N/S**	**100**	**N/A**	**2 lanes in each direction with raised medians and sidewalk **Eastmost lane turns into bus lane from Great Sky Court to Revere Street***	**N/A**	**Residential**	**N/A**	**Proposed Separated Bike Lane**	**Primary Connector**	**N/A**	**100' ROW - Alternative C**
Revere Street	4	Commerce Street	Dorrell Lane	N/S	100	24,512	1-3 lanes in ach direction with raised median, sidewalk and bike lanes	N/A	Residential/Commercial	N/A	Proposed Separated Bike Lane	Primary Connector	Half-street completed on south side only	Maintain Existing Cross Section There are bike lanes over the CC-215 in the 3 lane segment, propose buffers if space allows.
Revere Street	5	Dorrell Lane	Tule Springs Parkway	N/S	120	30,471	Undeveloped	N/A	Residential/Commercial	N/A	Proposed Separated Bike Lane	Neighborhood Street	N/A	Plan for Complete Streets with future development per MPSH
Revere Street	6	Iron Mountain Road	Moccasin Road	N/S	100	N/A	Undeveloped	N/A	Open Space/Future Residential	N/A	No Recommendations	No Recommendations	N/A	Plan for Complete Streets with future development per MPSH

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Commerce Street	**1**	**Cheyenne Avenue**	**Craig Road**	**N/S**	**80**	**11,233**	**2 lanes in each direction with TWLTL and sidewalk**	**N/A**	**Residential; Commercial/Public near Craig**	**School; Employment**	**Proposed Bike Lane**	**Primary Connector Pedestrian Priority Zone**	**N/A**	**80' ROW - Alternative A**
Commerce Street	2	Craig Road	Ann Road	N/S	80	22,161	2 lanes in each direction with TWLTL /raised median and sidewalk **Raised medians just south of Ann Road*	N/A	Residential; Commercial/Public near Craig	Park; School	Proposed Bike Lane - Craig to Washburn	Primary Connector Pedestrian Priority Zone	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Commerce Street	3	Ann Road	Centennial Parkway	N/S	100	18,875	2-3 lanes in each direction with TWLTL/raised medians and sidewalk/detached sidewalk **3rd lane becomes on-street parking on west side between El Campo Grande and Tropical*	N/A	Residential; Commercial Near Centennial	School	Proposed Separated Bike Lane - Washburn to Ann	Primary Connector Pedestrian Priority Zone	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Commerce Street	4	Centennial Parkway	Revere Street	N/S	100	24,512	3 lanes in each direction with TWLTL and sidewalks **Missing sidewalk from Centennial to Rome*	N/A	Residential; Commercial Near Centennial	N/A	Proposed Separated Bike Lane		Half-street completed on south side only between Centennial and Rome	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Commerce Street	5	Racel Street	Moccasin Road	N/S	80	N/A	Undeveloped	N/A	Open Space/Future Residential	N/A	No Recommendations	No Recommendations	Undeveloped	Incorporate Complete Street Elements from the MPSH as Development Starts

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
North 5th Street	1	Las Vegas Boulevard	Carey Avenue	N/S	150	45,845	4 lanes in each direction with raised median and side paths each side	Future High Capacity Transit	Industrial Downtown Area of Influence	Downtown	Existing Side path	High Capacity Transit	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes

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North 5th Street	**2**	**Carey Avenue**	**Cheyenne Avenue**	**N/S**	**150**	**47,684**	**3 lanes in each direction raised median, wide shoulders, and side path each side** ***Sidewalk missing between Losee and Cheyenne***	**N/A**	**Industrial Mix-Use**	**Employment Golf Course**	**Existing Side path Proposed Side path**	**High Capacity Transit**	**Sidewalk missing for portion of segment due to unimproved half-streets** **Public ROW is currently 90'**	**Construct side path along both sides of roadway**
North 5th Street	**3**	**Cheyenne Avenue**	**Craig Road**	**N/S**	**150**	**43,590**	**2 lanes each direction with TWLTL and sidewalk** ***Sidewalk missing at some locations along corridor***	**N/A**	**Industrial Residential**	**Employment School**	**Proposed Side path**	**High Capacity Transit**	**Sidewalk missing for portion of segment due to unimproved half-streets** **Public ROW between 90' and 125'**	**Construct side path along both sides of roadway**
North 5th Street	**4**	**Craig Road**	**Lone Mountain Road**	**N/S**	**150**	**36,606**	**2 lanes each direction with raised median/TWLTL and sidewalk** ***Sidewalk missing at some locations along corridor***	**N/A**	**Residential**	**N/A**	**Proposed Side path**	**High Capacity Transit**	**Sidewalk missing for portion of segment due to unimproved half-streets** **Public ROW between 90' and 120'**	**Construct side path along both sides of roadway**
North 5th Street	**5**	**Lone Mountain Road**	**Ann Road**	**N/S**	**150**	**26,252**	**2 lanes each with raised median, shoulders and sidewalk and side path** ***Sidewalk missing at some locations along corridor***	**N/A**	**Residential**	**School**	**Proposed Side path**	**High Capacity Transit**	**Sidewalk missing for portion of segment due to unimproved half-streets** **Side path alternates between east and west** **Public ROW between 100' and 125'**	**Construct side path along both sides of roadway**
North 5th Street	6	**Ann Road**	Centennial Parkway	N/S	150	18,467	**2 lanes each with raised median, shoulders and sidewalk and side path** ***Sidewalk missing at some locations along corridor***	**N/A**	**Residential Commercial**	**Commercial**	**Proposed Side path**	**High Capacity Transit**	**Sidewalk missing for portion of segment due to unimproved half-streets** **Side path alternates between east and west** **Public ROW between 100' and 125'**	**Construct side path along both sides of roadway**

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
North 5th Street	7	Centennial Parkway	CC-215	N/S	150	23,198	2 to 4 lanes each with raised median, shoulders and sidewalk and side path **Sidewalk missing at some locations along corridor*	N/A	Residential Commercial	Commercial	Proposed Side path	High Capacity Transit	Sidewalk missing for portion of segment due to unimproved half-streets Side path alternates between east and west Public ROW between 100' and 125'	Refer to Deer Springs Livable Centers Study Recommendations

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
North 5th Street	8	CC-215	Grand Teton Drive	N/S	150	N/A	Undeveloped	N/A	Master Planned Community	N/A	Proposed Side path	No Recommendation	Undeveloped	Plan for Complete Streets with future development per MPSH
North 5th Street	9	Grand Teton Drive	Moccasin Road	N/S	150	N/A	Undeveloped	N/A	Master Planned Community	N/A	Proposed Side path	No Recommendation	Undeveloped	Plan for Complete Streets with future development per MPSH
Bruce Street	1	Owens Avenue	Las Vegas Boulevard	N/S	80	5,846	1 to 2 lanes each direction with bike lanes, on-street parking, and sidewalk	N/A	Commercial/Residential	Commercial	Proposed Bike Lane	Primary Connector; Primary Pedestrian Zone	On-street parking varies along segment	Refer to Bruce Street Green and Complete Street Study Recommendations
Bruce Street	2	Gowan Road	Alexander Road	N/S	80	N/A	1 lane each direction with on-street parking and sidewalk	N/A	Industrial	Employment	No Recommendations	No Recommendations	Sidewalk missing for portions of segment due to unimproved half-streets	Maintain Existing Cross Section
Bruce Street	**3**	**Craig Road**	**Ann Road**	**N/S**	**80**	**10,162**	**2 lanes each direction with TWLTL and sidewalk**	**N/A**	**Residential**	**School**	**Proposed Bike Lane**	**Primary Connector; Primary Pedestrian Zone**	**Sidewalk missing for portions of segment due to unimproved half-streets**	**80' ROW - Alternative A**

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Bruce Street	4	Ann Road	Tropical Parkway	N/S	80	4857-10162	2 lanes each direction with TWLTL and sidewalk	N/A	Residential	School Park	Proposed Bike Lane	Primary Connector; Primary Pedestrian Zone	ROW is approximately 90' with additional dedicated area	80' ROW - Alternative A

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Bruce Street	**5**	**Tropical Parkway**	**Centennial Parkway**	**N/S**	**80**	**4,857**	**2 lanes each direction with TWLTL and sidewalk**	**N/A**	**Residential**	**School Park**	**Proposed Bike Lane**	**Primary Connector; Primary Pedestrian Zone**	**N/A**	**80' ROW - Alternative A**
Losee Road	**1**	**Lake Mead Boulevard**	**Carey Avenue**	**N/S**	**100**	**13,927**	**3 lanes in each direction with TWLTL/raised median and sidewalk**	**N/A**	**Industrial/Commercial**	**Employment**	**Proposed Buffered Bike Lane**	**Major St Commercial**	**N/A**	**100' ROW - Alternative A**
Losee Road	2	Carey Avenue	Cheyenne Avenue	N/S	100	26,903	2 lanes in each direction with TWLTL, sidewalk, and on-street parking	N/A	Industrial/Commercial	Employment	Proposed Buffered Bike Lane	Major St Commercial	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Losee Road	3	Cheyenne Avenue	Craig Road	N/S	100	25,953	2 lanes in each direction with TWLTL, sidewalk, and on-street parking	N/A	Industrial/Commercial	Employment	Proposed Buffered Bike Lane - Cheyenne Avenue to Alexander Road	Major St Commercial	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Losee Road	4	Craig Road	Ann Road	N/S	100	50,617	3 lanes in each direction with sidewalk/detached sidewalk and raised medians	DVX	Residential/Commercial/Industrial	Employment; Recreation	N/A	Major St Commercial	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes

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Losee Road	5	Ann Road	Deer Springs Way	N/S	100	33,437	3 lanes in each direction with sidewalk/detached sidewalk and raised medians	DVX - Ann Road to Centennial Parkway	Residential/Commercial/Industrial	Employment	Proposed Side path - Centennial to Deer Springs Way	Primary Connector	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Losee Road	6	Deer Springs Way	CC-215	N/S	120	30,793	3 lanes in each direction with raised medians and some sidewalk	N/A	Residential/Commercial/Industrial	N/A	Proposed Side path	Primary Connector	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Losee Road	7	CC-215	Elkhorn Road	N/S	120	N/A	Undeveloped	N/A	Mixed-Use	Employment	No Recommendations	No Recommendation	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Losee Road	8	Elkhorn Road	Moccasin Road	N/S	100	N/A	Undeveloped	N/A	Mixed-Use	Employment	No Recommendations	No Recommendation	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Civic Center Drive	1	Owens Avenue	Las Vegas Boulevard	N/S	100	36,203	3 lanes each direction with raised medians	110	Downtown	Downtown	Separated Bike Lane	High Capacity Transit	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes
Civic Center Drive	2	Las Vegas Boulevard	Cheyenne Avenue	N/S	100	30,559	2 lanes each direction with raised medians and shoulder/parking	110	Downtown	Downtown	Separated Bike Lane	Primary Connector; Priority Pedestrian Zones - McDaniel to Cartier	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes

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Civic Center Drive	3	Cheyenne Avenue	Mary Dee Avenue	N/S	80	7,966	2 lanes SB and 1 lane NB with TWLTL and on-street parking both sides	110	Commercial/Residential	Commercial	Separated Bike Lane	Primary Connector	N/A	80' ROW - Alternative C

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Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Civic Center Drive	**4**	**Mary Dee Avenue**	**Branson Avenue**	**N/S**	**80**	**5,351**	**2 lanes each direction w/o on-street parking**	**110**	**Industrial/Residential**	**Employment**	**Separated Bike Lane**	**Primary Connector**	**N/A**	**80' ROW - Alternative C**
Civic Center Drive	**5**	**Branson Avenue**	**Alexander Road**	**N/S**	**80**	**1,227**	**1 lane each direction and no SW on west side**	**N/A**	**Industrial**	**Employment**	**Separated Bike Lane**	**Primary Connector**	**N/A**	**80' ROW - Alternative C**
Statz Street	1	Engineers Way	Lone Mountain Road	N/S	80	7,028	1 lane each direction with TWLTL and parking	N/A	Industrial	N/A	No Recommendations	No Recommendations	Commercial trucks parked on the side of the road	Maintain Existing Cross Section due to low ADT and Industrial Area
Statz Street	2	Lone Mountain Road	Washburn Road	N/S	80	215	2 lanes each direction with TWLTL	N/A	Industrial	N/A	No Recommendations	No Recommendations		Maintain Existing Cross Section due to low ADT and Industrial Area
Statz Street	**2**	**Tropical Parkway**	**Deer Springs**	**N/S**	**80**	**5,124-6,617**	**2 lanes each direction with TWLTL**	**N/A**	**Residential/Commercial**	**N/A**	**Bike Lane**	**No Recommendations**	**YMCA**	**Refer to Deer Springs Livable Centers Study Recommendations**

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Statz Street	**3**	**Deer Springs**	**CC 215**	**N/S**	**80**	**6,617**	**Undeveloped**	**N/A**	**Commercial Mix-Use**	**Deer Springs District**	**Bike Lane**	**No Recommendations**	**N/A**	**Refer to Deer Springs Livable Centers Study Recommendations**
Statz Street	4	Elkhorn Road	Moccasin Road	N/S	80	N/A	Undeveloped	N/A	Future Mix-Use	Proposed UNLV Campus	No Recommendations	No Recommendations	N/A	Incorporate Complete Street Elements from the MPSH as Development Starts

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Belmont Street	1	Webb Avenue	Lake Mead Boulevard	N/S	80	N/A	One lane each direction with on-street parking.	N/A	Downtown	N/A	Existing Bike Lane from Tonopah to Carey Avenue	No Recommendations	Existing 52FT ROW; No Bike Lane	Remove segment from MPSH
Belmont Street	2	Lake Mead Boulevard	Carey Avenue	N/S	80	7,546	2 lanes each direction with on-street parking on west and bike lane on east	N/A	Downtown	N/A	Existing Bike Lane (NB)	No Recommendations	N/A	Reduce the lanes to 1 lane each direction with a TWLTL and provide bike lanes on both sides of the roadway while maintaining on-street parking on the west side
Belmont Street	3	Carey Avenue	Las Vegas Boulevard	N/S	80	6,882	2 lanes each direction with shoulder	N/A	Downtown	N/A	Bike Lane	No Recommendations	N/A	Reduce the lanes to 1 lane each direction with a TWLTL and provide bike lanes on both sides of the roadway while maintaining on-street parking on the west side to North of Haddock Avenue
Pecos Road	1	Owens Avenue	Cheyenne Avenue	N/S	100	28,456	2 lanes each direction with TWLTL and 11FT Shoulders each side with sidewalk	111	Downtown	Downtown Redevelopment Area	Separated Bike Lane	Major St Commercial	N/A	100' ROW - Alternative C
Pecos Road	2	Cheyenne Avenue	Alexander Road	N/S	100	18,764	2 lanes each direction with TWLTL and 11FT Shoulders each side with sidewalk	111	Residential/Commercial/Public/ Industrial	N/A	Separated Bike Lane	Major St Commercial	N/A	100' ROW - Alternative C

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Network Analysis

Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Pecos Road	3	Alexander Road	Craig Road	N/S	100	17,318	2 lanes each direction with TWLTL and 11FT Shoulders each side with sidewalk	111	Industrial	N/A	Separated Bike Lane	Major St Commercial	N/A	100' ROW - Alternative C

City of North Las Vegas Comprehensive Master Transportation Plan Study
Network Analysis

Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Pecos Road	4	Lone Mountain Road	Washburn Road	N/S	80	6,779	2 lanes each direction with TWLTL no shoulders with sidewalk	N/A	Industrial	N/A	Separated Bike Lane	No Recommendations	N/A	80' ROW - Alternative C (match to Lone Mountain)
Pecos Road	5	Washburn Road	Carla Ann Road	N/S	100	1,661	3 lanes each direction with raised medians and sidewalk	N/A	Residential/Public	N/A	Separated Bike Lane	No Recommendations	N/A	100' ROW - Alternative C
Pecos Road	6	Carla Ann Road	Centennial Parkway	N/S	100	8,640	3 lanes each direction with raised medians and sidewalk	N/A	Residential with Commercial near Tropical	N/A	Separated Bike Lane	Primary Connector - Carla Ann to Tropical	Some portions not fully built	100' ROW - Alternative C
Pecos Road	7	Centennial Parkway	Farm Road	N/S	100-120	12,331	1 lane each direction except for at VA	DVX	Residential/Commercial	N/A	Separated Bike Lane	Primary Connector; Pedestrian Priority Zone - Rome to 215	Not fully built; check other studies for recommendations	Refer to Deer Springs Livable Centers Study Recommendations
Pecos Road	8	Farm Road	Moccasin Road	N/S	100	15,367	Undeveloped	N/A	Public/Semi-Public	Proposed UNLV Campus	No Recommendations	Pedestrian Priority Zone	N/A	Plan for Complete Streets with future development per MPSH

City of North Las Vegas Comprehensive Master Transportation Plan Study
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Mitchell Street	1	Craig Road	Lone Mountain	N/S	80	3,180	2 lanes each direction with on-street parking, no sidewalk exists along this segment. This segment has heavy truck traffic. Trucks are currently parking on both sides of the road along entire segment.	N/A	Industrial	Employment	No Recommendations	No Recommendations	N/A	Construct sidewalks along this segment. Evaluate the need for bike lane in this section.

City of North Las Vegas Comprehensive Master Transportation Plan Study
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Walnut Road	**1**	**Villa Azul Avenue**	**Centennial Parkway**	**N/S**	**80**	**10,436**	**1-2 lanes in each direction with TWLTL and sidewalk **Sidewalk missing north of Tropical Parkway***	**N/A**	**Commercial/Residential**	**Commercial**	**No Recommendations**	**Primary Connector - Via Azul Avenue to Azure Avenue**	**Half-street completed on east side only north of Tropical Parkway**	**80' ROW - Alternative A**
Walnut Road	2	Centennial Parkway	Moccasin Road	N/S	80	9,734	Undeveloped	N/A	Commercial/Residential	Commercial	No Recommendations	No Recommendation	Undeveloped	Plan for Complete Streets with future development per MPSH
Lamb Boulevard	**1**	**Craig Road**	**I-15**	**N/S**	**100**	**33,179**	**3 lanes each direction with TWLTL and sidewalk**	**203**	**Industrial**	**Employment**	**No Recommendations**	**Major St Commercial**	**N/A**	**Incorporate Access Management**
Lamb Boulevard	2	I-15	Nexus Way	N/S	120	74,922	4 lanes each direction with raised medians and sidewalk *Sidewalk missing on the east side	220	Industrial	Commercial Employment	No Recommendations	Major St Commercial	Sidewalk missing for portions of segment due to unimproved half-streets	N/A
Lamb Boulevard	3	Nexus Way	Centennial Parkway	N/S	120	48,983	4 lanes with raised medians (NB outside line at 16FT) with sidewalk	220	Industrial/Residential/Commercial	Employment	Shared-use path	Major St Commercial - Nexus to Tropical; Primary Connector - Tropical to Centennial	N/A	Maintain existing cross section due to high ADT which does not allow for a reduction in the number of lanes

City of North Las Vegas Comprehensive Master Transportation Plan Study
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Lamb Boulevard	4	Centennial Parkway	CC 215	N/S	120	28,286	Undeveloped	N/A	Industrial/Commercial	Employment	Side path	Primary Connector	N/A	Plan for Complete Streets with future development per MPSH

City of North Las Vegas Comprehensive Master Transportation Plan Study
Network Analysis

Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Lamb Boulevard	5	CC 215	Moccasin Road	N/S	100-120	N/A	Undeveloped	N/A	Proposed UNLV Campus	Proposed UNLV Campus	No Recommendations	No Recommendations	N/A	Plan for Complete Streets with future development per MPSH
Marion Drive	1	Centennial Parkway	Elkhorn Road	N/S	80	N/A	Undeveloped	N/A	Industrial/Residential	Employment	No Recommendations	No Recommendations	Undeveloped	Plan for Complete Streets with future development per MPSH
Nellis Boulevard	1	Centennial Parkway	Elkhorn Road	N/S	100	N/A	Undeveloped	N/A	Industrial	Future Employment	No Recommendations	No Recommendations	Undeveloped	Plan for Complete Streets with future development per MPSH
Sloan Lane	**1**	**Washburn Road**	**Ann Road**	**N/S**	**N/A**	**100**	**3 lanes each direction with raised median and sidewalk**	**N/A**	**Industrial**	**Employment**	**No Recommendations**	**No Recommendations**	**ROW not drawn in existing MPSH**	**Extend Sloan Lane to this segment in the MPSH**
Sloan Lane	2	Ann Road	El Campo Grande	N/S	100	100	1-3 lanes each direction with raised median and sidewalk	N/A	Industrial	Employment	No Recommendations	No Recommendations	Sidewalk missing for portions of segment due to unimproved half-streets	Maintain Existing Cross Section

City of North Las Vegas Comprehensive Master Transportation Plan Study
Network Analysis

Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Sloan Lane	3	El Campo Grande	Tropical Parkway	N/S	80	100	3 lanes in each direction with sidewalk and raised medians	220	Industrial	Employment	No Recommendations	No Recommendations	Public ROW on Assessor's Map is 100' ROW not 80'	Update 80' ROW line to 100' ROW in updated to MPSH

City of North Las Vegas Comprehensive Master Transportation Plan Study
Network Analysis

Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Mt. Hood Street	1	Ann Road	Centennial Parkway	N/S	80	N/A	2 lanes each direction with TWLTL and sidewalk along developed parcels	220	Industrial	Employment	No Recommendations	No Recommendations	Sidewalk missing for portions of segment due to unimproved half-streets	Maintain Existing Cross Section
Hollywood Boulevard	1	Speedway Boulevard	Centennial Parkway	N/S	100	200	2 lanes each direction with TWLTL, shoulder and sidewalk on each side	220	Industrial	Las Vegas Motor Speedway	No Recommendations	No Recommendations	N/A	Provide
Hollywood Boulevard	2	El Camino Grande	Ann Road	N/S	100	200	1 lane NB and 2 lanes SB with raised median and sidewalk on west side	N/A	Industrial	Las Vegas Motor Speedway	No Recommendations	No Recommendations	N/A	Install sidewalk on west side once half street adjacent to Las Vegas Motor Speedway is built
Martin Luther King Boulevard	1	Carey Avenue	Craig Road	N/S	100	55,605	3 lanes each direction with raised median/TWLTL and sidewalk	105; Proposed Rapid Bus Line	Residential/Commercial	Commercial	Bike Lane (Alexander to Craig)	High Capacity Transit; Priority Pedestrian Zone	Bike lanes not feasible with a 6 lane cross section and speeds of 45 mph	Maintain Existing Cross Section
Camino Al Norte	**1**	**Craig Road**	**Lone Mountain Road**	**N/S**	**130**	**29,842**	**2 lanes each direction with raised median and shoulders**	**105**	**Mixed Use**	**N/A**	**Separated Bike Lane**	**High Capacity Transit; Priority Pedestrian Zone**	**N/A**	**Maintain 2 lanes each direction and install buffered bike lanes**

City of North Las Vegas Comprehensive Master Transportation Plan Study
Network Analysis

Street Name	Segment #	From	To	Direction	MPSH ROW (FT)	RTC TDM 2040 (ADT)	Existing Street Section (Typical)	Transit Route	Land Use	Attractors	2019 CNLV Bike and Ped Plan	RTC Walkability Plan	Notes	Recommendations
Camino Al Norte	2	Lone Mountain Road	Ann Road	N/S	130	25,793	2 lanes each direction with raised median, buffered bike lanes and sidewalk	105	Residential	Commercial Park	Separated Bike Lane	High Capacity Transit	A sidepath exists on the west side for a small portion from Lone Mountain Road to the wash trail	Maintain Existing Cross Section
Camino Eldorado	**3**	**Ann Road**	**Clayton Street**	**N/S**	**130**	**14,368**	**2 lanes each direction with raised median and sidewalk**	**105**	**Residential**	**Commercial Park**	**Separated Bike Lane**	**High Capacity Transit**	**On-Street Parking provided on east side for Eldorado Park**	**Maintain 2 lanes each direction, install buffered bike lanes, and provide a sidepath along Eldorado Park to allow bikes to ride on the sidepath while maintaining on-street parking along park**
Range Road	**1**	**CC 215**	**Clark County Boundary**	**N/S**	**80**	**N/A**	**1 lane each direction with no sidewalk**	**220**	**Industrial**	**Industrial Nellis Air Force Base**	**No Recommendations**	**No Recommendations**	**Public ROW on Assessor's Map is 100' ROW not 80'**	**Update 80' ROW line to 100' ROW in updated to MPSH**

APPENDIX H

RECOMMENDED CHANGES TO MASTER PLAN OF STREETS AND HIGHWAYS

Tule Springs Monument:
Remove linework within Tule Springs Monument.

UNLV North Campus:
Remove linework within proposed UNLV North Campus.

Deer Springs District:
-Add 100' ROW on Deer Springs Way from Statz Street to Pecos Road.
-Adjust Pecos Road 100' ROW to end at Deer Springs Way and continue 120' ROW from Deer Springs Way to Farm Road.
- Include 80' ROW at Dorrell Lane and Seeds Fate Street.

Villages at Tule Springs:
Match proposed changes from SHG (Figure 1B)

Elkhorn Road:
Remove Elkhorn Road segment from Statz Street to Nellis Boulevard.

APEX:
Coordinate with CNLV Public Works Director or Designee.

Belmont Street
Remove Belmont Street Segment from Lake Mead Boulevard to Webb Avenue since ROW is 52'.

Nellis Range Boundary

National Guard Boundary

Nellis Air Force Base

Sunrise Manor

City of Las Vegas

MASTER PLAN OF STREETS AND HIGHWAYS

Right-of-Way Widths

- 150'
- 130'
- 120'
- 100'
- 95'
- 90'
- 80'
- 65'
- 60'
- 51'
- 48'
- 40'

Proposed Complete Street Elements

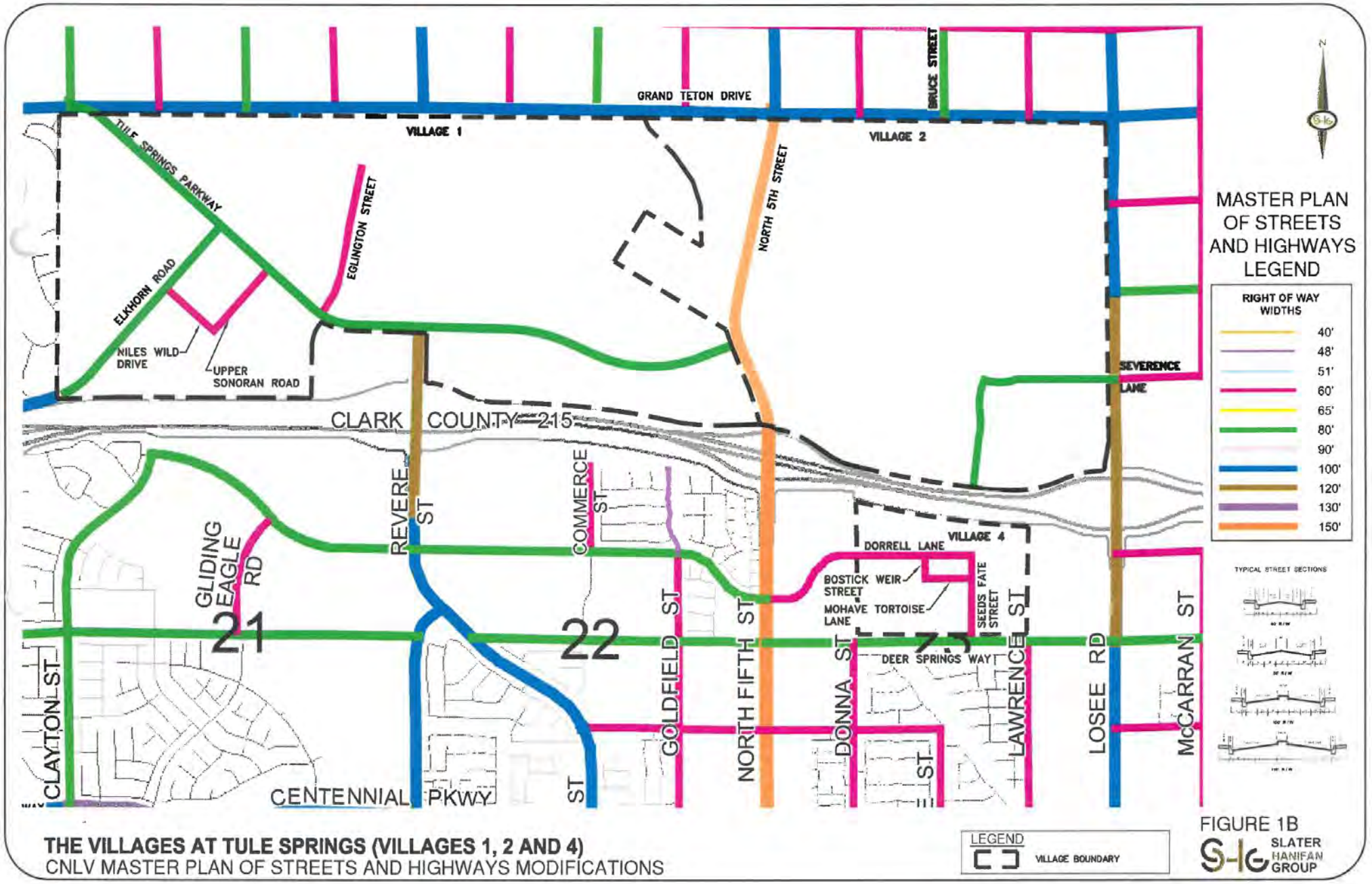
Proposed Removal from MPSH

May 12, 2020

This information is for display purposes only. No liability is assumed as to the accuracy of the data delineated hereon.

CITY OF NORTH LAS VEGAS
Your Community of Choice

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THE VILLAGES AT TULE SPRINGS (VILLAGES 1, 2 AND 4)
CNLV MASTER PLAN OF STREETS AND HIGHWAYS MODIFICATIONS

FIGURE 1B

SLATER HANIFAN GROUP