



Town of Camp Verde

Business Corridor Study

Finnie Flat Road: SR 260 to Main Street

FINAL REPORT

October 2013



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1. INTRODUCTION

The Arizona Department of Transportation (ADOT), in cooperation with the Town of Camp Verde, conducted a long-range corridor study for the Finnie Flat Road Business Corridor from SR 260 to the Main Street/Montezuma Castle Highway intersection. The study was funded by the Federal Highway Administration's (FHWA) State Planning and Research Program and administered through ADOT's Multimodal Planning Division's Planning Assistance for Rural Areas (PARA) program.

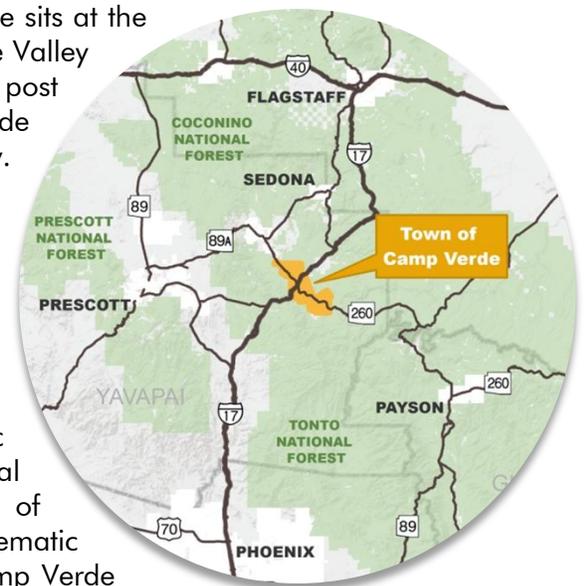
The primary purpose of this study was to develop a plan that enables the Town to facilitate safer and more efficient infrastructure for the traveling public and guide the development of the Business District. This study recommends phased improvement projects to address the multimodal transportation needs of the community, while steering community development and project funding. The study findings will also be incorporated into the Town's Capital Improvement Planning process for the next 5-, 10-, and 20-year timeframes.

The study was guided by a Technical Advisory Committee (TAC). The role of the TAC was to provide guidance, support, advice, suggestions, recommendations, and to perform document reviews throughout the study process. TAC members included representatives from:

- Town of Camp Verde
- Yavapai County
- ADOT – Multimodal Planning Division (MPD)
- ADOT – Prescott District
- ADOT – Environmental Group
- ADOT Communications
- Northern Arizona Council Of Governments (NACOG)
- Arizona State Land Department
- Town of Camp Verde Police
- Town of Camp Verde Town Marshall
- Town of Camp Verde Fire
- Town of Camp Verde Sanitary District
- APS
- Unisource
- Century Link

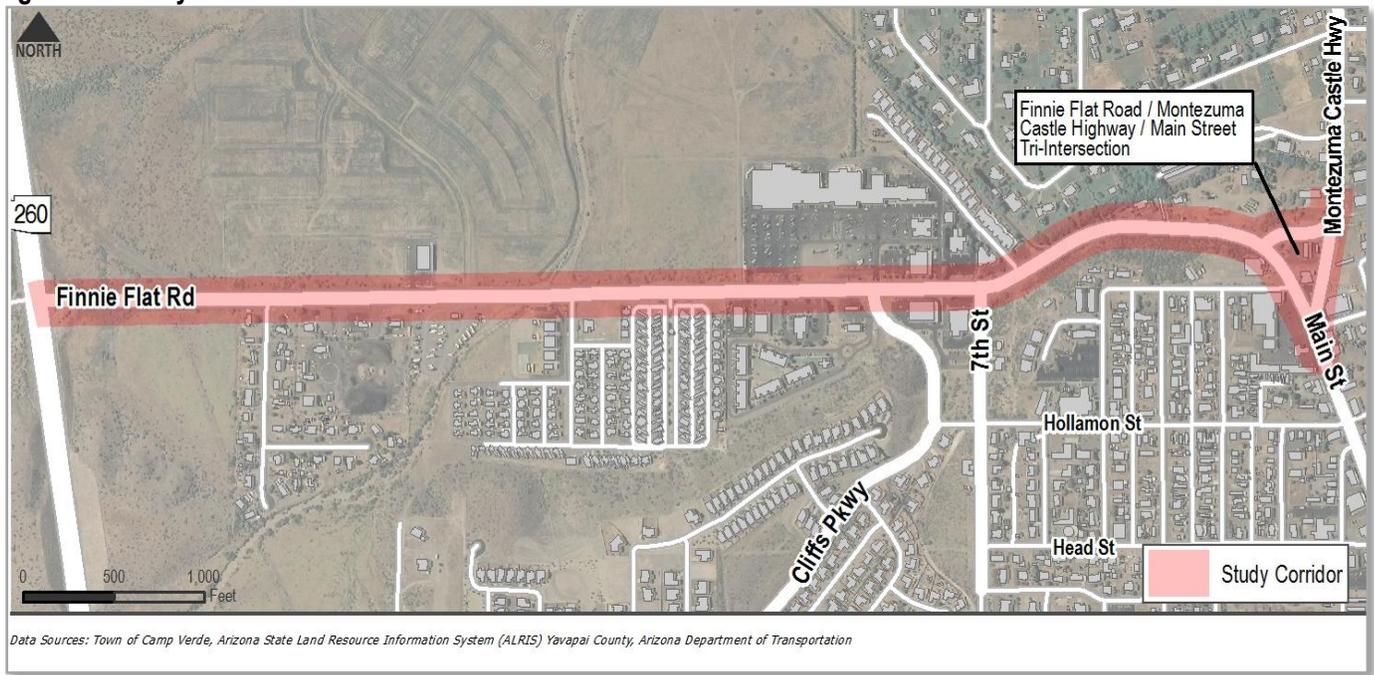
Study Area Overview

Approximately 86 miles north of Phoenix, the Town of Camp Verde sits at the banks of the Verde River at an elevation of 3,147 feet in the Verde Valley region of Central Arizona. Established in 1865 as the first military post in the area, Camp Verde is the earliest community in the Verde Valley thus providing the Town with a long and rich history. Described as the gateway to the Verde Valley, Camp Verde is located at the junction of I-17 (principal route between Phoenix and Flagstaff) and SR 260 (scenic route to the Mogollon Rim in the eastern portion of the State). The Town is bordered by Coconino National Forest to the east and Prescott National Forest to the west, while the Yavapai Apache Nation is located within the Town's boundary. Due to the Town's connection to regional and local attractions, such as the Cliff Castle Casino and the historic Fort Verde State Park, the Town has had an influx of seasonal visitors. Starting in 2001, the Town initiated the redevelopment of their downtown area to reflect the Town's history, by installing a thematic streetscape to preserve and enhance the historic character of Camp Verde and to promote economic activity.



As illustrated in Figure 1.1, this study focused on the Finnie Flat Road Business Corridor with particular emphasis on the Tri-Intersection of Finnie Flat Road/Main Street/Montezuma Castle Highway. The Finnie Flat Road Business Corridor, located between SR 260 and downtown Camp Verde, is a major link within the Town connecting vehicular traffic to businesses and recreation sites. The Tri-Intersection at Finnie Flat Road's junction with the downtown business district is a heavily traveled intersection that provides access to residential areas, the downtown area, local schools, and the Cliff Castle Casino to the north. The corridor's vehicular congestion and general lack of safe movements for bicyclists and pedestrians within the business corridor has hindered further development of the Town's vision of a "Business District and Historic Tourism District".

Figure 1.1. Study Area



Purpose and Need

The *Town of Camp Verde Business Corridor Study* was initiated to develop a planning strategy to improve the mobility and safety along the Finnie Flat Road Corridor from SR 260 to Main Street and at the Tri-Intersection of Finnie Flat Road/Main Street/Montezuma Castle Highway. The need for this study stemmed directly from the community and Town staff's desire to increase economic vitality and improve transportation conditions along the Town's major business corridor. Identified needs for this project included:

- **Address the Immediate Deficiencies and Needs at the Tri-Intersection.** The current configuration of the Tri-Intersection needed to be evaluated to identify solutions to improve safety, promote the movement of goods and services, and enhance the overall streetscaping of the intersection. Key issues to be immediately addressed at the Tri-Intersection included:
 - One-way streets and signage can be confusing to motorists, particularly tourists.
 - Motorists turning onto Main Street from Turner Street, Arnold Road, and Montezuma Castle Highway have skewed approaches and sight distance issues.
 - Trucks, school buses, and emergency vehicles have difficulty turning southbound on Main Street from the Montezuma Castle Highway Slip Ramp.
 - Limited pedestrian and bicycle facilities within the intersection and to activity centers located along Finnie Flat Road.
 - Streetscaping in the Downtown area abruptly ends, creating two discontinuous areas.

- **Enhance Mobility and Improve Safety.** Significant population growth, coupled with increased tourist traffic to the area's numerous recreation sites, has caused increased congestion on Finnie Flat Road, particularly at the Tri-Intersection.
- **Accommodate Planned Land Use and Future Growth.** Planned commercial and residential developments, particularly north of Finnie Flat Road, will significantly increase congestion along the corridor and will require updated facilities to promote multimodal transportation.
- **Provide Bicycle and Pedestrian Connections Between Activity Centers.** Sidewalks and bike paths are limited within the study area and are necessary to provide continuous connections between business and activity centers for residents and for recreational purposes.
- **Promote Economic Growth while Maintaining the Community's Character.** A "vision" for the future development of the corridor needs to be created to encourage growth in the Town, where businesses can thrive while still maintaining the Town's unique character. Establishing policies that protect the rural landscape, support multimodal transportation, and provide places for recreation often spur business growth and job creation.

The primary purpose for this study was to develop a comprehensive, long-range plan that can provide guidance to the Town of Camp Verde when making future land use and transportation decisions. This document outlines a set of conceptual improvements and planning recommendations along the Finnie Flat Road Corridor and at the Tri-Intersection. The recommendations from this study will enable the Town to facilitate safer and more efficient infrastructure for the traveling public and guide the development of the Finnie Flat Road Corridor. The study findings will also be incorporated into the Town's Capital Improvement Planning process for the next 5-, 10-, and 20-year timeframes.

Goals and Objectives

At the first kick-off meeting with the Technical Advisory Committee (TAC), a visioning exercise was conducted to discuss the study area issues, community values, and study expectations. The process resulted in the following objectives for the study:

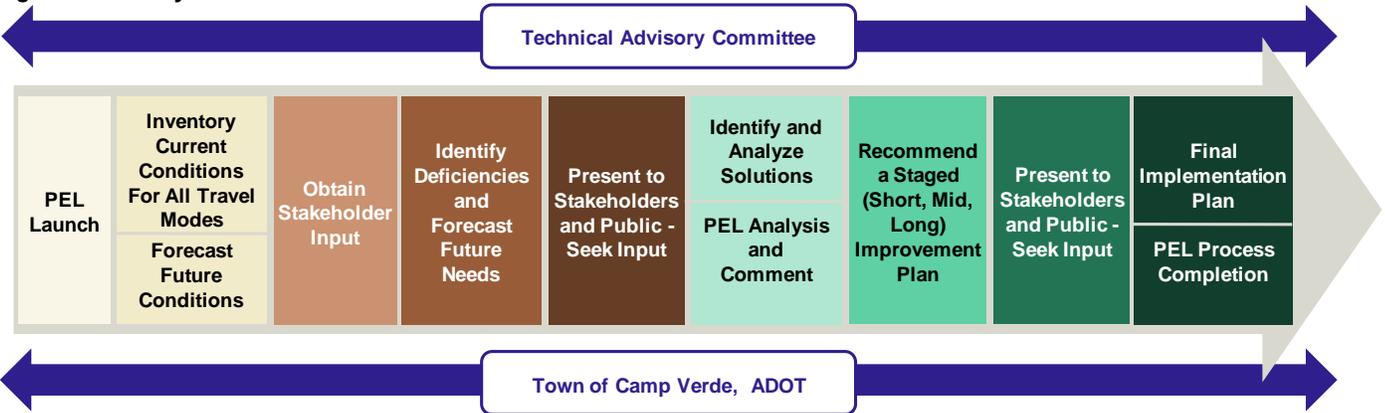
- Review and evaluate existing road and rights-of-way inventory, material conditions, and level of service;
- Evaluate and address pedestrian and bicycle facility needs and connectivity;
- Enhance traffic circulation and connectivity between all modes;
- Plan for future traffic demand and recommend phased improvements for the next 5-, 10-, and 20-year timeframes;
- Utilize ADOT's Planning and Environmental Linkages (PEL) approach to carry forward the data, analysis, and recommendations to the next phase of implementation;
- Evaluate need for roundabouts/traffic signals at Tri-Intersection and prepare improvement concepts;
- Develop planning level cost estimates for improvements;
- Identify appropriate funding sources; and
- Communicate with stakeholders, public, and Town Council at appropriate intervals to present results and obtain feedback.

Study Process

The development of this long-range multimodal transportation improvement plan consisted of a comprehensive six phase process: Data Collection, Existing and Future Conditions Analysis, Stakeholder Involvement, Conceptual Analysis, Recommendations, and Public Involvement. This study also utilized ADOT's Planning and Environmental Linkages (PEL) approach to carry forward the data, analysis, and recommendations to the next phase of implementation.

Throughout the process, the planning team maintained consistent contact with Town officials, the TAC, and stakeholders and included extensive public outreach efforts. Figure 1.2 illustrates the process utilized to complete this study.

Figure 1.2. Study Process



Working Paper 1: Existing and Future Conditions inventoried and analyzed the existing and future conditions in the study area, including existing transportation system deficiencies, issues, and needs. The First Public Open House was conducted on November 6, 2012 to present existing and projected transportation conditions and issues. *Working Paper 2: Draft Transportation Plan* identified and prioritized improvement projects to address the needs and deficiencies identified in Working Paper 1. The second of two public open houses was held in April 2013 to present proposed Tri-Intersection improvement concepts and recommended multimodal streetscape improvement scenarios along the Finnie Flat Road Business Corridor.

2. PREVIOUS STUDIES, REPORTS, AND PLANS

This chapter presents a review of studies, plans, and programs related to the multimodal transportation network relevant to the study area. Review of these previous and current planning efforts serves as a baseline of the current transportation issues and potential transportation improvements.

Ongoing and Completed Studies

2009 Town of Camp Verde Small Area Transportation Study

The *2009 Town of Camp Verde Small Area Transportation Study (SATS)* examined existing transportation and circulation issues within the Town of Camp Verde and recommended improvement scenarios to meet future traffic demand. Within the immediate vicinity of the Finnie Flat Road study corridor, the study recommended:

- Main Street/Montezuma Castle Highway/Finnie Flat Road Intersection: intersection improvements and conducting a traffic control study to identify potential traffic control options
- Finnie Flat Road/Cliffs Parkway Intersection: drainage improvements
- Cliffs Parkway: implement traffic calming measures
- 7th Street: develop as an alternative/emergency route
- 7th Street and Hollamon Street: upgrade functional classification to collector
- Designate a City Transit Coordinator and Transit Advisory Committee and partner with CATS and greyhound to develop a transit system

2012 Yavapai County Comprehensive Plan

Yavapai County recently completed the process of updating the Comprehensive Plan which was last adopted by the Board of Supervisors in 2003. The Plan provides a vision for the future growth of Yavapai County and focuses on four main elements: land use, transportation, water, and open space. In the Comprehensive Plan, the Town of Camp Verde is stated to have the potential of developing 1,500 new homes. In addition, small areas of State Land located within the Camp Verde area are deemed as developable land.

Town of Camp Verde General Plan

Approved in 2004, the *Camp Verde General Plan* is the guiding blueprint to the future growth and development of the Town. The plan integrates the vision of Town residents, businesses, and elected officials. The top qualities that the Town would like to preserve were identified as friendliness, historic nature, western/rural character, small town, and maintained roads. In addition, the three greatest future concerns for area residents were identified as water quality/quantity, increase in traffic, and lack of medium priced homes.

2009 Verde Valley Multimodal Transportation Study

As an update to the 1993 study, the *2009 Verde Valley Multimodal Transportation Study* was a long-range improvement plan that addressed routes of regional significance in the Verde Valley area. Recommendations for the Town of Camp Verde included improvements such as widening roadways and designating/preserving right-of-way for limited or access controlled highways. The study also advocated the need to pursue and evaluate other modes of transportation for local and tourist areas. Within the immediate vicinity of the Finnie Flat Road study corridor, the study recommended:

- Finnie Flat Road: Widen to a four-lane arterial
- Montezuma Castle Highway: Widen to two-lanes with center turn lane and upgrade functional classification of the roadway to a major collector

Programmed and Scoped Projects

The ADOT Multimodal Transportation Division published the *Draft Arizona State Transportation Improvement Program (STIP) Fiscal Years 2013-2017* in October 2012 that lists roadway improvement projects for the study area. Table 2.1 lists these improvement projects relevant to the study area.

Table 2.1. ADOT State Transportation Improvement Projects (STIP) FY 2013 – 2017

Year	Project Location	Type of Improvement, Type of Work, Equipment, Structure, etc.	Total Costs
2014	SR 260, Camp Verde	Design and construction of pedestrian bridge	\$1,100,000

Source: ADOT Multimodal Planning Division

Table 2.2 presents the roadway improvement projects in the Camp Verde area as identified in the *NACOG FY 2013 - 2016 Regional Transportation Improvement Program (TIP)*.

Table 2.2. NACOG Roadway Projects (STIP) FY 2013 – 2016

Year	Project Location	Type of Improvement, Type of Work, Equipment, Structure, etc.	Total Costs
2013	Finnie Flat Road	Design, ROW acquisition, construct sidewalks, landscaping	\$543,531
2015	Main Street and Montezuma Castle Highway	Partial reconstruction, overlay	\$897,137
2015	Sign Panel Replacement	Procure sign panels	\$75,000

Source: NACOG

3. LAND USE AND SOCIOECONOMIC CONDITIONS

This section summarizes current and future land use, existing socioeconomic conditions, environmental justice population review (Title VI), and future population projections for the study area.

Land Ownership

Privately owned land accounts for the majority of all land along the study corridor. Arizona State Land Department (ASLD), shown in blue on the right, manages approximately 355 acres surrounding the SR 260/Finnie Flat Road intersection. State Trust lands are not "public lands", but rather are managed for the benefit of 14 Trust beneficiaries, which include public schools and judicial buildings. Currently, there are no planned dispositions of the land and the current Low Density Residential zoning may be a "holding" designation for future roadway and freeway access. While not within the study corridor, directly east of the Tri-Intersection, is the Arizona State Park managed by the Fort Verde State Historic Park.



Arizona State Land Department (ASLD) property, shown in blue, at the corner of SR 260/Finnie Flat Road

Zoning and Land Use

The Finnie Flat Road corridor is a blend of both commercial services and residential housing allowing residents easy access to local commercial and shopping amenities as well as access to the SR 260 and I-17 regional travel corridors. The corridor has a variety of commercial uses including supermarkets (Bashas, CVS, Walgreens), retail chain stores (ALCO, Dollar General, UPS Store), Banking (Chase Bank, National Bank), Medical (Verde Valley Medical Center, Entire Care Rehab, Rayburn Chiropractic, Camp Verde Eye Care) and a variety of local restaurants and service shops.

The Tri-Intersection of Main Street/Finnie Flat Road/Montezuma Castle Highway is the northern boundary of Camp Verde's commercial district. This area serves as the main intersection point for traffic traveling to and from the Camp Verde downtown area, Cliff Castle Casino, and the Finnie Flat Road Business Corridor. The intersection is predominately service oriented (Circle K, Rain Tunnel) coupled by retail (Ace Hardware), restaurant (Valley View Restaurant) and a local shopping center located on the southwest corner of the Tri-Intersection.

Currently there are approximately 94 acres of occupied residentially zoned parcels and 79 acres of occupied commercially zoned parcels within the Finnie Flat Road study corridor. In addition, within the study corridor there are approximately 48 acres of vacant commercial property and 106 acres of vacant residential property, with the majority of the land being part of the vacant subdivision to the north of Finnie Flat Rd. Finally there are approximately 355 acres of vacant State Land to the south and west of the Finnie Flat Road/SR 260 intersection.

Zoning

Figure 3.1 presents existing Camp Verde zoning classifications and Table 3.1 outlines the zoning classification acreage within 1,000 feet of the study corridor. The current zoning classifications along Finnie Flat Road emphasize commercially zoned properties coupled with access to single-family subdivisions offset behind the commercial uses. In addition, east of Groseta Drive is the ADOT Camp Verde Maintenance Office.

Residential

Along the southern portion of the corridor, the majority of the residential zoning is comprised of single-family limited (R1L) with a minimum lot square footage ranging from 35,000 to 70,000. Single-family limited (R1L) is intended for site-built and modular single-family residential living, with restrictions against mobile homes and manufactured housing. The majority of this zoning classification resides south of the SR 260/Finnie Flat Road intersection as well as immediately south of the commercial zoning throughout the middle of the corridor. Other residential land usages along the southern portion of the corridor include single-family (R1), Duplex & Other Multi-Family Uses (R2), and Residential-Rural (R-R). Residential-Rural zoning is intended for areas which are not characterized as urban; providing rural, large lot residential uses.

The residential zoning along the northern portion of the Finnie Flat Road corridor is exclusively single-family limited (R1L) with a minimum lot square footage ranging from 5,000 to 35,000.

Commercial

Commercial zoning along the corridor is almost exclusively classified as General Sales (C2), with the intent to promote a broad range of business uses compatible with the surrounding area residential uses. These commercial uses vary widely and include grocery, restaurants, specialty stores, and office. The corridor is comprised of two major commercial sections, the first being the area surrounding the Tri-Intersection area which is predominately specialty shops and restaurants. The second major commercial area includes the businesses surrounding the Finnie Flat Rd/Cliffs Parkway intersection which are predominately service oriented. In conjunction with C2 zoning, small pockets of Commercial: Neighborhood sales and services (C1) line the corridor allowing limited business and residential use to provide convenience in supporting the local community.

Planned Unit Development

The northern portion of the corridor includes a section classified as Planned Unit Development which allows for increased flexibility with site regulations, providing a residential community that balances lot size and open space within a limited parcel area.

Table 3.1. Existing Study Area Zoning Classification

Zone	Acres*	Percent
Commercial: Neighborhood Sales and Service	12.1	1.4%
Commercial: General Sales and Service	116.0	13.5%
Open Space	5.2	0.6%
Planned Area Development	17.5	2.0%
Planned Unit Development	4.7	0.5%
Public Facilities	8.7	1.0%
Residential: Single-Family	486.2	56.6%
Residential: Single-Family Limited	8.9	1.0%
Residential: Duplex & Other Multi-Family Uses	21.9	2.6%
Residential-Rural	9.4	1.1%
Residential and Services	0.6	0.1%
Right-of-Way	168.0	19.5%

* Zoning designations within 1000 ft of Finnie Flat Road

Source: Yavapai County GIS Department

Figure 3.1. Study Area Zoning Classifications



Future Land Use

The vision for the Finnie Flat Road corridor as described by the *2004 Camp Verde General Plan* is to be a predominately business and retail oriented district. The General Plan identifies Finnie Flat Road as a growth area for future development within the Town, designating it as a suitable location for planned multi-modal transportation and infrastructure expansions. In conjunction with the corridor being designated a growth area, the Tri-Intersection falls within the Town’s special planning district designation. This designation strives to revitalize and maintain the Historic Town site’s sense of place throughout the Main Street area. Because of this designation, any future improvements to the Tri-Intersection area will be in accordance with the Town’s vision for the Historic Town site, focusing on economic success and compatible land uses.

Due to current zoning classifications, the corridor has the potential for a substantial increase in population. The north side of the Finnie Flat Road Corridor is zoned high density single family residential and has the potential capacity for approximately 600 single family homes. Another opportunity for significant growth is located in the southwest section of the corridor; however, the large vacant area is zoned State Land and would require further steps to obtain the property for private use. There is also a planned extension of the Verde Valley Medical Center to be constructed on the northeast corner of the SR 260/Finnie Flat Road intersection, further lending to the Town’s vision of a diverse, commercially oriented corridor.

Additionally, in October 2012, the Town Council unanimously approved the designation of the downtown area as an "Entertainment District". The Entertainment District will allow liquor licenses to be located within 300 feet from a church or public/private school in hopes that this will encourage growth and redevelopment along the corridor. The Entertainment District boundary includes Main Street businesses, portions of Montezuma Castle Highway to Zellner Lane, and the Fort Verde State Historic Park.

Existing Socioeconomic Conditions

A review of existing population and employment was conducted to understand the demographic characteristics of the Town of Camp Verde. Table 3.2 summarizes the Town of Camp Verde, Yavapai County, and the State of Arizona's population and housing unit growth trends from 2000 to 2011. While the Town has experienced slower growth than Yavapai County and the State of Arizona, there has been a significant increase in population and housing units within the Town. According to the Arizona Department of Administration's Office of Employment and Population Statistics, the Town of Camp Verde currently has a population of 10,849 people, which is a 14.8% increase in population since the 2000 US Census.

Figure 3.2 and Figure 3.3 illustrate the total population and occupied housing units per square mile, respectively. As illustrated in the figures, south of Finnie Flat Road there is a high concentration of population. In the area bounded by SR 260, Finnie Flat Road, and Main Street, according to the 2010 US Census, there are approximately 1,896 residents (17% of the Town's total population) and 895 housing units (18% of the Town's total number of housing units). Within the same area, approximately 86% of all housing units are occupied.

Table 3.2. Population and Housing Unit Growth Trends

Geographic Area	Population		Population Growth	Housing Units		Housing Units Growth
	2000	2011*		2000	2011	
Town of Camp Verde	9,451	10,849	14.8%	3,969	4,726	19.1%
Yavapai County	167,517	211,247	26.1%	81,730	110,432	35.1%
State of Arizona	5,130,632	6,438,178	25.5%	2,189,189	2,844,526	29.9%

Source: 2010 US Census, 2000 US Census ; *Office of Employment & Population Statistics, Arizona Department of Administration

Figure 3.2. Total Population per Square Mile

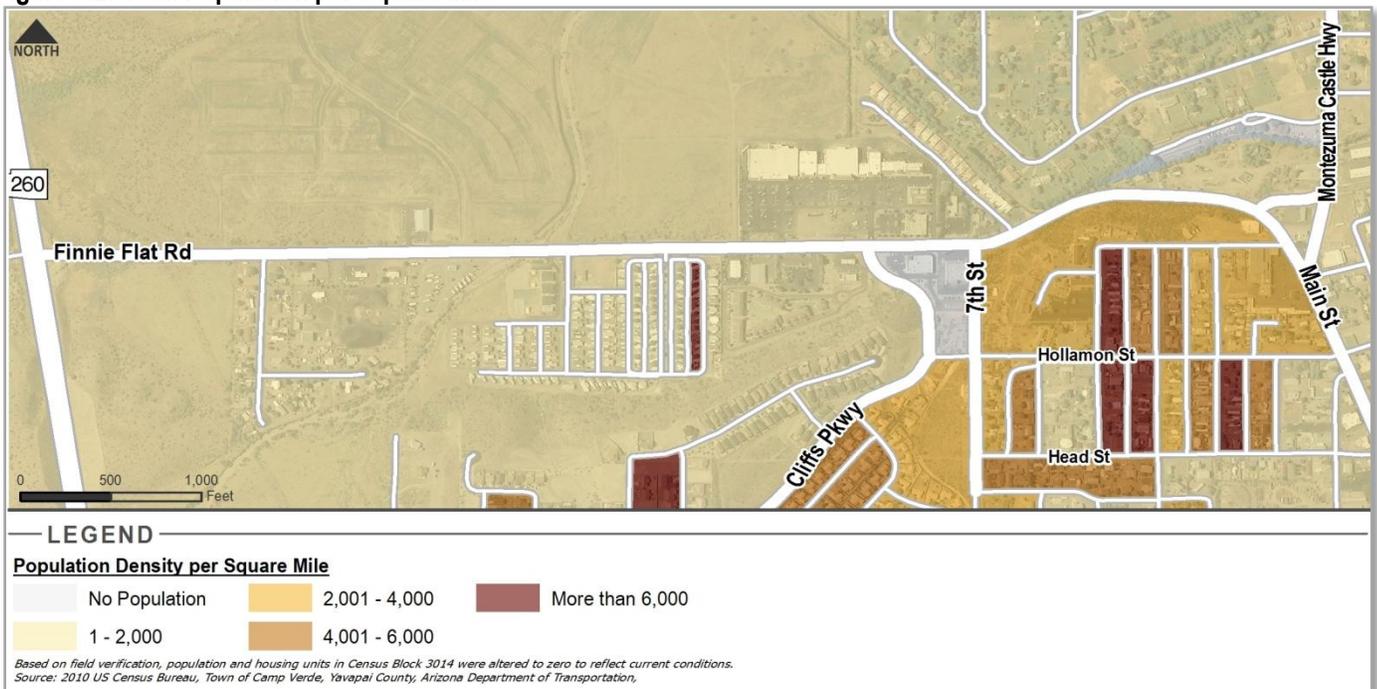
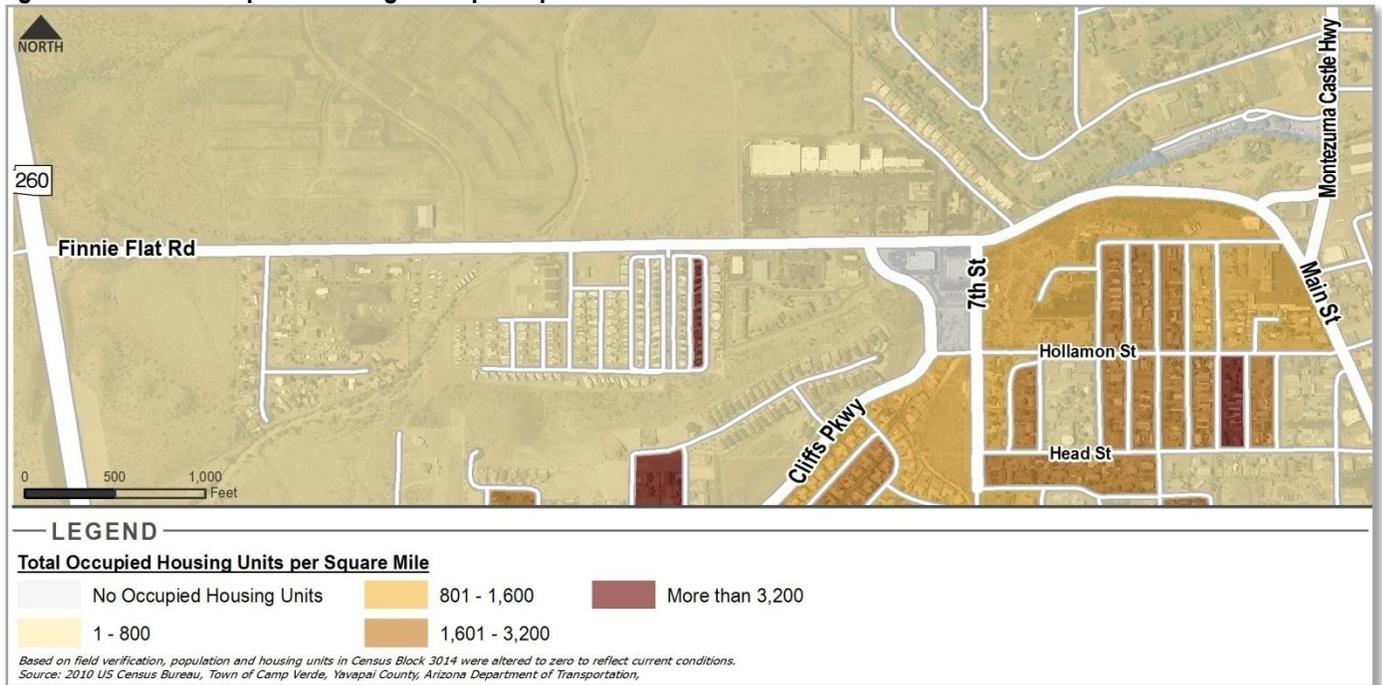


Figure 3.3. Total Occupied Housing Units per Square Mile



Employment Overview

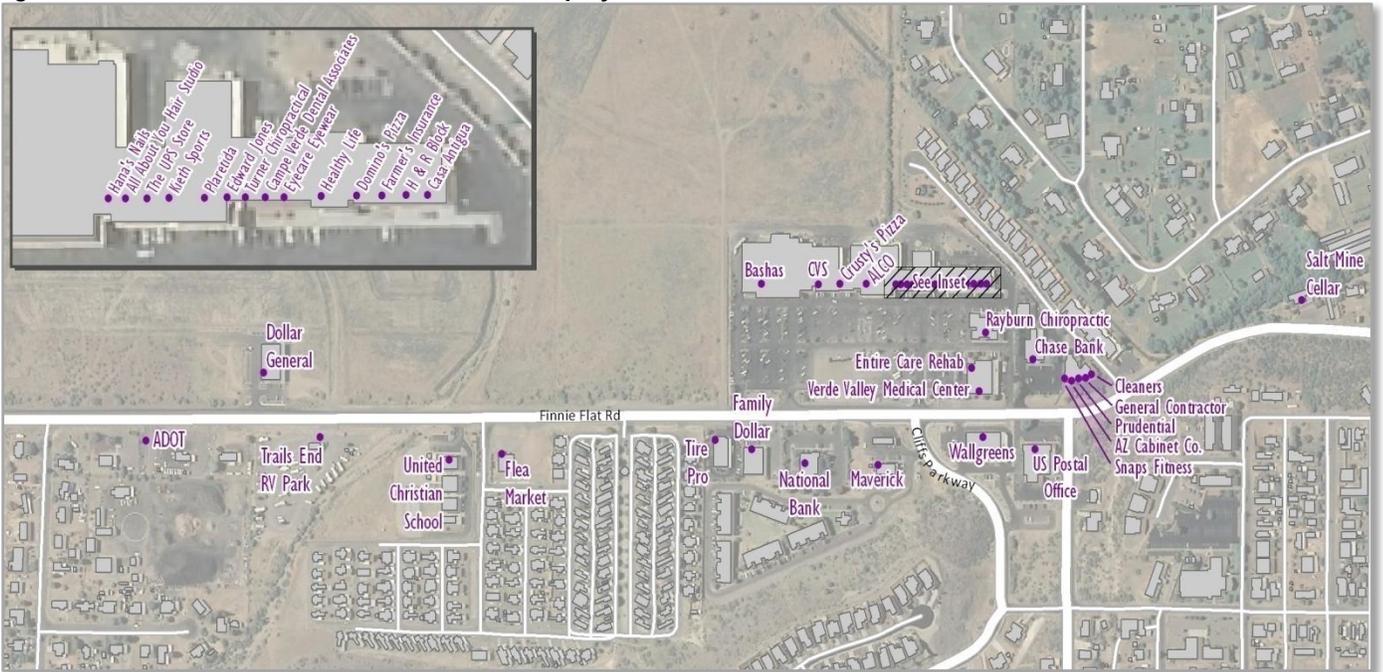
Reference USA data was compiled to identify primary employment industries and current employment levels within the Town of Camp Verde. With a comprehensive database of over 20 million business addresses and associated employment information, Reference USA is the leading provider in business and employment research. Reference USA's electronic directory provides users access to detailed business information, such as the company size, line of business, and number of employees, and is telephone verified and updated monthly. Based on Reference USA business database, there are approximately 4,800 employees within the Town of Camp Verde and nearly 500 along the Finnie Flat Road Business Corridor. Within the Town of Camp Verde, Cliff Castle Casino is the largest employer with over 500 employees. Full-service restaurants, schools, drug stores, and general merchandise stores are the lead employers along the Finnie Flat Road Corridor. Table 3.3 outlines the major employers within the Town of Camp Verde. Figure 3.4 illustrates the location of businesses along the Finnie Flat Road Business Corridor and Figure 3.5 identifies businesses located at the Tri-Intersection.

Table 3.3. Town of Camp Verde Major Employers

Major Employer	Employees
Cliff Castle Casino & Lodge	520
Yavapai County Sheriff	270
Yavapai County Detention Center	172
Yavapai County Jail	150
Lodge At Cliff Castle Casino	60
Verde Vista Care & Rehab	56

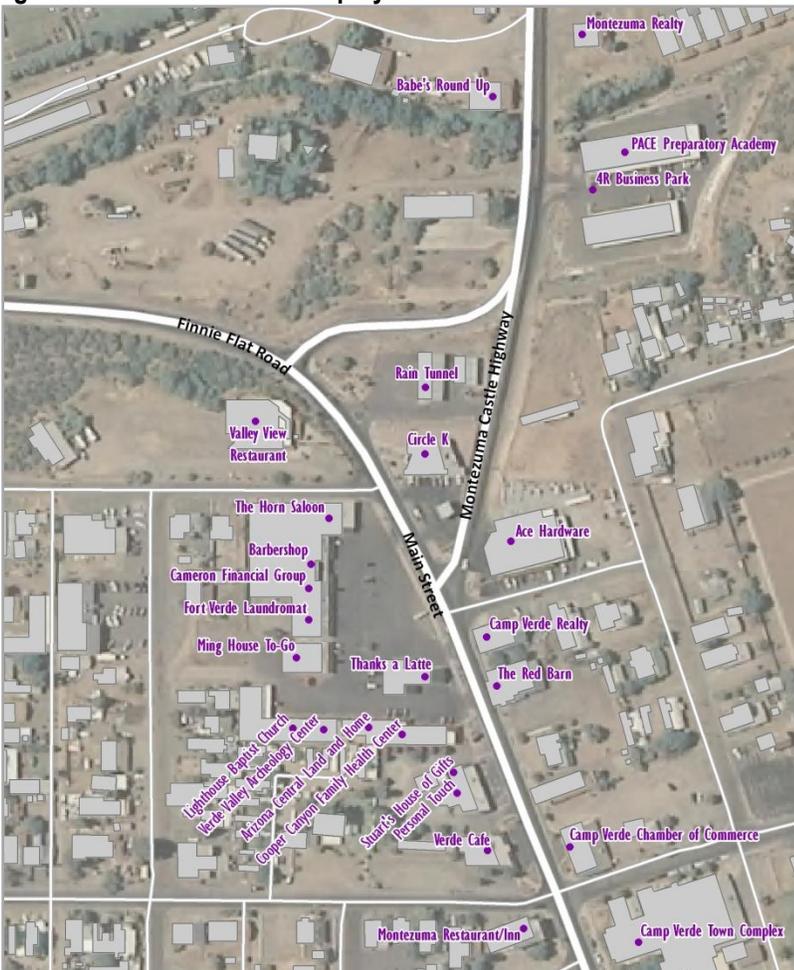
Source: Reference USA 2012

Figure 3.4. Finnie Flat Road Business Corridor Employers



Source: Jacobs Field Review 05/2012, Reference USA,, Town of Camp Verde, Yavapai County, Arizona Department of Transportation (ADOT)

Figure 3.5. Tri-Intersection Employers



Source: Jacobs Field Review 05/2012, Reference USA, Town of Camp Verde, Yavapai County, Arizona Department of Transportation (ADOT)

Travel Demand Model

For this study, the Verde Valley Transportation Planning Organization travel demand model was used, since it was the same model utilized in the *2009 Camp Verde Small Area Transportation Study*. Population, housing units, and various types of employment categories were inventoried for each Traffic Analysis Zones (TAZ) in the study area. TAZs are geographic subdivisions of the study area bounded by roads, political boundaries, natural and man-made geographical constraints (such as rivers, washes, etc.). The model designated a total of 56s TAZs within the Town of Camp Verde. Table 3.4 summarizes the population, housing units, and detailed employment for the Town of Camp Verde.

Table 3.4. Existing Socioeconomic Data

Socioeconomic Data Variable	Units	Town of Camp Verde Total
Population	Persons	10,849
Occupied Dwelling Units	Dwelling Units	4,088
Retail	Employees	776
Office	Employees	118
Service	Employees	418
Industrial	Employees	330
Public	Employees	866
Schools	Employees	185
College	Employees	10
Lodging	Employees	51
Casino	Employees	520

Environmental Justice Review (Title VI)

Title VI of the Civil Rights Act of 1964 and related statutes ensure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance on the basis of race, color, national origin, age, sex, and disability. Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, dictates that programs, policies, and activities identify and address, as appropriate, disproportionately high adverse human health and environmental effects on minority and low-income populations. Protected populations considered in this analysis include: minority, elderly, low-income, and disabled populations.

Environmental justice analyses have historically relied on decennial census data for identifying these protected populations; however, beginning with the 2010 Census, altered data gathering techniques eliminated the collection of income and disability status. As a supplement to the 2010 Census, the American Community Survey (ACS) samples approximately one percent of households across the county annually to determine social and economic trends. To account for the differences in Census and ACS data, Table 3.5 outlines the FHWA's Arizona Division identified data sources to use for environmental justice data collection. Figure 3.6 provides a graphical comparison of the protected populations while Table 3.6 summarizes the percentage of these protected populations in Camp Verde, Yavapai County, Arizona, and along the study corridor; while Tables 3.7 and 3.8 provide a detailed overview of these population groups along the study corridor by Census Block and Block Group.

Table 3.5. Environmental Justice Data Sources

Data Set	Sources
Minority	Census 2010
Population Age 65 and Older	
Female head of household (with children <18 and no husband present)	2006-2010 ACS ^a
Low-income (persons living below the poverty level)	
Disabled	Census 2000 ^b

^a The 2006-2010 estimates were released on December 8, 2011.

^b Because disability questions were changed substantially in 2008, disability data collected prior to 2008 cannot be compared with data collected from 2008 or later. Since five years of data have not yet been able to be collected since 2008, there is no 5-year disability estimate available, which means the most recent disability information at the census tract level is from Census 2000

Figure 3.6. Title VI and Environmental Justice Population Groups Comparison

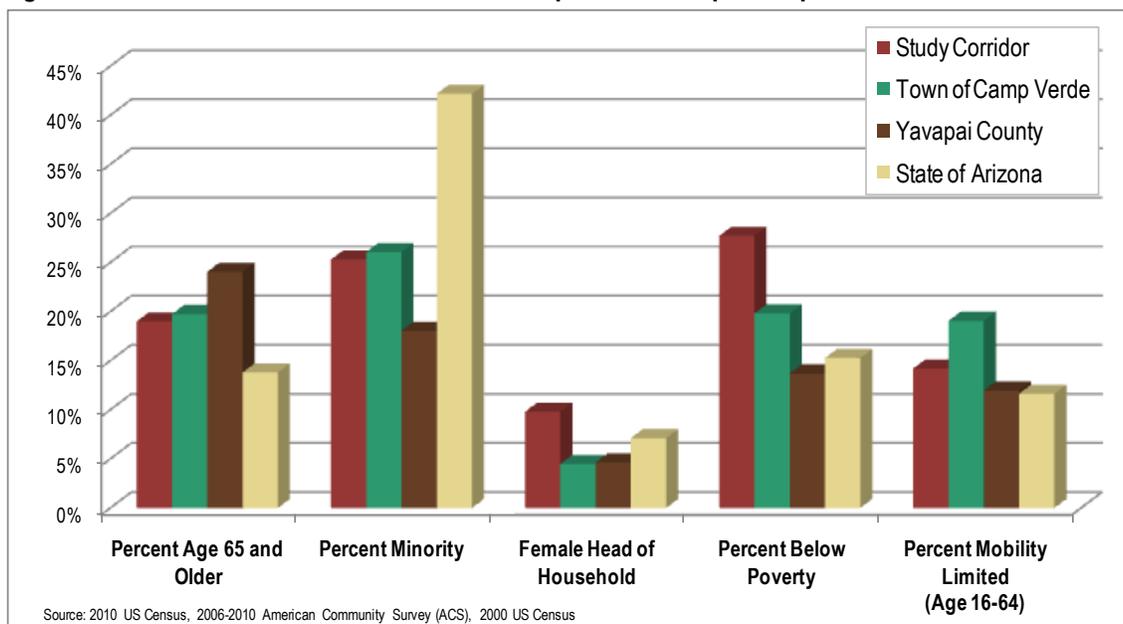


Table 3.6. Title VI and Environmental Justice Populations

Data Set	Camp Verde	Yavapai County	State of Arizona
2010 Total Population	10,873	211,033	6,392,017
Percent Age 65 and Older	19.8%	24.1%	13.8%
Percent Minority	26.1%	18.0%	42.2%
Percent Female Head of Household with Children Under 18 and No Husband	4.5%	4.6%	7.1%
Percent Below Poverty**	19.8%	13.7%	15.3%
Percent Mobility Limited (Age 16-64) ⁺	19.1%	12.0%	11.6%

Source: 2010 U.S. Census; **2006-2010 American Community Survey (ACS); ⁺ 2000 U.S. Census

Table 3.7. Minority, Age 65 and Older, Minority, and Female Head of Household Populations (Census 2010 Blocks)

Census Block	2010 Total Population	Total Housing Units	Percent Age 65 and Older	Percent Minority	Percent Female Head of Household with Children Under 18 and No Husband
Census Tract 16.01, Block 3006	585	273	16.6%	32.8%	10.5%
Census Tract 16.01, Block 3012	19	11	31.6%	47.4%	10.0%
Census Tract 16.01, Block 3015	106	40	6.6%	13.2%	32.4%
Census Tract 16.01, Block 3017	50	26	28.0%	6.0%	0.0%
Census Tract 16.01, Block 3020	0	0	-	-	-
Census Tract 16.01, Block 3024	43	22	11.6%	51.2%	11.1%
Census Tract 16.03, Block 2121	258	133	27.9%	12.0%	3.5%
Census Tract 16.03, Block 2128	18	9	22.2%	16.7%	0.0%
Census Tract 16.03, Block 2165	2	4	0.0%	0.0%	0.0%
Total	1,801	518	19.0%	25.3%	9.8%

Based on field verification, population and housing units in Census Block 3014 were altered to zero to reflect current conditions. Census Block 3014 is bounded by 7th Street to the west, Cliffs Parkway to the east, Finnie Flat Road to the north, and Hollamon Street to the south.

Source: 2010 U.S. Census

Table 3.8. Below Poverty and Mobility Limited Populations (Census Block Groups)

Census Block Group	% Below Poverty**	% Mobility Limited ⁺
Census Tract 16.01, Block Group 3	25.7%	20.9%
Census Tract 16.03, Block Group 2	29.7%	12.1%
Total	27.7%	14.2%

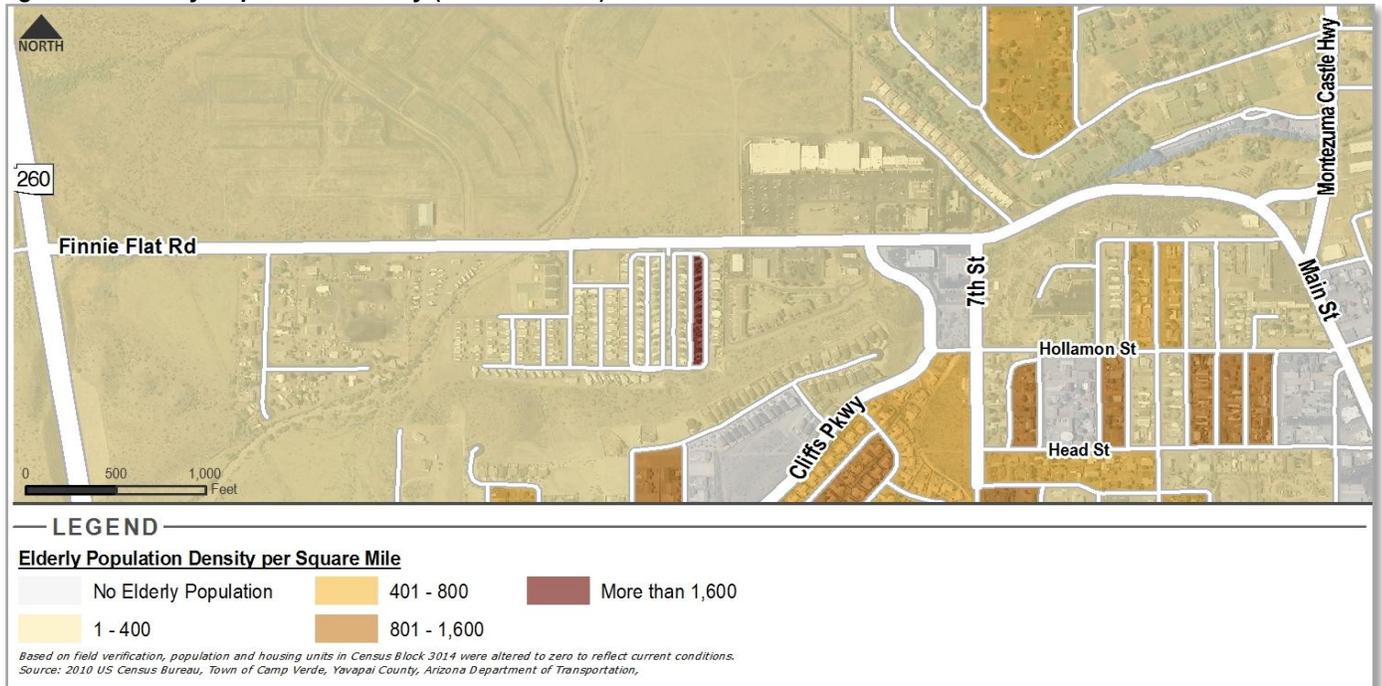
2000 Census Block Group IDs along the study corridor are Census Tract 16.00, Block Group 2 and Census Tract 16.00, Block Group 6

Source: 2010 U.S. Census; **2006-2010 American Community Survey (ACS); ⁺ 2000 U.S. Census

Population Age 65 and Older

Elderly populations, or persons who are over the age of 65, need to be addressed by Title VI and Executive Order 12898, Environmental Justice. Within the Town of Camp Verde, approximately 19.8% of the total population is over the age of 65, while along the study corridor 19% of the population is over the age of 65. These percentages are lower than the countywide estimate of 24% yet higher than the statewide estimate of 13.8%. Figure 3.7 displays the age 65 and over population concentrations along the study corridor. As illustrated in the figure, the western portion of the Camp Verde Mobile Village has the highest concentration of elderly population along the corridor. The Census Blocks along Montezuma Castle Highway have higher overall percentages of age 65 and over populations; however, this population group has higher densities southwest of the Tri-Intersection.

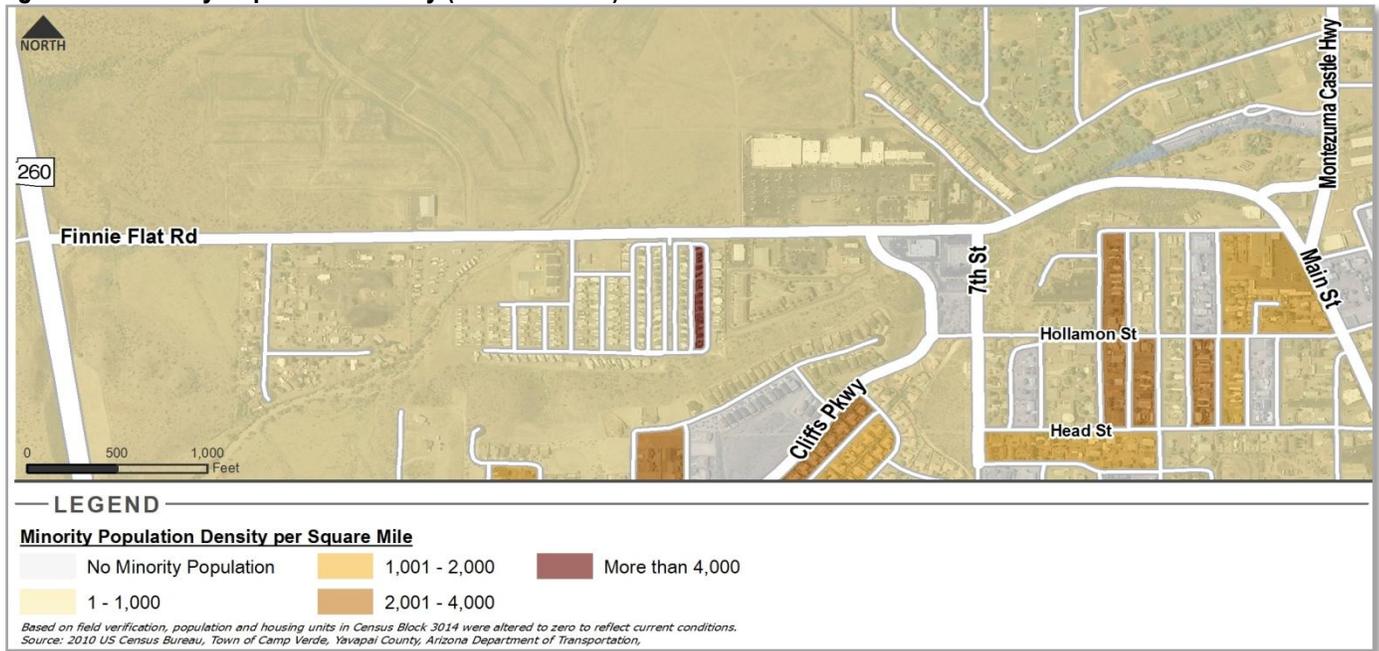
Figure 3.7. Elderly Population Density (Census Block)



Minority Population

Minority population consists of individuals who are members of the following population groups: American Indian or Alaskan Native, Asian or Pacific Islander, Black or African American, Hispanic or Latino, other race, or two or more races. The 2010 Census identified that within the Town of Camp Verde over 26% percent of the total population are minority, while the study corridor has over 25%. As outlined in Figure 3.6, the amount of minority population within the Town of Camp Verde and along the corridor is significantly lower than the State of Arizona, but higher than Yavapai County. Figure 3.8 illustrates the concentrations of the minority population along the study corridor.

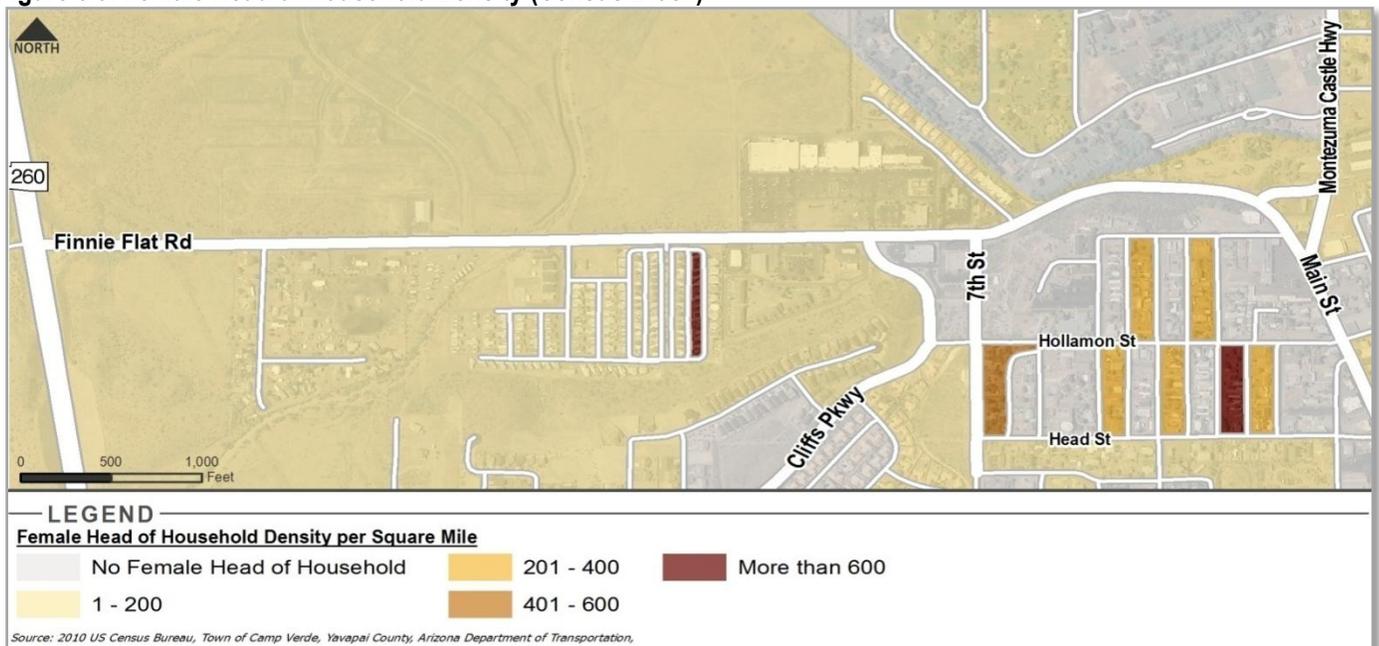
Figure 3.8. Minority Population Density (Census Block)



Female Head of Households

Female head of household populations consist of households headed by a female with no husband present and with children under the age of 18. These households are more likely to need affordable housing and transit access than households headed by married couples. The percent of female head of householders within the Town of Camp Verde (4.5%) is similar to that of Yavapai County, but is significantly lower than the statewide average (7.1%). Compared to the Town, County, and State, the study corridor has a significantly higher percentage of female head of householders (9.8%). Figure 3.9 illustrates the density of this protected population group. While the highest concentration of this population group occurs within the Camp Verde Mobile Village, the highest percentage of this population group is in the area southeast of the Finnie Flat Road/7th Street intersection and southwest of the Tri-Intersection.

Figure 3.9. Female Head of Household Density (Census Block)



Below Poverty Population

Below poverty populations are individuals living in households that lie within a set of income thresholds, which vary by family size and composition, established by the US Census Bureau. Table 3.9 shows the poverty thresholds (by family size and number of children under 18 years) utilized by the US Census Bureau to determine poverty status. Low-income households may rely on public transportation and services more than the general population; therefore, recognition of this groups concentration centers is needed to determine transportation needs. Poverty information is only available at the Census Tract and Block Group level; the study corridor is located within two Block Groups. According to the 2006-2010 ACS, nearly 20% of the total population in Camp Verde and over 27% of the population along the study corridor are below the poverty level. Both of these estimates are significantly higher than the County (13%) and State (15%). The study corridor is located predominately in Census Tract 16.03, Block Group 2, which is estimated to have over 29% of the population below the poverty level.

Table 3.9. Poverty Thresholds for Year 2010

Size of family unit	Weighted Average Threshold	Related children under 18 years								
		None	One	Two	Three	Four	Five	Six	Seven	Eight +
One person (unrelated individual)	11,139									
Under 65 years	11,344	11,344								
65 years and over	10,458	10,458								
Two people	14,218									
Householder under 65 years	14,676	14,602	15,030							
Householder 65 years and over	13,194	13,180	14,973							
Three people	17,374	17,057	17,552	17,568						
Four people	22,314	22,491	22,859	22,113	22,190					
Five people	26,439	27,123	27,518	26,675	26,023	25,625				
Six people	29,897	31,197	31,320	30,675	30,056	29,137	28,591			
Seven people	34,009	35,896	36,120	35,347	34,809	33,805	32,635	31,351		
Eight people	37,934	40,146	40,501	39,772	39,133	38,227	37,076	35,879	35,575	
Nine people or more	45,220	48,293	48,527	47,882	47,340	46,451	45,227	44,120	43,845	42,156

Source: U.S. Census Bureau

Disabled Population

Disabled populations are civilian, non-institutionalized persons ages 16-64 who have disabilities (such as mental, sensory, physical, self-care, unable to go outside the home, and/or employment disabilities). This protected population group often has difficulty operating automobiles and may require access to public transportation. According to the 2000 U.S. Census, 19% of the total population within the Town of Camp Verde are disabled and over 14% of the population along the study corridor are disabled, which is significantly higher than the Statewide and countywide estimates. The study corridor is located predominately in Census Tract 16.00, Block Group 2, in which approximately 21% of the total population is disabled.

Future Socioeconomic Conditions

Forecasting socioeconomic conditions allows us to anticipate changes in future travel demand and to envision potential solutions. Development of rational projections for population, housing units, and employment for each horizon year is vital to the process of forecasting realistic traffic volumes.

The Verde Valley Transportation Planning Organization travel demand model was used to estimate current traffic volumes and to forecast traffic volumes for horizon years 2016, 2021, and 2031. To accurately portray future conditions, Town staff assisted in determining growth areas and population projections. Based on future socioeconomic conditions, traffic volumes were forecasted for all major roads in the study area. Future socioeconomic data (population, housing units, and employment) was disaggregated into the travel model's Traffic Analysis Zones (TAZs). Table 3.10 shows a tabular summary of the projected population along with the number of occupied housing units in the Town of Camp Verde.

Within the study area, the most significant change in socioeconomic conditions is from increased employment along Finnie Flat Road. Figures 3.10 to 3.12 illustrate the employment density along the study corridor for the short- (by year 2016), mid- (by year 2021), and long-term (by year 2031) horizon years, respectively. As shown in the Figure, the northern portion of Finnie Flat Road will have a significant increase in employment, which will increase traffic along the roadway.

Table 3.10. Projected Socioeconomic Data by TAZ

	2011	Short-Term (By Year 2016)	Mid-Term (By Year 2021)	Long-Term (By Year 2031)
Town of Camp Verde				
Population	10,849	13,251	15,138	18,288
Occupied Dwelling Units	4,088	5,009	5,764	7,024
Total Employment	3,154	4,269	5,408	6,723

Figure 3.10. Short-Term Employment Density

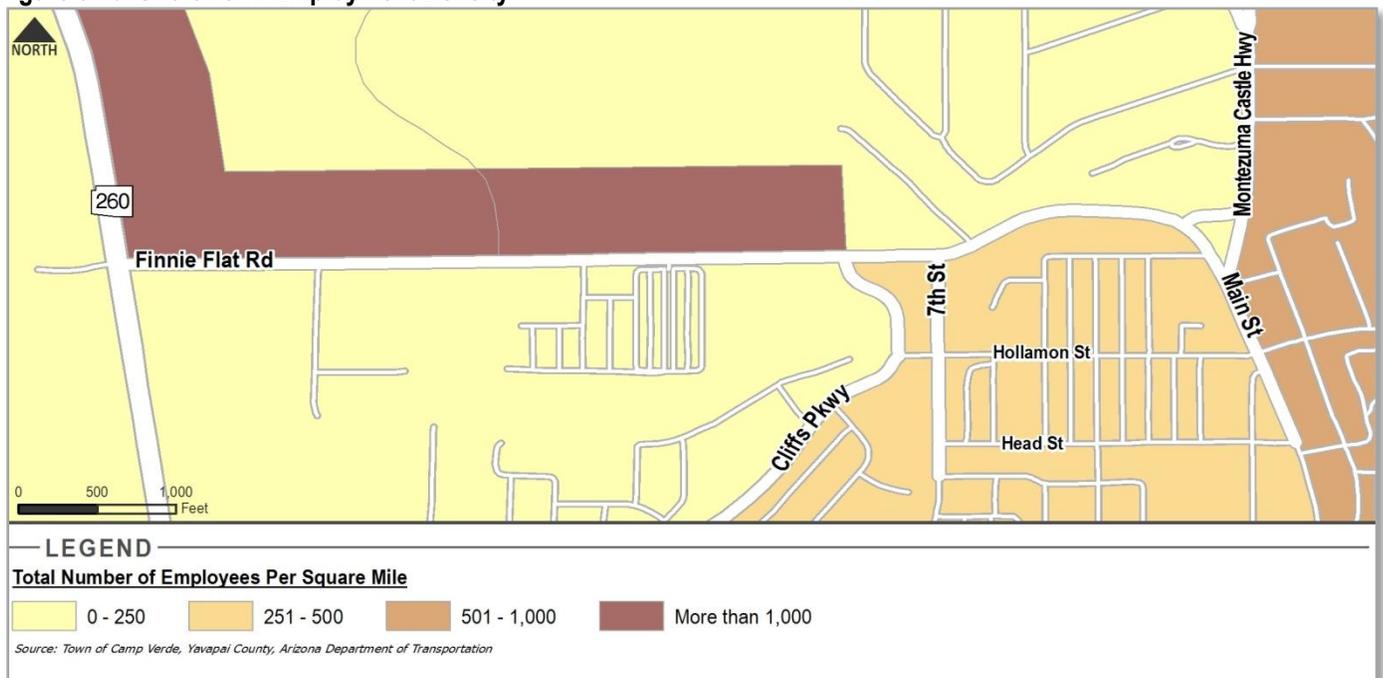


Figure 3.11. Mid-Term Employment Density

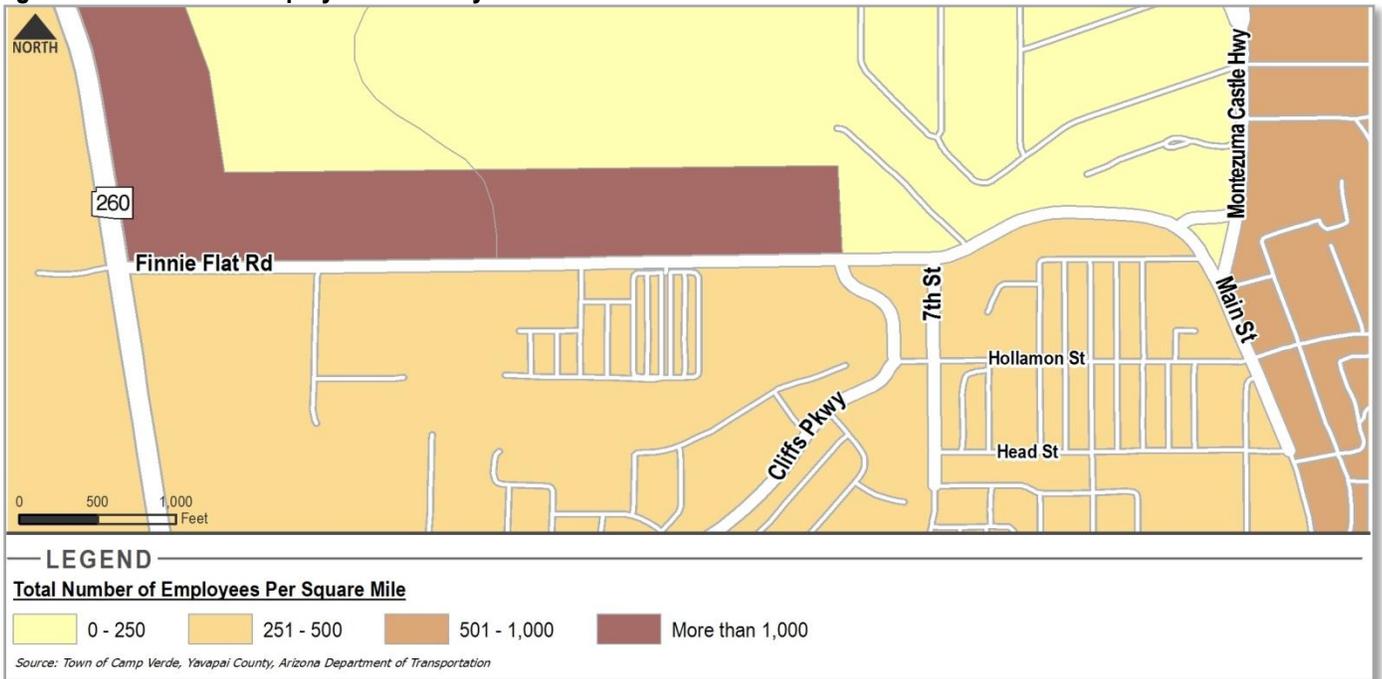
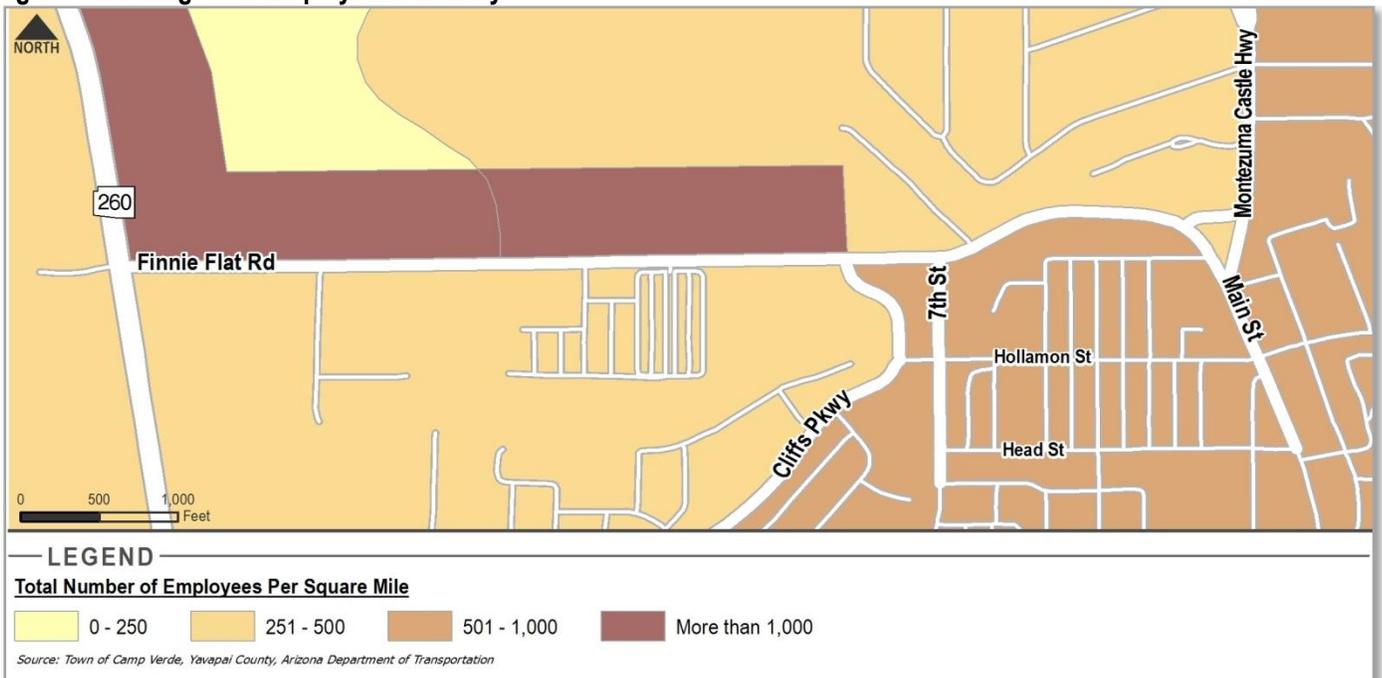


Figure 3.12. Long-Term Employment Density



4. EXISTING AND FUTURE TRANSPORTATION CONDITIONS

This section inventories major elements of the existing and future transportation system and documents the status/condition of each element. Major elements inventoried include bridges, pavement condition, crashes, traffic conditions, roadway performance, and other modes of transportation in the study area.

Existing Roadway Characteristics

The study area consists of approximately 1.4 miles along Finnie Flat Road and portions of Montezuma Castle Highway and Main Street at the Tri-Intersection. Table 4.1 outlines the road characteristics of the major roadways located within the study area. Figure 4.1 displays the total number of lanes, while Figure 4.2 illustrates the posted speed limits and traffic signal locations.

Table 4.1. Study Area Existing Roadway Characteristics

Road	Limits	Lanes	Speed Limit	Pavement Condition	Roadway Width	Functional Classification
Finnie Flat Road	SR 260 to Groseta Drive	2 eastbound 1 westbound Center turn lane	35 mph	Good	50 feet	Rural Minor Arterial
	Groseta Drive to 7th Street	1 eastbound 1 westbound Center turn lane	35-25 mph	Good	35-68 feet	Rural Minor Arterial
	7th Street to Montezuma Castle Highway	1 eastbound 1 westbound	25 mph	Good	35 - 50 feet	Rural Minor Arterial
Main Street	Montezuma Castle Highway to Hollaman Street	1 southbound 1 northbound Center turn lane	25 mph	Good	40 feet	Rural Minor Arterial
Montezuma Castle Highway	Main Street to Montezuma Castle Highway Slip Ramp (Northbound)	1 northbound (one-way)	25 mph	Good	30 feet	Rural Major Collector
	Montezuma Castle Highway to Finnie Flat Road (Southbound)	1 southbound (one-way)	25 mph	Good	30 feet	Not Federally Classified

Figure 4.1. Number of Lanes

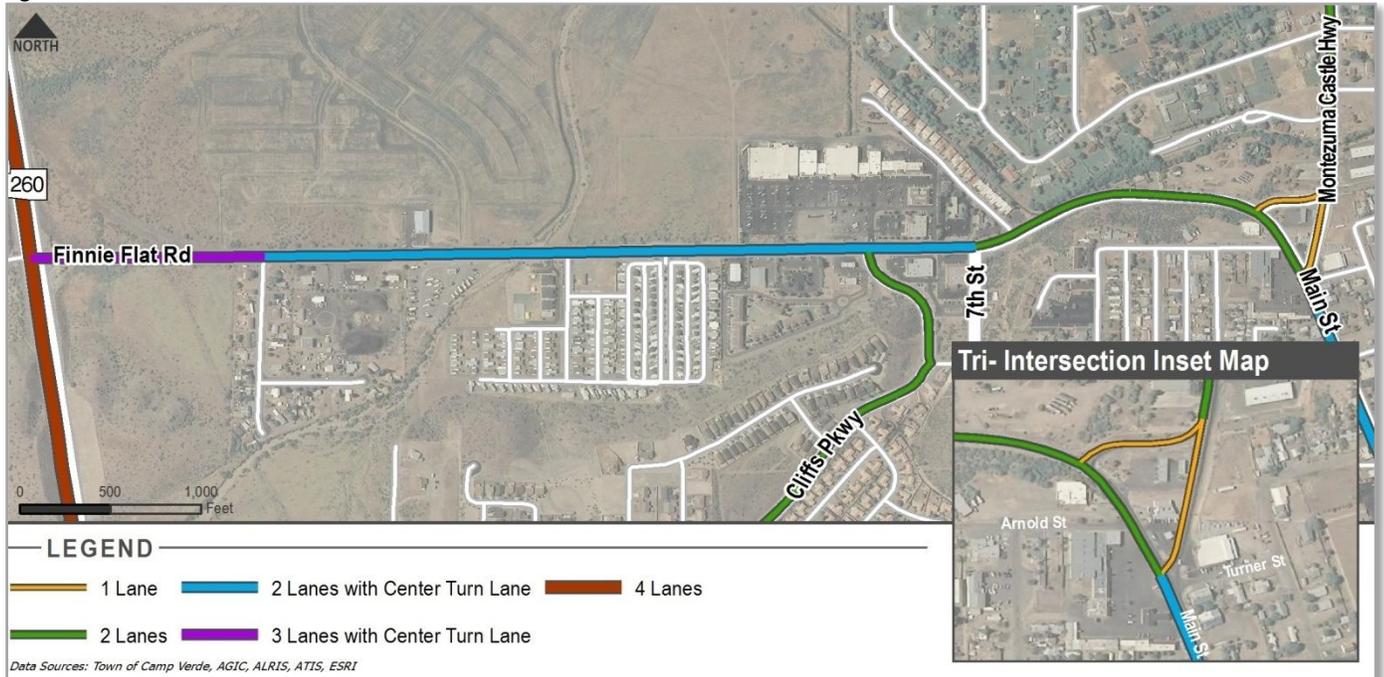
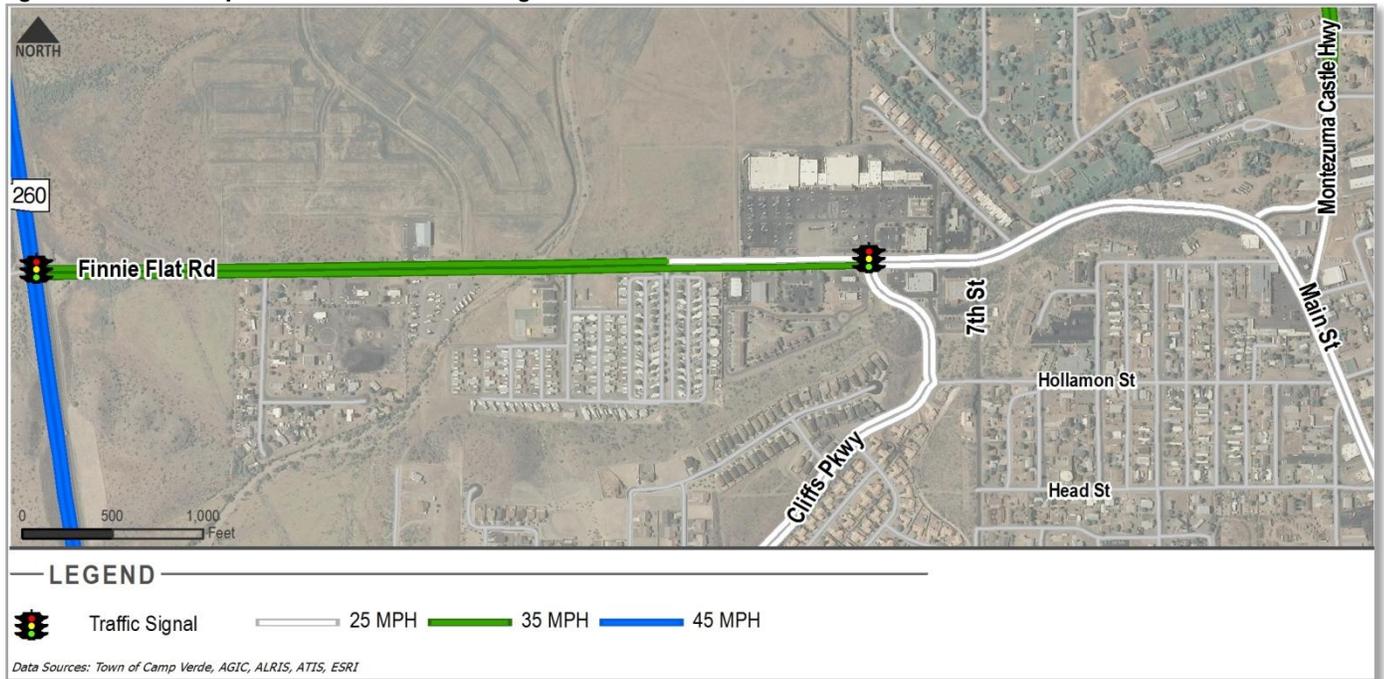


Figure 4.2. Posted Speed Limits and Traffic Signals



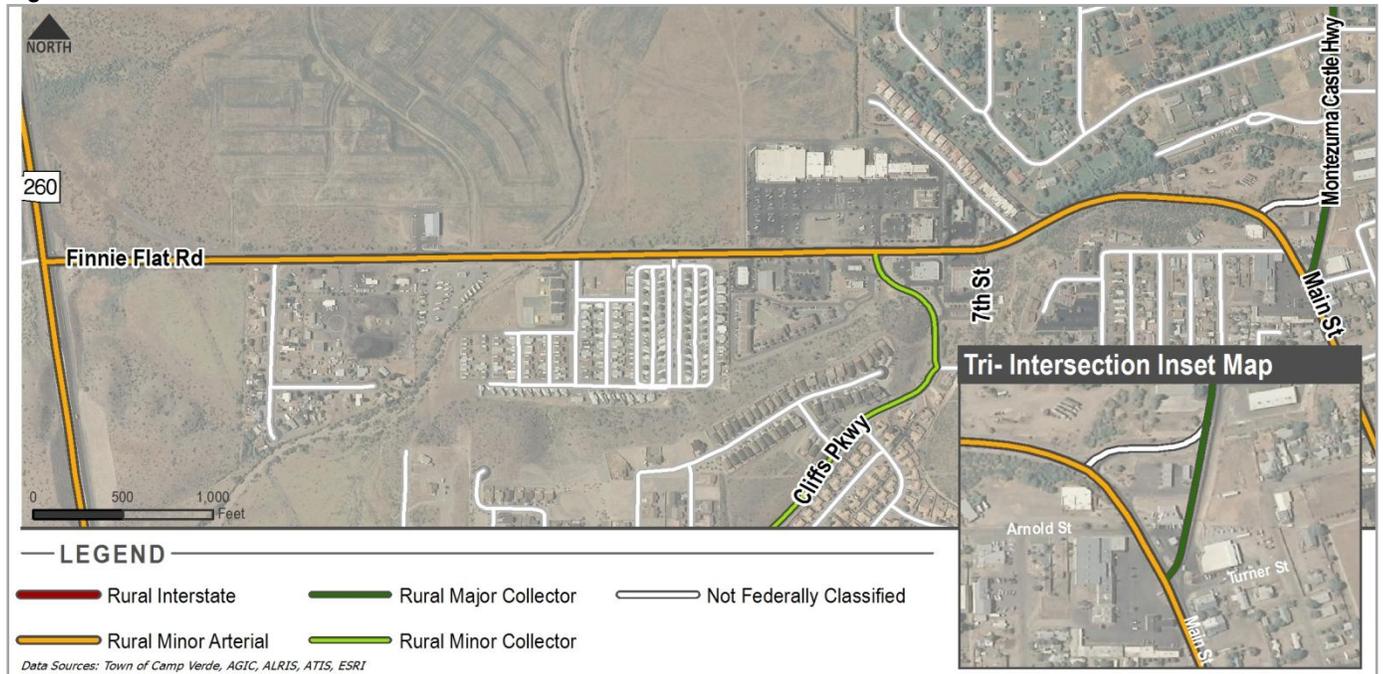
Roadway Functional Classification

Functional Classification is the grouping of streets and highways by the character of service they intend to provide. Defining a street’s functional classification serves as a basis for establishing speed limits, design standards, and access controls. Roadways that are not functionally classified are deemed ineligible for federal funding. Approved FHWA functional classifications for the study area are presented in Table 4.1. As identified in the table Finnie Flat Road and Main Street are classified as a Rural Minor Arterial, while Montezuma Castle Highway is a Rural Major Collector. As defined by the FHWA’s Highway Functional Classification, Rural Minor Arterials link city and towns to provide interstate and inter-county service, while Rural Major Collectors provide connectivity between minor collectors and local streets to the arterial network for intra-county and regional travel. Table 4.2 lists the standards of roadway functional classification from the General Plan. Figure 4.3 illustrates the functional classification within the study area.

Table 4.2. Roadway Functional Classification Definition

Classification	Description
Major Arterial	Defined as a street with access control, channelized intersections, restricted parking, and which collects and distributes traffic to and from minor arterials.
Minor Arterial	Defined as a street with signals at important intersections and stops signs on the side streets, and which collects and distributes traffic to and from collector streets.
Collector	Defined as a street which collects traffic from local streets and connects with minor and major arterials.

Figure 4.3. Functional Classification



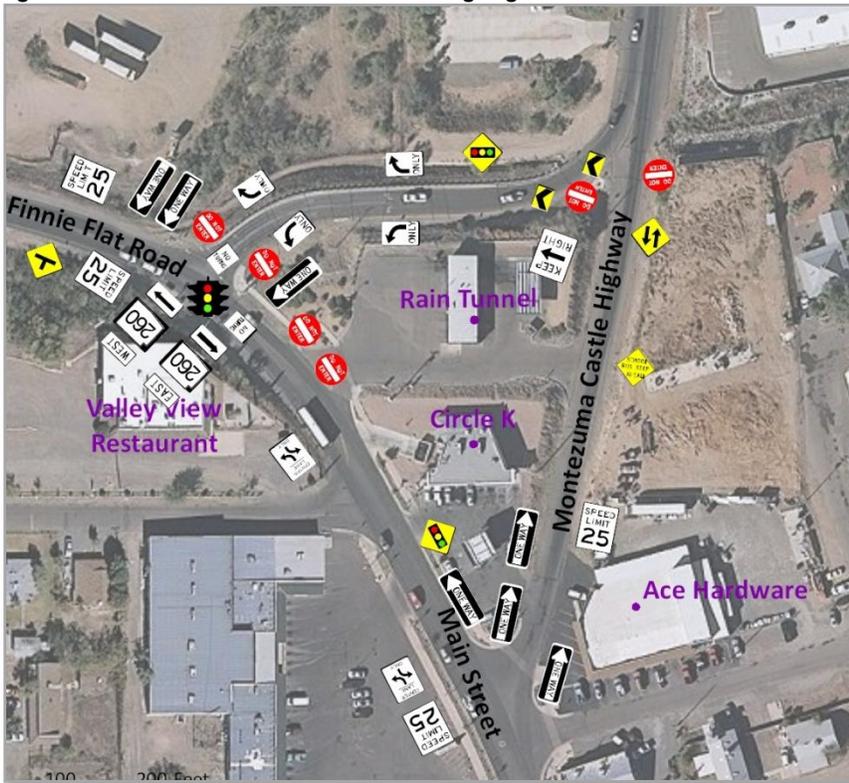
Traffic Control

The usage of traffic control devices is the primary method of ensuring orderly traffic flow at intersections and along roadway networks. Figures 4.4 and 4.5 provides a graphic illustration of the traffic control devices installed along the study corridor and Tri-Intersection as well as regulatory, warning, and informational signs. Traffic signals within the study area are located at the intersections of SR 260/Finnie Flat Road, Cliffs Parkway/Finnie Flat Road, and Montezuma Castle Highway Slip Ramp/Finnie Flat Road. Currently, there is no traffic control device at the Main Street/Montezuma Castle Highway intersection.

Figure 4.4. Traffic Control Devices and Signage on Finnie Flat Road



Figure 4.5. Traffic Control Devices and Signage at Tri-Intersection



Access Management

Access management enhances the flow of traffic on a corridor or roadway system by improving safety, capacity, and speed. Effective access management programs control the number of driveways and vehicular curb cuts, remove slower turning vehicles, and reduce the number of vehicular conflict points. Controlling access improves mobility and is linked to the function of a particular roadway. Access management guidelines for driveway spacing often range between 150 feet to over 300 feet. For instance, the City of Somerton requires driveways along Major Arterials to have a minimum spacing of 200 feet in commercial and residential areas. The City of Casa Grande requires a minimum driveway spacing of 200 feet on Major Arterials in commercial areas and 150 feet on Minor Arterials.

The Town of Camp Verde does not currently have an access management policy in place. Figure 4.6 provides an illustration of the existing driveway spacing near the Bashas' Shopping Complex along the Finnie Flat Road Corridor. As illustrated in the graphic, driveways along this portion of the Finnie Flat Road Corridor are spaced between less than 20 feet to over 400 feet apart. At the Tri-Intersection, driveway spacing ranges between 38 feet to over 600 feet apart. This close driveway spacing increases potential conflicts and can lead to an increase in vehicular crashes. Potential access management strategies that enhance safety and mobility along the Finnie Flat Road Corridor include constructing exclusive turn lanes to direct traffic, incorporating raised medians to reduce cross traffic turning movements, and reducing driveway density by creating shared access driveways accessing neighboring properties.

Figure 4.6. Finnie Flat Road Corridor Existing Driveway Spacing



Existing Traffic Conditions

Existing traffic conditions were evaluated for this study to identify current congestion levels and to anticipate future deficiencies. If available, existing daily traffic count data was obtained from the Town of Camp Verde, Yavapai County, and ADOT. In addition, an extensive traffic count exercise was conducted for this study during the week of May 21, 2012. The traffic count collection included obtaining traffic counts on roadway segment and at specific intersections.

Road Segment Counts

Daily traffic counts were collected for select roadway sections within the study area, including:

- Finnie Flat Road between SR 260 and Groseta Drive
- Main Street between Turner Street and Hollamon Street
- Montezuma Castle Highway, north of the Tri-Intersection

Table 4.3 outlines the existing traffic conditions.

Table 4.3. Existing Traffic Conditions on Specific Corridors

Road Segment	Direction	Average Daily Traffic Volume	AM Peak Hour	PM Peak Hour	Average Speed (mph)	Truck Percentage*
Finnie Flat Road: SR 260 to Groseta Drive	Eastbound	2,838	238	244	39.1	2.6%
	Westbound	2,933	256	270	38.2	2.3%
Finnie Flat Road: West of Montezuma Castle Highway	Eastbound	3,490	286	328	32.0	1.1%
	Westbound	3,882	324	336	32.1	1.2%
Main Street: Turner Street to Hollamon Street	Northbound	3,748	356	289	22.6	1.8%
	Southbound	3,325	246	286	22.6	2.0%
Montezuma Castle Highway: North of the Tri-Intersection	Northbound	4,119	392	372	33.5	1.9%
	Southbound	4,233	312	386	25.7	2.7%

*FHWA Scheme F classes 4-13

Intersection Turning Movement Counts

Hourly turning movement counts were collected during the morning (7AM - 9AM), Mid-Day (11AM - 1PM) and evening (4PM - 6PM) hours for specific intersections in the study area, including:

- Finnie Flat Road/Montezuma Castle Highway Slip Ramp
- Finnie Flat Road/Arnold Street
- Finnie Flat Road/Main Street/Montezuma Castle Highway

Table 4.4 outlines the existing traffic conditions.

Table 4.4. Existing Traffic Conditions at Intersections

Intersection	AM Period		Mid-Day Period		PM Period	
	Total	Peak Hour (8:00 AM)	Total	Peak Hour (11:30 AM)	Total	Peak Hour (4:15 PM)
Finnie Flat Road/ Montezuma Castle Highway Slip Ramp	1,104	634	1,483	779	1,267	768
Finnie Flat Road/Arnold Street	897	493	1,301	1,301	1,458	668
Finnie Flat Road/Main Street/Montezuma Castle Highway	1,267	700	1,283	740	1,480	747

Operational Analysis

Traffic congestion levels of major roadways within the study corridor were estimated using existing traffic count data. The degree of traffic congestion is commonly expressed in terms of Level of Service (LOS). LOS is a measurement of traffic congestion conditions defined by the Transportation Research Board's (TRB) Highway Capacity Manual (HCM). For a planning level analysis, the roadway LOS is determined based on the ratio of traffic volume on the road to capacity of the road. Capacity of the road is a function of the number of lanes, functional classification, speed, and roadway geometrics and provides thresholds for the maximum number of cars allowed to travel on a lane for the peak or daily conditions. Each level of service is given a letter grade based on its level of congestion, ranging from "A" through "F", with LOS A representing free flowing traffic conditions where vehicles experience minimal delays, and LOS F represents failure conditions where vehicles experience long delays. Figure 4.7 is an illustration of the LOS types. Road segment LOS is characterized by the HCM as follows:

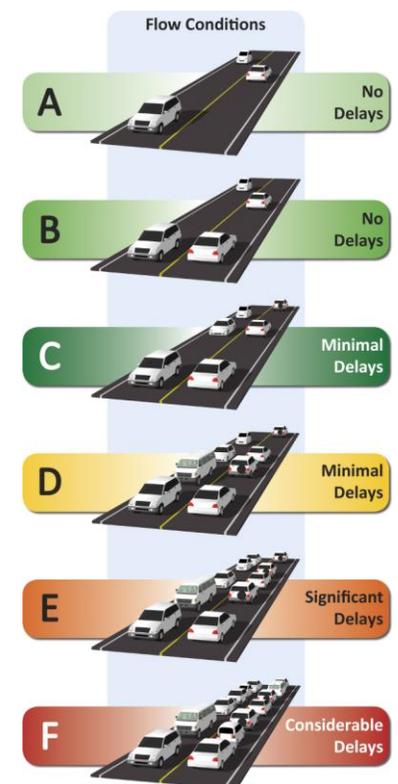
LOS A: Best, free flow operations (on uninterrupted flow facilities) and very low delay (on interrupted flow facilities). Freedom to select desired speeds and to maneuver within traffic is extremely high.

LOS B: Flow is stable, but presence of other users is noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within traffic.

LOS C: Flow is stable, but the operation of users is becoming affected by the presence of other users. Maneuvering within traffic requires substantial vigilance on the part of the user.

LOS D: High density but stable flow. Speed and freedom to maneuver are severely restricted. The driver is experiencing a generally poor level of comfort and convenience.

Figure 4.7. Level of Service



LOS E: Flow is at or near capacity. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within traffic is extremely difficult. Comfort and convenience levels are extremely poor.

LOS F: Worse, facility has failed, or a breakdown has occurred.

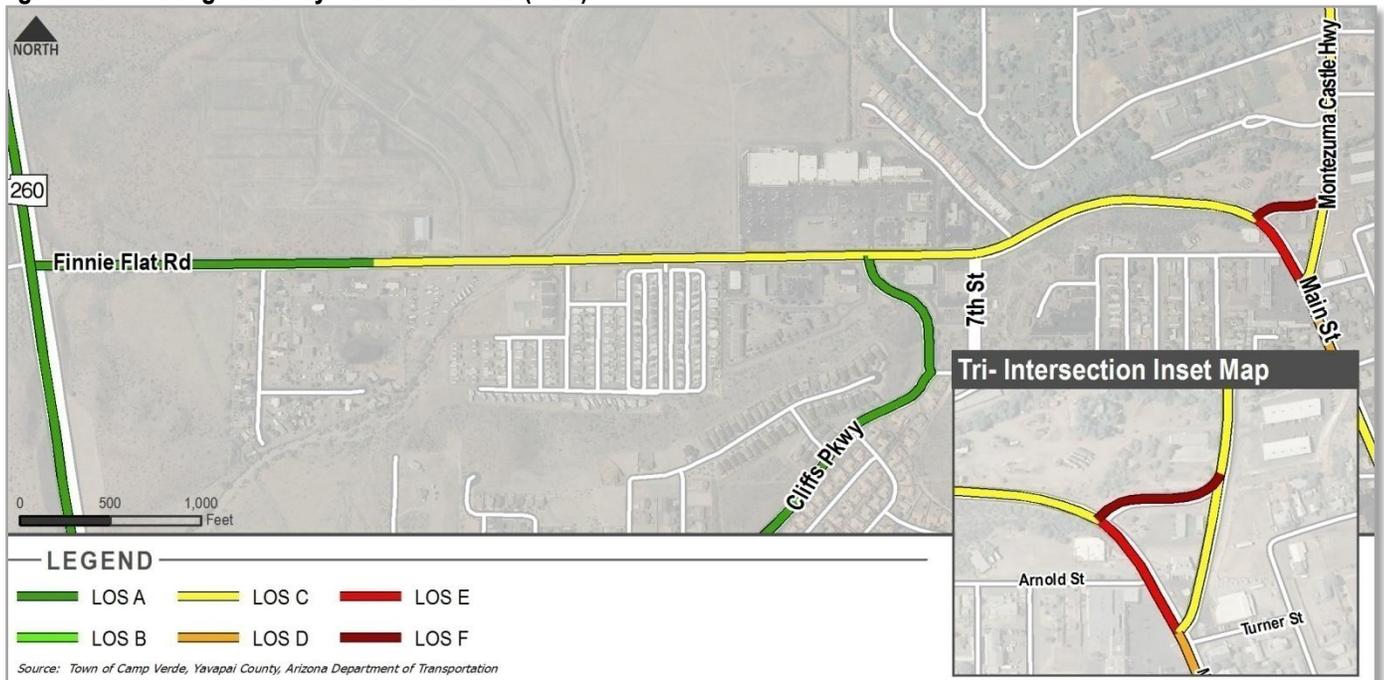
In general for rural areas, LOS A and B represent no congestion, LOS C represents moderate congestion, and LOS D, E, and F represent severe congestion.

Current Roadway Level of Service

Figure 4.8 illustrates the existing LOS for the study corridor. As illustrated in the figure, portions of the existing roadway network operate at a LOS C or worse:

- Finnie Flat Road east of the ADOT Maintenance Yard operates at a LOS C
- Finnie Flat Road south of Montezuma Castle Highway Slip Ramp is at LOS E
- Main Street south of Montezuma Castle Highway is at LOS D
- Montezuma Castle Highway north of Main Street operates at a LOS C
- Montezuma Castle Highway Slip Ramp is at LOS F

Figure 4.8. Existing Roadway Level of Service (LOS)



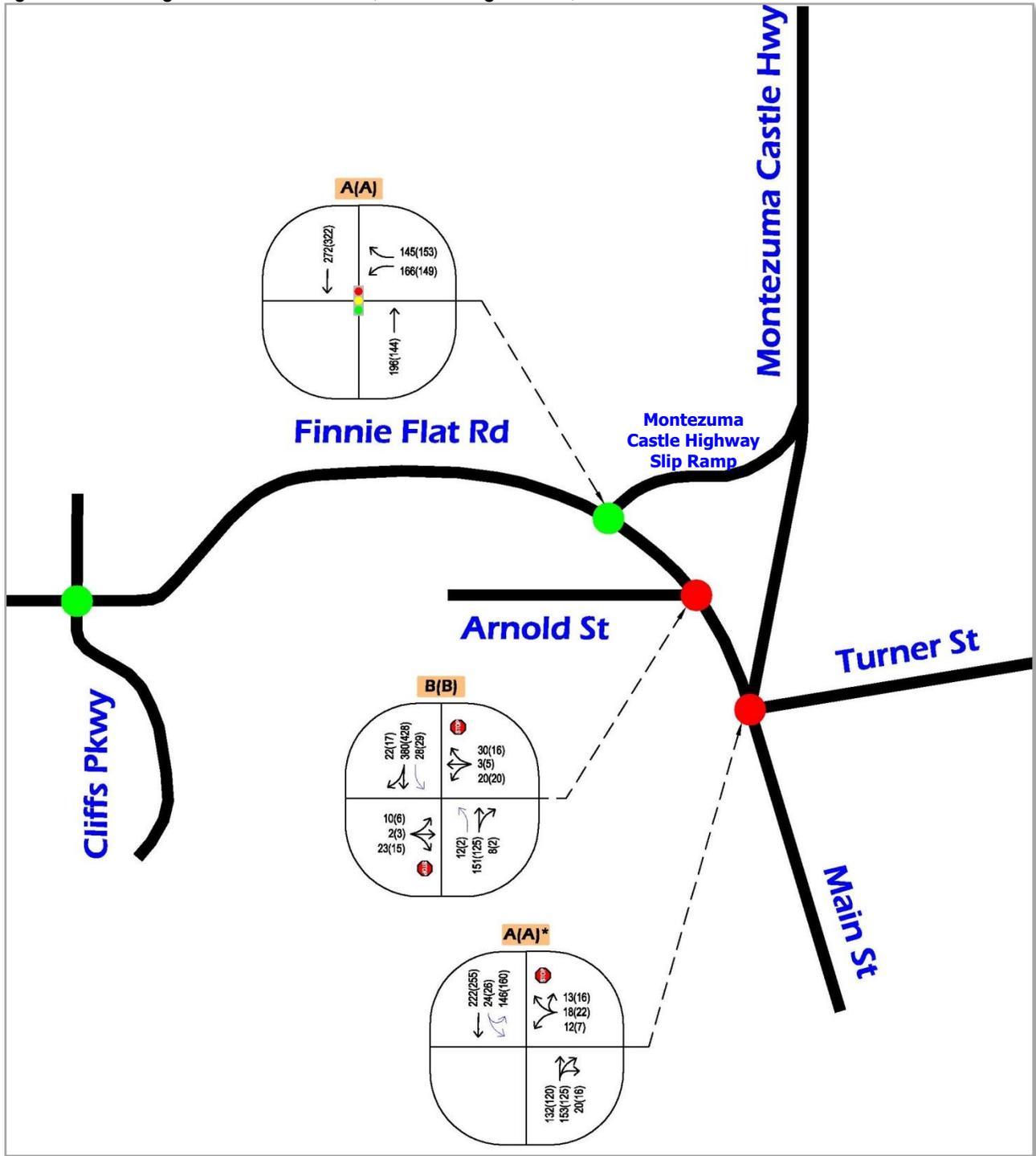
Current Intersection Level of Service

Table 4.5 outlines the existing delay and LOS for each turning movement. Figure 4.9 illustrates the existing volumes, lane configurations, and LOS for each turning movement collected. The current intersection LOS and the LOS for each turning movement of each leg/approach were calculated and are displayed in Figure 4.10. Based on existing traffic counts, all intersection approaches and overall intersection perform at a LOS of B or better.

Table 4.5.Existing Operations at Intersections

Intersection	Approach	2012					
		AM		Midday		PM	
		Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Finnie Flat Road / Montezuma Castle Highway (signalized)	NW-Bound	3.6	A	4.2	A	3.7	A
	SE-Bound	3.7	A	4.1	A	4.1	A
	SW-Bound	14.3	B	14.2	B	14.3	B
	Overall	8.9	A	8.1	A	8.0	A
Finnie Flat Road / Arnold Street (unsignalized)	E-Bound	10.9	B	11.7	B	11.9	B
	W-Bound	10.1	B	11.2	B	11.7	B
	Overall	10.9	B	11.7	B	11.9	B
Finnie Flat Road / Main Street / Turner Street (unsignalized)	W-Bound	9.5	A	6.6	A	6.9	A
	Overall	9.5	A	6.6	A	6.9	A

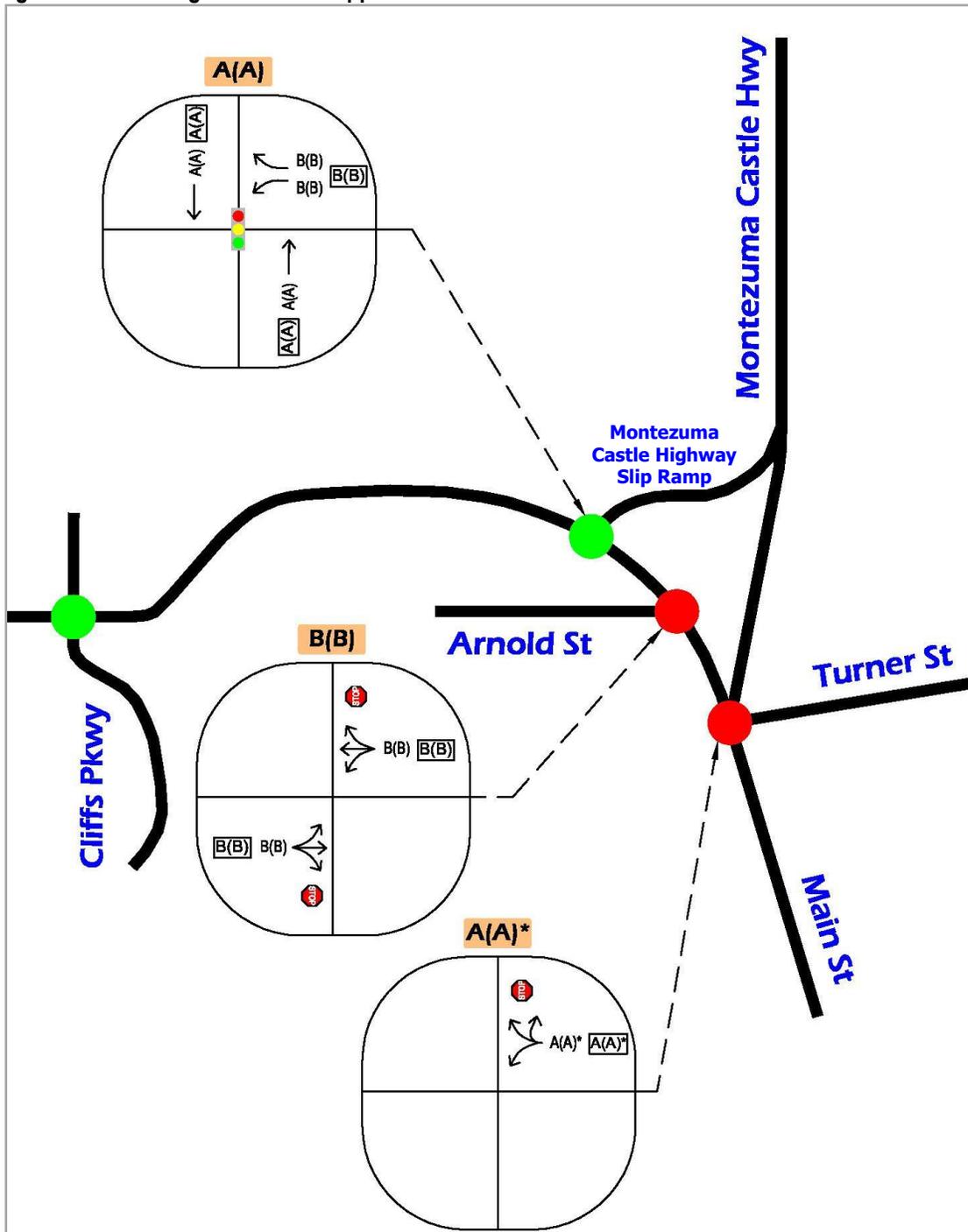
Figure 4.9. Existing Intersection Volumes, Lane Configurations, and LOS



LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION / DRIVEWAY
- XXX(YYY) PEAK-HOUR VOLUMES: MIDDAY(PM)
- X(Y) LEVEL-OF-SERVICE: MIDDAY(PM)
- ↶ LEFT-TURN ONLY LANE
- ↷ TWO-WAY LEFT-TURN LANE
- INTERSECTION CONFIGURATION NOT ALLOWED IN HCM ANALYSIS. SIMTRAFFIC SIMULATION WAS CONDUCTED TO DETERMINE APPROACH DELAY.

Figure 4.10. Existing Intersection Approach LOS



LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
X(Y)	MOVEMENT LOS: MIDDAY(PM)
X(Y)	APPROACH LOS: MIDDAY(PM)
X(Y)	OVERALL INTERSECTION LOS: MIDDAY(PM)
↷	TRAFFIC MOVEMENT DIRECTION
•	INTERSECTION CONFIGURATION NOT ALLOWED IN HCM ANALYSIS. SIMTRAFFIC SIMULATION WAS CONDUCTED TO DETERMINE APPROACH DELAY.

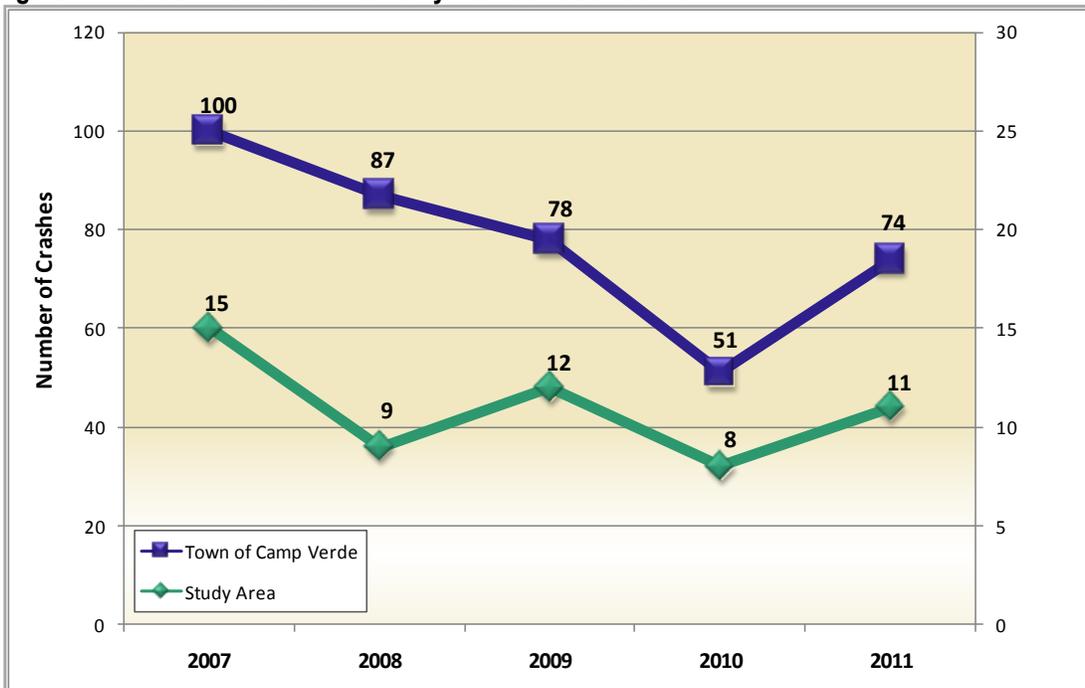
Crash Analysis

Crash analysis was conducted for major roadways in the study area to identify trends, patterns, predominant crash reasons, and high crash rate intersections and corridors. The purpose of the crash analysis is to discover safety hazard locations that need to be addressed to improve area safety.

Data for crashes occurring between December 2006 and December 2011 was obtained from ADOT's Accident Location Identification Surveillance System (ALISS) database. Since data from the year 2006 only includes information regarding the last month of the year, it was omitted from the crash analysis for consistency purposes. During the five year period a total of 398 incidents occurred within the Town of Camp Verde with 57 of those incidents taking place within the study corridor.

Figure 4.11 compares the crash data of the roadways within the Town of Camp Verde and the study corridor from January 2007 to December 2011. As illustrated in the Figure, the total number of crashes, while understandably different, does not follow the same pattern. The number of crashes within Town of Camp Verde decreases from year 2007 to 2010 and shows an increase in 2011, while the number of crashes along the study corridor alternates between positive and negative changes every year from 2007 to 2011.

Figure 4.11. Crash Trends from January 2007 to December 2011



Source: Accident Location Identification Surveillance System (ALISS), January 2007 to December 2011

Figure 4.12 illustrates the locations of crash occurrences along with the number of crashes at each of those locations during the five-year analysis period, while Figure 4.13 displays the crashes by injury severity. Utilizing the latitude and longitude coordinates of incidents identified in the ALISS, exact locations were pinpointed and summarized to display areas with high concentrations of "hot spot" crash locations. Figure 4.14 portrays the overall distribution of the crashes in which higher values indicate a greater density of crashes for any particular area. Figure 4.15 summarizes these crashes by intersection type, collision type (first harmful definition), collision manner, and injury severity. A review of the data identifies the following:

- The roadways within the study corridor account for over 14% of the crashes in the Town of Camp Verde.

- The majority of crashes along the study corridor were predominantly rear-end and left-turn type collisions with 33% and 21% of the total crashes, respectively.
- Approximately 80% of all crashes were collisions with motor vehicles, while 12% were collisions with a fixed object.
- The study corridor consists of three major intersections, Finnie Flat Road/SR 260, Finnie Flat Road/Cliffs Parkway, and Finnie Flat Road/Main Street/Montezuma Castle Highway. Intersection related crashes accounted for 60% of the all crashes within the study corridor. About half of the intersection crashes occurred at the Finnie Flat Road/SR 260 intersection.
- One fatal crash occurred at Finnie Flat Road/7th Street intersection within the five-year period. The fatal crash was caused by the driver crossing the centerline and hitting the guardrail on the south side of the road. "Speed too fast for conditions" violation was also cited for this crash.
- Possible injury (crashes with no signs of injury but complaint of pain) and non-incapacitating injuries (crashes with any visible injuries) accounted for 37% of all crashes. These crashes were typically intersection related, left-turn or rear-end collisions, and collisions with a fixed object. Violations cited for these crashes were predominately "inattention distraction" and "no improper action".
- Approximately five percent of all crashes were incapacitating injuries (crashes with any visible signs of injury from a crash or person(s) who had to be carried from the scene). These crashes were predominately angle or left-turn collisions, intersection or driveway related, and occurred in the daylight.
- Of the three major intersections in the study corridor, the Finnie Flat Road/SR 260 intersection has the most crashes. These collisions were largely left-turn and rear-end type collisions, occurred during daylight, and were with a motor vehicle in transport. Violations cited for these crashes were predominately "inattention distraction", "no improper action", and "failed to yield to right-of-way".
- Intersection related crashes at the Tri-Intersection predominately occurred during the daylight hours and were rear-end, left-turn, or angle collisions.
- Crashes at the Finnie Flat Road/SR 260 intersection were predominately left-turn and rear-end collisions that occurred during the daylight hours.
- Crashes at the Finnie Flat Road/Cliffs Parkway and Finnie Flat Road/7th Street intersections were predominately angle (font to side) and rear-end collisions that occurred during the daylight hours.
- Non-intersection related crashes primarily occurred on Finnie Flat Road between Cliffs Parkway and 7th Street, on Main Street, and along Montezuma Castle Highway. The majority of non-intersection related crashes were rear-end collisions.
- Approximately 40% of all non-intersection related crashes took place on Montezuma Castle Highway. The majority of these crashes were between Hereford Drive and just south of Cliff House Drive.
- 77% of all single vehicle crashes did not occur during daytime.

Figure 4.12. Crash Locations



Figure 4.13. Crash Locations by Injury Severity

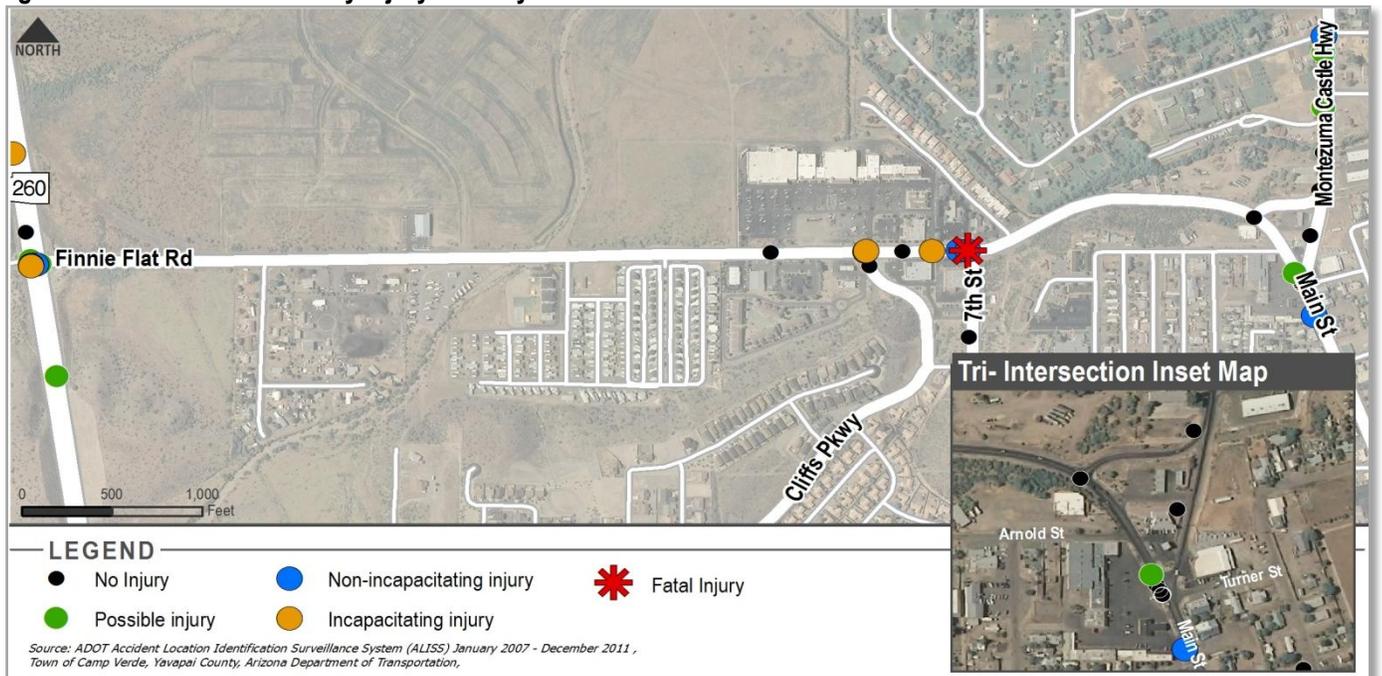


Table 4.6 displays different types of violations and how many crashes are due to each violation. As shown in the Table, “no improper action”, “unknown”, and “inattention distraction” were the most cited violation types within the five-year analysis time period. Crashes cited as “inattention distraction” were predominately rear-end collisions. One of the three crashes cited with “speed too fast for conditions” violation resulted in a fatal crash. Approximately 60% of the crashes cited with the “failed to yield to right-of-way” violation occurred on Finnie Flat Road between Cliffs Parkway and 7th Street.

Table 4.6. Crashes - Top Eight Predominant Violation Types

Violation	Crashes	Percent
No Improper Action	14	24.5%
Unknown	13	22.8%
Inattention Distraction	12	21.0%
Failed to Yield to Right-of-Way	5	8.8%
Failed to Keep in Proper Lane	3	5.3%
Followed Too Closely	3	5.3%
Other	3	5.3%
Speed too Fast for Conditions	3	5.3%

Source: ADOT ALISS 11/2007-12/2011

Crash rates were estimated along the three road segments and at four intersections to determine areas with a high number of crashes thus creating potential hazardous conditions within the study area. Crash rate is a function of the number of vehicles utilizing a roadway or entering an intersection; therefore, a higher total number of crashes do not always result in a high crash rate. Crash rates for the roadway segments are expressed in terms of crashes per million vehicle miles traveled. The highest crash rates occurred at:

- Finnie Flat Road from Cliffs Parkway to 7th Street (6 total crashes, 4.97 crash rate)
- Main Street from Arnold Street to Hollamon Street (9 total crashes, 2.92 crash rate)
- Montezuma Castle Highway from Main Street to Hereford Drive (5 total crashes, 2.56 crash rate)
- Finnie Flat Road/SR 260 Intersection (16 total crashes, 0.85 crash rate)
- Finnie Flat Road/Cliffs Parkway Intersection (10 total crashes, 0.80 crash rate)
- Main Street/Montezuma Castle Highway Intersection (5 total crashes, 0.34 crash rate)
- Finnie Flat Road/7th Street Intersection (3 total crashes, 0.28 crash rate)

While the most crashes occurred on Montezuma Castle north of Main Street, Finnie Flat Road from Cliffs Parkway to 7th Street has the highest crash rate within the study area. The high crash rate at this portion of Finnie Flat Road is due to the high number of crashes coupled with the short distance and slightly lower traffic volumes. All intersections had a crash rate lower than 1.00.

Future Traffic Conditions

The primary purpose of forecasting traffic volumes is to estimate the additional travel demand added to existing roadways and to determine congestion levels due to projected growth in population and employment. In addition, this analysis provides valuable insight into potential transportation solutions. As previously discussed, a travel demand model was developed to forecast traffic volumes for 2016, 2021, and 2031 using the projected socioeconomic data previously discussed. Similar to existing traffic analysis, the degree of traffic congestion is expressed in terms of LOS.

Projected 2016 Traffic Conditions

Figure 4.16 displays the projected 2016 traffic volumes and LOS for the current roadway network with projected 2016 socioeconomic conditions *if no roadway improvements are made (No-Build)*. Traffic volumes and LOS results in this section represent average annual daily traffic conditions. Road segments performing at a LOS B or worse include:

- Finnie Flat Road east of the ADOT Maintenance Yard (LOS C)
- Finnie Flat Road south of Montezuma Castle Highway Slip Ramp (LOS E)
- Main Street south of Montezuma Castle Highway (LOS D)
- Montezuma Castle Highway north of Main Street operates (LOS C)
- Montezuma Castle Highway Slip Ramp (LOS F)

Figure 4.16. 2016 No-Build Daily Traffic Volumes and LOS

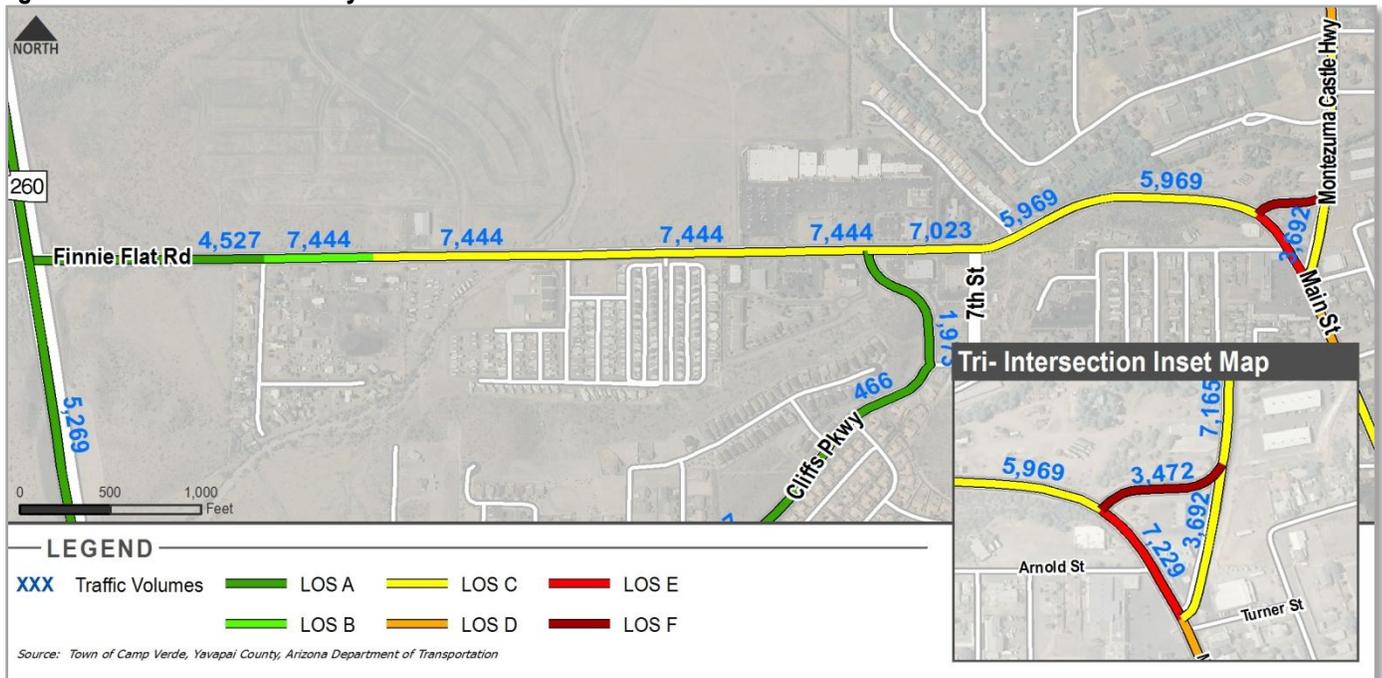
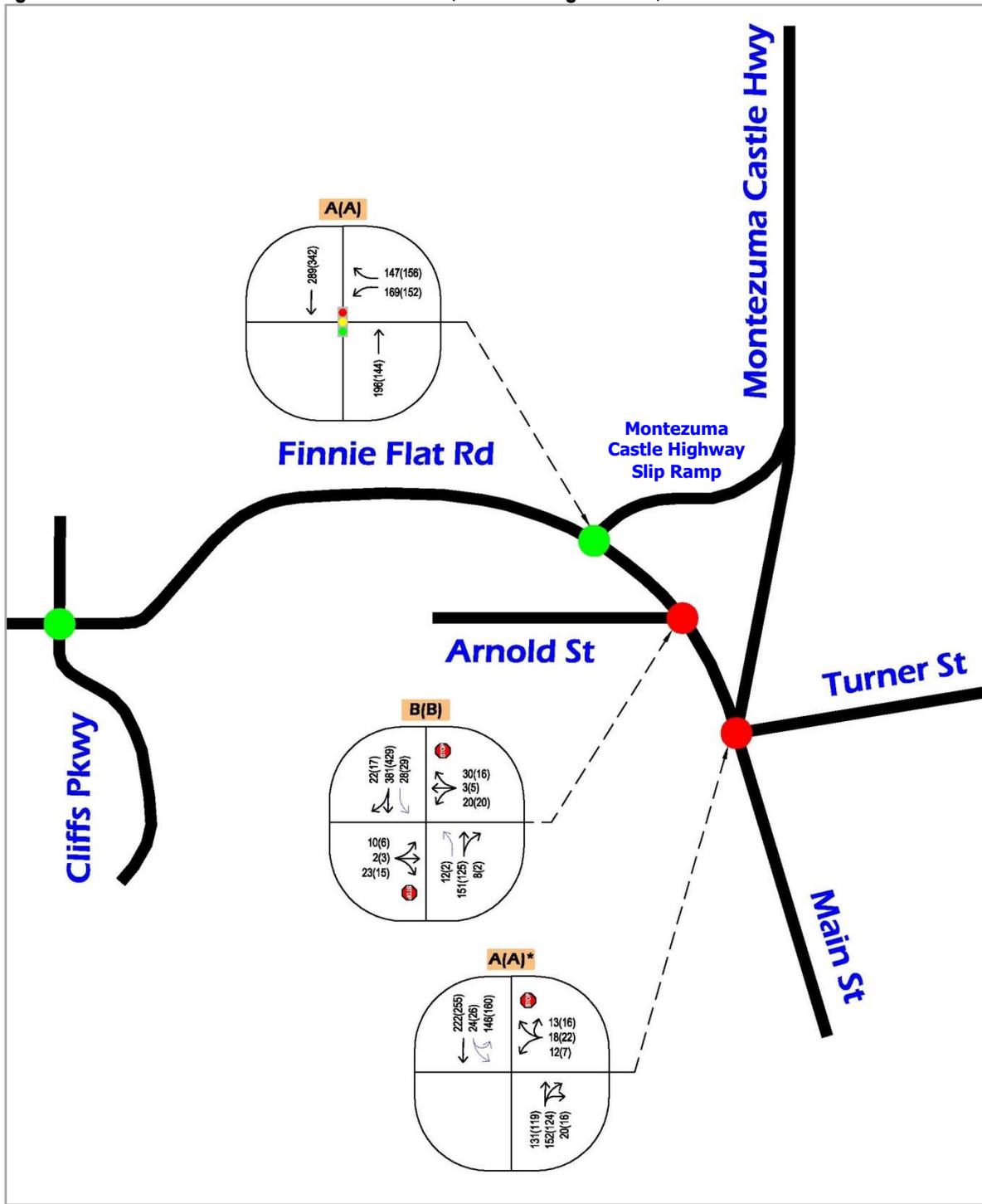


Figure 4.17 illustrates the projected 2016 volumes, lane configurations, and LOS at the Finnie Flat Road/Montezuma Castle Highway, Finnie Flat Road/Arnold Street, and Main Street/Turner Street intersections *if no roadway improvements are made (No-Build)*. The projected intersection LOS and the LOS for each turn movement of each leg/approach was determined and is displayed in Figure 4.18. Based on projected 2016 traffic volumes, all intersection approaches and overall intersection perform at a LOS of B or better.

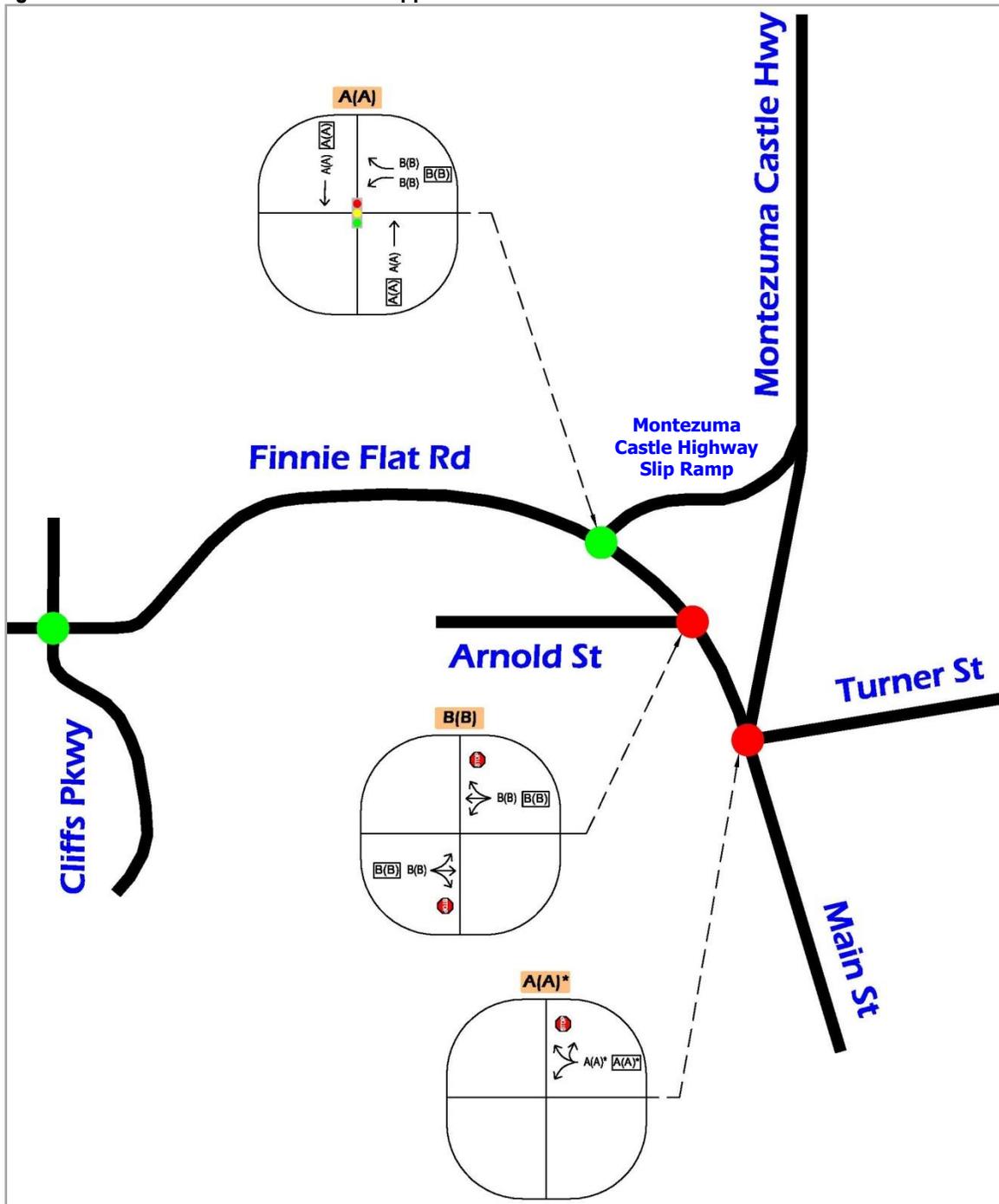
Figure 4.17. 2016 No-Build Intersection Volumes, Lane Configurations, and LOS



LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION / DRIVEWAY
- XXX(YYY) PEAK-HOUR VOLUMES: MIDDAY(PM)
- X(Y) LEVEL-OF-SERVICE: MIDDAY(PM)
- ↗ LEFT-TURN ONLY LANE
- ↘ TWO-WAY LEFT-TURN LANE
- INTERSECTION CONFIGURATION NOT ALLOWED IN HCM ANALYSIS. SIMTRAFFIC SIMULATION WAS CONDUCTED TO DETERMINE APPROACH DELAY.

Figure 4.18. 2016 No-Build Intersection Approach LOS



LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
X(Y)	MOVEMENT LOS: MIDDAY(PM)
X(Y)	APPROACH LOS: MIDDAY(PM)
X(Y)	OVERALL INTERSECTION LOS: MIDDAY(PM)
↔	TRAFFIC MOVEMENT DIRECTION
•	INTERSECTION CONFIGURATION NOT ALLOWED IN HCM ANALYSIS. SIMTRAFFIC SIMULATION WAS CONDUCTED TO DETERMINE APPROACH DELAY.

Projected 2021 Traffic Conditions

Figure 4.19 displays the projected 2021 traffic volumes and LOS for the current roadway network with projected 2021 socioeconomic conditions *if no roadway improvements are made (No-Build)*. Traffic volumes and LOS results in this section represent average annual daily traffic conditions. Road segments performing at a LOS B or worse include:

- Finnie Flat Road - ADOT Maintenance Yard to Cliffs Parkway(LOS D)
- Finnie Flat Road - Cliffs Parkway to Montezuma Castle Highway Slip Ramp (LOS C)
- Finnie Flat Road south of Montezuma Castle Highway Slip Ramp (LOS E)
- Main Street south of Montezuma Castle Highway (LOS D)
- Montezuma Castle Highway north of Main Street operates (LOS C)
- Montezuma Castle Highway Slip Ramp (LOS F)

Figure 4.19. 2021 No-Build Daily Traffic Volumes and LOS

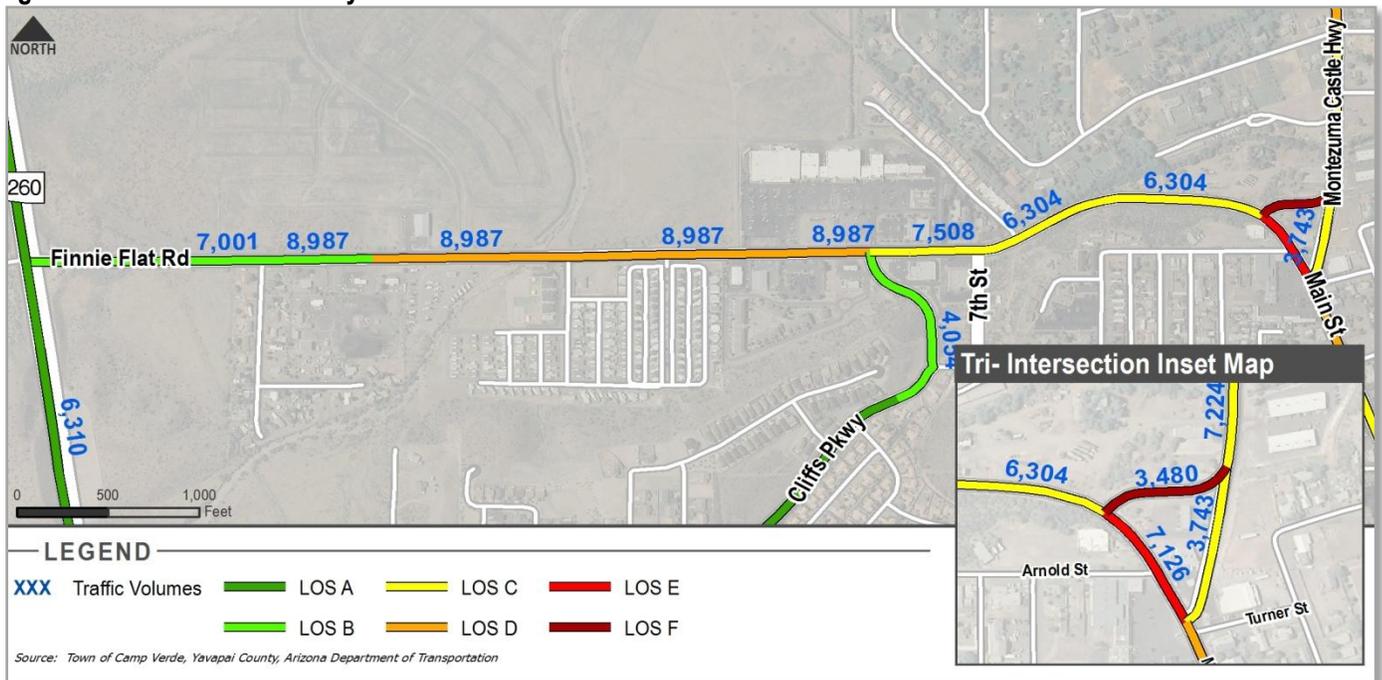
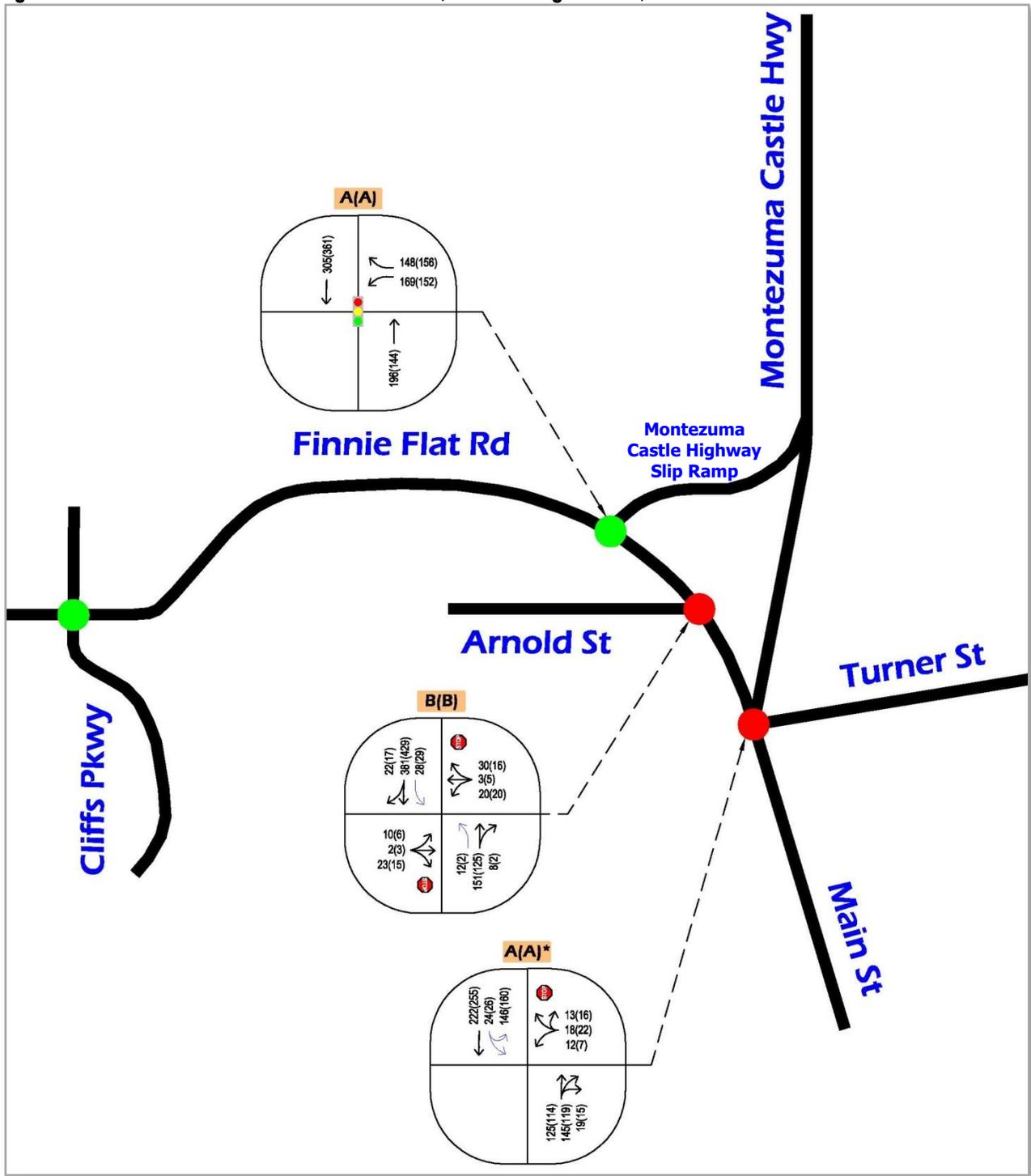


Figure 4.20 illustrates the projected 2021 volumes, lane configurations, and LOS at the Finnie Flat Road/Montezuma Castle Highway, Finnie Flat Road/Arnold Street, and Main Street/Turner Street intersections *if no roadway improvements are made (No-Build)*. The projected intersection LOS and the LOS for each turn movement of each leg/approach was determined and is displayed in Figure 4.21. Based on projected 2021 traffic volumes, all intersection approaches and the overall intersections perform at a LOS of B or better.

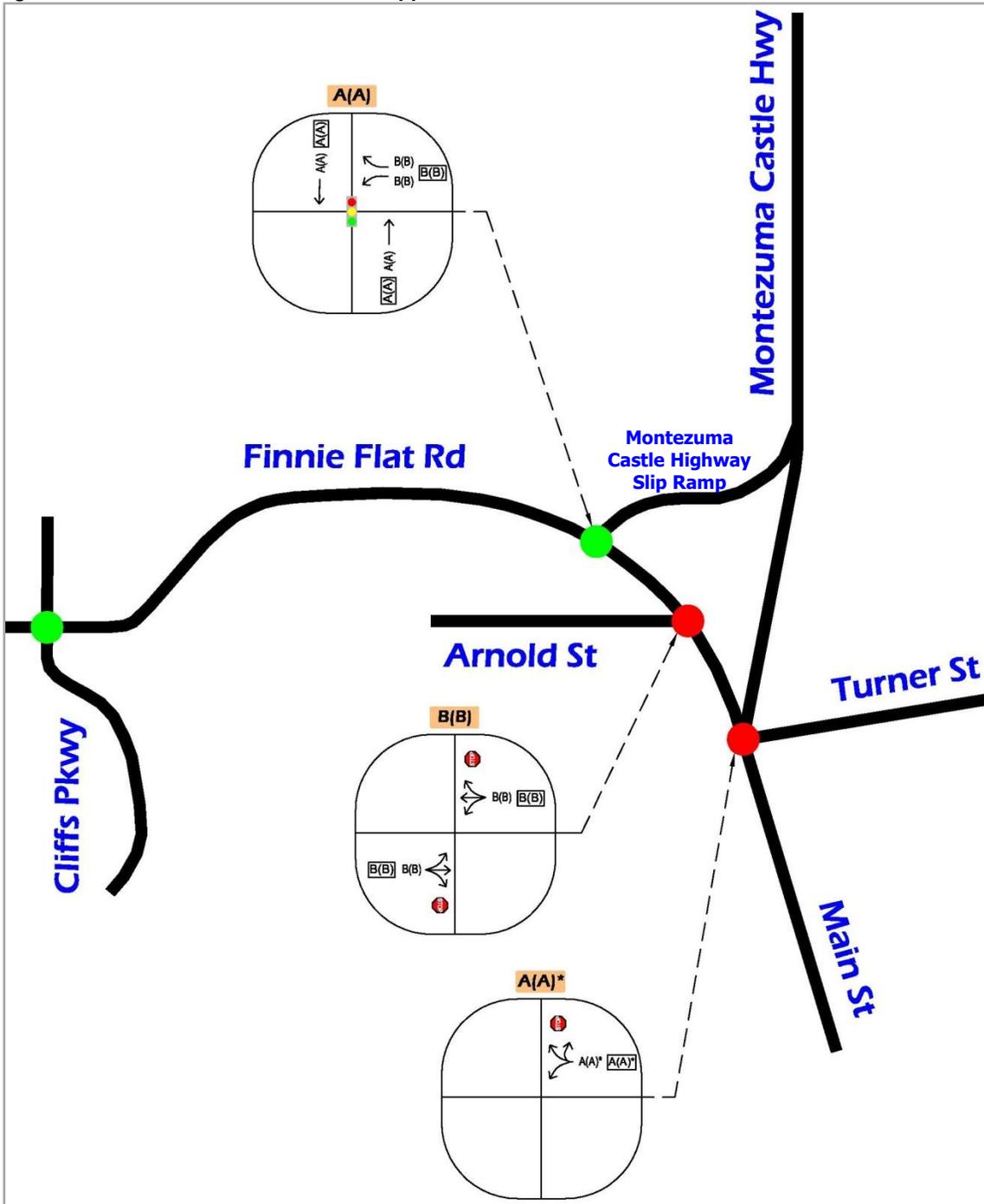
Figure 4.20. 2021 No-Build Intersection Volumes, Lane Configurations, and LOS



LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION / DRIVEWAY
- XXX(YYY) PEAK-HOUR VOLUMES: MIDDAY(PM)
- x(y) LEVEL-OF-SERVICE: MIDDAY(PM)
- ↗ LEFT-TURN ONLY LANE
- ↖ TWO-WAY LEFT-TURN LANE
- INTERSECTION CONFIGURATION NOT ALLOWED IN HCM ANALYSIS. SIMTRAFFIC SIMULATION WAS CONDUCTED TO DETERMINE APPROACH DELAY.

Figure 4.21. 2021 No-Build Intersection Approach LOS



LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
X(Y)	MOVEMENT LOS: MIDDAY(PM)
X(Y)	APPROACH LOS: MIDDAY(PM)
X(Y)	OVERALL INTERSECTION LOS: MIDDAY(PM)
↶	TRAFFIC MOVEMENT DIRECTION
*	INTERSECTION CONFIGURATION NOT ALLOWED IN HCM ANALYSIS. SIMTRAFFIC SIMULATION WAS CONDUCTED TO DETERMINE APPROACH DELAY.

Projected 2031 Traffic Conditions

Figure 4.22 displays the projected 2031 traffic volumes and LOS for the current roadway network with projected 2031 socioeconomic conditions *if no roadway improvements are made (No-Build)*. Traffic volumes and LOS results in this section represent average annual daily traffic conditions. Road segments performing at a LOS B or worse include:

- Finnie Flat Road - ADOT Maintenance Yard to Cliffs Parkway(LOS D)
- Finnie Flat Road - Cliffs Parkway to Montezuma Castle Highway Slip Ramp (LOS C)
- Finnie Flat Road south of Montezuma Castle Highway Slip Ramp (LOS F)
- Main Street south of Montezuma Castle Highway (LOS E)
- Montezuma Castle Highway north of Main Street operates (LOS D)
- Montezuma Castle Highway Slip Ramp (LOS F)

Figure 4.22. 2031 No-Build Daily Traffic Volumes and LOS

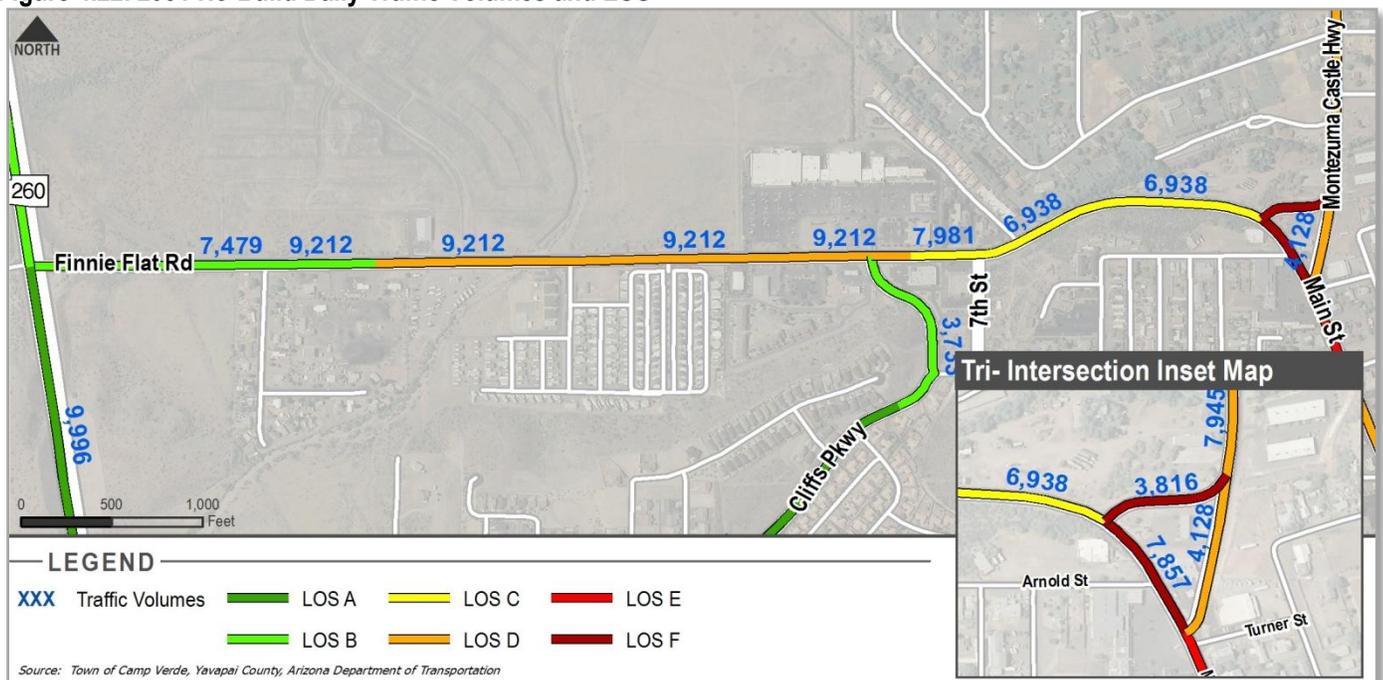
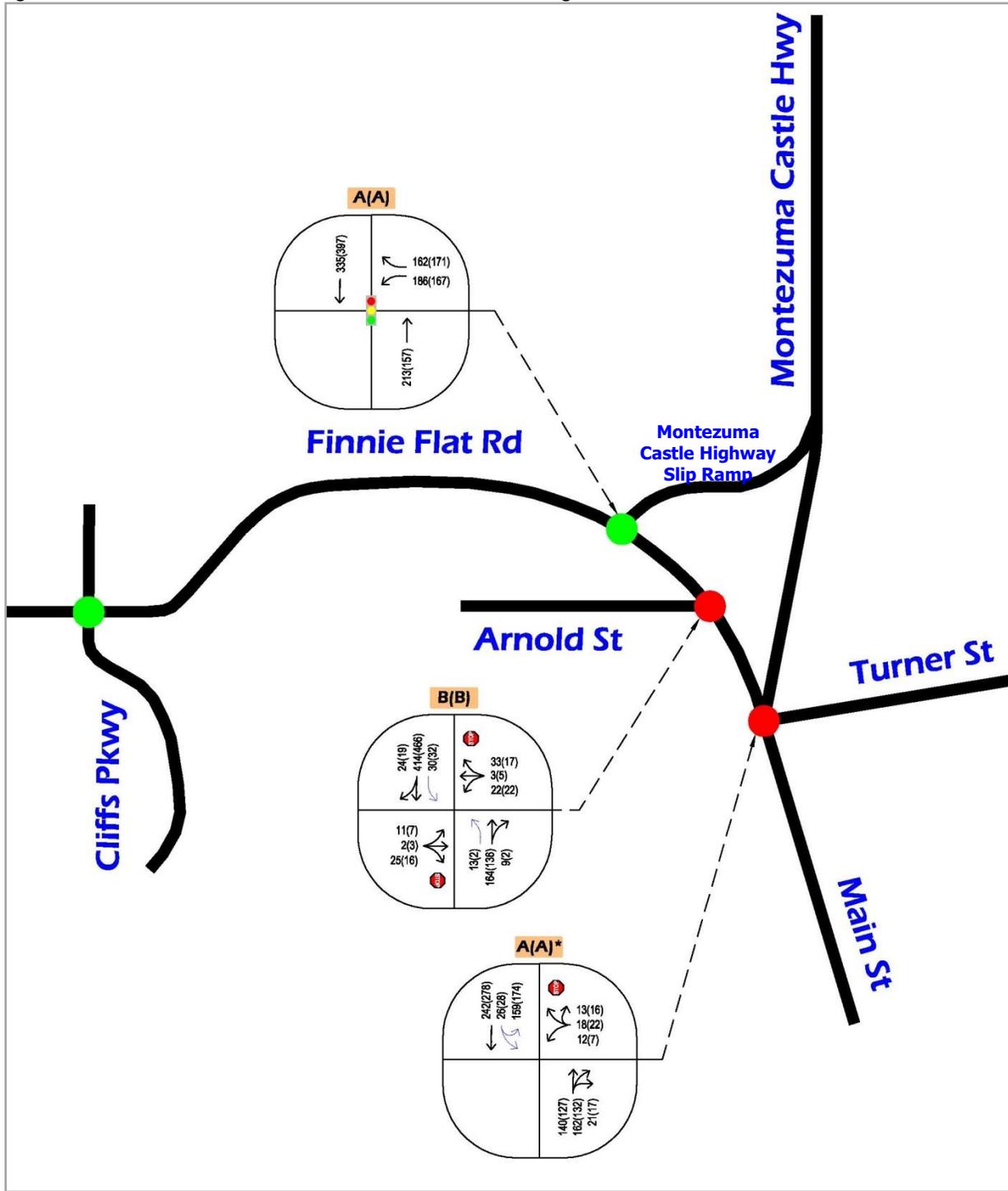


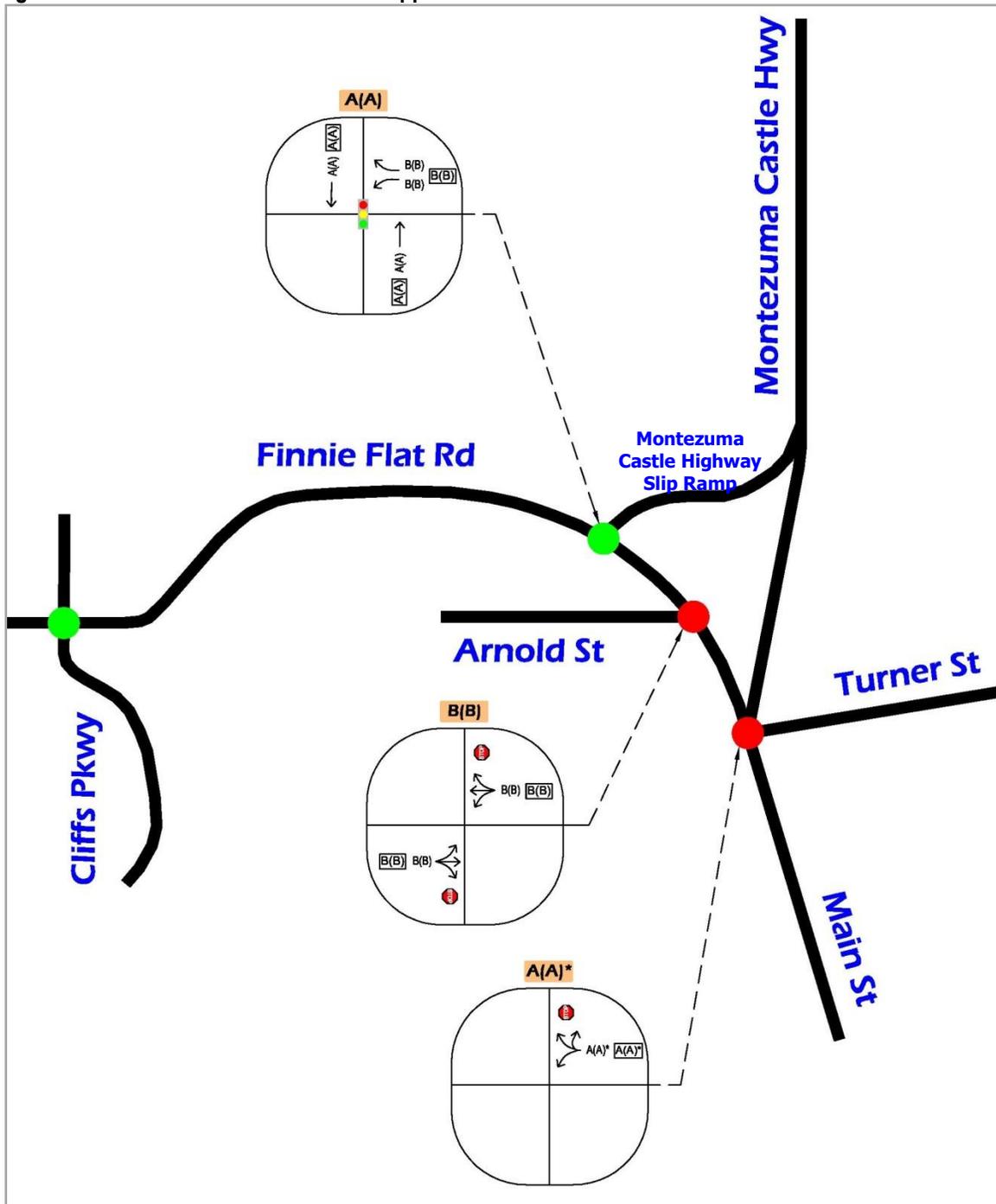
Figure 4.23 illustrates the projected 2031 volumes, lane configurations, and LOS at the Finnie Flat Road/Montezuma Castle Highway, Finnie Flat Road/Arnold Street, and Main Street/Turner Street intersections *if no roadway improvements are made (No-Build)*. The projected intersection LOS and the LOS for each turn movement of each leg/approach was determined and is displayed in Figure 4.24. Based on projected 2031 traffic volumes, all intersection approaches and overall intersections perform at a LOS of B or greater. While LOS estimates for the study area are within acceptable levels, improvements are recommended along Finnie Flat Road Corridor and at the Tri-Intersection to reduce confusion, and increase safety as well as accessibility for multiple modes of transportation.

Figure 4.23. 2031 No-Build Intersection Volumes, Lane Configurations, and LOS



LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
XXX(YYY)	PEAK-HOUR VOLUMES: MIDDAY(PM)
X(Y)	LEVEL-OF-SERVICE: MIDDAY(PM)
	LEFT-TURN ONLY LANE
	TWO-WAY LEFT-TURN LANE
•	INTERSECTION CONFIGURATION NOT ALLOWED IN HCM ANALYSIS. SIMTRAFFIC SIMULATION WAS CONDUCTED TO DETERMINE APPROACH DELAY.

Figure 4.24. 2031 No-Build Intersection Approach LOS



LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
X(Y)	MOVEMENT LOS: MIDDAY(PM)
X(Y)	APPROACH LOS: MIDDAY(PM)
X(Y)	OVERALL INTERSECTION LOS: MIDDAY(PM)
	TRAFFIC MOVEMENT DIRECTION
*	INTERSECTION CONFIGURATION NOT ALLOWED IN HCM ANALYSIS. SIMTRAFFIC SIMULATION WAS CONDUCTED TO DETERMINE APPROACH DELAY.

Table 4.7 provides a comparison of current and future delays at the Finnie Flat Road/Montezuma Castle Highway, Finnie Flat Road/Arnold Street, and Main Street/Turner Street intersections if no roadway improvements are made (*No-Build*). As the table indicates, delays for northwest and southeast turning movements from Montezuma Castle Highway are projected to increase 7 - 12%. The unsignalized intersection of Finnie Flat Road/Arnold Street's turning movement delay slightly increases from 2 - 7%. Westbound turning movements from Turner Street onto Finnie Flat Road decrease during the AM and PM periods; however, delays during the mid-day increase by more than 19%.

Table 4.7 Future Intersection Operations Comparison

Intersection	Approach	AM Delay (sec/veh)			Mid-day Delay (sec/veh)			PM Delay (sec/veh)		
		2012	2031	% Difference	2012	2031	% Difference	2012	2031	% Difference
Finnie Flat Road / Montezuma Castle Highway (signalized)	NW-Bound	3.6	3.9	8.3%	4.2	4.5	7.1%	3.7	4	8.1%
	SE-Bound	3.7	4.1	10.8%	4.1	4.6	12.2%	4.1	4.6	12.2%
	SW-Bound	14.3	14	-2.1%	14.2	14	-1.4%	14.3	14.1	-1.4%
	Overall	8.9	8.8	-1.1%	8.1	8.2	1.2%	8.0	8.1	1.3%
Finnie Flat Road / Arnold Street (unsignalized)	E-Bound	10.9	11.2	2.8%	11.7	12.1	3.4%	11.9	12.4	4.2%
	W-Bound	10.1	10.3	2.0%	11.2	11.6	3.6%	11.7	12.2	4.3%
	Overall	10.9	11.2	2.8%	11.7	12.1	3.4%	11.9	12.4	4.2%
Finnie Flat Road / Main Street / Turner Street (unsignalized)	W-Bound	9.5	6.8	-28.4%	6.6	7.9	19.7%	6.9	5.6	-18.8%
	Overall	9.5	6.8	-28.4%	6.6	7.9	19.7%	6.9	5.6	-18.8%

Other Modes of Transportation

Alternative modes of transportation are an important aspect of the multimodal transportation network as they provide mobility for those not able to operate or without access to a vehicle. This section presents existing multimodal conditions in the study area.

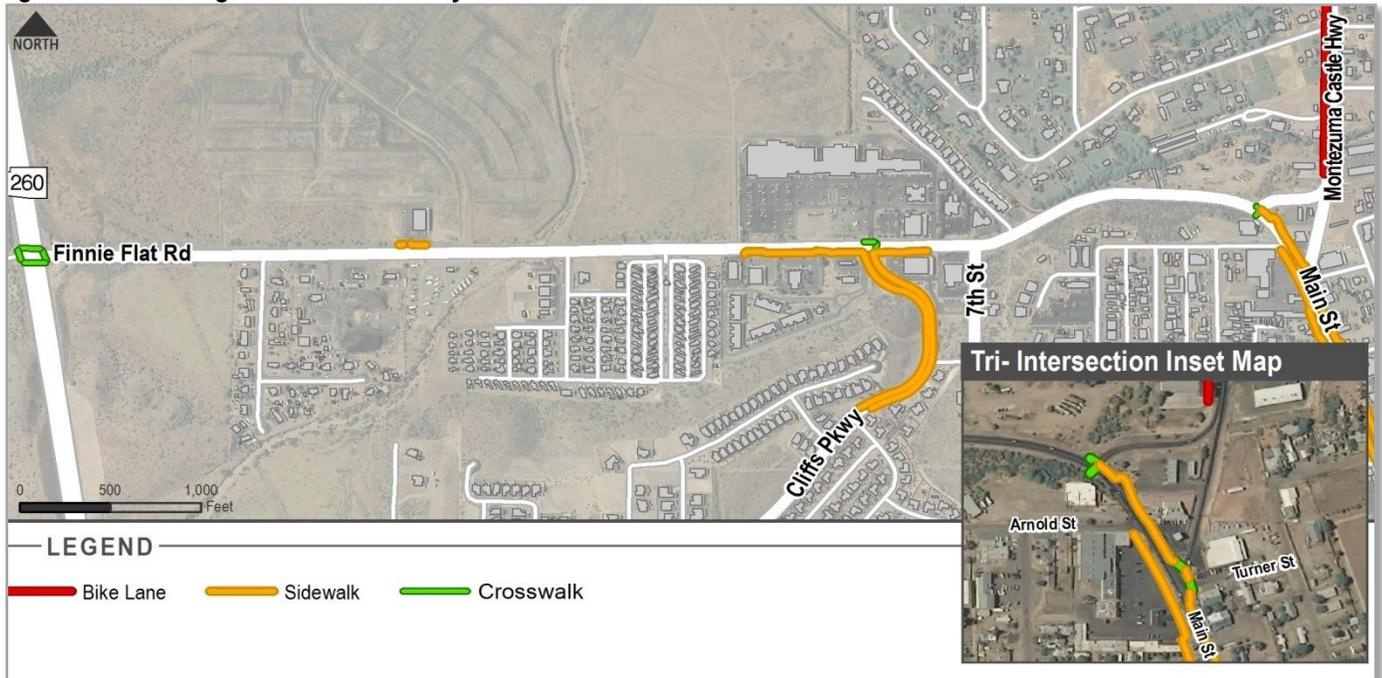
Existing Pedestrian and Bicycle Facilities

Based on the field review and Town and stakeholder input, existing pedestrian facilities were identified along the study corridor. Figure 4.25 illustrates the location of existing pedestrian sidewalks, bike lanes, pedestrian crosswalks, and crossing signs. According to Town staff and from stakeholder and TAC input, pedestrian access is very important to the community. Currently, pedestrians utilize dirt paths along the southern portion of Finnie Flat Road for pedestrian access between residential areas on the west side of Finnie Flat Road and the Bashas' shopping complex. In addition, students from Pace Academy often walk along Montezuma Castle Highway between Circle K and the Academy before and after school hours. Additionally, patrons of the Salt Mine Cellar restaurant on Finnie Flat Road often park on the side of the road and walk along the unlit roadway to access the restaurant.

Existing pedestrian and bicycle facilities include:

- Approximately 2,700 feet of sidewalk are located along the study corridor, including:
 - In front of the Dollar General, on the north side of Finnie Flat Road
 - South side of Finnie Flat Road between Family Dollar General and the United State Postal Service
 - East side of Main Street south of Arnold Street
 - West side of Main Street south of the Finnie Flat Road/Montezuma Castle Highway Slip Ramp intersection
 - Cliffs Parkway
- The Town recently constructed 1,000 foot of sidewalk on the north side of Finnie Flat Road between Cliffs Parkway and Main Street.
- Pedestrian crosswalk roadway striping is only located between Ace Hardware and Circle K; however, the SR 260/Finnie Flat Road, Finnie Flat Road/Cliffs Parkway, and Finnie Flat Road/Montezuma Castle Highway traffic signals do have pedestrian crossing controls.
- A bike lane is located on the southbound side of Montezuma Castle Highway; however, the bike lane abruptly ends at the Y-intersection.

Figure 4.25. Existing Pedestrian and Bicycle Facilities



Existing Transit Facilities

The Town of Camp Verde currently does not have a public transit system in place. Current transit services available to Town residents include:

- Greyhound offers a curbside bus stop at the Burger King along SR 260 that provides access to Greyhound's nationwide bus route and Amtrak passenger rail service.
- Sedona-Phoenix Shuttle provides nine trips daily between Sedona, Village of Oak Creek, Cottonwood, Camp Verde, and Phoenix Sky Harbor Airport. With the exception of Cottonwood, all stops along the route are by reservation only. In Camp Verde, the shuttle picks up riders at the Chevron Gas station near the corner of I-17 and SR 260.
- Arizona Shuttle provides on-call shuttle service from Camp Verde to Flagstaff, Phoenix Sky Harbor Airport, or the Phoenix Metrocenter Mall. Shuttle provides up to 12 daily trips between Flagstaff and Phoenix. In Camp Verde, the shuttle picks up riders at the northwest corner of I-17 and SR 260.
- Cliff Castle Casino provides motor coach services for their patrons to visit the Casino from Flagstaff, Phoenix, and the Verde Valley area. Coach service within Camp Verde is available every Monday and picks-up patrons on Thousand Trails, Western Horizons, the Super 8, Comfort Inn, and Days Inn.

Transportation Issues Summary

Based on analysis of existing conditions, and input received from Town staff, the TAC, and stakeholders, transportation system deficiencies and issues were identified. These issues and deficiencies formed the basis for the next phase of the study which is the development of the long range transportation plan. Figure 4.26 displays the current major transportation issues in the study area. Key issues are listed below.

Safety issues:

- Finnie Flat Road/Main Street/Montezuma Castle Highway Intersection
 - Several turning movements are confusing for motorists, particularly tourists
 - Left turn from the Montezuma Castle Highway Slip Ramp to southbound Main Street is difficult for trucks and buses due to the steep grade
 - Left-hand turning movements from Arnold Street are difficult due to sight distance issues
 - Unsafe traffic movements into/out of Circle K and shopping center
 - U-turns from Finnie Flat Road to Montezuma Castle Highway are not intuitive
 - Turning issues in/out of Turner Street
 - Emergency vehicles, school buses, and large trucks have issues maneuvering through the intersection
- Finnie Flat Road/Cliffs Parkway's small intersection footprint causes issues for emergency vehicles.
- Access management issues along Finnie Flat Road between the west entrance of the Bashas' shopping center and 7th Street.
- Numerous roadways lack curb or gutter to prevent flooding, particularly Turner Street, Main Street, and Arnold Street.
- Configuration and sight issues at Finnie Flat Road/Cliffs Parkway intersection.
- Parking and pedestrian issues along Finnie Flat Road at Salt Mine Cellars.
- Traffic signage at the Tri-Intersection is confusing to motorists especially tourists.
- Congestion issues at the Tri-Intersection for existing and future years.
- Projected congestion along Finnie Flat Road east of the ADOT Maintenance Yard.
- Traffic congestion on the southbound Montezuma Castle Highway Slip Ramp sometimes forces emergency vehicles to travel southbound (wrong way) on the one-way Montezuma Castle Highway to access Main Street.
- Large number of crashes occurred on Finnie Flat Road between Cliffs Parkway and 7th Street; Montezuma Castle Highway from Main Street to Hereford Drive, and on Main Street from Arnold Street to Hollamon Street.

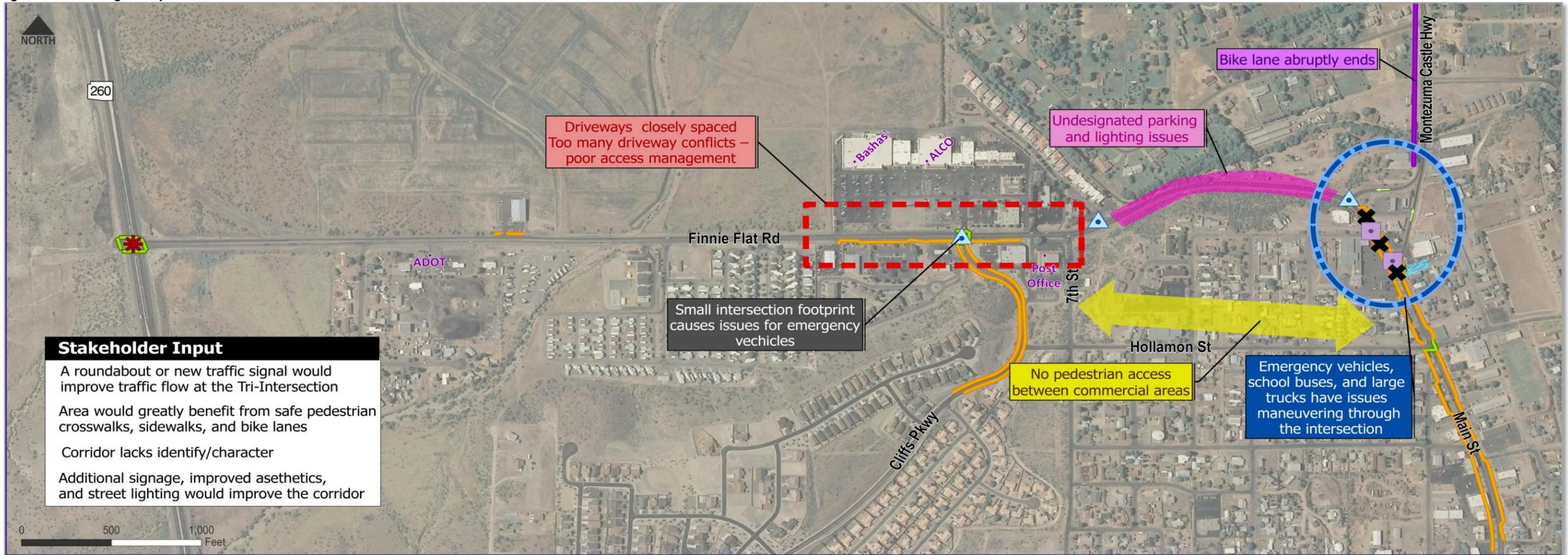
Pedestrian and bicycle issues:

- Lack of sidewalk connectivity.
- Bike lane on Montezuma Castle Highway abruptly ends.
- No pedestrian access along the southern portion of Finnie Flat Road west of the Family Dollar store.
- Lack of bicycle lanes and designated bike routes.
- Poor connectivity between modes of travel.

Transit issues:

- No local and regional public transit system.
- Private charter and Greyhound bus service only picks-up at the I 17/SR 260 interchange.

Figure 4.26. Existing Transportation Issues



Stakeholder Input

A roundabout or new traffic signal would improve traffic flow at the Tri-Intersection

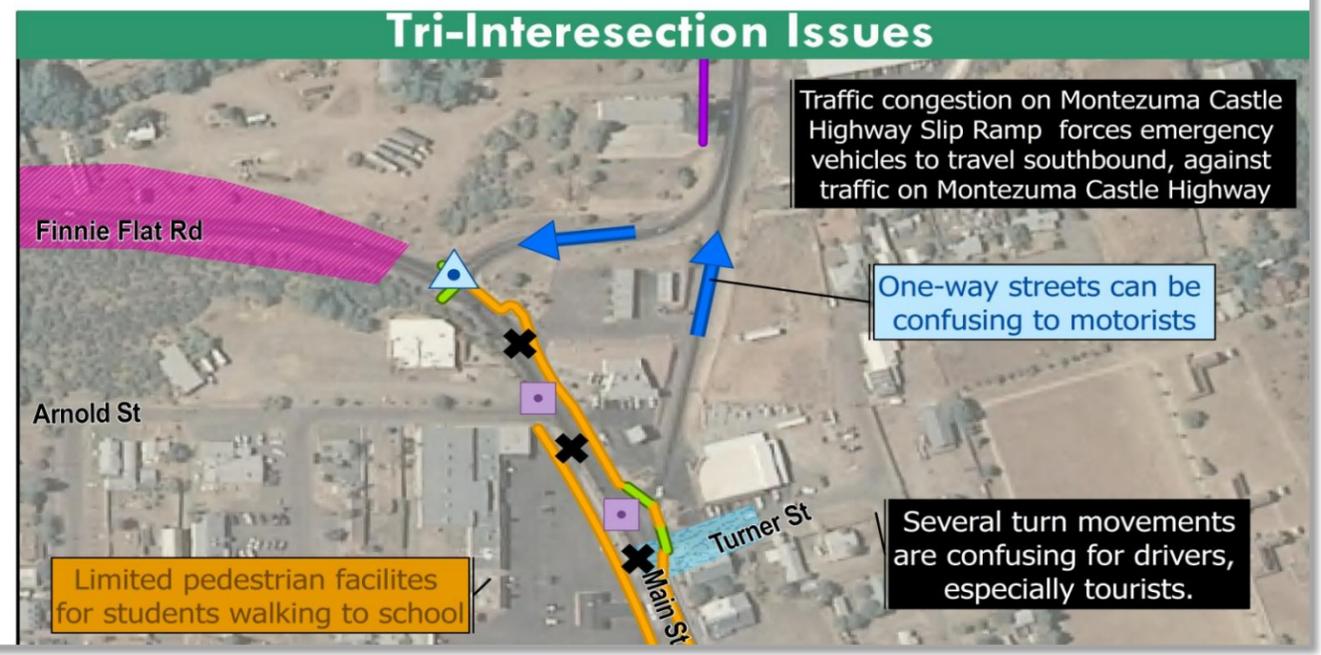
Area would greatly benefit from safe pedestrian crosswalks, sidewalks, and bike lanes

Corridor lacks identify/character

Additional signage, improved aesthetics, and street lighting would improve the corridor

- LEGEND**
- Intersection Issues**
- ✳ Intersection with High Number of Crashes
 - Poor Intersection Configuration (Approach Offset, Drainage, Conflicts, etc)
 - ▲ Sight Distance and Other Geometric Concerns
- Roadway Issues**
- ✕ Multiple Driveway Conflicts
 - ▭ Poor Access Management
- Limited Pedestrian Facilities**
- Existing Bike Lane
 - Existing Sidewalk
 - Existing Pedestrian Crosswalk
- Roadway Issues**
- ▭ On-Street Parking and Lighting Issues
 - ▭ Potential Roadway Flooding

- Corridor Wide Issues**
- Majority of the corridor lacks curb or gutter to prevent flooding
 - ➡ Limited pedestrian and bicycle facilities to access downtown area and the Finnie Flat Road Business Corridor
 - Few safe pedestrian crossings
 - Narrow shoulders
 - No public transit system



5. ALTERNATIVE ANALYSIS

This chapter presents the initial improvement concepts and the criteria used for evaluation for the Tri-Intersection and the Finnie Flat Road Corridor. Initial concepts were developed based on deficiencies and needs identified in the existing conditions analysis; future land use, socioeconomic, and traffic conditions; and the goals and objectives established by the study team and the TAC at the onset of the study.

Evaluation Criteria

Both quantitative and qualitative criteria were utilized to evaluate improvements for the Tri-Intersection and the Finnie Flat Road Corridor. Table 5.1 summarizes the criteria used to evaluate the Tri-Intersection and the Finnie Flat Road Corridor concepts.

Table 5.1. Evaluation Criteria

Evaluation Criteria	Objectives
Deficiencies and Needs	<ul style="list-style-type: none"> • Mitigate existing deficiencies • Support future needs
Safety and Security	<ul style="list-style-type: none"> • Reduce vehicle, pedestrian, and bicycle collisions • Improve access for emergency services
Economic Development Opportunity	<ul style="list-style-type: none"> • Promote economic growth • Compatible with existing and planned development
Transportation Choices	<ul style="list-style-type: none"> • Support transit, pedestrian, and bicycle modes
Congestion/Level of Service	<ul style="list-style-type: none"> • Reduce congestion, bottlenecks and travel times for all modes • Support future traffic demand
Mobility and Access	<ul style="list-style-type: none"> • Improve linkages between vehicular, transit, pedestrian, and bicycle modes • Facilitate efficient regional mobility • Enhance connectivity between the Finnie Flat Road Business Corridor and the Downtown Corridor • Maintain travel reliability
Environmental Impacts	<ul style="list-style-type: none"> • Protect and enhance natural, historical, and cultural environment by minimizing potential adverse impacts
Infrastructure Preservation/Maintenance	<ul style="list-style-type: none"> • Preserve and maintain existing transportation infrastructure
Cost Efficiency and Implementation Feasibility	<ul style="list-style-type: none"> • Minimize capital cost of improvements, including preservation of ROW • Reduce ROW impacts • Implementable and Flexible

Preliminary Tri-Intersection Improvement Concepts

The Tri-Intersection consists of four smaller intersections:

- Main Street/Turner Street/Montezuma Castle Highway;
- Finnie Flat Road/Montezuma Castle Highway Slip Ramp/Main Street;
- Montezuma Castle Highway Slip Ramp/Montezuma Castle Highway; and
- Arnold Street/Main Street.

As previously discussed, the Tri-Intersection is the main intersection point for traffic traveling to the town's commercial downtown area, Cliff Castle Casino, and the Finnie Flat Road Business Corridor. Local retail, commercial, and restaurants line the intersection. Within the center island of the Tri-Intersection are the popular businesses of Rain Tunnel and Circle K.



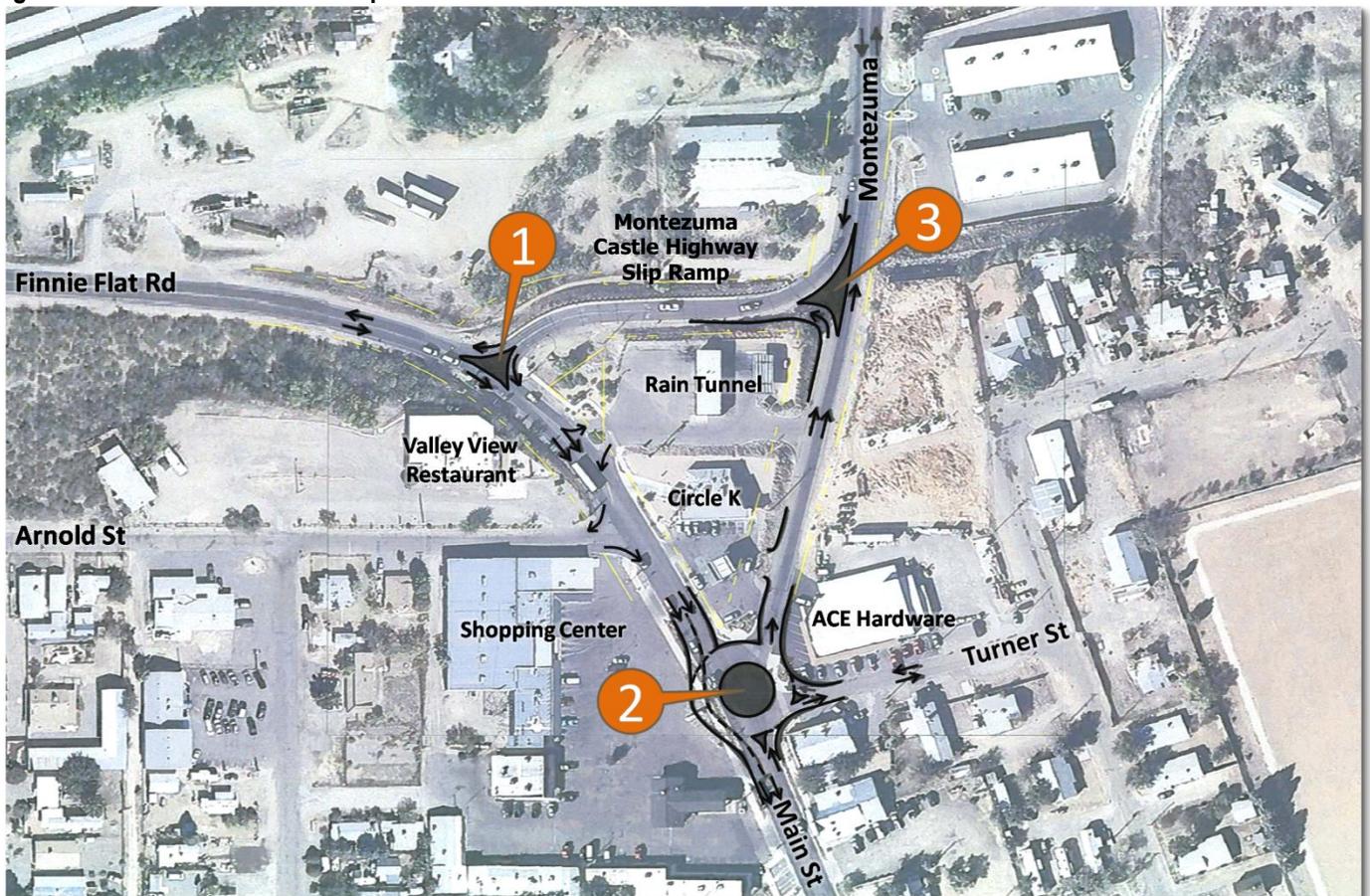
Three preliminary improvement concepts were developed for the Tri-Intersection to address existing deficiencies, future needs, and enhance safety and mobility. The following section presents a summary of three preliminary improvement concepts.

Tri-Intersection Concept 1

Figure 5.1 illustrates Tri-Intersection Concept 1.

- Traffic travels one-way counterclockwise through the Tri-Intersection
- Signal at Junction 1 is removed
- Traffic islands at Junctions 1 and 3 channelize traffic movements
- Two-lane roundabout regulates traffic at Junction 2

Figure 5.1. Tri-Intersection Concept 1



Advantages	Disadvantages
<ul style="list-style-type: none"> ✓ Improves circulation ✓ Channelized traffic flow improves safety ✓ Reduces visibility issues from Turner Street ✓ Safer turning movements onto Montezuma Castle Highway ✓ Less conflict points ✓ Opportunities for new sidewalks, bike lanes, and landscaping 	<ul style="list-style-type: none"> × Potential need for additional right-of-way acquisition from Shopping Center × Rain Tunnel's driveway on the west side altered to left-in and left-out × Restricts northbound access to Valley View Restaurant × Driveways to Shopping Center and Circle K may need to be closed and/or relocated × May reduce parking area at Ace Hardware

Tri-Intersection Concept 2

Figure 5.2 illustrates Tri-Intersection Concept 2.

- Northbound access to Montezuma Castle Highway closed from Main Street
- Montezuma Castle Highway Slip Ramp is converted to a two-lane, two directional roadway
- Traffic island at Junction 3 channelizes traffic movements
- Junction 1 signal remains

Figure 5.2. Tri-Intersection Concept 2



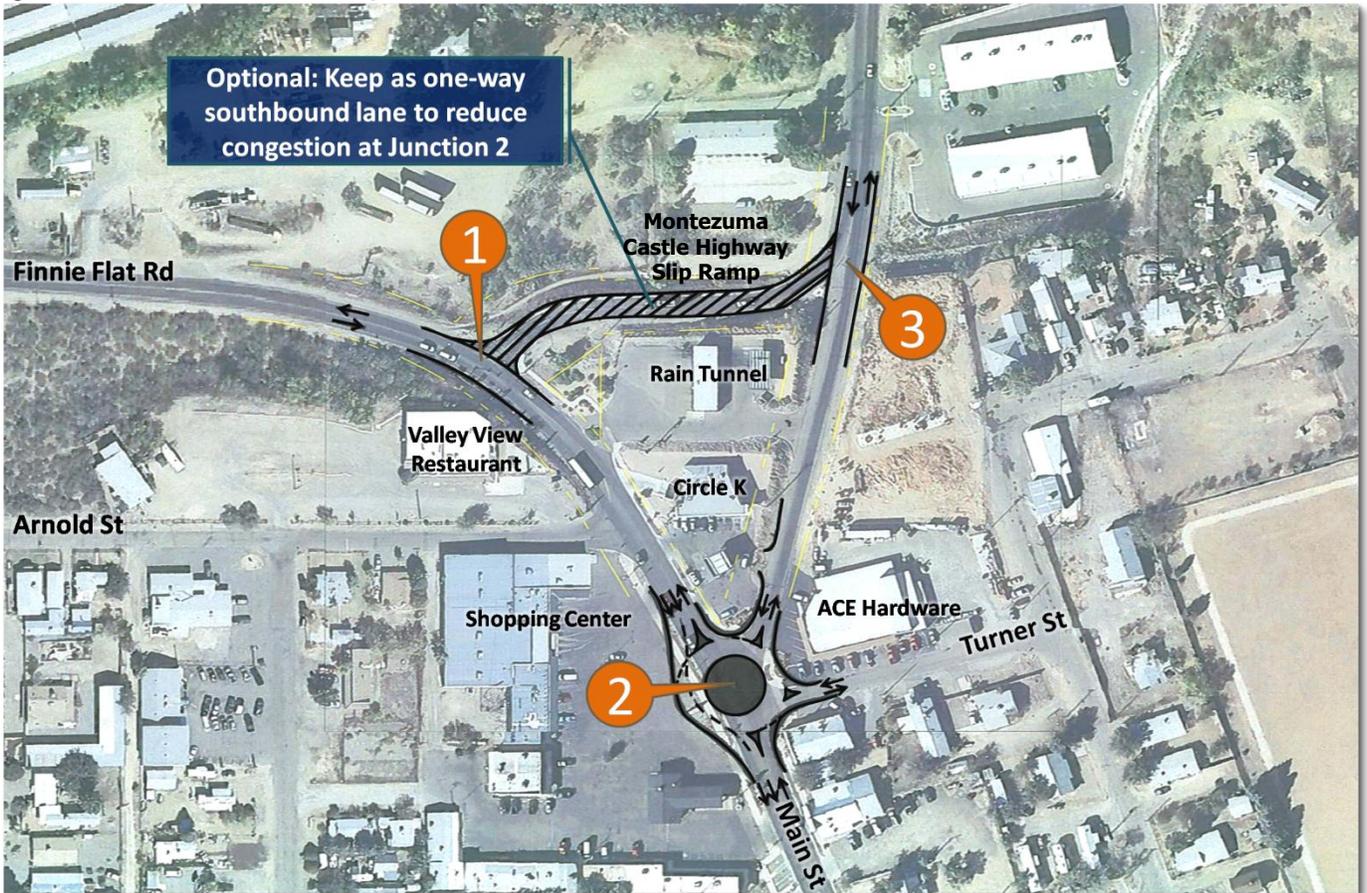
Advantages	Disadvantages
<ul style="list-style-type: none"> ✓ Finnie Flat Road and Main Street function as one continuous corridor ✓ Significant improvement in traffic circulation ✓ No additional right-of-way may be needed ✓ Improves safety for turning movements from Turner Street ✓ Opportunities for new sidewalks, bike lanes, and landscaping ✓ Potential for additional, safe parking at Circle K 	<ul style="list-style-type: none"> ✗ May still have left/right-hand turning issues from Arnold Street and Circle K ✗ Distance to northbound Montezuma Castle Highway from Main Street is slightly longer

Tri-Intersection Concept 3

Figure 5.3 illustrates Tri-Intersection Concept 3.

- Single-lane roundabout regulates traffic at Junction 2
- Montezuma Castle Highway Slip Ramp is closed (Optional: Slip ramp could remain open for southbound traffic to make a right-turn onto Finnie Flat Road)
- Montezuma Castle Highway at Tri-Intersection becomes two-way roadway

Figure 5.3. Tri-Intersection Concept 3



Advantages	Disadvantages
<ul style="list-style-type: none"> ✓ Reduces confusion to visitors as all directions lead to roundabout ✓ Improves safety for turning movements from Turner Street ✓ Opportunities for new sidewalks, bike lanes, and landscaping ✓ Optional opportunity to keep Montezuma Castle Highway Slip Ramp as a one-way southbound lane to reduce congestion at roundabout 	<ul style="list-style-type: none"> × Potential need for additional right-of-way acquisition from Shopping Center × Roundabout may become congested with increased future traffic volumes × Limits access to Shopping Center (optional exclusive driveway could be added at the roundabout to access the Shopping Center) × One driveway to Circle K may need to be closed and/or relocated

Evaluation of Results

Each concept was evaluated using the criteria outlined in Table 5.1. The preliminary Tri-Intersection concepts were presented to the TAC, stakeholders (business owners, utility companies, Town staff, and local agencies), and the general public. As discussed in the previous section, each Concept has advantages and disadvantages. Based on the evaluation results and input received, a general consensus was formed that:

- Concept 1 may still be too confusing for drivers and should not be considered for further review.
- Concept 2 was well received by the TAC and stakeholders; however, some members of the public expressed concern that closing the one-way Montezuma Castle Highway segment could affect access to the vacant lot on the east side of the intersection and possibly Circle K. This option was recommended for further review to address those concerns.
- Concept 3 was also well received by the TAC, stakeholders, and the general public; however, several members expressed concern about driving safely through the roundabout. This option would also require additional new right-of-way from the business owner on the west side of the intersection. This option was also recommended for further review.

Finnie Flat Road Corridor Vision

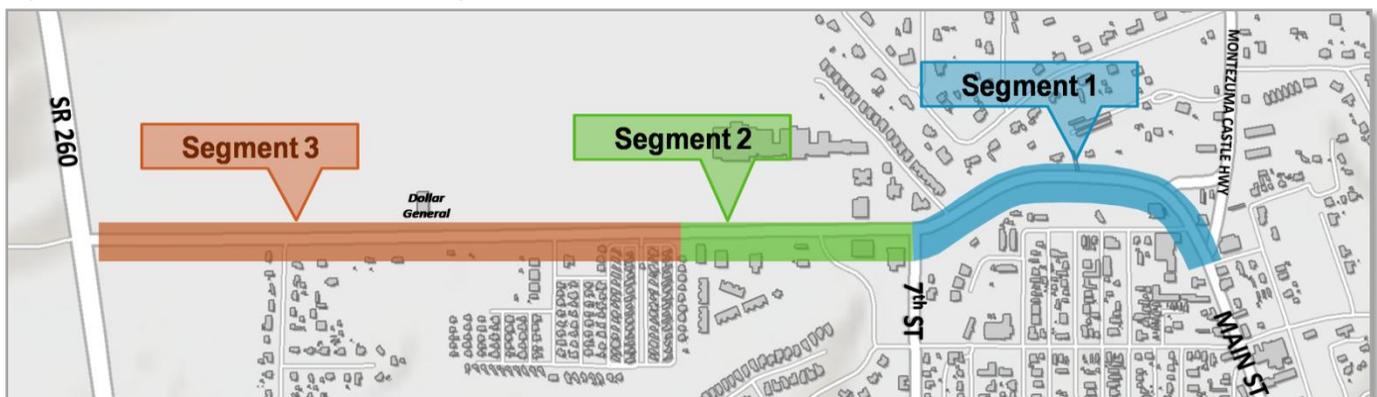
For the Finnie Flat Road Corridor, the primary goal was to develop a VISION that benefits the town residents, business owners, visitors, and future developers. The Corridor Vision will:

- Establish a streetscape design of the corridor to give it a unified identity/appearance.
- Include specific transportation improvements and strategies to address current and future needs for the next 5-, 10-, and 20- year timeframes.
- Accommodate transit, pedestrian, and bicycle modes.

The Corridor was divided in three segments (shown in Figure 5.4) based on current land use, planned land use, traffic volumes, existing right-of-way, developable land, and other pertinent characteristics.

- **Segment 1 (Tri-Intersection to 7th Street):** Both sides of Segment 1 are largely undeveloped with the exception of two parcels. Both sides of the street are primarily undevelopable due to topographical constraints. Right-of-way along this segment varies from 66 FT to 86 FT.
- **Segment 2 (7th Street to West of the Bashas' Shopping Complex):** Both sides of Segment 2 are fully developed with retail, commercial, and offices. Right-of-way along this segment is 86 FT.
- **Segment 3 (West of the Bashas' Shopping Complex to SR 260):** North side of Segment 3 is primarily undeveloped; while the south side is sparsely developed with residential use, light industrial use, and mobile homes. Most of this roadway segment has right-of-way in excess of 100 FT, with the exception of a small segment west of the Bashas' Shopping Complex that has only 66 FT of right-of-way.

Figure 5.4. Finnie Flat Road Corridor Segments



Streetscape concepts in use by other communities throughout the Country were researched to identify six streetscape concept examples that could be applicable to the three segments along the Finnie Flat Road corridor. "Complete Streets" concepts were also reviewed to designate streetscapes that addressed transit, pedestrian, and bicycle modes. Examples of potential streetscape concepts and their context include:

- **Streetscape Concept A (Town Center Commercial)**

- **Roadway Context:** Collector roadway, low traffic volumes, local traffic, aesthetically pleasing
- **Street Elements:** Two lanes, on-street parking, landscaped medians, crosswalks, decorative lighting, outdoor seating



Green Hills, TN

- **Streetscape Concept B (Suburban Mixed-Use)**

- **Roadway Context:** Collector roadway, moderate traffic volumes, local traffic
- **Street Elements:** Two lanes, center landscaped medians with left turn lanes, bike lanes, meandering sidewalks, landscaped buffer



Broomfield, CO

- **Streetscape Concept C (Urban Mixed-Use)**

- **Roadway Context:** Arterial roadway, high traffic volumes, regional and local traffic
- **Street Elements:** Four lanes, bike lanes, landscaped medians with left turn lanes, meandering sidewalk, landscaped buffer, pedestrian crosswalk with signage, street lighting in median



University Place, WA

- **Streetscape Concept D (Suburban Low-Density Mixed- Use)**

- **Roadway Context:** Collector roadway, moderate traffic volumes, local traffic
- **Street Elements:** Two lanes, center left turn lane, bike lanes, sidewalks, street lighting, pedestrian crosswalk



Vancouver, WA

- **Streetscape Concept E (Rural Main Street Commercial)**
 - **Roadway Context:** Collector roadway, low traffic volumes, local traffic
 - **Street Elements:** Two lanes, no center turn or median, left-turns allowed at roundabouts and intersections, bike lanes, sidewalks, landscaped buffer, decorative lighting, on-street parking, crosswalks



- **Streetscape Concept F (Suburban Residential)**
 - **Roadway Context:** Collector roadway, low traffic volumes, local traffic
 - **Street Elements:** Two lanes, center raised medians with left turn lanes, bike lanes, sidewalks, on-street parking



Evaluation of Results

TAC, stakeholders, and the public reviewed the six streetscape concept examples with the corresponding roadway and land use context and gave feedback prior to the development of customized streetscapes for the Finnie Flat Road Corridor. Feedback included the following:

- Street elements along the corridor should include bike lanes, medians, street lighting, and landscaping along the entire corridor.
- Development types along the corridor should include:
 - Office parks in the northeast corner of SR 260/Finnie Flat Road.
 - Neighborhood/strip commercial on the north side of Finnie Flat Road.
 - Open space and residential north of the corridor.
 - Some big box retail west of the Bashas' shopping complex.

6. PREFERRED IMPROVEMENT CONCEPTS

This chapter presents the preferred improvement concepts for Tri-Intersection and Finnie Flat Road corridor.

Preferred Tri-Intersection Concepts

Based on feedback received from the TAC, stakeholders, and public, and engineering analysis, Concepts 2 and 3 presented in Chapter 5 were identified as candidate preferred concepts. These two concepts were renamed as Concepts 2R and 3R and refined to address additional issues and concerns.

Preferred Tri-Intersection Concept 2R

This modified version of Concept 2, presented in Chapter 5, included:

- Montezuma Castle Highway Slip Ramp converted into a two-lane, two directional roadway.
- Montezuma Castle Highway (northbound) is a two-way roadway north of the Circle K driveway.
- Widened Finnie Flat Road/Montezuma Castle Highway Slip Ramp/Main Street Intersection to accommodate travel lanes and turning movements.
- Realignment of the Montezuma Castle Highway as it intersects Main Street.
- Reconfiguration of the Main Street/Turner Street Intersection.
- Traffic island at the Montezuma Castle Highway/Montezuma Castle Highway Slip Ramp to channelize traffic movements.
- Traffic signal at Finnie Flat Road/Montezuma Castle Highway Slip Ramp.
- Rumble strips on Montezuma Castle Highway preceding a Stop sign the Montezuma Castle Highway Slip Ramp intersection.
- New retaining walls north of Montezuma Castle Highway Slip Ramp, west of Main Street (north of Arnold Street), and east of Montezuma Castle Highway.
- Sidewalks located on the north side of the Montezuma Castle Highway Slip Ramp, both sides of Finnie Flat Road and Main Street, and on the east side of Montezuma Castle Highway.
- Pedestrian crosswalks on Finnie Flat Road, Montezuma Castle Highway, Turner Street, Arnold Street, and Montezuma Castle Highway Slip Ramp.
- Bike lanes incorporated throughout the intersection.

Figure 6.1 presents the layout of improvements for this concept, while Figure 6.2 presents examples of signage that can be utilized.

Advantages and Disadvantages

The following is a list of identified advantages and disadvantages of this concept compared to the no-build conditions presented in Chapter 4:

Advantages:

- No additional right-of-way needs to be acquired.
- Finnie Flat Road and Main Street function as one continuous corridor.
- Less confusing to motorists, especially tourists, traveling through the intersection.
- Traffic circulation improved.
- Alleviates turning movement conflicts and sight distance issues at the Main Street/Turner Street/Montezuma Castle Highway Intersection.

- Due to the widening of the Finnie Flat Road/Montezuma Castle Highway Slip Ramp/Main Street Intersection, school buses, large trucks, and emergency services are able to safely turn southbound onto Main Street.
- Stop sign at the Montezuma Castle Highway/Montezuma Castle Highway Slip Ramp Intersection forces drivers to slow down as they approach the intersection.
- Circle K and Rain Tunnel are accessible from two directions.
- Provides pedestrian and bicycle access from neighboring schools and residential areas to the intersection.
- Streetscaping creates an aesthetically pleasing appearance that matches and connects the intersection with the Town's downtown area.

Disadvantages:

- May still have left/right-hand turning and sight distance issues from Arnold Street and Circle K.
- Abrupt ending of the southbound lane on Montezuma Castle Highway at Circle K may be confusing to motorists.
- Some existing landscaping may need to be replaced.

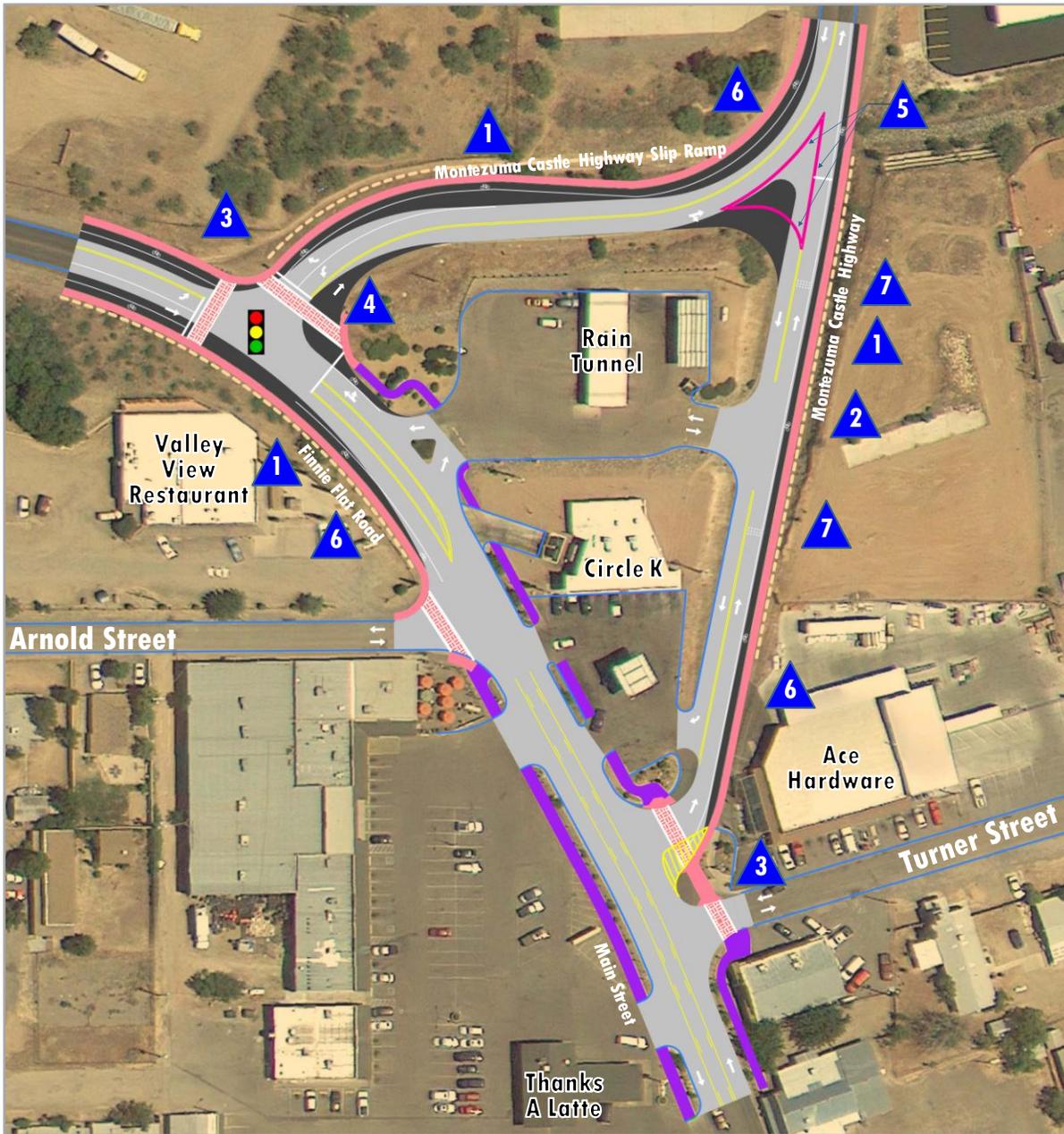
Evaluation of Results

As previously discussed, the Verde Valley Transportation Planning Organization's travel demand model was utilized to forecast traffic volumes for 2016, 2021, and 2031 based on the projected socioeconomic data. Similar to the no-build traffic analysis, the degree of traffic congestion is expressed in terms of LOS. Figures 6.3 - 6.8 illustrates the projected 2016, 2021, and 2031 intersection traffic volumes, lane configurations, LOS, and overall intersection performance of the Preferred Concept 2R, respectively.

As noted in the figures:

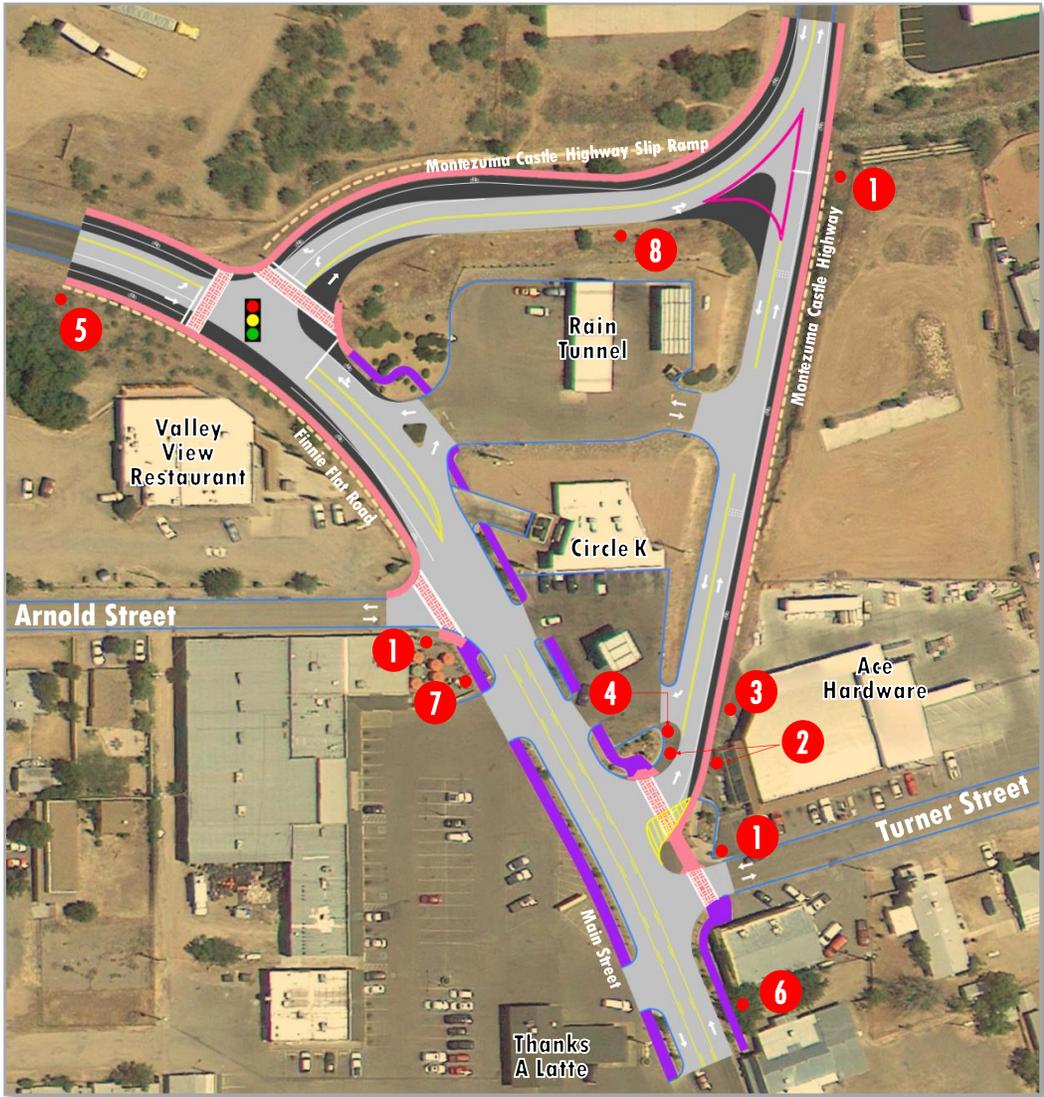
- Based on projected 2016 traffic volumes, the overall performance of all intersections is LOS B. The left and right turning movements from the Montezuma Castle Highway Slip Ramp and the left-hand turning movement from Finnie Flat Road have an approach LOS of C, but overall the intersection meets future needs.
- By 2021, the overall performance of all intersections is LOS B. The left and right turning movements from the Montezuma Castle Highway Slip Ramp and the left-hand turning movement from Finnie Flat Road have an approach LOS of C, but overall the intersection meets future needs.
- Based on projected 2031 traffic volumes, the overall performance of all intersections is LOS B. The left and right turning movements from the Montezuma Castle Highway Slip Ramp and the left-hand turning movement from Finnie Flat Road have an approach LOS of C, but overall the intersection meets future needs.

Figure 6.1. Preferred Tri-Intersection Concept 2R - Layout and Improvements



Proposed Improvements		Legend	
	New Retaining Wall		Existing Roadway/Mill and Repave
	Widen MCH to accommodate two-way traffic, bike lane, and sidewalk		New Pavement (Widening)
	Reconfigured Intersection		Direction of Traffic Flow
	Traffic Signal Modifications		Existing Sidewalk
	Raised Channelized Island		New Sidewalk
	New Bike Lanes		Crosswalk
	Rumble Strips		New Retaining Wall
			Bike Lane
			Signalized Intersection

Figure 6.2. Preferred Tri-Intersection Concept 2R - Signage Example



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Figure 6.3. Preferred Tri-Intersection Concept 2R - 2016 Traffic Volumes and Lane Configuration

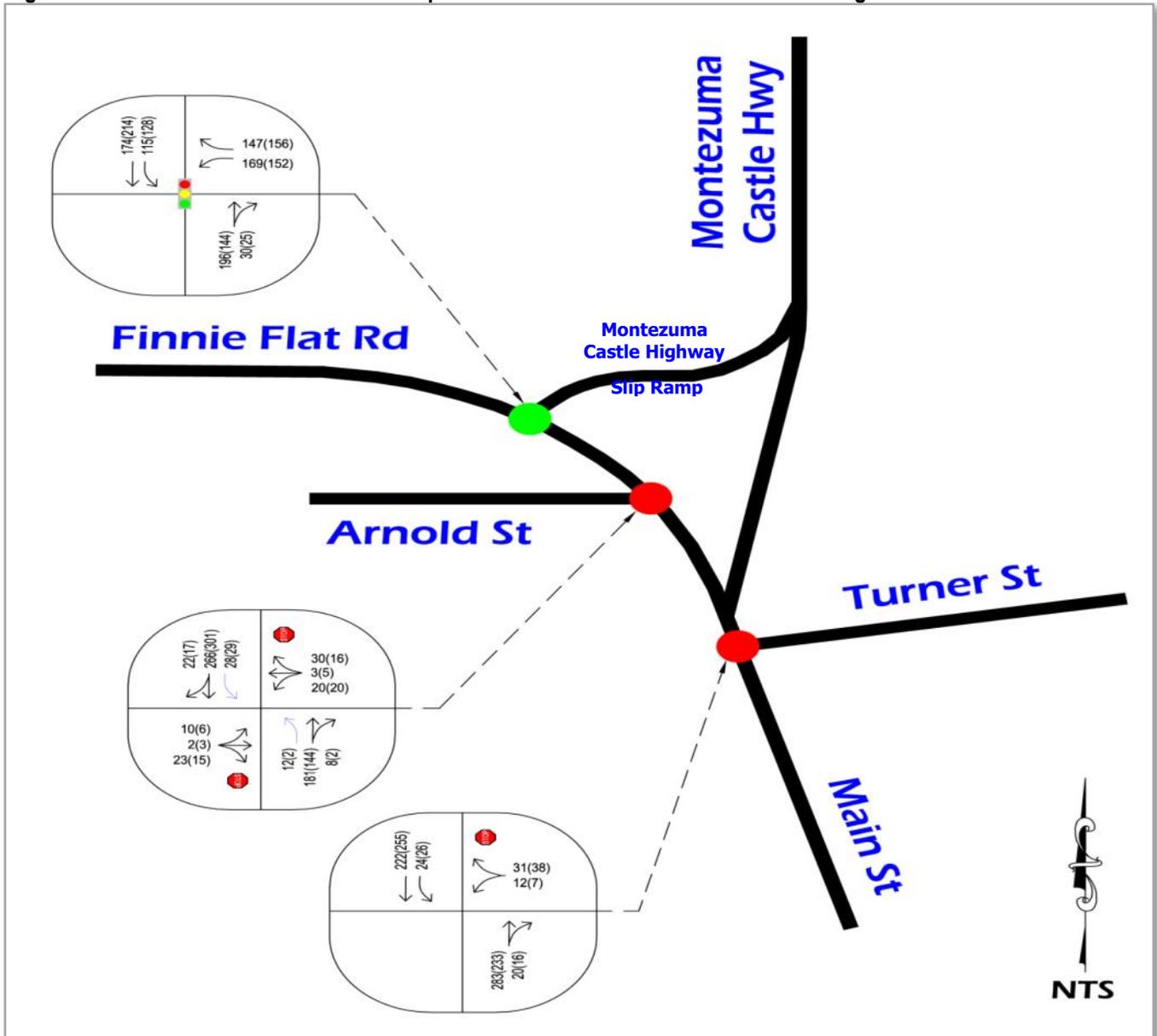
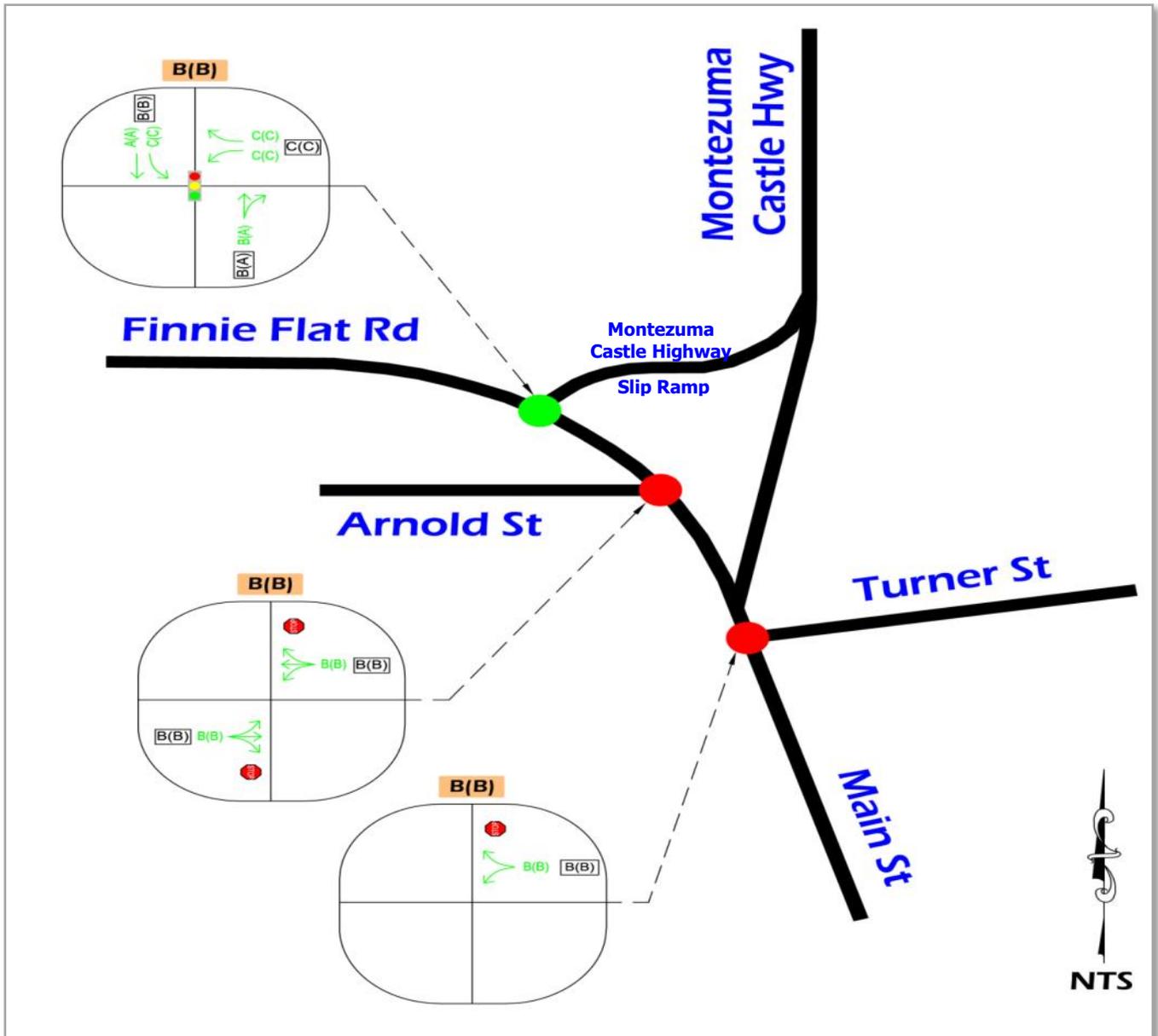
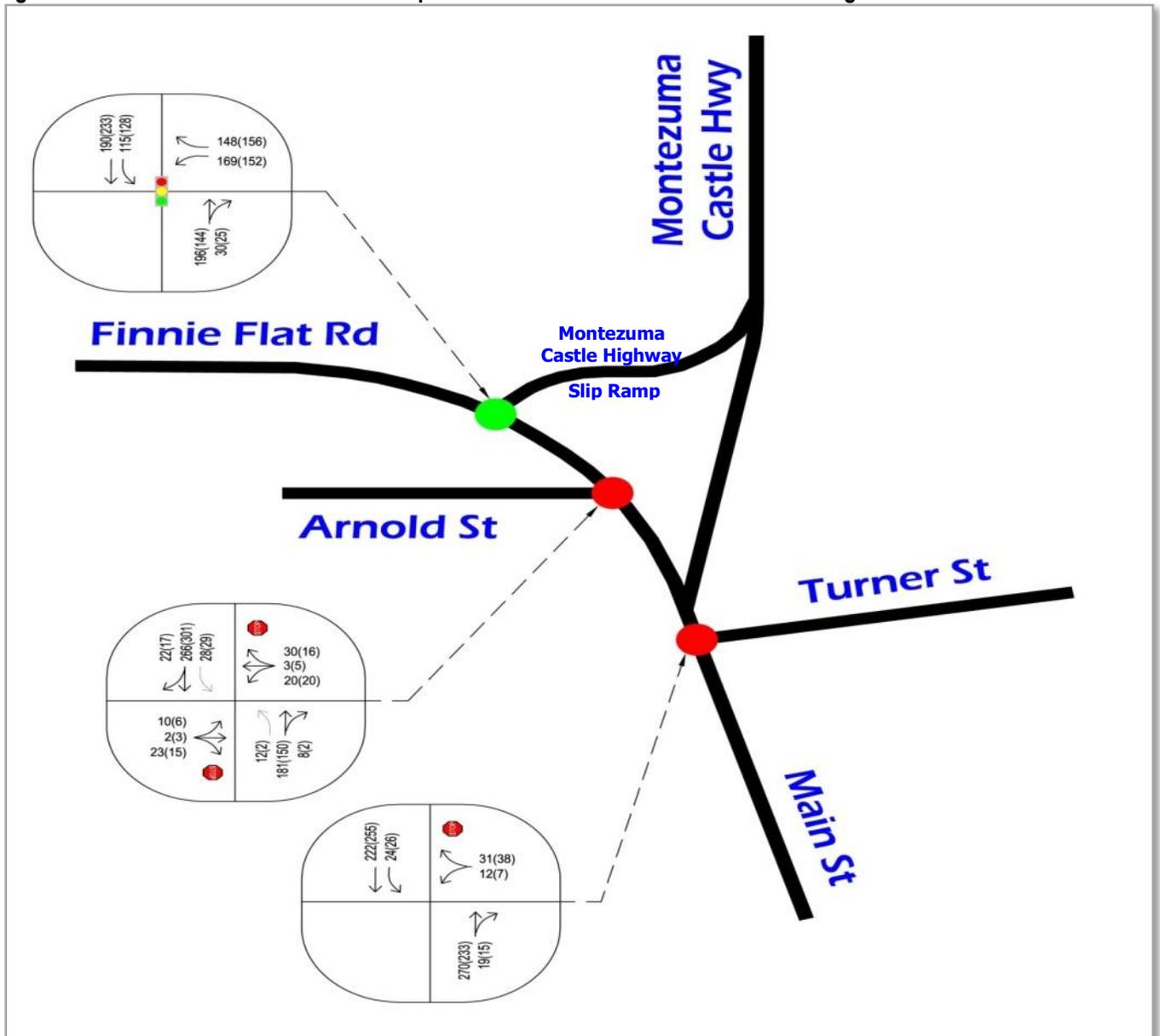


Figure 6.4. Preferred Tri-Intersection Concept 2R - 2016 Level of Service



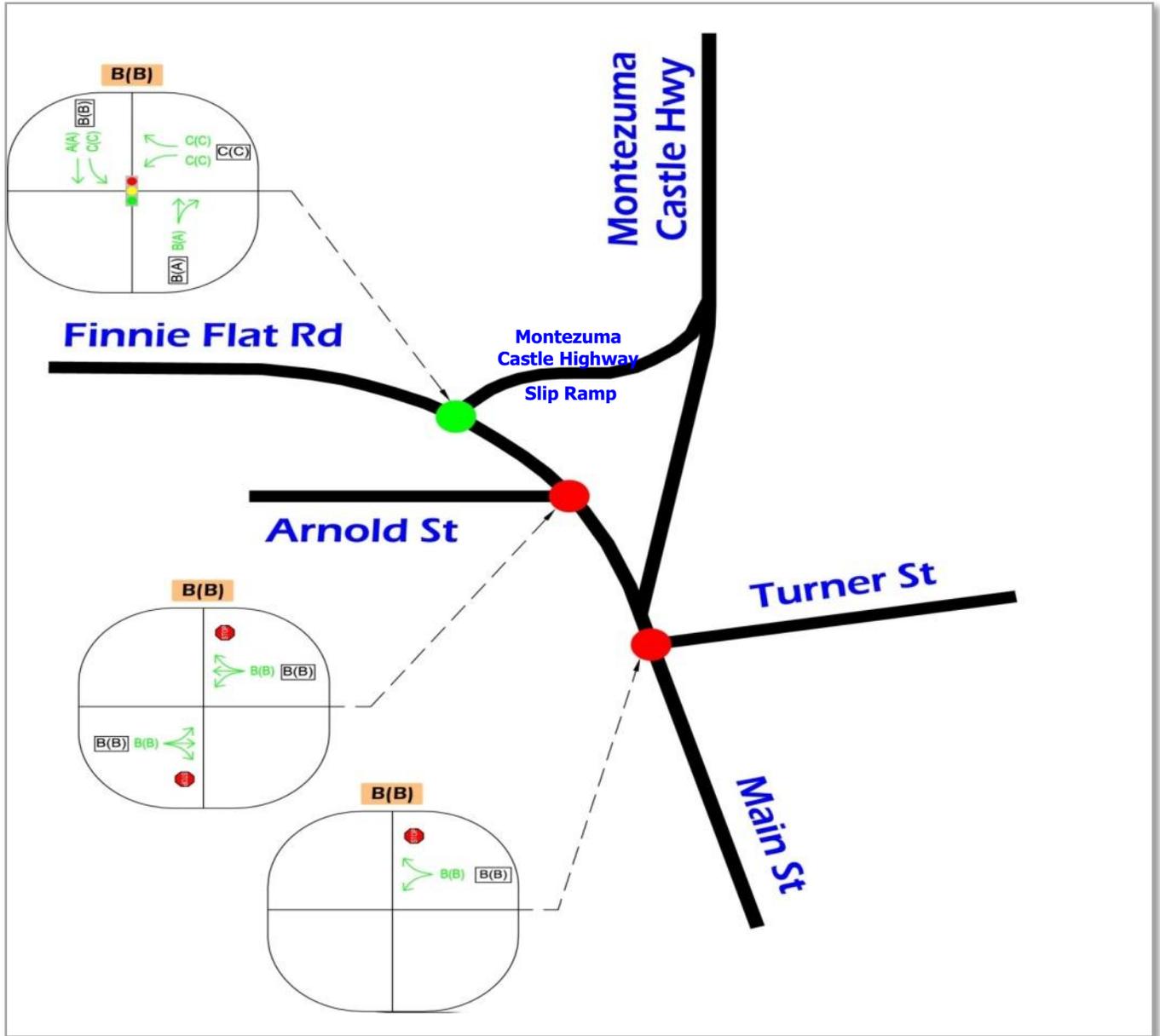
LEGEND	
	SIGNALIZED INTERSECTION
	UNSIGNALIZED INTERSECTION / DRIVEWAY
	INTERSECTION LEVEL-OF-SERVICE: MIDDAY(PM)
	APPROACH LOS: MIDDAY(PM)
	MOVEMENT LOS: MIDDAY(PM)
	TRAFFIC MOVEMENT DIRECTION

Figure 6.5. Preferred Tri-Intersection Concept 2R - 2021 Traffic Volumes and Lane Configuration



LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
	LEFT-TURN ONLY LANE
	TWO-WAY LEFT-TURN LANE
XXX(YYY)	PEAK-HOUR VOLUMES: MIDDAY(PM)

Figure 6.6. Preferred Tri-Intersection Concept 2R - 2021 Level of Service



LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
X(Y)	INTERSECTION LEVEL-OF-SERVICE: MIDDAY(PM)
X(Y)	APPROACH LOS: MIDDAY(PM)
↔	MOVEMENT LOS: MIDDAY(PM)
↗	TRAFFIC MOVEMENT DIRECTION

Figure 6.7. Preferred Tri-Intersection Concept 2R - 2031 Traffic Volumes and Lane Configuration

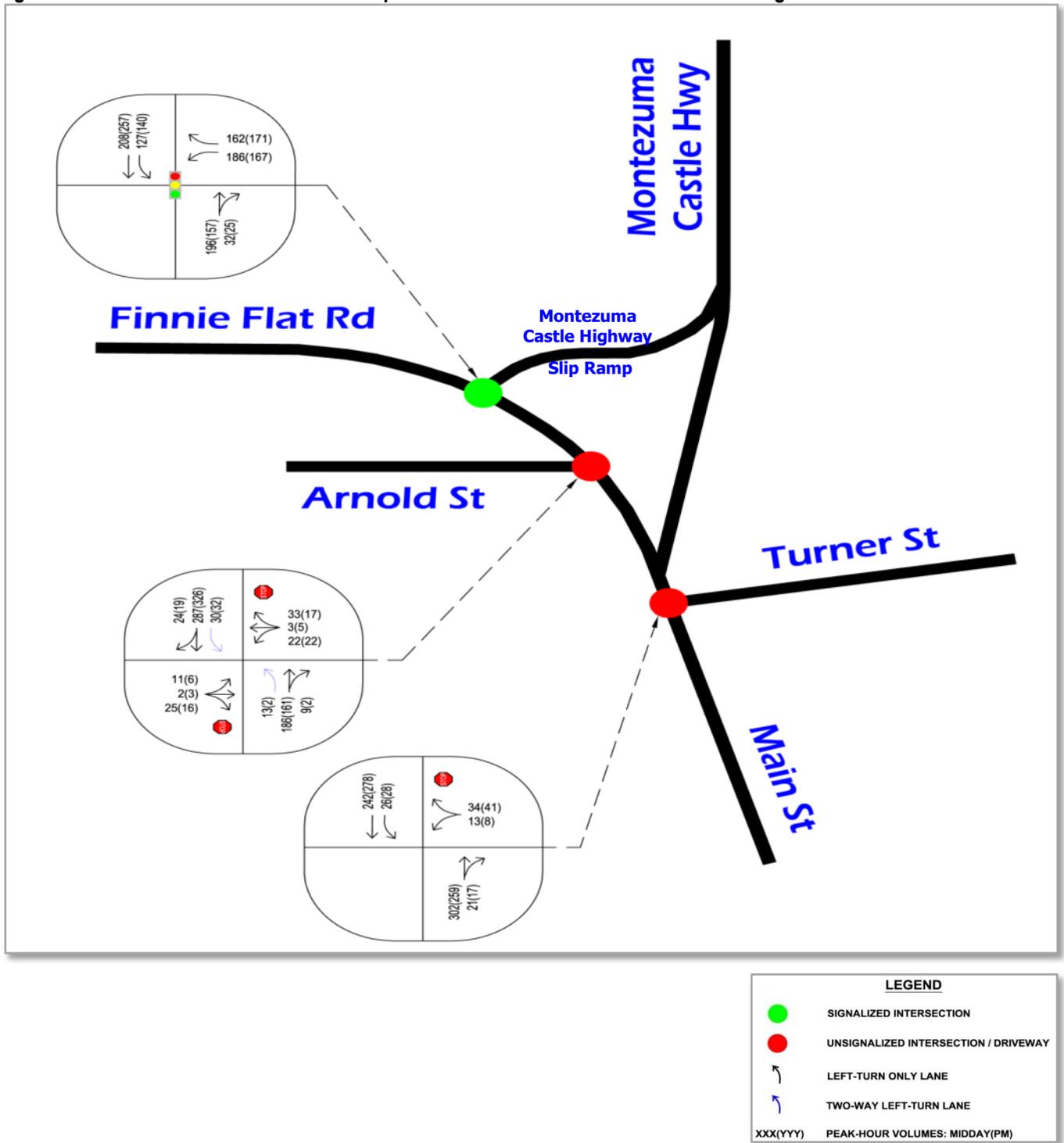
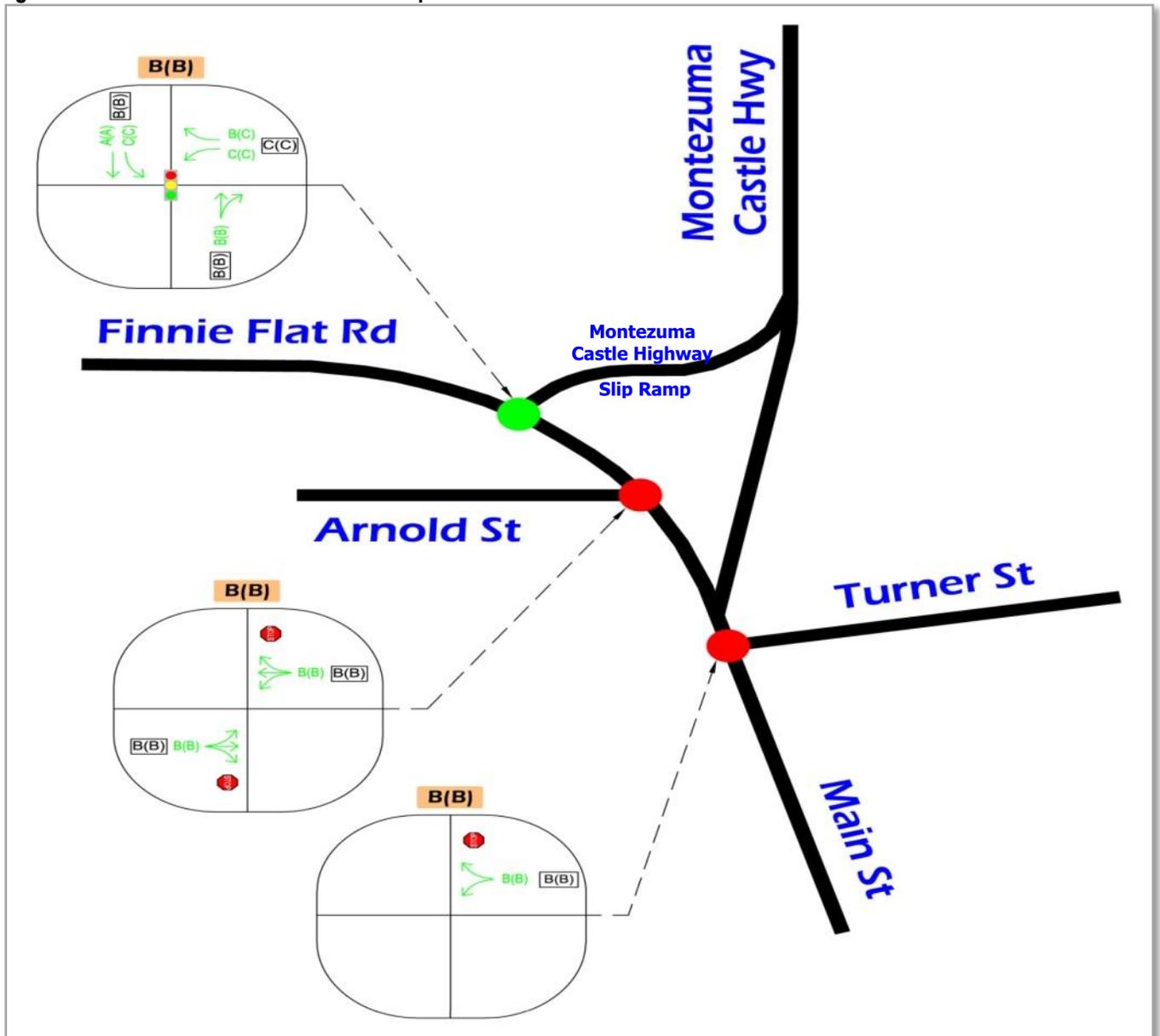


Figure 6.8. Preferred Tri-Intersection Concept 2R - 2031 Level of Service



LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
X(Y)	INTERSECTION LEVEL-OF-SERVICE: MIDDAY(PM)
X(Y)	APPROACH LOS: MIDDAY(PM)
↗	MOVEMENT LOS: MIDDAY(PM)
↗	TRAFFIC MOVEMENT DIRECTION

Preferred Tri-Intersection Concept 3R

This modified version of Concept 3, presented in Chapter 5, included:

- Reconfiguration of Main Street/Montezuma Castle Highway/Turner Street Intersection into a one-lane roundabout.
- Widened Finnie Flat Road/Montezuma Castle Highway Slip Ramp/Main Street Intersection to accommodate travel lanes and turning movements.
- Montezuma Castle Highway is reconfigured into a two-lane, two directional roadway.
- New driveway entrance into the shopping complex on the west side of Main Street from the roundabout.
- Raised traffic islands, channelize traffic in and out of the roundabout.
- Modified traffic signal at Finnie Flat Road/Montezuma Castle Highway Slip Ramp/Main Street Intersection.
- New retaining walls north of Montezuma Castle Highway Slip Ramp, west of Main Street (north of Arnold Street), and east of Montezuma Castle Highway.
- Sidewalks located at the roundabout, on the north side of the Montezuma Castle Highway Slip Ramp, both sides of Finnie Flat Road and Main Street, and on the east side of Montezuma Castle Highway.
- Pedestrian crosswalks incorporated into the roundabout, and on Finnie Flat Road, Arnold Street, and Montezuma Castle Highway Slip Ramp.
- Bike lanes incorporated throughout the intersection.

Figure 6.9 presents the layout of improvements for this concept, while Figure 6.10 presents examples of signage that can be utilized.

Advantages and Disadvantages

The following is a list of identified advantages and disadvantages of this concept compared to the no-build conditions presented in Chapter 4:

Advantages:

- Finnie Flat Road and Main Street function as one continuous corridor.
- Less confusing to motorists, especially tourists, traveling through the intersection.
- Traffic circulation improved.
- Motorists traveling southbound from Montezuma Castle Highway can have the option of utilizing the roundabout or the Slip Ramp to access Finnie Flat Road/Main Street.
- Alleviates turning movement conflicts and sight distance issues at the Main Street/Turner Street/Montezuma Castle Highway Intersection.
- Due to the widening of the Finnie Flat Road/Montezuma Castle Highway Slip Ramp/Main Street Intersection, school buses, large trucks, and emergency services are able to safely turn southbound onto Main Street.
- Circle K and Rain Tunnel are accessible from two directions.
- The shopping complex on the west side of Main Street has a designated entrance that may attract patrons to the complex.
- Provides pedestrian and bicycle access from neighboring schools and residential areas to the intersection.

- Streetscaping creates an aesthetically pleasing appearance that matches and connects the intersection with the Town's downtown area.

Disadvantages:

- Approximately 7,000 square feet of right-of-way will need to be acquired from the shopping complex on the west side of Main Street.
- Large trucks may have difficulty maneuvering through the roundabout; however, they may utilize the 10 FT apron.
- Ace Hardware and Camp Verde Realty will lose some parking spaces at their business.
- Gas trucks delivering fuel to Circle K may have difficulty entering and exiting the business.
- May still have left/right-hand turning and sight distance issues from Arnold Street and Circle K.
- Northern driveway to the shopping complex on the west side of Main Street will need to be closed; however, this will help to create additional parking spaces.
- Existing landscaping will need to be replaced.

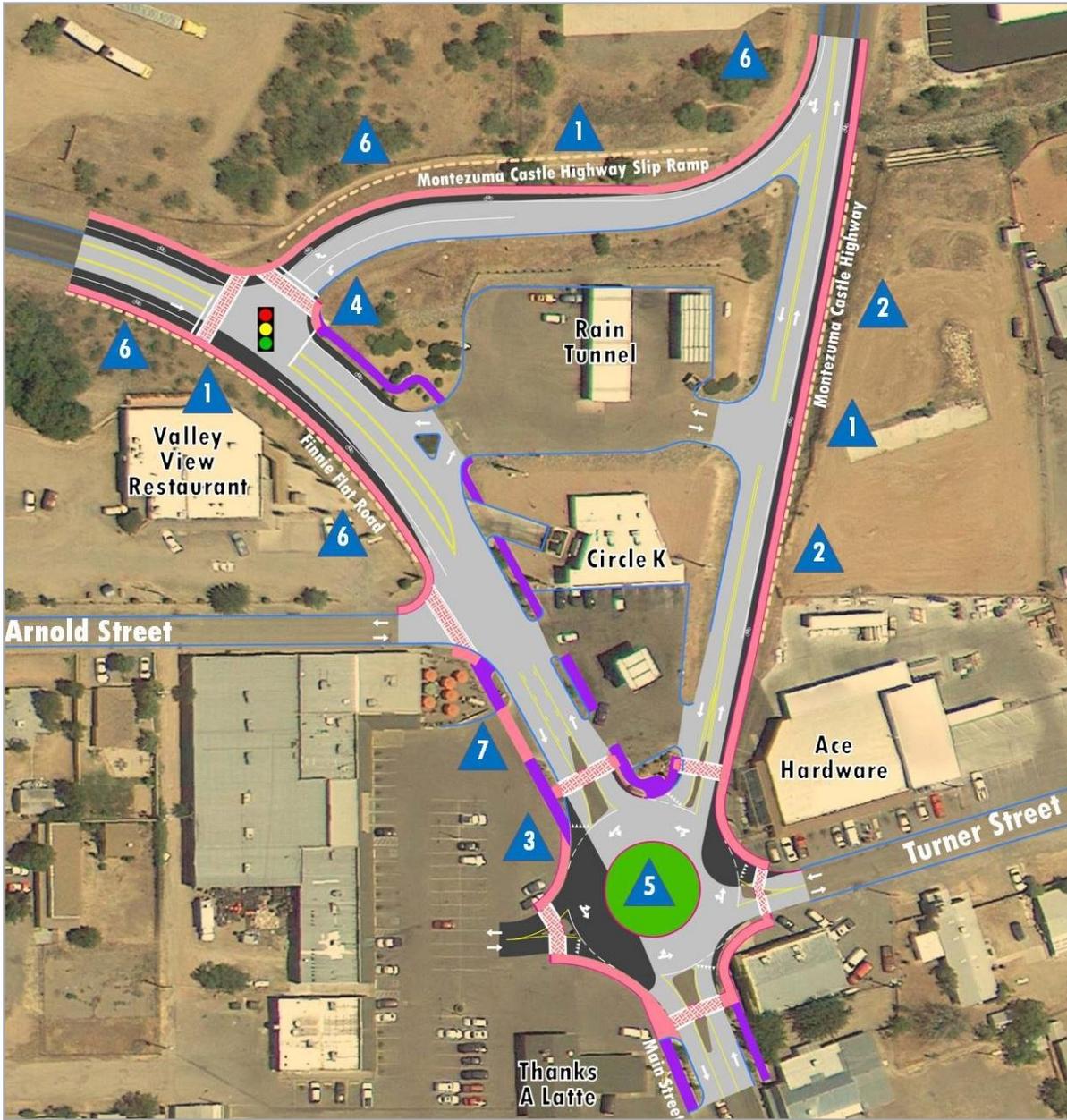
Evaluation of Results

The Verde Valley Transportation Planning Organization's travel demand model was utilized to forecast traffic volumes for 2016, 2021, and 2031 in addition to projected socioeconomic data. Similar to the no-build traffic analysis, the degree of traffic congestion is expressed in terms of LOS. Figures 6.11 - 6.16 illustrate the projected 2016, 2021, and 2031 intersection traffic volumes, lane configurations, LOS, and overall intersection performance of the Preferred Concept 2R, respectively.

As noted in the figures:

- Based on projected 2016 traffic volumes, the overall performance and approach of all intersections is LOS B or higher.
- By 2021, the overall performance and approach of all intersections is LOS B or higher.
- Based on projected 2031 traffic volumes, the overall performance and approach of all intersections is LOS B or higher.

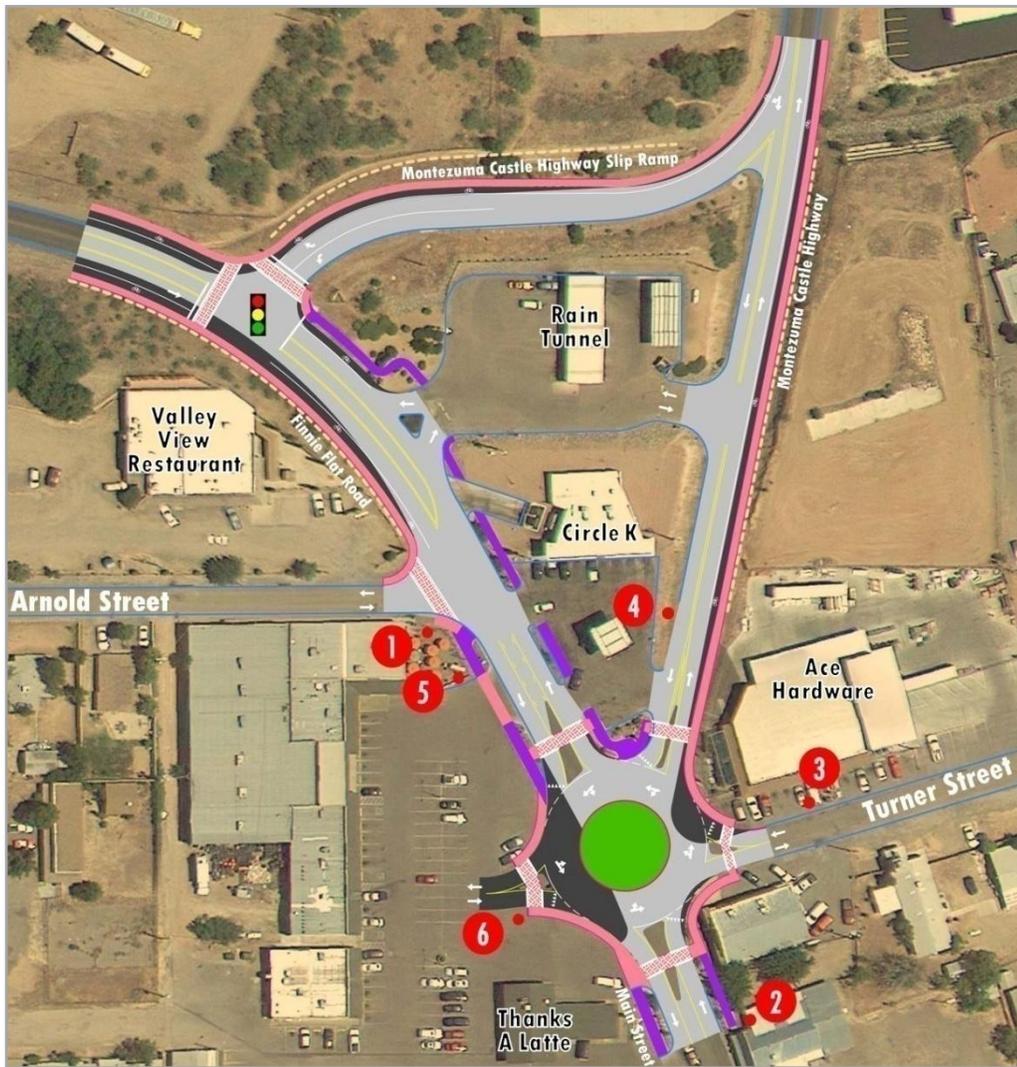
Figure 6.9. Preferred Tri-Intersection Concept 3R - Layout and Improvements



Proposed Improvements	
1	New Retaining Wall
2	Widen MCH to accommodate two-way traffic, bike lane, and sidewalk
3	Reconfigured Intersection
4	Traffic Signal Modifications
5	Construct Roundabout
6	New Bike Lanes
7	Close Driveway

Legend	
	Existing Roadway/Mill and Repave
	New Pavement (Widening)
	Direction of Traffic Flow
	Existing Sidewalk
	New Sidewalk
	Crosswalk
	New Retaining Wall
	Bike Lane
	Signalized Intersection

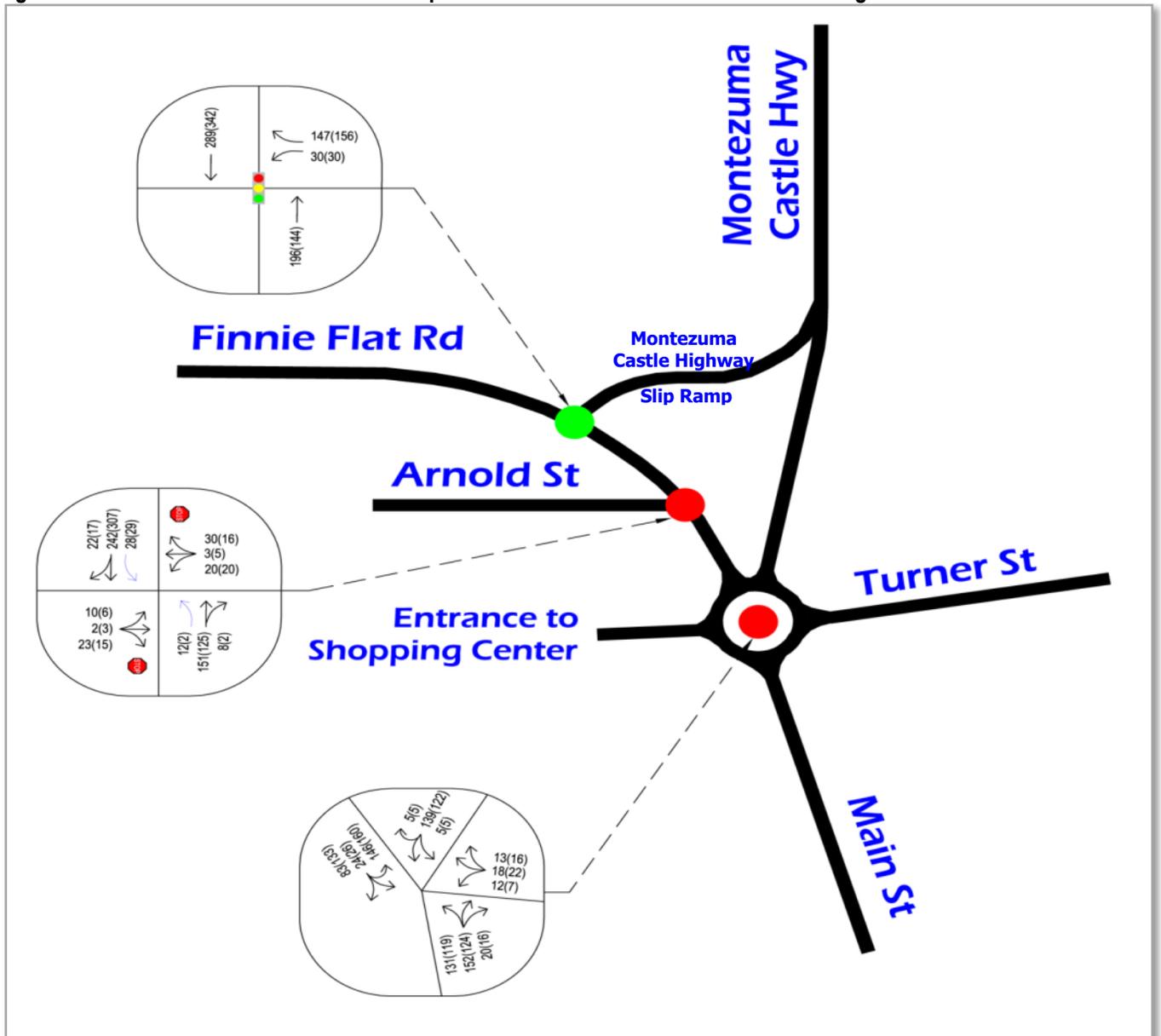
Figure 6.10. Preferred Tri-Intersection Concept 3R - Signage Example



Proposed Signs

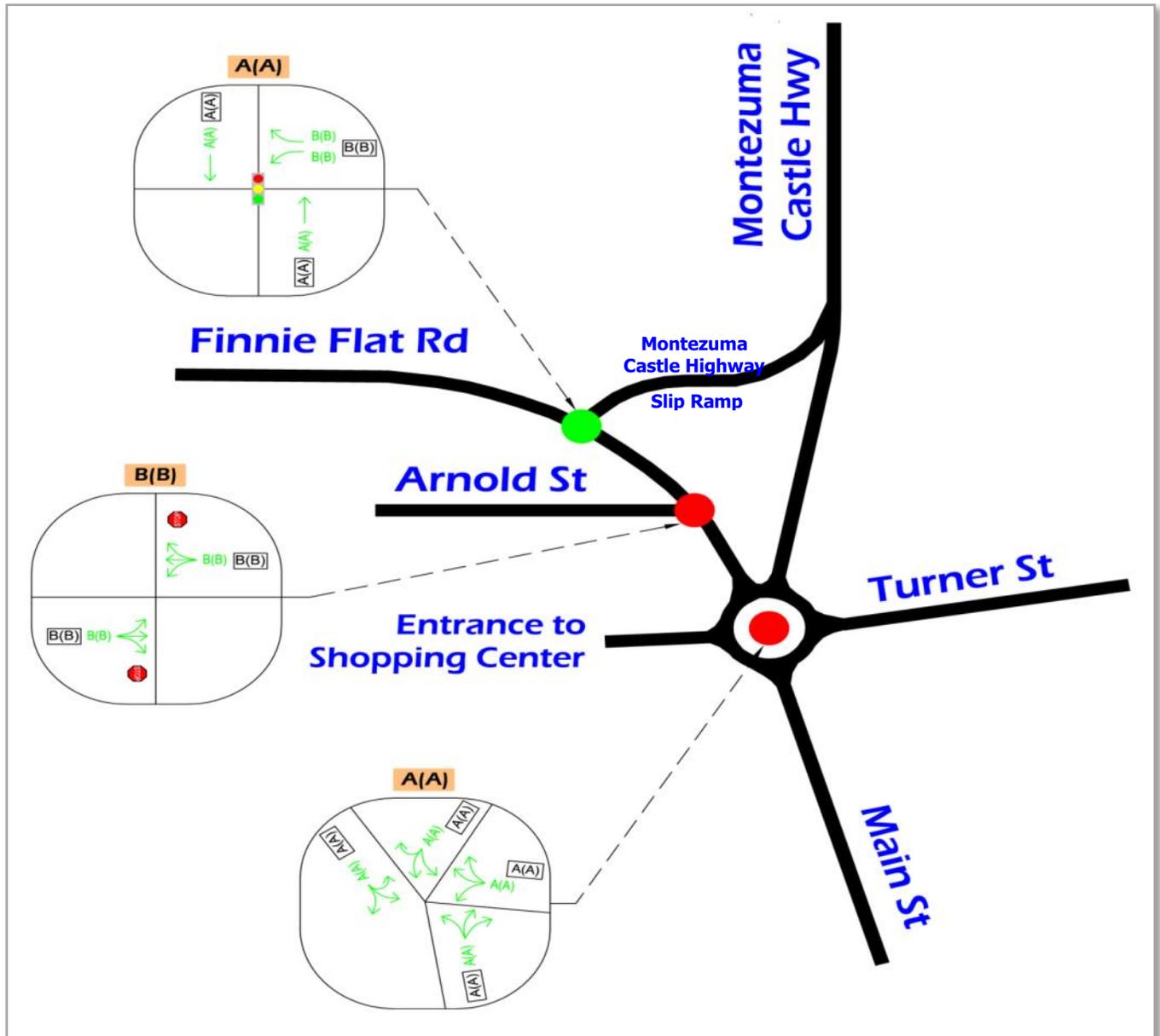
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Figure 6.11. Preferred Tri-Intersection Concept 3R - 2016 Traffic Volumes and Lane Configuration



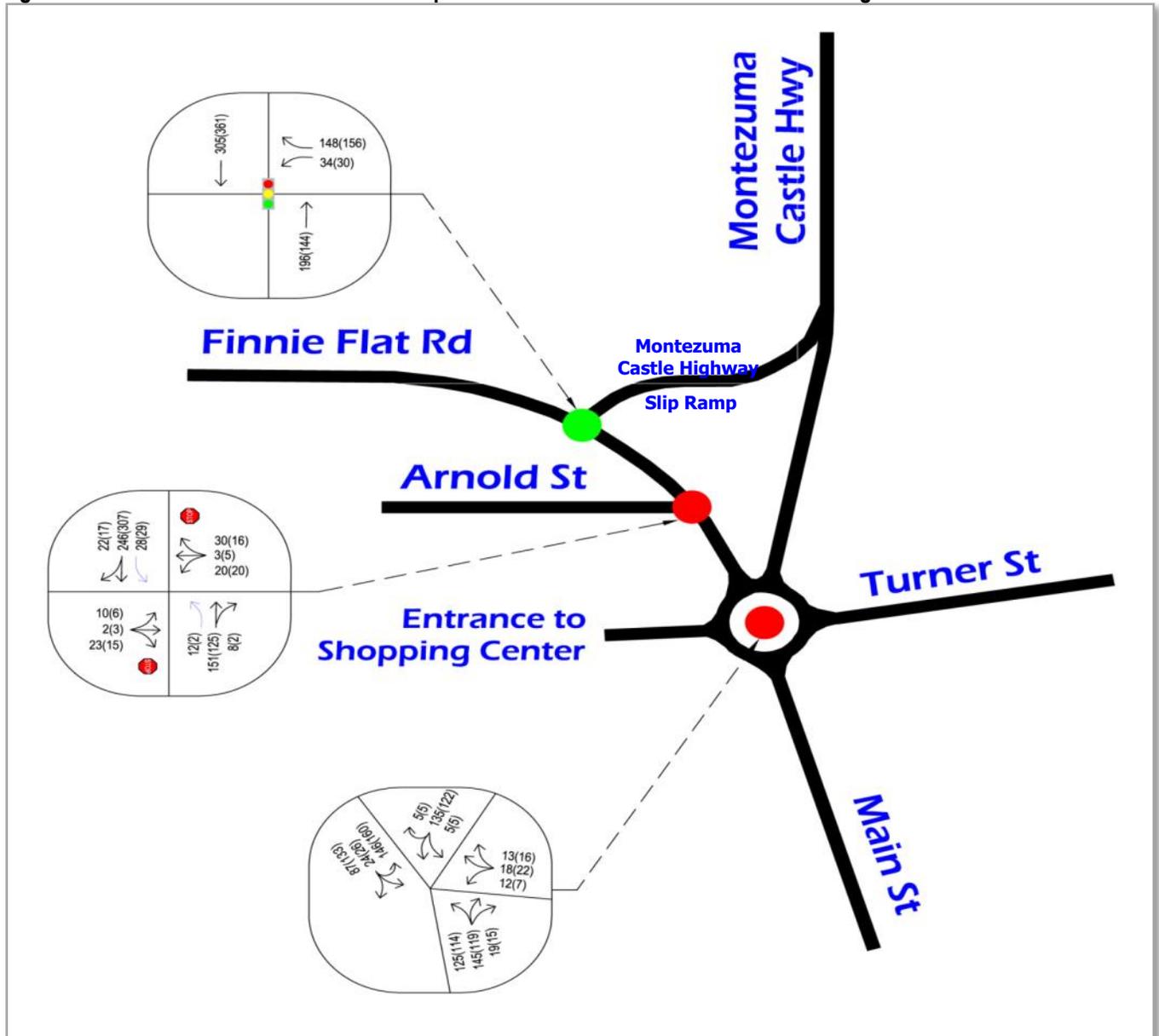
LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
	LEFT-TURN ONLY LANE
	TWO-WAY LEFT-TURN LANE
XXX(YYY)	PEAK-HOUR VOLUMES: MIDDAY(PM)

Figure 6.12. Preferred Tri-Intersection Concept 3R - 2016 Level of Service



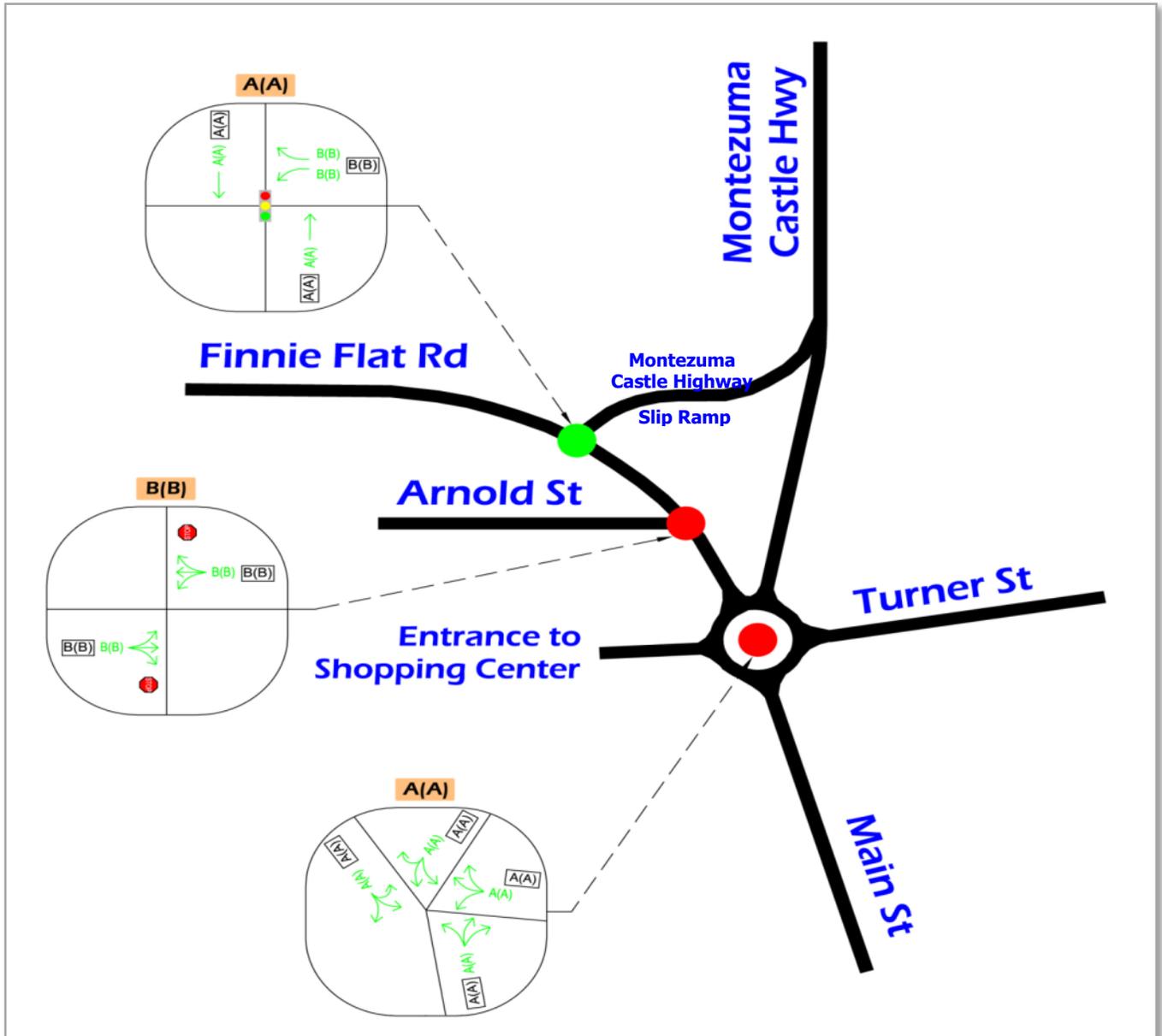
LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
A(A)	INTERSECTION LEVEL-OF-SERVICE: MIDDAY(PM)
X(Y)	APPROACH LOS: MIDDAY(PM)
X(Y)	MOVEMENT LOS: MIDDAY(PM)
↶	TRAFFIC MOVEMENT DIRECTION

Figure 6.13. Preferred Tri-Intersection Concept 3R - 2021 Traffic Volumes and Lane Configuration



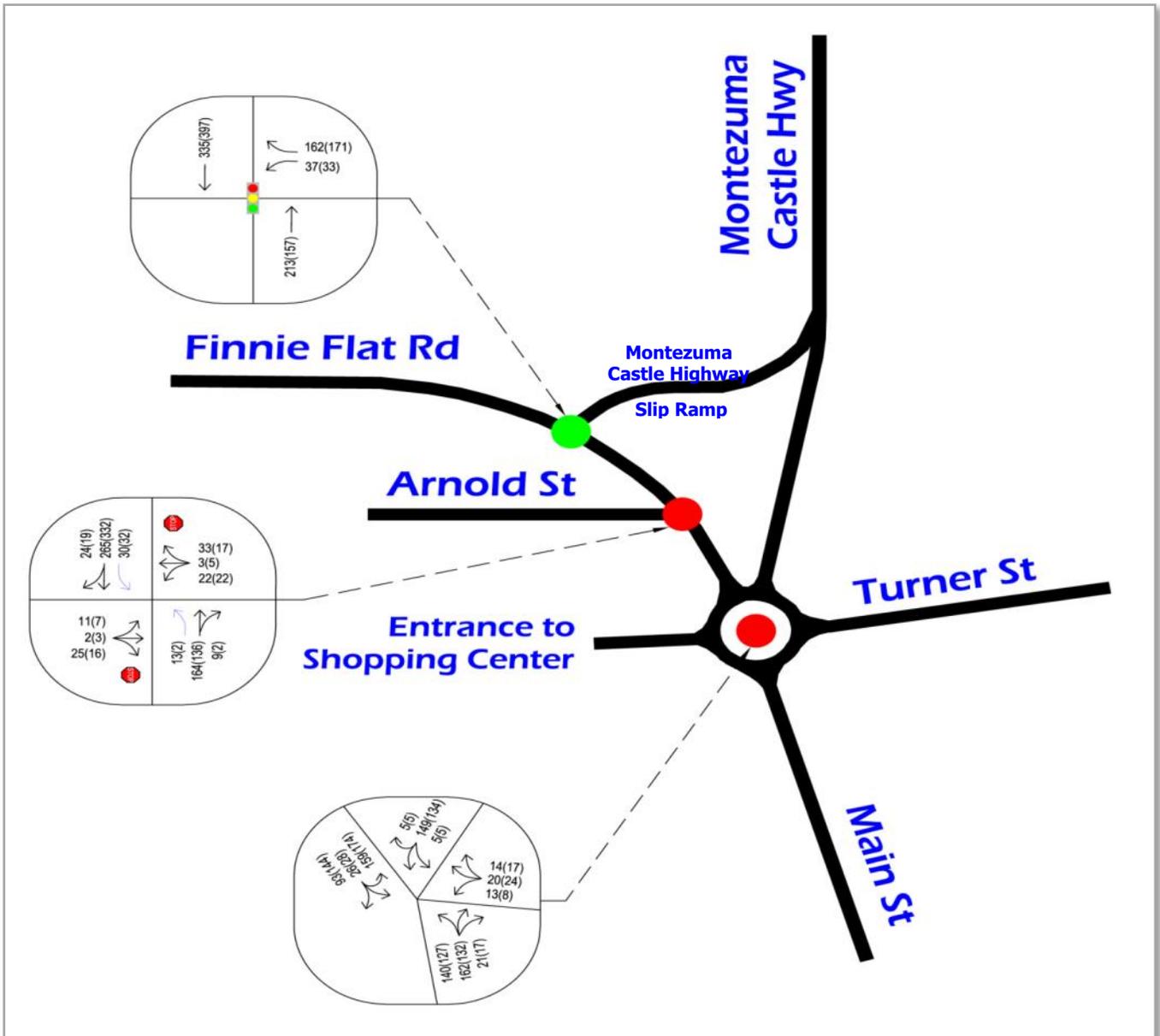
LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
	LEFT-TURN ONLY LANE
	TWO-WAY LEFT-TURN LANE
XXX(YYY)	PEAK-HOUR VOLUMES: MIDDAY(PM)

Figure 6.14. Preferred Tri-Intersection Concept 3R - 2021 Level of Service



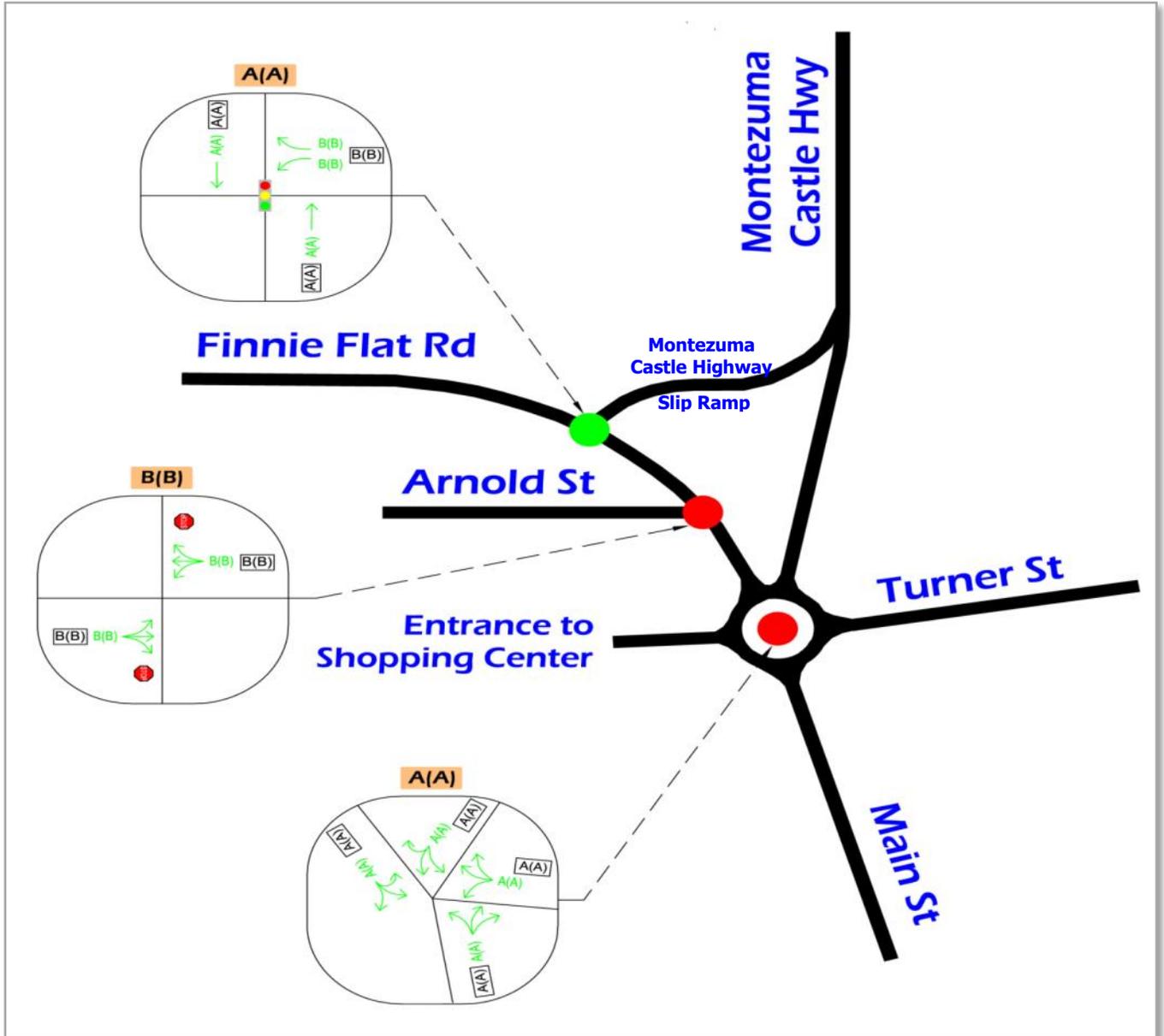
LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
A(A)	INTERSECTION LEVEL-OF-SERVICE: MIDDAY(PM)
X(Y)	APPROACH LOS: MIDDAY(PM)
X(Y)	MOVEMENT LOS: MIDDAY(PM)
↔	TRAFFIC MOVEMENT DIRECTION

Figure 6.15. Preferred Tri-Intersection Concept 3R - 2031 Traffic Volumes and Lane Configuration



LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
	LEFT-TURN ONLY LANE
	TWO-WAY LEFT-TURN LANE
XXX(YYY)	PEAK-HOUR VOLUMES: MIDDAY(PM)

Figure 6.16. Preferred Tri-Intersection Concept 3R - 2031 Level of Service



LEGEND	
●	SIGNALIZED INTERSECTION
●	UNSIGNALIZED INTERSECTION / DRIVEWAY
X(Y)	INTERSECTION LEVEL-OF-SERVICE: MIDDAY(PM)
X(Y)	APPROACH LOS: MIDDAY(PM)
X(Y)	MOVEMENT LOS: MIDDAY(PM)
→	TRAFFIC MOVEMENT DIRECTION

Preferred Finnie Flat Road Corridor Concepts

Based on feedback received from the TAC, stakeholders, and public, it was determined that the streetscape concepts developed for the Finnie Flat Road Corridor should include the following elements:

- Complements the community's character, values, and aesthetics;
- Supports current and planned land uses;
- Accommodates build-out traffic volume conditions;
- Promotes safety and mobility;
- Supports transit, pedestrian, and bicycle modes of transportation; and
- Minimizes right-of-way impacts.

A comprehensive, two-phase streetscape concept was developed that incorporated the above elements and could seamlessly be implemented by the Town as growth develops along the Corridor. The following section provides a detailed description of the proposed streetscape concepts for each segment of the Finnie Flat Road Corridor. Appendix A provides a detailed layout of the complete corridor using the streetscape concepts discussed below.

Finnie Flat Road Corridor (Segment 1): Tri-Intersection to 7th Street

This segment of Finnie Flat Road is mostly undevelopable due to topographical constraints. Traffic volumes on this segment of Finnie Flat Road carries approximately 7,000 vehicles per day by Year 2031, which requires only one travel lane in each direction to meet traffic demand. Figure 6.17 presents the "Complete Streets" compatible streetscape option proposed for this segment. The streetscape requires a roadway cross-section width of 66 FT.

As illustrated in the figure, Segment 1 will have:

- One 12 FT travel lane in both directions
- 13 FT raised median with left turn bays
- 5 FT sidewalk in both directions
- 5.5 FT bike lane in both directions
- 4 FT landscape buffer on both sides of road
- Street lighting, bus bays, and pedestrian crosswalks at appropriate intervals

Finnie Flat Road Corridor (Segment 2): 7th Street to West of the Bashas' Shopping Complex

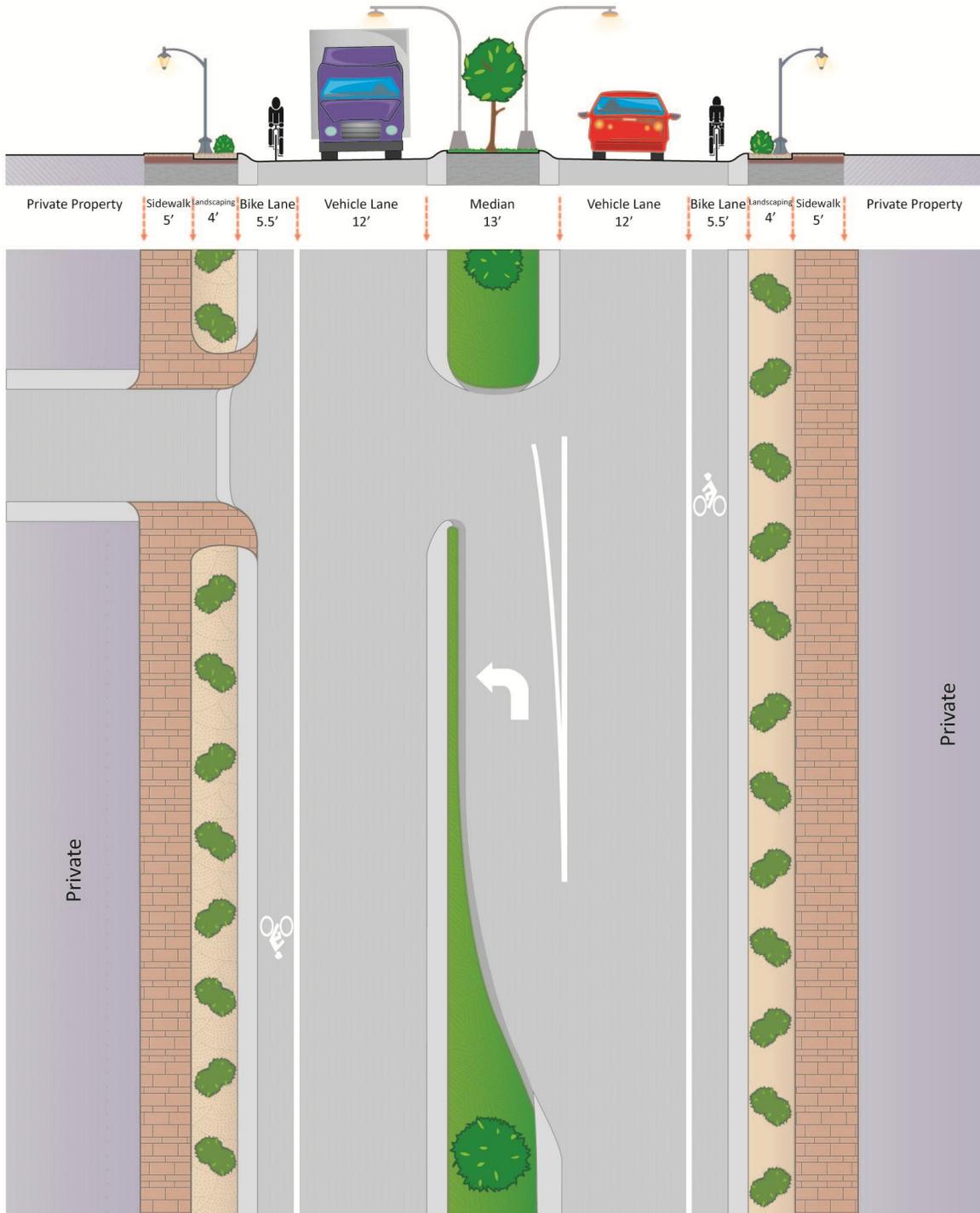
This segment of Finnie Flat Road is mostly built-out and has little potential for additional development. Traffic volumes on this segment of Finnie Flat Road range from 7,900 to 9,200 vehicles per day by Year 2031, which requires only one travel lane in each direction to meet traffic demand. Figure 6.18 displays the "Complete Streets" compatible streetscape option proposed for this segment. The streetscape requires a roadway cross-section width of 80 FT.

As illustrated in the Figure, Segment 2 will have:

- One 12 FT travel lane in both directions
- 15 FT center two-way left turn lane
- 6 FT sidewalk in both directions

- 5.5 FT bike lane in both directions
- 9 FT landscape buffer on both sides of the road
- Street lighting, bus bays, and pedestrian crosswalks at appropriate intervals

Figure 6.17. Preferred Finnie Flat Road Streetscape Concept - Segment 1



Finnie Flat Road Corridor (Segment 3): West of the Bashas' Shopping Complex to SR 260

A transitional "complete streets" compatible streetscape option that utilizes a 100 FT roadway cross-section is proposed for this segment. To accommodate future traffic demand, it is recommended to develop the corridor in two stages - the initial stage and by build-out. Projected traffic volumes in the year 2031 range between 7,000 and 9,000 vehicles per day, which warrants only one travel lane in each direction; however, two lanes will be needed at build-out to meet the increase traffic volumes of 9,600 to 11,400 vehicles per day.

To accommodate build-out traffic demand, the initial stage streetscape can be altered by converting the 12 FT temporary landscape buffer to a travel lane. Figure 6.19 illustrates the proposed streetscape for the initial stage for segment 3, while Figure 6.20 shows the proposed streetscape for the build-out stage.

As illustrated in the figure, Segment 3 will have:

- One 12 FT travel lane in both directions
- 15 FT raised median with turn lanes
- 6 FT sidewalk in both directions
- 5.5 FT bike lane in both directions
- 12 FT temporary dry landscaping buffer on both sides of road (*this will be converted to a travel lane in the build-out stage*)
- 7 FT permanent landscape buffer on both sides of the road
- Street lighting, bus bays, and pedestrian crosswalks at appropriate intervals

Figure 6.19. Preferred Finnie Flat Road Streetscape Concept - Segment 3 Initial Stage

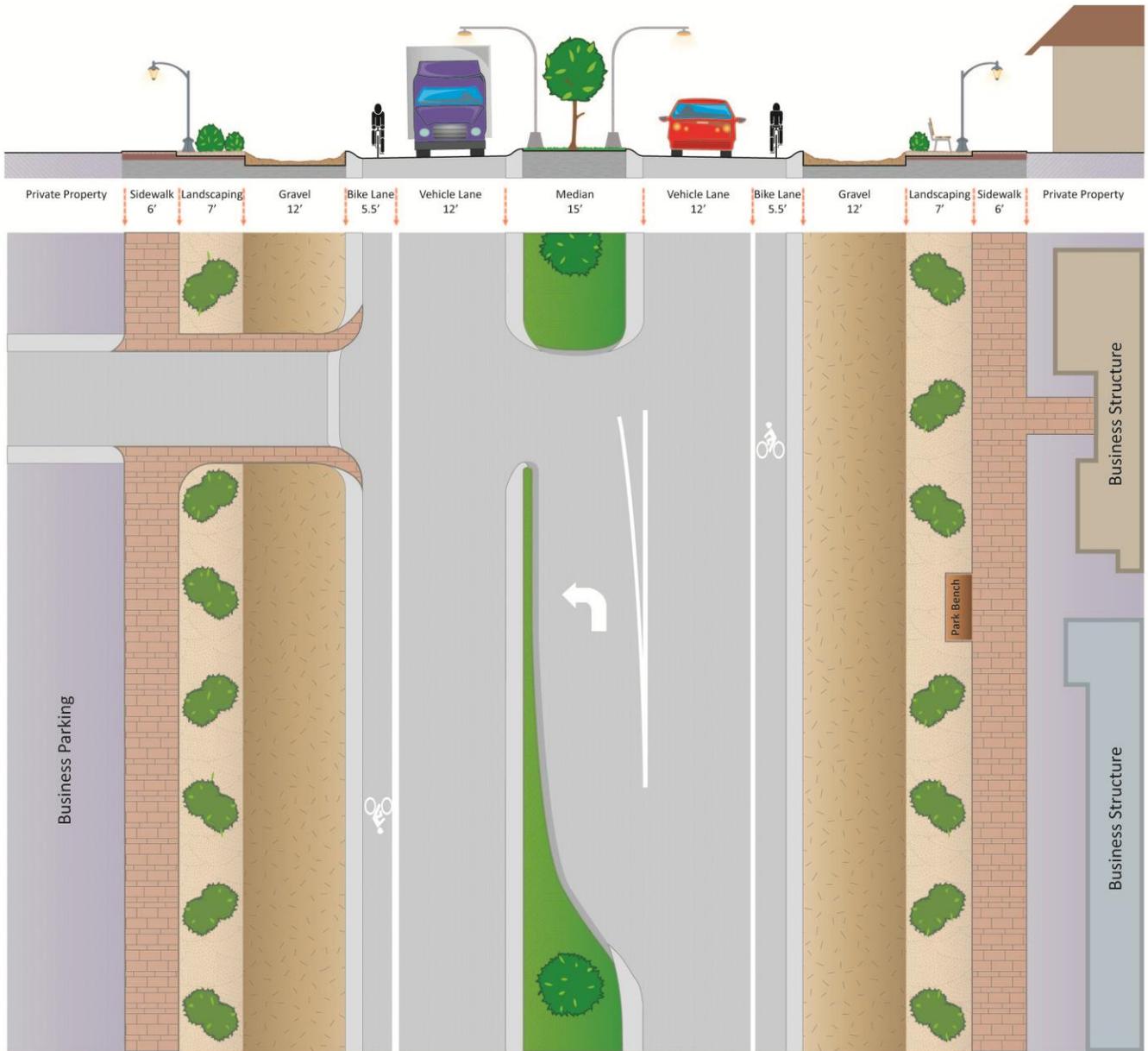
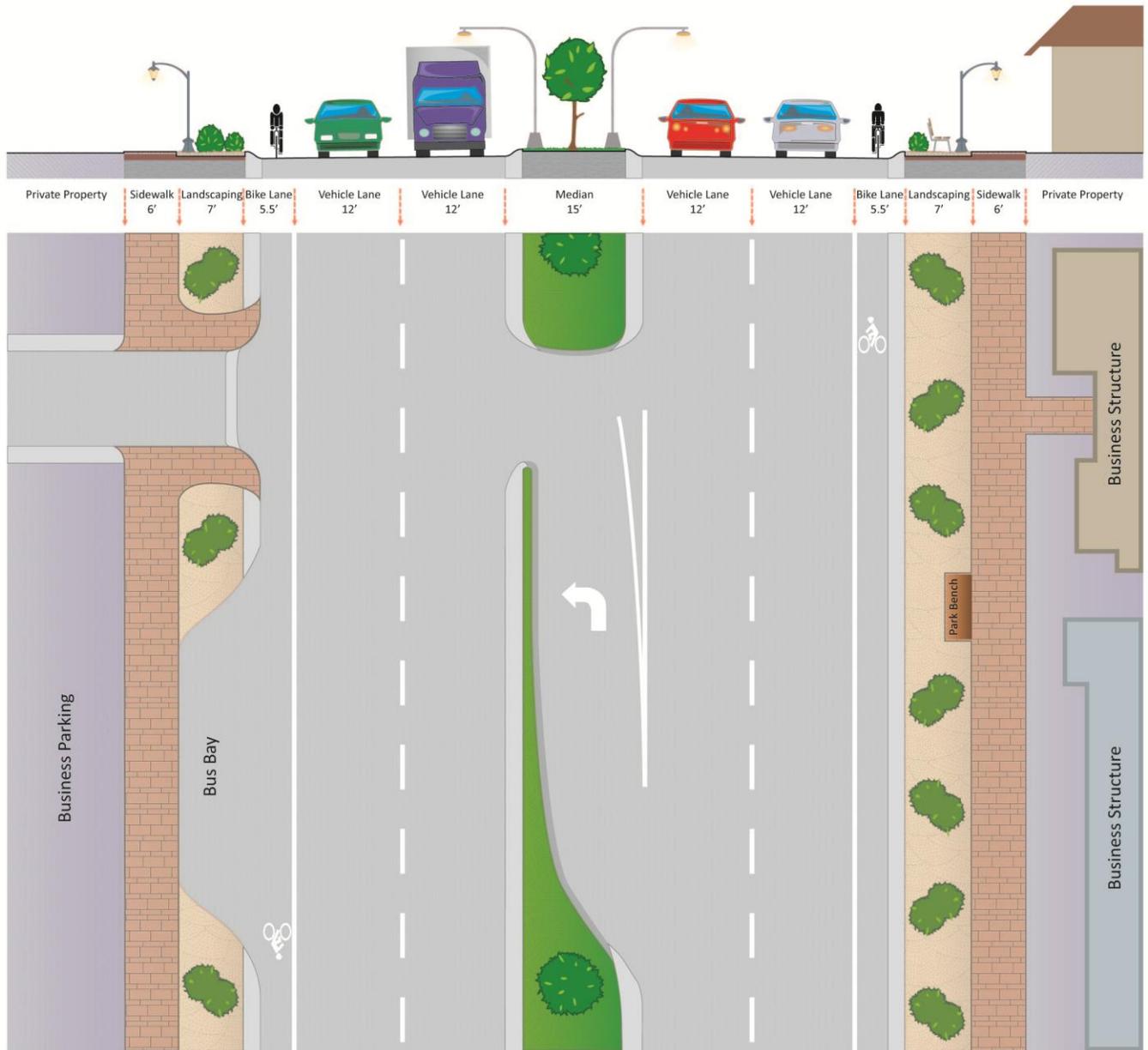
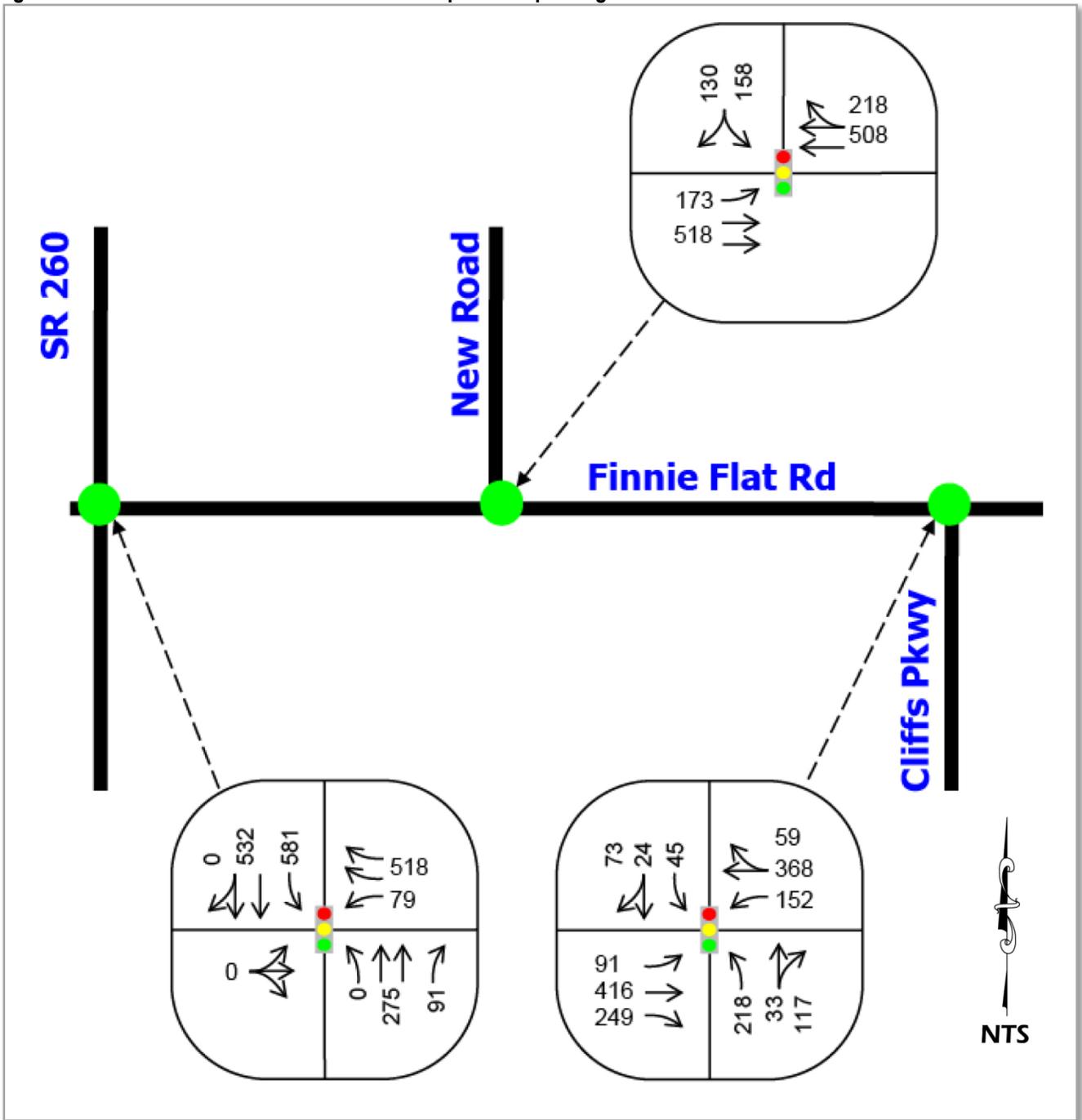


Figure 6.20. Preferred Finnie Flat Road Streetscape Concept - Segment 3 Build-out Stage



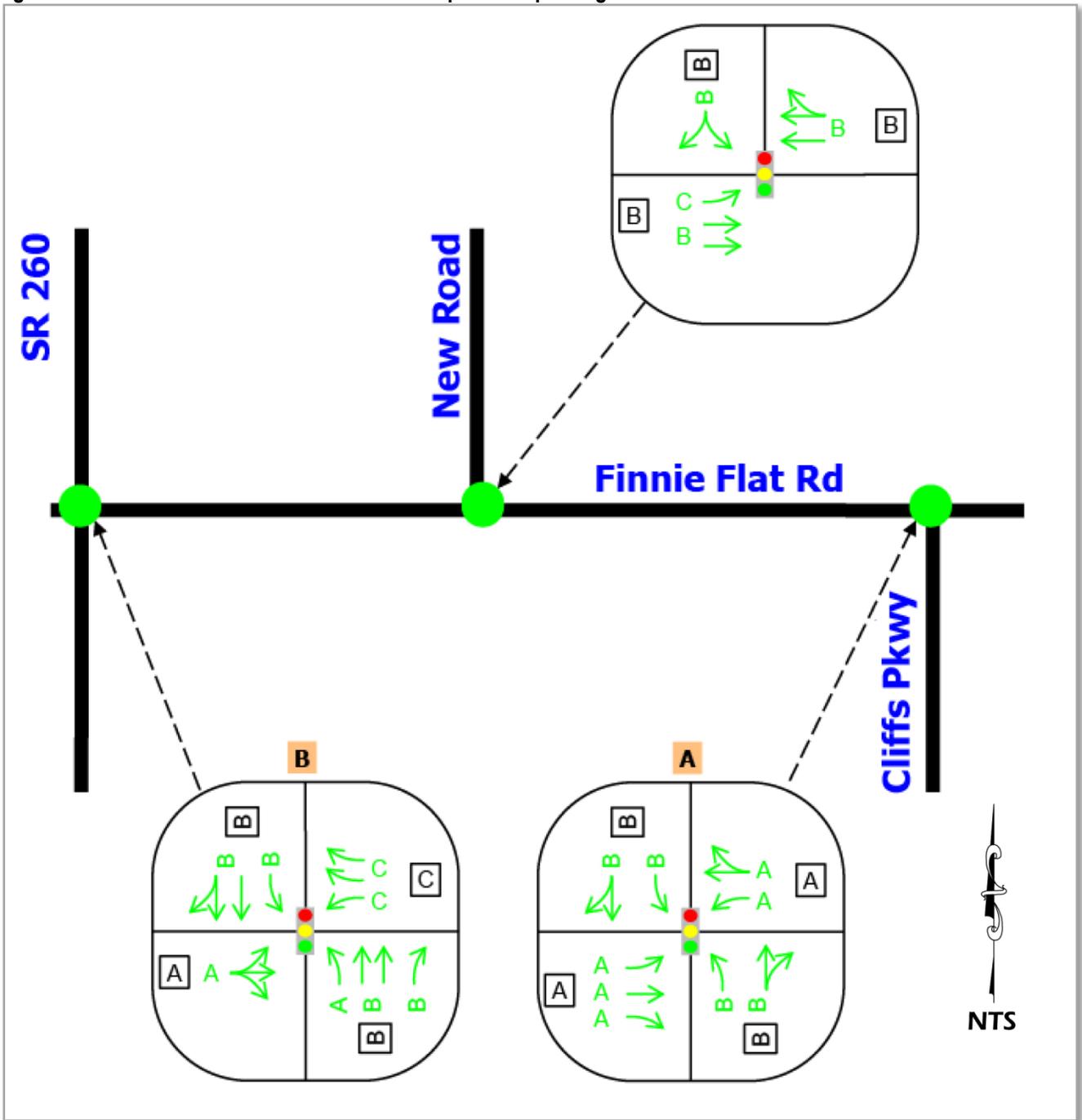
The north side of Segment 3 is primarily zoned for retail and residential type development. Although not developed yet, a large portion of the north side of Segment 3 is platted for a residential development of approximately 600 homes. If this development is built-out, a new signalized traffic intersection would be required along Finnie Flat Road. Based on analysis, intersections at Finnie Flat Road/SR 260 and Finnie Flat Road/Cliffs Parkway operate at acceptable LOS levels. Figure 6.21 presents the traffic volumes and Figure 6.22 shows the LOS results at the three intersections.

Figure 6.21. Preferred Finnie Flat Road Streetscape Concept - Segment 3 Number of Lanes and Traffic Volumes



*A new traffic signal may be needed on Finnie Flat Road (as shown in the above graphic at "New Road") if a projected development of approximately 600 homes occurs.

Figure 6.22. Preferred Finnie Flat Road Streetscape Concept - Segment 3 Level of Service



*A new traffic signal may be needed on Finnie Flat Road if a projected development of approximately 600 homes occurs.

7. STAKEHOLDER AND PUBLIC INPUT

Public involvement is essential to the broad acceptance and successful implementation of any transportation improvement plan. To ensure that decisions reflect the public's best interests, public involvement is a critical component of the transportation planning process. The goal of community outreach is to educate stakeholders and the public about the study through meaningful communication, provide opportunities for community input, and to create a process to build consensus in support of the study recommendations.

For this study, phase one of the community outreach focused on current transportation issues, problem areas, and the needs of the community; and phase two concentrated on recommending improvements for the problem areas identified in the first phase. To facilitate agency and stakeholder communication, the study team conducts meetings with the following groups:

- **Technical Advisory Committee (TAC):** Comprised of agency representatives, TAC meetings are held at key milestones throughout the project and allow agencies with vested interest in the project an opportunity to provide input and feedback.
- **Stakeholder:** These meetings help the study team understand the issues, concerns, and needs of the study area from the unique perspective of the stakeholders. Stakeholders for this study include local business owners, utility companies, schools, fire and police, local Town staff, and persons with vested interest in the project.
- **Town Council:** At key milestones, presentations are given to the Town Council to provide information on the study progression, elicit input, and to build consensus on project outcomes.

To engage the public, the study included two public meetings to inform, discuss, and to seek input. This chapter presents public and stakeholder outreach efforts conducting during the two phases.

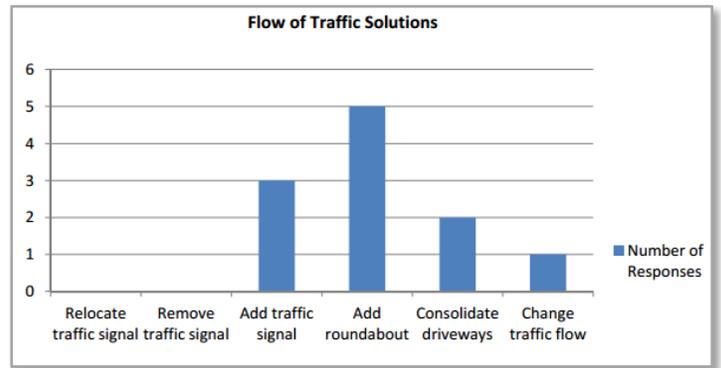
Phase 1 – Agency/Stakeholder Coordination

The Town, ADOT, and the study team hosted meetings for stakeholders and business owners/managers along the corridor to learn about the study goals, issues and concerns, obtain input on short-term improvement scenarios at the Tri-Intersection, and to discuss the long-term "vision" of the Finnie Flat Road corridor. Four meetings were held on Monday, October 1, 2012 at the Camp Verde Marshal's Office Training Room located in Camp Verde. Fifty-five businesses along the corridor were personally invited to participate in the meetings, as well as utility companies, State and local agencies, and Town staff. In total there were 12 participants at the meetings, not including study team members.

Each meeting commenced with a brief presentation of the study goals and objectives, key issues identified by the study team along the corridor and at the Tri-Intersection, and a handout to obtain feedback from the stakeholders. Comments received during the meetings helped identify numerous safety and mobility issues, and also helped the study team understand the needs of the community. Key comments received during the meeting included:

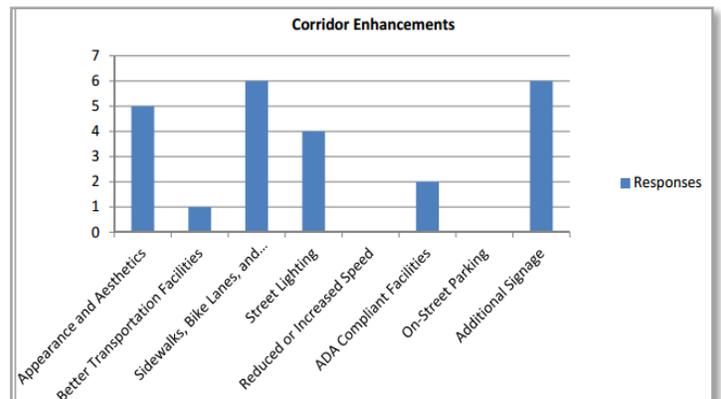
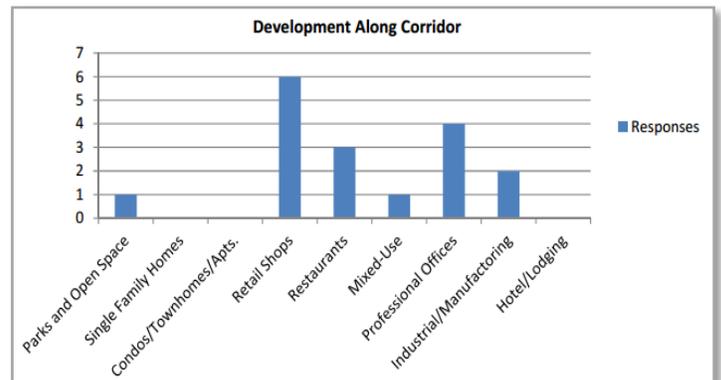
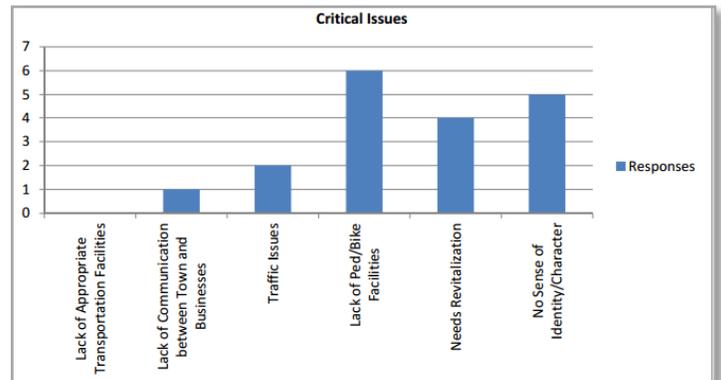
- **Tri-Intersection Issues and Short-Term Improvement Concepts:**
 - Safety and traffic flow at the Tri-Intersection would greatly be improved by a roundabout or new traffic signal.
 - Main Street, Turner Street, and Hollamon Street are elevated and cause major flooding to adjacent buildings.
 - School buses, emergency vehicles, and large trucks have a difficulty turning southbound onto Main Street from the Montezuma Castle Highway Slip Ramp.

- There are 26 school buses and two special needs buses that travel within the Tri-Intersection daily.
- Due to safety issues, the school system is allowed to pick-up students within two miles of the school and even directly across the street from the school. This is one of the only areas in the state that is able to do so.
- Access into the strip mall is very confusing especially with the two entrances to Circle K directly across Main Street.
- Bike lanes and sidewalks should be included in the re-design of the intersection.
- A roundabout or traffic signal would be the most beneficial to improving the traffic flow of the intersection.



- **Finnie Flat Road Issues and Potential Enhancements:**

- Finnie Flat Road corridor lacks identity/character, especially when compared to the downtown Camp Verde area.
- Congestion is an issue during morning and afternoon peak times.
- The multiple driveways and access points along Finnie Flat Road near the Bashas' shopping complex can cause unsafe turning movements.
- There is a lot of pedestrian traffic from Groseta Gardens to Bashas' and there are no shoulders or sidewalks.
- The three most critical issues identified by the stakeholders included lack of pedestrian and bike facilities, the need for revitalization, and absence of identify/character.
- The inclusion of additional signage and street lighting would improve safety along the corridor.
- Future developments that the stakeholders would like to see along the corridor include retail shops, professional offices, and restaurants.
- Renaming Finnie Flat Road to Main Street and continuing the



streetscaping from the downtown area to SR 260 will make the corridor feel more continuous and inviting.

- Sidewalks, bike lanes, crosswalks, and additional signage are the primary enhancements that would improve the corridor.
- **Bike and Pedestrian Issues:**
 - Pedestrian traffic at the Tri-Intersection is high before and after school, particularly between the Pace Academy, South Verde School, Circle K, and the downtown area.
 - The study corridor and Tri-Intersection would benefit from safe pedestrian crosswalks, sidewalks, and bike lanes.
 - Adding safe bike lanes and pedestrian facilities will encourage people to utilize the facilities.

Phase 1 – Public Outreach

The Town, ADOT, and the study team hosted the first of public meetings on November 6, 2012, at the Camp Verde Town Council Chambers. The goal of the meeting was to inform the public of the project's goals and objectives, discuss the deficiencies and needs of the study area, present draft improvement concepts to the Tri-Intersection, and elicit input on the public's "vision" for the future of Finnie Flat Road. In total, there were 11 participants at the meeting, not including study team members.

The meeting commenced with a brief presentation of the study goals and objectives, key issues identified by the study team along the corridor and at the Tri-Intersection, examples of streetscaping opportunities along the corridor, and review of potential alternatives for the Tri-Intersection. Oversized boards were also displayed to further communicate information and to generate conversation between the public and study team. The boards displayed included: pros and cons of potential short-term improvements to the Tri-Intersection, overview of current transportation issues, map to identify desired development types, and examples of potential streetscaping concepts that can be incorporated along the corridor.

Key comments received during the first phase of public outreach included:

- The favored alternative concept for the Tri-Intersection was the third concept that included a roundabout at Main Street/Montezuma Castle Highway/Turner Street. The public was also in favor of keeping the Montezuma Castle Highway Slip Ramp to Finnie Flat Road as a one-way roadway to reduce traffic at the roundabout.
- If budget allows, consider reconstructing Finnie Flat Road to run straight to Montezuma Castle Highway.
- Desired development along the corridor included:
 - Office parks in the northeast corner of SR 260/Finnie Flat Road.
 - Neighborhood/strip commercial on the north side of Finnie Flat Road.
 - Open space and residential north of the corridor.
 - Some big box retail west of the Bashas' shopping complex.
- Preferred street elements along the corridor included bike lanes, medians, street lighting, and landscaping along the entire corridor.

Phase 2 – Agency/Stakeholder Coordination

The second set stakeholder meetings were held with the intent to present improvement concepts for the Tri-Intersection and Finnie Flat Road to the following groups:

- Business Owner/Manager.
- Utility Companies and Agencies: This group includes ADOT, APS, Camp Verde Fire, Town of Camp Verde, and Yavapai-Apache Nation representatives.

The Town, ADOT, and the study team hosted three meetings on March 12, 2013 at the Town of Camp Verde Public Works department. Phase 2 of stakeholder meetings was divided into three sessions to provide more opportunities for business owners to attend at their convenience. Invitations containing the meeting information were delivered to 55 businesses along the corridor, as well as state and local agencies, and Town staff. The meeting consisted of 21 participants, not including study team members.

Each meeting began with a short presentation from the study team, leading into the open discussion session for comments and questions. Oversized boards and handouts were utilized to display the preferred Tri-Intersection concepts and the Finnie Flat Road Corridor streetscape design concepts. Participants were able to provide feedback on the handouts, by e-mail, verbally. Feedback provided at the meetings was utilized to further refine the recommended transportation improvements to the Tri-Intersection and the Finnie Flat Road Corridor streetscape design. Key comments received during the meeting included:

- **Tri-Intersection Concepts 2R and 3R:**
 - Crosswalks should be included in Tri-Intersection Concept 2R
 - Signage changes alone will not prevent illegal turns at the Tri-Intersection
 - Concept 3R will create problems for trucks accessing Circle K through the roundabout
 - Right-of-Way will be a major challenge at the Tri-Intersection Concept 3R as Ace Hardware and the plaza ownership do not wish to lose parking
 - A truck apron is essential for making the roundabout navigable by large trucks
 - The roundabout will create crossing issues for pedestrians
 - Bicycles will have issues with grade unless a bicycle lane is added to Montezuma Castle Slip Ramp
 - Two way traffic on Montezuma Castle Highway will be most beneficial for Camp Verde Fire
- **Finnie Flat Road Corridor Streetscape Design:**
 - The corridor concept will benefit from solar powered street lights

Phase 2 – Public Outreach

When advancing a project, continued public involvement is essential to ensure that all interested persons are freely permitted to provide input and suggestions. The second phase of public outreach was initiated by offering a meeting at which the public can provide comments on the proposed improvement scenarios at the Tri-Intersection and along the Finnie Flat Road Business Corridor.

The Town, ADOT, and the study team hosted the second of the public meetings on April 2, 2013, at the Camp Verde Town Council Chambers. The purpose of this meeting was to inform the public about the project progress, present study findings, and to elicit input on regarding the proposed Tri-Intersection concepts and the Finnie Flat Road streetscape design. Sixteen participants were present at the meeting, not including study team members.

The meeting was kicked off by a presentation by the study team that highlighted known corridor and Tri-Intersection issues, proposed improvements to the Tri-Intersection, and streetscaping vision scenarios for the Finnie Flat Road corridor. To help the public thoroughly understand the proposed Tri-Intersection improvement concepts, a simulation model was presented of the two concepts showing car and truck travel movements through the Tri-Intersection. The presentation was also supplemented by handouts and large display boards showing the intersection concepts and corridor streetscaping drawings. The handouts provided participants the ability to comment on the presented material. In addition, the public was invited to send comments by email and during a question and answer session directly after the presentation.

Key comments received during the second phase of public outreach included:

- Tri Intersection Concepts:
 - Opposition from some downtown business owners in regards to the construction of a roundabout in Tri-Intersection Concept 3R.
 - Concerns regarding the viability of the roundabout due to a perceived low number of pedestrians and bicyclists.
 - Concerns about access to businesses and semi-truck navigation at the Tri-Intersection in both concepts.
 - Desire for better intersection and lane striping to reduce confusion.
 - Signage should be installed to properly warn travelers of merging lanes and to warn travelers of approaching intersections.
- Throughout the study corridor, the center lane striping should be improved and concrete medians removed from final design to allow easier turning movements.
- Final design should include street lighting that is consistent with existing lighting on Main Street and should not cause an inconvenience or a safety hazard.
- Questions in regards to the total cost of the project, available funding, and timeline for construction. Concerns also

In addition to these comments, a 10-page document was also submitted to the study team on April 12, 2013 from the Camp Verde Citizens Against Roundabouts on Main Street. The document included signatures from local residents and business owners that opposed the construction of a roundabout at the Tri-Intersection.

8. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONCERNS

Inventory of the physical, natural, and cultural environment is an important component of the transportation planning process. When environmental conditions and concerns are reviewed in the early stages, of the transportation planning process, transportation solutions can be developed to lessen the negative impacts on the natural environment. This chapter presents a review of environmental conditions within the study area.

Planning and Environmental Linkages

The Planning and Environmental Linkage (PEL) process, developed by the FHWA, represents an approach to collaborate and integrate transportation planning efforts with the environmental review process required under the National Environmental Policy Act of 1969 (NEPA). The goal of the PEL process is to enable early collaboration among transportation and environmental agencies to identify important issues, minimize duplication of efforts, promote environmental stewardship, and support transportation decision-making. In conjunction with the *ADOT Planning and Environmental Linkages Questionnaire and Checklist*, a thorough evaluation of potential environmental resources and concerns was conducted to identify if future transportation policies or projects would be impacted.

Topography and Geology

The topography of the Finnie Flat Road is fairly flat with an elevation ranging between 3,107 feet to 3,160 feet above sea level. The steepest grades within the study area are located at the Tri-Intersection. The northbound Montezuma Castle Highway roadway has an elevation decrease of 20 feet in less than 0.25 miles from its intersection with Main Street. The Montezuma Castle Highway Slip Ramp has a seven foot increase in elevation in less than 0.10 miles.

The Finnie Flat Road corridor and the Tri-Intersection are located within geology types Tsy (Pliocene to Middle Miocene Deposits) and Qr (Holocene River Alluvium). According to the Arizona Geological Survey (AZGS), Tsy consists of moderately to strongly consolidated conglomerate and sandstone deposited in basins during and after late tertiary faulting. Tsy includes lesser amounts of mudstone, siltstone, limestone, and gypsum. AZGS defines Qr as unconsolidated to weakly consolidated sand and gravel in river channels and sand, silt, and clay on floodplains.

Recommendations for Further Analysis

A geotechnical evaluation of soils will need to be conducted during the design phase to determine pavement, slope protection, and structural needs. An analysis of drainage needs will also need to be performed during the DCR/EA phase.

Vegetation

The study area lies entirely within the Semidesert grassland vegetation community that is typically characterized by grasses interspersed with succulents. Tobosa grass and black gram are the most dominant species typically found in Semidesert grassland. Additionally, due to grazing practices, invasive grasses such as red brome, bristle grass, foxtail barely, and wild oats are increasing within this type of vegetation. According to the Nature Conservancy, the study area is classified as Type F shrubland. Type F shrubland is described as former grassland with greater than 15% canopy cover of mesquite and/or juniper combined or over 35% total shrub cover.

No formal inventory of native plants was conducted; however, native plants may occur within the study area. Native plants include mesquite, palo verde, a variety of cacti, and numerous tree species. These plants are protected under the Arizona Native Plant Act that was enacted to protect rare plant species and to protect some species from being over harvested. Landscaping along the corridor only occurs at specific commercial parcels that have installed their own specialized landscaping.

Recommendations for Further Analysis

Any widening or improvements of the study corridor and the Tri-Intersection has the potential to affect native plants. Protected species notification must be given to the Arizona Department of Agriculture and a permit must be issued prior to removal for compliance with the Arizona Native Plant Act. The presence of invasive species would not represent a substantial obstacle to the proposed improvements, but consideration should be given in the design phase of protecting native vegetation.

Biology

The Arizona Game and Fish Department (AZGFD) Heritage Data Management System (HDMS) was accessed to determine special state species and threatened, endangered, and candidate species in the vicinity of the study corridor. Table 8.1 outlines the special status species and critical habitat identified utilizing the HDMS online retrieval system for approximately 2.0 miles around the study corridor. As outlined in the table, within the vicinity of the study corridor, there are designated critical habitats for the southwestern willow flycatcher, spikedace, loach minnow, and razorback sucker. Critical habitats are geographic areas that are essential for the conservation of a threatened or endangered species that may require special management and protection.

Under Section 10 of the Endangered Species Act, the study's vicinity has been designated as a Section 10(i) area for the Colorado pikeminnow. Section 10(i) designations allow for the reintroduction of populations of listed species as "experimental populations" to determine if the experimental population is "essential" or "nonessential" for the continued existence of a species. From 1981-1990, over 623,000 Colorado pikeminnow were reintroduced to the Salt and Verde Rivers and later deemed as not essential for the continued existence of the species.

Wildlife movement through the study area depends on the availability of preferred habitat, foraging range, migration, and dispersal patterns. Often, resident wildlife species find that altered habitat and developed areas present a barrier to movement. The Arizona Wildlife Linkages Workgroup (AWLW), a collaboration effort between ADOT and nine public and nonprofit organizations, identified large blocks of protected habitat, potential wildlife movement corridors, and factors that may disrupt these linkage zones. The AWLW developed the Arizona Wildlife Linkages Assessment, which identified wildlife habitat blocks and linkage zones that allow land managers and transportation planners to integrate wildlife needs into development and land use plans. Wildlife linkage zones are areas of wildlife movement between habitat blocks. During the AWLW meeting a wildlife linkage was designated along SR 260 west from I-17 to SR 87 that covers the entirety of this study's project area. This wildlife linkage was also deemed as a high priority linkage based on the area's biological value and conservation threat and opportunities.

Located along the Verde River, north of the study area, are several riparian habitats. Riparian habitats are ecologically diverse areas typically found along the banks of rivers, lakes, or other bodies of water with unique soil and plant characteristics. Riparian areas provide a transition zone between dry and wet ecosystems and are among the most biologically rich habitats. Along the Verde River, the riparian habitats present include Mesquite, Cottonwood Willow, and Flood Scoured.

To further investigate the potential adverse impacts to wildlife and wildlife habitats within the study area, the AZGFD was asked to conduct a project specific evaluation to determine if recommended improvements would adversely impact wildlife. AZGFD determined that the Department does not anticipate any significant adverse impacts to wildlife resources in the immediate project vicinity, since the study area is located along an existing roadway. Additionally, the AZGFD commented that many of the species identified in Table 8.1 are associated with the riparian area of the Verde River north of the study area and as long as project activities are contained to the study area corridors, negative impacts should not occur to these riparian species.

Figure 8.1 illustrates the location of wilderness corridors, riparian habitats, and wetlands in the area.

Table 8.1. Special Status Species and Critical Habitats in Project Vicinity

Common Name	FWS	USFS	BLM	State
Common Black-Hawk		S		WSC
Desert Sucker	SC	S	S	
Sonora Sucker	SC	S	S	
Maricopa Tiger Beetle	SC			
Yellow-billed Cuckoo (Western U.S. DPS)	PS:C	S		WSC
Southwestern Willow Flycatcher	LE			
Heathleaf Wild-buckwheat		S		
Northern Mexico Gartersnaker	C	S		WSC
Roundtail Chub	C	S		
Bald Eagle	SC, BGA	S	S	WSC
Belted Kingfisher				WSC
Hualapai Milkwort		S		
Verde Valley Sage	SC	S		SR
Designated Critical Habitat				
Southwestern willow flycatcher				
Spikedace				
Loach minnow				
Razorback sucker				
10(J) Status Area				
Colorado pikeminnow				

Status Definitions (Source: Arizona Game and Fish Department):

FWS:

SC = US Fish and Wildlife Species of Concern

PS:C = Partial Status: Listed as Endangered or Threatened, but no in entire range

LE = Listed Endangered: imminent jeopardy of extinction

C = US Fish and Wildlife Candidate Species

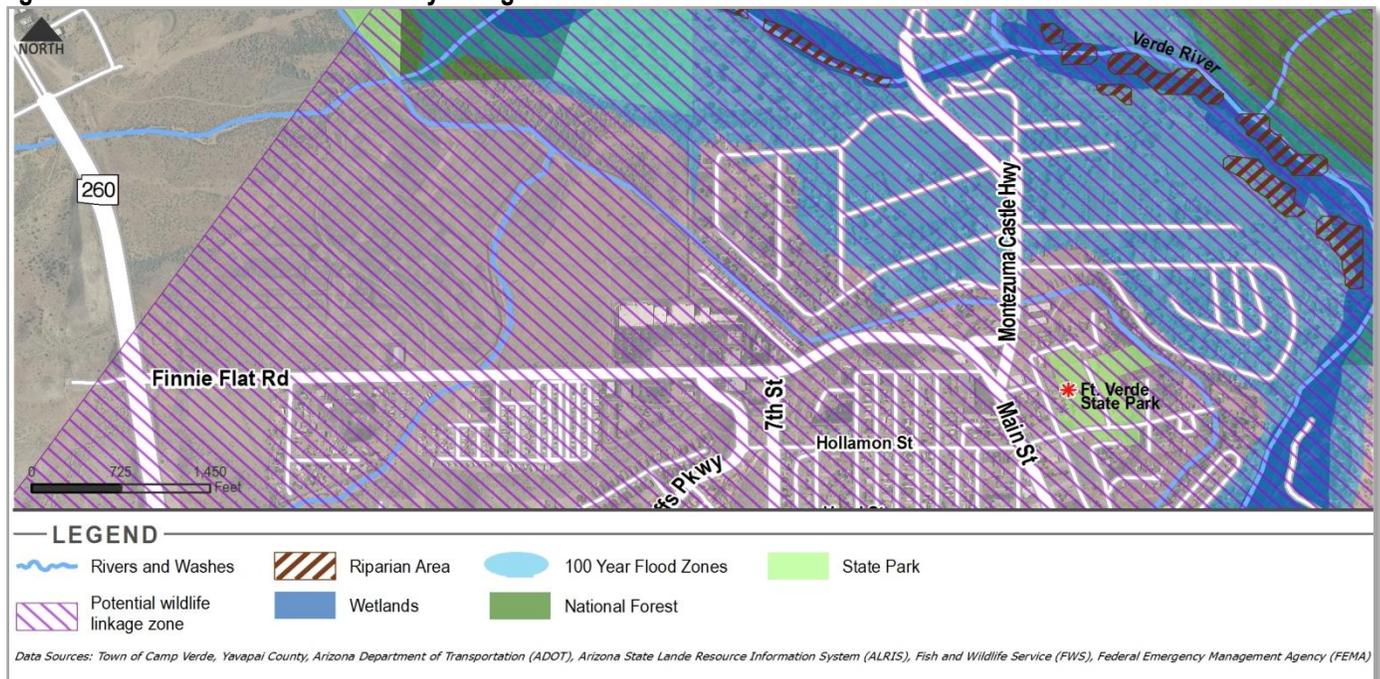
BGA = Bald and Golden Eagle Protection Act: Prohibits take of bald and golden eagles without prior USFWS permit.

USFS: S = US Forest Service Sensitive

BLM: S = US Forest Service Sensitive

State: AZGFS Wildlife of Special Concern in Arizona

Figure 8.1. Wilderness Corridor and Hydrologic Features



Recommendations for Further Analysis

Any improvements in the study area may have the potential to affect plants and wildlife identified in Table 8.1. During the design and environmental overview phase, a more detailed Biological Evaluation will need to be conducted to determine the specific presence/absence of protected species and potential mitigation measures. The wildlife corridors identified are based on current available data; additional corridors or linkages may exist. During the design process, coordination will need to occur with the AZGFD, the USFWS, and the Arizona Wildlife Linkages Workgroup to incorporate elements to protect wildlife from roadway traffic and to allow for the safe wildlife movement across the study area. On-going communication is also recommended between the Town, AGFD, USFWS, and Yavapai County to coordinate mitigation measures to protect all environmentally sensitive species in the area during the construction phase.

Hydrology

Major hydrological features in the area include the Verde River, located north of the study corridor, and two washes that flow over Finnie Flat Road and Montezuma Castle Highway. A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map shows a 100-year Flood Zone associated with the Verde River. While located outside the study area, the 100-year Flood Zone may have non-direct impacts to circulation from Montezuma Castle Highway to Finnie Flat Road. North of Finnie Flat Road, from the Verde Outpost Townhomes to north of the 4R Business Park, the area is within FEMA Flood Zone X - areas with 0.2% annual chance of flood.

Also following the Verde River, riverine wetlands are located just north of the study area. Wetlands are defined by the Environmental Protection Agency (EPA) as lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. Wetlands are typically areas where water covers the soil or is present at/near the surface of the soil year-round or during varying periods throughout the year. Riverine wetlands, those located north of the study area, are essential in maintaining healthy streams and rivers because they typically support dense vegetation that helps bind the soil of river banks. Proposed improvements in the study area will not impact the wetlands. Figure 8.1 illustrates the location of the major hydrologic features in the area.

Water Quality

The Verde River was identified in the *2006/2008 303(d) Impaired Waters Report*, released by the Arizona Department of Environmental Quality (ADEQ), as a Class 4A impaired water due to turbidity from samples collected between 1991 and 1995. Turbidity is a measure of water clarity or opacity and addresses excessive sedimentation that can impact aquatic ecosystems.

Wells

According to the Arizona Department of Water Resources (ADWR), there are approximately 22 wells ranging in depth from 49 to 360 feet (two were listed as zero) within the immediate proximity of the study corridor. From the identified wells, 23 are listed as exempt, three as non-exempt, and four as monitor.

Recommendations for Further Analysis

Although the Flood Zone is north of the study area, potential flooding in the Flood Zone may impact transportation movements to and around the study corridor. Impacts to floodplains from roadway construction need to be considered to reduce or eliminate induced increases to 100-year flood event water surface elevations. Drainage analysis during the design phase will also need to be conducted to determine the degree of impacts on the area's hydrological features and floodplains and to identify potential mitigation measures. Furthermore, landscaping considerations should be given to incorporate low water use desert or desert adaptable planting that is consistent with EPA guidelines.

Prime and Unique Farmlands

The Finnie Flat Road Business Corridor Study is located in the Natural Resources Conservation Service's (NRCS) Soil Survey Geographic (SSURGO) Database soil survey area AZ 639. This survey area's status is listed by the NRCS as being in the Initial US Forest Service (USFS) phase with Terrestrial Ecosystem Survey (TES) mapping complete. Upon further investigation into the Prescott National Forest's TES land type data, the Finnie Flat Road Business Corridor is simply recorded as private land.

Recommendations for Further Analysis

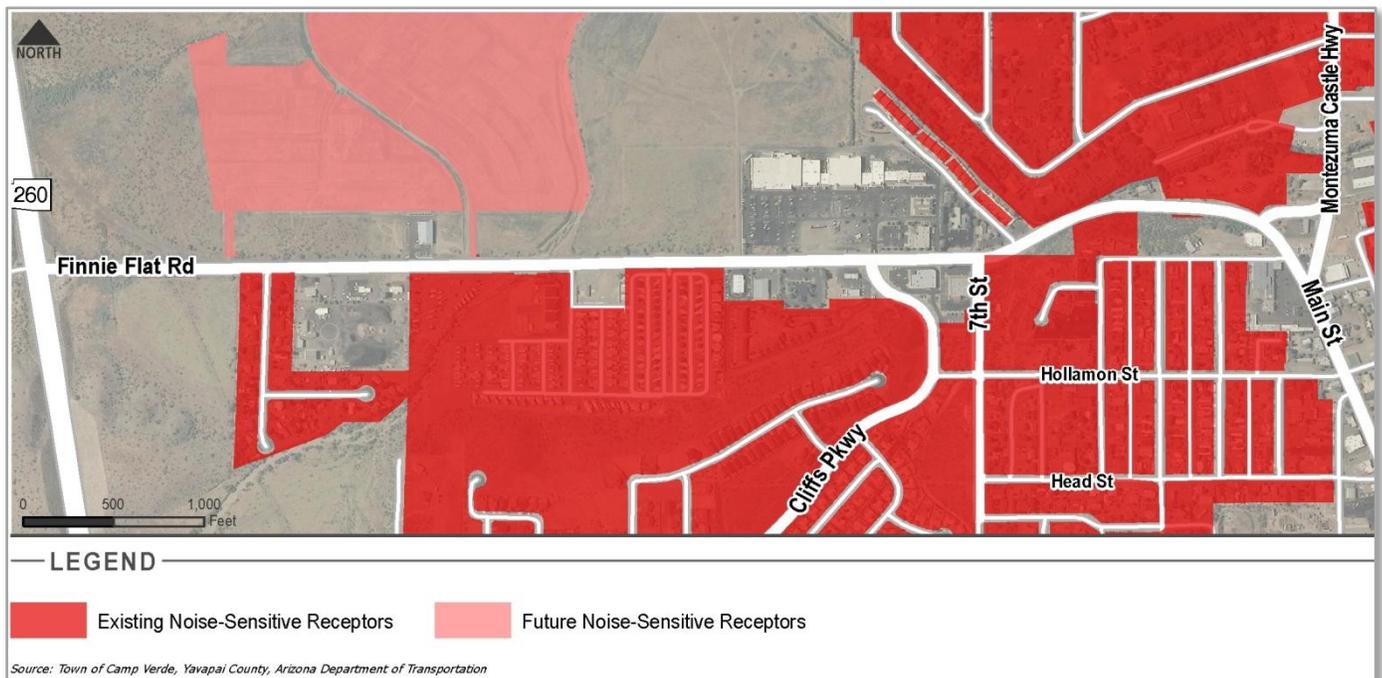
Coordination between Yavapai County, the Town, USDA, and the USFS is needed to identify areas of potential or prime unique farmlands. If soil types in the area are considered prime or unique as identified on the USDA prime and unique farmlands soils list, analysis needs to be conducted to determine whether water delivery irrigation systems associated with the farmlands are adversely affected by the recommended improvements.

Noise

Maintaining acceptable noise levels to preserve the character of open spaces, residential quiet zones, and recreational facilities should be considered when selecting a potential transportation improvement project. Figure 8.2 illustrates the locations of potential existing and future noise-sensitive receptors within the study area. Existing and future parks, recreational trail systems, residential development, and community uses requiring low noise levels are included in the list of potential noise-sensitive receptors.

Besides SR 260, Finnie Flat Road, and other local roads there are no major generators of noise adjacent to the study corridor. Located along the southern portion of Finnie Flat Road are numerous residential noise-sensitive receptors, including the Trails End RV Park, an apartment complex, and several housing communities. A potential future noise-sensitive receptor may be located along the north side of Finnie Flat Road, where the current residential zoning and the General Plan indicate that a housing community could be developed.

Figure 8.2 Potential Noise-Sensitive Receptors



Recommendations for Further Analysis

A detailed noise analysis study would need to be conducted to identify if potential noise levels exceed FHWA noise thresholds. During the DCR/EA phase of the project, noise-sensitive receivers should be modeled using the FHWA's approved Traffic Noise Model version 2.5 (TNM2.5) and validated against field measurements. Traffic noise impacts may occur as a result of future development; therefore, noise abatement measures should be assessed for all affected noise-sensitive receivers. Coordination will need to occur between Yavapai County and the Town to ensure that development complies with Town ordinances and noise policies.

Air Quality

Based on data provided by the ADEQ, air quality in the study area meets the National Ambient Air Quality Standards (NAAQS) set forth by the Clean Air Act (CAA) for criteria pollutants carbon monoxide (CO), nitrogen dioxide (NO₂), ozone, particle matter (PM) 2.5 and 10, and sulfur dioxide (SO₂).

Recommendations for Further Analysis

Initially, a qualitative evaluation should be conducted to assess air quality impacts. Measures should be taken to ensure that improvements made do not negatively impact the air quality of the region. During the implementation phase, proposed improvements along the corridor will require a detailed evaluation to identify the impacts with respect to the increase and decrease in criteria pollutants and mobile source air toxins. Coordination will need to occur between ADEQ, Yavapai County, and the Town to ensure that any proposed improvements comply with EPA ordinances and policies for air quality.

Utilities

The study area has a full-range of utilities expected to be found in a Town setting: water, waste water, above and below ground power, communications, and gas. Known major utilities identified in the study area include:

- UniSource Energy has a gas line running parallel to Finnie Flat Road on the north side of the roadway. The gas line crosses Finnie Flat Road on the west side of 7th Street and east of Groseta Drive. Within the proposed right-of-way, there is over 4,500 feet of Unisource Energy utility lines. During the stakeholder interview process, stakeholders commented that UniSource Energy is planning to tie in a gas line along Montezuma Castle Highway, for which they already have existing lines at Black Bridge.
- Camp Verde Sewer Department has a network of utilities providing waste services to the area. Within the proposed right-of-way, there are 14 manholes and over 2,200 feet of pipeline.
- Camp Verde Water Service provides water service to the area and has utilities located along the corridor. Within the proposed right-of-way, there are two water boxes, 42 water valves, one blow-off valve, one junction box, and approximately 1.90 miles of water lines. On Finnie Flat road, just west of the Montezuma Castle Highway intersection, a large CMP culvert crosses the roadway.
- APS has a network of above ground and underground power lines that run parallel to Finnie Flat Road and the Tri-Intersection and cross the roadway at multiple locations. Within the proposed right-of-way APS has over 7,900 feet of utility lines.

Recommendations for Further Analysis

Any improvements along the corridor at the Tri-Intersection would involve multiple utilities. During the pre-design and DCR/EA phase, additional investigations need to be made concerning the degree of impacts and

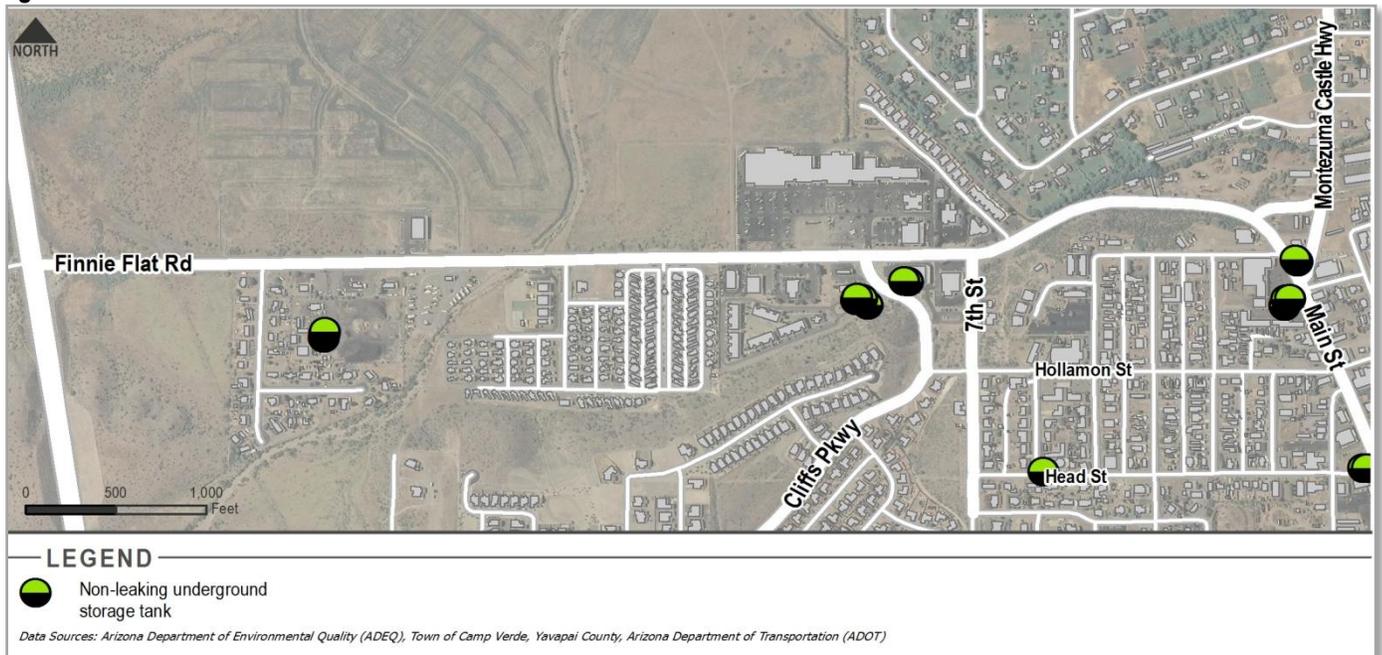
to see if any relocation or service interruptions would need to be made. Coordination between the utility companies and the Town is imperative during the pre-design and design phase of project implementation.

Hazardous Materials

A regulatory database review of federal and state hazardous materials database was evaluated to identify the presence of hazardous materials in the study area. Figure 8.3 identifies the locations of hazardous materials in the area. The review of the environmental databases revealed the following potential hazardous material sites:

- 15 non-leaking underground storage tanks (USTs).
- No superfund, solid waste landfills, or hazardous waste treatment, storage, and disposal (TSDFs) are located within the study area.

Figure 8.3. Hazardous Materials



Recommendations for Further Analysis

Although several properties adjacent to the study area use or contain hazardous or regulated materials, none are currently subject to any remediation activities. A more detailed evaluation based on ROW needs should occur during the DCR/EA phase of project development. A corridor-level Preliminary Initial Site Assessment (PISA) will need to be conducted during the design phase to identify issues and constraints related to hazardous sites in the area immediately adjacent to the corridor.

Section 4(f) and Section 6(f) Resources

Section 4(f) of the US Department of Transportation Act of 1966 and the Section 6(f) of the Land and Water Conservation Fund Act (LWCF) are intended to protect the nation's recreational resources from significant transportation-related impacts. Section 6(f) is a component of the LWCF Act of 1965 that protects recreational properties acquired or developed with LWCF Act funds that could be affected by transportation projects. Section 4(f) stipulates that the FHWA and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless there is no feasible alternative or the projects include all possible planning to minimize harm to the property. The "use" of Section 4(f) is defined in CFR Title 23, Part 771.135(p) as:

- a) When property is permanently incorporated into a transportation facility;
- b) When there is a temporary occupancy of land that is adverse in terms of the statute’s preservation purpose; or
- c) When there is a constructive use of a Section 4(f) property. A constructive use of Section 4(f) resource occurs when the proximity impacts of a proposed project adjacent or nearby a Section 4(f) property results in a substantial impairment to the property's activities or features that qualify a resource for protection under Section 4(f).

A historic site is considered a Section 4(f) property if it is eligible for the National Register of Historic Places (NRHP) under Criterion A, B, or C if the site is associated with events that have made a significant contribution to the broad patterns of our history, associated with the lives of persons significant in our past, or embodies the distinctive characteristics of a type, period, or method of construction, or that represents the work of a significant distinguishable entity whose components may lack individual distinction.

Potential Section 4(f) properties within the study corridor proximity include:

- Fort Verde State Historic Park (NHRP property owned by Arizona State Parks); amenities include a visitor center, gift shop, picnic area, and museum with exhibits.
- Community Center Park (owned by the Town of Camp Verde); amenities include a large ramada, picnic tables, playground equipment, and a soccer field.

Currently, there are no existing or planned Section 4(f) properties and no proposed future Section 4(f) resources. Figure 8.4 identifies the locations of potential Section 4(f) properties in the area.

Figure 8.4. Potential Section 4(f) Properties



Recommendations for Further Analysis

Additional analysis needs to be conducted into resources eligible for protection under Section 6(f) and Section 4(f) to evaluate potential impacts of the proposed improvements on these resources. A Section 4(f) evaluation report should be conducted that documents coordination efforts with local jurisdictions; attempts to avoid the resources, direct or constructive use impacts; and measures to minimize harm and impacts from temporary occupancy (if needed). During the DCR/EA phase, Section 4(f) properties need to be analyzed for measures to minimize harm on planned recreational facilities in proximity to the project area, if warranted.

Visual Resources

The visual character of the study area varies from open, undeveloped areas in the west, to a developed residential/commercial setting east of Groseta Drive. No designated scenic roads or byways are located in the study area. In addition, the study area does not include land owned by the Bureau of Land Management, which is subject to a visual resource management system (VR) that assesses the scenic value of an area and then establishes management objectives based on an acceptable level of visual preservation or disturbance. No other land-managing agencies with visual impact requirements (e.g., National Park Service, U.S. Forest Service) own or have jurisdiction over land in the study area.

Recommendations for Further Analysis

The proposed improvements are consistent in scope and scale with the current facility, adjacent land use, and the visual character of the Town. Vegetation removal and aesthetic treatment/landscaping should coordinate with the vision of the Town and follow ordinances set forth by Yavapai County and the Town. Where applicable, design consideration should be given to provide for vistas from the roadway and to incorporate cohesive planting design that allows for views of the surrounding Verde Valley.

Cultural Resources

Cultural resources are properties that reflect the heritage of local communities, states, and nations. Properties judged to be significant and to retain sufficient integrity to convey that significance are termed “historic properties” and are afforded certain protection in accordance with state and federal legislation. The National Historic Preservation Act (NHPA) of 1966, as amended, defines historic properties as any prehistoric or historic sites, buildings, structures, districts (including landscapes) and objects included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). Traditional cultural properties having heritage value for contemporary communities (often, but not necessarily, Native American groups) also can be determined eligible for, and listed in, the NRHP because of their association with historic cultural practices or beliefs that are important in maintaining the cultural identities of such communities.

Section 106 of the NHPA requires federal agencies to consider the potential effects of their undertakings on historic properties. Effects can be direct and result in physical alteration to the property, or indirect, as when the characteristics that qualify the property for NRHP listing are altered as a result of visual, auditory, or atmospheric intrusions. To be considered eligible for listing in the NRHP, a property must retain integrity of location, design, setting, materials, workmanship, feeling, and association and must also meet at least one of the following criteria:

- Criterion A - Associated with events that have made a significant contribution to the broad patterns of our history; or
- Criterion B - Associated with the lives of person significant in our past; or
- Criterion C - Embodies the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction; or
- Criterion D - Has yielded, or may be likely to yield, information important in prehistory or history

For this project, archival research and record searches were conducted at the AZSITE cultural resource database only. The AZSITE records search identified nine prior cultural resources projects and five previously recorded cultural resource sites in a search area that included the general project footprint of Finnie Flat Road to Main Street. Table 8.2 identifies the previous projects and Table 8.3 outlines the previous cultural resource sites within the study area.

NRHP eligibility recommendations of properties identified in Table 8.2 were based solely on information found on the AZSITE cultural resources database. In some cases, eligibility recommendations have been offered by recorders. In other cases, sites have not been evaluated for inclusion in the NRHP. Archaeological

testing and data recovery may have occurred on some of the sites identified; however, no details were available on AZSITE. One site (AZ O:5:28 [ASM], Fort Verde District) is listed on the NRHP.

Table 8.2. Previously Identified Projects

Project Number	Project Name	Results	Reference
76-037.ASU	Unknown	Unknown	AZSITE
1980-101.ASM	Camp Verde Relocation	No sites identified	Madsen 1980
1987-225.ASM	Dewey-Cottonwood Cable	Unknown	Hackbarth 1987
1991-249.ASM	Fort Verde Survey	No sites identified	Schreiber 1991
1991-315.ASM	SR 260 Survey	Unknown	Weaver 1992
1992-167.ASM	Archaeological Survey of Parade Grounds at Ft. Verde State Historic Park	No sites identified	Montero 1993
1995-45.ASM	SR 260 West of Camp Verde, Faulkner Wash	No sites identified	Weaver 1995a
1997-460.ASM	SR 260 Class III Archaeological Survey	AZ O:5:130 (ASM)	Hoffman and Adams 1998
2003-203.ASM	New corral and water pipeline	No sites identified	AZSITE

Table 8.3. Previously Identified Sites

Site Number/Name	Description	NRHP Eligibility	Reference
NA15557	Historic fort	Not evaluated	AZSITE
NA22512	Unknown	Not evaluated	AZSITE
AZ O:5:7(ASM)/Camp Verde; Fort Lincoln	Historic fort established in 1865	Listed on AZ Register of Historic Places in 1975	AZSITE; ASM site card
AZ O:5:9(ASM)	Historic monument	Not evaluated	AZSITE; ASM site card
AZ O:5:28(ASM)/ Fort Verde District	Historic Fort Verde District established in 1879	NRHP-Listed in 1977	Fenicle et al. 2008; ASM site card

Recommendations for Further Analysis

Based on initial review, none of the cultural resources are impacted. As project planning progresses, additional cultural resources research and inventory will likely be required. Efforts to obtain specific eligibility criteria and to arrive at definitive eligibility assessments, including assessing whether the portions of eligible properties subject to potential effects are contributing or non-contributing, also is required. It is probable that an agreement document (a memorandum of agreement or a programmatic agreement) will be developed to demonstrate Section 106 compliance. When a preferred alternative is defined, the lead agency would need to determine what effect construction of that alternative will have on historic properties. The three possible effect determinations are “no historic properties affected,” “no adverse effect,” and “adverse effect.”

Historic properties on or near the preferred alternative are not always subject to adverse effect. Various strategies can be employed to completely avoid effects or to ensure that effects are minimized and therefore not adverse. If it is determined that historic properties would be adversely affected, it would be necessary to identify mitigation measures to ameliorate those effects to the extent possible. Such measures can include data recovery of archaeological sites and documentation of historic buildings and structures. If adverse effects to cultural resources valued for in-place preservation (typically those determined eligible under Criteria A, B, or C) cannot be avoided, a Section 4(f) alternatives evaluation would be required to explore the potential for a prudent and feasible alternative that would not result in a Section 4(f) use.

When project alternatives and an area of potential effects (APE) have been identified, impacts on historic properties would need to be evaluated. In addition, it would be necessary to conduct cultural resource surveys, according to current Arizona State Museum guidelines, for all portions of the APE that have not been previously surveyed or that were surveyed 10 years or more prior.

Right-of-Way

Based upon as-built drawings provided by Town staff of the Finnie Flat Road and Tri-Intersection realignment, Table 8.4 outlines the available right-of-way within the study area.

Table 8.4. Available Right-of-Way

Road	From	To	Approximate ROW (FT)	
			North of Road	South of Road
Finnie Flat Road	SR 260	~ 150 FT east of SR 260	> 300	> 240
Finnie Flat Road	~ 150 FT east of SR 260	~ 650 FT east of SR 260	60	70
Finnie Flat Road	~ 650 FT east of SR 260	East of Dollar Tree Driveway	50	70
Finnie Flat Road	East of Dollar Tree Driveway	~ 220 FT west of Camp Verde Mobile Village	50	50
Finnie Flat Road	~ 220 FT west of Camp Verde Mobile Village	~ 120 FT west of Tire Pro Driveway	33	33
Finnie Flat Road	~ 120 FT west of Tire Pro Driveway	~ 75 FT west of Cliffs Parkway	33	50
Finnie Flat Road	~ 75 FT west of Cliffs Parkway	~ 130 FT east of Verde Outpost Townhouses driveway	50	33
Finnie Flat Road	~ 130 FT east of Verde Outpost Townhouses driveway	~ 480 FT west of Montezuma Castle Highway Slip Ramp	33	50
Finnie Flat Road	~ 480 FT west of Montezuma Castle Highway Slip Ramp	Montezuma Castle Highway Slip Ramp	33	33
Main Street	Montezuma Castle Highway Slip Ramp	Turner Street	33	33
Montezuma Castle Highway	Main Street	Montezuma Castle Highway Slip Ramp	33	33
Montezuma Castle Highway Slip Ramp	Montezuma Castle Highway	Finnie Flat Road	60	30 - 60

Source: ADOT Town of Camp Verde SR 260/ Montezuma Castle Highway STP-CMV-0(1)P As-Built Drawings; ADOT Right of Way Plan for The General Crook Highway Jct. I-17 - Forest Boundary 260 YV 218 H3005 01R As-Built Drawings; ADOT Right of Way Plan for The Cottonwood - Camp Verde - Mogollon Rim Highway - I-16 - Camp Verde ELC 260 YV 218 H3868 01R As-Built Drawings

Recommendations for Further Analysis

Detailed analysis will need to be conducted on the right-of-way needs during the design phase of project implementation. Right-of-way within the study area will require coordination and negotiations with either private entities or the ASLD.

Environmental Justice Review (Title VI)

Title VI of the Civil Rights Act of 1964 and related statutes ensure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance on the basis of race, color, national origin, age, sex, and disability. Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, dictates that programs, policies, and activities identify and address, as appropriate, disproportionately high adverse human health and environmental effects on minority and low-income populations. Protected populations considered in this analysis include: minority, elderly, low-income, and disabled populations. Detailed analysis of the environmental justice conditions along the study corridor can be found in *Working Paper 1: Existing and Future Conditions*. Key findings noted in Working Paper 1 include:

- *Minority Population* - The 2010 Census identified that within the Town of Camp Verde over 26% percent of the total population are minority, while the study corridor has over 25%.

- *Age 65 and Older* - The Census Blocks along Montezuma Castle Highway have higher overall percentages of age 65 and over populations; however, this population group has higher densities southwest of the Tri-Intersection.
- *Female Head of Households* - While the highest concentration of this population group occurs within the Camp Verde Mobile Village, the highest percentage of this population group is in the area southeast of the Finnie Flat Road/7th Street intersection and southwest of the Tri-Intersection.
- *Below Poverty Population* - According to the 2006-2010 ACS, nearly 20% of the total population in Camp Verde and over 27% of the population along the study corridor are below the poverty level. The study is located predominately in Census Tract 16.03, Block Group 2, which is estimated to have over 29% of the population below the poverty level.
- *Disabled Population* - According to the 2000 U.S. Census, 19% of the total population within the Town of Camp Verde and over 14% of the population along the study corridor are disabled. The study is located predominately in Census Tract 16.00, Block Group 2, in which approximately 21% of the total population is disabled.

Multimodal transportation improvements would provide numerous positive impacts to environmental justice populations in the study area. Enhanced streetscaping that provides bicycle and pedestrian facilities would increase protected population's ease of access to local activity centers, places of employment, medical services, and community facilities. Additionally, incorporating transit services and bus bays will give protected populations even greater accessibility to local and regional attractions.

Recommendations for Further Analysis

The potential positive and negative effects on the protected populations should be discussed in the environmental analysis of the design phase. The environmental justice data will need to be updated as data becomes available; continued coordination with the ADOT EPG department will determine the appropriate data source for the most accurate environmental justice review. Consideration should be given during the construction phase of project implementation on the impacts to minority-owned businesses, the mobility needs of the protected populations, and on residential parcels of protected populations. In addition, on-going outreach efforts need to be made to include meaningful participation by all residents, including low-income and minority populations, throughout project development.

9. PLAN FOR IMPROVEMENTS

This section presents the Plan for Improvements for Finnie Flat Road Corridor and the Tri-Intersection. The transportation plan is the result of the deficiency analysis from Working Paper 1, stakeholder input, Public Open House input, and Chapters 4, 5, and 6 of this report. It is a multimodal plan that includes roadway, transit, pedestrian, and bicycle improvements. Together these projects will strengthen the existing roadway system, provide a network of pedestrian and bicycle facilities, support economic development, and improve safety and operations.

Recommended improvements include:

- **Reconfiguration of Finnie Flat Road/Montezuma Castle Highway/Main Street Tri-Intersection.** Two concepts have been developed for immediate review, analysis, and determination. The reconstruction and reconfiguration of the Tri-Intersection will improve safety, operations, and provide pedestrian/bicycle access to activity centers. This project is a short-term priority for which funding has been identified and obtained for the construction and improvement of the intersection. This improvement should be included in the Town of Camp Verde's five-year Capital Improvement Plan (CIP) and the ADOT five-year work program.
- **Finnie Flat Road Corridor: Tri-Intersection to 7th Street.** This short-term improvement includes upgrading the current corridor into a "complete street" that includes one travel lane in each direction; raised median, incorporating sidewalks, bike lanes on both sides of the road; and installing street lighting along with a landscape buffer in each direction.
- **Finnie Flat Road Corridor: 7th Street to West of Bashas' Shopping Complex.** This short-term improvement includes upgrading the current corridor into a "complete street" with access for pedestrian, bicycle, motorists, and transit riders. Recommendations include converting the road to a two-lane roadway with center turn lane; incorporating sidewalks, bike lanes, bus pull-outs on both sides of the road; and installing street lighting along with a landscape buffer in each direction.
- **Finnie Flat Road Corridor: West of Bashas' Shopping Complex to SR 260.** The two phase improvement project includes upgrading the roadway to a "complete street" and widening the existing road to accommodate future demand. By the mid-term phase it is recommended to construct one travel lane in each direction, raised medians with a turn lane; incorporate sidewalks, bike lanes, and bus pull-outs on both sides of the road; and install a 12 FT temporary landscaping buffer and an additional 7 FT of permanent landscaping in each direction. Phase two of the improvement project, recommended to be completed by the long-term phase, is to convert the 12 FT temporary landscaping buffer developed in the mid-term to a travel lane to accommodate future traffic demand.
- **Finnie Flat Road and New Residential Community Road Intersection.** Based on future traffic analysis, if a residential community is built north of Finnie Flat Road and the current dirt road east of Dollar Tree is paved to accommodate the community, a traffic signal will be needed to allow users to safely turn in and out of the residential community and the Trails End RV Park.

Transportation Improvements

Table 9.1 presents a summary of all recommended improvements, while Tables 9.2 - 9.7 are comprehensive project worksheets for each of the proposed improvements. These worksheets will allow Town staff and ADOT to quickly obtain project information and will aid efforts when applying for funding. Each project is assigned a unique project number that the Town can use to track project progress. Unless otherwise noted, the recommended projects are not yet funded.

Table 9.1. Short-, Mid-, and Long-Term Recommendations

ID	Project Location and Description	Cost	Agency
ST - 1	<p>Finnie Flat Road/Montezuma Castle Highway/Main Street Tri-Intersection Concept 2R (No Roundabout): Reconfigures the Montezuma Castle Highway Slip ramp into a two-lane, two way roadway; Montezuma Castle Highway (northbound) is a two-way roadway north of the Circle K driveway; Montezuma Castle Highway/Main Street Intersection reconfigured; Main Street/Turner Street Intersection reconfigured; bike lanes and sidewalks incorporated into design Concept 3R (Roundabout): Main Street/Montezuma Castle Highway/Turner Street Intersection reconfigured to include a roundabout; Finnie Flat Road/Montezuma Castle Highway Slip ramp Intersection reconfigured; bike lanes and sidewalks incorporated into design</p>	<p>Concept 2R: \$1,400,000</p> <p>Concept 3R: \$1,500,000</p>	Camp Verde
ST - 2	<p>Finnie Flat Road Corridor: Tri-Intersection to 7th Street Upgrade corridor to "complete street" to provide safe access for all users, including pedestrians, bicyclists, motorists and transit riders. The complete street concept for the corridor includes:</p> <ul style="list-style-type: none"> • 12 FT travel lane in both directions • 13 FT raised median with turn lanes • 5 FT sidewalk in both directions • 5.5 FT bike lane in both directions • 4 FT landscape buffer on both sides of road • Street lighting and bus bays 	\$1,600,000	Camp Verde
ST - 3	<p>Finnie Flat Road Corridor: 7th Street to West of Bashas' Shopping Complex Upgrade corridor to "complete street" to provide safe access for all users, including pedestrians, bicyclists, motorists and transit riders. The complete street concept for the corridor includes:</p> <ul style="list-style-type: none"> • 12 FT travel lane in both directions • 15 FT center turn lane • 6 FT sidewalk in both directions • 5.5 FT bike lane in both directions • 9 FT landscape buffer on both sides of road • Street lighting and bus bays 	\$1,500,000	Camp Verde
MT - 1	<p>Finnie Flat Road Corridor: West of Bashas' Shopping Complex to SR 260 Upgrade corridor to "complete street" to provide safe access for all users, as well as pedestrians, bicyclists, motorists and transit riders. The complete street concept for the corridor includes:</p> <ul style="list-style-type: none"> • 12 FT travel lane in both directions • 15 FT raised median with turn lanes • 6 FT sidewalk in both directions • 5.5 FT bike lane in both directions • 12 FT dry landscaping/drainage ditch on both sides of road • 7 FT landscape buffer on both sides of road • Street lighting 	\$1,900,000	Camp Verde
LT - 1	<p>Finnie Flat Road Corridor: West of Bashas' Shopping Complex to SR 260 Upgrade enhancements made in the mid-term phase by replacing dry landscaping/ditch with new 12 FT travel lane</p>	\$2,100,000	Camp Verde
LT - 2	<p>Finnie Flat Road and New Residential Community Road Intersection Add new traffic signal</p>	\$500,000	Camp Verde

Estimated costs for each project are expressed in 2013 dollars and are planning level estimates. ROW acquisition costs are not included. Actual costs for projects could vary at the time of implementation; therefore, a detailed analysis should be performed on a case-by-case basis to determine actual costs.

Table 9.2. Short-Term Improvement - Finnie Flat Road/Montezuma Castle Highway/Main Street Tri-Intersection

Finnie Flat Road/Montezuma Castle Highway/Main Street Tri-Intersection **Project Number: ST-1**

<p>Project Location</p>	<p>Intersection of Finnie Flat Road/Montezuma Castle Highway/Main Street</p> 
<p>Existing Conditions</p>	<ul style="list-style-type: none"> • Main Street south of Montezuma Castle Highway: two lanes with center turn lane • Montezuma Castle Highway from Main Street to Montezuma Castle Highway Slip Ramp (Northbound): one lane, northbound only lane • Montezuma Castle Highway from Montezuma Castle Highway to Finnie Flat Road (Southbound): one lane, southbound only lane • Sidewalks located on the west of Main Street, south of Arnold Street, and on the east side of Main Street south of Montezuma Castle Highway (southbound slip ramp) • Bike lane abruptly stops north of Montezuma Castle Highway split • Limited street lighting
<p>Project Description</p>	<ul style="list-style-type: none"> • <u>Preferred Concept 2R</u>: Reconfigure the Montezuma Castle Highway Slip Ramp into a two-lane, two way roadway; Montezuma Castle Highway (northbound) is a two-way roadway north of Circle K; reconfigures Montezuma Castle Highway/Main Street Intersection and Main Street/Turner Street Intersection; incorporates bike lanes and sidewalks • <u>Preferred Concept 3R</u>: Main Street/Montezuma Castle Highway/Turner Street Intersection reconfigured to include a roundabout; Finnie Flat Road/Montezuma Castle Highway Slip Ramp intersection is reconfigured; incorporates bike lanes and sidewalks
<p>Community Benefits</p>	<ul style="list-style-type: none"> • Improves circulation • Provides bicycle and pedestrian access • Improves street lighting • Streetscape improves aesthetics
<p>Modes Addressed</p>	<p>Motor vehicle, transit, pedestrian, and bicycle</p>
<p>Cost Estimate</p>	<p>Concept 2R: \$1,400,000 Concept 3R: \$1,500,000</p>

Table 9.2. Short-Term Improvement - Finnie Flat Road/Montezuma Castle Highway/Main Street Tri-Intersection (Continued)

ST-1 Project Impacts	
Right-of-Way	<ul style="list-style-type: none"> No additional right-of-way is needed for Preferred Concept 2R Additional right-of-way (~7,000 SQFT) is needed for Preferred Concept 3R from the shopping complex on the west side of Main Street
Existing Businesses/Residences	<ul style="list-style-type: none"> Temporary constraints to access businesses and Finnie Flat Road during construction
Potential Development	<ul style="list-style-type: none"> Vacant lot to the east of Tri-Intersection could be developed
Water Resources	<ul style="list-style-type: none"> <u>Surface Water</u>: No rivers or washes are within the immediate project area; Area is not located within an Active Management Area (AMA) <u>Groundwater</u>: One ground well is located approximately 90 FT north of the Montezuma Castle Highway Slip Ramp, while five ground wells are located in the shopping complex southwest of the Main Street/Arnold Street intersection
Floodplains	<ul style="list-style-type: none"> Project area is located outside the 100-year floodplain
Topography and Geology	<ul style="list-style-type: none"> <u>Topography</u>: Main Street and the business located along the roadway sit at a higher elevation than Montezuma Castle Highway; The northbound slip ramp has a steep downward slope from Circle K to the Montezuma Castle Highway Slip Ramp. The Montezuma Castle Highway Slip Ramp has a steep incline to the Finnie Flat Road Intersection <u>Geology</u>: Intersection is located within geology types Tsy (Pliocene to Middle Miocene Deposits) and Qr (Holocene River Alluvium); Tsy is moderately to strongly consolidated sandstone, while Qr is weakly consolidated sand, silt, and clay
Biological Resources*	<ul style="list-style-type: none"> <u>Plant Communities</u>: Lies entirely within Semidesert grassland vegetation community <u>Riparian and Wetland Communities</u>: Not located within a riparian or wetland community <u>Threatened and Endangered Species</u>: Area located north of project area is designated as a Section 10(j) area for the Colorado pikeminnow; Southwestern Willow Flycatcher and Yellow-billed Cuckoo are potential endangered or partial status endangered species that may be located within the project vicinity <u>AZGFD Heritage Data Management System</u>: Special status species and critical habitats are located adjacent to project vicinity <u>Wildlife Corridors</u>: Located within potential wildlife linkage zone
Section 4(f) and Section 6(f) Resources	<ul style="list-style-type: none"> Fort Verde State Historic Park is located approximately 1,200 FT east of the project area The Camp Verde Community Center Park is located approximately 1100 FT southeast of the project area
Cultural Resources	<ul style="list-style-type: none"> Nine prior cultural resource projects and five previously recorded cultural resource sites are located within the project search area. Impacts on historic properties and cultural resources will need to be evaluated in the design phase.
Farmland	<ul style="list-style-type: none"> No prime or unique farmland identified in the study area
Hazardous Materials	<ul style="list-style-type: none"> Six non-leaking underground storage tanks are located within 100 FT of the project area

Table 9.2. Short-Term Improvement - Finnie Flat Road/Montezuma Castle Highway/Main Street Tri-Intersection (Continued)

ST-1 Project Impacts	
Utilities	<ul style="list-style-type: none"> • <u>Unisource Gas</u>: 260 FT of gas line is located on the west side of Main Street from Arnold Street to Turner Street; 75 FT of gas line crosses Main Street north of Turner Street; 110 FT of gas line is located on the east side of the northbound Montezuma Castle Highway ramp • <u>APS Electric</u>: 50 FT of overhead wire crosses the northbound Montezuma Castle Highway ramp; 320 FT of overhead wire is located within the new proposed roadway east of Rain Tunnel; 511 FT of underground wire is located within the new proposed roadway along the east side of Main Street to the Circle K entrance • <u>Camp Verde Sanitary District</u>: 425 FT of main pipe and four manholes are located along Main Street from Arnold Street to south of Turner Street • <u>Camp Verde Water System</u>: CMP culvert crosses Finnie Flat Road at the Montezuma Castle Highway intersection; 70 FT of water line crosses Main Street in front of the Rain Tunnel entrance; 122 FT of water line and three water valves are located at the Main Street and Arnold Street Intersection; 267 FT of water line is located along the west side of Main Street from Arnold Street to south of Turner Street; 95 FT of water line and two water valves are located at the Main Street and Turner Street Intersection; 150 FT of water line is located along the eastside of the Montezuma Castle Highway northbound ramp; 444 FT of water line and one water valve are located along the Montezuma Castle Highway Southbound Slip Ramp
Noise	<ul style="list-style-type: none"> • No noise-sensitive receptors are located within project area
Air Quality	<ul style="list-style-type: none"> • No air quality constraints
Visual Resources	<ul style="list-style-type: none"> • No impact to designated vistas and visual resources; Final design elements should consider landscape and structural design to maintain or improve vistas and overall visual character
Title VI/Environmental Justice Populations	<ul style="list-style-type: none"> • Temporary constraints to access businesses, residential areas, and the Finnie Flat Road Corridor during construction • Upon completion will provide pedestrian and bicycle access and improved vehicle safety

Table 9.3. Short-Term Improvement - Finnie Flat Road Corridor: 7th Street to West of Bashas' Shopping Complex

Finnie Flat Road Corridor: 7th Street to West of Bashas' Shopping Complex **Project Number: ST-3**

<p>Project Location</p>	<p>Finnie Flat Road from 7th Street to West of Bashas' Shopping Complex <u>Length:</u> Approximately 0.27 miles</p> 
<p>Existing Conditions</p>	<ul style="list-style-type: none"> • One travel lane in each direction with center turn lane • Limited sidewalks on south side of roadway • Limited street lighting • No bicycle facilities
<p>Project Description</p>	<p>Upgrade corridor to "complete streets" that provides safe access for all users, as well as pedestrians, bicyclists, motorists and transit riders. The complete street concept for the corridor includes:</p> <ul style="list-style-type: none"> • 12 FT travel lane in both directions • 15 FT center turn lane • 6 FT sidewalk in both directions • 5.5 FT bike lane in both directions • 9 FT landscape buffer on both sides of road • Street lighting and bus bays
<p>Community Benefits</p>	<ul style="list-style-type: none"> • Provides bicycle and pedestrian access • Improves street lighting • Streetscape improves aesthetics
<p>Modes Addressed</p>	<p>Motor vehicle, transit, pedestrian, and bicycle</p>
<p>Cost Estimate</p>	<p>\$1,500,000</p>

Table 9.3. Short-Term Improvement - Finnie Flat Road Corridor: 7th Street to West of Bashas' Shopping Complex (Continued)

ST-3 Project Impacts	
Right-of-Way	<ul style="list-style-type: none"> No additional right-of-way is needed
Existing Businesses/Residences	<ul style="list-style-type: none"> Temporary constraints to access businesses and Finnie Flat Road during construction
Potential Development	<ul style="list-style-type: none"> No future developments are planned for this area
Water Resources	<ul style="list-style-type: none"> <u>Surface Water</u>: No rivers or washes are within the immediate project area; Area is not located within an Active Management Area (AMA) <u>Groundwater</u>: Two ground wells are located 400 FT north of the Finnie Flat Road, and four ground wells are located south of Finnie Flat Road along Cliffs Parkway
Floodplains	<ul style="list-style-type: none"> Project area is located outside the 100-year floodplain and the 100- to 500-year floodplain.
Topography and Geology	<ul style="list-style-type: none"> <u>Topography</u>: The project area's terrain remains relatively flat throughout the project corridor <u>Geology</u>: Intersection is located within geology types Tsy (Pliocene to Middle Miocene Deposits) and Qr (Holocene River Alluvium); Tsy is moderately to strongly consolidated sandstone, while Qr is weakly consolidated sand, silt, and clay
Biological Resources	<ul style="list-style-type: none"> <u>Plant Communities</u>: Lies entirely within Semidesert grassland vegetation community <u>Riparian and Wetland Communities</u>: Not located within a riparian or wetland community <u>Threatened and Endangered Species</u>: Area located north of project area is designated as a Section 10(j) area for the Colorado pikeminnow; Southwestern Willow Flycatcher and Yellow-billed Cuckoo are potential endangered or partial status endangered species that may be located within the project vicinity <u>AZGFD Heritage Data Management System</u>: Special status species and critical habitats are located north of project vicinity in the Verde River riparian habitat <u>Wildlife Corridors</u>: Located within potential wildlife linkage zone
Section 4(f) and Section 6(f) Resources	<ul style="list-style-type: none"> No Section 4(f) or Section 6(f) resources located within project area
Cultural Resources	<ul style="list-style-type: none"> Nine prior cultural resource projects and five previously recorded cultural resource sites are located within the project search area; Impacts on historic properties and cultural resources will need to be evaluated in the design phase
Farmland	<ul style="list-style-type: none"> No prime or unique farmland identified in the study area
Hazardous Materials	<ul style="list-style-type: none"> Two non-leaking underground storage tanks are located within 150 FT of the project area

Table 9.3. Short-Term Improvement - Finnie Flat Road Corridor: 7th Street to West of Bashas' Shopping Complex (Continued)

ST-3 Project Impacts	
Utilities	<ul style="list-style-type: none"> • <u>Unisource Gas</u>: 1120 FT of gas line is located on the north side of the road; 60 FT of gas line crosses Finnie Flat Road west of 7th Street • <u>APS Electric</u>: 1710 FT of underground wire is located on the Southside of the road; 1570 FT of underground wire is located on the north side of the road; 66 FT of wire crosses Finnie Flat Road west of Cliffs Parkway • <u>Camp Verde Sanitary District</u>: 555 FT of main pipe with one manhole crosses Finnie Flat Road from east of Cliffs Parkway to 7th Street • <u>Camp Verde Water System</u>: 1040 FT of water lines and three water valves are located on the north side of the road; 1250 FT of water lines and five water valves are located on the south side of the road; 100 FT of water lines, one junction box, and three water valves are located at the Finnie Flat Road/7th Street intersection
Noise	<ul style="list-style-type: none"> • No noise-sensitive receptors are located within project area
Air Quality	<ul style="list-style-type: none"> • No air quality constraints
Visual Resources	<ul style="list-style-type: none"> • No impact to designated vistas and visual resources. Final design elements should consider landscape and structural design to maintain or improve vistas and overall visual character
Title VI/Environmental Justice Populations	<ul style="list-style-type: none"> • Temporary constraints to access businesses, residential areas, and the Finnie Flat Road Corridor during construction • Upon completion will provide pedestrian and bicycle access and improved vehicle safety

Table 9.4. Short-Term Improvement - Finnie Flat Road Corridor: Tri-Intersection to 7th Street

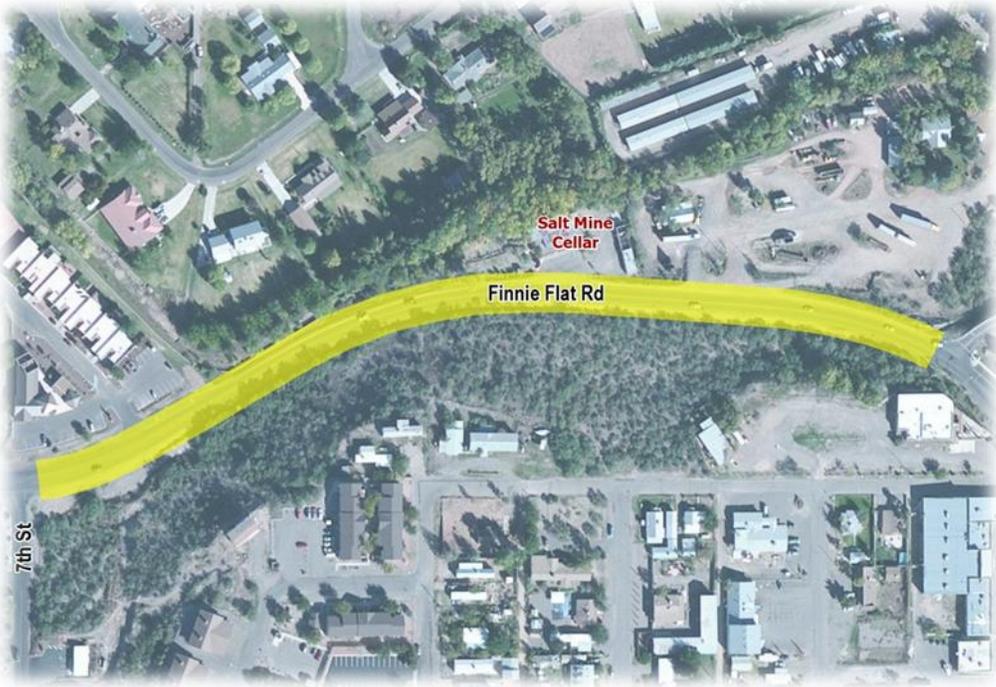
<p>Project Location</p>	<p>Finnie Flat Road from Tri-Intersection to 7th Street <u>Length:</u> Approximately 0.30 miles</p> 
<p>Existing Conditions</p>	<ul style="list-style-type: none"> • One travel lane in each direction • No sidewalks • Street lighting issues • No bicycle facilities
<p>Project Description</p>	<p>Upgrade corridor to "complete streets" that provides safe access for all users, as well as pedestrians, bicyclists, motorists and transit riders. The complete street concept for the corridor includes:</p> <ul style="list-style-type: none"> • 12 FT travel lane in both directions • 13 FT raised median with turn lanes • 5 FT sidewalk in both directions • 5.5 FT bike lane in both directions • 4 FT landscape buffer on both sides of road • Street lighting and bus bays
<p>Community Benefits</p>	<ul style="list-style-type: none"> • Provides bicycle and pedestrian access • Improves street lighting • Streetscape improves aesthetics • Improves safety
<p>Modes Addressed</p>	<p>Motor vehicle, transit, pedestrian, and bicycle</p>
<p>Cost Estimate</p>	<p>\$1,600,000</p>

Table 9.4. Short-Term Improvement - Finnie Flat Road Corridor: Tri-Intersection to 7th Street (Continued)

ST-2 Project Impacts	
Right-of-Way	<ul style="list-style-type: none"> No additional right-of-way is needed
Existing Businesses/Residences	<ul style="list-style-type: none"> Temporary constraints during construction
Potential Development	<ul style="list-style-type: none"> No future developments are planned for this area
Water Resources	<ul style="list-style-type: none"> <u>Surface Water</u>: No rivers or washes are within the immediate project area; Area is not located within an Active Management Area (AMA) <u>Groundwater</u>: Five ground wells are located within 175 FT of Finnie Flat Road
Floodplains	<ul style="list-style-type: none"> Finnie Flat Road is located outside the 100-year floodplain and the 100- to 500-year floodplain North Finnie Flat Road area is designated as an area of 0.2% annual chance flood
Topography and Geology	<ul style="list-style-type: none"> <u>Topography</u>: The corridor has a gradual incline from 7th Street to the Tri-Intersection. <u>Geology</u>: Intersection is located within geology types Tsy (Pliocene to Middle Miocene Deposits) and Qr (Holocene River Alluvium); Tsy is moderately to strongly consolidated sandstone, while Qr is weakly consolidated sand, silt, and clay
Biological Resources	<ul style="list-style-type: none"> <u>Plant Communities</u>: Lies entirely within Semidesert grassland vegetation community <u>Riparian and Wetland Communities</u>: Not located within a riparian or wetland community <u>Threatened and Endangered Species</u>: Area located north of project area is designated as a Section 10(j) area for the Colorado pikeminnow; Southwestern Willow Flycatcher and Yellow-billed Cuckoo are potential endangered or partial status endangered species that may be located within the project vicinity <u>AZGFD Heritage Data Management System</u>: Special status species and critical habitats are located north of project vicinity in the Verde River riparian habitat <u>Wildlife Corridors</u>: Located within potential wildlife linkage zone
Section 4(f) and Section 6(f) Resources	<ul style="list-style-type: none"> No Section 4(f) or Section 6(f) resources located within project area
Cultural Resources	<ul style="list-style-type: none"> Nine prior cultural resource projects and five previously recorded cultural resource sites are located within the project search area; Impacts on historic properties and cultural resources will need to be evaluated in the design phase
Farmland	<ul style="list-style-type: none"> No prime or unique farmland identified in the study area
Hazardous Materials	<ul style="list-style-type: none"> No hazardous materials present

Table 9.4. Short-Term Improvement - Finnie Flat Road Corridor: Tri-Intersection to 7th Street (Continued)

ST-2 Project Impacts	
Utilities	<ul style="list-style-type: none"> • <u>Unisource Gas</u>: No utilities present • <u>APS Electric</u>: 480 FT of underground wire is located on the north side of the road; 50 FT of underground wire crosses Finnie Flat Road west of the Verde Valley Outpost Townhomes • <u>Camp Verde Sanitary District</u>: 300 FT of main pipe and two manholes are located on the north side of the road; 43 FT of lateral pipe crosses Finnie Flat Road east of the Verde Valley Outpost Townhomes • <u>Camp Verde Water System</u>: No utilities present
Noise	<ul style="list-style-type: none"> • No noise-sensitive receptors are located within project area
Air Quality	<ul style="list-style-type: none"> • No air quality constraints
Visual Resources	<ul style="list-style-type: none"> • No impact to designated vistas and visual resources; Final design elements should consider landscape and structural design to maintain or improve vistas and overall visual character
Title VI/Environmental Justice Populations	<ul style="list-style-type: none"> • Temporary constraints to access businesses, residential areas, and the Finnie Flat Road Corridor during construction • Upon completion will provide pedestrian and bicycle access and improved vehicle safety

Table 9.5. Mid-Term Improvement - Finnie Flat Road Corridor: West of Bashas' Shopping Complex to SR 260

Finnie Flat Road Corridor: West of Bashas' Shopping Complex to SR 260 **Project Number: MT-1**

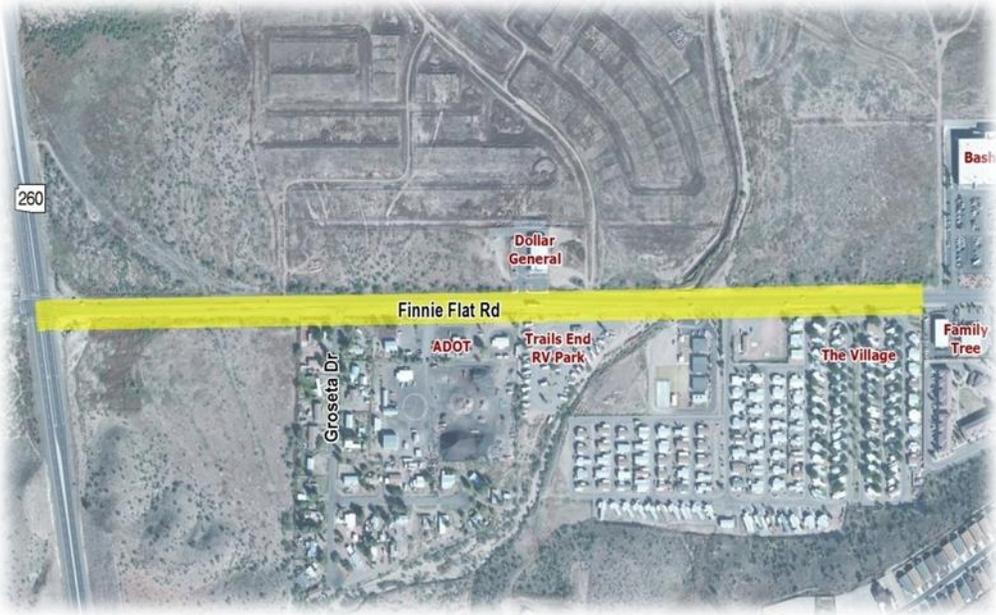
<p>Project Location</p>	<p>Finnie Flat Road from West of Bashas' Shopping Complex to SR 260</p> <p><u>Length:</u> Approximately 0.70 miles</p> 
<p>Existing Conditions</p>	<ul style="list-style-type: none"> • SR 260 to Groseta Drive: two eastbound lanes, one westbound, center turn lane • Groseta Drive to West of Bashas' Shopping Complex: one travel lane in each direction with center turn lane • Sidewalks only present in front of Dollar General store • Limited street lighting • No bicycle facilities
<p>Project Description</p>	<p>Upgrade corridor to "complete streets" that provides safe access for all users, as well as pedestrians, bicyclists, motorists and transit riders. The complete street concept for the corridor includes:</p> <ul style="list-style-type: none"> • 12 FT travel lane in both directions • 15 FT raised median with turn lanes • 6 FT sidewalk in both directions • 5.5 FT bike lane in both directions • 12 FT dry landscaping/drainage ditch on both sides of road • 7 FT landscape buffer on both sides of road • Street lighting
<p>Community Benefits</p>	<ul style="list-style-type: none"> • Provides bicycle and pedestrian access • Improves street lighting • Streetscape improves aesthetics • Improves safety
<p>Modes Addressed</p>	<p>Motor vehicle, transit, pedestrian, and bicycle</p>
<p>Cost Estimate</p>	<p>\$1,900,000</p>

Table 9.5. Mid-Term Improvement - Finnie Flat Road Corridor: West of Bashas' Shopping Complex to SR 260 (Continued)

MT-1 Project Impacts	
Right-of-Way	<ul style="list-style-type: none"> • Right-of-way will need to be acquired on the north side of the roadway from The Village Mobile Home Park to west of the Bashas' Shopping Complex
Existing Businesses/Residences	<ul style="list-style-type: none"> • Temporary constraints to businesses and residential areas during construction
Potential Development	<ul style="list-style-type: none"> • Future regional medical facilities planned in the northeast corner of the SR 260/Finnie Flat Road intersection • Potential future residential area on the north side of the roadway surrounding the Dollar General
Water Resources	<ul style="list-style-type: none"> • <u>Surface Water</u>: No rivers or washes are within the immediate project area; Area is not located within an Active Management Area (AMA) • <u>Groundwater</u>: Five ground wells are located within 400 FT of Finnie Flat Road
Floodplains	<ul style="list-style-type: none"> • Project area is located outside the 100-year floodplain and the 100- to 500-year floodplain
Topography and Geology	<ul style="list-style-type: none"> • <u>Topography</u>: The project area's terrain remains relatively flat throughout the corridor • <u>Geology</u>: Project Area is located within geology type Qr (Holocene River Alluvium); Qr is weakly consolidated sand, silt, and clay
Biological Resources	<ul style="list-style-type: none"> • <u>Plant Communities</u>: Lies entirely within Semidesert grassland vegetation community • <u>Riparian and Wetland Communities</u>: Not located within a riparian or wetland community • <u>Threatened and Endangered Species</u>: Area located northwest of project area is designated as a Section 10(j) area for the Colorado pikeminnow; Southwestern Willow Flycatcher and Yellow-billed Cuckoo are potential endangered or partial status endangered species that may be located within the project vicinity • <u>AZGFD Heritage Data Management System</u>: Special status species and critical habitats are located northwest of project vicinity in the Verde River riparian habitat • <u>Wildlife Corridors</u>: Located within potential wildlife linkage zone
Section 4(f) and Section 6(f) Resources	<ul style="list-style-type: none"> • No Section 4(f) or Section 6(f) resources located within project area
Cultural Resources	<ul style="list-style-type: none"> • Nine prior cultural resource projects and five previously recorded cultural resource sites are located within the project search area; Impacts on historic properties and cultural resources will need to be evaluated in the design phase
Farmland	<ul style="list-style-type: none"> • No prime or unique farmland identified in the study area
Hazardous Materials	<ul style="list-style-type: none"> • No hazardous materials present

Table 9.5. Mid-Term Improvement - Finnie Flat Road Corridor: West of Bashas' Shopping Complex to SR 260 (Continued)

MT-1 Project Impacts	
Utilities	<ul style="list-style-type: none"> • <u>Unisource Gas</u>: 2795 FT of gas line is located on the north side of the road; 80 FT of gas line crosses Finnie Flat Road just east of Groseta Drive; 70 FT of gas line crosses Finnie Flat Road at the entrance to The Village Mobile Home Park • <u>APS Electric</u>: 2330 FT of overhead wire and 13 FT of underground wire is located on the south side of the road; 330 FT of wire is located on the north side of the road in front of the Dollar General; 270 FT of wire crosses Finnie Flat Road at Dollar Tree • <u>Camp Verde Sanitary District</u>: 930 FT of main pipe and six manholes are located along the south side of the road • <u>Camp Verde Water System</u>: 2670 FT of water line, six water valves, and one blow off valve are located on the north side of the road; 2687 FT of water line, 17 water valves, and two water boxes are located on the south side of the road; 500 FT of a water line crosses Finnie Flat Road west of Groseta Drive; 46 FT of water line crosses Finnie Flat Road east of the Trails End RV Park
Noise	<ul style="list-style-type: none"> • Potential residential noise-sensitive receptors located north and south of Finnie Flat Road
Air Quality	<ul style="list-style-type: none"> • No air quality constraints
Visual Resources	<ul style="list-style-type: none"> • No impact to designated vistas and visual resources. Final design elements should consider landscape and structural design to maintain or improve vistas and overall visual character
Title VI/Environmental Justice Populations	<ul style="list-style-type: none"> • Temporary constraints to access businesses, residential areas, and the Finnie Flat Road Corridor during construction • Upon completion will provide pedestrian and bicycle access and improved vehicle safety

Table 9.6. Long-Term Improvement - Finnie Flat Road Corridor: West of Bashas' Shopping Complex to SR 260

Finnie Flat Road Corridor: West of Bashas' Shopping Complex to SR 260 **Project Number: LT-1**

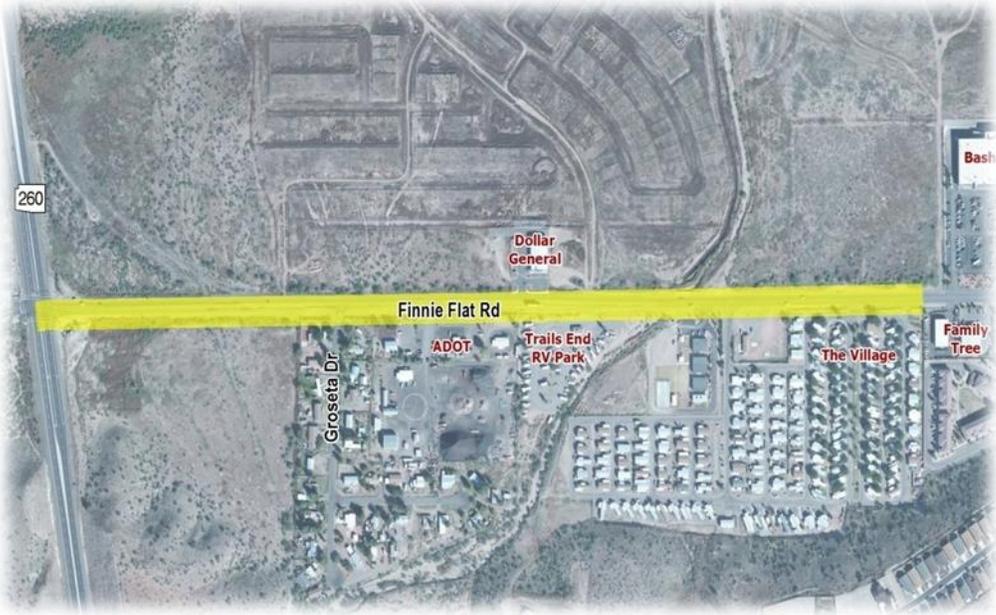
<p>Project Location</p>	<p>Finnie Flat Road from West of Bashas' Shopping Complex to SR 260</p> <p><u>Length:</u> Approximately 0.70 miles</p> 
<p>Existing Conditions</p>	<ul style="list-style-type: none"> • SR 260 to Groseta Drive: two eastbound lanes, one westbound, center turn lane • Groseta Drive to West of Bashas' Shopping Complex: one travel lane in each direction with center turn lane • Sidewalks only present in front of Dollar General store • Limited street lighting • No bicycle facilities
<p>Project Description</p>	<p>Upgrade enhancements made in the mid-term phase by replacing dry landscaping/ ditch with new 12 FT travel lane</p>
<p>Community Benefits</p>	<ul style="list-style-type: none"> • Improves circulation and addresses future travel demand • Improves safety
<p>Modes Addressed</p>	<p>Motor vehicle and transit</p>
<p>Cost Estimate</p>	<p>\$2,100,000</p>

Table 9.6. Mid-Term Improvement - Finnie Flat Road Corridor: West of Bashas' Shopping Complex to SR 260 (Continued)

LT-1 Project Impacts	
Right-of-Way	<ul style="list-style-type: none"> • Right-of-way will need to be acquired on the north side of the roadway from The Village Mobile Home Park to west of the Bashas' Shopping Complex
Existing Businesses/Residences	<ul style="list-style-type: none"> • May cause temporary constraints to businesses and residential areas during construction
Potential Development	<ul style="list-style-type: none"> • Future regional medical facilities planned in the northeast corner of the SR 260/Finnie Flat Road intersection • Potential future residential area on the north side of the roadway surrounding the Dollar General
Water Resources	<ul style="list-style-type: none"> • <u>Surface Water</u>: No rivers or washes are within the immediate project area; Area is not located within an Active Management Area (AMA) • <u>Groundwater</u>: five ground wells are located within 175 FT of Finnie Flat Road
Floodplains	<ul style="list-style-type: none"> • Project area is located outside the 100-year floodplain and the 100- to 500-year floodplain
Topography and Geology	<ul style="list-style-type: none"> • <u>Topography</u>: The project area's terrain remains relatively flat throughout the project corridor • <u>Geology</u>: Project Area is located within geology type Qr (Holocene River Alluvium); Qr is weakly consolidated sand, silt, and clay
Biological Resources	<ul style="list-style-type: none"> • <u>Plant Communities</u>: Lies entirely within Semidesert grassland vegetation community • <u>Riparian and Wetland Communities</u>: Not located within a riparian or wetland community • <u>Threatened and Endangered Species</u>: Area located northwest of project area is designated as a Section 10(j) area for the Colorado pikeminnow; Southwestern Willow Flycatcher and Yellow-billed Cuckoo are potential endangered or partial status endangered species that may be located within the project vicinity • <u>AZGFD Heritage Data Management System</u>: Special status species and critical habitats are located northwest of project vicinity in the Verde River riparian habitat • <u>Wildlife Corridors</u>: Located within potential wildlife linkage zone
Section 4(f) and Section 6(f) Resources	<ul style="list-style-type: none"> • No Section 4(f) or Section 6(f) resources located within project area
Cultural Resources	<ul style="list-style-type: none"> • Nine prior cultural resource projects and five previously recorded cultural resource sites are located within the project search area; Impacts on historic properties and cultural resources will need to be evaluated in the design phase
Farmland	<ul style="list-style-type: none"> • No prime or unique farmland identified in the study area
Hazardous Materials	<ul style="list-style-type: none"> • No hazardous materials present

Table 9.6. Mid-Term Improvement - Finnie Flat Road Corridor: West of Bashas' Shopping Complex to SR 260 (Continued)

LT-1 Project Impacts	
Utilities	<ul style="list-style-type: none"> • <u>Unisource Gas</u>: 2795 FT of gas line is located on the north side of the road; 80 FT of gas line crosses Finnie Flat Road, just east of Groseta Drive; 70 FT of gas line crosses Finnie Flat Road at the entrance to The Village Mobile Home Park • <u>APS Electric</u>: 2330 FT of overhead wire and 13 FT of underground wire is located on the south side of the road; 330 FT of wire is located on the north side of the road in front of the Dollar General; 270 FT of wire crosses Finnie Flat Road at Dollar General • <u>Camp Verde Sanitary District</u>: 930 FT of main pipe and six manholes are located along the south side of the road • <u>Camp Verde Water System</u>: 2670 FT of water line, six water valves, and one blow off valve are located on the north side of the road; 2687 FT of water line, 17 water valves, and two water boxes are located on the south side of the road; 500 FT of a water line crosses Finnie Flat Road west of Groseta Drive; 46 FT of water line crosses Finnie Flat Road east of the Trails End RV Park
Noise	<ul style="list-style-type: none"> • Potential residential noise-sensitive receptors located north and south of Finnie Flat Road
Air Quality	<ul style="list-style-type: none"> • No air quality constraints
Visual Resources	<ul style="list-style-type: none"> • No impact to designated vistas and visual resources; Final design elements should consider landscape and structural design to maintain or improve vistas and overall visual character
Title VI/Environmental Justice Populations	<ul style="list-style-type: none"> • Temporary constraints to access businesses, residential areas, and the Finnie Flat Road Corridor during construction • Upon completion will provide pedestrian and bicycle access and improved vehicle safety

Table 9.7. Long-Term Improvement - Finnie Flat Road and New Residential Community Road Intersection

Finnie Flat Road and New Residential Community Road Intersection **Project Number: LT-2**

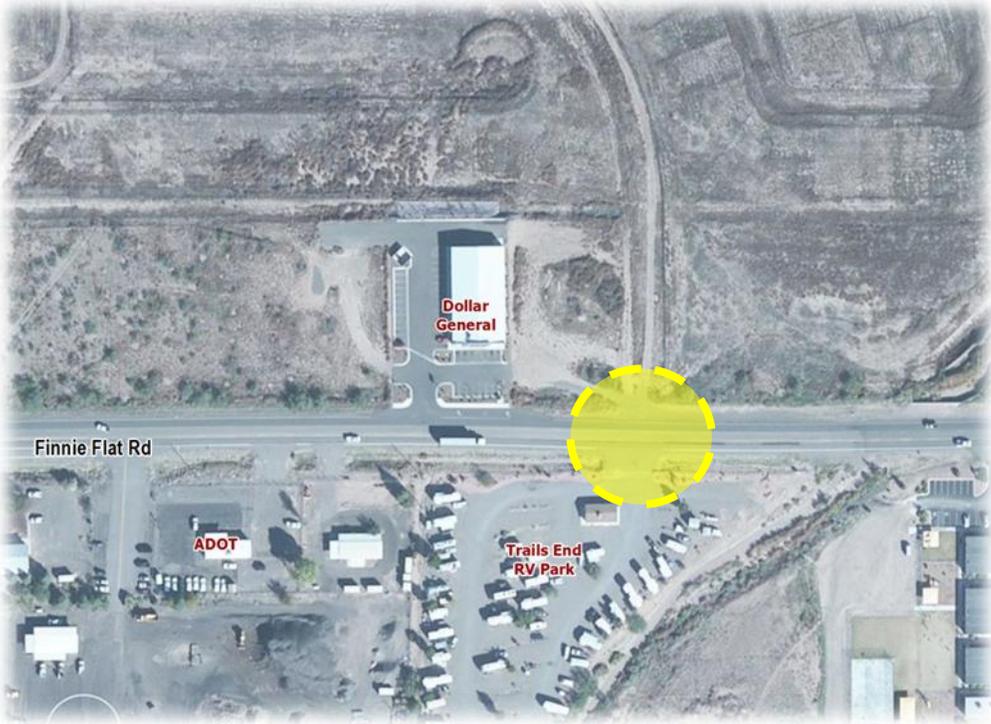
<p>Project Location</p>	<p>Finnie Flat Road at the intersection of the new residential community entrance</p> 
<p>Existing Conditions</p>	<ul style="list-style-type: none"> • One travel lane in each direction with center turn lane on Finnie Flat Road • Future residential community entrance is an unpaved roadway • No sidewalks present • Limited street lighting • No bicycle facilities
<p>Project Description</p>	<p>Add new traffic signal</p>
<p>Community Benefits</p>	<ul style="list-style-type: none"> • Reduces potential turning movement impacts from residential community and the Trails End RV Park • Improves traffic flow and safety
<p>Modes Addressed</p>	<p>Motor vehicle and pedestrian</p>
<p>Cost Estimate</p>	<p>\$500,000</p>

Table 9.7. Long-Term Improvement - Finnie Flat Road and New Residential Community Road Intersection (Continued)

LT-2 Project Impacts	
Right-of-Way	<ul style="list-style-type: none"> • Right-of-way will need to be acquired in the mid-term phase on the north side of the roadway from The Village Mobile Home Park to west of the Bashas' Shopping Complex
Existing Businesses/Residences	<ul style="list-style-type: none"> • May cause temporary constraints to businesses and residential areas during construction
Potential Development	<ul style="list-style-type: none"> • Potential future residential area on the north side of the roadway surrounding the Dollar General
Water Resources	<ul style="list-style-type: none"> • <u>Surface Water</u>: No rivers or washes are within the immediate project area; Area is not located within an Active Management Area (AMA) • <u>Groundwater</u>: Five ground wells are located within 175 FT of Finnie Flat Road
Floodplains	<ul style="list-style-type: none"> • Project area is located outside the 100-year floodplain and the 100- to 500-year floodplain
Topography and Geology	<ul style="list-style-type: none"> • <u>Topography</u>: The project area's terrain is relatively flat • <u>Geology</u>: Intersection is located within geology type Qr (Holocene River Alluvium); Qr is weakly consolidated sand, silt, and clay
Biological Resources	<ul style="list-style-type: none"> • <u>Plant Communities</u>: Lies entirely within Semidesert grassland vegetation community • <u>Riparian and Wetland Communities</u>: Not located within a riparian or wetland community • <u>Threatened and Endangered Species</u>: Area located northwest of project area is designated as a Section 10(j) area for the Colorado pikeminnow; Southwestern Willow Flycatcher and Yellow-billed Cuckoo are potential endangered or partial status endangered species that may be located within the project vicinity • <u>AZGFD Heritage Data Management System</u>: Special status species and critical habitats are located northwest of project vicinity in the Verde River riparian habitat • <u>Wildlife Corridors</u>: Located within potential wildlife linkage zone
Section 4(f) and Section 6(f) Resources	<ul style="list-style-type: none"> • No Section 4(f) or Section 6(f) resources located within project area
Cultural Resources	<ul style="list-style-type: none"> • Nine prior cultural resource projects and five previously recorded cultural resource sites are located within the project search area; Impacts on historic properties and cultural resources will need to be evaluated in the design phase
Farmland	<ul style="list-style-type: none"> • No prime or unique farmland identified in the study area
Hazardous Materials	<ul style="list-style-type: none"> • No hazardous materials present
Utilities	<ul style="list-style-type: none"> • <u>Unisource Gas</u>: Gas line is located on the north side of Finnie Flat Road • <u>APS Electric</u>: No utilities present • <u>Camp Verde Sanitary District</u>: No utilities present • <u>Camp Verde Water System</u>: Water lines are located on the north and south side of Finnie Flat Road
Noise	<ul style="list-style-type: none"> • Potential residential noise-sensitive receptors located north and south of Finnie Flat Road
Air Quality	<ul style="list-style-type: none"> • No air quality constraints
Visual Resources	<ul style="list-style-type: none"> • No impact to designated vistas and visual resources
Title VI/Environmental Justice Populations	<ul style="list-style-type: none"> • Temporary constraints to access businesses, residential areas, and the Finnie Flat Road Corridor during construction • Upon completion will provide pedestrian and bicycle access and improved vehicle safety

Implementation and Funding Strategies

This section discusses available funding sources, roadway standards and policies, and implementation actions to help implement the Plan for Improvement.

Funding Sources

The successful implementation of the Camp Verde's Finnie Flat Road Business Corridor Study Plan for Improvements is contingent upon the availability of funding for design and construction of the improvement projects. Primary funding sources for the area include Federal programs, ADOT, and other regional government agencies such as NACOG. Passed in July 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) reauthorized surface transportation programs through fiscal year 2014. The program was enacted to create a streamlined, performance-based, and multimodal program to address the many challenges facing the Nation's transportation system. MAP-21 authorizes Federal-aid highway programs for the next two-years while maintaining current spending levels by consolidating core highway programs in the SAFETEA-LU. Figure 5.1 illustrates the restructured SAFETEA-LU programs under the new seven core groups of the MAP-21 as well as the apportioned funding for the next two fiscal years.

The six new core MAP-21 Program includes:

- National Highway Performance Program (NHPP)
- Surface Transportation Program (STP)
- Transportation Alternatives
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Highway Safety Improvement Program (HSIP)
- Transportation Infrastructure Finance and Innovation Act (TIFIA) Loan Program

In addition, MAP-21 gives FTA significant new authority to strengthen the safety of public transportation systems throughout the United States. The Act aims to align Federal funding to progress towards the goals of restoring and replacing aged public transportation infrastructure, supporting development, and improving the efficiency of administering grant programs by consolidating and streamlining several programs.

Table 9.8 presents a comprehensive matrix of potential funding sources that the Town of Globe can apply for funding to implement the Plan for Improvement identified by this study. Funding for the Tri-Intersection has been allocated for the partial reconstruction and overlay of the Tri-Intersection in the NACOG TIP for funding year 2014-2015.

Table 9.8: Funding Sources

Program	Description	Eligible Uses
Federal		
High Risk Rural Roads (HRRR)	MAP-21 legislation does not set aside funds for a high risk rural roads program. However, the Special Rule requires States with an increase in fatality rates on rural roads to obligate a specified amount of HSIP funds on HRRRs.	Variety of capital projects including: <ul style="list-style-type: none"> • Intersection safety improvements • Pavement and shoulder widening • Improving pedestrian and bicycle facilities • Improving highway signage and pavement markings • Traffic control devices • Installing guardrails and barriers • Construction of a traffic calming features • Railway-highway crossing safety features
Highway Safety Improvement Program (HSIP)	The HSIP is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands.	Eligible projects include, but are not limited to: <ul style="list-style-type: none"> • Intersection improvements • Construction of shoulders • Traffic calming • Improvements for bicyclists, pedestrians, and individuals with disabilities. • Projects to maintain minimum standards of retro-reflectivity of traffic signs and pavement markings
National Priority Safety Program	Under MAP-21, Section 405 was renamed the National Priority Safety Program, which combines the impaired driving, occupant protection, traffic records and motorcyclist safety programs authorized under SAFETEA-LU and adds two new incentive programs – one for distracted driving and one for graduated driver licensing.	Programs include: <ul style="list-style-type: none"> • Section 405(b): Occupant Protection • Section 405(c): State Traffic Safety Information System Improvements • Section 405(d): Impaired Driving Countermeasures • Section 405(e): Distracted Driving • Section 405(f): Motorcyclist Safety • Section 405(g): State Graduated Driver Licensing Laws
Surface Transportation Program (STP)	The Surface Transportation Program is the most flexible of all the highway programs and historically one of the largest single programs. States and metropolitan regions may use these funds for highway, bridge, transit (including intercity bus terminals), and pedestrian and bicycle infrastructure projects.	Eligible projects include, but are not limited to: <ul style="list-style-type: none"> • Highway and bridge construction and rehabilitation • De-icing of bridges and tunnels • Federal-aid bridge repair • Congestion pricing and travel demand management • Off-system bridge repair • Transit capital projects • Bicycle, pedestrian, and recreational trails
Transportation Alternatives Program (TAP)	MAP-21 consolidated the Transportation Enhancements, Safe Routes to School, and Recreational Trails. Instead of a state requirement to spend a percentage of funds, local applicants compete for grants to fund a broad range of activities that provide transportation options, improve safety, and enhance economic vitality.	Eligible projects include, but are not limited to: <ul style="list-style-type: none"> • Bicycle and pedestrian facilities • Safe routes projects for non-drivers • Construction of turnouts and overlooks • Community improvement activities including vegetation management and historic preservation • Environmental mitigation activity including NEPA compliance

Table 9.8: Funding Sources (Continued)

Program	Description	Eligible Uses
Transportation Infrastructure Financing and Innovation Act (TIFIA)	The TIFIA program provides loans, loan guarantees, and standby lines of credit to highway, bridge, transit, and intermodal freight projects that have a dedicated source of revenue pledged toward repayment.	Eligible projects include, but are not limited to: <ul style="list-style-type: none"> • Highway, passenger rail, transit and certain intermodal projects • Certain freight rail facilities • Surface transportation infrastructure modifications necessary to facilitate direct intermodal transfer • Intelligent transportation systems • Intercity passenger bus or rail facilities and vehicles • Groups of related eligible transportation projects secured by a common pledge
State		
Community Development Block Grant Program (CDBG) - State Administered	States participating in the CDBG Program award grants only to units of general local government that carry out development activities.	Eligible projects include, but are not limited to: <ul style="list-style-type: none"> • Acquisition of property for public purposes • Construction or reconstruction of streets, water and sewer facilities, neighborhood centers, recreation facilities, and other public works • Rehabilitation of public and private buildings • Planning activities
Governor’s Office of Highway Safety	Finances State and local government highway safety projects.	Inventories, need studies, engineering studies, system development, program implementation, or for purchasing equipment. Cannot be used for the construction, design, or maintenance of highways or for highway construction research papers.
Highway User Revenue Fund (HURF)	Funds derived from fuel taxes, vehicle license tax, registration fees, and other fees.	Highway construction, improvements, and other related expenses
State and Community Highway Safety Grant Program	The Section 402 program provides grants to states to improve driver behavior and reduce deaths and injuries from motor vehicle-related crashes.	Funds can be spent in accordance with national guidelines for programs such as reducing impaired driving; reducing speeding; encouraging the use of occupant protection; improving motorcycle safety; improving pedestrian and bicycle safety; improving enforcement of traffic safety laws; improving traffic records; and enhancing emergency services.
State Planning and Research Program	The funds are used to establish a cooperative, continuous, and comprehensive framework for making transportation investment decisions and to carry out transportation research activities throughout the State.	Eligible projects include, but are not limited to: <ul style="list-style-type: none"> • Engineering and economic surveys and investigations • Planning of future highway programs and local public transportation systems Studies of the economy, safety, and convenience of surface transportation systems
Vehicle License Tax	Arizona tax paid by vehicle owners.	

Table 9.8: Funding Sources (Continued)

Program	Description	Eligible Uses
Local and Private		
AAA Foundation for Traffic Safety	Funding for projects to discover the causes of traffic crashes, prevent them, and minimize injuries when they do occur.	Projects needed to evaluate new or existing traffic safety initiatives.
Community Facilities District (CFD)	A CFD is a special purpose, tax levying public improvement district that aids in financing and providing public infrastructure, such as water, sewer, schools and streets in a defined district.	<p>A wide range of public infrastructure improvements may be acquired or constructed with CFD bond proceeds, including:</p> <ul style="list-style-type: none"> • Flood control and drainage projects • Landscaping and lakes • Lighting and traffic control • Parks and recreation facilities • Enhanced public services
Development Impact Fees	Development impact fees are one-time charges applied to offset the additional public-service costs of new development. They are usually applied at the time a building permit is issued and are dedicated to provision of additional services, made necessary by the presence of new residents in the area.	<ul style="list-style-type: none"> •
Development Stipulations	Developers dedicate appropriate ROW and build adjacent streets.	<ul style="list-style-type: none"> •
Developer Exactions	Require developers to construct off-site facilities necessary to serve their development.	<ul style="list-style-type: none"> •
Hotel Bed Tax	Tax added to hotel room charge that is paid to the state during tax returns and refunded to the local jurisdiction by the state of Arizona.	<ul style="list-style-type: none"> •
Road Improvement and Maintenance Road District	District is established to share the costs of the improvements between the residents and property owners within district.	<ul style="list-style-type: none"> • Cannot be used to improve and maintain private roads as private roads. • After completion of the road, ongoing maintenance becomes the responsibility of the District.
Public-Private Partnerships (P3)	Public-private partnerships (P3s) are contractual agreements formed between a public agency and a private sector for financing transportation projects.	<ul style="list-style-type: none"> • Public-private partnerships can be applied to a large range of projects, including: design, construction, operation, maintenance, and program management.
Sales Tax	Funds from a portion of a municipality's sales tax.	<ul style="list-style-type: none"> •

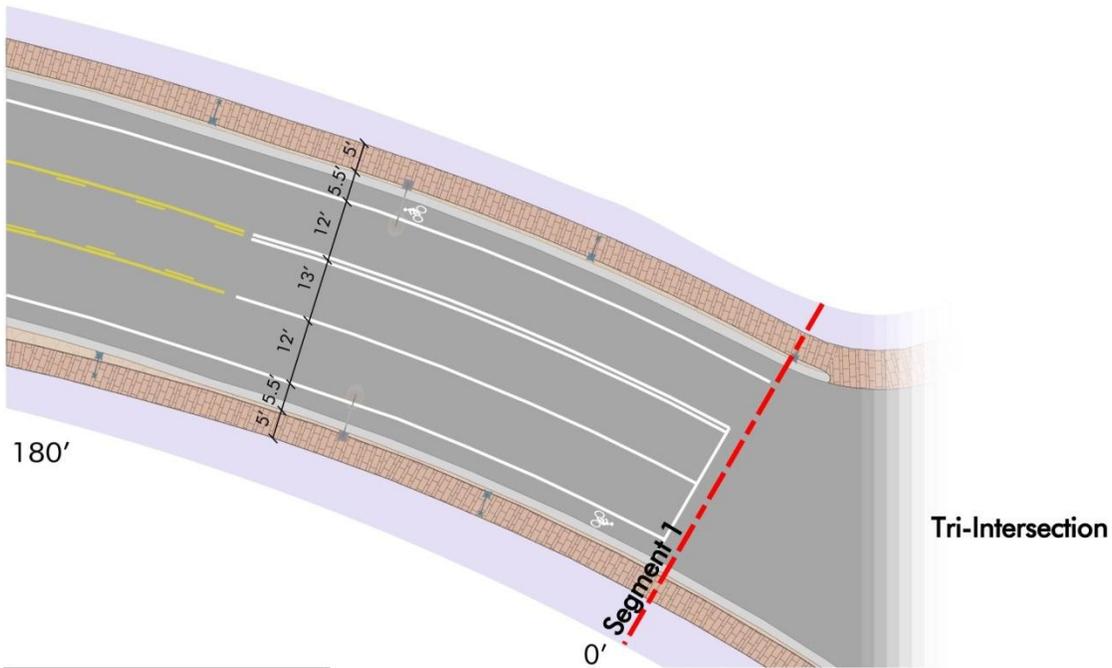
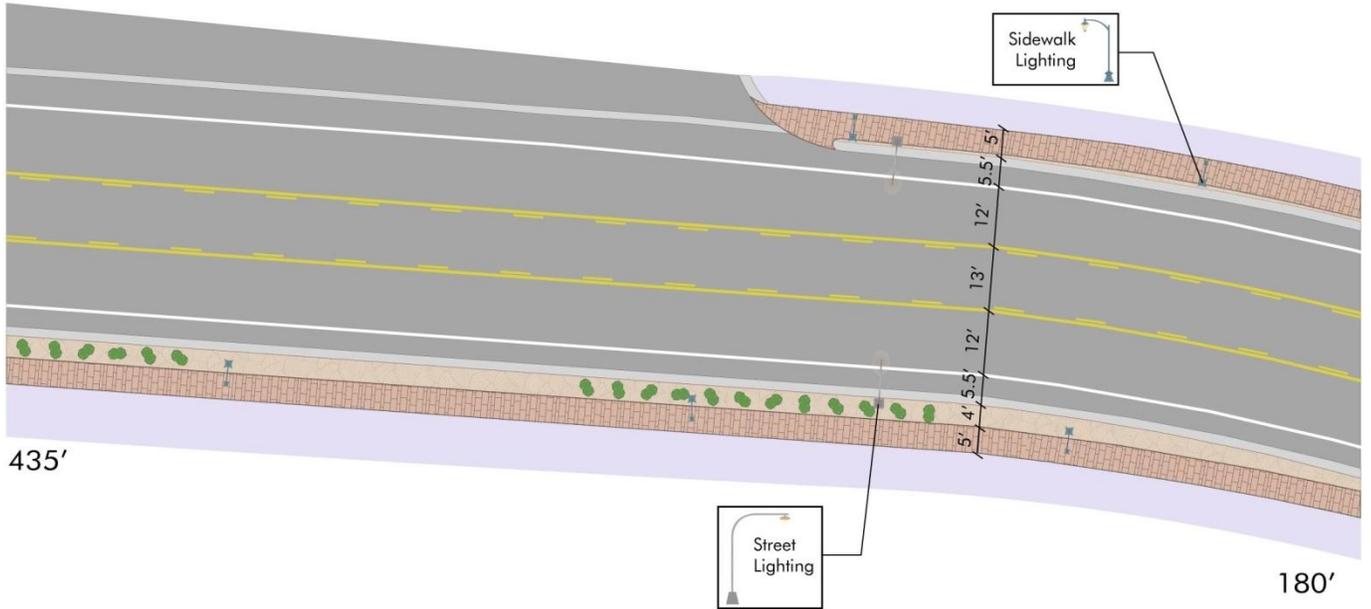
Implementation Actions

Implementation of the corridor vision for the enhancement of the Finnie Flat Road Business Corridor requires active participation from local citizens, private entities, and local and State government officials. The following actions are recommended to successfully implement the Plan for Improvements developed as part of this study.

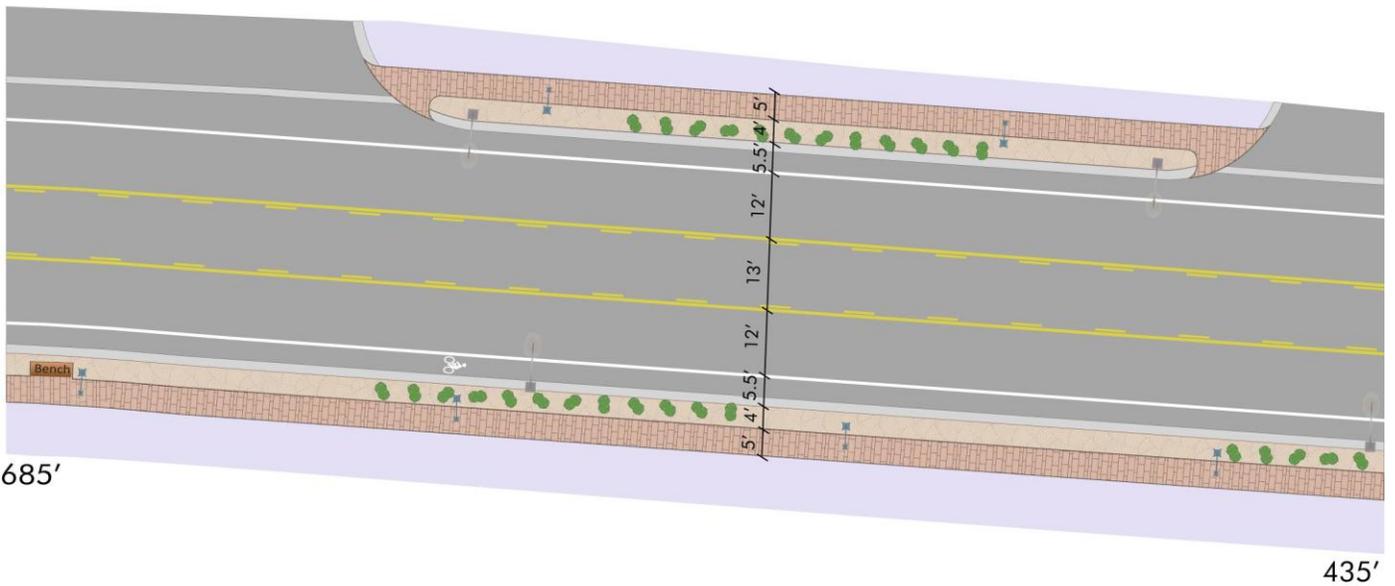
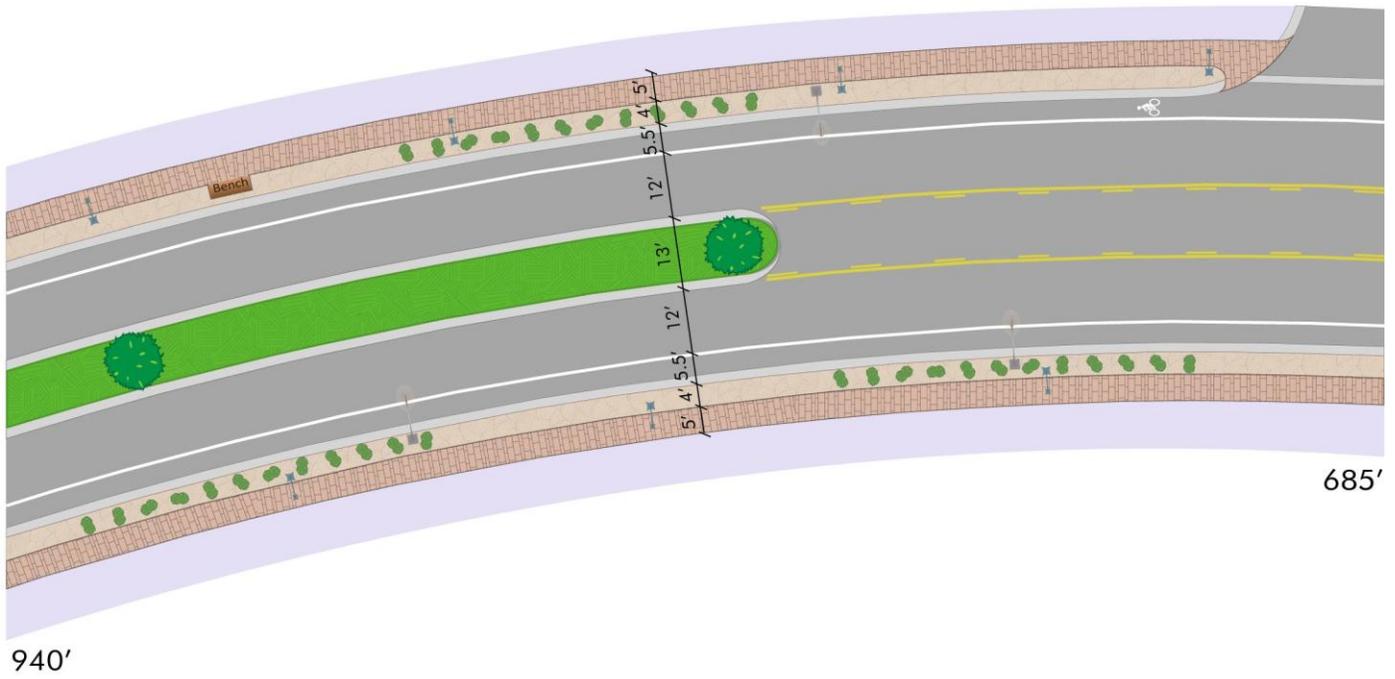
- Incorporate high priority improvement projects in the Town's Capital Improvement Program (CIP).
- Conduct a detailed Design Concept Report of the Tri-Intersection in order to further refine planning level improvement concepts.
- Conduct additional public outreach efforts to build public support.
- Work with Yavapai County and ADOT to confirm existing ROW widths and identify areas where additional ROW is required. If needed, purchase required ROW from property owners.
- Further research and apply for funding for each project identified in the Plan for Improvements.
- Consider establishing a Roadway Improvement District to fund construction, operation, and maintenance of needed infrastructure within the Corridor.
- Pursue developer stipulations and exactions as development occurs along the Corridor in order to construct necessary infrastructure for the additional growth.
- Promote public-private partnerships between the Town and the private sector to implement improvements.
- Solicit grants for bicycle and pedestrian improvements to add bicycle lanes, enhance connections to existing facilities, and to construct new facilities in deficient locations.
- Develop policies and procedures to promote alternative modes of transportation.
- Review and update street design standards, develop comprehensive access management standards, and detailed traffic impact guidelines and procedures.
- Collaborate with local property owners, real estate professionals, and developers to identify economic development goals and to formulate an outreach plan to promote development along the corridor.

APPENDIX A.
FINNIE FLAT ROAD CORRIDOR -
BUILD-OUT STREETScape CONCEPT - EXAMPLE LAYOUT

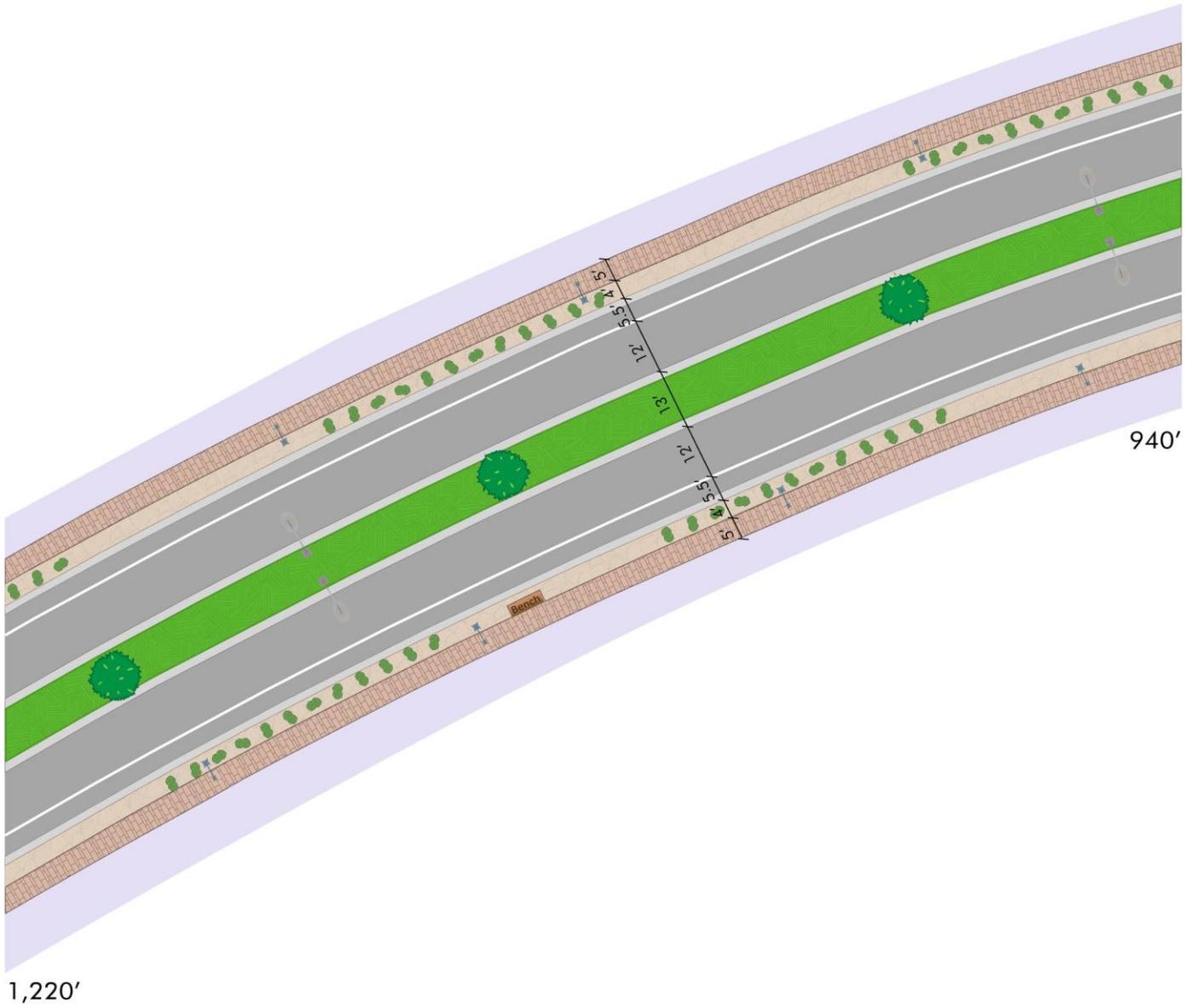
Finnie Flat Road - Segment 1



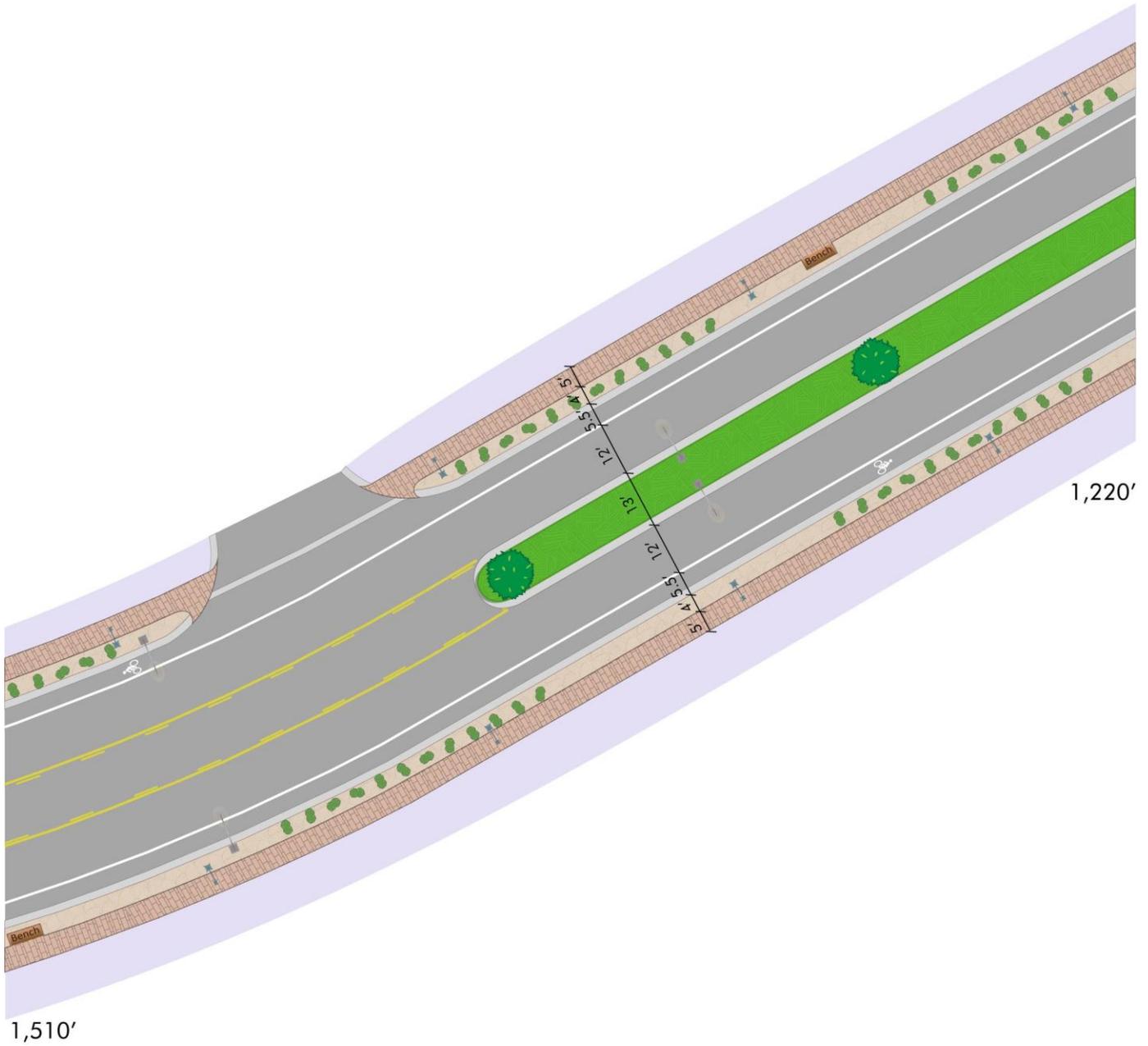
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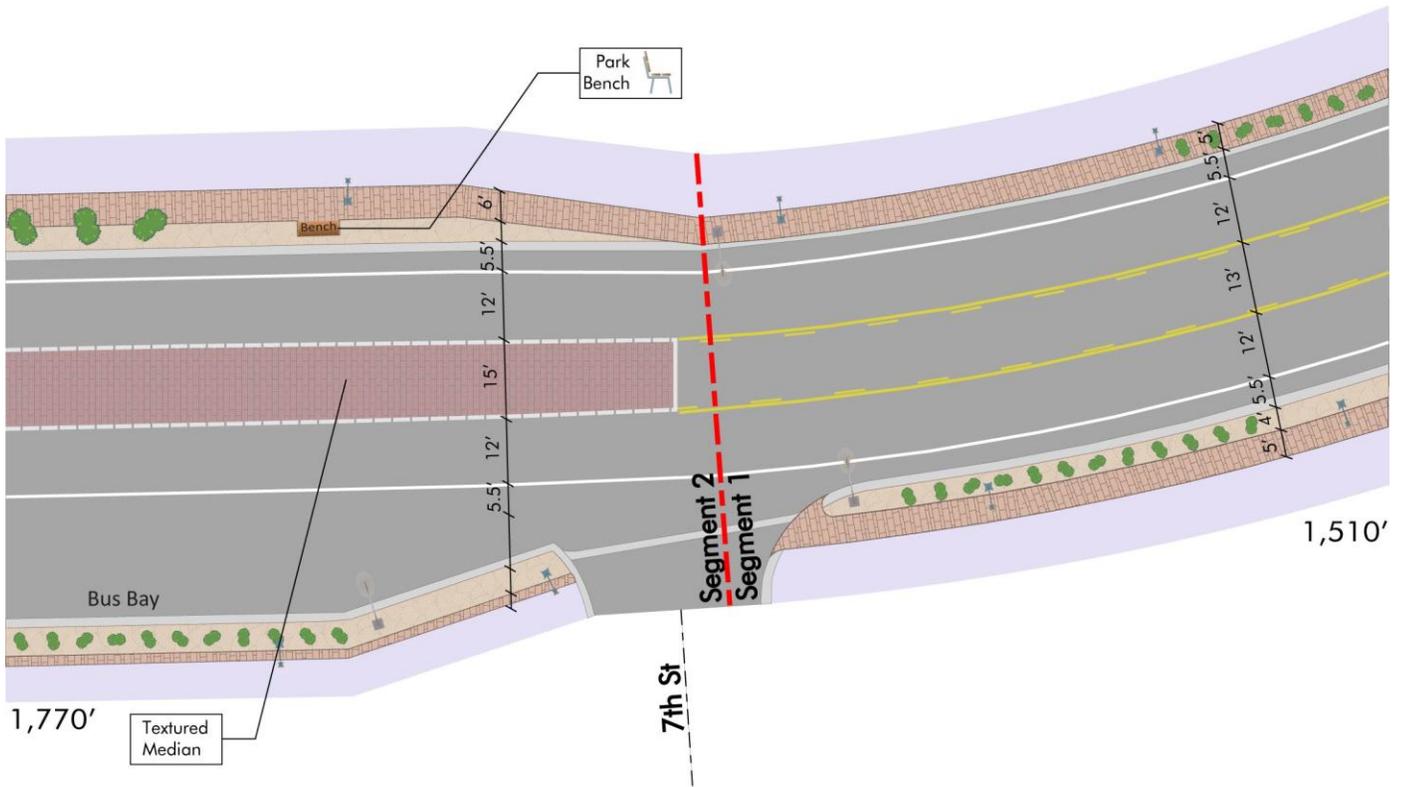
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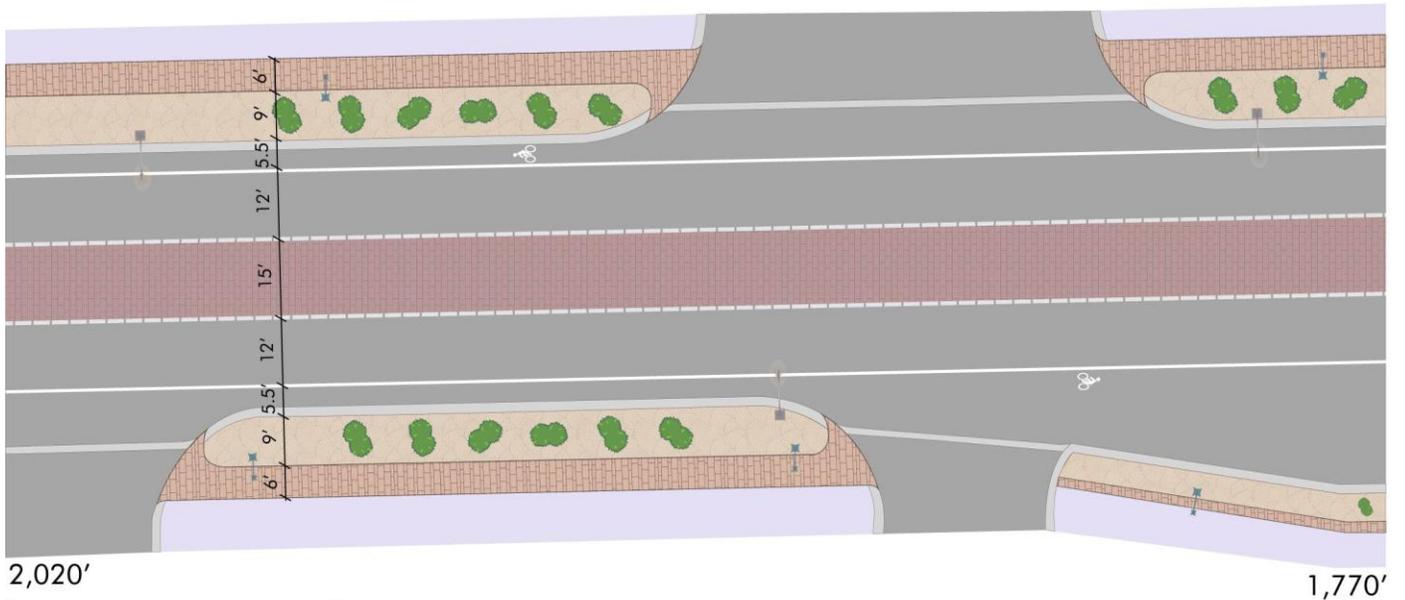
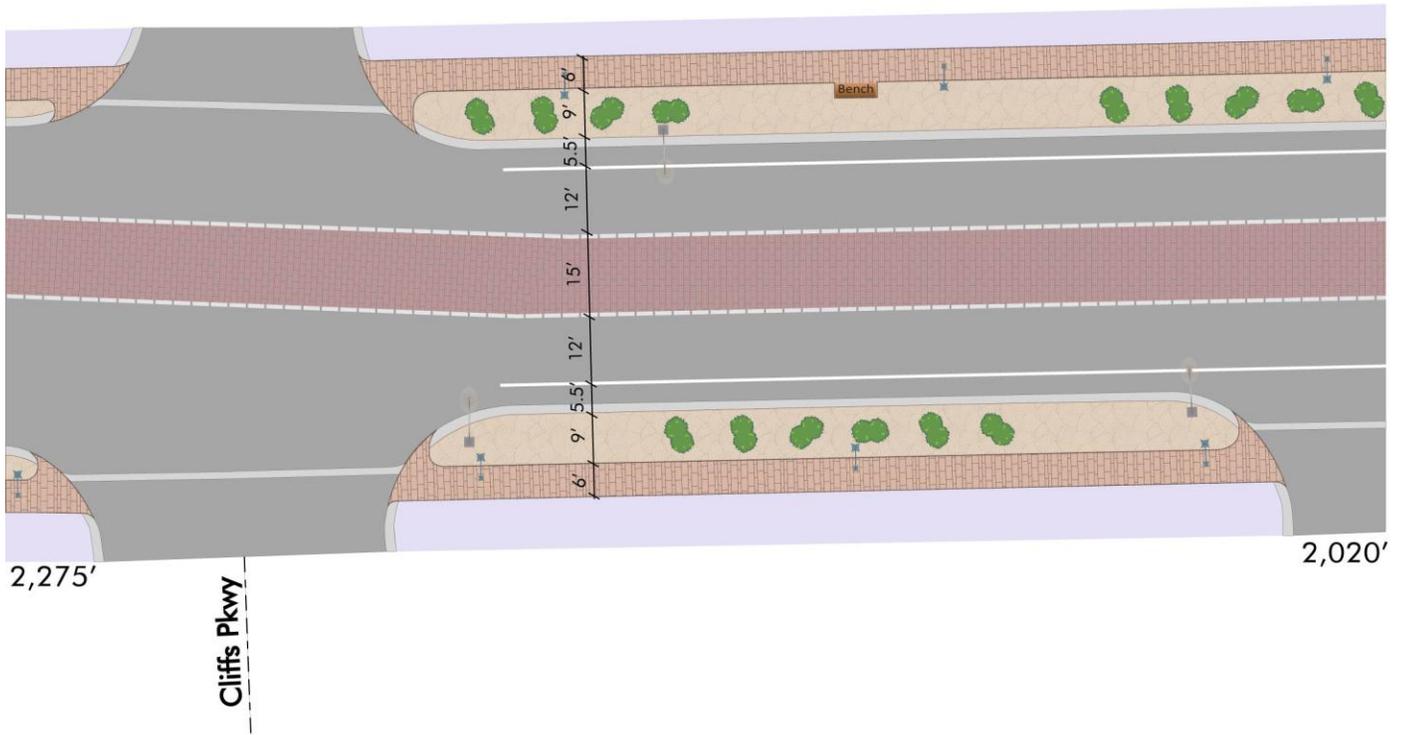
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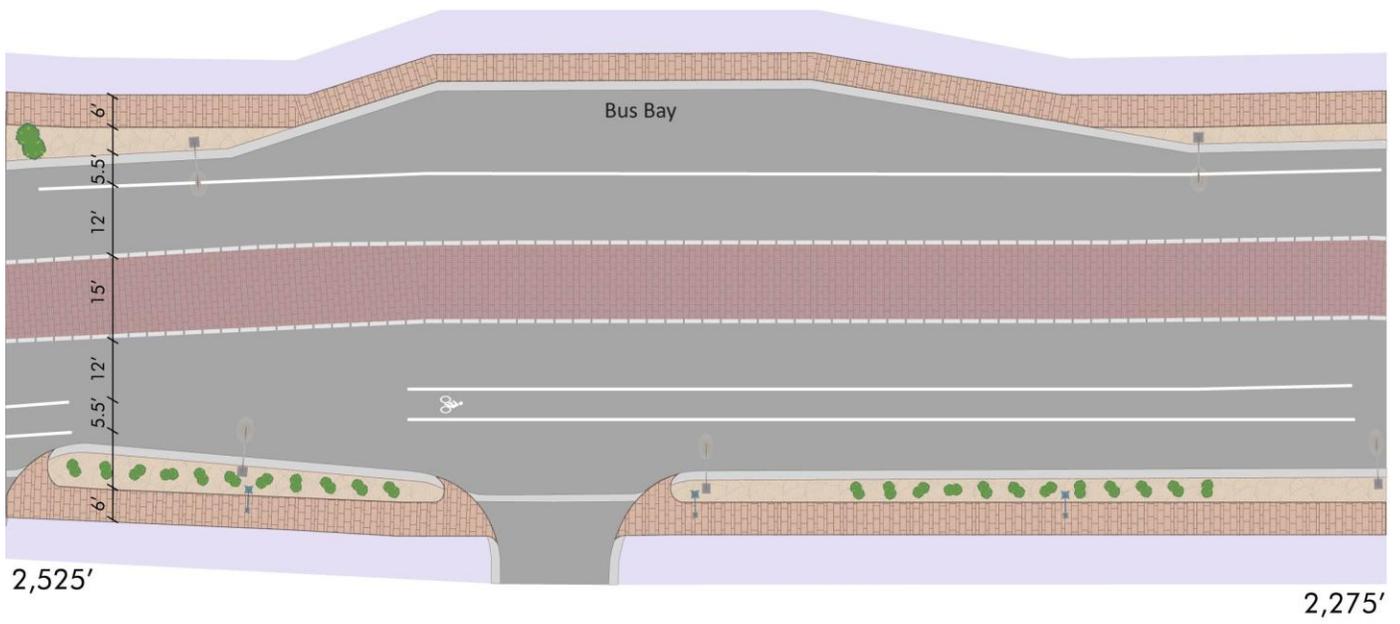
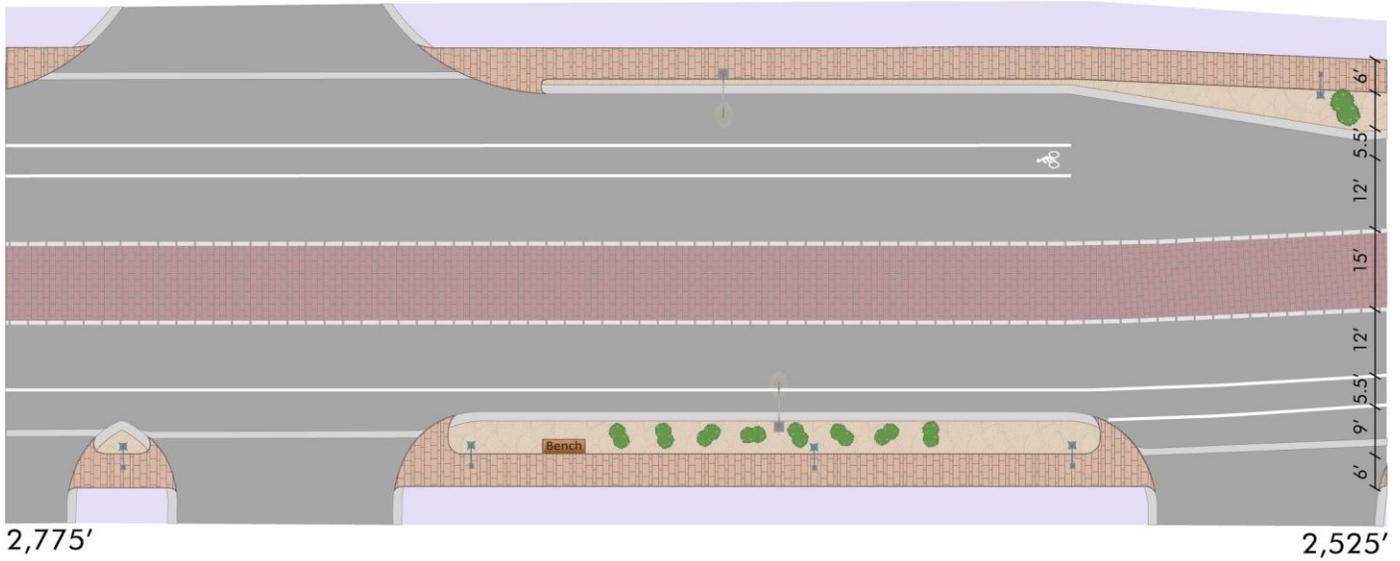
Finnie Flat Road - Segments 1 and 2



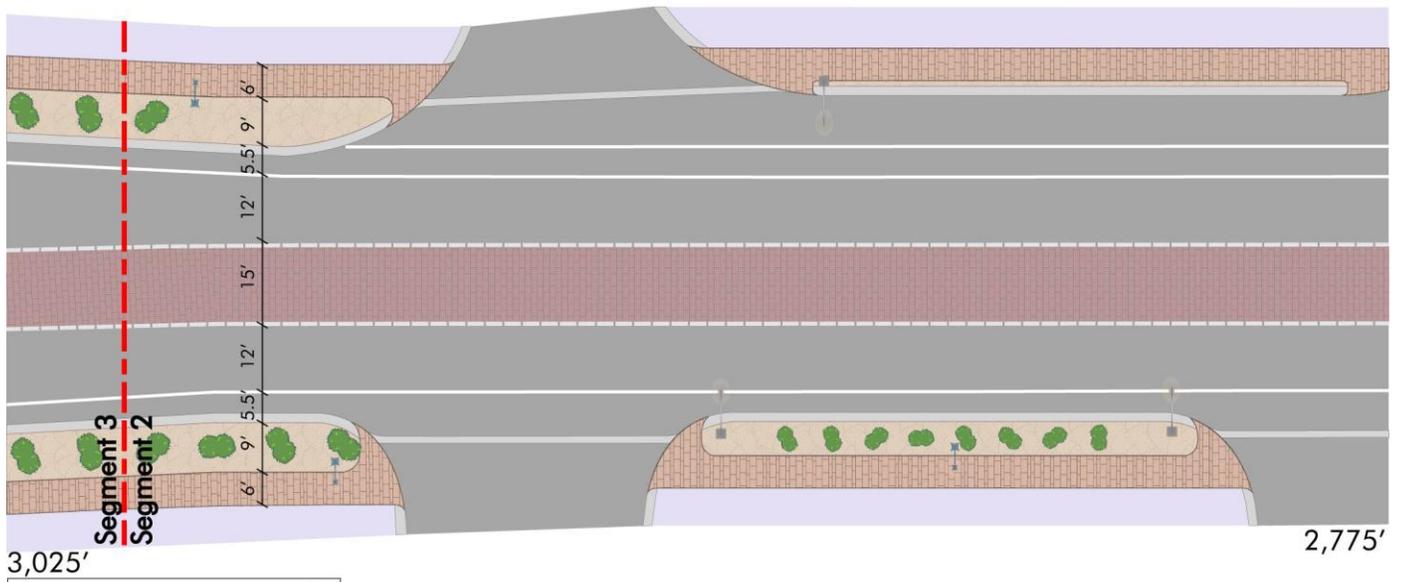
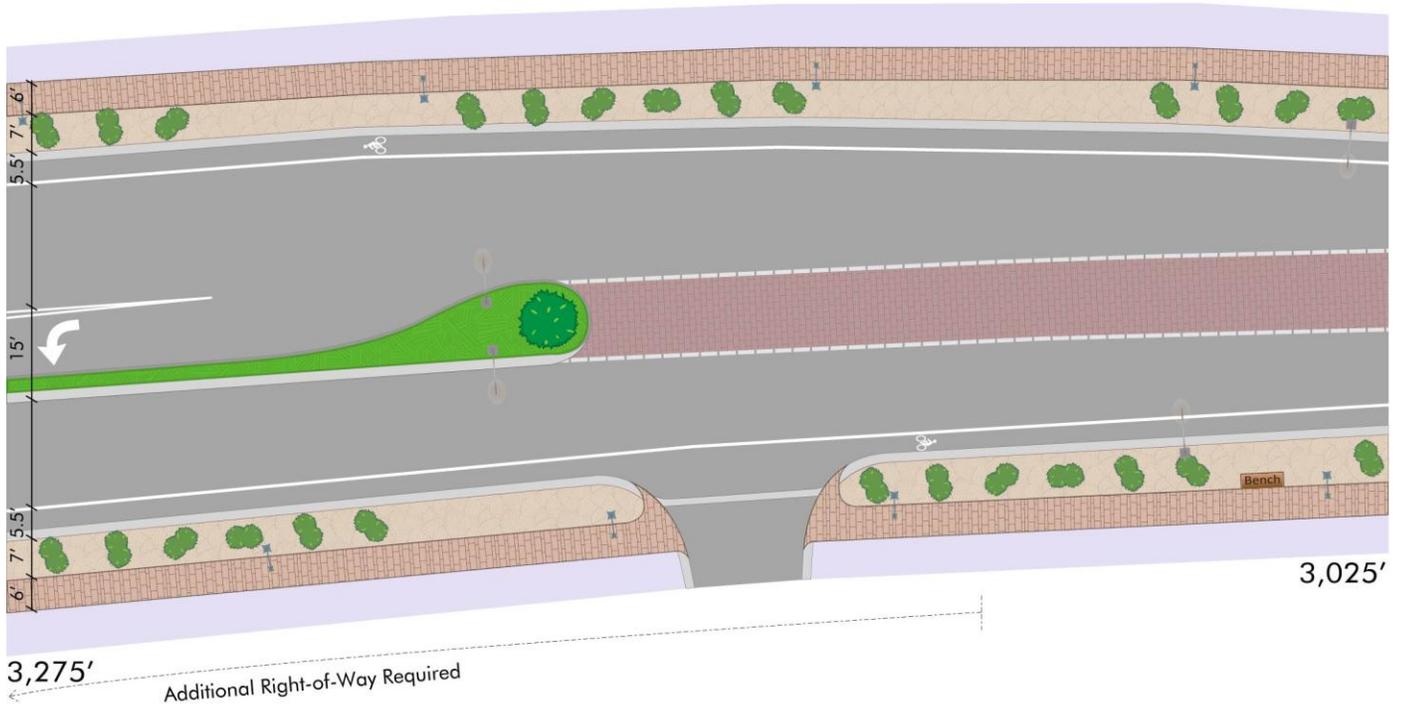
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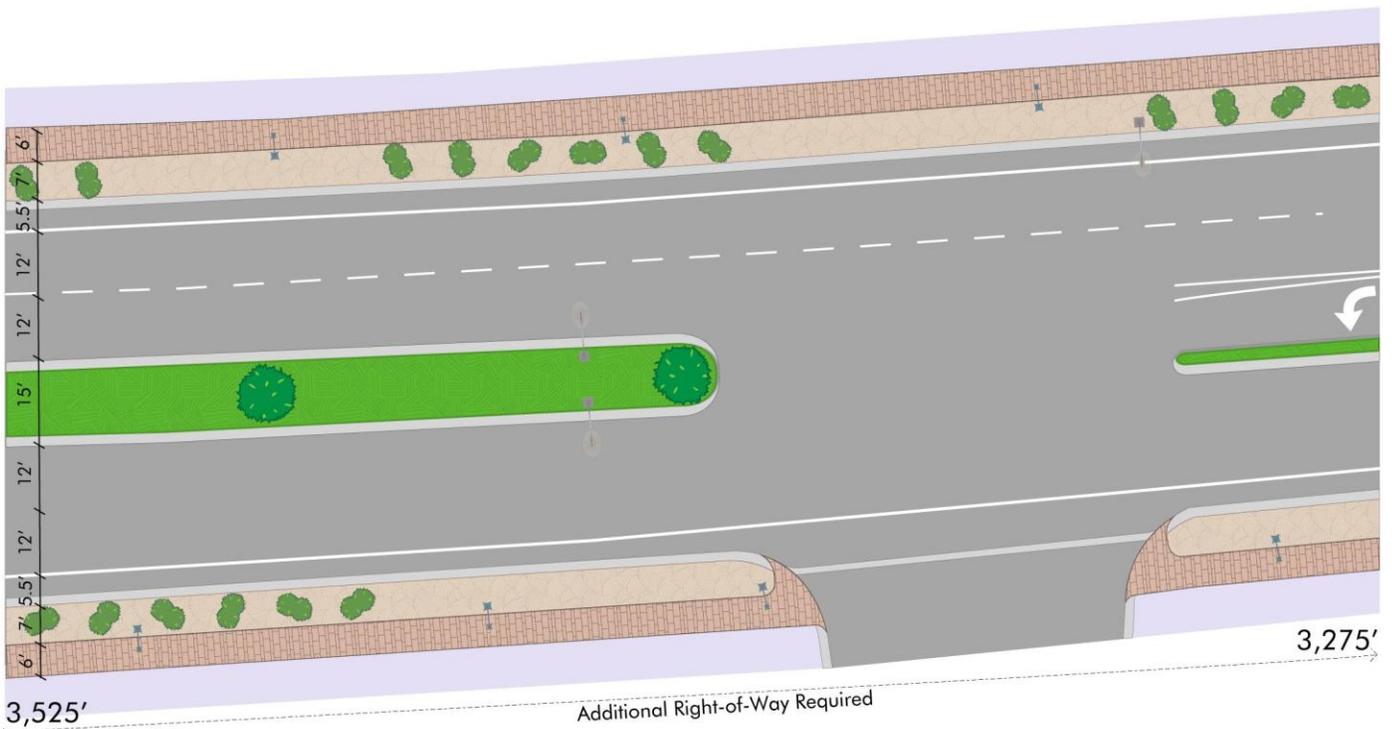
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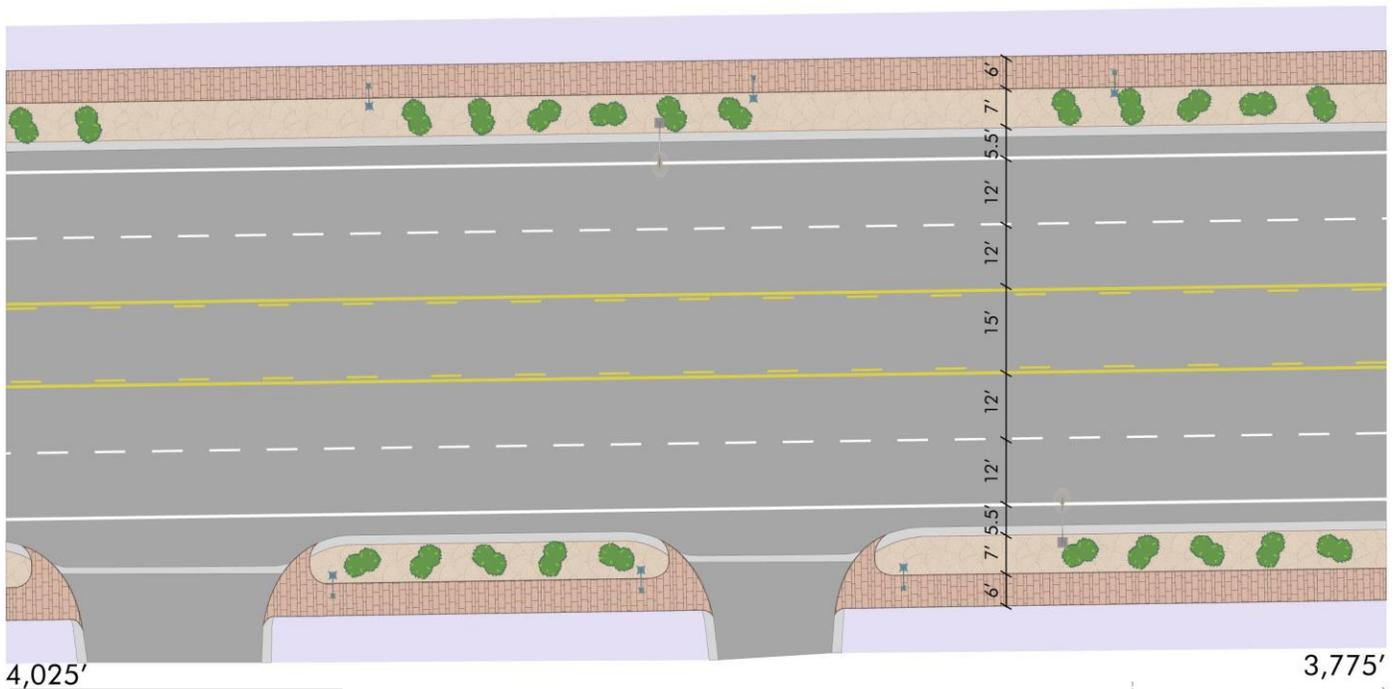
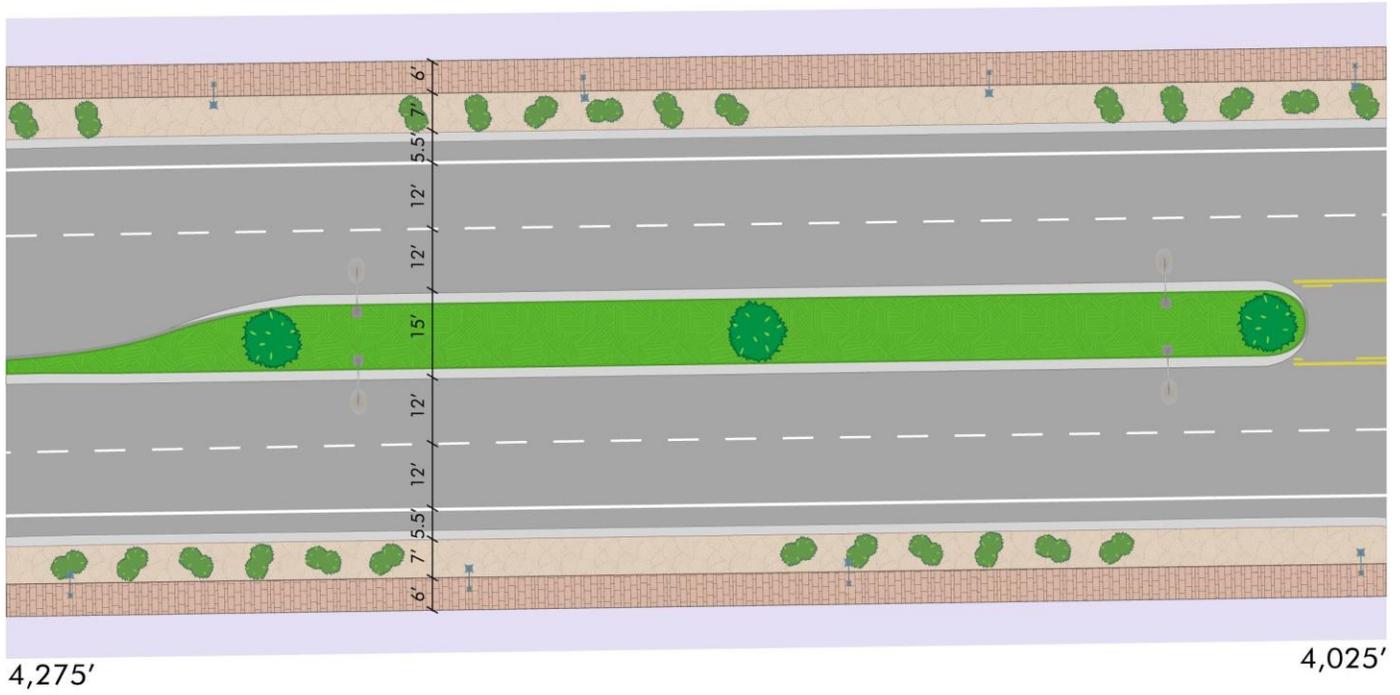
Finnie Flat Road - Segments 2 and 3



Finnie Flat Road - Segment 3 Continued

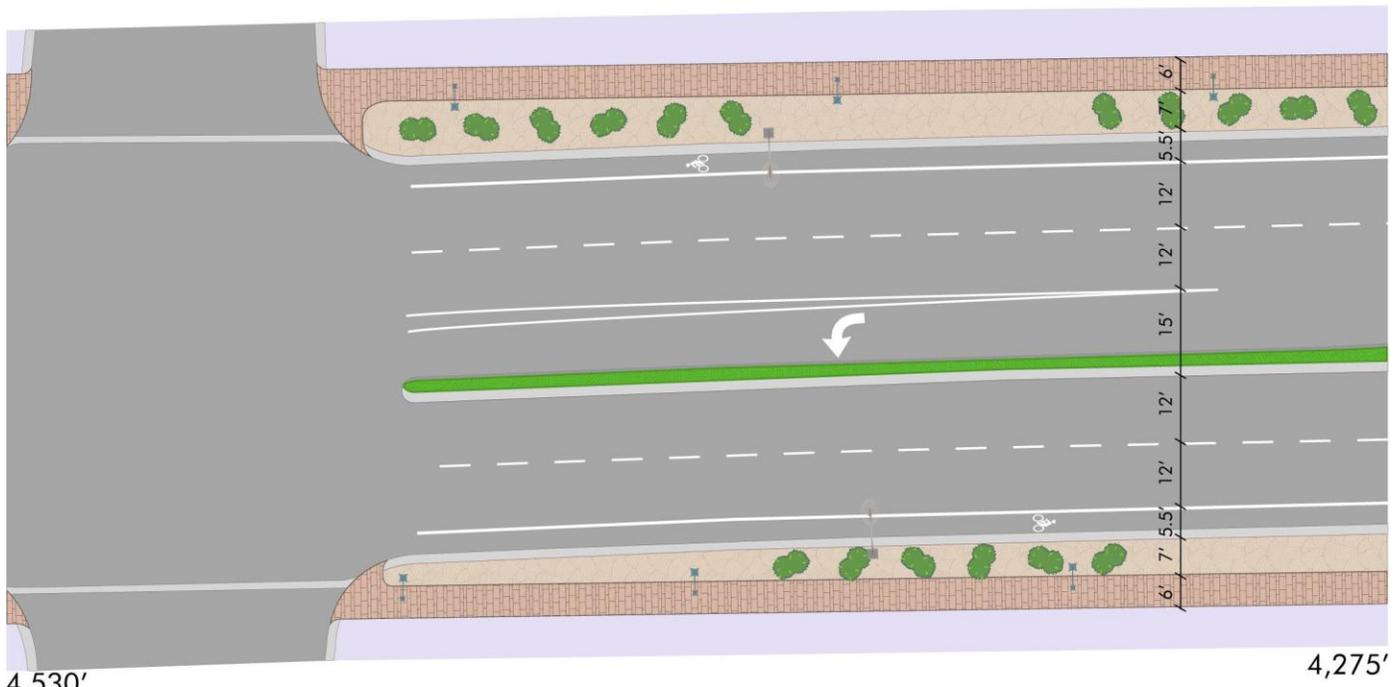
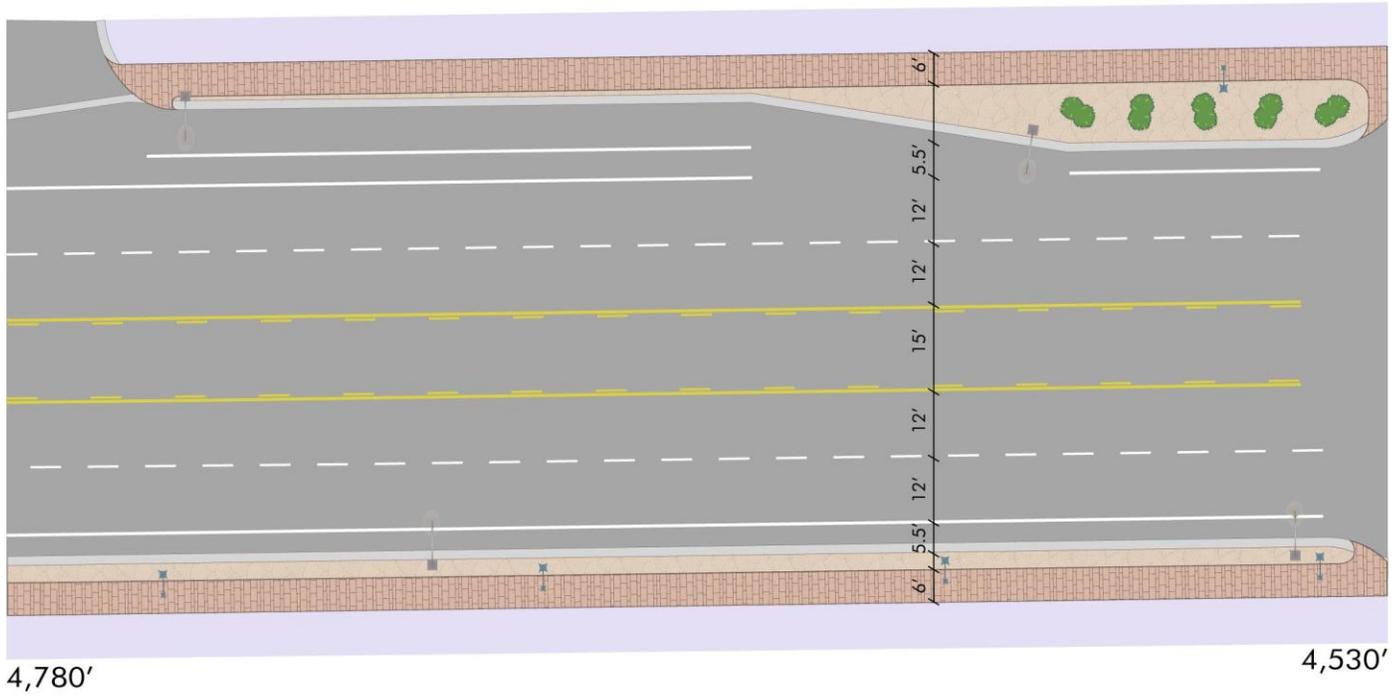


Finnie Flat Road - Segment 3 Continued

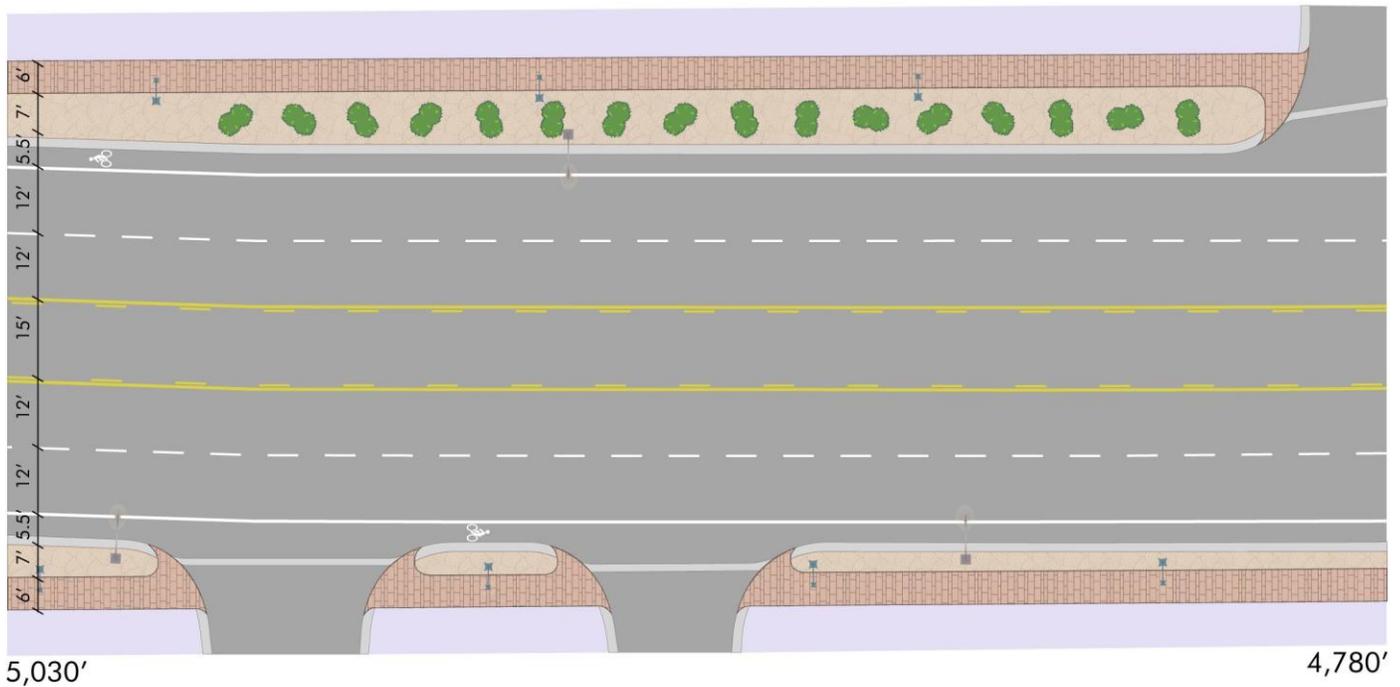
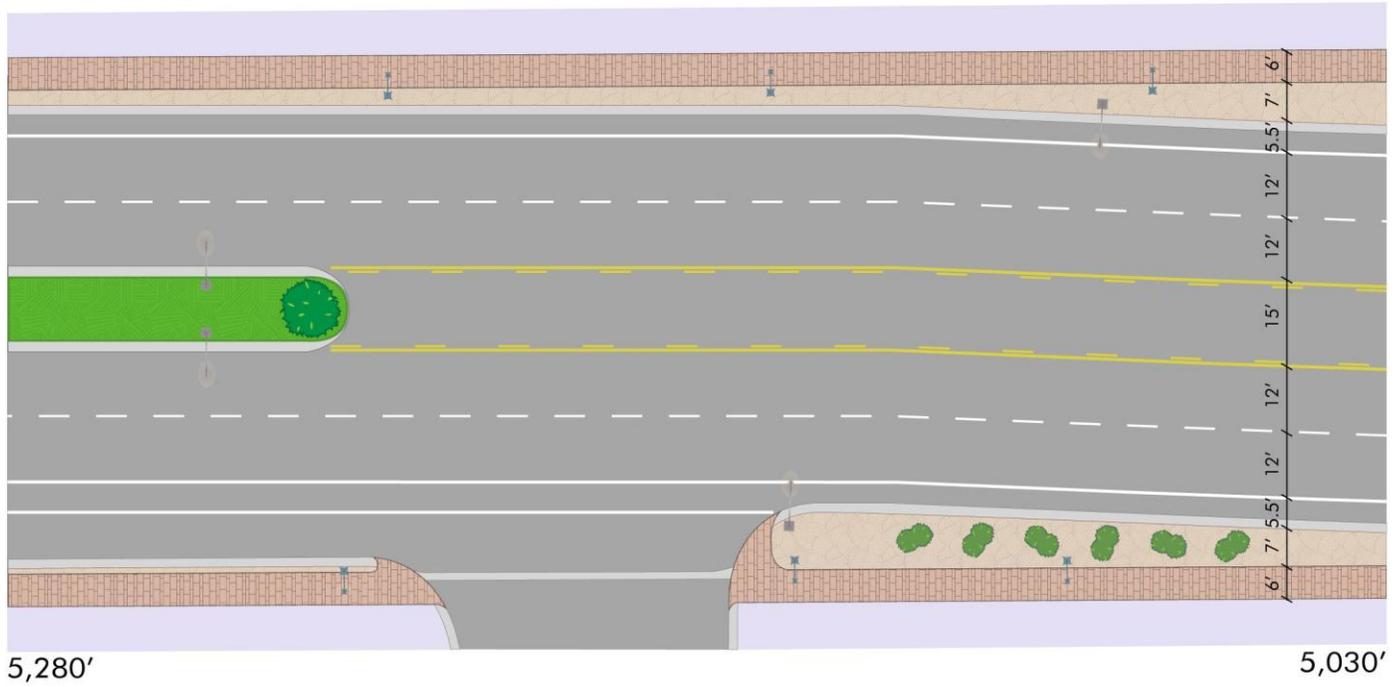


Additional Right-of-Way
Required

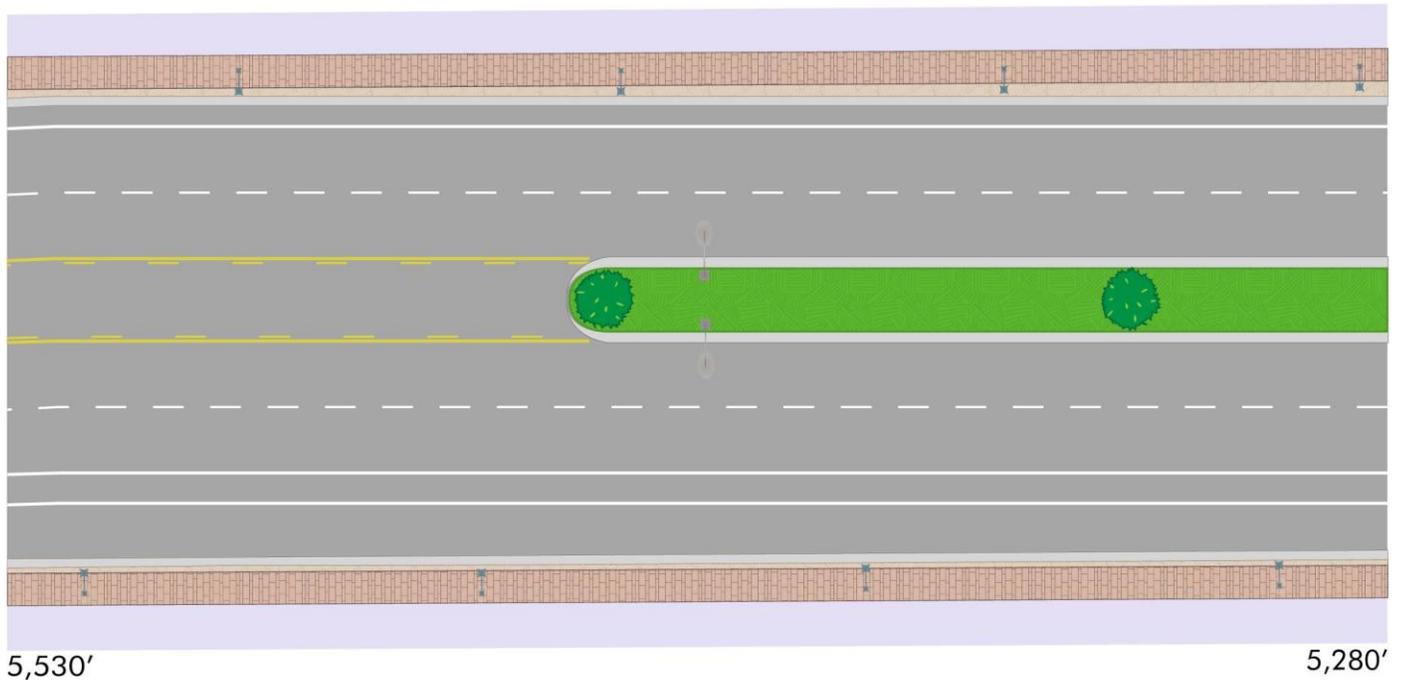
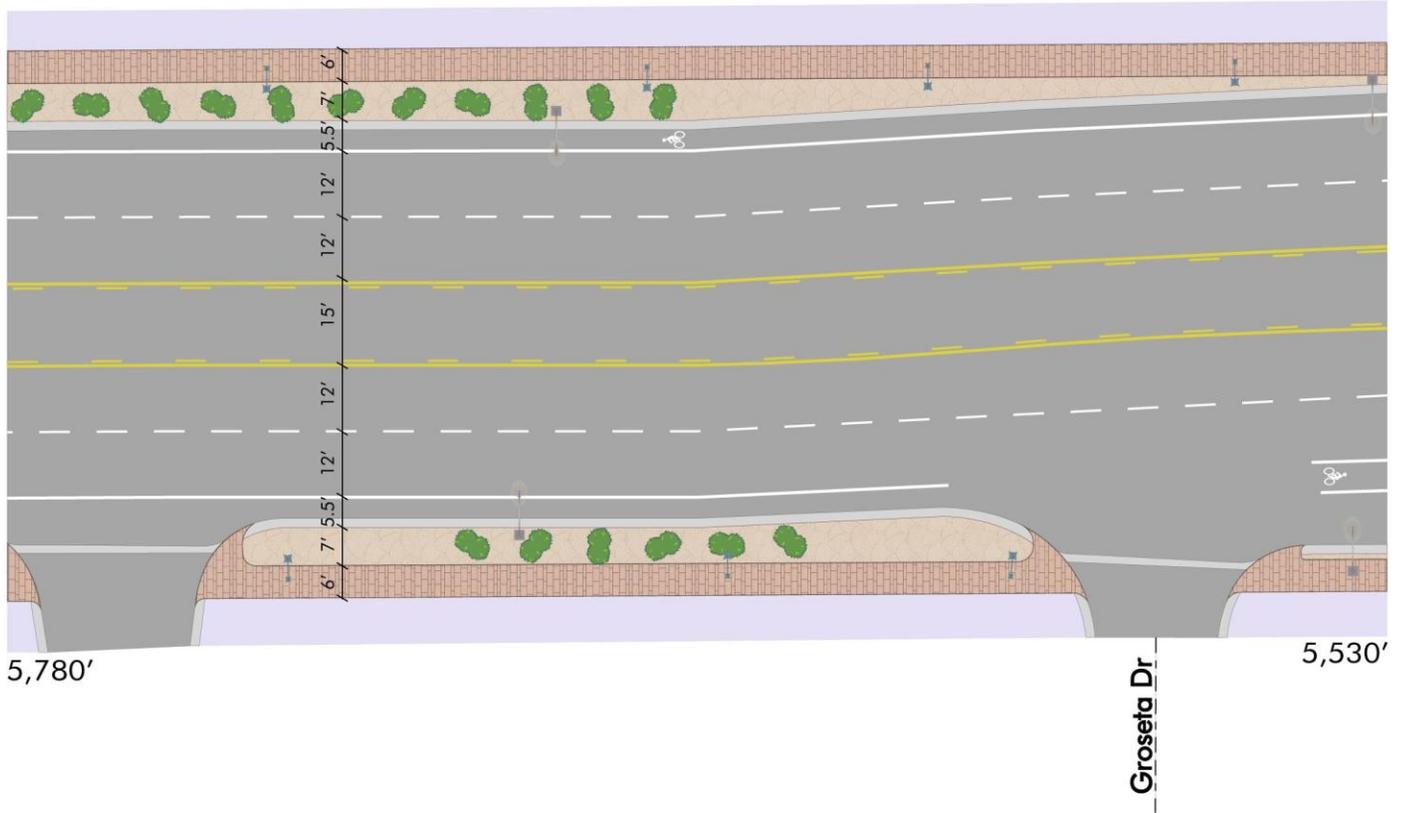
Finnie Flat Road - Segment 3 Continued



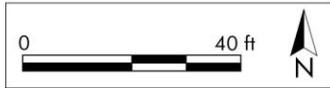
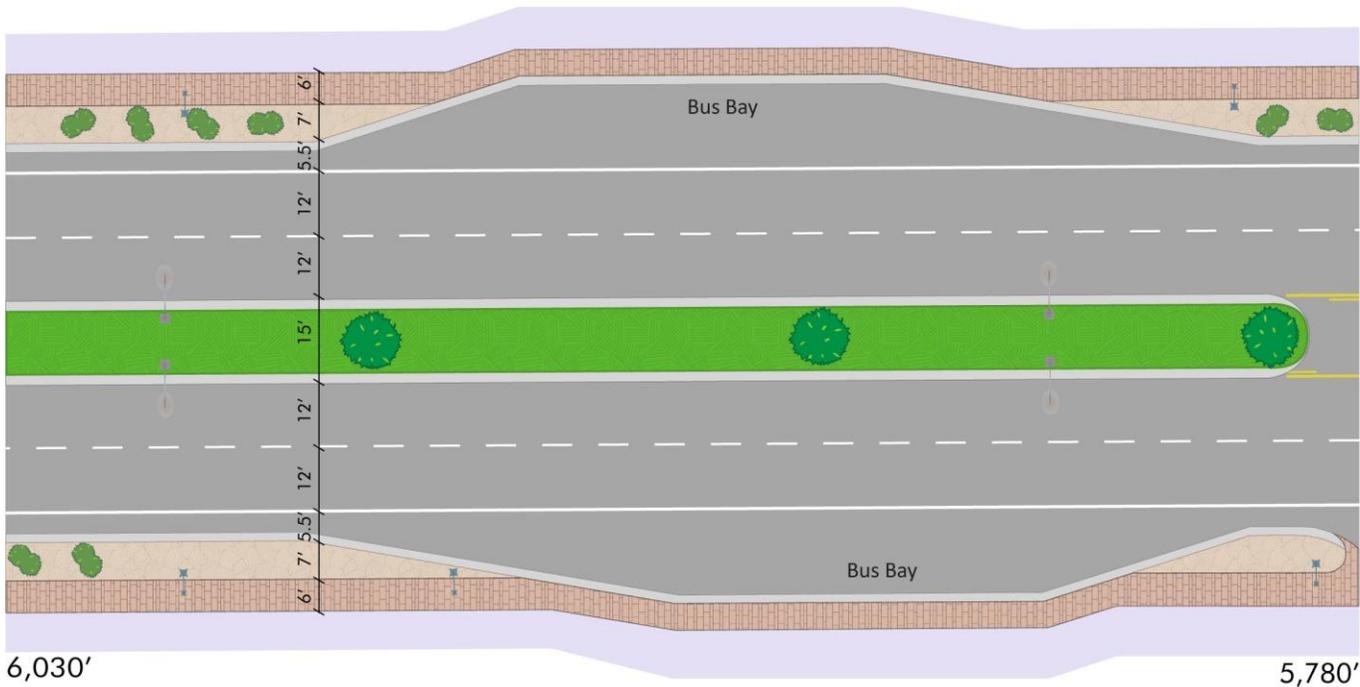
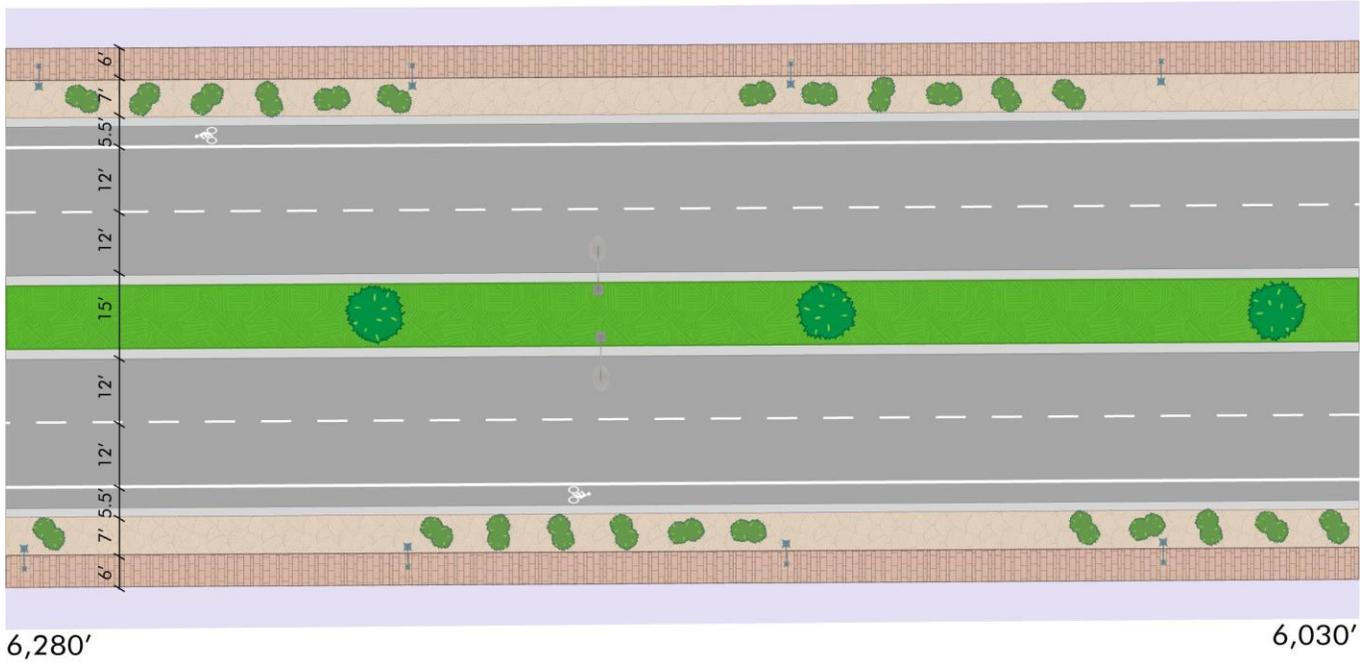
Finnie Flat Road - Segment 3 Continued



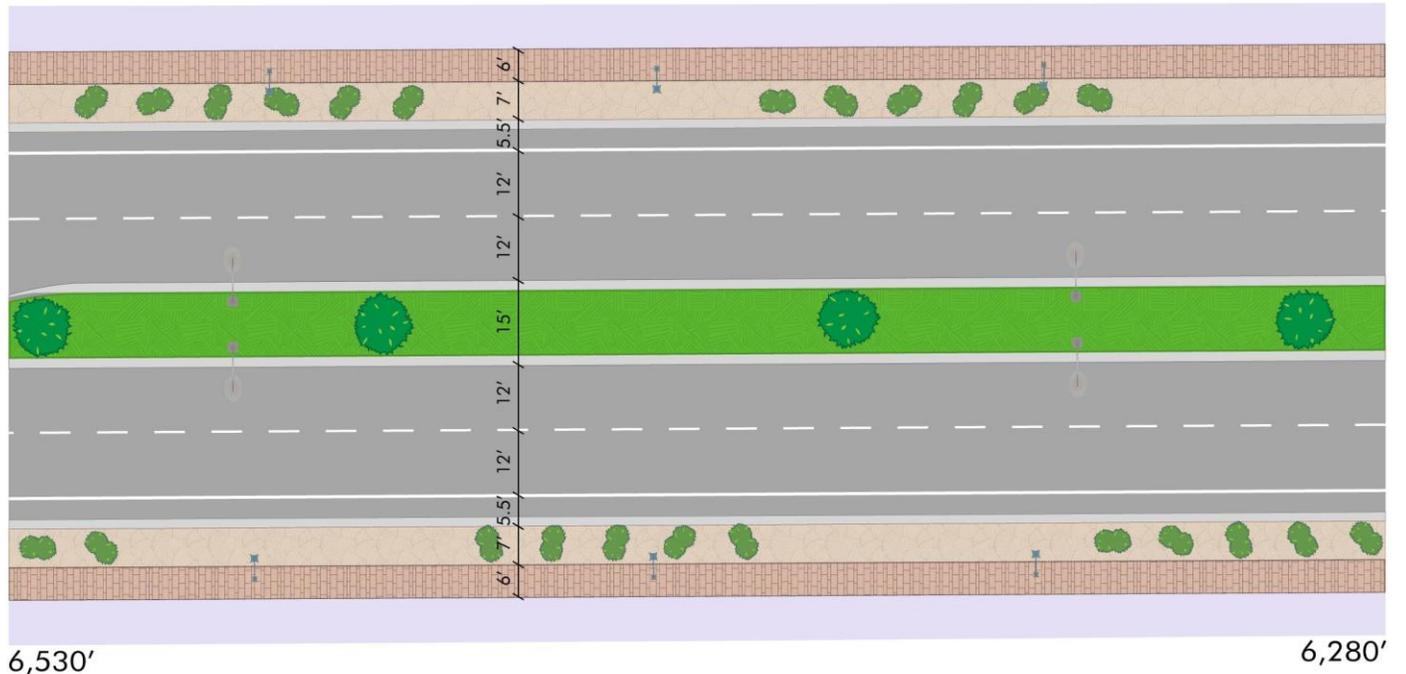
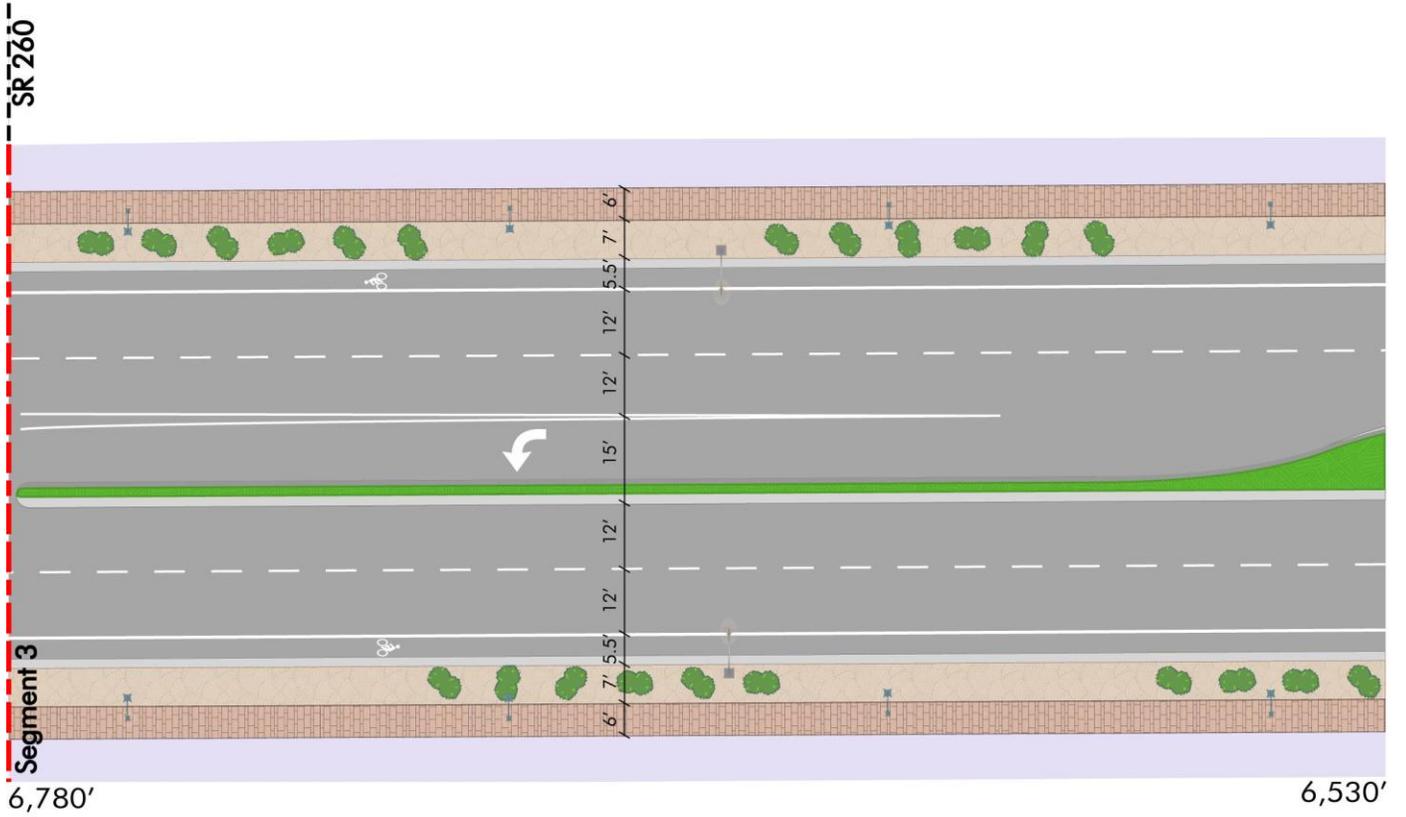
Finnie Flat Road - Segment 3 Continued



Finnie Flat Road - Segment 3 Continued



Finnie Flat Road - Segment 3 Continued



APPENDIX B.
PLANNING AND ENVIRONMENTAL LINKAGES (PEL) QUESTIONNAIRE
AND CHECKLIST

Planning and Environmental Linkages

Questionnaire and Checklist

The Planning and Environmental Linkage (PEL) process, a specific product of implementing SAFETEA-LU,¹ seeks to develop subarea and corridor studies that can be used more directly to inform the NEPA² process. Effective, conceptual-level transportation planning studies that follow the PEL process provide opportunities both to identify important issues of concern early and to build the agency, stakeholder, and public understanding necessary to successfully address them. Such early, integrated planning is not driven solely by regulatory requirements and the quest for more efficient and effective processes, although those are desirable results. Transportation and environmental professionals—as well as those in metropolitan planning organizations, state and federal resource agencies, and nongovernmental organizations—are finding that early collaboration helps achieve broader transportation and environmental stewardship goals through better decisions regarding programs, planning, and projects.

This document has been developed by the Arizona Department of Transportation (ADOT) to provide guidance, particularly to transportation planners and environmental planners, regarding how to most effectively link the transportation planning and NEPA processes. By considering the questions and issues raised in this questionnaire, transportation planners will become more aware of potential gaps in their subarea or corridor studies, better understand the needs of future users of the studies, and be reminded of the benefits of wider and/or deeper collaboration with agencies, the public, and other stakeholders. Environmental planners who fill out the checklist will assume a new role in the transportation planning process: becoming an advocate for early awareness of environmental issues before the NEPA process begins.

This questionnaire and checklist will be used to effectively influence the scope, content, and process employed for ADOT transportation planning studies that focus on specific transportation corridors or on transportation network subareas (versus statewide transportation studies). Completion of this questionnaire and checklist will support the PEL process and serve dual objectives:³

- provide guidance to transportation planners on the level of detail needed to ensure that information collected and decisions made during the transportation planning study can be used during the NEPA process for a proposed transportation project
- provide the future NEPA study team with documentation on the outcomes of the transportation planning process, including the history of decisions made and the level of detailed analysis undertaken

When conducting a transportation planning study that links to the future NEPA process, major issues include:⁴

- identifying the appropriate level of environmental analysis for the study
- identifying the appropriate level of agency, stakeholder, and public involvement
- defining unique study concurrence points for seeking agreement from relevant resource agencies, stakeholders, and members of the public

¹ Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (Public Law 109-59)

² National Environmental Policy Act of 1969

³ Objectives are based on the Federal Highway Administration's online document: *Case Studies: Colorado: Colorado Department of Transportation: Tools and Techniques to Implement PEL*, <www.environment.fhwa.dot.gov/integ/case_colorado2.asp> (accessed October 24, 2011).

⁴ Further guidance is available in the Federal Highway Administration's *Guidance on Using Corridor and Subarea Planning to Inform NEPA*, dated April 5, 2011, available online at <www.environment.fhwa.dot.gov/integ/corridor_nepa_guidance.pdf>.

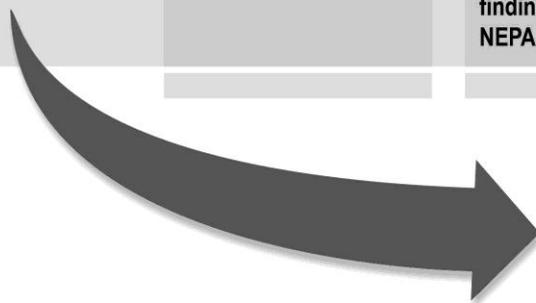
- developing a process to ensure that the study will be recognized as valid within the NEPA process
- identifying when to involve resource agencies in the study, and to what extent they influence decision making
- identifying how to persuade U.S. Department of Transportation (USDOT) reviewers to accept the use of these studies in the NEPA process

These issues should be considered throughout the transportation planning study process. Users of this *ADOT Planning and Environmental Linkages Questionnaire and Checklist* should review the entire document at the beginning of the study to familiarize themselves with whatever local and general issues may be operative. The questionnaire is provided in two parts: one to be completed by transportation planners at the beginning of the study and one to be completed at the end. The checklist (Part 3) should be used by environmental planners throughout the study and should be finalized at the end of the study.

Upon completion of the transportation planning study, this document should be included as an appendix to the study's final report to document how the study meets the requirements of 23 Code of Federal Regulations § 450.212 or § 450.318 (Subpart B: Statewide Transportation Planning and Programming or Subpart C: Metropolitan Transportation Planning and Programming, respectively).

The flowchart on the following page outlines the major inputs, decision points, and outcomes that occur during implementation of a transportation planning study using the PEL process.

	Transportation Planners	Both	Environmental Planners
PEL Launch	Review Part 1 and Part 2 of questionnaire Complete Part 1 of questionnaire	Become familiar with local and general issues Modify study scope to include or deepen analysis of specific resources or environmental issues	Review checklist Advocate inclusion of resources and issues Seek resource agency assistance in changing study scope
Analysis and Comment	Define, clarify, analyze, and screen modes, corridors, and alternatives (including no-action alternative) Involve relevant stakeholders, agencies, and public in comments and reviews to ensure later acceptability and defensibility in NEPA	Become familiar with local and general issues Modify study scope to include or deepen analysis of specific resources or environmental issues	Continue to advocate addressing collection and analysis of data pertinent to effective application in NEPA process
PEL Completion	Complete Part 2 of questionnaire	Include questionnaire and checklist in appendix to study Document relevant findings for use in later NEPA documents	Complete checklist (Part 3)



Beginning of NEPA Process

Environmental planners review completed PEL questionnaire and checklist and confirm that study recommendations and analyses can support the anticipated NEPA process(es) and document type(s), including, if applicable, incorporation into the content of a Notice of Intent

Questionnaire for Transportation Planners – Part 1

This part of the questionnaire should be completed by transportation planners at the beginning of the transportation planning study. Please note that planners should also review the second part of the questionnaire to understand what additional issues will need to be considered and documented as the study progresses.

Project identification	
<i>What is the name of the study? What cities and region does it cover? What major streets are covered? For corridor studies, what are the intended termini?</i>	
Study Name: Town of Camp Verde Business Corridor Study (Finnie Flat Road: SR 260 - Main Street). Corridor Limits: Covers Finnie Flat Road (from SR 260 to Main Street), and a portion of Main Street and Montezuma Castle Highway in the Town of Camp Verde, Arizona. The intersection of Finnie Flat Road/Main Street/Montezuma Castle Highway has specific intersection issues the study will address.	
<i>Who is the study sponsor?</i>	
The study is funded through Arizona Department of Transportation's (ADOT) Multimodal Transportation Planning Division through the Planning Assistance for Rural Areas (PARA) Program. ADOT, in conjunction with the Town of Camp Verde, will oversee the project.	
<i>Briefly describe the study and its purpose.</i>	
The primary purpose of this study is to review and recommend improvements to the Finnie Flat Road business corridor with particular emphasis on the Tri-Intersection of Finnie Flat Road/Main Street/Montezuma Castle Highway intersection. The end product of this study will enable the Town to facilitate a safer and more efficient infrastructure for the traveling public and guide in the development of the Business and Historic District.	
<i>Who are the primary study team members (include name, title, organization name, and contact information)?</i>	
Justin Feek (ADOT MPD Project Manager), ADOT, 602-712-6196; Thor Anderson (ADOT EPG Environmental Planning Manager), ADOT, 602-712-4574; Ron Long (Public Works Director), Town of Camp Verde, 928-567-0534; Deborah Ranney (Public Works Administrative Assistant), Town of Camp Verde, 928-567-0534; Patrizia Gonella (Project Advisor), Jacobs, 602-650-4942; Vamshi Yellisetty (Project Manager), Jacobs, 602-530-1603	
<i>Does the team include advisory groups such as a technical advisory committee, steering committee, or other? If so, include roster(s) as attachment(s).</i>	
Yes, the team includes a Technical Advisory Committee. Please see attached list for TAC member contact information.	
<i>Have previous transportation planning studies been conducted for this region? If so, provide a brief chronology, including the years the studies were completed. Provide contact names and locations of the studies and study websites.</i>	
1999 Verde Valley Regional Transportation Study update, Yavapai County 2001 Camp Verde Transit Study, Town of Camp Verde 2003 Yavapai County General Plan, Yavapai County, http://www.yavapai.us/devserv/comprehensive-plan-update-information/ 2004 Camp Verde General Plan, Town of Camp Verde, http://www.campverde.az.gov/government/town-clerk/documents/general-plan/ 2006 Verde Valley Regional Land Use Plan, Yavapai County, http://www.yavapai.us/devserv/verde-valley-regional-land-use-plan-work-group/ 2009 Verde Valley Multimodal Transportation Study, Yavapai County, http://www.yavapai.us/publicworks/verde-valley-multimodal-transportation-study-2/	
<i>What current or near-future planning (or other) studies in the vicinity are underway or will be undertaken? What is the relationship of this study to those studies? Provide contact names and locations of the studies and study websites.</i>	
2012 Yavapai County Comprehensive Plan; http://www.yavapai.us/devserv/comprehensive-plan-update-information/ This study has little or no impact on the study corridor.	
Study objectives	
What are your desired outcomes for this study? (Mark all that apply.)	
<input checked="" type="checkbox"/> Stakeholder identification <input type="checkbox"/> Stakeholder roles/responsibilities definition <input checked="" type="checkbox"/> Travel study area definition <input checked="" type="checkbox"/> Performance measures development <input checked="" type="checkbox"/> Development of purpose and need goals and other objectives <input checked="" type="checkbox"/> Alternative evaluation and screening <input type="checkbox"/> Alternative travel modes definition	<input checked="" type="checkbox"/> Scheduling of infrastructure improvements over short-, mid-, and long-range time frames <input checked="" type="checkbox"/> Environmental impacts <input type="checkbox"/> Mitigation identification <input type="checkbox"/> Don't know <input type="checkbox"/> Other _____

<i>Have system improvements and additions that address your transportation need been identified in a fiscally constrained regional transportation plan?</i>
Improvements for the Tri-Intersection of Finnie Flat Road/Main Street/Montezuma Castle Highway have secured funding through NACOG STP funds and is part of the regional plan.
<i>Will a purpose and need statement⁵ be prepared as part of this effort? If so, what steps will need to be taken during the NEPA process to make this a project-level purpose and need statement?</i>
A Purpose and Need statement will be developed for the study intersection of Finnie Flat Road/Main Street/Montezuma Castle Highway; however, the statement will be relatively broad. Within the framework of this study, all data compiled, developed, and analyzed will closely adhere to NEPA requirements in coordination with the PEL representative.
Establishment of organizational relationships
<i>Is a partnering agreement in place? If so, who are signatories (for example, affected agencies, stakeholders, organizations)? Attach the partnering agreement(s).</i>
No partnering agreements are in place
<i>What are the key coordination points in the decision-making process?</i>
Study team will coordinate with appropriate stakeholders and impacted parties at the following milestones and/or project phases: 1) During the development of the existing and future conditions task 2) When transportation improvement scenarios are identified and evaluated 3) When the draft set of transportation improvements are developed 4) When the final set of transportation improvements are prepared
Planning assumptions and analytical methods
<i>Is the time horizon of the study sufficiently long to consider long-term (20 years or more from completion of the study) effects of potential scenarios?</i>
Yes. Time horizons for this study are 2011, 2016, 2021, 2031
<i>What method will be used for forecasting traffic volumes (for example, traffic modeling or growth projections)? What are the sources of data being used? Has USDOT validated their use?</i>
- Verde Valley's current travel demand model will be used for traffic forecasting. - Growth projections will be reviewed and updated to reflect current growth patterns - General plans and development plans from the Town of Camp Verde, Yavapai-Apache Indian Reservation, and Yavapai County will be utilized in developing growth projections
<i>Will the study use FHWA's Guide on the Consistent Application of Traffic Analysis Tools and Methods⁶? If not, why not? How will traffic volumes from the travel demand model be incorporated, if necessary, into finer-scale applications such as a corridor study?</i>
Yes. This study will strive be consistent with FHWA's Guide on the Consistent Application of Traffic Analysis Tools and Methods. Traffic patterns based on current traffic counts and the model forecasted traffic volumes will be utilized in developing traffic forecasts for the corridor and study intersections.
<i>Do the travel demand models base their projections on differentiations between vehicles?</i>
No.
Data, information, and tools
<i>Is there a centralized database or website that all State resource agencies may use to share resource data during the study?</i>
No, not at this time

⁵ For an explanation of purpose and need in environmental documents, please see the Federal Highway Administration's (FHWA's) "NEPA and Transportation Decision making: The Importance of Purpose and Need in Environmental Documents," <[Purpose and Need](#)>. This website provides links to five additional resources and guidance from FHWA that should be helpful in understanding the relationship between goals and objectives in transportation planning studies and purpose and need statements of NEPA documents.

⁶ FHWA November 2011 publication: <[Traffic Analysis Tools and Methods](#)>

Questionnaire for Transportation Planners – Part 2

This part of the questionnaire should be completed by transportation planners at the end of the transportation planning study. This completed document should become an appendix to the study’s final report to document how the study meets the requirements of 23 Code of Federal Regulations § 450.212 or § 450.318.

Purpose and need for this study
<i>How did the study process define and clarify corridor-level or subarea-level goals (if applicable) that influenced modal infrastructure improvements and/or the range of reasonable alternatives?</i>
Study goals were developed and refined through discussion with Town staff, the Technical Advisory Committee (TAC), ADOT, and area stakeholders.
<i>What were the key steps and coordination points in the decision-making process? Who were the decision-makers and who else participated in those key steps?</i>
Key coordination efforts include: - On-going meetings and discussions with Town staff - Two TAC Meetings, a full list of TAC members is attached - One Stakeholder meeting consisting of local business owners, Town staff, and ADOT representatives - ADOT Environmental Planning Meeting - Two Public Meetings (November 7th, 2012 and April 4th, 2013) - Three Town Council Meetings - Analysis of technical data
<i>How should this study information be presented in future NEPA document(s), if applicable? Are relevant findings documented in a format and at a level of detail that will facilitate reference to and/or inclusion in subsequent NEPA document(s)?⁷</i>
The Town of Camp Verde Business Corridor Study (Finnie Flat Road: SR 260 to Main Street) should be utilized as a reference and supporting document for the analysis of existing and future multimodal deficiencies, environmental conditions and constraints, and planned improvements.
<i>Were the study’s findings and recommendations documented in such a way as to facilitate an FHWA or Federal Transit Administration decision regarding acceptability for application in the NEPA process? Does the study have logical points where decisions were made and where concurrence from resource or regulatory agencies, stakeholders, and the public was sought? If so, provide a list of those points.</i>
Yes

Establishment of organizational relationships – tribes and agencies ⁸			
Tribe or agency	Date(s) contacted	Describe level of participation	Describe the agency’s primary concerns and the steps needed to coordinate with the agency during NEPA scoping. ⁹
Tribal			
N/A			
Federal			
Bureau of Indian Affairs	N/A		
Bureau of Land Management	N/A		
Bureau of Reclamation	N/A		
Federal Highway Administration	Throughout study	Technical Advisory Committee	
National Park Service	N/A		

⁷ For an explanation of the types of documents needed under the NEPA process and the nature of the content of those documents, please see “NEPA Documentation: Improving the Quality of Environmental Documents,” <[Documentation](#)>.

⁸ Users may add rows to this table to accommodate additional tribes and agencies. Unused rows may be deleted.

⁹ If the transportation planning study final report does not adequately document interactions (for example, meeting minutes, resolutions, letters) with the relevant agencies, append such information to the end of this questionnaire and checklist.

Establishment of organizational relationships – tribes and agencies⁹			
Tribe or agency	Date(s) contacted	Describe level of participation	Describe the agency's primary concerns and the steps needed to coordinate with the agency during NEPA scoping.⁹
U.S. Army Corps of Engineers	N/A		
U.S. Department of Agriculture Forest Service	N/A		
U.S. Environmental Protection Agency	06/13/2012	Provided GIS shapefiles	None identified
U.S. Department of Defense	N/A		
U.S. Fish and Wildlife Service	N/A		
State			
Arizona Department of Environmental Quality	05/21/2012	Provided GIS shapefiles	None identified
Arizona Department of Public Safety	N/A		
Arizona Game and Fish Department	05/21/2012, 5/22/2013	Provided GIS shapefiles and conducted project specific evaluation	Correspondence with the AZGFD is attached
Arizona State Land Department	10/25/2012	Interview, Stakeholder	Would like to be contacted throughout the process, especially if an easement is necessary through their property
County			
Yavapai County	Throughout the Study	Limited participation. Provided GIS shapefiles	None identified
Local			
Town of Camp Verde	Throughout the Study	Intimately involved in all aspects of the study Technical Advisory Committee, Interviews	Refer to meeting notes

Establishment of organizational relationships – stakeholders and members of the public¹⁰			
Public and stakeholders	Date(s) contacted	Describe level of participation	Describe the primary concerns expressed by members of the public and stakeholders.
Public			
Members of the public	Public meetings were held on 11/7/2012 and 4/4/2013. Please refer to the Public Involvement Summary Report for additional details.		
Stakeholders			
Other (for example, Audubon Society, Center for Biological Diversity, citizens groups, homeowners associations, Sierra Club, private mining or energy interests, railroad companies)	Stakeholder group: 10/1/2012 3/12/2013	Stakeholder	Refer to Public Involvement Summary Report

¹⁰ Users may add rows to this table to accommodate additional stakeholders.

Planning assumptions and analytical methods
<i>Did the study provide regional development and growth assumptions and analyses? If so, what were the sources of the demographic and employment trends and forecasts?</i>
Yes, the Verde Valley's travel demand model was used to forecast future traffic congestion. The model includes growth assumptions for the Camp Verde Area, in general the Town is projected to experience a moderate population increase, while the study area is projected to have more employment growth than residential growth.
<i>What were the future-year policy and/or data assumptions used in the transportation planning process related to land use, economic development, transportation costs, and network expansion?</i>
Traffic forecasts for the Study were derived from the Verde Valley Transportation Planning Organization's regional travel demand model. The planning assumptions inherent to that model were carried forward.
<i>Were the planning assumptions and the corridor vision/purpose and need statement consistent with each other and with the long-range transportation plan? Are the assumptions still valid?</i>
Assumptions made in this report are consistent with the vision/purpose and need statement as well as with regional and local long-term transportation plans.
Data, information, and tools
<i>Are the relevant data used in the study available in a compatible format that is readily usable? Are they available through a centralized web portal?</i>
Yes, all data is stored in a central GIS geodatabase that can easily be distributed. No centralized web portal has been developed.
<i>Are the completeness and quality of the data consistent with the quality (not scale or detail) of inputs needed for a NEPA project-level analysis¹¹?</i>
Yes; however, since the study recommends long-term improvements, updates will be necessary as the projects move towards development/implementation.
<i>Are the data used in the study regularly updated and augmented? If regularly updated, provide schedule and accessibility information.</i>
ADOT accident crash data is often updated, as well as many of the environmental datasets utilized in this study. To maintain accuracy, it is necessary to update socioeconomic and traffic condition data periodically.
<i>Have the environmental data been mapped at scales that facilitate comparison of effects across different resources and at sufficient resolution to guide initial NEPA issue definition? If not, what data collection and/or manipulation would likely be needed for application to the NEPA scoping process?</i>
Yes; however, in-depth environmental analysis will need to be conducted as projects enter the development phase.

¹¹ For an explanation of the types of information needed to evaluate impacts in environmental documents, please see FHWA's "NEPA and Transportation Decision making: Impacts," <[Analysis of Impacts](#)>. This website provides links to six additional resources and guidance that should be helpful in understanding the types of impacts that need to be assessed, their context, and their intensity.

Examine the Checklist for Environmental Planners, at the back of this document, for more detail about potential impacts that could be mapped. Below is an abbreviated list of resources that could occur in the study area and may be knowable at this time and at the study's various analytical scales:

Resource or issue	Is the resource or issue present in the area?	Would any future transportation policies or projects involve the issue? Would there be impacts on the resource?	Resource or issue	Is the resource or issue present in the area?	Would any future transportation policies or projects involve the issue? Would there be impacts on the resource?
Sensitive biological resources	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Section 4(f) ¹² wildlife and/or waterfowl refuge, historic site, recreational site, park	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Wildlife corridors	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Section 6(f) ¹³ resource	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Wetland areas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Existing development	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Riparian areas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Planned development	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
100-year floodplain	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Title VI/ Environmental justice populations ¹⁴	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Prime or unique farmland or farmland of statewide or local importance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Utilities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Visual resources	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Hazardous materials	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Designated scenic road/byway	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Sensitive noise receivers ¹⁵	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Archaeological resources	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Air quality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable
Historical resources	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Other (list) _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable

¹² Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S. Code § 303, as amended); see <[Section 4\(f\)](#)>.

¹³ Section 6(f) of the Land and Water Conservation Fund Act

¹⁴ refers to Title VI of the 1964 Civil Rights Act and 1994 Executive Order 12898 on environmental justice

¹⁵ under FHWA's Noise Abatement Criterion B: picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals

<p><i>Did the study incorporate models of, for example, species/habitat locations (predictive range maps), future land use, population dynamics, stormwater runoff, or travel demand? What models were used? Did the study adequately document what models were used, who was responsible for their use, and how they were used (with respect to, for example, calibration, replicability, contingencies, and exogenous factors)?</i></p>
<p>The Study included future land use GIS data and the Verde Valley Transportation Planning Organization's regional travel demand model. The document clearly outlines the source and how the models were utilized in planning and analysis. Also worked with the Arizona Game and Fish Department to analyze wildlife habitats and species of concern within the study area.</p>
<p><i>In scoping, conducting, and documenting the planning study, participants have come across documents and leads from agency staff and other sources that the environmental planners may be able to use in conducting their studies. List any applicable memoranda of understanding, cost-share arrangements, programmatic agreements, or technical studies that are underway but whose findings are not yet published, etc.</i></p>
<p>Wildlife connectivity and ADEQ environmental information should be checked to ensure it is the latest available information.</p>
<p>Development of alternatives</p>
<p><i>Were resource agencies, stakeholders, and members of the public engaged in the process of identifying, evaluating, and screening out modes, corridors, a range of alternatives,¹⁶ or a preferred alternative (if one was identified—the latter two refer to corridor plans)? If so, how? Did these groups review the recommendation of a preferred mode(s), corridor(s), range of alternatives (including the no-build alternative), or an alternative? Were the participation and inputs of these groups at a level acceptable for use in purpose and need statements or alternatives development sections in NEPA documents? If not, why not?</i></p>
<p>Stakeholders and the public were involved in analysis of potential intersection improvements at the Tri-Intersection. A list of stakeholder s involved in this study is attached. The participation of these groups was at a level acceptable for use in purpose and need statements or alternative development section in NEPA documents.</p>
<p><i>Describe the process of outreach to resource agencies, the public, and other stakeholders. Describe the documentation of this process and of the responses to their comments. Is this documentation adequate in breadth and detail for use in NEPA documents?</i></p>
<p>Technical Advisory Committee, interviews with stakeholders, and public meeting (refer to Public Involvement Summary Report for additional information). A list of stakeholders and TAC members is attached.</p>
<p><i>If the study was a corridor study, describe the range of alternatives considered (if any), screening process, and screening criteria. Include what types of alternatives were considered (including the no-build alternative) and how the screening criteria were selected. Was a preferred alternative selected as best addressing the identified transportation issue? Are alternatives' locations and design features specified?</i></p>
<p>The study focused on improving the Finnie Flat Road corridor as well as the developing improvements for the Tri-Intersection. No-build analysis and build analysis was conducted. Preferred improvement concepts at the Tri-Intersection were determined based on their feasibility and if they addressed identified transportation issues.</p>
<p><i>Also regarding whether the study was a corridor study, for alternatives that were screened out, summarize the reasons for their rejection. Are defensible, credible rationale articulated for their being screened out? Did the study team take into account legal standards¹⁷ needed in the NEPA process for such decisions? Did the study team have adequate information for screening out the alternatives?</i></p>
<p>Three initial Tri-Intersection concepts that were rejected based on input from stakeholders and the public as well as their lack of addressing identified issues. The study team conducted detailed design analysis and had adequate information to screen out these alternatives.</p>
<p><i>What issues, if any, remain unresolved with the public, stakeholders, and/or resource agencies?</i></p>
<p>Utility conflicts and environmental issues</p>
<p>Formally joining PEL with the NEPA process</p>
<p><i>Lead federal agencies proposing a project that will undergo the NEPA process will want to most effectively leverage the transportation planning study's efforts and results. How could a Notice of Intent (for an environmental impact statement¹⁸) refer to the study's findings with respect to preliminary purpose and need and/or the range of alternatives to be studied?</i></p>
<p>Not applicable</p>
<p><i>Could a Notice of Intent in the NEPA process clearly state that the lead federal agency or agencies will use analyses from prior, specific planning studies that are referenced in the transportation planning study final report? Does the report provide the name and source of the planning studies and explain where the studies are publicly available? If not, how could such relevant information come to the environmental planners' attention and be made available to them in a timely way?</i></p>
<p>Yes, all analysis and documents utilized are clearly summarized and cited.</p>

¹⁶ For an explanation of the development of alternatives in environmental documents, please see FHWA's "NEPA and Transportation Decision making: Development and Evaluation of Alternatives," <[Alternatives](#)>.

¹⁷ 23 Code of Federal Regulations (CFR) § 771.123(c), 23 CFR § 771.111(d), 40 CFR § 1502.14(a), 40 CFR § 1502.14(b) and (d), 23 CFR § 771.125(a)(1); see FHWA Technical Advisory T 6640.8A, October 30, 1987, <[FHWA Technical Advisory T 6640.8A](#)>.

¹⁸ While Notices of Intent are required by some federal agencies for environmental assessments, they are optional for FHWA. Please see "3.3.2 Using the Notice of Intent to Link Planning and NEPA," in *Guidance on Using Corridor and Subarea Planning to Inform NEPA* (Federal Highway Administration, April 5, 2011), <[Notice of Intent](#)>.

List how the study's proposed transportation system would support adopted land use plans and growth objectives.

The recommendations that are included in the Study are a response to the needs identified in adopted land use and planning documents for the study corridor.

What modifications are needed in the goals and objectives as defined in the transportation study process to increase their efficient and timely application in the NEPA process?

No modification to the goals and objectives will be required.

Jurisdictional delineations of waters of the United States frequently change. Housing and commercial developments can alter landscapes dramatically and can be constructed quickly. Noise and air quality regulations can change relatively rapidly. Resource agencies frequently alter habitat delineations to protect sensitive species. Will the study data's currency, relevance, and quality still be acceptable to agencies, stakeholders, and members of the public for use in the NEPA process? If not, what will be done to rectify this problem? Who will be responsible for any needed updating?

When a project is ready for design, information from the study will need to be reevaluated and updated. The environmental data from this Study was not used for screening purposes and will not be relevant to the future NEPA process.

Other issues

Are there any other issues a future NEPA study team should be aware of (mark all that apply)? In the space below the check boxes, explain the nature and location of any issue(s) checked.

- | | |
|--|---|
| <input checked="" type="checkbox"/> Public and/or stakeholders have expressed specific concerns | <input type="checkbox"/> Contact information for stakeholders |
| <input checked="" type="checkbox"/> Utility problems | <input type="checkbox"/> Special or unique resources in the area |
| <input checked="" type="checkbox"/> Access or right-of-way issues | <input type="checkbox"/> Federal regulations that are undergoing initial promulgation or revision |
| <input type="checkbox"/> Encroachments into right-of-way | <input type="checkbox"/> Other _____ |
| <input checked="" type="checkbox"/> Need to engage—and be perceived as engaging—specific landowners, citizens, citizen groups, or other stakeholders | |

Concurrence

By signature, we concur that the transportation planning document meets or exceeds the following criteria in terms of acceptability for application in NEPA projects:

- Public involvement (outreach and level of participation)
- Stakeholder involvement (outreach and level of participation)
- Resource agencies' involvement and participation
- Documentation of the above efforts
- Applicability of the general findings and conclusions for use, by reference, in NEPA documents

Approved by: _____ Date: _____

JENNIFER TOTH

State Engineer

Arizona Department of Transportation

Approved by: _____ Date: _____

SCOTT OMER

Director

Multimodal Planning Division, Arizona Department of Transportation

Approved by: _____ Date: _____

KARLA PETTY

Division Administrator

Federal Highway Administration

Technical Advisory Committee Contact List

Name	Organization	Email	Phone
James Bramble	ADOT Prescott District	jbramble@azdot.gov	928-777-5930
James Lemmon	ADOT EPG	jlemmon@azdot.gov	602-712-6843
Tricia Lewis	ADOT CCP	tlewis@azdot.gov	928-606-2420
Ruben Ojeda	ASLD	rojeda@azland.gov	602-542-2648
Deb Ranney	Camp Verde	deb.ranney@campverde.az.gov	928-567-6621
Earl Huff	Camp Verde Police	earl.huff@campverde.az.gov	928-567-6621 ext 407
Nancy Gardner	Camp Verde Town Marshal	nancy.gardner@campverde.az.gov	928-567-6621 ext 406
Dave Niehuis	Camp Verde Fire	dave.niehuis@campverde.az.gov	928-567-9401 ext 103
Chris Fetzer	NACOG	cfetzer@nacog.org	928-774-1895 ext 1142
Mike Willett	Yavapai County	mike.willett@co.yavapai.az.us	928-771-3177
Robert Witte	APS	robert.witte@aps.com	
Jim Duncan	Unisource	jduncan@uesaz.com	
Bill Parry	Unisource	bparry@uesaz.com	
Jan Grogan	Camp Verde Sanitary District	jan@campverdesewer.com	
Marshall Davis	Camp Verde Sanitary District	marshall@campverdesewer.com	
Rick Tackitt	Camp Verde Water	cvwsinc@yahoo.com	
Karen Prutzman	Telephone Provider	Karen.Prutzman@centurylink.com	
Ron Long	Camp Verde	PublicWorks@campverde.az.gov	928-567-0534
Justin Feek	ADOT MPD	jfeek@azdot.gov	
Amy Rosar	KDA Creative	amy@kdacreative.com	602-318-9332
Patrizia Gonella	Jacobs	patrizia.gonella@jacobs.com	602-650-4942
Vamshi Yellisetty	Jacobs	vamshi.yellisetty@jacobs.com	602-530-1603

Stakeholder List*

Name	Organization
Bill Parry	Unisource Energy
Bob Witte	APS
Buddy Rocha, Jr.	Yavapai Apache Indian Reservation
Christiaan Bonelli	Ace Hardware
Clayton Young	Camp Verde Fire District
Dave Freeman	Camp Verde Chamber of Commerce
Dave Lewis	Yavapai-Apache Nation
Francene Beeny	R&M Commercial Leasing, LLC
Gary Thompson	Arizona Central Land and Home
Jan Grogan	Camp Verde Sanitary Dist.
Jim Duncan	Unisource Energy
John McReynolds	Babes Round-Up
Justin Bullard	Camp Verde Water System
Karen Porter	Century Link
Katherine Cole	Circle K
Kristi Gagnon	Camp Verde Fire District
Linda Peterson	Town of Camp Verde
Lonny Ward	Cable One
Mark Beeny	R&M Commercial Leasing, LLC
Mark Edelman	Arizona State Land Department
Marshall Davis	Camp Verde Sanitary Dist.

Name	Organization
Matt Tolman	ADOT
Mike Jenkins	Town of Camp Verde
Mike Willett	Yavapai County
Nancy Garcia	Arizona State Land Department
Nancy Gardner	Town of Camp Verde Marshals
Neal Lanning	Rain Tunnel
Renee Teeters	Snap Fitness
Rich Revis	Rain Tunnel
Rick Tackitt	Camp Verde Water System
Robert Barker	Camp Verde Unified School District
Robert Witte	APS
Ruben Ojeda	Arizona State Land Department
Shiela Stubler	Fort Verde State Historic Park
Steve Ayers	Town of Camp Verde
Steve Goetting	Camp Verde Chamber of Commerce
Steve Sarkesian	Camp Verde Fire District
Susan Helms	Circle K
Susi Thompson	Arizona Central Land and Home
Trevor Buhr	Arizona Game and Fish Department
Wendy Ferguson	Yavapai-Apache Nation

* This list represents stakeholders that attended the meetings. Invitations were sent to all businesses along the Finnie Flat Road Corridor and at the Tri-Intersection.



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

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PHOENIX, AZ 85086-5000
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GOVERNOR
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DIRECTOR
LARRY D. VOYLES
DEPUTY DIRECTORS
GARY R. HOVATTER
BOB BROSCHEID



June 19, 2013

Justin Feek
Program Manager
Multimodal Planning Division
Arizona Department of Transportation

Re: Finnie Flat Road Business Corridor Study

Dear Mr. Feek:

The Arizona Game and Fish Department (Department) has reviewed your letter regarding the Finnie Flat Road Business Corridor Study. The Department's Heritage Data Management System (HDMS) has been accessed and current records show that the special status species listed on the attachment have been documented as occurring in the project vicinity (2-mile buffer).

We have reviewed the information packet provided to us in your letter. Since the proposed business corridor study area is located along existing roadways (as pictured in the Camp Verde Study Area Map), the Department does not anticipate any significant adverse impacts to wildlife resources would occur as a result of this project in the immediate project vicinity. The species listed in the attached receipt are all primarily associated with the riparian area of the Verde River to the north of the study area. As long as the project activities are contained to the project area as shown in the study area map, the Department does not anticipate any negative impacts to these riparian species.

The Department appreciates the opportunity to provide an evaluation of impacts to wildlife or wildlife habitats associated with the project activities. If you have any questions regarding this letter, please contact me at (623) 236-7486.

Sincerely,

Chip Young
Project Evaluation Specialist

cc: Laura Canaca, Project Evaluation Program Supervisor
Kelly Wolff, Habitat Program Manager, Region VI

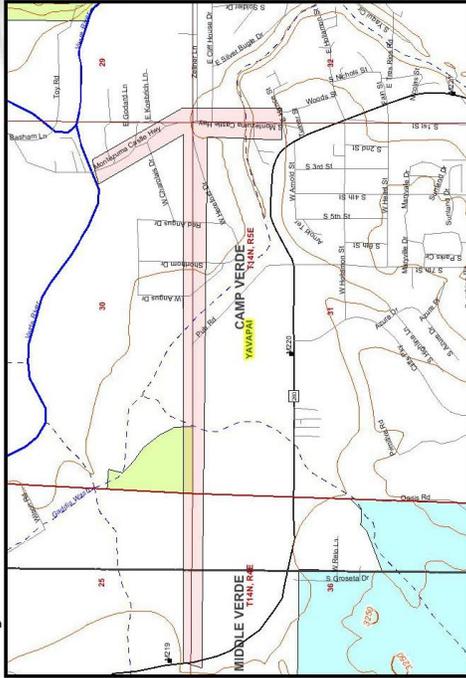
AGFD# M13-06195308

AN EQUAL OPPORTUNITY REASONABLE ACCOMMODATIONS AGENCY



Arizona's On-line Environmental Review Tool
 Search ID: 20130619020604
 Project Name: Finnie Flat Road
 Date: 6/19/2013 1:36:02 PM

Project Location



Project Name: Finnie Flat Road
Submitted By: PEP Project Evaluation Program
On behalf of: ADOT
Project Search ID: 20130619020604
Date: 6/19/2013 1:35:54 PM
Project Category: Transportation & Infrastructure, Road Improvements, Pedestrian enhancements (curbs, sidewalks, bike lanes, etc.)
Project Coordinates (UTM Zone 12-NAD 83): 420834.972, 3825631.307 meter

Project Area: 70.534 acres
Project Perimeter: 6301.761 meter
County: YAVAPAI
USGS 7.5 Minute Quadrangle ID: 902
Quadrangle Name: MIDDLE VERDE
Project locality is currently being scoped

Location Accuracy Disclaimer

Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Receipt is solely responsible for the project location and thus the correctness of the Project Review Receipt content.

The Department appreciates the opportunity to provide in-depth comments and project review when additional information or environmental documentation becomes available.

Special Status Species Occurrences/Critical Habitat/Tribal Lands within 2 miles of Project Vicinity:

Name	Common Name	FWS	USFS	BLM	State
<i>Buteogallus anthracinus</i>	Common Black-Hawk		S		WSC
CH for <i>Empidonax traillii</i> <i>extimus</i>	Designated Critical Habitat for Southwestern willow flycatcher				
CH for <i>Meda fulgida</i>	Designated Critical Habitat for spikedace				
CH for <i>Tiaroga cobitis</i>	Designated Critical Habitat for loach minnow				
CH for <i>Xyrauchen texanus</i>	Designated Critical Habitat for razorback sucker				
Camp Verde Indian Reservation	Camp Verde Indian Reservation				
<i>Catostomus clarkii</i>	Desert Sucker	SC	S	S	
<i>Catostomus insignis</i>	Sonora Sucker	SC	S	S	
<i>Cicindela oregona maricopa</i>	Maricopa Tiger Beetle	SC			
<i>Coccyzus americanus</i>	Yellow-billed Cuckoo (Western U.S. DFS)	PS,C*	S		WSC
<i>Empidonax traillii</i> <i>extimus</i>	Southwestern Willow Flycatcher	LE			WSC
<i>Eriogonum ericifolium</i> var. <i>ericifolium</i>	Heathleaf Wild-buckwheat		S		
<i>Gila robusta</i>	Roundtail Chub	C*	S		WSC
<i>Haliaeetus leucocephalus</i> (wintering pop.)	Bald Eagle - Winter Population	SC, BG A	S	S	WSC
<i>Haliaeetus leucocephalus</i> pop. 3	Bald Eagle - Sonoran Desert Population	SC, BG A	S	S	WSC
<i>Megaceryle alcyon</i>	Belted Kingfisher				WSC
Munds Mountain - Black Hills Linkage Design	Wildlife Corridor				
<i>Polygala rusbyi</i>	Hualapai Milkwort		S		
<i>Phycocheilus lucius</i>	10J area for Colorado pikeminnow				
<i>Salvia dorrii</i> ssp. <i>meansii</i>	Verde Valley Sage	SC	S		SR
<i>Thamnophis eques</i> <i>megalops</i>	Northern Mexican Gartersnake	C*	S		WSC

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Please review the entire receipt for project type recommendations and/or species or location information and retain a copy for future reference. If any of the information you provided did not accurately reflect this project, or if project plans change, another review should be conducted, as this determination may not be valid.

Arizona's On-line Environmental Review Tool:

1. This On-line Environmental Review Tool inquiry has generated recommendations regarding the potential impacts of your project on Special Status Species (SSS) and other wildlife of Arizona. SSS include all U.S. Fish and Wildlife Service federally listed, U.S. Bureau of Land Management sensitive, U.S. Forest Service sensitive, and Arizona Game and Fish Department (Department) recognized species of concern.
2. These recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation). These recommendations are preliminary in scope, designed to provide early considerations for all species of wildlife, pertinent to the project type you entered.
3. This receipt, generated by the automated On-line Environmental Review Tool does not constitute an official project review by Department biologists and planners. Further coordination may be necessary as appropriate under the National Environmental Policy Act (NEPA) and/or the Endangered Species Act (ESA).

The U.S. Fish and Wildlife Service (USFWS) has regulatory authority over all federally listed species under the ESA. Contact USFWS Ecological Services Offices: <http://arizonaes.fws.gov/>.

Phoenix Main Office
2321 W. Royal Palm Road, Suite 103
Phoenix, AZ 85021
Phone 602-242-0210
Fax 602-242-2513

Tucson Sub-Office
201 North Bonita, Suite 141
Tucson, AZ 85745
Phone 520-670-6144
Fax 520-670-6154

Flagstaff Sub-Office
323 N. Leroux Street, Suite 101
Flagstaff, AZ 86001
Phone 928-226-0614
Fax 928-226-1099

Disclaimer:

1. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area.
2. The Department's Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there.
3. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HDMS data contains information about species occurrences that have actually been reported to the Department.

Arizona Game and Fish Department Mission

To conserve, enhance, and restore Arizona's diverse wildlife resources and habitats through aggressive protection and

management programs, and to provide wildlife resources and safe watercraft and off-highway vehicle recreation for the enjoyment, appreciation, and use by present and future generations.

Project Category: Transportation & Infrastructure, Road Improvements, Pedestrian enhancements (curbs, sidewalks, bike lanes, etc.)

Project Type Recommendations:

Based on the project type entered; coordination with State Historic Preservation Office may be required
<http://azstateparks.com/SHPO/index.html>

During planning and construction, minimize potential introduction or spread of exotic invasive species. Invasive species can be plants, animals (exotic snails), and other organisms (e.g. microbes), which may cause alteration to ecological functions or compete with or prey upon native species and can cause social impacts (e.g. livestock forage reduction, increase wildfire risk). The terms noxious weed or invasive plants are often used interchangeably. Precautions should be taken to wash all equipment utilized in the project activities before and after project activities to reduce the spread of invasive species. Arizona has noxious weed regulations (Arizona Revised Statutes, Rules R3-4-244 and R3-4-245). See Arizona Department of Agriculture website for restricted plants <http://www.azda.gov/PSD/quarantine5.htm>. Additionally, the U.S. Department of Agriculture has information regarding pest and invasive

plant control methods including: pesticide, herbicide, biological control agents, and mechanical control:
<http://www.usda.gov/wps/portal/usdahome>. The Department regulates the importation, purchasing, and transportation of wildlife and fish (Restricted Live Wildlife), please refer to the hunting regulations for further information http://www.azgfd.gov/h_f/hunting_rules.shtml.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife.

Hydrological considerations: design culverts to minimize impacts to channel geometry, or design channel geometry (low flow, overbank, floodplains) and substrates to carry expected discharge using local drainages of appropriate size as templates. Aquatic wildlife considerations: reduce/minimize barriers to migration of amphibians or fish (e.g. eliminate falls). Terrestrial wildlife: washes and stream corridors often provide important corridors for movement. Overall culvert width, height, and length should be optimized for movement of the greatest number and diversity of species expected to utilize the passage. Culvert designs should consider moisture, light, and noise, while providing clear views at both ends to maximize utilization. For many species, fencing is an important design feature that can be utilized with culverts to funnel wildlife into these areas and minimize

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the potential for roadway collisions. Guidelines for culvert designs to facilitate wildlife passage can be found at <http://www.azgfd.gov/hgis/guidelines.aspx>.

Planning: consider impacts of lighting intensity on mammals and birds and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Project Location and/or Species recommendations:

Tribal Lands are within the vicinity of your project area (refer to page 1 of the receipt) and may require further coordination. Please contact:

Yavapai-Apache Tribal Council
3435 Shaw Ave.
Camp Verde, AZ 86322
Phone: 928-567-3649
Fax: 928-567-3994

Heritage Data Management System records indicate that one or more listed, proposed, or candidate species or Critical Habitat (Designated or Proposed) have been documented in the vicinity of your project (refer to page 1 of the receipt). Please contact:
Ecological Services Office
US Fish and Wildlife Service
2321 W. Royal Palm Rd.
Phoenix, AZ 85021-4951

Phone: 602-242-0210
Fax: 602-242-2513

Heritage Data Management System records indicate that one or more native plants listed on the Arizona Native Plant Law and Antiquities Act have been documented within the vicinity of your project area (refer to page 1 of the receipt). Please contact:
Arizona Department of Agriculture
1688 W Adams
Phoenix, AZ 85007
Phone: 602-542-4373

HDMS records indicate your project is in or near an identified wildlife habitat linkage corridor. Project planning and implementation efforts should focus on maintaining adequate opportunities for wildlife permeability. For information on the linkage assessment and wildlife species that may be affected refer to:
<http://www.corridordesign.org/arizona>. Contact your Arizona Game and Fish Department Regional Office for specific project recommendations:
http://www.azgfd.gov/inside_azgfd/agency_directory.shtml

Recommendations Disclaimer:

1. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project.
2. These recommendations are proposed actions or guidelines to be considered during **preliminary project development**.
3. Additional site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or

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new project proposals.

5. The Department is interested in the conservation of all fish and wildlife resources, including those Special Status Species listed on this receipt, and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
6. **Further coordination requires the submittal of this initialed and signed Environmental Review Receipt with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map).**
7. Upon receiving information by AZGFD, please allow 30 days for completion of project reviews. Mail requests to:

**Project Evaluation Program, Habitat Branch
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85086-5000
Phone Number: (623) 236-7600
Fax Number: (623) 236-7366**

Terms of Use

By using this site, you acknowledge that you have read and understand the terms of use. Department staff may revise these terms periodically. If you continue to use our website after we post changes to these terms, it will mean that you accept such changes. If at any time you do not wish to accept the Terms, you may choose not to use the website.

1. This Environmental Review and project planning website was developed and intended for the purpose of screening projects for potential impacts on resources of special concern. By indicating your agreement to the terms of use for this website, you warrant that you will not use this website for any other purpose.
2. Unauthorized attempts to upload information or change information

on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. The Department reserves the right at any time, without notice, to enhance, modify, alter, or suspend the website and to terminate or restrict your access to the website.
4. This Environmental Review is based on the project study area that was entered. The review must be redone if the project study area, location, or the type of project changes. If additional information becomes available, this review may need to be reconsidered.
5. A signed and initialed copy of the Environmental Review Receipt indicates that the entire receipt has been read by the signer of the Environmental Review Receipt.

Security:

The Environmental Review and project planning web application operates on a complex State computer system. This system is monitored to ensure proper operation, to verify the functioning of applicable security features, and for other like purposes. Anyone using this system expressly consents to such monitoring and is advised that if such monitoring reveals possible evidence of criminal activity, system personnel may provide the evidence of such monitoring to law enforcement officials. Unauthorized attempts to upload or change information; to defeat or circumvent security measures; or to utilize this system for other than its intended purposes are prohibited.

This website maintains a record of each environmental review search result as well as all contact information. This information is maintained for internal tracking purposes. Information collected in this application will not be shared outside of the purposes of the Department.

If the Environmental Review Receipt and supporting material are not mailed to the Department or other appropriate agencies within six (6) months of the Project Review Receipt date, the receipt is considered to be null and void, and a new review must be initiated.

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Print this Environmental Review Receipt using your Internet browser's print function and keep it for your records. Signature of this receipt indicates the signer has read and understands the information provided.

Signature: _____

Date: _____

Proposed Date of Implementation: _____

Please provide point of contact information regarding this Environmental Review.

Application or organization responsible for project implementation

Agency/organization: _____

Contact Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

E-mail: _____

Person Conducting Search (if not applicant)

Agency/organization: _____

Contact Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

E-mail: _____

Page 6 of 6 APPLICATION INITIALS: _____

Checklist for Environmental Planners – Part 3

By completing this checklist, environmental planners will be able to systematically evaluate the transportation planning study with regard to environmental resources and issues. It provides a framework for future NEPA studies by identifying those resources and issues that have already been evaluated, and those that have not. The role of environmental planners during the study's various stages is laid out in the flowchart on page 3. This role includes timely advocacy for resources and issues that will later be integral to NEPA processes.

3.1 Checklist for environmental planners				
Resource or issue	Is the resource or issue present in the area?	Are impacts to the resource or issue involvement possible?	Are the impacts mitigatable?	Discuss the level of review and method of review for this resource or issue and provide the name and location of any study or other information cited in the planning document where it is described in detail. Describe how the planning data may need to be supplemented during NEPA.
Natural environment				
Sensitive biological resources	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	A review of biological databases was performed for this study, but a biologist did not visit the study area. At a minimum, a biological review should be performed as part of the NEPA study during project development.
Wildlife corridors	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	AGFD department Wildlife Linkages assessments indicated that the study area in a Wildlife Movement area. However, AGDF determined that this project is not likely to adversely to impact sensitive wildlife species since the improvements are to an existing road.
Invasive species	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Invasive species mitigation measures should be included in the NEPA clearance.
Wetland areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Wetlands are located along the Verde River in the project vicinity. This project will not impact the wetlands but this should be reevaluated during NEPA.
Riparian areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Riparian areas are located in the vicinity of the project but are unlikely to be impacted. Potential impacts to riparian areas should be reevaluated during NEPA.
100-year floodplain	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Floodplain impacts should be re-evaluated during project development.
Clean Water Act Sections 404/401 waters of the United States	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Since washes are located in the project vicinity, a 404 review will need to be performed during the NEPA study.

3.1 Checklist for environmental planners

Resource or issue	Is the resource or issue present in the area?	Are impacts to the resource or issue involvement possible?	Are the impacts mitigatable?	Discuss the level of review and method of review for this resource or issue and provide the name and location of any study or other information cited in the planning document where it is described in detail. Describe how the planning data may need to be supplemented during NEPA.
Prime or unique farmland	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Coordination between Yavapai County, the Town, USDA, and the USFS is needed to identify areas of potential or prime unique farmlands. If soil types in the area are considered prime or unique as identified on the USDA prime and unique farmlands soils list, analysis needs to be conducted to determine whether water delivery irrigation systems associated with the farmlands are adversely affected by the recommended improvements.
Farmland of statewide or local importance	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Same as above.
Sole-source aquifers	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Sole-source aquifers should be evaluated during the NEPA study.
Wild and scenic rivers	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	N/A
Visual resources	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	Visual resources should be re-evaluated during the NEPA study.
Designated scenic road/byway	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	N/A
Cultural resources				
Archaeological resources	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	A records review revealed several archaeological sites in the study area. A cultural resources survey should be performed as part of the NEPA study.
Historical resources	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Historical resources should be evaluated as part of the cultural resources study during NEPA. Cultural resources may be subject to protection under section 4(f) of the USDOT Act and thus could result in changes to the preferred alternative during project development.
Section 4(f) and Section 6(f) resources				
Section 4(f) wildlife and/or waterfowl refuge	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	None have been identified at this time; however, this should be re-evaluated during NEPA.

3.1 Checklist for environmental planners

Resource or issue	Is the resource or issue present in the area?	Are impacts to the resource or issue involvement possible?	Are the impacts mitigatable?	Discuss the level of review and method of review for this resource or issue and provide the name and location of any study or other information cited in the planning document where it is described in detail. Describe how the planning data may need to be supplemented during NEPA.
Section 4(f) historic site	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Historical resources should be evaluated as part of cultural resources study during NEPA.
Section 4(f) recreational site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	None have been identified at this time. Re-evaluated during project development.
Section 4(f) park	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	A park is located in the project vicinity; however, none are directly impacted by the preferred alternative. This will need to be re-evaluated during project development.
Section 6(f) resource	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Section 6(f) resources will need to be evaluated during project development.
Human environment				
Existing development	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Existing development is present in the vicinity. The extent and nature of any impacts that may occur will be determined during project development.
Planned development	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Development is planned in the project vicinity. Re-evaluated during project development.
Displacements	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Re-evaluate during project development.
Access restriction	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	This project has access control measures.
Neighborhood continuity	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Neighborhood continuity is considered in the development of proposed solutions in this planning study.
Community cohesion	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Community cohesion is considered in the development of proposed solutions in this planning study.
Title VI/Environmental justice populations	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	This should be re-evaluated during project development.

3.1 Checklist for environmental planners

Resource or issue	Is the resource or issue present in the area?	Are impacts to the resource or issue involvement possible?	Are the impacts mitigatable?	Discuss the level of review and method of review for this resource or issue and provide the name and location of any study or other information cited in the planning document where it is described in detail. Describe how the planning data may need to be supplemented during NEPA.
Physical environment				
Utilities	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Utilities will be addressed during project development.
Hazardous materials	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	Some hazardous materials generators are present in the project study area. A hazardous materials evaluation should be performed during project development.
Sensitive noise receivers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	A noise evaluation should be performed during project development.
Air quality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Not applicable	An air quality evaluation should be performed during project development.
Other (list)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Not applicable	

3.2 Identification of potential environmental mitigation activities

Could the transportation planning process be integrated with other planning activities, such as land use or resource management plans? If so, could this integrated planning effort be used to develop a more strategic approach to environmental mitigation measures?

This study could be used to inform city and county planning efforts.

With respect to potential environmental mitigation opportunities at the PEL level, who should ADOT consult with among federal, State, and local agencies and tribes and how formally and frequently should such consultation be undertaken?

N/A

3.2 Identification of potential environmental mitigation activities

Off-site and compensatory mitigation areas are often creatively negotiated to advance multiagency objectives or multiple objectives within one agency. Who determined what specific geographic areas or types of areas were appropriate for environmental mitigation activities? How were these determinations made?

No off-site or compensatory mitigations were identified in this study.

To address potential impacts on the human environment, what mitigation measures or activities were considered and how were they developed and documented?

This project is expected to have a positive impact to the human environment in the area. Negative impacts are expected to be small and localized and mitigations for these impacts will be addressed during project development.

Prepared by: ___Thor Anderson_____ Date: __8-28-13_____