



CURRENT CONDITIONS

W. Route 66 Operational Assessment

*Approved by the MetroPlan Technical Advisory
Committee (TAC) on May 23, 2024*

TABLE OF CONTENTS

Introduction.....	1
What is the Purpose of the Operational Assessment (OA)?.....	1
Study Area.....	2
Why Now?.....	3
What is the OA about?.....	4
Local and state plans and policies.....	5
Flagstaff Regional Plan 2030.....	5
Flagstaff In Motion: A Community Transit Plan.....	8
A Brief History of the Corridor.....	11
The Mother Road.....	11
Tourism and Commerce.....	12
Corridor History Timeline.....	14
Population and Demographics.....	15
Community Conditions.....	19
Corridor Employers.....	22
Environmental Justice & Equity.....	24
Current Development.....	27
Environmental Conditions.....	32
Transportation Conditions.....	33
Travel To and From the Corridor.....	34
Roads and Intersections.....	35
Intersections and Crossings.....	39
Traffic Counts and Level-of-Service.....	42
Transit and Active Transportation.....	47
Existing Bike Facilities.....	47
Existing Pedestrian Facilities.....	48
Existing Transit Services.....	48
Bicycle and Pedestrian Counts.....	49
Crash Data Analysis (2017-2022).....	50
Bicycle and Pedestrian Crashes.....	53
Network Screening and Crash Severity.....	54
Public Transportation Safety Concerns.....	56
Access Management.....	57

MetroPlan is conducting this Operational Assessment on behalf our partners, the City of Flagstaff, Mountain Line, Coconino County, and the Arizona Department of Transportation (ADOT) to determine multi-jurisdictional solutions and projects to support the growth of the corridor.

INTRODUCTION

MetroPlan, in collaboration with the City of Flagstaff, Mountain Line, Coconino County, and the Arizona Department of Transportation (ADOT) is assessing W. Route 66 operations as future development and growth continues along the corridor. This growth impacts the use of the roadway and its connections to broader Flagstaff, Northern Arizona University, and Interstate 40. To create future conditions that best manage congestion and provide people with safe and comfortable options for moving around Flagstaff without a vehicle, the project team is using scenario-based assumptions to inform options for future consideration.

What is the Purpose of the Operational Assessment (OA)?

The purpose of the W. Route 66 Operation Assessment (OA) is to identify and prioritize multimodal transportation project(s) for the corridor as a whole. However, a special emphasis will be placed on identifying projects and funding partnerships for voter-approved 419 tax initiative funds that have been specifically allocated to W. Route 66 between Milton Road to Flagstaff Ranch Road. In addition, this plan will also support Mountain Line's planned extension of Route 8 along W. Route 66 as identified in the Flagstaff in Motion 5-Year Plan, by providing guidance on future bus stop location(s), potential bus stop design options, and route design.

The OA will consider existing and future conditions to horizon year 2045 to determine projects that will address future transportation needs and corridor safety for all modes and are implementable by local jurisdictions.

Potential project(s) will be guided through existing plans and policies such as those found in the City of Flagstaff [Carbon Neutrality Plan](#), [Active Transportation Master Plan](#), [Mountain Line's 5-year Transit Plan](#), and MetroPlan's [Regional Transportation Plan Stride Forward](#). Development of future land use scenarios for road design sensitivity testing will be guided by the City's [Regional Plan 2030](#) and any new data or information provided by the ongoing Regional Plan update.

The OA will not provide a visioning process for the corridor nor will the results impact future developers beyond what is expected through the implementation of the existing City of Flagstaff and the Arizona Department of Transportation (ADOT) policies and standards.

What are the Benefits of Prop 419?

- Addresses connectivity
 - Parallel routes to Milton
 - Pedestrian/bike improvements
 - Access to future housing options
 - Access to jobs
-

Study Area

The study area ranges 4 miles in length from Interstate 40 (I-40) to Milton Road (Figure 1). This study area factors in adjacent communities directly impacted and mainly reliant on West Route 66 for daily use. West Route 66 is predominantly owned by ADOT, with a small portion near Flagstaff Ranch Road owned by Coconino County. The City of Flagstaff has allocated 419 Tax Initiative funding set aside for W. Route 66 from Milton Road to Flagstaff Ranch Road.

To understand the surrounding context, this study looks at existing land uses, zoning, housing, employment, retail, and connection to W. Route 66 ranging from the BNSF railroad tracks to the north and I-40 to the south through four distinct segments of the roadway (Figure 2).

FIGURE 1: STUDY AREA

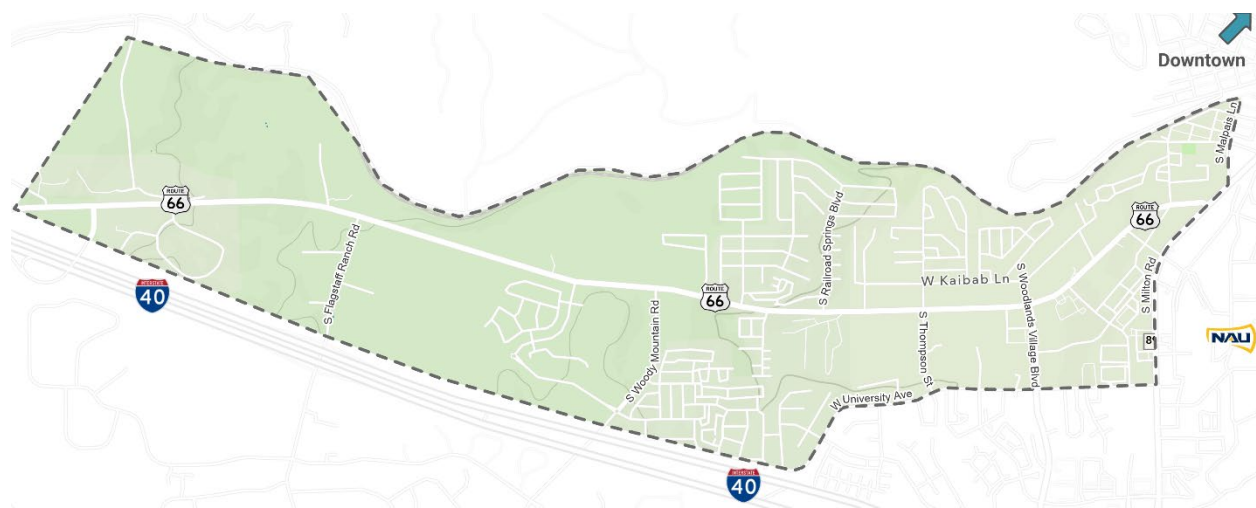


FIGURE 2: CORRIDOR BY SEGMENT



- Segment 1: I-40 to Flagstaff Ranch Rd.
- Segment 2: Flagstaff Ranch Rd. to Woody Mountain Rd.
- Segment 3: Woody Mountain Rd. to Woodlands Village Blvd.
- Segment 4: Woodlands Village Blvd. to Milton Rd.

Why Now?

This plan is part of a multi-jurisdictional effort to determine the best project to fit the city’s investment of 419 tax initiative funds to support multi-modal improvements along W. Route 66 and to support future decision-making around the expansion of Mountain Line’s Route 8 to service the new communities and businesses along the corridor.

Voter Expectations:

Proposition 419 was approved by voters in 2018. The City Transportation Sales tax is intended to fund “new streets, pedestrian and bicycle projects, safety improvements, and street operations, including but not limited to, traffic signal technology. To accommodate vehicles, pedestrians, bicycles, and buses, new and widened streets will be proposed to be built as “complete streets” ([General/Special Election Pamphlet, 2018](#)). W. Route 66 is identified as a transportation sales tax investment area.

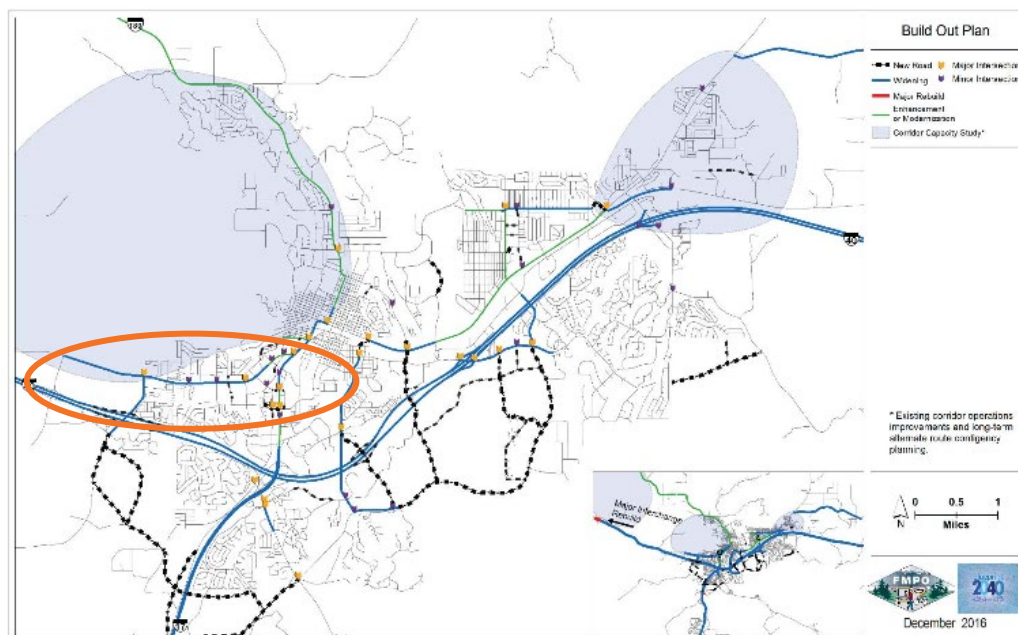
Growth Pressures:

Through previous plans and studies, W. Route 66 has been identified as a key corridor for future growth, development, and network connectivity. Currently, there are several single-family homes, multi-family homes, and businesses being developed along the corridor, particularly to the west, with the potential for further build-out to support future development.

Critical Access:

W. Route 66 provides a direct route to/from I-40, connects to industry and retail to the south, NAU and downtown to the east, and the town of Belmont to the west. A new road is planned to connect to the corridor providing a new north/south connection to support the growing population (Figure 3). Additionally, W. Route 66 supports trucking services that frequently deliver to the surrounding industrial sites and provides an emergency or alternate route when I-40 is closed.

FIGURE 3: ROADWAY BUILD OUT PLAN, CITY OF FLAGSTAFF



What is the OA about?

The operational assessment is seeking to address the following:

- Identify multimodal and transportation for the corridor with additional emphasis on projects specific to 419 funding by prioritizing projects that meet the funding timeline and reach a 15% design level.
- Identify bus stop locations for future route 8 extension along the corridor that allow for good pedestrian access from both sides of the corridor and are supported by all jurisdictions.
- Address future transportation needs through baseline and future performance analysis of the transit network, complete streets/active transportation, arterial network, and intersection assessments.
- Design with best practices set forth in an outcome-oriented evaluation criteria that will be created with jurisdictional partners to achieve corridor goals.
- Prioritize potential projects through an evaluation process that eliminates any alternatives early that do not meet state, city, or regional policies, standards, and design guidelines. Prioritized projects may be evaluated further for conceptual design(s).
- Create a plan that is implementable by local jurisdictions and provides solutions aligned with policies and standards.
- Identify projects in existing plans that may be eligible for future federal funding.

LOCAL AND STATE PLANS AND POLICIES

This section offers a review and synopsis of existing studies, plans, or reports will influence the planning process of the W. Route 66 Operational Assessment. These studies and reports offer insights into the existing transportation issues and potential recommendations that may be associated with the W. Route 66 corridor.

While Table 1 provides an overview of each of the documents reviewed, a summary is provided of the urban and transportation planning influences on W. Route 66. All the plans impact the region, few impact the corridor directly. The City's Regional Plan provides the most detailed envisioning of the corridor, and the Mountain Line 5-year Transit Plan guides future service expansion along W. Route 66.

The operational assessment will recommend new bus stop locations, provide guidance on how to integrate the Activity Transportation Master Plan and Cabron Neutrality Plan, and identify the convergence of proposed planning projects for optimum impact. The Operational Assessment will work towards providing recommendations that support local, regional, and state plans and policies.

Flagstaff Regional Plan 2030

The Flagstaff Regional Plan 2030 is used for decision-making so that the Flagstaff City government is accountable for publicly derived policy outcomes and goals. It provides the basis for policies and regulations to guide physical and economic development within the Flagstaff region. The plan is currently being updated ([Regional Plan 2045](#)). Scenario planning is underway for the update. As the latest information and direction from the community becomes available it will be incorporated into this planning process where applicable.

While the Regional Plan provides a variety of policies for future growth, not all policies will be directly addressed through the Operational Assessment such as affordable housing, water resources, energy efficiency, arts, sciences, and educational goals, etc. as these policies fall outside of the operational assessment of the transportation system. However, broader policies such as those described below may impact the selections and solutions for future projects.

The Regional Plan identifies W. Route 66 as an area of future growth with a need to define its character, all while providing multi-modal transportation options that expand safe and sustainable travel for everyone. The Plan identifies activity centers, great streets, and transition zones for the corridor.

FUTURE GROWTH & ACTIVITY CENTERS

The Future Growth Illustration (Figure 4) defines the geographic locations of area types and place types. The circle icons represent future activity centers in urban (orange), rural (tan) and suburban (yellow) contexts.

FIGURE 4: FUTURE GROWTH ILLUSTRATION



Goal LU.18. Develop well-designed activity centers and corridors with a variety of employment, business, shopping, civic engagement, cultural opportunities, and residential choices. (Regional Plan - Page IX-68)

Corridors are another place type identified in the Regional Plan, the entire length of Route 66 as a commercial corridor. [Activity Centers](#) along W. Route 66 are identified at the following intersections:

- Flagstaff Ranch Rd – *Future Suburban Neighborhood Activity Center (S10).*
- Woody Mountain Rd – *Future Urban Neighborhood Activity Center (U7).*
- Woodlands Blvd. – Existing Urban Regional Activity Center (S13).
- Milton Rd. – Existing Suburban Regional Activity Center (S7).

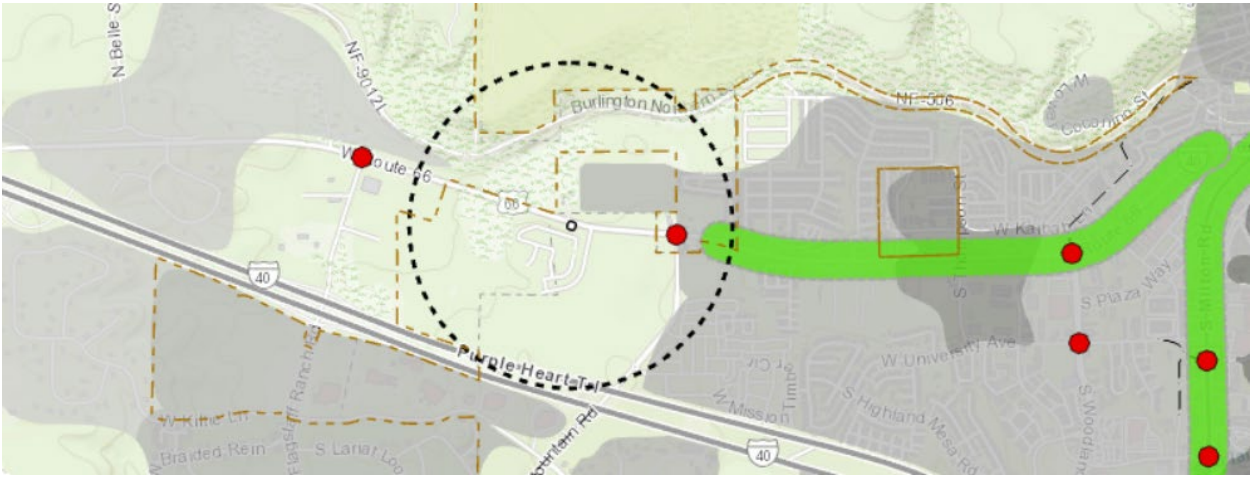
“Activity Center” - A mixed-use center that varies by scale and activity mix depending on location. Includes commercial, retail, offices, residential, shared parking, and public spaces.

GREAT STREETS & GATEWAYS

"Great Streets" have been identified as having potential for reinvestment, retrofit, and revitalization to make them more appealing to pedestrians (and shoppers), enhance transit potential, and make them ultimately safer. The Regional Plan envisions a corridor plan that integrates land use and transportation needs being created for each great street (Figure 5). The [Flagstaff Regional Plan](#) envisions the corridor development celebrating Route 66 and the region's role in the great history of our nation.

Gateways provide the first impression people have as they enter the region and thus warrant distinctive design considerations to reflect community pride and local design traditions. A Gateway Corridor has been identified for W. Route 66. However, a Corridor Master Plan has not been completed for this area.

FIGURE 5: REGIONAL PLAN GREAT STREETS & GATEWAYS



TRANSITION AREAS

Figure 6 provides an overview of the identified [transition area](#) along W. Route 66 from Milton Rd. to Flagstaff Ranch Rd. The brown line represents the area to “improve and evolve” through Great Streets and Activity Centers. The light peach color between Saskan Ranch Cir. and Woody Mountain Rd. is identified as a “Transform” or new growth area.

FIGURE 6: REGIONAL PLAN TRANSITION ZONES



Flagstaff In Motion: A Community Transit Plan

Flagstaff in Motion is a Community Transit Plan that identifies how best to provide and fund Mountain Line transit services, captures known community transit needs for the next five years, and prioritizes them into a list with recommendations to fund and implement. Two main goals guided the improvements selected for the Plan. The first goal was to target areas with the highest ridership potential. The second goal was to support transit-dependent populations.

The extension of Route 8 (to the west past Thompson Rd.) Ranks #2 in the Prioritized Areas and Route for Transit Service.

Recommendations for W. Route 66 include:


Transit	Bike/Ped
<ul style="list-style-type: none"> • Kiss-in-Ride near Woody Mountain Rd. • Bus stop locations (existing) <ul style="list-style-type: none"> ○ near Woodlands Village Rd (1) ○ near Thompson St (1) • Bus stop locations (extended route 8) <ul style="list-style-type: none"> ○ near Thompson (1) ○ near Railroad Springs (2) ○ near S. Northwestern St (2) ○ near Woody Mountain Rd (1) 	<ul style="list-style-type: none"> • Enhanced pedestrian crossings (Near): <ul style="list-style-type: none"> ○ Railroad Springs ○ Northwestern ○ Woody Mountain

Six (6) Bus Shelters w/ pullout, bike rack, trash receptacle, horizontal, easement. One (1) Bus Shelter w/ bike rack, and trash receptacle (in partnership with Sky Cottage’s development). These areas would require enhanced pedestrian crossing.

Route 8 Extension

#2

Extend Route 8 to Woody Mountain Rd roundabout, maintain existing peak frequency of 30 minutes and improve off-peak to 30 minutes.



Route 8 currently interlines with Route 7 during weekday evenings, weekends, and holidays. Extending Route 8 would require a dedicated bus during the off-peak period that it currently shares with Route 7. An additional impact would result in off-peak frequency on Route 7 increasing to 40 minutes (it is currently at a 60-minute frequency).

The following plans, studies, and reports have been reviewed for their impact on the W. Route 66 Operational Assessment. Full details on each plan can be found in [\(Appendix A\)](#).

TABLE 1: SUMMARY OF LOCAL, REGIONAL, AND STATE PLANS

AGENCY	PLAN, STUDIES, & REPORTS	SUMMARY
City of Flagstaff	Woodlands Village Specific Plan (1990)	<p>The Regional Plan sets the goals and policies of the City and the region. The Regional Plan identifies W. Route 66 as an area of future growth with a need to define its character, all while providing multi-modal transportation options that expand safe and sustainable travel for everyone. The Plan identifies activity centers, great streets, and transition zones for the corridor—additional goals and policies related to the Carbon Neutrality Plan and Active Transportation Master Plan. While roadway improvements geared towards vehicles are incorporated into many of the plans and policies, project considerations and recommendations support non-single occupancy vehicle travel.</p> <p>The specific plans are incorporated into the Regional Plan and guide specific neighborhood and community development.</p>
	West Side Study (1999)	
	La Plaza Vieja Neighborhood Specific Plan (2015)	
	Carbon Neutrality Plan (2021)	
	Active Transportation Master Plan (2022)	
	Flagstaff Regional Plan 2030 <i>NOTE: Update in Progress</i>	
MetroPlan	Stride Forward Regional Transportation Plan (2022)	<p>Through the 2017 Regional Transportation Plan (RTP), Blueprint 2040, MetroPlan identified congestion reduction solutions specific to W. Route 66 in anticipation of future growth along the corridor. Blueprint 2040 further identified \$250 million in projects and resulted in 3 ballot measures. Of the ballot measures, Proposition 419 for General Transportation identified W. Route 66 as an area to receive local funding for improvements. The 2022 Stride Forward (RTP) responds to recent policy developments (Carbon Neutrality Plan) and is focused on “how” to program and design these previously identified projects within current policies and standards.</p> <p>Regional plans such as the Safety Plan provide not only an overview of high crash areas but also identify potential projects and countermeasures that may be implemented in the corridor.</p>
	Blueprint 2040 Regional Transportation Plan (2017)	
	Regional Transportation Safety Plan (In progress)	
Mountain Line	Flagstaff in Motion (2023)	<p>Mountain Line identified extending service along W. Route 66 as a top priority to increase access to Flagstaff’s growing community. In addition to this expansion, Mountain Line through their support of the City’s Active Transportation Master Plan advocates for well-designed bus stops and proper crossings for the public to access service.</p> <p>Mountain Line is considering a future tax initiative to support the expansion of service.</p>
Coconino County	Comprehensive Plan (2015) – <i>(Update in progress)</i>	<p>The County’s Comprehensive Plan works in conjunction with the City’s Regional Plan to identify future growth areas and how that growth impacts City and County land uses and policies. While no specific projects or policies were identified for W. Route 66 in the Comprehensive Plan, it does guide the density and type of development along the corridor. Area Plans are the next step in</p>

	Bellemont Area Plan (2019)	<p>identifying projects to support the goals and objectives of the Comprehensive Plan at a community level. The town of Bellemont is outside of the W. Route 66 Study Area, the Area Plan assesses the needs to serve the community of Bellemont and the region through future growth assumptions. Interstate 40 provides direct access to/from Bellemont, W. Route 66 offers a secondary route to connect the two communities.</p>
Arizona Department of Transportation	Flagstaff Urban Mobility Study (2004)	<p>These documents guide future infrastructure investments by the State. Historic Route 66 has a colorful legacy, and future improvements should preserve, protect, and enhance this significant roadway corridor.</p>
	Historic Route 66 Corridor Management Plan (2005)	<p>The Arizona Department of Transportation (ADOT) is responsible for all state-owned and operated roadways. Interstate-40, Milton Road, and Historic Route 66 are owned by ADOT and create an important network and access through Flagstaff. As a designated All-American Road, future preservation, protection, and enhancement of this significant roadway are the ADOT values for the corridor.</p>
	I-40 Concept Report Bellemont to Winona	<p>ADOT projects are prioritized based on a set of criteria and then incorporated into the ADOT 5-Year Construction Program. Not all projects identified will be funded. However local agencies can help to advocate for investments in projects that serve their region and community.</p>
	Milton Road Corridor Master Plan (2022)	<p>The Milton Road Corridor Master Plan identified short-term, long-term, and no-build hybrid alternatives spot improvements, and recommendations. This includes intersection improvements at W. Route 6 that add a second right run lane from Milton to WR66</p> <p>The I-40 Design Concept would be the most impactful on the corridor through the addition of a new traffic interchange at Woody Mountain Rd. This would redirect traffic from the interstate to a new north/south connection. This project is not funded as it is an expensive construction project.</p> <p>Of the ADOT documents reviewed, the Flagstaff Urban Mobility Study is the most related to the Operational Assessment. The study identified improvements and management techniques to address mobility and enhance safety along W. route 66. The ultimate recommendation included widening the roadway to support both the rural and urban character of the corridor.</p>

A BRIEF HISTORY OF THE CORRIDOR

Flagstaff was first settled as a city in 1876. Leading up to the establishment of the City of Flagstaff, between 1857 and 1860 the community of La Plaza Vieja was created and centered on a water spring and wagon road that was well-traveled by emigrants heading to California and as part of the westward expansion of the railroad. Due to the rich resources in grasslands, water, timber, and game, travelers began to settle the area by establishing ranches and lumber mills. The small settlement underwent several name changes beginning with Antelope Spring, then Flagstaff, and finally Old Town after the establishment of a new “town” one half-mile east. (La Plaza Vieja Neighborhood Specific Plan, 2015). La Plaza Vieja is a historic neighborhood located on the northeast section of W. Route 66. This neighborhood helped to bring the city to life as we know it today.

Influences on La Plaza Vieja and W. Route 66

- 1880 - The railroad began to lay track westward from Albuquerque which spurred the development of the surrounding area.
- 1882 - Flagstaff was an established town with railroad, livestock, and lumber industries of merchant, cafes, hotels, and saloons to serve the people.
- 1883 – The railroad moved their depot about a half mile east of the Flagstaff settlement. Merchants followed the train depot and established businesses and a post office. This settlement assumed the name of “Flagstaff.” As a result, Flagstaff became two settlements: The original site “Old Town” (La Plaza Vieja) and “New Town.”
- 1884 – a catastrophic fire nearly wiped out all of Old Town, creating a new slate for growth.
- 1890 – Old Town would evolve into La Plaza Vieja – a diverse community of working middle class that would foster economic and social growth of Flagstaff.
- 1900’s – Local businesspeople lobbied for Route 66 to pass through Flagstaff. This created tourist destinations, and tourism-related businesses including hotels, motels, cafes, and gas stations to service the new road-based travelers. The town grew not around the railroad stations (as in the past), but along Route 66. (Flagstaff, Route 66, and the Green Book, 2021)



POSTCARD LOOKING WEST ON ROUTE 66 IN THE LATE 1950'S

The Mother Road

Route 66 was designated by the Federal Highways Act in 1921 and the highway, much of it unpaved, ran from Chicago to Santa Monica through Flagstaff. Paving of the highway was completed in 1937. The route through Flagstaff was placed on an existing alignment and ran along what is now South San Francisco Street and Mike’s Pike and later moved when the bridge under the railroad was constructed in 1934.

This short segment of the iconic Route 66, once a thread connecting far-away travelers and local industrial endeavors, eventually evolved into a passage that brought life into the city's tourism and commercial sectors. Its importance paralleled the growth of Flagstaff, carving a path that led to its modern identity.

In the early 1920s, W. Route 66 was paralleled by the clamor of several lumber mills. This segment reflects the road's utilitarian roots, serving as a conduit for the bustling activities that characterized the era.

In the 1930s, while the industrial sector continued, the road started to weave itself into the social fabric of the city. The road's expanding influence beyond industrial boundaries foreshadowed its road's role in shaping the city.

The 1940s brought rapid change, with W. Route 66 becoming a catalyst for innovation. The rise of grand motels and fast-food establishments marked a shift towards catering to a booming tourist market.

Tourism and Commerce



1950's, FLAMINGO MOTOR COURT, ADJACENT TO W. ROUTE 66

The 1950s and 1960s were a transformative period for W. Route 66. The industrial ties that once defined West 66 began to fade, paving the way for a road of tourism and commerce. The demise of the lumber mill in the late 1950s redirected industrial activities elsewhere in town. The first Holiday Inn in Flagstaff on West 66 signaled the road's transition from an industrial corridor to a hub of hospitality. The road was also expanded to four lanes.

Through the 1980s and beyond, West 66 continued as a central artery of Flagstaff. The road transformed into one of residential and commercial development. West 66, now lined with local and national retail businesses such as Home Depot, Double Tree Hotel, Chevron Gas Station, and local favorite, Galaxy Dinner primarily located to the east. The west corridor is more industrial, servicing the Waste Management transfer station, Swire Coca-Cola distributing, and Self-Storage. Residential neighborhoods offer a variety of housing along the corridor. This includes single-family, multi-family, mobile home parks, modular homes, and RV parks.

The journey of West 66 reflects Flagstaff's own transformation. From an industrial thoroughfare to a commercial and residential hub, the road's progression parallels the city's growth story. It stands as a landmark of adaptation, forging a path that has become an integral part of Flagstaff's heritage and identity.

Historic Route 66 is now designated an All-American Road through Flagstaff and beyond. The historic character of W. Route 66 can still be seen through the rural character towards the west of the corridor and the urban character to the east that still maintains roadside dinners, lodging, and auto lots. Future



1950 WEST END OF ROUTE 66, SAWMILLS AT LEFT AND RIGHT.
COURTESY OF CLINE LIBRARY COLORADO PLATEAU DIGITAL
COLLECTIONS

developments will impact the character of this historic route by creating new needs for residents and businesses along the corridor.

The protected status of West Route 66 provides a unique responsibility and opportunity to enhance its significance, not only as a historical icon, but also as a safe and pleasant transportation facility.

TIMELINE

WEST ROUTE 66



1926

Workers at the site of U.S. Highway Route 66 construction in Flagstaff



1952

Saginaw and Manistee Lumber is transported via railroad



1964

Aerial photo of first Holiday Inn in Flagstaff along West Route 66



1968

Rows of Motels along West Route 66 serve the growing tourist population



1985

Pink Flamingo Motor Hotel at the corner of S. Milton and W Route 66



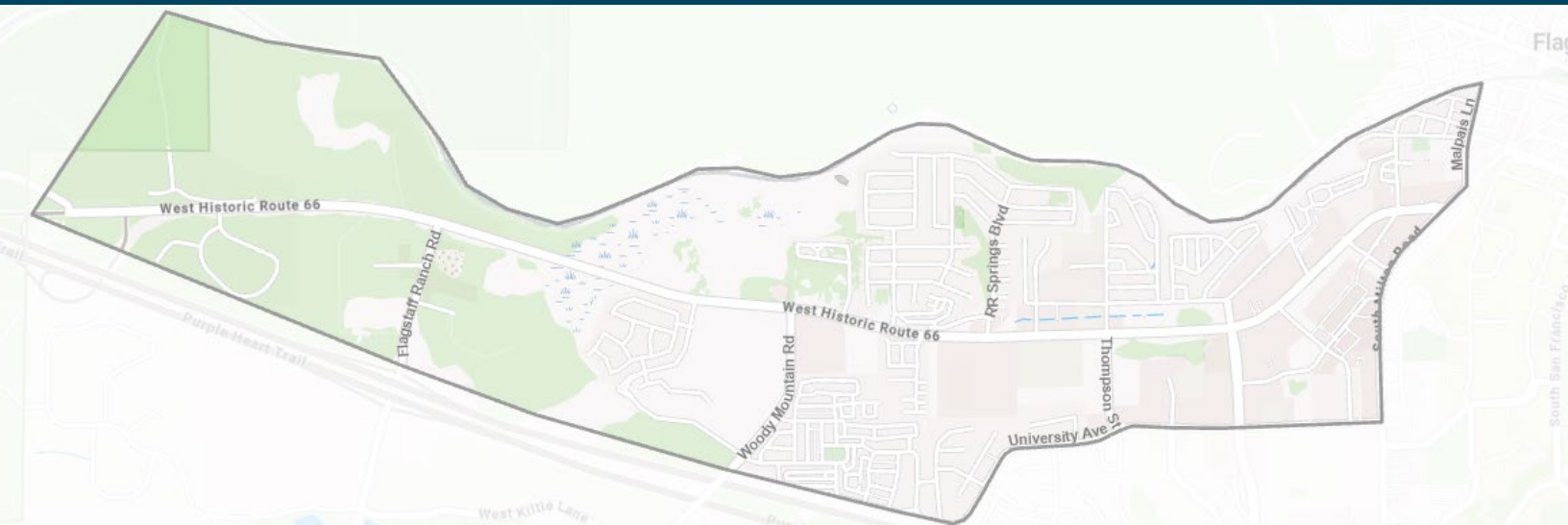
2019

The Standard: Mixed Use Student Housing opens



DEMOGRAPHICS

Study Area



Source: This infographic contains data provided by Esri (2023, 2028), ACS (2017-2021), Esri-Data Axle (2023).

3,043

Households

8,225

Population

2.46

Avg Size Household

31.0

Median Age

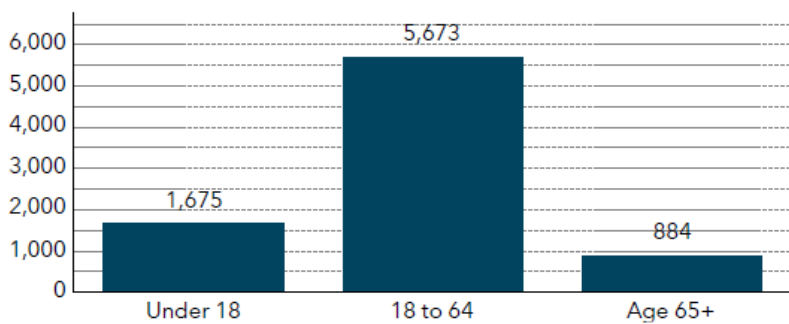
\$66,984

Median Household Income

\$272,439

Median Home Value

POPULATION BY AGE



AT RISK POPULATION



694

Households With Disability



884

Population 65+



44

Households Without Vehicle

RACE DEMOGRAPHICS

The largest group: White Alone (60.87)

The smallest group: Pacific Islander Alone (0.33)

Indicator	Value ▼	Diff
White Alone	60.87	-4.61
Hispanic Origin (Any Race)	26.08	+5.72
Two or More Races	13.24	+2.19
American Indian/Alaska Native Alone	11.71	+0.74
Other Race	9.37	+2.06
Asian Alone	2.53	-0.18
Black Alone	1.96	-0.24
Pacific Islander Alone	0.33	+0.06

Bars show deviation from Flagstaff city



14%

Households Below the Poverty Level



371

Households Below the Poverty Level

POPULATION AND BUSINESSES



344

Total Businesses



4,432

Total Employees

Race:

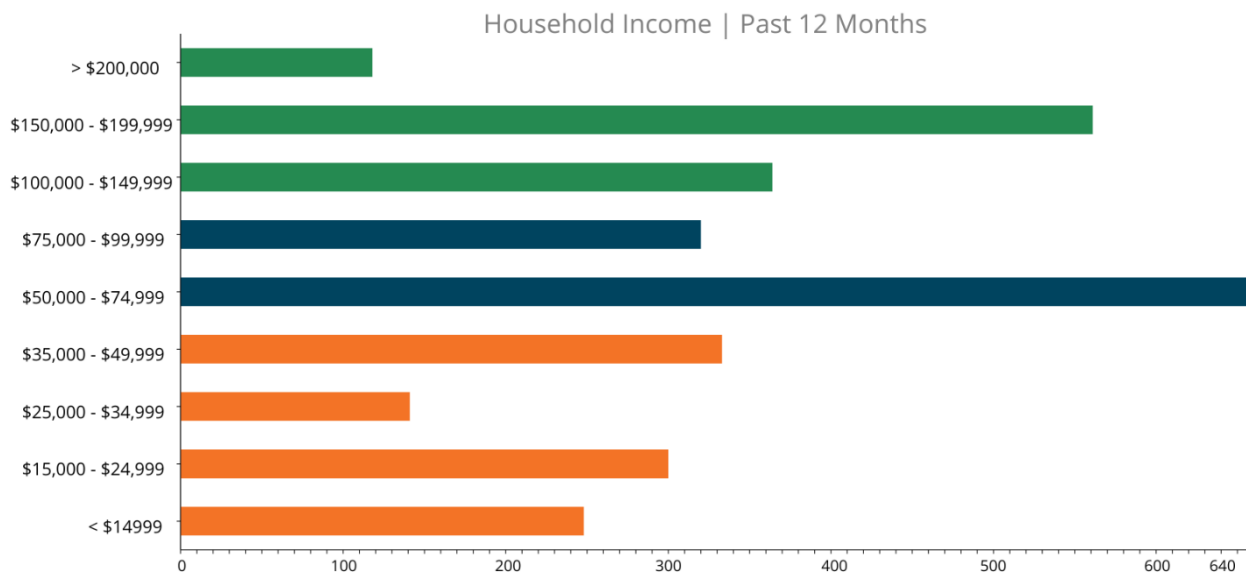
Race within the corridor skews towards the White Alone population at 61%. This is 4.6% less than the city. The minority community makes up the remaining 39% of the corridor, with those reporting as “two or more races” having the highest minority percentage of 13.2% followed by American Indian and Alaska Native Alone at 11.7%.

Of the total population within the study area, 26.1% identify as Hispanic or Latino. Making Hispanic or Latinos the second largest population besides White Alone.

Income:

The median income of Flagstaff is \$65,652 ([Census](#)), while the study areas is median income is slightly higher. Income along the corridor varies (Figure 7). The US Department of Housing and Urban Development (HUD) provides the following [FY2022 Extremely Low-Income Limits Calculation](#) for the City of Flagstaff (Figure 8).

FIGURE 7: STUDY AREA HOUSEHOLD INCOME – PAST 12 MONTHS



Source: This infographic contains data provided by Esri (2023, 2028), ACS (2017-2021), Esri-Data Axle (2023).

FIGURE 8: HOUSING & URBAN DEVELOPMENT LOW INCOME FOR FLAGSTAFF

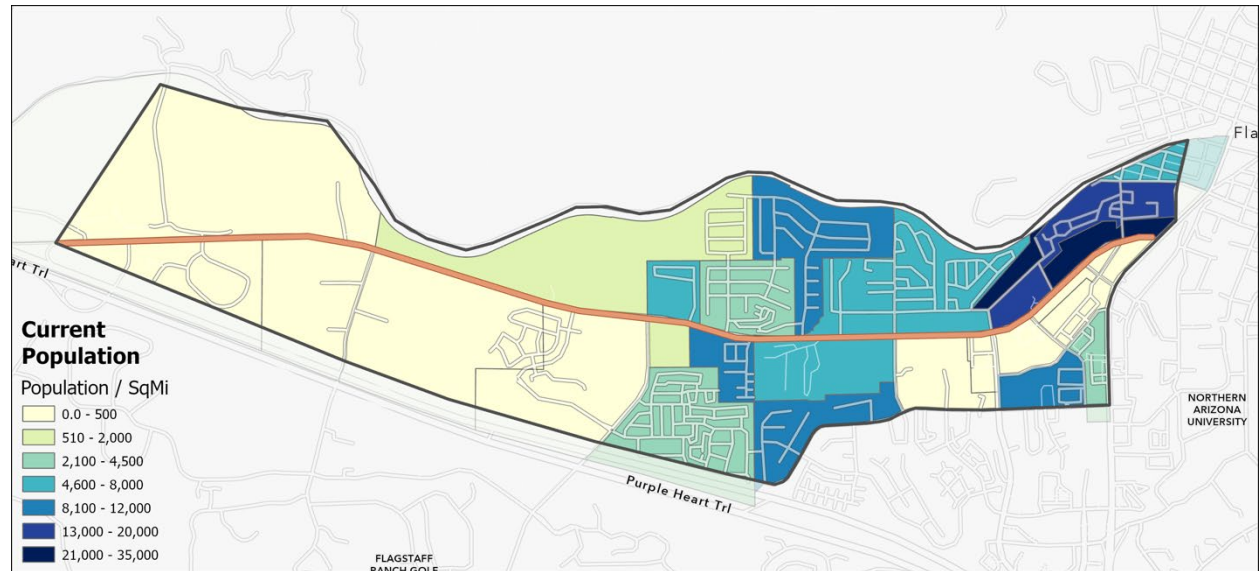
Very Low (50%) Income Limits								
Table (d)								
Area	1-person	2-person	3-person	4-person	5-person	6-person	7-person	8-person
Flagstaff, AZ MSA	\$30,100	\$34,400	\$38,700	\$42,950	\$46,400	\$49,850	\$53,300	\$56,700

Final Extremely Low-Income Limits								
Minimum of Table (c) and Table (d)								
Area	1-person	2-person	3-person	4-person	5-person	6-person	7-person	8-person
Flagstaff, AZ MSA	\$18,050	\$20,600	\$23,200	\$27,750	\$32,470	\$37,190	\$41,910	\$46,630

The first step in establishing the Extremely Low-Income Limit is establishing the preliminary 4-person income limit. This is derived by multiplying the 4-person Very Low-Income limit by 0.6 (30%/50%) and rounding the product to the nearest 50.

Figure 9 demonstrates the population density along the corridor using MetroPlan’s Transportation Analysis Zones (TAZ) at the census block level, clearly showing population density towards the east of the corridor nearing NAU and including several multi-family housing units.

FIGURE 9: CURRENT POPULATIONS PER TRANSPORTATION ANALYSIS ZONES



Vulnerable Populations:

Vulnerable populations include people with disabilities. Of all households reported within the study area by the American Community Survey (ACS), 26% of households include one or more members with a disability.

Vehicle Availability:

ACS Household Vehicle Availability estimates that 2,594 households within the study area have access to one or more vehicles. Two-vehicle households make up the largest percentage at 49.3% (1,301). Followed by one and three-vehicle households, at 30.3% (800) and 16% (421), respectively. 44 households within the study area report having no access to a vehicle.

Key Takeaways for the Corridor:

- The overall minority population is slightly higher compared to the city.
- Population density decreases moving west across the study area.
- 14% of the corridor is considered in poverty.
- 1.7% of households have no access to a vehicle.

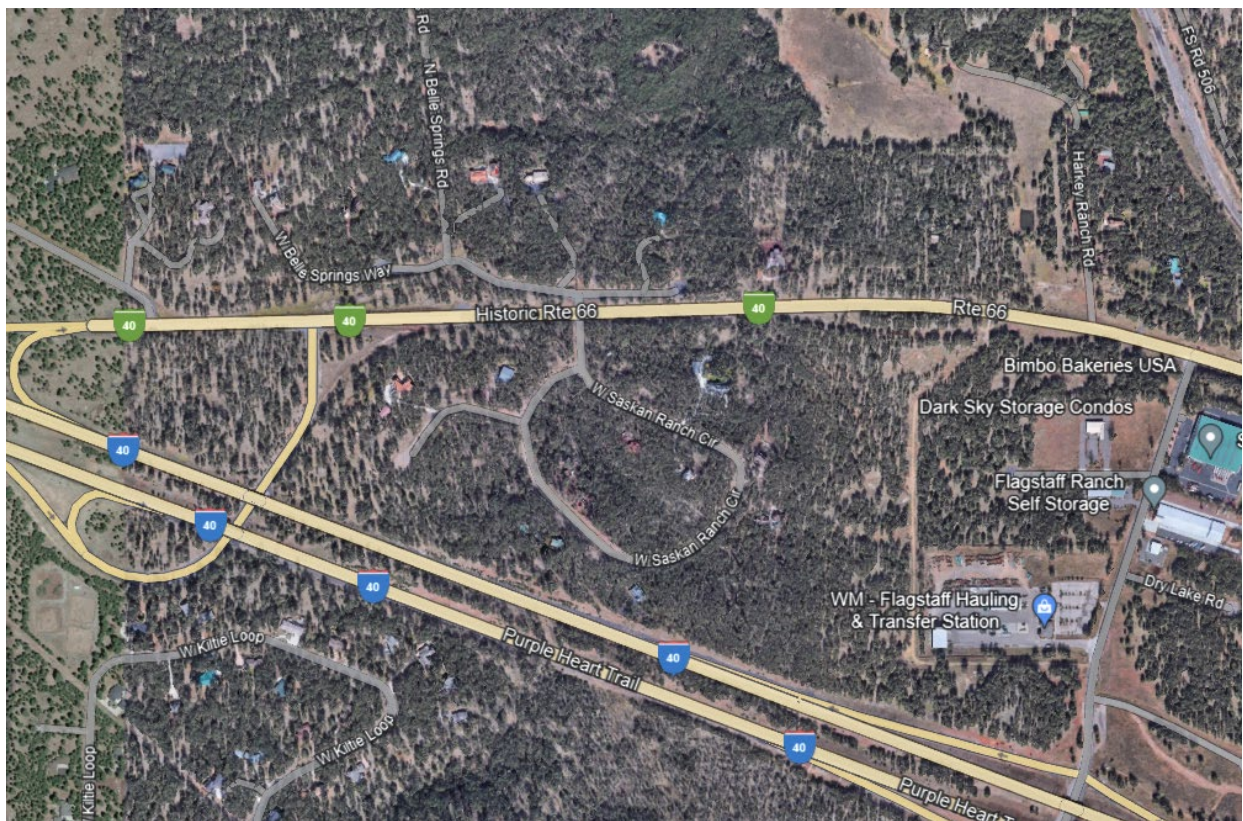
Community Conditions

This section provides an overview of the current conditions along the corridor in 4 distinct segments.



- Segment 1: I-40 to Flagstaff Ranch Rd.
- Segment 2: Flagstaff Ranch Rd. to Woody Mountain Rd.
- Segment 3: Woody Mountain Rd. to Woodlands Village Blvd.
- Segment 4: Woodlands Village Blvd. to Milton Rd.

Segment 1: I-40 to Flagstaff Ranch Rd.



Segment 1 is characterized as rural with primarily single-family homes sitting on 5 to 10-acre lots. The primary neighborhoods include West Peak and Saskan Ranch. Light industrial is also included in this area but is primarily located on S. Flagstaff Ranch Road. Industry includes Swire Coca-Cola, Bimbo Bakeries, Self-Storage, and Waste Management Services. This segment is protected by Federal lands to the north and east of W. Route 66.

The majority of this segment of roadway is owned and maintained by Coconino County.

Segment 2: Flagstaff Ranch Rd. to Woody Mountain Rd.



Segment 2 is characterized as suburban due to ongoing development, with single and multi-family homes, as well as commercial service.

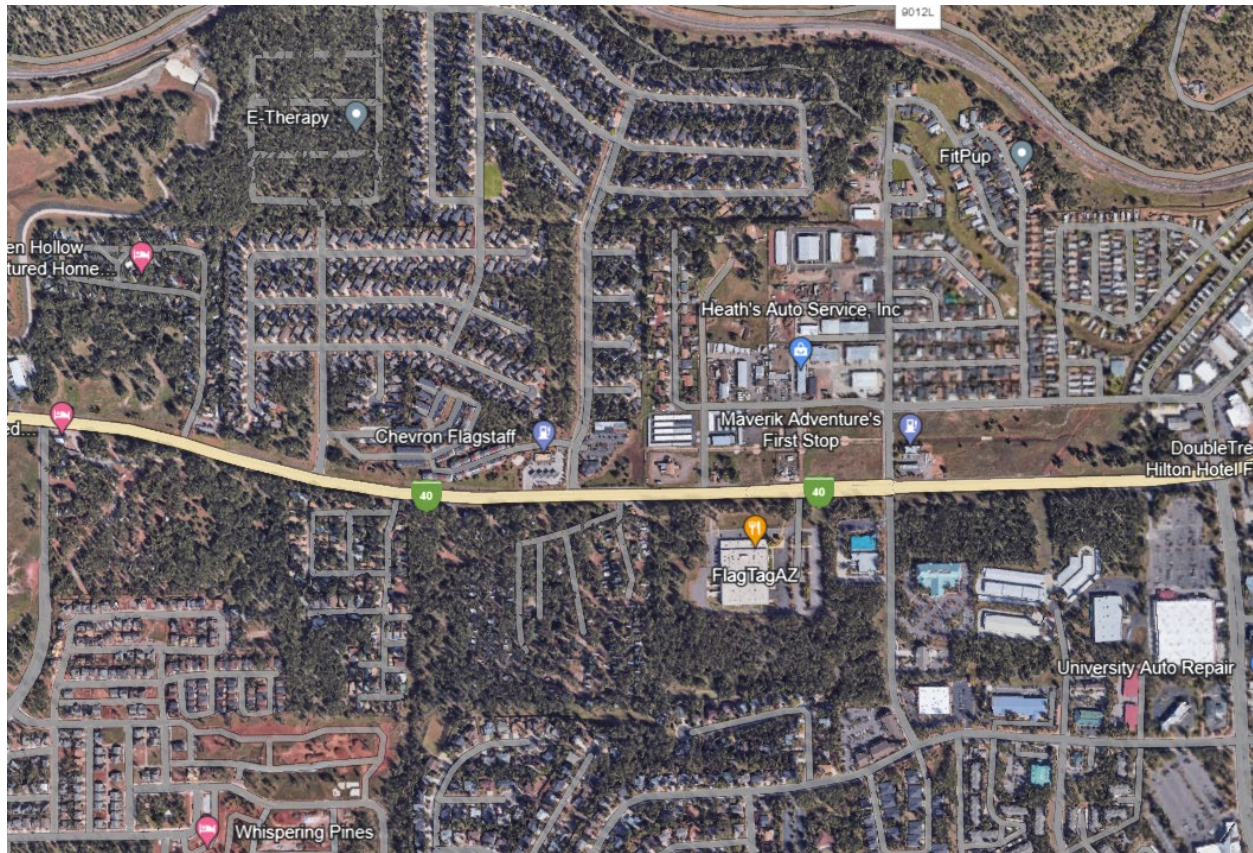
This neighborhood will be known as Timber Sky and Sky Cottages. Up to 60 affordable units will be built for rental and ownership opportunities.

This segment borders the City of Flagstaff land to the north and includes the City of Flagstaff Public Works Department.

This section of roadway is owned and maintained by ADOT.

This area is currently under construction as single-and-multi-family homes. This may change the demographics and needs of this area in the near future. See more information in the Future Conditions Report.

Segment 3: Woody Mountain Rd. to Woodlands Village



Segment 3 is well established and is characterized as suburban with multi-and-single-family homes, manufactured homes, townhomes, and apartments. To the north, is the Railroad Springs neighborhood. Railroad Springs is a community of manufactured homes and provides some of the most affordable real estate on the west side of town. A few townhomes are located near the entry. This community includes green space, paths, a basketball court, a central park, and additional common space amenities.

To the south includes Boulder Point, a sub-division of Woodlands Village. This neighborhood includes townhomes, apartments, and single-family homes. A unique feature of this segment is the Woody Mountain Campground and RV Park. A long-standing campground that offers RV camping as well as bed and breakfast. Along with light industrial, commercial, and retail, mainly located to the south of the corridor. Commercial and services include Basha's, Walmart, Home Depot, Northern Arizona Health Care, and local and chain restaurants, just to name a few.

This section of roadway is owned and maintained by ADOT.

Segment 4: Woodlands Village to Milton Rd.



Segment 4 is characterized as generally urban with multi-family housing, commercial, and hospitality services. This section of the corridor is fronted by car dealerships, services, and hotels. This section services the West Village Neighborhood, La Plaza Vieja Neighborhood, and the Milton Commercial Corridor. Accessing Milton Rd from W. Route 66 allows residents to access Downtown, Northern Arizona University, and Interstates 17 and 40.

This section of roadway is owned and maintained by ADOT.

Key Takeaways for the Corridor:

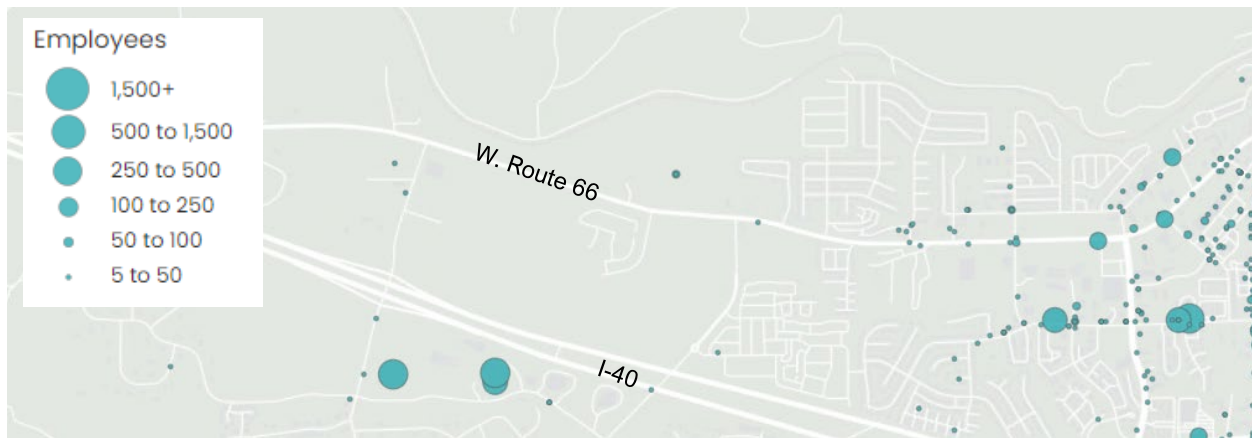
- Each segment is unique in rural, suburban, and urban contexts. This means that the roadway needs to accommodate a variety of needs for both residents and businesses alike.
- The primary roadway owner is ADOT with a minor section near Flagstaff Ranch Rd. owned by Coconino County. Partnerships are key to creating a roadway that serves the community as demand increases.

Corridor Employers

The employers along and near the corridor that employ 5 or more employees are shown in Figure 10 and summarized in Table 2. Within the study area, there are 4,000 employees with almost half being employed by W.L. Gore & Associates. Along the corridor itself, Home Depot, Hilton Doubletree, and the City of Flagstaff Public Works are the top 3 employers providing 484 jobs on the corridor.

Many businesses are clustered to the east end of the corridor at Woodlands Village and Milton Rd. This area provides retail, shopping, restaurants, and professional services in a more urban setting with proximity to NAU.

FIGURE 10: 2017 - 2021 ARIZONA COG/MPO EMPLOYER DATABASE, EMPLOYERS WITH 5 OR MORE EMPLOYEES.



The largest employer in the study area is W.L. Gore & Associates. The location of W.L. Gore facilities faces east-west access constraints as the closest access ramps to I-40 are at Flagstaff Ranch Rd. and W. Route 66. These connections provide north/south access to W.L. Gore via Flagstaff Ranch Rd. and Woody Mountain Rd. W.L. Gore has submitted requests to expand on-site parking, which is currently under consideration by the city. This could impact travel demand along West Route 66 for access to W.L. Gore facilities.

TABLE 2: TOP EMPLOYERS IN THE STUDY AREA

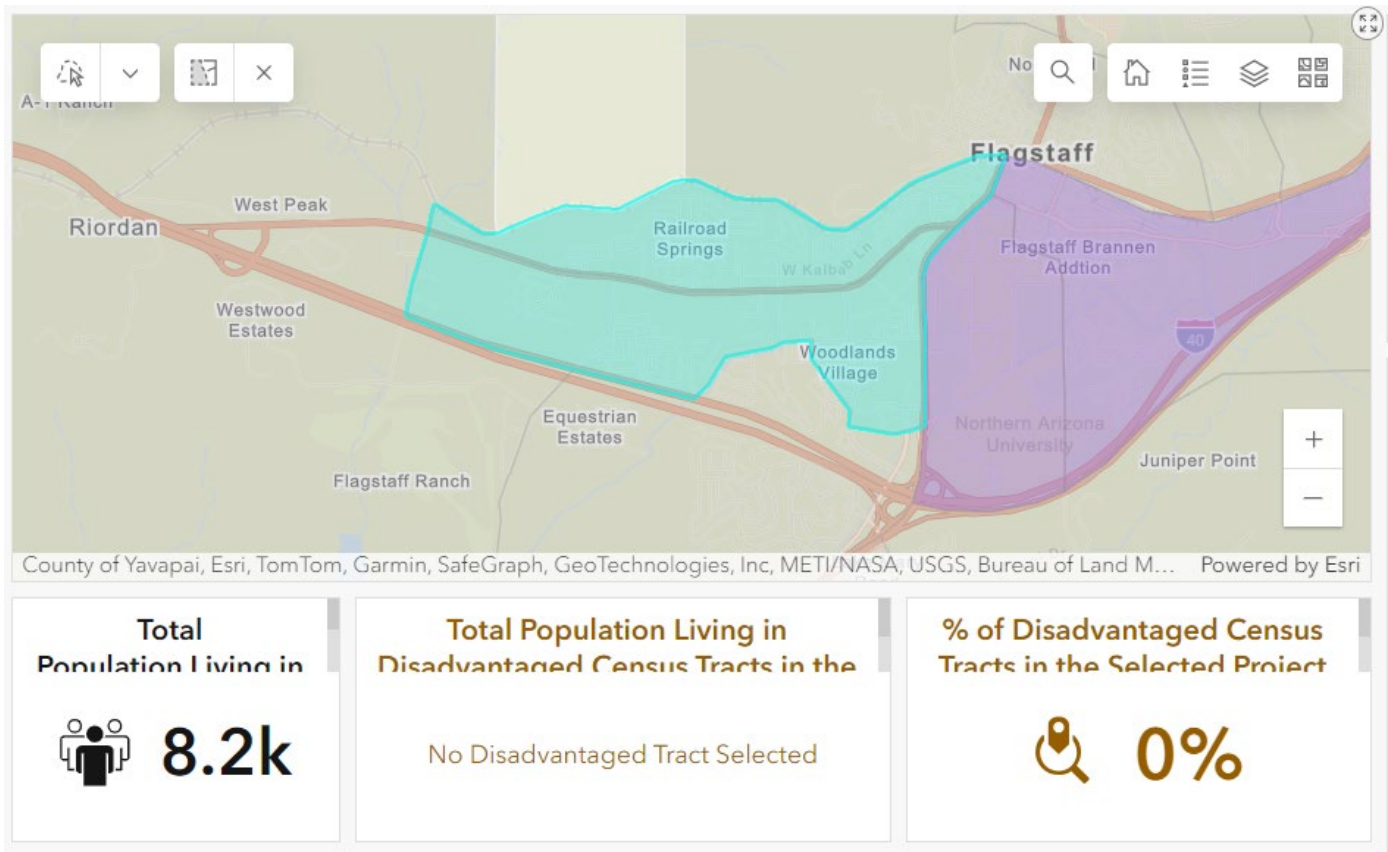
Top employers along W. Route 66 (50+ Employees)	
Employer	# of Employees
City of Flagstaff, Public Works	134
USDA Forest Services	100
Home Depot	200
Flagstaff Athletic Club	75
Doubletree by Hilton	150
Total	659
Top employers within the broader study area (50+ Employees)	
Employer	# of Employees
State of Arizona	112
Haven of Flagstaff	512
Arizona Children Association	400
US Department of Veterans Affairs	262
W.L. Gore & Associates	2,023
Total	3,309

Note that business employment data is provided through self-reporting and may not represent all the employers, or businesses with less than 5 employees along the corridor. Additionally, data may include employees who work in other facilities or remotely.

ENVIRONMENTAL JUSTICE & EQUITY

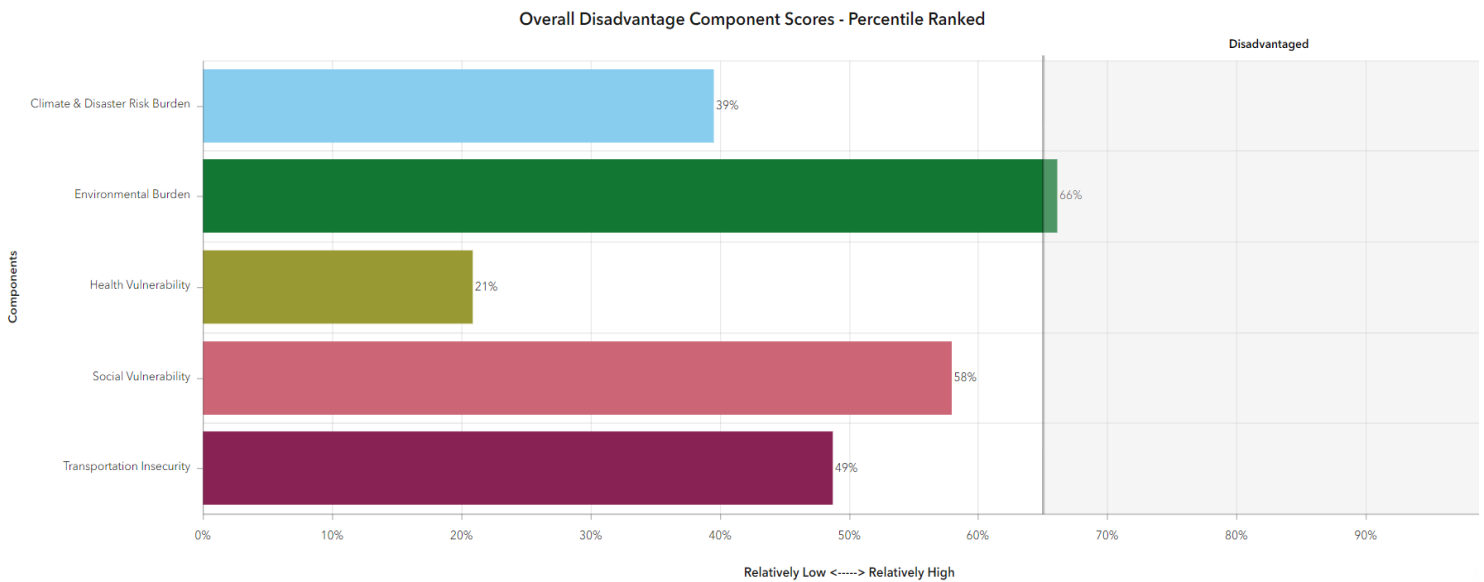
The majority of the study area is comprised of two census tracts. Viewing the United States Department of Transportation (USDOT) Equitable Transportation Communities (ETC) Explorer, no census tracts within the corridor study area are identified as *Disadvantaged Census Tracts*. (Figure 11)

FIGURE 11: ETC DISADVANTAGED TRACTS



The study area does reveal environmental burdens at the 66th percentile. These burdens included current hazard risk, future climate risk, and impervious surfaces (Figure 12).

FIGURE 12: ETC EXPLORER RESULTS FOR THE STUDY AREA



The most notable burdens within this study area may be considered in its impacts on the surrounding community and/or in the future consideration of future projects (Table 3). Over the 65th percentile is considered disadvantaged.

TABLE 3 ETC PERCENTILE RANKING OF BURDENS

Environmental		Social Vulnerability		Transportation Insecurity	
Burden	Percentile	Burden	Percentile	Burden	Percentile
Railway Proximity	96%	200% Poverty Line	70%	Transportation Cost Burden	65%
Airport Proximity	78%	Mobile Homes	67%	Transportation Access	53%
High-Volume Roadway	67%	Disability	31%	Traffic Safety	30%

Equity Data Review

In November 2023, ADOT completed a Vulnerable Road User Safety Assessment that identified areas with underserved populations through a comprehensive approach that incorporates data from four (4) different sources and tools to determine overall equity by census tract. (Figure 12) demonstrates the findings and scoring from Justice 40, the Social Vulnerability Index (SVI), EJ Screen, and a proprietary Equity Needs Analysis using Census data. Each tool uses different measurements to display equity severity. This measurement was converted to a scoring system to establish a 20-point scale from the four sources to create a comprehensive lens to view equity in Arizona.

FIGURE 13: ADOT VULNERABLE ROAD USER SAFETY ASSESSMENT SCORING FOR WEST ROUTE 66



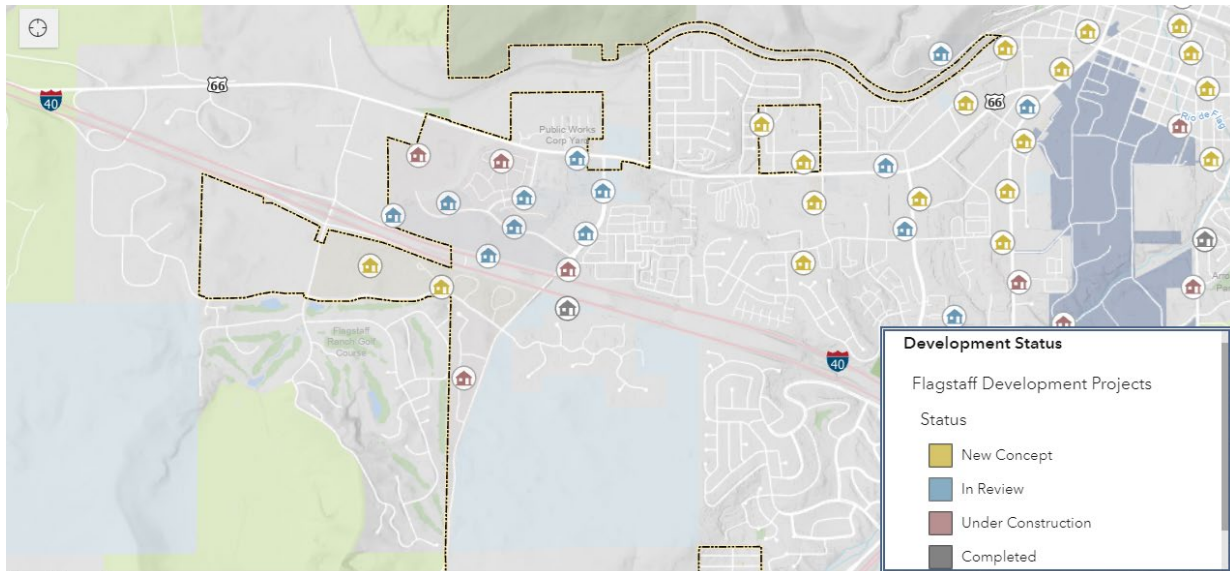
Using demographic data from the 2020 Census, the equity needs tool was developed to rank block groups based on underserved populations, with scores ranging from 0 (least underserved) to 20 (most underserved).

These rankings are labeled in Figure 13 for the West Route 66 Project extent. The eastern portion of the corridor is ranked the highest (9 and 7) for disadvantaged/underserved groups. While the middle section is moderately disadvantaged in rankings in comparison to the east. The western section is the lowest rated at a one (1), which is expected given its limited housing within this rural section of the corridor.

CURRENT DEVELOPMENT

Figure 14 provides an overview of current development projects and their status. Development is a mix of single-family, multi-family housing, and commercial development. West of Woody Mountain Rd, much of the development is under construction or review for new housing. The eastern extent of the study area shows several development concepts characterized by commercial and retail services. The following demonstrates growth in the area which has substantial impacts on the transportation network.

FIGURE 14: CITY OF FLAGSTAFF DEVELOPMENT STATUS



<https://gis.flagstaffaz.gov/portal/apps/sites/#/opendata/apps/0502DBAE9B7340AFA3D24F18A16EB0EE/EXPLORE>

TABLE 4: CORRIDOR-WIDE DEVELOPMENT SUMMARY

STATUS	TYPE	DETAILS
UNDER CONSTRUCTION	Single-Family	425 Units
	Lots	50 Units
	Condos	39 Units
IN REVIEW	Lots	2 Lots
	Apartments (Affordable)	221 Units
	Multi-Family	202 Units
	Single-Family	89 Units
	Industrial	1 Property
	Commercial	3 Properties
	Hotels	248 Rooms
NEW CONCEPT	Additional Parking	1 Property
	Mixed Use	1 Property
	Residential (Mobile Homes)	1 Property
	Renovate/Addition	1 Property

IMAGE 1: SEGMENT 1



Segment 1: I-40 to Flagstaff Ranch Rd.

This segment's land use and zoning are under the authority of Coconino County. The only known development is the new construction of Grace Community Church located directly east of Flagstaff Ranch Rd on the south side of the corridor.

IMAGE 2: SEGMENT 2



Segment 2: Flagstaff Ranch Rd. to Woody Mountain Rd.

Much of the development within Segment 2 is currently under construction providing a combination of single and multi-family housing options. Residential construction in this segment includes a total of 976 new units. W.L. Gore and Associates are one of the largest private employers in Flagstaff, supporting over 2,500 employees. Gore has submitted a proposal to expand parking to the existing Gore facility located just south of I-40 along S. Woody Mountain Rd.

STATUS	DEVELOPMENTS	TYPE	UNITS
UNDER CONSTRUCTION	Orion at Timber Sky	Single-Family	89
	Aries at Timber Sky	Single-Family	35
	Adora at Timber Sky	Single-Family	35
	Adora 2	Single-Family	39
	Sirius at Timber Sky	Single-Family	63
	Timber Sky – Block 5	Single-Family	101
	Timber Sky – Block 6	Lots	50
	Aries at Timber Sky – Block 7B	Single-Family	16
	Presidio Tract M	Condos	39
	The Wedge	Single-Family	47
IN REVIEW	Timber Sky -Block 2	Lots	2
	Woody Mountain Apartments	Apartments (Affordable)	221
	Sky Cottages	Multi-Family	202
	Liv Timber Sky	Single-Family	89
NEW CONCEPT	Gore Kendrick Peak Parking Expansion	Additional Parking	

IMAGE 3: SEGMENT 3



Segment 3: Woody Mountain Rd. to Woodlands Village

The development within Segment 3 is commercial and/or provides services to both residents and visitors alike. No residential development is currently planned for this segment.

STATUS	DEVELOPMENTS	TYPE	UNITS
IN REVIEW	1683 Self Storage	Industrial	106,000 sq. ft. 3 Stories.
	Homewood Suites	Commercial	5-story, 154 rooms
NEW CONCEPT	KC HiLites	Commercial	
	Flagstaff Front Climbing Club	Fitness Facility	
	Carson Park	Mixed Use (Commercial, Retail & Residential)	22 apts, 20 townhomes, 205 homesites, 18,908 sq. ft. commercial

IMAGE 4: SEGMENT 4



Segment 4: Woodlands Village to Milton Rd.

Commercial development and services are happening on and adjacent to the corridor. Commercial services include hotels and auto repair shops. Residential and Mixed-use concepts are proposed just north of the corridor along Blackbird Roost.

STATUS	DEVELOPMENTS	TYPE	UNITS
IN REVIEW	Hyatt House	Commercial	4-story, 94 rooms
	Route 66 Auto Plaza	Commercial	5000 sq. ft.
NEW CONCEPT	Oxendale Kia Addition	Renovate and addition	9,061 addition
	Arrowhead Village	Residential (Mobile Homes)	
	Flagtown Grounds	Mixed-use	

Key Takeaways for the Stud Area:

- A majority of new development is occurring on the western extent of the corridor.
- Western development consists of single-family homes.
- A majority of commercial development is occurring in the eastern extent of the corridor, this area has greater population density to support business activity.

ENVIRONMENTAL CONDITIONS

As part of the Operational Assessment, a high-level Environmental Scan of the corridor was conducted. **Appendix B** is set up to assist in future Planning and Environmental Linkages Study (PEL) or National Environmental Policy Act (NEPA) processes. Once project(s) are identified for the corridor, local agencies can use this information to further the study of environmental impacts as related to specific project needs.

Natural, cultural, and historical resources should be considered along the corridor to reduce impacts on our environment and to ensure a livable community compatible with our natural surroundings. Whereas the information below provides a summary of potential mitigation (Table 5), mitigation for those resources identified is fairly minimal in terms of complexity and may not substantially impact future projects.

It should be noted that the scan was not conducted by an Environmental Planner and only reflects the resources in which staff could access data and information. As potential projects become more defined in size and location, further detailed environmental scans may be needed.

TABLE 5: SUMMARY OF RESOURCES AND KNOWN MITIGATION STRATEGIES

RESOURCE	MITIGATION
Migratory Bird Treaty Act (MBTA)	<ul style="list-style-type: none"> • Avoid construction and vegetation removal during the nesting season, typically early April to July 15. • If construction cannot be avoided, then surveys for nesting migratory birds should be conducted and if located then establishment of a buffer should be put in place. There is no clear direction on the size of the buffers, however, buffers are typically a 90-foot perimeter. This is especially important for vegetation removal. • During construction, noise attenuation barriers can be put in place to minimize disturbance to nesting migratory birds with a buffer of approximately 50 feet.
Section 4(f) Wildlife and/or Waterfowl, Section 4(f) Historic Site, Section 4(f) Recreational Site, Section 4(f) Park	If the City of Flagstaff owns adequate land to move and reconfigure the FUTS trailhead and parking area(s) to mitigate any potential effects relating to expansion or upgrades to Section 4(f) property, then De Minimis Impact would be considered.
100-year Floodplain	A Floodplain Management Plan will be required to mitigate any impacts to floodplains within the W. Route 66 study area.
Wildlife Corridors	No mitigation is required
Sole Source Aquifers	No mitigation is required
Wild and Scenic Rivers	No mitigation is required
Section 6(f) Resources	No mitigation is required

The following environmental resources need to be further explored by the project sponsor and/or environmental planner once a project location is selected. More details are provided in [Appendix B](#).

- Sensitive Biological Resources
- Invasive Species
- Wetlands
- Riparian Areas
- Clean Water Act Sections 404/401 Waters of the United States (WOTUS)
- Designated Scenic Road/Byway
- Archaeological Resources and Historic resources

TRANSPORTATION CONDITIONS

The nature and functions of W. Route 66 continue to evolve to support the growth of the City of Flagstaff. Currently, W. Route 66 serves residents of Flagstaff, Bellemont, and regional visitors alike as a connection between I-40 and NAU/Downtown. It may be used as a secondary route when weather or accidents along I-40 cause closures. It is also known that this corridor is routinely used for access to and from the southwest through Woodlands Village.

There are some known issues along W. Route 66, including:

- Congestion and traffic between Woodlands Village and Milton Rd are caused by a combination of local traffic, visitors, and the lack of east-west connectivity in the adjacent and regional street network.
- Multimodal challenges facing bicyclists, pedestrians, and transit users include safety issues, lack of adequate facilities, lack of safe and convenient crossings, and poor comfort for these modes.
- Lack of transit service east of Thompson Rd.
- Lack of Access Management, particularly in Segment 4 (Woodlands Village to Milton Rd) with the frequency and proximity to driveways and intersections.

This section provides an overview of the current transportation conditions of the W. Route 66 Operational Assessment study area.

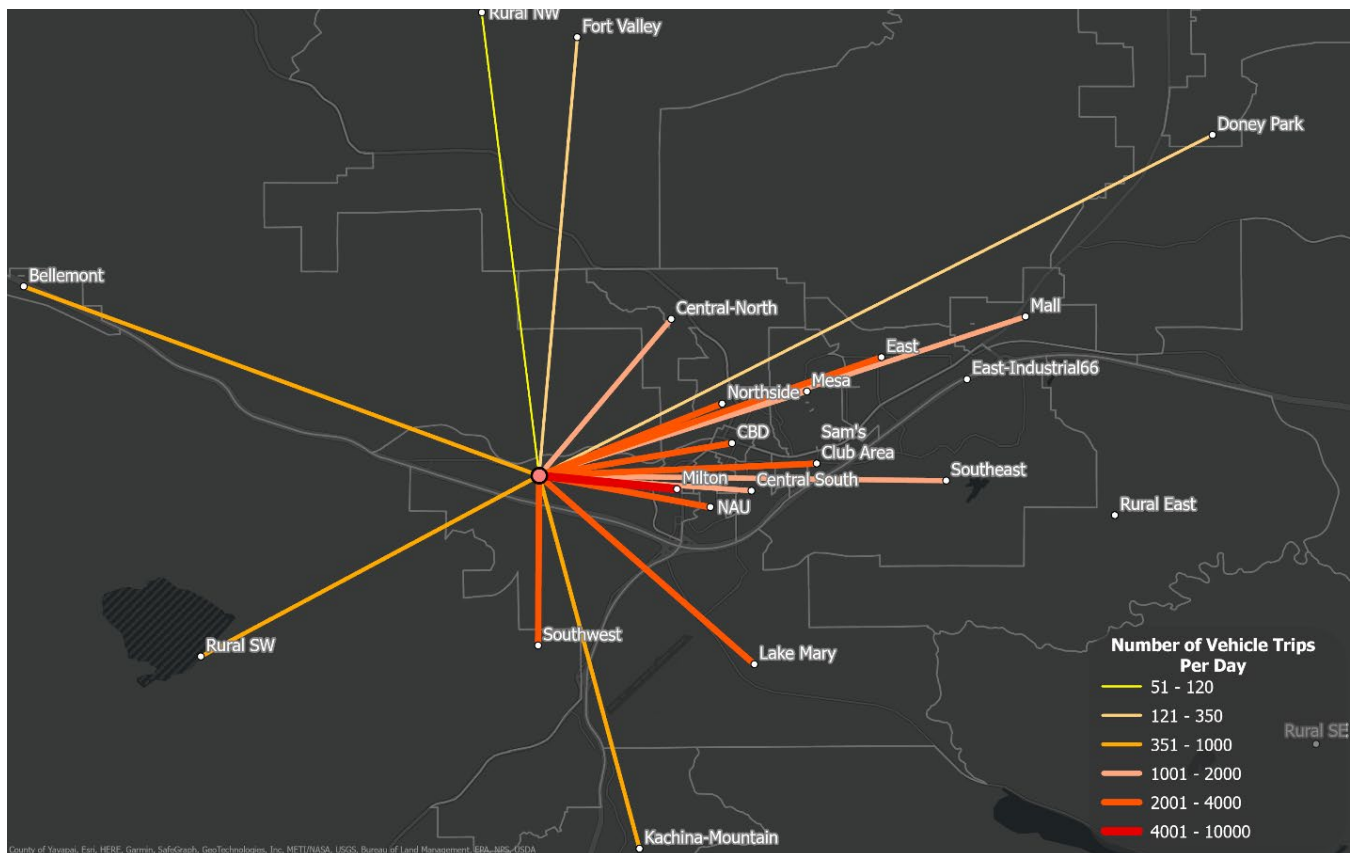


Travel To and From the Corridor

People traveling to and from W. Route 66 come from all areas of the region. Image 5 illustrates the flows of people and goods from a point-based value (vehicle trips per day). The majority of trips are between the West (the epicenter of the map) and Milton Rd. Districts. Milton Road is a destination due to its proximity to goods and services and NAU from W. Route 66. While south of W. Route 66 offers additional goods and services such as grocery stores, restaurants, and retail that are the closest services for the residents south of I-40.

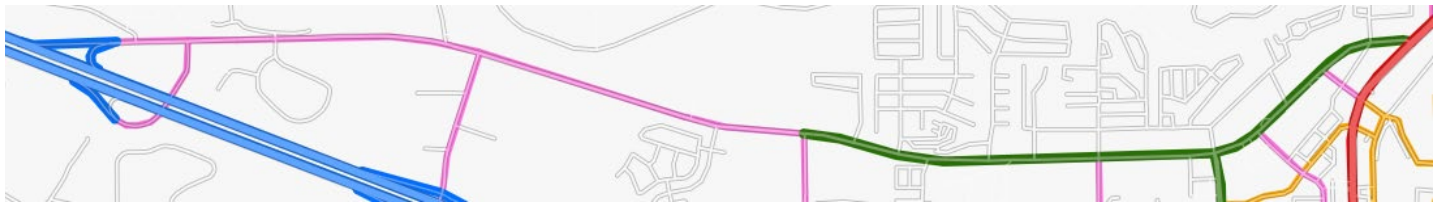
The majority of movement flows from east to west to the corridor. This can be explained by the lack of north-south connections to the corridor.

IMAGE 5: ORIGIN AND DESTINATION TO W. ROUTE 66



Roads and Intersections

Roadway Classification



Arterials

Principal Arterial - Interstate (FFC = 1)



Principal Arterial - Freeway (FFC = 2)



Other Principal Arterial (FFC = 3)



Minor Arterial (FFC = 4)



Collectors

Major Collector (FFC = 5)



Minor Collector (FFC = 6)



FIGURE 15: FHWA FUNCTIONAL CLASSIFICATION

Segments 1 and 2 of W. Route 66 are classified as a Major Collector per the FHWA functional classification. Per the FHWA, Generally, Major Collector routes are longer in length; have lower connecting driveway densities; have higher speed limits; are spaced at greater intervals; have higher annual average traffic volumes; and may have more travel lanes than their Minor Collector counterparts.

These segments are primarily two lanes with one general purpose through lane in each direction.

Segments 3 and 4 of W. Route 66 are classified as Minor Arterials per the FHWA functional classification. Per the FHWA, Minor Arterials provide service for trips of moderate length, serve geographic areas that are smaller than their higher Arterial counterparts, and offer connectivity to the higher Arterial system.

These segments are primarily four-lane with two general-purpose through lanes.

Roadway Width

W. Route 66, formerly designated as State Business 40 (SB 40) by the Arizona Department of Transportation (ADOT), is the official designation displayed on street signs. The number of lanes on Route 66 varies along the project area from two-lane to four-lane plus turning lanes. Roadway widths (asphalt to asphalt) across the corridor vary from 35 feet to 88 feet (Figure 16).

FIGURE 16: ROADWAY WIDTHS

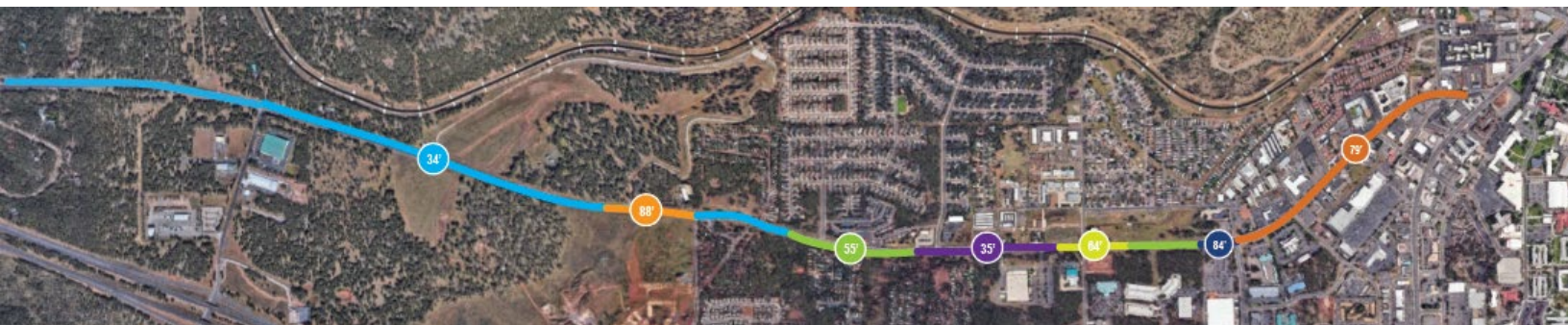


FIGURE 17: TYPICAL CROSS-SECTION OF THE WEST END

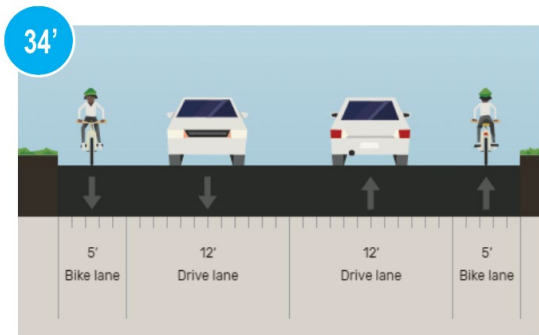
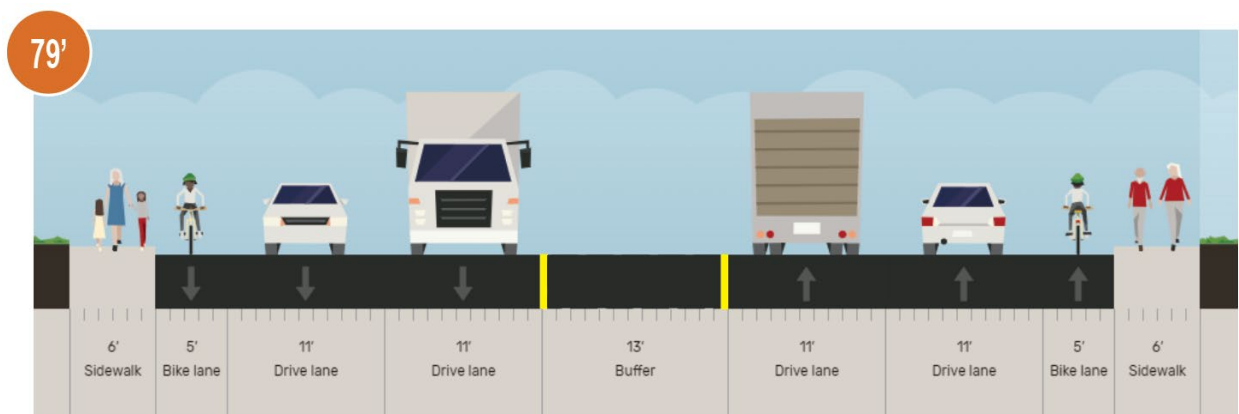


FIGURE 18: TYPICAL CROSS-SECTION OF THE EAST END



A typical vehicular travel lane along the corridor is between 11 - 12 ft wide, while bicycle facilities range between 5 – 6 ft. Sidewalks along the corridor vary from non-existent to 10 ft wide, with an average-sized sidewalk of 6 ft. Right-of-way (ROW) varies across the corridor. The corridor's total right-of-way spans 73 to 134 feet (Figure 19).

In Segment 4, west of Milton Road, W. Route 66 has a five-lane cross-section with two travel lanes and a shoulder in each direction with a continuous two-way left turn lane. In segments 1, 2, and 3 within the study area, W. Route 66 typically has one travel lane in each direction and a conventional bike lane with marking and signing in each direction.

Additionally, a two-way left turn lane is available between Northwestern Street and Railroad Spring Boulevard, as well as east of Thompson Street.

The speed limits on Route 66 are posted at 30 miles per hour in the vicinity of Milton Road, with transitions to 45 mph zones (the specific zones vary based on direction) heading westward beyond Thompson Street.

FIGURE 19: CORRIDOR RIGHT-OF-WAY (ROW)



LOOKING WEST BETWEEN FLAGSTAFF RANCH RD.
AND WOODY MOUNTAIN RD.



LOOKING EAST AT THE INTERSECTION OF PINNACLE
ST.

URBAN GREAT STREETS

W. Route 66 between Woody Mountain Rd. and Milton Rd. is identified as a future Great Street within the Regional Plan 2030. A Great Street is defined as “having potential for reinvestment, retrofit, and revitalization to make them more appealing to pedestrians, shoppers, enhance transit potential, and make them ultimately safer.” Great Streets should be designed to balance the need to move traffic with other modes of travel. Great Streets is where a mix of automobiles, bicycles, pedestrians, homes, and businesses are the pulse of civic activity and the street itself is a public space to use and enjoy.

The corridor between Woodlands Village and Milton Rd has most elements of a Great Street, such as denser development, transit accommodation, and street-fronting shops. However, based on the [crash analysis](#) of that segment of the corridor, safety considerations should be made, especially around those who bicycle and walk.

IMAGE 6: REGIONAL PLAN 2030 - URBAN CORRIDOR CHARACTERISTICS

URBAN CORRIDOR CHARACTERISTICS
 Corridors are where commercial development is encouraged; local streets and residential access are not considered urban corridors. Great Streets are corridors with the greatest potential for reinvestment, beautification, and appropriate land uses. Refer to page IX-62 for more discussion of Activity Centers (Map 24) and Corridors (Map 25), and the Great Streets and Gateways (Map 12.)

<p>Characteristics of an Urban Corridor</p>		
<p>Urban Corridor</p>		
<p>Serves larger capacities of vehicles and people, with more intense land uses. These corridors will be wider with faster speed limits, yet street parking is encouraged and pedestrian safety is a priority. Provides well designed signage, landscaping, and public spaces, with shops and services in buildings that front the street. More frequent intersections with local roads. Local roads in an urban area type carry more through traffic than suburban local roads. Thoroughfares and boulevards may be applied in the context of Traditional Neighborhood Design (TND) and the use of transect zones.</p>		

Intersections and Crossings

The project area contains a total of 11 intersections, defined as a junction where two or more roads converge. Intersection identification does not include driveways or building entrances. There are a total of 3 signalized intersections and 1 HAWK pedestrian crossing located on W. Route 66. There are no stop signs along the east-west extent of W. Route 66.

All three signalized intersections are considered four-way intersections. These intersections include S Milton Rd, W Riordan Rd, and S Woodlands Village Blvd. There is one HAWK signal within the project study area at S Blackbird Roost. The HAWK is also known as a pedestrian hybrid beacon and allows a pedestrian or cyclist to press a walk button and stop traffic in both directions.

The 8 stop sign junctions shown in Figure 20 are for north-south traffic on intersecting city and county roads. There are no stop signs on W. Route 66 itself. North-south stop signs include S Pinnacle St, Yale St, S Thompson St, Railroad Springs Blvd, S Northwestern St, S Woody Mountain Rd, Alvan Clark Way, and Flagstaff Ranch Rd.

FIGURE 20: INTERSECTIONS & CROSSINGS ON CORRIDOR



The following signalized intersections are defined in more detail:

The intersection of **Milton Road** and W. Route 66 is a signalized four-legged intersection, although the signal does not control the east leg, which is an uncontrolled driveway. The lane configurations and controls on each approach are as follows:

- NB (Milton Rd): 1 left (protected/permitted), 2 through.
- SB (Milton Rd): 2 through, 1 right (with overlap).
- EB (W Route 66): 1 left, 1 shared left/right, 1 bike lane.
- WB (private driveway): 1 shared.

The intersection of **Blackbird Roost, Metz Walk** and W. Route 66 is a HAWK intersection, although the configuration does not permit left turns from Blackbird Roost or Metz Walk. The lane configurations and controls on each approach are as follows:

- NB (Metz Walk): 1 right
- SB (Blackbird Roost): 1 right
- EB (W Route 66): 1 through, 1 shared through/right.
- WB (W Route 66): 1 through, 1 shared through/right.

The intersection of **Riordan Road** and W. Route 66 is a signalized four-legged intersection, although the SB signal is private driveway access. The lane configurations and controls on each approach are as follows:

- NB (Riordan Rd): 1 shared lane
- SB (private driveway): 1 shared through/right, 1 left
- EB (W Route 66): 1 through, 1 shared through/right, 1 left (protected/permitted), 1 bike lane.
- WB (W Route 66): 1 through, 1 shared through/right, 1 left (protected/permitted), 1 bike lane.

The intersection of **Woodlands Village Blvd** and W. Route 66 is a four-legged intersection. The lane configurations and controls on each approach are as follows:

- NB (Woodlands Village): 1 right (protected/permitted), 1 through, 1 left (protected/permitted)
- SB (Woodlands Village): 1 shared through/right, 1 through, 1 left (protected/permitted).
- EB (W Route 66): 1 through, 1 shared through/right, 1 left.
- WB (W Route 66): 2 left (protected/permitted), 1 through, 1 shared through/right, 1 bike lane.

Intersection Volumes

The study area intersections were reviewed using ADOT's Traffic Data Management System (TDMS) to quantify the amount of entering and exiting that takes place at an intersection. These counts are often used to evaluate and implement intersection improvements that impact traffic operations, congestion, and safety. Turn movement counts were conducted in August 2023.

East and westbound vehicles make up the majority of turn movements at the intersections along the corridor. This is expected given the limited east-west access outside of the corridor itself. Table 6 shows Milton Rd. as having the highest approach volumes, with much of the volume heading south along Milton Rd. towards I-17 and I-40. The number of turn movements diminishes along the corridor from the east to the west as there are fewer destinations causing demand.

TABLE 6: EXISTING APPROACH VOLUMES 2023

Intersections	NB	SB	WB	EB	Total
Woody Mountain Rd	1283	5	3935	2556	7779
Railroad Springs Blvd	0	698	5101	4424	10223
Thompson St	512	669	5560	5108	11849
Woodlands Village	5053	1637	6878	5077	18645
Yale St	746	0	6838	7012	14596
Riordan Rd	1244	135	6635	7005	15019
Blackbird Roost	414	1192	5542	6444	13592
Milton Rd	8598	12780	N/A ¹	6061	27451
Total	17850	17116	40501	43687	

Using ADOT’s TDMS data system, volumes by vehicle classification are shown in Table 6. This includes bicyclists, pedestrians, trucks, and “medium” class vehicles, which are defined as buses, recreational vehicles, or box trucks, essentially most vehicles with dual rear tires or 3 to 4 axles (FHWA).

Pedestrians make up a considerable number of users, especially at the intersections from Woodland Village to Milton Rd. while numbers dwindle along the corridor toward the east. Due to the urban nature of the west end of the corridor, access to transit, shopping, and student housing is more than likely the cause of high pedestrian use. Pedestrian counts are the counts of a person's movement through an intersection. For example, if you cross north and then cross east at an intersection, that may be counted as 2 pedestrian movements. Figure 21 provides a visual of turn movements, traffic counts, and intersection types.

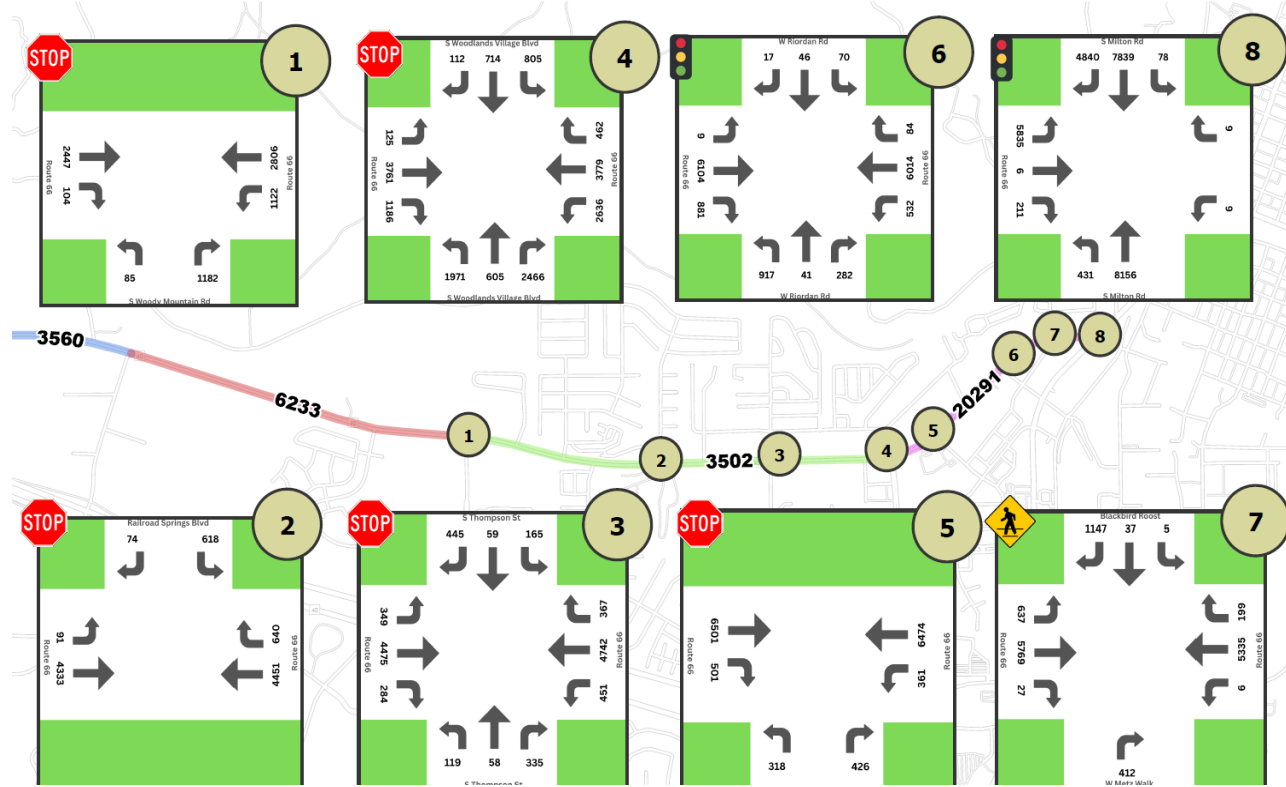
TABLE 6: TURN MOVEMENTS BY TYPE

Intersection	Bike	Ped	Total	Medium*	Truck	Total
Woody Mountain Rd	31	12	43	136	49	271
Railroad Springs Blvd	16	27	43	219	53	358
Thompson St	24	28	52	262	85	451
Woodlands Village	23	90	113	305	95	626
Yale St	15	69	84	241	50	459
Riordan Rd	22	194	216	261	56	749
Blackbird Roost	18	197	215	249	51	730
Milton Rd	33	351	384	378	99	1245
Corridor Totals	182	968	1150	2051	538	4889

*Medium class vehicles – buses, recreational vehicles, box trucks, etc.

¹ Data was incomplete/incorrect for WB movements within the ADOT Traffic Data Management System. Therefore, it was omitted from this report.

FIGURE 21: EXISTING INTERSECTION VOLUMES AND TURN MOVEMENTS



Traffic Counts and Level-of-Service

Twenty-four-hour daily approach and departure traffic volumes in 15-minute intervals were collected by ADOT at four locations along the W. Route 66 study corridor from 2019. Traffic counts are conducted by ADOT every 3 to 6 years on state-owned facilities. Between these counts, ADOT uses a formula to estimate growth from the prior year through a “growth factor.” The following 2022 traffic counts demonstrate this growth rate for four of the locations along the corridor. The collected traffic volumes included vehicular, pedestrian, and bicycle counts.

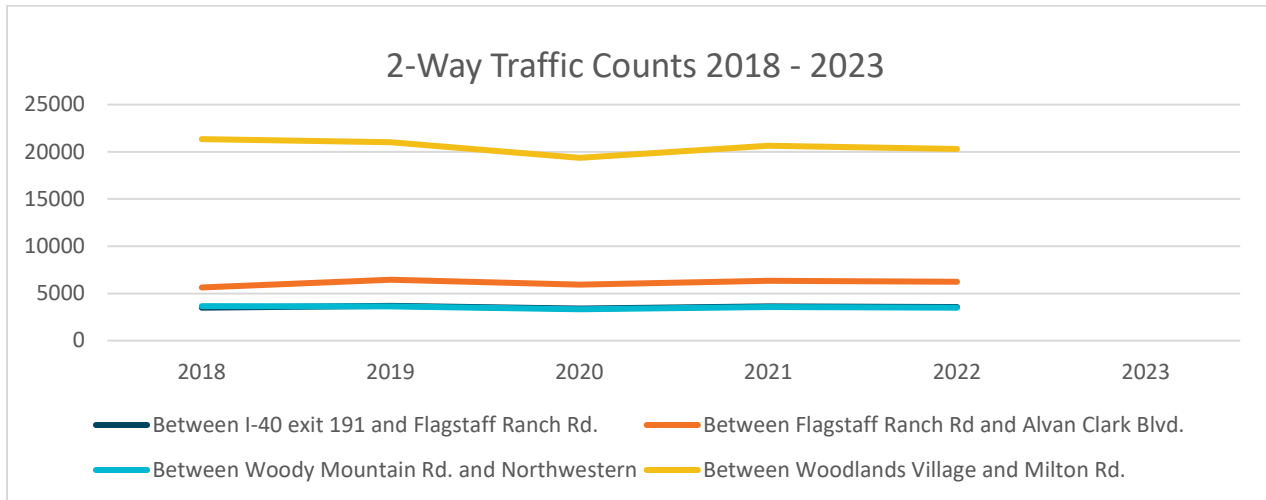
Traffic volumes can be used to evaluate the current performance characteristics of existing roadway segments and identify the need for additional transportation facilities to reduce existing congestion, and the use of daily traffic count information can identify trends in traffic volumes to assist in the development of seasonal adjustment factors and future growth rates. The existing daily traffic volumes along the corridor are shown in Table 7.

TABLE 7: 2022 DAILY TRAFFIC VOLUMES

Count Location	24-Hour Daily Traffic Volume		
	Eastbound	Westbound	Total
I-40 exit 191 and Flagstaff Ranch Rd.	1655	1903	3558
Between Flagstaff Ranch Rd. and Alvan Clark Blvd	3053	3178	6231
Between Woody Mountain Rd. and Northwestern	3752	3822	7574
Between Woodlands Village and Milton Rd.	10545	9746	20291

Two-way traffic counts over the past five years can be seen in Figure 22. Segment 4 (Woodlands Village to Milton Rd.) has the highest use in the corridor as expected due to the proximity of NAU, student housing, retail, and shopping opportunities. The trend lines are steady across the four count locations along the corridor with minimal changes over time. As with much transportation data, the 2020 COVID-19 pandemic and resulting shelter-in-place orders impacted traffic and travel movements. This can be seen in the slight dip in use over the period.

FIGURE 22: TRAFFIC VOLUMES OVER TIME

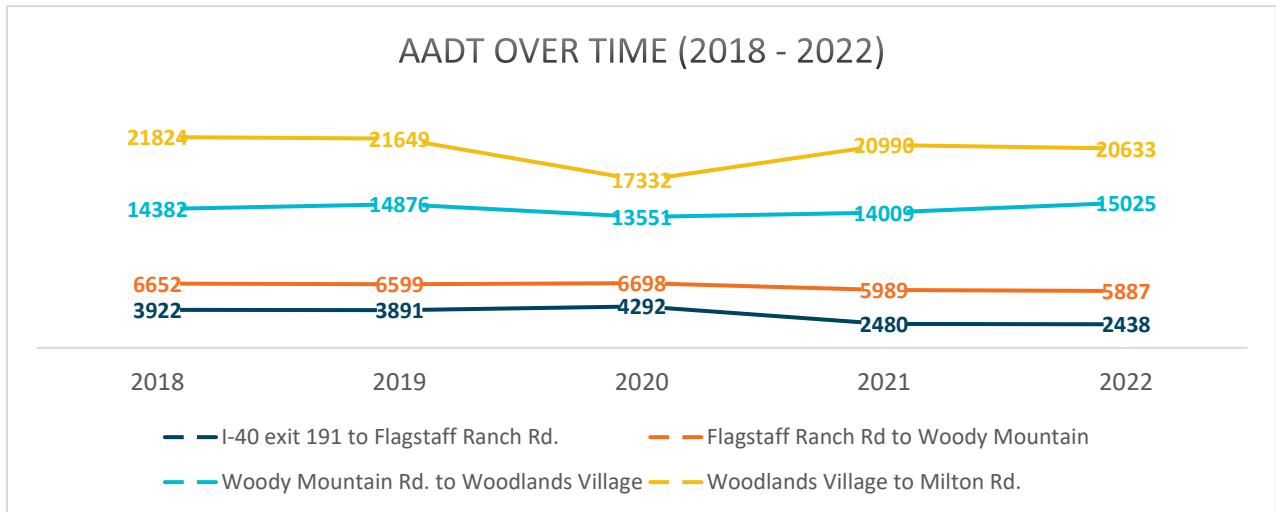


Annual Average Daily Traffic (AADT)

Annual Average Daily Traffic (AADT) is a metric for analyzing and forecasting traffic volume. Among other things, it is used for the planning and design of infrastructure, tracking traffic congestion, and estimating road safety. AADT is generally used to measure long-term trends or changes in travel demand. In its simplest form, AADT takes in all vehicle trips on a segment of road or highway during a yearlong interval, in both directions, and then divides the total by 365 days to arrive at the average number of daily trips.

The AADT trend lines (Figure 23) mimic the above traffic counts (Figure 22) with the exception of the segment between Woody Mountain and Woodlands Village seeing a slight increase in use in 2022.

FIGURE 23: ANNUAL AVERAGE DAILY TRAFFIC (AADT)



Level-Of-Service (LOS)

The ability of a transportation system to move vehicle-based transportation demand is characterized as its Level of Service or LOS. LOS is a rating system from “A,” representing the best operation, to “F,” representing the worst operation. The appropriate reference for LOS operation is the Highway Capacity Manual, published by the Transportation Research Board.

The following LOS analysis was conducted as part of the Timber Sky Transportation Impact Analysis (TIA) in 2016. A TIA is required by a developer before site development to determine the potential effects of the development on the surrounding transportation system. The TIA predicts future travel demand, identifies potential issues that may influence traffic flow, and suggests ways to mitigate negative effects.

Due to the significant impact of the Timber Sky development, the TIA looks at the corridor as a whole and predicts future impacts at years, 2018, 2022, 2030, and 2040. This TIA was submitted to and approved by the Arizona Department of Transportation (ADOT) and the City of Flagstaff. The following is a summary of their LOS findings for 2018 and 2022. Future years will be presented in the Future Conditions Report.

Segment Capacity Analysis:

The results of the segment capacity analysis indicate that all segments currently operate at LOS D or better during the existing PM peak hour except for Route 66 between Woodland Village Boulevard and Riordan Road, westbound. (CivTech, 2016)

Intersection Capacity Analysis:

Given that Timber Sky is currently under development with future phases anticipated, for the purposes of this study, the total traffic is characterized by adding the site-generated traffic to the projected background traffic. The intersection capacity analysis of 2018 and 2022 predicted conditions are summarized in Table 8 by applying an annual growth rate of 2.0% from 2015-2022. While recommended mitigation strategies and potential LOS were analyzed as part of the TIA, the following total traffic assumes no mitigation or intersection improvements have been made since 2016.

The Timber Sky TIA revealed that over half of the study intersections operate at acceptable LOS while the others have one or more movements that were evaluated to operate at LOS E or F during the peak hours.

When comparing the predicted LOS from 2018 to 2022, the following intersection saw a decrease in their overall LOS indicating that vehicle delays would increase. The anticipated delay mostly impacts northbound movements.

- Woody Mountain Rd. (Northbound)
- Woodlands Village Blvd. (Northbound)
- Yale St (Northbound)
- Riordan (Eastbound, Westbound)
- Milton (North, South, and Eastbound)

TABLE 8: PREDICTED INTERSECTION LOS FOR 2018 AND 2022

Intersections	Approach	2018		2022	
		AM	PM	AM	PM
Flagstaff Ranch Rd.	NB	B	B	B	B
	SB	-	-		
	EB	A	A	A	A
	WB	A	A	A	A
Woody Mountain Rd.	NB	C	C	D	D
	SB	A	A	A	A
	EB	-	-	-	-
	WB	A	A	A	A
Railroad Springs Blvd.	NB	-	-	-	-
	SB	F	F	F	F
	EB	A	A	A	A
	WB	A	A	A	A
Thompson St.	NB	F	F	F	F
	SB	F	F	F	F
	EB	A	A	A	A
	WB	A	A	A	A
Woodlands Village Blvd.	NB	D	D	D	E
	SB	D	D	D	D
	EB	F	C	C	C
	WB	E	F	E	E
Yale St.	NB	C	D	D	F
	SB	-	-	-	-
	EB	A	A	A	A
	WB	A	A	A	A
Riordan Rd.	NB	F	F	D	D
	SB	-	F	-	C
	EB	A	A	B	D
	WB	A	A	A	C
Milton Rd	NB	B	B	B	C
	SB	D	E	E	F
	EB	E	F	F	F
	WB	-	-	-	-

"Design LOS and capacity goals for Arizona state roadways are described in the Roadway Design Guidelines (RDG) from the ADOT Roadway Engineering Group." ("Table 10 Corridor K, D, and T Factors 2.0 Traffic and Crash Data ... - ADOT") The design LOS for various highway types as published in Table 103.2A of the RDG are shown in Table 9.

"Design levels of service shall be in accordance with Table 103.2A. Where a range is shown, the higher level of service should be provided except where costs or environmental constraints justify the lower level of service." (ADOT,2022)

TABLE 9: ADOT LOS BY HWY TYPE

Controlled Access Highway Type	Design LOS
Level Terrain	B
Rural/Rolling Terrain	B
Mountainous Terrain	B-C
Urban/Fringe Urban Areas	C-D

Level-of-Service (LOS) does not take bike, pedestrian, and transit use into account, and sometimes adding these improvements decreases the vehicle LOS.

TRANSIT AND ACTIVE TRANSPORTATION

The corridor is incomplete for bicyclists and pedestrians as there are many gaps in the sidewalk and bike networks. Additionally, access to the existing bus stops can be challenging depending on the boarding locations on the corridor due to the lack of safe north-south crossings. The east end of the corridor provides safe and complete facilities to accommodate those who walk, bike, and roll. Most network issues reside to the west of Woodlands Village. This creates great challenges not only for those who walk or bike but also for those who have mobility challenges. Lastly, when considering the extension of Mountain Line’s bus route 8, first-last mile connections will need to be considered.

Existing Bike Facilities

Shoulders exist along the majority of W. Route 66 between Milton Road and the 1-40 EB on/off ramp; however, they are not signed and striped as designated bike lanes. Striped shoulders vary in width from 5 to 8 1/2 feet wide.

A common parallel route for cyclists involves riding south of the corridor through University Avenue to cut into the Presidio neighborhood, exiting at Woody Mountain road.

There are numerous gaps in shoulders along W. Route 66. Westbound between Riordan Road and Pinnacle St, Woodlands Village, and Hidden Hollow Mobile Home Park, shoulders are fragmented, and end abruptly (Figure 24). Eastbound between Railroad Springs and Woodlands Village, Woodlands Village, and Yale Street, striped shoulders are also broken up for vehicular turning movements.

Bicyclists are permitted to use the Flagstaff Urban Trail System (FUTS) which connects to W Route 66 from the north at Railroad Springs and will eventually link to FUTS running west of Alvan Clark Way and Timber Sky developments. This network is incomplete, cyclists and pedestrians cannot traverse the entire corridor through this path.

Existing Pedestrian Facilities

Continuous sidewalks exist on both sides of W. Route 66 from Milton Road to Woodlands Village. West of Woodlands Village, fragmented sidewalks exist on the north side of W. Route 66 to Hidden Hollow Mobile Home Park. Beyond Hidden Hollow, no sidewalks exist on the north side of W. Route 66.

West of Woody Mountain Rd, a fragmented sidewalk exists along the south extent of Timber Sky developments. Between Woody Mountain Rd and Woodlands Village, no sidewalk exists on the south extent of W. Route 66.



A PEDESTRIAN USING THE BIKE LANE NEAR THOMPSON STREET

Pedestrians may connect to the Flagstaff Urban Trail System (FUTS) which meets W. Route 66 from the north at Railroad Springs and will eventually link to FUTS running west of Alvan Clark Way and Timber Sky developments.

Crosswalks exist only at all four legs of signalized intersections and a single crossing at the HAWK at Blackbird Roost and Metz Walk, all are located on the east end of the corridor. When crossing westbound or eastbound traffic along perpendicular streets to W. Route 66 at stop sign crossings, pedestrians must use caution due to unmarked crossings.

At stop signs where traffic turns from the north or south onto W. Route 66, Pedestrians are not legally permitted to cross W. Route 66 as there is no traffic control.

Existing Transit Services

Mountain Line is the transit agency that serves the City of Flagstaff. Route 8 operates along W. Route 66 between Milton Road and Thompson Drive, originating at the Downtown Connection Center, Mountain Line's primary hub. Mountain Line Paratransit, an origin-to-destination, demand-responsive service is also available along the corridor to people with disabilities or without functional ability to ride fixed-route buses.

Mountain Line services are available along the east end of the W. Route 66 corridor. Bus stops for Route 8 are located at the following locations along or near W. Route 66.

- East of Riordan Road, Westbound
- East of Pinnacle St, Westbound
- South of W Route 66/Thompson, Southbound
- East of Forest Meadows, Eastbound
- North of W University/Woodlands Village, Northbound
- East of Woodlands Village, Eastbound
- West of Metz Walk, Eastbound

FIGURE 24: EXISTING ACTIVE TRANSPORTATION & TRANSIT

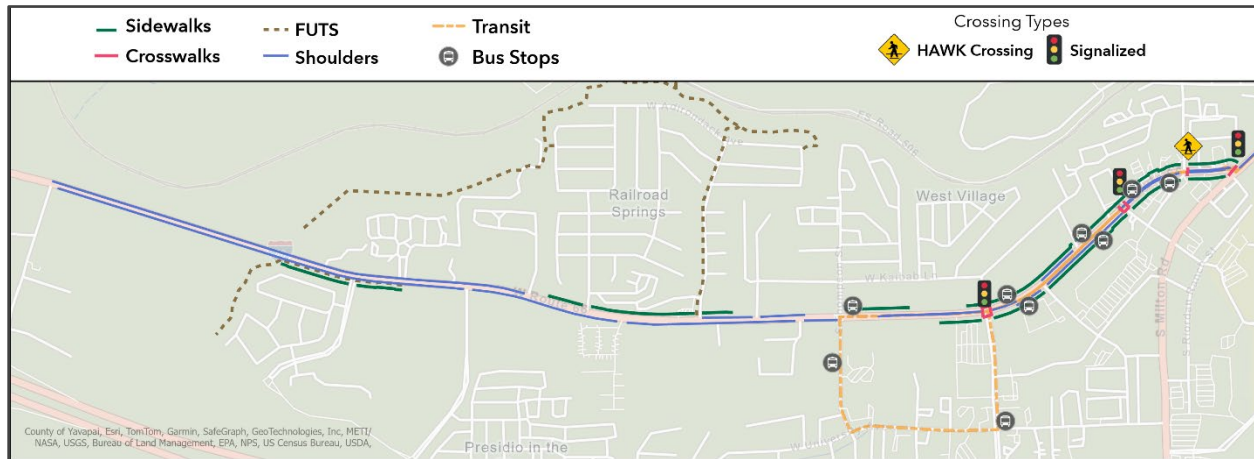


TABLE 10: RIDERSHIP DATA FOR STOPS ALONG WEST ROUTE 66

Ridership by bus stop along W. Route 66			
Stop ID	Name	Number of Riders, FY2023	Riders Per Day (AVG)
146	Route 66 (The Standard)	5,724	15.8
150	Route 66/Pinnacle	5,231	14.4
190	Route 66/Woodlands Village	2,501	6.9
155	Route 66/Metz Walk	3,707	10.2

Total Route 8 Ridership for FY23: 36,994

Bicycle and Pedestrian Counts

Bicycle and pedestrian counts were conducted along W. Route 66 just west of Metz Walk. These counts were done in coordination with the annual traffic counts. Counts were conducted over two days in September 2023 (Table 11). Counts were conducted using video feed and looked at the use of the sidewalk, bike lanes, and roadway. No bike and pedestrian movements were recorded along the road. Of the 411 bicyclists and pedestrians, 65% were pedestrians and 35% were bicyclists. Of the total bicyclists, 42% choose to ride on the sidewalk. This could be an indication of the comfort level of riders along this section of the corridor.

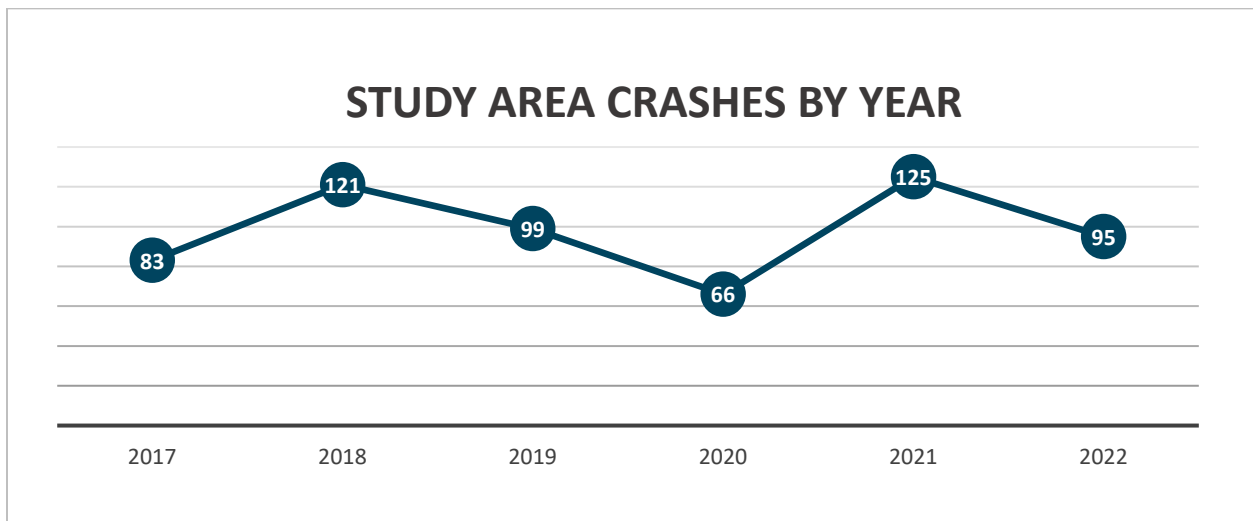
TABLE 11: TOTAL BICYCLE AND PEDESTRIAN COUNTS (2023)

Location	Type	Total
Sidewalk	Pedestrians	267
	Bicyclists	60
Bike Path/Lane	Bicyclists	84
Roadway	-	
Sum		411

CRASH DATA ANALYSIS (2017-2022)

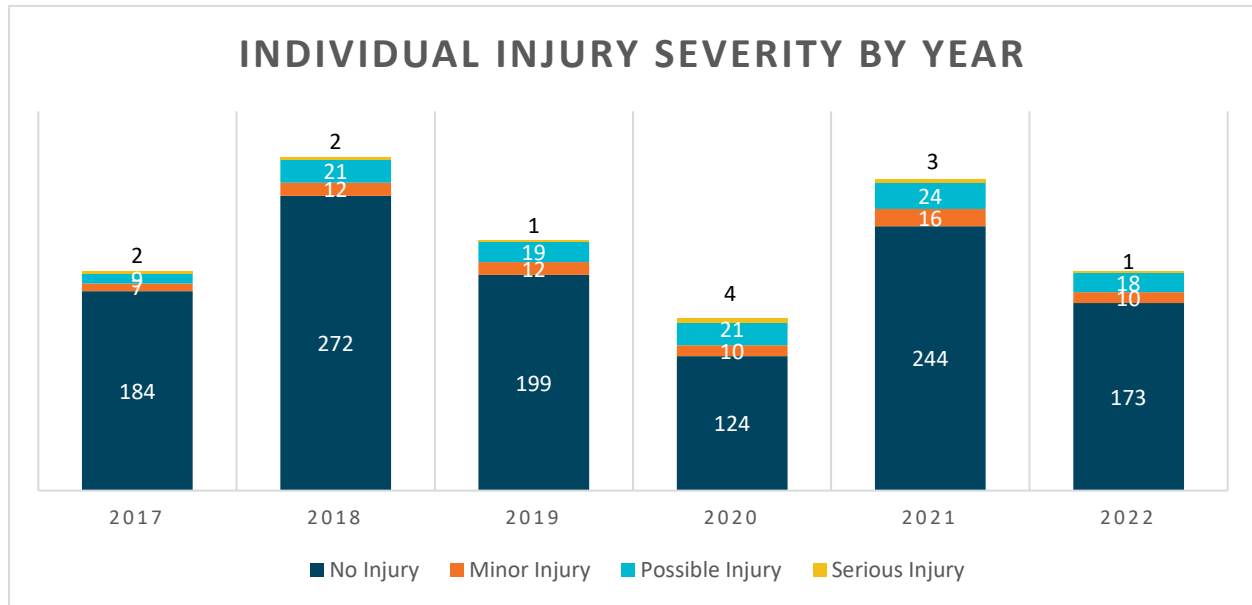
A crash analysis was conducted for the study area to identify trends, patterns, predominant crash types, and high crash intersections. The purpose of the crash analysis is to discover safety hazard locations that need to be addressed to improve area safety. Crash data was obtained from the Arizona Department of Transportation Traffic Records Section. Figure 25 shows the total number of reported crashes over 5 Years.

FIGURE 25: W. ROUTE 66 CRASHES OVER 5 YEARS



In the 6 years, 2017-2022, the study area experienced a total of 589 incidents involving 1,129 units (vehicles, bikes, pedestrians) and 1,457 individuals. Due to the COVID-19 pandemic and resulting lockdowns, crashes in 2020 provided a downward trajectory. However, in 2021, crashes exceeded 2019 levels and continue to remain high. National and state trends show that crashes have and will continue to rise past 2021/22 levels.

FIGURE 26: YEARLY CRASHES BY INJURY TYPE



Of the crashes recorded, 1388 individual injury statuses were recorded. Over the 6 years, 86.2% of the crashes did not result in an injury for individuals, 8.1% possible injury, followed by 4.8% minor injury, and 0.94% serious injury.

591 collisions were a result of individual error. Of these, 29.1% were caused by **failure to yield right of way**, and 24.9% due to **speed too fast for conditions** (Table 12). These two factors account for:

- 57% of **non-injury** crashes
- 64% of **possible injury** crashes
- 24% of **minor injury** crashes
- 86% of **serious injury** crashes

Besides Unknown (15.9%), and Other (6.1%), the three next reasons for collision are followed too closely at 5.4%, unsafe lane changes at 4.9%, and failure to keep in proper lane at 3.9% (Table 12).

TABLE 12: INJURY SEVERITY AND CAUSE

Row Labels	No Injury		Possible Injury		Minor Injury		Serious Injury		Unknown		Grand Total	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Disregarded Traffic Signal	5	1.1%		0.0%		0.0%		0.0%		0.0%	5	0.8%
Drove Left Of Center Line	3	0.6%	1	2.8%		0.0%		0.0%	1	1.8%	5	0.8%
Drove/Rode In Opposing Traffic Lane	2	0.4%		0.0%		0.0%		0.0%	1	1.8%	3	0.5%
Exceeded Lawful Speed		0.0%	1	2.8%	2	9.5%		0.0%		0.0%	3	0.5%
Failed To Keep In Proper Lane	17	3.6%	2	5.6%	4	19.0%		0.0%		0.0%	23	3.9%
Failed To Yield Right Of Way	142	30.1%	14	38.9%	4	19.0%	6	85.7%	6	10.9%	172	29.1%
Followed Too Closely	29	6.1%	1	2.8%	1	4.8%		0.0%	1	1.8%	32	5.4%
Made Improper Turn	24	5.1%		0.0%	1	4.8%		0.0%	1	1.8%	26	4.4%

Other	28	5.9%	3	8.3%	1	4.8%		0.0%	4	7.3%	36	6.1%
Ran Stop Sign	11	2.3%	1	2.8%	2	9.5%		0.0%	2	3.6%	16	2.7%
Speed Too Fast For Conditions	126	26.7%	9	25.0%	1	4.8%		0.0%	11	20.0%	147	24.9%
Unknown	59	12.5%	4	11.1%	4	19.0%	1	14.3%	26	47.3%	94	15.9%
Unsafe Lane Change	26	5.5%		0.0%	1	4.8%		0.0%	2	3.6%	29	4.9%
Grand Total	472	100.0%	36	100.0%	21	100.0%	7	100.0%	55	100.0%	591	100.0%

Where multiple crashes occur at the same location, the highest severity crashes are displayed most prominently. The heat map is also displayed in line with areas of most occurring crashes (Figure 27). The majority of injury-related crashes occur between Thompson Rd and Milton Rd. While the western segments, from Flagstaff Ranch Rd to I-40 experience minor injuries or no injury crashes.

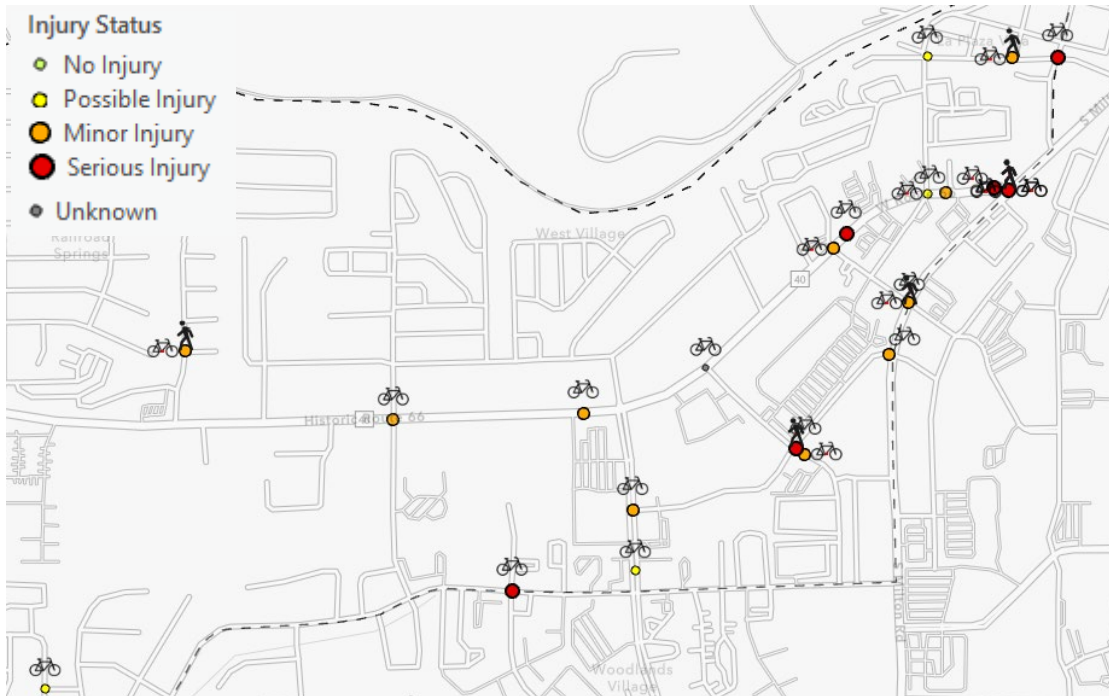
FIGURE 27: STUDY AREA CRASHES



Bicycle and Pedestrian Crashes

Over the 6 years, 18 bicycle-related crashes occurred along the corridor. Among these, 2 were possible injuries, 9 were minor injuries, 4 were serious injuries and 1 was unknown. Seven pedestrian crashes occurred. Among these, 1 was a possible injury, 3 were minor injuries and 4 were serious injuries. (Figure 28).

FIGURE 28: BICYCLE AND PEDESTRIAN CRASHES



Network Screening and Crash Severity

A network screening and intersection crash analysis was conducted as part of the [Regional Transportation Safety Plan](#) (RTSP). This process evaluated the frequency and severity of crashes at every intersection and roadway segment in the study area over the 5 years (2017 – 2021).

For each location with a reported crash history within five years, the intersection or segment is scored using a Crash Severity Score that evaluates both the frequency and severity of crashes. Crashes are weighed by the average societal cost associated with the severity of the crashes using the Arizona Department of Transportation crash costs. These weighted crash values are then summed for each location to score the site based on the severity-weighted frequency of crashes at each location. Results are presented as a percentile of the overall scores with higher percentiles indicating the locations with the most frequent and/or severe crashes in the study period. Table 13 summarizes the intersection locations that are above the 90th percentile.

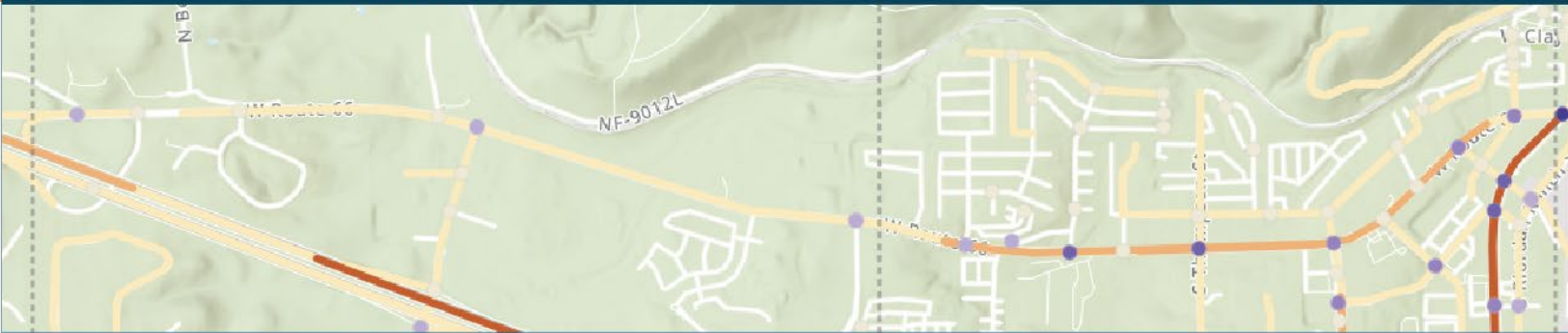
TABLE 13: INTERSECTIONS ABOVE 90TH PERCENTILE

	Milton	Railroad Springs	Thompson	Riordan	Blackbird Roost	Woodlands Village
Crash Severity Percentile	99.75	95.93	95.11	94.88	93.71	91.86
Annual Crash Severity Score (EPDO)	263.51	44.78	31.15	29.15	21.17	16.19
Annual Crash Frequency	14.80	7.00	5.20	5.20	8.20	8.40

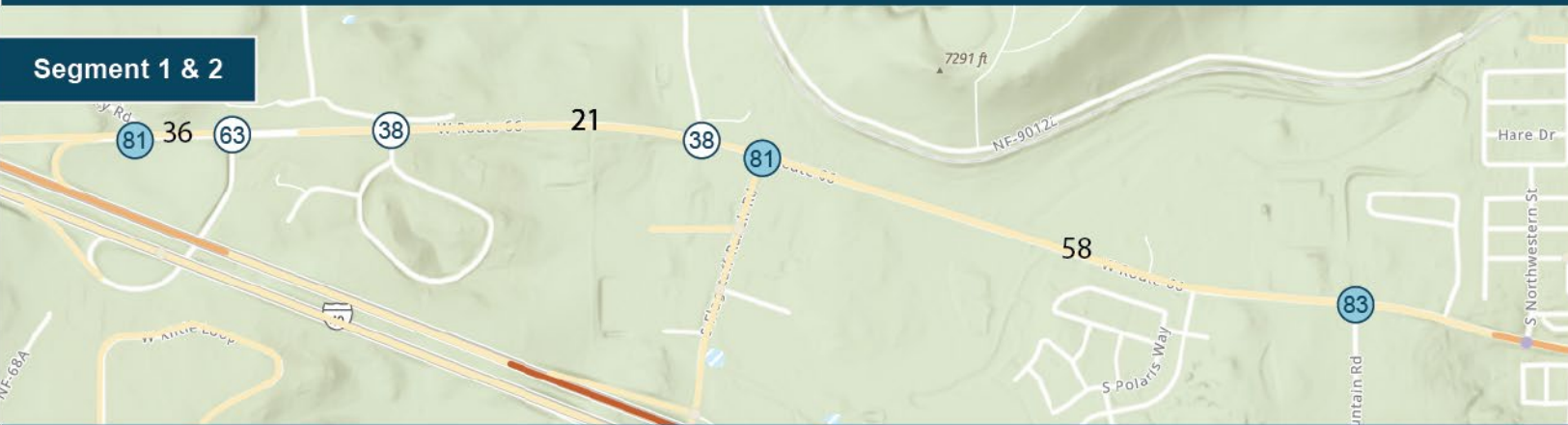
The highest crash severity percentile for the corridor is for the 1-mile segment between Northwestern St and Woodlands Village at the 83rd percentile.

NETWORK SCREENING RESULTS (2017-2021)

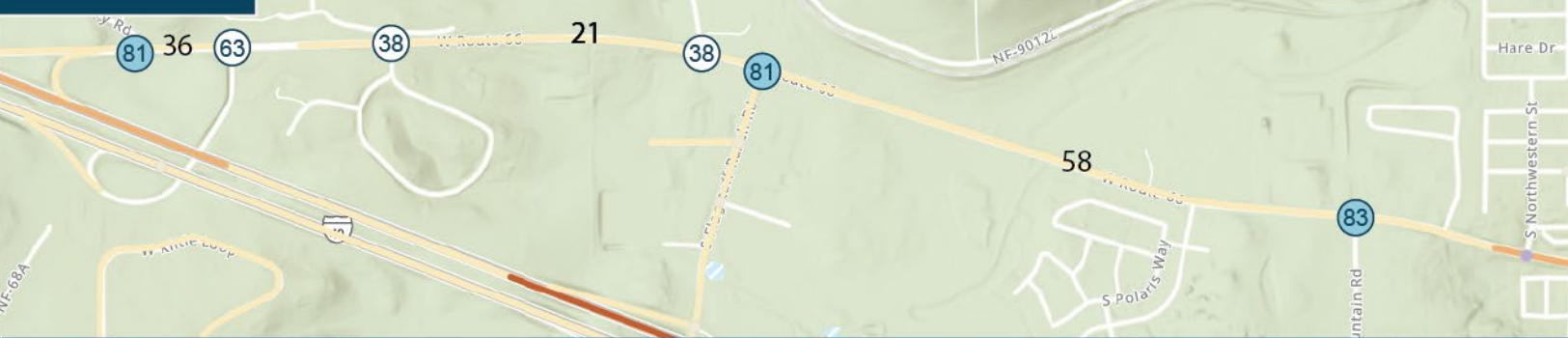
Segment 1 & 2



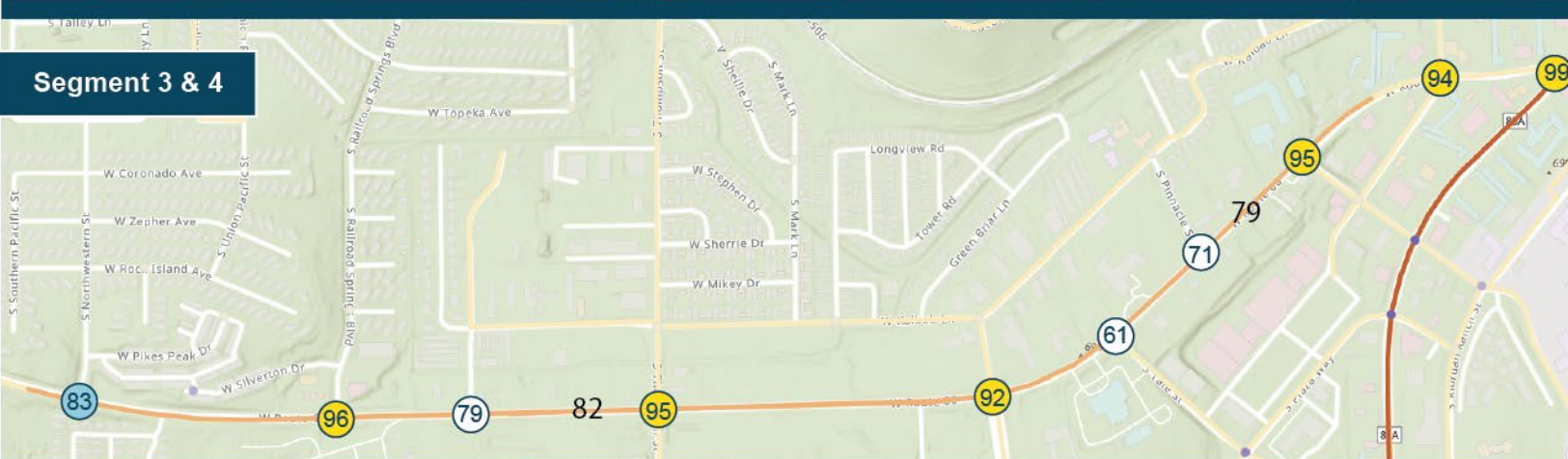
Segment 3 & 4



Segment 1 & 2



Segment 3 & 4



This map displays the results from the network screening analysis conducted as part of the Northern Arizona Regional Transportation Safety Plan (RTSP). The network screening process evaluated the frequency and severity of crashes at every intersection and roadway segment in the study area. The crash data analyzed cover the five complete years from January 2017 through December 2021.

For each location with reported crash history within the five year period, the intersection or segment is scored using a Crash Severity Score that evaluates both the frequency and severity of crashes. Crashes are weighting by the average societal cost associated with the severity of the crash using Arizona Department of Transportation crash costs (e.g., a fatal crash's societal cost is \$9,515,371 and a property damage only crash's societal cost is \$10,680). These weighted crash values are then summed for each location to score the site based on the severity-weighted frequency of crashes at each location. Results are presented as a percentile of the overall scores with higher percentiles indicating the locations with the most frequent and/or severe crashes in the study period. Where no segment or intersection is shown on the map there were no reported crashes at those sites in the dataset.

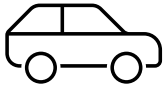
<https://kai.maps.arcgis.com/apps/instant/interactivelegend/index.html?appid=f93a1b10527043698a05044682a6aac6¢er=-110.4805;35.1956&level=8>

Public Transportation Safety Concerns

Through the outreach efforts of the Regional Transportation Safety Plan, the public was provided an opportunity to use Social Pinpoint, an online mapping tool, in the Spring of 2023. This mapping platform allowed the public to pin and post their concerns about transportation safety. W. Route 66 received a total of 32 comments, 50% related to vehicles, 25% related to bicyclists, and 25% related to pedestrians.

Top concerns by category:

Vehicles:



- Westbound merge lane at **Woodlands Village**. People are unaware of the merge and demonstrate bad behaviors such as speeding and cutting off other drivers. *(Pedestrians noted feeling uncomfortable in this area due to the merging and lack of sidewalks to the west)*
- **Railroad Springs** intersection – often difficult to turn from Railroads Springs onto W. Route 66 due to high speeds, traffic, and lack of turn lanes on W. Route 66 obstructing traffic flow.
- **Northwestern** Intersection – drivers noted natural obstructions (large trees and bushes) that make the line of sight difficult when attempting to turn onto W. Route 66. Speeding is also a concern in this area.

Bicyclists:



- Missing bike lanes and/or unmaintained bike lanes.
- Challenges crossing W. Route 66, including at intersections and marked crossings.
- Vehicular speeds and not yielding to bicyclists.

Pedestrians:



- No continuous sidewalks on either side of the road making it difficult for residents to reach services.
- Having to walk on the shoulder or roadway during snowy conditions.
- Lack of safe pedestrian crossings *(cited primarily at Thompson)*.

ACCESS MANAGEMENT

Access Management (AM) Plans are a proactive way to manage vehicular access points to land parcels adjacent to all manner of roadways. Good access management promotes safe and efficient use of the transportation network and calls for effective ingress and egress to a facility, efficient spacing, and design to preserve the functional integrity, and overall operational viability of street and road systems.

Effective access management programs control the location, spacing, design, and operation of driveways, median openings, and intersections to reduce the number of vehicular conflict points. Driveway and access management guidelines for ADOT and the City of Flagstaff are summarized below:

Arizona Department of Transportation (ADOT)

A summary of the ADOT Traffic Engineering Guidelines and Procedures (TGP) Section 1060 – Median Openings for urban areas is summarized below:

1. All median openings shall be designed to include median storage lanes for both directions of travel.
2. Spacing between median openings at intersections shall not be less than 330 feet.
3. In urban areas, median openings between intersections may be established for public safety and convenience if the opening is not closer than 660 feet to an intersection with an improved public street or another median opening.
4. Median openings may be established for businesses generating relatively high traffic volumes, provided that:
 - a. The minimum left-turn traffic volume is 500 vehicles per day or 100 vehicles during the peak hour in urban areas where the major street speed limit is less than 40 miles per hour.
 - i. The minimum left-turn traffic volume is 350 vehicles per day or 70 vehicles during the peak hour in urban areas where the major street posted speed limit is 40 mph or greater.
 - ii. The distance to the nearest adjacent median opening is not less than 330 feet.

City of Flagstaff

A summary of the City of Flagstaff access management guidelines, included in Engineering Design Standards and Specifications for New Infrastructure Section 13-10-006-0001 are as follows:

1. Distances between centerlines of adjacent intersections shall be a minimum of 135 feet, regardless of the direction of the intersection streets.
2. The minimum spacing of driveways to signalized and unsignalized intersections shall be in accordance with Table 14.

Access Management should address:

- Facility Hierarchy
- Intersection and Interchange Spacing
- Driveway spacing
- Traffic signal spacing
- Median treatments and median openings
- Turning lanes and auxiliary lanes
- Street connections

TABLE 14: MINIMUM SPACING OF DRIVEWAYS TO INTERSECTIONS PER CITY OF FLAGSTAFF

Posed Speed (mph)	Spacing	
	Signalized	Unsignalized
< 30	230	-
30	-	115
35	275	135
40	320	155
45	365	180

Each access point along the study corridor was identified through an aerial mapping review. Each access point was then categorized into one of the following two access types:

Right-in/Right-out (RIRO) – only two traffic movements, right-in, and right-out, are permitted into and out of a side street or a driveway. Intersections are typically controlled by a stop sign on the side street. RIRO access points along the study corridor provide access to private commercial properties.

Full Access – Full access driveways generally allow all traffic movements on all approaches. These intersections are either STOP controlled on both the side streets and traffic signal controlled.

There are a total of 63 driveways along the W. Route 66 study area corridor and the number of each type is listed in Table 15. There are no “entrance only” or Right-in/Right-out (with stop signs) along the corridor.

TABLE 15: CURRENT ACCESS TYPES

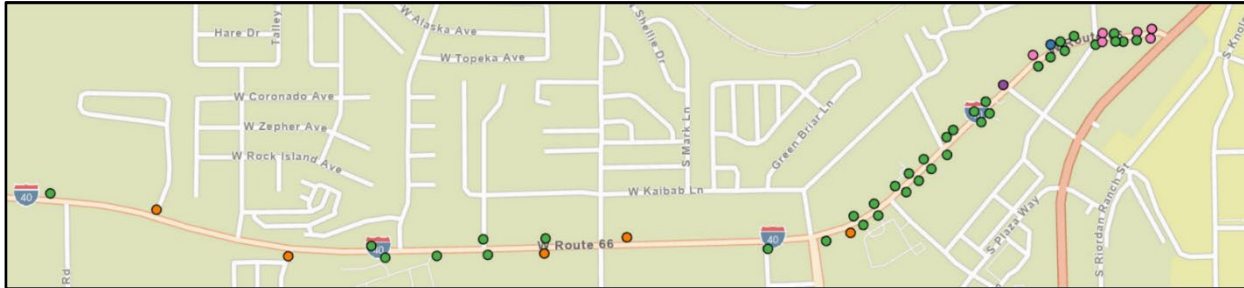
Map Key	Quantity	Type
	40	Full access (without stop sign)
	10	Full access (with a stop sign)
	6	Right-in / right-out (without stop sign),
	3	Private Driveways
	2	Unknown (Access to private lands, temp. construction access)
	1	Exit Only
	1	Full access (traffic light)

FIGURE 29: SEGMENT 1 & 2 ACCESS: I-40 TO WOODY MOUNTAIN RD.



Segments 1 and 2 are comprised of 5 full access (with stop sign), 5 full access (without stop sign), 3 private driveways, and 2 unknown accesses. For a total of 15 access points within these sections. Given the rural nature of these segments, access points include private driveways/roads, and access to new and existing neighborhood developments.

FIGURE 30: SEGMENT 3 & 4: WOODY MOUNTAIN ROD TO MILTON RD.



Segments 3 and 4 are comprised of 35 full access (without stop sign) with the majority at the east end of the corridor within the urban area, 6 Right-in / right-out (without stop sign), 5 full access (with stop sign), 1 exit only, and 1 full access (Traffic light). For a total of 48 access points within these sections to support local businesses, professional services, and retail.

An evaluation of existing access points has not been compared to ADOT and City of Flagstaff guidelines to ensure compliance. Rather this information will be used to evaluate potential project sites and bus pullout design and spacing.

Key Takeaways for the Study Area:

- Intersection delay is an existing concern for north-south movements at many intersections requiring improvement, volume reduction or an evaluation of existing standards.
- Few network (i.e., connectivity) improvements are planned, programmed or practical that would shift, and thereby alleviate, delay for some movements.
- Proposed development, not to mention growth beyond that, may exacerbate conditions.
- Given network deficiencies, bicycle and pedestrian travel are not available or acceptable modes for many trips.