FINAL

SR 264 Corridor Planning Study

Working Paper 1: Identify Current and Future Conditions

JUNE 2025

Prepared for:

Arizona Department of Transportation
Multimodal Planning Division
Mail Drop 310B, 1611 W. Jackson St
Phoenix, AZ 85007

Prepared by:

Kimley»Horn

1001 W. Southern Ave., Suite 131
Mesa, AZ 85210

Contents

1. Introduction 1
2. Previous Plans and Studies Review 1
3. Roadway Characteristics 6
4. Roadway Context 18
5. Socioeconomic Characteristics 23
6. Roadway Usage 24
7. Safety 27
8. Future Conditions Analysis 32
9. Environmental Overview 35
10. Corridor Needs and Deficiencies 40

1. Introduction

The State Route (SR) 264 corridor serves as a major roadway connecting several population centers of the Hopi Tribe and Navajo Nation, including Moenkopi, Hotevilla-Bacavi, Kykotsmovi, Second Mesa, First Mesa, Keams Canyon, and Jeddito. The corridor provides access to essential services, schools, and employment opportunities. This corridor is the only continuous east-west route in northern Navajo County and acts as the primary roadway in area. In recent years, the Arizona State Transportation Board and the Arizona Department of Transportation (ADOT) Northeast District have received concerns about traffic and multimodal safety along the corridor from Hopi Tribal officials and Tribal community members.

The Hopi Tribe is a sovereign nation located in Coconino and Navajo counties in Arizona. The Tribe is located on three mesas: First Mesa, Second Mesa, and Third Mesa and is comprised of 12 villages.

The SR 264 Corridor Planning Study assesses SR 264 from Moenkopi, at Milepost 321.97, to the Navajo-Apache County boundary, at Milepost 417.58, as shown in **Figure 2**.The Study will develop strategic countermeasures to improve safety and access along the corridor. The Study has six primary objectives:

- Assess existing conditions
- Compile historical crash data
- Preform Road Safety Audits (RSAs)
- Develop and prioritize alternatives
- Identify potential funding opportunities
- Strengthen the relationship between ADOT, the Hopi Tribe, and the Navajo Nation

PLANNING PROCESS

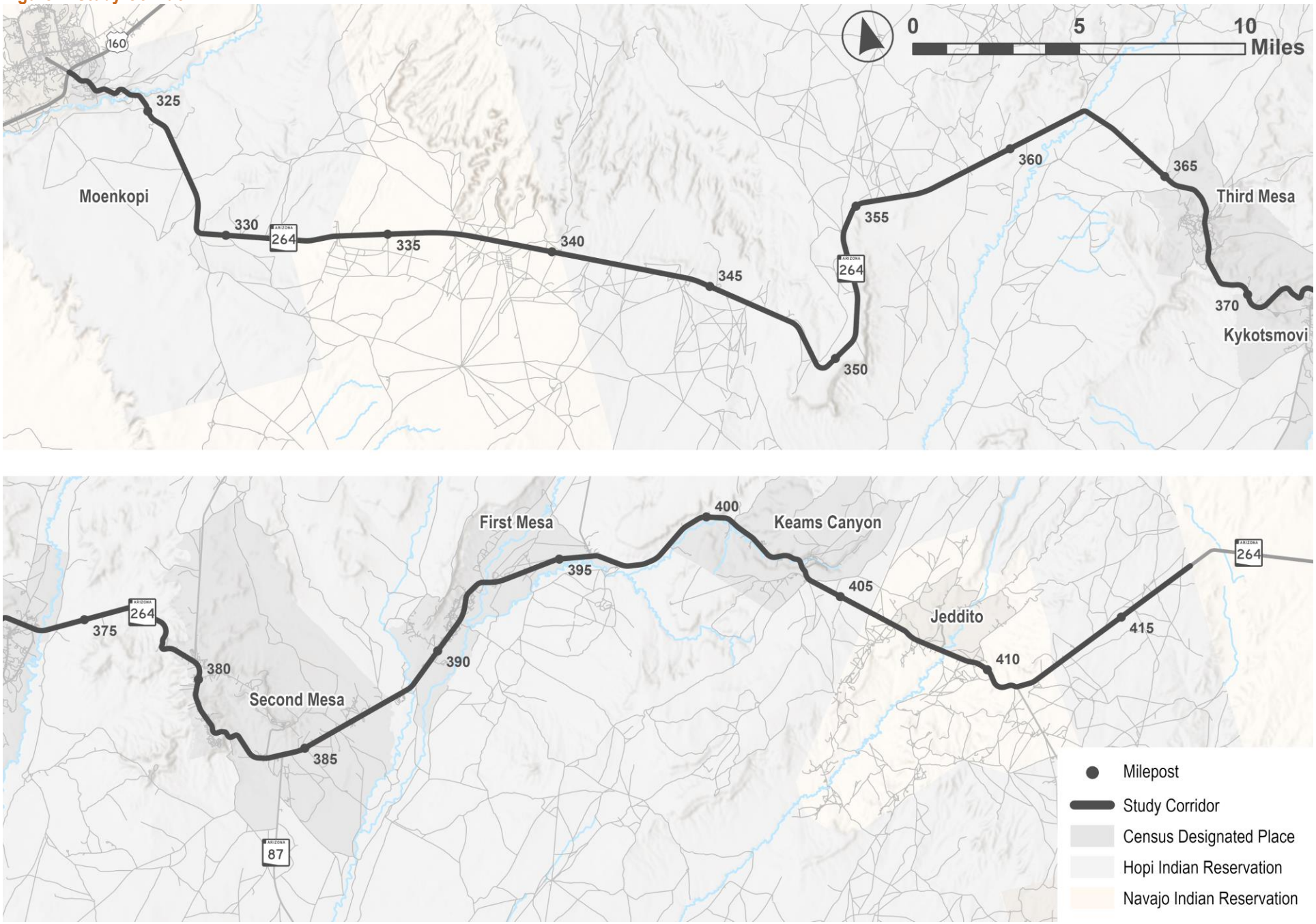
Working Paper 1: Identify Current and Future Conditions (WP1) is the first of three interim deliverables in the SR 264 Corridor Planning Study process. WP1 provides an overview of the existing conditions of the corridor, including previous plan recommendations, infrastructure and socioeconomic characteristics of the corridor, roadway usage and safety conditions, and future conditions. The analysis completed in WP1 aims to identify needs and deficiencies along the corridor.

Working Paper 2: Identify Deficiencies and Establish Evaluation Criteria (WP2) will identify anticipated traffic needs on the corridor, establish an alternative prioritization framework, and develop potential improvement alternatives. *Working Paper 3: Develop Recommended Plan for Improvements* (WP3) will prioritize the improvement recommendations to determine the Study's recommended projects. The three working papers will be compiled into a final plan for the recommended improvements. Recommendations resulting from the study will inform future transportation planning efforts for stakeholders in the region. **Figure 1** shows the planning process for the SR 264 Corridor Planning Study.

Figure 1. SR 264 Corridor Study Planning Process

1 Project Management and Coordination
2 Data Collection and Existing Conditions
3 Deficiencies and Evaluation Criteria
4 Recommended Plan for Improvements
5 Final Report Development

Figure 2. Study Corridor



Source: Kimley-Horn

2. Previous Plans and Studies Review

Previous plans and studies were reviewed to identify past goals and recommendations for the SR 264 corridor.

PREVIOUS PLANS AND STUDIES OVERVIEW

Previous plans that identified goals, strategies and recommendations along the study corridor include:

- Navajo County Comprehensive Plan (2024)
- NACOG Regional Transportation Safety Plan (RTSP) 2023
- Hopi Long-Range Transportation Plan (LRTP) 2018
- SR 264 Corridor Profile Study 2003

Navajo County 2050 (2024)

The Navajo County 2050 Comprehensive Plan was developed to provide guidance on future growth and development in the county. The plan identifies circulation goals and policies, including:

- Promote safety through the Safey System Approach to reduce fatal and serious crashes in Navajo County.
- Improve the efficiency of the freight network in Navajo County to reduce travel times for goods on trucks and rail.
- Maintain a high-quality network of roadways and transit services in Navajo County.
- Ensure Navajo County's transportation and network is accessible for all residents regardless of age or ability.

Northern Arizona Regional Transportation Safety Plan (2023)

Northern Arizona Council of Governments (NACOG) developed the Regional Transportation Safety Plan (RTSP) to identify a framework for lowering fatal and serious injury crashes in the region. The study identified priority intersections and segments, with numerous locations along the SR 264 corridor, including:

- From MP 332.5 – MP 336.0
- From MP 347.7 – MP 349.4
- From MP 361.8 – MP 363.0
- From MP 368.2 – MP 369.7
- From MP 374.7 – MP 379.8
- From MP 382.6 – MP 389.4
- From MP 405.0 – MP 407.0
- From MP 413.1 – MP 414.6

To supplement the identified priority locations, safety strategies were recommended for non-infrastructure safety issues such as lack of seatbelt use, weather, older drivers, and impaired driving as well as systemic infrastructure improvements for lane departure and speeding.

Hopi Tribe Long Range Transportation Plan (2018)

The Hopi Tribe Long-Range Transportation Plan (LRTP) was developed in 2018 and inventoried current transportation conditions for the Tribe and identified recommended projects for the Tribal Transportation Improvement Program (TTIP). Community outreach with representatives from Lower Moenkopi Village identified that future residential and commercial development may occur along eastbound SR 264, which may result in additional roadways connecting to the route.

State Route 264 Corridor Profile Study (2003)

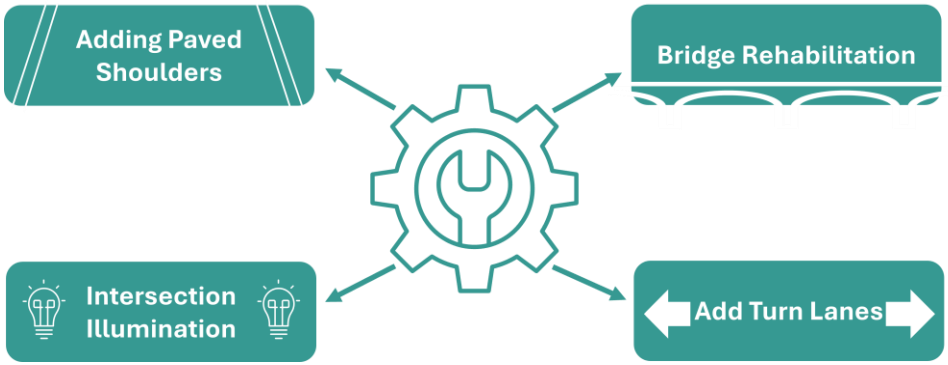
The SR 264 Corridor Profile Study was conducted in 2003 from MP 321.97 to 476.12 and identified recommended, planned, and programmed improvements along the corridor.

PREVIOUS PLAN AND STUDY KEY TAKEAWAYS

The reviewed previous plans identified countermeasures, goals, as well as recommended and programmed projects.

Countermeasures

Previous planning efforts identified potential countermeasures that may be beneficial along the SR 264 corridor. Common countermeasures included:



Goals

Goals identified in previous planning efforts include:

- Provide a range of transportation options that are safe and more efficient and that complement local communities and the natural environment.
- Ensure quality design and development of the circulation system.
- Improve and maintain circulation infrastructure to meet the needs of residents and to protect the natural environment.
- Improve non-motorized circulation networks and provide more opportunities for alternative modes of travel.

Recommendations

Previous plan recommendations that have not been implemented are shown in **Table 1** and **Figure 3**.

PROGRAMMED PROJECTS

There is one programmed project on the study corridor, documented in ADOT's Five Year Transportation Facilities Construction Program. The project 'SR 264/Indian Route (IR) 4 Phase 2' recommends a multi-use path is constructed at the intersection of SR 264 and IR 4. The project limits are shown in **Figure 3**.

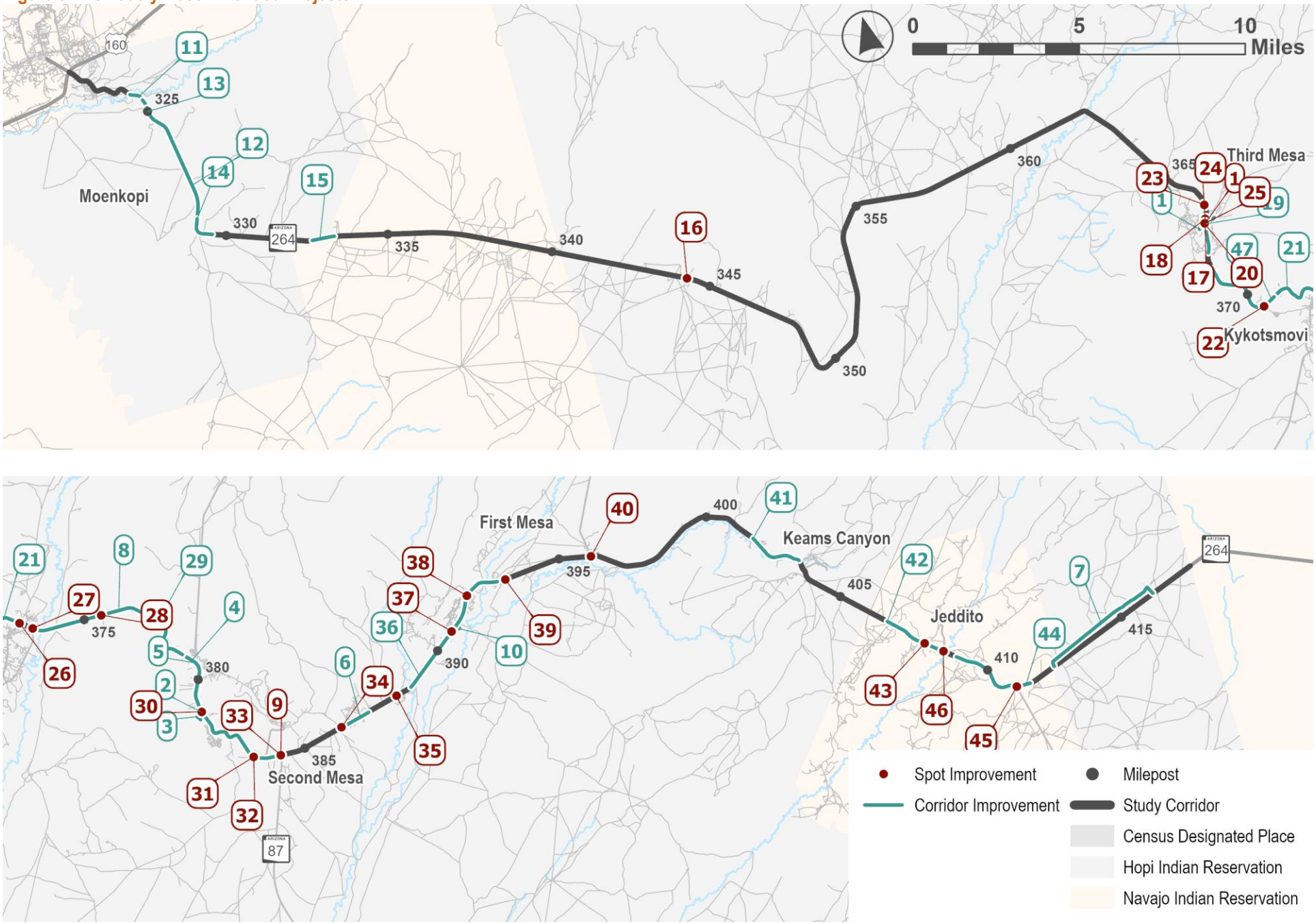
Table 1. Previously Recommended Projects

ID	LOCATION	DESCRIPTION	MODE	SOURCE
1	Western Loop to Hotevilla-Bacavi Community School	New sidewalk or pedestrian path from south end of Western Loop to Hotevilla-Bacavi Community School and crosswalk across SR 264	Active Transportation	Hopi LRTP
2	Just North of Bluebird Road to SR 264	New roadway connection to SR 264	Vehicular	Hopi LRTP
3	Bluebird Road to SR 264	New roadway connection to SR 264	Vehicular	Hopi LRTP
4	East side of SR 264 from MP 379.3-381.3	New sidewalk or pedestrian path connecting the Hopi Cultural Center into Second Mesa	Active Transportation	Hopi LRTP
5	West side of SR 264 from MP 379.3-380.1	Improved SR 264 Access Roads	Vehicular	Hopi LRTP
6	South side of SR 264 from MP 386.5-387.2	New frontage road on south side of SR 264 to provide driveway access for future development	Vehicular	Hopi LRTP
7	North side of SR 264 from MP 412.6-416.2	New frontage road to provide driveway access to future development	Vehicular	Hopi LRTP
8	Leupp Oraibi Rd to SR 87 along SR 264	Improve by paving shoulders, rumble strips, etc.	Vehicular	NACOG RTSP
9	SR 264 and SR 87	Install advanced warning signs and consider roundabout	Vehicular	NACOG RTSP
10	SR 264 from MP 389.7-390.9	Improved SR 264 Access Roads	Vehicular	Hopi LRTP
11	SR 264 MP 324.2-324.6	Add Guardrails	Vehicular	SR 264 CPS
12	SR 264 MP 324.5-329.0	Climbing Lane	Vehicular	SR 264 CPS
13	SR 264 MP 324.8-325.1	Add Guardrails	Vehicular	SR 264 CPS
14	SR 264 MP328.8-329.6	Add Guardrails	Vehicular	SR 264 CPS
15	SR 264 MP 332.7-333.3	Climbing Lane	Vehicular	SR 264 CPS
16	SR 264 and Indian Rural Rte.	Widen Intersection for turn lanes	Vehicular	SR 264 CPS
17	SR 264 MP 366.9	Intersection Illumination	Vehicular	SR 264 CPS
18	SR 264 MP 366.9	Widen Intersection for turn lanes	Vehicular	SR 264 CPS
19	SR 264 MP 366.8-368.0	Widen to Three-Lane Cross Section	Vehicular	SR 264 CPS
20	SR 264 MP 367.1	Intersection Illumination	Vehicular	SR 264 CPS
21	SR 264 MP 368.5-372.7	Climbing Lane	Vehicular	SR 264 CPS
22	SR 264 MP 370.7	Intersection Illumination	Vehicular	SR 264 CPS
23	SR 264 MP 366.5	Install Pedestrian Signage	Vehicular	SR 264 CPS

ID	LOCATION	DESCRIPTION	MODE	SOURCE
24	SR 264 MP 366.9	Install Pedestrian Signage	Vehicular	SR 264 CPS
25	SR 264 MP 367.1	Install Pedestrian Signage	Vehicular	SR 264 CPS
26	SR 264 and Main St	Intersection Illumination	Vehicular	SR 264 CPS
27	SR 264 MP 373.6	Intersection Illumination	Vehicular	SR 264 CPS
28	SR 264 MP 375.6	Widen Intersection for turn lanes	Vehicular	SR 264 CPS
29	SR 264 MP 377.3-379.0	Climbing Lane	Vehicular	SR 264 CPS
30	SR 264 MP 381.0	Rockfall Containment	Vehicular	SR 264 CPS
31	SR 264 MP 383.3	Intersection Illumination	Vehicular	SR 264 CPS
32	SR 264 MP 383.3	Install Pedestrian Signage	Vehicular	SR 264 CPS
33	SR 264 and SR 87	Intersection Illumination	Vehicular	SR 264 CPS
34	SR 264 MP 386.2	Widen Intersection for turn lanes	Vehicular	SR 264 CPS
35	SR 264 MP 388.1	Install Pedestrian Signage	Vehicular	SR 264 CPS
36	SR 264 MP 388.5-393.0	Widen to Five-Lane Cross Section with Shoulders	Vehicular	SR 264 CPS
37	SR 264 MP 390.7	Install Pedestrian Signage	Vehicular	SR 264 CPS
38	SR 264 MP 391.8	Install Pedestrian Signage	Vehicular	SR 264 CPS
39	SR 264 MP 393.2	Widen Intersection for turn lanes	Vehicular	SR 264 CPS
40	SR 264 and Indian Rte 60	Widen Intersection for turn lanes	Vehicular	SR 264 CPS
41	SR 264 MP 401.75-403.3	Widen to Three-Lane Cross Section	Vehicular	SR 264 CPS
42	SR 264 MP 406.5-408.5	Climbing Lane	Vehicular	SR 264 CPS
43	SR 264 and Jeddito School Rd	Intersection Illumination	Vehicular	SR 264 CPS
44	SR 264 MP 409-411.5	Climbing Lane	Vehicular	SR 264 CPS
45	SR 264 and SR 77	Intersection Illumination	Vehicular	SR 264 CPS
46	SR 264 MP 408.54	Bridge Replacement	Vehicular	SR 264 CPS
47	SR 264 MP 370.8 – 371.2	Construct a Multi-Use Path	Active	ADOT 2025-29 Program

Source: SR 264 Corridor Profile Study, Hopi LRTP, NACOG RTSP

Figure 3. Previously Recommended Projects



Source: SR 264 Corridor Profile Study, Hopi LRTP, NACOG RTSP

3. Roadway Characteristics

The physical features of the corridor have an impact on the potential improvements that may be needed. A full-corridor review of existing infrastructure was conducted to identify areas of constraints.

CORRIDOR GEOMETRIC DESIGN FEATURES

During the corridor review process, the following geometric features were collected:

- Safety Features
- Traffic control features
- Active transportation facilities
- Transit infrastructure
- Corridor cross-sections
- Pavement, shoulder, and bridge conditions
- Topography

Safety Features

Bus and Vehicle Safety Pullouts. There are 44 locations on the corridor that can be used as bus and vehicle safety pullouts. The average pullout length is 195 feet in length and 45 feet in width. Pullouts along the corridor are primarily constructed of dirt and gravel, although paved pullouts are present at MP 334.1, 334.9, and 344.3. Most pullout locations can be found between MP 360 and MP 400. Bus and vehicle safety pullout locations are shown in **Figure 4**.

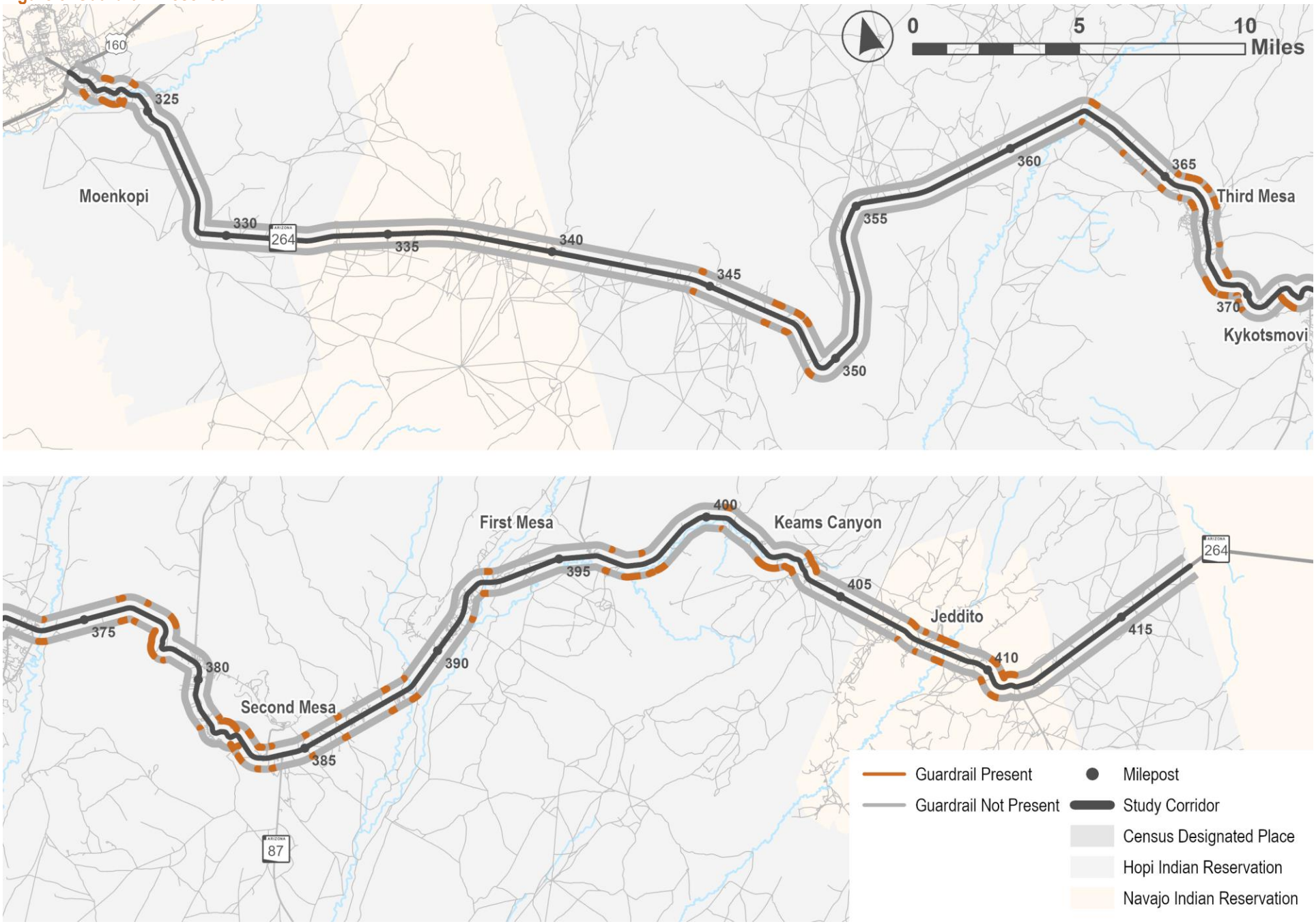
Rumble Strips. Rumble strips are not common along the corridor, with edge-line rumble strips only present in Jeddito, from MP 408 to MP 409 on both sides of the road, and just west of First Mesa, between MP 390 and MP 392 on the south side of the corridor. There were no centerline rumble strips found along the corridor. Rumble strip locations on the study corridor are shown in **Figure 4**.

Guardrails. There are 15.75 miles of guardrail present along the corridor, as shown in **Figure 5.** The guardrail inventory identified the presence of guardrail rather than its conformity. Throughout the corridor, there are curves and elevation changes that are accompanied by the presence of guardrails to improve safety for vehicles and active transportation users. The continuous length of guardrail segments are typically short and are present where there is significant change in topography. Guardrail is most concentrated between MP 365 and MP 390.

Figure 4. Rumble Strips & Safety Pullout Locations

Source: Kimley-Horn

Figure 5. Guardrail Presence



Source: Kimley-Horn

Traffic Control Features

There are 323 access points on the study corridor, one of which is signalized at United States Highway (US) 160 at the western end of the corridor. All other access points are side-street stop controlled. Many access points serve private driveways and dirt roads, resulting in most access points having 3-way access. An access point was considered an intersection if SR 264 intersects with a named roadway or a roadway that led to multiple residents or roadways. All other access points were considered driveways. **Figure 6** shows the locations of all access points on the corridor.

Turn Lanes

Turn lanes were documented at major intersections to evaluate if supplemental turn lanes should be a future recommendation in response to safety issues. Major intersections and the associated turn lanes that are on the corridor are shown in **Table 2.**

Table 2. Major Intersections

MP	Intersection	Left Turn Lane	Right Turn Lane
321.9	US 160	1	0
322.3	Roadrunner St	2	0
322.5	Hopi Dr	1	0
322.7	Kachina Trl	0	0
338.5	IR 6720	1	1
372.9	Main St	2	2
373.5	Leupp-Oraibi Rd	1	1
381.3	Main St	1	1
384.3	SR 87	1	1
388.2	Hopi Healthcare Driveway	1	1
396.7	Tribal Court Driveway	1	1
396.8	Hopi Junior Senior High School Driveway	1	1
403.3	Main St	1	1
407.9	Jeddito School Rd	1	1
411.2	Indian Rte. 6	1	1

Source: Kimley-Horn

Active Transportation Facilities and Crossing Locations

Active transportation facilities and crossing locations are limited on the SR 264 corridor. A sidewalk is present at MP 403 in front of the Keams Canyon Shopping Center. A shared-use path is also present in Kykotsmovi from MP 379 to MP 380, providing active transportation connections to the Hopi Cultural Center. The only pedestrian crossing location on the corridor is at the intersection with Bacavi Street in Moenkopi. Active transportation facilities are shown in **Figure 7.**

Transit Infrastructure

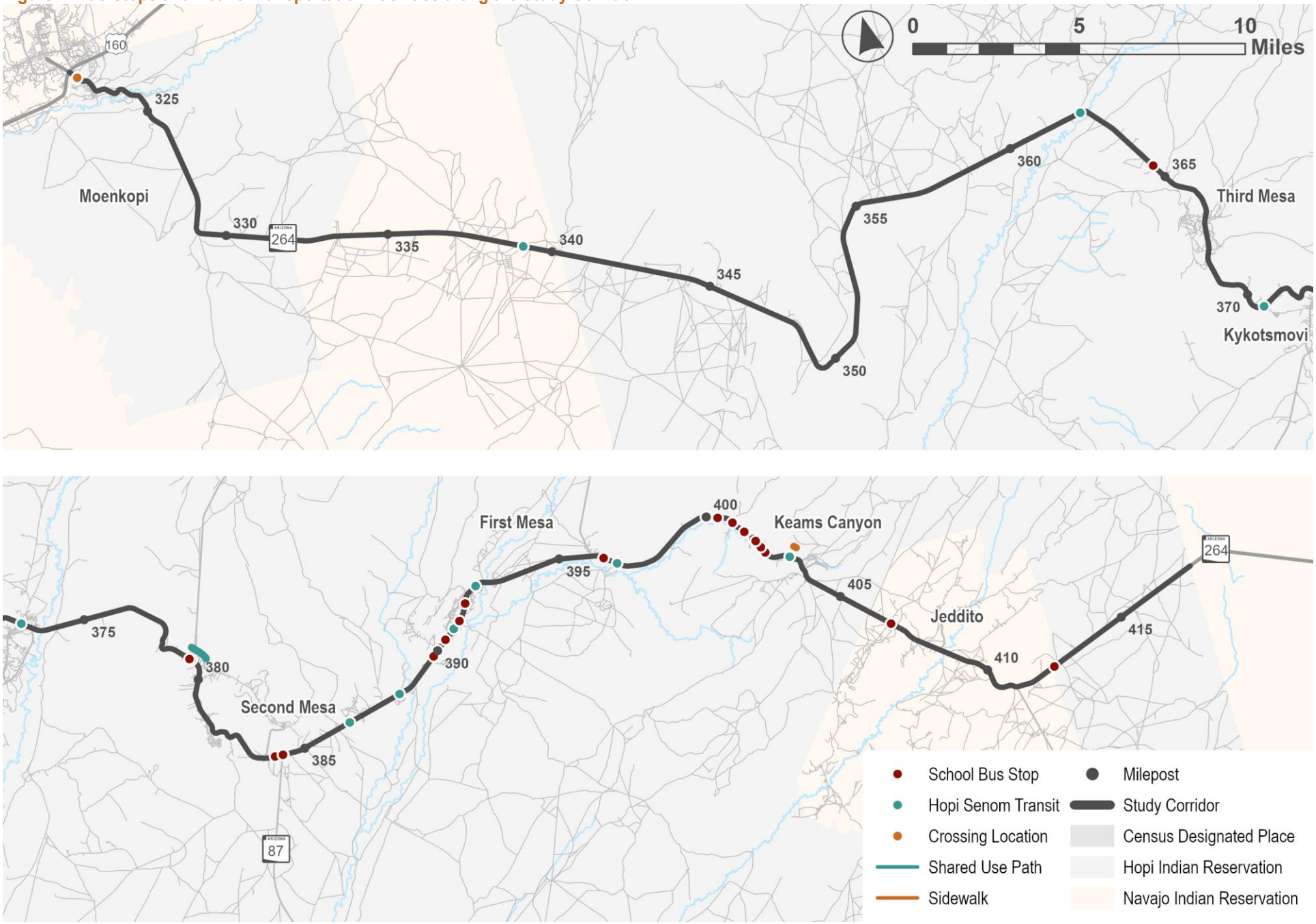
Hopi Senom Transit provides public transportation to the Hopi Tribe and runs service along the SR 264 corridor. The service provides fixed-route connections to Winslow and Flagstaff as well as local destinations including Kykotsmovi and Keams Canyon via SR 264. Key stops along the corridor include the Hopi Tribal Hall, Hopi Health Care Center, Hopi Cultural Center, and Hopi Police Department as well as stops at shopping centers along the route.

School bus stops along the study corridor were provided by Hopi Day School, Hopi High and Junior High School, and Keams Canyon Elementary School. **Figure 7** shows bus stops by school. Bus stops are concentrated from MP 390 to MP 393 near First Mesa and from MP 400 to MP 403 near Keams Canyon.

Figure 6. Corridor Intersections

Source: Kimley-Horn

Figure 7. Bus Stops and Active Transportation Facilities along the Study Corridor



Source: Hopi-Senom Transit, Hopi Day School, Hopi High and Junior High School, Keams Canyon Elementary School, Kimley-Horn

Corridor Cross-Sections

The study corridor consists of one travel lane in each direction, with a typical cross section of 25 to 30 feet wide. The corridor cross-section widens in Moenkopi, Keams Canyon, and Jeddito with wider shoulders. The corridor's widest cross-section, at 65 feet, is located in Moenkopi where the roadway widens to five lanes. **Figure 8** identifies changes in cross section along the corridor. The corridor cross-section typically widens approaching major intersections.

INFRASTRUCTURE CONDITIONS

Pavement Condition

Pavement condition data was sourced from ADOT's Pavement Management Group and is categorized by:

- **Good.** Rating is above the identified desirable/average range
- **Fair.** Rating is within the identified desirable/average range
- **Poor.** Rating is below the identified desirable/ average range

Much of the corridor has fair pavement conditions, with 77.5 miles or 81% categorized as fair. In total, there are two miles of the corridor that are in poor condition All of the segments are found on the eastern half of the corridor from MP 375 to MP 414. Most corridor segments in poor condition are very short, averaging 0.2 miles per segment. **Figure 9** shows the corridor's pavement condition.

Shoulder Width

Appropriate shoulder widths on the corridor can reduce run-off incidents and provides a space for active transportation users where there are no designated facilities. To identify shoulder locations that are areas of concern, it was determined that if the width of the shoulder was less than eight feet wide, it is considered deficient. This threshold was determined by the ADOT Roadway Design Guidelines.

The majority of shoulders along the corridor are less than two feet wide, making it difficult for vehicles to recover if they run off the road. Although there are no shoulders along the corridor in adequate width, wider shoulders are present between Second Mesa and First Mesa and Jeddito, although they are not continuous segments. Shoulder width is shown in **Table 3** and **Figure 10**.

Table 3. Shoulder Presence

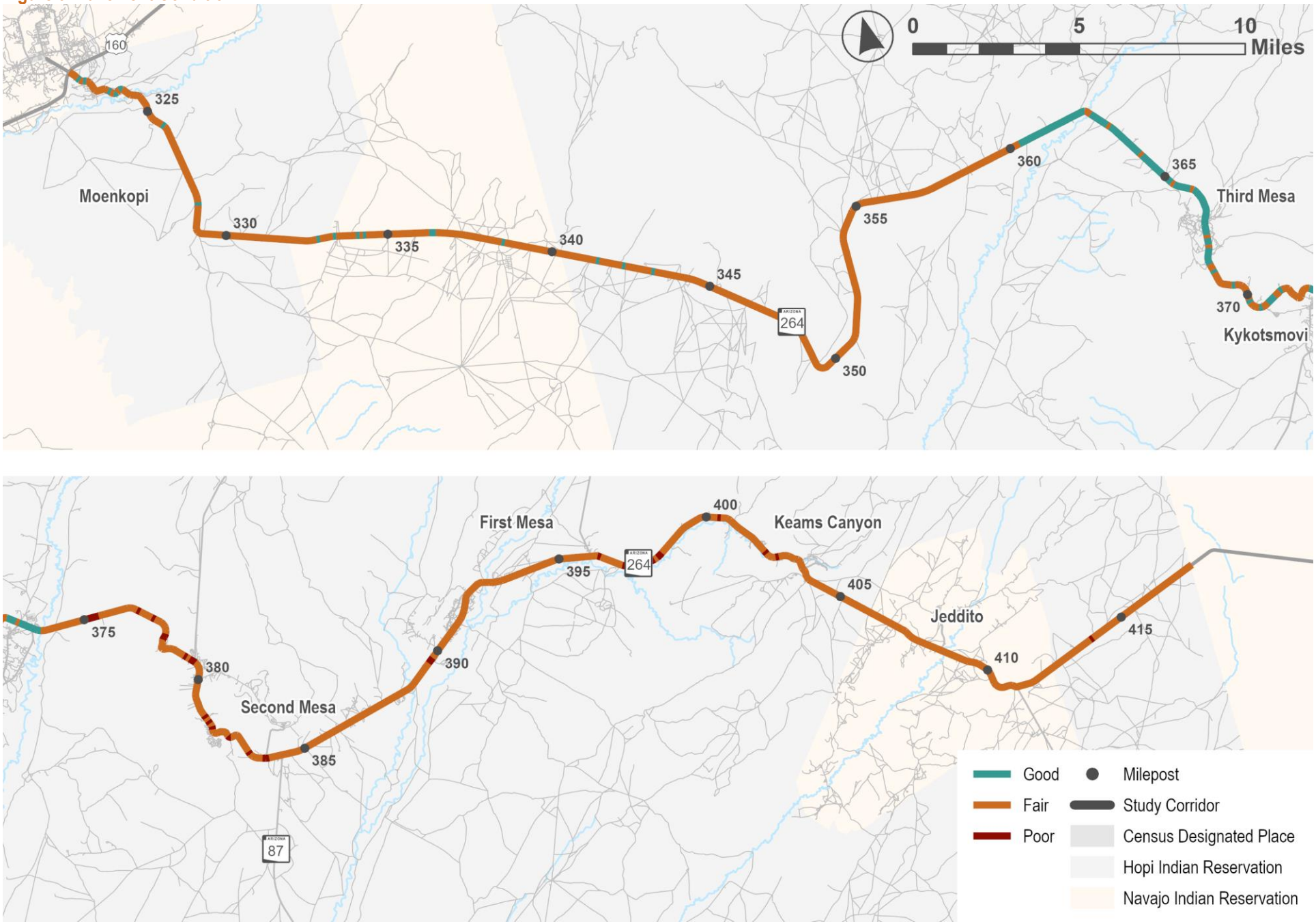
MP Bounds	Direction	Shoulder Width
322.0 - 333.5	Eastbound	2 ft
322.0 – 338.5	Westbound	0 ft
333.5 – 334.1	Eastbound	0 ft
334.1 – 334.2	Eastbound	6 ft
334.2 – 334.9	Eastbound	0 ft
334.9 – 335.0	Eastbound	6 ft
335.0 – 338.2	Eastbound	0 ft
338.2 – 338.3	Eastbound	6 ft
338.4 – 338.7	Both	4 ft
338.7 – 349.3	Both	0 ft
349.3 – 362.5	Eastbound	2 ft
349.3 – 362.5	Westbound	0 ft
362.5 – 367.0	Both	0 ft
367.0 – 367.2	Eastbound	4 ft
367.0 – 367.2	Westbound	2 ft
367.2 – 373.5	Both	2 ft
373.5 – 373.9	Both	4 ft
373.9 – 381.2	Both	0 ft
381.2 – 382.5	Both	2 ft
382.5 – 388.6	Both	0 ft
388.6 – 388.8	Both	4 ft
388.8 – 389.5	Both	0 ft
389.5 – 390.8	Eastbound	4 ft
389.5 - 390.6	Westbound	0 ft
390.6 – 390.8	Westbound	4 ft
390.8 – 391.8	Both	0 ft
391.8 – 391.9	Both	4 ft
391.9 – 396.0	Eastbound	2 ft
391.9 – 396.0	Westbound	0 ft
396.0 – 408.1	Both	0 ft
408.1 – 409.0	Both	4 ft
409.0 – 417.5	Both	0 ft

Source: Kimley Horn

Figure 8. Cross Section Width (Feet)

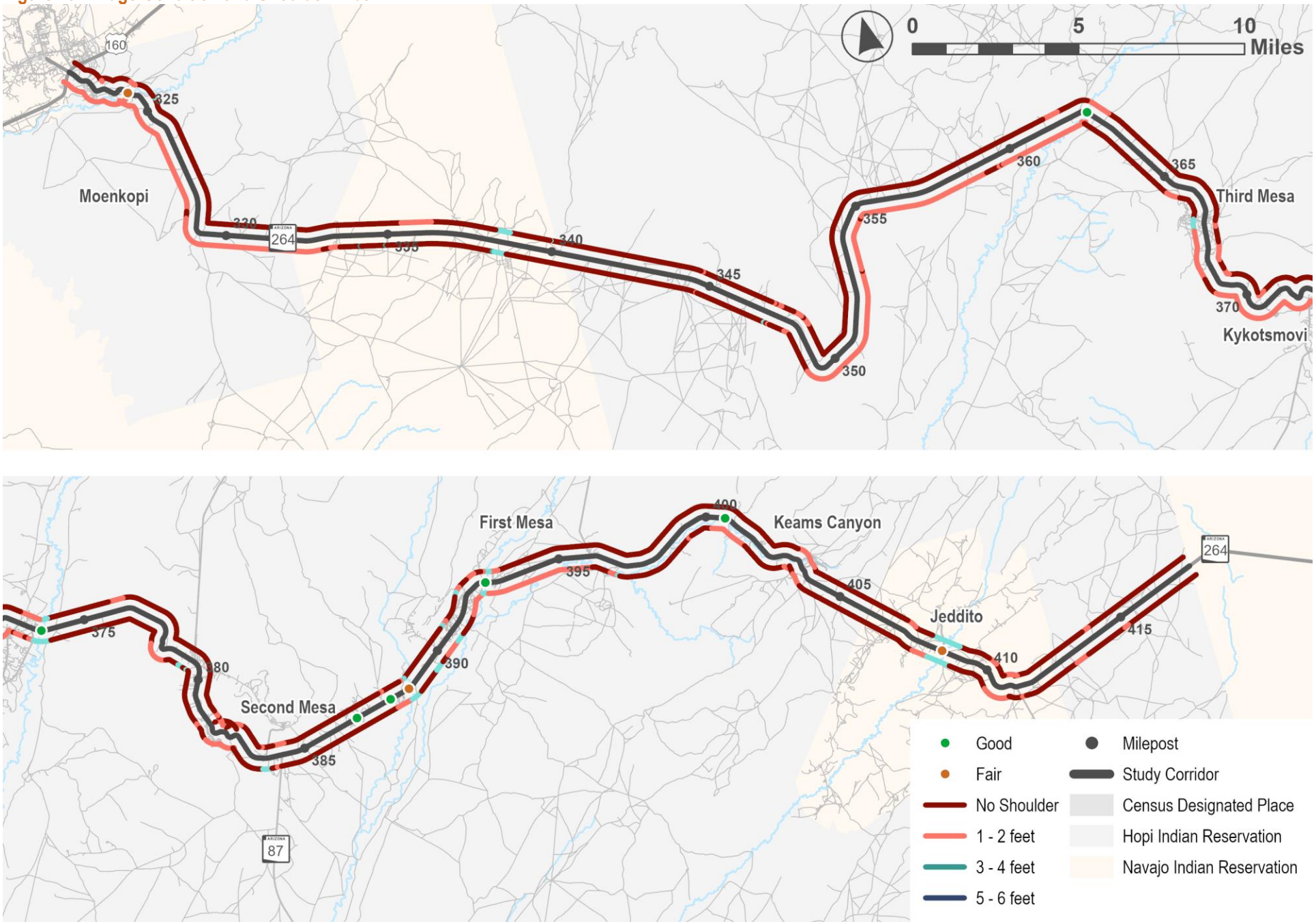
Source: Kimley-Horn

Figure 9. Pavement Condition



Source: ADOT

Figure 10. Bridge Condition and Shoulder Width



Source: Kimley-Horn

Bridge Conditions

Along the corridor, there are six bridges and three culverts in ADOT's Bridge Inventory. Bridge characteristics are shown in **Table 4**. According to ADOT's rating system for bridges and culverts, three of the bridges are in fair condition and the remaining bridges and culverts are in good condition. Bridge locations and ratings are shown graphically in **Figure 10**.

Table 4. Bridge and Culvert Characteristics

Location	Length	Width	Condition	Type
MP 324.0	236	32	Fair	Bridge
MP 362.6	207	30	Good	Bridge
MP 373.6	371	46	Good	Bridge
MP 387.2	18	36	Good	Culvert
MP 387.9	30	28	Good	Culvert
MP 388.5	228	46	Fair	Bridge
MP 392.6	250	46	Good	Bridge
MP 400.5	42	32	Good	Culvert
MP 408.4	297	46	Fair	Bridge

Source: Kimley Horn

TOPOGRAPHY

The corridor is primarily characterized by mild rolling terrain with occasional steel, curvy alignments. Corridor topography changes are characterized below and shown in **Table 5** and **Figure 11**. Locations with steep terrain and curvy alignment can cause immense safety concerns if countermeasures are not implemented.

- **Flat Terrain.** Areas that are flat with little change in elevation.
- **Mild Rolling.** Areas where the terrain elevation changes gradually
- **Steep Terrain**. Areas where the terrain elevation changes quickly

Table 5. Topography Characteristics

Begin (Milepost)	End (Milepost)	Character Description
322.6	324.0	Steep Terrain
324.0	338.6	Mild Rolling w/ some curvy alignment
338.6	339.1	Steep Terrain
339.1	347.5	Mild Rolling
347.5	348.3	Steep Terrain w/ some curvy alignment
348.3	368.4	Mild Rolling w/ some curvy alignment
368.4	372.3	Steep Terrain w/ some curvy alignment
372.3	377.9	Mild Rolling
377.9	383.5	Steep Terrain w/ some curvy alignment
383.5	402.0	Mild Rolling w/ some curvy alignment
402.0	404.0	Steep Terrain w/ some curvy alignment
404.0	417.5	Mild Rolling

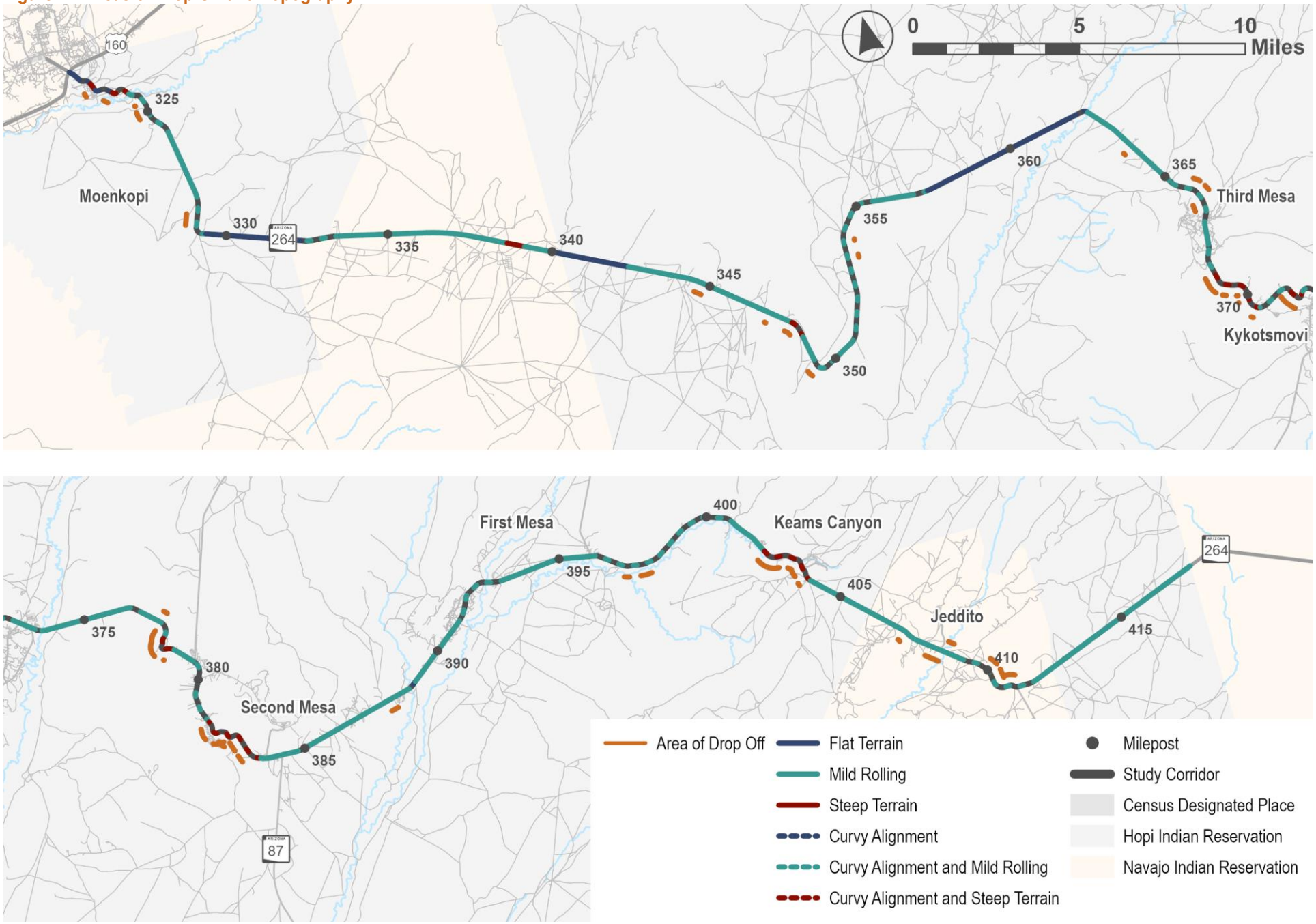
Source: Kimley Horn

Areas of Drop Off

There are sections of terrain along the corridor that prevent vehicles from pulling off due to the risk of falling from a drop off. Areas of drop off are concentrated where the corridor curves due to terrain changes. **Figure 11** shows the areas of drop off as well as the topography. Major areas of drop off include:

- MP 322.8 – MP 329.0
- MP 344.5 – MP 353.8
- MP 363.7 – MP 372.1
- MP 377.3 – MP 383.3
- MP 387.8 – MP 388.1
- MP 397.0 – MP 404.0
- MP 407.1 – MP 411.1

Figure 11. Areas of Drop Off and Topography



Source: Kimley-Horn

4. Roadway Context

The study corridor and surrounding land was reviewed to understand how the corridor interacts with the adjacent areas and communities.

LAND USE AND KEY ACTIVITY CENTERS

The Hopi Tirbal Council maintains authority over the land use of the reservation and Tribal properties. Villages along the corridor are comprised of residential homes, agriculture, historic and cultural facilities, and administrative/institutional facilities. Commercial land uses are present in some locations along SR 264 but are not found in every village.

Activity centers, including Tribal facilities, shopping centers, schools, and medical centers, were identified along the study corridor and are generally concentrated in the Village areas. Activity center hot spots and significant residential areas are shown in **Figure 12**. There is a large concentration of both the activity centers and residential areas in Moenkopi and along SR 264 from Third Mesa to just east of First Mesa, near the Hopi Junior Senior High School. Although the east portion of the corridor is less dense, Keams Canyon and Jeddito have residential developments and schools.

LAND OWNERSHIP

The study corridor is under the jurisdiction of ADOT although the roadway is within the Hopi Tribe and intersects with two sections of the Navajo Nation. Land surrounding the corridor is owned by the Hopi Tribe and Navajo Nation.

FUNCTIONAL CLASSIFICATION

ADOT groups Arizona's roadway network into a hierarchical functional classification system based on the characteristics of the roadway, as well as the type of service the roadway is intended to provide. The transportation system is organized into the following functional classifications:

- **Freeway.** Full access control, high speed, long-distance travel
- **Principal Arterial.** High speeds and long, uninterrupted travel
- **Minor Arterial.** Slower Speeds than principal arterials, provide connections between principal arterials
- **Major Collector.** Collects traffic from local roads, distributes to arterials
- **Minor Collector:** Collects traffic from local roads, distributed to arterials or major collectors
- **Local:** Provides access to land, little or no through traffic, slow travel speeds

The federal functional classification for the study corridor identifies SR 264 as a minor arterial. **Figure 13** shows the functional classifications on and surrounding the study corridor.

ACCESS MANAGEMENT

There 323 access points along the study corridor, 206 of which are private driveways, with the remainder being roadway intersections. Of the 206 private driveways, 113 are dirt driveways and 93 are paved with asphalt. Dirt driveways are concentrated between MP 365 and MP 405.

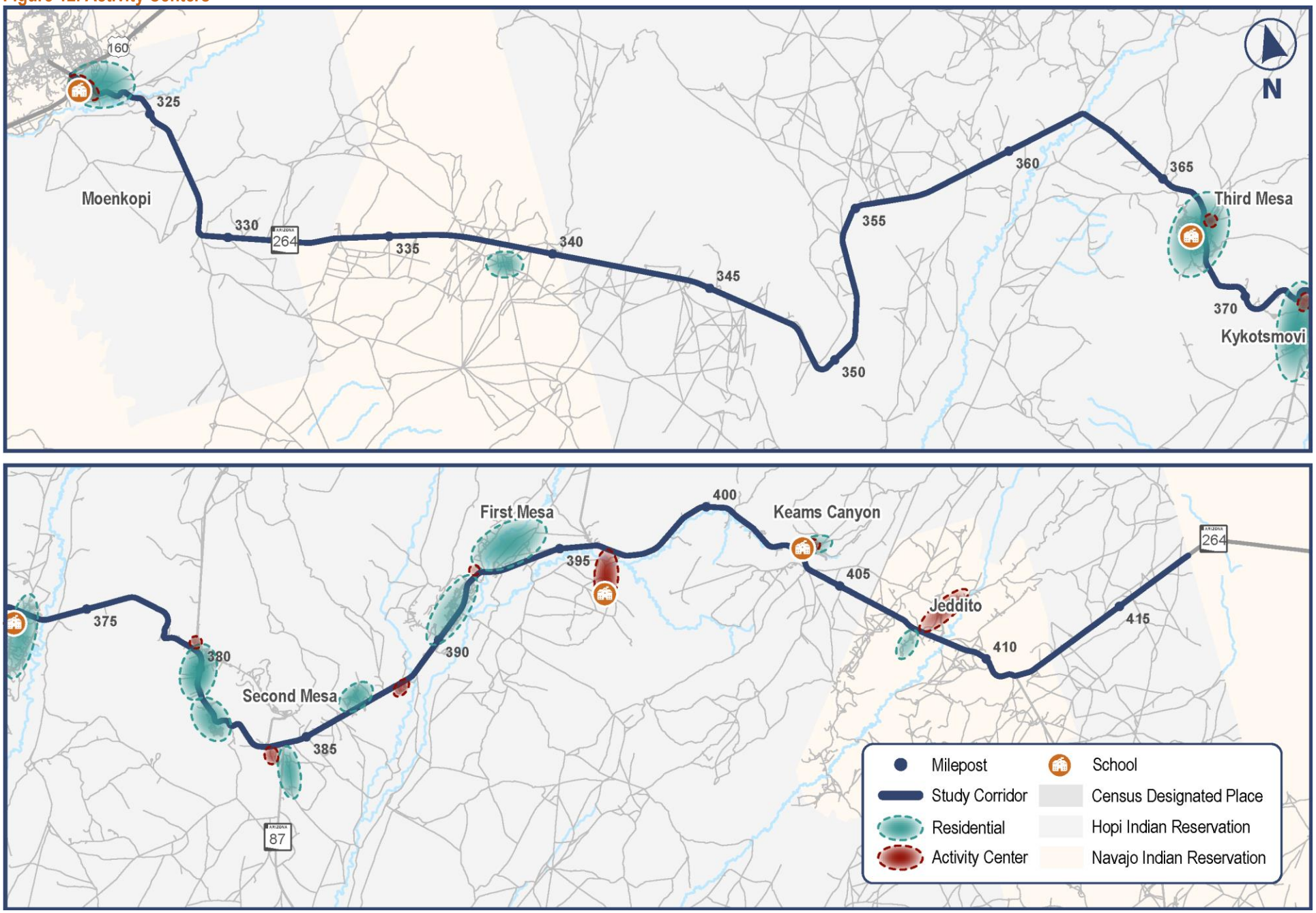
Too many driveway accesses too close together increases the number of conflict points for vehicles, pedestrians, and cyclists, leading to unsafe conditions. The areas along the corridor with a high concentration of close driveways are also commonly where there are topographic changes, increasing safety concerns for users. **Figure 14** shows distances between access points along the corridor. Areas with a high number of access points closer than ¼ mile should be reviewed to potentially improve access management. These areas include:

- MP 367 – MP 368.5 (23 access points)
- MP 378.5 – MP 381.5 (44 access points)
- MP 384 – MP 393 (80 access points)
- MP 400 – MP 403 (18 access points)

SPEED LIMIT

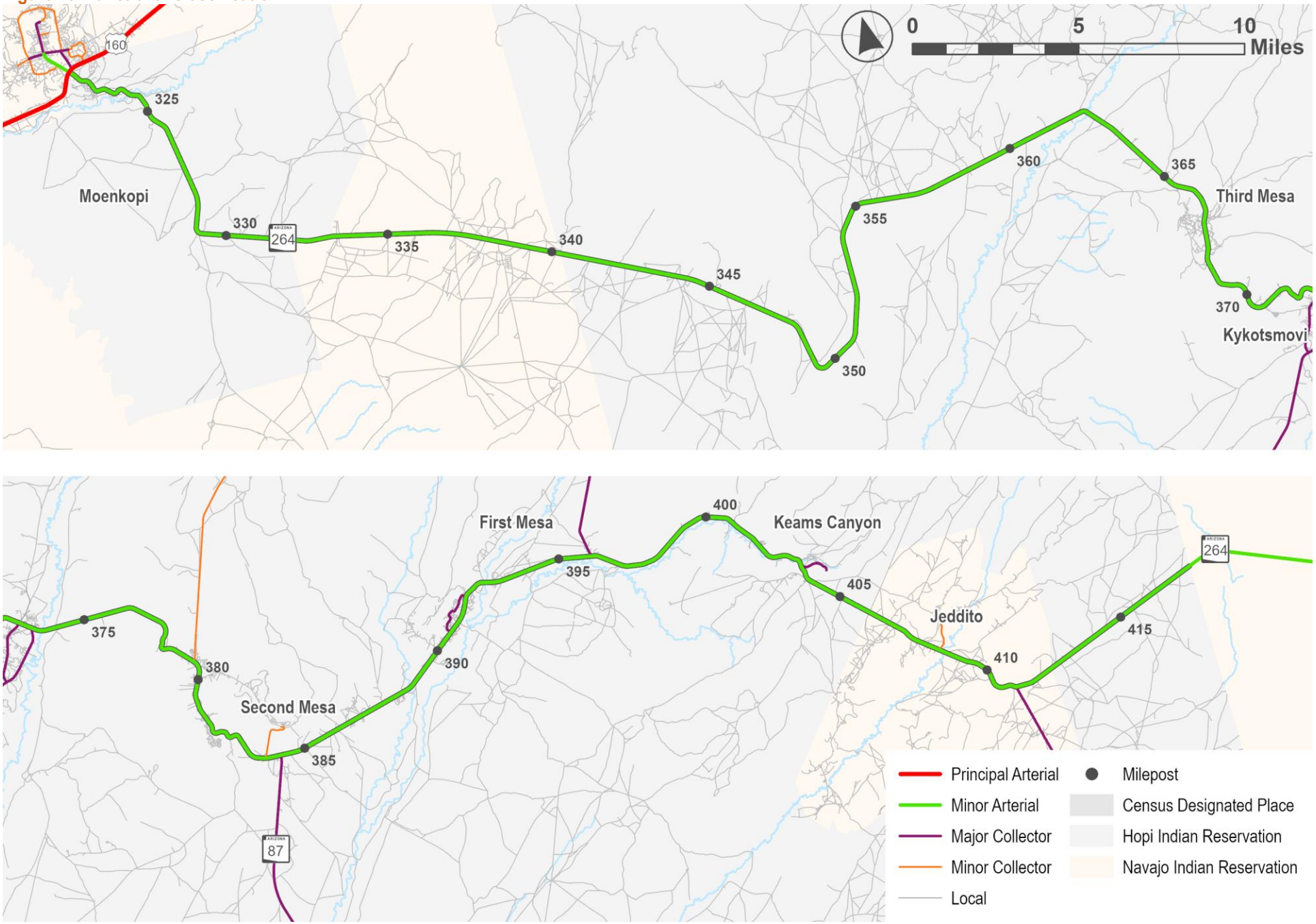
Along the corridor the speed limit ranges from 35 mph to 65 mph. Speed limits that are less than 40 mph are located in Moenkopi and in Keams Canyon. Over half of the study corridor has a speed limit of 65 mph. The breakdown of the speed limits along the corridor can be seen in **Figure 15**.

Figure 12. Activity Centers



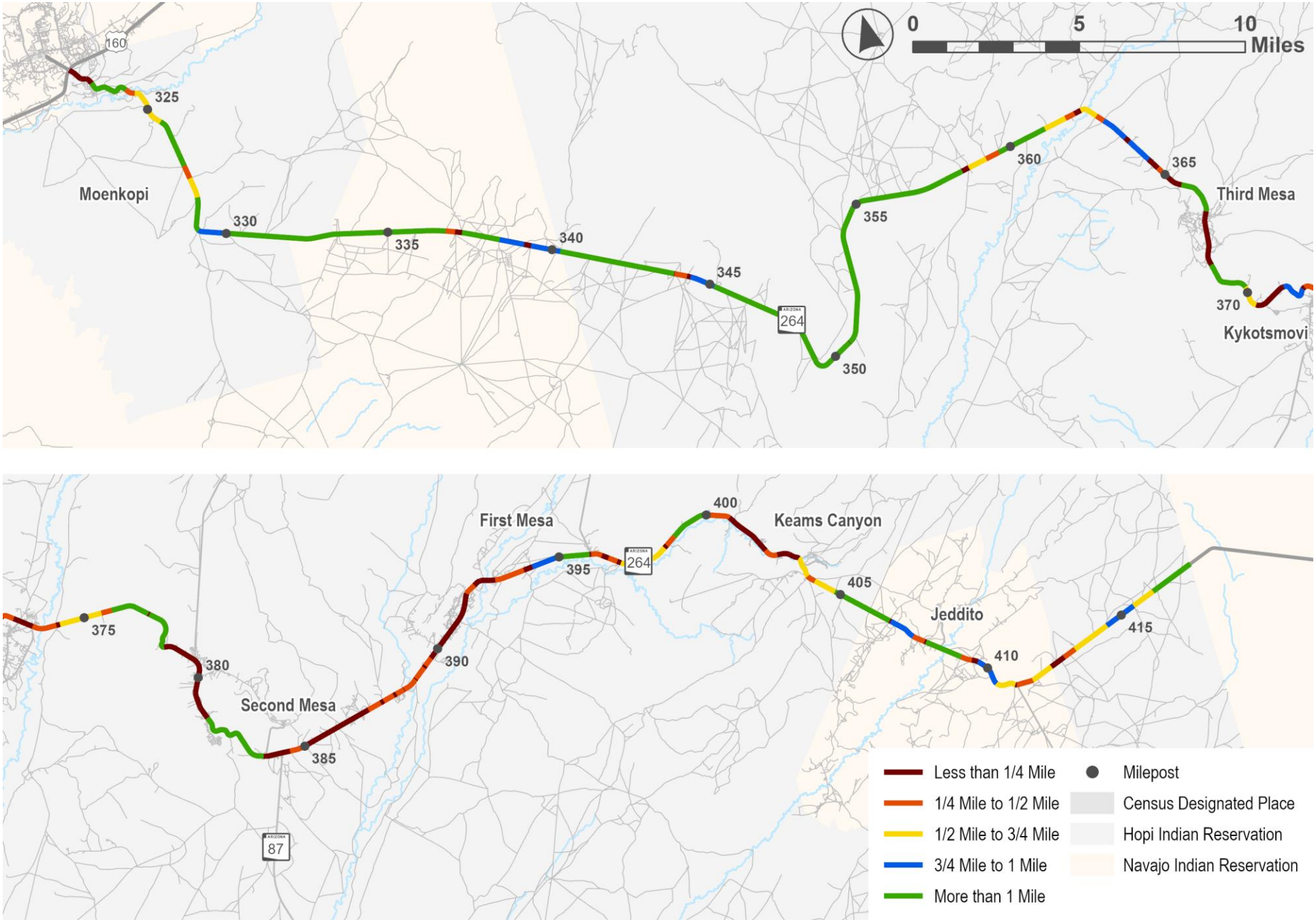
Source: Kimley-Horn

Figure 13. Functional Classification



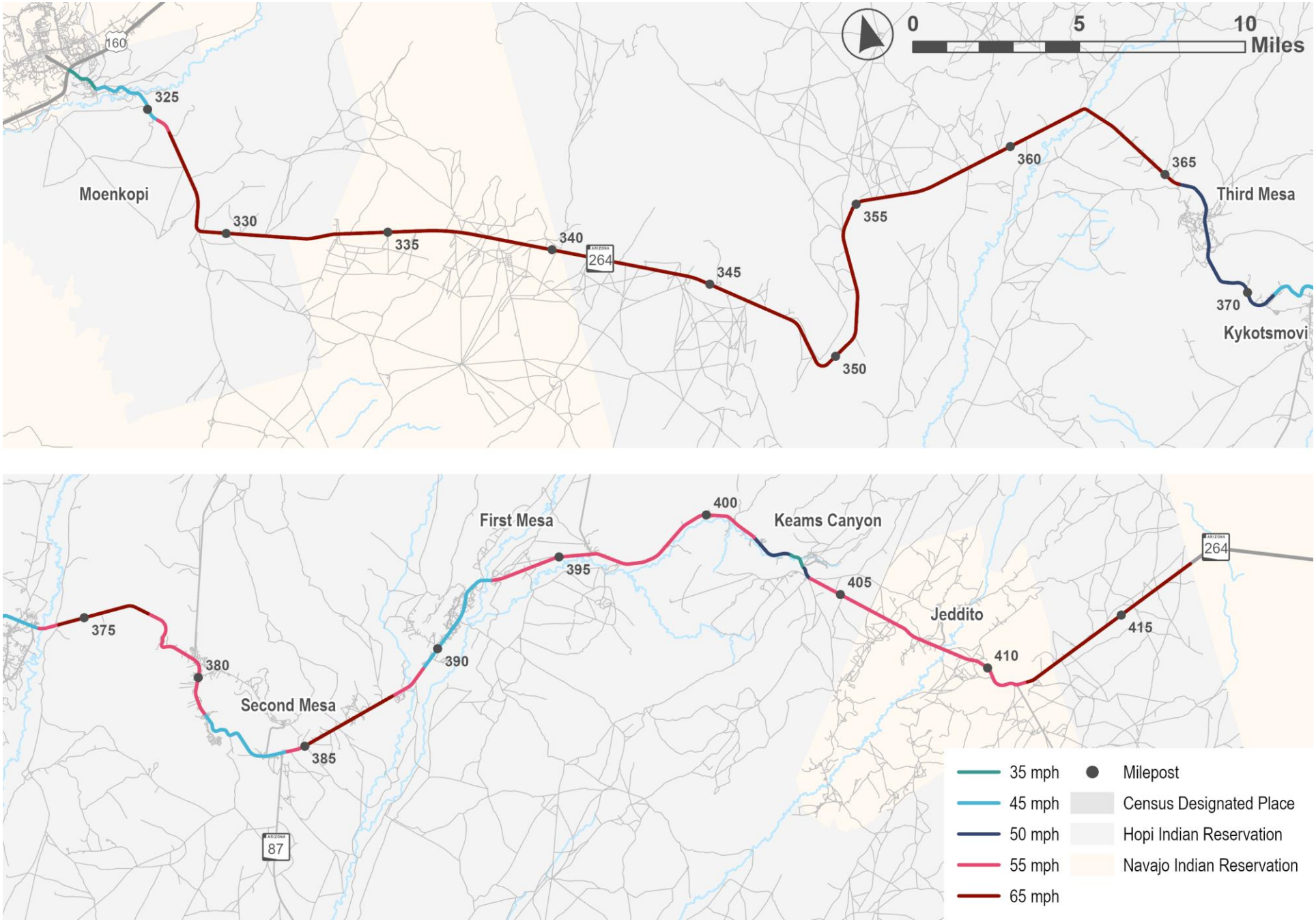
Source: ADOT

Figure 14. Access Management



Source: Kimley-Horn

Figure 15. Speed Limit Zones



Source: Kimley-Horn

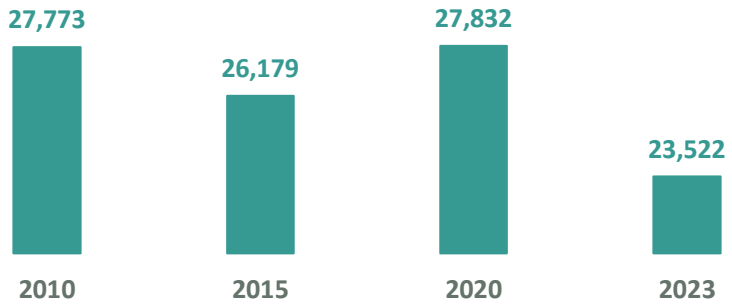
5. Socioeconomic Characteristics

Population, employment, housing conditions, and demographics help define transportation needs and decisions for the community. As these characteristics change, the demand on the corridor changes with them. This section summarizes the current population, employment, and other factors to provide a projection of future population and employment along the corridor.

POPULATION

Population by census tract along the corridor was assessed from the U.S. Census Bureau. From 2010 to 2023, the population along the corridor has remained steady with a small increase from 2010 and 2020. The population has started to decline following 2020, decreasing by 15% from 2020 to 2023. Population changes over time are shown in **Figure 16**.

Figure 16. Study Corridor Population Growth (2010-2023)



Source: U.S. Census Bureau

EMPLOYMENT

Per the Maricopa Association of Governments (MAG) Statewide Employment Database, there were 669 employees along the corridor in 2019. Employment along the corridor in 2019 was examined by reviewing locations of employment within two miles of the corridor whose access roads are served by SR 264. There were several employment locations that were left out that fell within the buffer zone on the west side of US 160 in Tuba City as those locations are more likely to have employees travel via US 160 than SR 264. Major employers along the corridor are shown in **Table 6**.

Table 6. Number of Employees by Employer

Employer	Number of Employees (2019)
Moenkopi Legacy Inn and Suites	20
Hopi Mission School Inc	24
Bureau of Indian Affairs	24
Hopi Tribal Council	26
Moenkopi Day School Inc	30
Hopi Assisted Living Facility Inc	31
Hopi Twin Arrows Limited Partnership	32
Cedar Public School District 25	48
Hopi Traders Inc	60
Hopi Tribe	300

Source: MAG Employment Data

HOUSING CONDITIONS

In 2023, there were 3,187 housing units in the Hopi Tribe, according to the US Census Bureau. Of those units, 2,421 were occupied and the other 766 were vacant.

ENVIRONMENTAL JUSTICE

Identifying disadvantaged communities helps to understand areas that may be burdened or underserved to inform strategic and fair transportation investments for the SR 264 corridor. This process helps to understand the needs that are not being met for the community.

Federally Designated Environmental Justice Populations

Environmental Justice (EJ) populations are groups that are disproportionately impacted by environmental and social inequalities. The Climate and Economic Justice Screening Tool (CEJST) is a United States Department Transportation (USDOT) tool that considers climate change, energy, health, housing, legacy pollution, transportation, waste and wastewater, and workforce development to determine if an area is considered disadvantaged. According to the CEJST all of the census tracts adjacent to the corridor are designated disadvantaged.

Vulnerable Populations

The vulnerable population analysis consists of five socioeconomic conditions that were collected by the U.S. Census Bureau by block group. The assessed population groups in the study area include:

Persons with Limited English Proficiency (LEP). Identification of LEP persons can be informative for the purpose of devising appropriate strategies for meaningful public involvement and ensuring LEP persons are able to weigh in on transportation decisions. LEP Persons comprise approximately 11.4% of the study area population.

Minority Populations. ADOT and the Federal Highway Administration (FHWA) define four minority groups, as follows:

- **Black** – a person having origins in any of the black racial groups of Africa.
- **Hispanic** – a person of Mexican, Puerto Rican, Cuban, Central or South American. Or other Spanish culture or origin, regardless of race.
- **Asian or Pacific Islander**– All persons having origins in any of the original peoples of the Far East, Southeast Asia, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa.
- **American Indian or Alaskan Native** – All persons having origins in any of the original people of North America

The minority populations comprised 98.7% of the study area population, with American Indian or Alaskan Native accounting for the vast majority of the population.

Low-Income Population. Low-income populations are those whose median annual household income is at or below the Department of Health and Human Services poverty guidelines for a family of four, which is currently $32,150. Approximately 35% of households in the study area are low-income households.

Internet Availability. The ability to have reliable internet connectivity is a challenge in rural areas throughout Arizona and the United States. Approximately 48% of residents in the study area do not have reliable internet access.

Zero-Vehicle Households. Households without access to a personal vehicle can exist for several reasons, including residents having a disability, preferring not to drive, or are not being able to afford the expense of owning a vehicle. Regardless of the reason, these households are reliant on alternative methods of transportation, such as transit, active transportation modes, or rides from family and friends. Approximately 17% of the study area population does not have access to a personal vehicle.

The analysis from both the Vulnerable Populations analysis and CEJST show that all census tracts adjacent to the corridor are designated as disadvantaged populations.

6. Roadway Usage

Current transportation usage was assessed by mode to determine if there are congested locations on SR 264.

VEHICULAR TRAFFIC

Average daily traffic (ADT) along SR 264 was collected in April of 2025. Daily traffic volumes along the corridor are shown in **Figure 18** and were collected at the following locations*:

- West of Second Mesa Day School
- Moenkopi Village Area
- Kykotsmovi Village Area
- West of Sunlight Mission Road
- West of BIA Route 60
- East of San Clan Intersection
- West of Keams Canyon Area
- West of SR 264/Jeddito School Road

**Note: the ADT reported on SR 264 in Moenkopi was supplemented from traffic counts collected in 2023, near MP 322.5.*

Traffic volumes along the corridor range from 1,300 to just under 3,000 vehicles per day. Volumes are highest in Second Mesa, close to the intersection with SR 87 and in Moenkopi, near US 160. Traffic counts decrease east of MP 400, near Keams Canyon and Jeddito.

TRUCK TRAFFIC

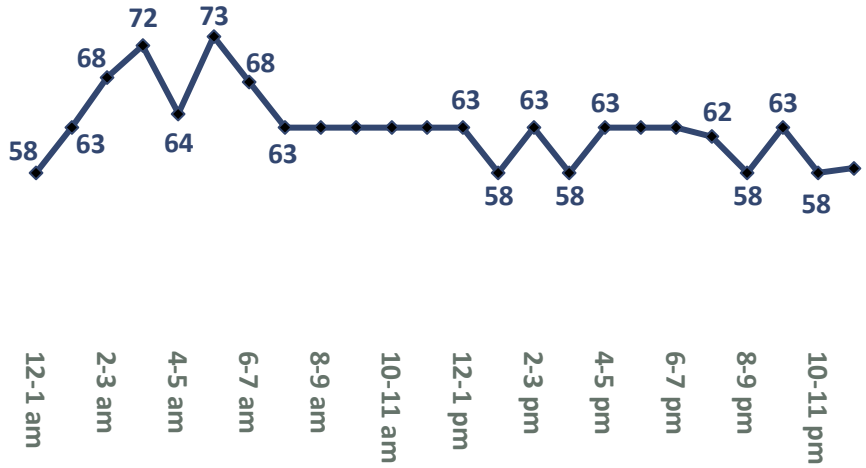
The corridor is a designated freight route by Navajo Nation, identified in the Navajo Long Range Transportation Plan. Truck traffic counts were collected just west of Second Mesa Day School and in Kykotsmovi Village to provide a snapshot of truck usage on the corridor. Daily truck volumes along the corridor reached 77 daily trucks near the intersection of SR 87. Truck traffic at this location interacts with school traffic at the Second Mesa Day School. Truck traffic was typically lower in Kykotsmovi, with a daily truck volume of approximately 45.

SPEED SNAPSHOT

To provide a speed snapshot along the corridor, vehicle speeds were collected just west of Second Mesa Day School, in Kykotsmovi, and in Moenkopi.

Traffic volumes were highest from 7:00 to 8:00 am and from 5:00 to 6:00 pm, during peak commute times. Although the volumes were higher the peak times had similar speeds by the 85th percentile as the rest of the day. It is the early morning hours that have higher speeds in the 85th percentile. The posted speed limit signage at both collection locations is 45 mph and the average speed was 52 mph. **Figure 17** shows the 85th percentile speed per hour at the collection locations.

Figure 17. 85th Percentile Speed by Hour



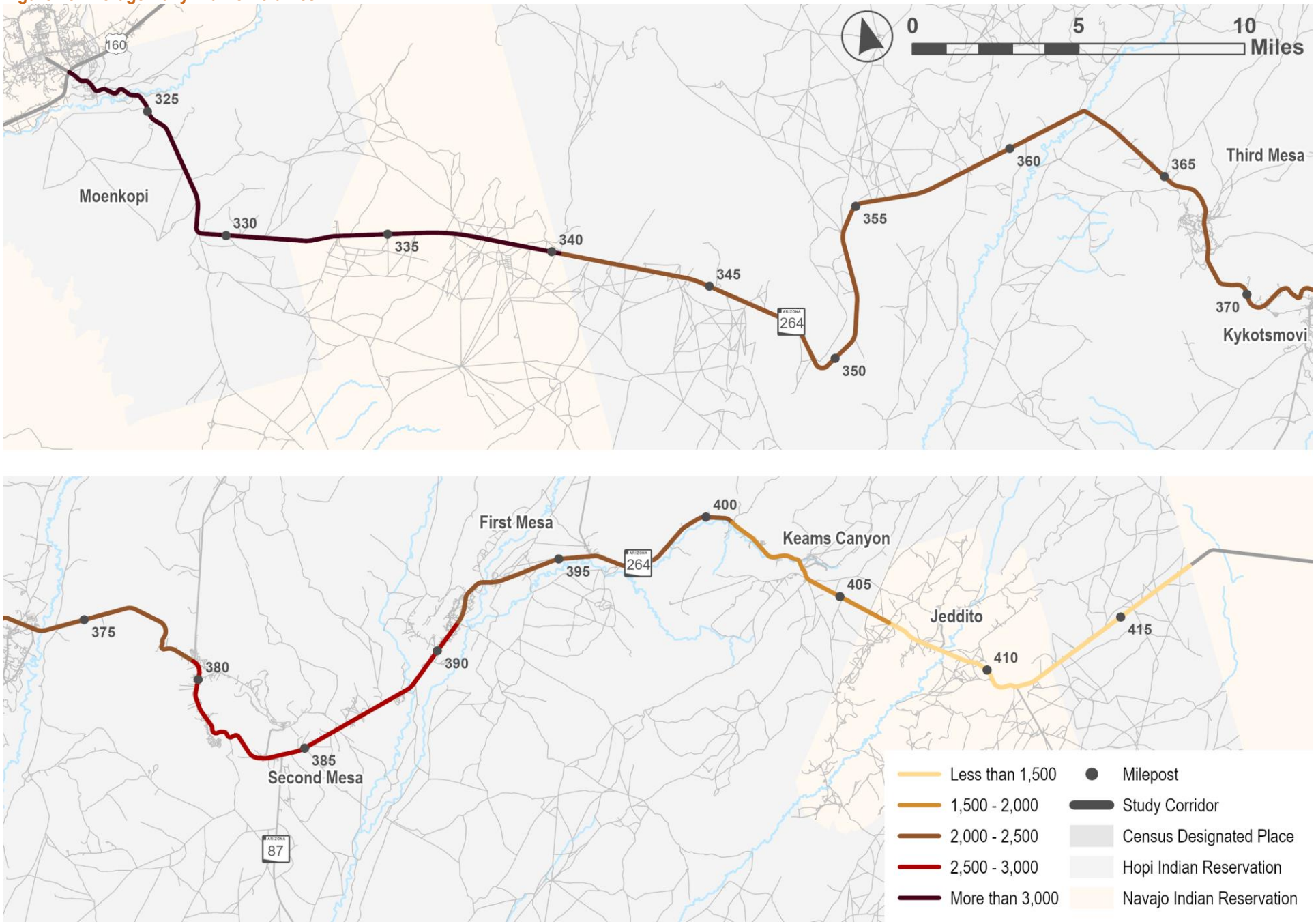
Daily traffic volume, average speed, and average truck volume is shown in **Table 7**.

Table 7. Collected Traffic Data

ID	ADT	Peak Hour Speed	Average Truck Volume
Kykotsmovi Village Area	2,554	60	45
West of Second Mesa Day School	2,247	65	39
West of Sunlight Mission Rd	2,983	-	-
West of BIA Rte 60	2,289	-	-
East of San Clan Intersection	2,170	-	-
West of Keams Canyon	1,703	-	-
West of Jeddito School Rd	1,355	-	-
Moenkopi*	3,795	45	64

**- Supplemental data location* *Source: ADOT ADTs*

Figure 18.Average Daily Traffic Volumes



Source: ADOT, Hopi Tribe

7. Safety

Safety along the study corridor was analyzed for the most recent five years of crash data available (2020-2024) from the ADOT Arizona Crash Information System (ACIS), the Hopi Law Enforcement Services, and the Navajo Nation Police Department to determine hot spots that may require safety improvements.

CRASH DATA AVAILABILITY

Along the SR 264 corridor, crashes have the potential to be responded to by Hopi Law Enforcement Services, the Navajo Nation Police Department, and the Arizona Department of Public Safety (DPS) depending on who is closest to the crash when it is reported. Of these three agencies, only DPS has historically reported crash data to ACIS. Hopi Law Enforcement Services is now reporting to ACIS, but historical crash data is incomplete in the ACIS database. The Navajo Nation Police Department does not currently report crashes to ACIS.

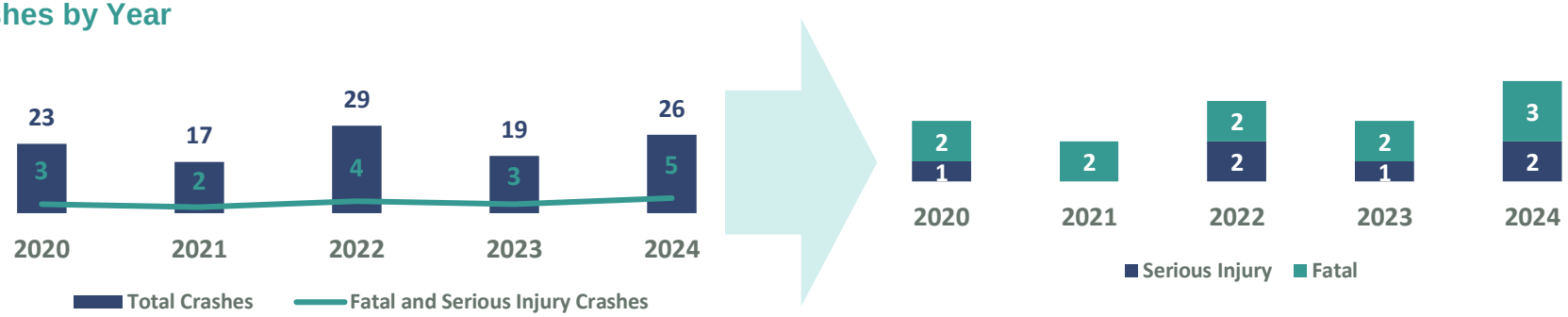
To get a complete picture of crash data along the SR 264 corridor, data was assembled with input from all three sources for 2020-2024. Both Hopi Law Enforcement Services and the Navajo Nation Police Department provided historical crash data to supplement what is available in the ACIS database. However, due to mismatches in the crash reports from each data source, some historical crash data does not have details on specific characteristics, which are reported as 'unknown' in the subsequent crash characteristic analyses.

SAFETY SNAPSHOT

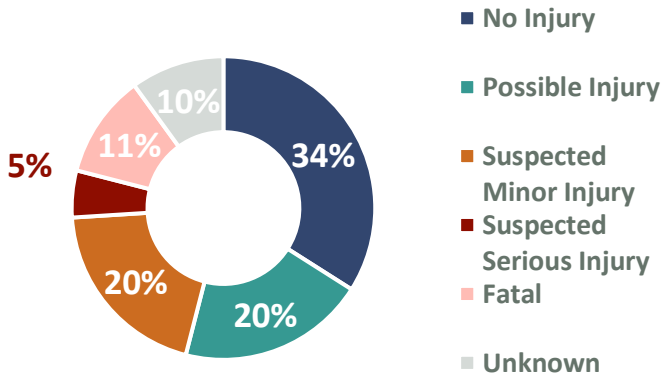
A total of 114 crashes were reported from 2020 to 2024 along the SR 264 corridor. It is important to note that there are likely additional crashes not captured in this dataset due to lack of crash data sharing. Some crash data reports had limited details regarding the crash characteristics; crashes with limited information are shown as ‘unknown’ in the safety snapshot (**Figure 19**) if the data was not available. **Figure 20** shows crash density along the corridor.

Figure 19. Safety Snapshot

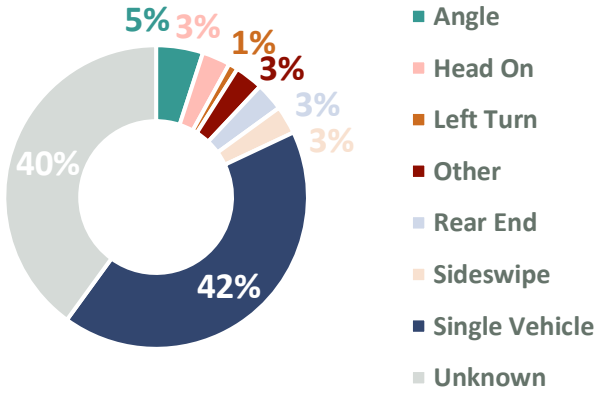
Crashes by Year



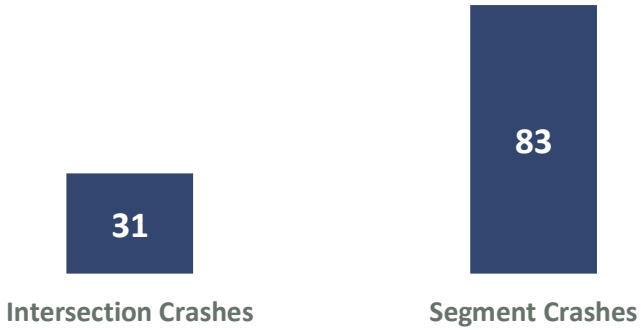
Crashes By Injury Level



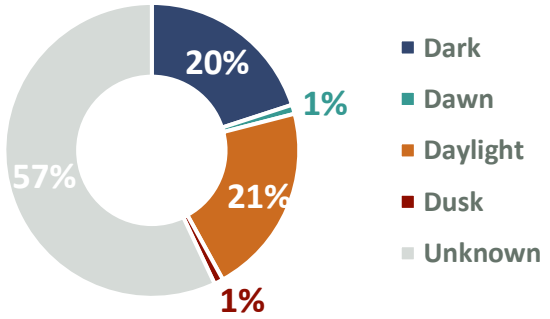
Top Manner of Collision



Crashes by Location

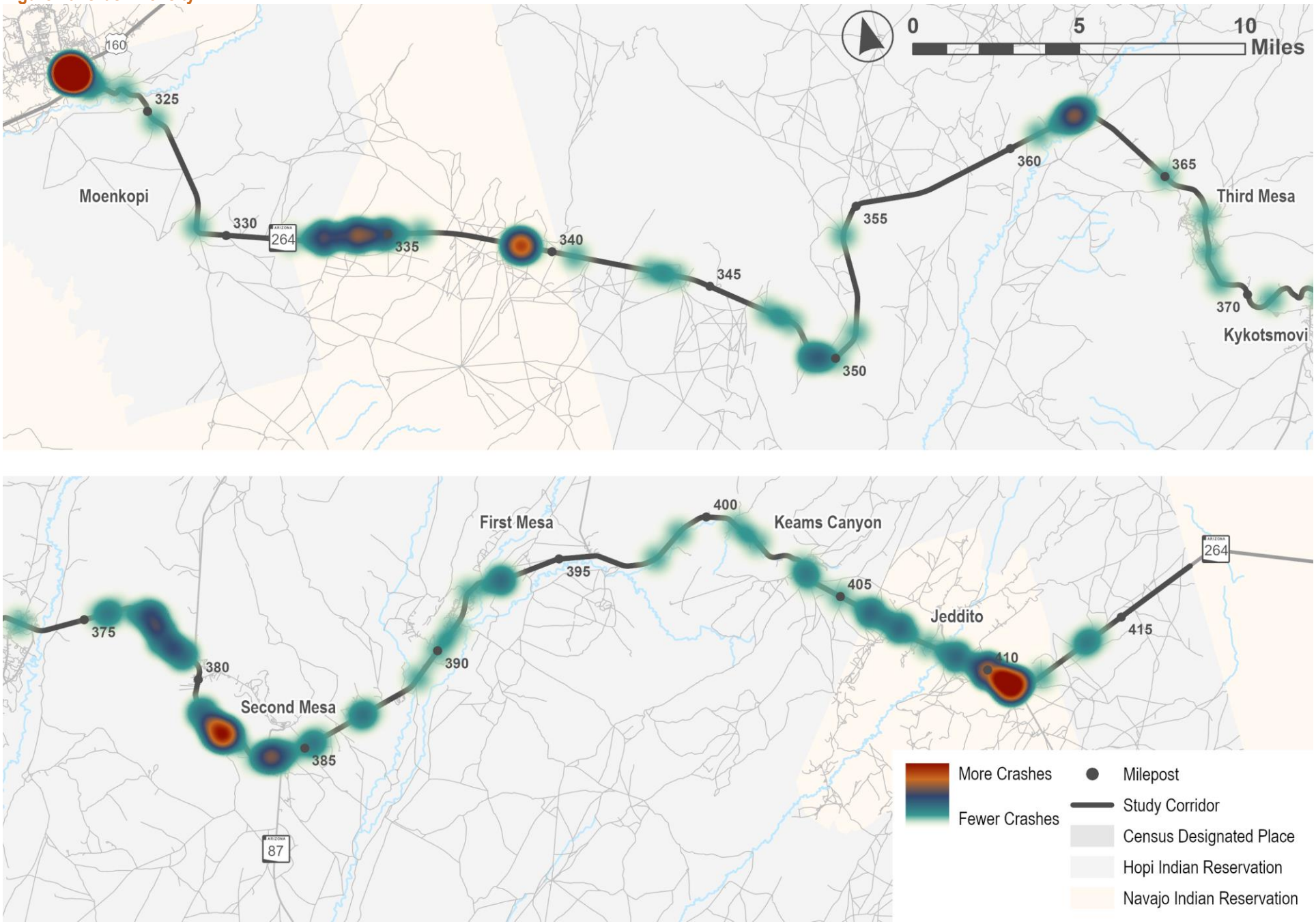


Crashes by Light Condition



Source: ADOT, Hopi Tribe, Navajo Nation, Kimley Horn

Figure 20. Crash Density



Source: ADOT, Hopi Tribe, Navajo Nation, Kimley Horn

Intersection Crashes

Crashes within 500 feet of each intersection were analyzed to determine possible crash-prone intersections along the study corridor. Of all the crashes along the corridor, 23% of crashes occurred at intersections. Crash rates were analyzed to assess the number of crashes at the intersection compared to traffic exposure.

Crash rates consider the amount of traffic at an intersection compared to the crash frequency. The equation below shows the formula used to develop the intersection crash rates:

$$R = \frac{1{,}000{,}000\ x\ C}{365\ x\ N\ x\ V}$$

Where:

- R= Crash rate for the intersection expressed as crashes per million entering vehicles (MEV)
- C=Total Number of intersection crashes in the study period
- N=Number of years of data
- V=Traffic volume entering the intersection daily

Assumptions were made for the traffic volumes entering from roadways that did not have ADT data from ADOT or other sources. For any road that is classified as a 'Local', the assumption was an ADT of 500 and any road designated as a 'Collector' the assumption was an ADT of 1,500. The distribution of crash rates along the corridor are similar to the crash frequencies, with the highest crash frequency intersection being reflected in highest crash rate intersections. The maximum crash rate on the corridor (0.69 crashes per MEV) was at the intersection with US 160. Only two additional intersections that had more than one crash over the five-year analysis period and are shown in **Table 8**. All other intersections had either one or zero crashes. Intersection crash rates are shown in **Figure 21**.

Table 8. Intersections with Notable Crash Rates

Intersection	Crash Rate
US 160	0.68
Indian Rte 62	0.40

Segment Crashes

Segment crashes were reviewed to analyze crash trends outside of the intersections on SR 264. Corridor segment crash trends may have underlying influences, such as capacity or access management deficiencies. Crash rates were also analyzed between each intersection to assess the number of crashes along the segment compared to the traffic exposure.

Segment crashes account for 77% of all crashes along the corridor. Crash frequency was the highest west of Hotevilla-Bacavi from MP 337 to just past MP 361.

Segment crash rates are expressed in terms of crashes per 100 million vehicle miles traveled (VMT). The equation below shows the formula used to develop segment crash rates:

$$R = \frac{100{,}000{,}000\ x\ C}{365\ x\ N\ x\ V\ x\ L}$$

Where:

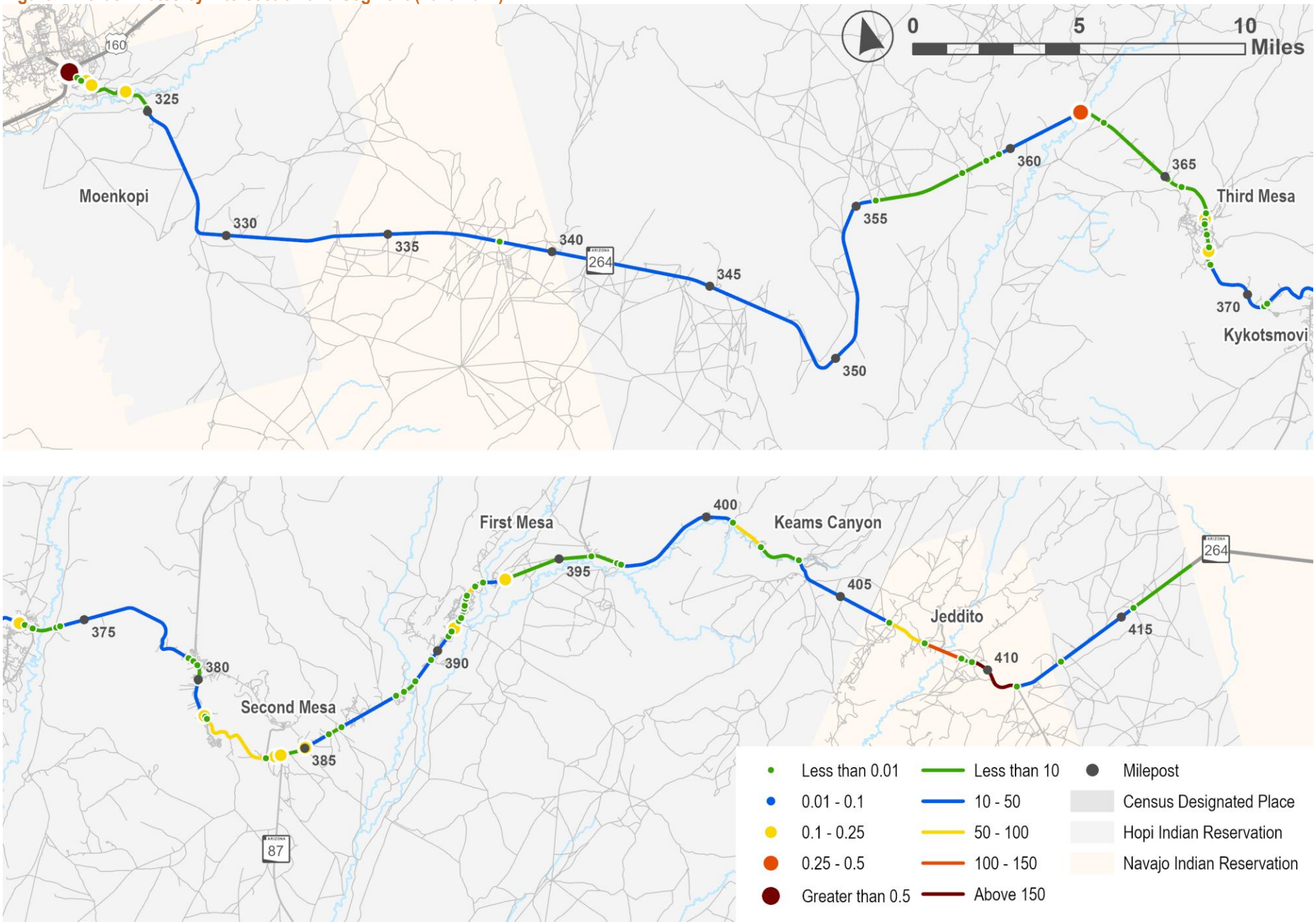
R= Crash rate for the road segment expressed as crashes per 100 Million VMT
C= Total number segment crashes in the study period
N= Number of years of data
V= Number of vehicles per day (both directions)
L= Length of the roadway segment in miles

The highest crash rate along the corridor was observed at just west of the intersection with IR 6. This segment and all others with a crash rate over 50 are shown in **Table 9**. **Figure 21** shows crash rates by segment along the corridor.

Table 9. Segment Crash Rates over 50

Segment MPs	Crash Rate
409.5 – 411.2	257.81
407.8 – 409.2	101.29
383.6 – 384.0	76.52
406.7 – 407.9	65.47
391.9 – 392.4	62.83
381.4 – 383.6	60.86
400.8 – 402.0	57.22

Figure 21. Crash Rates by Intersection and Segment (2020-2024)



Source: ADOT, Hopi Tribe, Navajo Nation, Kimley Horn

8. Future Conditions Analysis

Future projections for population, employment, and traffic usage provide a view to what the future needs of the roadway may look like. This section will review the forecasted data and provide insights into how they will impact future improvements.

FUTURE SOCIOECONOMIC CONDITIONS

Population

The Arizona Office of Economic Opportunity (OEO) has developed low, medium, and high forecasts for Navajo County, extending to 2060. The OEO does not provide forecasts specifically for Tribal lands. The low projection anticipates a county-wide population decrease of 20% by 2060 while the medium and high forecasts project county-wide population to decrease by 12% and 2% respectively. The forecasted population for Navajo County can be seen in **Figure 22**.

Of the Census Designated Places found along the corridor. five of six have projected populations from the OEO. The five locations and their forecasted changes are:

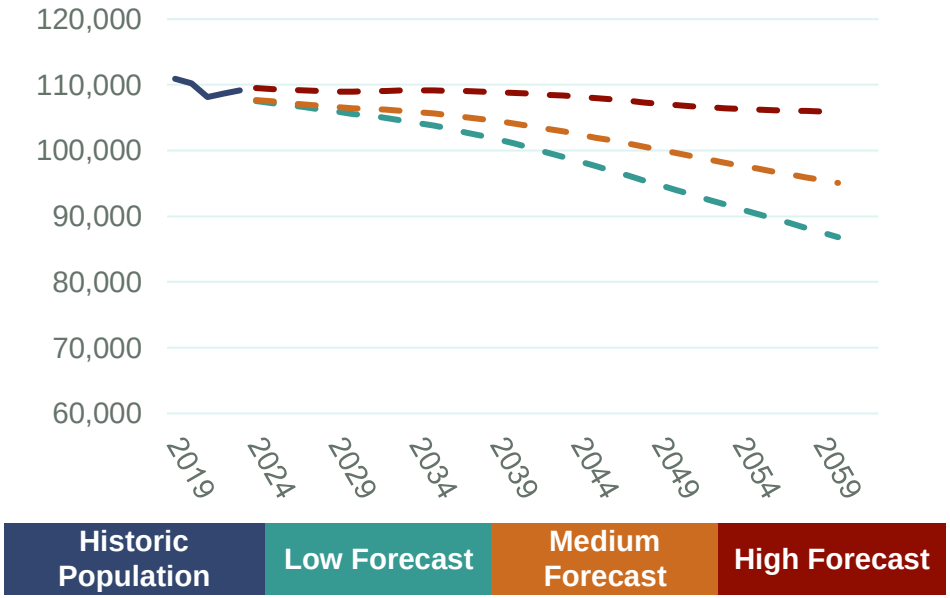
- First Mesa: 14.9% Decrease
- Hotevilla-Bacavi: 14.9% Decrease
- Kykotsmovi Village: 14.8% Decrease
- Moenkopi: 4.3% Increase
- Second Mesa: 14.8% Decrease

Figure 23 shows the forecasted population of these locations.

Employment

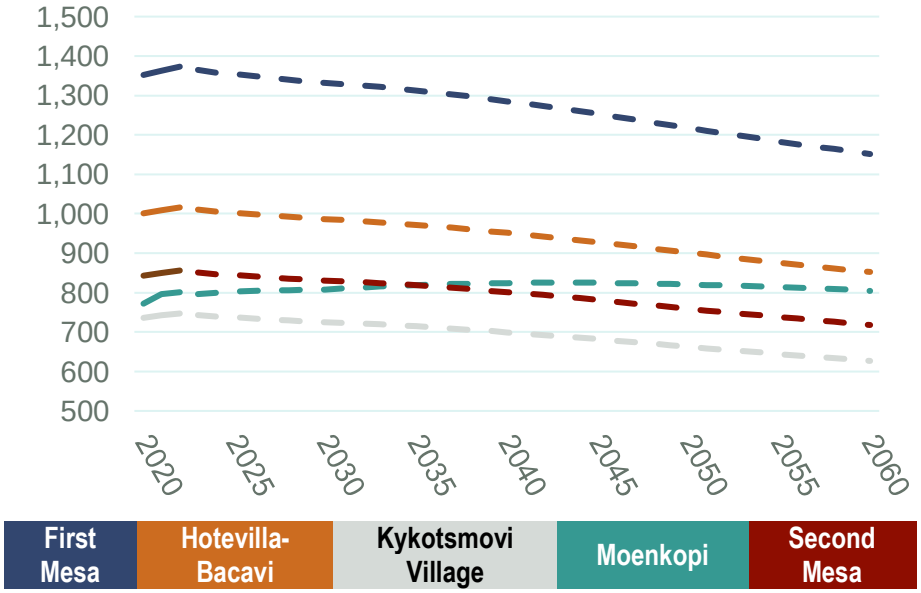
Forecasted employment can be assessed based on projected population trends. The forecasted employment is based on the medium Navajo County forecasted population growth rate (-12%) applied to the number of employees from the MAG Employment data (669). The total forecasted employment along the corridor in 2060 is 588, a reduction of 81 jobs along the corridor.

Figure 22. Navajo County Forecasted Population Changes



Source: Arizona Office of Economic Opportunity

Figure 23. Census Designated Place Forecasted Population Changes



Source: Arizona Office of Economic Opportunity

FUTURE ROADWAY USAGE

Projected traffic volumes were identified using ADOT's Average Annual Daily Traffic Report (2023), projecting corridor volumes out to 2043.

Projected traffic volumes along the corridor show volumes increasing by an average of 234 daily vehicles. From SR 87 east to First Mesa, near MP 392, traffic volumes along the corridor is expected to grow the most with close to 350 new daily vehicles. **Figure 24** highlights the future traffic volumes for the corridor.

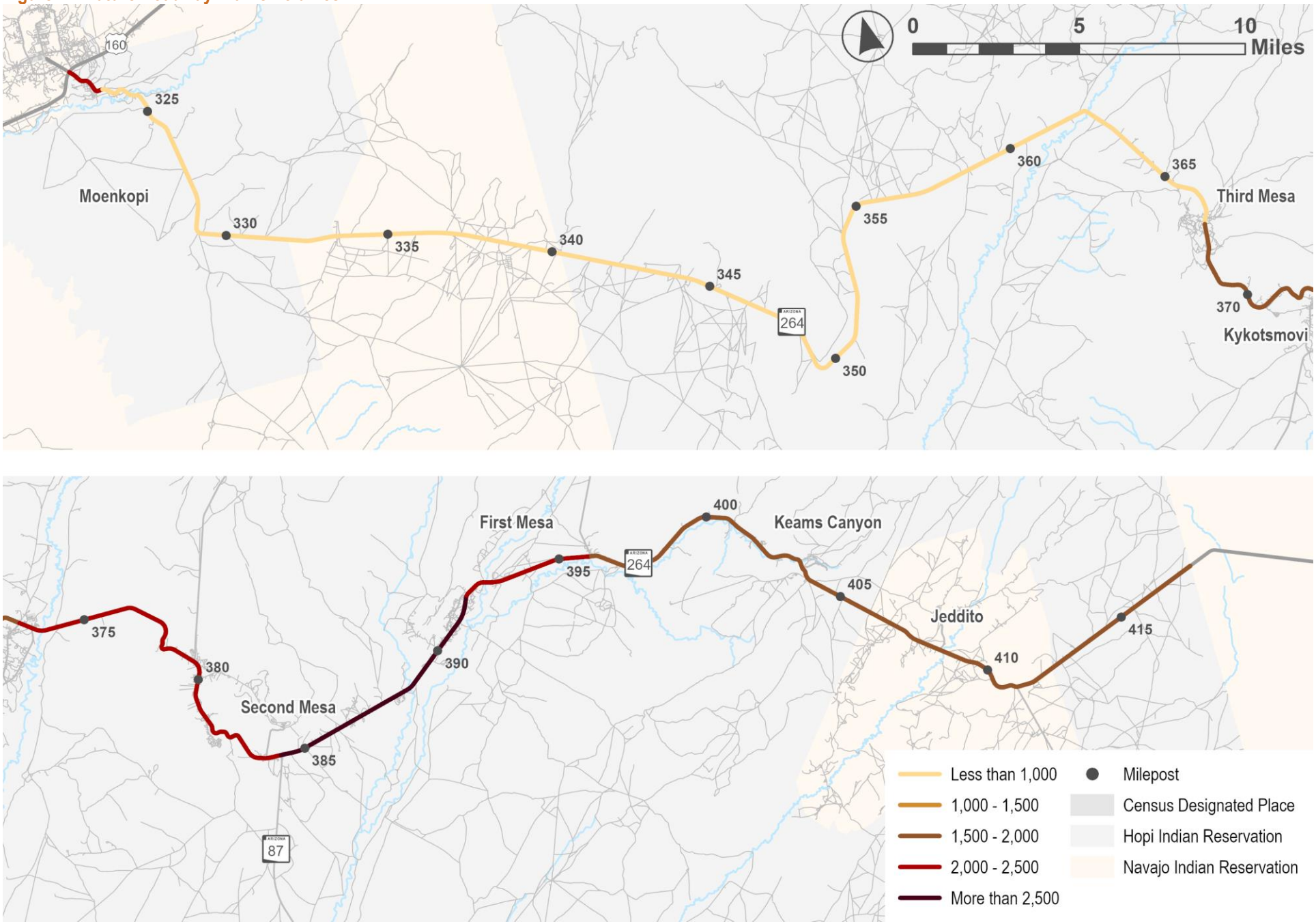
FUTURE SAFETY CONDITIONS

To forecast future safety conditions the existing crash rate for the segments was examined with the forecasted average of daily vehicles. To show a comparison to the previously reviewed five years of crash data, the next five years of data collection shows that some segments are expected to increase while others will decrease. The five largest expected number of crashes by 2030 are shown in **Table 10**. There is an estimated total of 71 expected crashes between 2025 and 2030, a decrease of 16 from the last five years.

Table 10. Expected Crash Numbers by 2030

Segment MPs	Current Crash #	Future Crash #
409.5 – 411.2	11	14
374.2 – 379.2	9	9
381.3 – 383.7	7	6
338.3 – 355.6	15	5
403.2 – 406.7	5	5

Figure 24. Future Roadway Traffic Volumes



Source: Kimley Horn

9. Environmental Overview

This Environmental Overview (EO) includes descriptions of the existing environmental resources within the study corridor. This EO also contains potential known environmental issues, constraints, and opportunities, and will serve as a planning tool during improvement alternatives development and evaluation.

BIOLOGICAL RESOURCES

According to Brown and Lowe's Biotic Communities of the Southwest, the study corridor is within the Plains and Great Basin Grassland, Great Basin Conifer Woodland, and Great Basin Desertscrub biotic communities. From the western end of the study corridor near milepost (MP) 321.97 to approximately MP 365 [1]the corridor alternates through Great Basin Desertscrub and Plains and Great Basin Grassland. From MP 365 to the eastern end of the study corridor near MP 417.58, the corridor alternates between Plains and Great Basin Grassland and areas of Great Basin Conifer Woodland. The elevation within the corridor ranges from 1,500 feet to 2,000 feet above sea level.

Threatened and Endangered Species

Based on a review of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) report, eight federally threatened, endangered, proposed, candidate, or experimental population species have the potential to occur in the project vicinity. The species and their habitat requirements are listed below in **Table 11** and will need to be further evaluated for potential impacts during the environmental clearance process. There is no federally designated Critical Habitat within the study corridor.

Tribal Status Species

The study corridor is located on tribal lands (Navajo Nation between MP 333–340 and MP 406–142 and Hopi Reservation between MP 321–333, MP 341–406, and MP 142–417).

Navajo Nation

The Navajo Nation Department of Fish and Wildlife (NNDFW) maintains the Navajo Endangered Species List (NESL) to identify and protect species of concern within the Navajo Nation. The list is organized into four groups based on threats such as habitat loss, overuse, disease, predation, and other natural or man-made factors. Group 1 includes species that no longer occur on Navajo lands and will not be considered further. Group 4 includes species with insufficient data that will not be evaluated. Species in Groups 2 and 3 are classified as endangered and will be evaluated during the environmental clearance process.

NNDFW developed the Biological Resource Land Use Clearance Policies and Procedures (RCP) (approved September 10, 2008) to help direct development to areas where impacts to wildlife and/or their habitat will be less significant. Six wildlife areas were identified within the Navajo Nation per the RCP:

1. Highly Sensitive Area – recommended no development with few exceptions.
2. Moderately Sensitive Area – moderate restrictions on development to avoid sensitive species/habitats.
3. Less Sensitive Area – fewest restrictions on development.
4. Community Development Area – areas in and around towns with few or no restrictions on development.
5. Biological Preserve – no development unless compatible with the purpose of this area.
6. Recreation Area – no development unless compatible with the purpose of this area.

The portion of the project within Navajo Nation is located in Area 3, a zone designated as having low sensitivity for special status species. According to the NNDFW, Area 3 is characterized by a low and fragmented concentration of species of concern.

[1]Conservation Biology Institute (CBI). 1979. Brown and Lowe's Biotic Communities of the Southwest. https://databasin.org/maps/new/#datasets=e8e241e869054d7e810894e5e993625e

1

Table 11. ESA Species Potentially in the Project Vicinity

Species	Status	Habitat Requirements	Potential Habitat Assessment
Birds			
California Condor (*Gymnogyps californianus*)	ESA XN	High desert canyons and plateaus.[2]	Potentially suitable habitat is present in the study corridor; therefore, this species should be evaluated during the environmental clearance process.
Southwestern Willow Flycatcher (*Empidonax traillii extimus*)	ESA LE	Cottonwood/willow and tamarisk vegetation communities along rivers and streams.[2]	Potentially suitable habitat is present in the study corridor; therefore, this species should be evaluated during the environmental clearance process.
Yellow-Billed Cuckoo (*Coccyzus americanus*)	ESA LT	Uses large contiguous patches of multi-layered riparian habitat, such as cottonwood-willow gallery forests along rivers and streams below 6,600 feet in elevation.[2]	Potentially suitable habitat is present in the study corridor; therefore, this species should be evaluated during the environmental clearance process.
Fishes			
Zuni Bluehead Sucker (*Catostomus discobolus yarrowi*)	ESA LE	Small streams in low-velocity, moderately deep pools, and pool runs with seasonal dense algae. Young prefer quieter, shallower areas near the shoreline.[2]	Suitable habitat for this species is not present in the study corridor.
Insects			
Monarch Butterfly (*Danaus plexippus*)	ESA PT	Open grasslands and meadows consisting of a variety of flowering plants. Particularly drawn toward milkweed.[3]	Potentially suitable habitat is present in the study corridor; therefore, this species should be evaluated during the environmental clearance process.
Suckley's Cuckoo Bumble Bee (*Bombus suckleyi*)	ESA PE	Prairies, grasslands, meadows, and woodlands.[4]	Potentially suitable habitat is present in the study corridor; therefore, this species should be evaluated during the environmental clearance process.
Flowering Plants			
Navajo Sedge (*Carex specuicola*)	ESA LT	"Hanging gardens" in alcoves with springs, associated with aeolian sandstone cliffs, with limited development of soil (sandy to silty).[5]	Suitable habitat for this species is not present in the study corridor.
Welsh's Milkweed (*Asclepias welshii*)	ESA LT	Open, sparsely vegetated semi-stabilized sand dunes and on lee slopes of actively drifting sand dunes.[5]	Suitable habitat for this species is not present in the study corridor.
Status Definitions: ESA = Endangered Species Act; LE = Listed Endangered, LT = Listed Threatened, PT = Proposed Threatened, PE = Proposed Endangered, XN = Experimental Population, Non-Essential			

[2]USFWS. 2016. All Arizona Species, 24 pp.
[3]USFWS. Environmental Conservation Online System (ECOS). Monarch Butterfly (*Danaus plexippus*). https://ecos.fws.gov/ecp/species/9743
[4]USFWS. 2024. Suckley's Cuckoo Bumble Bee (*Bombus suckleyi*) Species Status Assessment (Version 1.0), 131 pp.
[5]USFWS. 2016. All Arizona Species, 24 pp.

Species may be locally abundant in isolated 'islands' of habitat, but these patches are relatively small, few in number, and widely spaced across the landscape. However, NNDFW recognizes that some areas within Area 3 may not have been fully surveyed, and the presence of sensitive species or habitat cannot be entirely ruled out. Although all developments within the Navajo Nation typically require a Biological Evaluation (BE), the need to avoid sensitive habitats in Area 3 is generally less frequent. As a result, projects in these areas are more likely to proceed as planned with appropriate and timely planning.[6]

The RCP requires a species data request and a "No Biological Evaluation (No BE)" letter to be submitted to the NNDFW during the environmental clearance process. If the Navajo Natural Heritage Program (NNHP) issues a Data Response stating that there are no known or potential species of concern for the specific project location, then a BE is typically not required. The project sponsor may then request a Biological Resource Compliance Form (BRCF) with concurrence from the NNDFW Director, confirming that the project will not affect species of concern.

Hopi Tribe's Department of Natural Resources, Wildlife, and Ecosystem Management Program

Per the ADOT Biology Scoping Guidelines, coordination with the Hopi Tribe's Wildlife and Ecosystems Management Program should be discussed with the ADOT Environmental Planning Biologist during the environmental clearance process.[7]

WETLAND AND RIPARIAN AREAS

According to the National Wetlands Inventory Wetlands Mapper, riverine features (ephemeral washes), freshwater forested/shrub wetlands, and freshwater pond features (dry playas) are present within the study corridor.[8] Potential impacts to these resources should be evaluated during the environmental clearance process.

SECTION 401/404 OF THE CLEAN WATER ACT

Based on a review of aerial photography and the U.S. Geological Survey (USGS) National Hydrography Dataset (NHD), ephemeral and intermittent streams up to stream order six are present within and adjacent to the study corridor. Potential impacts to these resources should be evaluated during the environmental clearance process to determine Section 401/404 permitting requirements, if applicable.

FLOODPLAIN ENCROACHMENT

Based on a review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), the study corridor is located within the Zone D flood hazard area and are depicted on FEMA FIRM panels 04005C3500G, 04005C4075G, 04005C3525G, 04005C4100G, and 04005C4050G (Map Effective Date: September 3, 2010); and 04017C1550E, 04017C1575E, 04017C1750E, 04017C1775E, 04017C1800E, 04017C1825E, 04017C2000E, 04017C2025E, and 04017C1850E (Map Effective Date: September 26, 2008). Zone D is designated for areas where possible flood hazards are not determined due to a lack of detailed analysis. These areas carry an undetermined flood risk. As the project area is located on tribal land, consultation with both the Navajo County Flood Control District (NCFCD) and the Hopi Tribe's Department of Public Safety & Emergency Services (DPSES) is recommended. These entities may maintain independent flood hazard datasets or localized hydrologic information that could inform a more accurate assessment of flood risks within the study corridor. Impacts to floodplains typically occur when the topography within a floodplain is substantially modified by the placement or removal of materials within the floodplain. This should be evaluated during the final design of the proposed project.

SOLE SOURCE AQUIFER

The project is not located within the limits of a Sole Source Aquifer.[9] Therefore, no impacts are anticipated. This should be reevaluated during the environmental clearance process.

[6]NNDFW. 2008. Biological Resource Land Use Clearance Policies and Procedures. https://www.nndfw.org/docs/BRLC%20Policies%20and%20Procedures.pdf
[7]ADOT. 2024. Biology Scoping Guidelines. https://azdot.gov/sites/default/files/2024-05/BIO-Scoping-Guidelines-May-2024.pdf
[8]NWI. 2025. https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/
[9]Sole Source Aquifer. https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b

SECTION 4(F) RESOURCES

The project is subject to Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966 (49 U.S.C. 303). Based on a preliminary review, there are no potential Section 4(f) park and recreational lands, or wildlife and waterfowl refuges in the study corridor. This should be reevaluated during the environmental clearance process.

SECTION 6(F) RESOURCES

Section 6(f) of the Land and Water Conservation Fund (LWCF) Act of 1965 (16 U.S.C. 4601-4 et seq.) applies to all transportation projects, regardless of funding source or approval authority, which propose to use land from a Section 6(f) property. Based on a preliminary review, there are no potential protected Section 6(f) properties in the study corridor. This should be reevaluated during the environmental clearance process.

VISUAL

Proposed corridor improvements—such as widening shoulders, rumble strips, and intersection improvements—would not significantly alter the visual contrast within the study corridor. This should be reevaluated during the environmental clearance process.

SCENIC AND HISTORIC ROUTE

The project is not located on scenic roads. Roads within the study corridor are not designated as historic routes.[10]

SOCIOECONOMIC IMPACTS

Socioeconomic analysis is an examination of how a proposed project will impact the overall social and economic character of an area and the well-being of current and future residents of the affected community. Population, employment, housing conditions, and demographics are socioeconomic parameters that should be analyzed during the environmental clearance process.

HAZARDOUS MATERIALS

Based on a review of the Arizona Department of Environmental Quality (ADEQ) eMaps website, there are no open leaking underground storage tank (LUST) cases within the study corridor.[11] According to the Arizona Groundwater Site Inventory (GWSI), recent data on depth to groundwater is not available.[12] A Preliminary Initial Site Assessment (PISA) and sampling for asbestos-containing materials (ACM) and lead-based paint (LBP) will be conducted during the environmental clearance process to evaluate potential hazardous material concerns for the project.

NOISE

Noise-sensitive receptors are located within the study corridor. Alternatives that do not increase capacity or significantly alter alignment would likely not require noise analysis. Alternatives that increase capacity and/or significantly alter alignment would likely require noise analysis during the environmental clearance process. This should be evaluated during the environmental clearance process.

STORMWATER PERMITTING

Construction of the project may disturb more than one acre; therefore, stormwater-related permits may be required. For portions of the project located on Navajo Nation land, Section 402 permits under the Navajo Nation Pollutant Discharge Elimination System (NNPDES), as well as a Stormwater Pollution Prevention Plan (SWPPP), may be required from the Navajo Nation Environmental Protection Agency (EPA). For portions of the project located on Hopi land, Section 402 permits under the National Pollutant Discharge Elimination System (NPDES), as well as a SWPPP, may be required from the U.S. EPA. Permitting requirements should be reevaluated during the environmental clearance process.

[10]ADOT. Scenic and Historic Routes. 2023. https://experience.arcgis.com/experience/4ad8a8bc9af742da8cfe0dc128e1c741

[11]ADEQ. eMaps. https://adeq.maps.arcgis.com/apps/webappviewer/index.html?id=e224fc0a96de4bcda4b0e37af3a4daec&showLayers=Counties;UST%20-%20Place%20Facilities;UST%20-%20Releases;

[12]Arizona Department of Water Resources (ADWR). Arizona GWSI. https://azwatermaps.azwater.gov/gwsiweb/

AIR QUALITY

The project is not located within nonattainment or maintenance areas for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM) for both PM_{10} and $PM_{2.5}$, or sulfur dioxide (SO_2).[13] Because the project is not in a nonattainment or maintenance area, an air quality analysis is not required; however, air quality impacts should be reevaluated during the environmental clearance process.

PUBLIC/AGENCY SCOPING

Public/agency scoping should be completed during the environmental clearance process in the form of scoping letters.

[13] ADEQ. eMaps. https://adeq.maps.arcgis.com/apps/webappviewer/index.html?id=e224fc0a96de4bcda4b0e37af3a4daec&showLayers=Counties;UST%20-%20Place%20Facilities;UST%20-%20Releases;

10. Corridor Needs and Deficiencies

The analyses included in this working paper have identified deficiencies that the recommended projects will aim to address. These deficiencies are described below and **Figure 25** shows locations on the study corridor that are hot spots for transportation deficiencies and corridor constraints.

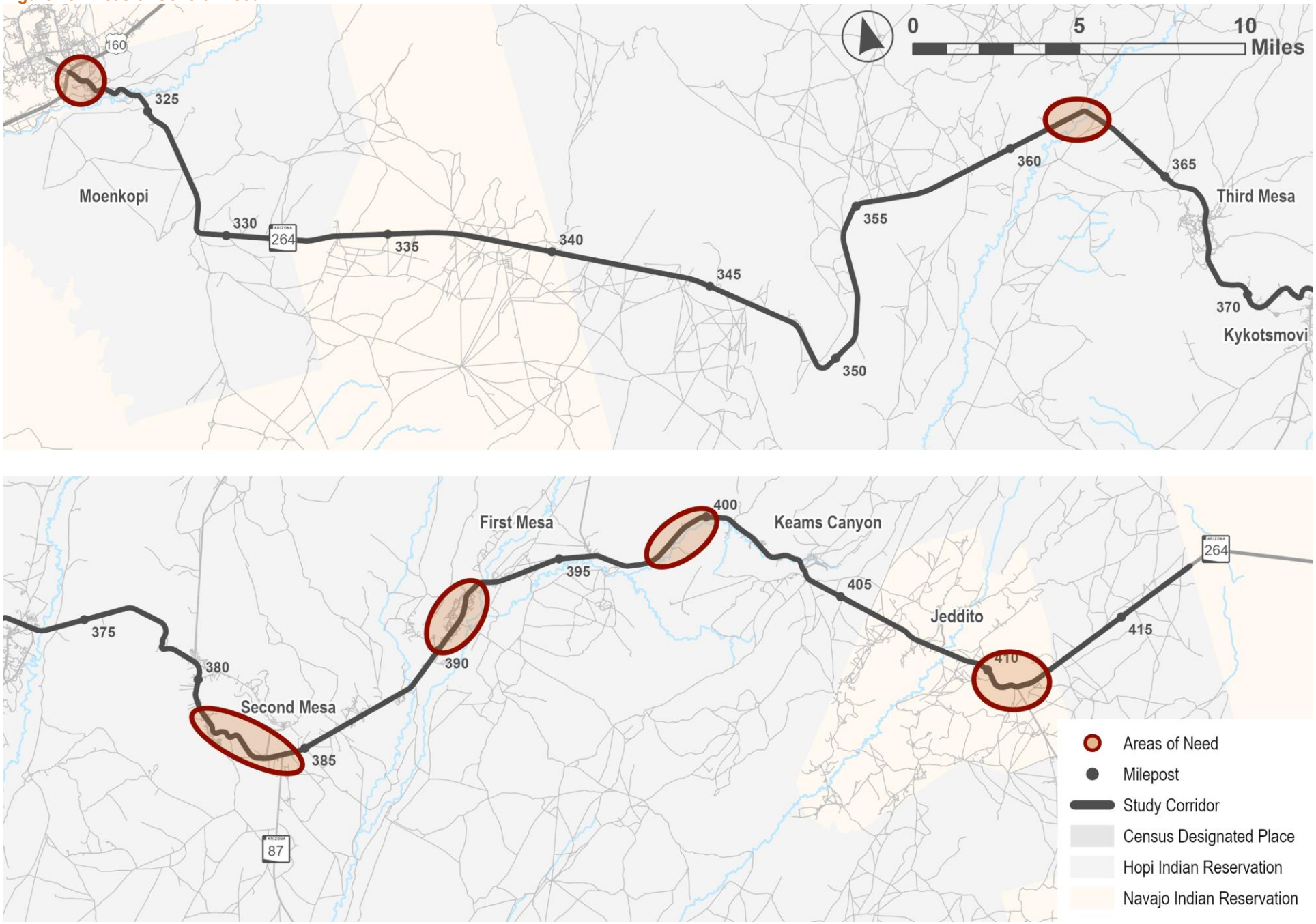
TRANSPORTATION DEFICENCIES

- Although the corridor's pavement condition is mostly fair or good, there are two miles that are in poor condition pavement condition and can cause safety issues.
- The western portion of the corridor, from Third Mesa to Moenkopi, has few bus stops along the corridor, limiting the transit options.
- From Kykotsmovi Village to Keams Canyon there poor access management in several areas, leading to unsafe roadway conditions and a high number of conflict points.
- There is a lack of active transportation facilities for pedestrians and cyclists throughout the corridor.
- There is a high number of crashes that occur east of Jeddito near the intersection with IR 6 as well as east of Second Mesa near the intersection with SR 87.

CORRIDOR CONSTRAINTS

- There are several sections of the corridor that have a physical drop offs along the edge, restricting widening opportunities.
- Many of the roadways that intersect with the corridor are not paved and do not have signed traffic control.
- The areas with active transportation are isolated and disconnected. Even if accessibility is improved along SR 264, additional neighborhood connections will likely be needed to make active transportation trips feasible.
- The SR 264 corridor is the primary and only road in northern Navajo County that stretches from US 160 to US 191, any disruption along the route will have significant travel impacts as there are no alternate routes.

Figure 25. Areas of General Need



Source: Kimley Horn