

FINAL

ADOT SR 264 Corridor Planning Study

Working Paper 2: Identify Deficiencies and Establish Evaluation Criteria

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Prepared for:

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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 into Coconino 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
- Perform 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 provided 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 informed the needs and deficiencies along the corridor.

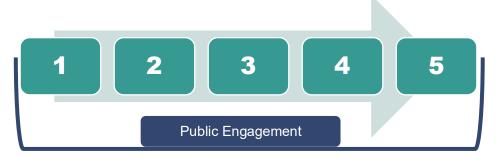
Working Paper 2: Identify Deficiencies and Establish Evaluation Criteria

Working Paper 2: Identify Deficiencies and Establish Evaluation Criteria (WP2) will identify areas of need based on findings from WP1, anticipated traffic needs on the corridor, establish an area of need prioritization framework, and develop potential 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. **Figure 1** shows the planning process for the SR 264 Corridor Planning Study.

Figure 1. SR 264 Corridor Study Planning Process

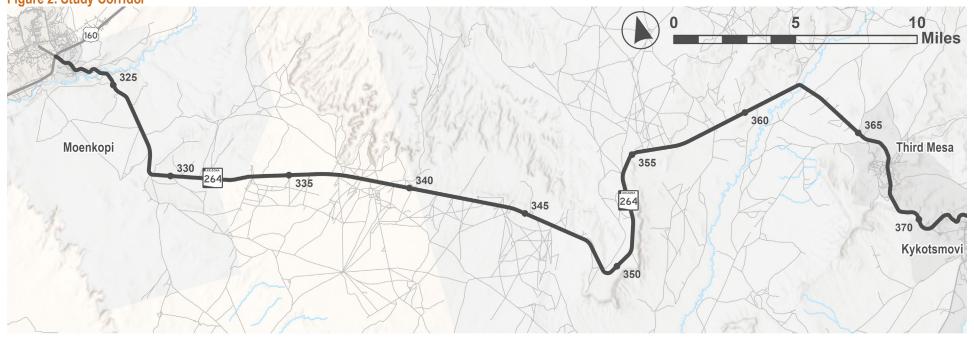


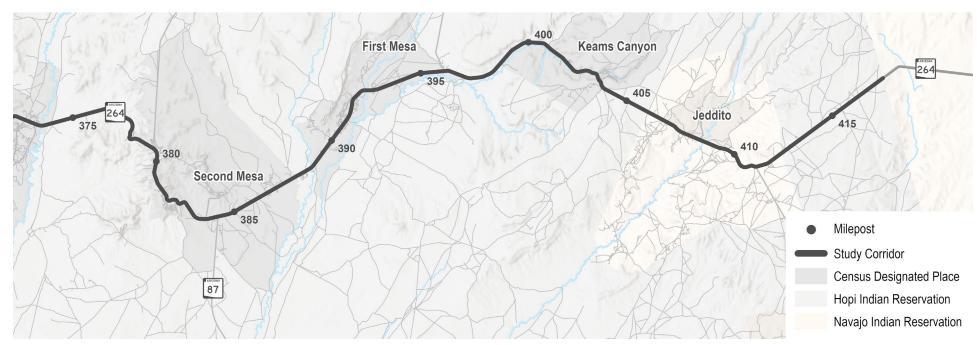
- 1 Project Management and Coordination
- 2 Data Collection and Existing Conditions
- 3 Deficiencies and Evaluation Criteria
- 4 Recommended Plan for Improvements
- 5 Final Report Development

WORKING PAPER 2 OVERVIEW

WP2 identifies areas of need based on the deficiencies and constraints outlined in WP1. For each area of need, short- and long-term alternatives were developed. The working paper also identifies potential future congestion constraints anticipated on the corridor. Prioritization framework that will be used to assess the identified alternatives is also outlined in WP2 and will be applied during the development of WP3.









2. Corridor Deficiencies and Constraints

At the conclusion of WP1, key deficiencies and constraints were identified for the SR 264 corridor. These deficiencies and constraints pinpoint critical locations for improvements along the corridor and highlight factors that may pose challenges in implementation of improvements.

TRANSPORTATION DEFICIENCIES

- 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 are 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 off 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.

3. Areas of Need

Areas of need are key locations on the SR 264 corridor that have a high concentration of overlapping transportation deficiencies based on findings from WP1. **Figure 3** shows the identified areas of need. Short- and long-term alternatives were developed for each area of need.

Working Paper 2: Identify Deficiencies and Establish Evaluation Criteria

4. Alternatives Development

ALTERNATIVE DEVELOPMENT PROCESS

For each area of need, the following sources were used to identify shortand long-term alternatives:

- Transportation Deficiencies and Corridor Constraints. The transportation deficiencies and corridor constraints identified in WP1 were assessed at each location to identify potential causes for safety issues in that area of the corridor.
- Previously Recommended Projects. Recommended projects identified in the Previous Plans and Studies Review from WP1 were reviewed to identify potential improvements.
- National Best Practices. National best practices, including the <u>FHWA Proven Safety Countermeasures</u>, were leveraged to identify best fitting alternatives for a given locations current needs.

Short-term alternatives are typically low-cost improvements that may fit into the roadway's maintenance funds and are expected to be implemented in the next five years. Long-term alternatives are improvements that require additional funding and are anticipated to be implemented outside of the five-year planning horizon.

For each area of need, alternatives may include segment or intersection improvements, providing a comprehensive scope of improvement alternatives.

Multiple Low-Cost Countermeasures at Stop-Controlled Intersections

Select locations include multiple low-cost improvements, as determined by FHWA's <u>Systematic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections</u>. Where alternatives include the language 'Multiple Low-Cost Countermeasures at Stop-Controlled Intersections', improvements include:

- Install oversized intersection warning signage
- Install solar-powered LED stop sign and streetlights
- Install transverse and edge-line rumble strips

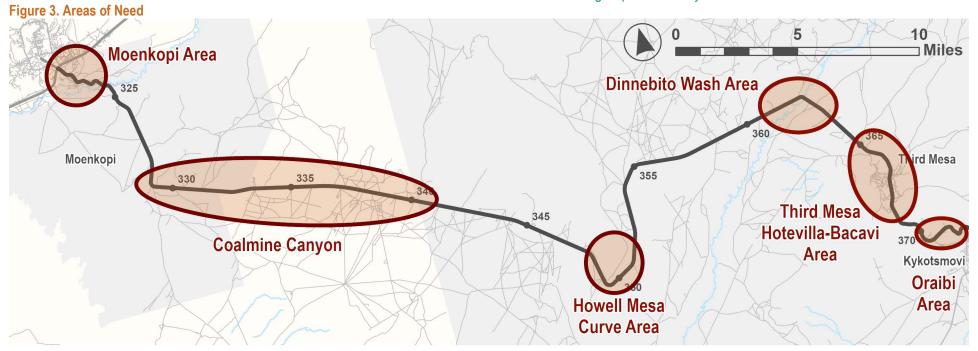
ALTERNATIVES REVIEW

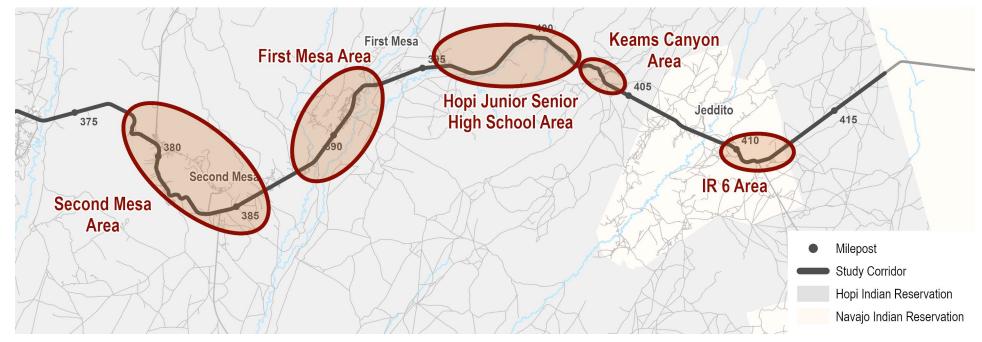
The short- and long-term alternatives for the areas of need are summarized in the following section. Additional non-infrastructure recommendations will be made during the recommendations phase to supplement safety issues that may require further study before developing infrastructure recommendations.

Some alternatives will need additional assessments, studies or permits to ensure the installation is needed. Crosswalk warrant assessments for any crosswalk alternative, speed study for any reduction of speed limit alternatives, and encroachment permits for any speed feedback sign alternatives are examples of these additional requirements.











MOENKOPI AREA

The Moenkopi Area of Need stretches from MP 321.97 to 324.00. The short- and long-term alternatives are outlined below. Short- and long-term alternatives are shown in **Figure 4** and **Figure 5**, respectively.

Current Deficiencies and Constraints

Deficiencies

- Insufficient access management
- No active transportation facilities to connect to marked crosswalk
- No shoulder on the north side

Constraints

- High density of activity centers
- High crash rates

Alternatives

Alternative 1. East Moenkopi Area (MP 322.75 – 324.00)

Short-Term

Install curve delineation

Long-Term

Install centerline rumble strip

Alternative 2. Tuuvi Travel Center Driveway (MP 321.99 – 322.07)

Long-Term

 Relocate driveway to align with Moenkopi Legacy Inn & Suites Driveway

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Alternative 3. West Moenkopi Area (MP 321.97 – 322.75)

Long-Term

- Install corridor lighting
- Install shared-use path on the south side of roadway
- Install sidewalk on north side of roadway

Alternative 4. Moencopi Day School (MP 322.22)

Short-Term

- Install Rectangular Rapid Flashing Beacon (RRFB)
- Install pedestrian-scale lighting
- Install School Zone Signs
- Conduct Speed Study to determine warrant to reduce speed to 30 MPH

Long-Term

Install ADA improvements

Alternative 5. West Moenkopi Speed Feedback (MP 322.8)

Short-Term

Install westbound speed feedback sign

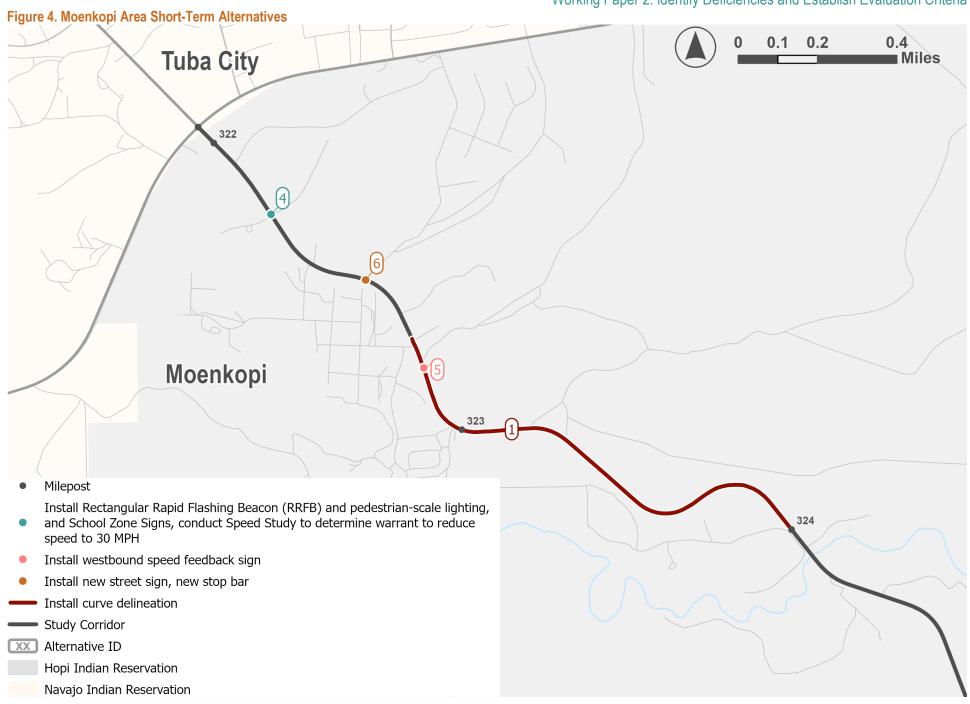
Alternative 6. Hopi Drive Intersection (MP 322.53)

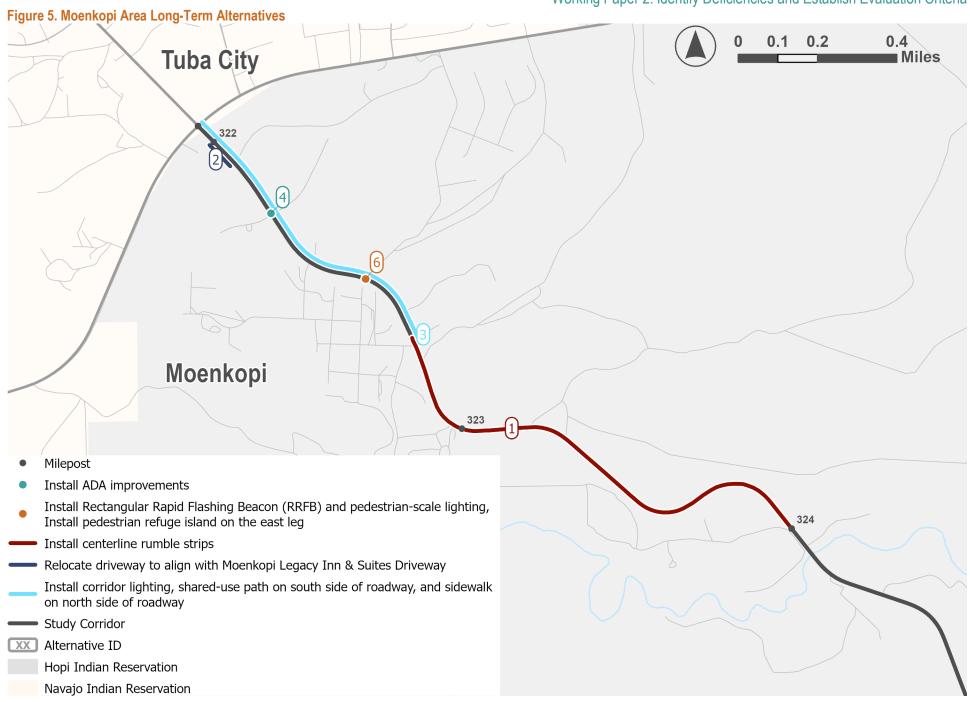
Short-Term

- Install new street sign
- Install new stop bar

Long-Term

- Install new high-visibility pedestrian crossing with RRFB
- Install lighting, and pedestrian refuge island on the east leg







COALMINE CANYON AREA

The Coalmine Canyon Area of Need stretches from MP 328.98 to 340.20. Short- and long-term alternatives are shown in **Figure 6** and **Figure 7**.

Current Deficiencies and Constraints

Deficiencies

- High speed limit
- Insufficient shoulder width

Constraints

- Curvy alignment with mild rolling topography
- Notable crash density

Alternatives

Alternative 7. Curve at MP 329 (MP 328.98 – 329.31)

Short-Term

- Install transverse rumble strips
- Install dynamic curve warning signs
- Install oversized chevrons with retroreflective strips on signposts

Long-Term

- Widen shoulders to 5'
- Install edge-line rumble strips
- Install left and right turn lanes at IR 6710
- Utilize High Friction Surface Treatment (HFST)
- Install centerline rumble strips

Alternative 8. MP 330.6 (MP 330.6)

Short-Term

Install eastbound 'Road May Flood' signage

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Alternative 9. MP 331.8 (MP 331.8)

Short-Term

Install eastbound 'Road May Flood' signage

Alternative 10. MP 332-335 (MP 332.06 – 335.01)

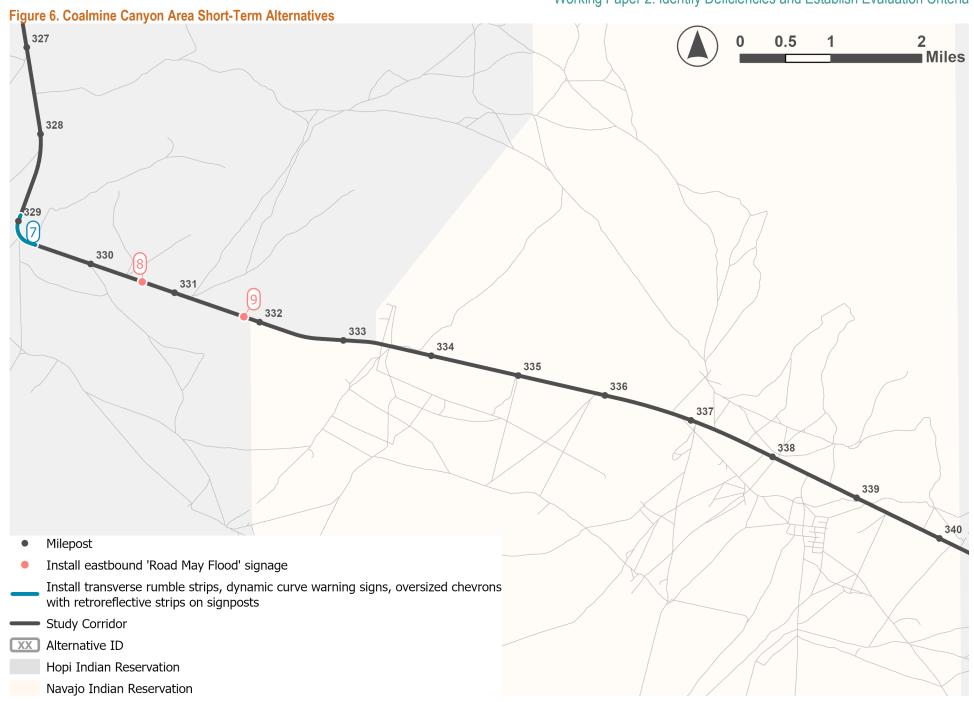
Long-Term

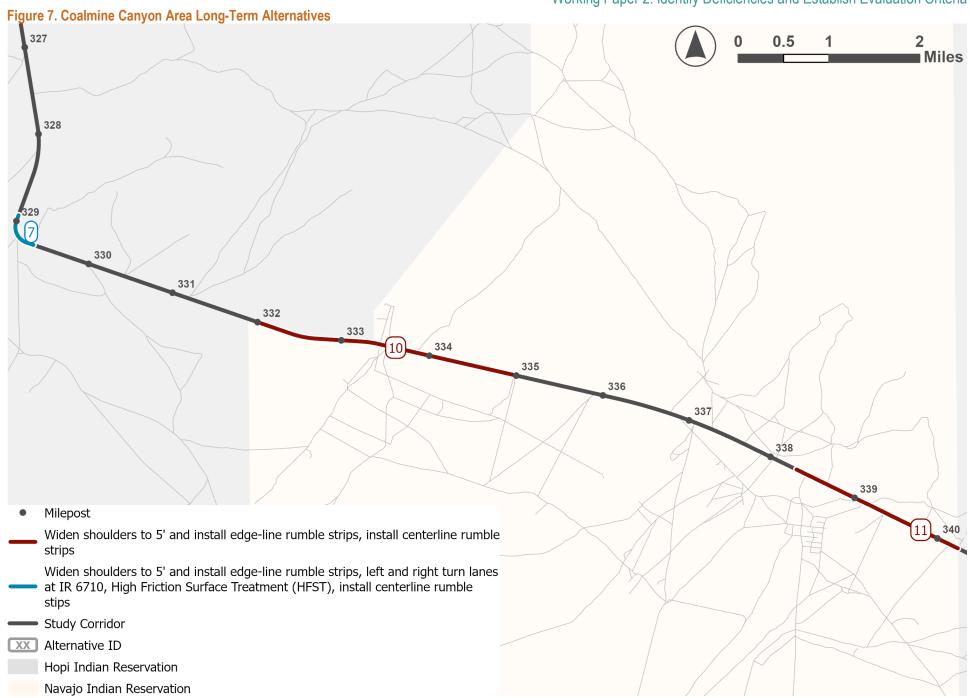
- Widen shoulders to 5'
- Install centerline rumble strips
- Install edge-line rumble strips

Alternative 11. IR6720/Hopi Reservation Boundary (MP 338.30 – 340.20)

Long-Term

- Widen shoulders to 5'
- Install centerline rumble strips
- Install edge-line rumble strips







HOWELL MESA CURVE AREA

The Howell Mesa Curve Area of Need stretches from MP 348.58 to 351.50. Short- and long-term alternatives are shown in **Figure 8** and **Figure 9**, respectively.

Current Deficiencies and Constraints

Deficiencies

- Insufficient shoulder width
- High speed limit
- Lack of guardrails along the curve

Constraints

- Curvy alignment with mild rolling topography
- Area of drop off to the south of the curve

Alternatives

Alternative 12. Entire Area (MP 348.58 – 351.50)

Short-Term

- Install transverse and centerline rumble strips
- Install dynamic curve warning signs
- Install oversized chevrons with retroreflective strips on signposts

Long-Term

- Widen shoulders to 5' and install edge-line rumble strips
- Utilize High Friction Surface Treatment (HFST)
- Install centerline rumble strips

DINNEBITO WASH AREA

The Dinnebito Wash Area of Need stretches from MP 361.00 to 363.50. Short- and long-term alternatives are shown in **Figure 10** and **Figure 11**.

Current Deficiencies and Constraints

Deficiencies

- Insufficient shoulder width
- Poor access management approaching curve
- High speed limit

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Constraints

High intersection crash rate (IR 62)

Alternatives

Alternative 13. Entire Area (MP 361.00 – 363.50)

Long-Term

- Widen shoulders to 5' and install edge-line rumble strips
- Install centerline rumble strips

Alternative 14. H8027 Intersection (MP 362.41 – 362.51)

Short-Term

- Multiple low-cost countermeasures at stop-controlled intersections
- · Extend no passing zone

Alternative 15. Curve between H8027 and Dinnebito Wash Bridge (MP 362.51 – 362.65)

Short-Term

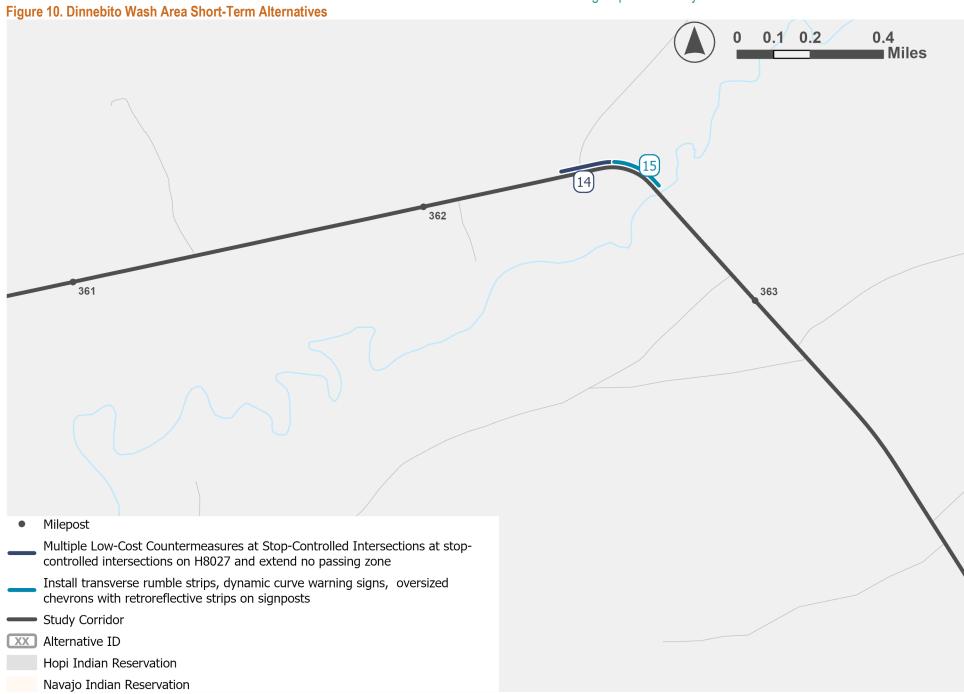
- Install transverse rumble strips
- Install dynamic curve warning signs
- Install oversized chevrons with retroreflective strips on signposts

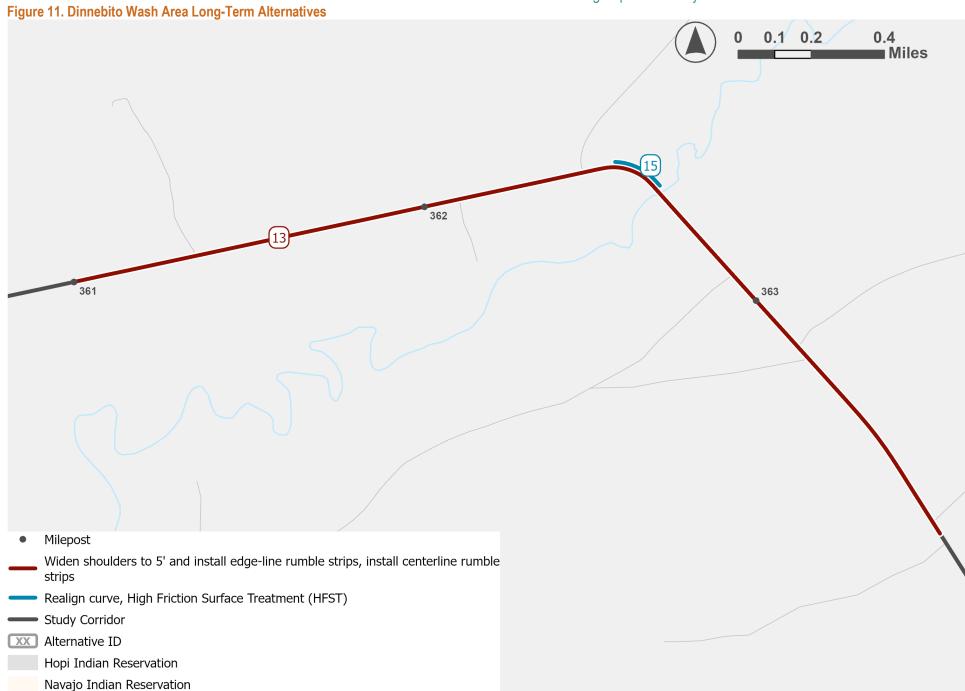
Long-Term

- Realign curve
- Utilize High Friction Surface Treatment (HFST)











THIRD MESA/HOTEVILLA-BACAVI AREA

The Third Mesa/Hotevilla-Bacavi Area of Need stretches from MP 365.00 to 368.50. Short- and long-term alternatives are shown in **Figure 12** and **Figure 13**, respectively.

Current Deficiencies and Constraints

Deficiencies

- Poor Access management
- Insufficient shoulder width
- No active transportation facilities to connect to marked crosswalk

Constraints

Curvy alignment with mild rolling topography

Alternatives

Alternative 16. Entire Area (MP 365.00 – 368.50)

Long-Term

Install corridor lighting

Alternative 17. Hotevilla-Bacavi Community Center Rd to Intersection at MP 366.81 (MP 366.81 – 367.11)

Long-Term

· Widen corridor to 3-lane roadway section

Alternative 18. Intersection at MP 366.81 to Intersection at MP 367.44

(MP 366.81 - 367.44)

Long-Term

Install shared-use path on west side of roadway

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Alternative 19. Intersection at Bacavi Community Center (MP 367.11)

Short-Term

 Install new high-visibility pedestrian crossing with RRFB and pedestrian scale lighting

Alternative 20. Intersection at MP 367.44 (MP 367.44)

Long-Term

Install left and right turn lanes, realign east leg of intersection

Alternative 21. MP 367.44 to MP 368.50 (MP 367.44 – 368.50)

Long-Term

Widen shoulders to 5' and install edge-line rumble strips







ORAIBI AREA

The Oraibi Area of Need stretches from MP 370.5 to 371. Short- and long-term alternatives are shown in **Figure 14** and **Figure 15** respectively.

Current Deficiencies and Constraints

Deficiencies

- High Speed
- Insufficient shoulder width
- No active transportation facilities to connect to marked crosswalk, bus stops, and activity centers
- Poor Access management

Constraints

High traffic and roadway usage

Alternatives

Alternative 22. South Frontage Rd (MP 370.8 – 371.0)

Long-Term

Construct safety access road on south side of SR 264

Alternative 23. Curve at MP 370.8 (MP 370.8)

Long-Term

 Install new high-visibility pedestrian crossing with RRFB and pedestrian scale lighting

Alternative 24. Entire Area (MP 370.5 – 371.0)

Short-Term

Conduct a Speed Study to reduce speed limit to 45 MPH

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SECOND MESA AREA

The Second Mesa Area of Need stretches from MP 375.5 to 386.50. Shortand long-term alternatives are shown in **Figure 16** and **Figure 17**, respectively.

Current Deficiencies and Constraints

Deficiencies

- Segments of poor pavement condition
- Insufficient shoulder width
- No active transportation facilities to connect to marked crosswalk, bus stops, and activity centers
- Poor Access management

Constraints

- Areas of drop-off with steep, curvy terrain
- Notable crash density

Alternatives

Alternative 25. Wellness Center/IR 25 (MP 375.5)

Short-Term

- Multiple low-cost countermeasures at stop-controlled intersections
- Install double arrow signage
- Install cattle guard object markers
- · Install no passing zone
- Reconstruct approach and define edges

Long-Term

Install left and right turn lanes

Alternative 26. Entire Area (MP 375.5 – 386.5)

Long-Term

- · Widen shoulders to 5'
- Install edge-line rumble strips
- Resurface roadway and spot stabilization





Alternative 27. From MP 377.9 – 381.4 (MP 377.9 – 381.4)

Short-Term

Conduct a Speed Study to reduce speed limit to 45 MPH

Alternative 28. Climbing Section at MP 378 (MP 377.80 – 378.53)

Short-Term

- Install transverse and centerline rumble strips
- Install downgrade sign, dynamic curve warning signs
- Install oversized chevrons with retroreflective strips on signposts
- Extend guard rail

Long-Term

- Future feasibility study for:
 - Cut back rock face and widen road to include 5' shoulders with edge-line rumble strips and median buffer space
 - Install WB deceleration route following power poles
- Utilize High Friction Surface Treatment (HFST)

Alternative 29. IR 4 to Main St (MP 379.36 – 381.27)

Long-Term

 Extend shared-use path, pedestrian-scale lighting on east side of roadway

Alternative 30. Intersection at MP 380.61 to Main St (MP 380.61 - 381.27)

Long-Term

Widen to 3-lane roadway section

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Alternative 31. Main Street to Second Mesa Day School (MP 381.27 – 383.75)

Short-Term

- Install transverse rumble strips
- Install dynamic curve warning signs,
- Install oversized chevrons with retroreflective strips on signposts
- Install reflective tabs on guardrail

Long-Term

- Cut back rock face/rock scale
- Widen road to include 5' shoulders with edge-line rumble strips and median buffer space
- Install centerline rumble strips

Alternative 32. Second Mesa Day School Intersection (MP 383.75)

Short-Term

- Install RRFB and pedestrian scale lighting,
- Install school zone signage,
- Conduct a Speed Study to reduce speed limit to 35 MPH

Long-Term

- Install right turn lane
- Conduct an Intersection Control Evaluation (ICE) to determine feasibility of:
 - construct roundabout
 - signalization and HAWK

Alternative 33. At MP 383.9 (MP 383.9)

Short-Term

Install westbound speed feedback sign

Alternative 34. Hopi Senom Transit Stop L (MP 384.05)

Long-Term

Install bus pullout, shelter, and ADA facilities



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Alternative 35. SR 87 Intersection (MP 384.22)

Short-Term

- Multiple low-cost countermeasures for stop-controlled intersections
- Install speed feedback signs
- Extend left-turn lane

Long-Term

Conduct an ICE to determine feasibility to construct roundabout

Alternative 36. Sunlight Community Church Rd (MP 386.23)

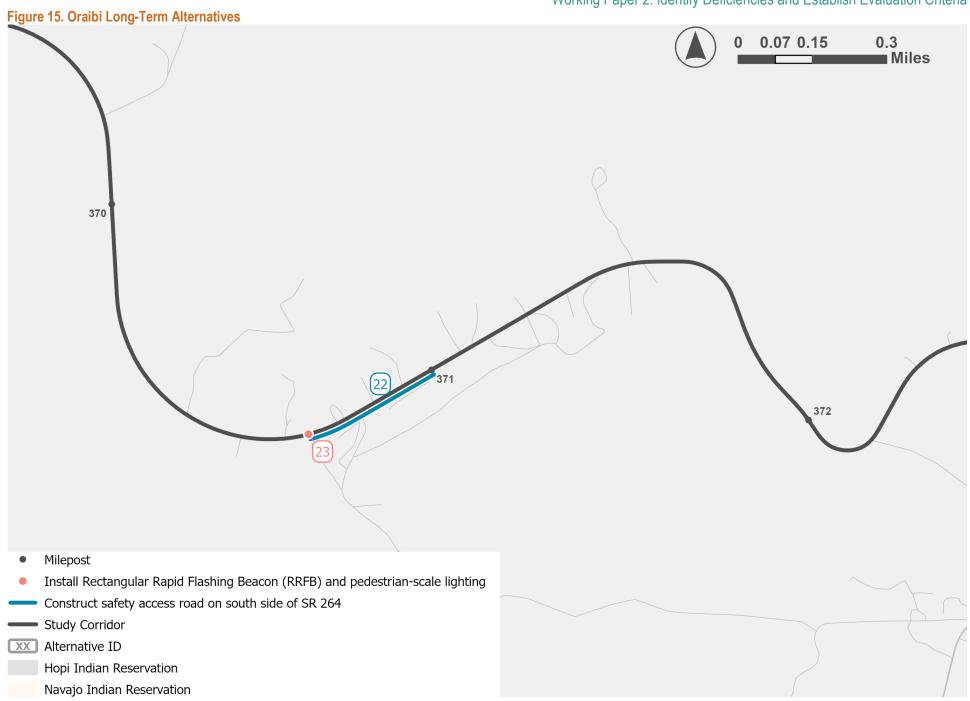
Short-Term

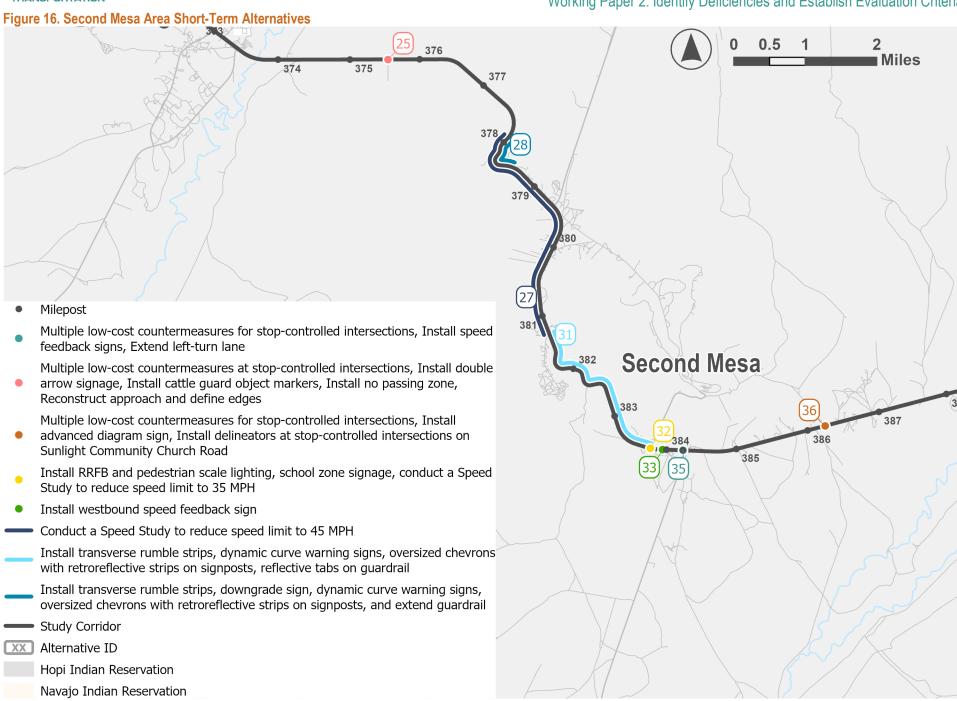
- Multiple low-cost countermeasures for stop-controlled intersections
- Install advanced diagram sign
- Install delineators at stop-controlled intersections on Sunlight Community Church Road

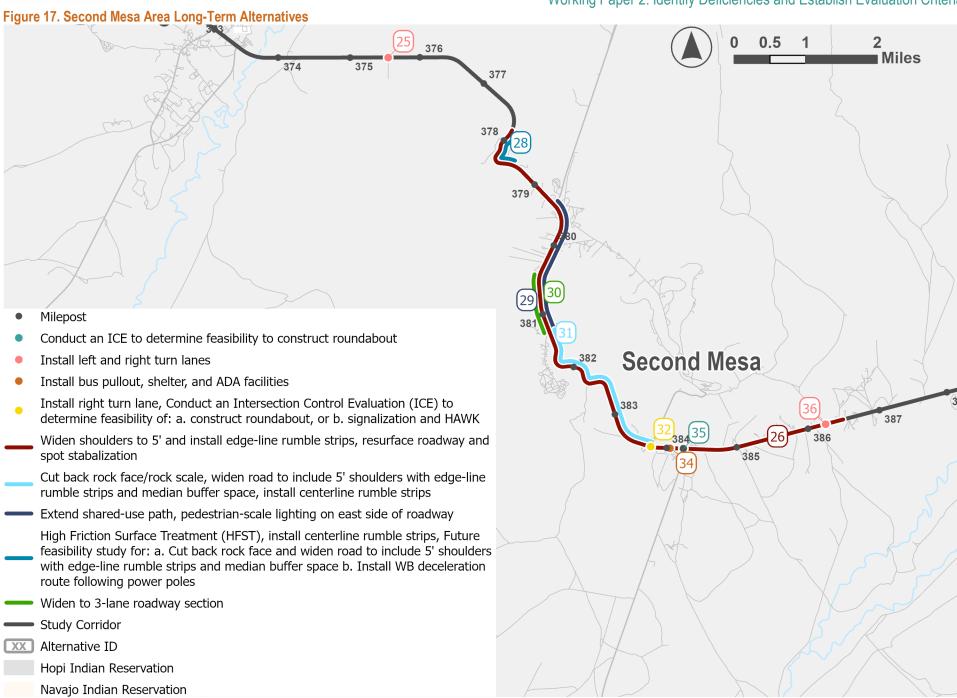
Long-Term

Install left and right turn lanes













FIRST MESA AREA

The First Mesa Area of Need stretches from MP 388.00 to 393.20. Shortand long-term alternatives are shown in **Figure 18** and **Figure 19**, respectively.

Current Deficiencies and Constraints

Deficiencies

- High concentration of bus stops with no active transportation facilities
- Insufficient shoulder width
- High concentration of activity centers and residential
- Poor access management

Constraints

Curvy alignment with mild rolling topography

Alternatives

Alternative 37. Entire Area (MP 388.0 – 393.2)

Long-Term

- Install corridor lighting
- Widen to 3-lane roadway section
- Widen shoulders to 5'
- Install edge-line rumble strips

Alternative 38. Airport Rd (MP 388.9)

Short-Term

- Multiple low-cost countermeasures for stop-controlled intersections
- Delineate edges, add fill to tighten corner and east-bound right-turn lane

Long-Term

Realign Airport Rd approach

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Alternative 39. First Mesa Elementary School to the Intersection west of Polacca Bridge (MP 389.67 – 392.56)

Long-Term

Install shared-use path on north side of roadway

Alternative 40. First Mesa Access Road (MP 390.02)

Long-Term

- Install left and right turn lanes
- Install new high-visibility pedestrian crossing with RRFB and pedestrian-scale lighting

Alternative 41. IR 508 Intersection (MP 391.68)

Long-Term

 Install new high-visibility pedestrian crossing with RRFB and pedestrian-scale lighting

Alternative 42. At MP 392.8 (MP 392.8)

Short-Term

Install westbound speed feedback sign

Alternative 43. Sand Clan Access (IR 603) (MP 393.20)

Short-Term

- Multiple low-cost countermeasures for stop-controlled intersections
- Install culvert markers
- · Install curve approach definition with striping
- Extend no passing zone

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Alternative 44. Polacca Wash Bridge (MP 392.8)

Short-Term

- Install reflective tabs
- Install object markers

Alternative 45. Hopi Senom Transit Stop K (MP 391.24)

Long-Term

Install bus pullout, shelter, and ADA facilities

Alternative 46. Hopi Senom Transit Stop J (MP 391.68)

Long-Term

Install bus pullout, shelter, and ADA facilities

Alternative 47. Polacca Circle M (MP 392.30)

Short-Term

- Stripe ingress and egress
- Install obstructions

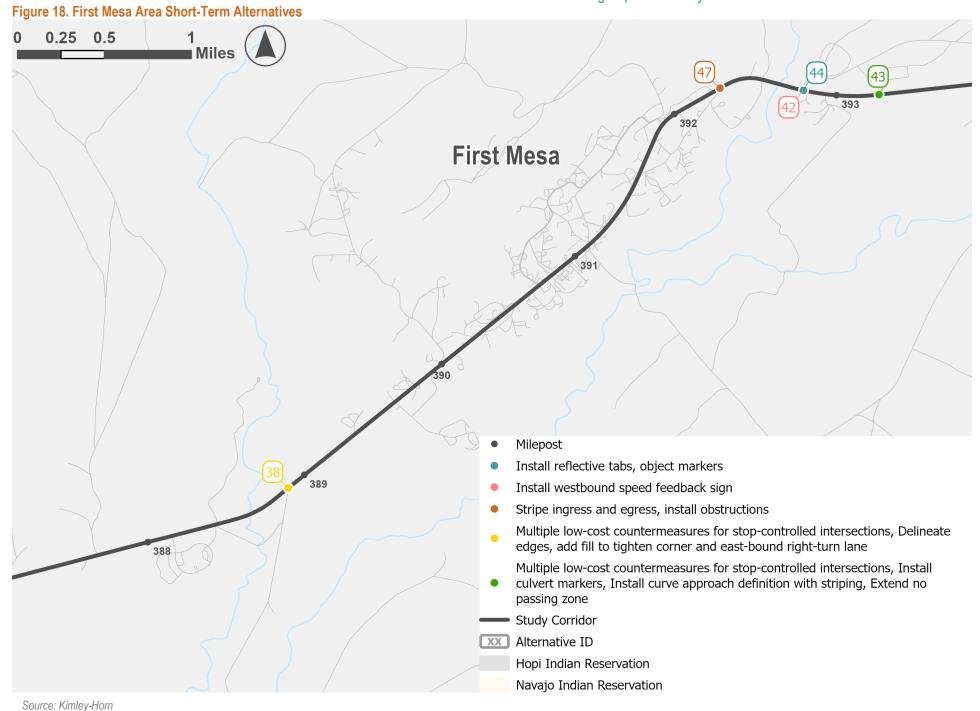
Long-Term

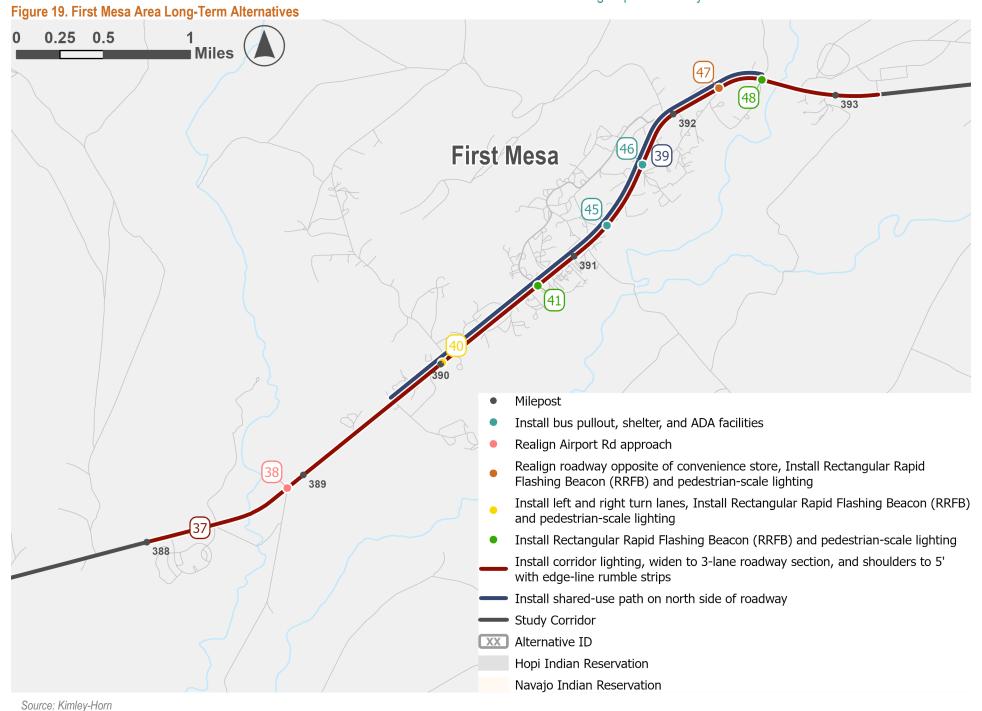
- Install new high-visibility pedestrian crossing with RRFB and pedestrian-scale lighting,
- Realign roadway opposite of convenience store

Alternative 48. IR 25 Intersection (MP 392.56)

Long-Term

 Install new high-visibility pedestrian crossing with RRFB and pedestrian-scale lighting







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Alternative 51. Hopi Housing Authority and High School Intersections

(MP 396.78 – 396.91)

HOPI JUNIOR SENIOR HIGH SCHOOL AREA

The Hopi Junior Senior High School Area of Need stretches from MP 395.95 to 401.97. Short- and long-term alternatives are shown in **Figure 20** and **Figure 21**, respectively.

Current Deficiencies and Constraints

Deficiencies

- Segments in poor pavement condition
- Insufficient shoulder width
- High speed limit

Constraints

Curvy alignment with mild rolling topography

Alternatives

Alternative 49. Entire Length (MP 395.95 – 401.97)

Long-Term

 Widen to 3-lane roadway section and shoulders to 8' with edge-line rumble strips

Alternative 50. IR 60 Intersection (MP 395.95)

Short-Term

- Multiple low-cost countermeasures for stop-controlled intersections
- Install no passing zone 225' on each side

Long-Term

Install left and right turn lanes

Short-Term

- Multiple low-cost countermeasures for stop-controlled intersections on the Hopi Housing Authority roadway and High School roadway
- Install advanced warning school and intersection sign
- Install school zone
- Conduct Speed Study to determine warrant to reduce speed to 35 MPH

Long-Term

 Conduct an ICE to determine the feasibility of installing roundabouts at both intersections

Alternative 52. At MP 401.95 (MP 401.95)

Long-Term

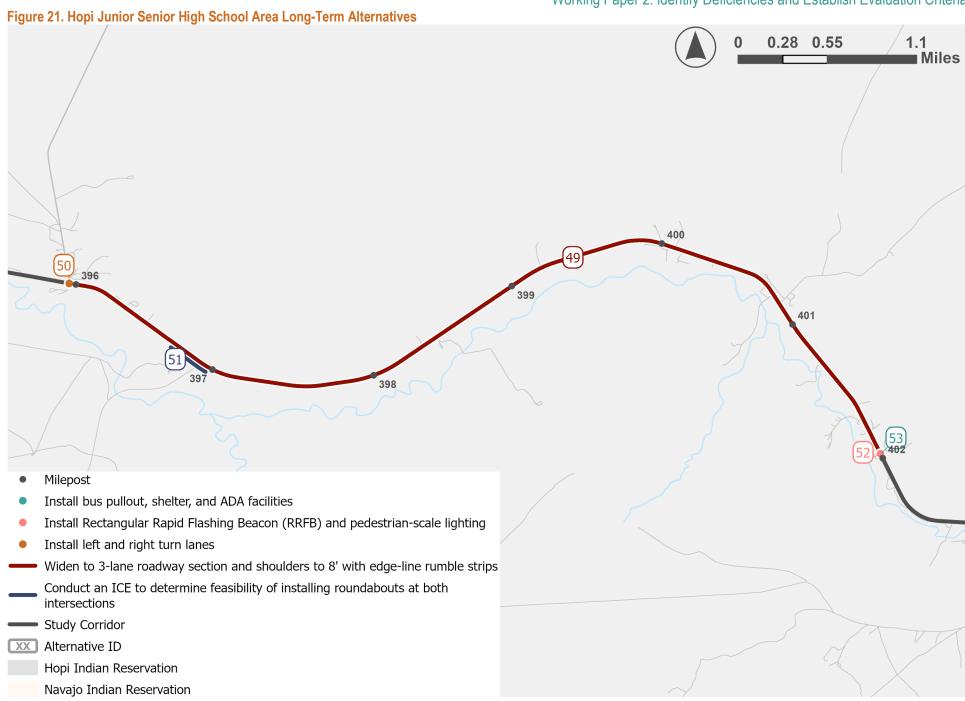
 Install new high-visibility pedestrian crossing with RRFB and pedestrian-scale lighting

Alternative 53. Hopi Senom Transit Stop E (MP 401.97)

Long-Term

Install bus pullout, shelter, and ADA facilities







KEAMS CANYON AREA

The Keams Canyon Area stretches from MP 401.80 to 403.30. Short- and long-term alternatives are shown in **Figure 22** and **Figure 23**, respectively.

Current Deficiencies and Constraints

Deficiencies

- No active transportation facilities to connect to marked crosswalk, bus stops, and activity centers
- Poor Access management

Constraints

Curvy alignment with mild rolling topography and areas of drop-off

Alternatives

Alternative 54. Entire Area (MP 401.8 – 403.3)

Long-Term

Install shared-use path on north side of road

Alternative 55. From MP 402.3 to 402.6 (MP 402.3 – 402.6)

Short-Term

Install guardrail object markers

Alternative 56. At MP 403.1 (MP 403.1)

Long-Term

 Install new high-visibility pedestrian crossing with RRFB and pedestrian-scale lighting

IR 6 AREA

The IR 6 Area of Need stretches from MP 409.75 to 412.50. Short- and long-term alternatives are shown in **Figure 24** and **Figure 25**, respectively.

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Current Deficiencies and Constraints

Deficiencies

- Varying speed limit
- Insufficient shoulder width
- High speed limit

Constraints

- · Curvy alignment with mild rolling topography and areas of drop-off
- High segment crash rate

Alternatives

Alternative 57. Entire Area (MP 409.75 – 412.50)

Short-Term

- Install transverse rumble strips,
- Install 6" retroreflective edge-line
- Install dynamic curve warning signs, oversized chevrons with retroreflective strips on signposts
- Remove passing zone west of intersection

Long-Term

- Widen shoulders to 5' and add edge-line rumble strips
- Resurface roadway
- Utilize High Friction Surface Treatment (HFST)
- Install centerline rumble strips

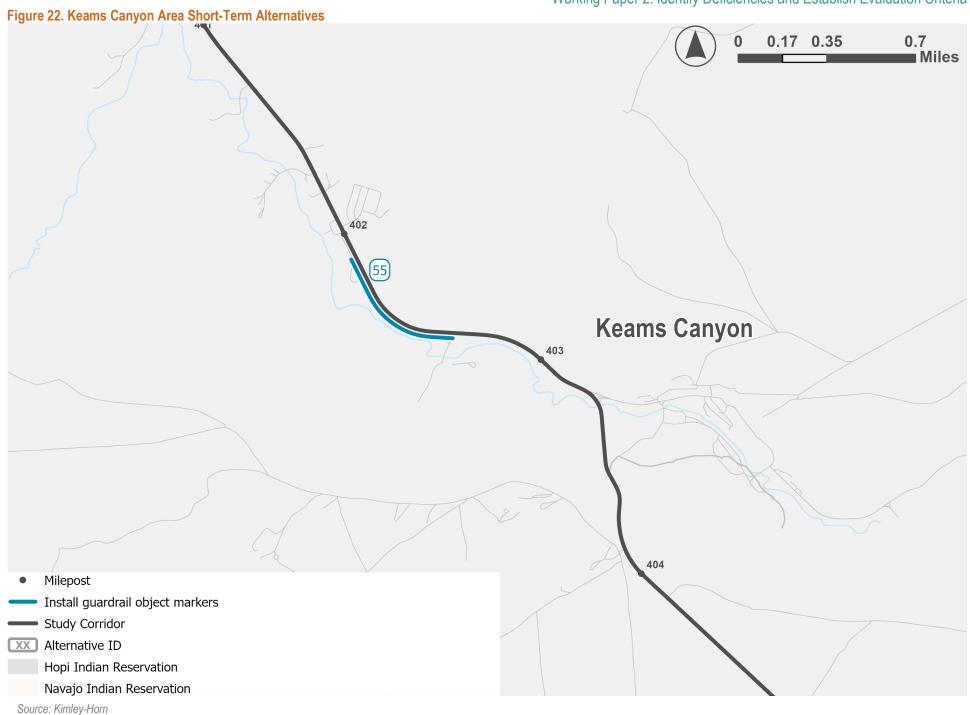
Alternative 58. IR 6 Intersection (MP 411.19)

Short-Term

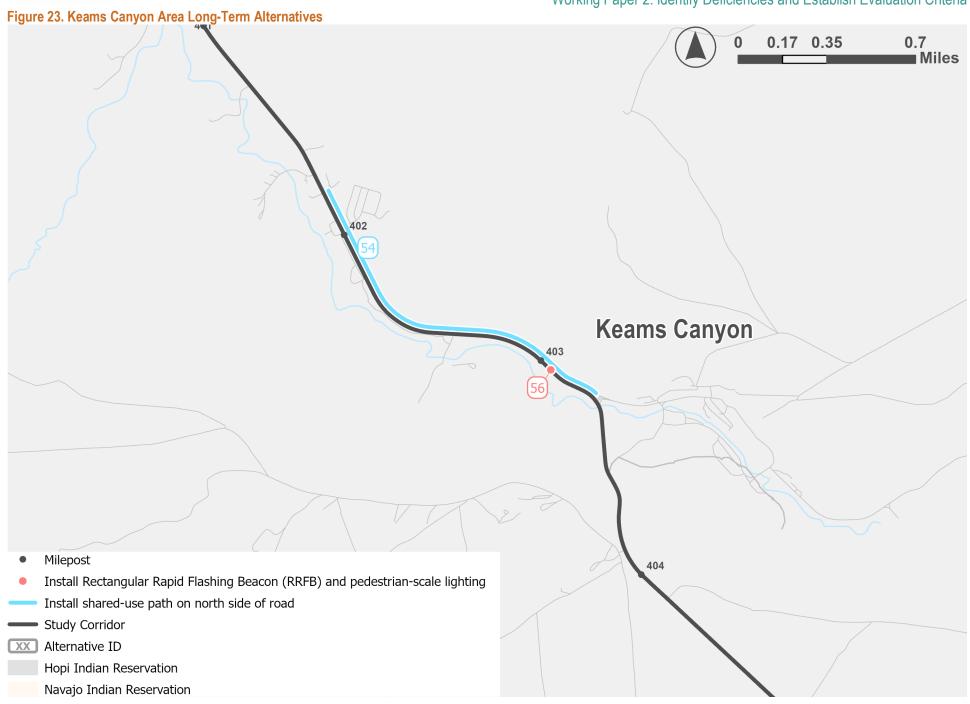
- Multiple low-cost countermeasures for stop-controlled intersections
- Install stop bar at the north bound right (NBR) lane
- Change yield at ramp on IR 6 to stop sign and stop bar
- · Remove no passing zones on both sides of intersection

Long-Term

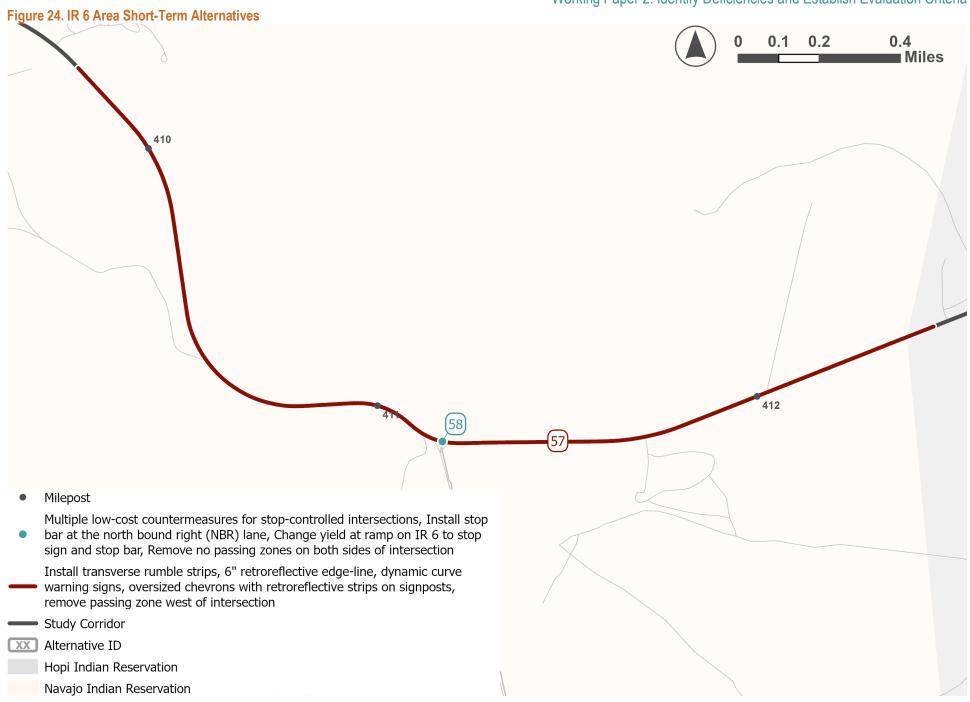
Conduct an ICE to determine the feasibility of installing roundabout



35



Source: Kimley-Horn





5. Forecasted Traffic Analysis

A traffic impact analysis was performed to determine forecasted congestion on the corridor and assess alternatives for multimodal crossing improvements for their appropriateness.

FUTURE LEVEL OF SERVICE ASSESSMENT

The corridor's future level of service was assessed based on the functional classification, number of lanes, whether the roadway is divided with a median, and the future Average Daily Traffic (ADTs).

According to the MCDOT Roadway Design Manual, the corridor is anticipated to operate at LOS B or better in 2043.

CROSSING LOCATION ASSESSMENT

Alternatives that proposed the addition of a rectangular rapid flashing Beacons (RRFB) were assessed to determine whether the countermeasure was appropriate for that location. This assessment took into account the forecasted ADT, the speed limit at that location, and the number of lanes per the guidance of the *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations* from the US Department of Transportation (USDOT).

Per the criteria, all locations identified for active transportation crossing improvements are candidates for a RRFB.

6. Prioritization Framework

After identifying potential short- and long-term alternatives for the areas of need on the SR 264 corridor, the areas must be prioritized to determine which are most beneficial to invest in short- and long-term. Ranking areas and alternatives by priority will allow ADOT and the Hopi Tribe to focus their resources on making the most effective investments in the region. To prioritize recommended investments, each short- and long-term area recommendation will be compared to a set of 'evaluation criteria' to appropriately understand project impact on roadway users of all modes.

CORRIDOR PRIORITIES

The priorities on the following page were identified to aid in determining the highest priority areas that are most beneficial to the transportation system users and best align with the Study's goals. **Figure 26** shows the corridor priorities.

The corridor priorities are currently equally weighted. The factors will be weighted by the study Technical Working Group (TWG) and the public to rank each priority's significance in the alternative prioritization process. Individual evaluation criteria within each priority may also be weighted based on importance. As the spreadsheet-based prioritization tool is developed and areas of need are prioritized by short- and long-term alternatives, weighting can be adjusted with ADOT and Hopi Tribe DOT staff to ensure prioritization results reflect implementable and diverse projects. **Figure 27** shows the current equal weighting of the proposed corridor priorities, which will be updated following TWG input.

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Figure 26. Corridor Priorities

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Safety



Engineering Constraints



Tribal Community, Public, and Stakeholder Support

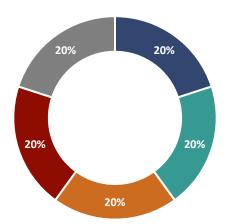


Activity Center Accessibility



Construction and Maintenance Costs

Figure 27. Priority Weighting



EVALUATION CRITERIA

The quantitative evaluation criteria below were developed to assess the short- and long-term alternatives identified for the areas of need by corridor priority.

Safety

- Monetary value of crashes avoided
- Average crash rate of project segments and intersections
- Pavement and Bridge Condition (good, fair, poor)
- Average access points per mile

Engineering Constraints

- Number of constructability risks related topography issues and areas of drop-off
- Severity of identified constructability issues (low, medium, high)
- Number of cultural sensitivity and environmental conflicts

Tribal Community, Public, and Stakeholder Support

- Number of previously recommended projects addressed
- Average rating for project from public input
- Average rating for project from TWG

Accessibility

- Project adds or enhances a direct multimodal connection to an activity center
- Number of modes of travel improved by the project
- Future estimated congestion

Construction and Maintenance Costs

- Planning-level construction costs
- Planning-level maintenance costs (high, medium, low)