Missouri Avenue Corridor Study
Public Meeting

Welcome to the meeting

The Mesilla Valley MPO is completing a corridor study to evaluate proposed alternatives for the potential transportation network connections from Missouri Avenue or Roadrunner Parkway east to Sonoma Ranch Boulevard.

In response to the FHWA funding used for the Corridor Study, the planning process will follow the ***NMDOT Phase A Location Study Procedures***

Phase A includes:

- Analysis of existing conditions
- Initial alternatives, screening for fatal flaws, limited engineering
- Recommendations on 1-3 alternatives for further analysis (plus No-Build)

Phase A does <u>not</u> include:

- Exact costs (will consider magnitude of costs)
- Full preliminary engineering or analysis

Project Scope

The Mesilla Valley MPO is working in collaboration with the City of Las Cruces, Doña Ana County, NMDOT, Las Cruces Public Schools, Bureau of Land Management, and the New Mexico Farm and Ranch Museum to create a range of alternatives which will bring value to the region.

Purpose and Need

The **Purpose** of the Missouri Avenue Corridor Study is to provide additional multi-modal connectivity from Missouri Avenue or Roadrunner Parkway across vacant land to Sonoma Ranch Boulevard.

The **Need** is based on the following:

- Lack of east-west roadway connections in and near the study area
- Lack of pedestrian and bicycle facilities across southeastern Las Cruces

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Alternatives Considered

1: No Build
Keep Missouri Ave and Roadrunner Pkwy on the MTP project list, no further analysis or pursuit of construction at this time.

2: Missouri Ave Extension *(Recommended)*
Build Missouri Ave to Sonoma Ranch Blvd (2-lane collector) along MTP corridor. No-Build Roadrunner Pkwy (project remains on MTP Future Thoroughfare Network).

3: Roadrunner Pkwy Extension
Build Roadrunner Pkwy along MTP corridor (2-4 lane minor arterial). No-Build Missouri Ave (project remains on MTP Future Thoroughfare Network).

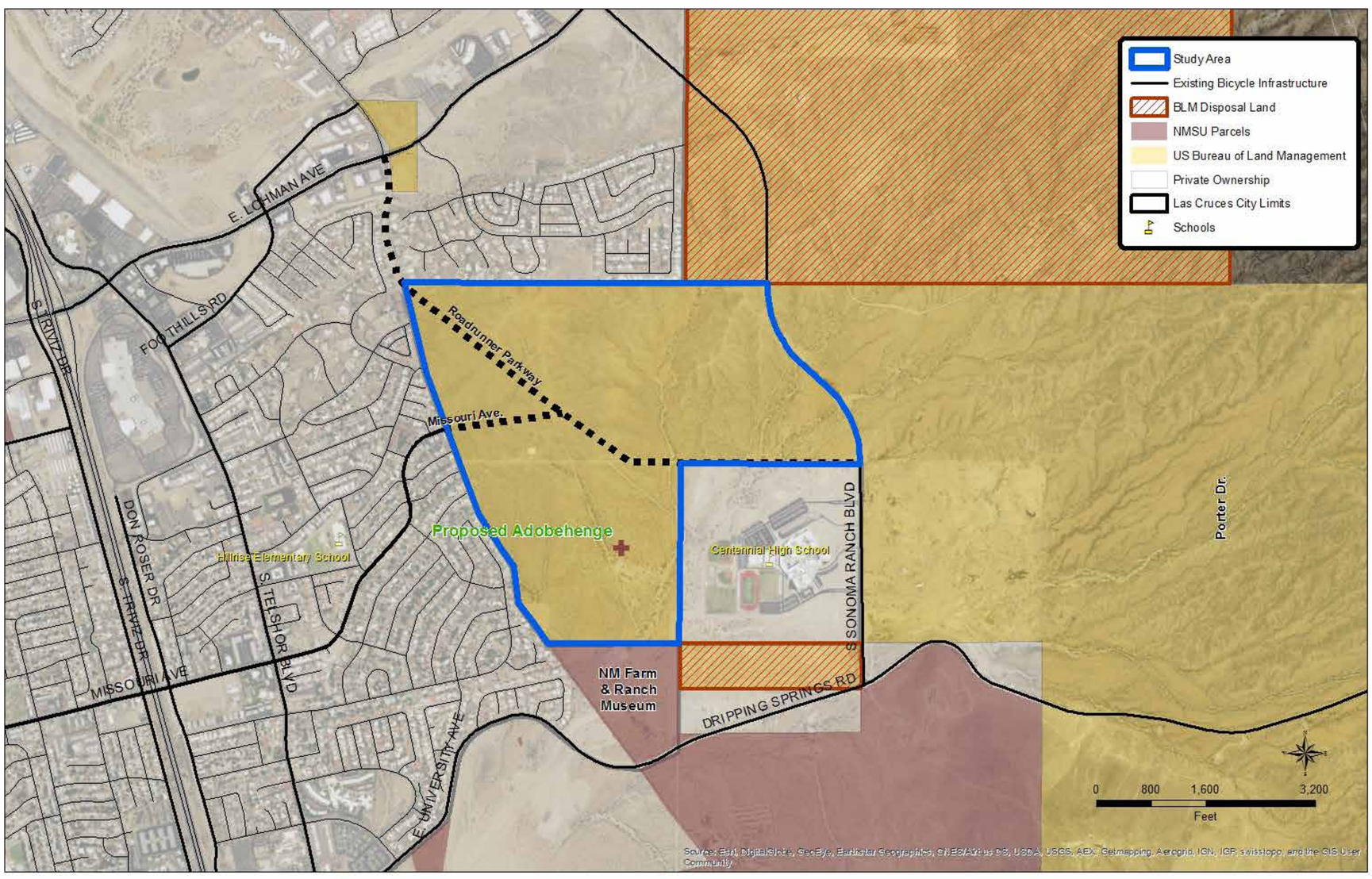
4: MTP Build. Scenario
Build Missouri Ave (2-lane collector) to connect with Roadrunner Pkwy (2-4 lane arterial) and Sonoma Ranch Blvd along the MTP corridor..

5A: Missouri Ave Northern
Build Missouri Ave to Sonoma Ranch Blvd along northern route; No-Build Roadrunner Pkwy.

5B: Roadrunner Pkwy Northern
Build Roadrunner Pkwy to Sonoma Ranch Blvd along northern route; No-Build Missouri Ave.

5C: MTP Scenario Northern Route
Build Missouri Ave (2-lane collector) to connect with Roadrunner Pkwy (2-4 lane arterial) and Sonoma Ranch Blvd along the northern route.

6: Non-Motorized Path *(Recommended)*
Build bicycle and pedestrian only separated path along the Missouri Ave extension to Sonoma Ranch Blvd.



Transport 2040 MTP Roadways:

The extension of Missouri Ave is included in the Transport 2040 MTP as a funded project in the years 2021-2030. Roadrunner Pkwy is identified in the Mesilla Valley MPO Future Thoroughfare Network as a potential long-term improvement project. Funding for the extension of Roadrunner Pkwy has not yet been identified. This study validates the status of the roadways in the MTP. The proposed extensions are shown in the map above.

Land Use Considerations:
This study assumed that the land in the study area - owned by the Bureau of Land Management - remains as open space for low-intensity recreationsal uses.

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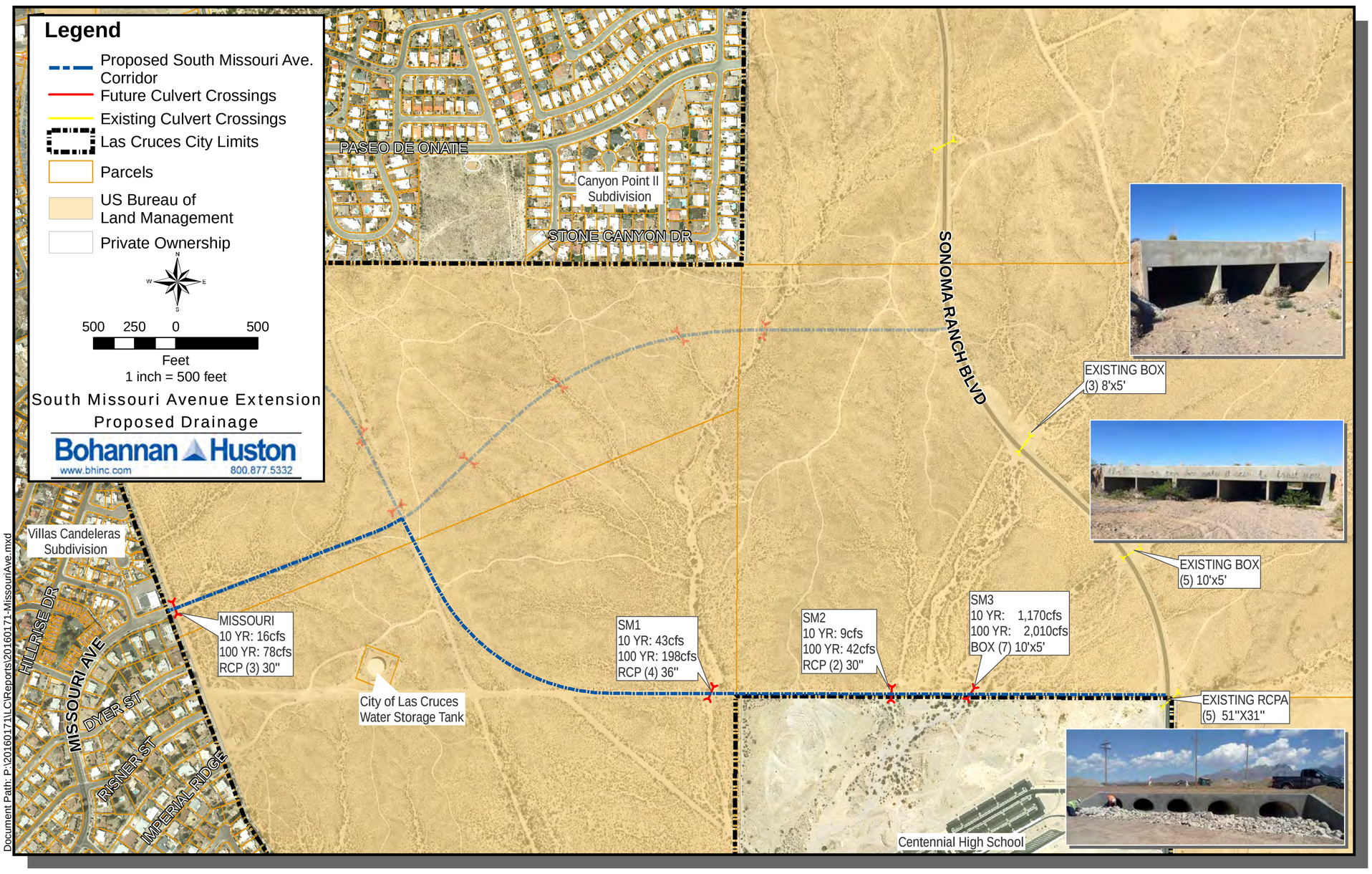
Drainage Analysis



Legend:

RCP = Reinforced concrete pipes

BOX = Box culvert

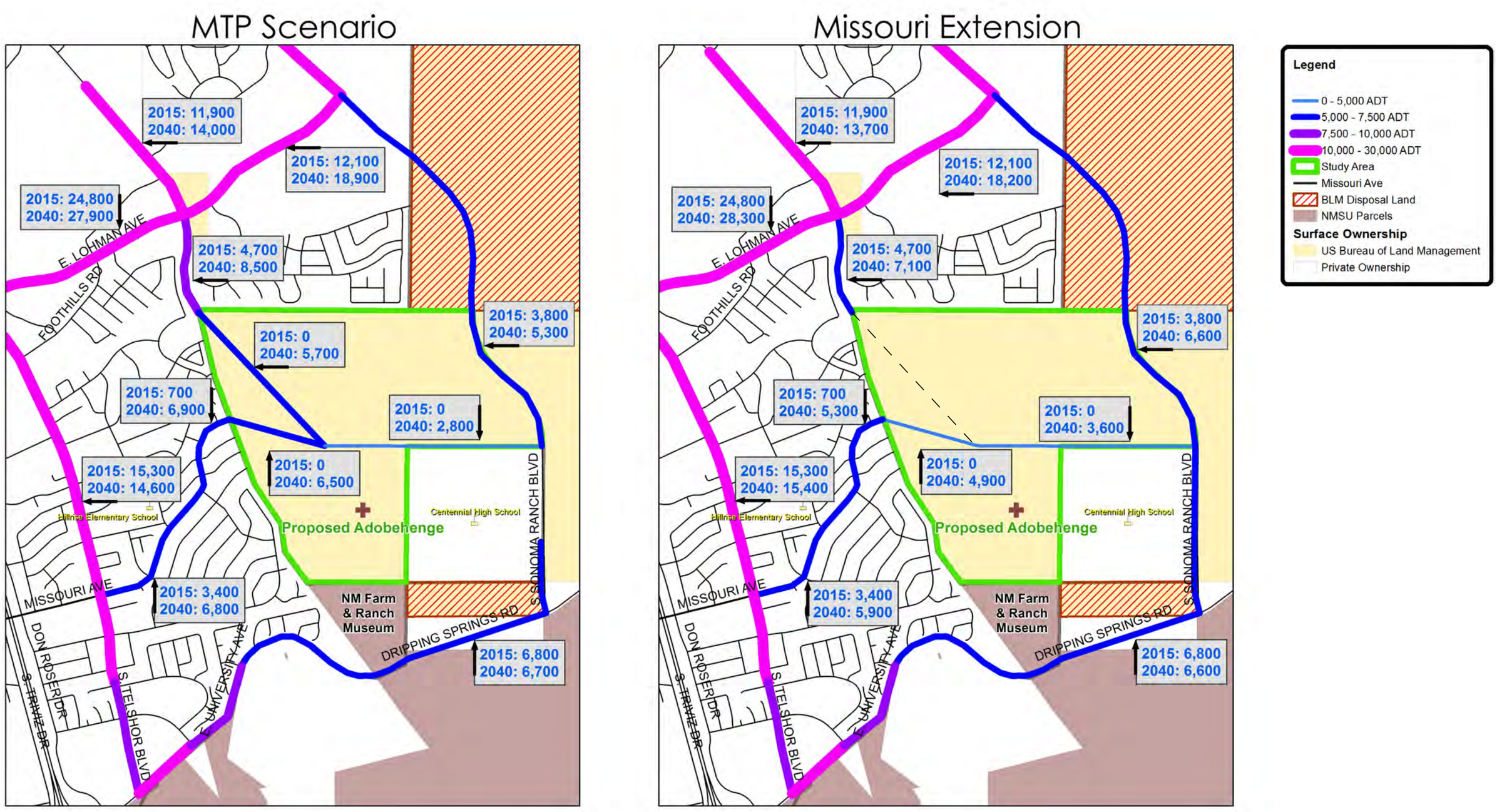
cfs = Cubic feet per second

10 YR = Water flow in 10-year rainfall event

100 YR = Water flow in 100-year rainfall event

A series of arroyos traverse the study area and would require drainage infrastructure to support any roadway improvements. The most costly infrastructure would be required for the arroyo system on the north side of Centennial High School. The same series of box culverts would be required for a roadway or a non-motorized path.

Travel Demand Model Analysis



The maps indicate the estimated number of current trips (2015) along roadways near the study area and the projected trips (2040) based on an expanded roadway network in the Mesilla Valley MPO regional travel demand model.

The travel model results indicate a general pattern of rerouted trips through the study area as a result of the extended roadways. In particular, Missouri Ave - in conjunction with Sonoma Ranch Blvd or the proposed Roadrunner extension - presents an attractive alternative route for trips that ultimately travel north-south across Las Cruces.

* Note the numbers should be considered rough estimates from a model used for understanding regional travel patterns. A more refined model would be beneficial to understand the exact impacts of a new roadway in the study area.

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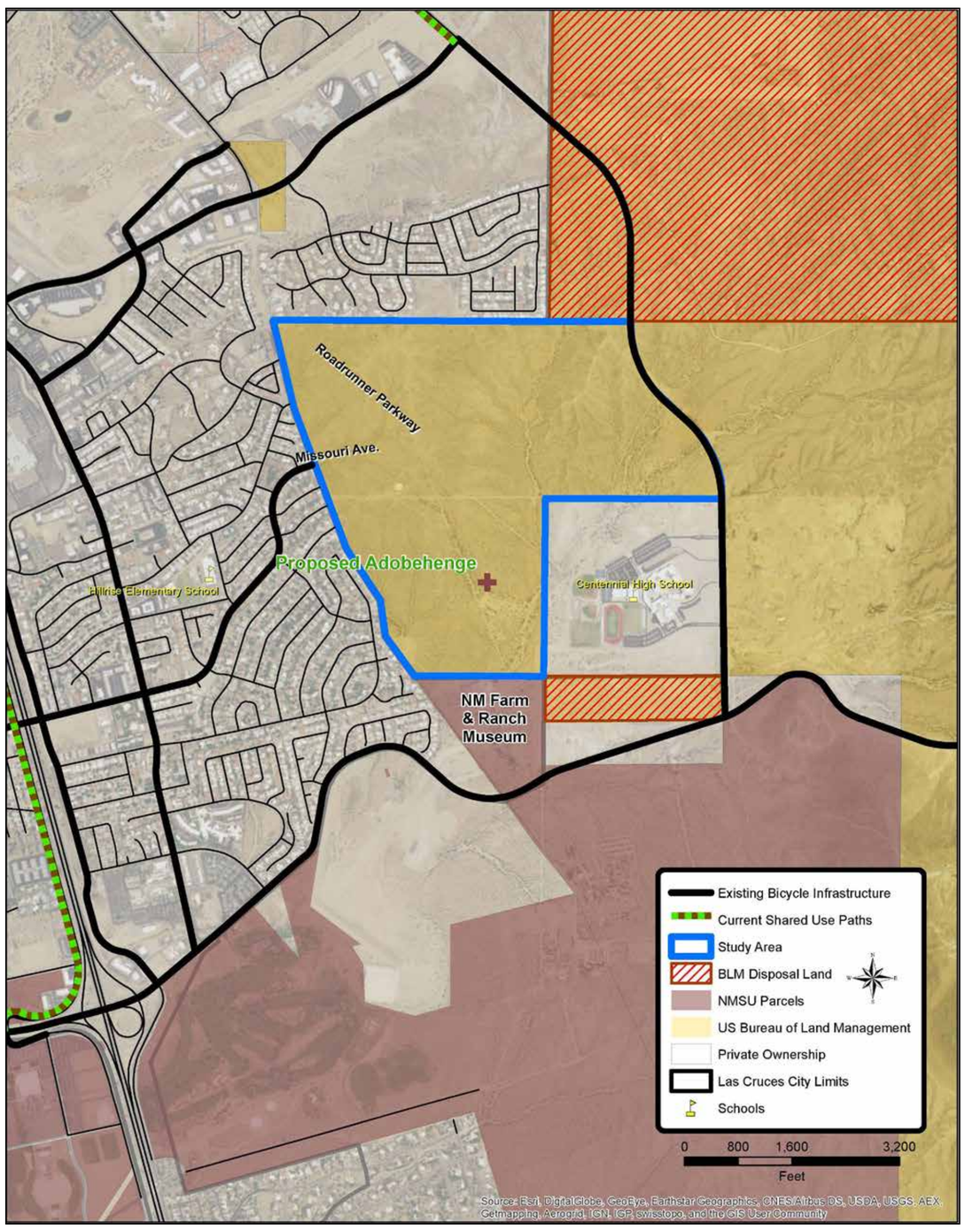
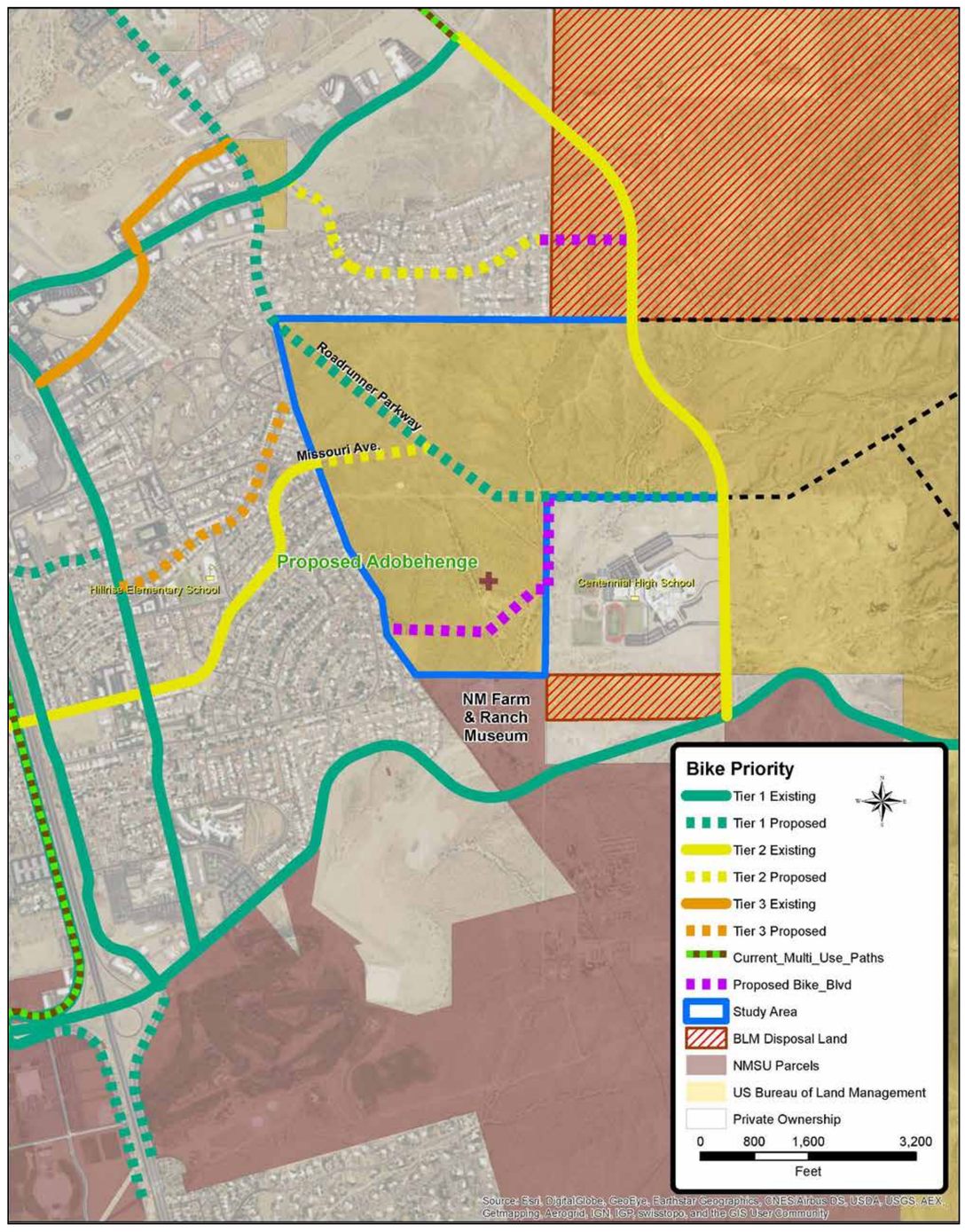
Bicycle Level of Service

Existing Bicycle Infrastructure



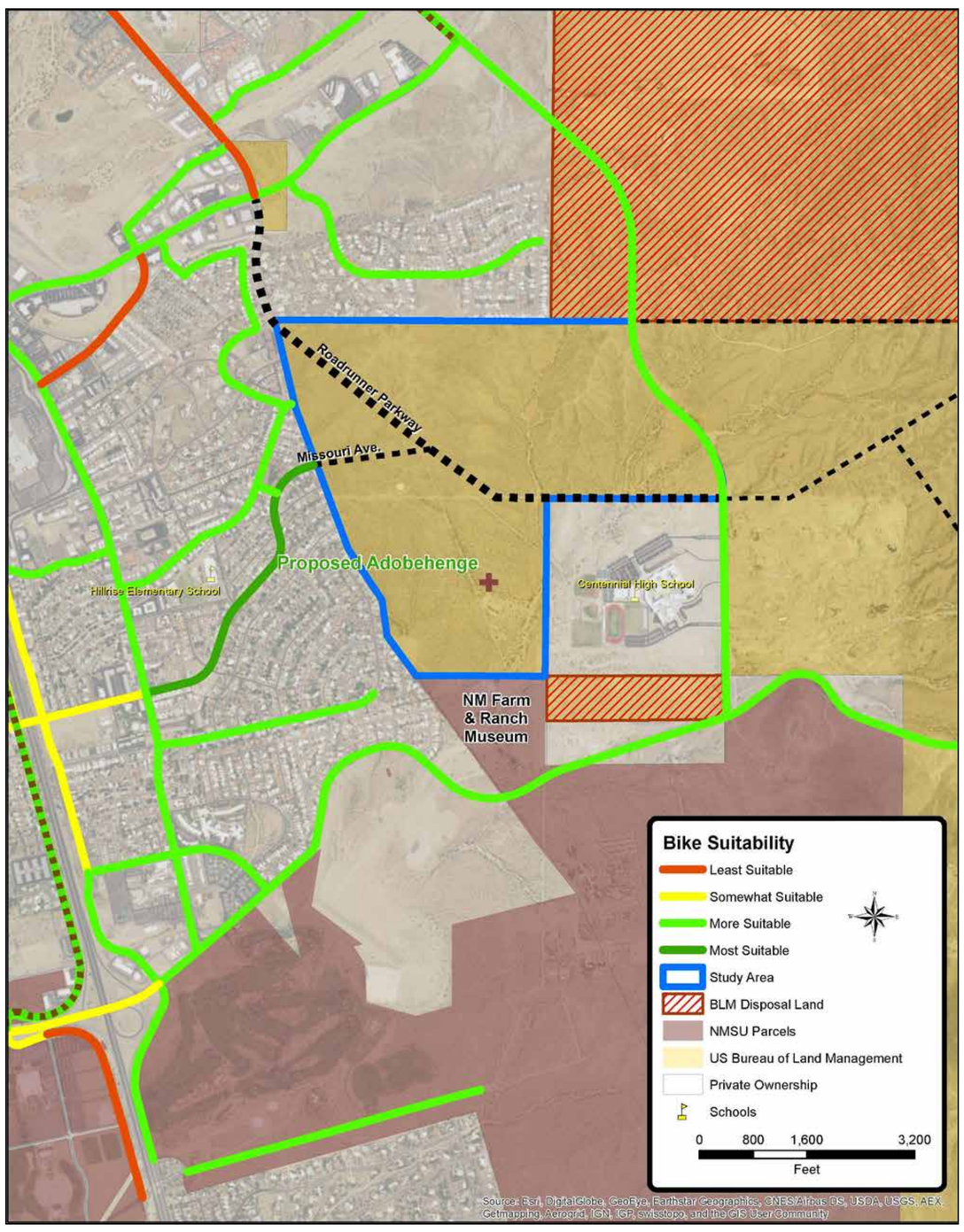
Roads in or near the study area with some form of existing bicycle infrastructure. This map does no depict the quality of the bicycle infrastructure.

Bicycle Priority



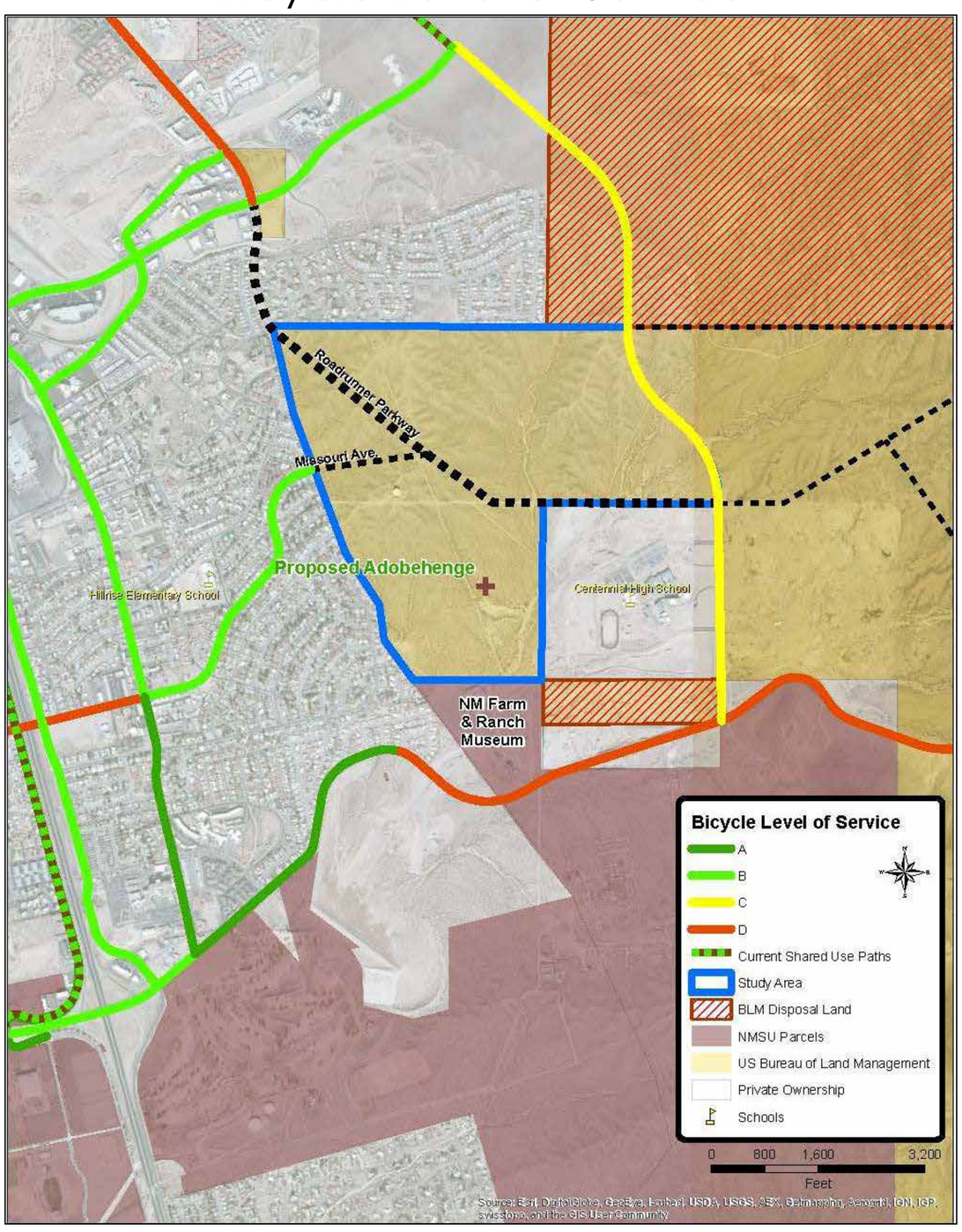
Existing and proposed bicycle facilities by tier, according to the MVMPO Bicycle System Priorities Plan. The Tiers represent the role of the facility in the regional bicycle network. The tiers do not represent priority levels for implementation.

Bicycle Suitability



The suitability of roads for bicycle travel is based on traffic counts, posted speed, functional class, and facility type. Designations are found in the Mesilla Valley Bicycling Suitability Map.

Bicycle Level of Service



Bicycle LOS considers traffic conditions and factors related to the quality of the infrastructure, including lane widths and pavement conditions.

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Evaluation Matrix

Criteria	Definition	Alternative: 1. No Build	2. Missouri Extension	3. Roadrunner Extension	4. MTP Build Scenario	5A. Missouri Northern	5B. Roadrunner Northern	5C. MTP Scenario Northern Route	6. Bicycle/Pedestrian Connection
		No Build Scenario - Keep Missouri Ave and Roadrunner Pkwy on the MTP project list.	Build Missouri Ave to Sonoma Ranch Blvd (2-lane collector, including bicycle lanes) along MTP corridor; No Build Roadrunner Pkwy (project remains on MTP list).	Build Roadrunner Pkwy (2-lane arterial, including bicycle lanes) along the MTP corridor; No-Build Missouri Ave (project remains in the MTP).	Build Missouri Ave (2-lane collector) to tie in with Roadrunner Pkwy (2-lane arterial) which connects with Sonoma Ranch Blvd along the MTP Corridor.	Build Missouri Ave to Sonoma Ranch Blvd along northern route (No Build of Roadrunner Pkwy).	Build Roadrunner Pkwy to Sonoma Ranch along northern route (No Build of Missouri Ave)	Build Missouri Ave (2-lane collector) to tie in with Roadrunner Pkwy (2 lane arterial) which connects with Sonoma Ranch Blvd along a northern corridor.	Build bike and pedestrian facilities independently, evaluating the best route to connect the Missouri Ave neighborhood to Centennial High School as well as Adobehenge and the Farm and Ranch Museum.
Purpose and Need	Enhanced transportation network connectivity and improved options for non-motorized travel.	Does not meet purpose and need.	Fully meets purpose and need.	Provides additional connection to Sonoma Ranch Blvd, but route is somewhat redundant to Lohman Ave. Does not meet need of improved east-west pedestrian and bicycle connections from Missouri Ave.	Fully meets purpose and need.	All three northern routes provide east-west connectivity to Sonoma Ranch Rd, but do not provide direct access to Centennial HS. The route does not meet the need of providing direct pedestrian and bicycle connectivity through study area for residents along Missouri Ave.			East-west connectivity needs are met for non-auto modes only. However, large benefits are gained by bicycle and pedestrian connections.
Access	Multi-modal access to Centennial HS, New Mexico Farm & Ranch Museum, Adobehenge, and to east Las Cruces.	Does not provide improved access.	Provides direct access to major destinations within study area plus areas further east.	Access to study area destinations is indirect through Sonoma Ranch Blvd from the east	Provides direct access to major destinations within study area plus areas further east	Access to key destinations in or near the study area is somewhat improved, but less direct due to the more northern alignment.			Improved access for pedestrian and bicycle travel only. Potential to create trail connecting to Farm & Ranch Museum
Network Connectivity	Link Missouri Ave neighborhood to destinations to the east and improve network connections.	Does not provide improved connectivity.	Provides east-west connectivity and new multi-modal links.	Limited connectivity benefits for neighborhoods west of the study area. Bicycle network is extended but connections are not improved.	Provides east-west connectivity and new multi-modal links.	Provides east-west connectivity and new multi-modal links from neighborhoods west of the study area.	Limited connectivity benefits for neighborhoods west of the study area.	Provides east-west connectivity and new multi-modal links from neighborhood	Creates new bicycle and pedestrian network connectivity. Does not improve roadway network.
Engineering Feasibilty	Presence of arroyos, natural land uses, or other topography that create engineering challenges.	No engineering required.	The alignment must cross a total of four arroyos, including three minor arroyo crossings (including an arroyo to the east of the terminal point for the existing Missouri Ave roadway). A large arroyo crossing along the northern edge of the Centennial HS campus would require a large set of box culverts.	Roadrunner section: There are a total of six arroyo crossings. The largest of which is to the south of Lohman Ave. Missouri section: There are three arroyo crossings along the Missouri Ave southern alignment, including the large crossing on the northern edge of the Centennial HS campus.	Roadrunner section: Six crossings. Missouri section (southern alignment): Three crossings, including large system north of Centennial HS. Missouri extension: One crossing.	The Missouri Ave northern alignment crosses a total of five arroyos, including one crossing to the east of the existing roadway terminal point. The upstream location of the corridor reduces the potential flows considerably compared to the southern alignment.	The Roadrunner Pkwy northern alignment crosses a total of ten arroyos, the largest of which is to the south of Lohman Ave. The upstream location of the corridor reduces the potential flows considerably compared to the southern alignment.	The MTP scenario northern alignment crosses a total of 11 arroyos, the largest of which is to the south of Lohman Ave. The upstream location of the corridor reduces the potential flows considerably compared to the southern alignment.	Must cross a total of four arroyos, including the large system on the north side of the Centennial HS campus. Low water crossings may be appropriate for other arroyos.
Traffic Impacts	Changes in vehicle travel patterns resulting from alternative.	No additional impacts. There is no change in travel patterns over time, but no benefits to regional circulation.	Extension of Missouri results in increase in through-traffic on existing corridor between Telshor and Sonoma Ranch. Improved speed on east-west connection results in re-routing of trips. Traffic calming may be required on Missouri to minimize through traffic. *Traffic impacts should be evaluated further.*	Extension of Roadrunner results in minor changes in vehicle patterns and does not create additional connections. Roadrunner extension provides minimal relief to existing roadways. *Traffic impacts should be evaluated further.*	Extension of Missouri and Roadrunner results in increased through-traffic on existing Missouri corridor between Telshor and Roadrunner. Improved speed on east-west connection results in re-routing of trips along Missouri to complete north-south movement. Benefits to regional traffic flow, though *overall traffic impacts should be evaluated further*.	Extension of Missouri results in increase in through-traffic on existing corridor between Telshor and Sonoma Ranch. Improved speed on east-west connection results in re-routing of trips. Traffic calming may be required on Missouri to minimize through traffic. *Traffic impacts should be evaluated further.*	Extension of Roadrunner results in minor changes in vehicle patterns and does not create additional connections. Roadrunner extension provides minimal relief to existing roadways. *Traffic impacts should be evaluated further.*	Extension of Missouri and Roadrunner result in increased through-traffic on existing Missouri corridor between Telshor and Roadrunner. Improved speed on east-west connection results in re-routing of trips along Missouri to complete north-south movement. *Traffic impacts should be evaluated further.*	No change in vehicle travel. Benefits to non-motorized regional travel.
Environmental Issues	Based on land area for potential biological, cultural, or natural resource impacts and impacts of motor vehicle travel.	No impacts to surrounding natural environment.	Possible environmental impacts resulting from land required for right-of-way, as well as air quality and arroyo crossings. *Further environmental analysis required.*	Possible environmental impacts resulting from land required for right-of-way, as well as air quality and arroyo crossings. *Further environmental analysis required.*	Possible environmental impacts resulting from land required for right-of-way, as well as air quality and arroyo crossings. *Further environmental analysis required.*	Possible environmental impacts resulting from land required for right-of-way, as well as air quality and arroyo crossings. *Further environmental analysis required.*	Possible environmental impacts resulting from land required for right-of-way, as well as air quality and arroyo crossings. *Further environmental analysis required.*	Possible environmental impacts resulting from land required for right-of-way, as well as air quality and arroyo crossings. *Further environmental analysis required.*	Modest impacts since little right-of-way is required, no CO_2 emissions are generated, and arroyo crossings may be minimized.
Community Impacts	Project may produce adverse impacts to residential neighborhoods or may provide benefits such as improved access to key destinations.	No additional impacts or benefits.	Potential impacts to residents along proposed Roadrunner Pkwy, including construction of a new road adjacent to existing homes. Access to east Las Cruces is minimally improved. No impacts to Missouri Ave neighborhoods.	Potential impacts to residents along proposed Roadrunner Pkwy, including construction of a new road adjacent to existing homes. Access to east Las Cruces is minimally improved. No impacts to Missouri Ave neighborhoods.	Potential impacts to residents along Missouri and proposed Roadrunner Pkwy extension, including construction of a new road adjacent to existing homes, as well as additional traffic through neighborhoods. Access to east Las Cruces is improved, including non-motorized travelers.	Potential to generate additional through traffic in existing Missouri Ave neighborhoods. No construction adjacent to existing homes along Missouri Ave, or impacts to residences near Roadrunner Pkwy. Access to east Las Cruces area and Centennial HS is only minimally improved.	Potential impacts to residents along proposed Roadrunner Pkwy, including construction of a new road adjacent to existing homes. Access to east Las Cruces is minimally improved. No impacts to Missouri Ave neighborhoods.	Potential impacts to residents along Missouri and proposed Roadrunner Pkwy extension, including construction of a new road adjacent to existing homes, as well as additional traffic through neighborhoods. Access to east Las Cruces is minimally improved.	There is a positive impact to the community through increased pedestrian and bicycle access without additional vehicle capacity.
Consistency with Existing Planning Documents	Alternative is identified in the Mesilla Valley MPO's Transport 2040 Plan. The project is consistent with the goals and objectives of the MTP, or is named in the Future Thoroughfare Map or the Bicycle System Priorities Plan.	Projects remain listed in MTP and on Future Thoroughfare Map, but implementation is postponed.	Missouri Ave extension is identified as a funded project in the 2021-2030 years of the MTP and is listed as a Tier 2 priority corridor on the Bicycle System Priorities Plan.	Roadrunner Pkwy is a proposed Minor Arterial in the MVMPO Future Thoroughfare Map and is listed as a Tier 1 priority corridor on the Bicycle System Priorities Plan.	Both projects are identified in the MTP as part of the long-term roadway network and Bicycle System Priorities Plan.	The northern route itself is not an alignment identified in the 2040 MTP or the MVMPO Future Thoroughfare Map, although it could be considered as an alternative to routes identified in those documents.			Missouri Ave and Roadrunner Pkwy are both identified in the Bicycle System Priorities Plan by the Mesilla Valley MPO.
Right-of-Way	Length of roadway to be constructed. All routes are along land currently owned by BLM and would require leases. The City of Las Cruces owns the northernmost portion of the proposed Roadrunner Pkwy.	None required at this time.	≈ 6,690' or 1.27 miles	≈ 9,190' or 1.74 miles	≈ 10,730' or 2.03 miles (Missouri Ave collector extension is 0.29 miles)	≈ 5,240' or 0.99 miles	≈ 7,740' or 1.47 miles	≈ 9,280' or 1.76 miles	≈ 6,690' or 1.27 miles - These numbers reflect the distance if the shared-use path follows the Missouri alignment. The exact alignment for a shared-use path has not yet been identified.
Magnitude of Costs	Magnitude of cost based on length and type of roadway, plus the presence of topographical features such as arroyos and the related drainage infrastructure needs.	No costs at this time.	Moderate	Moderate-High	Highest among MTP scenario alternatives, though Missouri Ave collector segment is not overly costly.	Moderate	Moderate	Moderate-High	Low-Moderate

- Green: **Net postive impacts**
- Yellow: **Net neutral impacts**
- Red: **Net negative impacts**

The evaluation matrix is a means of understanding the impacts associated with each proposed alternative from a range of criteria and perspectives. In an NMDOT-funded study, the recommendations must be supported by the analysis and findings contained in the matrix.

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Recommended Alternatives

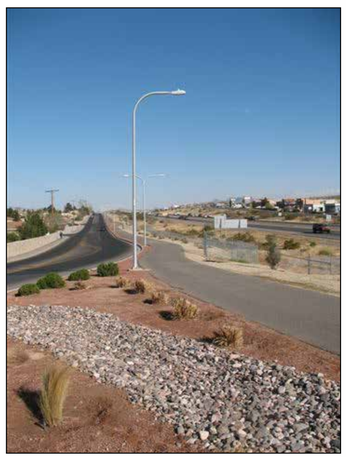
Alternative 6 - Non-Motorized Path

Benefits:

- There are minimal impacts to environment
- Recreational benefits for surrounding neighborhoods and cyclists
- Improved access to Centennial High School as well as the southeastern part of Las Cruces for bicyclists and pedestrians
- Support from public and technical committees

Considerations:

- Funding could be pursued through a variety of options
- Implementation could be pursued as stand-alone project OR part of a phased approach toward full roadway typical
- Alternative is ready for environmental analysis, design, and construction



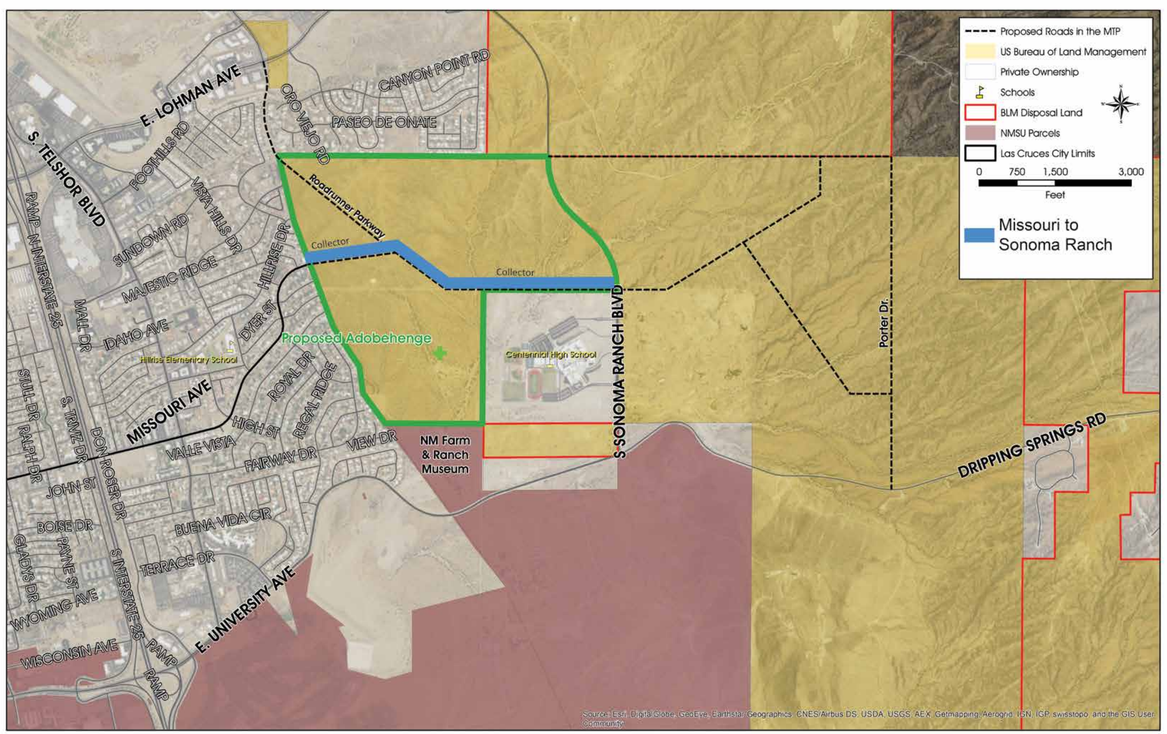
Alternative 2 - Missouri Ave

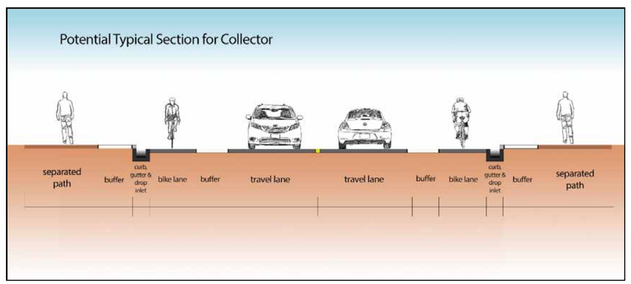
Benefits:

- Provides improved east-west vehicular connectivity across Las Cruces
- Improved access to Centennial High School as well as the southeastern part of Las Cruces for bicyclists and pedestrians

Considerations:

- Regional traffic patterns cannot be addressed through this project alone. A regional traffic study examining potential improvements and impacts on roadways inside and outside the study area is necessary before environmental analysis or design can begin.
- While there is enough benefit to warrant further study, there is not enough information to make a decision or justify investment in a new roadway at this time





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