

EXECUTIVE SUMMARY

The US 550 corridor is a significant commuter, local, and regional roadway operated by The New Mexico Department of Transportation (NMDOT). The east-west connector locally serves the Town of Bernalillo, serves the commuting needs of communities like Rio Rancho, Santa Fe, and Albuquerque, and provides regionally connectivity to the Farmington Area. NMDOT categorizes this roadway as a limited access principal urban arterial from Paseo del Volcan to NM 313. The corridor traverses several different governmental boundaries including Sandoval County, Town of Bernalillo, City of Rio Rancho, and borders the Santa Ana Pueblo. **Figure 1.1** shows a vicinity map indicating area roadways, project study extents, and major study intersections.

The purpose of the US 550 corridor project is to reduce congestion on this heavily traveled east-west Rio Grande crossing route, increase safety, minimize access conflicts, create economic development opportunities, and recommend facilities for alternative modes of travel.

In order to develop alternatives to address the purpose and need established for this project, the efforts initiated under the Phase A evaluations include assessing existing corridor conditions along US 550 from Paseo del Volcan to NM 313. The areas of assessment include traffic capacity and operations, transit, pedestrian and bicycle facilities, bridge structures, drainage, environmental, public feedback, safety, and access management. In addition, input was gathered from local stakeholders and the public. As part of the Phase 1A process, a collection of short-term and long-term recommendations for potential projects have been developed. These recommendations include preliminary cost estimates so that future funding decisions can be made. Aligned with the project purpose, alternatives evaluated were focused on improving access, mobility, and safety for all modes of travel.

The following design alternatives were investigated for this study:

- Six-Lane Cross-section
- Eight-Lane Cross-section
- Reversible Lanes
- Double Decker
- Arterial Super Street

Capacity analysis indicates that all of these alternatives, aside from the Double Decker option, will operate at unsatisfactory Levels of Service (LOS) (F) under 2035 traffic demands as provided by the Mid-region Council of Governments (MRCOG). The double decker option would severely impact

adjacent properties and businesses and would not be sensitive to community needs of the Town of Bernalillo, Santa Ana Pueblo, and City of Rio Rancho.



Additionally, five separate design options were reviewed for the US 550 and NM 528 intersection and includes the following:

- Four-lane Section with Triple Left-Turns
- Continuous Flow Intersection
- Super Street
- Interchange
- Flyover

Out of the above design options both the interchange and flyover is projected to operate at an acceptable LOS.

It should be mentioned that since the analyses was completed for this report, MRCOG has updated the 2035 model demands to reflect a downward trend in economic factors and growth. Recently, MRCOG has provided preliminary updated 2035 traffic demands with some peak directional demands reduced up to 30%. This projected reduction demand makes the more community sensitive six-lane and super street design alternatives much more viable. As a result it is recommended that they should be investigated further in the Phase 1B stage of this Project.

Therefore, the following alternatives and design options are recommended to be further analyzed in greater detail during the Phase 1B stage of the project:

- **Alternative 1 – Six Lane Section**
- **Alternative 5 – Super Street**
- **Design Option 2 – Continuous Flow Intersection**
- **Design Option 3 – Super Street**
- **Design Option 5 – Flyover**

Additionally, it is recommended that as many of the traffic demand reduction strategies be implemented in conjunction with one of the above design alternatives to further increase its design life and provide much greater value for the cost.

Additionally, there are several alternatives discussed within this study which are aimed at further reducing demands on US 550. They include the following:

- Transit Route/BRT Improvements
- New Park and Rides on the West Side of the Rio Grande
- Incorporation of Back-Access Roads Parallel to US 550
- Development of a Comprehensive Adjacent Corridor Plan
- Improved Access Management

- Pedestrian and Bicycle Improvements
- Signal Timing Upgrades
- ITS/Traffic Demand Management
 - Dynamic message signs, CCTV cameras, Blue Tooth Travel Time Systems, and vehicle data collection devices
 - Carpooling or car sharing programs
 - Implementation of flexible company work hours
 - Encouragement of telecommuting and tele-meeting practices
 - Incorporation of parking fees
 - Development of work center destinations on the west side of the river to balance river crossing demands.

The above strategies, if implemented collectively, could further reduce demands on US 550 by as much as 10-15%.