

## CHAPTER 8 CONCLUSIONS AND RECOMMENDATIONS

As indicated in this report, the US 550 corridor is expected to experience significantly heavy growth within the next 20 years and thus will experience significantly greater congestion as that growth is realized. Since this is the only bridge crossing within the area it will remain a focal point for commuter traffic. Additionally, there is a large amount of adjacent undeveloped land that is expected to contribute to this continued traffic demand growth and congestion.

### 8.1 Conclusions

This Phase 1A Report reviewed existing conditions, constraints, and public input to develop a series of alternatives that would attempt to address the project purposes. It is a challenge to balance the needs between accommodating future traffic demands and the desire for the local communities to maintain their identities and not feel divided between the north side and south side of the corridor. As the only bridge crossing for several miles, 2035 travel demand is projected to correspond with a roadway which generally requires a freeway section to provide acceptable LOS. Instead of proposing such a major modification, which would divide the community, recommendations include more modest capacity improvements combined with modal choice and demand management strategies which should include the following strategies:

1. Provide additional transit routing and amenities including a Park and Ride facility on the west side of the river that will connect future routes north-south and east west to the Railrunner Transit Hub. Bus rapid transit (BRT) and associated amenities such as queue jump lanes, transit pre-emption, and reversible transit lanes would also provide transit as a potential attractive option over vehicular traffic. Implementation of these improvements could help make transit an attractive modal choice over vehicle traffic.
2. Enhance bicycle and pedestrian facilities to encourage these mode choices. Options for these modes must be safe and relatively convenient to promote them as an attractive alternative and to encourage connectivity, especially between the north and south side of US 550.
3. Consideration of access control and driveway sharing for the east side of the river.
4. Creation of a comprehensive regional traffic circulation plan for the adjacent road network, including planning for additional east-west and north-south corridors as well as consideration of back access roads to supplement adjacent commercial properties access.
5. Continued expansion of the ITS tools at the NMDOT's disposal including, CCTV incident cameras, Dynamic Message Signs, and travel time information sharing.

6. Encourage a more balanced land use scenario on the west side of the river to minimize the need for vehicular travel east across the Rio Grande bridge.

There is no one design option for this corridor that will address both capacity and community issues. A combination of efforts must be enacted to better accommodate the needs of the US 550 corridor.

The next step is to take the recommendations of this Phase 1A study and evaluate them at a more detailed level. The new MRCOG 2035 model will be revised in the coming year to reflect a more appropriate socio-economic condition with 2035 projections looking more like today's 2025 model projection, which could make some options discussed in this report more viable from a traffic capacity analysis. The study team has recently gotten the opportunity to review an updated 2035 model as provided by MRCOG. Reductions between the old and model are significant, especially in the peak hour direction with up to 30% traffic demand reductions observed on US 550. These reduction factors were applied to the 2035 six-lane alternative model with preliminary results indicating that all intersections may operate at a LOS of D or better. Therefore many of these options have been recommended for further analysis in the Phase 1B study to see how these design alternatives perform under more detailed and revised traffic projections. This does not mean that supplementary efforts should be scaled back because it will still be very beneficial to realize the estimated 10-15% traffic capacity increase expected from implementing BRT, new park and rides on the west side of the river, incorporating backage roads, a new access management plan, adaptive signal timing, pedestrian and bicycle improvements, comprehensive adjacent corridor planning, and ITS/Traffic Demand Management strategies.

### 8.2 Recommendations

#### **8.2.1 Recommended Long Term Alternatives for Phase 1B Analysis**

The following alternatives are recommended for further analysis in greater detail during the Phase 1B stage of the project:

#### **US 550 Improvements**

- **Alternative 1 – Six Lane Section**
- **Alternative 5 – Super Street**

#### **NM 528 Intersection Improvements**

- **Design Option 2 – Continuous Flow Intersection**
- **Design Option 3 – Super Street**
- **Design Option 5 – Flyover**

As discussed in Chapter 7 of this report, the above alternatives and design options should also be accompanied by 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

### **8.2.2 Short Term Recommendations**

Based on the analysis of 2012 traffic demands the following “short term” mitigation is recommended. Short term mitigation would be potential construction projects that could be completed within the next year or two. These include the following:

- Construction of full signal control is warranted at both Paseo del Volcan and Sheriff’s Posse/Kuaua intersections.
- Realignment of the Kuaua Road with Sheriff’s Posse Road to accommodate the proposed signal control at this location.
- A full re-timing and re-coordination of the corridor is warranted especially when and if new signals come on line at Paseo del Volcan and Sheriff’s Posse/Kuaua intersections. A potential new signal timing plan is provided in the “Signal Timing Improvements” section of the Traffic Operations Report.
- Install additional CCTV incident management cameras at the Paseo del Volcan and Don Tomas intersections and at the Rio Grande Bridge.
- All pedestrian facilities should be upgraded to be brought into compliance with the recent PROWAG standards, which the NMDOT has recently adopted.

- The eastbound and westbound left and right- turn lanes at the west approach of the US 550/NM 313 intersection need to be lengthened to accommodate current 95<sup>th</sup> percentile queue lengths indicated in the Traffic Operations Report.
- Develop regional network plan to identify back access road locations and proposed right of way for future construction.

### **8.2.3 Near Term Recommendations**

Based on the analysis of 2012 traffic demands the following “near term” mitigation. “Near term” mitigation is considered to be construction that could be completed within the next five to seven years. These include the following:

- Dual left-turn lanes at the south leg of the NM 313 intersection.
- Dual left-turn lanes at the south leg of the Don Tomas intersection. This will require realignment of the north and south legs of the intersection for proper through lane alignment.
- An additional through right-turn lane at southbound Jemez Dam Road if and when development projects occur on the south side of the signalized intersection.
- Addition of a third through lane, a bike lane, and sidewalks on US 550 from NM 528 to NM 313. With the addition of a third through lane on US 550, raised medians in conjunction with driveway consolidation, driveway relocation to side streets, and the development of back access roads need to be undertaken.
- Build or at least acquire right-of-way for the construction of back access roads along US 550.