



## RM 620 Improvement Study: Summary

**Background** - In order to reduce congestion and enhance mobility in western Travis County, TxDOT has conducted a corridor improvement study of Ranch-to-Market 620 from State Highway 71 West to United States Highway 183. This report outlines a plan for short-, medium- and long-term improvements. This 18.8 mile section of RM 620 is typically a four-lane roadway with a two-way center left-turn lane. It provides regional mobility and connects major roadways, including SH 71, Bee Cave Parkway, RM 2222, Anderson Mill Road, US 183, Parmer Lane, SH 45N, and I-35. RM 620 experiences high levels of congestion and delay during the morning and afternoon peak periods, and the daily traffic volumes far exceed the level at which the roadway provides safe and efficient operations.

**Public Involvement Plan** – The public engagement included six section working groups, extensive meetings with local business, government and business groups, and an online survey with more than 3,000 responses.

**Findings** - To ensure RM 620 continues to serve as an effective link in the regional roadway network, it is necessary to develop roadway improvements to service existing congestion and expected growth.

*Short-Term Options* - The proposed short-term projects or current planned improvements will have immediate positive impacts on traffic conditions. They mostly consist of intersection improvements and additional auxiliary lanes. However, these projects will not address the capacity constraints along the corridor. As a result, some intersections will continue to operate at level of service E or F. These low cost improvements range in construction costs in the range of \$400,000 to \$1.5 million.

*Mid-Term Options* - Recommended mid-term improvements include the construction of a raised median with turn bays along the entire length of RM 620 and widening from four-lanes to six-lanes from SH 71W to Lakeway Boulevard, as well as from Quinlan Park Road to US 183. The total construction costs for all of the improvements are approximately \$176 million, plus approximately \$26 million in right-of-way costs.

The mid-term option will result in decreased congestion and improved mobility. Conversion of the center two-way left-turn lane into a raised median with curbs and turn bays improves safety by controlling turning movements. By limiting turns in the center median to specific locations, they can be made at predictable and safe locations.

*Long-Term Options* - Since short and mid-term improvements do not adequately address all traffic congestion problems through 2035, the following long-term improvements are proposed:

- Add a four-lane limited-access roadway connecting US 183/SH 45N with RM 620 and RM 2222. Incorporate flyovers into this design at the US 183/SH 45N interchange and at RM 2222.
- Extend the six-lane roadway with a raised median north from Lakeway Boulevard to Hudson Bend Road.
- Extend the RM 620 to RM 2222 flyovers to pass over River Place Boulevard.

**Limited-Access Lanes** - Five options were evaluated for location of the four limited-access lanes from US 183 to RM 2222. Although elevating the lanes in the middle of the existing

right of way was chosen for analysis purposes, a future study will be necessary to see if some segments can be build “at grade” or a ground level. This study would weigh the cost of elevated roadway construction against the impact of considerable right of way acquisition and subsequent impact on adjoining land use. Considering the limited (100-150 feet) right of way on most of RM 620, a significant amount of right of way would be needed for any ground level options. Additionally, future analysis is needed as to whether these additional lanes should be general purpose lanes (unrestricted) or managed lanes, in some form. Managed lanes are lanes that are controlled by using some regulations, such as tolls, number of occupants per vehicle, or time of day.

While general purpose lanes could handle greater volumes of traffic, managed lanes could provide more predictable levels of service. In either case, these additional lanes would effectively extend SH 45N further southwest and enhance regional connectivity between US 183 and RM 2222. Although at a construction cost of approximately \$620 million, the elevated option is expensive with a construction time estimated at three years, if constructed all at once.

## **Conclusion**

Proposed short-, mid- and long-term improvements all have substantial benefits in reducing delay along the corridor compared to no-build conditions. The short-term improvements, which are low-cost and easily implementable, do reduce delay; however, they do not fully address current capacity constraints, let alone those of 2035.

Since traffic volumes are anticipated to substantially increase between 2015 and 2035, peak period traffic congestion is also anticipated to worsen substantially. The mid-term improvements would improve the level of service for most intersections. Adding raised medians with turn bays and widening the roadway to a six-lane divided roadway for much of the corridor would also reduce delays and address congestion and safety concerns. However, to properly address long-term problems, substantial long-term improvements are needed to provide relief from congestion and properly address future traffic volumes.

The economic impacts of these improvements are very positive, providing benefits of approximately \$90 million for mid-term and \$120 million for long-term solutions for the single analysis year of 2035 alone. These benefits do not include the savings of lives and property from fewer crashes resulting from the proposed raised median.

## **Next Steps**

TxDOT will continue with intersection improvements including the design and construction of the RM 620/RR 2222 bypass. Meanwhile, the environmental clearance for constructing the center median on RM 620 from SH 71 to the Colorado River and adding a lane in each direction from SH 71 to Lakeway Boulevard will proceed as rapidly as possible. The implementation of mid-term improvements north of the Colorado River and the timing of long-term improvements await further analysis and depend on future funding availability.