

# STATE LOOP 1604

SH 16 (Bandera Road) to FM 471 (Culebra Road)

## Current Conditions

South of Bandera Road and towards Braun Road, Loop 1604 transitions from a freeway section to a 4-lane divided highway with signalized intersections. Traffic lights and turnarounds improve traffic flow, but there is significant congestion. Current congestion slowdowns occur near equally both in the morning and evening rush hours. However, northbound traffic slows down during both rush hour periods but not as much as westbound traffic in the evening.

- Segment Length: 4.7 miles
- Road Type: 4-Lane divided highway
- Annual Hours of Delay: 300,000
- Texas Congestion Index: 1.31
- Commuter Stress Index: 1.52

## Possible Congestion Causes

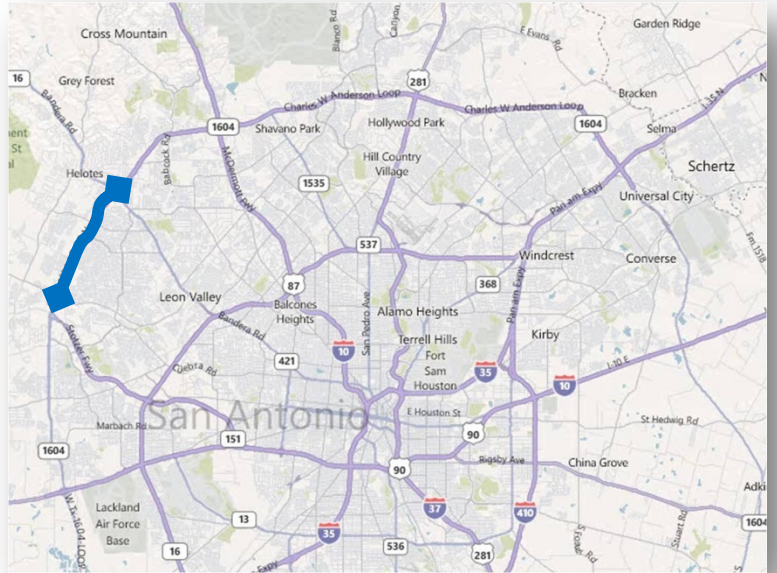
Residential and commercial land development has grown extensively in recent years. Traffic volume surpassed the capacity of the current facility and causes recurring congestion.

## Projects in Progress or Completed

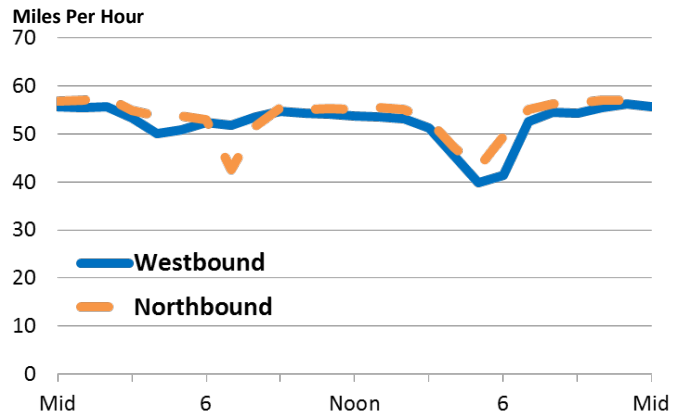
### Superstreet Improvements

The Loop 1604 superstreet improvement was completed in September 2011. Two other projects to reduce congestion and improve safety included intersection improvements at Braun Road and ramp and a frontage road reconfiguration south of Culebra Road. Signal timing operations for the superstreet will be maintained by the City of San Antonio.

- Improvements at Braun Road were environmentally cleared and constructed by the Texas Department of Transportation (TxDOT).
- Alamo Regional Mobility Authority (Alamo RMA) environmentally cleared the operational improvement and



<b>2010 Rank: 23</b>	<b>2013 Rank: 231</b>
<b>Annual Hrs of Delay/Mile:</b>	<b>64,000</b>
<b>Congestion Time:</b>	<b>4 Hours</b>
<b>Annual Cost of Delay:</b>	<b>\$6.8 Million</b>
<b>Average Daily Traffic:</b>	<b>52,000 Vehicles</b>



reconfiguration of intersections to the superstreet design at New Guilbeau Road and Shaenfield Road in September 2010; construction began in March 2011. The San Antonio District of TxDOT oversaw construction for this phase, with \$6.3 million in funding from one-time federal sources.

### *SH 151 Underpass*

The SH 151 underpass of Loop 1604 began construction in summer 2012, but several months into the project an endangered spider species was discovered on site. Construction was halted, and TxDOT is working with the Federal Highway Administration and the US Fish and Wildlife Service to determine the path forward.

### *Corridor Improvements*

Up through the fall of 2012, the Alamo RMA was working on the Environmental Impact Statement (EIS) for SL 1604 corridor improvements across the west, north, and east sides of the city, including this congested corridor. Several public meetings were held, and Alamo RMA maintains an active web site, Twitter account, and Facebook page for the future project.

However, during the course of the Alamo RMA's Loop 1604 EIS, TxDOT and the MPO identified state and local funding sources that could be utilized to construct a 4-lane expressway with frontage roads along Loop 1604 from Bandera Road to Potranco Road, at a cost of approximately \$200 million. The first component of this project, known as the "Loop 1604 Western Extension," includes construction of a 4-lane expressway with frontage roads between SH 16 and FM 471 at a cost of \$82 million. A \$38 million option also exists to construct improvements to the Loop 1604/SH 151 interchange.

No federal funds were needed for this project, so environmental clearance for the project was expedited. TxDOT issued a request for qualifications in February 2013 and received proposals from qualifying finalists at the end of July 2013. The project is expected to be awarded in the fall of 2013, with construction beginning in early 2014.

### *Expansion*

In October 2011, Bexar County completed widening from two to four lanes on Shaenfield Road just north of Culebra Road.

### *Nearby Projects*

TxDOT began construction on a grade separation safety project at Loop 1604 and Marbach Road, with \$11.2 million funded by state sources.

### *Park and Ride*

VIA Transit has an interim park and ride facility two miles south of Culebra Road at SL 1604 and Military Drive/Sea World Drive.

## **Planning Efforts to Date**

### *Expansion of SL 1604*

Options studied in the Alamo RMA EIS up through the fall of 2012 included:

- Widening the existing facility (both divided highway and freeway sections),
- Providing tolled managed lanes,
- Managed lane HOV/HOT lane options

Other aspects of the corridor situation and future plans include:

- Local opposition to tolling in the corridor has been strong for years.
- When construction moves forward, Alamo RMA will require the construction contractor to provide incident clearance during construction.
- Any future tolling improvements will be done with electronic tolling.
- Dynamic message signs and cameras will be used for traffic management in the corridor, in cooperation with TxDOT.

Tolled managed lanes constructed by the RMA may ultimately augment the Loop 1604 Western Extension project, and the MPO, TxDOT, and local agencies will continue to seek funding for a 4-lane expressway with frontage roads from Potranco to US 90. However, the current focus of the Alamo RMA's environmental study is the managed lane expansion of Loop 1604 from SH 16 to IH 35.



### *Planned Improvements*

The San Antonio-Bexar County Metropolitan Planning Organization's (MPO) Metropolitan Transportation Plan (MTP)/Transportation Improvement Program (TIP) includes the following projects for this portion of SL 1604:

- Expand to a 6-lane toll expressway from W. Military Drive to Braun Road with non-tolled frontage roads, including two tolled direct connectors at SH 151. Total project cost for this improvement is \$226 million.
- Expand from a 4-lane to an 8-lane expressway (with tolling on the four new mainlanes) from Braun Road to SH 16 with non-tolled frontage roads. Total cost of this project is \$62.6 million.
- Expand from a 4-lane to an 8-lane expressway (with tolling on the four new mainlanes) from SH 16 to NW Military Highway with non-tolled frontage roads, including two tolled direct connectors at IH 10. Total project cost for this portion of the Loop 1604 improvements is \$308.8 million.

### **Next Steps**

- There is local agency agreement and support for more aggressive incident management methods to improve mobility and congestion in the San Antonio area.

### **Improved incident management and related agency coordination**

in quickly clearing crashes and disabled vehicles will reduce incident-related delay and congestion. Improving incident management will be one component of a Rider 42-funded traffic management study in San Antonio that will begin in January 2013.

- **Broad deployment of advanced traveler information systems** (including dynamic message signs and camera monitoring) in cooperation with TxDOT has been identified as a city-wide congestion management measure. The TransGuide traffic management center does not cover the Loop 1604 west corridor. TransGuide can be improved with electronic signs, which provide updated traffic information and other traffic management solutions to travelers. Funding for the expansion and maintenance of additional traffic management devices and services has not been identified. A study of traffic management improvement needs for San Antonio is being funded under Rider 42, and work on this study will begin in January 2013.

- **Superstreet operation should be monitored and signal timing adjusted** in the corridor to ensure the best possible operation of the existing road.
- There is local agency agreement and support for **increased travel demand management activity and strategy deployment** in San Antonio. Likely champions of these activities in the San Antonio region are the Alamo Area Council of Governments and VIA Metropolitan Transit. Studies can determine the most effective travel demand management strategies for the region and the potential to form Transportation Management Associations (TMAs) in cooperation with major employers in the region. Rider 42 is funding a study on travel demand management in San Antonio; this study will be underway by the spring of 2013.
- **Monitor the progress of the Alamo RMA EA for this corridor.** Due to the state funding that became available for improving Loop 1604 between Bandera Road and Culebra Road, it was determined that a new environmental study should be undertaken for Loop 1604 managed lane improvements. The limits for this new study are Bandera Road (SH 16) to the west and IH 35 to the east. The FHWA determined that based on the previous environmental study work performed by the Alamo RMA on the Loop 1604 corridor, the new environmental study would be an environmental assessment (EA) study. The new EA study is expected to be completed in spring 2015, and the budget for the managed lanes improvements between SH 16 and IH 35 is expected to fall between \$800 million and \$900 million.