



A Visual and Economic Analysis of Alternatives for Bandera Road/State Highway 16 in the City of Leon Valley

Center for Urban and Regional Planning Research - College of Architecture, Construction and Planning

The Institute of Economic Development - Center for Community and Business Research

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Preface

The Texas Department of Transportation is proposing to alleviate congestion along Bandera Road, in Leon Valley, Texas, by building additional lanes in both directions and also by adding an elevated freeway. The intent of the elevated freeway is to move vehicular traffic efficiently from Loop 410 to Loop 1604 above Bandera Road. The City of Leon Valley concurs that traffic congestion is a problem but is concerned about the impact that an elevated freeway may have on the City economically.

This study, prepared jointly by the Center for Urban and Regional Planning Research and the Institute for Economic Development at the University of Texas at San Antonio, examines future design/ planning options for Bandera Road/State Highway 16 along with the potential impact of each option. An economic analysis was performed in order to determine the impact an elevated freeway would have on the local sales tax and property values. A Image Preferences Survey was also conducted with residents and businesses within Leon Valley to determine their preference with regard to a selective design/planning alternative.

The three design/planning alternatives considered were: No Change, A Boulevard Option and an Elevated Freeway Option. The positive and negative consequences of each option are discussed in the concluding chapter of this study Findings and Next Steps.

Additional traffic engineering studies will be needed to evaluate the cost implications and overall feasibility of each option in greater detail.

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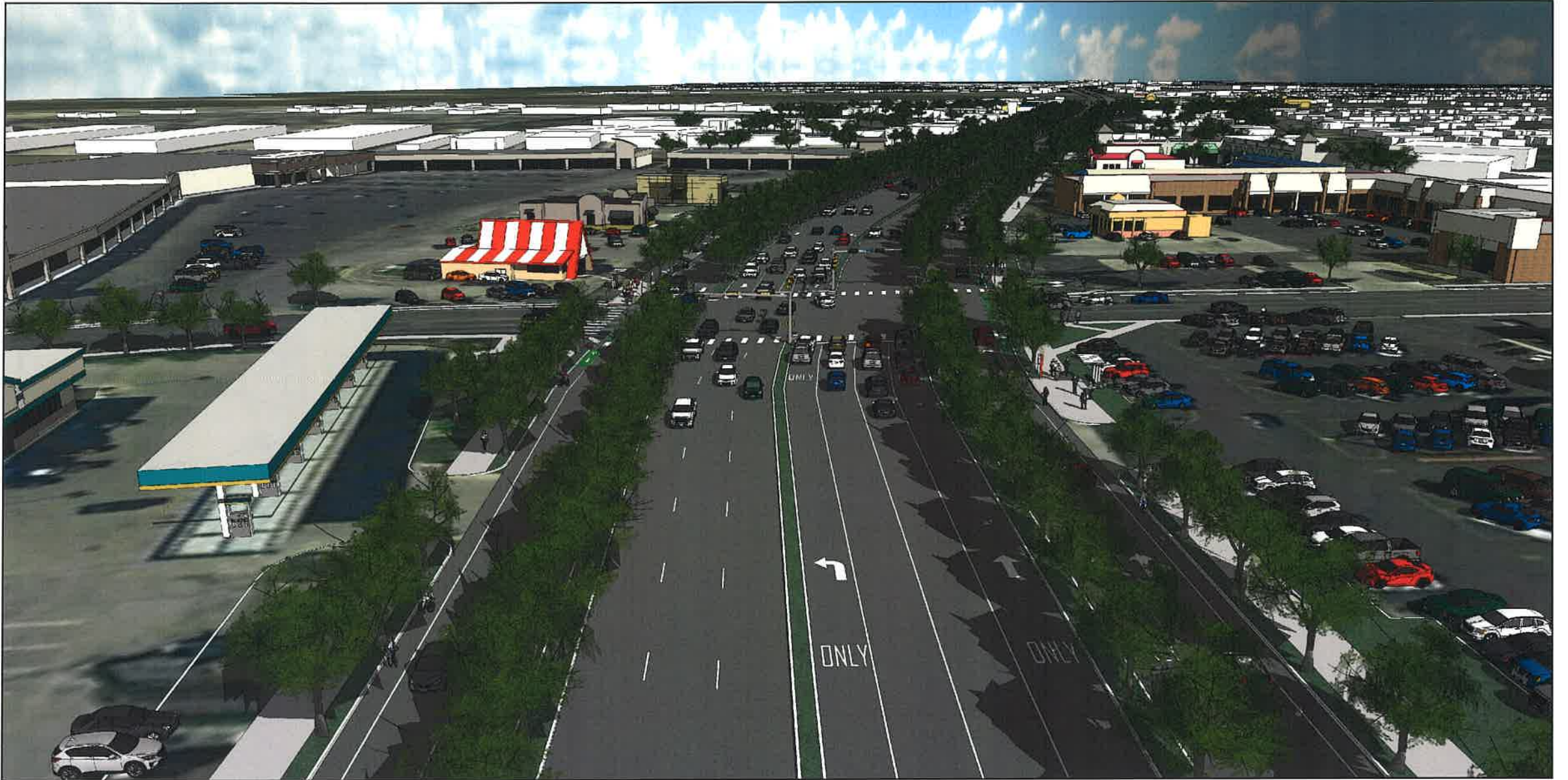
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INTRODUCTION

Regional Context

The City of Leon Valley is located in northwest Bexar County and is 8 miles from Downtown San Antonio. Interstate 410 passes east and west through the city, providing easy access and connections to the rest of the San Antonio metropolitan area, as well as Interstates 10, 35, and 37. Additionally, connectivity with the San Antonio metropolitan area is aided by Bandera Road and Wurzbach Road, two major thoroughfares.

Within Leon Valley’s 5-mile market radius, shown in Figure 1, sits part of the cities of San Antonio and Balcones Heights. Within the 10-mile radius can be found much of San Antonio, as well as the cities of Castle Hills, Shavano Park, Grey Forest, Helotes, and Alamo Heights. Within the city’s 20-mile radius is nearly all of San Antonio, plus Terrell Hills, Kirby, Windcrest, Converse, Live Oak, Universal City, Hollywood Park, Hill Country Village, Shavano Park, Fair Oaks Ranch, Von Ormy, and Castroville.

As a city within the San Antonio metropolitan area, Leon Valley has always had a close connection with its much larger neighbor and will continue to do so as the metropolitan area experiences major growth in the decades ahead.

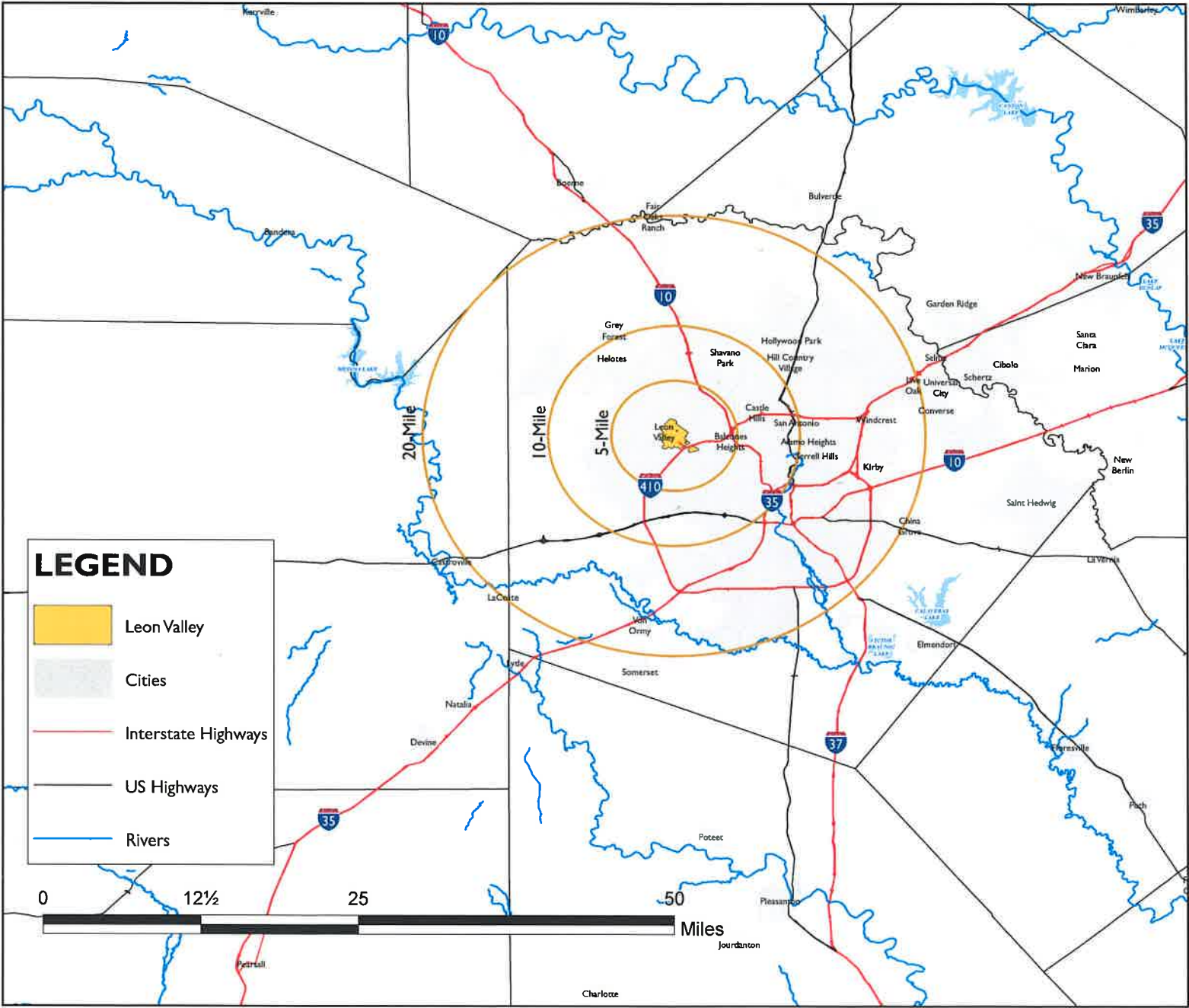


Figure 1: Regional Context Map

Source: CURPR, ArcGIS

History

The City of Leon Valley is named for Leon Creek, which passes just to the west of the city limits. The creek drew its name from mountain lions (lion in Spanish is “leon”) observed drinking from its waters by 19th-century settlers. Archeological evidence suggests that the site was popular among Native Americans, particularly the Tonkawa tribe. The majority of the area that would become Leon Valley was purchased in 1858 by Joseph Huebner, an Austrian immigrant, as part of his large ranch that would grow to 850 acres in size. He constructed a limestone homestead along a creek, and the building also served as a stagecoach stop and repair shop. The stagecoach running along his property was a busy one, connecting San Antonio to destinations to the north and west. Today, the stagecoach route gave way to Bandera Road. The preserved homestead that sits along it is now a historic property, and the adjacent creek that runs through the middle of Leon Valley bears his name: Huebner Creek.

A small farming community developed in the area in the early 20th century. Typically considered an unofficial part of Helotes, the community eventually felt the need for their own public school, and constructed Leon Valley School, which was the first use of the name in an official capacity. The area continued slowly growing, until, in 1952, residents discovered that San Antonio had plans to annex their community. Acting quickly, the residents voted nearly unanimously to incorporate, and the City of Leon Valley was formed on March 31, 1952, less than three weeks after hearing of the annexation plans. The City’s first mayor, Raymond Rimkus, alerted local citizens of San Antonio’s plans. The site of his grocery store, at Bandera and Grissom Road, has since been replaced, first by a gas station, and now a bank, but the historical marker dedicating the space remains.

Since incorporation, the city grew to 500 people in 1960, 2,500 in 1970, and up to 9,000 by 1980, and has grown steadily since, sitting at just over 11,000 as of 2016. Though now largely a suburban, relatively densely developed area, the City still shows some signs of its agricultural roots. Leon Valley is still growing, and in order

to properly utilize its assets and continue to be an important part of the San Antonio metropolitan area, it must make sound planning decisions and develop its full potential to insure quality of life for residents.



Figure 2: Huebner-Onion Homestead

Source: San Antonio Conservation Society

Traffic Counts

Using data obtained from the Texas Department of Transportation (TxDOT) and the Alamo Area Metropolitan Planning Organization (MPO), Figure 3 shows the traffic volume in and around the Leon Valley area. Annual Average Daily Traffic counts, or AADT counts, measure the traffic volume at a specific location over the course of a year, and then averages that out to find the expected traffic for any one day at the location in that year. The AADT count locations are shown as points on the map, while the major roads in the area are colorized based on their traffic averages. Traffic counts for 2013, 2014 and 2015 are shown on Figure 3.

Within Leon Valley’s city limits, the highest traffic counts can be found on the short stretch of Highway 410 that crosses in the south of the City, with counts exceeding 100,000 cars per day. Bandera Road experiences high traffic volumes with counts in the range of 40,000-60,000 in a day. These counts diminish as Bandera Road approaches the edge of San Antonio’s metropolitan area to the north of Leon Valley. Other high-volume roads in the area include Wurzbach Parkway, Huebner Road, Eckhert Road, and Grissom Road.

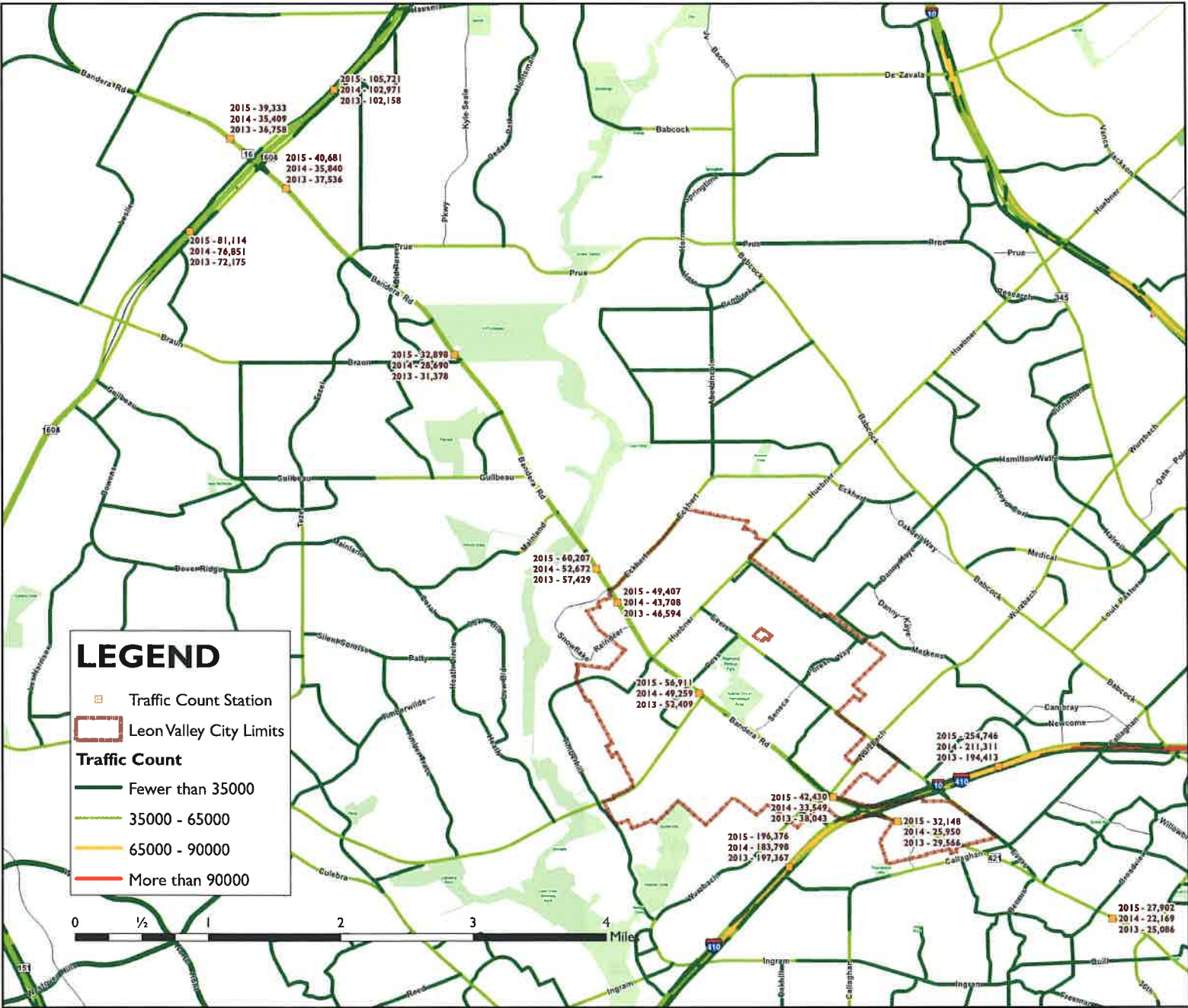


Figure 3: Traffic Counts

Source: CURPR, ArcGIS

The Pedestrian, Bicycle and Transit Environment on Bandera Road

Figure 4 shows the location of VIA Metropolitan Transit (VIA) stops and routes within the Leon Valley area, as well as sidewalk coverage within roughly a block on either side of Bandera Road/State Highway 16.

Sidewalk coverage along Bandera Road is relatively extensive, but needs to be expanded in the north/west. From the southeast edge of Leon Valley to roughly the Huebner-Orion Homestead, the blocks directly abutting the highway have consistent sidewalk coverage, extending into the residential areas behind them. From the Huebner-Orion Homestead northwest along the highway, the sidewalk network is much less consistently represented. It is spotty in certain blocks, while others lack public sidewalks at all. Sidewalks are especially needed when adjacent traffic is relatively high speed

The quality of sidewalks in Leon Valley is also inconsistent, even in well-covered areas. Many of the existing sidewalks would not be adequate for two pedestrians standing shoulder-to-shoulder, and would be even less accommodating to pedestrians using wheelchairs. Sidewalk width should be a minimum of 5 feet in width and 7 feet if adjacent to a curb. The network also frequently crosses drainage areas, and dirt and grass patches. Especially common are wide curb cuts used to facilitate large commercial areas along the highway, which would be particularly hazardous to handicapped or elderly pedestrians.

To maximize the pedestrian potential of the commercial corridor along Bandera Road, Leon Valley should improve the sidewalk

network in several ways. First, the City must ensure that the network provides complete coverage for the entirety of the highway's stretch through Leon Valley. Second, the City needs to widen, improve, and maintain the sidewalk network in order to accommodate pedestrians of all needs. Finally, Leon Valley should look to reduce the number of wide commercial curb cuts; and, overall, make the street-level design of the area more welcoming to pedestrians.

Leon Valley also appears to lack any sort of bike lane network and the City needs to work towards a more effective multi-modal transportation environment that includes bike lanes.

VIA bus service is relatively extensive in this area. Routes that can be found within this corridor include the 88, 100, 534, 550, 551, 607, and the 609. Bus stops can be found all along the corridor, and are dispersed to make access easy across the whole area.

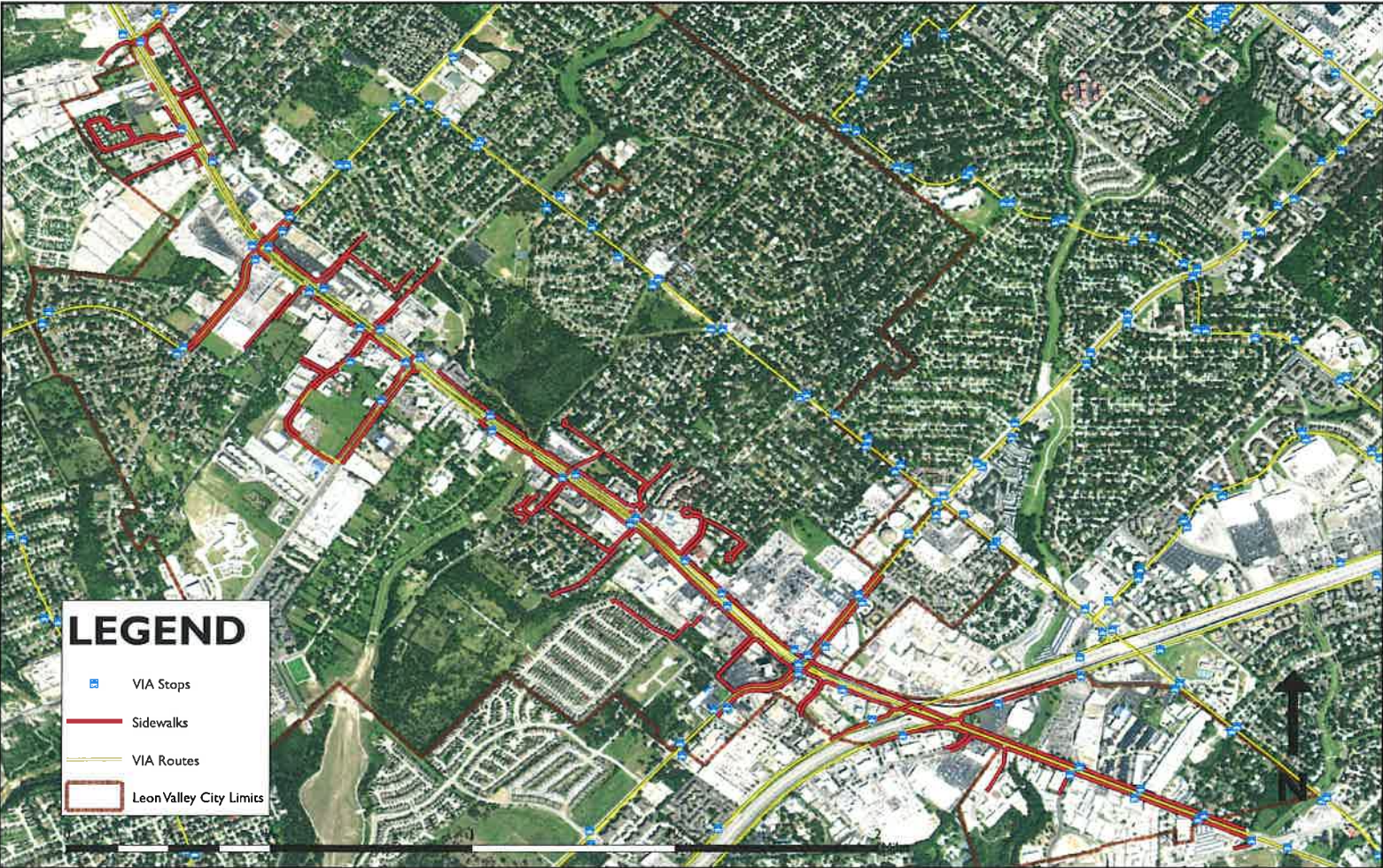


Figure 4: Existing Sidewalks and Public Transportation

Source: CURPR, ArcGIS

Economic Analysis of Proposed Leon Valley Elevated Freeway

Over the past fifty years, cities in the U.S. have spent in excess of \$20 billion removing their urban elevated freeways. Other Texas metro areas, including Austin (IH-35), Dallas (IH-345) and Houston (IH-45 - Pierce Elevated) are considering similar moves with existing elevated expressways. According to available research, property values increased significantly in every instance of removal.

Virtually all of the elevated freeway projects in the United States were initially constructed in the wake of the 1956 Federal Highway Bill. The Futurama Exhibit at the 1939 World's Fair appears to have been the largest single influence on such projects, focused primarily on vehicle traffic flows. However, starting with the proposed Lower Manhattan Expressway in the 1960s – ultimately quashed – elevated freeway plans have increasingly been called into question because of unanticipated negative impacts on homes, businesses and communities.

More recently, several elevated freeway projects that were eventually constructed have since been removed. For example, Portland removed its Harbor Drive Freeway in the mid-1970s. As a result, property values tripled in the area. By inverse inference, this would imply a 66% decrease in property values for homes and businesses located near the proposed elevated freeway project in Leon Valley if it were to be constructed.

In 1991, San Francisco removed the Embarcadero Freeway, resulting in a 300% increase in property values. This translates

to an implied 66% to 75% decrease in property values by being located near an elevated freeway.

Milwaukee's Park East Freeway removal increased property values by over 180%, which implies a 44% to 64% decrease in property values. Average assessed land values in the areas increased by 45%, implying a 31% decrease in property values and taxes for the land located nearby.

Other communities continue to debate whether to remove their own elevated freeways. Research indicates that inferred property

value decreases would result from less aesthetic visuals, increased noise, decreased air quality, perceived lack of safety associated with a freeway, and perhaps other difficult-to-quantify factors as well.

According to a study from the Journal of Transport Economics and Policy an 8-10% decrease in property values tends to occur as a result of freeway noise alone. This would likely represent the best-case scenario for residents located near the proposed elevated freeway in Leon Valley.

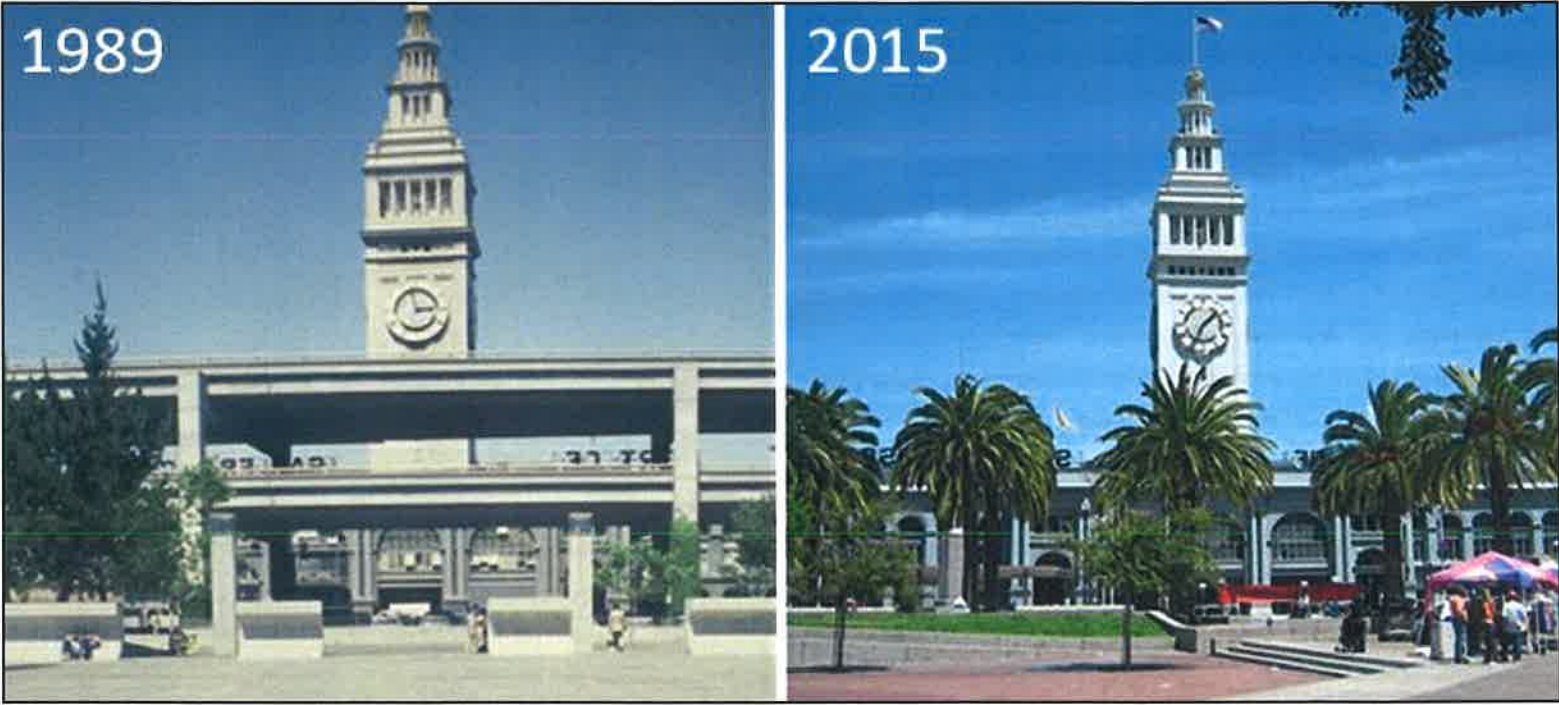


Figure 5: Before and After the Removal of the Embarcadero Freeway - San Francisco, California

Methodology

In order to define the potentially impacted areas in Leon Valley, the UTSA research team identified individual businesses and residences located within 1 to 2 blocks of the Bandera Road between IH-410 and Eckhert Road. These tracts appear in the nearby map of the area and present a conservative approach at estimating impacts.

Data from the Dallas Federal Reserve for the past ten years indicates that property values in the San Antonio area have increased at an average annual rate of just over 3%. Using that figure as a basis for future increases (assuming no elevated freeway), for the period 2017-2021, the cumulative increase in property values and taxes would be 12.7%.

The dollar values for increases in property taxes in Leon Valley appear in the table below for Bexar County as a whole, Leon Valley, and for the Northside ISD. A boulevard solution for Bandera Road implies an increase in property taxes for Leon Valley alone from \$467,899 in 2017 to \$527,443 in 2021. Bexar County overall, including Northside ISD would benefit similarly. It is important to note that the impacts in the tables below represent the City of Leon Valley only. Property tax estimates for the City of San Antonio, north of Eckhert Road to Loop 1604 would also increase or decrease, depending on the nature of future TXDOT development along Bandera Road.

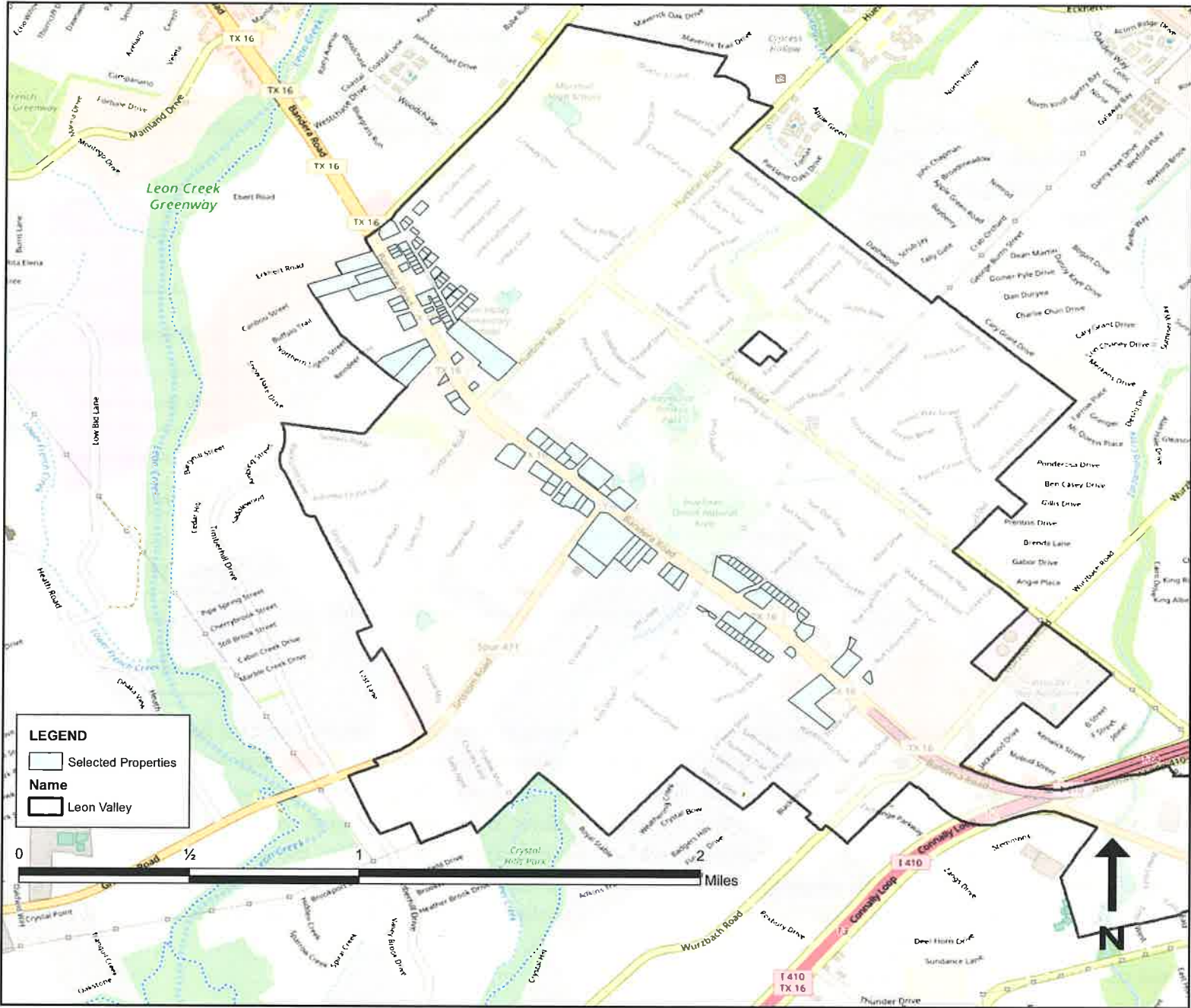


Figure 6: Properties Adjacent to Bandera Road/Highway 16

Source: CURPR, ArcGIS

The Bexar County totals consist of the Leon Valley and Northside ISD property tax shares, plus the remaining property tax entities in Bexar County. The other entities include:

- Bexar County Road and Flood Control
- San Antonio River Authority
- Alamo Colleges
- University Health System
- Bexar County

10% or \$46,790. This is in contrast with the historical trend of a 3% annual increase during the past ten years. Using inferences from elevated freeway removal projects, the eventual decrease in property taxes could reach as high as \$280,739 (60%) or more for Leon Valley as well as the other associated Bexar County taxing entities.

Table 1: Expected Property Tax Increases Along Bandera Road with Boulevard
(Along Bandera Road from IH-410 - Eckhert Road)

	2017 (actual)	2018	2019	2020	2021
Bexar County Total	\$2,237,638	\$2,305,662	\$2,375,754	\$2,447,977	\$2,522,396
Leon Valley	\$467,899	\$482,123	\$496,780	\$511,882	\$527,443
Northside ISD	\$1,134,157	\$1,168,635	\$1,204,162	\$1,240,768	\$1,278,487

Source: Center for Community and Business Research

Using current property values and tax rates as a starting point, estimated impacts of an elevated freeway appear in Table 2. Based on the experience of elevated highways that have been removed, the table estimates the impacts of a 10%, 30% and 60% decrease in property taxes, as well as the net effect of the decrease. Available research found no instance in which property located near an elevated freeway systematically increased.

Based on the scenarios, the least impact to Leon Valley alone in terms of property taxes would be an eventual decrease of

Table 2: Potential Property Tax Impacts (Three Scenarios)
(Along Bandera Road from IH-410 - Eckhert Road)

	Bexar County Total	Leon Valley	Northside ISD
Current (2017)	\$2,237,638	\$467,899	\$1,134,157
10% drop in value	\$2,013,874	\$421,109	\$1,020,741
30% drop in value	\$1,566,347	\$327,529	\$793,910
60% drop in value	\$895,055	\$187,160	\$453,663
Amount of decrease (10%)	\$223,764	\$46,790	\$113,416
Amount of decrease (30%)	\$671,291	\$140,370	\$340,247
Amount of decrease (60%)	\$1,342,583	\$280,739	\$680,494

Source: Center for Community and Business Research

Approximately 52,000 vehicles traverse Bandera Highway each day. Assumptions are that 7% of these vehicles will divert along the proposed elevated freeway. Assuming that 10% of these vehicles would have stopped to make a purchase along the route in Leon Valley and that the average purchase was \$5, the diversion translates into \$664,300 in lost annual revenue to local merchants and \$13,286 in lost annual sales tax revenue to Leon Valley.

Conclusions of Economic Analysis

Overall, the literature clearly demonstrates that elevated highways create barriers between neighborhoods and communities. Construction of an elevated highway in Leon Valley would impede future economic development and lower property and tax revenues by establishing an effective barrier through the center of the city. In essence, the proposed elevated freeway would serve to benefit a small group of commuters in the outlying areas of the San Antonio MSA at the expense of the overall Leon Valley community.

Further, traffic diversion via alternative routes could channel through existing arteries already designated as freeways. To the east, IH-10 serves this purpose. To the west, the Raymond E. Stotzer Jr. Freeway (State Highway 151) also serves to move heavy volumes of traffic from IH-410 to Loop 1604.

Property value increases for the elevated freeway removal projects in other metro areas occur in part from the accommodation of multimodal transportation systems that include not only automobiles and trucks, but also pedestrians, cyclists and light rail – the combination of which is necessary for urban vitality. A boulevard solution for Bandera Road would encourage such multimodal approaches and boost the likelihood of not only increased economic development, but also enhanced community development for Leon Valley.

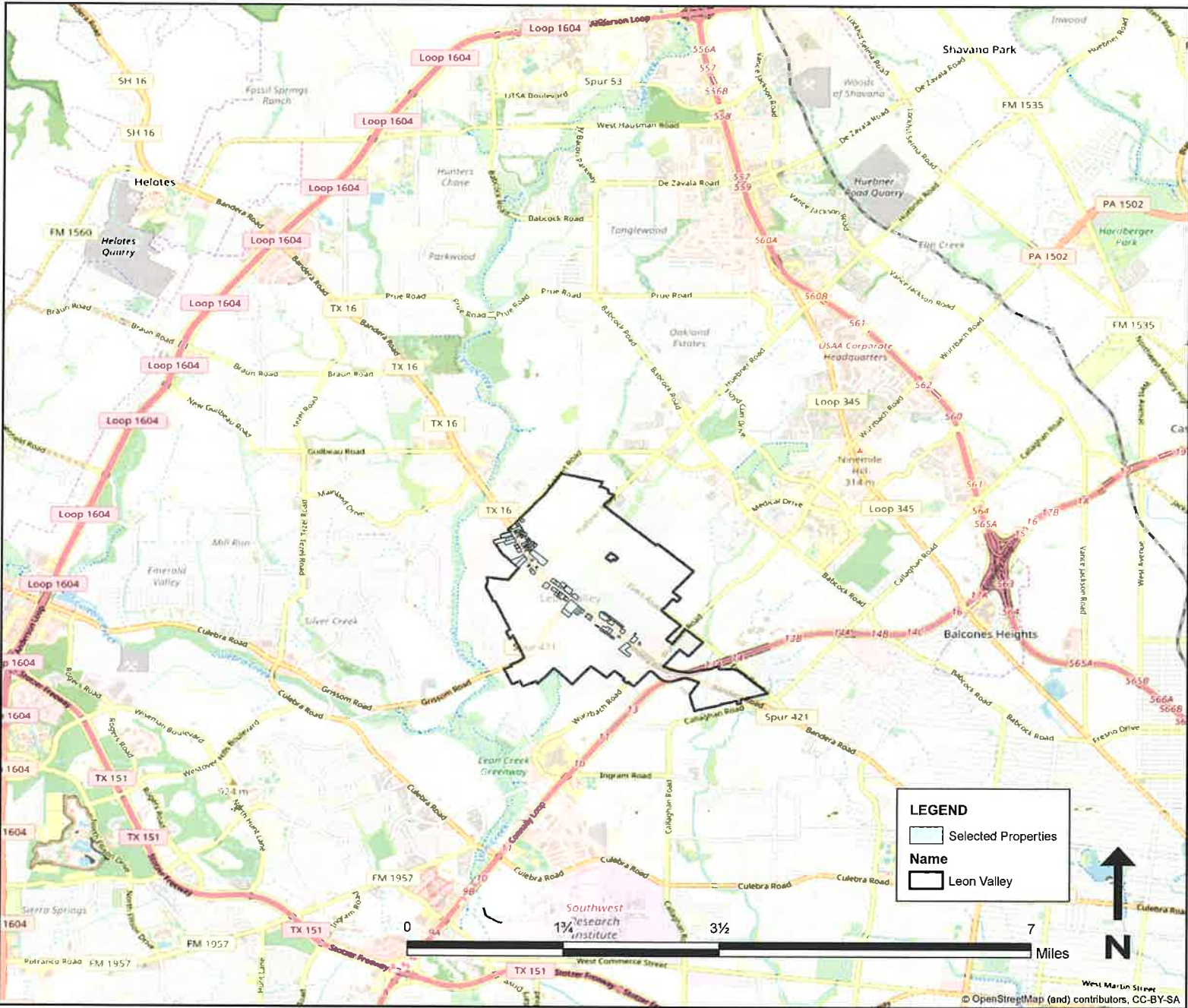


Figure 7: Area Arterial Network

Source: CURPR, ArcGIS

A Survey of Image Preferences for Bandera Road Options in Leon Valley

In order to get community feedback on three options under consideration for Bandera Road, a survey of image preferences survey was prepared and administered. A survey of image preferences is a recognized public participation technique for soliciting public input for physical transportation options. With this method, participants are shown actual photos or computer-generated images of different alternatives and are asked to rate the images on a five-point scale from “very negative” to “very positive.” The City of Leon Valley’s clicker system was used to tabulate the responses.

A brief survey was conducted on October 21, 2017, at a “Coffee with the Mayor and City Council” meeting already scheduled at

the Leon Valley Conference Center, 6421 Evers Road. The City of Leon Valley’s clicker system was used to tabulate the responses. Twenty-four citizens participated in the survey, but not every participant voted at every opportunity.

The majority (83%) of those surveyed had lived in Leon Valley for at least five years. Almost all (92%) of those voting did not work along Bandera Road with the remainder indicating that they owned or managed a business along Bandera Road. Three-fourths (76%) of the respondents used Bandera Road daily and the remainder used Bandera Road a few times a week. Nearly all (91%) respondents felt that Bandera Road was “unsafe and inadequate” as a place to walk while the remaining voters indicated that it was “OK.” As a place to shop, the dominant response (46%) was “positive” with 42% rating it “Neutral,” 8% “Negative, and 4% “Very Positive.”



Figure 10: Survey of Image Preferences - Community Meeting
Source: City of Leon Valley

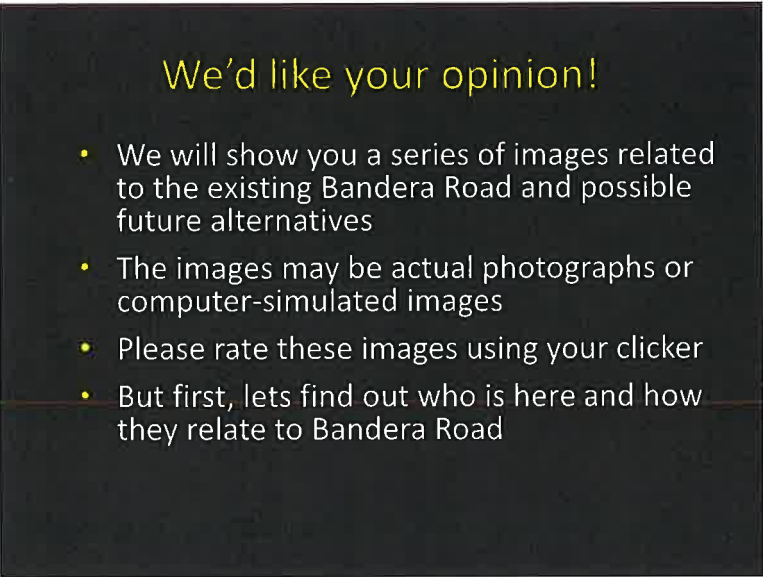


Figure 8: Preference Survey Opinion Slide
Source: CURPR

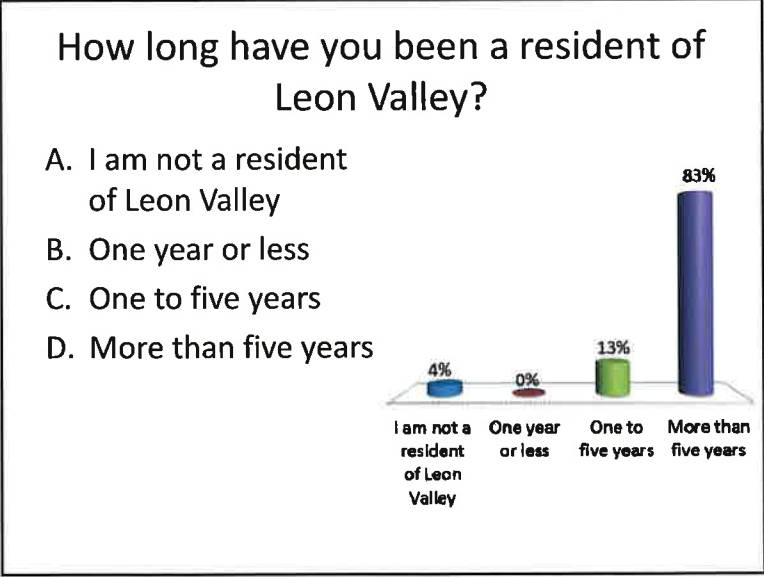


Figure 9: Preference Survey Question Slide
Source: CURPR

The images presented related to the existing Bandera Road, a possible elevated freeway section over Bandera Road, and a Boulevard concept proposal to replace the existing Bandera Road. The multipath Boulevard has three main lanes in each direction for facilitating through traffic with two lane access roads, separated by a median, on either side of the road to accommodate local traffic. The access roads would accommodate local bus service and a bicycle lane. The slower traffic on the access roads would also be a more inviting environment for pedestrians on adjacent sidewalks.

Assigning a score of 1 for “very negative”, 2 for “somewhat negative”, and so forth up to a 5 for “very positive”, it was possible to compute a numerical rating for each image. As can be seen in Table 1, all of the images involving the Boulevard were relatively highly rated, i.e., at or above a score of 2.92.

Table 3: Ranking of Bandera Road Images

Image Presented	Score	Image #
Poss Road with Bandera Boulevard	4.23	14
On Bandera Boulevard access road with bike lane and trees	4.22	8
On Bandera Boulevard main road with no bike lane or trees	3.82	3
Leon Valley monument in median	3.8	1
On Bandera Boulevard access road with bike lane but no trees	3.49	9
On Bandera Boulevard access road with trees but no bike lane	3.32	10
On Bandera Boulevard access road with no bike lane or trees	2.92	11
Poss Road with elevated over Bandera Road	2.44	13
Current Bandera Road	2.36	2
On Bandera Road with elevated highway above	2.11	4
Current Poss Road	1.88	12
On elevated section over Bandera Road	1.86	5
Dirt path for pedestrians	1.56	6
Pedestrian in traffic	1.4	7

Source: CURPR



Figure 11: Survey of Image Preferences - Community Meeting
Source: City of Leon Valley

The highest rated (4.23) image was the computer-generated view from Poss Road facing a Boulevard on Bandera Road. The highest rated (4.22) image of travel along Bandera Road was the access road portion of the proposed Boulevard with both the dedicated bicycle lane and trees portrayed by the computer-generated image. If given a choice between trees or the bike lane on the access road, the participants rated the image with the bike lane higher. The image of the access road without both trees and a bike lane ranked the lowest of the access road images.

The lowest rated images depicted the actual pedestrian environment on the existing Bandera Road with actual

photographs of a pedestrian dirt path (1.56) in lieu of a sidewalk and a pedestrian weaving through traffic on the Bandera Road (1.40).

The computer-generated images of Bandera Road with an elevated highway section above the viewer rated 2.11, and the image of being on the elevated section rated 1.86. Both of these rated lower than the existing Bandera Road (2.36).



RECOMMENDATIONS

Bandera Road/State Highway 16 Options

The fate of Bandera Road/State Highway 16 is a major question facing the City of the LeonValley that has far-reaching implications for the development of the City of Leon Valley, San Antonio, and the larger metropolitan area. LeonValley needs to be an advocate for the option which would best serve the needs of its residents.

The Alamo Area MPO, Mobility 2040 Plan projects an increase of nearly 1.5 million new residents for Bexar County by 2040 for a 85% population increase from 2010 to 2040. This major increase in population within a 30 year time frame will have significant impact on the existing road network in northwest Bexar County. The 2010 congested road exhibit within the report identifies Bandera Road as congested through Leon Valley.

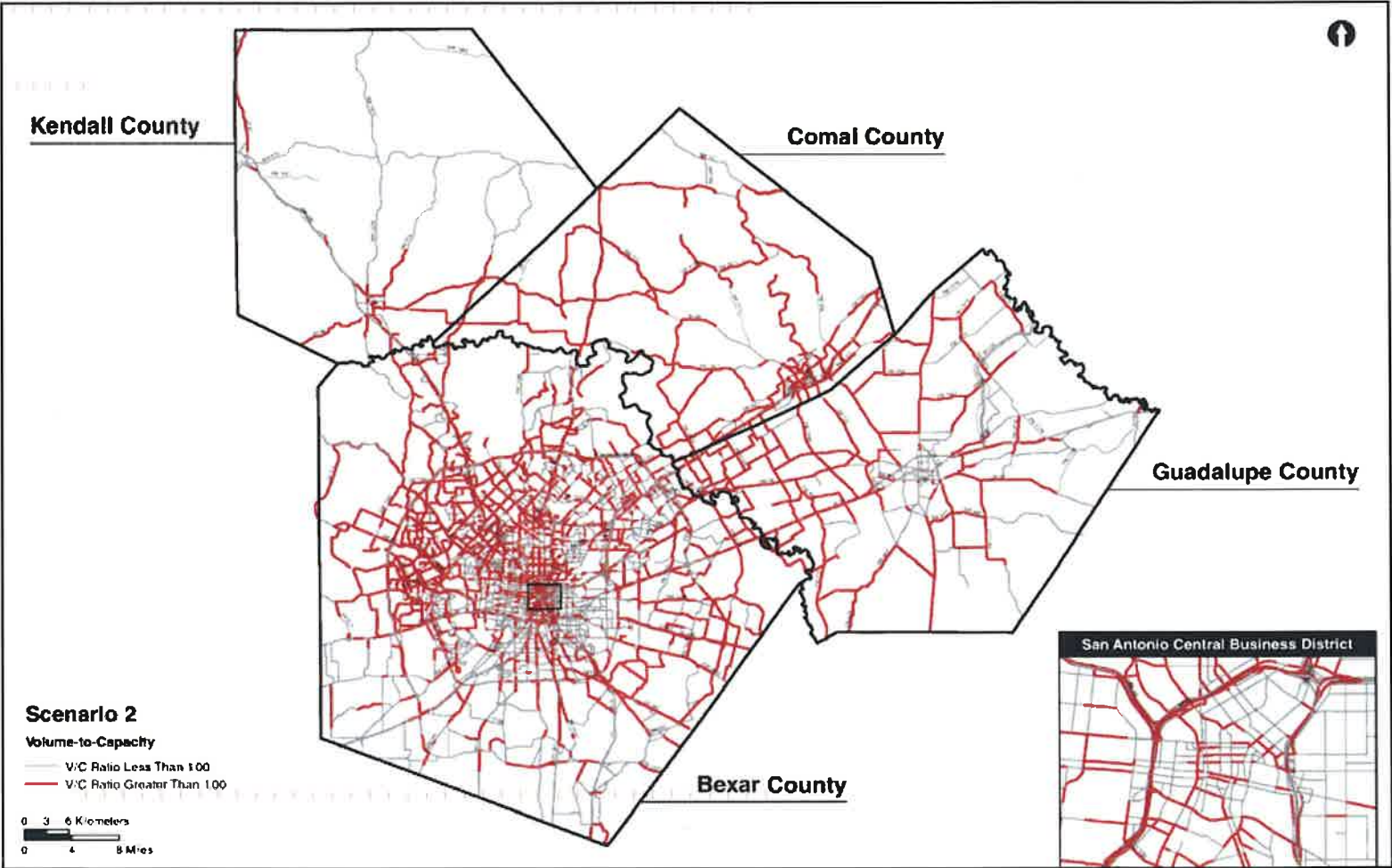


Figure 12: 2040 Congested Roads

Source: Mobility 2040, Alamo Area MPO

No or Minimal Change Option

This option would leave the structure of the road unchanged from its present state, choosing to do nothing outside of basic maintenance for the foreseeable future. Bandera Road through Leon Valley already experiences some of the heaviest rush hour traffic in the San Antonio area – with average daily traffic counts exceeding 60,000 in 2015. Currently, the road receives much heavier traffic than its designed capacity.

The San Antonio metropolitan area is projected to grow by over 1 million people over the next 30 years. Barring something extremely unpredictable happening, Leon Valley and the area around is likely to see much of this population growth as the center of the metropolitan area densifies. Choosing to leave Bandera Road as is would almost certainly further increase the congestion experienced, making the road more difficult to use during high-traffic periods.

If this option is chosen, Leon Valley should consider increasing the capacity of other parallel roads in its area, in order to relieve some of the volume on Bandera Road. With the City of Leon Valley’s relatively limited geographic scope, this would likely require cooperation with the City of San Antonio and/or the Texas Department of Transportation. Similarly, increased public transportation, bicycle and pedestrian options in San Antonio could also possibly relieve some of this traffic.



Figure 13: 6498 Bandera Road and Seneca Drive

Source: Google Earth



Figure 14: 6600 Bandera Road



Figure 15: 6801 Poss Road and Bandera Road

Source: Google Earth

Explore a Boulevard Option

The boulevard option seeks to increase the capacity of this thoroughfare while still enhancing the character and integrity of the existing streetscape within Leon Valley. Figures 16 through 19 show a possible design of a Bandera Road Boulevard through Leon Valley.

This development could provide a certain level of congestion relief, through the expansion of lanes and the provision of separated access roads on either side of the main boulevard. These access roads are extremely important to the success of a proposed Bandera Road Boulevard, for a number of reasons. By providing a separated route for traffic seeking to turn, the main boulevard can focus on providing service for travelers navigating their way to further destinations, allowing for higher speeds and less congestion. For drivers on the access roads, they can now navigate and safely turn off without worrying about doing so from a high-speed thoroughfare, which is the present condition on Bandera Road. This option also benefits the businesses along the road, making the navigation to these locations safer for drivers and pedestrians.

The boulevard option is also useful for its reduction of negative effects on the surrounding area, when compared to traditional highway development. Aesthetically, a boulevard with greenery serving as medians and sidewalk buffers is able to blend easily into the character of the surrounding area. This prevents the road from being a visual dividing barrier. Any road of this size will inevitably serve as somewhat of a physical barrier, but by making the thoroughfare amenable to pedestrians, those effects can be mitigated. More importantly, there's ample evidence that psychological barriers can have devastating effects on established neighborhoods and businesses, and the understated, well-

designed structure of a boulevard is less likely to serve as one of those psychological barriers.

If this option were chosen, Leon Valley could make full use of this design to build up the commercial corridor along the access

roads, while also creatively using the median and sidewalk space to showcase gateways, wayfinding signage, and other unique branding opportunities.



Figure 16: Boulevard Option

Source: CURPR



Figure 17: Boulevard Option

Source: CURPR



Figure 18: Boulevard Option

Source: CURPR



Figure 19: Boulevard Option

Source: CURPR

The Elevated Freeway Option

This option has been the more traditional way of handling high-traffic corridors in the United States during past decades, and would consist of constructing an elevated overpass for traffic from Loop 410 to Loop 1604 within the Bandera Road right-of-way, with limited access via on- and off-ramps at select locations along the highway. Figures 20 through 23 illustrate how this would look in Leon Valley.

As mentioned earlier, nearly every American city has examples of neighborhoods that were degraded or destroyed during the construction of highway overpasses during “urban renewal” periods. One way in which this happens is economic: even though greater traffic is facilitated on elevated freeways, drivers are much less likely to stop at business they would have to exit for. This leads to many businesses directly adjacent to the elevated highway to close. The result of this could be a reduction in Leon Valley’s tax base, as fewer businesses succeed in this environment, and the diminishing of Leon Valley’s unique business culture.

Elevated freeways also serve as major physical and psychological barriers for communities. Crossing between the two sides can become much harder for vehicular traffic, and more difficult for pedestrian traffic. Aesthetically, the elevated highway is often seen as a negative addition to the neighborhood, and serves as a visual reminder of a divided community.

If this option is implemented, Leon Valley should try to mitigate it as much as possible. One way to do this is to encourage pedestrian activity under the highway and along the access road, by intelligent urban design of streetscapes and intersections. By creatively utilizing the dead space directly under the elevated

freeway, Leon Valley could attempt to maintain the unique character of the city and to connect the opposite sides of the area which is not an easy task.

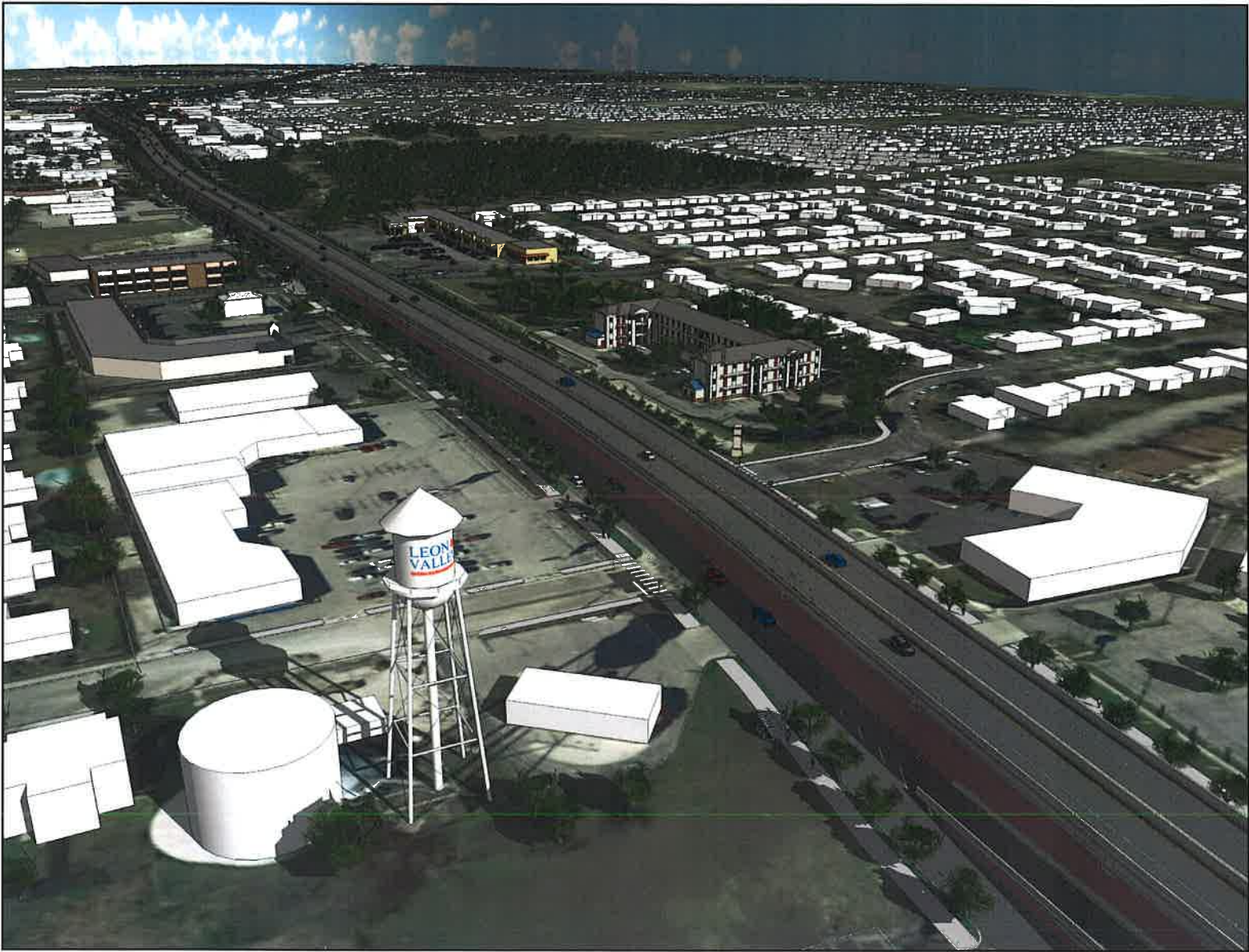


Figure 20: Elevated Freeway Option

Source: CURPR



Figure 21: Elevated Freeway Option

Source: CURPR



Figure 22: Elevated Freeway Option

Source: CURPR



Figure 23: Elevated Freeway Option

Source: CURPR

Findings

A literature review was conducted as part of this study and a partial list of sources is noted in Sources Consulted within this research report. The literature review revealed that a number of major cities (San Francisco, Portland, Milwaukee, Austin and New Orleans) have removed and are considering removing elevated freeways from downtown business districts in favor of at-grade boulevards. This shift in urban policy is generated by the desire to promote livability for residents and promote economic vitality for businesses. Some of the reasons given for removing and not building elevated freeways are:

- elevated freeways increase blight and can decrease property values nearby;
- create barriers to movement by pedestrians;
- disrupt the existing urban grid and street system;
- sever local commercial activity from customers;
- are expensive to maintain and repair;
- and, they do not contribute to the tax base.

The visual model for the elevated freeway shows four lanes although two lanes have been discussed with some on and off ramps at important intersections. An accident on a one lane congested elevated roadway going north or south would make it difficult for emergency vehicles to reach the scene of the accident. Without on or off ramps, many vehicles could be trapped for an extended length of time. Although an elevated freeway would expedite traffic moving between Loop 410 and Loop 1604, there could be substantial negative impact on the City of Leon Valley in terms of the reasons cited above. The elevated freeway could also encourage longer trips and more vehicle miles of travel.

In a paper titled Rethinking The Urban Freeway, for the Mayors Innovation Project in 2013, the issue of where will the cars go is discussed when removing an elevated freeway.

Cities that have removed freeways discovered that traffic formerly on the freeway dispersed throughout the larger urban grid network. In many cases the cities saw either improvements to traffic flow and congestion, or no meaningful increase in traveler delay.

Next Steps

The larger arterial network in the northwest sector requires additional study to determine how to best disperse and handle vehicular traffic in the area. A network of boulevards might provide a better long range traffic solution. This study should include the City of San Antonio, the Texas Department of Transportation and surrounding smaller cities in the northwest sector. Also additional traffic studies are needed to determine business and tax impact, environmental, feasibility and cost implications of alternative traffic planning strategies for Leon Valley by the Texas Department of Transportation. These studies should address in greater depth the points made in the findings section of this report. Given the projected population growth in the northwest sector of the San Antonio Metropolitan area by 2040, planning for vehicular traffic and pedestrian movement needs to begin immediately to avoid major congestion and negative economic impact that the City could be facing in the decades ahead.

Any future improvements to the Bandera Road Corridor should include enhancements to the pedestrian network to include adequate sidewalk width, bike lanes, safe corner crossings, lighting and street trees. Leon Valley needs a sidewalk and bicycle

lane network in the neighborhood areas that connects to the Bandera Road Business Corridor wherever possible. This effort can be accomplished in stages and incorporated into a capital improvements program by the City of Leon Valley.

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Urban Land Magazine, Jack Skelly, "Tear Down That Freeway!" accessed October 30, 2017, <https://urbanland.uli.org/sustainability/tear-down-that-freeway/>. Uploaded on April 20, 2011. Published by the Urban Land Institute.

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State Smart Transportation Initiative, "Rethinking the Urban Freeway," accessed October 30, 2017, http://www.ssti.us/wp/wp-content/uploads/2013/12/SURDNA_freeway-brief.pdf. Uploaded November 2013.

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Jon P. Nelson, "Highway Noise and Property Values," accessed October 30, 2017, http://www.bath.ac.uk/e-journals/jtep/pdf/Volume_XVI_No_2_117-138.pdf. Published by the University of Bath.

D Magazine, Patrick Kennedy, "How Dallas is Throwing Away \$4 Billion," accessed October 30, 2017, <https://www.dmagazine.com/publications/d-magazine/2013/february/how-dallas-is-throwing-away-4-billion-dollar-investment/>. Uploaded February 2013.

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Appendix A

City Compass, “New Orleans Community Works to Erase Freeway’s Shadow,” accessed October 30, 2017, <http://www.connectedcitycouncil.com/2017/09/08/new-orleans-community-works-to-erase-freeways-shadow/>. Uploaded on September 8, 2017.

Summary: Claiborne Avenue in New Orleans was once the site of a thriving commercial corridor in a historically black neighborhood. With the construction of Interstate 10 along the route, the corridor declined into irrelevance. Wanting to revitalize Claiborne without the costs of tearing down the elevated freeway, the City of New Orleans decided to turn the area under the freeway into a “Cultural Innovation District.”

Relevant findings: Offers an example of creative use of the space under an elevated freeway, if a elevated freeway is unavoidable; this article does not detail the results of this designation, only the decision by the city.

D Magazine, Patrick Kennedy, “How Dallas is Throwing Away \$4 Billion,” accessed October 30, 2017, <https://www.dmagazine.com/publications/d-magazine/2013/february/how-dallas-is-throwing-away-4-billion-dollar-investment/>. Uploaded February 2013.

Summary: Dallas should tear down the I-345 highway – a 1.5 mile connector adjacent to downtown – in order to free up 245 acres for development. The author points to its high maintenance costs, low need, and the fact that the surface street grid could handle much of the traffic from it. More broadly, the author asserts that using large highways to “solve” congestion in an outmoded way of thinking, that traffic networks tend to self-adjust, that

several cities have had success tearing down their highways, and that this move would help Dallas establish walkability and mass transit, and surge investment Downtown.

Relevant findings: Its arguments on the economic benefits of not using urban space for major highways are compelling and applicable to Leon Valley; the fact that cities’ car traffic tends to fill whatever infrastructure is available is well-established, although can be hard to assert outside of planning circles; , as Leon Valley’s distance from Downtown San Antonio makes its situation considerably different.

Urban Bikeway Design Guide, “Conventional Bike Lanes,” accessed October 30, 2017, <https://nacto.org/publication/urban-bikeway-design-guide/bike-lanes/conventional-bike-lanes/>. Published by the National Association of City Transportation Officials.

Summary: A detailed guide to bike lanes, when they’re called for, and best practices for their design.

Relevant findings: Specific measurements and figures for traffic volume are useful for modeling the bike lanes in our proposals for Leon Valley.

Urban Land Magazine, Jack Skelly, “Tear Down That Freeway!” accessed October 30, 2017, <https://urbanland.uli.org/sustainability/tear-down-that-freeway/>. Uploaded on April 20, 2011. Published by the Urban Land Institute.

Summary: The article lists several reasons for tearing down urban highways, as well as a multitude of examples U.S. cities that have done so. Emphasis is placed on cities that have replaced the

elevated freeways with boulevards, and the positive consequences of doing so.

Relevant findings: Boulevards have been successful across the country and on social, economic, and cultural levels; replacing elevated freeways with boulevards brings together previously segregated cities, and frees up land for development.

Urban Land Magazine, Jeffrey Spivak, “Top 10 Metro Highway Removal Projects,” accessed October 30, 2017, <https://urbanland.uli.org/development-business/top-10-metro-highway-removal-projects/>. Uploaded on September 13, 2011. Published by the Urban Land Institute.

Summary: A listing, as of 2011, of the ongoing highway removal projects occurring in the U.S., ranked by progress towards completion.

Relevant findings: A good resource for examples of how cities are utilizing the space previously dedicated to elevated freeways

State Smart Transportation Initiative, “Rethinking the Urban Freeway,” accessed October 30, 2017, http://www.ssti.us/wp/wp-content/uploads/2013/12/SURDNA_freeway-brief.pdf. Uploaded November 2013.

Summary: This article is an extensive look at the downsides of urban freeways, and exploration of alternatives. It lays out all the arguments against urban freeways, and weighs the other options for development. It also uses several case studies to make the point that cities should move away from urban freeways.

Relevant findings: A good source for a comprehensive overview of all the arguments against building elevated freeways

through urban areas; breaks down the different options in detail; explains how cities can go about achieving freeway removal/alternative options.

Dallas News, Brandon Formby, “New TxDOT downtown Dallas plan includes a scenario with a freeway’s demise,” accessed October 30, 2017, <https://www.dallasnews.com/news/transportation/2016/06/10/new-txdot-downtown-dallas-plan-freeway-demise>. Uploaded on June 10, 2016. Published by the Dallas Morning News.

Summary: TxDOT released a report regarding traffic congestion and Dallas’ highways, including the projected results of several repair or tear-down projects. This report is notable for marking a possible cultural shift in TxDOT, since it is unusual for the department to consider highway tear-downs solutions to congestion issues. The report discusses how building interstates through downtowns favor suburban development, and provides estimates on future congestion and cost for each potential project.

Relevant findings: Shows how cities and TxDOT are turning more to alternatives instead of urban elevated freeways; provides contextual figures on traffic hours of delay and construction/demolition costs; discusses the positives to urban areas that come from removing highways,

Journal of Urbanism: International Research on Placemaking and Urban Sustainability, Robert Cervero, Junhee Kang, and Kevin Shively, “From elevated freeways to surface boulevards: neighborhood and housing price impacts in San Francisco,” accessed October 30, 2017, <http://www.tandfonline.com/doi/full/10.1080/17549170902833899?scr>

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Summary: This is an empirical study looking at two freeway removals in San Francisco at how they affected noise, traffic, and the economy of nearby neighborhoods. It found that converting freeways to boulevards has a positive impact on neighborhoods while traffic performance was not seriously affected negatively.

Relevant findings: Removing the freeways in San Francisco resulted in higher property values, increases in jobs, more transit usage, and more development; the boulevards in their place don’t experience worse traffic than any other parts of the city; gentrification based on highway removal was considered a worry.

Centre for Social and Economic Research on the Global Environment, and Centre for Environmental Risk School of Environmental Sciences University of East Anglia Norwich, Iain R. Lake, et al, “Modelling Environmental Influences on Property Prices in an Urban Environment,” accessed October 30, 2017, http://www.geocomputation.org/1998/85/gc_85.htm. Published by GeoComputation CD-ROM.

Summary: This paper studies the impact of road noise and placement in house viewsheds on property value using GIS. The study finds that increases in both variables have a depressing effect on property values.

Relevant Findings: Turning Bandera Road into an elevated freeway would increase road noise and viewshed interruption, which would mean it would have a negative effect on nearby property values; the study also provides a model for using GIS to determine these effects.

Jon P. Nelson, “Highway Noise and Property Values,” accessed October 30, 2017, http://www.bath.ac.uk/e-journals/jtep/pdf/Volume_XVI_No_2_117-138.pdf. Published by the University of Bath.

Summary: This paper is a review of multiple studies done on the relationship between highway noise and property values. The paper finds empirical problems with all of the studies, but does point out that the consistent results indicate that highway noise reduces property values.

Relevant findings: Increased highway noise negatively affects property values.

Brookings Mountain West, Daniel Waqar, “The End of the Road: The State of Urban Elevated Expressways in the United States,” accessed October 30, 2017, https://www.unlv.edu/sites/default/files/page_files/27/Brookings-DanielWaqar-2016.pdf. Uploaded on May 26, 2016. Published by the University of Nevada, Las Vegas.

Summary: This paper considers the effects of urban freeways in major U.S. cities, and looks at several case studies of cities who tore down their elevated freeways. The paper is done from the point-of-view of comparing these cases to a proposed elevated freeway in Las Vegas. The study finds consistent downsides to urban elevated freeways, and provides alternatives to that option.

Relevant findings: Further evidence of the negative consequences of urban freeways; this paper also sheds light on the costs associated with first building then demolishing these freeways, indicating how important it is to avoid these projects in the first place.

Appendix B

Leon Valley Business and Residential Addresses Used for Impact Analysis				
Address	Bexar County Prop Tax		Leon Valley Prop Tax	Northside ISD Prop Tax
7249 Bandera Road	\$	48,101.29	\$	9,994.19
7249 Bandera Road	\$	8,211.28	\$	1,706.09
7240 Bandera Road	\$	7,651.88	\$	1,593.64
7231 Bandera Road	\$	1,518.91	\$	315.59
7229 Bandera Road	\$	1,518.91	\$	315.59
7228 Bandera Road	\$	11,653.10	\$	2,421.20
7225 Bandera Road	\$	1,518.91	\$	315.59
7213 Bandera Road	\$	137.43	\$	28.55
7213 Bandera Road	\$	3,842.04	\$	798.28
7212 Bandera Road	\$	139,301.29	\$	28,943.14
7212 Bandera Road	\$	818.94	\$	170.15
7210 Bandera Road	\$	14,385.00	\$	2,988.82
7210 Bandera Road	\$	29,360.42	\$	6,100.32
7200 Bandera Road	\$	40,584.89	\$	8,432.47
7200 Bandera Road	\$	570.86	\$	118.61
7170 Bandera Road	\$	3,731.94	\$	775.40
7160 Bandera Road	\$	8,036.62	\$	1,669.80
7160 Bandera Road	\$	233.05	\$	48.42
7160 Bandera Road	\$	3,301.44	\$	685.95
7137 Bandera Road	\$	5,347.03	\$	1,110.97
7133 Bandera Road	\$	30,860.59	\$	6,412.02
7128 Bandera Road	\$	2,986.67	\$	620.55
7128 Bandera Road	\$	16,737.32	\$	3,477.57
7125 Bandera Road	\$	1,518.91	\$	315.59
7113 Bandera Road	\$	3,421.19	\$	710.83
7113 Bandera Road	\$	190.99	\$	39.69
7106 Bandera Road	\$	198.77	\$	41.30
7106 Bandera Road	\$	133,943.55	\$	27,829.95
7100 Bandera Road	\$	10,568.41	\$	2,195.83
7100 Bandera Road	\$	55.18	\$	11.46
7050 Bandera Road	\$	6,394.72	\$	1,328.66
7050 Bandera Road	\$	3,409.13	\$	708.33
7050 Bandera Road	\$	3,305.09	\$	686.71
7031 Bandera Road	\$	18,162.76	\$	3,773.74
7031 Bandera Road	\$	831.26	\$	172.72
7020 Bandera Road	\$	25,539.36	\$	5,306.40
7020 Bandera Road	\$	5,876.63	\$	1,221.01
7016 Bandera Road	\$	2,184.10	\$	453.80
7016 Bandera Road	\$	23,248.36	\$	4,830.40
7003 Bandera Road	\$	7,807.03	\$	1,622.10

7003 Bandera Road	\$	452.46	\$	94.01	\$	232.33
6893 Bandera Road	\$	133.94	\$	27.83	\$	68.78
6893 Bandera Road	\$	359.75	\$	74.75	\$	184.73
6891 Bandera Road	\$	7,923.03	\$	1,646.20	\$	4,068.17
6891 Bandera Road	\$	1,955.56	\$	406.32	\$	1,004.12
6891 Bandera Road	\$	29,707.07	\$	6,172.35	\$	15,253.47
6850 Bandera Road	\$	48,219.68	\$	10,018.79	\$	24,759.00
6850 Bandera Road	\$	327.60	\$	68.07	\$	168.22
6815 Bandera Road	\$	1,967.36	\$	408.77	\$	1,010.17
6815 Bandera Road	\$	18,484.22	\$	3,840.53	\$	9,490.95
6811 Bandera Road	\$	29,554.89	\$	6,140.73	\$	15,175.34
6811 Bandera Road	\$	3,932.31	\$	817.03	\$	2,019.10
6810 Bandera Road	\$	5,936.38	\$	1,233.42	\$	3,048.11
6810 Bandera Road	\$	40,049.13	\$	8,321.15	\$	20,563.73
6810 Bandera Road	\$	186.18	\$	38.68	\$	95.60
6810 Bandera Road	\$	3,603.09	\$	748.62	\$	1,850.05
6807 Bandera Road	\$	23,841.95	\$	4,953.73	\$	12,241.95
6807 Bandera Road	\$	198.23	\$	41.19	\$	101.79
6805 Bandera Road	\$	15,052.57	\$	3,127.53	\$	7,728.93
6805 Bandera Road	\$	958.26	\$	199.10	\$	492.02
6803 Bandera Road	\$	-	\$	-	\$	-
6803 Bandera Road	\$	11,748.46	\$	2,441.02	\$	6,032.39
6803 Bandera Road	\$	3,064.88	\$	636.80	\$	1,573.71
6802 Bandera Road	\$	384.67	\$	79.93	\$	197.52
6799 Bandera Road	\$	901.70	\$	187.35	\$	462.99
6799 Bandera Road	\$	87,063.33	\$	18,089.47	\$	44,703.75
6790 Bandera Road	\$	485.96	\$	100.97	\$	249.52
6780 Bandera Road	\$	103.94	\$	21.60	\$	53.37
6780 Bandera Road	\$	2,893.17	\$	601.12	\$	1,485.54
6780 Bandera Road	\$	385.75	\$	80.15	\$	198.07
6727 Bandera Road	\$	305.66	\$	63.51	\$	156.94
6710 Bandera Road	\$	8,304.50	\$	1,725.46	\$	4,264.05
6710 Bandera Road	\$	142.52	\$	29.61	\$	73.18
6710 Bandera Road	\$	1,492.39	\$	310.08	\$	766.29
6701 Bandera Road	\$	5,973.89	\$	1,241.22	\$	3,067.37
6701 Bandera Road	\$	475.51	\$	98.80	\$	244.15
6701 Bandera Road	\$	320.13	\$	66.51	\$	164.37
6700 Bandera Road	\$	13,421.14	\$	2,788.56	\$	6,891.26
6700 Bandera Road	\$	13,597.95	\$	2,825.30	\$	6,982.04
6700 Bandera Road	\$	3,306.27	\$	686.96	\$	1,697.64
6700 Bandera Road	\$	51,977.59	\$	10,799.58	\$	26,688.55
6635 Bandera Road	\$	30,368.74	\$	6,309.82	\$	15,593.22
6635 Bandera Road	\$	52,740.29	\$	10,958.04	\$	27,080.16

6632 Bandera Road	\$	-	\$	-	\$	-
6612 Bandera Road	\$	21,841.64	\$	4,538.12	\$	11,214.86
6612 Bandera Road	\$	8,725.63	\$	1,812.95	\$	4,480.28
6610 Bandera Road	\$	515.41	\$	107.09	\$	264.65
6610 Bandera Road	\$	10,993.53	\$	2,284.17	\$	5,644.77
6608 Bandera Road	\$	10,918.55	\$	2,268.59	\$	5,606.26
6608 Bandera Road	\$	73.67	\$	15.31	\$	37.83
6600 Bandera Road	\$	15,001.67	\$	3,116.95	\$	7,702.80
6600 Bandera Road	\$	815.16	\$	169.37	\$	418.56
6529 Bandera Road	\$	61.61	\$	12.80	\$	31.64
6526 Bandera Road	\$	146.53	\$	30.45	\$	75.24
6526 Bandera Road	\$	321.46	\$	66.79	\$	165.06
6526 Bandera Road	\$	7,500.83	\$	1,558.48	\$	3,851.40
6526 Bandera Road	\$	376.11	\$	78.15	\$	193.12
6520 Bandera Road	\$	10,688.71	\$	2,220.83	\$	5,488.25
6520 Bandera Road	\$	6,947.38	\$	1,443.49	\$	3,567.23
6516 Bandera Road	\$	572.47	\$	118.95	\$	293.95
6516 Bandera Road	\$	9,295.70	\$	1,931.40	\$	4,772.99
6461 Bandera Road	\$	16,832.16	\$	3,497.28	\$	8,642.68
6430 Bandera Road	\$	42,861.94	\$	8,905.58	\$	22,008.00
6430 Bandera Road	\$	363.78	\$	75.58	\$	186.79
6430 Bandera Road	\$	234.67	\$	48.76	\$	120.49
6430 Bandera Road	\$	6,256.25	\$	1,299.88	\$	3,212.35
6430 Bandera Road	\$	42,861.93	\$	8,905.58	\$	22,008.00
6428 Bandera Road	\$	20,091.53	\$	4,174.49	\$	10,316.25
6428 Bandera Road	\$	757.04	\$	157.30	\$	388.71
6428 Bandera Road	\$	3,982.96	\$	827.55	\$	2,045.09
6421 Bandera Road	\$	43,028.83	\$	8,940.26	\$	22,093.69
6346 Bandera Road	\$	13,541.95	\$	2,813.66	\$	6,953.29
6346 Bandera Road	\$	589.35	\$	122.46	\$	302.61
6321 Bandera Road	\$	32,019.21	\$	6,652.75	\$	16,440.66
6321 Bandera Road	\$	2,002.72	\$	416.11	\$	1,028.32
6320 Bandera Road	\$	92,421.07	\$	19,202.66	\$	47,454.75
6320 Bandera Road	\$	3,964.19	\$	823.66	\$	2,035.46
6320 Bandera Road	\$	52,781.53	\$	10,966.61	\$	-27,101.34
E Bandera Road	\$	-	\$	-	\$	-
6757 Poss Road	\$	18,618.16	\$	3,868.37	\$	9,559.73
6757 Poss Road	\$	2,281.06	\$	473.95	\$	1,171.24
6756 Poss Road	\$	2,929.09	\$	608.59	\$	1,503.98
6756 Poss Road	\$	10,929.80	\$	2,270.93	\$	5,612.04
6500 Grissom	\$	20,037.95	\$	4,163.36	\$	10,288.74
6500 Grissom	\$	-	\$	-	\$	-
6500 Grissom	\$	-	\$	-	\$	-

6500 Grissom	\$	1,636.78	\$	340.08	\$	840.43
7224 Linkcrest	\$	5,922.40	\$	1,280.18	\$	2,888.55
7220 Linkcrest	\$	3,411.70	\$	791.10	\$	1,203.83
7216 Linkcrest	\$	2,116.31	\$	491.13	\$	671.91
7212 Linkcrest	\$	1,410.80	\$	441.16	\$	194.55
7208 Linkcrest	\$	2,402.49	\$	582.33	\$	766.70
7204 Linkcrest	\$	4,012.71	\$	883.39	\$	1,908.00
7200 Linkcrest	\$	3,232.73	\$	674.02	\$	1,407.14
7144 Linkcrest	\$	2,917.73	\$	612.26	\$	1,316.17
7130 Linkcrest	\$	5,665.18	\$	1,226.73	\$	2,756.49
7126 Linkcrest	\$	6,271.50	\$	1,303.06	\$	3,220.18
7122 Linkcrest	\$	6,211.48	\$	1,290.58	\$	3,189.37
7118 Linkcrest	\$	332.17	\$	69.02	\$	170.56
7118 Linkcrest	\$	5,221.18	\$	1,134.48	\$	2,528.50
7102 Linkcrest	\$	3,167.02	\$	654.77	\$	1,452.54
7505 Linkside	\$	473.09	\$	98.30	\$	242.91
7504 Linkside	\$	568.99	\$	118.22	\$	292.16
7501 Linkside	\$	1,818.68	\$	462.16	\$	456.14
7500 Linkside	\$	4,331.68	\$	949.67	\$	2,071.78
7403 Linklea	\$	2,275.63	\$	626.50	\$	507.17
7317 Linklea	\$	5,704.41	\$	1,234.88	\$	2,776.63
7316 Linklea	\$	4,018.32	\$	834.90	\$	2,063.25
7310 Linklea	\$	5,804.91	\$	1,250.62	\$	2,516.95
7309 Linklea	\$	2,300.81	\$	625.91	\$	596.28
7306 Linklea	\$	3,382.05	\$	975.69	\$	895.06
7302 Linklea	\$	6,569.24	\$	1,414.58	\$	3,220.68
7301 Linklea	\$	2,147.91	\$	462.16	\$	760.91
7101 Huebner Road	\$	115,727.23	\$	24,045.08	\$	59,421.60
7407 Linkview	\$	871.98	\$	181.17	\$	447.73
7404 Linkview	\$	871.98	\$	181.17	\$	447.73
7403 Linkview	\$	4,596.36	\$	1,004.66	\$	2,207.68
7402 Linkview	\$	5,590.68	\$	1,211.26	\$	2,718.23
7405 Linkwood	\$	4,167.78	\$	865.95	\$	2,140.00
7401 Linkwood	\$	4,539.05	\$	992.76	\$	2,178.25
7400 Linkwood	\$	2,675.00	\$	715.17	\$	737.17
7307 Linkmeadow	\$	871.98	\$	181.17	\$	447.73
7305 Linkmeadow	\$	5,453.59	\$	1,182.77	\$	2,647.84
7304 Linkmeadow	\$	7,206.59	\$	1,547.00	\$	3,547.94
7303 Linkmeadow	\$	6,217.86	\$	1,341.57	\$	3,040.27
7300 Linkmeadow	\$	3,962.79	\$	778.63	\$	1,795.85
6430 Handsome Lake Dr.	\$	4,600.98	\$	955.96	\$	2,362.42
6426 Handsome Lake Dr.	\$	-	\$	-	\$	-
6422 Handsome Lake Dr.	\$	5,096.83	\$	1,108.65	\$	2,464.65

6418 Handsome Lake Dr.	\$	1,574.88	\$	480.44	\$	218.70
6414 Handsome Lake Dr.	\$	2,822.44	\$	643.15	\$	1,199.34
6410 Handsome Lake Dr.	\$	1,224.11	\$	326.74	\$	263.00
6406 Handsome Lake Dr.	\$	4,905.56	\$	1,068.91	\$	2,366.45
6402 Handsome Lake Dr.	\$	1,636.32	\$	422.24	\$	417.75
6326 Handsome Lake Dr.	\$	2,877.54	\$	594.75	\$	1,293.90
6322 Handsome Lake Dr.	\$	1,844.77	\$	385.58	\$	726.25
6318 Handsome Lake Dr.	\$	4,046.89	\$	890.50	\$	1,925.55
6314 Handsome Lake Dr.	\$	4,220.32	\$	876.87	\$	2,166.97
6310 Handsome Lake Dr.	\$	2,441.09	\$	519.41	\$	1,063.78
6306 Handsome Lake Dr.	\$	4,043.64	\$	889.82	\$	1,923.89
6302 Handsome Lake Dr.	\$	3,952.59	\$	870.91	\$	1,877.13
6131 Britania Ct.	\$	692.25	\$	143.83	\$	355.43
6130 Britania Ct.	\$	4,627.12	\$	1,011.05	\$	2,223.47
6343 Mary Jamison St.	\$	2,656.25	\$	574.58	\$	1,172.48
6339 Mary Jamison St.	\$	3,069.31	\$	659.86	\$	1,373.71
6335 Mary Jamison St.	\$	5,140.48	\$	1,068.06	\$	2,639.45
6331 Mary Jamison St.	\$	2,552.40	\$	533.52	\$	1,141.64
6327 Mary Jamison St.	\$	4,456.79	\$	975.66	\$	2,136.02
6323 Mary Jamison St.	\$	1,829.51	\$	408.85	\$	665.63
6319 Mary Jamison St.	\$	3,400.67	\$	756.23	\$	1,593.74
6315 Mary Jamison St.	\$	4,166.13	\$	915.27	\$	1,986.78
6311 Mary Jamison St.	\$	4,095.80	\$	900.66	\$	1,950.67
6307 Mary Jamison St.	\$	2,398.00	\$	492.56	\$	1,061.34
6303 Mary Jamison St.	\$	2,625.64	\$	510.53	\$	1,152.41
6202 Echo Hl	\$	1,880.00	\$	495.27	\$	519.15
6206 Echo Hl	\$	2,844.26	\$	599.15	\$	1,251.71
6300 Rue MarieIyne St.	\$	203,594.19	\$	42,301.52	\$	104,538.00
6004 Rue Liliane	\$	2,689.80	\$	661.00	\$	994.53
	\$	2,237,638	\$	467,899	\$	1,134,157

