Welcome to the SH 16 (Bandera Road) Public Meeting

Meeting Format

PRESENTATION AREA

We would like to take a moment to share the new data collected by our study team, as well as some of our preliminary observations. Join us for a 15-20 minute presentation starting at:
5:15 p.m. | 5:45 p.m. | 6:15 p.m.

OPEN HOUSE AREA

Visit with staff from the Texas Department of Transportation, as well as the cities of Leon Valley and San Antonio at one of our interactive open house exhibits. The open house will be from 5:00 p.m. to 7:00 p.m.

Be Sure to Comment

We have multiple ways for you to provide your comments at tonight's meeting including:

- Via a written comment form
- Verbally to a court reporter
- Interactively at station exercises and exhibits
- Via the online public meeting at www.txdot.gov keyword search "SH 16 (Bandera Road)."

Memorandum of Understanding

Memorando de Entendimiento

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

La revisión ambiental, consultas y otras acciones requeridas por las leyes ambientales federales aplicables para este proyecto están siendo o han sido, llevado a cabo por TxDOT - en virtud de 23 USC 327 y un Memorando de Entendimiento fechado el 16 de diciembre del 2014, y ejecutado por la FHWA y el TxDOT.

Project Background

Project Facts

Location
SH 16 (Bandera Road) in Leon Valley and San Antonio

Limits
From I-410 to Loop 1604

Length
Approx. 6.5 miles

Existing Facility

- 2 – 3 lanes in each direction
- 17 signalized intersections
- Discontinuous sidewalks

STATE HIGHWAY 16
BANDERA ROAD

Corridor Studies

TxDOT: SH 16 (Bandera Road) Feasibility Study

GOALS

To improve mobility, safety, and community connectivity while reducing congestion with the SH 16 (Bandera Road) corridor; and to accomodate multimodal transportation including bicyclists and pedestrians, while accomodating economic development.

FOCUS

- SH 16 (Bandera Road) Existing Conditions Assessment
- Urban Design & Roadway Concepts
- Design Schematic & Environmental Studies
- Community Outreach

San Antonio: Bandera Road Corridor Plan

GOALS

To analyze existing market and land use as well as traffic, transit, and other connectivity conditions.
The plan will work in conjunction with TxDOT planning to make recommendations for future land use, corridor improvements, and network improvements to address congestion and other issues in the corridor.

FOCUS

- Economic Development
- Land Use & Design
- Multimodal Improvements
- Community Outreach
- Sustainability and Innovation

Corridor History

1920s

Constructed as a two-lane roadway

1950s

Wurzbach Road to Evers Road segment constructed

1970s

Widened to a four-lane divided roadway

1980s – 1990s

South of Guilbeau Road improved to six lanes

TxDOT feasibility study of bypass/fly-over concept

1990s – 2000s

Various intersection/signal improvements

SH 16 (Bandera Road) at Loop 1604 re-striped to six lanes

SH 16 direct connecting ramps to I-410 constructed

The Texas Transportation Institute (TTI) study on access management and signal modifications

The Alamo Regional Mobility Authority (RMA) feasibility study on elevated tollway

2010 – present

TTI follow-up study on access management

TxDOT study of “superstreet” concept (Restricted crossing U-turn [RCUT] intersections with access management)

TxDOT study of multiple build concepts

City of Leon Valley/UTSA study of boulevard concept

Constructed SH 16 (Bandera Road)/Loop 1604 Displaced Left Turn Interchange (DLT)

TxDOT’s current study SH 16 (Bandera Road) project initiated

SH 16 Construction | **SH 16 Studies**

STATE HIGHWAY 16 BANDERA ROAD

Multimodal Options and Connected Neighborhoods

Multimodal Options

Benefits of Multimodal

- Multimodal gives people choice in how to travel
- A multimodal corridor supports safe travel for all forms of transportation
- Multimodal corridors help reduce vehicular traffic

Why is It Important?

- Safety! Multimodal corridors are safer for everyone
- Multimodal options reduce congestion
- Accommodating different forms of transportation prepares us for the future

What Are Multimodal Options?

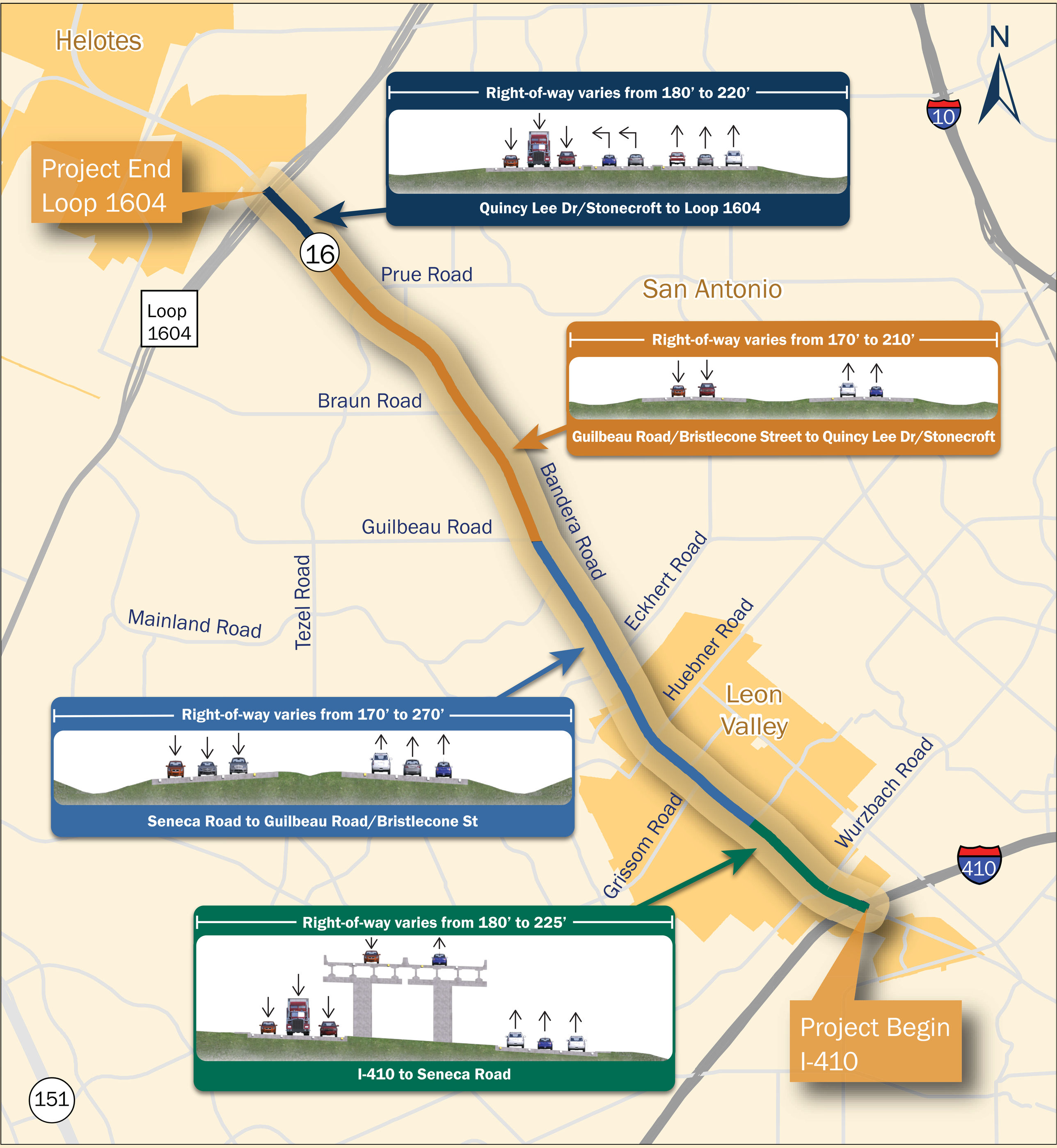
- Private Cars
- Bicycles
- Walking
- Local Buses
- Scooters
- Light Rail
- Uber/Lyft
- Microtransit
- E-bikes
- Motorcycles
- Streetcars
- Inter-city Buses

Connected Neighborhoods

Benefits of a Connected Neighborhood

- Connected neighborhoods allow residents to walk, bike, and drive from home to destinations
- Connected neighborhoods are the natural partner of multimodal corridors

Existing Conditions



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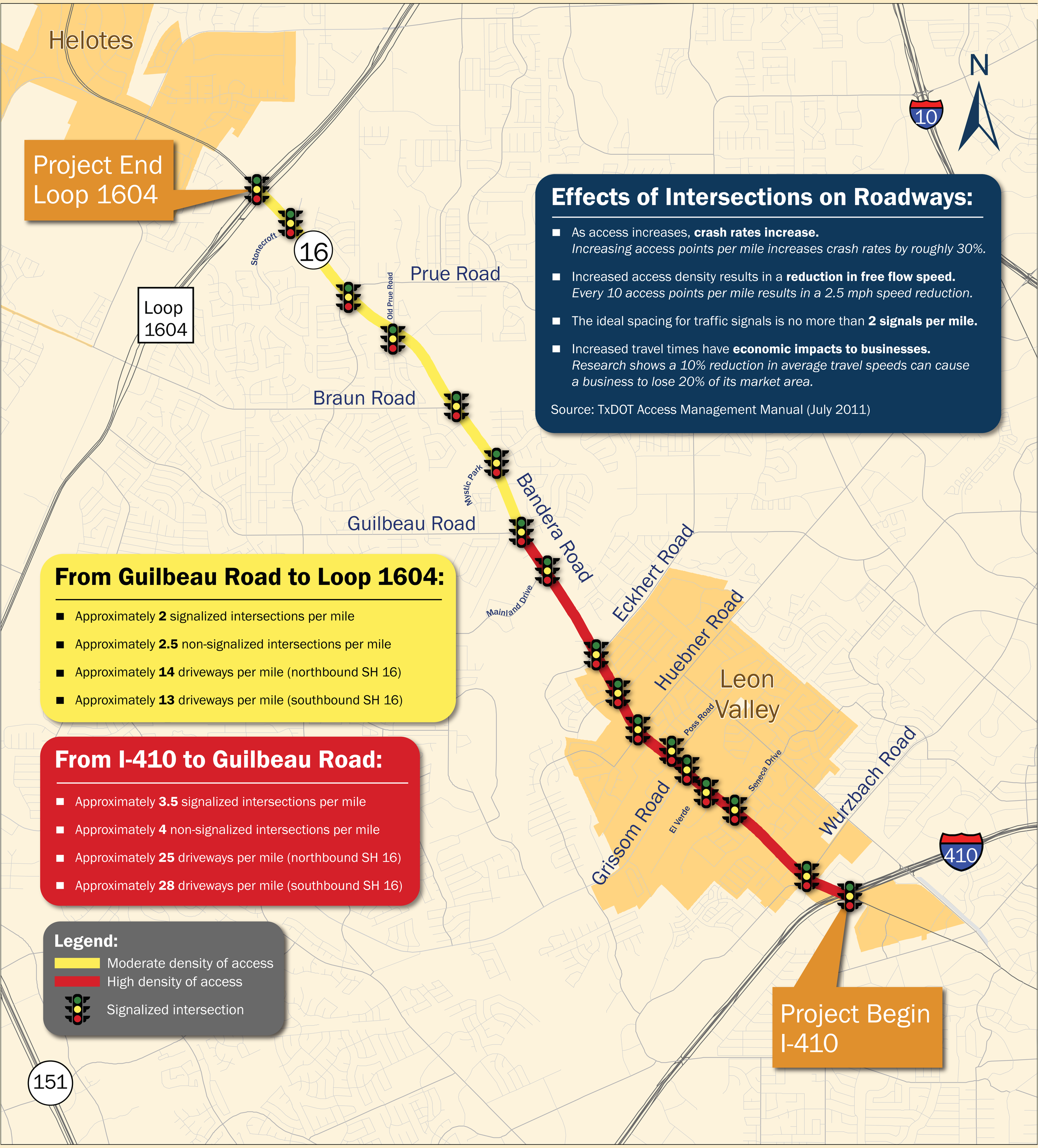
BANDERA ROAD

Existing Intersections and Driveways



Effects of Intersections on Roadways:

- As access increases, **crash rates increase.**
  Increasing access points per mile increases crash rates by roughly 30%.
- Increased access density results in a **reduction in free flow speed.**
  Every 10 access points per mile results in a 2.5 mph speed reduction.
- The ideal spacing for traffic signals is no more than **2 signals per mile.**
- Increased travel times have **economic impacts to businesses.**
  Research shows a 10% reduction in average travel speeds can cause a business to lose 20% of its market area.

Source: TxDOT Access Management Manual (July 2011)

From Guilbeau Road to Loop 1604:

- Approximately **2** signalized intersections per mile
- Approximately **2.5** non-signalized intersections per mile
- Approximately **14** driveways per mile (northbound SH 16)
- Approximately **13** driveways per mile (southbound SH 16)

From I-410 to Guilbeau Road:

- Approximately **3.5** signalized intersections per mile
- Approximately **4** non-signalized intersections per mile
- Approximately **25** driveways per mile (northbound SH 16)
- Approximately **28** driveways per mile (southbound SH 16)

Legend:

- Moderate density of access
- High density of access
- Signalized intersection

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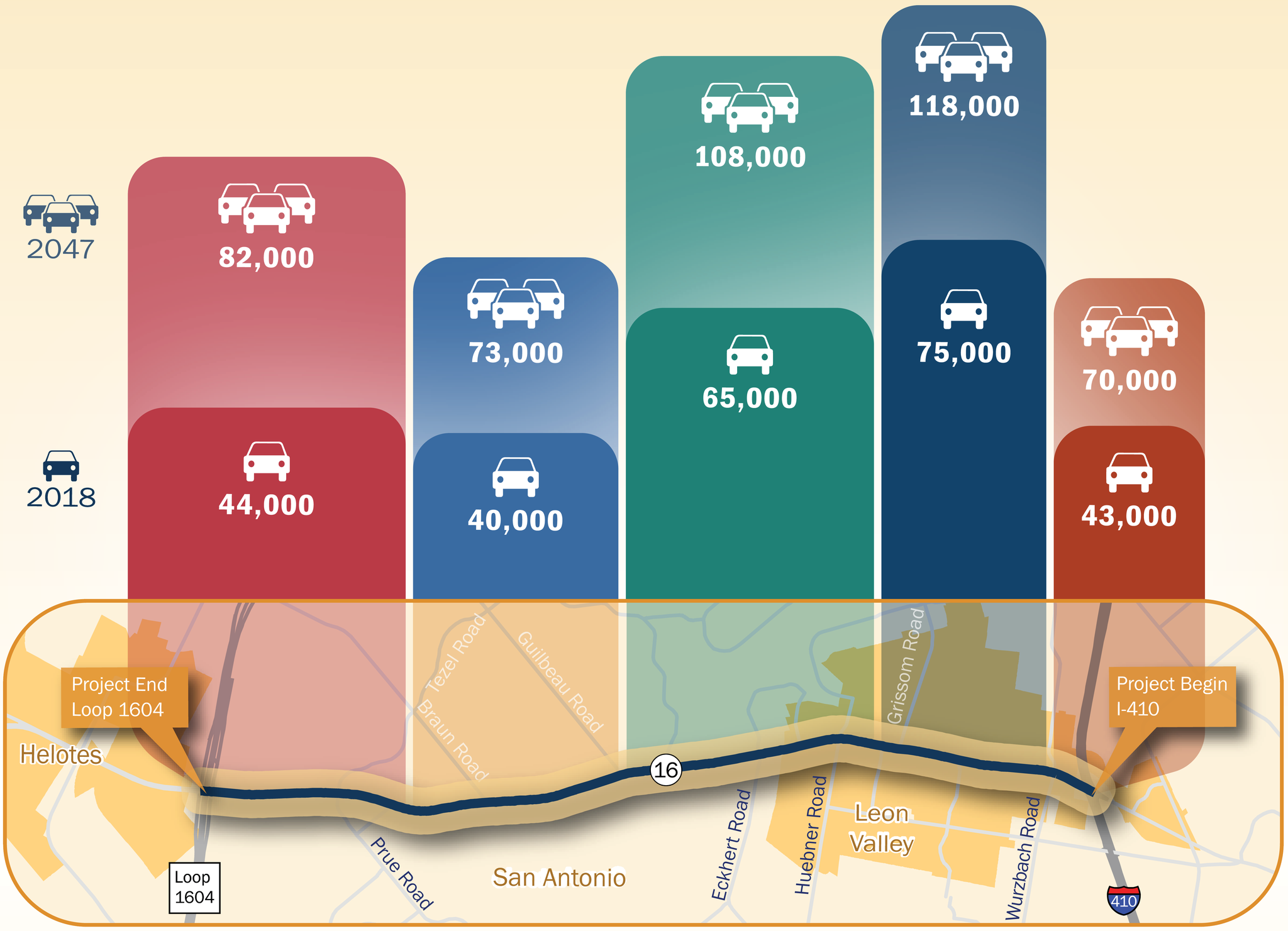
BANDERA ROAD

Traffic Volumes

By the year 2047, forecasted traffic will nearly double on portions of SH 16.



Existing Travel Times During Peak Periods

AM Peak Period (6 a.m. to 9 a.m.)

- Southbound SH 16 is the peak traffic direction
- Highest congestion observed from 7:30 a.m. to 8:30 a.m. (peak hour)

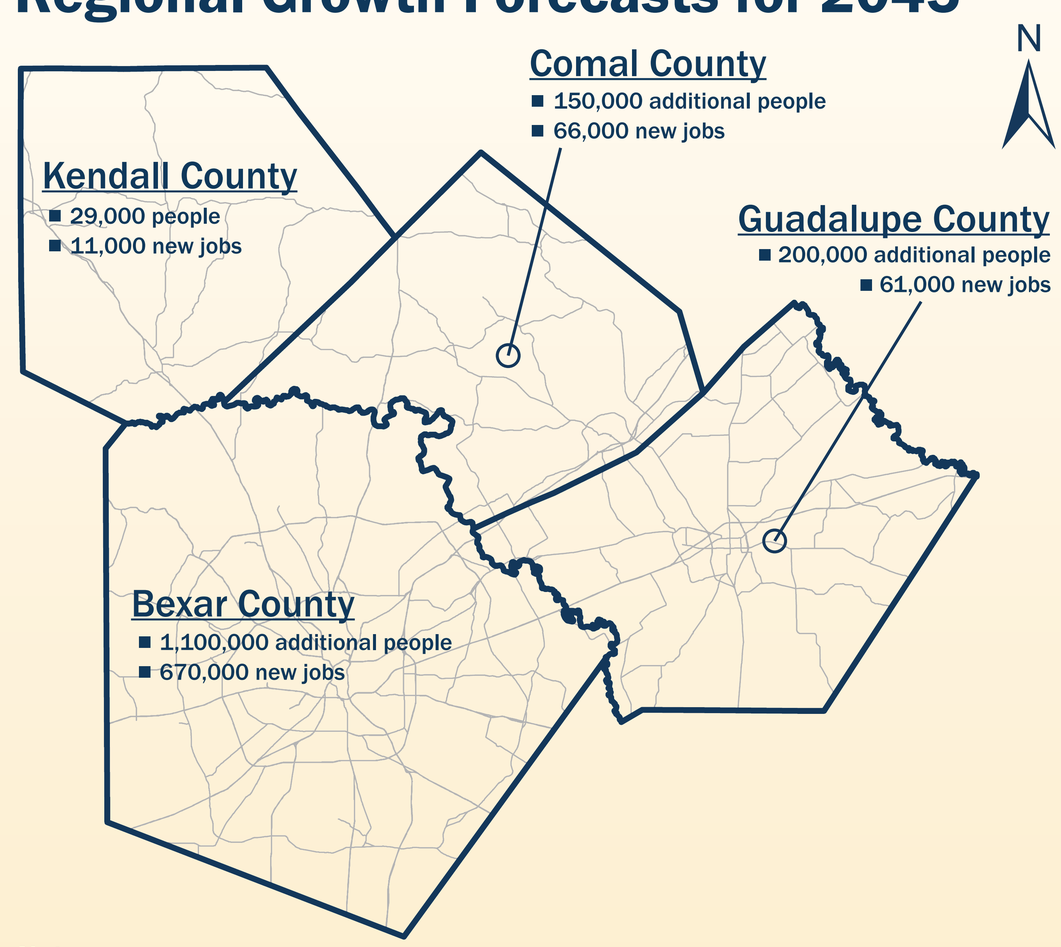
PM Peak Period (4 p.m. to 7 p.m.)

- Northbound SH 16 is the peak traffic direction
- Highest congestion observed from 5:30 p.m. to 6:30 p.m. (peak hour)

Average Travel Times between I-410 Ramps & Quincy Lee

- Off-peak (free flow) takes about 14 minutes either direction
- Southbound a.m. peak hour takes more than 28 minutes
- Northbound p.m. peak hour takes more than 40 minutes

Regional Growth Forecasts for 2045



Notes:

1. Year 2018 and 2045 traffic volumes are average daily traffic.
2. Year 2045 growth is compared to 2015 employment and population data.
3. 2045 demographic data from the Alamo Area Metropolitan Planning Organization (AAMPO) *Mobility 2045.*

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BANDERA ROAD

Crash History

Texas Department of Transportation

Crashes shown are prior to construction of the SH16/Loop 1604 displaced left turn interchange.

Helotes

Project End Loop 1604

Loop 1604

16

Braun Road

Prue Road

San Antonio

Babcock Road

Guilbeau Road

Bandera Road

Eckhert Road

Huebner Road

Leon Valley

Tezel Road

Grissom Road

Wurzbach Road

Project Begin I-410

410

10

151

N

4 to 7x

Crash rate is ~ 4 to 7 times higher than statewide average

5,842 total crashes

From 2014 – 2018

Most crashes are near intersections

18 crashes involving pedestrians

4 crashes involving bicyclists

From 2014 - 2017

Crash Data Sources:

- San Antonio: Crash Records Information System (CRIS) database
- Leon Valley: Provided by the Leon Valley Police Department
- Bicycle & pedestrian involved crashes: Provided by Alamo Area Metropolitan Planning Organization

Low — High

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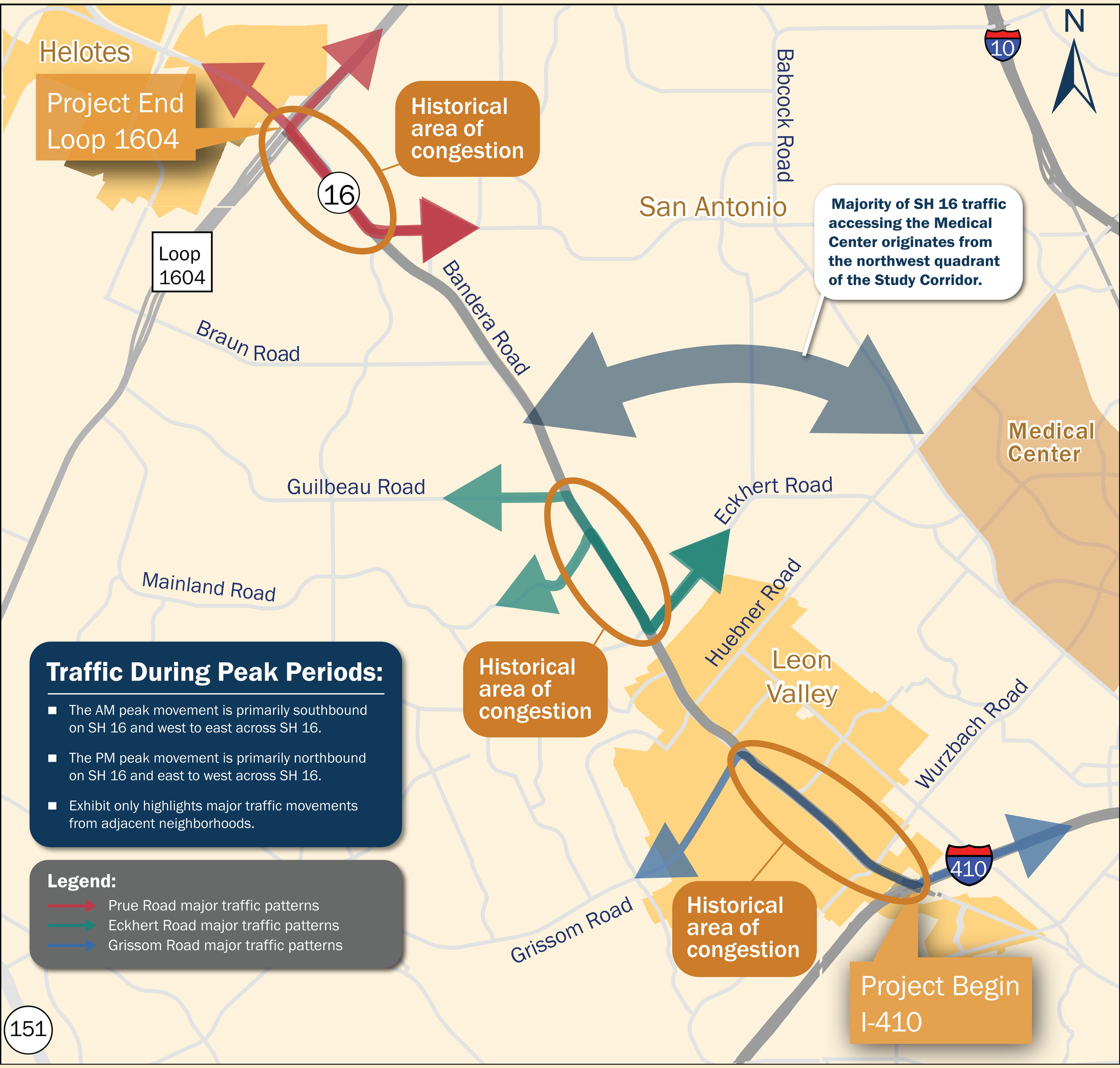
SH 16 Traffic Origin & Destination

Major Travel Patterns From Adjacent Neighborhoods



Traffic During Peak Periods:

- The AM peak movement is primarily southbound on SH 16 and west to east across SH 16.
- The PM peak movement is primarily northbound on SH 16 and east to west across SH 16.
- Exhibit only highlights major traffic movements from adjacent neighborhoods.

Legend:

- Prue Road major traffic patterns
- Eckhert Road major traffic patterns
- Grissom Road major traffic patterns

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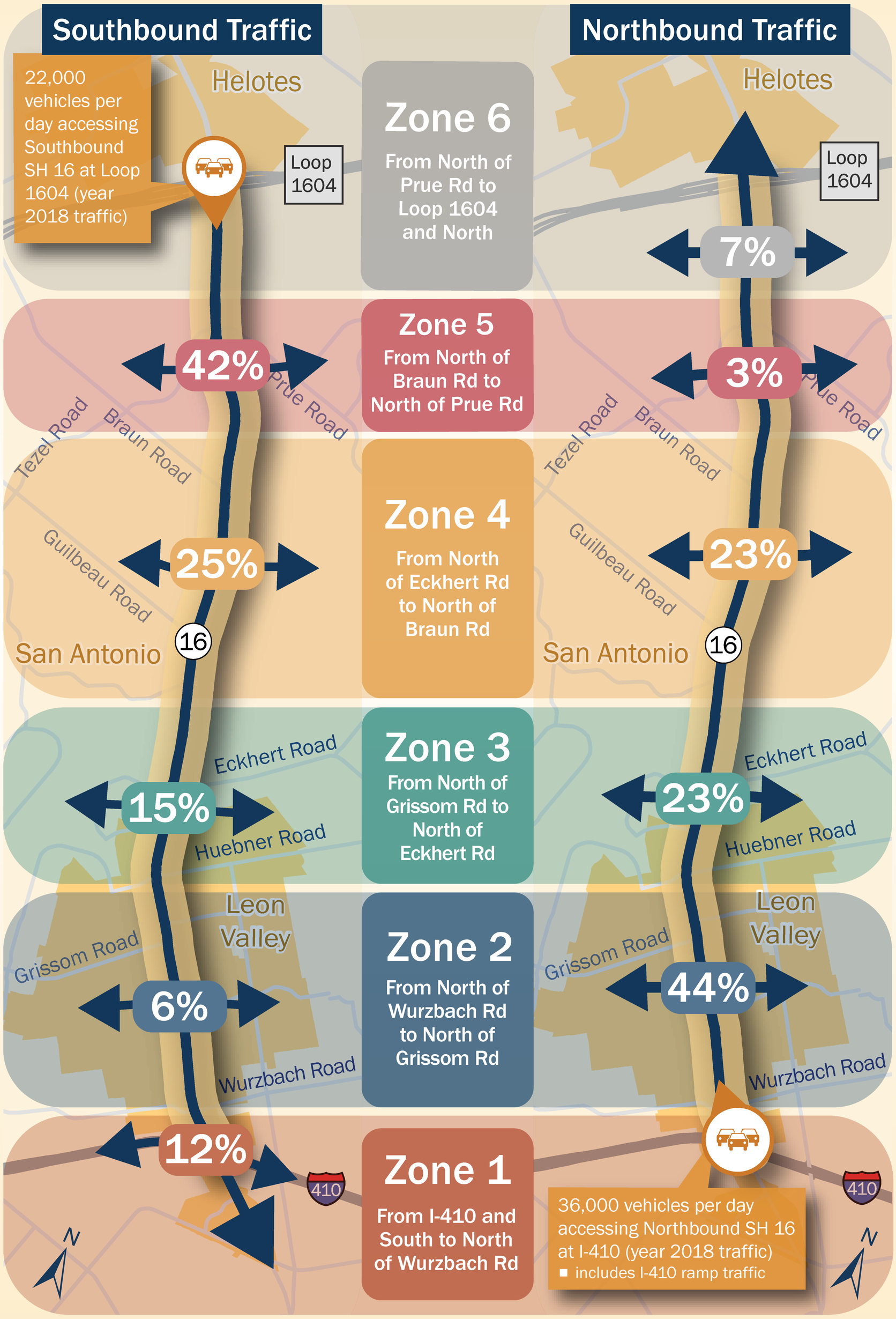
SH 16 Traffic Origin & Destination

Travel Patterns for Vehicles Entering at the Project Begin and End Limits



Legend:

% vehicles exiting SH 16 within a zone

Note: Zone distribution percentages are an average of Bluetooth and Streetlight Origin-Destination data.

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Community Engagement

TASK FORCE

The Bandera Corridor Task Force works collaboratively across government agencies and with public and private partners to transform Bandera Road into a destination-corridor that moves people safely, efficiently; accommodates multimodal transportation including pedestrians, cyclists, automobiles and high-occupancy vehicles; enriches the surrounding community with attractive amenities and businesses; and ties the adjacent communities together, creating a sense of place for residents, employees and commuters along the corridor.

PLANNING TEAM

The Planning Team was created at the direction of the Task Force to provide local input from residents and businesses in the process and to be a sounding board for the project team prior to taking information out to the public.

TECHNICAL WORK GROUP

The Technical Work Group consists of technical staff with expertise in various elements of corridor planning. Their focus is to oversee the technical analysis and provide guidance and input as the corridor is evaluated.

RESIDENTS

BUSINESSES

CITIES

TRANSPORTATION PARTNERS

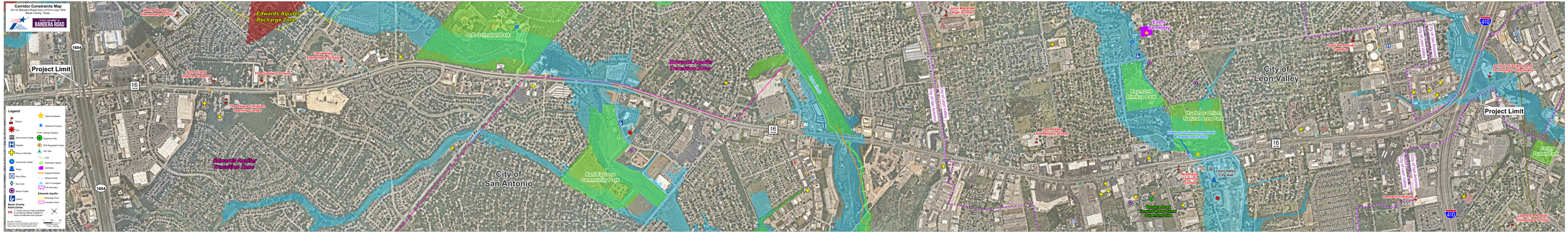
STATE HIGHWAY 16 BANDERA ROAD

Map Your Comments

In addition to looking at traffic and crash data, a feasibility study also takes into consideration the road user's experience. Please take a moment to share your thoughts about SH 16 (Bandera Road) on the map. Use the stickers provided to indicate the following issue areas or concerns.

- PEDESTRIAN
- BICYCLE
- TRANSIT
- SAFETY
- TRAFFIC
- ADA
- ENVIRONMENTAL
- LIGHTING
- DRAINAGE

STATE HIGHWAY 16
BANDERA ROAD


Corridor Constraints Map
SH 16 (Bandera Road) from IH 410 to Loop 1604
Bexar County, Texas
BANDERA ROAD
Project Limit
Project Limit
Legend
School
Park
Government Facility
Hospital
Place of Worship
Community Center
Police
Post Office
Day Care
Social Facility
Bexar County Karst Zones
(1) Areas having a high probability of karst development, based on available karst sources
Historical Marker
Historical Property
Gas/Gas Pipeline
Electrical Grid
EPA Regulated Facility
PST Site
Trail
Park/Open Space
Cemetery
Major Aquatic Stream
Stream/Creek
100-Yr Floodplain
City Boundary
Edwards Aquifer
Recharge Zone
Transition Zone
Edwards Aquifer Recharge Zone
Edwards Aquifer Transition Zone
Edwards Aquifer Transition Zone
Edwards Aquifer Transition Zone
Navy Deadman Elementary School
Anna Frank Hayden Academy
The Goddard School
Sci Works Elementary School
The Bishop's Children Learning Center
O.P. Schnabel Park
Nani Falconer Community Park
City of San Antonio
Leon Creek
Bandera Rd
Culebra Rd
Ingram Rd
Hamilton Rd
Wurzbach Rd
Huebner Rd
Grissom Rd
Evers Rd
Ewing Rd
Leon Valley Rd
Raymond Rimkus Park
Huebner-Oaklan Natural Area Park
Huebner-Oaklan Homestead Management Site
Leon Valley Elementary School
Leon Valley City Hall
Northwest Leadership Center
Bandera Road Beautification Phase Improvement Site
John Marshall High School
Evers Cemetery
City of Leon Valley
City of San Antonio
Post Elementary School
City of Leon Valley
City of San Antonio
City of Leon Valley
City of San Antonio
Lawrence Creek Elementary School
Jimmy Borgfeld Park
School of Science and Technology - Discovery
Lawrence Creek Elementary School
1604
16
410

What would you do?

Given that congestion on SH 16 (Bandera Road) is projected to increase, what would you be willing to do (or what have you already done) to avoid congestion?

You will be given three poker chips. Place your chips in the container that shows what you're willing to do to avoid congestion. You can place one chip in three different containers or place all your chips in one container.

Ride the bus	Ride a bicycle	Carpool or vanpool	Move to another area of town
Change jobs or schools	Change work or school schedule	Work or go to school from home	Change where I shop, eat, or play
Leave to work or school earlier	Leave to work or school later	Change my route	Nothing

STATE HIGHWAY 16
BANDERA ROAD

We Want Your Feedback!

Commenting Options:

1. Fill out a comment card at the comment table.
2. Give verbal comments to the court reporter.
3. Fax comments to (210) 349-4395.
4. Email comments to BanderaRoad@pozcam.com.
5. Mail comments to:

   SH 16 (Bandera Road) Project Team
   c/o Linda Vela
   5835 Callaghan Rd., Ste. 200
   San Antonio, Texas 78228
6. Visit the online public meeting at www.txdot.gov, keywords “SH 16 Bandera Road.”

Deadline for comments:
Tuesday, December 31, 2019

Thank you for your participation!

Next Steps

TxDOT SH 16 Study

- SH 16 existing conditions assessment
- Develop SH 16 improvement concepts
- SH 16 design schematic and environmental studies

2018	2019	2020	2021	2022

City of San Antonio

- Corridor market, land use and mobility assessments
- Develop land use, urban design and network concepts
- Documentation and approval of proposed corridor plan

STATE HIGHWAY 16 BANDERA ROAD CORRIDOR PLAN

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Walking/Biking Analysis

Existing Conditions

Bike Facilities

- None from I-410 to Guilbeau
- Shoulders only from Guilbeau to Loop 1604
- Road intersects Leon Creek Greenway; limited connection
- Striped lanes on parts of Mystic Park and Camino Villa

Pedestrian Facilities

- Sidewalks disconnected on both sides
- About 1/3 total length has sidewalks
- Crosswalks at all signalized intersections, but many are at locations with no sidewalks

Bike-unfriendly road

Multiuse path

Disconnected neighborhood, few sidewalks

City of Leon Valley (sidewalk data not available, so walkability data not included)

Connected neighborhood with sidewalks

Disconnected neighborhood with sidewalks

Data Sources

Sidewalk Extents: City of San Antonio GIS Department; Shapefile showing location and length of City of San Antonio sidewalks
Bicycle Road Ratings: Alamo Area Metropolitan Planning Organization; Shapefile showing subjective road ratings for major city roads
City Limits: City of San Antonio GIS Department; Shapefile showing extents of City of San Antonio municipal boundaries
Multiuse Path: City of San Antonio GIS Department; Shapefile documenting location of multi-use (combined walking/biking) dedicated paths

Vision Graffiti Wall

What is your vision for SH 16 (Bandera Road)?

Draw or write your ideas on the graffiti wall.

What types of uses would you like to see on SH 16 (Bandera Road)?

Housing, offices, parks, commercial, mixed-use?

Tell us what you want to see along Bandera Road!
Draw a picture or write a note