

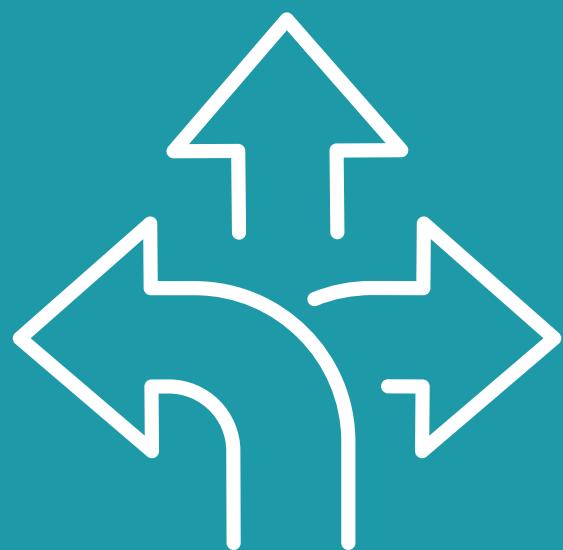
# FM 1626 / RM 967

## INTERSECTION STUDY

Prepared for:  
City of Buda / CAMPO

### APPENDICES

November 2025



# APPENDICES



**Appendix A-1 –  
Buda City Council  
Presentations**

**Appendix A-2 – Open  
House #1 Summary  
Report and Exhibits**

**Appendix A-3 – Open  
House #2 Summary  
Report and Exhibits**

**Appendix A-4 – Open  
House #3 Summary  
Report and Exhibits**

**Appendix B – Review of  
Existing Studies**

**Appendix C – FM 1626/  
RM 967 Intersection  
Study Conditions  
Assessment**

**Appendix D – Potentially  
Viable Alternatives  
Right of Way Footprints**

**Appendix E – Traffic  
Operations Analysis  
Memorandum**

**Appendix F – Evaluation  
Matrix**

# **Appendix A-1**

## Buda City Council Presentations

CENTRAL  TEXAS



# FM 1626/RM 967 Intersection Study

Buda City Council

May 20, 2025

# Introduction

FM 1626/RM 967 Study - Buda City Council Presentation



# Study Goals

.....

FM 1626/RM 967 Study  
Buda City Council  
Presentation

## Goals of the Study

- » Improve **mobility and connectivity** by enhancing traffic flow and reducing delays while strengthening roadway connections for local and regional users.
- » It prioritizes **multimodal travel** by ensuring safe and efficient infrastructure for drivers, pedestrians, cyclists, and public transit riders.
- » **Safety enhancements** will address high-crash areas and reduce conflicts between transportation modes.
- » **Economic development is supported** by aligning with the city's vision for strategic land use and corridor growth.
- » It emphasizes creating a **sense of place** by integrating design elements that improve aesthetics, comfort, and community identity.



# Study Process

.....

FM 1626/RM 967 Study  
Buda City Council  
Presentation

## Phases of the Study

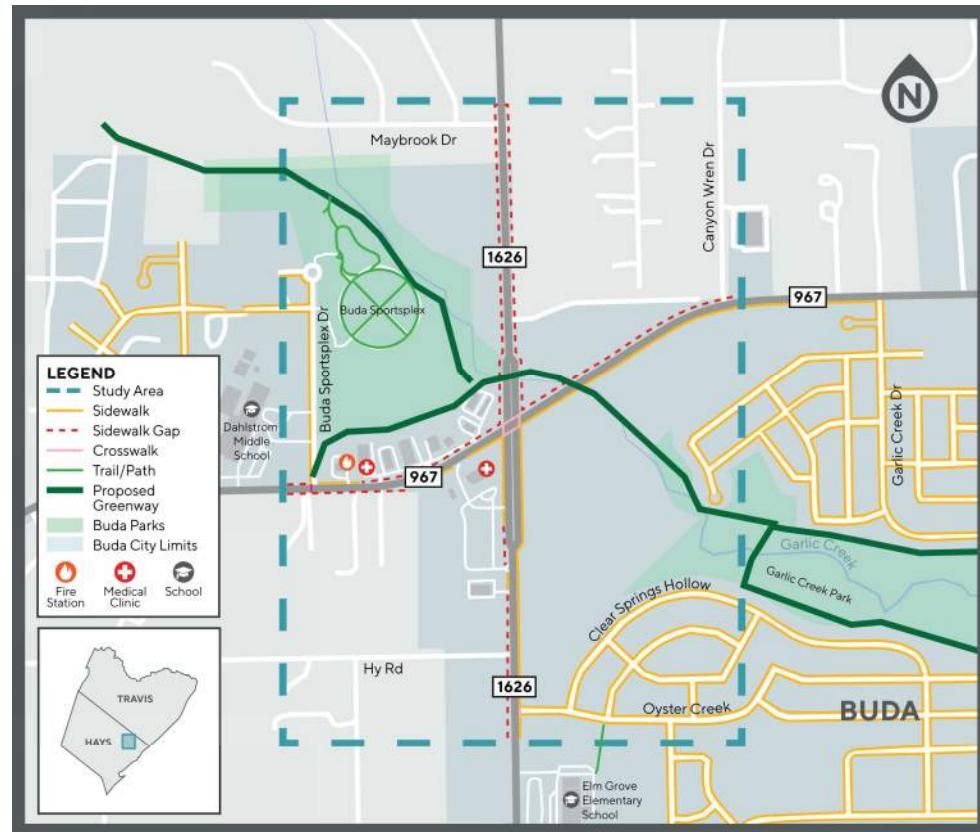
- » Data Collection and Analysis
- » Concept Development
- » Stakeholder Review and Input
- » Final Recommendations

# Study Background

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## Overview of the Intersection

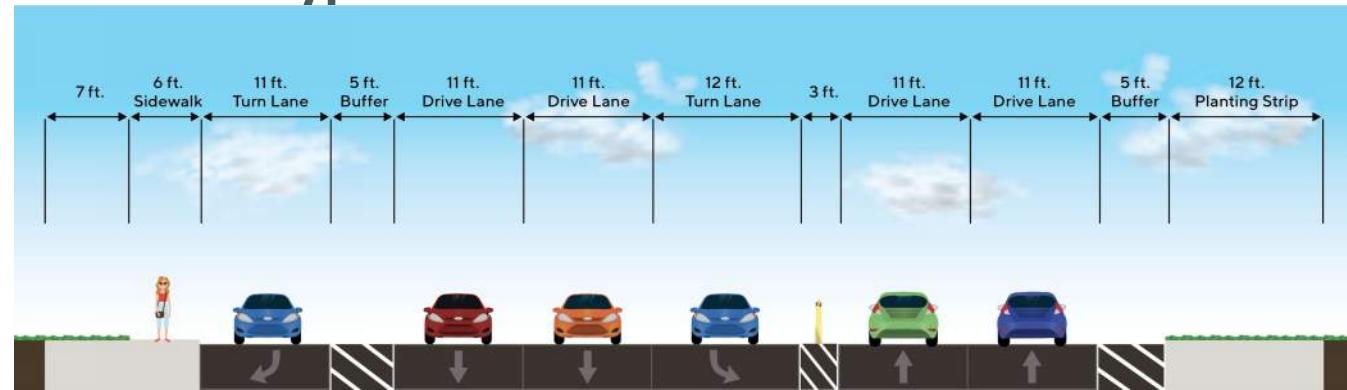


# Study Background

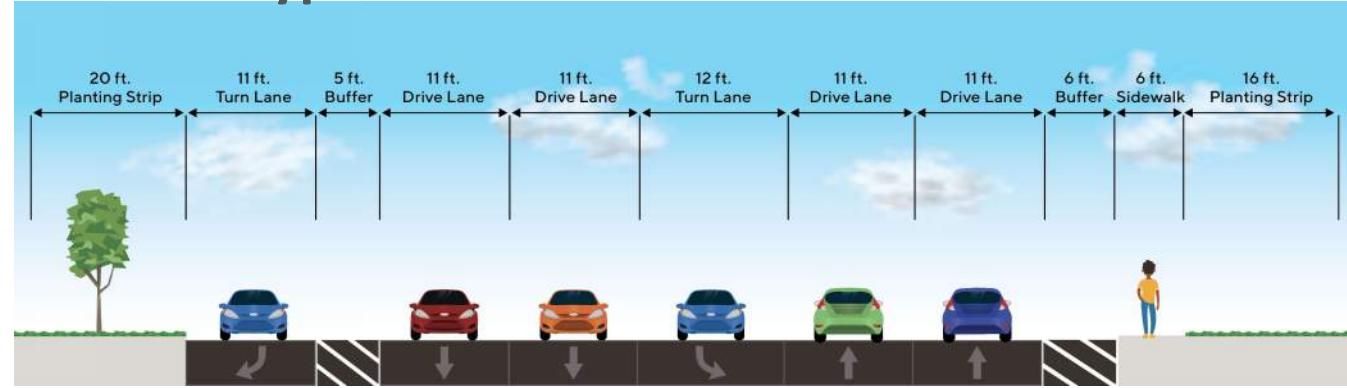
FM 1626/RM 967 Study  
Buda City Council  
Presentation



## FM 1626 Typical Section



## RM 967 Typical Section

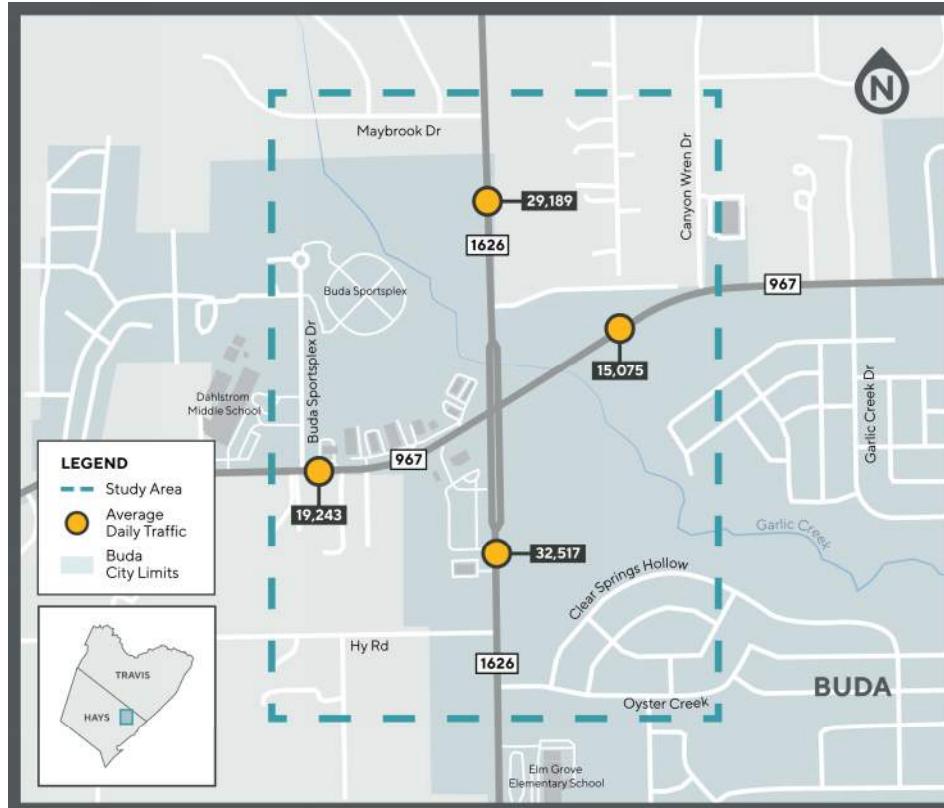


# Study Background

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## Existing Traffic Volumes



# **Public Meeting and Feedback**

FM 1626/RM 967 Study - Buda City Council Presentation



---



# Public Meeting #1 Overview

.....

FM 1626/RM 967 Study  
Buda City Council  
Presentation

## Public Meeting #1

- » Open house held on January 30<sup>th</sup> at the City of Buda Welcome Center.
- » The first round of feedback had a comment period lasting from the open house to March 7<sup>th</sup> .
- » More than 30 attendees participated in the open house and 118 surveys were submitted during the comment period.

---



# Comment Period #1 Review

.....

FM 1626/RM 967 Study  
Buda City Council  
Presentation

## Background of Commentors

- » 86% live on or use FM 1626/RM 967 to get home
- » 70% Drive on FM 1626/RM 967 daily
- » Over 60% of respondents use the parks, hike/bike trails, sidewalks, and City sports complex less often than weekly.
- » The biggest concern of the respondents is traffic congestion followed by safety.

# Comment Period #1 Review

.....

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## Common Themes of Submitted Comments

- » **Severe Traffic Congestion & Poor Flow** – The intersection experiences heavy delays, especially during school and rush hours. Short signal times, merging conflicts, and high volumes of turning vehicles cause backups in all directions.
- » **Safety Concerns & Accident Risks** – Frequent red-light running, dangerous merges, and unsafe driveway access points create hazardous conditions. Many users report near misses, crashes, and difficulties for pedestrians and cyclists.
- » **Infrastructure Improvements Needed** – Many suggestions call for additional lanes, extended turn lanes, overpasses, and better traffic signal timing to alleviate congestion and improve flow.
- » **School Traffic Impact** – The three nearby schools significantly contribute to peak-hour congestion. Some suggest an alternative route to the schools or expanded road capacity to manage school-related traffic.
- » **Pedestrian & Bicycle Safety** – The intersection is not pedestrian- or bike-friendly, with long, unsafe crossings and no dedicated walk signals. Some suggest a pedestrian bridge or improved crosswalks

# Initial Concept Analysis

FM 1626/RM 967 Study - Buda City Council Presentation





# Cap-X Overview

.....

FM 1626/RM 967 Study  
Buda City Council  
Presentation

## Cap-X Analysis

- » A FHWA tool designed to evaluate various intersection designs.
- » Evaluation is based on peak traffic volumes and current compared to proposed lane configurations.
- » Traffic Volume data from CAMPO's 2050 model AM and PM peak hour volumes were used to predict operational capacity.

# Cap-X Overview

FM 1626/RM 967 Study  
Buda City Council  
Presentation

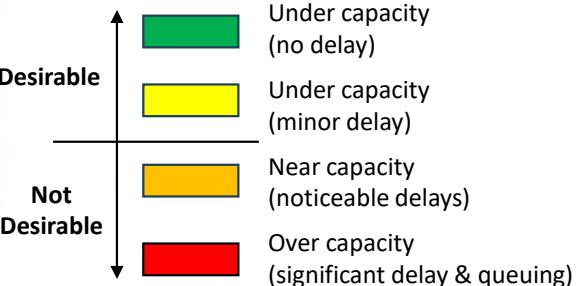
## Initial Evaluation



Cap-X analyzes the volume-to-capacity ratio for:

- » 18 intersection concepts
- » 6 roundabout concepts
- » 8 grade-separated interchange concepts

### Volume-to-Capacity Ratio Legend



Year 2050	
AM	PM
0.92	1.27
0.83	1.09
0.71	0.78
0.96	0.72
0.79	0.80
0.82	0.77
0.74	0.79
0.63	0.66
1.31	1.53
0.87	1.04
0.87	1.07
0.86	1.07
0.77	0.86
0.63	0.66
0.63	0.70
3.39	3.80
0.60	0.49
0.52	0.38
0.69	0.70
0.54	0.47
0.71	0.59
0.90	0.84

*Note: Table does not include all concepts evaluated*



# Cap-X Overview

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## Eight Concepts Considered Potentially Viable

- » Conventional (traditional) improvements include:
  - Adding dual left-turns to the at-grade intersection
  - Diamond interchange (grade-separation)
- » Six concepts considered innovative configurations

Existing Intersection Configuration (No build)	
<b>Proposed Intersections</b>	
Conventional Traffic Signal (Improved Dual LT)	
*	Quadrant Roadway
*	Partial Displaced Left Turn (on FM 1626)
*	Displaced Left Turn (on FM 1626 & RM 967)
<b>Proposed Grade Separated Intersections</b>	
*	Center Turn Overpass (Grade Separated)
<b>Proposed Interchanges (FM 1626 over RM 967)</b>	
Diamond Interchange	
* Diverging Diamond Interchange	

Year 2050	
AM	PM
0.92	1.27
0.83	1.09
0.71	0.78
0.96	0.72
0.74	0.79
0.63	0.66
0.63	0.70
0.60	0.49
0.54	0.47

\* Innovative intersection configuration



# ROW Footprints

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## ROW Footprints Overview

- » Footprints were drawn for each potentially viable alternative.
- » Footprints show the estimated ROW needed for each and how it would affect the surrounding area.



Example of ROW Footprint Exhibit for Conventional Intersection

# ROW Footprints

.....  
FM 1626/RM 967 Study  
Buda City Council  
Presentation

## Right-of-Way Need Estimates

### Proposed Right-of-Way (ROW) Need Potentially Viable Concepts

Proposed Intersections	
Conventional Traffic Signal (Improved Dual LT)	
Quadrant Roadway	S-W
Quadrant Roadway	N-E & S-W
Partial Displaced Left Turn (on FM 1626)	
Displaced Left Turn (on FM 1626 & RM 967)	
Proposed Grade Separated Intersections	
Center Turn Overpass (Grade Separated)	
Proposed Interchanges (FM 1626 over RM 967)	
Diamond Interchange	
Diverging Diamond Interchange	

Additional ROW Need (Acres)	Number of Impacted Properties
5.0	31
5.7	22
11.9	34
6.0	18
9.2	27
7.6	36
6.8	29
9.8	29

*None of the concepts proposed ROW footprints are anticipated to impact an existing building. Each concept has varying access impacts, which may require adjustments to site access configurations.*

# Overview of Evaluation Criteria

FM 1626/RM 967 Study - Buda City Council Presentation



# Evaluation Criteria

.....

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## Overview of Evaluation Criteria for Fatal Flaw Analysis

- » Cap-X Traffic Flow Benefit
- » ROW Impact
- » Property Access Impact
- » Safety Impact
- » Environmental Impact
- » Effort to Construct
- » Construction Cost
- » Effect on Multimodal Connection
- » Alignment with Public Perspective
- » Connection to Study Goals

# Next Steps

FM 1626/RM 967 Study - Buda City Council Presentation





# Study Process and Timeline

FM 1626/RM 967 Study  
Buda City Council  
Presentation

## Schedule

Fall 24

Existing Conditions Report

Winter 24

Concept Plan Development

Spring 25

Draft Recommendations

Summer 25

Final Report

We are Here

# Next Steps

.....

FM 1626/RM 967 Study Buda  
City Council Presentation



## Upcoming Tasks

- » Performing Fatal Flaw Analysis.
- » Scheduling additional public involvement sessions & stakeholder coordination.
- » Refining concepts & determining Preferred Alternatives.

---

CENTRAL  TEXAS

---

# Thank you!

FM 1626/RM 967 Intersection Study





# FM 1626/RM 967 Intersection Study

Buda City Council

August 5, 2025

# Introduction

FM 1626/RM 967 Study - Buda City Council Presentation

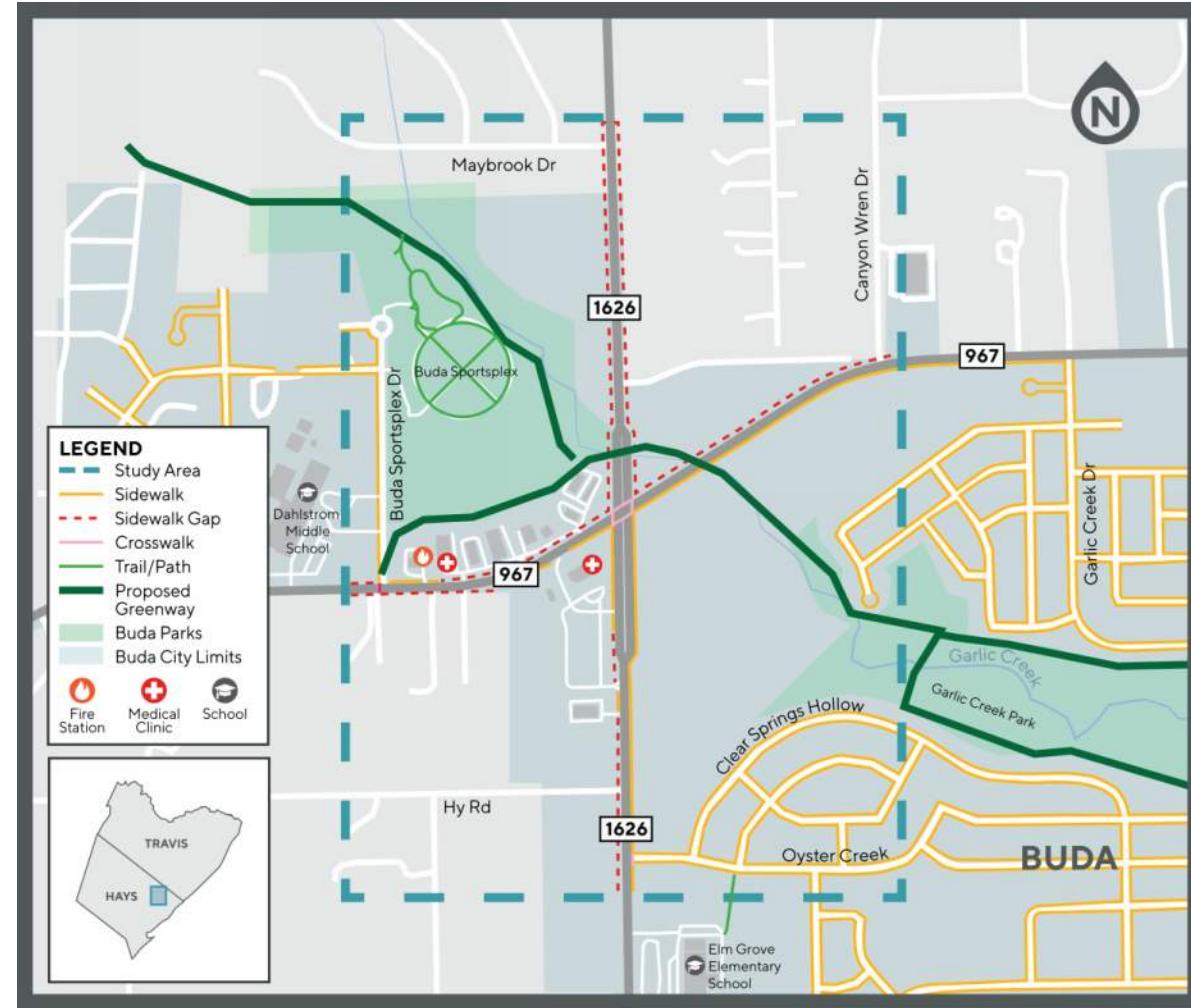


# Study Background

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## Overview of the Intersection



# Study Goals

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## Goals of the Study

- » Improve **mobility and connectivity** by enhancing traffic flow and reducing delays while strengthening roadway connections for local and regional users.
- » Prioritize **multimodal travel** by ensuring safe and efficient infrastructure for drivers, pedestrians, cyclists, and public transit riders.
- » **Enhance safety** to address high-crash areas and reduce conflicts between transportation modes.
- » Support **economic development** by aligning with the city's vision for strategic land use and corridor growth.
- » Create a **sense of place** by integrating design elements that improve aesthetics, comfort, and community identity.



# May Council Presentation

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## Recap of the May Council Meeting Briefing

- » Public Meeting #1 summary
- » Results of the initial traffic capacity analysis (Cap-X)
  - Five (5) at-grade intersection concepts, which includes innovative intersections
  - Three (3) concepts requiring FM 1626 overpasses (bridges) over RM 967
- » Results of the initial right-of-way need evaluation
  - All ultimate concepts would require right-of-way needs
  - Right-of-way needs varied from 5 to 12 acres

# Recent Efforts

FM 1626/RM 967 Study  
Buda City Council  
Presentation



- **Efforts Since May 2025 Council Briefing**
  - » Public Meeting #2
  - » Stakeholder Coordination
  - » Evaluation of Ultimate Build Concepts
  - » Recommendations and Next Steps

# Public Meeting #2 and Stakeholder Feedback

FM 1626/RM 967 Study - Buda City Council Presentation



---



# Public Meeting #2 Overview

FM 1626/RM 967 Study  
Buda City Council  
Presentation

## Public Meeting #2

- » Provided project information and exhibits illustrating eight (8) potentially viable concepts and the traffic movements allowed
- » Virtual Open House and Comment Period was open from June 16<sup>th</sup> to July 16<sup>th</sup>
  - 639 survey responses
- » In-Person Open house was held on June 18<sup>th</sup> at the Buda City Hall Multi-Purpose Room
  - 12 attendees and 4 submitted surveys

# Public Meeting #2 Comments

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## Common Themes of Submitted Surveys

- » **Priority on safety and simplicity:** Concern expressed regarding the high number of teenage drivers and confusion of navigating innovative concepts.
  - Higher comfort level with conventional at-grade intersection improvements or the conventional diamond interchange.
  - Displaced left-turn concepts and diverging diamond interchange concepts considered confusing.
  - Quadrant concepts considered over complicated and ineffective.
  - The center-turn overpass' elevated ramps would be a concern for teenage drivers, and it would not address long-term traffic needs.
  - Ensure that safe pedestrian and bicycle routes are provided.
- » **Need for additional lanes:** In addition to improving the intersection, many comments expressed a need to widen RM 967 and FM 1626.
- » **FM 1626 overpass at RM 967:** Many commenters felt an overpass may be needed to remove FM 1626 through traffic from the RM 967 intersection.



# Evaluation of Build Concepts

FM 1626/RM 967 Study - Buda City Council Presentation



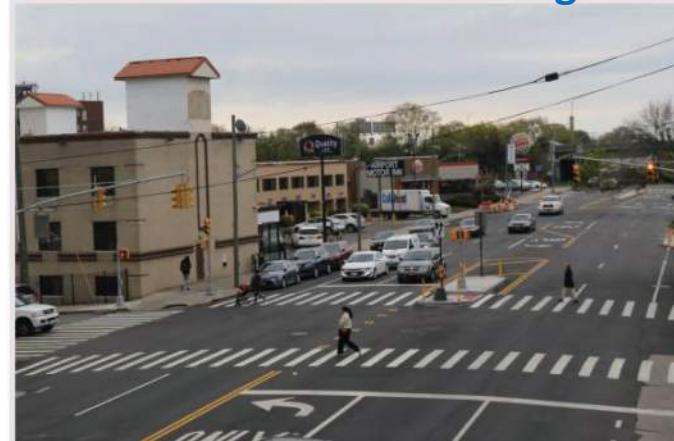
# Build Concepts

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## Potentially Viable Build Concepts

Conventional Traffic Signal



Displaced Left Turn



Quadrant Roadway



# Build Concepts

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## Potentially Viable Build Concepts



Diamond Interchange



Diverging Diamond Interchange

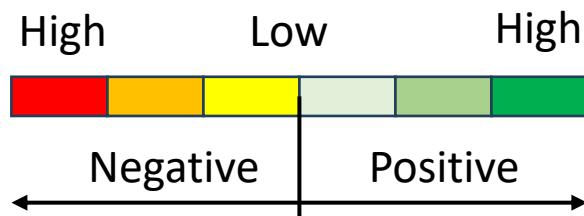


Center Turn Overpass



# Build Concepts

FM 1626/RM 967 Study  
Buda City Council  
Presentation



## Summary of Evaluation of Build Concepts

Build Concept	Requires Overpass	Traffic Benefit	ROW & Access Impacts	Costs	Public Support
Conventional Intersection	No	Low	Low to Mid	\$\$	High
Partial Displaced Left-Turn	No	Mid	Mid	\$\$	Low
Full Displaced Left-Turn	No	Mid to High	Mid	\$\$\$	Low
Quadrant (SW)	No	Mid	High	\$\$	Low
Quadrant (SW & NE)	No	Mid to High	Mid to High	\$\$\$	Neutral
Center-Turn Overpass	Yes	Mid to High	Mid to High	\$\$\$\$	Neutral
Diamond Interchange	Yes	High	Mid	\$\$\$	Mid to High
Diverging Diamond Interchange	Yes	High	Mid to High	\$\$\$\$	Low



# Improved Conventional Intersection

FM 1626/RM 967 Study  
Buda City Council  
Presentation

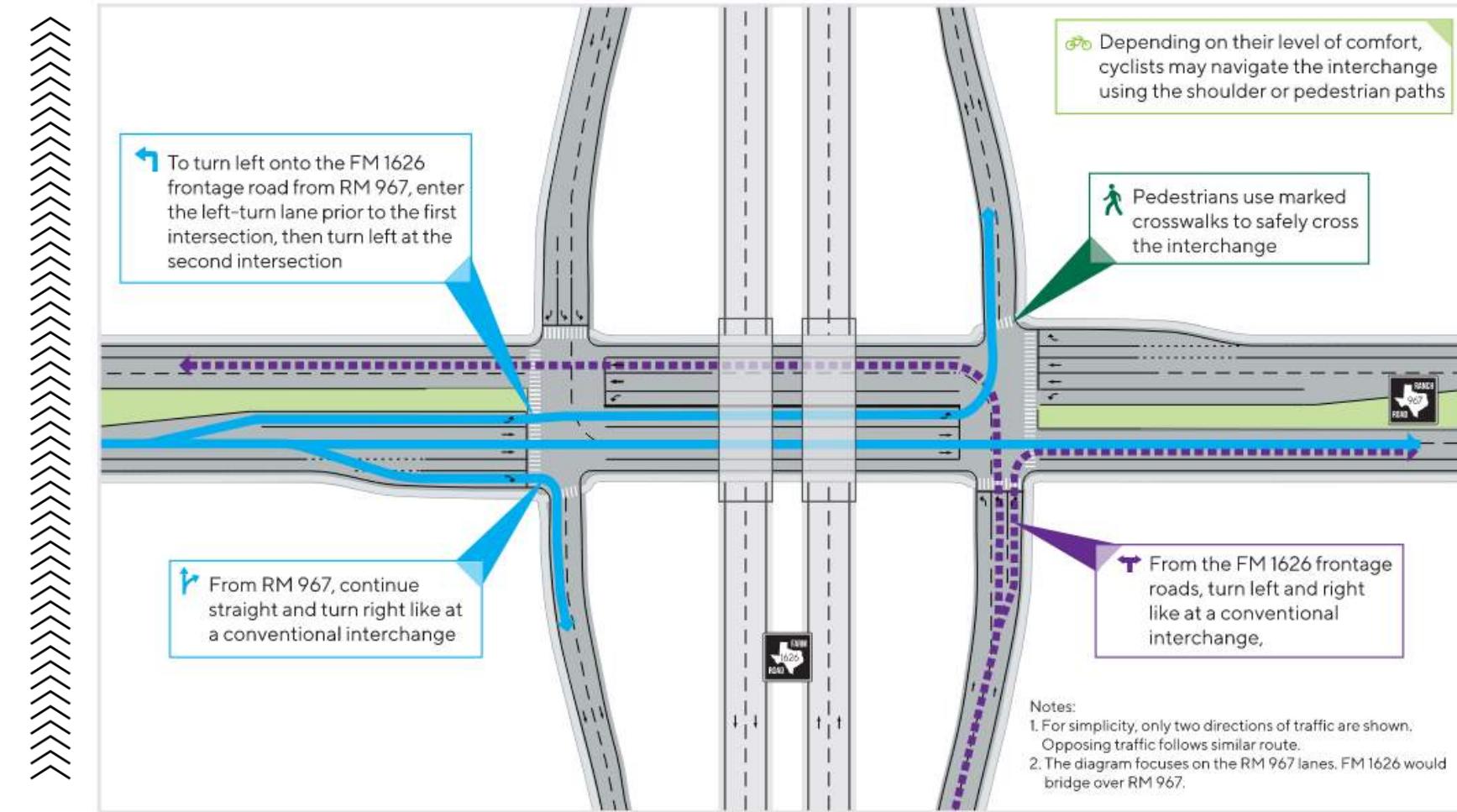
- **Improved Conventional Intersection**

- » Add dual left-turn lanes and improve right-turn lanes
- » Lowest right-of-way, access, & cost impacts
- » Lowest traffic benefit for year 2050
- » Recommended as interim improvement
  - Requires additional thoroughfare improvements to be an effective ultimate concept



# Diamond Interchange

FM 1626/RM 967 Study  
Buda City Council  
Presentation

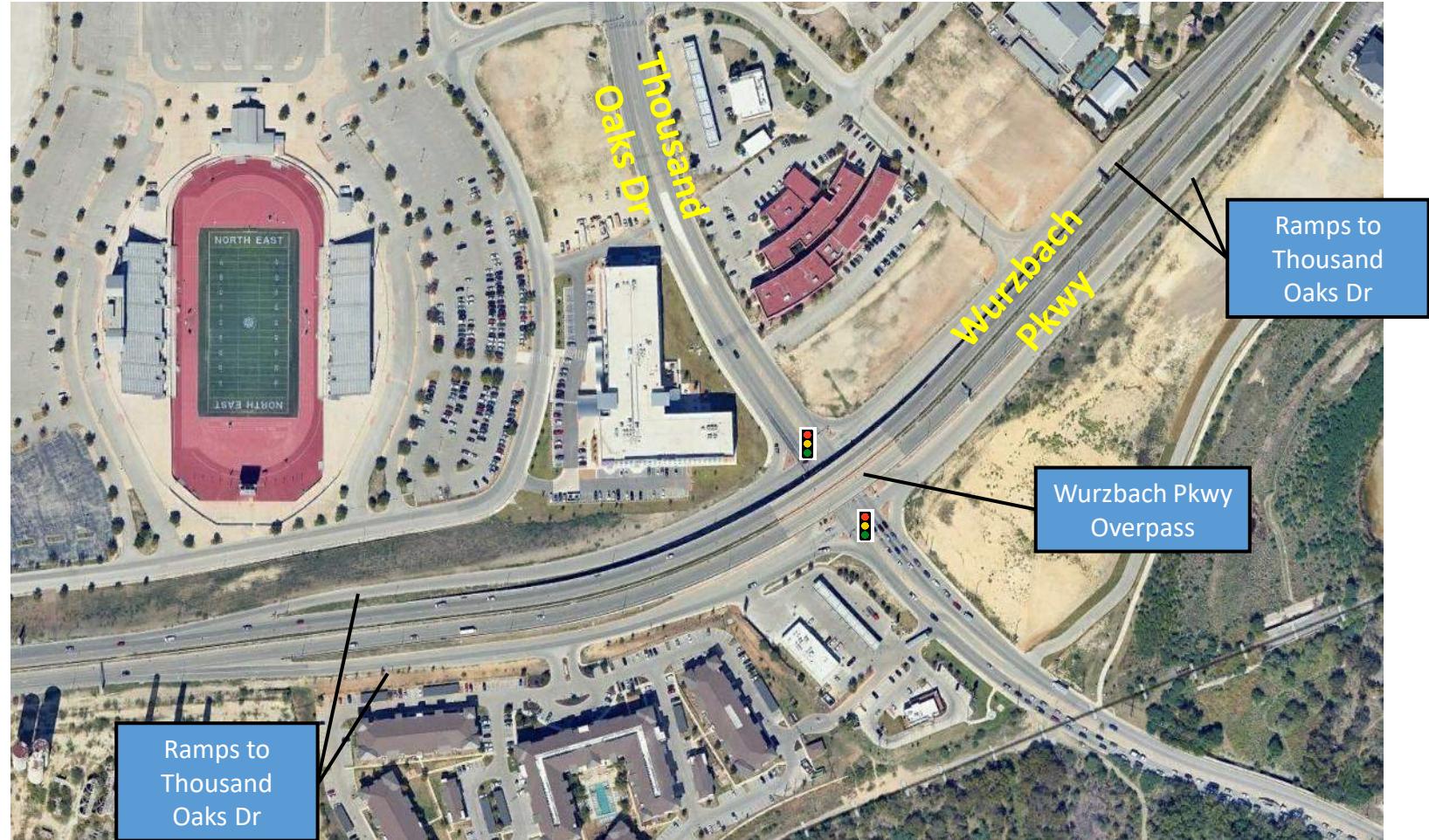


# Diamond Interchange

FM 1626/RM 967 Study  
Buda City Council  
Presentation

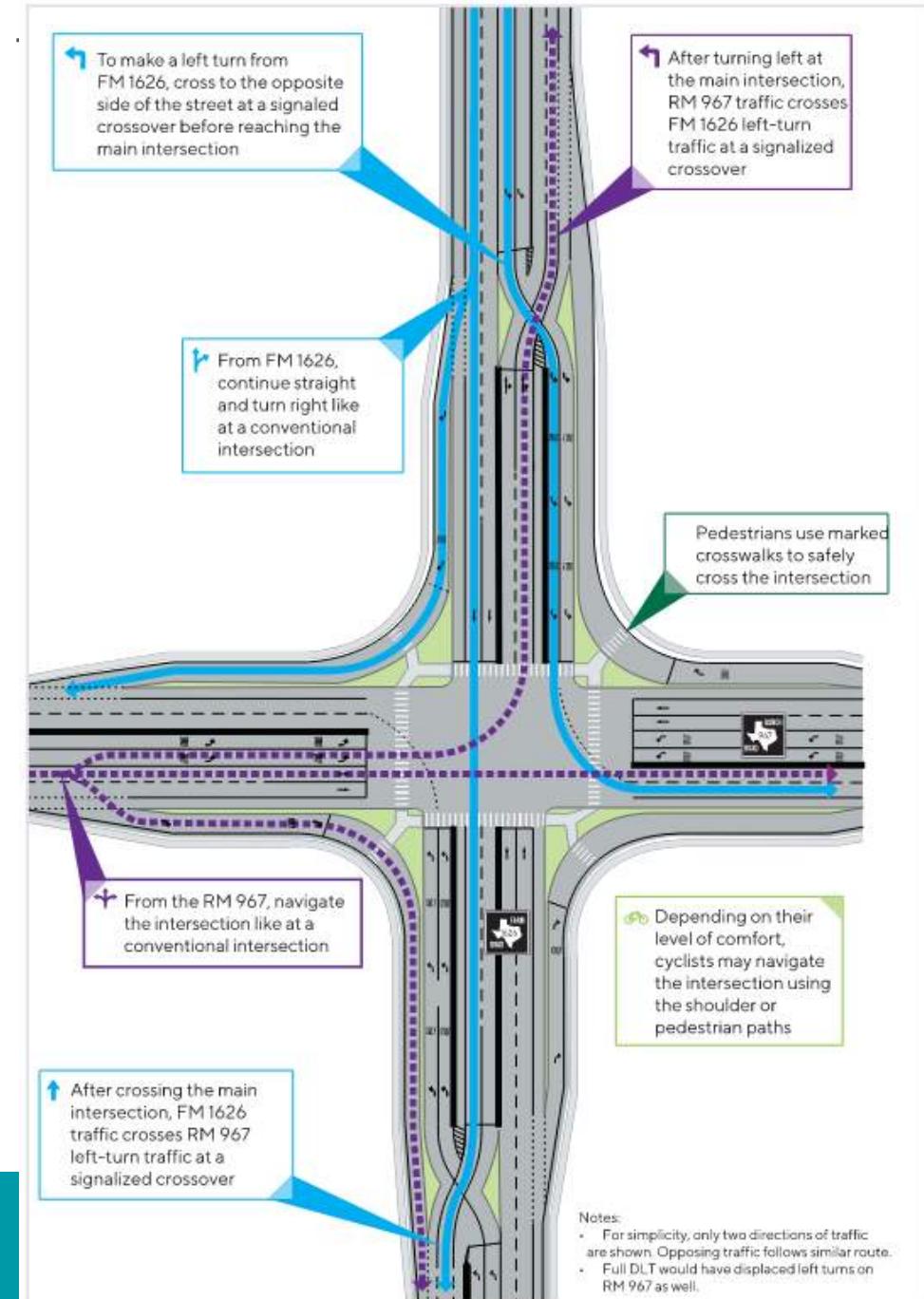


Diamond Interchange at Wurzbach Parkway and Thousand Oaks Drive in San Antonio



# Displaced Left-Turn Intersection

FM 1626/RM 967 Study  
Buda City Council  
Presentation



# Displaced Left-Turn Intersection

FM 1626/RM 967 Study  
Buda City Council  
Presentation



Partial Displaced Left-Turn at Ronald Reagan Blvd and Whitestone Blvd, Cedar Park



*Note: Partial displaced left-turn is shown. A full displaced left-turn intersection has the displaced left crossover on all four approaches.*

# Ongoing Efforts

FM 1626/RM 967 Study  
Buda City Council  
Presentation



- **Current Efforts for Ultimate Concepts**
  - » Performing traffic studies to evaluate travel delay, queueing, and level of service
    - No-build, improved conventional intersection, full displaced left-turn, and diamond interchange
  - » Developing layouts for the full displaced left-turn and diamond interchange concepts
    - Verifying right-of-way footprints
    - Identifying access configurations

# Recommendations & Next Steps

FM 1626/RM 967 Study - Buda City Council Presentation





# Feasibility Study Recommendations

FM 1626/RM 967 Study  
Buda City Council  
Presentation

## • Study Recommendations

### » Near Term (1 to 5 years)

- TxDOT initiate NEPA process for FM 1626 / RM 967 intersection improvements
- Feasibility Study to add capacity to RM 967
- Buda Thoroughfare Plan study to evaluate new roadway connections providing alternative routes west of FM 1626
- TxDOT design, funding, and construction of interim FM 1626/RM 967 intersection improvements, in partnership with Buda
  - Extend WB right turn approach to FM 1626
  - Add dual left turns from NB FM 1626 to WB RM 967



# Feasibility Study Recommendations

FM 1626/RM 967 Study  
Buda City Council  
Presentation

## • Study Recommendations

### » Mid Term (6 to 10 years)

- TxDOT/Buda secure funding for ultimate intersection and any related thoroughfare improvements
- Right-of-way acquisition and utility relocations

### » Long Term (10+ years)

- TxDOT construction of ultimate improvements at FM 1626 and RM 967
- Buda construction of any related city thoroughfare improvements (if necessary)



# Next Steps

FM 1626/RM 967 Study Buda  
City Council Presentation

## Upcoming Feasibility Study Tasks

- » Finalize traffic analysis and concept layouts for two (2) build alternatives
- » Public Meeting #3
- » Submit study recommendations documentation by end of August

# Thank you!

FM 1626/RM 967 Intersection Study



**COMPO**  
CAPITAL AREA METROPOLITAN  
PLANNING ORGANIZATION

# **Appendix A-2**

## Open House #1

### Summary and

### Report Exhibits



# FM 1626/RM 967 Intersection Study

## Round 1 Outreach Summary

### OVERVIEW

The Capital Area Metropolitan Planning Organization (CAMPO) and the City of Buda are working together to conduct the FM 1626/RM 967 Intersection Study, which aims to identify, evaluate, and recommend potential improvements for the intersection.

CAMPO and the City invited the public to participate in the Study at an in-person open house on Thursday, January 30, 2025 at the City of Buda Welcome Center, and a virtual open house and comment period from Tuesday, January 28 to Friday, March 7, 2025 at [campotexas.org/fm-1626-rm-967-intersection-study](http://campotexas.org/fm-1626-rm-967-intersection-study). The purpose of the open house was to introduce the study, explore potential options for improving the intersection, and gather community input to evaluate the feasibility of these improvements.

Open house materials included informational exhibits, fact sheets, and an online survey, all of which were available in English and Spanish. The same information was provided at both the in-person and virtual open houses. Feedback was collected through printed and online surveys, as well as emailed, mailed, and verbal comments. More than 30 attendees participated in the in-person open house, and 118 survey submissions were received throughout the comment period.

## NOTIFICATION TOOLS

### CAMPO Webpage Announcement

An announcement was posted on the CAMPO website and project webpage on January 17, 2025, notifying the public about the study, the in-person open house, and the launch of the virtual open house and comment period.

### City of Buda Website Announcement

An announcement was posted on the City of Buda website on January 17, 2025, notifying the public about the study, the in-person open house, and the launch of the virtual open house and comment period.

### Social Media

Information about the study and how to participate was shared through CAMPO's Facebook and Instagram accounts, as well as the City of Buda's Nextdoor platform from January 21 - March 7, 2025.



**CAMPO** Capital Area Metropolitan Planning Organization - CAMPO  
January 21 · 4 comments

CAMPO and the City of Buda are working together on the FM 1626/RM 967 Intersection Study to identify options for improving the intersection in Buda, TX. Attend an open house on Thursday, January 30 or participate online January 28 - March 7 [at campotexas.org/get-involved/](http://campotexas.org/get-involved/)

**OPEN HOUSE**  
**FM 1626/RM 967**  
Intersection Study  
Thursday, January 30  
**»» campotexas.org/get-involved**

Like Comment Share



**CAMPO** Capital Area Metropolitan Planning Organization - CAMPO  
March 5 at 1:25 PM · 4 comments

Friday is the final day to share your feedback for the FM 1626/RM 967 Intersection Study! Help us define and identify feasibility options for improving the intersection by taking our survey or leaving a comment at [campotexas.org/get-involved/](http://campotexas.org/get-involved/).

**OPEN HOUSE**  
**FM 1626/RM 967**  
Intersection Study  
Thursday, January 30  
**»» campotexas.org/get-involved**

Like Comment Share



**campotexas** campotexas · 1 comment

**CAMPO** CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION  
BudaTx breathe easy here.

**OPEN HOUSE**  
**FM 1626/RM 967**  
Intersection Study  
Thursday, January 30  
**»» campotexas.org/get-involved**

Like Comment Share

campotexas Friday is the final day to share your ideas for the FM 1626/RM 967 Intersection Study! Help us identify options for improving the intersection by taking our survey at [campotexas.org/get-involved/](http://campotexas.org/get-involved/)



**campotexas** campotexas · 1 comment

**CAMPO** CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION  
BudaTx breathe easy here.

**OPEN HOUSE**  
**FM 1626/RM 967**  
Intersection Study  
Thursday, January 30



**»» campotexas.org/get-involved**

Like Comment Share

campotexas CAMPO and the City of Buda are hosting an open house January 30 on the FM 1626/RM 967 Intersection Study. Attend in person to share your feedback on the intersection or participate online from January 28 - March 7 at [campotexas.org/get-involved/](http://campotexas.org/get-involved/)



## Media Outreach

A media release was distributed to local media outlets throughout the region on January 27, 2025. A media release was also posted to the City of Buda website on January 27, 2025.

## Stakeholder Phone Calls & Emails

The outreach team made direct phone calls and emails to stakeholders including HOA representatives, businesses, and community organizations, as well as elected officials from the City of Buda and greater Hays County region to invite them to the CAMPO public open house. Attachments, including a study fact sheet and flyer, were included in the email communications.

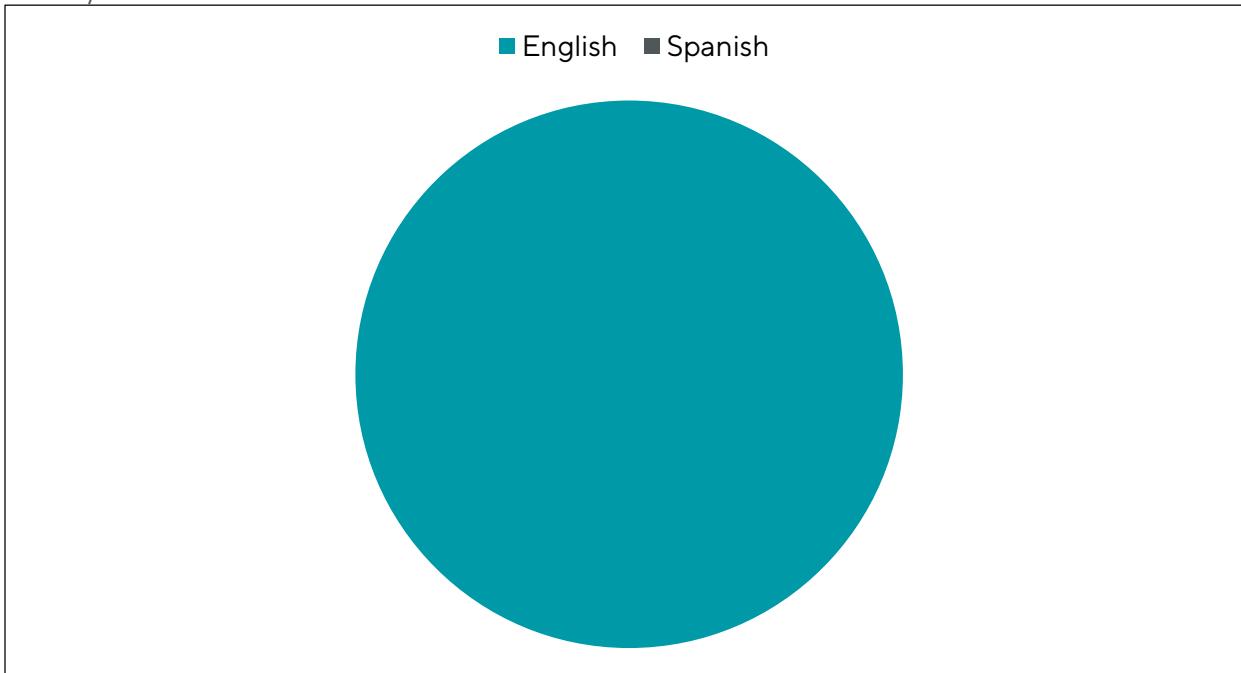
## WHAT WE HEARD

### Survey Summary

*115 completed or partially completed surveys received*

**Q1 – Please select the language you would like to take the survey in?**

*115 responses*



**Q2 – What zip code or city/town do you commute or travel to often?**

*104 responses*

Zip code	# of responses
78610	94
78212	1
78652	2
78619	1
78640	3
78649	1
78641	1
78739	1

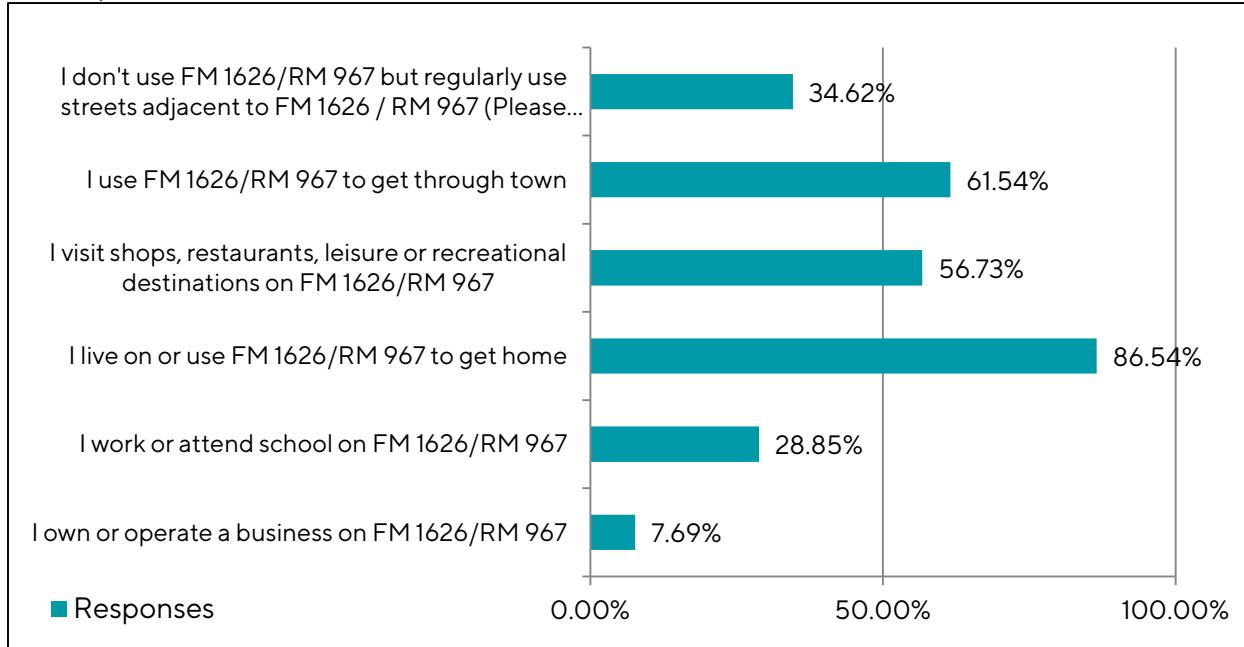
**Q3 – What zip code or city/town do you commute or travel to often?**

113 responses

Zip code	# of responses
Austin/Kyle	1
Austin and Kyle	1
Austin, Buda, Kyle	2
Buda, Kyle, South Austin	1
Buda/Kyle	1
78743	1
78703	1
78752	1
78735	1
78744	1
78741	1
Kyle	7
Downtown Austin	1
Kyle, Austin	1
Buda and Austin	1
none	1
78737	1
All Austin Zip Codes	1
78610 and South Austin	1
78640, 78701, 78704, Kyle, Austin	1
78739	1
Austin/Kyle	1
Austin and Kyle	1
78645	1
Driftwood	1
Various	1
78745	3
78748	4
78610	21
Austin	31
78701	6
78751	3
78652	3
78746	3
Austin, Kyle	2
San Marcos	3
Buda	7
Dripping Springs	3

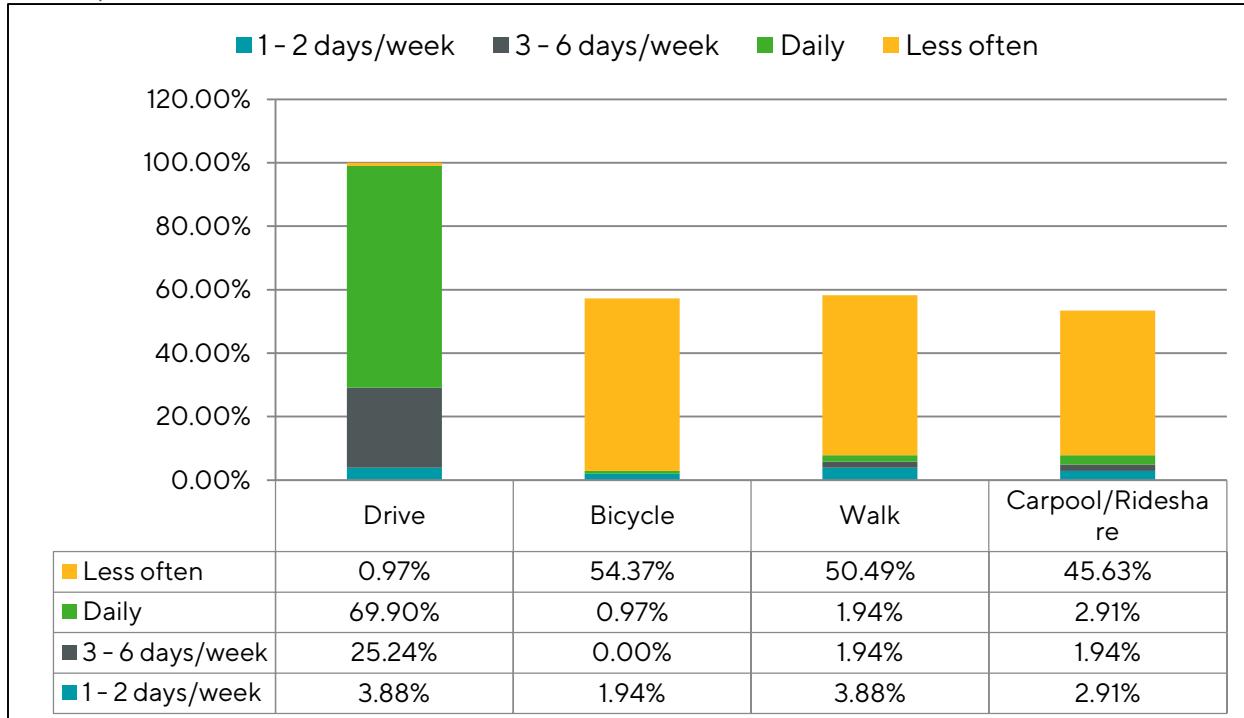
#### Q4 - Why do you travel on FM 1626/RM 967?

104 responses



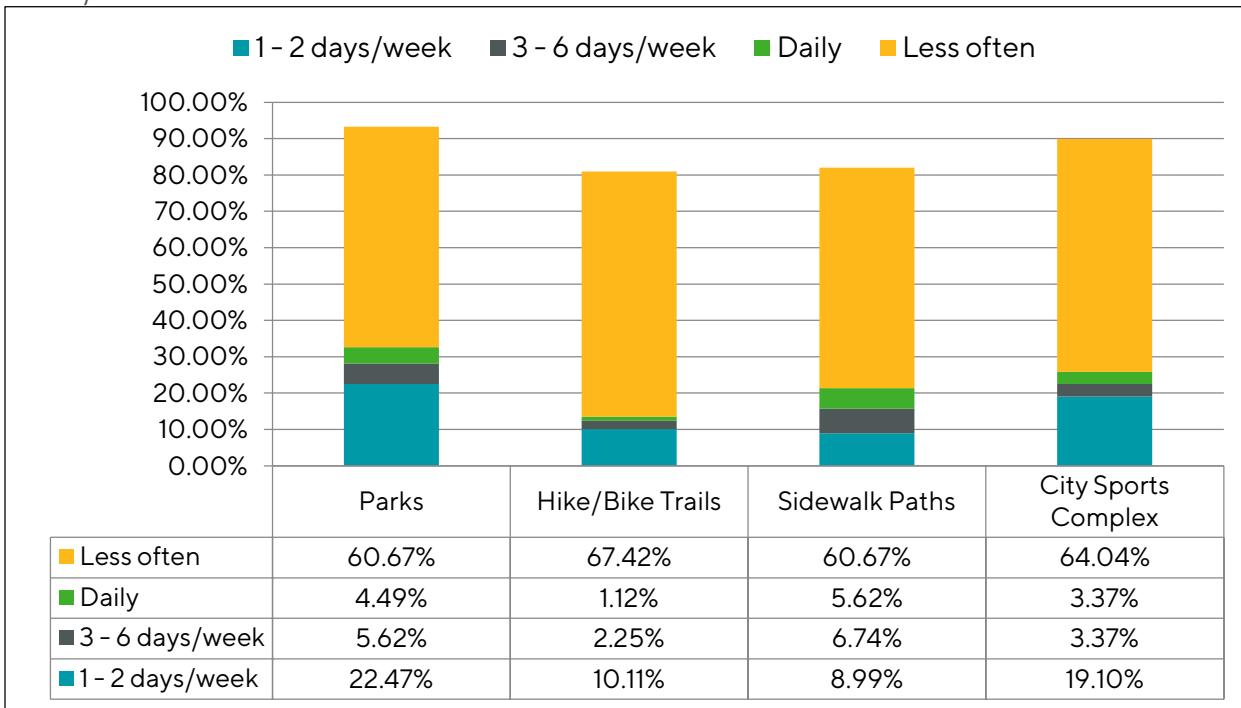
#### Q5 - How often do you travel on FM 1626/RM 967 using the following options?

103 responses



**Q6 – How often do you use one of the following options along FM 1626/RM 967?**

89 responses

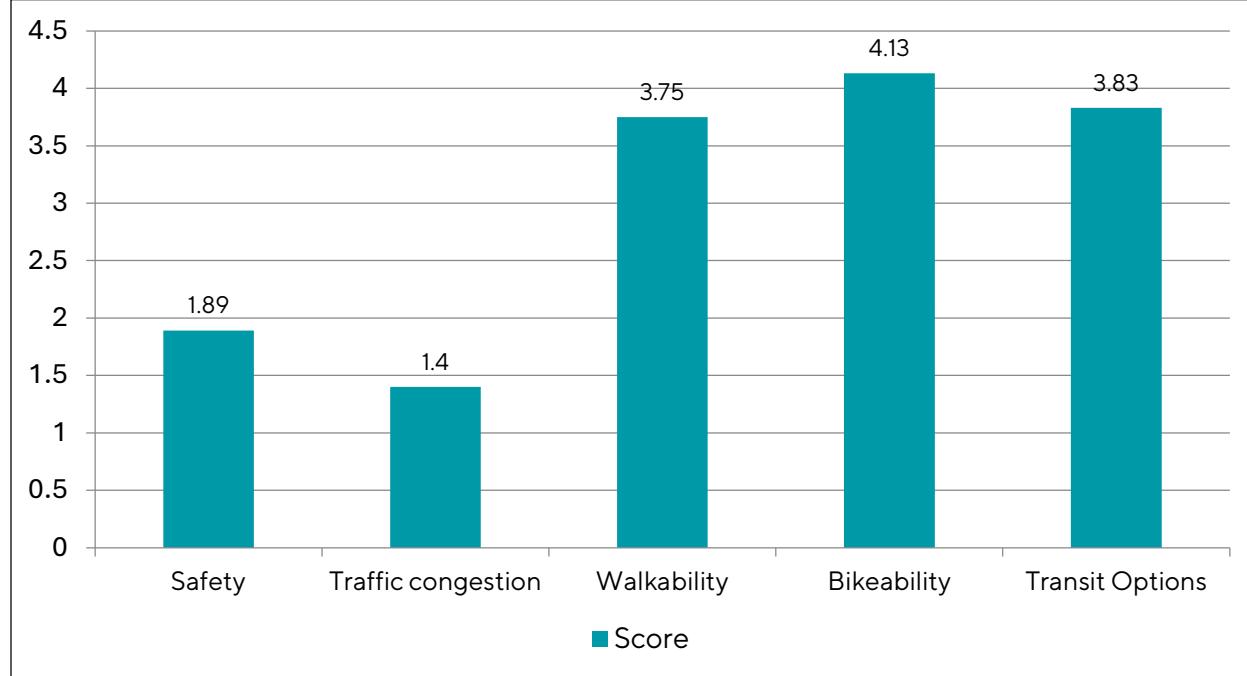


**Other responses:**

- Visit Johnson High School events
- Schools
- Commercial businesses, middle school & high school.
- YMCA 3-6days/week
- YMCA
- I work for Hays Transportation and have buses in this intersection almost everyday.

**Q7 – What are your concerns at the FM 1626/RM 967 Intersection? Please rate with your top concern starting with number 1 with your least concern being number 5.**

*105 responses*



**Q8 – Do you have any comments on the study goals or objectives?**

*68 responses*

#### **Common Themes of Submitted Comments – Q8**

##### **Severe Traffic Congestion & Need for Capacity Improvements**

- Concern about traffic backups, especially during peak hours and school zones.
- Calls for widening FM 967 to two lanes each direction and extending turn lanes.
- Requests for a flyover or overpass at FM 1626/RM 967 to improve traffic flow.

##### **Safety Concerns in Nearby Neighborhoods**

- Dangerous cut-through traffic in residential areas like Cimarron Park and Canyon Wren due to congestion.
- Lack of sidewalks and narrow streets making it unsafe for pedestrians and children.
- Calls for traffic calming measures and improved neighborhood access.

##### **School Traffic & Infrastructure Needs**

- High congestion attributed to multiple school zones and a single access point to Johnson High School.

- Need for better traffic management during school drop-off and pickup times.
- Suggestions for additional school exits and enhanced intersection signal timing.

### Long-Term Planning & Regional Coordination

- Concerns that prior improvements did not account for growth and future developments.
- Requests to expand the study area to consider impacts from new developments and SH 45 extension.
- Need for collaboration with other regional agencies to address regional mobility solutions.

### Multimodal & Pedestrian Considerations

- Mixed opinions on bike and pedestrian infrastructure—some see it as a priority, others as unnecessary.
- Calls for safer pedestrian crossings, particularly near schools and commercial areas.
- Interest in environmental mitigation and integration with trails like the Great Springs Project.

## Q9 – Is there anything else you would like to tell us about FM 1626/RM 967 Intersection?

63 responses

### Common Themes of Submitted Comments – Q9

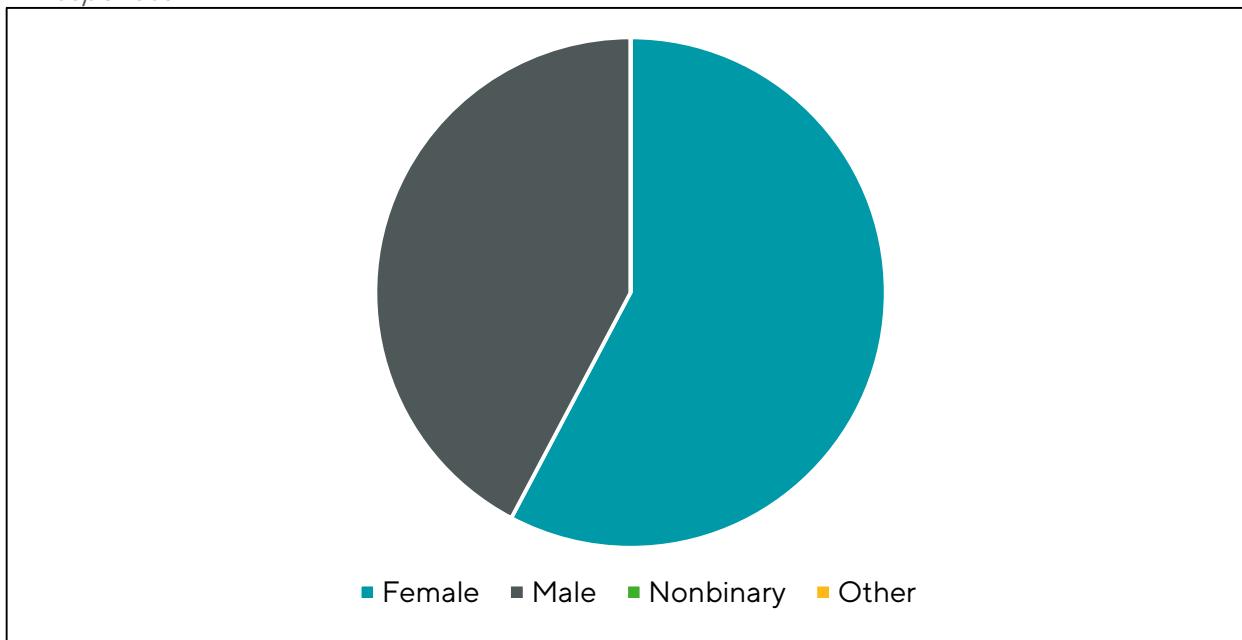
- **Severe Traffic Congestion & Poor Flow** – The intersection experiences heavy delays, especially during school and rush hours. Short signal times, merging conflicts, and high volumes of turning vehicles cause backups in all directions.
- **Safety Concerns & Accident Risks** – Frequent red-light running, dangerous merges, and unsafe driveway access points create hazardous conditions. Many users report near misses, crashes, and difficulties for pedestrians and cyclists.
- **Infrastructure Improvements Needed** – Many suggestions call for additional lanes, extended turn lanes, overpasses, and better traffic signal timing to alleviate congestion and improve flow.
- **School Traffic Impact** – The three nearby schools significantly contribute to peak-hour congestion. Some suggest an alternative route to the schools or expanded road capacity to manage school-related traffic.
- **Pedestrian & Bicycle Safety** – The intersection is not pedestrian- or bike-friendly, with long, unsafe crossings and no dedicated walk signals. Some suggest a pedestrian bridge or improved crosswalks.

## Demographic Questions

**The survey included the following optional demographic questions.**

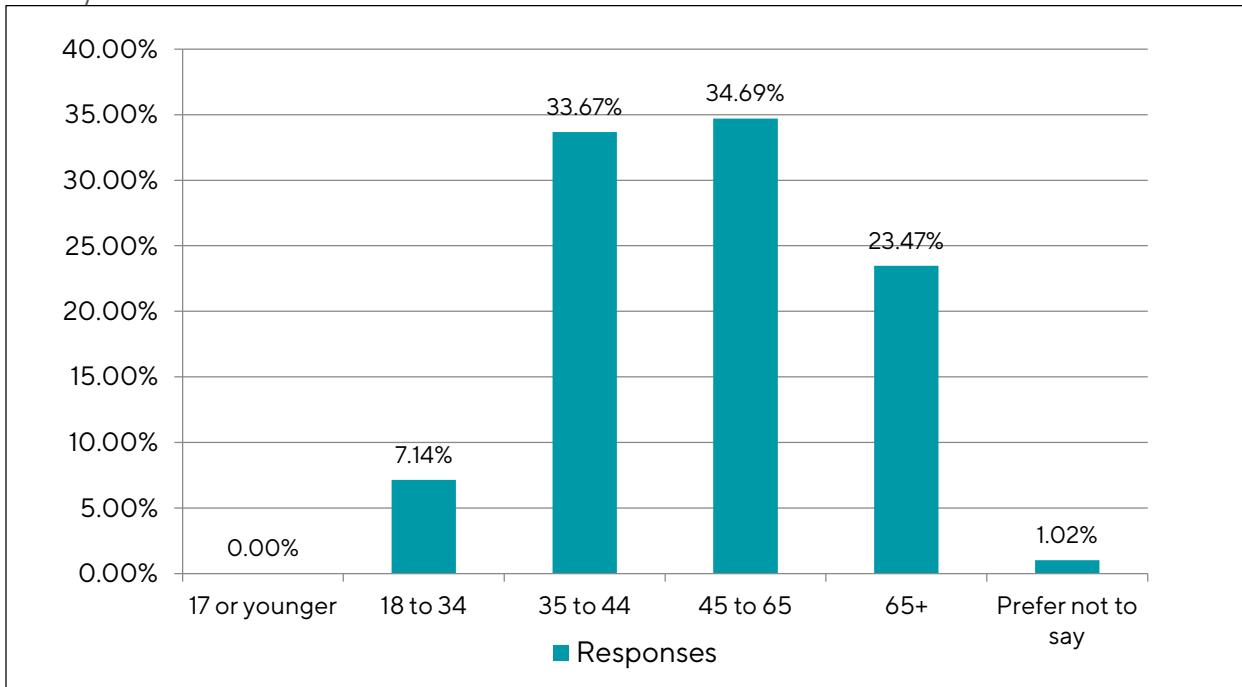
**Q1 – Which gender do you identify as most?**

97 responses



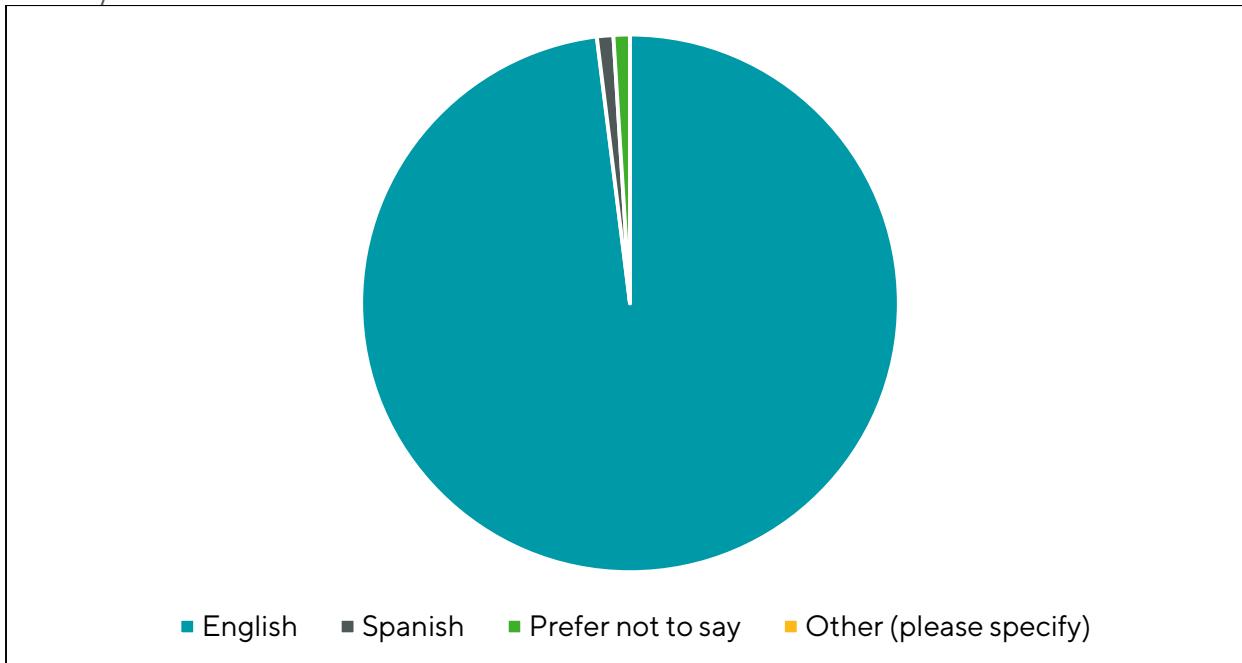
**Q2 – Please tell us your age group.**

98 responses



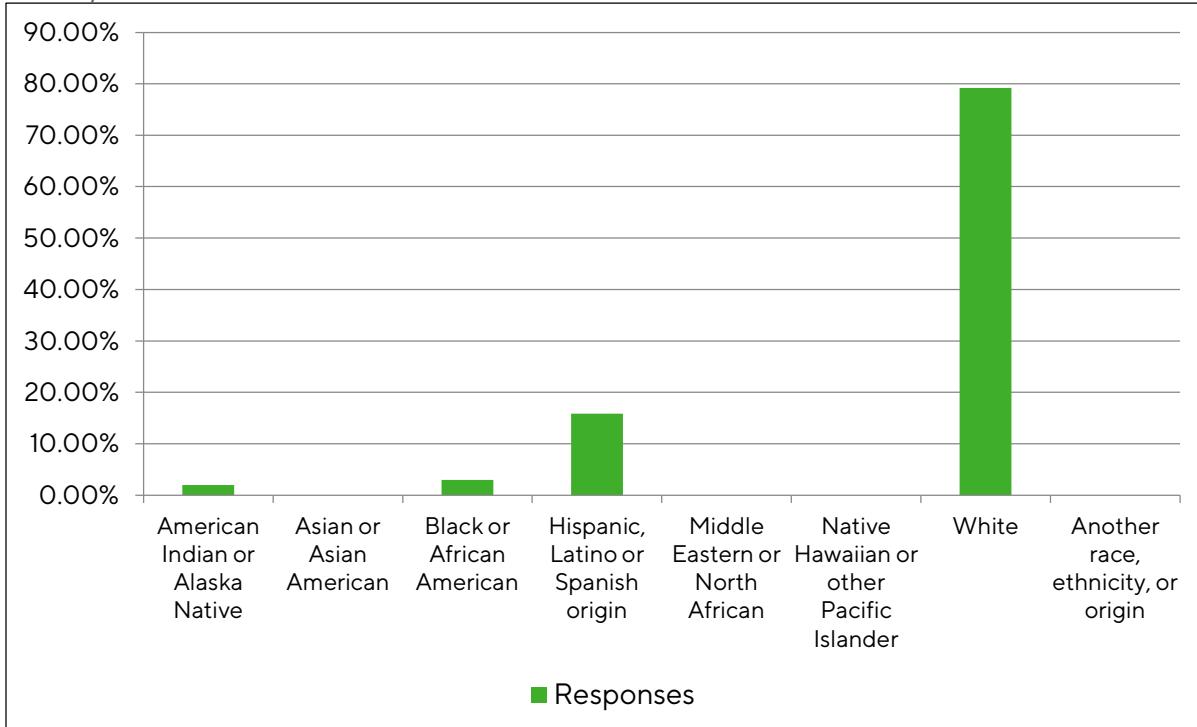
**Q3- What language is primarily spoken in your home?**

100 responses



**Q4- Which category best describes you? (Choose all that apply)**

101 responses



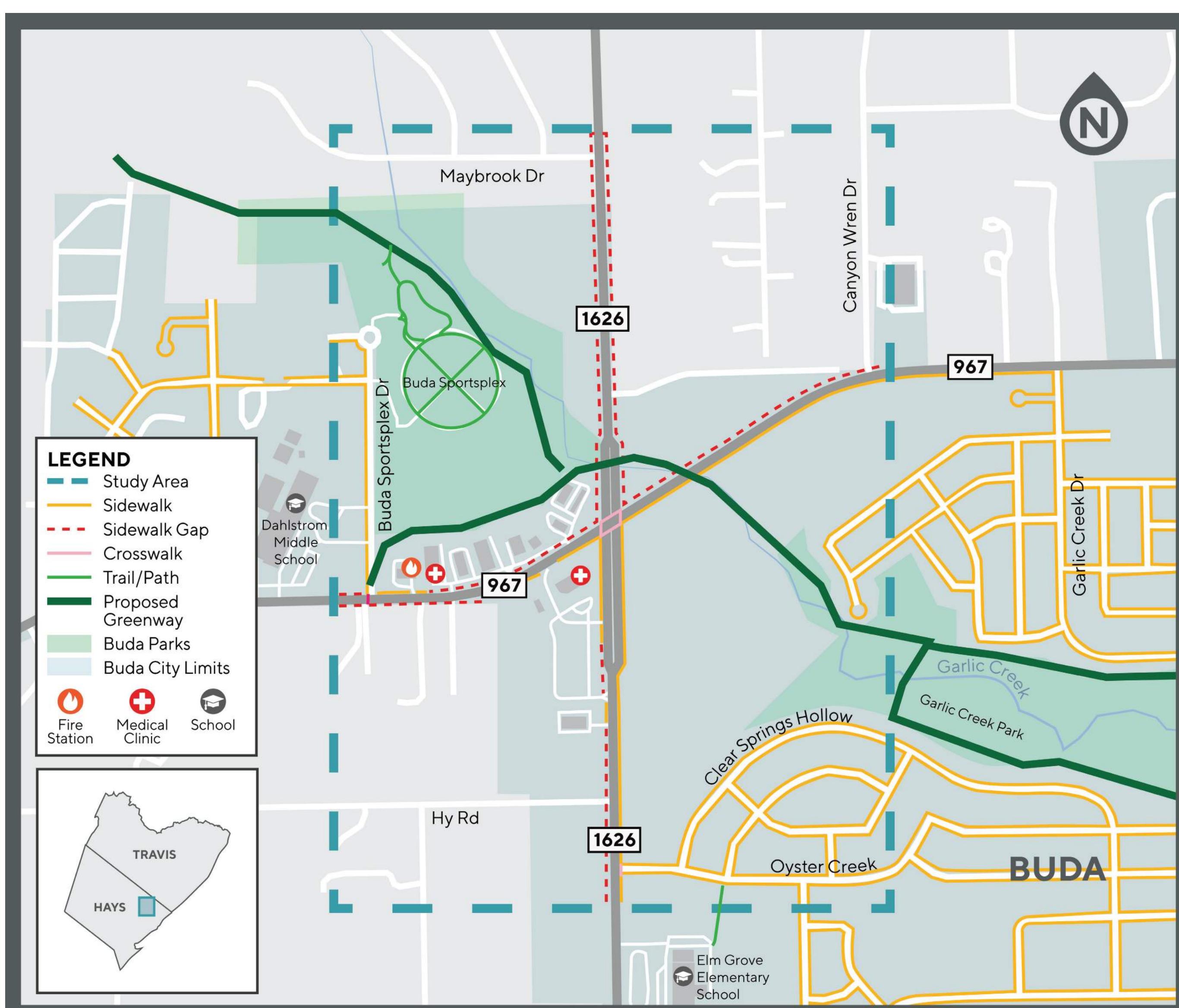
# STUDY INTRODUCTION

## STUDY OVERVIEW

The **Capital Area Metropolitan Planning Organization (CAMPO)** and the **City of Buda** are working together to identify, evaluate, and recommend potential improvements for the **FM 1626/RM 967** Intersection in the City of Buda.

## WHY THE STUDY IS NEEDED

This intersection connects two essential commuter roads in Hays County. FM 1626 functions as the primary north-south route in eastern Hays County, paralleling Interstate 35, while RM 967 serves as the principal east-west corridor in the area. CAMPO and the City of Buda are conducting this study to identify safety and mobility enhancements and plan as the region continues to grow.



## WHAT THE STUDY WILL ACCOMPLISH

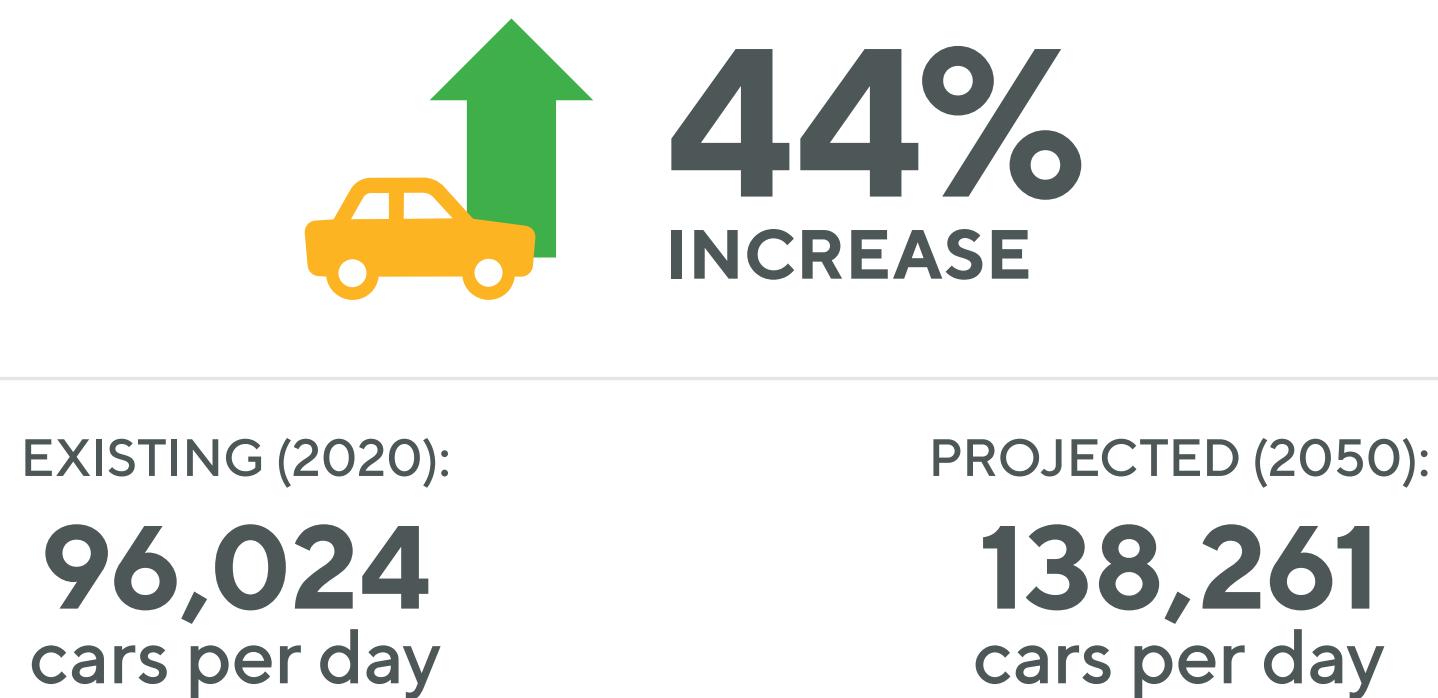
The Intersection Study will use public input to help CAMPO and the City of Buda define and identify feasible options for improvements to FM 1626/RM 967. The study will include an analysis of current and projected traffic volumes, crash hotspots, environmental features, needs and concerns identified in stakeholder and public input and will result in recommendations for improvements.



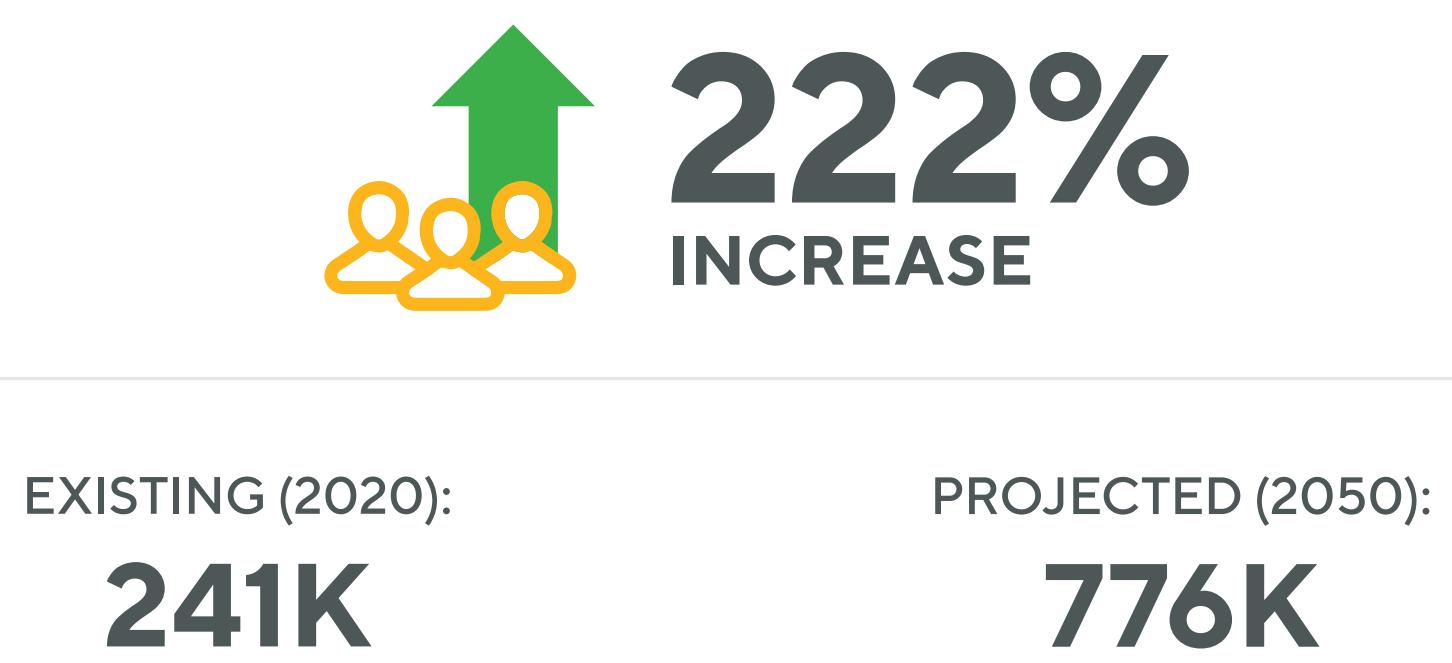


# FM 1626/RM 967 INTERSECTION TRAFFIC DATA

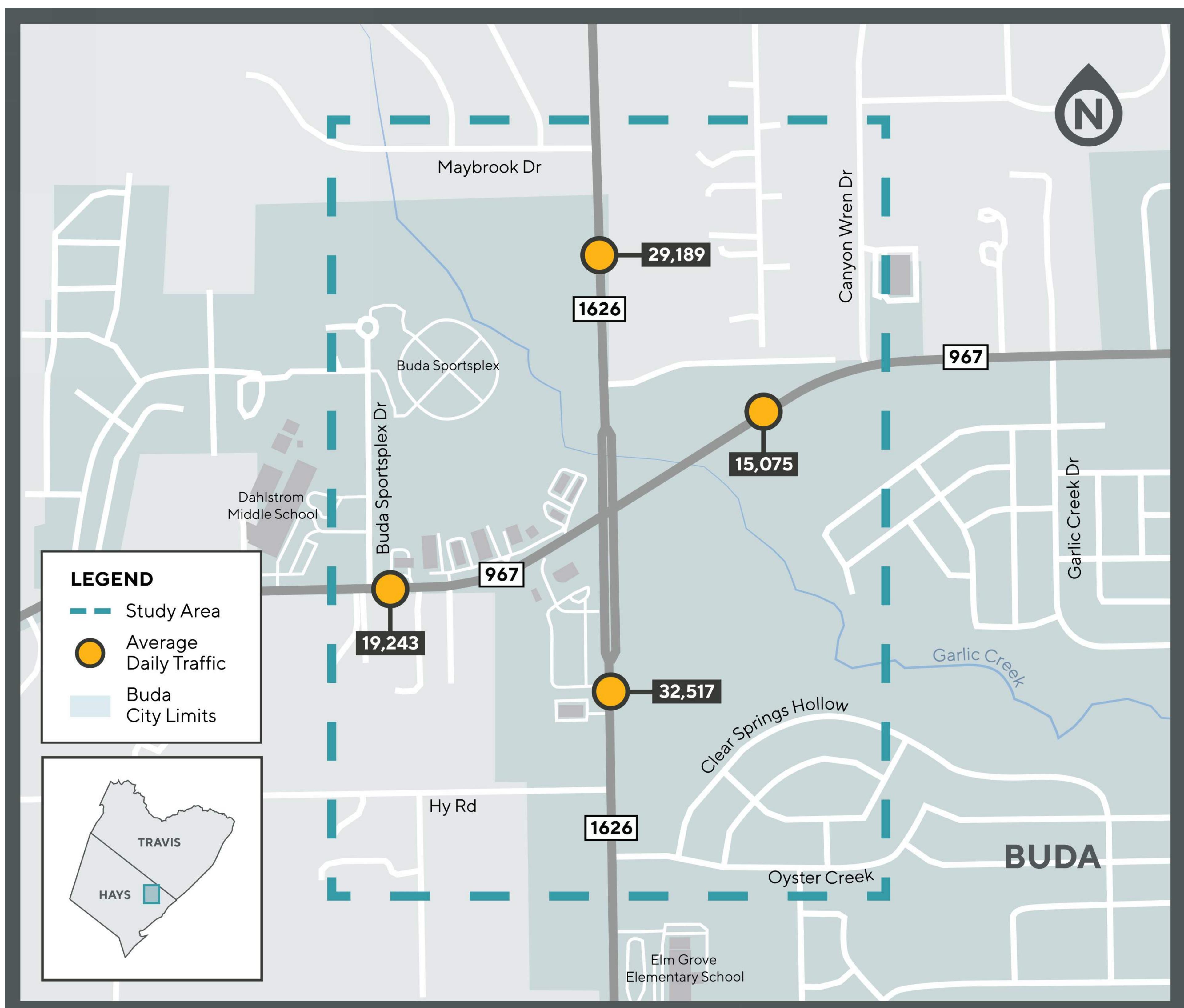
## FM 1626/RM 967 AVERAGE DAILY TRAFFIC



## HAYS COUNTY POPULATION



Sources: US Census Bureau, CAMPO Draft 2050 Regional Transportation Plan data



Source: TxDOT Traffic Count Database System, 2023 data





1

**Data Collection  
and Analysis**FALL 2024  
WINTER 2025

- › Analyze existing traffic and safety information including existing traffic volumes and projections, crash data, and bicycle and pedestrian accommodations
- › Identify environmental features and constraints in the study area
- › Collect input from the community on preliminary intersection improvements

2

**Develop  
Potential  
Improvements**

SPRING 2025

- › Use input and technical analyses from previous steps to identify and develop potential improvements to the FM 1626/RM 967 intersection
- › Establish evaluation criteria and quantify the impacts and features for each potential improvement concept
- › Collect input from the community on potential improvement concepts, including a no-build option

3

**Recommend  
Improvements  
& Prepare  
Final Report**

SUMMER 2025

- › Use public input from previous steps to refine potential improvements
- › Submit final report that includes recommendations for improvements, project materials, and an implementation plan

**NOTE:** Future project development phases to advance recommendations from this study will be a multi-year process that will require additional funding. Future phases will include gathering additional community input and may also include performing detailed environmental studies, detailed design, right of way acquisition and utility coordination, and construction.



# **Appendix A-3**

## Open House #2

### Summary and Report Exhibits



# FM 1626/RM 967 Intersection Study

## Round 2 Outreach Summary

### OVERVIEW

The Capital Area Metropolitan Planning Organization (CAMPO) and the City of Buda are working together to conduct the FM 1626/RM 967 Intersection Study, which aims to identify, evaluate, and recommend potential improvements for the intersection.

CAMPO and the City invited the public to participate in the Study at a second in-person open house on Wednesday, June 18, 2025 at the Buda City Hall Multi-Purpose Room, and a virtual open house and comment period from Monday, June 16 to Wednesday, July 16, 2025 at [campotexas.org/fm-1626-rm-967-intersection-study](http://campotexas.org/fm-1626-rm-967-intersection-study). The purpose of the open house was to share updates on the study and gather community input on potential intersection alternatives, design considerations, and existing conditions.

Open house materials included informational exhibits, fact sheets, and an online survey, all of which were available in English and Spanish. The same information was provided at both the in-person and virtual open houses. Feedback was collected through printed and online surveys, as well as emailed, mailed, and verbal comments. A total of 643 comments were received during the comment period, 638 online submissions in English, 1 online submission in Spanish, and 4 written submissions – including 12 attendees at the in-person meeting.

## NOTIFICATION TOOLS

### CAMPO Webpage Announcement

An announcement was posted on the CAMPO website and project webpage on June 5, 2025, notifying the public about the study, the in-person open house, and the launch of the virtual open house and comment period.

### City of Buda Website Announcement

An announcement was posted on the City of Buda website on June 5, 2025, notifying the public about the study, the in-person open house, and the launch of the virtual open house and comment period.

### Social Media

Information about the study and how to participate was shared through CAMPO's Facebook and Instagram accounts, as well as the City of Buda's Nextdoor platform from June 9 – July 14, 2025.



## Media Outreach

A media release was distributed to local media outlets throughout the region on June 16, 2025. A media release was also posted to the City of Buda website on June 16, 2025.

## Stakeholder Phone Calls & Emails

The outreach team made direct phone calls and emails to stakeholders including HOA representatives, businesses, and community organizations, as well as elected officials from the City of Buda and greater Hays County region to invite them to the CAMPO public open house. Attachments, including a study fact sheet and flyer, were included in the email communications.

**FM 1626/RM 967  
INTERSECTION STUDY**

**CAMPO**  
CAPITAL AREA METROPOLITAN  
PLANNING ORGANIZATION

**BudaTx** breathe  
easy here.<sup>TM</sup>

The Capital Metropolitan Planning Organization (CAMPO) and the City of Buda are working together to identify, evaluate, and recommend potential improvements for the FM 1626 and RM 967 intersection in Buda, TX. CAMPO and the City of Buda are hosting a second open house to share updates on the study and gather community input on potential intersection alternatives, design considerations, existing conditions, and the overall study process – including desired transportation and safety improvements.

**IN-PERSON OPEN HOUSE**

Wednesday, June 18, 2025

Buda City Hall, Multi-Purpose Room  
405 E Loop St., Bldg. 100,  
Buda, TX 78610.

5 – 7 p.m.



**VIRTUAL OPEN HOUSE**

June 16 – July 16, 2025

[bit.ly/FM1626-RM967](http://bit.ly/FM1626-RM967)

Comments must be received or postmarked by **Wednesday, July 16, 2025**, to be included in the open house record.

**»» QUESTIONS OR COMMENTS**

FM 1626/RM 967 Project Team

[FM1626andRM967Study@gmail.com](mailto:FM1626andRM967Study@gmail.com)

(512) 651-3964

FM 1626/RM 967 Intersection Study, c/o CD&P  
PO Box 5459, Austin, TX 78763



Scan the QR code to visit  
the virtual open house!

## WHAT WE HEARD

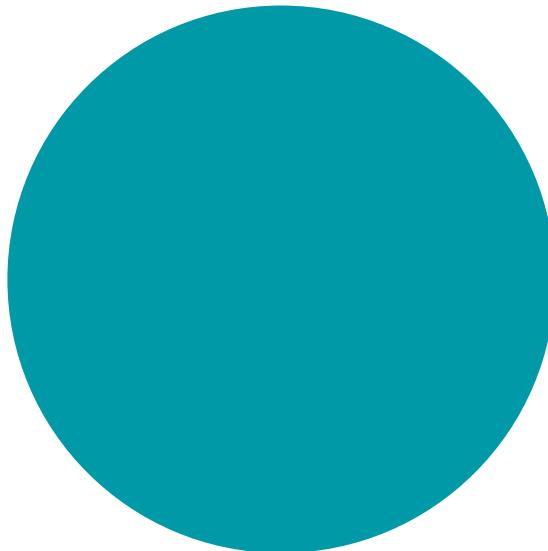
### Survey Summary

643 completed or partially completed surveys received

Q1 – Please select the language you would like to take the survey in?

*643 responses*

■ English ■ Spanish



Q2 – What zip code do you live in?

*566 responses*

Zip code	# of responses
78610	498
78640	29
78619	16
78652	10
78748	3
78160	2
78620	2
78666	2
79610	2
78223	1
78662	1

**Q3 – What zip code or city/town do you commute or travel to often?**

**557 responses**

Zip code	# of responses
78610	222
78640	48
78748	29
78749	16
78745	15
78704	15
78701	14
78744	13
78735	11
78746	10
78666	10
78759	8
Austin	7
78739	6
78652	6
78741	6
78703	5
78620	5
78737	5
78705	6
78723	5
78619	4
78702	4
78757	4
78712	4
78665	3
78738	3
78751	3
78753	3
78754	3
78644	3
78130, 78759	2
78747	2
78731	2
78736	2
78730	2
78613	2
78645	2
78729	2

78725	2
78762	2
78763	2
78722	1
78724	1
78734	1
78758	1
78655	1
78681	1
78688	1
78646	1
7860	1
77840	1
76810	1
79730	1
73301	1
78132	1
1626	1
1826	1
Austin & Dripping Springs	1
Austin/Kyle	1
Austin and Kyle	1
Austin, Buda, Kyle	1
Buda, Kyle, South Austin	1
Buda/Kyle	1
Downtown Austin	1
Kyle, Austin	1
Buda and Austin	1
All Austin Zip Codes	1
78610 and South Austin	1
78640, 78701, 78704, Kyle, Austin	1
Driftwood	1
Various	1
Austin, Kyle	1
San Marcos	1
Buda	1
Dripping Springs	1
Travel	1
Daily	1
N/a	1
NA	1
none	1

78640 everyday	1
78610 and 78644	1
78610 78748 78640	1
78610, 78620, Austin	1
78619, 78604	1
78610, 78620, 78640	1
78748, 78610	1
78640, 78727, 78666	1
78749, 78704	1
Kyle (78640) or Austin zip codes	1

#### Q4 – What are your comments on the two Intersection Improvement Concepts?

*306 responses*

##### Overall Sentiment Breakdown

Concept	Support (%)	Neutral/Unclear (%)	Opposition (%)
Conventional	60-65%	15-20%	15-20%
Displaced Left Turn (DLT)	10-15%	10-15%	70-75%

*Note: Percentages provided are estimates based on analysis of public feedback and comments.*

##### Key Themes of Responses

###### 1. Conventional Intersection

- Safety for Teen Drivers: 70+ explicit mentions of Johnson High School students.  
"Keep it simple for new drivers—DLT will cause accidents."
- Familiarity: "Traditional is easier to navigate."
- Cost/Feasibility: "Fewer disruptions during construction."
- "Won't fix traffic without widening 967 or adding overpasses."
- "Ignores right-turn lane extensions needed at the bridge bottleneck."

###### 2. Displaced Left Turn (DLT)

- Safety Risks: "Terrifying for drivers," "Unsafe for pedestrians/bikes," "Deadly for teens."
- Complexity: "Confusing design," "Signage won't help new drivers."
- Negative Precedents: Comparisons to "chaotic" San Marcos/Oak Hill intersections
- Cites success at Slaughter/Mopac: "Moves more traffic once learned."

###### 3. Recurring Themes (Beyond Intersection Type)

- Critical Needs Highlighted:

1. Widen Roads: 40% request widening FM 967 (especially near schools) and 1626
2. Extend Turn Lanes: 30% note short right-turn lanes cause bottlenecks
3. Pedestrian Safety: 20% request connected sidewalks/bridges near schools
4. Overpass Request: 25% request grade separation is the only long-term fix

- Traffic Management:
  - "Sync traffic lights with middle school signal."
  - "Extend left-turn light durations during rush hour."

#### 4. Teen Driver Impact (Cross-Cutting Concern)

- Mentioned in 80%+ of responses:
  - "Johnson HS students dominate rush-hour traffic—designs must prioritize simplicity."
  - "DLT is a disaster waiting to happen with inexperienced drivers."

#### 5. Data & Transparency Requests

- Common Requests:
  - "Show traffic studies comparing DLT vs. conventional."
  - "Release Slaughter/Mopac DLT performance data."
  - "Simulate school-hour traffic for both options."

#### Conclusion

- Community Priority: Safety and simplicity for teen drivers at Johnson High School is the dominant lens shaping preferences
- Conventional Design Favored: 3:1 preference over DLT due to familiarity and perceived lower risk
- Underlying Requests: Road widening (967/1626), extended turn lanes, pedestrian upgrades, and overpasses are seen as essential regardless of intersection choice

#### Q5 – What are your comments on the two Quadrant Intersection Improvement Concepts?

*246 responses*

##### Overall Sentiment Breakdown

Concept	Support (%)	Neutral/Unclear (%)	Opposition (%)
Southwest Quadrant Only	10-15%	15-20%	65-70%
Southwest and Northeast Quadrants	20-25%	20-25%	50-55%

*Note: Percentages provided are estimates based on analysis of public feedback and comments.*

##### Key Themes of Responses

###### 1. Southwest Quadrant, Southwest and Northeast Quadrant

- Safety and Complexity: "Dangerous for the neighborhood," "confusing," and "increases safety risks."
- Ineffectiveness: "These are not drastic enough to alleviate traffic," "will not help the congestion," and "We would outgrow this before completion."
- Construction and Traffic Impact: "Too much construction," "will back up traffic even worse," and "construction would be a nightmare."
- Traffic Flow Potential: "Could work well to alleviate traffic," "promising," and "might be the solution."
- Balanced Approach: "It seems to balance impacts and costs," and "alleviates issues going north and south."

## 2. Recurring Themes

- Critical Needs Highlighted:
  - Overpass Requests: 25-30% request an overpass is the only viable solution. "A better long-term solution would be to construct a bridge."
  - Road Widening: 20-25% note that without widening 967/1626, no solution will work. "Expand 967 to four lanes."
  - Pedestrian Safety: 10-15% mention the need for safe crossings. "What pedestrian in their right mind would take the risk of crossing?"
- Traffic Management Concerns:
  - "Adds more lights and not do much to ease the situation" (40-45% of responses)
  - "Multiple intersections will cause more backups" (30-35%)

## 3. Teen Driver Impact

- Mentioned in 20-25% of responses:
  - Concerns about complexity for Johnson High School students: "Yet again, more confusion especially with new young drivers."

## 4. Design-Specific Feedback

- For SW Only:
  - Severe bottlenecks: "A left turn from SB 1626 to EB 967 requires traveling through 3 traffic lights... time could be astronomical."
  - Incomplete solution: "Southwest only is not enough."
- Southwest/Northeast Quadrants:
  - Land and Business Impact: "Hard to visualize due to existing development," and "will not work unless current businesses are torn down."
  - Light Timing Issues: "Four lights from 967 west making a left to 1626 north" increases delays

## Conclusion

- Community Priority: The majority of respondents view both quadrant concepts as overcomplicated and ineffective. The SW/NE Quadrants option is seen as slightly better but respondents still had concerns
- Common Requests: Overpass construction and road widening remain the most requested solutions. The quadrant designs are perceived as temporary fixes that ignore core issues
- Key Weakness: Both quadrant options introduce multiple new intersections and traffic lights, which are predicted to worsen congestion during peak hours (especially school rush times)

### Q6 – What are your comments on the two Interchange Improvement Concepts? (Overpass/Underpass)

*202 responses*

#### Overall Sentiment Breakdown

Concept	Support (%)	Neutral/Unclear (%)	Opposition (%)
Diamond Interchange	50-55%	10-15%	30-35%
Diverging Diamond (DDI)	10-15%	15-20%	65-70%

*Note: Percentages provided are estimates based on analysis of public feedback and comments.*

#### Key Themes from Responses

##### 1. Diamond Interchange

- Simplicity and Familiarity: "Regular diamond is solid," "Traditional and easy to understand."
- Safety for Teens: Emphasis on Johnson High School drivers: "Keep it simple for new drivers," "DDI is a death trap for teens."
- Traffic Flow: "Allows 1626 to flow without stopping," "Similar to interstate, no confusion."
- Feedback:
  - Doesn't address 967 bottleneck: "Only helps 1626 traffic," "Ignores school traffic on 967."
  - Property/Environmental Concerns: "Overpass will hurt neighborhood views," "Too much concrete for a residential area."

##### 2. Diverging Diamond Interchange (DDI)

- Complexity and Safety: "DDI looks like a mess," "Confusing and dangerous," especially for teen drivers
- Negative Precedents: Comparisons to "chaotic" Slaughter/Mopac DDI in Austin

- Cost/Construction: "Years of traffic nightmares," "Over-engineered and unnecessary."
- Praised efficiency: "Works at Slaughter/Mopac," "Moves more traffic once learned."

### 3. Concerns Beyond Interchanges

- Critical Needs Highlighted:
  - Road Widening: 30% request widening 967 (especially near schools) and adding lanes to 1626
  - Overpass as Ultimate Solution: 20-25% request, "Build a bridge for uninterrupted flow."
  - Construction Impact: "5-year timeline unacceptable," "Detours will cripple daily commutes."
- Teen Driver Impact:
  - Relevant in 40% of responses: "Johnson HS students need simplicity," "DDI is a disaster for new drivers."

### 4. Design-Specific Feedback

- Diamond Interchange Adjustments Requested:
  - Add dual left-turn lanes on ramps (mirroring Slaughter/Mopac)
  - Ensure pedestrian safety with bridges near schools
- DDI Rejection Drivers:
  - 70% associate it with confusion and accidents: "Whoever designed DDI should be fired."

### Conclusion

- Community Priority: Safety and simplicity for Johnson HS drivers. Diamond Interchange is favored 5:1 over DDI
- DI's Edge: Perceived as reliable, scalable, and less disruptive. Respondents accept it as a "necessary step" despite concerns about 967 bottlenecks
- DDI's Liability: Irredeemable reputation for complexity; respondents cite teen safety and construction chaos as concerns
- Unresolved Requests: 30% still advocate for pure overpasses or road widening, viewing interchanges as half-measures

### Q7 – What are your comments on the Intersection Improvement Concept? (Overpass/Underpass)

*187 responses*

Overall Sentiment Breakdown

Concept	Support (%)	Neutral/Unclear (%)	Opposition (%)
Center Turn Overpass	35-40%	20-25%	40-45%

*Note: Percentages provided are estimates based on analysis of public feedback and comments.*

## Key Themes from Responses

### 1. Support for Simplicity and Flow

- Familiarity: "Simple and easy to navigate," "Less confusing than DDI," "Feels like a traditional overpass."
- Traffic Efficiency: "Allows 1626 to flow without stopping," "Addresses left-turn delays."
- *Respondent Quote:* "This actually makes sense—keeps traffic moving."
- Caveats:
  - Requests for pedestrian bridges and widened ramps to prevent backups

### 2. Primary Concerns

- Bottlenecks: "Ramps will back up during school rush," "One accident paralyzes the turn lane."
- Safety Risks: "Support pillars block sightlines," "Merge conflicts create T-bone risks."
- Neighborhood Impact: "Alters Buda's small-town feel," "Lowers property values."
- *Respondent Quote:* "NOPE. Freeway-like, not safe for pedestrians or cyclists."
- Cost/Construction:
  - "Extremely costly," "Years of disruptive construction for minimal gain."

### 3. Recurring Themes

- Ignored Fundamentals:
  - 967 Widening: 30% stress this remains critical near Johnson HS
  - Full Grade Separation: 20% request: "Only true solution is 1626 overpass without lights."
- Pedestrian Safety: 15% note: "Where are the sidewalks/overpasses for schools?"

### 4. Design-Specific Feedback

- Structural Flaws:
  - "Elevated turns won't fix 967's bottleneck."
  - "No space for breakdowns/accidents on narrow ramps."
- Ineffectiveness:
  - "Relocates rather than solves congestion," "Straight traffic still faces light delays."

### 5. Teen Driver Focus

- Mentioned in 15%+ Responses:
  - "Simpler than DDI but ramps still challenge new drivers," "Merge conflicts risky for teens."

## Conclusion

- Balanced Feedback: While 35-40% see this as a "pragmatic upgrade," other respondents cite fundamental flaws: ramp backups, neighborhood harm, and unaddressed 967 widening
- Teen Driver Priority: Some respondents noted simplicity over DDI, but others noted ramps pose new risks for Johnson HS drivers
- Common Theme: 30% note that without widening 967 or full grade separation, this is "another short-term fix."
- Suggested Design Adjustments: If pursued, respondents noted:
  - Wider ramps and breakdown lanes
  - Pedestrian bridges near schools
  - Synced lights to prevent cascading delays
- Alternative: 20-25% noted, "Build a full diamond interchange instead—it's safer and more comprehensive."

## Additional Questions

**The survey included three additional open-ended questions.**

**Q8 – Is there anything else you would like to tell us about FM 1626/RM 967 Intersection or any of the concepts that were presented?**

*158 responses*

## Key Themes from Responses

- **Severe Traffic Congestion & Poor Flow:**
  - Heavy delays during morning/afternoon rush hours and school pickup/drop-off times
  - Short signal cycles and insufficient turn lanes causing gridlock
  - Cut-through traffic from commuters avoiding I-35 or toll roads
- **Safety Concerns & Accident Risks :**
  - Red-light runners and conflicting turn signals (e.g., U-turns vs. green arrows)
  - Dangerous mergers (e.g., disappearing lanes near Sonic/Fire Station)
  - Inexperienced drivers (teens) and large trucks exacerbate risks
- **Request for Infrastructure Upgrades:**
  - Overpass/underpass for 1626 to prioritize through traffic
  - Additional lanes (dual left turns, extended merge lanes)

- Better traffic signals (longer cycles, "No U-Turn" signs)
- **School Traffic Overloads the Intersection:**
  - Three nearby schools (Johnson HS, Dahlstrom MS, Elm Grove Elementary) create peak-hour chaos
  - New teen drivers struggle with complex maneuvers
  - Parent drop-off lines block through lanes
- **Lack of Pedestrian/Bike Safety:**
  - No safe crossings for students or cyclists
  - Sidewalks could eliminate school bus services (hazardous route funding)
  - Requests for pedestrian bridges or protected bike lanes

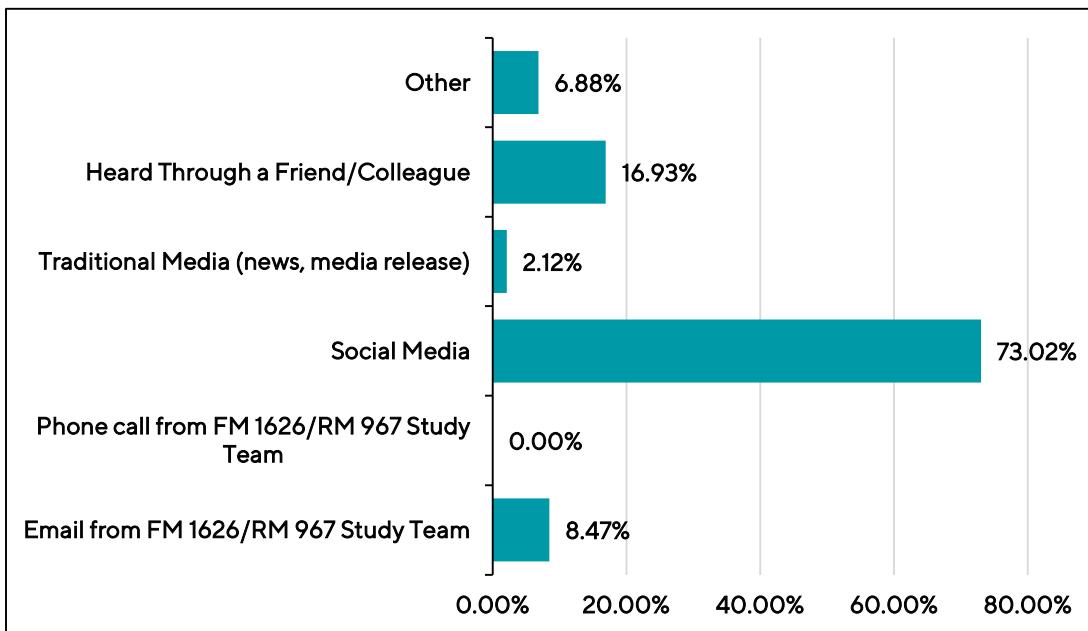
**Q9 – If you would like to receive updates on this project, please note your contact information below.**

*120 responses*

- **Name:** 118 people provided their name
- **Email:** 119 people provided their email address
- **Phone:** 90 people provided their phone number

**Q10 – How did you hear about the open house?**

*199 responses*





# WELCOME

# FM 1626/RM 967 INTERSECTION STUDY OPEN HOUSE

## IN-PERSON OPEN HOUSE

**Wednesday, June 18, 2025**

**Buda City Hall, Multi-Purpose Room**  
**405 E. Loop St., Bldg. 100, Buda, TX 78610**

## VIRTUAL OPEN HOUSE

**Monday, June 16 –  
Wednesday, July 16, 2025**

[bit.ly/FM1626-RM967](http://bit.ly/FM1626-RM967)

## OPEN HOUSE PURPOSE

**Learn about the study  
Share your thoughts**





# CAMPO 101

# WHAT IS CAMPO?

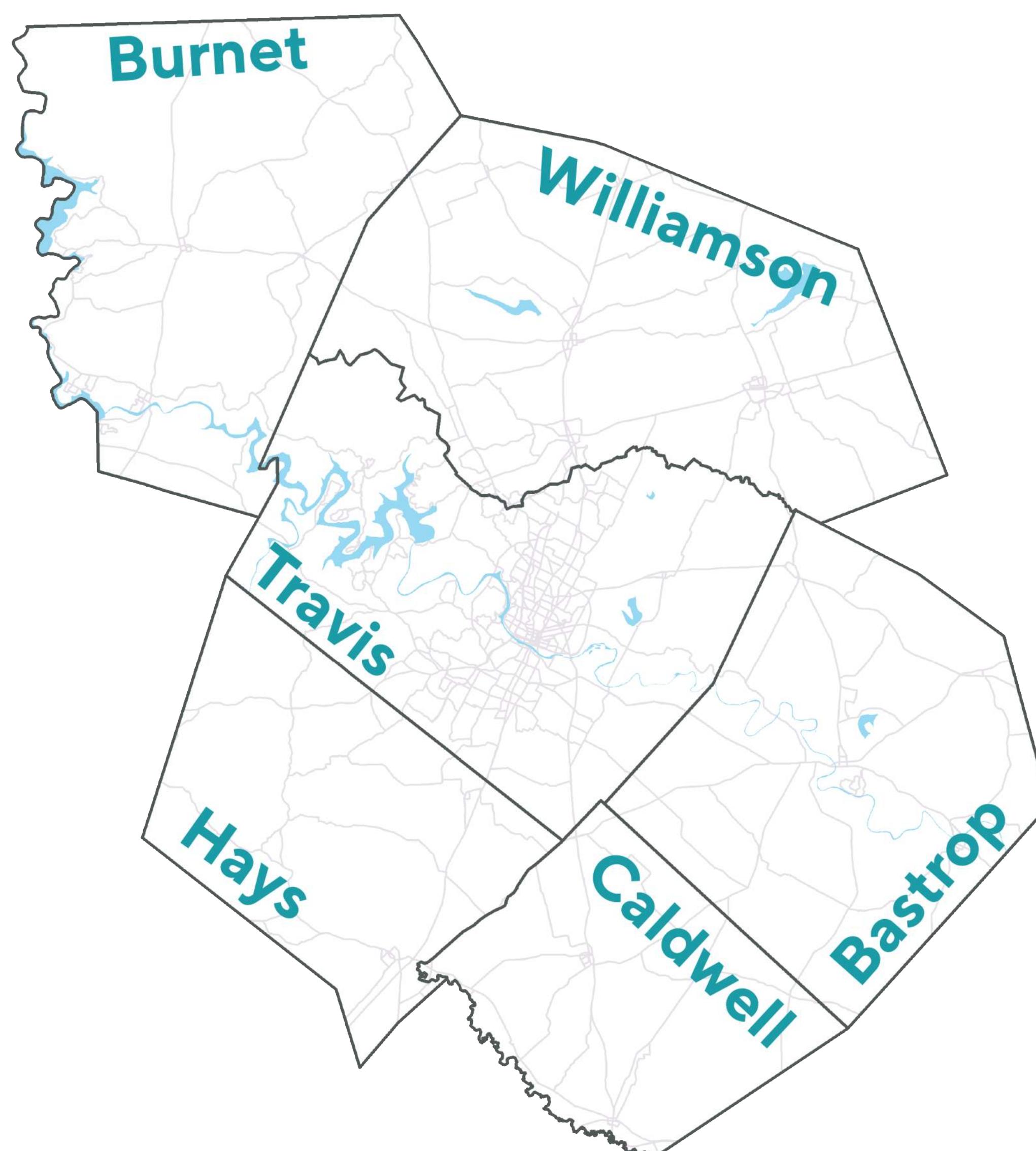
The Capital Area Metropolitan Planning Organization (CAMPO) is the Austin region's transportation decision-making body, coordinating regional transportation planning between counties, local governments, and transportation agencies. The organization is made up of a 22-member Transportation Policy Board (TPB) that makes decisions on CAMPO policy and allocates federal transportation funds for the region, a 24-member Technical Advisory Committee (TAC) that provides technical expertise and recommendations to inform the Transportation Policy Board, and the Executive Director, who reports to the TPB and oversees the CAMPO staff.

# WHAT IS AN MPO?

A metropolitan planning organization, or MPO, is a regional transportation planning entity designated by the federal government beginning in 1962. MPO are required in areas with a population greater than 50,000. CAMPO is one of 25 MPOs in Texas, and one of 408 in the United States.

# WHERE IS CAMPO?

CAMPO conducts regional transportation planning work within six counties: Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson.



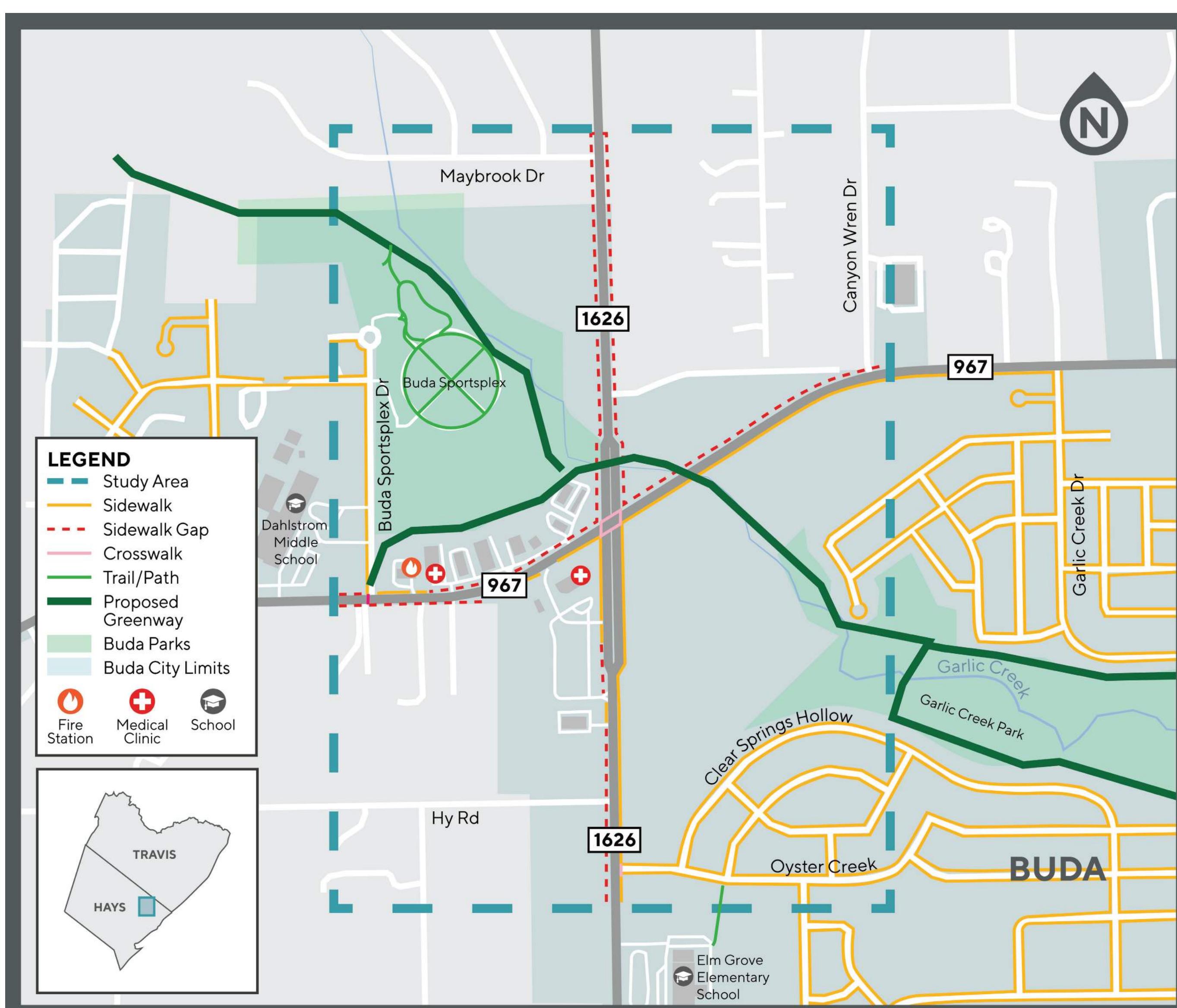
# STUDY INTRODUCTION

## STUDY OVERVIEW

The **Capital Area Metropolitan Planning Organization (CAMPO)** and the **City of Buda** are working together to identify, evaluate, and recommend potential improvements for the **FM 1626/RM 967** Intersection in the City of Buda.

## WHY THE STUDY IS NEEDED

This intersection connects two essential commuter roads in Hays County. FM 1626 functions as a primary north-south route in eastern Hays County, paralleling Interstate 35, while RM 967 serves as a principal east-west corridor in the area. CAMPO and the City of Buda are conducting this study to identify safety and mobility enhancements and plan as the region continues to grow.



## WHAT THE STUDY WILL ACCOMPLISH

The Intersection Study will use public input to help CAMPO and the City of Buda define and identify feasible options for improvements to FM 1626/RM 967. The study will include an analysis of current and projected traffic volumes, crash hotspots, environmental features, needs and concerns identified in stakeholder and public input and will result in recommendations for improvements.





# STUDY GOALS AND OBJECTIVES

## Identify and recommend solutions to improve safety

- › Evaluate and consider crash data, intersection improvements, bicycle and pedestrian travel, and input from the community



## Enhance mobility and functionality of the intersection

- › Improve traffic operations to create a reliable and consistent network for the movement of people and goods through and within the intersection
- › Improve access to adjacent businesses, neighborhoods, and schools



## Enhance multimodal movement, operations, and safety

- › Consider and plan for transportation needs for multimodal use of the intersection, including improving facilities for bicyclists, pedestrians, and transit



## Develop community-supported recommendations for the intersection

- › Employ strategies to maximize participation across diverse audiences that reflect the community, including outreach to underreached communities and those with Limited English Proficiency
- › Consider and incorporate feedback from the community in each step of the study development process



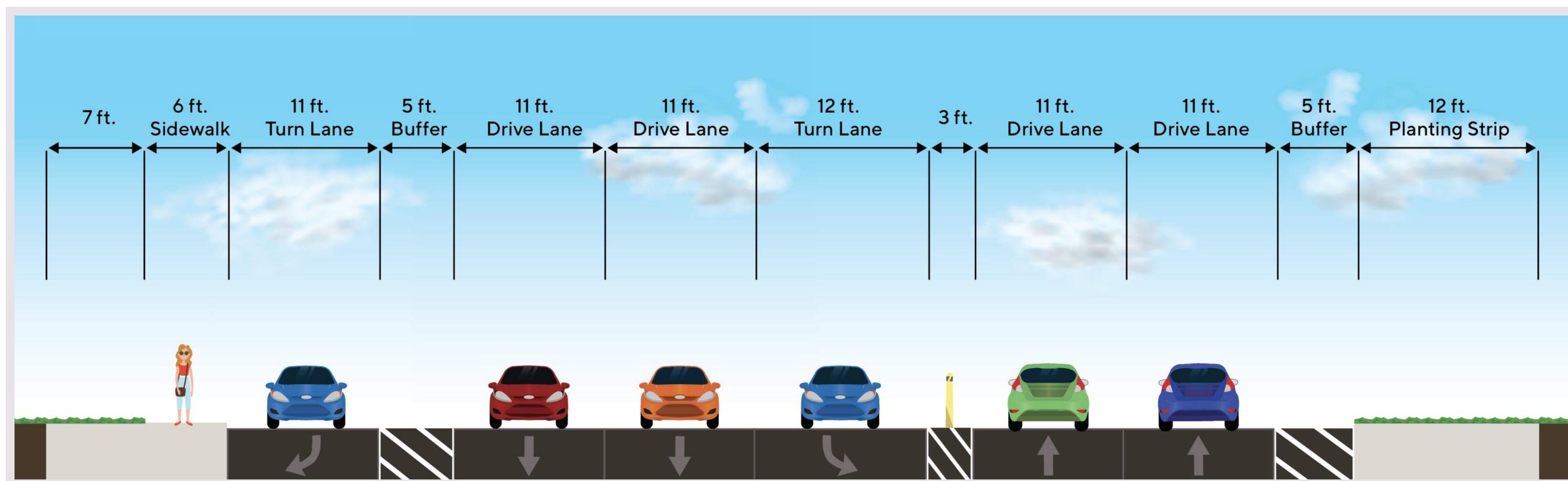


# FM 1626/RM 967 INTERSECTION

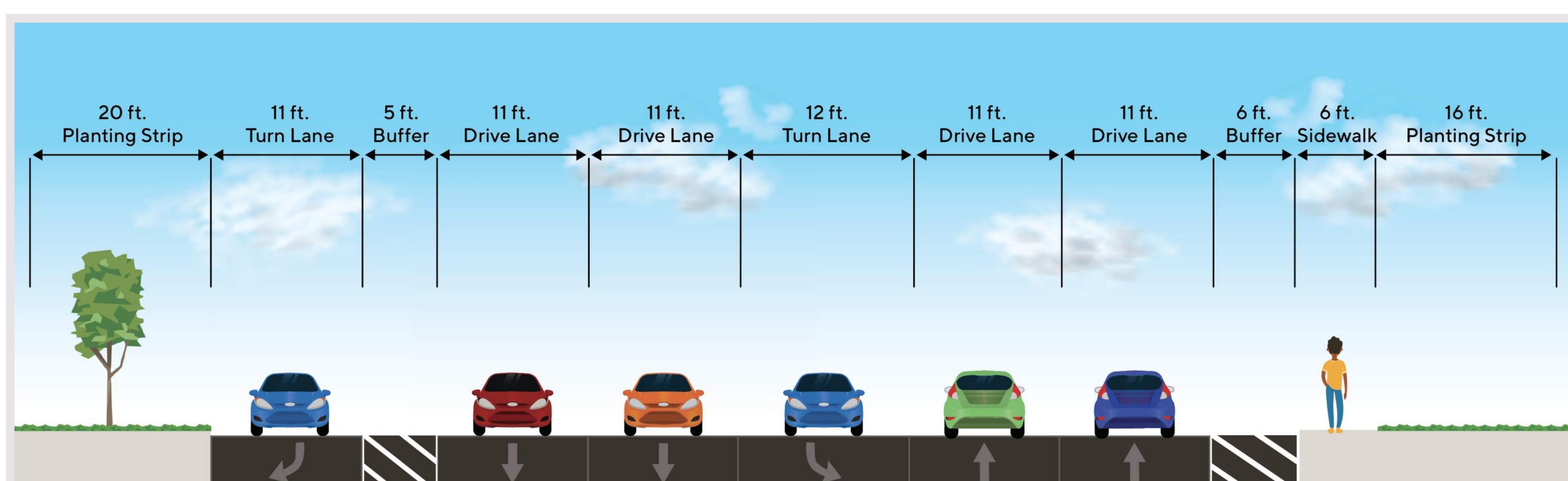
## FM 1626/RM 967 INTERSECTION

- › Two lanes in each direction (North/South (FM 1626) – East/West (RM 967))
- › Single dedicated left-turn lane and right-turn lane at each intersection approach
- › Discontinuous sidewalks & minimal bicycling accommodations

## FM 1626 – NORTH OF INTERSECTION



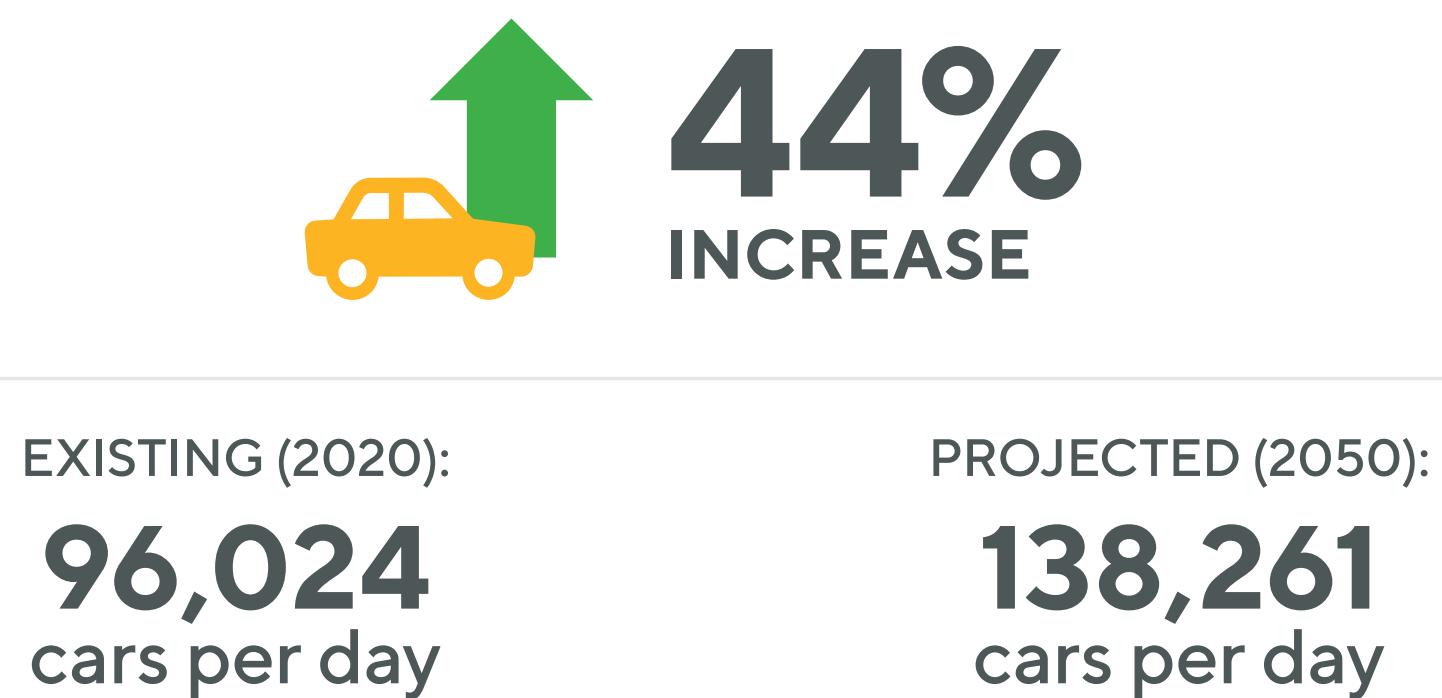
## RM 967 – EAST OF INTERSECTION



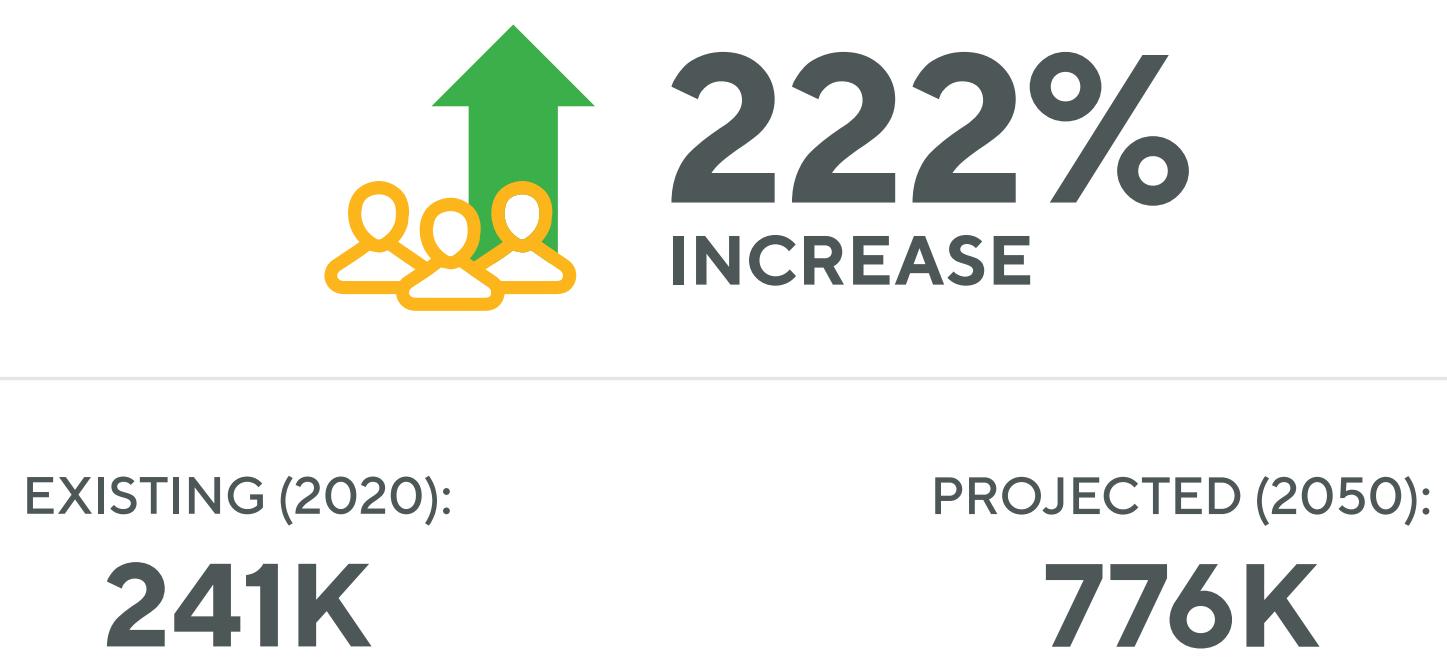


# FM 1626/RM 967 INTERSECTION TRAFFIC DATA

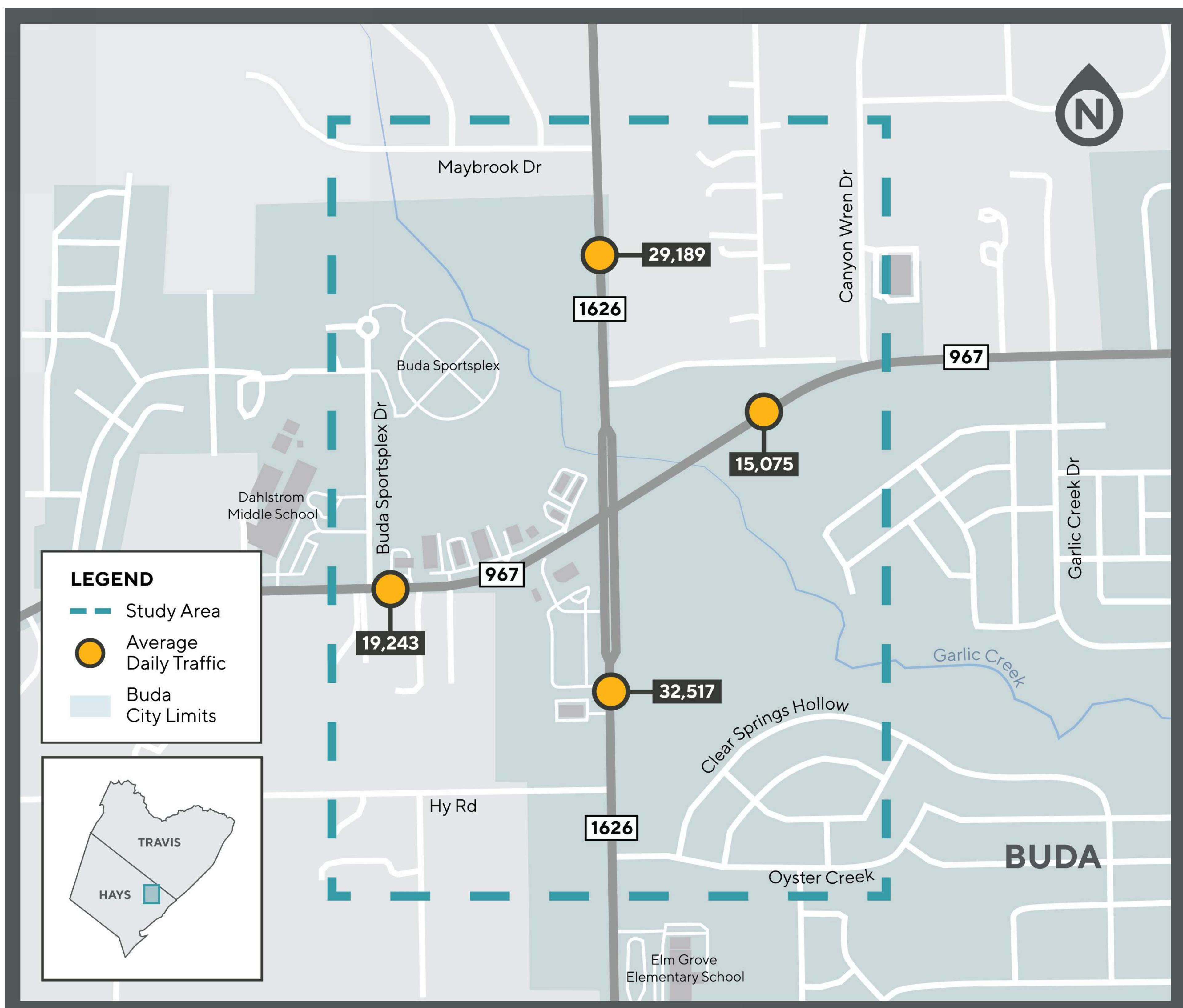
## FM 1626/RM 967 AVERAGE DAILY TRAFFIC



## HAYS COUNTY POPULATION



Sources: US Census Bureau, CAMPO 2050 Regional Transportation Plan data



Source: TxDOT Traffic Count Database System, 2023 data





# FM 1626/RM 967 INTERSECTION CRASH DATA

## 2019 – 2024 CRASH SUMMARY



### Total Crashes

**205** total crashes were reported in the study area between January 2019 and September 2024



### Crash Locations

**55%** of crashes occurred at or near intersections within the study area



### Crash Severity

**82%** of crashes resulted in no injuries, while less than **3%** involved serious injuries



### Crash Types

**27%** of crashes involved left-turn collisions, with a large number happening at or near the FM 1626 and RM 967 intersection



### Crash Patterns

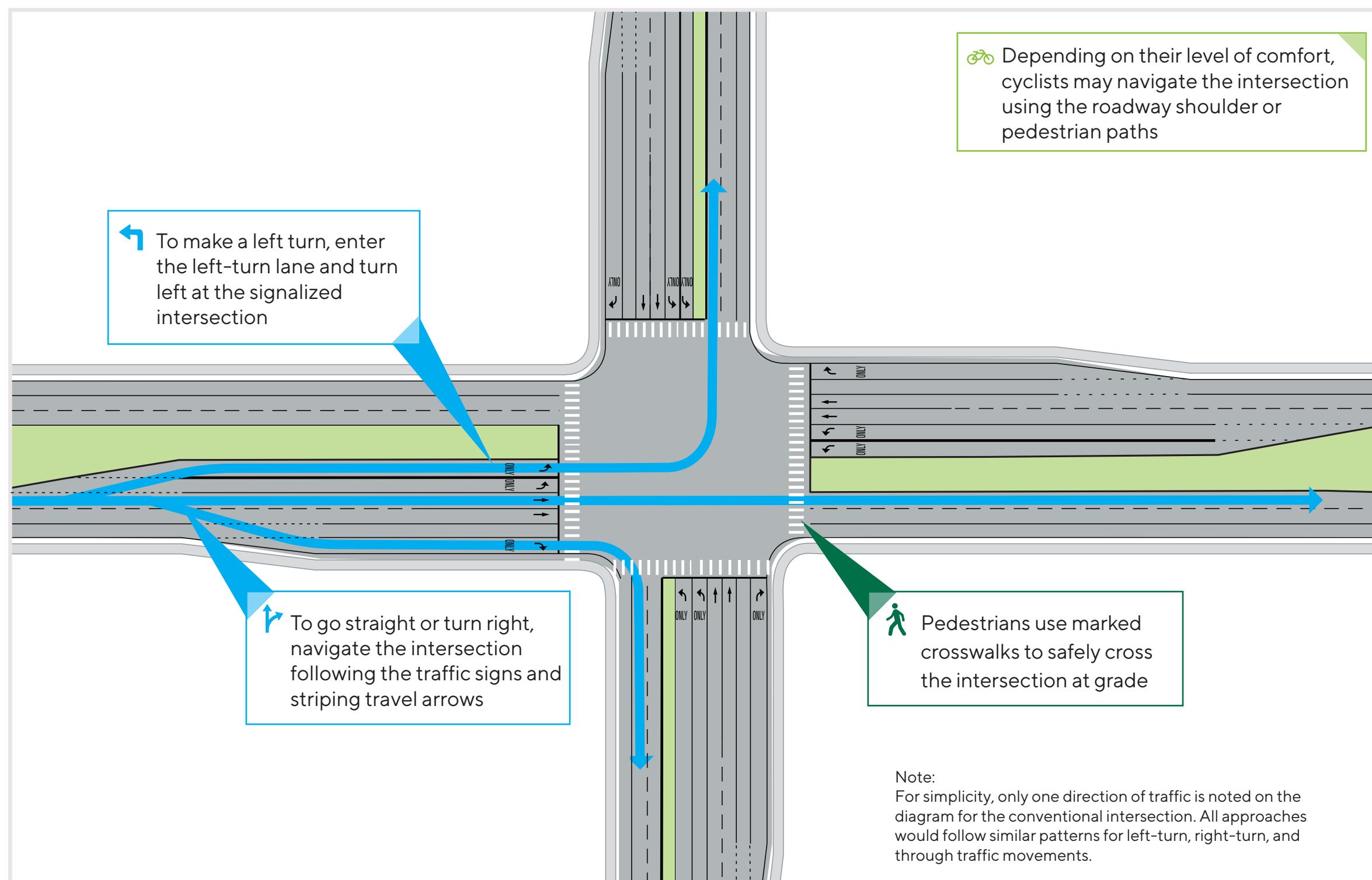
**22%** of crashes involved one vehicle going straight while another made a left turn from the opposite direction (one straight – one left), with another **20%** of crashes occurring when one vehicle traveling straight rear-ended another vehicle that was stopped (one straight – one stopped)

Source: TxDOT Crash Records Information System, 2019-2024 data



## CONVENTIONAL TRAFFIC SIGNAL (IMPROVED DUAL LEFT-TURN LANES)

**Common Uses** Used at busy intersections to manage high traffic volumes and improve turn movements.

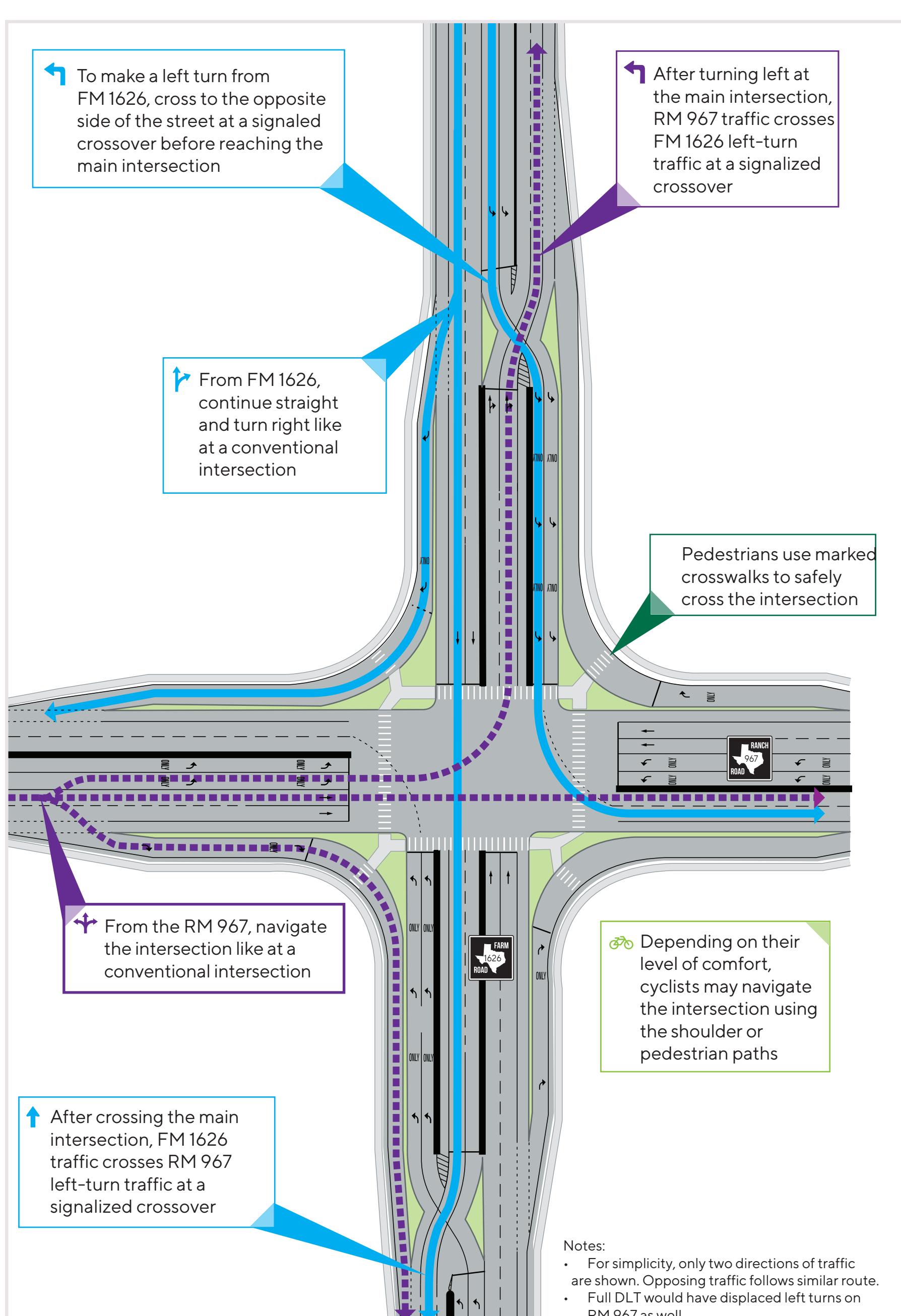


### Potential Benefits

- Minor traffic flow improvements in the morning rush hour
- Familiar and easily understood by drivers while accommodating multimodal travel and adding shared-use path for bicyclists and pedestrians
- Standard construction phasing and duration with moderate total project cost

### Potential Drawbacks

- No reduction in crashes or major improvements to traffic flow in the afternoon rush hour
- Requires additional right of way with moderate impacts to properties, driveways, and environment
- Longer pedestrian crossings



## DISPLACED LEFT TURN (ON FM 1626/RM 967)

**Common Uses** Used at intersections with moderate to heavy traffic volumes in all directions and heavy left-turn movements to improve traffic flow and reduce delay by allowing for simultaneous movement of left-turns and opposing through movements

### Potential Benefits

- Improves traffic flow in both morning and afternoon rush hour
- Reduces crash potential by up to 24%
- Accommodates multimodal travel and adds shared-use paths for pedestrians and cyclists

### Potential Drawbacks

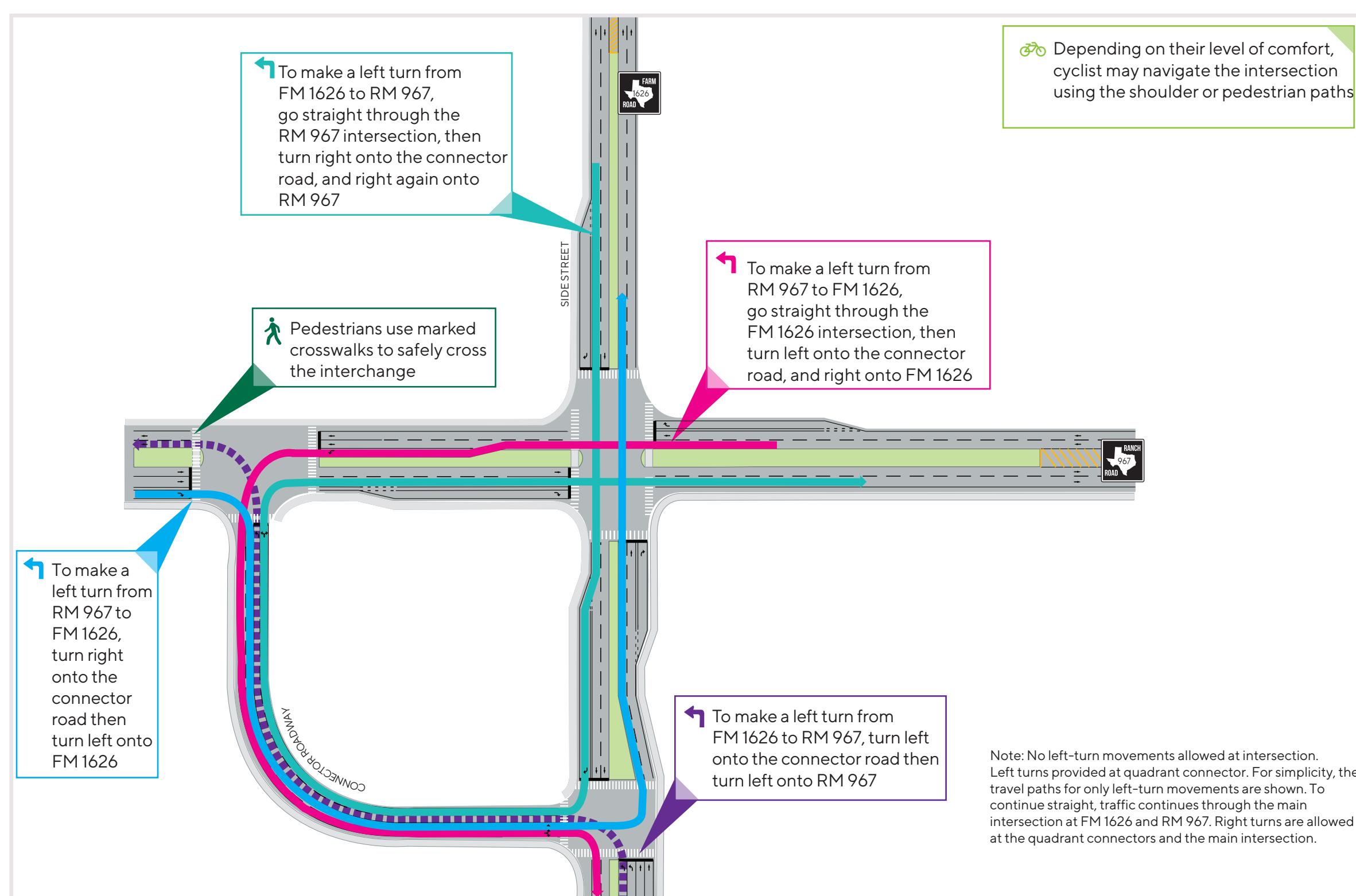
- Would require additional right of way with higher impacts to properties and driveways
- Higher impacts within Edwards Aquifer Recharge Zone, floodplain, and wetlands
- Complex construction phasing and longer duration with higher total project cost



# QUADRANT INTERSECTION CONCEPTS

## QUADRANT ROADWAY (SOUTHWEST)

**Common Uses** Used at intersections with a high-volume of through and left-turn movements. Improves traffic flow by redirecting left-turning traffic to a secondary intersection and connector road to the southwest rather than at the main intersection.



### Potential Benefits

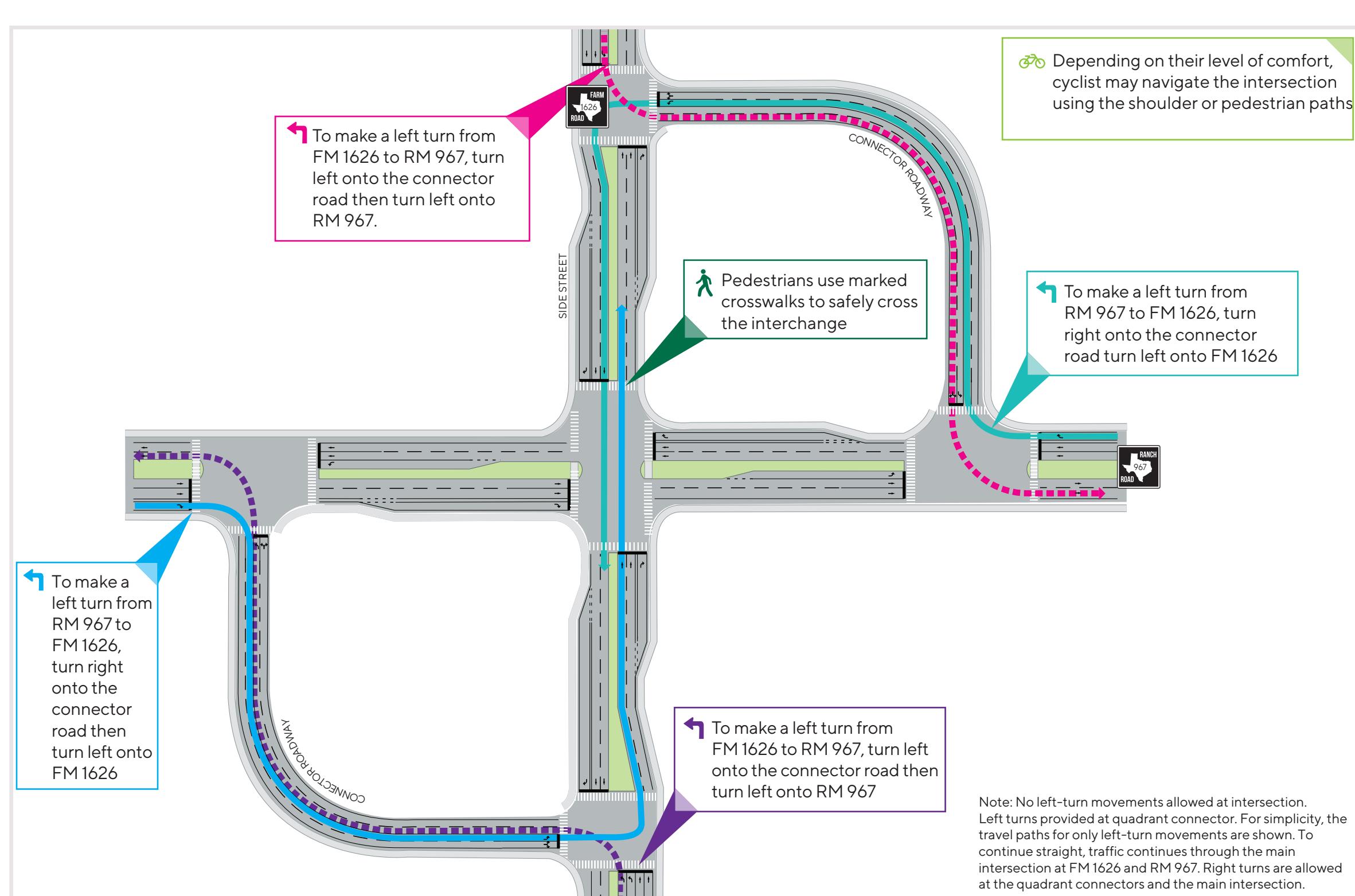
- Improves traffic flow, especially during morning rush hour
- Enhances safety with raised medians, shorter pedestrian crossings and fewer vehicle conflict points
- Accommodates multimodal travel and adds shared-use paths and safer crossings
- Standard construction phasing and duration with moderate project costs

### Potential Drawbacks

- Requires additional right of way with moderate impacts to properties and driveways and minor impacts to the environment
- Relocation of left-turn movements can be confusing to unfamiliar drivers

## QUADRANT ROADWAY (SOUTHWEST & NORTHEAST)

**Common Uses** Similar to the Quadrant Roadway (Southwest), this concept is used at intersections with a high-volume of through and left-turn movements. Improves traffic flow by redirecting left-turning traffic to one of two secondary intersections and connector roads, either to the southwest or to the northeast, rather than at the main intersection.



### Potential Benefits

- Improves traffic flow in both morning and afternoon rush hour
- Accommodates multimodal travel, adds shared-use paths, and provides shorter, safer crossings
- Providing two connector roads minimizes distance left-turn traffic is rerouted

### Potential Drawbacks

- Requires additional right of way with moderate impacts to properties, driveways, and the environment
- Relocation of left-turn movements can be confusing to unfamiliar drivers
- Higher total project cost, but would include standard construction phasing and duration

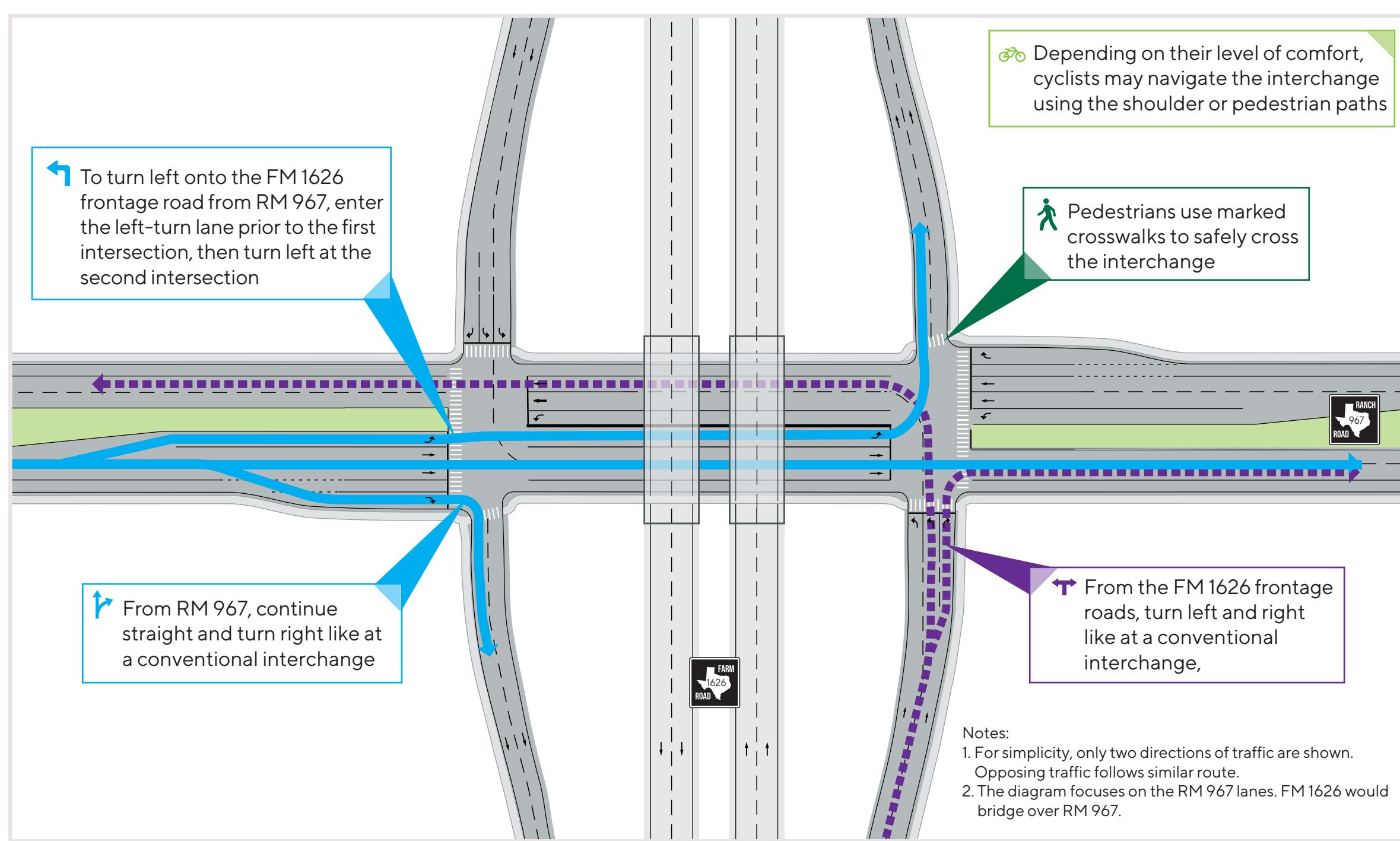


# INTERCHANGE CONCEPTS

## (Overpass/Underpass)

### DIAMOND INTERCHANGE

**Common Uses** Traditional interchange that is often used where a major highway or arterial with a high-volume of through traffic crosses over a secondary cross street to improve traffic flow and safety.



#### Potential Benefits

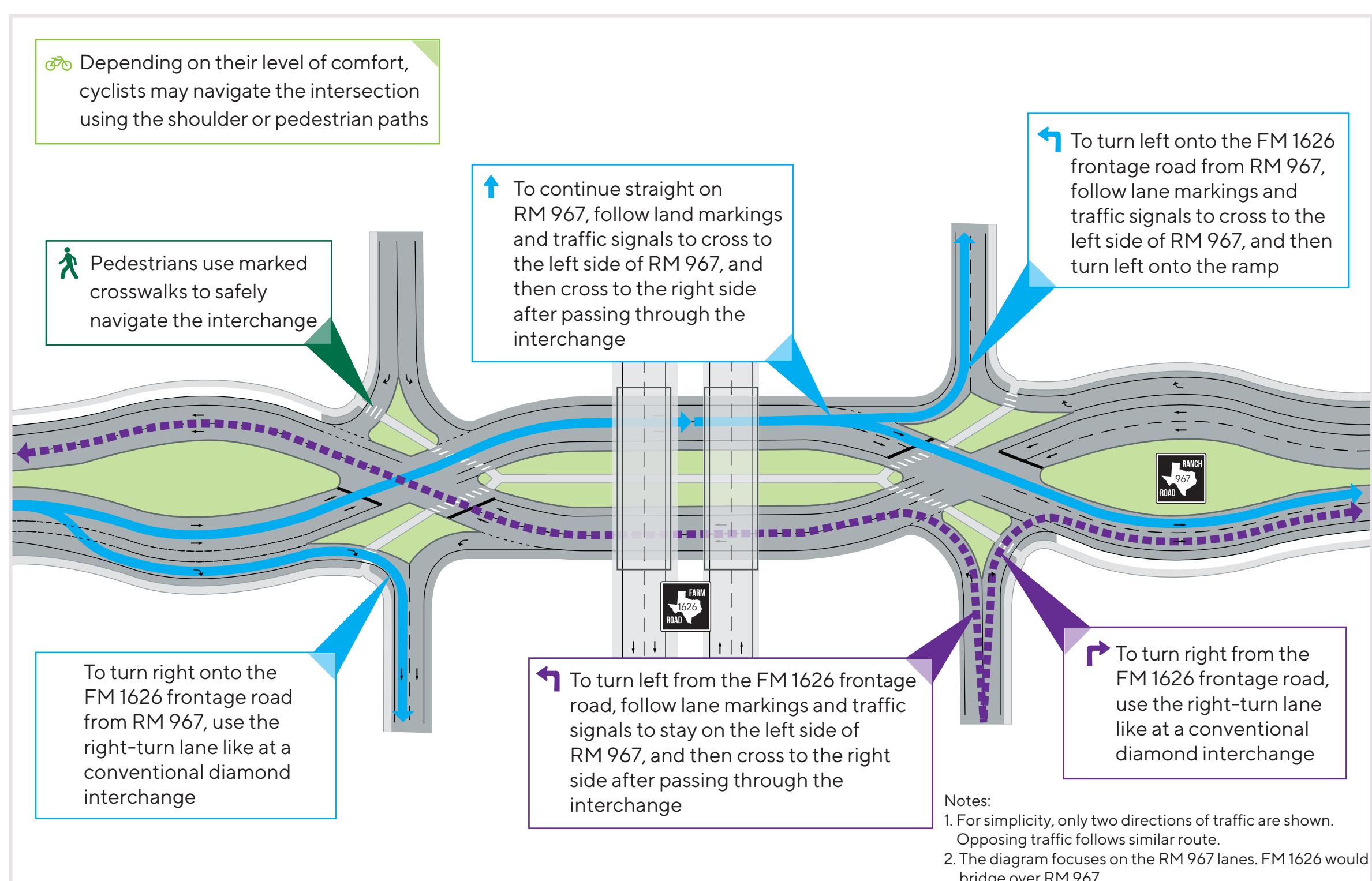
- Familiar and easily understood by drivers
- Significantly improves traffic flow during morning and afternoon rush hour
- Provides safety improvements by allowing the FM 1626 high-volume through traffic to overpass RM 967
- Accommodates multimodal travel, adds shared-use paths, and provides shorter crossings at the at-grade intersections

#### Potential Drawbacks

- Complex construction phasing and longer duration with higher total project cost
- Requires additional right of way with moderate impacts to properties and higher environmental impacts and concerns
- The overpass creates a visual barrier across FM 1626 that may not be desirable to adjacent development

### DIVERGING DIAMOND INTERCHANGE (DDI)

**Common Uses** Used at intersections with heavy left-turn movements to improve traffic flow and reduce delays by allowing for simultaneous movement of left-turns and opposing through movements



#### Potential Benefits

- Significantly improves traffic flow during morning and afternoon rush hour
- Reduces crash potential by up to 72%
- Accommodates multimodal travel, adds shared-use paths, and provides shorter crossings at the at-grade intersections

#### Potential Drawbacks

- Complex construction phasing and longer duration with higher total project cost
- Requires additional right of way with major impacts to property access and higher environmental concerns
- The overpass creates a visual barrier across FM 1626 that may not be desirable to adjacent development
- Multimodal crossings at intersections are circuitous

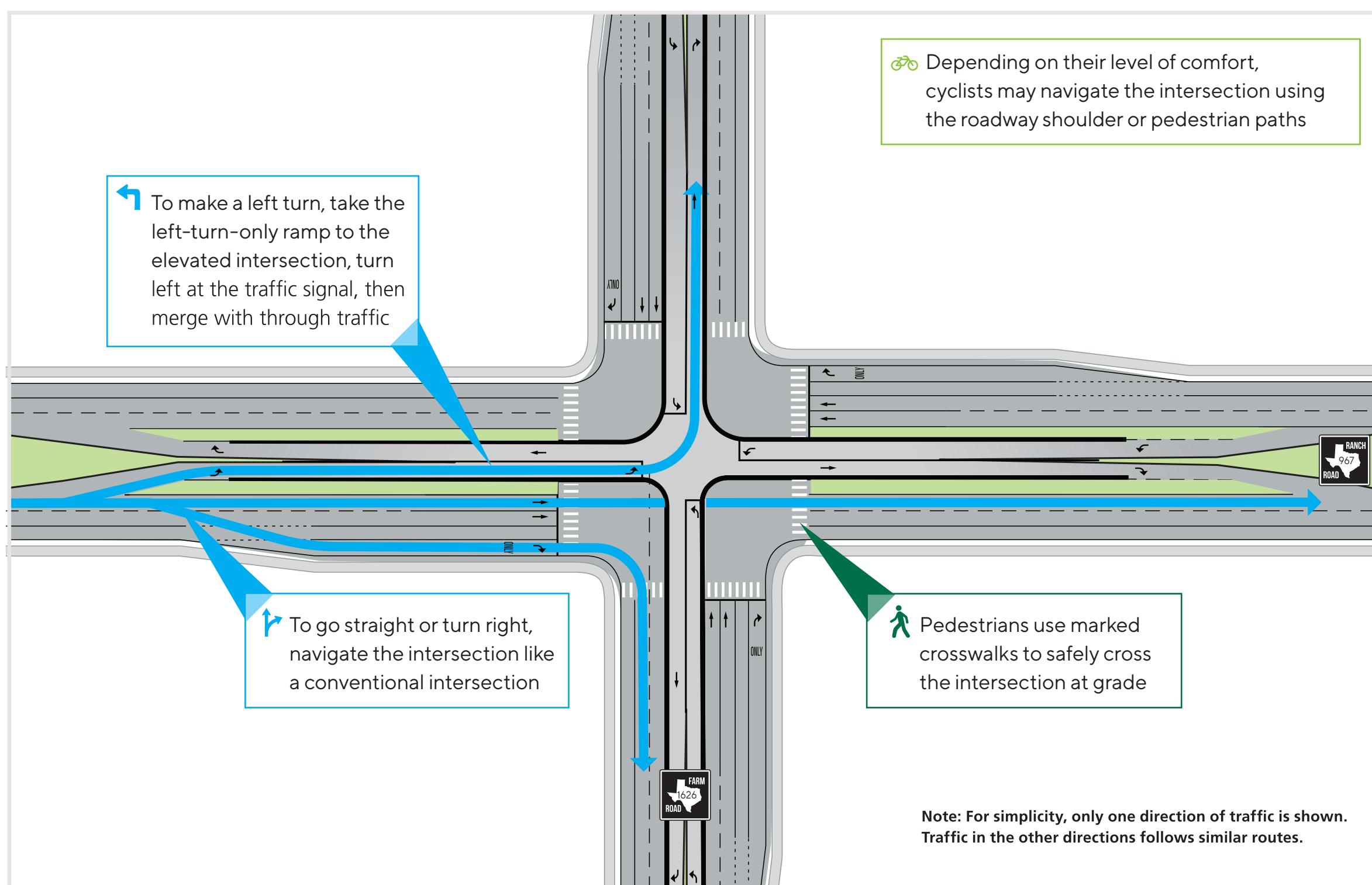


# INTERSECTION CONCEPT

## (Overpass/Underpass)

### CENTER TURN OVERPASS

**Common Uses** Used at intersections where the major and cross street have similar left-turn traffic volumes to improve traffic flow and safety by separating left-turns from through traffic with a bridge.



#### Potential Benefits

- Improves traffic flow during morning and afternoon rush hour
- Reduces vehicle conflict points by up to 25%
- Accommodates multimodal travel, adds shared-use paths, and eliminates conflicts with left-turn traffic

#### Potential Drawbacks

- Requires additional right of way with major impacts to property access and moderate environmental concerns
- Complex construction phasing and longer duration with higher total project cost
- Center turn overpass creates visual barrier across FM 1626 and RM 967 that may not be desirable to adjacent development

Source: [www.vdot.virginia.gov](http://www.vdot.virginia.gov)

### WE WANT TO HEAR FROM YOU!

After reviewing the proposed concepts, please share your thoughts to help guide the next steps in the FM 1626/RM 967 Intersection Study.



# CONCEPT EXAMPLES

## CONVENTIONAL TRAFFIC SIGNAL



## DISPLACED LEFT TURN



## QUADRANT ROADWAY



## DIAMOND INTERCHANGE



## DIVERGING DIAMOND INTERCHANGE (DDI)



## CENTER TURN OVERPASS



Source:  
[www.txdot.gov](http://www.txdot.gov)  
[www.vdot.virginia.gov](http://www.vdot.virginia.gov)  
[www.nyc.gov/html/dot](http://www.nyc.gov/html/dot)



# PROCESS & TIMELINE

1

## Data Collection and Analysis

FALL 2024  
WINTER 2025

- › Analyze existing traffic and safety information including existing traffic volumes and projections, crash data, and bicycle and pedestrian accommodations
- › Identify environmental features and constraints in the study area
- › Collect input from the community on preliminary intersection improvements



2

## Develop Potential Improvements

SPRING 2025

- › Use input and technical analyses from previous steps to identify and develop potential improvements to the FM 1626/RM 967 intersection
- › Establish evaluation criteria and quantify the impacts and features for each potential improvement concept
- › Collect input from the community on potential improvement concepts, including a no-build option

3

## Recommend Improvements & Prepare Final Report

SUMMER 2025

- › Use public input from previous steps to refine potential improvements
- › Submit final report that includes recommendations for improvements, project materials, and an implementation plan

**NOTE:** Future project development phases to advance recommendations from this study will be a multi-year process that will require additional funding. Future phases will include gathering additional community input and may also include performing detailed environmental studies, detailed design, right of way acquisition and utility coordination, and construction.



# **Appendix A-4**

## Open House #3

### Summary and Report Exhibits

# FM 1626/RM 967 Intersection Study

## Round 3 Outreach Summary

### OVERVIEW

The Capital Area Metropolitan Planning Organization (CAMPO) and the City of Buda are working together to conduct the FM 1626/RM 967 Intersection Study, which aims to identify, evaluate, and recommend potential improvements for the intersection.

CAMPO and the City invited the public to participate in the Study at a third and final in-person open house on Thursday, August 14, 2025 at the City of Buda Welcome Center, and a virtual open house and comment period from Monday, August 11 to Wednesday, September 10, 2025 at [campotexas.org/fm-1626-rm-967-intersection-study](http://campotexas.org/fm-1626-rm-967-intersection-study). The purpose of the open house was to share final recommendations, including short-, mid-, and long-term intersection improvements, key design considerations, and potential impacts.

Open house materials included informational exhibits, fact sheets, and an online survey, all of which were available in English and Spanish. The same information was provided at both the in-person and virtual open houses. Feedback was collected through printed and online surveys, as well as emailed, mailed, and verbal comments. A total of 120 comments were received during the comment period, 101 online submissions in English, 2 online submissions in Spanish, 2 written submissions, and 15 roll plot comments – including 20 attendees at the in-person meeting.

## NOTIFICATION TOOLS

### CAMPO Webpage Announcement

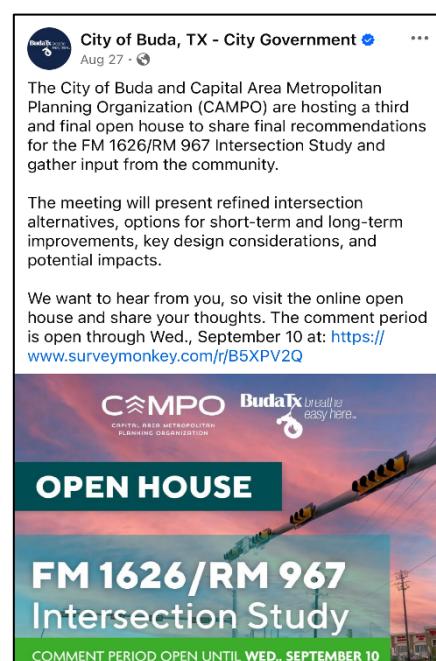
An announcement was posted on the CAMPO website and project webpage on August 1, 2025, notifying the public about the study, the in-person open house, and the launch of the virtual open house and comment period.

### City of Buda Website Announcement

An announcement was posted on the City of Buda website on August 1, 2025, notifying the public about the study, the in-person open house, and the launch of the virtual open house and comment period.

### Social Media

Information about the study and how to participate was shared through CAMPO's Facebook and Instagram accounts, as well as the City of Buda's Nextdoor platform from August 5 – September 5, 2025





## Media Outreach

A media release was distributed to local media outlets throughout the region on August 8, 2025. A media release was also posted to the City of Buda website on August 8, 2025.

## Stakeholder Phone Calls & Emails

The outreach team made direct phone calls and emails to stakeholders including HOA representatives, businesses, and community organizations, as well as elected officials from the City of Buda and greater Hays County region to invite them to the CAMPO public open house. Attachments, including a study fact sheet and flyer, were included in the email communications.

# FM 1626/RM 967 INTERSECTION STUDY

The Capital Metropolitan Planning Organization (CAMPO) and the City of Buda are working together to identify, evaluate, and recommend potential improvements for the FM 1626 and RM 967 intersection in Buda, TX. CAMPO and the City of Buda are hosting a third in-person open house to share final recommendations for the FM 1626 and RM 967 Intersection, including refined short-, mid-, and long-term intersection improvements, key design considerations, and potential impacts.

**IN-PERSON OPEN HOUSE**

Thursday, August 14, 2025

City of Buda Welcome Center  
303 Main St.,  
Buda, TX 78610.

5 – 7 p.m.

**VIRTUAL OPEN HOUSE**

August 11 – September 10, 2025

[bit.ly/FM1626-RM967](http://bit.ly/FM1626-RM967)

Comments must be received or postmarked by Wednesday, September 10, 2025, to be included in the open house record.

**»» QUESTIONS OR COMMENTS**

**FM 1626/RM 967 Project Team**

[FM1626andRM967Study@gmail.com](mailto:FM1626andRM967Study@gmail.com)

(512) 651-3964

FM 1626/RM 967 Intersection Study, c/o CD&P  
PO Box 5459, Austin, TX 78763

Scan the QR code to visit the virtual open house!

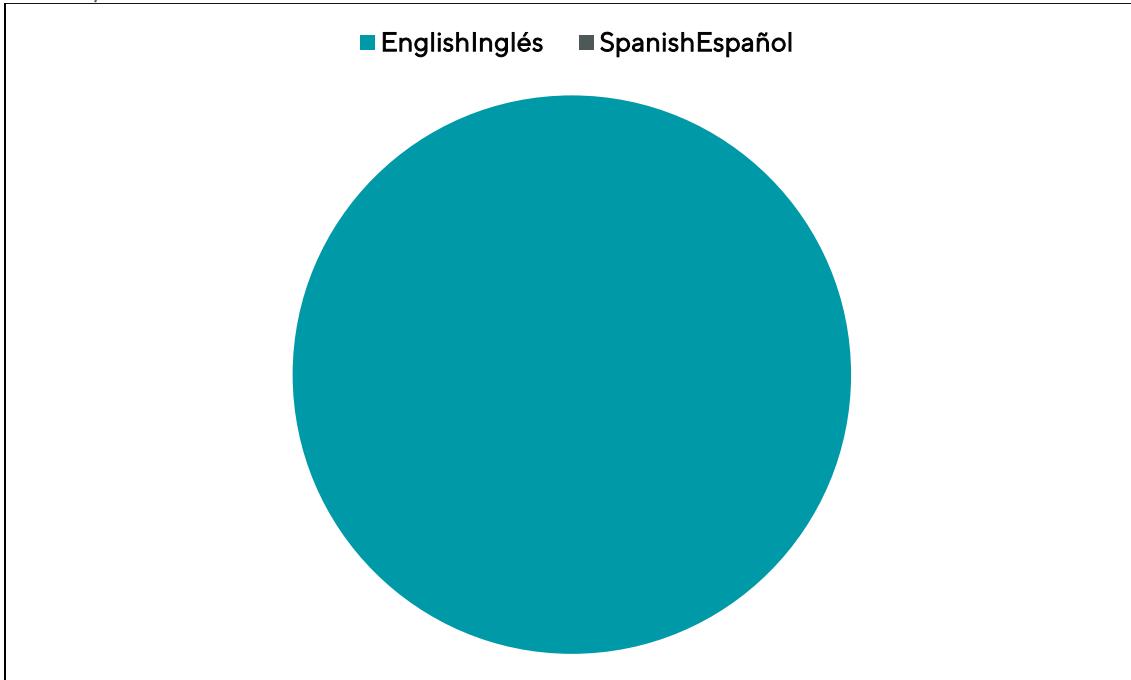
## WHAT WE HEARD

### Survey Summary

*105 completed or partially completed surveys received*

**Q1 – Please select the language you would like to take the survey in?**

*107 responses*



**Q2 – What zip code do you live in?**

**Top five zip codes provided:**

*79 responses*

Zip code	City/State
78610	Buda, TX
78640	Kyle, TX
78610-9246	Buda, TX
78652	Manchaca, TX
78666	San Marcos, TX

**Q3 – What zip code do you commute or travel to often?**

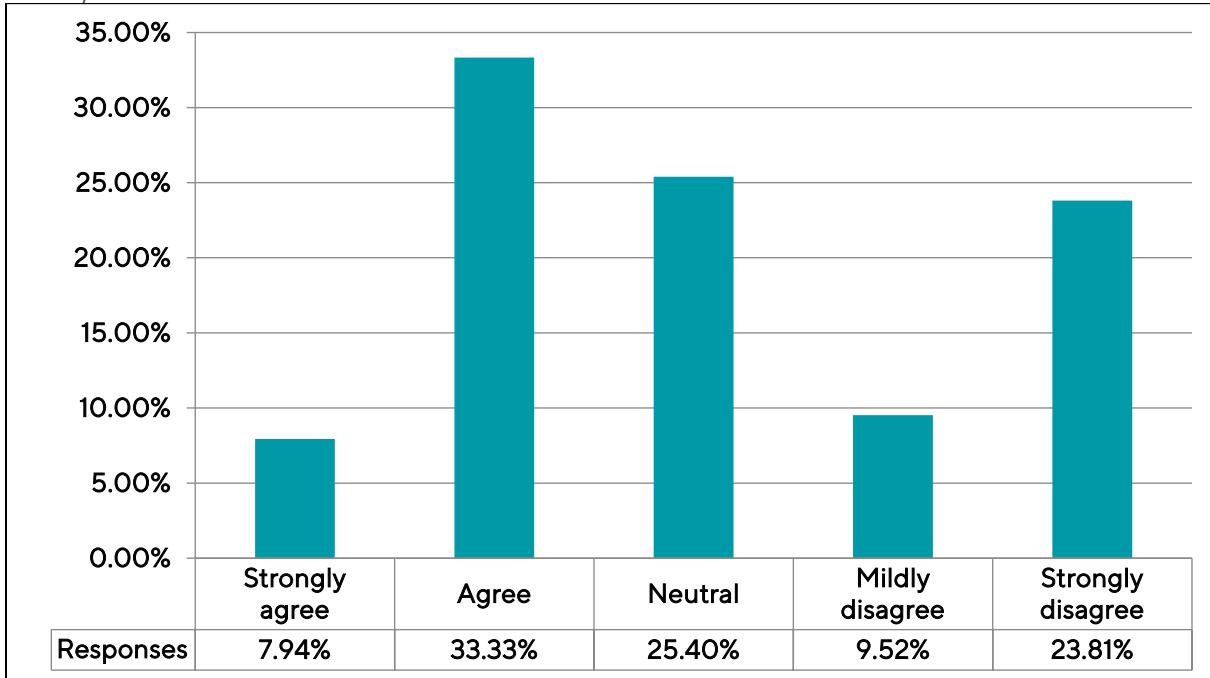
Top five zip codes provided:

78 responses

Zip code	City/State
78610	Buda, TX
78745	Austin, TX
78748	Austin, TX
78640	Kyle, TX
78701	Austin, TX

**Q4 – To what extent do you agree that the recommended Displaced Left Turn concept meets the overall goals and objectives of the study (improving safety, enhancing mobility, and supporting future growth)?**

67 responses



**Q4 – Additional Comments: Key Themes**

**Design is confusing and unfamiliar**

- Many commenters find the displaced left-turn concept difficult to understand and potentially dangerous due to its uncommon design in the area.

### Doubt about effectiveness in reducing congestion

- Several believe the proposal won't meaningfully improve traffic flow and may worsen backups, especially with limited lane capacity and merging issues.

### Support for alternative infrastructure solutions

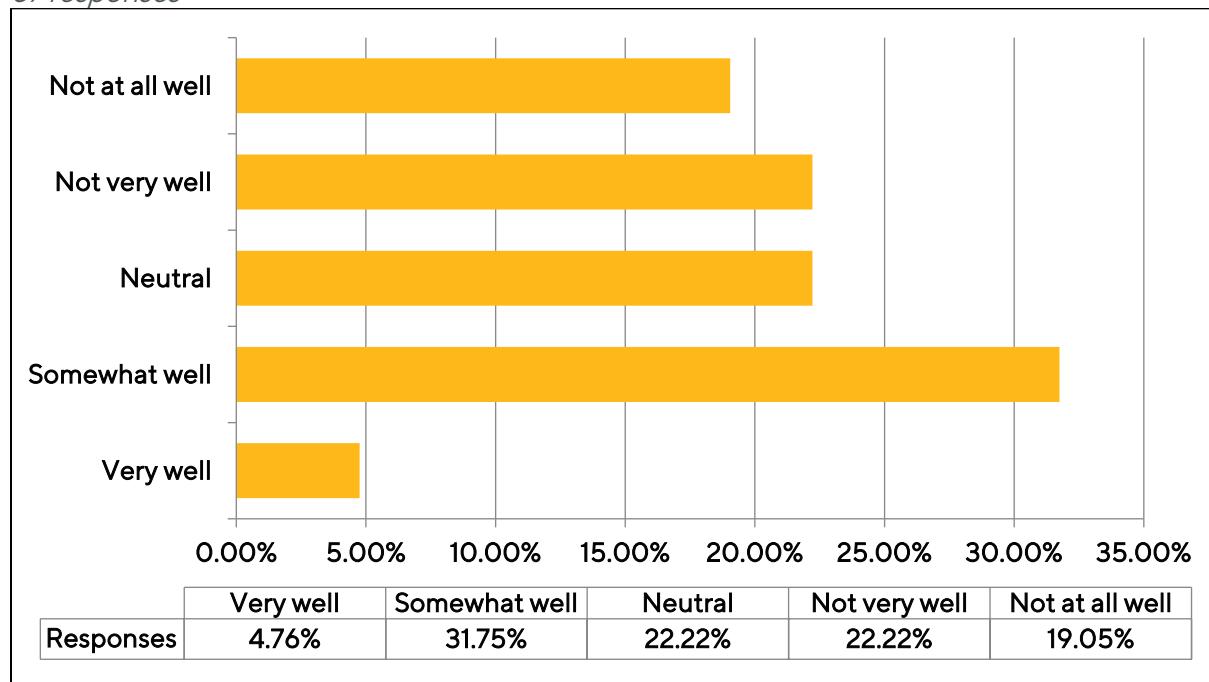
- Suggestions include extending turn lanes, widening roads, or building an overpass instead of implementing a complex intersection design.

### Some cautious optimism, but with concerns

- A few acknowledge potential benefits, particularly for left turns, but question whether the design delivers enough improvement to justify the change.

### Q5 – How well do you feel the recommended Displaced Left Turn concept addresses the specific transportation needs of this area?

67 responses



### Q5 – Additional Comments: Key Themes

#### Ongoing concerns about through-traffic and right turns

- Several commenters note that while left-turn movements may improve, through-traffic and short right-turn lanes remain major bottlenecks, especially for drivers coming from Kyle or trying to head north on 1626.

### Support for an overpass as a more effective long-term solution

- Many express a preference for building an overpass instead of implementing a displaced left-turn, citing long-term growth and the need for a more permanent fix.

### Uncertainty and need for clarity

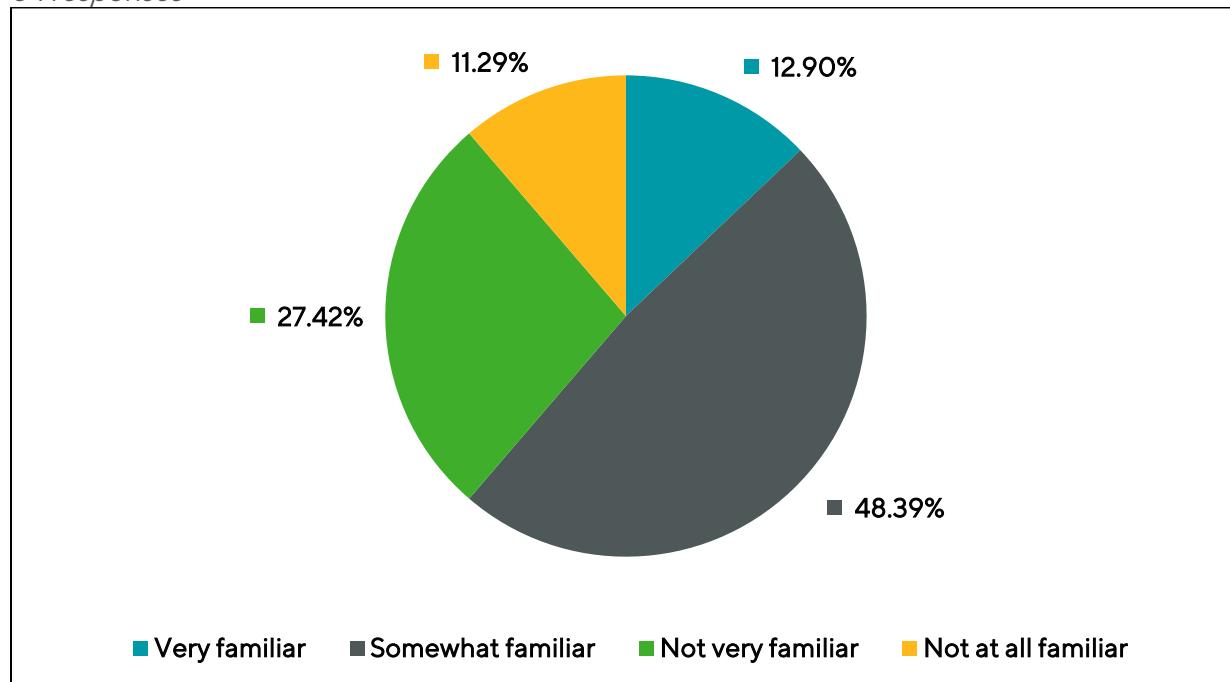
- Some users mention difficulty understanding how the design functions or how specific movements (like leaving CVS and heading north) would be handled, indicating a need for better communication and visualizations.

### Mixed short-term optimism, long-term doubt

- A few see potential short-term improvements if implemented immediately but worry it won't be enough to accommodate future growth or the scale of current congestion.

### Q6 – How familiar do you feel with the features and benefits of the recommended Displaced Left Turn concept?

64 responses



### Q6 – Additional Comments: Key Themes

#### Confusion and Complexity

- Many users express confusion or concern about the complexity of the design and navigation, especially for drivers unfamiliar with it.

## Familiarity Helps, but Doesn't Eliminate Confusion

- Even those who are familiar with similar setups (like Slaughter & Mopac) still find them confusing at times.

## Desire for Simpler Infrastructure

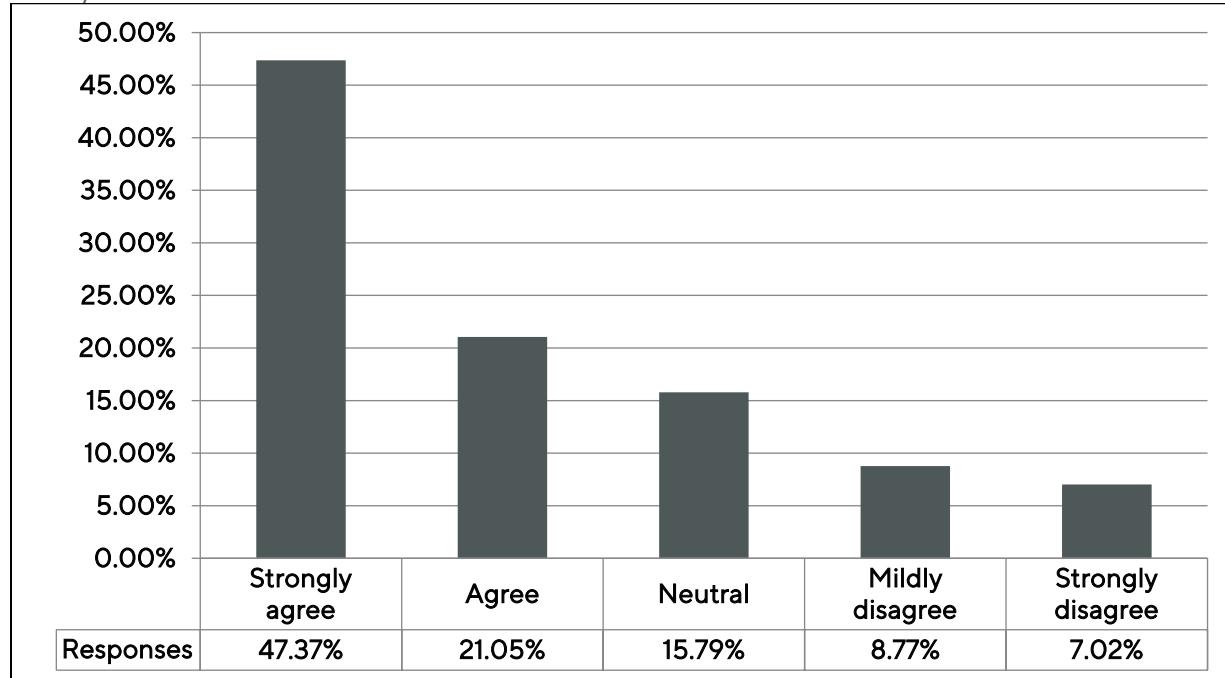
- Some users suggest straightforward alternatives like an overpass, indicating frustration with the current setup.

## Mixed Reception and Acceptance Over Time

- While some initially found it strange or confusing, they acknowledge that people may get used to it over time and see it as a necessary change.

**Q7 – To what extent do you agree that the recommended Diamond Interchange concept meets the overall goals and objectives of the study (improving safety, enhancing mobility, and supporting future growth)?**

61 responses



## Q7 – Additional Comments: Key Themes

### Initial Confusion with New Traffic Designs

- Many commenters find the traffic setup confusing, especially when first encountering it.

## Experience Doesn't Guarantee Clarity

- Even users familiar with similar intersections elsewhere report ongoing confusion when navigating them.

## Preference for Traditional Solutions

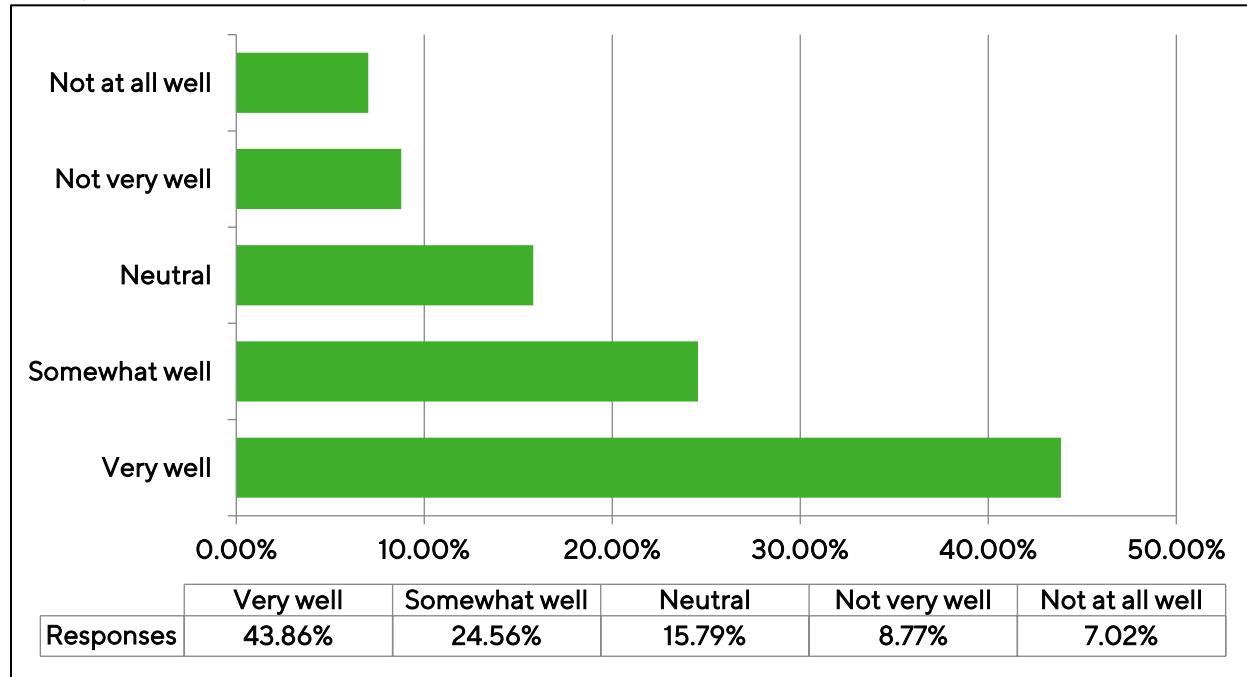
- Some users express frustration and advocate for simpler, more conventional solutions like building an overpass.

## Gradual Adjustment and Understanding

- Despite early confusion, a few users acknowledge that understanding improves over time and accept the change as necessary.

## Q8 – How well do you feel the recommended Diamond Interchange concept addresses the specific transportation needs of this area?

61 responses



## Q8 – Additional Comments: Key Themes

### Support for Long-Term Traffic Relief

- Some users believe the proposed changes will significantly reduce traffic strain over time.

### Concerns About Cost and Future Expansion

- There is worry that future growth and overpass construction could be expensive and disruptive.

### Desire for Immediate, Simple Solutions

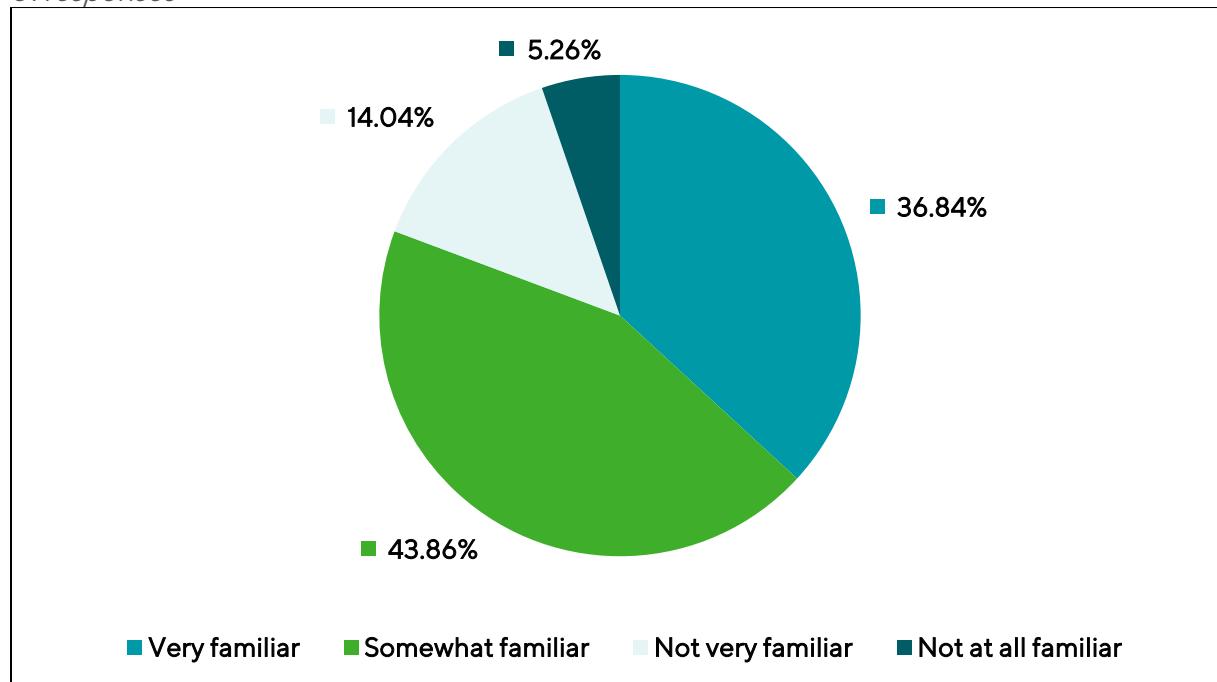
- A few users express frustration and push for a straightforward fix—such as building an overpass—as the most effective option.

### Importance of Local Access and Pedestrian Connectivity

- One commenter emphasizes the need for improvements that benefit local residents, including better pedestrian access across key roads (e.g., FM 1626).

### Q9 – How familiar do you feel with the features and benefits of the recommended Diamond Interchange concept?

61 responses



### Q9 – Additional Comments: Key Themes

#### Ongoing Preference for an Overpass Solution

- Once again, there's a clear call for a simpler, direct solution, building an overpass to ease traffic concerns.

#### Familiarity Bias

- Some users acknowledge their judgment is influenced by what they're used to (traditional setups), making it harder to assess newer concepts like a DLT (Displaced Left Turn) objectively.

## Typical Design Expectations

- One comment frames the proposal as standard for freeway underpasses, suggesting it may not be as radical or confusing as others think.

## Map and Visual Clarity

- At least one user indicates they understand the visual/map provided, suggesting that with the right information, comprehension improves.

**The survey included the following optional general comments section so commentors could provide general feedback on the FM 1626/RM 967 Intersection Study.**

*41 responses*

**Q10 – Please share any additional comments you have on the FM 1626/RM 967 Intersection Study.**

### Key Themes:

#### Widespread Traffic Congestion and Frustration

- Strong concern over extreme delays and backups at the FM 1626/RM 967 intersection, especially during peak hours and school traffic times.
- Left turns and short light cycles are repeatedly called out as major pain points.
- Many describe daily commutes doubling in time, particularly during the school year.

#### Strong Support for Overpass or Flyover Solutions

- Overwhelming support for an overpass or flyover, seen as the most effective, long-term fix.
- Many consider interim or partial measures as inadequate given current and projected traffic volumes.
- Some suggest design considerations like exit ramp length and connecting nearby roads (e.g., Elm Grove).

#### School and Neighborhood Safety Concerns

- Specific attention on school zones (Johnson HS, Dahlstrom MS, Elm Grove Elem), noting young drivers, bus traffic, and pedestrian safety.
- Concerns about cut-through traffic in neighborhoods like Woods of Cimarron, where there are no sidewalks and high foot traffic.



## Pedestrian, Cyclist, and Local Safety Emphasis

- Multiple calls to improve safety for non-drivers, including footbridges, bike lanes, and barriers to prevent risky turns.
- Dangerous behaviors (e.g., cutting across traffic or using turn lanes improperly) were highlighted as hazards made worse by poor design.

## Desire for Short-Term Fixes and Phased Implementation

- Strong desire for immediate relief, even through small adjustments (light timing changes, additional turn lanes, merge improvements).
- Some suggest interim fixes like signal adjustments or better signage until a larger project is complete.

## Growth, Development, and Long-Term Planning

- Several responses stress that any plan must account for rapid area growth, new housing developments, and commercial additions (e.g., new stores and Chick-fil-A).
- Warnings against repeating past planning mistakes (e.g., Oak Hill) without long-term vision.
- FM 1626 is viewed as a major thoroughfare, potentially a mini-highway, and many feel it should function more like one—with fewer signals and more continuous flow.



WELCOME

# FM 1626/RM 967 INTERSECTION STUDY OPEN HOUSE

## IN-PERSON OPEN HOUSE

Thursday, August 14, 2025

**City of Buda Welcome Center**  
303 Main St., Buda, TX 78610

## VIRTUAL OPEN HOUSE

Monday, August 11 -  
Wednesday, September 10, 2025

[bit.ly/FM1626-RM967](http://bit.ly/FM1626-RM967)

## OPEN HOUSE PURPOSE

Learn about the study  
Share your thoughts





# CAMPO 101

# WHAT IS CAMPO?

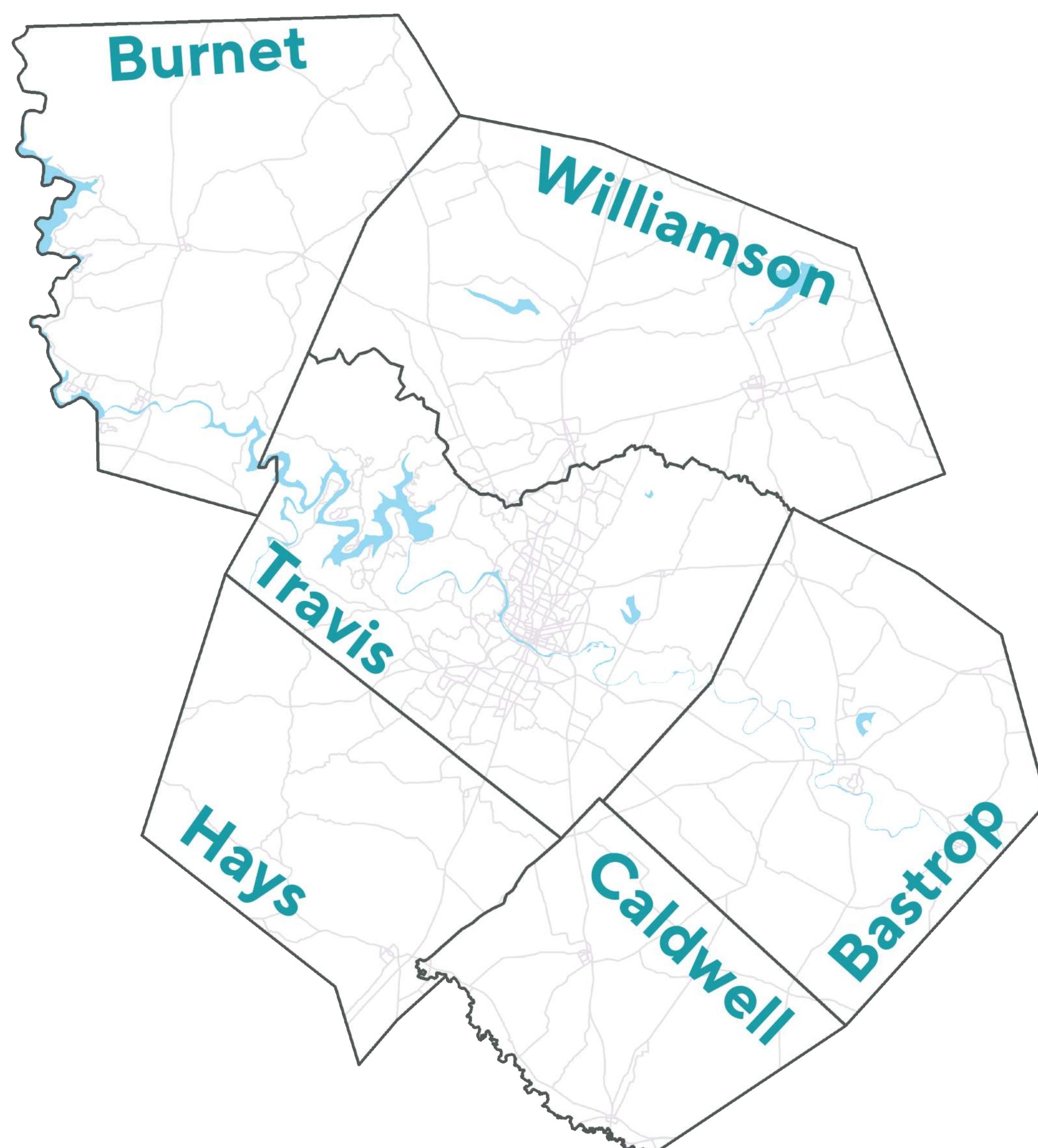
The Capital Area Metropolitan Planning Organization (CAMPO) is the Austin region's transportation decision-making body, coordinating regional transportation planning between counties, local governments, and transportation agencies. The organization is made up of a 22-member Transportation Policy Board (TPB) that makes decisions on CAMPO policy and allocates federal transportation funds for the region, a 24-member Technical Advisory Committee (TAC) that provides technical expertise and recommendations to inform the Transportation Policy Board, and the Executive Director, who reports to the TPB and oversees the CAMPO staff.

# WHAT IS AN MPO?

A metropolitan planning organization, or MPO, is a regional transportation planning entity designated by the federal government beginning in 1962. MPO are required in areas with a population greater than 50,000. CAMPO is one of 25 MPOs in Texas, and one of 408 in the United States.

# WHERE IS CAMPO?

CAMPO conducts regional transportation planning work within six counties: Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson.

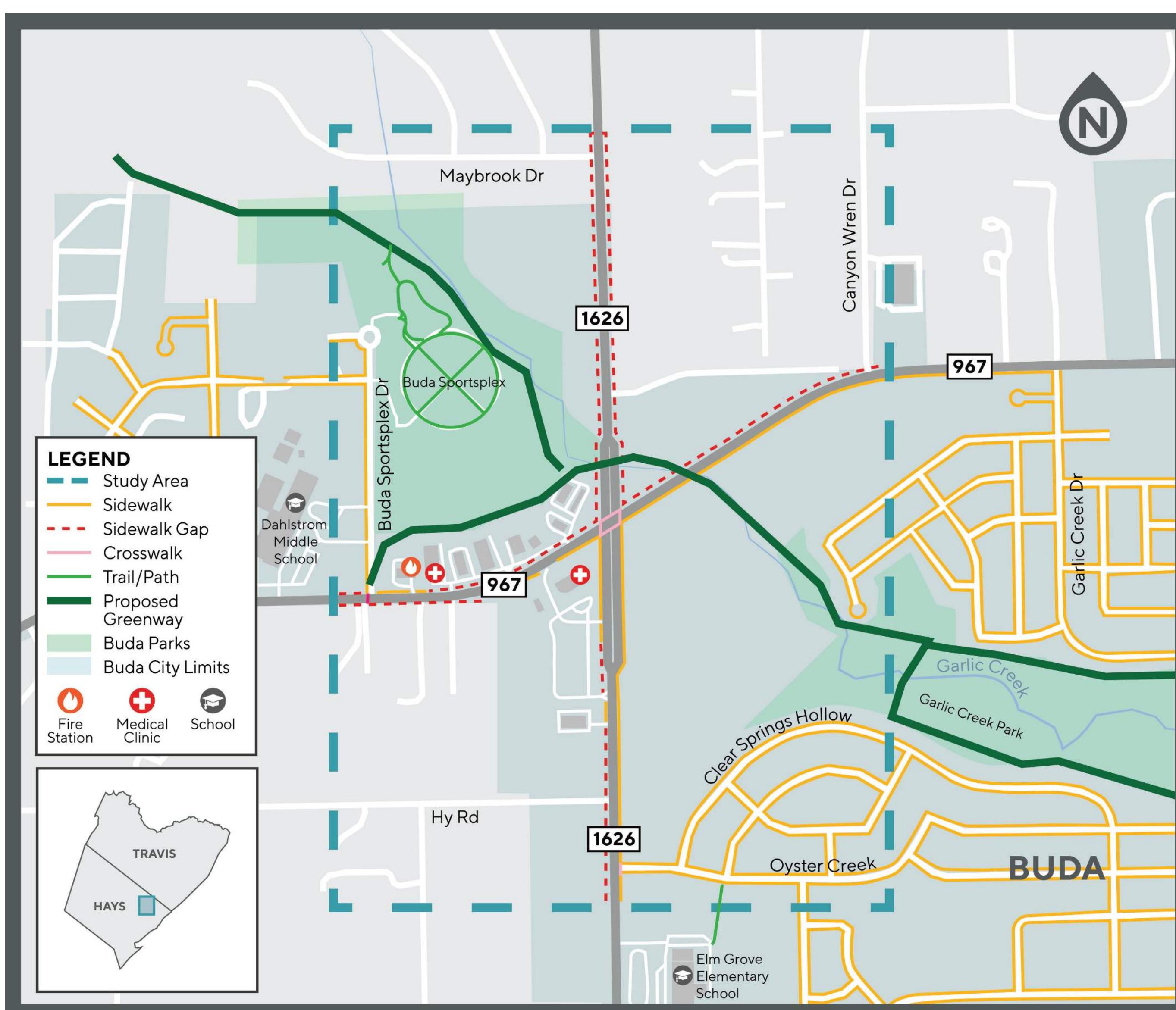


## STUDY OVERVIEW

The **Capital Area Metropolitan Planning Organization (CAMPO)** and the **City of Buda** are working together to identify, evaluate, and recommend potential improvements for the **FM 1626/RM 967** Intersection in the City of Buda.

## WHY THE STUDY IS NEEDED

This intersection connects two essential commuter roads in Hays County. FM 1626 functions as a primary north-south route in eastern Hays County, paralleling Interstate 35, while RM 967 serves as a principal east-west corridor in the area. CAMPO and the City of Buda are conducting this study to identify safety and mobility enhancements and plan as the region continues to grow.



## WHAT THE STUDY WILL ACCOMPLISH

The Intersection Study will use public input to help CAMPO and the City of Buda define and identify feasible options for improvements to FM 1626/RM 967. The study will include an analysis of current and projected traffic volumes, crash hotspots, environmental features, needs and concerns identified in stakeholder and public input and will result in recommendations for improvements.



## STUDY GOALS AND OBJECTIVES

### Identify and recommend solutions to improve safety

- › Evaluate and consider crash data, intersection improvements, bicycle and pedestrian travel, and input from the community



### Enhance mobility and functionality of the intersection

- › Improve traffic operations to create a reliable and consistent network for the movement of people and goods through and within the intersection
- › Improve access to adjacent businesses, neighborhoods, and schools



### Enhance multimodal movement, operations, and safety

- › Consider and plan for transportation needs for multimodal use of the intersection, including improving facilities for bicyclists, pedestrians, and transit



### Develop community-supported recommendations for the intersection

- › Employ strategies to maximize participation across diverse audiences that reflect the community, including outreach to underreached communities and those with Limited English Proficiency
- › Consider and incorporate feedback from the community in each step of the study development process



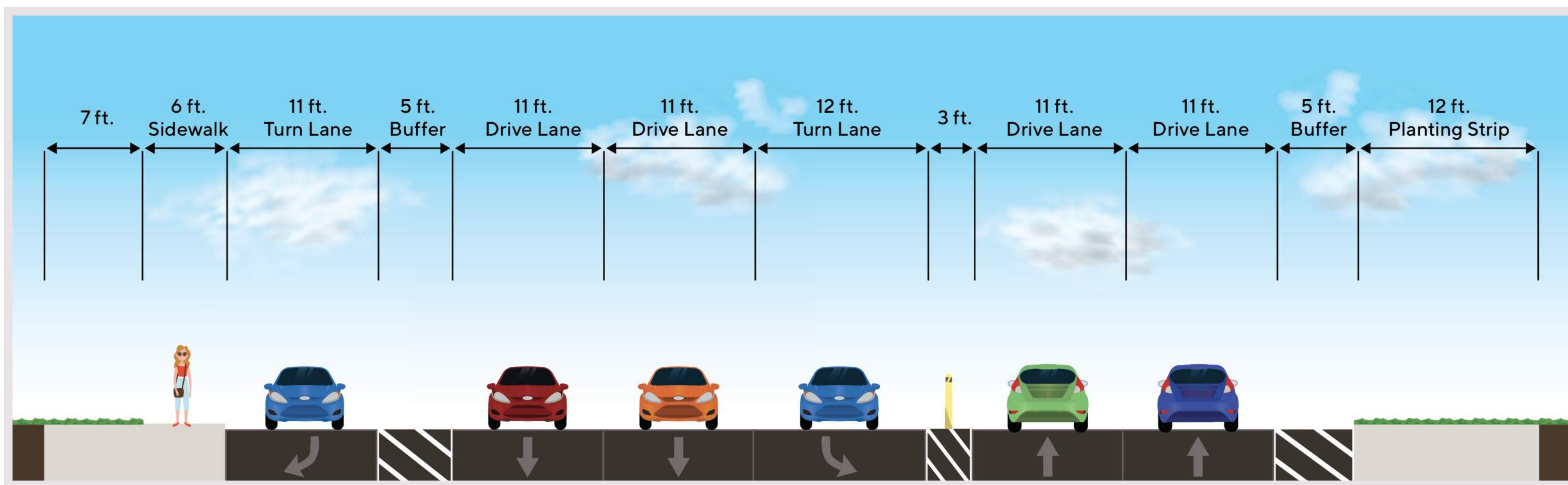


## FM 1626/RM 967 INTERSECTION

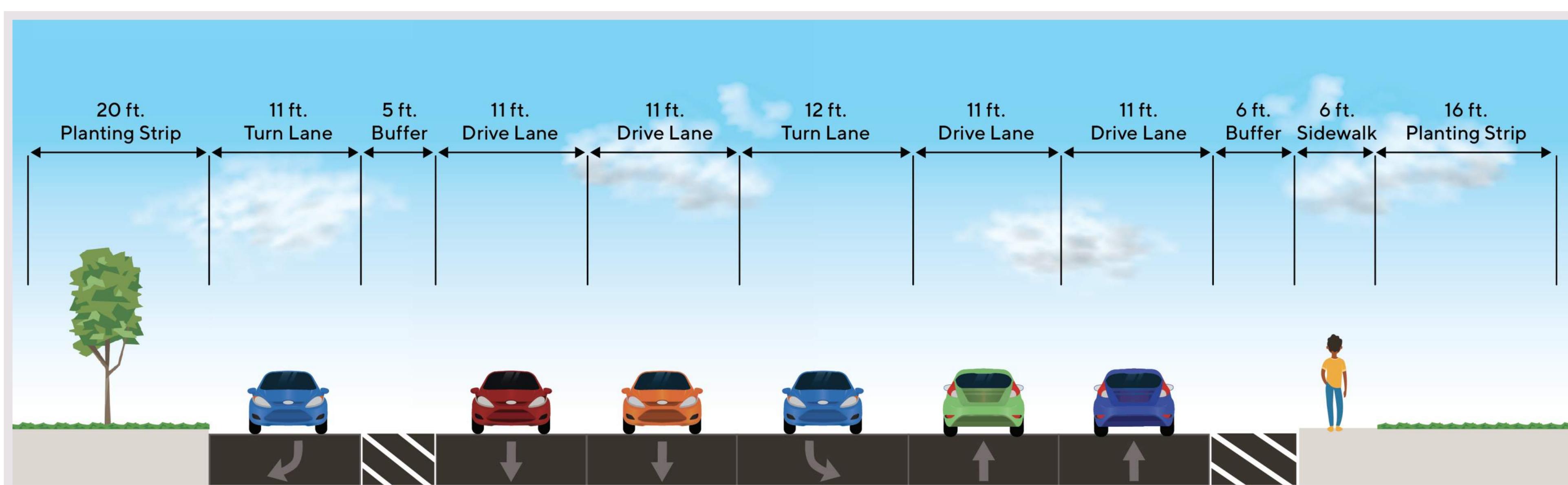
### FM 1626/RM 967 INTERSECTION

- › Two lanes in each direction (North/South (FM 1626) – East/West (RM 967))
- › Single dedicated left-turn lane and right-turn lane at each intersection approach
- › Discontinuous sidewalks & minimal bicycling accommodations

### FM 1626 – NORTH OF INTERSECTION



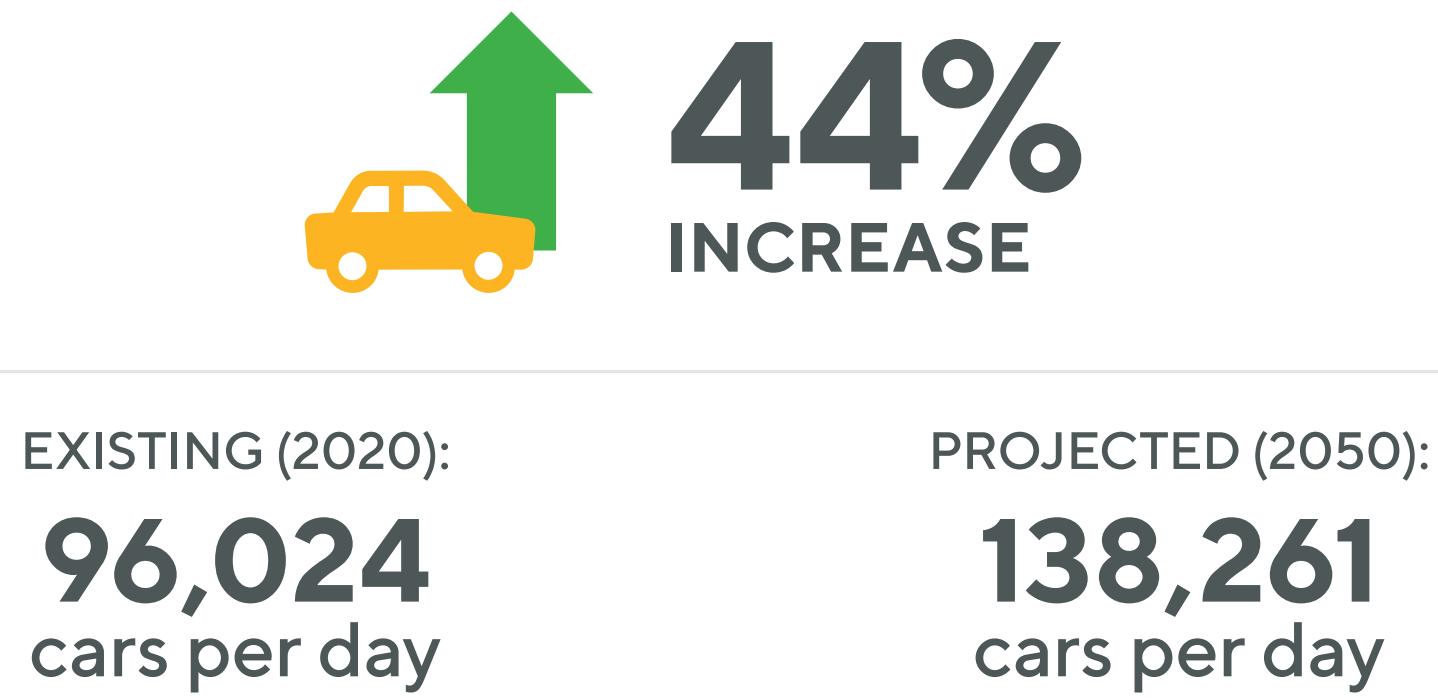
### RM 967 – EAST OF INTERSECTION



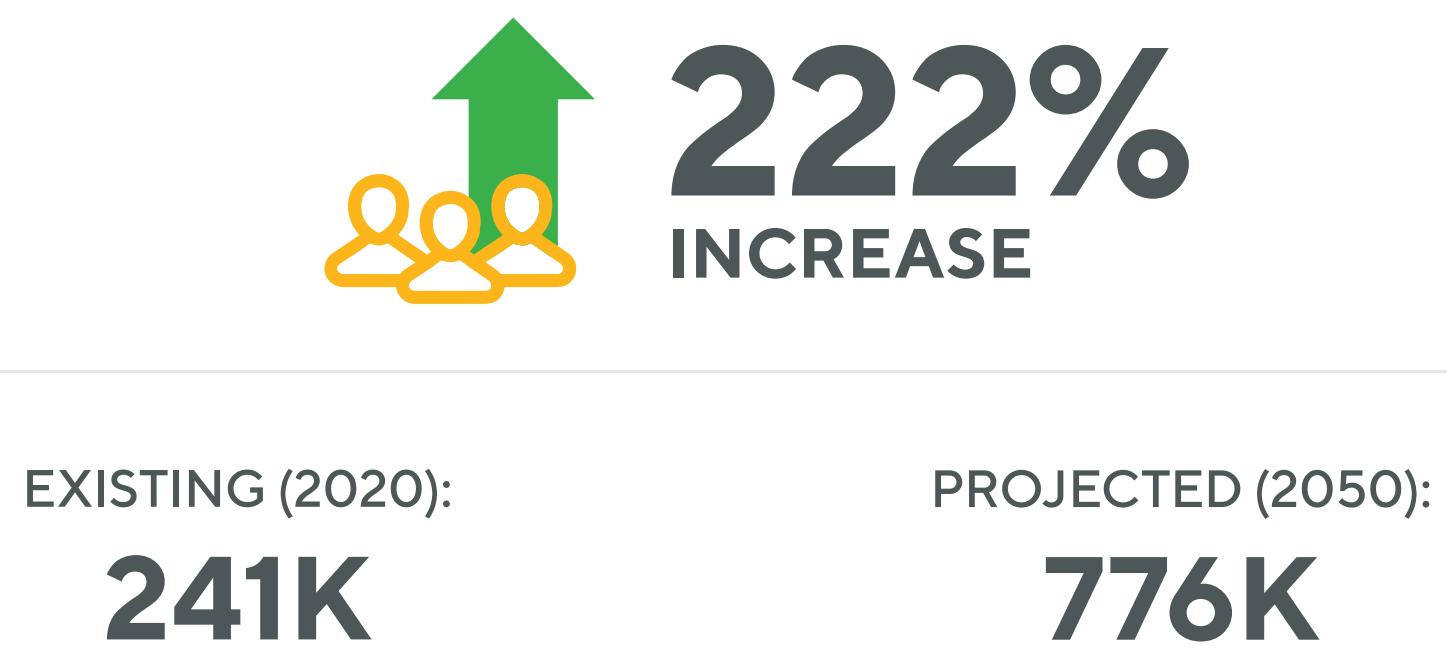


# FM 1626/RM 967 INTERSECTION TRAFFIC DATA

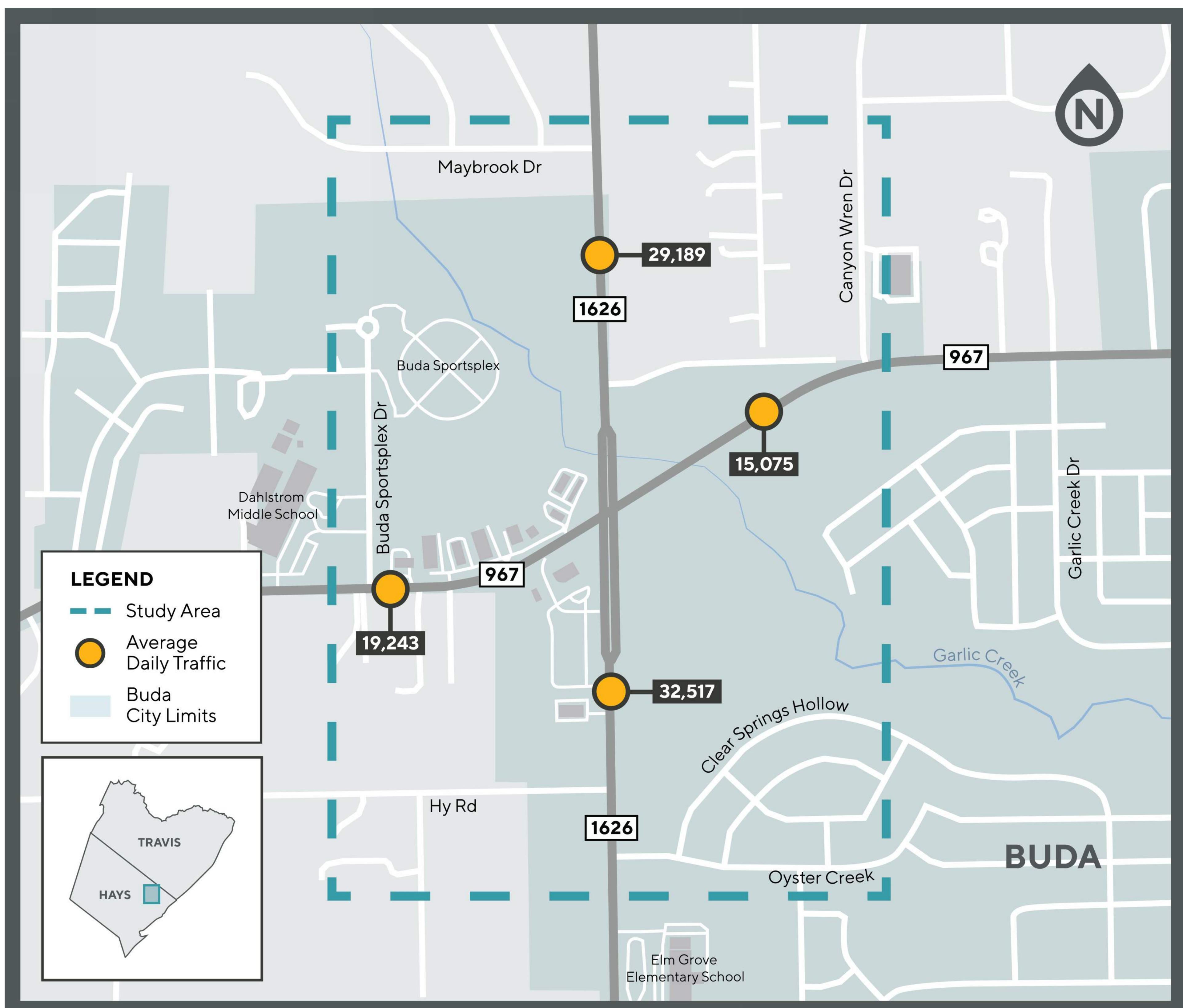
## FM 1626/RM 967 AVERAGE DAILY TRAFFIC



## HAYS COUNTY POPULATION



Sources: US Census Bureau, CAMPO 2050 Regional Transportation Plan data



Source: TxDOT Traffic Count Database System, 2023 data





# FM 1626/RM 967 INTERSECTION CRASH DATA

## 2019 – 2024 CRASH SUMMARY



### Total Crashes

**205** total crashes were reported in the study area between January 2019 and September 2024



### Crash Locations

**55%** of crashes occurred at or near intersections within the study area



### Crash Severity

**82%** of crashes resulted in no injuries, while less than **3%** involved serious injuries



### Crash Types

**27%** of crashes involved left-turn collisions, with a large number happening at or near the FM 1626 and RM 967 intersection



### Crash Patterns

**22%** of crashes involved one vehicle going straight while another made a left turn from the opposite direction (one straight – one left), with another **20%** of crashes occurring when one vehicle traveling straight rear-ended another vehicle that was stopped (one straight – one stopped)

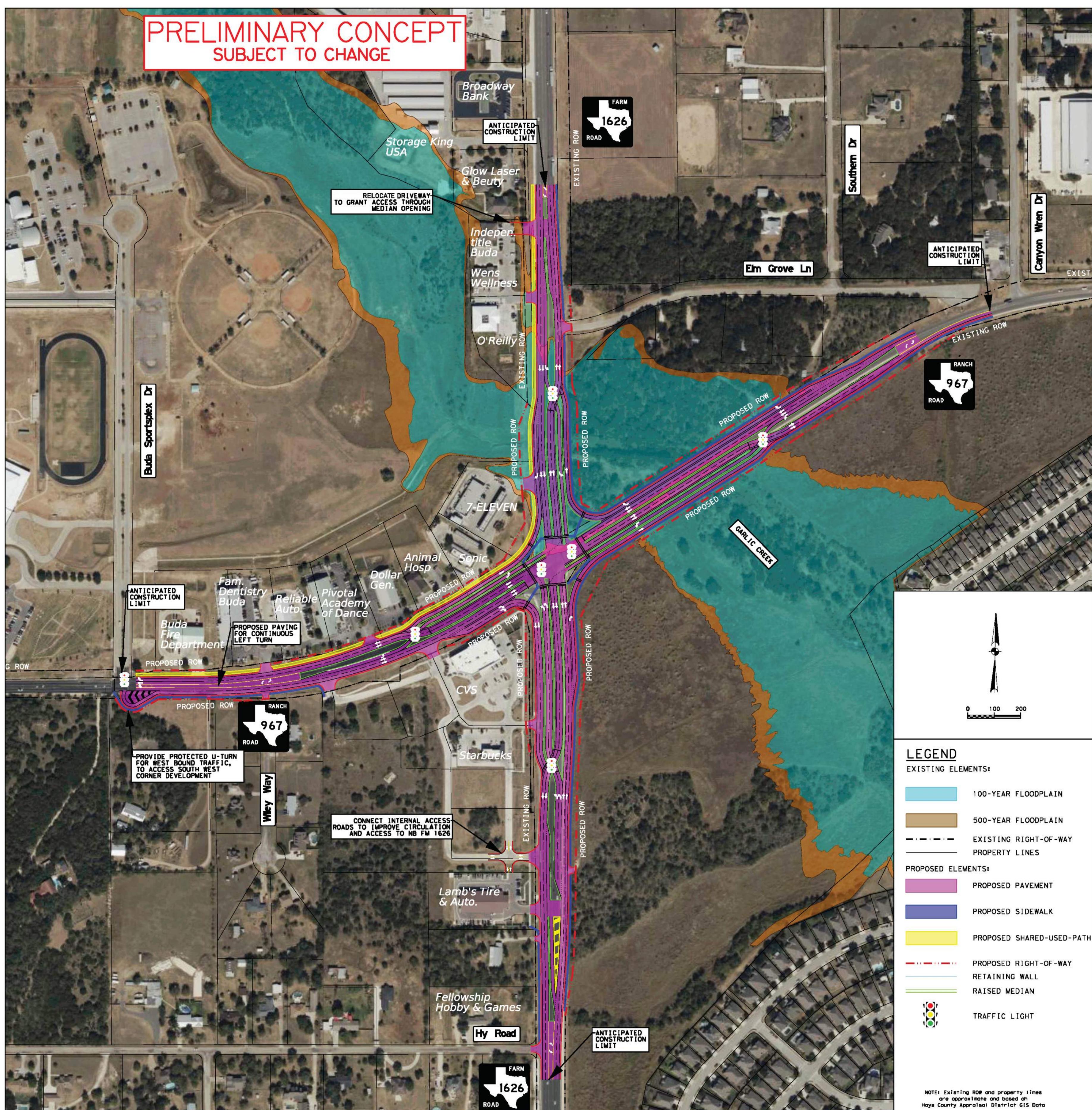
Source: TxDOT Crash Records Information System, 2019-2024 data



# ULTIMATE CONCEPT RECOMMENDED FOR FURTHER STUDY

## DISPLACED LEFT TURN ON FM 1626/RM 967

- Compared to the existing configuration, the Full Displaced Left-Turn Intersection concept reduces total intersection delay by more than 75% in the AM peak period and in the PM peak period (forecasted year 2050 traffic).
- The Displaced Left-Turn intersection includes construction of a shared-use path (for bicyclists and pedestrians), sidewalks, and ADA crossings at the intersection.
- Displaced Left-Turns improve safety by reducing conflicts at the main intersection. Research shows they can reduce crashes by more than 25% at an intersection.
- A Partial Displaced Left-Turn is another viable concept that does not include displaced left-turns on RM 967.



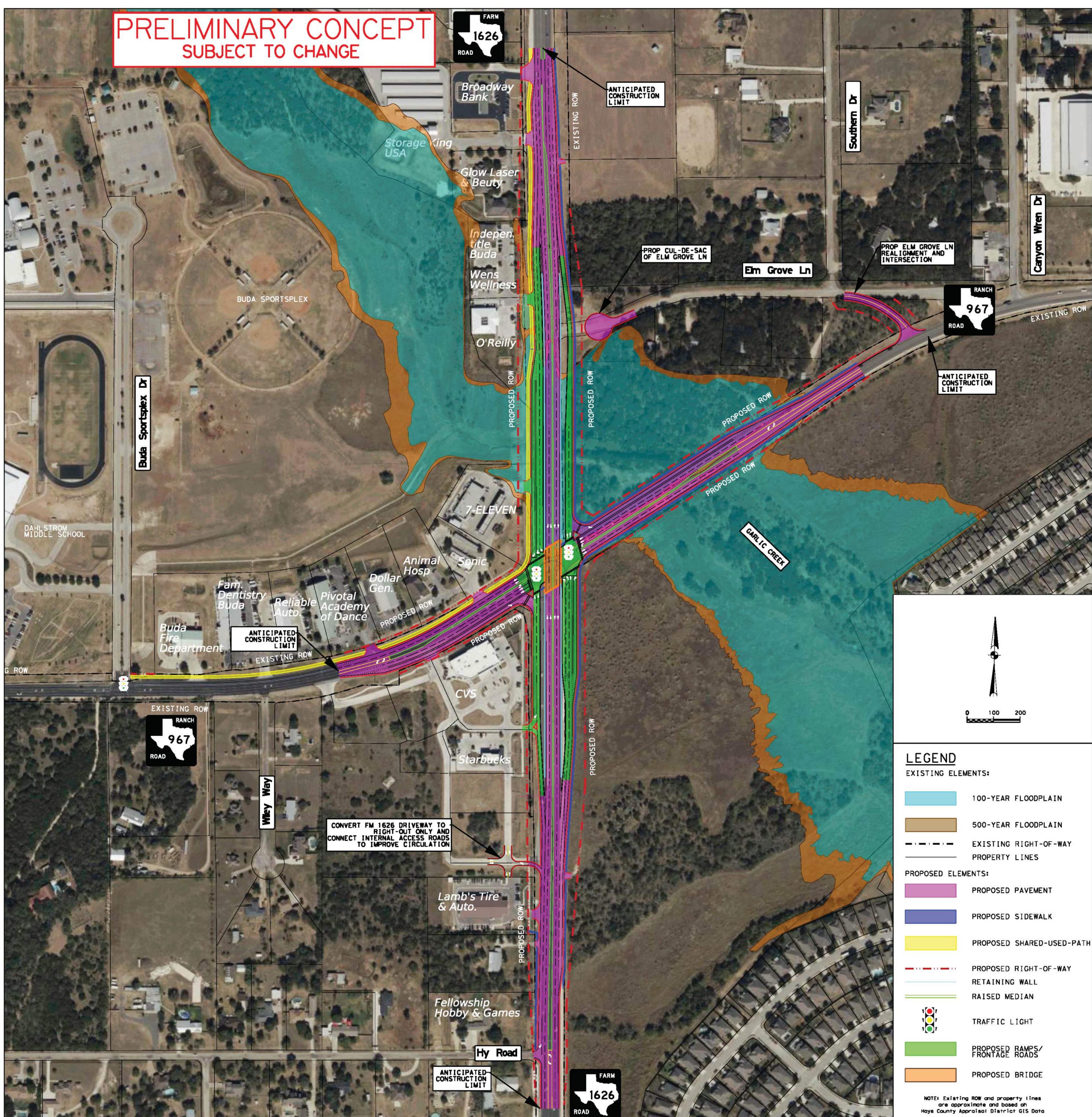
Note: Total intersection delay is calculated by summing the peak hour delay experienced by all vehicles passing through the signalized intersection of RM 967 and FM 1626.



# ULTIMATE CONCEPT RECOMMENDED FOR FURTHER STUDY

## DIAMOND INTERCHANGE (Overpass/Underpass)

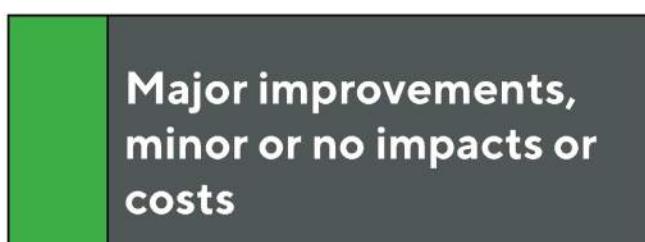
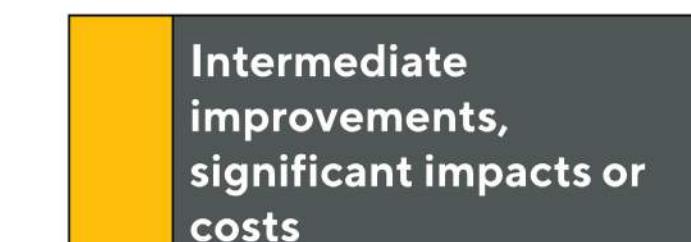
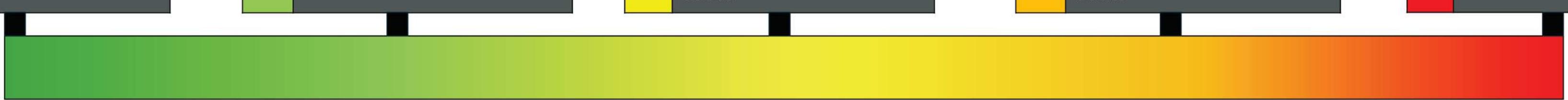
- Compared to the existing configuration, the Diamond Interchange concept reduces total intersection delay by more than 75% in the AM peak period and more than 90% in the PM peak period (forecasted year 2050 traffic).
- The Diamond Interchange includes construction of a shared-use path (for bicyclists and pedestrians), sidewalks, and ADA crossings at the at-grade intersection.
- The Diamond Interchange overpass improves intersection safety by removing the large FM 1626 through traffic movement from the intersection at RM 967.



Note: Total intersection delay is calculated by summing the peak hour delay experienced by all vehicles passing through the signalized intersection of RM 967 and FM 1626.



# FM 1626/RM 967 EVALUATION MATRIX

EVALUATION MATRIX		No Build	Conventional Traffic Signal (Improved Dual LT)	Quadrant Roadway S-W	Quadrant Roadway S-W & N-E	Partial Displaced Left Turn (on FM 1626)	Displaced Left Turn (on FM 1626 & RM 967)	Center Turn Overpass (Grade Separated)	Diamond Interchange	Diverging Diamond Interchange
<b>Mobility</b>										
Traffic Flow Benefit										
AM		Red	Yellow	Green			Green	Green	Green	Green
PM		Red	Red	Yellow	Green	Yellow	Green	Green	Green	Green
<b>Safety &amp; Multimodal Travel</b>										
Safety Impact		Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Green
Affect on Multimodal Connection		Red	Yellow	Green	Green	Yellow	Yellow	Green	Green	Yellow
<b>Economic Development &amp; Sense of Place</b>										
Right of Way Impact		Green	Yellow	Red	Red	Yellow	Yellow	Yellow	Yellow	Yellow
Property Access Impact		Yellow	Green	Red	Yellow	Yellow	Yellow	Red	Yellow	Red
Potential Environmental Impact		Green	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Aesthetic Alignment		Yellow	Yellow	Green	Green	Yellow	Yellow	Red	Yellow	Yellow
Community Support		Red	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow
<b>Cost &amp; Constructability</b>										
Effort to Construct		Green	Green	Green	Green	Green	Green	Red	Yellow	Red
Total Project Cost		Green	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Yellow	Red
	Major improvements, minor or no impacts or costs		Good improvements, intermediate impacts or costs		Moderate improvements, moderate impacts or costs		Intermediate improvements, significant impacts or costs		Minor or no improvements, major impacts or costs	
										

## MOBILITY

**Traffic Flow Benefit:** Measures how much the design reduces congestion and improves traffic movement.

## SAFETY & MULTIMODAL TRAVEL

**Safety Impact:** Looks at how well the design improves safety and reduces the risk of crashes.

**Affect on Multimodal Connection:** Evaluates whether the design supports people walking, biking, and using mobility aids with safe, connected facilities.

## COST & CONSTRUCTABILITY

**Effort to Construct:** Estimates construction complexity, traffic shifts, and duration.

**Total Project Cost:** Estimates how much the project would cost to build, from low to very high investment levels.

## ECONOMIC DEVELOPMENT & SENSE OF PLACE

**Right of Way Impact:** Considers how much new land (outside the current roadway) would be needed for construction.

**Property Access Impact:** Reviews how the design affects access to homes, businesses, and driveways.

**Potential Environmental Impact:** Assesses potential effects on sensitive areas like floodplains, wetlands, and protected lands.

**Aesthetic Alignment:** Looks at opportunities to improve the visual appeal and character of the corridor.

**Community Support:** Reflects the level of public and stakeholder support or concerns shared during outreach.





## NEAR, MID, AND LONG-TERM RECOMMENDATIONS

### NEAR-TERM (1 TO 5 YEARS)

- › TxDOT initiate **National Environmental Policy Act (NEPA) process** for FM 1626 / RM 967 intersection improvements
- › **Feasibility Study** to add capacity to RM 967
- › **Buda Thoroughfare Plan** study to evaluate new roadway connections providing alternative routes west of FM 1626
- › TxDOT design, funding, and construction of **interim FM 1626/RM 967 intersection improvements**, in partnership with Buda
  - › **Extend westbound right turn** approach to FM 1626
  - › **Add dual left turns** from northbound FM 1626 to westbound RM 967

### MID-TERM (6 TO 10 YEARS)

- › TxDOT/Buda **secure funding** for ultimate intersection and any related thoroughfare improvements
- › **Right-of-way acquisition** and utility relocations

### LONG-TERM (10+ YEARS)

- › TxDOT **construction of ultimate improvements** at FM 1626 and RM 967
- › Buda **construction of any related city thoroughfare improvements** (if necessary)



# PROJECT DEVELOPMENT PHASES



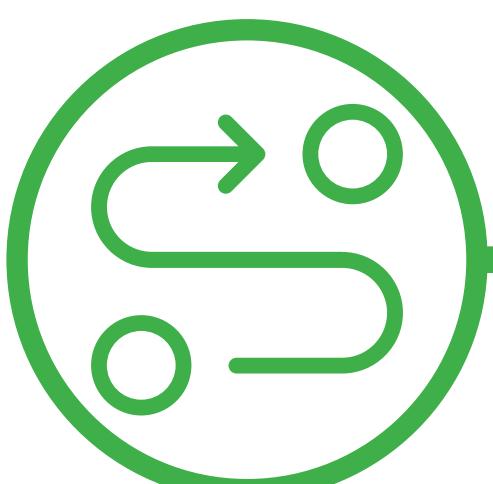
## IDENTIFY A NEED

Needs are identified through a variety of sources at the local, state, or federal level. This step represents the first opportunity for public input into a potential new project. TxDOT also monitors highway system performance to support need identification.



## ASSESS NEED *Up to 1 year*

TxDOT conducts analyses related to safety, congestion, and other needs. An initial project concept and preliminary funding strategy are developed.



## ADVANCED PLANNING *1–2 years*

For large, complex, and new-location projects, TxDOT conducts planning studies to explore project design alternatives prior to performing more detailed, expensive analyses. Public involvement is essential.



## ENVIRONMENTAL & DESIGN STUDIES *1–3 years*

Many types of projects require preliminary design and examination of environmental and community impacts. For many projects, this stage involves a high level of public engagement.



## DESIGN, RIGHT OF WAY, UTILITIES & OTHER PREP *2 years*

At this stage, the project is fairly well defined and details of project construction are being addressed, including acquiring right of way, moving utilities, and other construction preparation.



## *1.5–3 years* CONSTRUCTION

In order to move forward to construction, a project must be fully designed and have all funding identified. Public information about construction activities is critical to ensure public safety and address construction-related traffic.



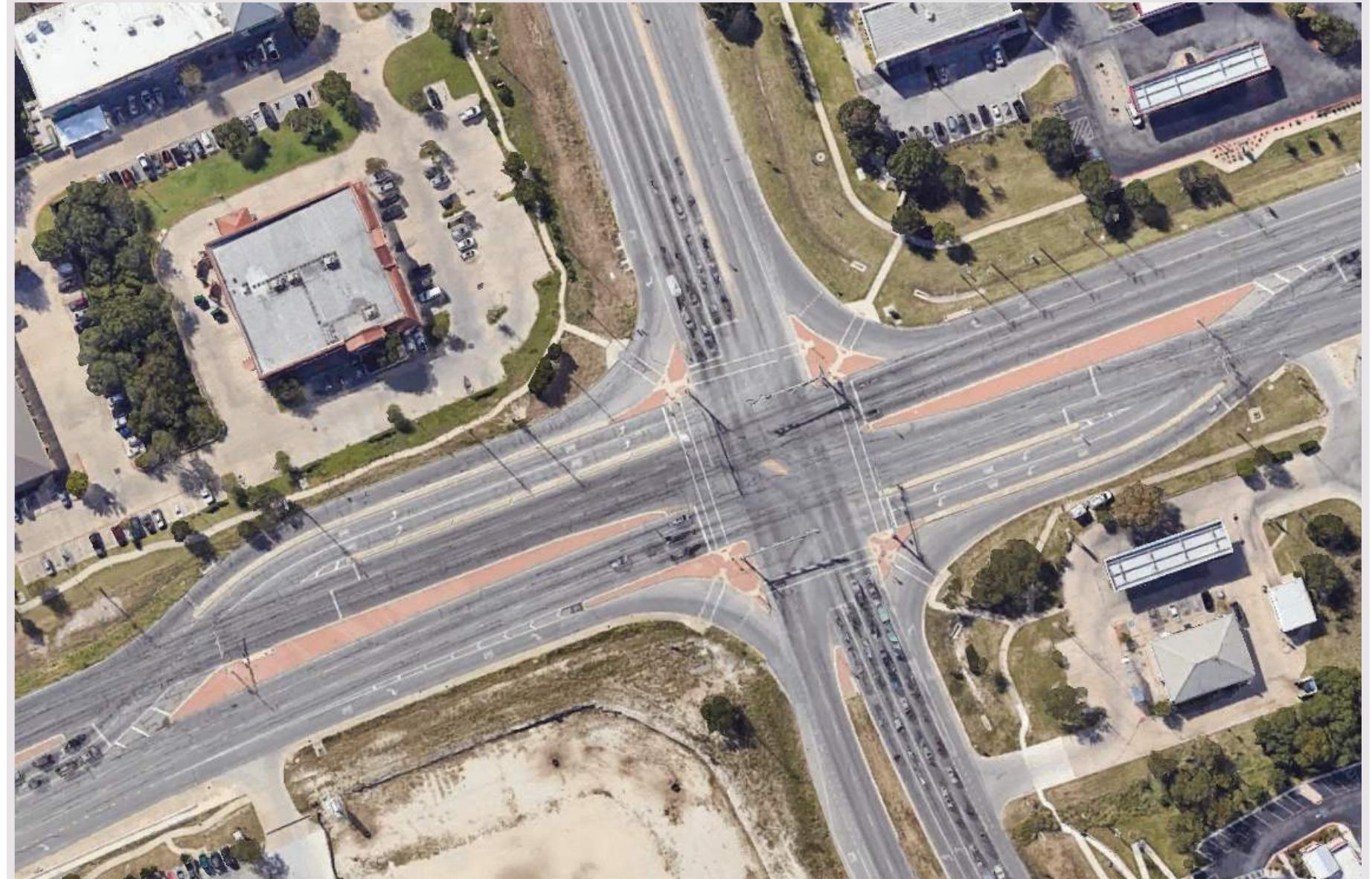
# VIABLE CONCEPT EXAMPLES

## CONVENTIONAL TRAFFIC SIGNAL



Main St and East Loop Street, Buda

## DISPLACED LEFT TURN



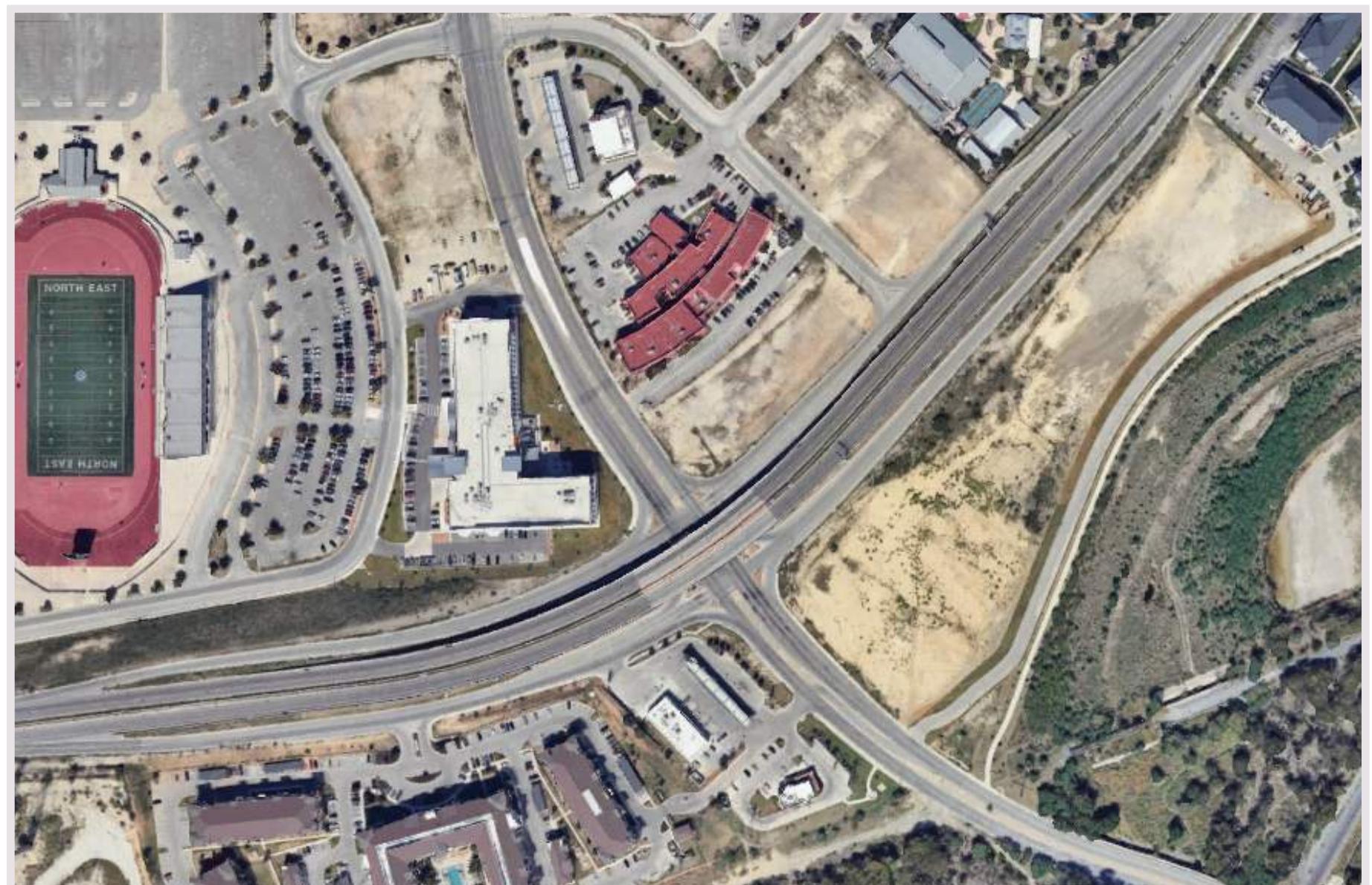
Ronald Regan Blvd. and Whitestone Blvd., Cedar Park

## QUADRANT ROADWAY



State Route 4 at State Route 4 Bypass/Ross Road, Fairfield, Ohio

## DIAMOND INTERCHANGE



Wurzbach Parkway and Thousand Oaks Drive, San Antonio

## DIVERGING DIAMOND INTERCHANGE (DDI)



Slaughter Lane and La Crosse Ave., Austin

## CENTER TURN OVERPASS



3D Visualization provided by Virginia DOT

Source:

[www.txdot.gov](http://www.txdot.gov)  
[www.vdot.virginia.gov](http://www.vdot.virginia.gov)  
[www.nyc.gov/html/dot](http://www.nyc.gov/html/dot)



1

## Data Collection and Analysis

FALL 2024  
WINTER 2025

- › Analyze existing traffic and safety information including existing traffic volumes and projections, crash data, and bicycle and pedestrian accommodations
- › Identify environmental features and constraints in the study area
- › Collect input from the community on preliminary intersection improvements

2

## Develop Potential Improvements

SPRING 2025

- › Use input and technical analyses from previous steps to identify and develop potential improvements to the FM 1626/RM 967 intersection
- › Establish evaluation criteria and quantify the impacts and features for each potential improvement concept
- › Collect input from the community on potential improvement concepts, including a no-build option

3

## Recommend Improvements & Prepare Final Report

SUMMER 2025



- › Use public input from previous steps to refine potential improvements
- › Submit final report that includes recommendations for improvements, project materials, and an implementation plan

**NOTE:** Future project development phases to advance recommendations from this study will be a multi-year process that will require additional funding. Future phases will include gathering additional community input and may also include performing detailed environmental studies, detailed design, right of way acquisition and utility coordination, and construction.

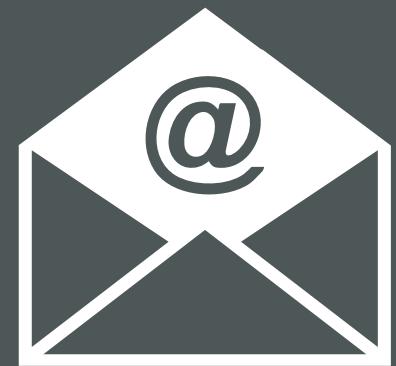




## HOW TO COMMENT

# REVIEW MATERIALS ASK QUESTIONS SHARE YOUR THOUGHTS

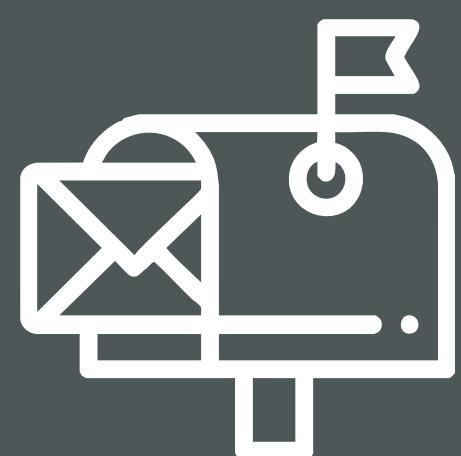
Your input is an important part of developing this study, and there are several ways you can share your input with the study team:



Email comments to  
[FM1626andRM967Study@gmail.com](mailto:FM1626andRM967Study@gmail.com)



Online Survey  
[surveymonkey.com/r/B5XPV2Q](https://surveymonkey.com/r/B5XPV2Q)



Mail comments to  
FM 1626 RM 967 Intersection Study c/o CD&P  
PO Box 5459 Austin, TX 78763

You are welcome to share input at any point during the study development process, but to be included in the open house record, comments must be received or postmarked by

# WEDNESDAY, SEPTEMBER 10, 2025



# **Appendix B**

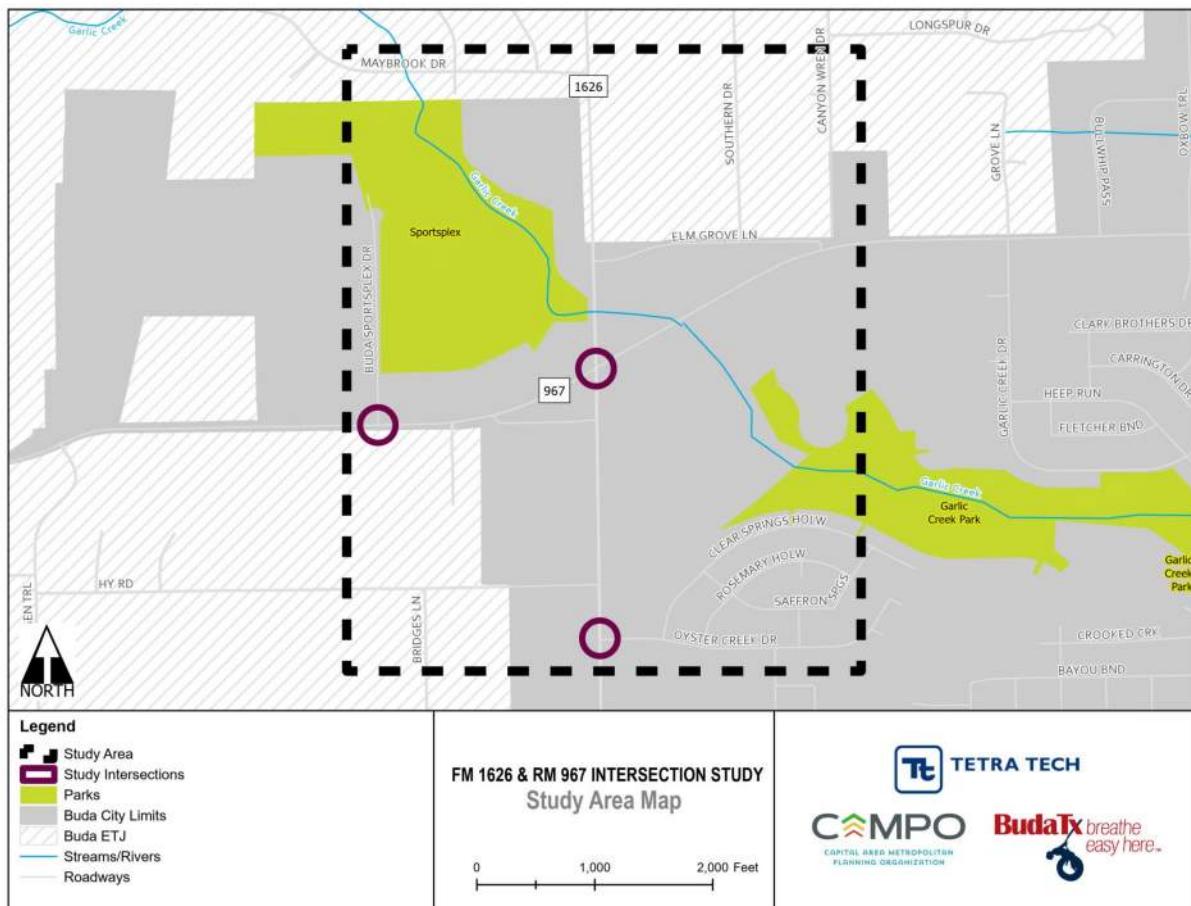
## Review of Existing Studies



CAPITAL AREA METROPOLITAN  
PLANNING ORGANIZATION

## FM 1626/RM 967 Intersection Study

### Review of Existing Studies



## Table of Contents

1	UNIFIED DEVELOPMENT CODE (UDC) .....	3
2	STRATEGIC PLAN .....	3
3	CAPITAL IMPROVEMENT PLAN (CIP) .....	4
4	CAMPO 2045 REGIONAL TRANSPORTATION PLAN .....	4
5	CAMPO REGIONAL ARTERIAL CONCEPT INVENTORY (RACI) .....	5
6	HAYS COUNTY REGIONAL TRANSPORTATION UPDATE .....	6
7	CITY OF BUDA DRAINAGE MASTER PLAN PHASE 2 .....	7
8	TRANSPORTATION MOBILITY MASTER PLAN .....	7
9	COMPREHENSIVE PLAN .....	8
10	TRANSIT DEVELOPMENT PLAN .....	8

## 1. Unified Development Code (UDC)

The Unified Development Code (UDC) governs development codes in the City of Buda. While primarily focused on private property development regulations, it also covers roadway design standards, intersection alignments, landscaping regulations, right-of-way management, and other transportation elements. Several UDC elements should be considered when designing the proposed intersection updates:

### 1. Street Cuts and Right-of-Way Management

- Addresses obstructions in the right-of-way and the vision triangle, as well as minimum design standards for street layout and utility construction.
- May affect roadway width and right-of-way improvements but should adhere to typical engineering design standards.

### 2. Landscaping/Streetscaping

- Tree Preservation: The UDC regulates tree removal and specifies replacement plantings when a tree is approved for removal. This could affect landscaping design, particularly if tree removal is needed for roadway expansion.

### 3. Zoning Districts

- The zoning districts of surrounding properties can influence design, traffic access, and nearby development types.
- The zoning districts near the study area include Agricultural, Form Districts 1, 4, and 5, Arterial Business, and Suburban Residential.

These and other code elements are crucial for ensuring that the intersection design complies with the UDC and aligns with other intersections in the community.

## 2. Strategic Plan

The Strategic Plan, last updated in 2023, outlines the City of Buda's vision for 2036. While the 2036 Vision encompasses high-level goals for the city, the plan also includes a roadmap for 2026, supported by specific goals and objectives in various areas, such as balanced growth and improved mobility, which are relevant to studies like this intersection design.

When planning the intersection design, it is important to consider the objectives, challenges, and opportunities listed under Improved Mobility:

- Reduce traffic congestion and improve traffic flow
- Increase community walkability and bikeability
- Reroute truck traffic
- Upgrade the quality of city streets
- Keep up with community growth
- Address traffic congestion and limited road capacity, particularly at RM 967/FM 1626

Additionally, the following actions from the plan should be noted:

- Update the Public Infrastructure Design Criteria Manual, Permit Application Review Checklist, and New Public Infrastructure Acceptance Processes (Evergreen Documents).
- Develop a Road Maintenance Plan, including service levels, direction, and funding mechanisms (such as a Street Maintenance Fee) to expand the Pavement Management Program.

While the Strategic Plan provides limited direct guidance for the intersection study beyond listing it as part of the Improved Mobility objective, it should still be considered when developing intersection designs and planning the corridor's future development.

### **3. Capital Improvement Plan (CIP)**

The Capital Improvement Plan (CIP) outlines the improvements the city plans to implement over a five-year period to address its most critical infrastructure needs. It focuses on parks, facilities, water/wastewater, mobility, and drainage. For this study, the mobility section will significantly impact how the study area intersection should be developed.

There are three projects related to the study area:

- RM 967 Accel / Decel Lanes
- RM 967 Right Turn Lane onto FM 1626
- FM 1626 and RM 967 Intersection Study

The first two projects support intersection improvements related to this study, and the final project is part of the funding source for this project. Besides these, the mobility-focused projects include multiple trail and pedestrian improvement projects, road connections, and rehabilitations.

The numerous trail and pedestrian projects indicate a strong community interest in enhancing walkability, which should be considered in the intersection designs for the study area. Additionally, the four-year CIP forecast provides a comprehensive view of upcoming projects within the city, indicating how they might impact or be impacted by the final design for the intersection study.

### **4. CAMPO 2045 Regional Transportation Plan**

The Capital Area Metropolitan Planning Organization (CAMPO) is the Metropolitan Planning Organization for the Austin area in Central Texas, covering Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson Counties. The Regional Transportation Plan (RTP) is updated every five years by the CAMPO Transportation Policy Board and forecasts the region's needs for at least 20 years. This multimodal plan includes roads, transit, walking, and biking and will guide regional projects and future transportation growth, including in the study area. The plan's goals should be considered when planning improvements.

#### **Mobility Goals & Objectives**

- Connectivity: Reduce network gaps, eliminate bottlenecks, and enhance seamless use across all modes.

- Reliability: Improve network reliability through better incident management and intelligent transportation systems.
- Travel Choices: Offer time-competitive, accessible, and integrated transportation options.
- Implementation: Plan and deliver projects for all modes, reducing delivery delays.
- Regional Coordination: Collaborate among agencies for planning and implementation.

### Key Chapters

Chapters 4, 6, and 7 are particularly relevant for designing the intersections in the study area.

**Chapter 4 (RRTP Project List Development)** discusses the project list, which includes investments along the I-35 corridor through Buda.

**Chapter 6 (The Mobility Economy)** covers Truck, Freight, Rail, and Air transport, as well as active transportation and smart technology in roadway design. These are crucial for the study area's design.

**Chapter 7 (Performance Measures and 2045 Policies)** outlines performance measures and policies, focusing on highway safety improvements, which are key for designing safe intersections. Policies to consider include:

- Implementing pedestrian and bicycle facilities on major roadways.
- Prioritizing person-carrying over vehicle-carrying capacity.
- Reducing per capita vehicle miles traveled.
- Preserving right-of-way for future needs as per local and TxDOT standards.

The plan includes a list of proposed and funded projects supporting its goals, impacting regional movement near the study area, including IH-35 improvements. These projects should be considered for their impact on traffic volume and movement into the study area.

### 5. Regional Arterial Concept Inventory\* (RACI\*)

The Regional Arterials Concept Inventory (RACI):

- Provides a hierarchy of roads to support different travel needs.
- Establishes a well-connected variety of roads within the hierarchy to promote flexible movement of people and goods.
- Ensures proper road spacing within the hierarchy and offers a menu of street cross-sections.
- Identifies policy tools that enable local entities within the region to achieve regional connectivity goals.

The intent of the RACI is to identify mobility options that are safe, convenient, reliable, efficient, and flexible. It includes information to support the development and decision-making process for arterial roads in the Capital Area region. Considerations for enhancing travel over the next 25 years include:

- Improved safety
- Efficient mobility
- Multi-modal travel
- Economic, equity, and health benefits
- Effective management of future growth
- Environmental protection and preservation
-

This plan provides a framework for regional and local entities to evaluate arterial roadway needs and enhancements related to movement in and around the region. The inventory may offer guidance in understanding traffic movement into the study area, including traffic origin, volume, destination, and movement patterns relative to the corridor.

### **6. Hays County Transportation Plan Update**

This document is the 2021 update to the Hays County Transportation Plan. The purpose of this update is to identify safety improvements, enhance regional connections and mobility, and plan for future growth and development. The Hays County Transportation Plan Update is guided by the following goals:

- Address recent rapid growth and future projected growth.
- Improve connectivity by enhancing access to housing and employment.
- Address traffic capacity issues to improve safety and reduce crash rates.
- Preserve the character, environmental features, and natural beauty of Hays County

To achieve these goals, the planning effort completed the following steps:

1. Identify existing roads to be maintained and improved within their current right-of-way limits without adding lanes.
2. Identify existing roads that require increased capacity and potentially additional right-of-way to enhance safety and efficiency.
3. Identify new connections needed to complete the network and improve safety and mobility.

This plan guides future roadway improvements and connectivity throughout the county, including Buda, the surrounding region, and the study area. Its elements and recommendations should be considered when developing designs in the study area. The plan aims to improve the roadway network capacity to enhance mobility and safety in the region, aligning with the purpose of intersection improvements within the study area. As such, the project recommendations, implementation strategies, transportation system assessment, and review of additional studies can provide valuable insights into the planning process for the study area.

### **7. City of Buda Drainage Master Plan Phase 2**

The Drainage Master Plan was initiated in response to widespread flooding issues and rapid growth in the City of Buda. The city launched a two-phase Master Plan study to identify drainage problems city-wide and develop a strategy for prioritizing and addressing current and future issues. In 2014, LAN completed Phase 1 of the Drainage Master Plan, which aimed to identify and prioritize the top ten drainage problem areas in the city.

Phase 2 of the Buda Drainage Master Plan was designed to help the city evaluate the existing conditions of selected stormwater infrastructure and develop prioritized capital improvement projects (CIPs) to address the identified problems using a sustainable Microsoft Access database. Phase 2 builds on Phase 1 by including projects identified in Phase 1 that were not fully developed and additional problem areas identified by the city, totaling thirty projects.

The recommended projects are determined based on a prioritization and ranking criteria, which assess projects with the highest risk of roadway flooding, property and structure damage, and overall cost and funding needs. Although the project list may not directly impact study area designs, it remains important to consider, especially when determining the drainage needs for the study area after final designs are decided.

### **8. Transportation Mobility Master Plan**

The City of Buda has developed this plan as both a communication tool and a guiding document for the growth of its transportation network, aiming to enhance safety and mobility for all modes of transportation. It outlines the city's transportation needs and the projects designed to address them. The planning process identified the following priorities for Buda's transportation network:

- Preserve the small-town character
- Add system capacity to accommodate rapid development
- Increase east-west connectivity
- Prepare for increased traffic from the SH 45 extension
- Improve trail connectivity
- Enhance safety for bicyclists and pedestrians

The City of Buda has created the Transportation Mobility Master Plan (TMMP) to serve two main purposes:

- To communicate the city's transportation needs, programs, and projects to residents and partners
- To identify mobility needs, solutions, and prioritize improvements to ensure the transportation system keeps pace with growth and development

While this plan aligns with other transportation-related plans discussed in this summary, it specifically focuses on guiding the growth of the network itself. Additionally, it highlights the RM 967/FM 1626 Intersection study, recommending its implementation. This plan should be referenced for communicating the intersection study and determining the best approach to guide the network's growth along the two study area roadways.

### **9. City of Buda Comprehensive Plan**

A comprehensive plan is a long-range planning document that helps guide future decision-making for a community. It serves as a blueprint to guide future development and redevelopment, derived from the stated desires of the community. This plan is focused on four goals: Community, Activity, Mobility, and Economy. Of these four Mobility has a direct connection to the study area project. The mobility goal components are below:

**GOAL 3: MOBILITY | Build thoughtfully designed and connected mobility networks**

Objective 1: Insist on great streets

Objective 2: Target priority street improvements to alleviate traffic

Objective 3: Develop a multi-pronged network of community trails

Objective 4: Promote multi-modal alternatives to cars with complete streets

Objective 5: Connect the community with integrated mobility networks

The document's focus on mobility includes network improvements, roadway enhancements, and upgrades to multi-modal and active transportation segments. All these components directly address the needs of the study area and the desired improvements for its corridors. The plan's goals and objectives offer clear guidance, but the document goes further by detailing specific steps for conducting the FM 1626/RM 967 intersection study.

The comprehensive plan thoroughly examines the FM 1626/RM 967 intersection, dedicating an entire section to the future growth of the FM 1626 corridor. It explores multiple potential futures for the corridor and outlines various development goals. One significant goal is to develop it into a commercial hub while preserving the area's character and improving access, visibility, and walkability. Additionally, the plan considers reclassifying FM 1626 as a highway, which would significantly affect the study area's design. This reclassification would be accompanied by a strategy to expand the Rural Heritage Overlay District along RM 967 and FM 1626 within city limits, ensuring the desired design character for future development. The comprehensive plan offers valuable insights into the community's vision for the corridor's development.

### **10. Transit Development Plan**

The Buda Transit Development Plan (TDP) assessed transit opportunities and needs for the community. The updated TDP builds on these earlier recommendations, integrating new initiatives to accommodate Buda's growing population. The City of Buda updated its TDP to address the community's expanding needs. The 2023 update incorporates community feedback and technical analysis to outline goals, strategies, and priorities for future transportation infrastructure. The plan aims to improve connectivity between people, jobs, and communities by offering high-quality local and regional public transportation options.

The update also seeks to integrate new initiatives and ensure that transit options remain relevant as the city grows. Key opportunities include on-demand transit, fixed-route commuter services, and park & ride stations. The updated TDP focuses on:

- Providing efficient and reliable transit services
- Meeting residents' mobility needs by improving access to key activity centers
- Connecting local transit services with regional infrastructure

The overall vision is to create a balanced transportation system that integrates various modes (driving, walking, biking, and transit) while enhancing Buda's character. Key actions include adopting complete streets policies, updating the Transportation Master Plan, and establishing a park & ride station in collaboration with CapMetro.

#### **Key Points from the Survey:**

- Emphasis on serving aging and disabled communities.

- Ensuring accessibility and affordability
- Maintaining consistent schedules and routes
- Improving connectivity to South Austin
- Providing access to healthcare facilities
- Coordinating with planning and zoning efforts
- Considering future developments in transit planning

This further plays into other transit/transportation focused plans throughout the region that focus on mobility, key network connections, and regional, reliable infrastructure improvements. Considering the regional implication that the FM 1626 corridor has it is important to consider these priorities when developing the study area design to reflect the desired vision in the region.

# **Appendix C**

## FM 1626/RM 967

### Intersection Study Conditions Assessment



CAPITAL AREA METROPOLITAN  
PLANNING ORGANIZATION

**FM 1626/RM 967  
Intersection Study**



## Table of Contents

<b>1 INTRODUCTION .....</b>	<b>4</b>
<b>2 PHYSICAL CHARACTERISTICS .....</b>	<b>6</b>
2.1 Roadway Network .....	6
2.2 Pedestrian Facilities .....	7
2.3 Existing Cross Sections at the Intersection .....	8
2.4 Driveways .....	10
2.5 Signage .....	10
2.6 Land Use .....	11
<b>3 OPERATIONAL CHARACTERISTICS .....</b>	<b>16</b>
3.1 Traffic Volumes and Operations .....	16
3.1.1 Annual Average Daily Traffic Volumes (AADT) .....	16
3.1.2 Intersection Level of Service (LOS) .....	17
3.1.3 Projected Traffic Growth .....	20
3.2 Posted Speed Limits & Speed Management .....	23
3.3 Safety Analysis .....	23
3.4 Roadway Connectivity Analysis .....	27
<b>4 ROADWAY DEFICIENCIES.....</b>	<b>29</b>
4.1 Roadway Geometry .....	29
4.2 Intersection Geometry and Signal Timing .....	30
4.3 Access Management .....	30
4.4 Pedestrian Mobility .....	31
<b>5 ENVIRONMENTAL CONSTRAINTS.....</b>	<b>33</b>
5.1 Wetlands, Floodplains, and Water Resources .....	33
5.2 Public Utilities .....	34

## Tables

<b>Table 1 - Driveways in the Study Area.....</b>	<b>10</b>
<b>Table 2 - Signage Type by Number .....</b>	<b>11</b>
<b>Table 3 - Level of Service at the Study Intersection .....</b>	<b>17</b>
<b>Table 4 - Level of Service at Other Intersections .....</b>	<b>20</b>
<b>Table 5 - Geometric Deficiencies .....</b>	<b>30</b>

## Figures

<b>Figure 1 - FM 1626/RM 967 Study Area Map .....</b>	<b>5</b>
<b>Figure 2 - Roadway Network .....</b>	<b>6</b>
<b>Figure 3 - Active Transportation Map.....</b>	<b>8</b>
<b>Figure 4 - FM 1626 Cross Section .....</b>	<b>9</b>
<b>Figure 5 - RM 967 Cross Section .....</b>	<b>9</b>

# FM 1626/RM 967 Intersection Study | 2024

Figure 6 - Existing Land Use by Percentage .....	12
Figure 7 - Existing Land Use Map .....	13
Figure 8 - Future Land Use by Percentage .....	14
Figure 9 - Future Land Use Map .....	15
Figure 10 - Annual Average Daily Traffic (AADT) Map .....	16
Figure 11 - AM Existing Level of Service Map .....	18
Figure 12 - PM Existing Level of Service Map .....	19
Figure 13 - Annual Average Daily Traffic 20 Year Trends (2004-2023) .....	21
Figure 14 - Daily Traffic Projected Growth (2020-2050) .....	22
Figure 15 - Percent Projected Traffic Growth (2020-2050) .....	22
Figure 16 - Crashes by Year (2019-2024) .....	24
Figure 17 - Crashes by Location .....	24
Figure 18 - Crashes by Severity (2019-2024) .....	25
Figure 19 - Crash Factors Map .....	26
Figure 20 - Crashes by Manner of Collision (2019-2024) .....	27
Figure 21 - Effective Roadway Connectivity Network .....	28
Figure 22 - Top 3 Non-intersection Crash Types .....	31
Figure 23 - Environmental Resources Map .....	34
Figure 24 - Public Utilities Map .....	35

## 1 Introduction

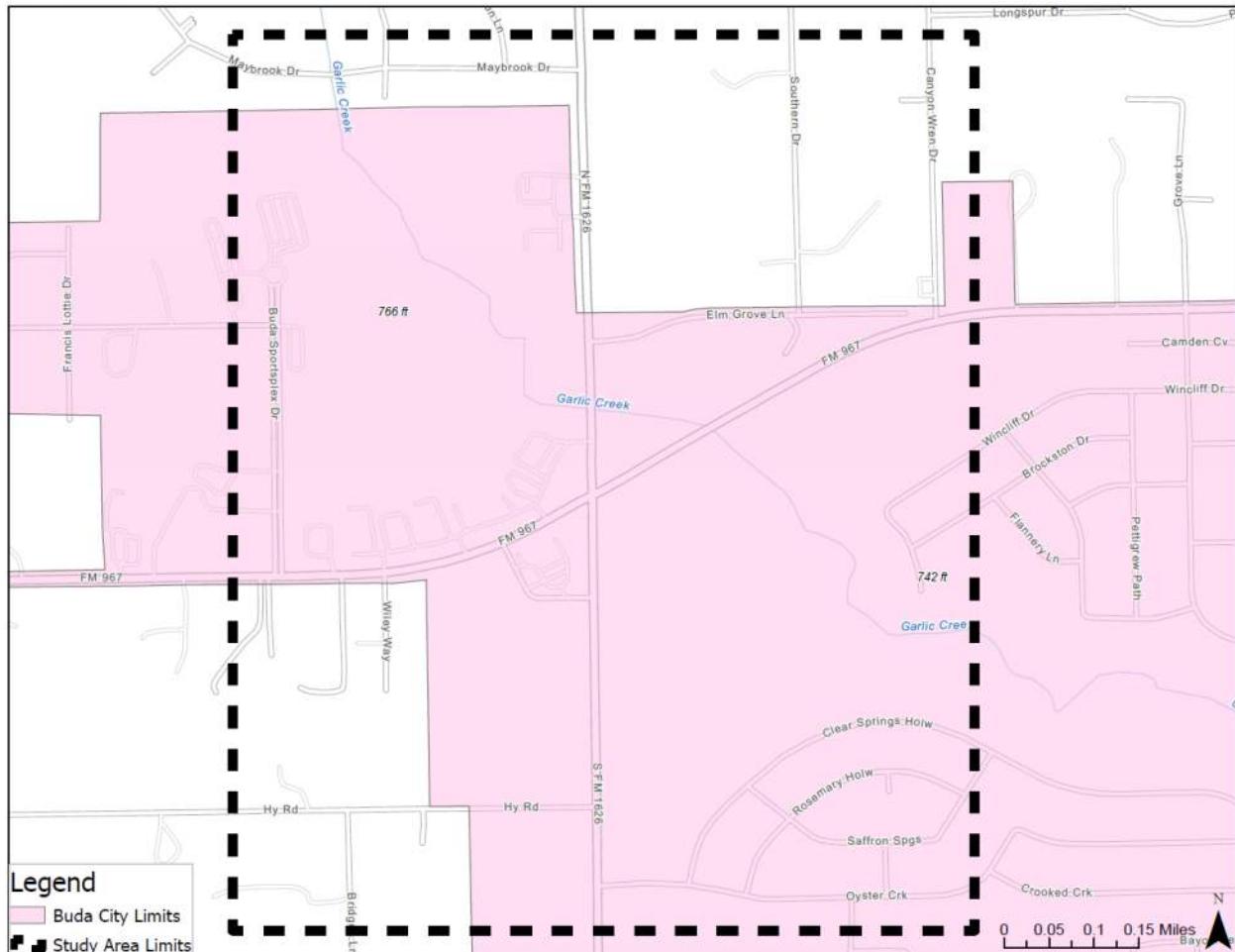
FM 1626/RM 967 represents a critical intersection of two significant transportation corridors within the City of Buda. Enhancing this area is a key priority for the city, aimed at addressing traffic congestion and improving safety for both motorists and pedestrians. This intersection serves as a vital nexus for two essential commuter pathways within Hays County. FM 1626 functions as the primary north-south route in eastern Hays County, paralleling Interstate 35, while RM 967 serves as the principal east-west corridor in the region.

Given the rapid population growth in the area, it is anticipated that congestion at this intersection will increase. The undeveloped parcel of land located to the southeast of the intersection has garnered considerable commercial interest, thereby highlighting the economic potential of this location. This underscores the necessity for strategic infrastructure planning to adequately respond to the evolving demands of the community and local businesses. A map of the intersection study area is presented below in **Figure 1**.

The Existing and Future Conditions Analysis aims to create a baseline of the current conditions in the study area using the collected data and to estimate how traffic conditions and demographic changes will impact the study area over the next 25 years. The analysis details the corridor's current physical and operational characteristics, along with the environmental constraints affecting the area. It also identifies existing deficiencies in the corridor, with a focus on roadway and intersection geometry, access management, and bicycle and pedestrian infrastructure.

# FM 1626/RM 967 Intersection Study | 2024

Figure 1 - FM 1626/RM 967 Study Area Map



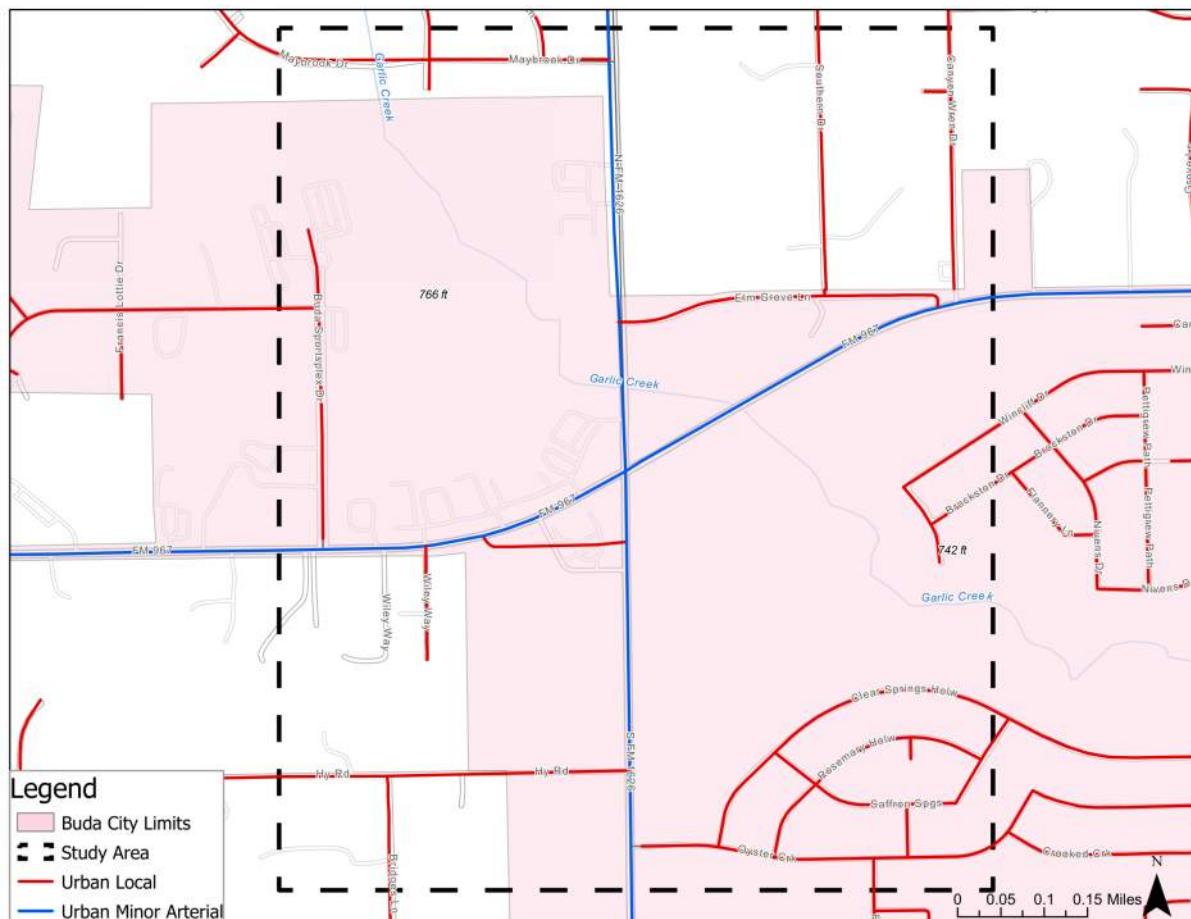
## 2 Physical Characteristics

### 2.1 Roadway Network

The roadway network in the study area consists of two functional classifications: urban minor arterials and urban local roads. Roadway functional classification is a hierarchical system based on access and mobility that categorizes roadways into freeways, major arterials, minor arterials, collectors, and local roads or streets. This classification system ensures efficient transportation by balancing mobility and access for different travel types and land uses.

FM 1626 and RM 967 are classified as Urban Minor Arterials by the City of Buda and the Texas Department of Transportation (TxDOT). Aside from the two main study area roads, all nearby roadways are classified as Urban Local roads by the City of Buda. These include Maybrook Drive, Buda Sportsplex Drive, Hy Road, Oyster Creek, and Canyon Wren Drive. The existing roadway network within and around the study area is illustrated in **Figure 2**.

**Figure 2 - Roadway Network**



## 2.2 Pedestrian Facilities

There are currently approximately two miles of existing sidewalks along the roadways that allow for travel in the region, but significant gaps in pedestrian mobility persist within the region. A comprehensive assessment of the current quality of the existing sidewalks is lacking, making it difficult to evaluate their condition accurately. Many sidewalks exhibit signs of deterioration, such as cracks, uneven surfaces, and overgrown vegetation, which lead to misalignments and further exacerbate existing disconnections. The absence of marked crosswalks at driveways and intersections poses a challenge for pedestrian safety. Many existing sidewalks and crosswalk features do not comply with ADA requirements. Improvements should prioritize meeting these standards along with addressing other apparent violations as a foundational step. Currently, the area features only four designated crossing locations: one at the intersection of Buda Sportsplex Drive and RM 967, another in front of Buda Fire Department Station #3, a third at the intersection of FM 1626 and RM 967, and a fourth at Oyster Creek and FM 1626.

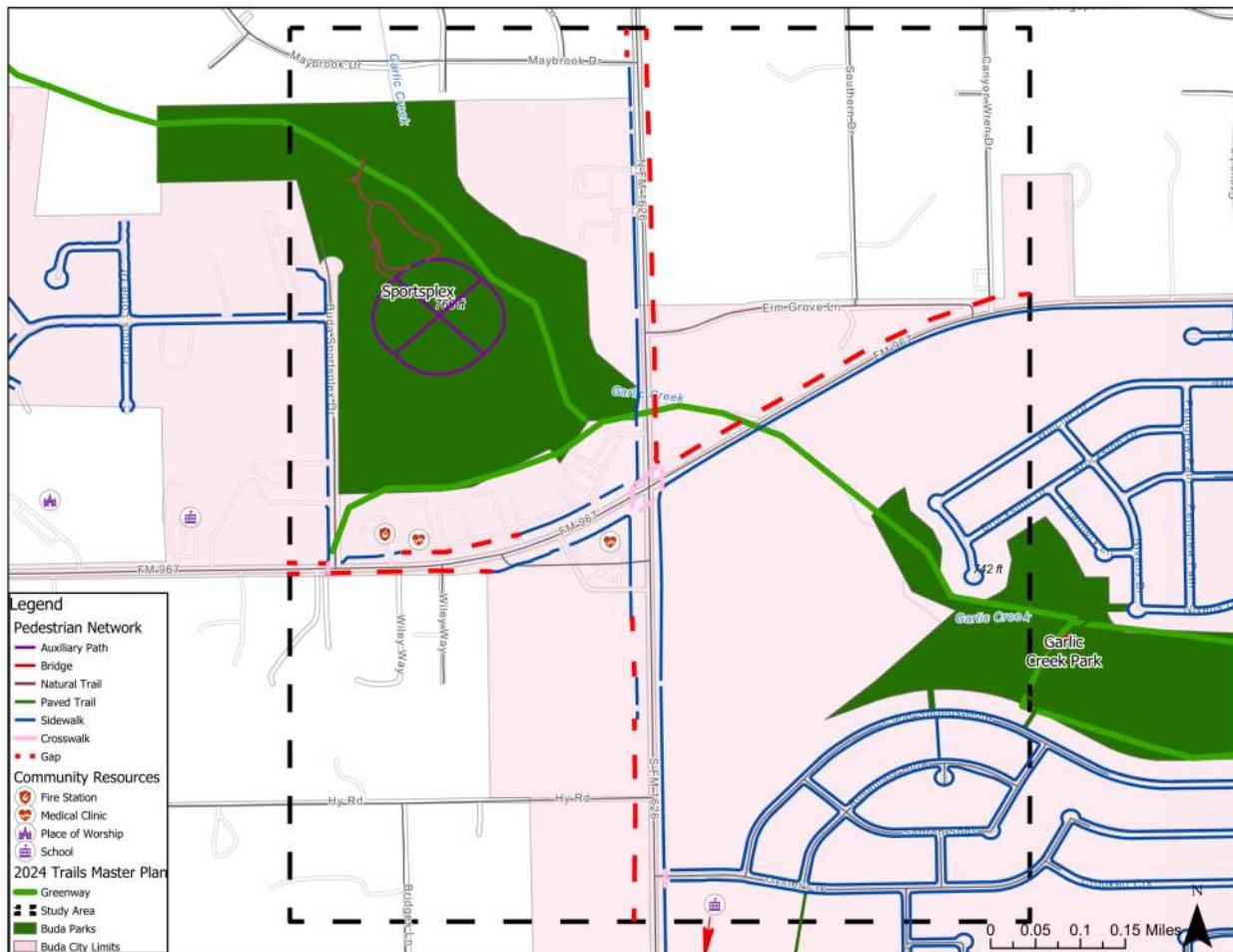
In addition to the existing and proposed sidewalks, there is a planned trail aimed at addressing the needs of pedestrians and other multimodal users. This proposed trail will be designed to provide a safe and effective connection for pedestrians throughout the area. Specifically, it will link Sportsplex Park, located across FM 1626, with Garlic Creek Park. This trail will also connect to existing recreational trails and paths within Garlic Creek Park and Sportsplex Park.

A promising initiative to enhance multimodal connectivity within the study area is the Great Springs Project, a non-profit effort to establish a 100-mile trail network linking Austin and San Antonio, Texas. Although the exact alignment has not been finalized, a segment near the FM 1626/RM 967 intersection could potentially integrate into this regional trail network. This would complement the planned shared-use trail additions for FM 1626 and RM 967 outlined in the **2024 Trails Master Plan**.

While the proposed trail segment is currently unfunded, future development projects along the designated alignment would be required to incorporate their respective portions of the trail. The completion of this network—whether through external projects, land development, or public initiatives—would significantly enhance mobility into and throughout the study area, fostering greater access and connectivity for all users.

The study area contains several important community resources, including two medical clinics, a place of worship, a fire station, and a high school. An elementary school is located just outside of the study area to the south. These community resources are essential for residents and visitors alike. Ensuring that there are adequate pedestrian facilities to access these areas is vital for the community's overall mobility and health. **Figure 3** illustrates the pedestrian facilities and community resources in the area.

Figure 3 - Active Transportation Map



### 2.3 Existing Cross Sections at the Intersection

The intersection design at FM 1626 and RM 967 includes two cross section designs that share similarities but also have distinct differences. The FM 1626 cross section north of the intersection includes a Right of Way (ROW) of 105 feet. The layout features two 11-foot travel lanes in each direction, along with a 12-foot left-turn lane that stretches approximately 430 feet and an 11-foot right-turn lane that is about 390 feet long. The eastern side of the roadway features a 5-foot shoulder, along with a 3-foot bollard buffer that separates the left-turn lane from the northbound driving lanes. The cross section also incorporates a 6-foot sidewalk running northbound along FM 1626 on the western side. The rest of the ROW is allocated to green space buffers. The FM 1626 cross section is illustrated in **Figure 4**.

The RM 967 cross section east of the intersection features a ROW of 120 feet. This design features two travel lanes in each direction, each 11 feet wide, a left-turn lane that is approximately 150 feet long and 12 feet wide, and a right-turn lane that is approximately 125 feet long and 11 feet wide. There is a 6-foot shoulder on the south side and a 5-foot buffer between the right-turn lane and the westbound drive lane. The remaining ROW area is allocated for a 6-foot eastbound sidewalk and green space buffer zones. The RM 967 cross-section is illustrated in **Figure 5**.

Figure 4 - FM 1626 Cross Section

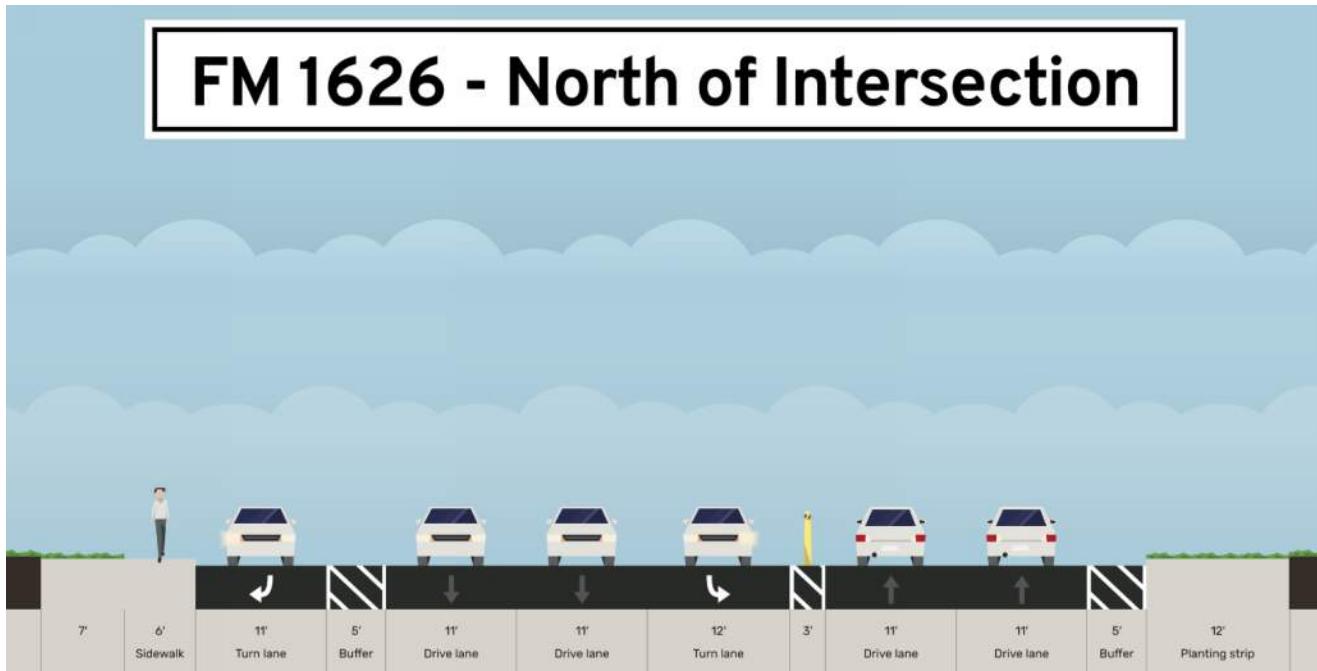
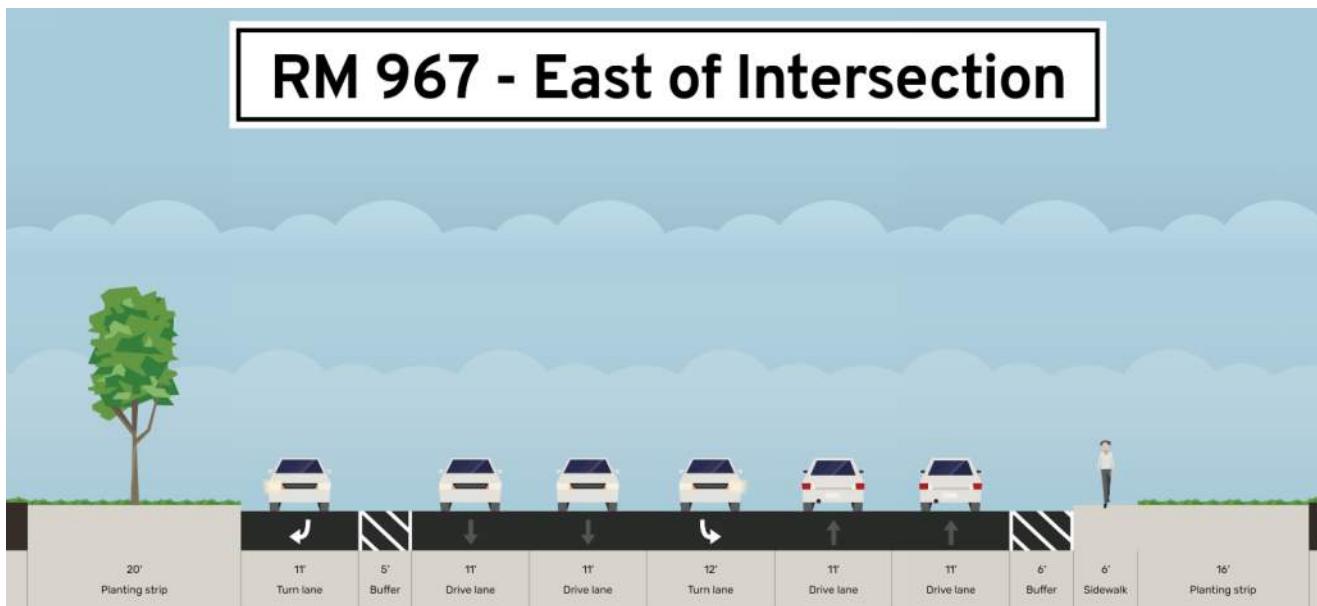


Figure 5 - RM 967 Cross Section



RM 967 transitions to single travel lanes in both directions approximately 240 feet east and 390 feet west of the intersection. East of the intersection, the roadway consists of two 11-foot travel lanes in

each direction, along with a 12-foot two-way left turn lane. The ROW in this area begins to taper down to approximately 90 feet.

To the west of the intersection, the cross-section changes to two 11-foot travel lanes in each direction, a 12-foot two-way left turn lane, and a 11-foot right turn lane that ends at the intersection with Buda Sportsplex Drive. From this point, the roadway continues with two travel lanes and one two-way left turn lane, while the ROW narrows to between 70 and 80 feet.

## 2.4 Driveways

The existing driveways in the study area were mapped and analyzed, with the findings summarized in **Table 1**. The analysis identified a total of 19 driveways along FM 1626 and RM 967. Most of the driveways in the study area are commercial, while a few residential driveways provide access to single-family residences along the corridor.

**Table 1 - Driveways in the Study Area**

Limits From	Limits To	Feet	Number of Driveways	Commercial Driveways	Residential Driveways
Buda Sportsplex Dr	FM 1626	1,688	8	6	2
Maybrook Dr	RM 967	2,506	6	5	1
Oyster Creek	RM 967	2,298	5	3	2
Canyon Wren Dr	FM 1626	1,958	0	0	0

According to the guidelines established by the Federal Highway Administration (FHWA), which TxDOT follows, roadways with a speed limit of 55 miles per hour (MPH) must maintain a minimum spacing of 450 to 500 feet between driveways. In the designated study area, both FM 1626 and RM 967 principally accommodate 55 MPH, and there are multiple occurrences of driveways that do not adhere to the minimum spacing requirements. This condition raises concerns regarding access management and traffic safety within the study area.

## 2.5 Signage

The signage data for the FM 1626 and RM 967 intersection study provides a comprehensive overview of the various traffic signs present within the study area. The signage inventory was completed through a desktop analysis of roadway features along the corridor. This inventory of traffic signage within the study area revealed a variety of sign types that play a critical role in traffic control and safety. A breakdown of the different sign types and their frequency of occurrence across the corridor is shown in **Table 2**. A total of 40 traffic-oriented signs were identified within the study area. The most common sign is the "Right Turn Only" sign, which appears 10 times. "Stop" signs follow as the next most frequent, with 4 instances, while all other categories have 3 or fewer occurrences. Overall, the distribution of signage in the study area prioritizes right-turn movements, stop control at intersections, speed regulation, and pedestrian safety. This diverse collection of signs indicates an area that balances vehicle movement control, speed management, and pedestrian considerations.

While the variety of signage supports key priorities like vehicle movement, pedestrian safety, and speed management, the distribution and placement of signs could benefit from alignment with the Manual on Uniform Traffic Control Devices (MUTCD) standards. Regulatory signs, such as speed limits (55 mph on the corridor and 35 mph in school zones), generally comply with MUTCD recommendations for speed transitions and visibility. However, the frequent use of "Right Turn Only" signs should be reviewed to ensure they are not redundant and provide clear guidance to drivers. Warning signs, such as curve warnings and pedestrian crossings, appear less frequently and could be supplemented to enhance safety, particularly in areas with sharp turns or high pedestrian activity. Bicycle-related signage aligns with MUTCD guidelines but could be expanded to improve cyclist safety. Key areas for improvement include verifying the placement distances, visibility, and retro-reflectivity of all signs, as required by MUTCD. Enhancements such as additional pedestrian crossings, warning signage, and uniform sign spacing can better address safety gaps and improve driver awareness. Overall, while the current signage provides a solid foundation for traffic control and safety, strategic adjustments can ensure full MUTCD compliance and support safer, more efficient traffic flow within the study area.

**Table 2 - Signage Type by Number**

Type	Number
Begin Center Lane	1
Bike Lane	2
Center Lane Turn Only	3
End Center Lane	1
End School Zone	2
Lane Direction Guide	2
Merge Left	2
Left Lane Must Turn Left	2
No U-Turn	1
Pedestrian Crossing	2
Right Turn Only	10
School Zone Speed Limit 35	2
Slow Speed to 40, Curve Ahead	1
Slow Speed to 50, Curve Ahead	2
Speed Limit 55	3
Stop	4

### 2.6 Land Use

The following section provides a detailed overview of the existing and future land use distribution in the study area surrounding the FM 1626 and RM 967 intersection. It details how land is currently allocated within the study area and outlines the anticipated changes for future development. The land use data was obtained from the City of Buda.

A review of the existing land use within the FM 1626 and RM 967 study area highlights the distribution of land dedicated to various functions. A breakdown of the existing land use categories by percentage is shown in **Figure 6**, providing insight into how the area is currently developed. Most of the study area is split between floodplains and single-family residential use, with both accounting for 36% of the land. It is important to note that the designated floodplains in the study area change the percentages of land use types compared to those shown in Figure 6 and the land use map in Figure 7 below. Governmental or institutional purposes, such as public buildings, schools, or other civic infrastructure, accounts for 11% of the study area land. Office/Retail/Commercial, being the only commercial category present in the study area, makes up 7% of the study area. Parks and public open spaces, offering recreational opportunities and green areas, are somewhat limited, covering 1% of the area. Lastly, Vacant land makes up 6% and unknown/excluded (which is largely comprised of public ROW) makes up 3% of the study area. A visual representation of the study area is shown in **Figure 7**, outlining the distribution of existing land use types.

**Figure 6 - Existing Land Use by Percentage**

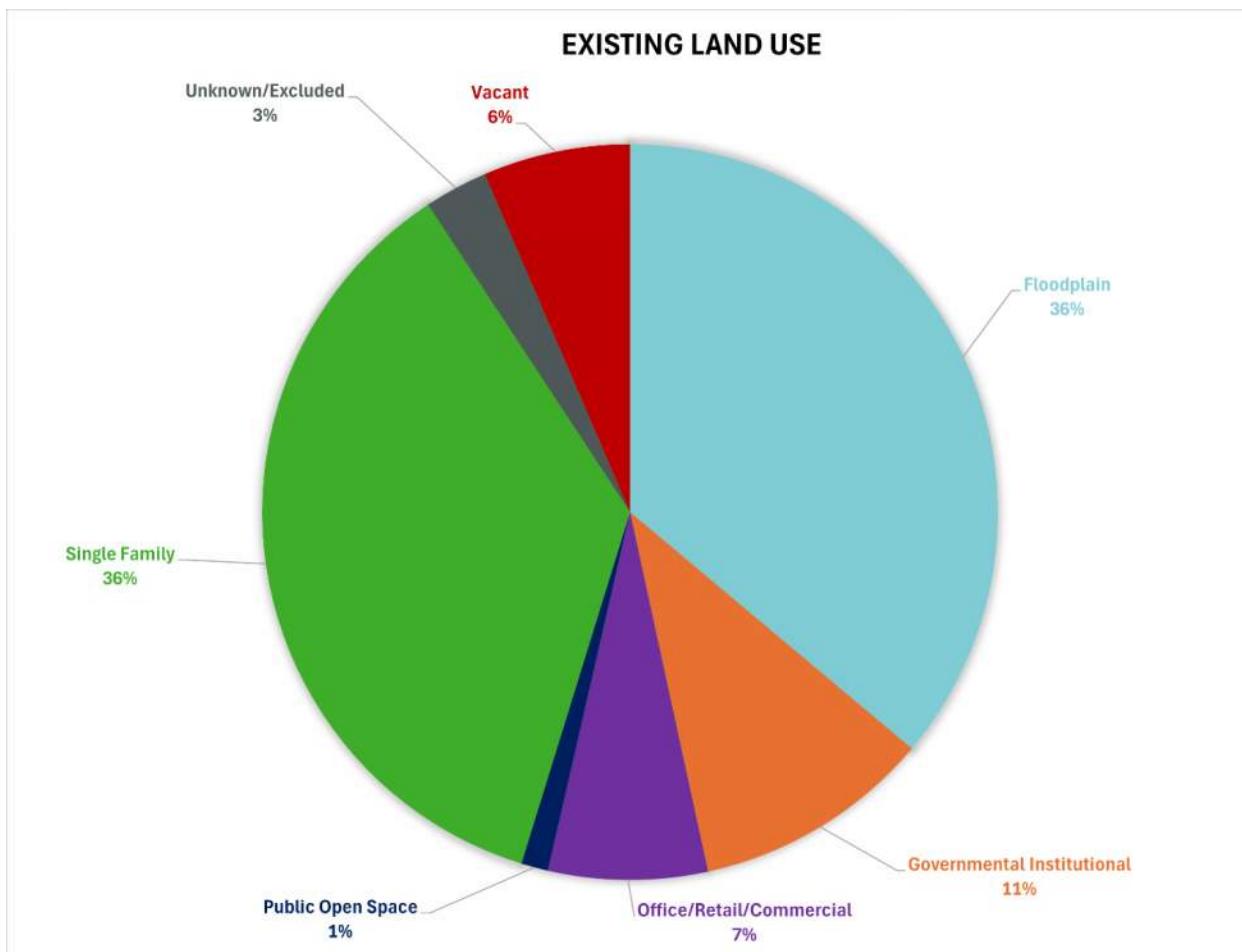
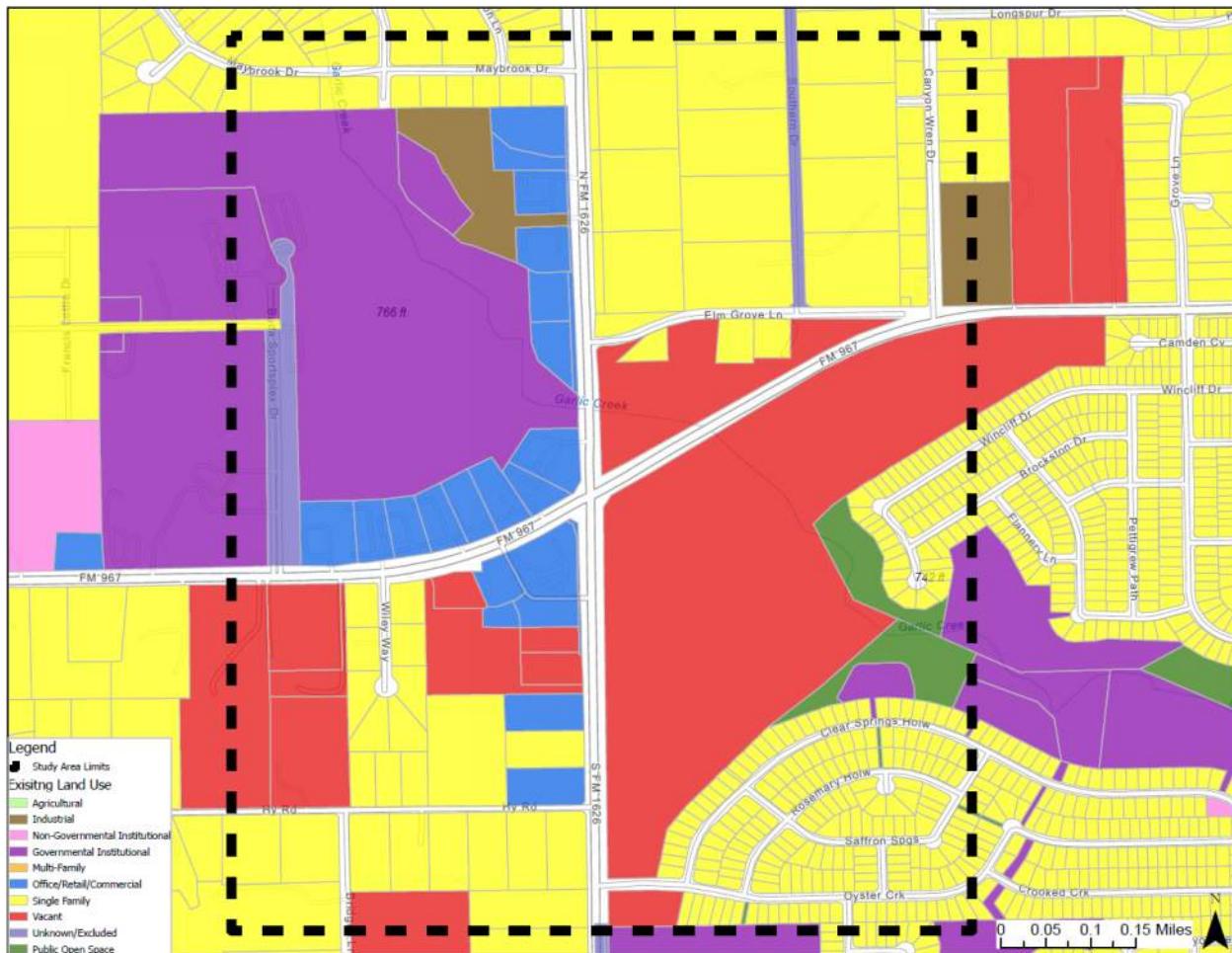
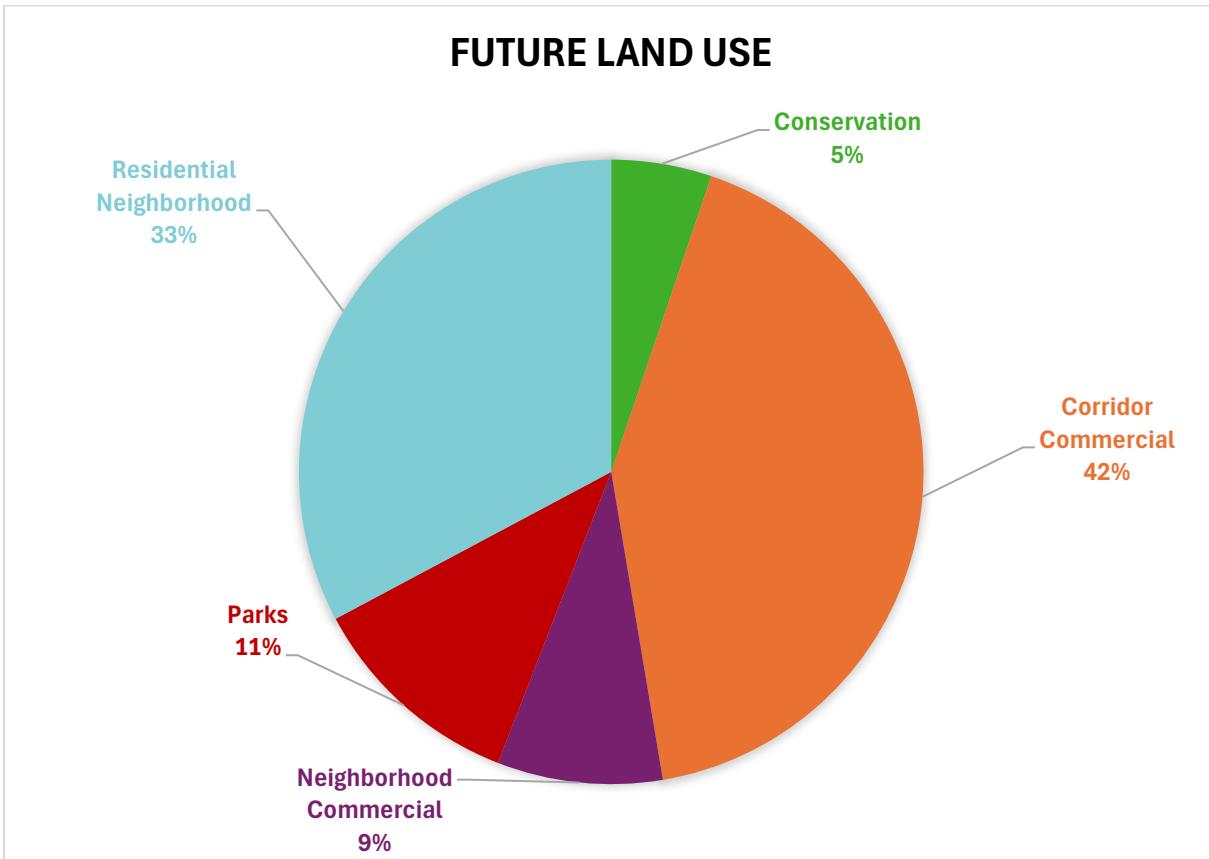


Figure 7 - Existing Land Use Map



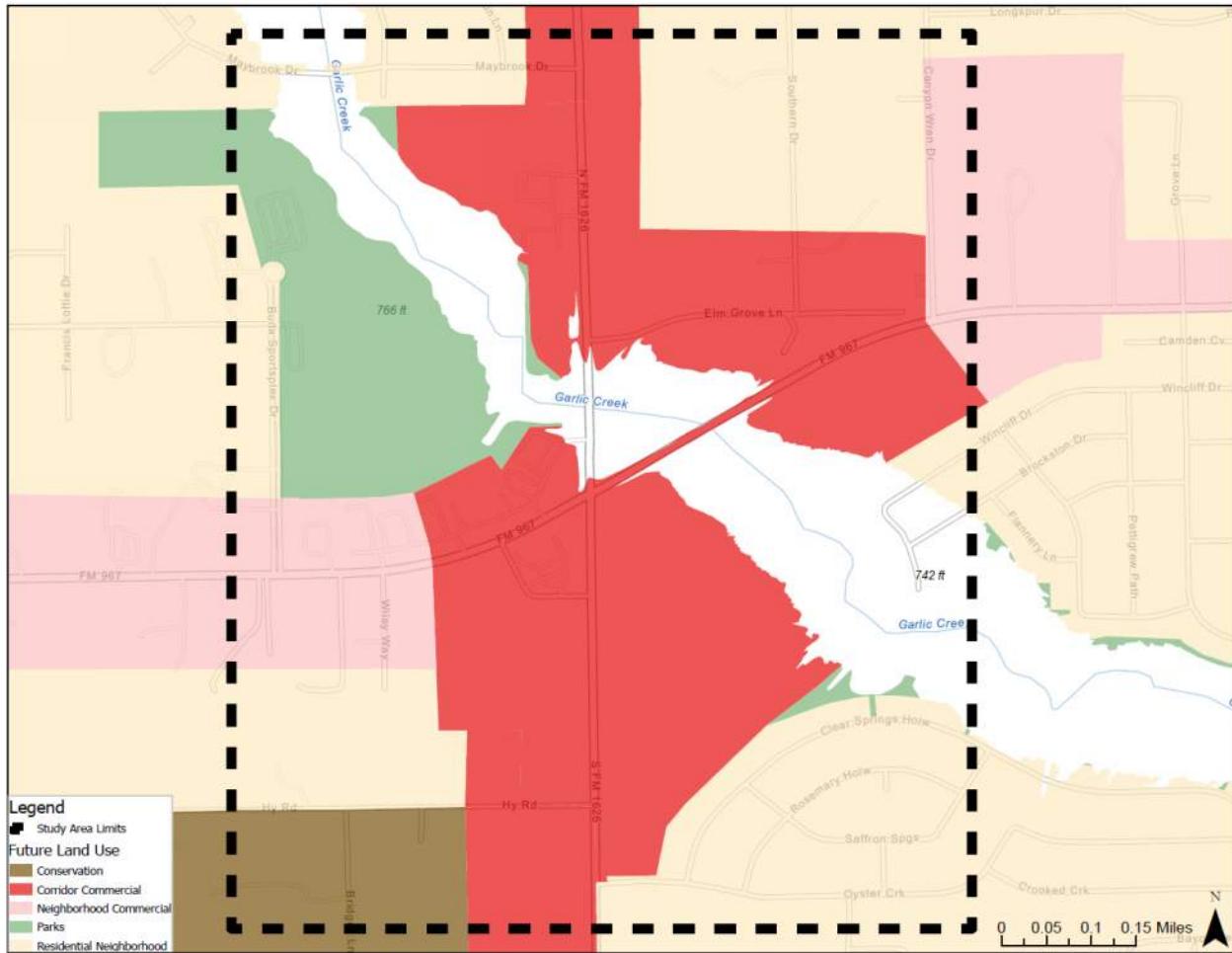
A review of the future land use within the FM 1626 and RM 967 study area provides insights into potential development patterns. **Figure 8** illustrates the anticipated distribution of land use by percentage. Most of the land is expected to remain suburban, with 33% designated as a residential neighborhood. The area is expected to see increased economic activity, with commercial development in the corridor making up 42% of the land. Conservation areas are expected to cover 5% of the land, reflecting the region's commitment to preserving green spaces, particularly around natural features like Garlic Creek and nearby water bodies. 9% of the area is projected for neighborhood commercial focusing on small-scale, localized businesses within residential areas to serve nearby communities. Lastly, parks are expected to occupy 11% of the land. A visual representation of these allocations is shown in **Figure 9**, illustrating how the anticipated land use types are distributed across the study area.

Figure 8 - Future Land Use by Percentage



## FM 1626/RM 967 Intersection Study | 2024

Figure 9 - Future Land Use Map



### 3 Operational Characteristics

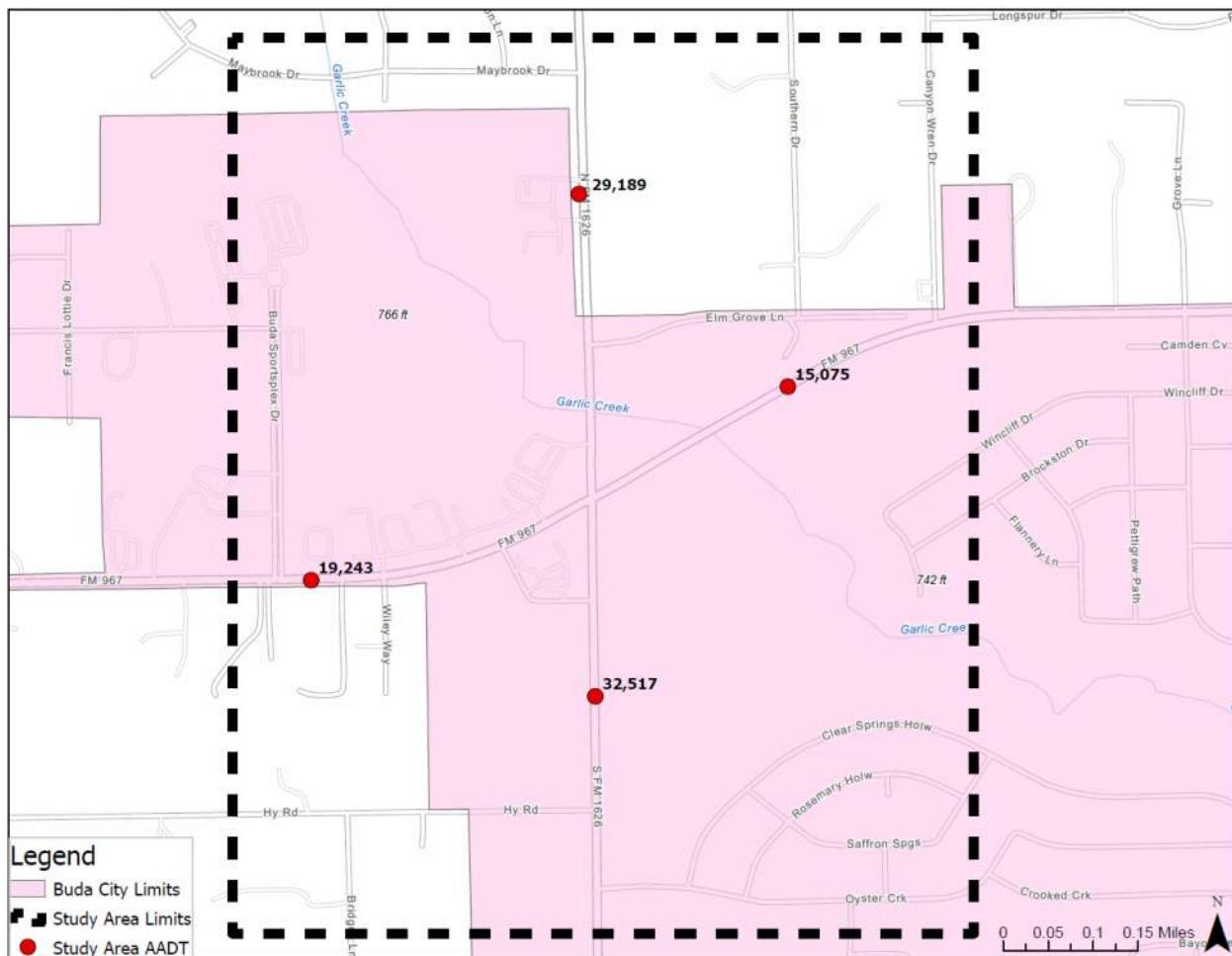
### 3.1 Traffic Volumes and Operations

This section examines traffic volumes and operations within the study area, focusing on current conditions, intersection performance, and future growth trends. It begins by analyzing Annual Average Daily Traffic (AADT) volumes to highlight congestion patterns and the significance of FM 1626 as a primary traffic route. Next, it evaluates intersection Level of Service (LOS), identifying capacity issues and peak-hour inefficiencies that hinder traffic flow. Finally, it examines projected traffic growth using historical trends and forecasting models to assess long-term roadway demands, emphasizing the need for targeted infrastructure improvements.

### 3.1.1 Annual Average Daily Traffic Volumes (AADT)

The AADT data for the FM 1626 and RM 967 intersection study was obtained from TxDOT's Traffic Count Database System (TCDS). **Figure 10** shows the 2023 AADT for the four roadway segments: FM 1626 in both the northbound and southbound directions, and RM 967 in both the eastbound and westbound directions, within the study area.

### Figure 10 - Annual Average Daily Traffic (AADT) Map



The AADT counts range from 32,517 vehicles per day along the southern portion of FM 1626 to 15,075 vehicles per day along the eastern portion of RM 967. This data indicates that FM 1626 is a crucial route for traffic movement, experiencing AADTs on par with some of the region's busiest major and minor arterials. These traffic volumes are instrumental in identifying congestion points and prioritizing areas for infrastructure improvements. This is particularly relevant in instances where intersection redesigns or traffic flow optimizations may be required.

### 3.1.2 Intersection Level of Service (LOS)

A LOS analysis was conducted for the study area intersection using traffic counts collected by a subconsultant, CJ Hensch & Associates, on August 20<sup>th</sup>, 2024. **Table 3** displays the results of this collection. **Figures 11 and 12** display the existing LOS for intersections during the AM and PM peak hours, respectively. Most design or planning efforts typically set the desired operation of a signalized intersection as LOS D or better (indicating an intersection is near its capacity for traffic), to ensure an acceptable operating service for facility users.

**Table 3 - Level of Service at the Study Intersection**

			Existing AM		Existing PM	
ID	Intersection	Movement	DELAY (s/veh)	LOS	DELAY (s/veh)	LOS
102	FM 1626 at RM 967	<i>Intersection</i>	78.3	E	128.5	F
		<i>EB-Left</i>	64.4	E	73.0	E
		<i>EB-Through</i>	60.6	E	95.1	F
		<i>EB-Right</i>	128.3	F	594.3	F
		<i>WB-Left</i>	61.7	E	86.2	F
		<i>WB-Through</i>	76.4	E	84.9	F
		<i>WB-Right</i>	118.9	F	102.2	F
		<i>NB-Left</i>	40.4	D	105.8	F
		<i>NB-Through</i>	87.0	F	28.6	C
		<i>NB-Right</i>	28.0	C.	25.7	C
		<i>SB-Left</i>	82.4	F	28.5	C
		<i>SB-Through</i>	56.2	E	82.5	F
		<i>SB-Right</i>	65.0	E	39.3	D

## FM 1626/RM 967 Intersection Study | 2024

The analysis of the AM and PM peak hours at the intersection indicates demand is significantly exceeding the current capacity. Among the movements analyzed, only the northbound left turn and northbound right turn during the AM peak and the northbound through movement, northbound right turn, southbound left turn, and southbound right turn during the PM peak are operating at LOS D or better. As a result, the overall LOS for the intersection is rated as E for the AM peak hour and F for the PM peak hour. These LOS results highlight significant issues with traffic congestion and underscore the need for traffic flow improvements to the intersection.

**Figure 11 - AM Existing Level of Service Map**

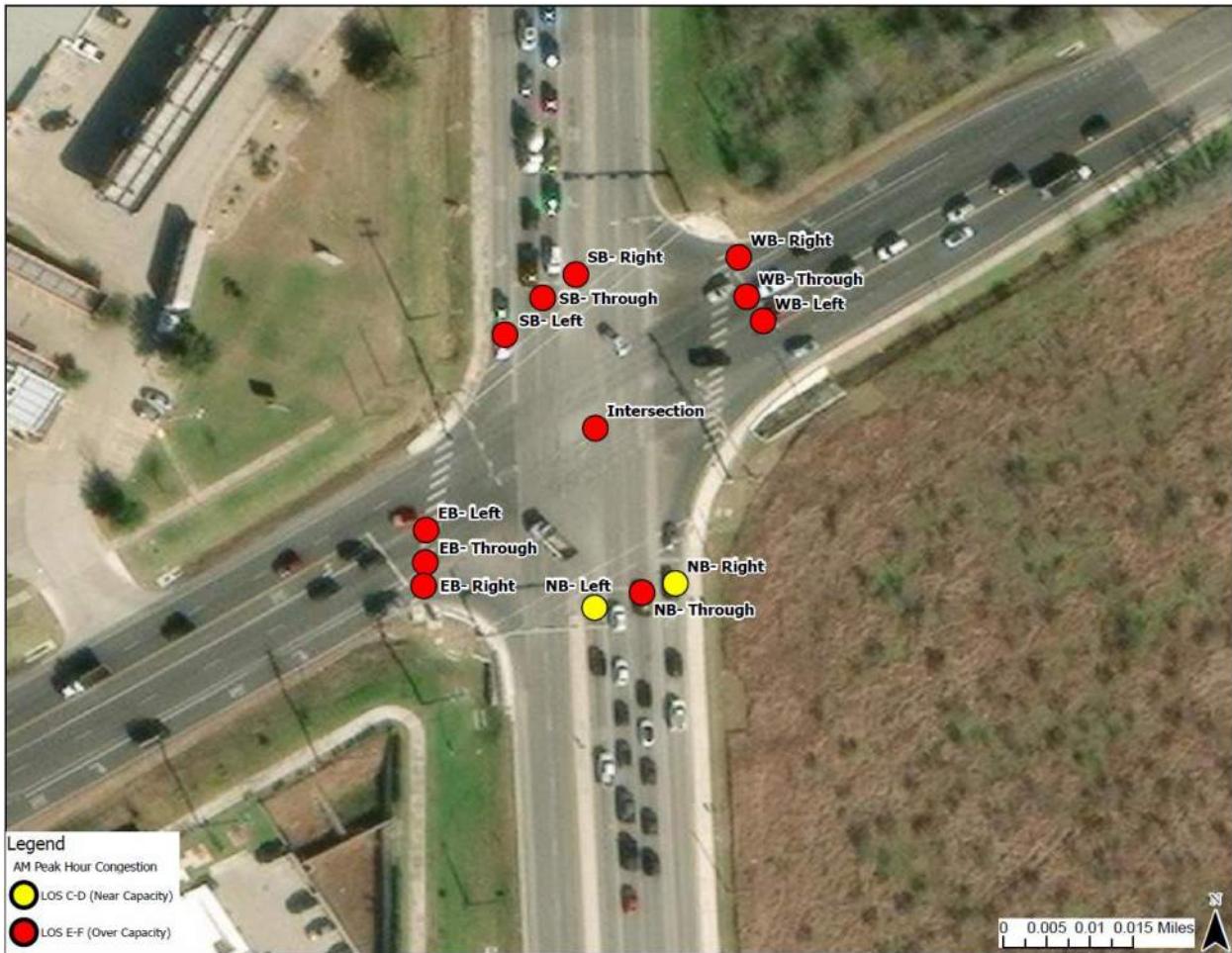
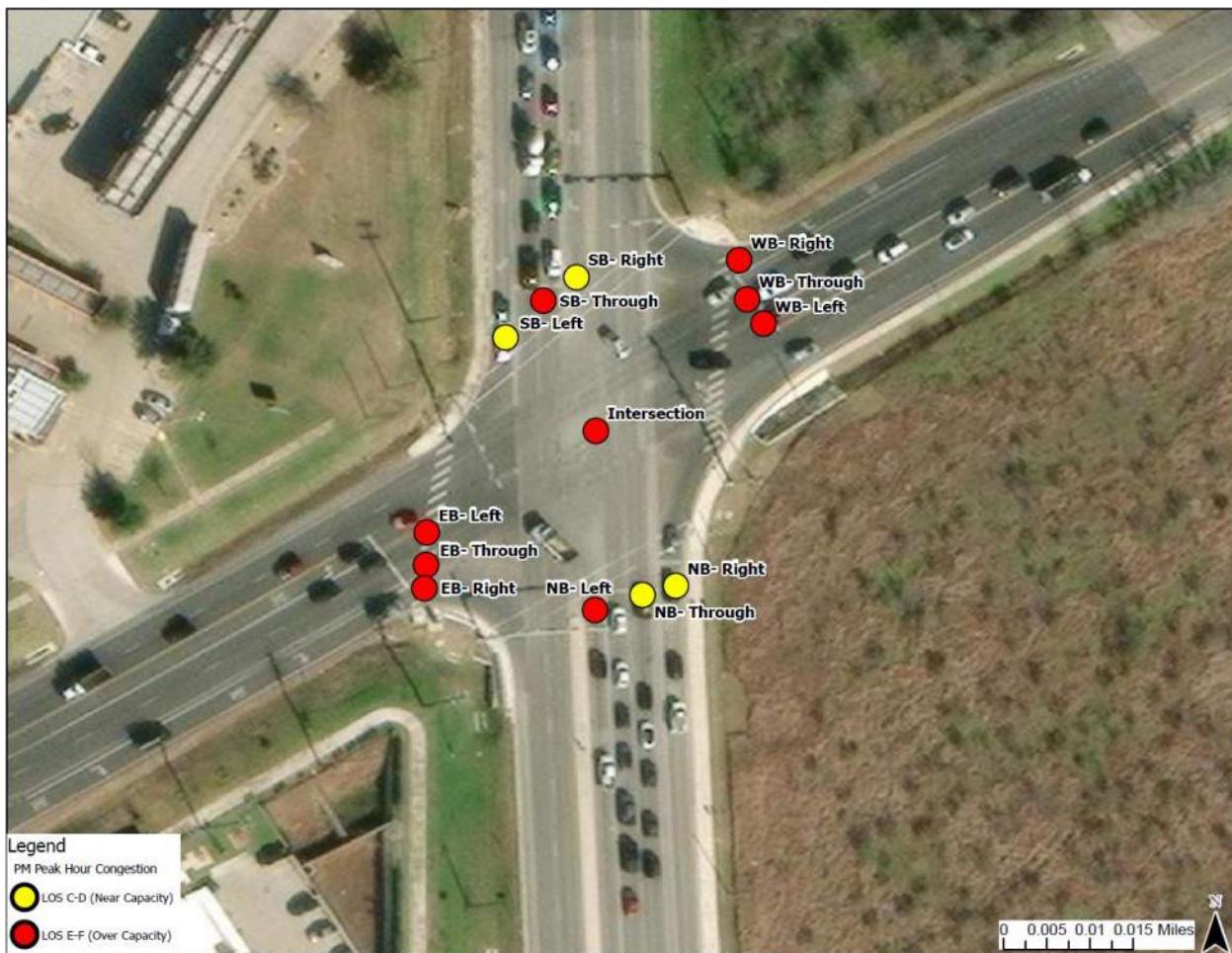


Figure 12 - PM Existing Level of Service Map



In addition to the primary intersection, LOS was also calculated for the intersections at RM 967 and Buda Sportsplex Dr and FM 1626 and Oyster Creek. These intersections experience significantly lower traffic volumes from the minor streets, resulting in better service flow rates that remain mostly below or near capacity during both AM and PM peaks. The only turning movements that exceed capacity are those turning right or left onto RM 967 and FM 1626, highlighting recurring issues with traffic flow entering and using these two main roadways. Detailed LOS results are provided in **Table 3** below.

Table 4 - Level of Service at Other Intersections

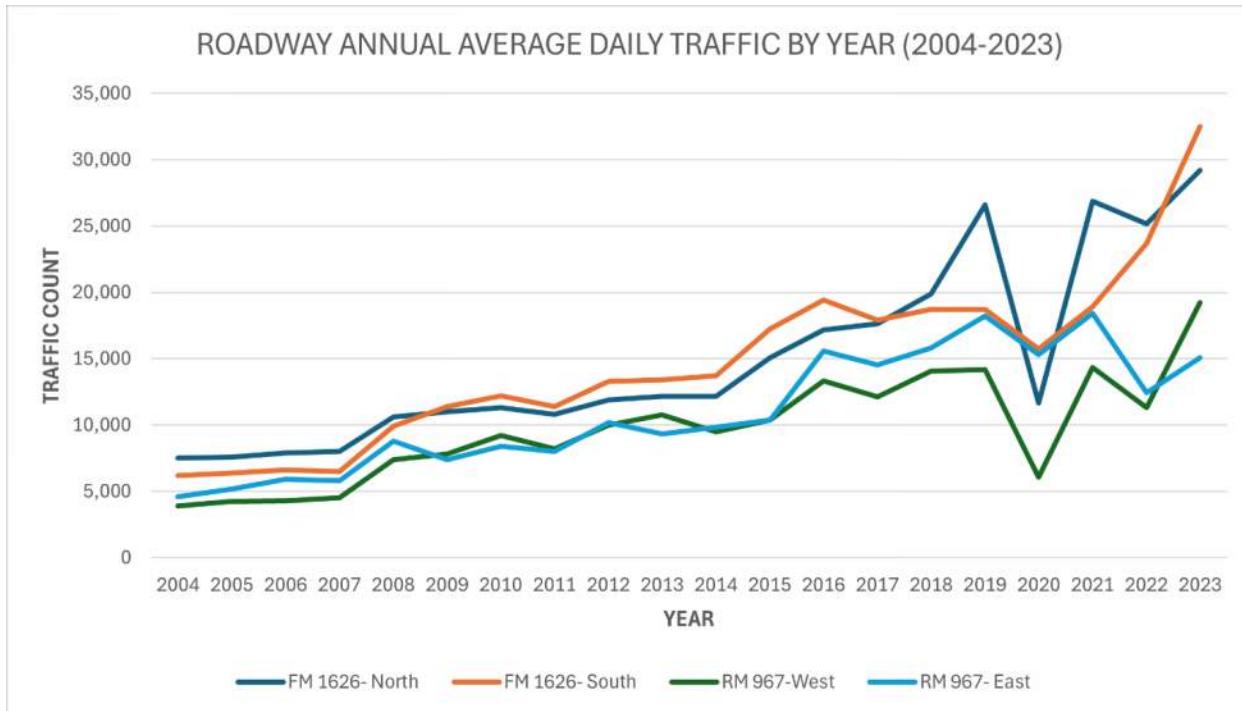
ID	Intersection	Movement	Existing AM		Existing PM	
			DELAY (s/veh)	LOS	DELAY (s/veh)	LOS
101	RM 967 at Buda Sportsplex Dr	Intersection	10.7	B	14.7	B
		EB-Left	7.8	A	5.1	A
		EB-Through	4.5	A	9.8	A
		WB-Through	10	B	8.1	A
		WB-Right	3.8	A	5.9	A
		SB-Left	64.4	E	69.6	E
		SB-Right	54.8	D	53.4	D
103	FM 1626 at Oyster Creek	Intersection	33.8	C	11.4	B
		WB-Left	85.4	F	88.0	F
		WB-Right	323	F	124.2	F
		NB-Through	14.6	B	7.0	A
		NB-Right	14.6	B	7.0	A
		SB-Left	17.3	B	5.1	A
		SB-Through	3.5	A	6.3	A

### 3.1.3 Projected Traffic Growth

In addition to the current traffic counts, AADT data spanning from 2004 to the present was obtained through the Traffic Count Data System (TCDS) for all four roadway segments: FM 1626, north and south, as well as RM 967, east and west. This dataset provides a 20-year overview of traffic volume measurements, offering valuable insight into the overall changes within the study area. **Figure 13** below illustrates the growth in traffic volumes since 2004, highlighting the trend of increasing traffic that has pushed the intersection beyond its designed capacity.

## FM 1626/RM 967 Intersection Study | 2024

Figure 13 - Annual Average Daily Traffic 20 Year Trends (2004-2023)



Between 2004 and 2023, the four roadway segments experienced an average annual growth rate of 7.9%. This overall figure is based on the individual growth rates of each directional segment over the 20-year period, with the FM 1626 South segment seeing the highest growth at 9.1% and the RM 967 West segment the lowest at 6.4%. Additionally, traffic growth bounced back significantly after an initial dip during 2020, rising beyond even pre-pandemic levels.

Looking ahead, traffic is projected to grow steadily, spurred by the development observed over the past 20 years, ongoing expansion in the surrounding area, and the essential role these roadways play in facilitating regional mobility. The Capital Area Metropolitan Planning Organization (CAMPO) DRAFT Regional Transportation Plan (RTP) 2050 model was used to forecast future traffic volumes. This model integrates current and historical traffic data, roadway capacity, planned developments, and various other factors to estimate how traffic patterns may evolve across the region.

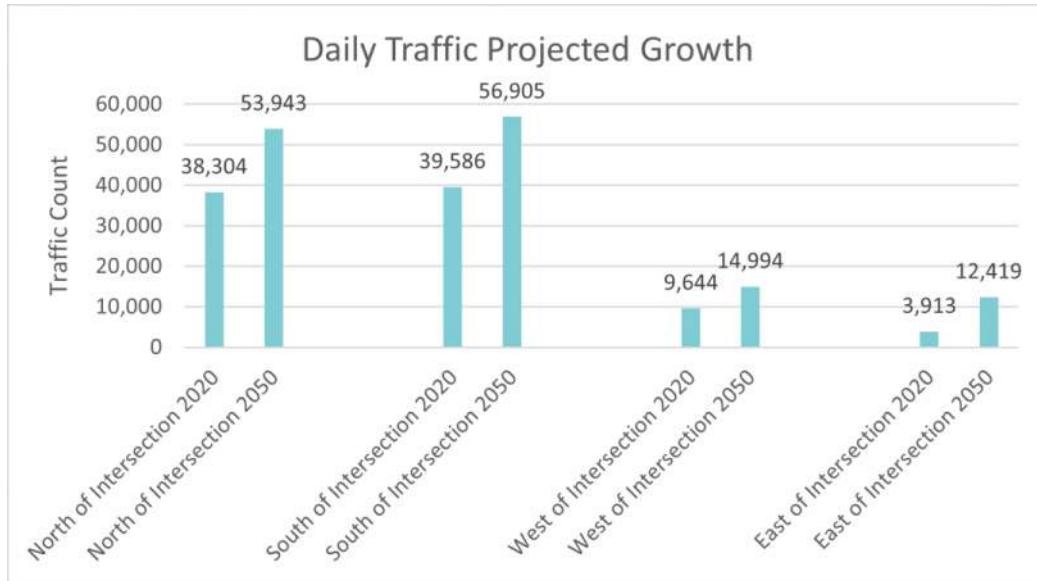
It is important to note that while this model provides valuable estimates, it remains just that—an estimate. Given that FM 1626 and RM 967 are already operating above capacity based on their design and function, the projected traffic counts may understate actual future volumes. This is due to the model's assumption that travelers will seek alternative routes when roadways exceed capacity, which could result in lower projections than what might occur.

The model provides traffic figures based on a baseline from 2020 and projects growth through 2050. The projected traffic growth is illustrated in **Figure 14**, with the percentage growth displayed in **Figure 15**. The findings indicate modest growth across all four roadway segments, particularly along both sides of RM 967, where the 2050 traffic counts are expected to be lower than TxDOT's estimated volumes for 2023. In contrast, FM 1626, which shows relatively slow overall growth, is projected to exceed 50,000 vehicles per day by 2050. The relatively modest growth rates expected (1-2% average annual growth for three out

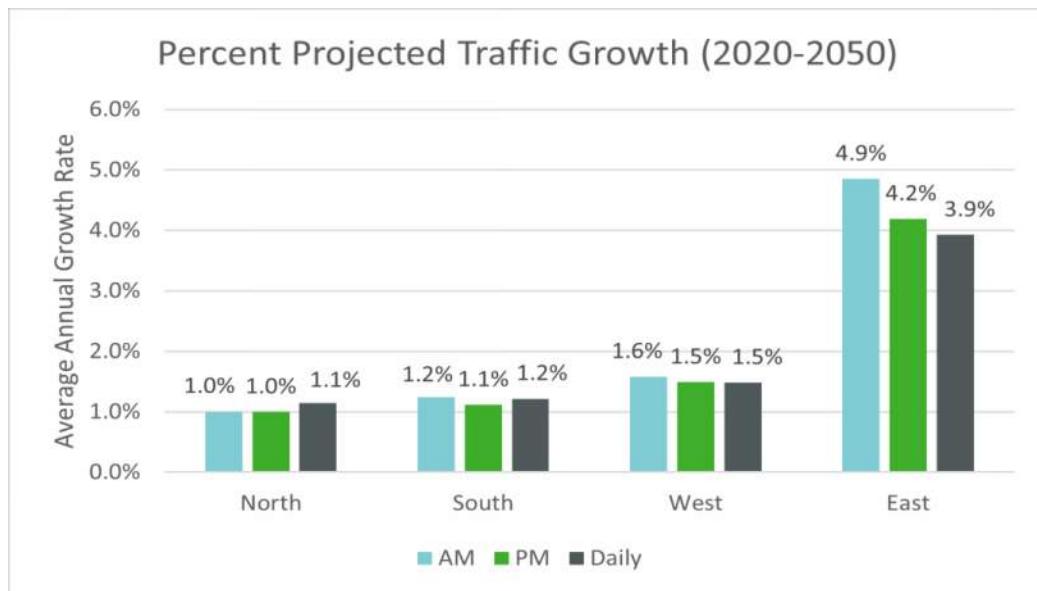
## FM 1626/RM 967 Intersection Study | 2024

of the four intersection legs) may be due to limited available capacity during peak hours at the intersection.

**Figure 14 - Daily Traffic Projected Growth (2020-2050)**



**Figure 15 - Percent Projected Traffic Growth (2020-2050)**



## 3.2 Posted Speed Limits & Speed Management

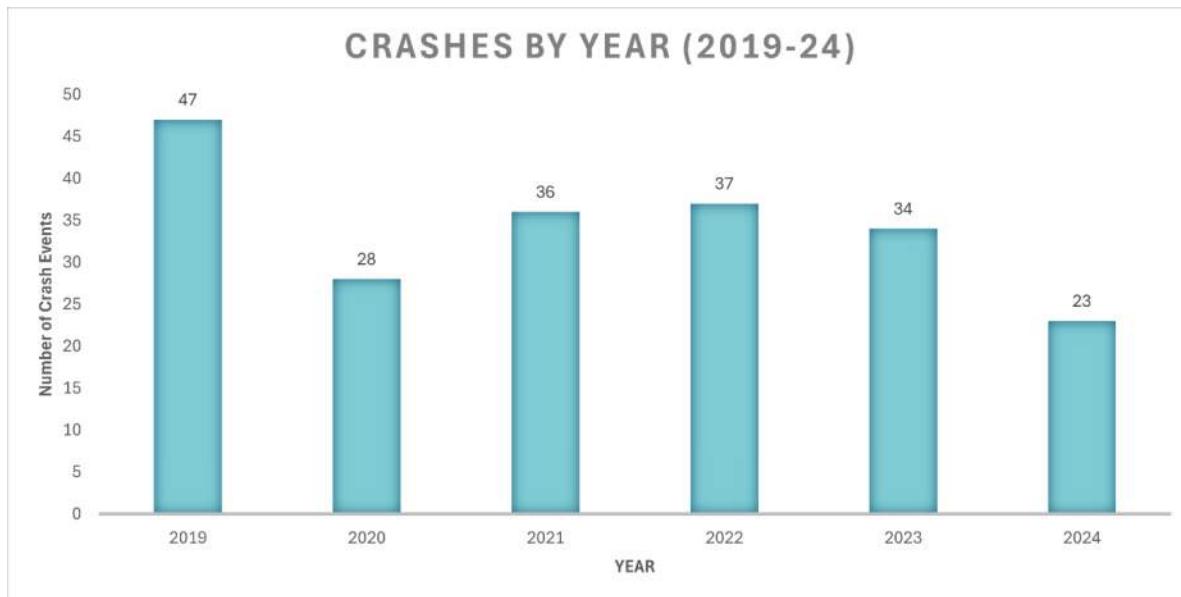
The speed limits along FM 1626 and RM 967 are generally set at 55 miles per hour (mph) throughout most of the study area. However, there are exceptions. On certain curved sections of RM 967, the speed limit decreases to 40 mph and 50 mph for safety. Additionally, in marked school zones—starting at Hy Road and extending south beyond the study area along FM 1626, as well as approximately 200 feet east of Buda Sportsplex Road and continuing west beyond the study area along RM 967—the speed limit is reduced to 35 mph.

An analysis of the crashes recorded in the study area from 2019 to 2024 revealed that the leading cause of crashes was "driver inattention," accounting for over 32% of all crashes during this period. The second most common cause was "failed to yield right of way," contributing to more than 23% of the incidents, while "failed to control speed" was responsible for over 10%. This indicates that speed management is not a major concern for the study area. Further review and analysis of the posted speed limits throughout the roadways in the study area may support updates to these limits. However, focusing on addressing concerns related to turning movements and congestion is likely to have a more significant overall impact on improving traffic safety issues currently observed in the area.

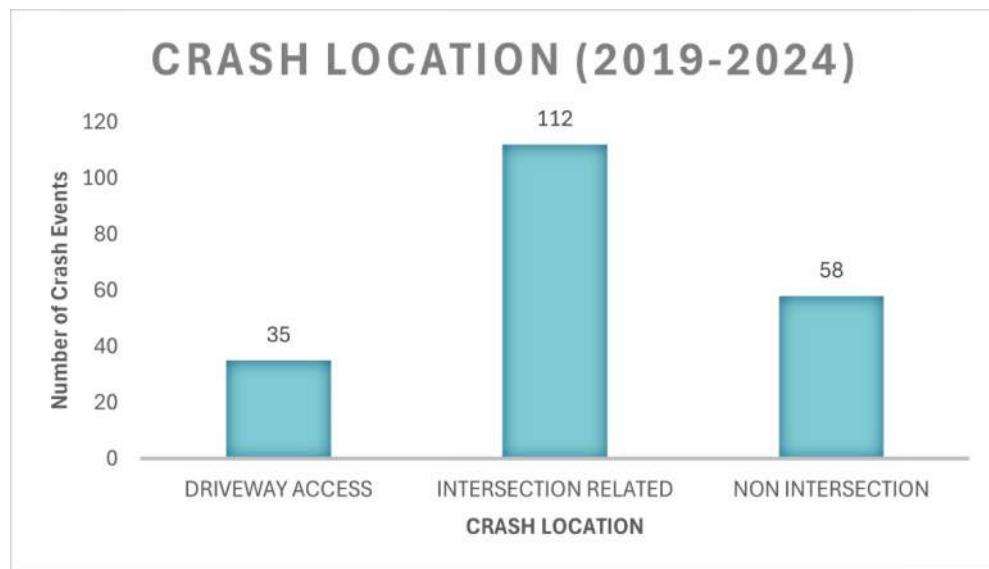
## 3.3 Safety Analysis

The crash data for the FM 1626 and RM 967 intersection study area from 2019 to 2024 provides critical insights into the frequency, location, severity, and growth of traffic crashes in the region. The crash data was sourced from the TxDOT Crash Records Information System (CRIS) database. With a total of 205 crashes recorded, most of these events occurred at or near intersections, particularly at the high-risk FM 1626 and FM 967 junction. Most crashes resulted in no injuries, but a small percentage involved minor or serious injuries, emphasizing the need for targeted safety interventions. The analysis of crash locations highlights key areas where improvements in intersection design, traffic control measures, and access management could significantly reduce accidents' occurrence and severity. This comprehensive crash data is a foundation for prioritizing infrastructure upgrades and safety enhancements to improve road conditions and reduce future traffic crashes.

The number of total crash events by year from 2019 to 2024 within the study area is shown in **Figure 16**. The data reveals that the highest number of crashes occurred in 2019, with 47 crash events. In 2020, crashes dropped significantly to 28 events, likely due to decreased road use during the COVID-19 pandemic. As restrictions eased, crashes increased again to 36 events in 2021, stabilized at 37 events in 2022 and 34 events in 2023, reflecting a return to pre-pandemic traffic volumes. As of September 2024, 23 crashes have been recorded, with the year not yet complete, suggesting it may align with post-pandemic figures from recent years. This data underscores the need for focused traffic safety improvements at the FM 1626 and RM 967 intersections. The sharp decrease in crashes during the pandemic highlights the impact of traffic volumes on crash frequency, while the gradual recovery indicates more stable but still significant traffic safety challenges. The high crash rates, particularly in 2019, suggest areas where specific interventions, such as traffic control measures or infrastructure improvements, could reduce future crashes.

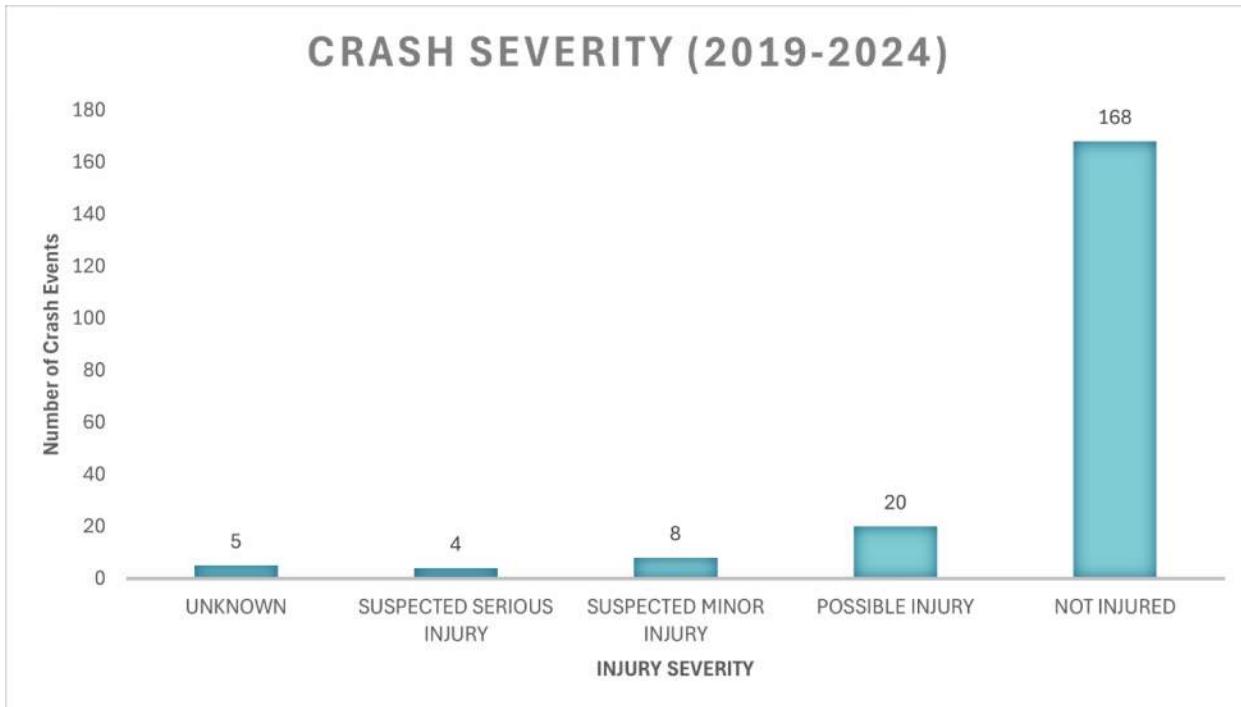
**Figure 16 - Crashes by Year (2019-2024)**

A categorization of crash events from 2019 to 2024 based on their location: Driveway Access, Intersection-Related, and Non-Intersection areas is shown in **Figure 17**. Most of the crashes (112 events) occurred at or near intersections. Non-intersection areas recorded 58 events, while driveway access points experienced 35 crashes. The data suggests that intersections are high-risk areas, requiring focused safety interventions such as signal timing improvements, better signage, or intersection redesigns. Non-intersection crashes point to potential issues with speeding or unsafe driving along road segments. Driveway access crashes highlight the risks associated with frequent ingress and egress points, suggesting that access management strategies, such as consolidating driveways, could help reduce crashes.

**Figure 17 - Crashes by Location**

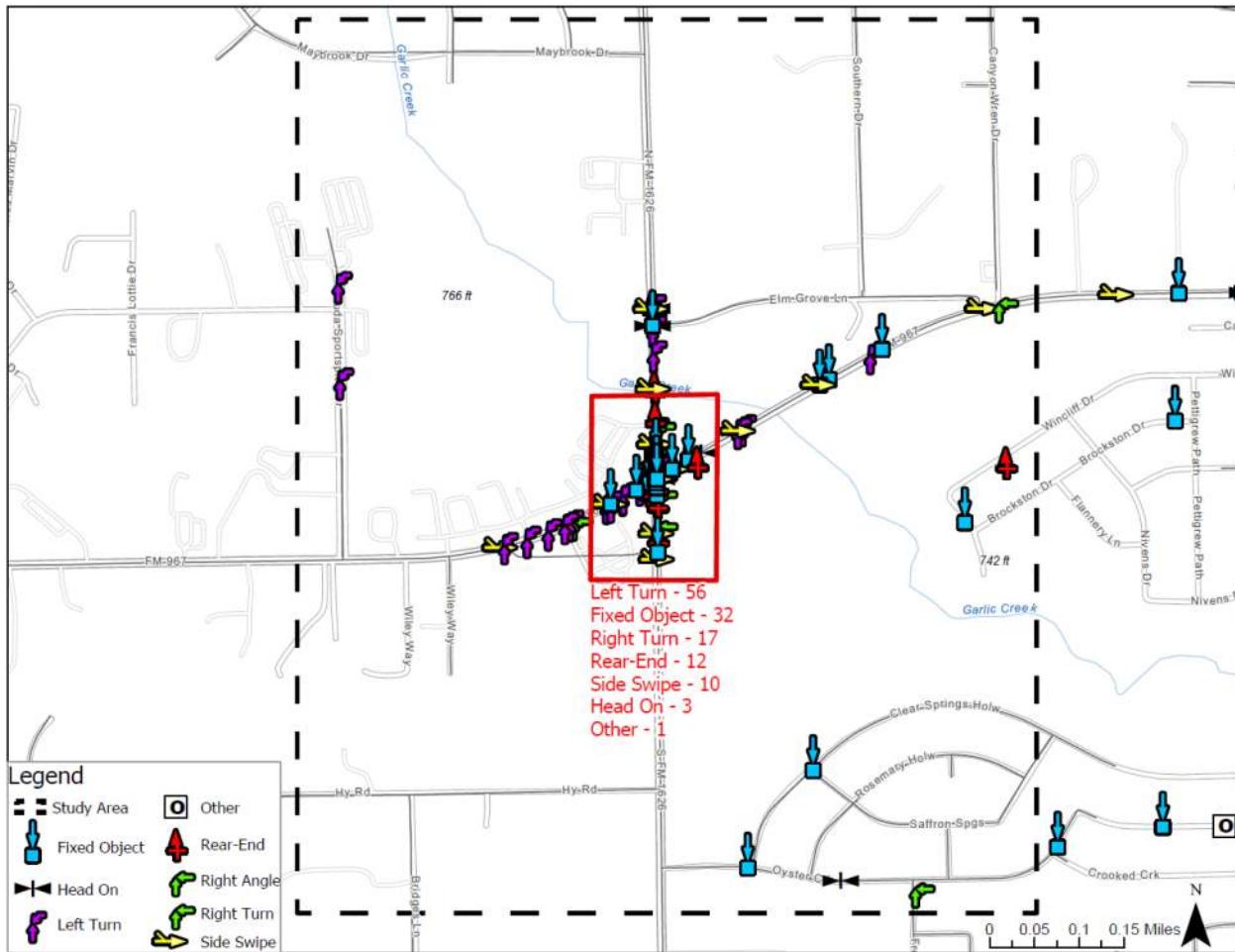
A breakdown of the injury outcomes for crashes between 2019 and 2024 is shown in **Figure 18**. Most crashes (168 out of 205 events) resulted in no injuries, reflecting a relatively low severity profile for incidents in the study area.

**Figure 18 - Crashes by Severity (2019-2024)**



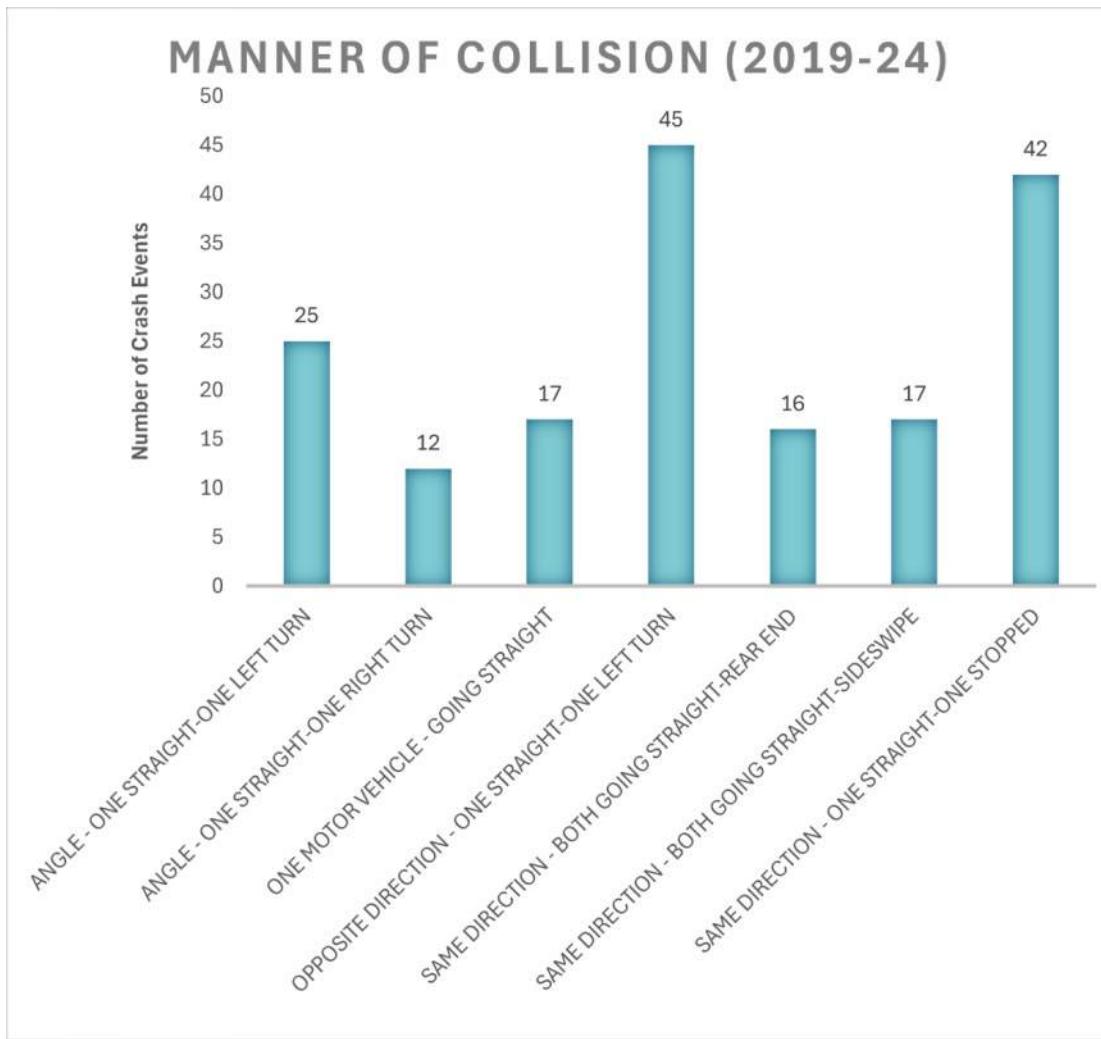
A visual representation of the distribution of crash factors across the study area is shown in **Figure 19**. The most common crash factor is left-turn collisions, with 56 instances marked on the map, followed by fixed-object crashes (32 events), and right-turn collisions (17 events). The concentration of left-turn collisions, particularly at FM 1626 and RM 967, suggests the need for improved turn safety measures, such as dedicated turn lanes, better signal timing, or even the consideration of a roundabout. The presence of fixed-object crashes and right-turn collisions across various locations further emphasizes the importance of addressing traffic flow issues and improving visibility and lane delineation to prevent crashes. The frequency of fixed-object crashes indicates a need for improved lighting, speed control, and traffic management devices to enhance traffic flow and reduce such accidents.

Figure 19 - Crash Factors Map



The types of collisions are broken down by number of events in **Figure 20**. Same Direction – Both Going Straight – Rear End crashes are the most common, with 45 instances, followed by Same Direction – One Straight, One Stopped collisions (42 events). Angle – One Straight, One Left Turn crashes occurred 25 times, while Opposite Direction – One Straight, One Left Turn and Same Direction – Both Going Straight – Sideswipe each had 17 events. The dominance of rear-end collisions and crashes involving turning vehicles suggests the need for enhanced traffic flow management and turn safety improvements. Measures like improved turn signals, signage, and lane configurations could help reduce these types of accidents, especially at high-risk intersections.

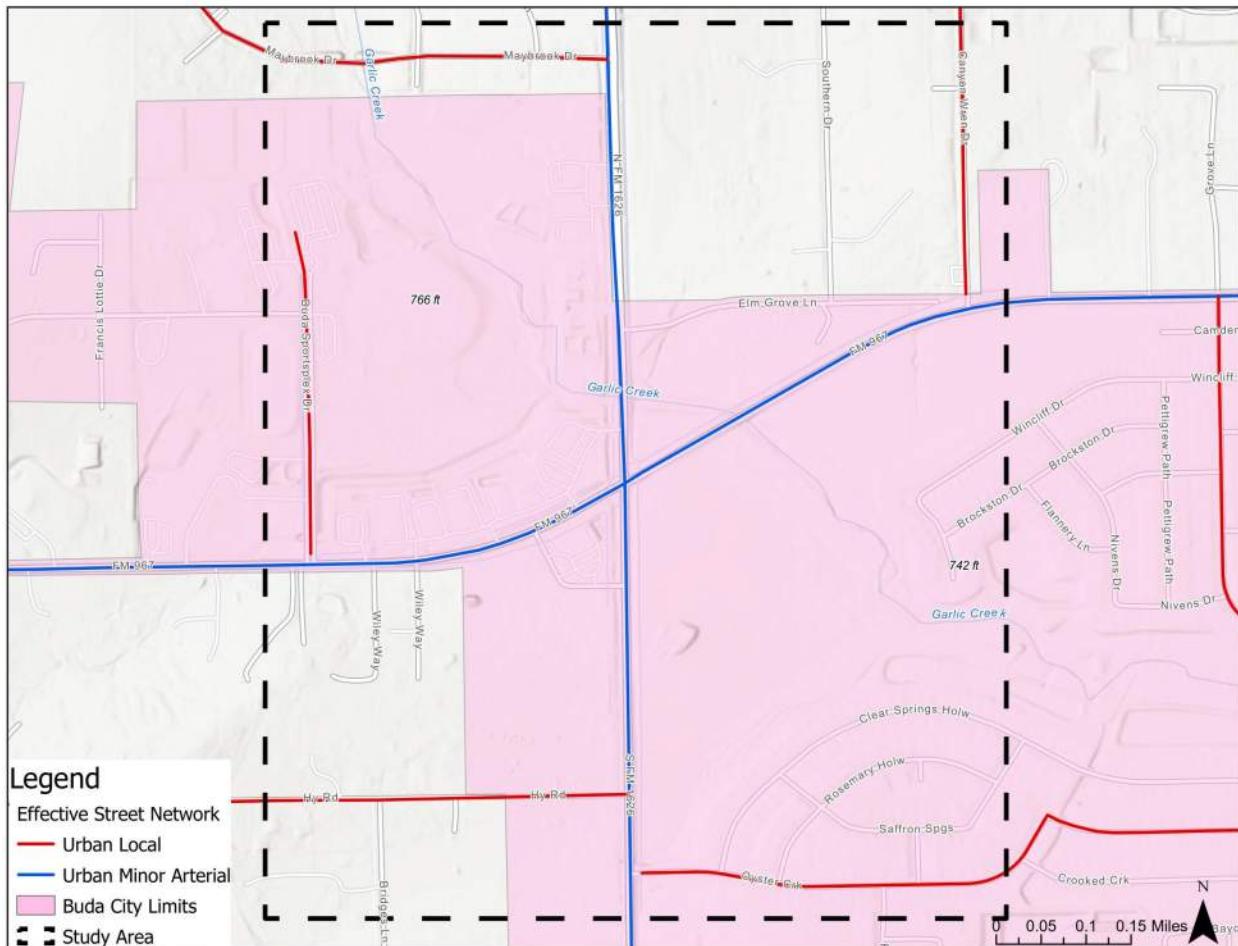
Figure 20 - Crashes by Manner of Collision (2019-2024)



### 3.4 Roadway Connectivity Analysis

A roadway connectivity analysis was conducted along the study area using information obtained during the data collection phase, the City of Buda Thoroughfare Plan, and the Our Buda, Our Future Comprehensive Plan. A roadway connectivity analysis evaluates the interconnectedness and efficiency of the roadway network to identify the overall mobility and accessibility of the area. The effective street network map as shown in **Figure 21** illustrates the key roadways that provide important connectivity throughout the study area. To identify the effective street network, roadways such as dead-end, cul-de-sac, and other disconnected roads were removed from the map. The analysis highlights key roadways such as FM 1626, RM 967, Oyster Creek Road, Hy Road, Maybrook Road, and Elm Grove Lane, emphasizing the importance of preserving and enhancing access to these routes for improved connectivity in the study area.

Figure 21 - Effective Roadway Connectivity Network



## 4 Roadway Deficiencies

This section provides an overview of the existing deficiencies identified within the study area. The analysis focuses on several key aspects of roadway geometry, intersection geometry and signal timing, access management, and pedestrian mobility. By examining these factors, the objective is to identify areas of improvement and bring attention to the critical challenges that require addressing to enhance the functionality, safety, and mobility of the project area. This comprehensive evaluation of existing deficiencies is a foundation for formulating effective strategies and recommendations for future enhancements.

### 4.1 Roadway Geometry

Roadway geometry refers to the design and layout of a road and includes elements such as sight distance, horizontal and vertical alignment, and cross-sectional elements. These design elements heavily influence a roadway's functionality, safety, and efficiency. Cross-sectional deficiencies identified along FM 1626 and RM 967 relate to median design, curb and gutters, and pedestrian and bicycle facilities.

#### Median Design

The study area exhibits deficiencies in controlling and restricting mid-block left-turn and crossing maneuvers. RM 967 is classified as an Urban Minor Arterial by the City of Buda. The existing cross section includes two travel lanes in each direction, a continuous two-way left-turn lane (TWLTL), and right turn lanes at the FM 1626 intersection. The TxDOT Roadway Design Manual provides guidelines for several different roadway facilities; The manual states medians are desirable for urban streets with four or more traffic lanes. A raised median is used on urban streets where it is desirable to control or restrict mid-block left-turn and crossing maneuvers. Installing a raised median can improve traffic safety, increase throughput, reduce delays, and provide pedestrian refuge areas. While this does not directly impact the main study area intersection, improving the left-turn and crossing maneuver functionality throughout the study area would greatly improve mobility and ease of travel through the intersection. The manual states a raised median design should be considered where:

- AADT exceeds 20,000 vehicles per day;
- New development is occurring, and volumes are anticipated to exceed 20,000 vehicles per day; or
- There are operational concerns for mid-block turns

The findings from the analysis conducted in **Section 3.1 Traffic Volumes** and **Section 3.3 Safety Analysis** validate the existence of these conditions along FM 1626, but RM 967 is still noticeably below the recommended AADT counts. The existence of a raised median along FM 1626, which does have AADT exceeding 20,000 vehicles per day, while having significantly less concern for mid-block left-turns and crossing maneuvers suggests the potential need for a raised median being utilized along RM 967. The analysis reveals the current AADT along RM 967 is roughly 15,000 vehicles on the east side of the intersection and greater than 19,000 vehicles on the west side. With the future projected traffic volumes expected to continue growing, the 20,000 vehicle per day threshold is likely to be reached within the coming years. This consideration, in conjunction with the findings for crash frequency and Level of Service analysis validate these concerns and suggest the potential need for a raised median along RM 967 in the study area vicinity.

## Curb and Gutters

Curb and gutter infrastructure are absent along the RM 967 west of the study area intersection with FM 1626 and east of the intersection along the north side of RM 967. Curb and gutter are present along all of FM 1626 within the study area and along the south side of RM 967 east of the intersection, resulting in over 50% of the study area roadways featuring curb and gutter. Curb and gutters play a crucial role in roadway design by effectively managing stormwater runoff and enhancing the overall functionality and longevity of roadways. The purpose of curb and gutters is to channelize and control the flow of water, prevent erosion, and minimize damage to the roadway and adjacent properties. They help collect and direct stormwater towards designated drainage systems, reducing the risk of flooding, improving roadway safety, and preserving the structural integrity of the pavement. Additionally, curb and gutters provide a clear delineation between the roadway and adjacent areas, improving pedestrian safety and facilitating efficient maintenance operations.

## 4.2 Intersection Geometry and Signal Timing

The study area demonstrates deficiencies in both the design of the intersection and the timing of the traffic signals, which negatively affect the efficiency of the roadway network. The FM 1626 and RM 967 intersection is not adequately designed to handle the volume of turning movements, resulting in increased congestion, turning conflicts, and potential safety hazards for vehicles and pedestrians. Moreover, the signal timing does not effectively optimize traffic flow and does not facilitate smooth progression through the intersection. These issues lead to delays, increased travel times, and increased risks of conflicts among vehicles, pedestrians, and bicyclists.

It is essential to address these deficiencies through appropriate geometric design improvements and optimizing signal timing. This will enhance the functionality, safety, and overall performance of the intersection, ensuring a smoother flow of traffic and improving the transportation experience for all users. A list of the existing geometric deficiencies is provided in **Table 4**.

**Table 5 - Geometric Deficiencies**

Roadway	Direction	Deficiencies
FM 1626	Northbound	Left turning movement is high and the single left turn bay may not be sufficient for the northbound movements.
RM 967	Both Directions	High through volume along RM 967 is causing high delay along FM 1626.
FM 1626	Both Directions	High through volume along FM 1626 is causing high delay along RM 967.

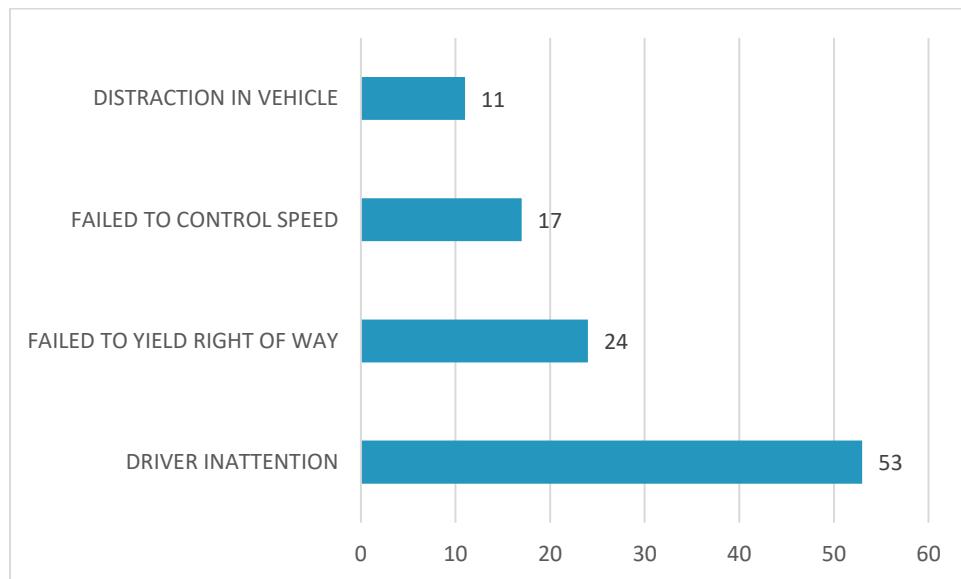
## 4.3 Access Management

The study area exhibits significant deficiencies in access management and has a high density of driveways, which creates challenges for the efficient and safe operation of the roadway. The roadways in this area lack appropriate access management strategies, particularly along the western portion of RM 967, resulting in an increased number of driveways. As noted in **Section 2.6 Driveways**, the current arrangement does not comply with FHWA standards regarding the spacing between access points. This contributes to many non-intersection crash types, as shown in **Figure 22**.

This excessive number of driveways leads to frequent conflicts between turning vehicles, reduces traffic flow capacity, and increases the potential for accidents. Additionally, the proximity of these driveways to intersections exacerbates these issues, resulting in congestion, reduced sight lines, and compromised overall safety along the corridor. This heightens concerns about mid-block left turns and crossing maneuvers, as mentioned in **Section 4.1**.

To address these deficiencies, it is crucial to implement effective access management techniques. These may include consolidating driveways, implementing access restrictions, improving spacing between access points, and planning for local access roads. Such measures are vital for reducing conflicts, improving traffic flow, enhancing safety, and optimizing the functionality of the roadways in the study area.

**Figure 22 - Top 3 Non-intersection Crash Types**



#### 4.4 Pedestrian Mobility

The study area exhibits significant deficiencies in its sidewalk and bicycle infrastructure, which greatly hinder the safe and efficient movement of pedestrians and bicyclists. These deficiencies are primarily characterized by gaps in the sidewalk network, leading to discontinuities that force pedestrians to navigate through areas without proper walkways. This situation increases the likelihood of conflicts with vehicular traffic.

The absence of dedicated bicycle lanes or protected cycling facilities puts bicyclists at risk, as they must share the roadway with motor vehicles. This not only compromises their safety but also discourages the use of active transportation modes. These deficiencies highlight the urgent need for improved sidewalk connectivity and the implementation of dedicated bicycle infrastructure to enhance overall accessibility and promote a more sustainable, pedestrian-friendly environment within the study area.

A review of origin-destination data obtained from CAMPO's Passenger Origin-Destination Dashboard, which is based on the 2020 Next Generation National Household Travel Survey Passenger Origin-

## FM 1626/RM 967 Intersection Study | 2024

Destination Dataset, revealed that roughly 7% of travel (both starting and ending within the Census Block Groups the study area) was done by walking or biking. As expected in a suburban area, the vast majority (approximately 93%) is by car. This contributes to concerns about congestion and traffic volumes exceeding roadway capacity.

## 5 Environmental Constraints

An environmental constraints analysis involves identifying and assessing the environmental factors and limitations that could impact a project or area. These factors may include sensitive habitats and regulatory requirements. In the study area, the environmental constraints examined include parks and water features, wetlands, floodplains, historic resources, and existing public utilities.

### 5.1 Wetlands, Floodplains, and Water Resources

The environmental factors in the study area are illustrated in **Figure 23** below. GIS data for wetlands and floodplains was obtained from the National Wetlands Inventory (NWI) and Federal Emergency Management Agency (FEMA). Additionally, data regarding the Edwards Aquifer was obtained from the City of Buda. The wetlands within the study area are classified as riverine and are found exclusively along Garlic Creek. Their presence is not anticipated to significantly impact the study intersection.

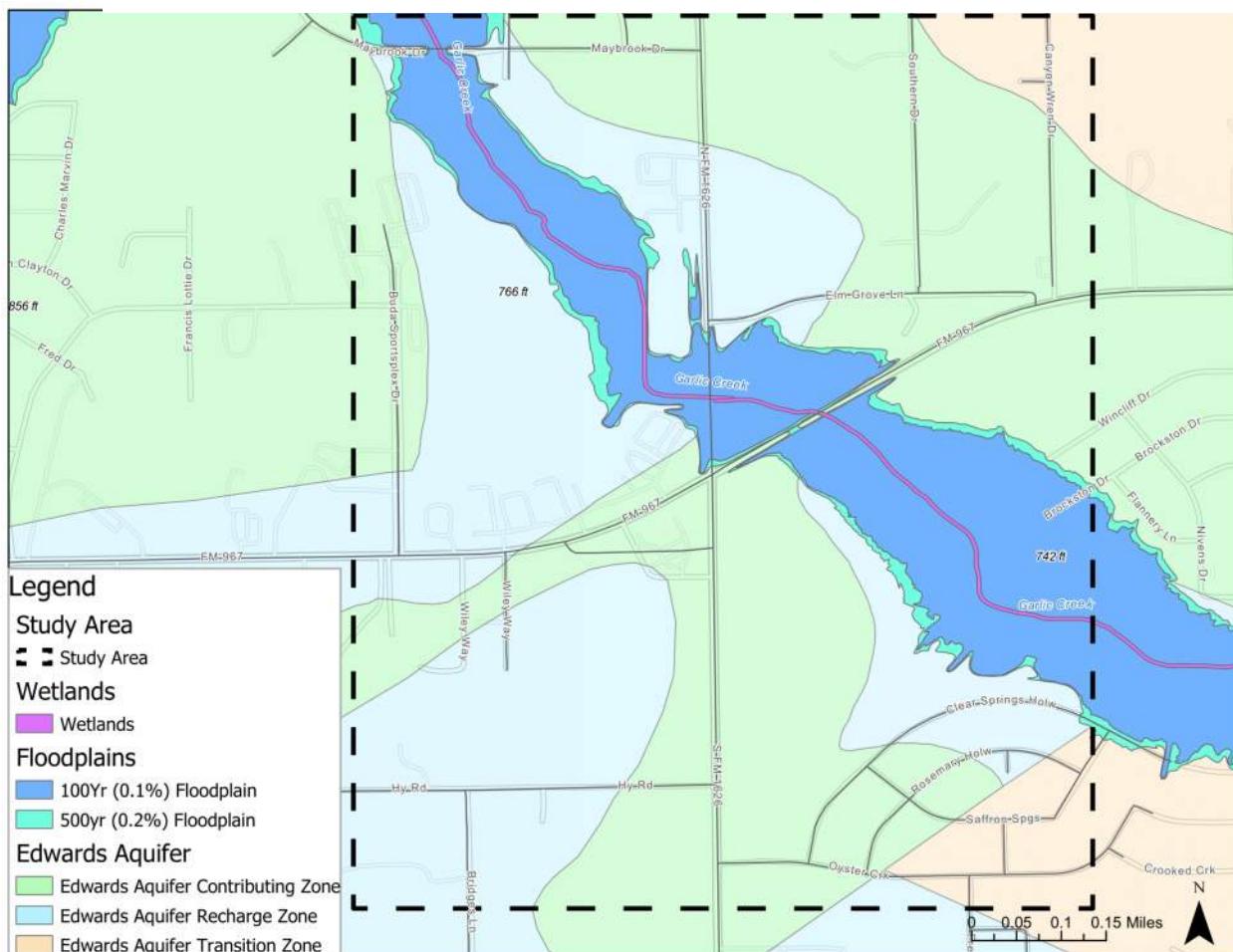
The floodplains in the study area include both 100-year and 500-year floodplains along Garlic Creek. A section of the roadway to the north of the intersection, along FM 1626, falls within the 100-year floodplain, while a small area of the designated 500-year floodplain extends between 35 and 50 feet into the study intersection. The proximity of these floodplains to the intersection and their crossing over one of the study roadways will influence any future design modifications. Any work conducted at the intersection will necessitate regulatory compliance prior to the start of construction. Depending on the established boundaries of the floodplains, it may also be required to raise the roadway above the Base Flood Elevation (BFE) if it is not already elevated. This requirement will extend to the section of FM 1626 north of the intersection if any work reaches that area.

The aquifer zones present in the study area are classified into three types: Contributing Zone, Recharge Zone, and Transition Zone. The study area roadways intersect both the Contributing Zone and the Recharge Zone, with the intersection located entirely within the Contributing Zone. Both zones influence the level of development and the extent of impervious surfaces allowed within them.

The Contributing Zone, primarily located north of the intersection on FM 1626, is the area where rainfall flows overland into streams. Excessive impervious surfaces in this zone can increase both the volume and velocity of runoff. To mitigate this, it is essential to limit impervious cover and prioritize the use of pervious surfaces, which aid in water infiltration and movement. The Recharge Zone, which is more critical and located at the intersection, is where water directly enters the aquifer. The regulations regarding impervious surfaces are stricter in this zone, making it vital to incorporate stormwater management systems to filter runoff and sustain natural infiltration rates.

The restrictions associated with these two zones may necessitate design changes for the proposed roadways in the study area. Emphasizing pervious coverage and effective infiltration systems is crucial to protect the Edwards Aquifer.

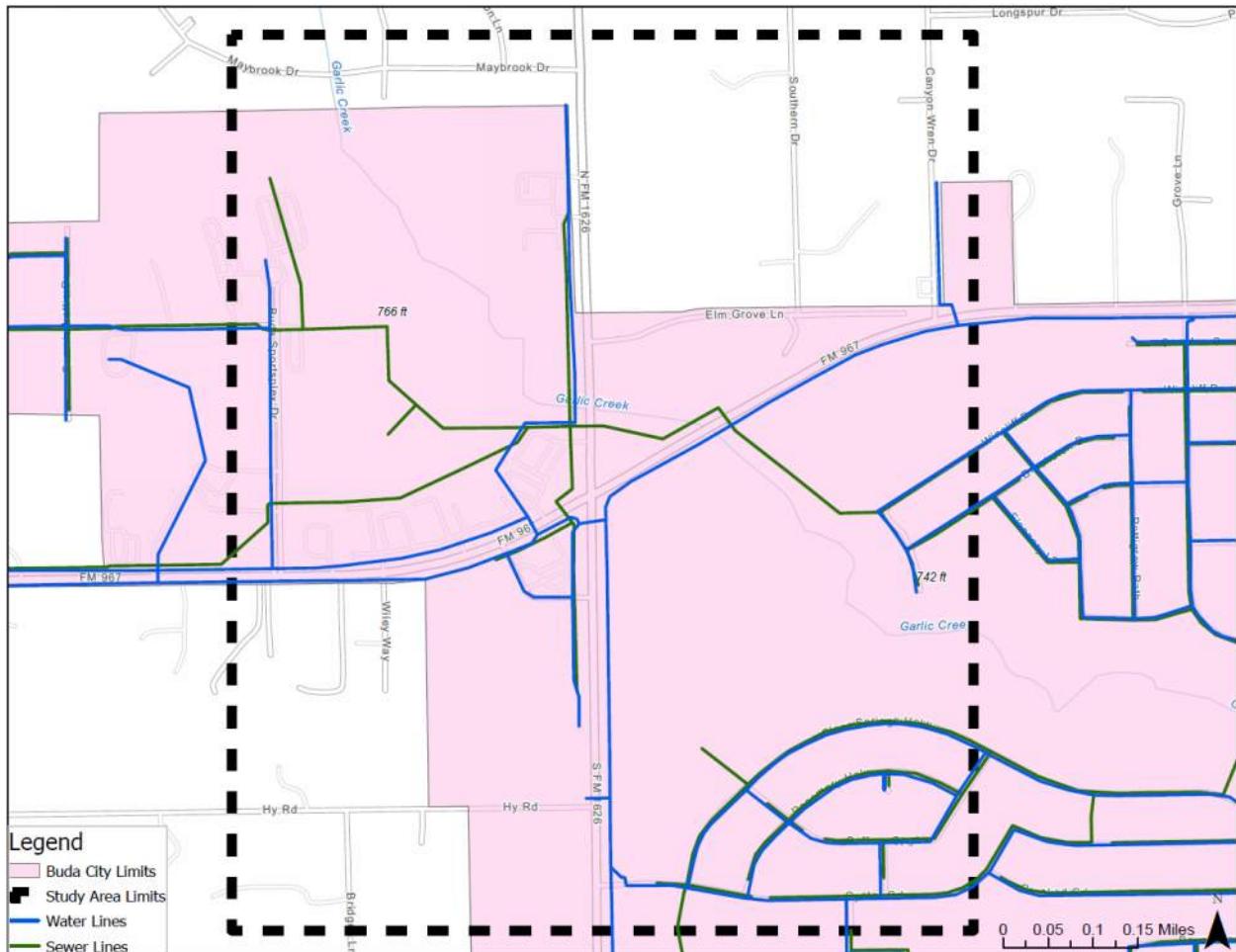
Figure 23 - Environmental Resources Map



## 5.2 Public Utilities

GIS data for public utilities were obtained from the City of Buda. Water and wastewater systems are distributed throughout the study area, primarily within public ROW and public land. Currently, the existing public utilities in the study area do not present any significant concerns or obstacles to improving the intersection. However, it is important to note that any redesign of the roadway in the study area will necessitate adjustments to the existing utilities, which could affect construction costs. A depiction of the existing public utilities is shown in **Figure 24** below.

Figure 24 - Public Utilities Map



# **Appendix D**

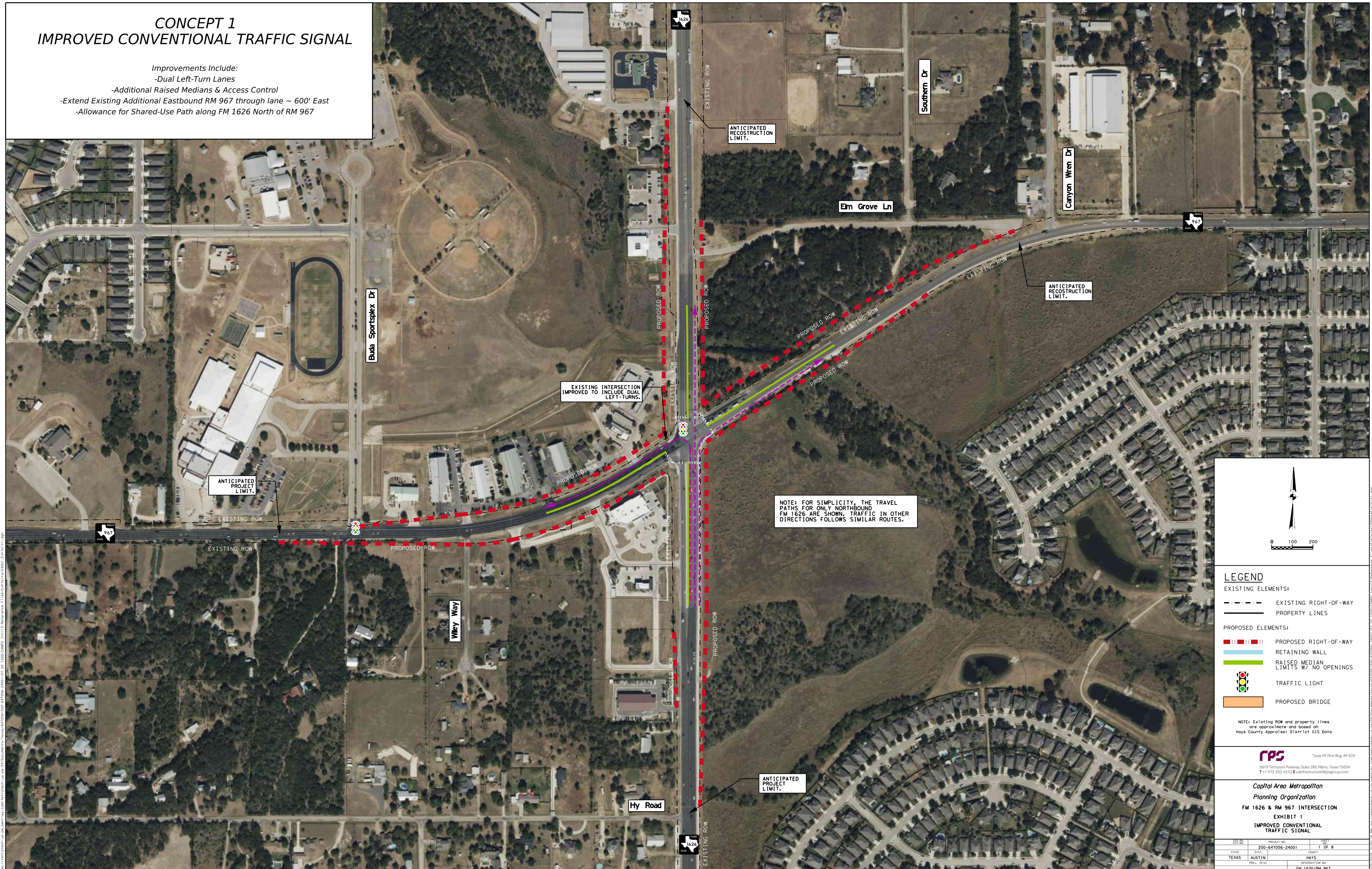
## Potentially Viable Alternatives Right of Way Footprint

# CONCEPT 1

## IMPROVED CONVENTIONAL TRAFFIC SIGNAL

*Improvements Include:*  
*-Dual Left-Turn Lanes*

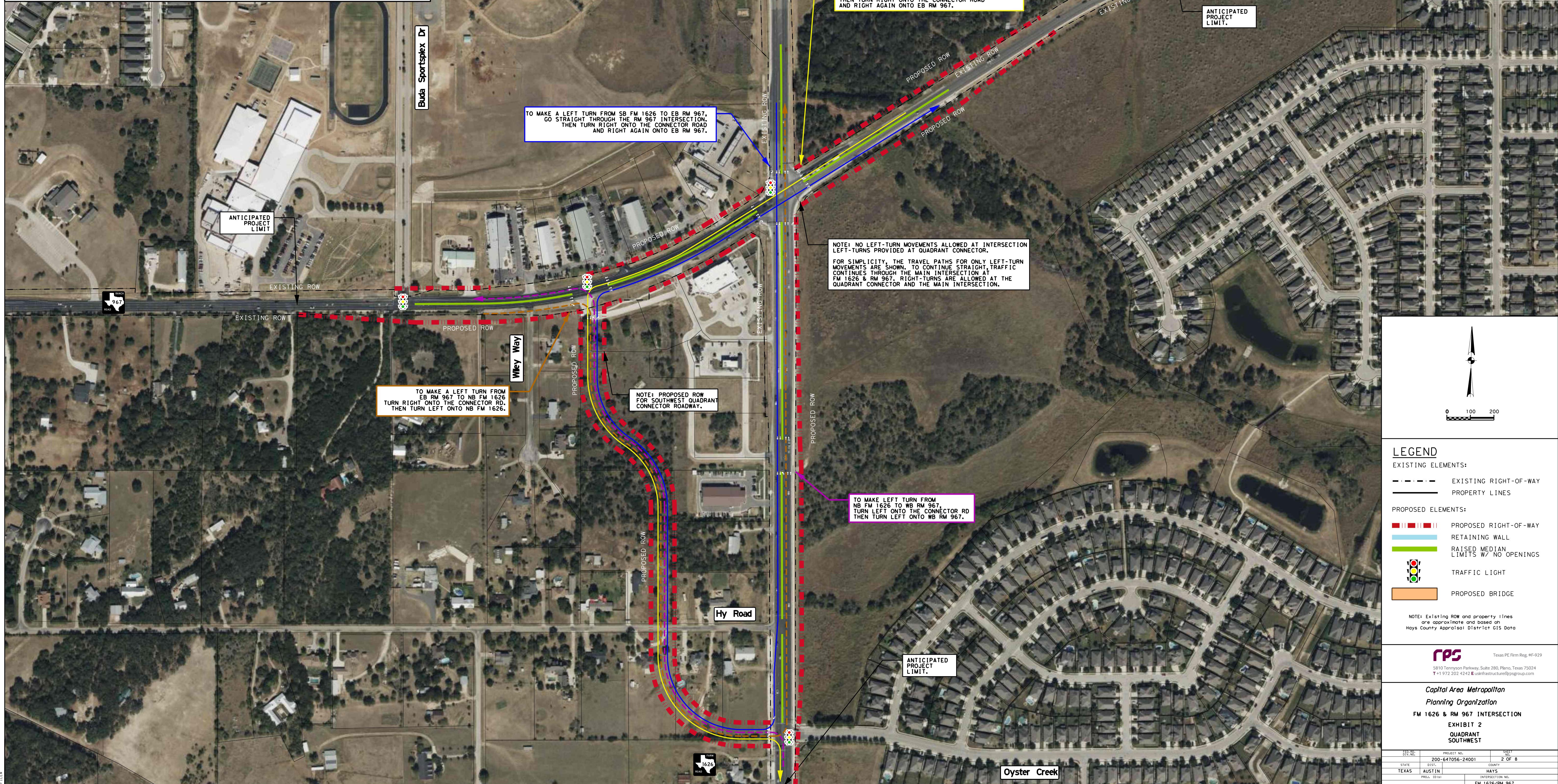
- Additional Raised Medians & Access Control
- Extend Existing Additional Eastbound RM 967 through lane ~ 600' East
- Allowance for Shared-Use Path along FM 1626 North of RM 967



## CONCEPT 2 QUADRANT CONNECTION SOUTHWEST

### Improvements Include:

- No Left-Turns allowed at FM 1626 & RM 967 Intersection
- Quadrant Connector Roadway Provided in the Southwest Quadrant for Left-Turn Movements
- Additional Raised Medians & Access Control
- Extend Existing Additional Easbound RM 967 Through Lane ~600' East



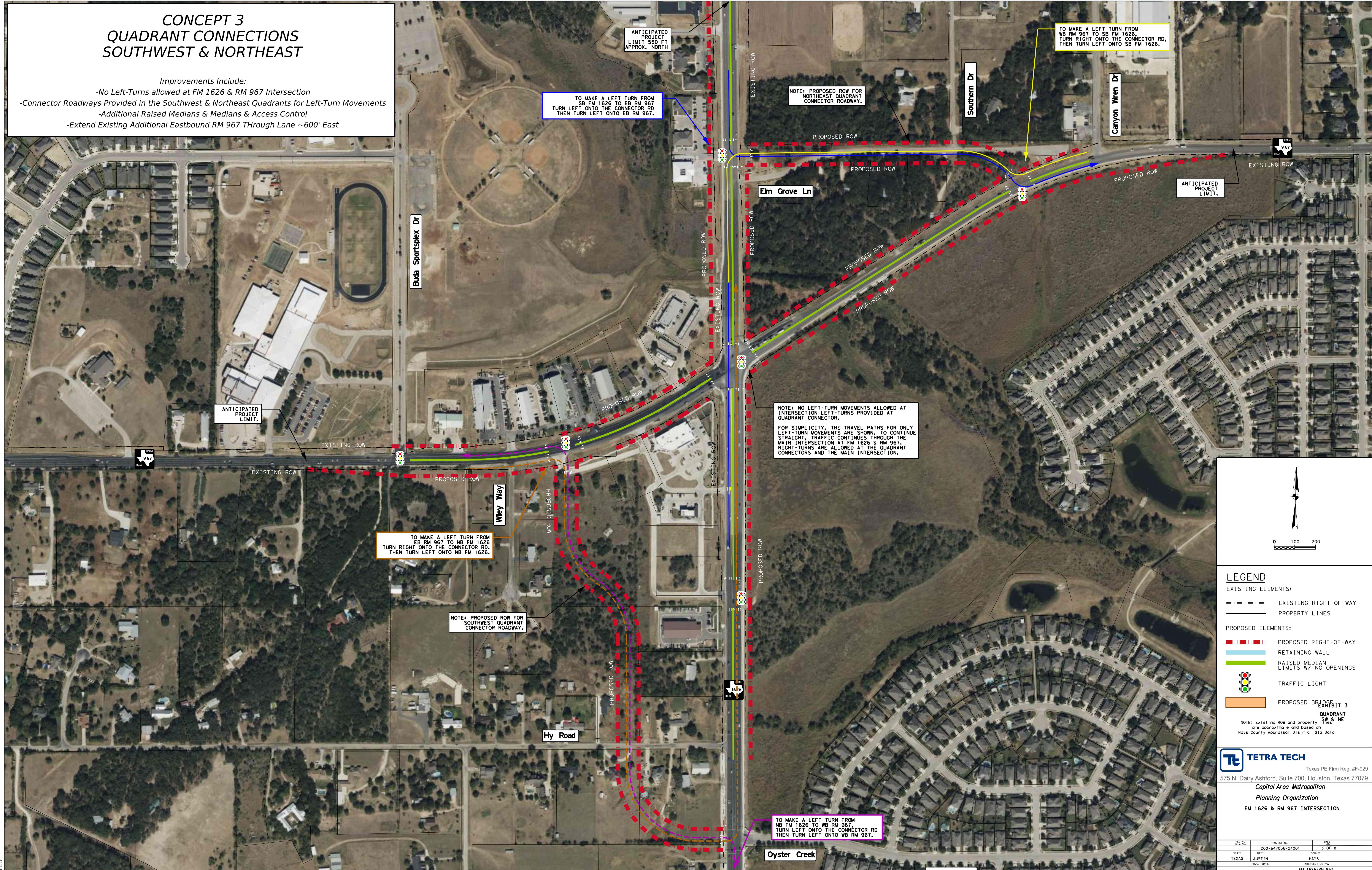
# CONCEPT 3

## QUADRANT CONNECTIONS

### SOUTHWEST & NORTHEAST

### *Improvements Include:*

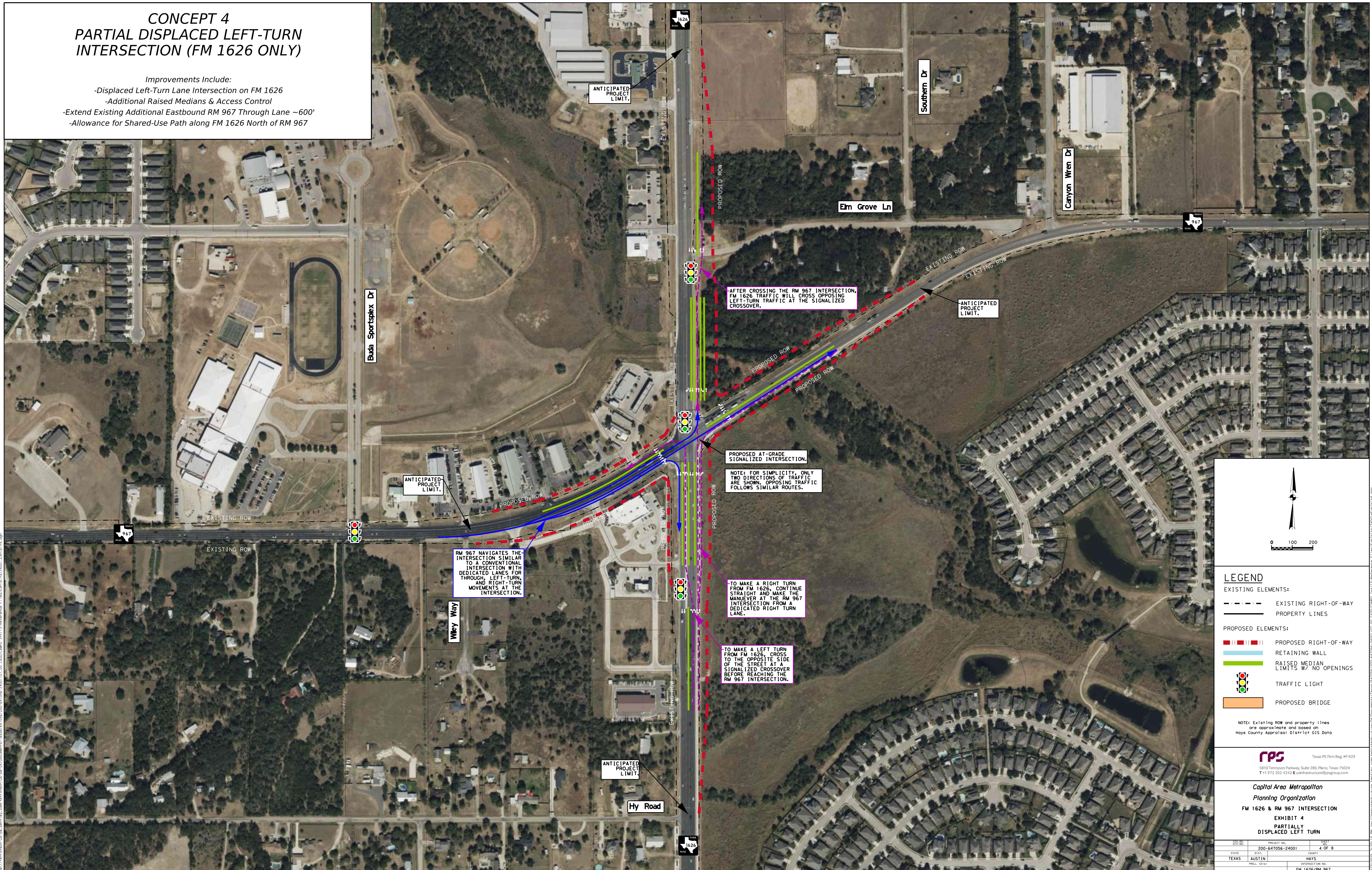
- No Left-Turns allowed at FM 1626 & RM 967 Intersection
- Connector Roadways Provided in the Southwest & Northeast Quadrants for Left-Turn Movements
  - Additional Raised Medians & Medians & Access Control
  - Extend Existing Additional Eastbound RM 967 Through Lane ~600' East



## CONCEPT 4 PARTIAL DISPLACED LEFT-TURN INTERSECTION (FM 1626 ONLY)

### Improvements Include:

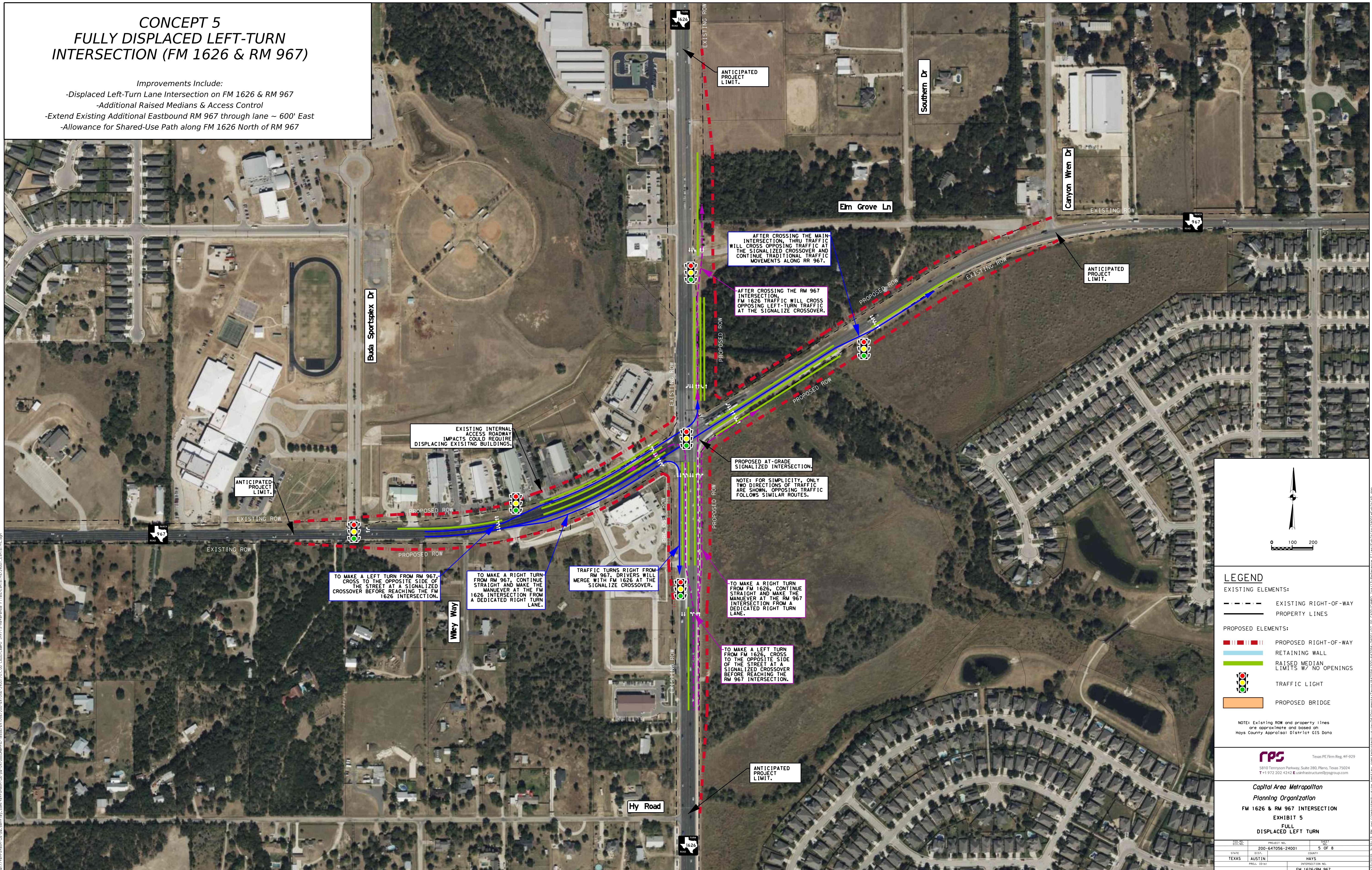
- Displaced Left-Turn Lane Intersection on FM 1626
- Additional Raised Medians & Access Control
- Extend Existing Additional Eastbound RM 967 Through Lane ~600'
- Allowance for Shared-Use Path along FM 1626 North of RM 967



## CONCEPT 5 FULLY DISPLACED LEFT-TURN INTERSECTION (FM 1626 & RM 967)

### Improvements Include:

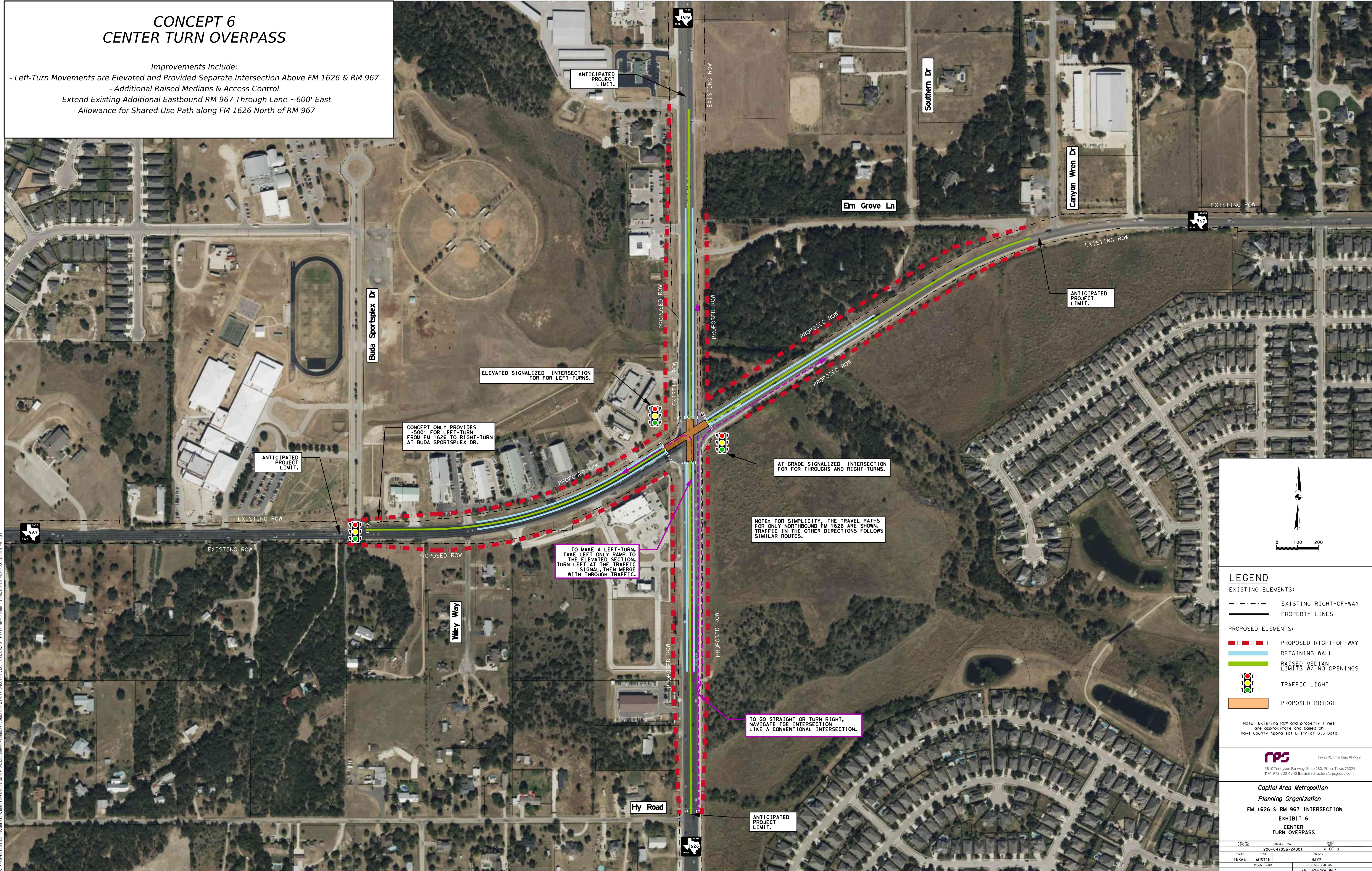
- Displaced Left-Turn Lane Intersection on FM 1626 & RM 967
- Additional Raised Medians & Access Control
- Extend Existing Additional Eastbound RM 967 through lane ~ 600' East
- Allowance for Shared-Use Path along FM 1626 North of RM 967



## CONCEPT 6 CENTER TURN OVERPASS

### Improvements Include:

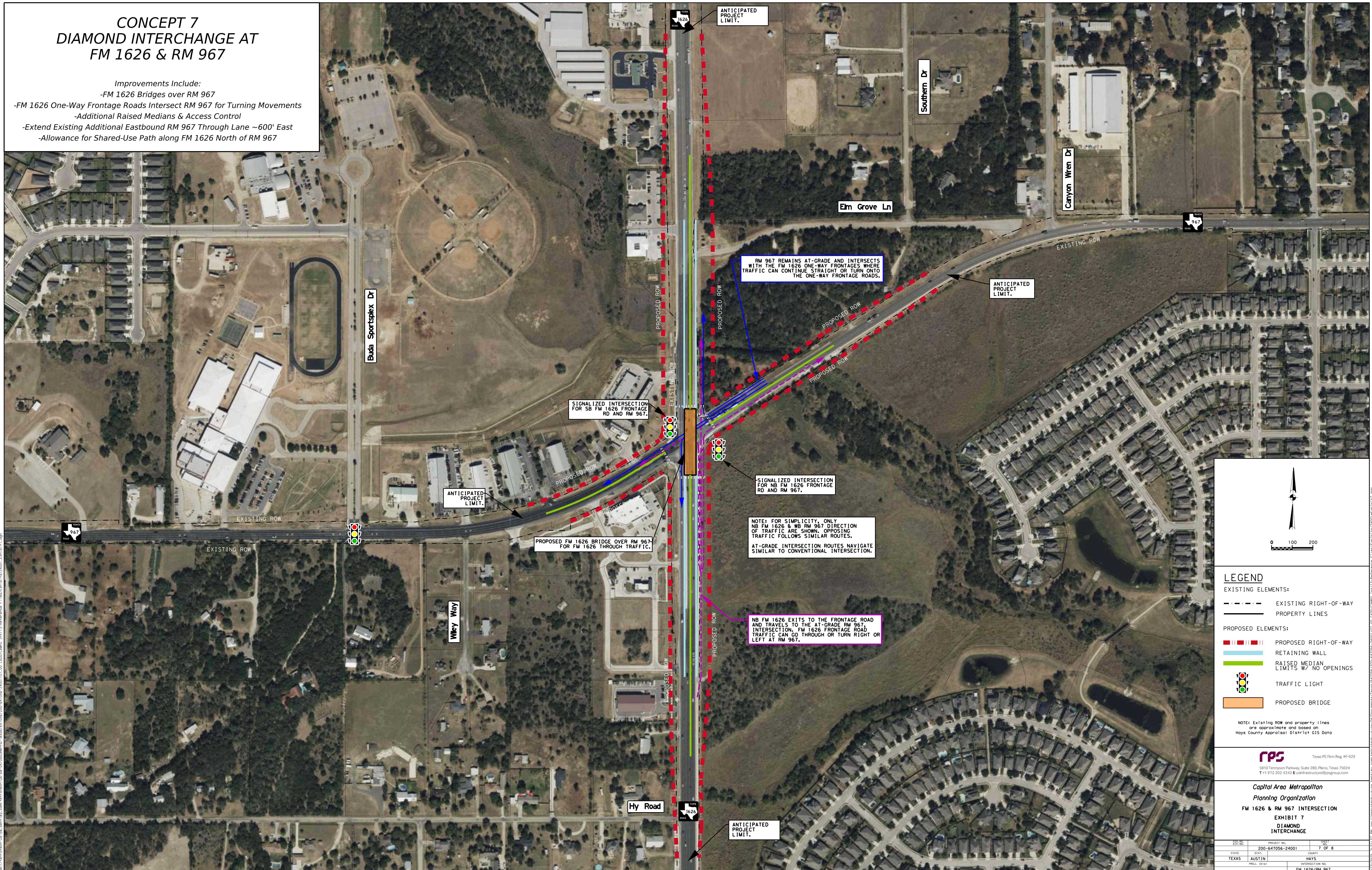
- Left-Turn Movements are Elevated and Provided Separate Intersection Above FM 1626 & RM 967
  - Additional Raised Medians & Access Control
- Extend Existing Additional Eastbound RM 967 Through Lane ~600' East
  - Allowance for Shared-Use Path along FM 1626 North of RM 967



# CONCEPT 7 DIAMOND INTERCHANGE AT FM 1626 & RM 967

## Improvements Include:

- FM 1626 Bridges over RM 967
- FM 1626 One-Way Frontage Roads Intersect RM 967 for Turning Movements
- Additional Raised Medians & Access Control
- Extend Existing Additional Eastbound RM 967 Through Lane ~600' East
- Allowance for Shared-Use Path along FM 1626 North of RM 967



## CONCEPT 8 DIVERGING DIAMOND INTERCHANGE AT FM 1626 & RM 967

### Improvements Include:

- FM 1626 Bridges over RM 967
- RM 967 Intersections Configured as Diverging Diamond
- FM 1626 One-Way Frontage Roads are Required to Turn at RM 967 (No Through Movements Allowed Across RM 967)
  - Additional Raised Medians & Access Control
- Extend Existing Additional Eastbound RM 967 Through Lane ~600' East
- Allowance for Shared-Use Path along FM 1626 North of RM 967



# **Appendix E**

## Traffic Operations Analysis Memorandum

**Date: 8/26/2025**

**Technical Memorandum**

## **RE: Traffic Analysis for the Intersection of FM 1626 & RM 967**

### **INTRODUCTION:**

---

FM 1626/RM 967 represents a critical intersection of two significant transportation corridors within the City of Buda. Enhancing this area is a key priority for the city, aimed at addressing traffic congestion and improving safety for both motorists and pedestrians. This intersection serves as a vital nexus for two essential commuter pathways within Hays County. FM 1626 functions as the primary north-south route in eastern Hays County, paralleling Interstate 35, while RM 967 serves as the principal east-west corridor in the region.

Given the rapid population growth in the area, it is anticipated that the existing traffic congestion at this intersection will aggravate. The existing congestion is mostly incurred by the recurring peak demand at this intersection, driven by nearby trip generators. These generators include the Buda Sports Complex, Moe and Gene Johnson High School, and Carpenter Hill Elementary School. School-day arrival and dismissal periods, along with evening and weekend athletic events, produce concentrated traffic surges that overlap with commuter traffic on FM 1626 and RM 967, worsening the congestion and queueing at the intersection.

The undeveloped parcel of land located to the southeast of the intersection has garnered considerable commercial interest, thereby highlighting the economic potential of this location. This underscores the necessity for strategic infrastructure planning to adequately respond to the evolving demands of the community and local businesses. A study area map is presented below in **Figure 1**.

The traffic analysis aims to create a baseline of the existing geometric conditions using the collected data and to estimate how traffic conditions and demographic changes will impact the study area over the next 25 years (2050). The analysis also detailed and assessed potential geometric improvements and quantified the performance for comparison.

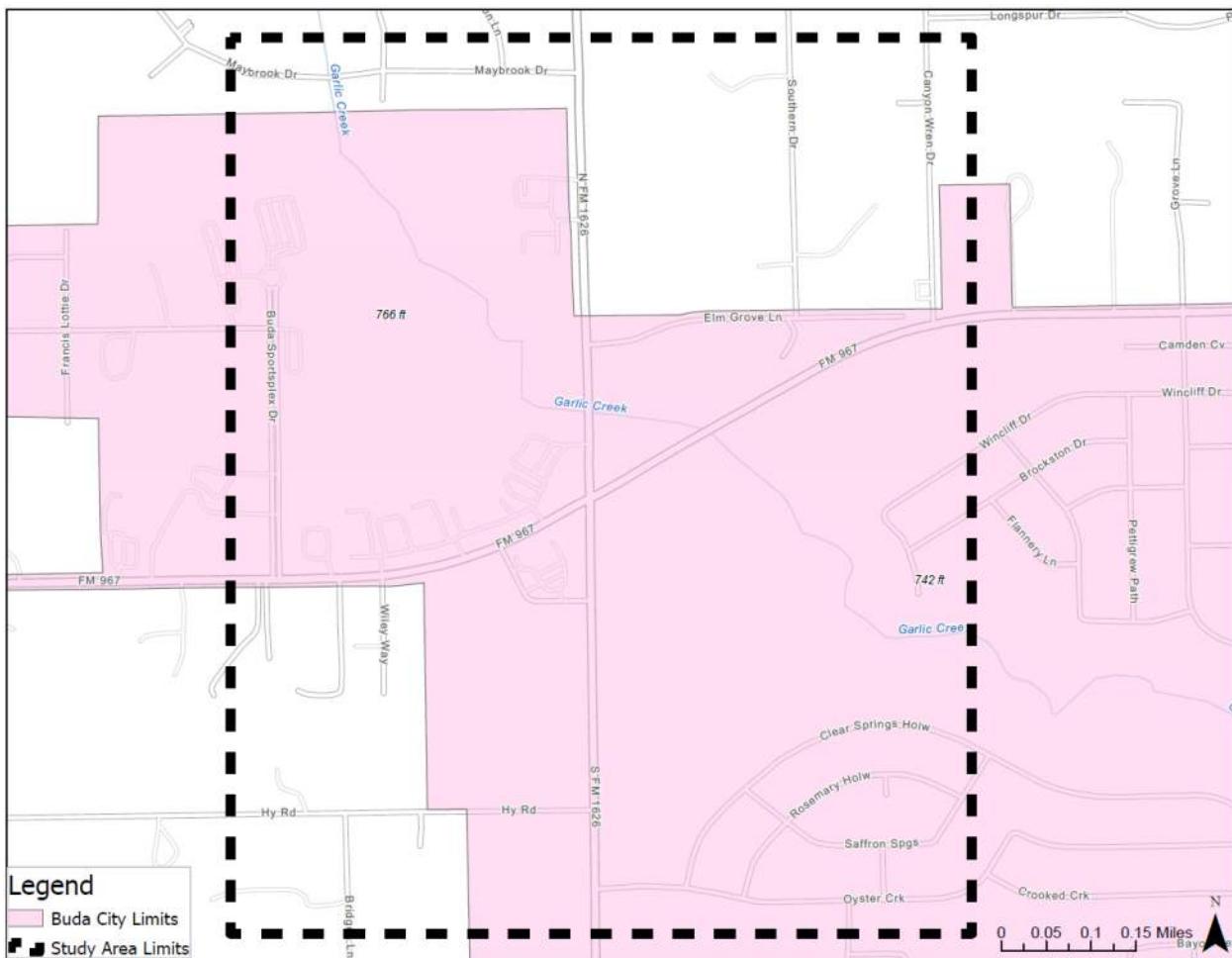


Figure 1 - Study Area Map at FM 1626 & RM 967

## APPROACH

In the study, we developed Synchro and SimTraffic microsimulation models. The models reflected the proposed geometric changes with optimized signal timing parameters. The scenarios are evaluated using SimTraffic outputs such as delays, LOS, and queue lengths, representing the average simulation results of five (5) random number seeds.

## TRAFFIC VOLUME PROJECTION

Traffic volumes for the study intersection have been projected for the next 25 years to the planning year 2050. For this analysis, we followed a 1.4% compound annual growth rate as recommended by CAMPO, yielding a 2050 growth factor of 1.44 (a 44% growth from 2025).

## SCENARIOS ASSESSED

By comparing the scenarios, this study provides insights into infrastructure decisions that balance cost, construction feasibility, and traffic outcomes. This study evaluates four traffic scenarios for the study intersection projected to the year 2050. The scenarios analyzed included:

- (1) 2050 No-Build (Baseline)
- (2) 2050 Overpass
- (3) 2050 Displaced Left Turns
- (4) 2050 Dual Left Turns in All Directions

Each scenario was assessed based on traffic delays and queues. We recognized the significantly heavy, northbound and southbound volumes represent the critical movements in through & left directions. The four scenarios represent distinct approaches to managing traffic at the intersection, ranging from minor geometric adjustments to significant capital infrastructure improvement. Below is a detailed description of each scenario.

### Scenario 1 - 2050 No-Build

This scenario assumes no geometric changes to the existing infrastructure, serving as a baseline for comparison. **Figures 2 and 3** show the lane assignment and the projected peak-hour volumes associated with the No Build scenario.



Figure 2 – Projected AM Peak Hour Volumes (No-Build)



Figure 3 - Projected PM Peak Hour Volumes (No-Build)

## Scenario 2 - 2050 Overpass

This scenario involves constructing an overpass to separate through traffic (northbound and southbound) from the intersecting RM 967. The overpass design prioritizes the heaviest traffic movements, allowing northbound and southbound vehicles to bypass the intersection. It is assumed that the projected through volumes on the FM 1626 frontage roads accounted for 10% of the northbound and southbound volumes in the No-Build scenario. We assumed that only 10% are heading for frontage-road-abutting destinations for both AM & PM scenarios, while 90% of the through movements will use the overpass to pass by. **Figures 4 and 5** show the lane assignment and the projected peak hour volumes associated with the Overpass scenario.

The overpass carries FM 1626 over RM 967, with four one-way ramps tying into two closely-spaced, at-grade junctions (i.e., a diamond interchange). Due to the skewed angle RM 967 intersects with FM 1626, storage space between the two junctions is not sufficient to operate the diamond interchange using TTI 4-Phase Phasing. We recommend that the diamond interchange operate as one wide intersection.

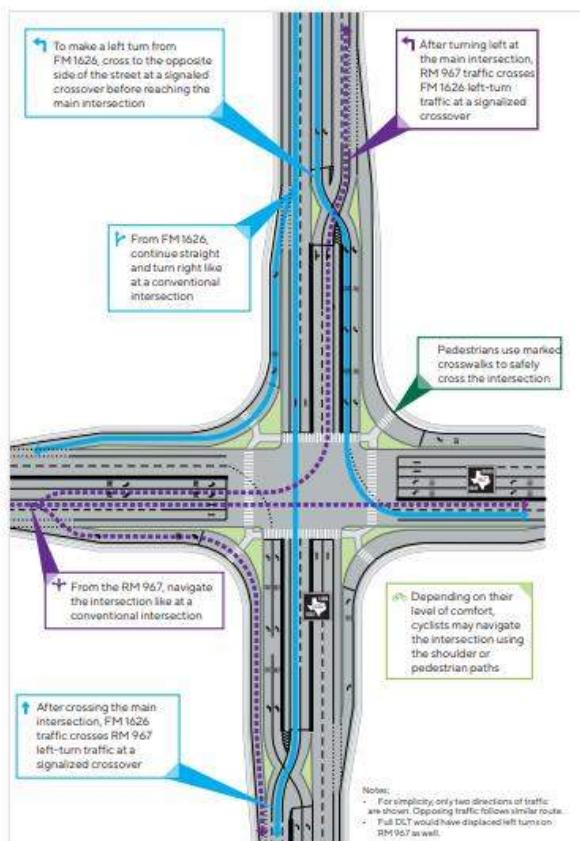


Figure 4 - Projected AM Peak Hour Volumes (Overpass)



### Scenario 3 - 2050 Displaced Left Turns

A Displaced Left Turn (DLT) shifts left-turn vehicles to the opposite side at an upstream crossover so they can turn left concurrently with opposing through traffic at the main intersection, reducing phases, conflicts, and delay.



### DISPLACED LEFT TURN (ON FM 1626/RM 967)

**Common Uses** Used at intersections with moderate to heavy traffic volumes in all directions and heavy left-turn movements to improve traffic flow and reduce delay by allowing for simultaneous movement of left-turns and opposing through movements

#### Potential Benefits

- Improves traffic flow in both morning and afternoon rush hour
- Reduces crash potential by up to 24%
- Accommodates multimodal travel and adds shared-use paths for pedestrians and cyclists

#### Potential Drawbacks

- Would require additional right of way with higher impacts to properties and driveways
- Higher impacts within Edwards Aquifer Recharge Zone, floodplain, and wetlands
- Complex construction phasing and longer duration with higher total project cost

In this scenario, left-turn movements are reconfigured to occur before the main intersection, reducing conflicts between left-turning vehicles and through traffic. This design aims to streamline traffic flow by eliminating left-turn phases at the intersection of FM 1626 at RM 967. **Figures 6 and 7** show the projected peak hour volumes associated with the Displaced Left Turn scenario.



Figure 6 - Projected AM Peak Hour Volumes (Displaced Left Turns)



Figure 7 - Projected PM Peak Hour Volumes (Displaced Left Turns)

#### Scenario 4 - 2050 Dual Left Turns

This scenario kept the existing lane geometry with the only exception of adding a second left-turn lane to accommodate higher left-turn volumes. This is a minor adjustment to the geometry, aiming to reduce delays for left-turning vehicles without major changes. **Figures 8 and 9** show the lane assignment and the projected peak hour volumes associated with the Dual Left Turn Built scenario.



Figure 8 – Projected PM Peak Hour Volumes (Dual Left Turns)



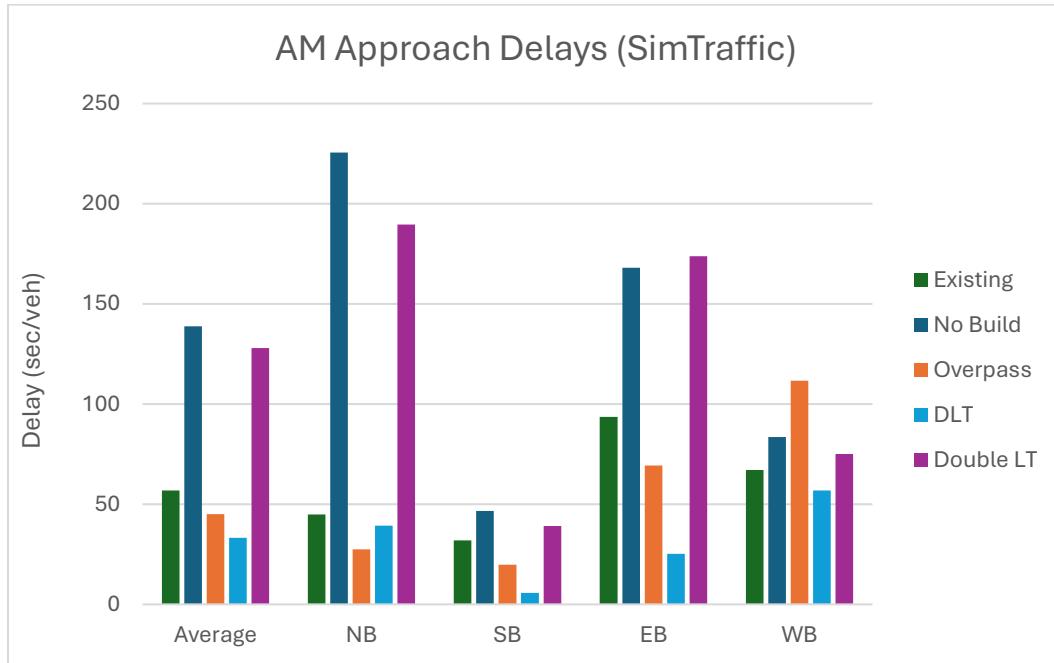
Figure 9 - Projected PM Peak Hour Volumes (Dual Left Turns)

## NUMERICAL RESULTS & KEY FINDINGS

---

### Traffic Delay Assessment

- AM Peak: The results showed that the Displaced Left Turns scenario is the best alternative with an intersection average delay of 33 sec/veh followed by the Overpass scenario delay of 45 sec/veh (36% more). The Overpass worked the best for the peak direction (NB), representing 31% delay reduction as opposed to Displaced Left Turns scenario.
- PM Peak: The assessment indicated the Overpass scenario represented the best alternative with an average delay of 23 sec/veh followed by the Displaced Left Turn scenario delay of 34.7 sec/veh (41% more). The Overpass scenario worked the best for the peak direction (SB).
- Overall, the delay results showed that the Overpass scenario is the best as it takes out most of the heavy through movements away from the intersection in both Northbound & Southbound directions, most effective in addressing the peak direction congestion.
- The Dual Left scenario showed as the least favorable alternative, slightly improved from the No-Build scenario – the peak direction queue spilled back, blocking the left turns from accessing the double turn lanes, which diminished the benefits that Dual Lefts were supposed to bring.
- **Figures 10 and 11** represent AM and PM critical Approach Delays using Sim Traffic software

**Figure 10 - AM Peak Hour Approach Delays**

AM LOS	Average	NB	SB	EB	WB
Existing	E	D	C	F	E
No-Build	F	F	D	F	F
Overpass	D	C	B	E	F
DLT	C	D	A	C	E
Double LT	F	F	D	F	E

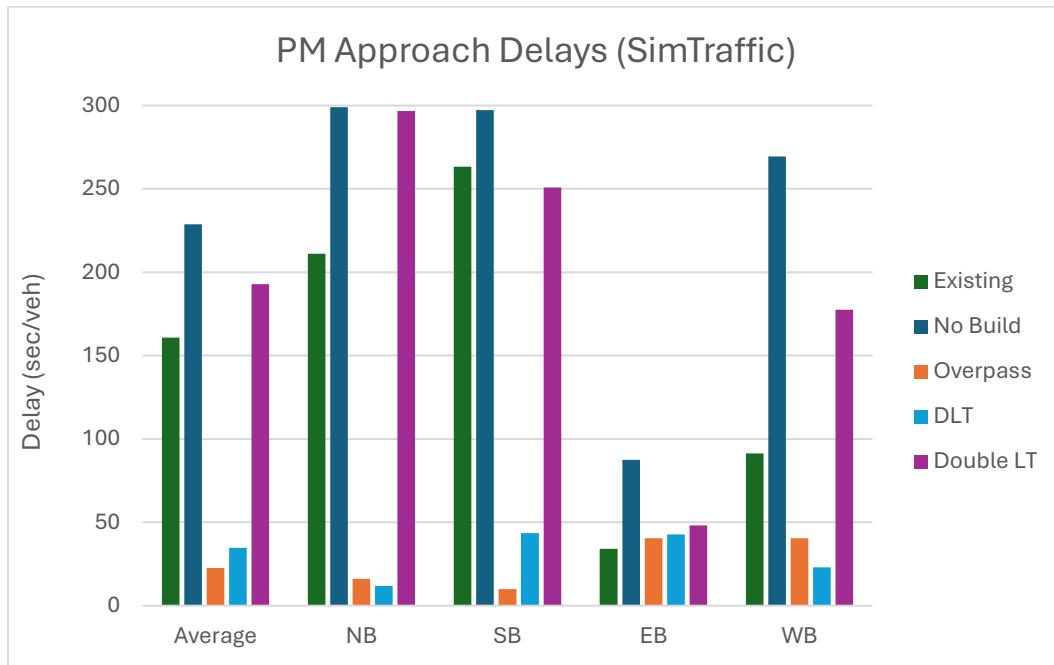


Figure 11 - PM Peak Hour Approach Delays

PM LOS	Average	NB	SB	EB	WB
Existing	F	F	F	C	F
No-Build	F	F	F	F	F
Overpass	C	B	A	D	D
DLT	C	B	D	D	C
Double LT	F	F	F	D	F

The LOS tables followed the thresholds of traffic delay as defined in the Highway Capacity Manual (HCM), using letters A through F, with A being the best and F being the worst.

- LOS A: free flow when the traffic delay ranges 0-10 seconds/vehicle
- LOS B: reasonably free flow when the traffic delay ranges > 10 - 20 seconds/vehicle
- LOS C: stable flow when the traffic delay ranges > 20 - 35 seconds/vehicle
- LOS D: approaching unstable flow when the traffic delay ranges > 35 - 55 seconds/vehicle
- LOS E: unstable flow, operating at capacity when the traffic delay ranges > 55 - 80 seconds/vehicle
- LOS F: forced or breakdown flow when the traffic delay ranges > 80 seconds/vehicle

### Traffic Queuing Analysis:

- AM Peak: The queueing results showed that the Overpass scenario represents the best option with the most heavily queueing movement being in the NB through with a queue length of 584 ft, followed by the Displaced Left turns scenario being 975 ft (50% more) as the second best.
- PM Peak: The queueing exhibited that the Overpass scenario is the best option with the longest queue stacking in the SB though direction with a 249-ft-long queue, followed by the second best - Displaced Left turns scenario being 799 ft (105% more).
- The Dual Left Turns scenario was identified as the least favorable alternative slightly better than No-Build scenario.
- **Figures 12 and 13** represent AM and PM critical Queues using Sim Traffic software

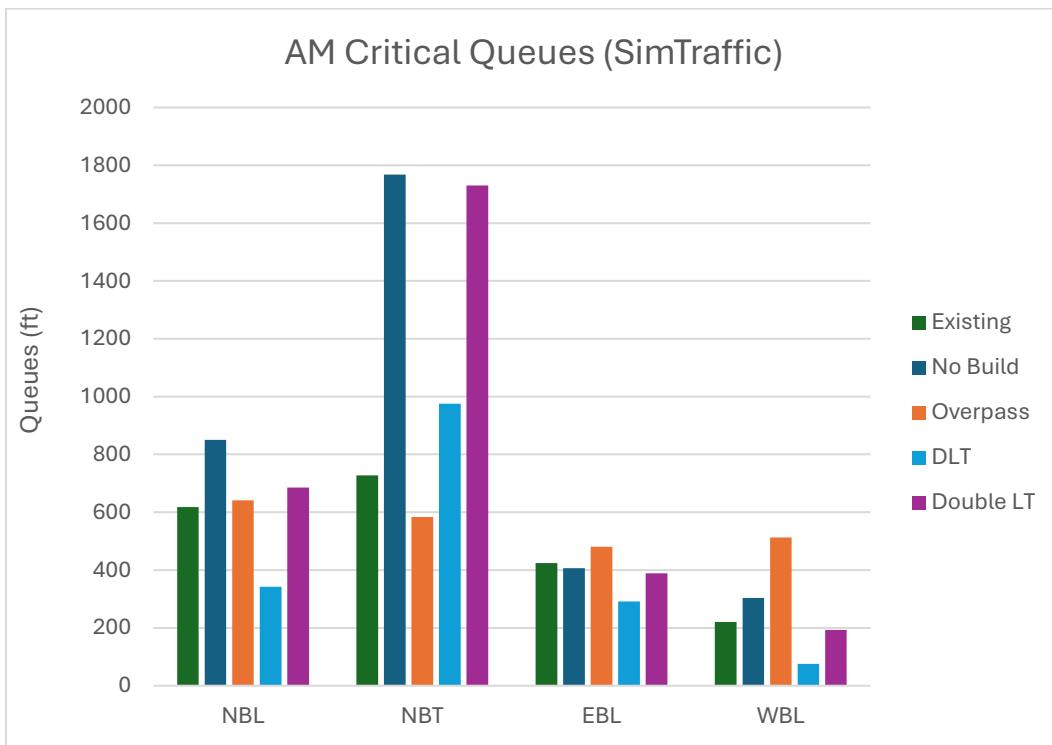
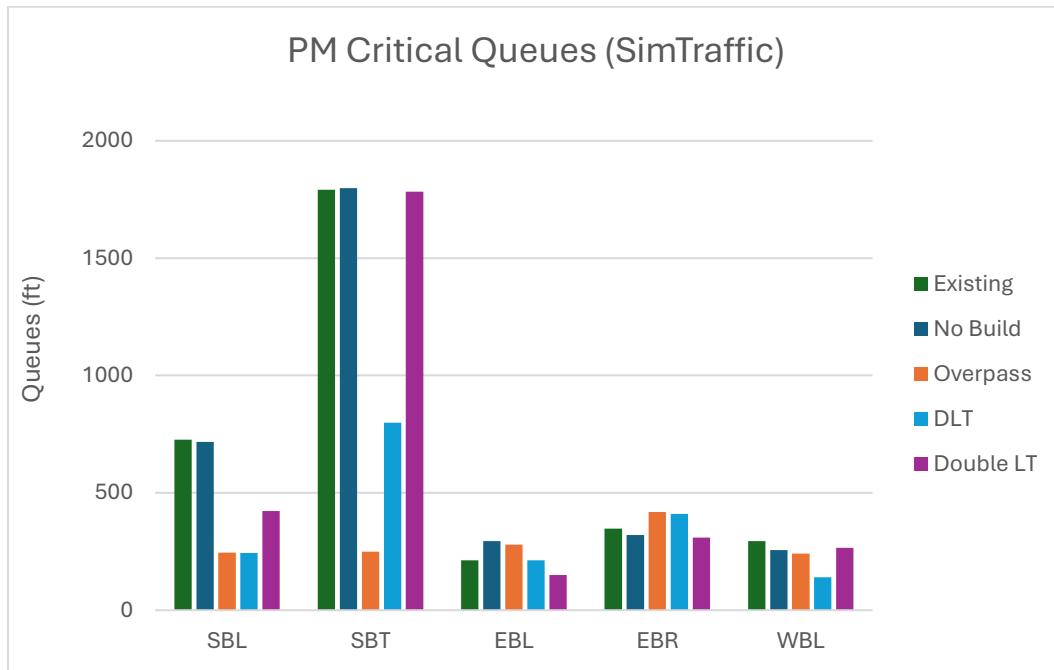


Figure 12 - AM Critical Queues



**Figure 13 - PM Critical Queues**

Please note that Synchro/SimTraffic provides limited fidelity for assessing displaced-left-turn operations. The reported control delay and 95th-percentile queues may be biased low due to simplified coding of crossovers and signal phasing. We recommend use of calibrated Vissim microsimulation, which can also be used to perform demand/timing sensitivity tests to verify storage and bound worst-case queues.

## OVERALL RANKING

---

- (1) The traffic study demonstrates that the 2050 **Overpass** scenario represented the most effective alternative in addressing traffic congestion at the intersection. By removing northbound and southbound through traffic from the intersection, the overpass significantly reduced the congestion and improved the travel times.
- (2) The 2050 **Displaced Left Turns** scenario was a close second, offering substantial improvements by reconfiguring left-turn movements to minimize conflicts with through traffic.

The analysis highlights the importance of prioritizing through movements, which constitutes the heaviest flow beyond existing capacity at this intersection. The Overpass and Displaced Left-Turn scenarios excelled. The **Overpass** worked because it directly addressed the priority by adding additional number of through lanes and free-flowing the through movements. The **Displaced Left-Turn** contributed by minimizing conflicts with left-turning movements.

The **Overpass** is more costly and complex, while the **Displaced Left Turns** is a lower-cost at-grade option. However, to fit widened medians and upstream crossovers, the **Displaced Left Turn** typically entails greater right-of-way impacts along the approaches, and both alternatives present access management challenges with driveway consolidations/turn restrictions that affect commercial access. For multimodal users, the **Overpass** scenario enables shorter, staged crossings at ramp terminals with median refuge and barrier separation on the bridge, whereas the **Displaced Left Turns** produces longer, multi-stage pedestrian paths through crossovers and the main junction, increasing exposure and operational complexity.

- (3) The 2050 **Dual Left Turns** scenario, while better than the No-Build option, ranked third due to persistent conflicts between left-turn and through traffic. The impacts become marginal when the peak direction queue spilled back, blocking the left turns from accessing the double turn lanes. This diminished the benefits that Dual Lefts were supposed to bring.
- (4) The 2050 **No-Build** scenario performed the worst, failing to address the projected traffic increases, resulting in severe congestion and delays. This underscores that doing-nothing for this intersection is not a preferred option.

# Appendix F

## Evaluation Matrix

Category	No Build		Conventional Traffic Signal (Improved Dual LT)		Quadrant Roadway S-W		Quadrant Roadway S-W & N-E		Partial Displaced Left Turn (on FM 1626)		Displaced Left Turn (on FM 1626 & RM 967)		Center Turn Overpass (Grade Separated)		Diamond Interchange		Diverging Diamond Interchange	
<b>Mobility</b>																		
Traffic Flow Benefit	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
	1	1	3	1	4	3	4	4	4	3	4	4	4	4	5	5	5	5
<b>Safety &amp; Multimodal Travel</b>																		
Safety Impact	2		3		3		3		3		3		4		3		5	
	(No improvements)		(Conflict points reduction = 0%) (Intersection crash reduction = 0%) (Adds raised medians)		(Total Conflict points reduction = 6%) (Main intersection conflicts decreases) (Adds raised medians)		(Total Conflict points reduction = -3%) (Main intersection conflicts decreases) (Adds raised medians)		(Conflict points reduction = 6%) (Intersection crash reduction = 19-24%) (Adds raised medians)		(Conflict points reduction = 13%) (Crash reduction = 19-24%) (Adds raised medians)		(Conflict points reduction = 25%) (Adds raised medians)		(Conflict points reduction = 19%) (Adds raised medians)		(Conflict points reduction = 56%) (Crash reduction = 19-72%)	
Affect on Multimodal Connection	1		3		4		4		3		3		4		4		3	
	(No multimodal improvements)		(Adds SUP, requires long intersection crossings)		(Reduces intersection crossing distance; removes left-turns from main intersection; adds SUP; requires additional intersection crossings)		(Reduces intersection crossing distance; removes left-turns from main intersection; adds SUP; requires additional intersection crossings)		(Adds SUP, requires long intersection crossings)		(Adds SUP, requires long intersection crossings)		(Eliminates left-turn conflicts for pedestrians, simplified crossings)		(Reduces intersection crossing distance; adds SUP)		(Reduces intersection crossing distance; adds SUP, bike/peds required to utilize SUP circuitous path for through movement on FM 1626 frontage roads)	
<b>Economic Development &amp; Sense of Place</b>																		
Economic / ROW Impact	5		3		1		1		3		2		2		3		2	
	(0 Acres, No impacted properties)		(5 Acres, 31 impacted properties)		(5.7 Acres, 22 impacted properties)		(11.9 Acres, 34 impacted properties)		(6 Acres, 18 impacted properties)		(9.2 Acres, 27 impacted properties) (Requires adjustment to internal access & parking)		(7.6 Acres, 36 impacted properties) (Requires adjustment to internal access & parking)		(6.8 Acres, 29 impacted properties)		(9.8 Acres, 29 impacted properties) (Requires adjustment to internal access & parking)	
Property Access Impact	3		4		1		2		3		3		1		3		1	
	(Increased no-build congestion impacts ability to access properties and less desirable to patrons)		(2/44 affected driveways)		(19/44 affected driveways) (Requires long rerouting of traffic)		(23/44 affected driveways)		(9/44 affected driveways)		(15/44 affected driveways)		(34/44 affected driveways) (Requires long rerouting of traffic) (Impacts access to Buda Sportsplex Dr)		(16/44 affected driveways) (U-turns allowed at interchange)		(12/44 affected driveways) (No through traffic on FM 1626 front. rds)	
Potential Environmental Impact	4		3		4		3		2		2		3		2		2	
	(No congestion improvements negatively impacts air quality)		(Floodplain significant encroachment, impact to wetlands along Garlic Creek) (Mitigation option TBD)		(Impact to wetlands along Garlic Creek only east of FM 1626) (Mitigation option TBD)		(Reconstruction within Edwards Aquifer Recharge Zone, Impact to wetlands along Garlic Creek only east of FM 1626) (Mitigation option TBD)		(Widening within Edwards Aquifer recharge Zone, Floodplain significant encroachment, impact to wetlands along Garlic Creek) (Mitigation option TBD)		(Widening within Edwards Aquifer recharge Zone, Floodplain significant encroachment, impact to wetlands along Garlic Creek) (Mitigation option TBD)		(Floodplain significant encroachment, impact to wetlands along Garlic Creek) (Mitigation option TBD)		(Widening within Edwards Aquifer recharge Zone, Floodplain significant encroachment, impact to wetlands along Garlic Creek) (Mitigation option TBD)		(Widening within Edwards Aquifer recharge Zone, Floodplain significant encroachment, impact to wetlands along Garlic Creek) (Mitigation option TBD)	
Aesthetic Alignment	3		3		4		4		3		3		1		2		2	
	(No meaningful aesthetic enhancements along corridor)		(Wide intersections minimize opportunity for meaningful aesthetic enhancements)		(Narrower intersections minimize pavement and provide increased opportunities for aesthetic enhancements)		(Narrower intersections minimize pavement and provide increased opportunities for aesthetic enhancements)		(Wide intersections minimize opportunity for meaningful aesthetic enhancements)		(Wide intersections minimize opportunity for meaningful aesthetic enhancements)		(Requires retaining walls and bridges along all 4 approaches creating significant visual obstruction)		(Requires retaining walls and bridges along FM 1624 creating visual obstruction across FM 1624)		(Requires retaining walls and bridges along FM 1624 creating visual obstruction across FM 1624)	
Community Support	1		5		2		3		2		2		3		4		2	
	(Public feedback indicates a desire to improve the intersection)		(15%-20% opposition during 2nd PM)		(65%-70% opposition during 2nd PM)		(50%-55% opposition during 2nd PM)		(70%-75% opposition during 2nd PM)		(70%-75% opposition during 2nd PM)		(40%-45% opposition during 2nd PM)		(30%-35% opposition during 2nd PM)		(65%-70% opposition during 2nd PM)	
<b>Cost &amp; Constructability</b>																		
Effort to Construct	5		4		4		4		3		3		1		2		1	
	(No time required)		(Widening existing and signal modifications)		(Widen existing, construct connectors, new traffic signals)		(Widen existing, construct connectors, new traffic signals)		(Lane relocations, and complex signal and staging plans on FM 1626 and RM 967)		(Lane relocations, and complex signal and staging plans on FM 1626 and RM 967)		(Extensive structural construction, utility relocations, extended construction duration, and traffic detours)		(Extensive structural construction and related detours, utility relocations)		(Extensive structural construction and related detours, complex phasing for DDI intersections, extended construction duration, utility relocations)	
Total Project Cost	5		3		3		2		3		2		1		2		1	
	(No construction cost associated)		(Construction Cost \$20.2M) (Total Project Cost \$28.0M)		(Construction Cost \$20.9M) (Total Project Cost \$29.3M)		(Construction Cost \$39.5M) (Total Project Cost \$55.4M)		(Construction Cost \$29.4M) (Total Project Cost \$37.4M)		(Construction Cost \$50.6M) (Total Project Cost \$64.3M)		(Construction Cost \$75.9M) (Total Project Cost \$91.7M)		(Construction Cost \$60.8M) (Total Project Cost \$72.7M)		(Construction Cost \$69.7M) (Total Project Cost \$85.3M)	

Category	5 Points	4 Points	3 Points	2 Points	1 Point
<b>Traffic Flow Benefit</b>	Scores < 0.625	Scores 0.625 to < 0.750	Scores 0.750 to < 0.875	Scores 0.875 to < 1.000	Scores >= 1.000
<b>Safety Impact</b>	Major safety improvement, eliminates or drastically	Significant reduction in crash potential,	Moderate safety enhancement that	Minimal safety change or neutral impact	Worsens safety or creates new conflict types
<b>Affect on Multimodal Connection</b>	Provides complete, safe, and direct facilities for all users	Significant improvements for at least one mode, with safe and direct access	Moderate improvements, adds some facilities but lacks full connectivity	Minimal improvement, still lacking key connections or facilities	No improvements or actively worsens multimodal access by introducing new barriers
<b>ROW Impact</b>	No additional ROW needed, entirely within	Minor ROW takes only involving small strips of	Moderate ROW required, affects developed parcels	Significant ROW required, affects developed parcels	Major ROW impacts including displacement of structures or
<b>Property Access Impact</b>	No impact to property access, all existing	Minor access adjustments that retain	Moderate access changes requiring some rerouting or	Significant impacts such as driveway closures, access	Major access disruptions including loss of access for some
<b>Environmental Impact</b>	Minimal or no impact to floodplain, aquifer, or other sensitive environmental factors	Low impact with minor encroachment and clear mitigation options	Moderate impacts requiring permits or mitigation, but feasible to address	Significant environmental constraints likely requiring major mitigation	High environmental risk or regulatory barriers that may jeopardize project
<b>Aesthetic Alignment</b>	Provides significant opportunities to incorporate aesthetic enhancements creating strong "sense of place" along the corridor	Provides moderate opportunities to incorporate aesthetic enhancements	Minimal or no changes to existing corridor aesthetics	Creates visual barrier across one roadway; limited opportunities to create "sense of place"	Creates visual barrier across both roadways; limited opportunities to create "sense of place"
<b>Community Support</b>	Strong public support, minimal or no opposition and consistent positive feedback. (100-80%)	Generally favorable public input with only minor concerns or isolated opposition.	Mixed public feedback, notable support but balanced by moderate concerns.	Predominantly negative feedback or substantial concern from key stakeholder groups.	Strong public opposition, widespread criticism, or significant organized resistance.
<b>Effort to Construct</b>	Minimal construction effort, short duration less than 1 year, and limited or low traffic disruptions or utility conflicts.	Straightforward construction, short duration (1-1.5 years) with manageable traffic impacts and utility conflicts.	Moderate construction, medium duration (1.5-2 years), including phasing challenges and noticeable traffic disruption.	Significant construction effort, long duration (2-2.5 years), complex staging, utility relocations, and high traffic impact.	Major construction effort (2.5-3+ years), full reconstruction, long detours, severe disruption and conflicts with traffic and utilities.
<b>Total Project Cost</b>	Small cost projects, < \$10 million	Small to moderate \$10M to < \$25M	Moderate cost projects \$25M to < \$50M	High cost projects, \$50M to < \$75M	Very high cost projects, >= \$75M