

**BTX**

**MOVES**

## Burleson Mobility Plan

2023 Update  
Adopted November 13, 2023



Kimley»Horn

# ACKNOWLEDGEMENTS

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# INTRODUCTION

## PURPOSE OF MOBILITY PLANNING

Mobility planning is a process that defines future investments that will move people and goods to and from destinations in a safe and efficient manner. Effective multimodal mobility planning can enhance the quality of life for residents and visitors of Burleson by creating paths to destinations and activity centers without the necessity of a motorized vehicle. By integrating transportation planning and land use, the City of Burleson can develop a transportation network where the streets compliment adjacent land uses and improve the pedestrian experience. A Mobility Plan (MP) is a long-range multimodal transportation plan that identifies mobility goals, capital improvement projects, and policies the City of Burleson should consider as it continues to grow.

This 2023 Mobility Plan (referred to in this document as "2023 MP") should be used as a decision-making tool for local elected officials and City of Burleson Staff to utilize when identifying solutions to traffic congestion, creating policies, and identify transportation projects that accomplish the goals of the MP. Developing the 2023 MP was a collaborative process that involved citizens, stakeholders, and elected officials.

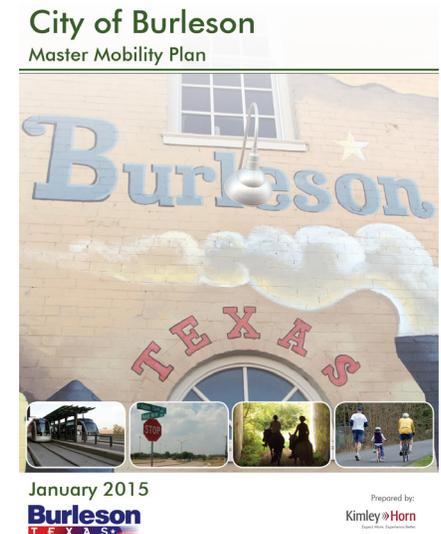


Source: Google Earth

## UPDATING THE 2015 PLAN

A mobility plan should be updated on a regular basis to accurately depict the City of Burleson's current roadway, bicycle, and pedestrian priorities throughout the various transportation networks in the City. The 2023 MP is updated with the purpose of reflecting on priorities from previous efforts to realign goals and objectives with the updated roadway network. These changes may include adding a new planned corridor to the map, redesigning a road's cross section, or making alignment changes. Understanding past transportation planning efforts in Burleson is necessary to achieve success. As a result, the *2015 Master Mobility Plan* is being updated to reevaluate what projects have been identified as previous priorities for the City of Burleson, determine what projects have been completed, and set new projects for future years to come.

The *2015 Master Mobility Plan*, pictured to the right, is used as the basis of this project. All roads included in the 2015 plan stretch through Burleson's city limits, extra-territorial jurisdiction (ETJ), and beyond. It is important to have a regional mindset when creating mobility plans to allow for a more complete picture of how future growth in Burleson will affect the regional roadway network.



# 2015 MASTER MOBILITY PLAN

The 2015 Master Mobility Plan recommended various roadway and bicycle projects, which includes plans and tools to assist the City with the implementation and construction process. Since 2015, several of these projects have been completed and incorporated into the 2023 study.

**Table 1** to the right shows the status of the projects identified in the 2015 plan. For a full list of recommendations from the 2015 plan, please see **Appendix A: 2015 Master Mobility Plan Recommendations**. The 2023 Mobility Plan will improve upon the prior plan by utilizing the following strategies:

- **Context Sensitive Solutions:** The 2015 plan introduced the concept of creating Context Sensitive Solutions (CSS). The 2023 Mobility Plan integrates multimodal elements that were indicated by context in the previous plan that now are standard. Flexibility in design is recommended to be incorporated into the proposed cross sections and is recommended to be outlined in the update to the Burleson Design Standards Manual. Rural context is also considered and is incorporated into the proposed cross sections.
- **Travel Demand Modeling:** The modeling from the 2015 plan will be updated to include more recent improvements to roadway and multimodal infrastructure.
- **Bicycle Network Updates:** The bicycle network will be updated and will extend into Burleson’s extra-territorial jurisdiction, where feasible.
- **Pedestrian Network Prioritization:** A new pedestrian infrastructure project prioritization methodology will be introduced in the 2023 Mobility Plan.
- **Policy Implementation Strategies:** Many of the recommendations originating from the 2015 plan have been completed, as seen in **Table 1**.

**Table 1. 2015 Master Mobility Plan Recommendations and Status**

Corridor Plans	Status
Renfro Street Phase 1 (from Johnson Avenue to IH-35)	<ul style="list-style-type: none"> <li>• Completed</li> </ul>
SH 174 (Wilshire Boulevard) Corridor Study	<ul style="list-style-type: none"> <li>• Completed in 2010</li> <li>• Recommend updating and adoption by City Council</li> <li>• Current design activity</li> </ul>
Summercrest Boulevard	<ul style="list-style-type: none"> <li>• Completed</li> <li>• Constructed additional bicycle infrastructure</li> </ul>
Thoroughfare Recommendations	Status
SH 174 (Wilshire Boulevard) Corridor Connectivity	<ul style="list-style-type: none"> <li>• In the current MP</li> <li>• Not constructed yet</li> </ul>
Hidden Creek Parkway-Hulen Street Connectors	<ul style="list-style-type: none"> <li>• Cardinal Ridge Road has been constructed</li> <li>• Other roads are in the current MP for the future</li> </ul>
FM 731 (John Jones Drive)/Hulen Street Commercial Connectors	<ul style="list-style-type: none"> <li>• Under Design</li> <li>• Greenridge Road has been constructed</li> </ul>
SH 174 (Wilshire Boulevard) Forest Connectors	<ul style="list-style-type: none"> <li>• In the current MP</li> <li>• Not constructed yet</li> </ul>
Chisholm Trail Parkway/SH 121 Connectivity	<ul style="list-style-type: none"> <li>• In the current MP</li> <li>• Not constructed yet</li> <li>• Large focus of the 2023 MP</li> </ul>

## INTEGRATING THE IMAGINE BURLESON 2020 MIDPOINT UPDATE

Since its original adoption in 2010, the *2030 Imagine Burleson Comprehensive Plan* has undergone a 2020 midpoint update process. This 2023 Mobility Plan is part of this update and will serve the City as a vehicle to implement specific mobility goals and objectives identified in the *Imagine Burleson 2020 Midpoint Update*. The mobility goals identified in the callout to the right lay out the specific goals and actions the recently updated comprehensive plan seeks to achieve for Burleson's transportation systems by the year 2030. The 2023 Mobility Plan will assist with the composition of Burleson's next Capital Improvements Plan (CIP) which will lay out funding and a timeline for the projects determined in the Mobility Plan.

In 2019, the City of Burleson also implemented an Intelligent Transportation System (ITS) Master Plan. The implementation of the plan will be completed in phases and includes installing Advanced Traffic Management System (ATMS) central software, communication systems, CCTV, upgraded traffic signal controllers, a traffic management center, and an upgraded GPS opticom system. The implementation of the plan will coincide with the City assuming maintenance control of the on-system TxDOT signals and will give the City the ability to remotely monitor the traffic signals and other ITS devices.

***Integration of all existing planning documents is important to understand what exists today and create a context sensitive approach for mobility in the future.***



## IMAGINE BURLESON 2020 MIDPOINT UPDATE MOBILITY CORE VALUES

### Goal 1: Develop or Refine Strategies for Key Corridors

- Action 1A – Reevaluate and implement the SH 174 (Wilshire Boulevard) Vision/Plan
- Action 1B – Develop a Chisholm Trail Corridor Vision
- Action 1C – Reevaluate the IH-35W Vision
- Action 1D – Develop a plan for Hulen Street
- Action 1E – Develop a plan for Alsbury Boulevard
- Action 1F – Develop a plan for FM 731 (John Jones Drive)
- Action 1G – Develop a plan for Summercrest Boulevard
- Action 1H – Develop a plan for Hidden Creek Parkway
- Action 1I – Develop a plan for East Renfro Street
- Action 1J – Explore options for congestion mitigation

### Goal 2: Foster Walkability and Bikeability

- Action 2A – Complete the 10-mile bike loop
- Action 2B – Create a comprehensive sidewalk program

### Goal 3: Encourage a Multimodal Transportation System

- Action 3A – Develop a mobility innovation plan
- Action 3B – Develop a transit master plan
- Action 3C – Develop a plan for a bike sharing program

### Goal 4: Support the Development of Complete Streets

- Action 4A – Reevaluate and update the Complete Streets chapter of the Master Mobility Plan
- Action 4B – Develop policy/strategy for traffic calming

# DOCUMENT ORGANIZATION

The Table of Contents on page 3 specifies the beginning page of each chapter and what each chapter generally discusses. The 2023 Mobility Plan contains links throughout the document to view electronic versions of larger scale maps for ease of viewing information. The following is a general overview of what can be found in this document by chapter:

**Chapter 1: Existing Conditions** contains a brief analysis of the current state of Burleson's roadway network and demographic makeup. Topics such as existing number of lanes and current daily traffic will be discussed.

**Chapter 2: Public Engagement** depicts all of the engagement conducted with the public throughout the duration of this project, and how that engagement was incorporated into the final recommendations of the 2023 Mobility Plan.

**Chapter 3: Modeling and Mapping** provides an in-depth overview of the travel demand modeling process conducted for the Mobility Plan. This chapter will review the methodology used in this process as well as all the scenarios that were analyzed in the model. The results will act as a key decision-making tool for making the updates to the 2015 Master Thoroughfare Plan.

**Chapter 4: Pedestrian Network** summarizes the status of Burleson's current pedestrian network. A pedestrian prioritization methodology was created to determine sidewalk improvements needed to enhance multimodal connectivity options between neighborhoods and schools, surrounding destinations, and key employment centers. Pedestrian recommendations are provided at the end of this chapter and are organized into short-, mid-, and long-term projects the City should complete.

**Chapter 5: Bicycle and Trail Network** reviews Burleson's current bicycle and trail network and summarizes the updates recommended using a prioritization methodology. Bicycle infrastructure recommendations are provided at the end of this chapter.

**Chapter 6: Implementation** summarizes the multimodal priority list including roadway, pedestrian, and bicycle/trail projects, policy guides; and specific strategies and actions the City of Burleson can implement to follow through on the 2023 Mobility Plan's recommendations.

# CHAPTER 1

## Existing Conditions



Chapter 1 explores the state of mobility in the City of Burleson. In order to plan for the future, an in-depth review of what exists currently is necessary to set a baseline for the analysis. The existing conditions analysis looks at population and development growth trends, and transportation networks in order to identify connectivity gaps and future need.

The existing conditions will review the following:

- Demographics
- Land Use
- Roadway Conditions and Classification
- Traffic Patterns
- Safety
- Pedestrian Infrastructure
- Bicycle Infrastructure



Source: Burleson Chamber of Commerce

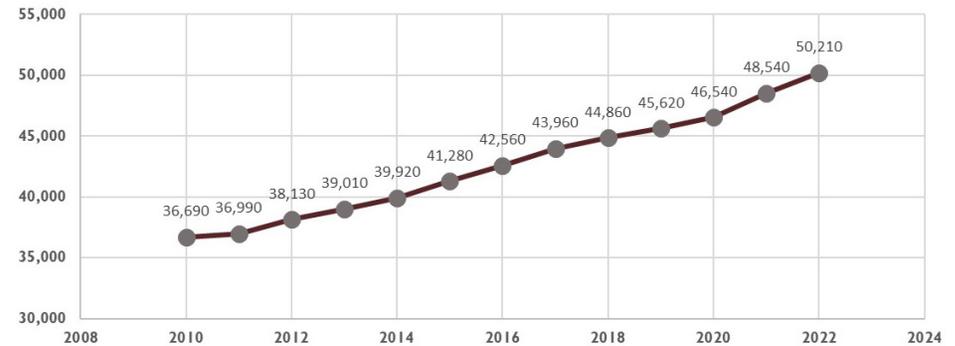
# DEMOGRAPHICS

Burleson has experienced significant population growth over the past decade. The Dallas-Fort Worth metroplex has experienced an average growth rate of 28% from 2010 - 2020. The City of Burleson has grown approximately 37% within this same timeframe, shown in **Figure 1**. The rapid growth seen in this community can be attributed to an increase in housing inventory, an increase in number of jobs, and the City's close proximity to employment centers. The median age of residents is 35 and the median annual household income is \$77,329. Burleson has been on a linear path since 2010, and this is expected within the next 5 - 10 years based on proposed developments, so planning for adequate transportation systems that will be able to handle this growth is essential.

Burleson primarily consists of residential and rural residential estates, with pockets of commercial activity surrounding Historic Old Town around the convergence of Willshire Boulevard/SH 174 and IH-35W in the north end of the City. IH-35W and Wilshire Boulevard are the major commercial corridors in Burleson, with additional planned commercial growth in strategic areas along John Jones Drive, SW Hulen Street, and the future extension of Lakewood Drive. Residential growth has occurred in Burleson through a mix of single-family subdivisions, Planned Developments (PDs), and multi-family developments.

**~37% population growth since 2010**

**Figure 1. Burleson Population Growth**



Source: NCTCOG 2022 Population Estimates; US Census

## SNAPSHOT OF BURLESON



Number of Housing Units  
**16,557**



Median Age  
**35**  
Texas: 36



Median Income  
**\$77,329**  
Texas: \$66,963



Number of Employees  
**23,814**



Number of Schools  
**18**



Zero Vehicle Households  
**1.4%**  
Texas: 2.4%

Source: 2020 American Community Survey 5-Year Estimates

# ROADWAY EXISTING CONDITIONS

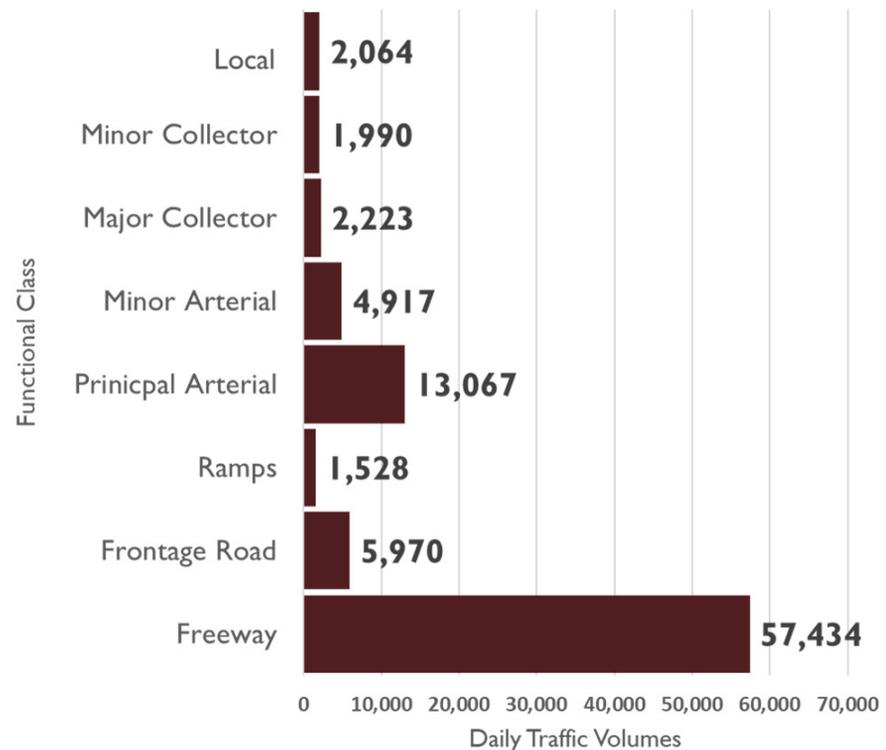
## FUNCTIONAL CLASS AND ROADWAY TRAFFIC

Average Daily Traffic (ADT) is an important factor to analyze when addressing changes to the current MP. Current daily traffic volumes are shown in the Daily Traffic Volumes map on page 11. Traffic volumes directly correlate to the road's functional class, which is pictured in **Figure 2**. Roads that carry large amounts of traffic have higher functional classes. Local streets act as last mile connectors to residential neighborhoods, while large highways and interstates carry regional traffic throughout the area.

Displayed on the map on page 11, SH 174/Wilshire Boulevard, IH-35W, and Chisholm Trail Parkway are the key north-south connectors through Burleson. These three roads have the highest traffic within the city. East Renfro Street and West Hidden Creek Parkway act as critical east-west connectors in the northern portion of the City. In the southern part of Burleson, within the ETJ and portions of the city limits, there is not a large east-west connecting roadway facility.

The Burleson Population Density map on page 12 displays the city's population distribution. Burleson's population density is concentrated in the northern part of the city. The southern portion of the city is dedicated to residential and rural residential land uses with pockets of commercial activity. This concentration of non-residential development has resulted in higher traffic volumes in the northern portion of the City. Other key roadway facilities include John Jones Drive, Alsbury Boulevard, and Summercrest Boulevard.

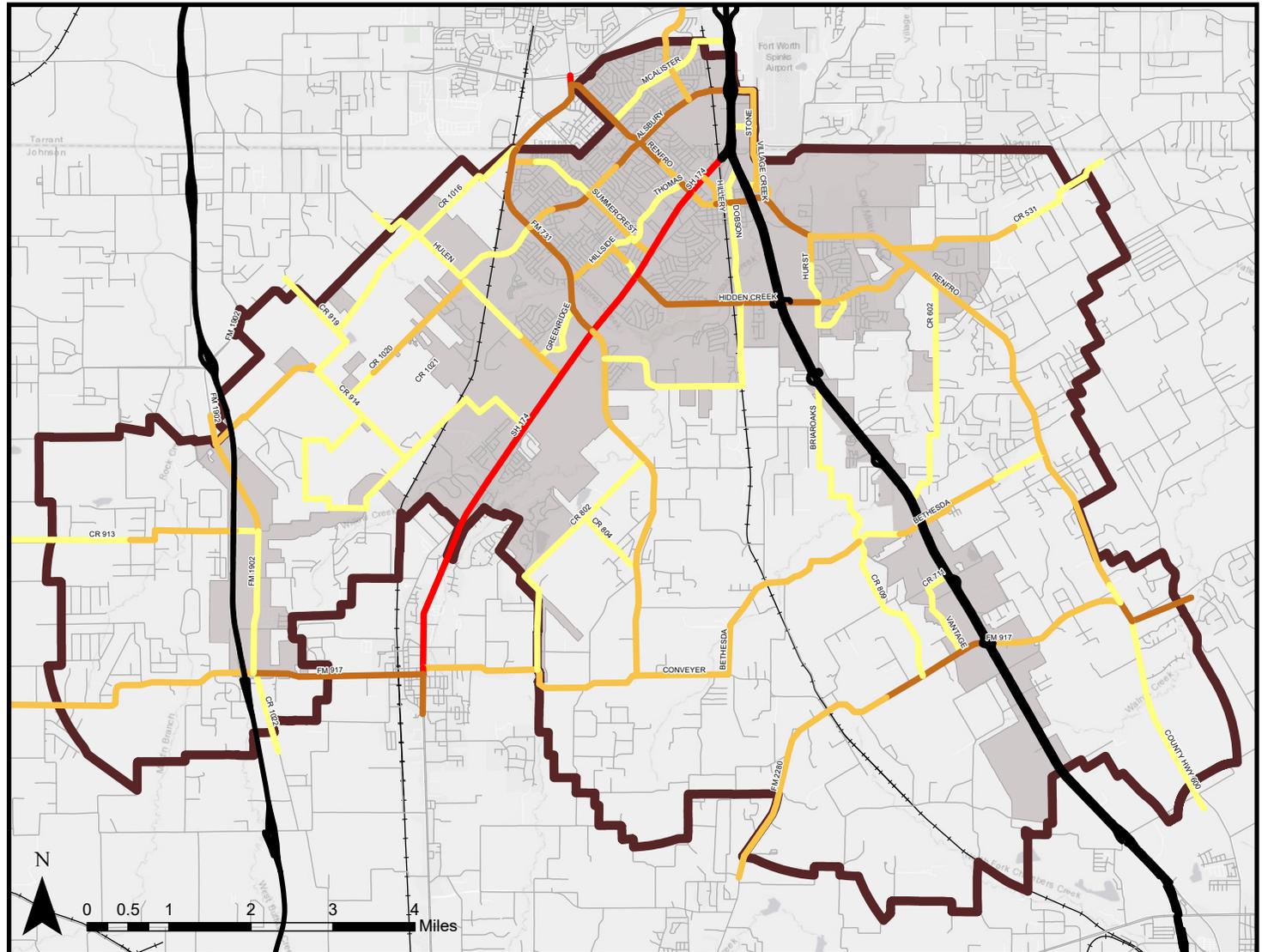
**Figure 2. Existing Traffic Volumes and Functional Classifications**



# DAILY TRAFFIC VOLUMES

## LEGEND

-  Highways
-  0 - 4,000 Daily Vehicles
-  4,001 - 12,000 Daily Vehicles
-  12,001 - 26,000 Daily Vehicles
-  26,000 or More Daily Vehicles
-  Floodplains
-  Planning Area
-  Burleson City Limits



[Click here to access full scale map](#)



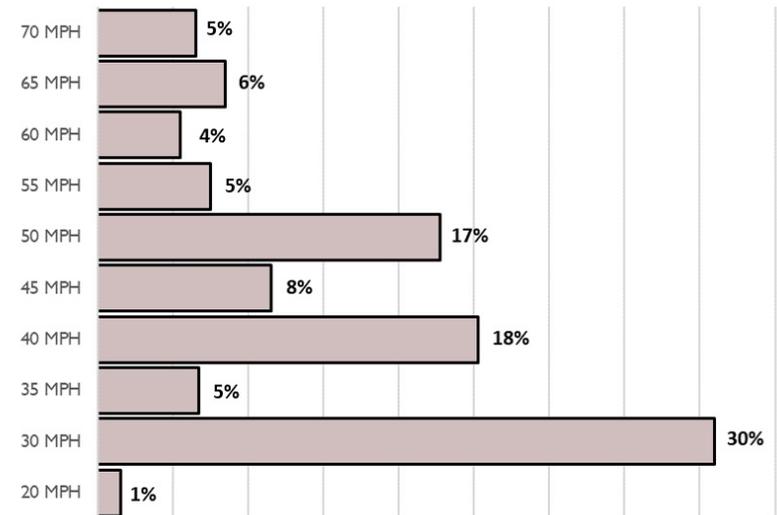
## ROADWAY CONFIGURATION

Other factors to consider when assessing existing conditions of a transportation network are the number of lanes, speed limit, and lane configuration. The pictures below depict existing lane configuration in Burlison, showing if the roadway is divided, undivided, or has a center turn lane, as well as the distribution of these road types along Burlison streets.

**Figure 3** shows the speed limits throughout Burlison. Speed limits will differ by land use and functional class. Residential streets have fewer lanes and lower speed limits, while streets with higher functional classifications have higher speeds to carry larger amounts of traffic.

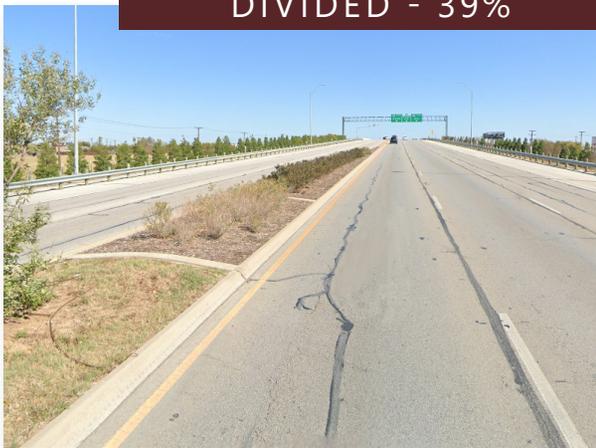
Roadway configurations will vary depending on the surrounding land use and context. Within Old Town an emphasis will be placed on sidewalks and other pedestrian elements. In rural settings, the roadway may contain elements such as shoulders. Flexibility from typical cross sections need to be considered based on both land use and constraints. When planning for future connectivity projects, it is important to realize the impact constructing a new road will have on the rural areas.

**Figure 3. Speed Limit Distribution on Burlison's Roadway Network**



## LANE CONFIGURATION

DIVIDED - 39%



UNDIVIDED - 56%



CENTER TURN LANE - 5%



Source: Google Earth

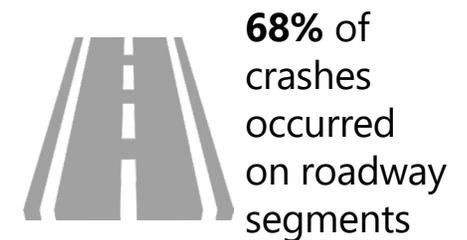
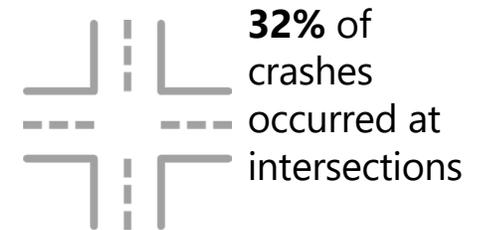
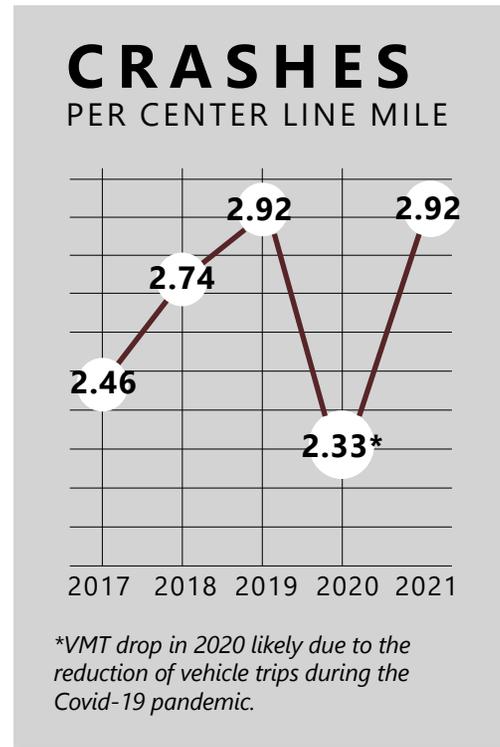
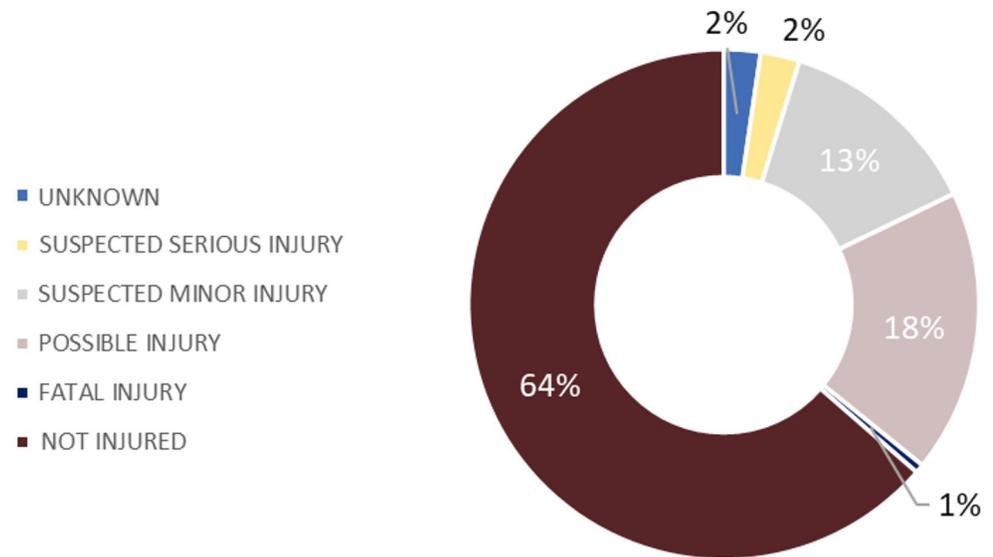
## SAFETY

The frequency of crashes in Burleson affects the safety and daily quality of life for residents and visitors. Between the years of 2017-2021, a total of 3,920 crashes occurred within the city limits. Of those, 1,313 of the crashes resulted in injury or possible injury with 22 of those crashes ultimately resulting in death. **Figure 4** shows the overall crash severity from all of the roads in Burleson.

**Figure 5** on the following page shows a heat map of crashes in the City. The intersection of Northwest Renfro Street and SH 174/Wilshire Boulevard showcases a significant problem area. Improvements could be considered for this intersection to reduce the crash rate, such as traffic calming measures, lowering the speed limit, or signal timing improvements. Other high frequency crash locations are also seen along Wilshire Boulevard through the heart of Burleson. Wilshire Boulevard carries more cars than any other local arterial, so it is expected that crash rates are higher here. However, additional safety improvements can be implemented to reduce this high crash frequency. Other crash hot spots are located on the interchanges of IH-35W and Alsbury Boulevard.

Out of the five years of traffic data collected, 32% of the crashes occurred at intersections, while 68% of crashes were located on roadway segments. The two most frequent manner of collision categories were "One Motor Vehicle – Going Straight" (921 crashes) and "Same Direction – One Straight One Stopped" (748 crashes). Single vehicle crashes are common in rural areas where certain elements are more frequent, such as wildlife crossing the street, limited shoulders adjacent to roads, and steep drainage ditches along the road.

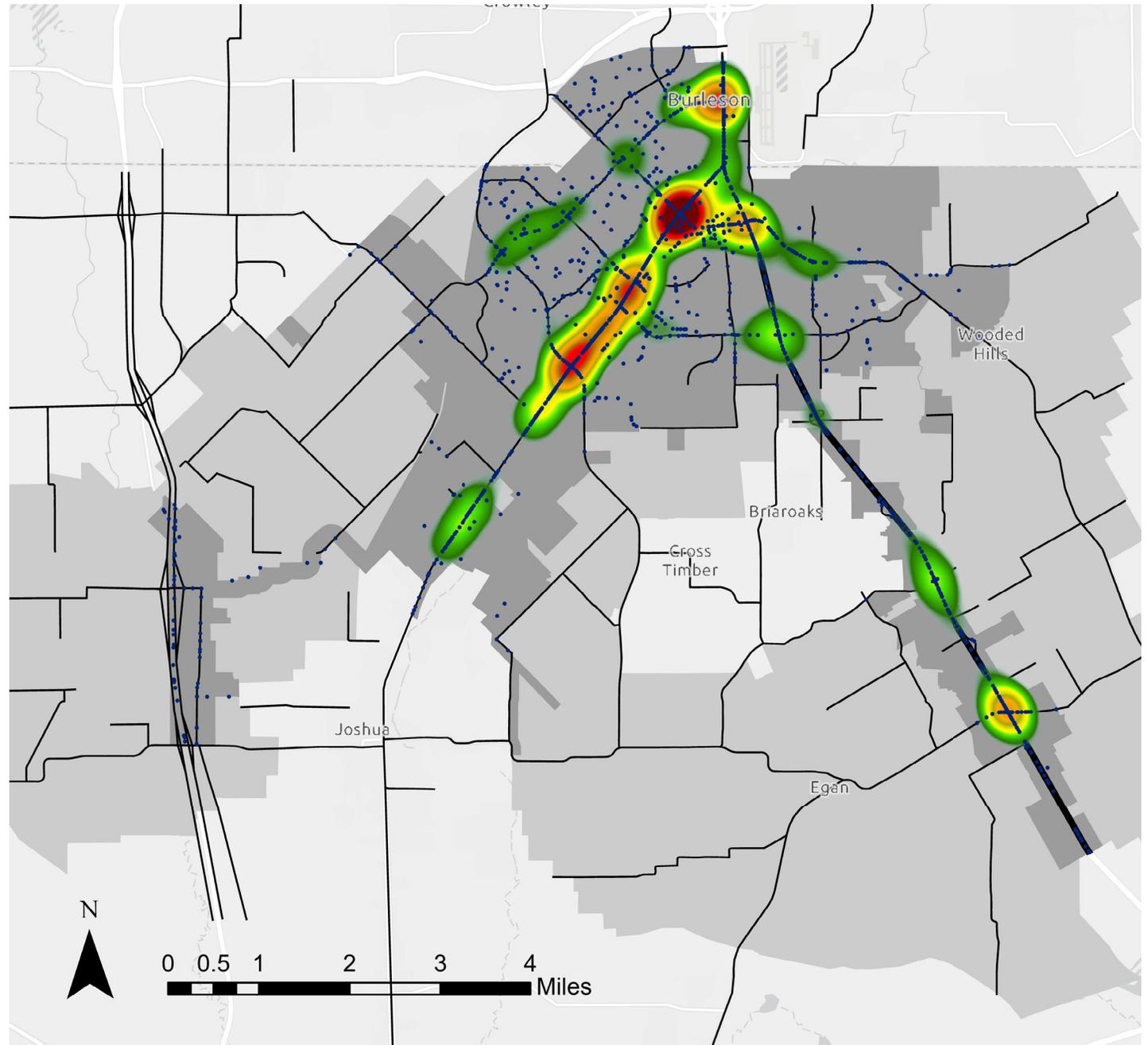
**Figure 4. Crash Severity Distribution**



**Figure 5. Crash Heat Map**

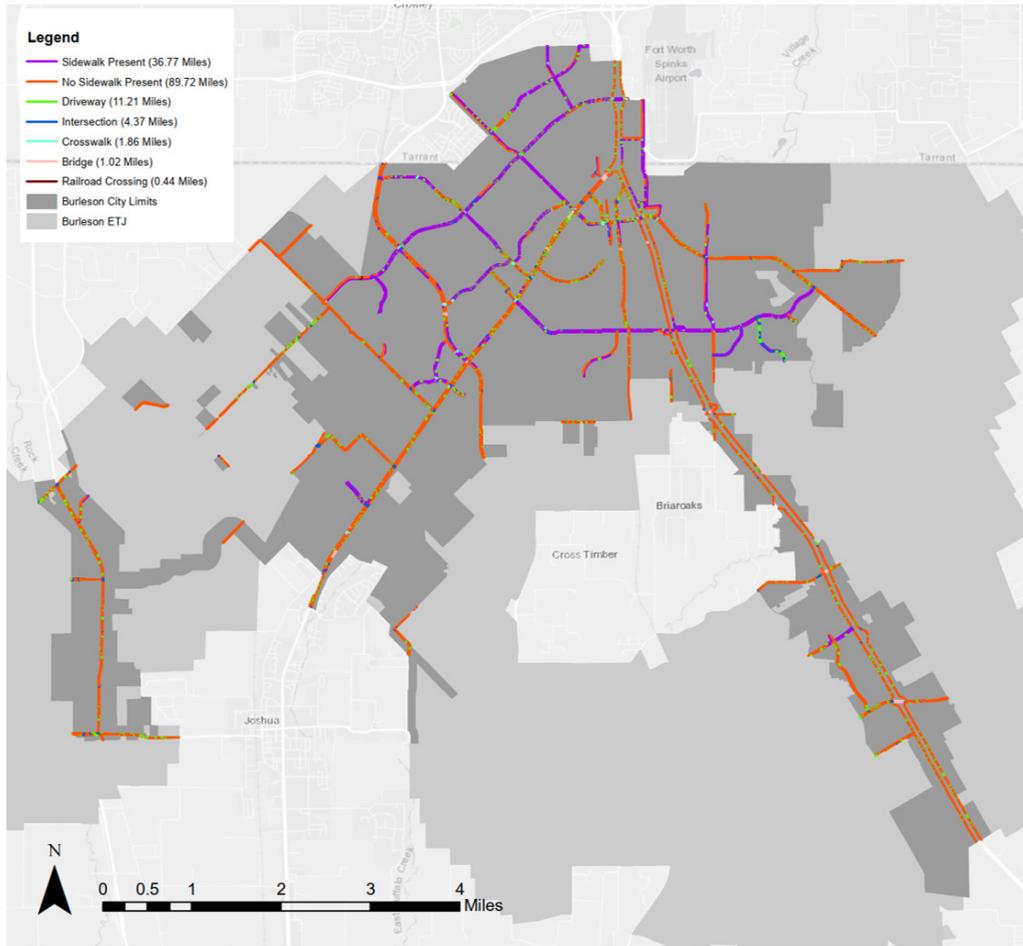
Crash rates were calculated by taking the number of crashes by year and dividing that by the total number of roadway miles in Burleson, which is 293.4 miles. Continual improvements should be made to reduce the crash rate leading to a decrease in potential loss of life.

Intersection improvements, traffic calming measures, and multimodal infrastructure improvements can all help in reducing the overall crash rate in Burleson. If trips do not require a vehicle and can be made by bicycling or walking, this reduces the overall risk of crashing. However, pedestrian and bicycle infrastructure should be constructed with generous safety measures along highly traveled corridors to protect vulnerable roadway users.

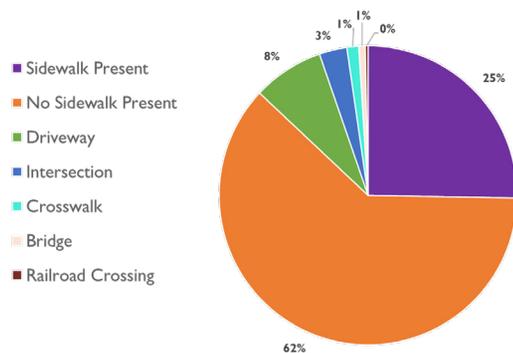


Source: TxDOT's Crash Records Information System

**Figure 6. Pedestrian Facilities on 2015 MMP Roads**



**Figure 7. 2015 MMP Sidewalk Status**



**PEDESTRIAN FACILITIES**

Sidewalks can be used for utilitarian or recreational purposes. This variety of uses for sidewalks attract high usage in urban areas. Sidewalks are an important piece of infrastructure that will improve health for residents, reduce congestion, and reduce carbon emissions. Burleson is home to many sidewalks in the northern portion of the city. Alsbury Boulevard and West Hidden Creek Parkway are both entirely lined with sidewalks. However, sidewalks become less continuous in the areas outside of Historic Old Town. **Figure 6** to the left displays where sidewalks are present in Burleson along roadways identified on the *2015 Master Mobility Plan*. **Figure 7** also shows the breakdown of sidewalk status in the 2015 MMP by percentage. As land uses are spread farther apart from the center of the City, the harder it is to utilize the sidewalks for transportation purposes. New commercial developments in the southern portion of the City present an opportunity to install new sidewalks that connect to the existing network. The roads that were chosen to be a part of this analysis were existing major roadways that were located within the city limits and also in the *2015 Master Mobility Plan*.

A well designed pedestrian network is safe, connected, and separated from vehicular traffic. The standard width is currently 4 feet wide with some enhanced facilities at 6 feet. Through the process of updating this document the City is transitioning to a 5 foot standard sidewalk or a 10 foot minimum shared use path.

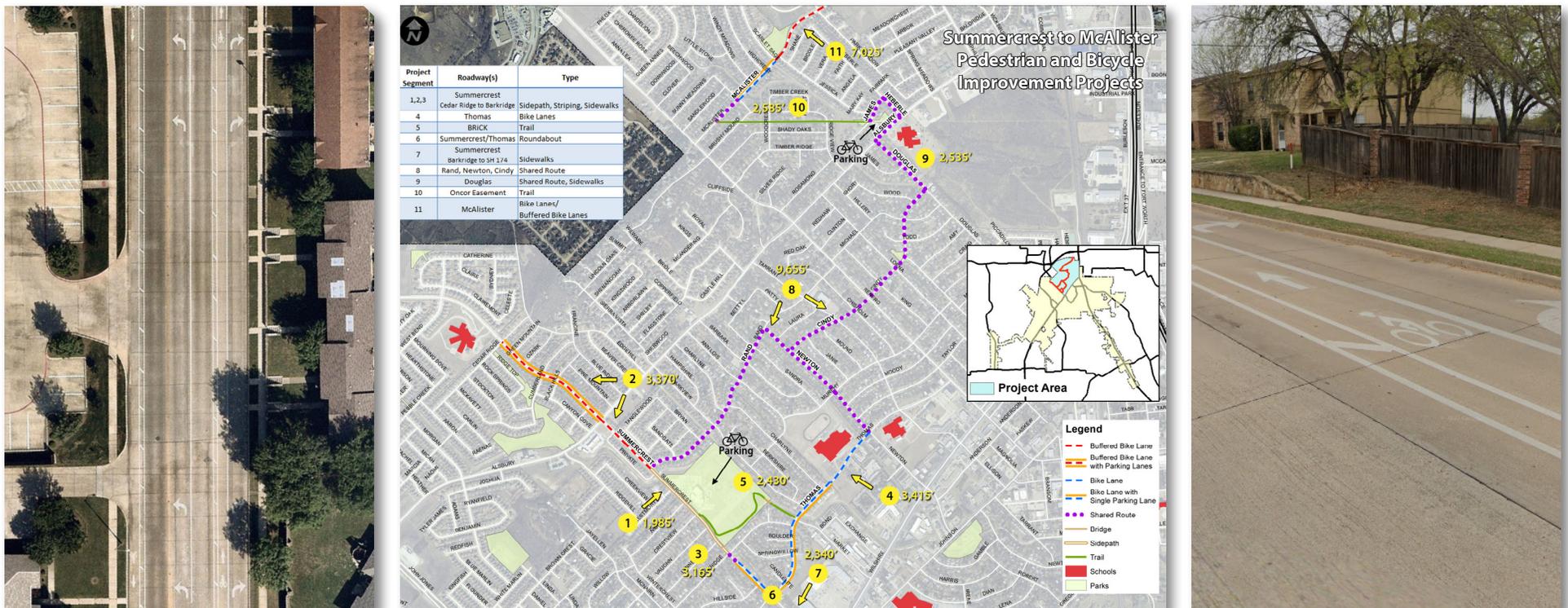
Chapter 4 of this plan presents the sidewalk prioritization methodology used to rank future pedestrian projects. The methodology focuses on areas of interests, especially distance from schools and activity centers. This tool will assist local planners and policymakers on where and how to spend public dollars on pedestrian infrastructure.

## BICYCLE FACILITIES

In the 2015 Master Mobility Plan, the Bike Path and Trail plan was established through a series of evaluations of the existing conditions of the City's roadway network. The core goal was to develop a network throughout the City that provides safe and convenient connections to residential areas, schools, recreational facilities, commercial developments, and Historic Old Town. Each of the recommended bicycle facilities were based on existing roadway factors, such as pavement width, traffic speeds and number of lanes, as well as land-use context and route continuity. Multiple bicycle facility treatments were analyzed for Burleson including bike lanes, buffered bike lanes, shared use paths, and off-street trails. **Figure 8** depicts the bicycle network map that was produced in the 2015 plan. This 2023 MP will update the bicycle network as necessary, building off of the 2015 foundational framework. Since the adoption of the 2015 Bike Path and Trail Plan, the following projects have been constructed:

- Summercrest Boulevard Buffered Bike Lanes
- Irene Street Bike Route
- S Warren Street Buffered Bike Lanes
- Candler Street Bike Lanes

**Figure 8. Summercrest Boulevard Buffered Bike Lane**



Source: Google Earth

# CHAPTER 2

## Public Engagement



Chapter 2 of the Burleson Mobility Plan summarizes the outreach campaigns conducted to involve the public in the mobility planning efforts. Due to the COVID-19 pandemic, the majority of the public engagement was held in a virtual format. A mobility survey and interactive map engagement were the two main components of the public outreach efforts. This chapter presents the results of those engagements.



### BTX Moves

Welcome to the digital project hub for the Burleson Mobility Plan! We are glad you are here!

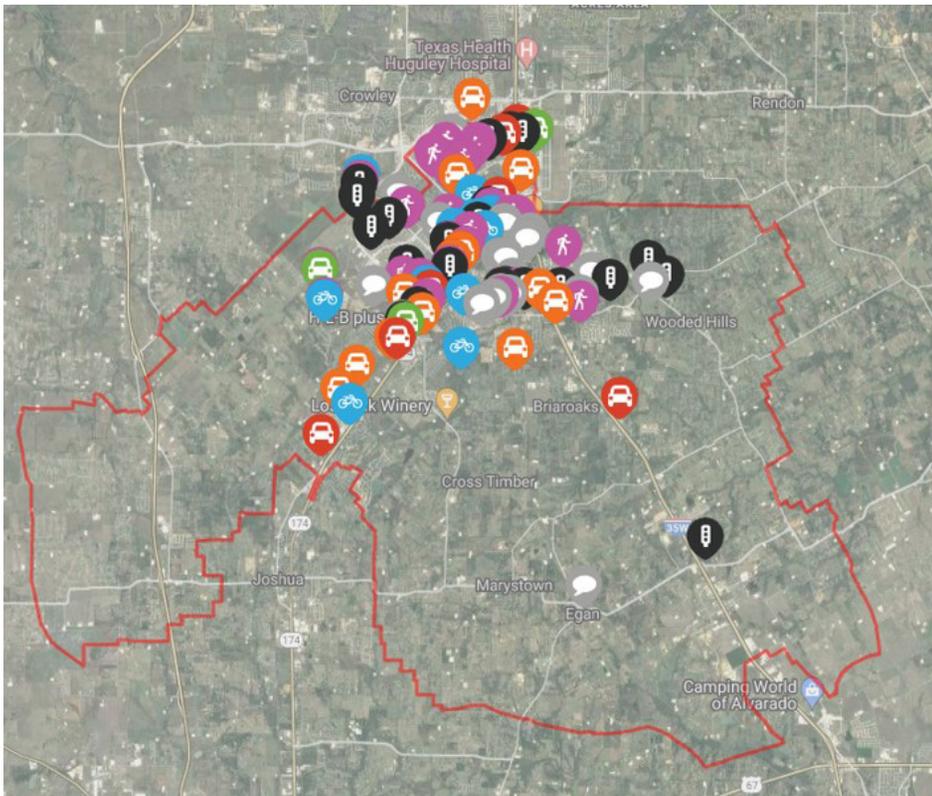
THE CITY OF  
**BURLESON**  
TEXAS

*BTX Moves Project Website*

# OUTREACH EFFORTS

The outreach efforts for the 2023 Mobility Plan consisted of a mobility survey and an interactive map as stated on the previous page. These efforts are crucial parts of the BTX Moves planning process as it allows the public and those directly affected by the plan to engage and comment on areas or topics that they may agree or disagree with.

The mobility survey and interactive map were open and available to the public from January 2021 to March 2021. During this period, citizens had the opportunity to respond to the seventeen (17) survey questions and pinpoint comments and concerns they had on the interactive map.



## SUMMARY OF ENGAGEMENTS

### Mobility Plan Survey

- 280 Responses
- 17 Questions



### Interactive Map

					
New Road Connection Needed	Road Problem - Safety	Road Problem - Congestion	New Bicycle Route Needed	New Sidewalk Needed	Intersection Comment

**3      15      8      11      30      26**

**Other Comments: 23**

**Total Comments: 116**

# MOBILITY SURVEY RESULTS

The purpose of the mobility survey for the 2023 Mobility Plan is to better understand the demographics, occupation, activity level, and other attributes of Burleson transportation system users. The survey consisted of seventeen (17) multiple choice and short answer questions. A total of 280 responses were recorded including answers to basic information about the respondents and their modes of transportation usage, as well as valuable comments and recommendations they offered.

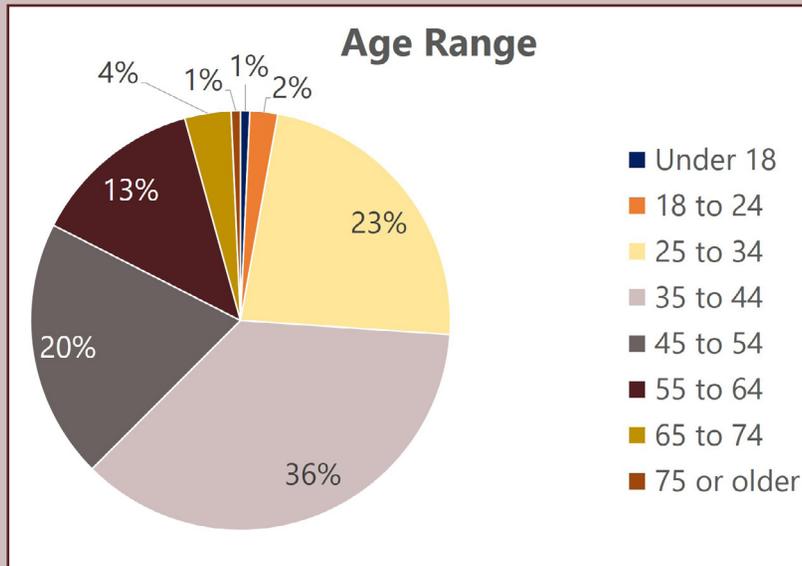
## PERSONAL INFORMATION

The initial questions in the survey covered participant's age range, occupation status, and relationship to public decision-making. The highest age group of citizens responding to the survey were of ages 35-44, working full-time, and a concerned citizen without relation decision-making or involvement in an action group.

## RELATIONSHIP TO AREA

Respondents were also asked to choose an answer that best described their relation to the area by selecting which provided 'zone' they either reside, own, or work in. The following page contains a map of the locations of each zone as well as the percentage of respondents that live in each zone. The zone that was best represented was Zone 2 with 73 of 280, or approximately 26%, of survey responses.

## SURVEY SNAPSHOT



70%

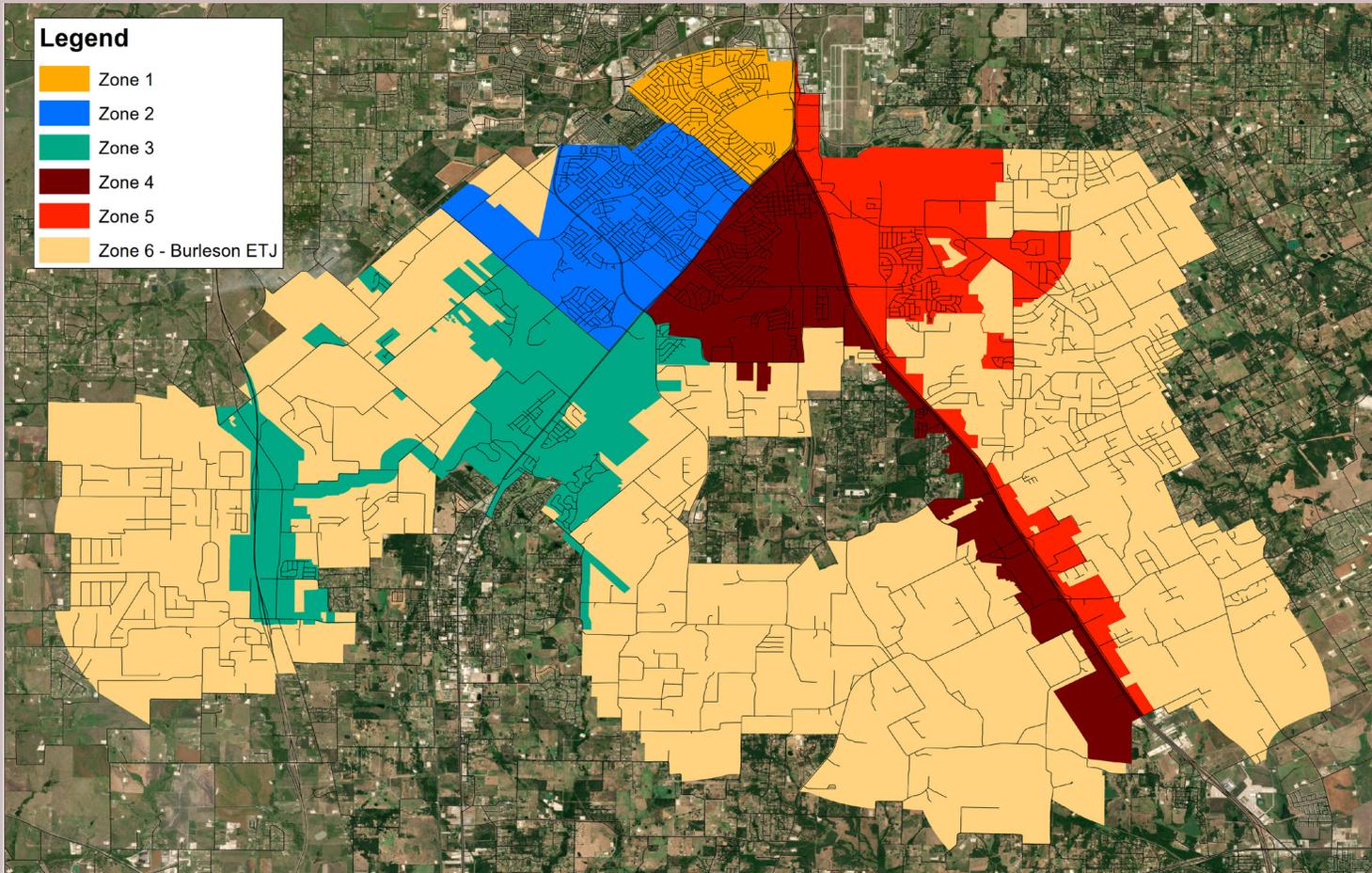


WORKS FULL TIME

91%



IDENTIFIES AS  
A CONCERNED  
CITIZEN IN PUBLIC  
DECISION-MAKING



<b>ZONE 1</b>	<b>ZONE 2</b>	<b>ZONE 3</b>	<b>ZONE 4</b>	<b>ZONE 5</b>	<b>ZONE 6</b>
<b>14%</b>	<b>26%</b>	<b>17%</b>	<b>12%</b>	<b>13%</b>	<b>11%</b>

**I ONLY WORK IN THE PROJECT AREA**

**2%**

**I DO NOT LIVE OR WORK IN THE PROJECT AREA, BUT I DO OWN PROPERTY WITHIN IT**

**1%**

**NONE OF THE ABOVE**

**4%**

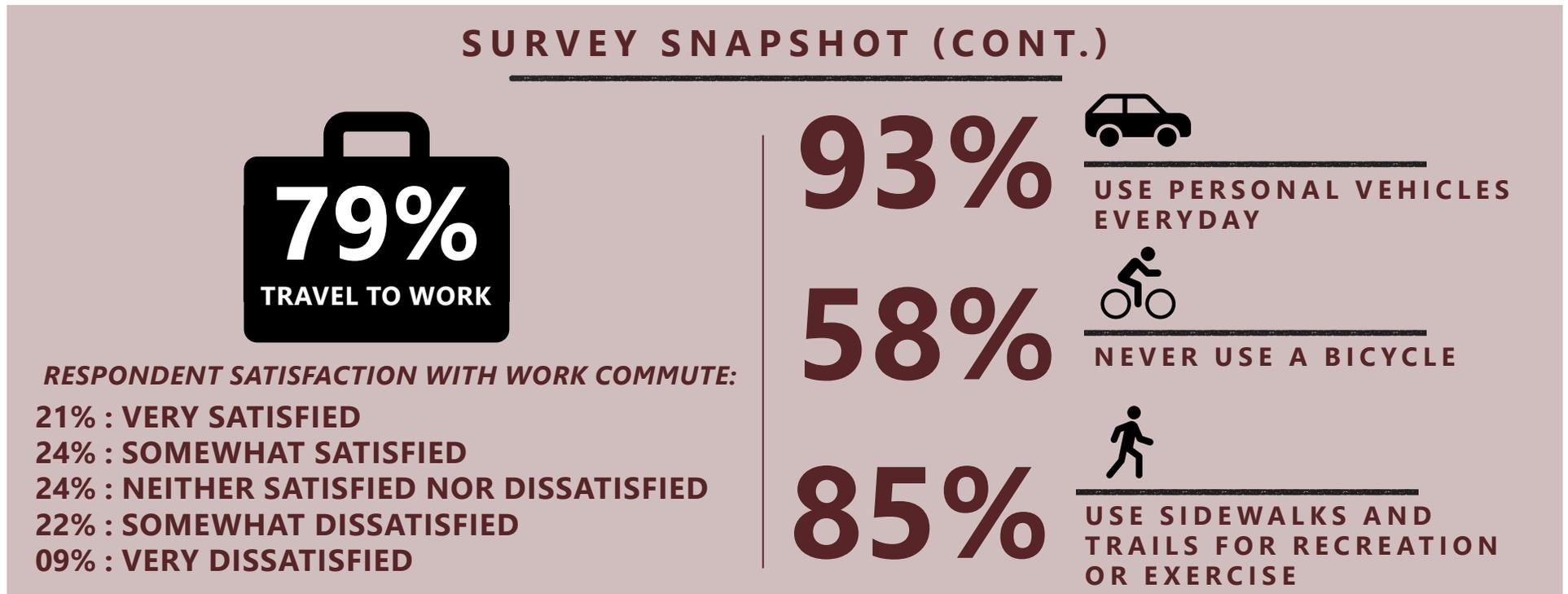
# MOBILITY SURVEY RESULTS (CONT.)

## COMMUTE & DAILY TRIPS

An important part of a mobility survey is analyzing commutes to work. The questions regarding daily commutes to work asked participants to answer whether or not they traveled to work prior to the COVID-19 pandemic and their satisfaction of that commute. The graphic below illustrates a snapshot of how survey respondents are satisfied with their commute as well as the respondents usage of the sidewalk and trail network.

## MODE CHOICE & PERSONAL PREFERENCES

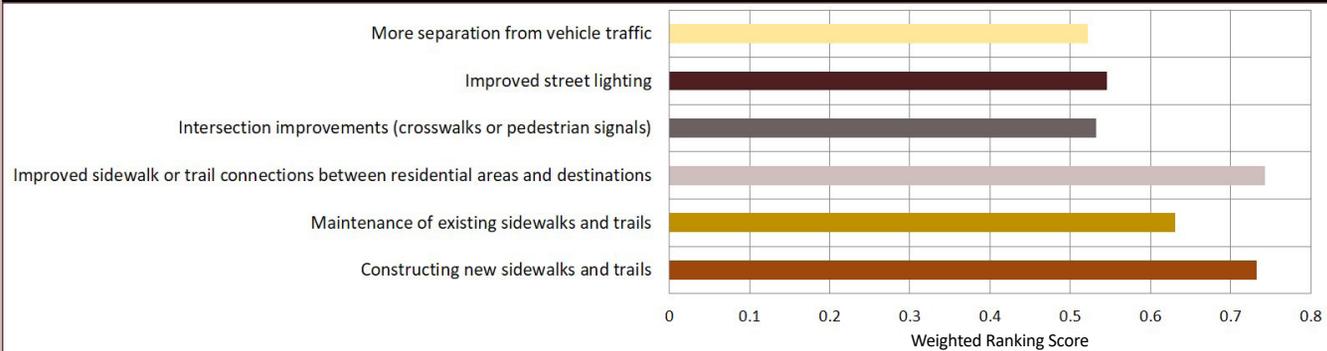
In this section of the mobility survey, participants were asked to indicate their level of usage per mode of travel (personal vehicle, bicycle, or walking), as well as their reason for using Burleson's sidewalk and trail system, if applicable. The majority of the respondents use their personal vehicle every day. Respondents primarily utilize the system for recreational or exercise purposes. The graphic provides a snapshot of the mode of travel. Walking had a more diverse response outcome with most participants walking either once a week or once a month. Almost 85% of sidewalk users in Burleson utilize the system for recreational or exercise purposes.



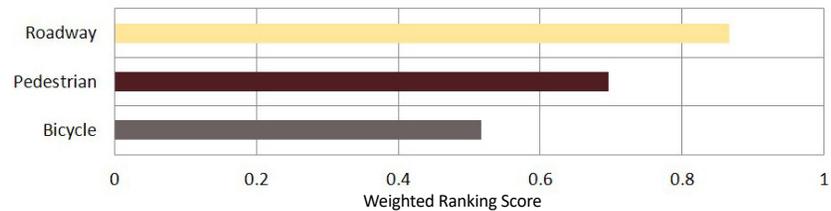
## RANKING QUESTIONS

In the final portion of the mobility survey, participants were asked a series of three additional questions to rank project types, themes, and improvements based on importance. Results showed that roadway safety and traffic calming were the most crucial project types and themes, as well as improving and constructing new sidewalks and trail for cyclists and pedestrians.

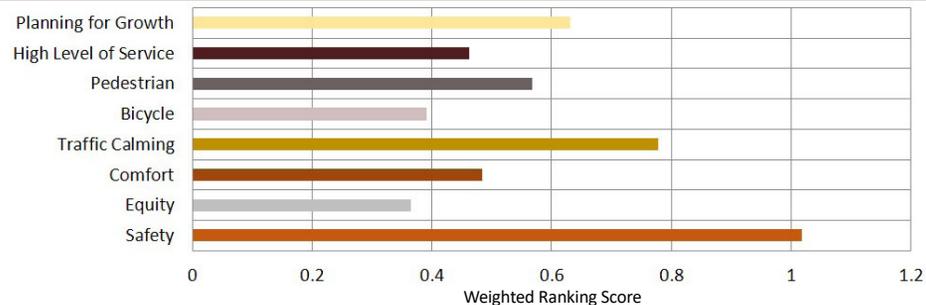
### HOW WOULD YOU RANK THE IMPORTANCE OF THE FOLLOWING WALKING IMPROVEMENTS TO SIDEWALKS AND TRAILS IN BURLESON?



### PLEASE RANK THE FOLLOWING PROJECT TYPES IN ORDER OF MOST IMPORTANT TO LEAST IMPORTANT TO YOU.



### PLEASE RANK THE FOLLOWING PROJECT THEMES IN ORDER OF MOST IMPORTANT TO LEAST IMPORTANT TO YOU.



# INTERACTIVE MAP

The interactive map for BTX Moves was available on the project website and provided an opportunity for the public to pinpoint or comment on specific locations within the City of Burleson, in addition to voting on other participant's responses, providing feedback on the roads, intersections, sidewalks, and more. **Figure 9** displays all of the interactive map comments. **Figure 10** provides a heat map of the comment locations. Respondents had the choice of using seven different comment types including New Road Connection Needed, Road Problem - Safety, Road Problem - Congestion, New Bicycle Route Needed, New Sidewalk Needed, Intersection Comment, and Other. A total of 116 comments were added to the interactive map by the public.



**New Road Connection Needed**



**Road Problem - Safety**



**Road Problem - Congestion**



**New Bicycle Route Needed**



**New Sidewalk Needed**



**Intersection Comment**



**Other Comment**

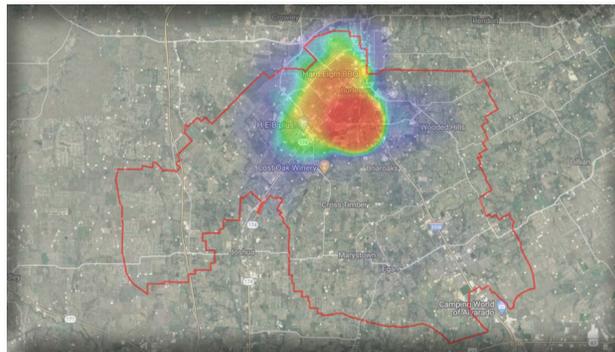
**New Road Connection Needed (3 comments)** - Feedback generally discussed the desire to add road connections to provide more direct paths around Burleson. A comment recommending a connection from Greenridge Drive to SH 174/Wilshire Boulevard was the most popular among many interactive map participants and received the most upvotes.

**Road Problem - Safety (15 comments)** - Participants noted speeding, dangerous intersections, and hazardous road conditions in various locations. On Gardens Boulevard, the lane designations are reported to change very suddenly, and many public respondents agreed that the area would be safer if a traffic signal were added at Johnson Avenue. **Figure 11** displays the roadway safety concern areas.

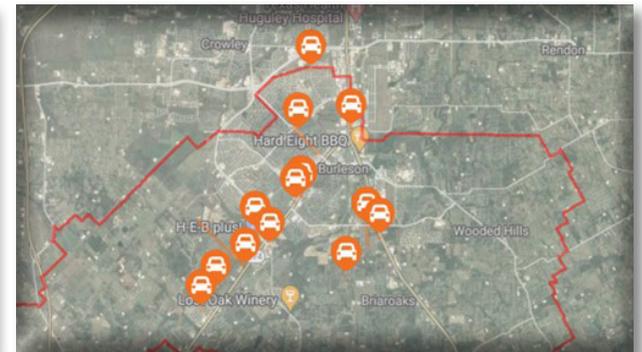
**Figure 9. All Interactive Map Pindrops**



**Figure 10. Heat Map of Comments**



**Figure 11. Road Safety Pindrops**



**Road Problem - Congestion (8 comments)** - Most road problem comments were found at common Burleson intersections that experience sever congestion. There was a popular request for SH 174/Wilshire Boulevard to be expanded to three lanes among participants and was repeated a few times on the interactive map. This improvement project is currently in progress.

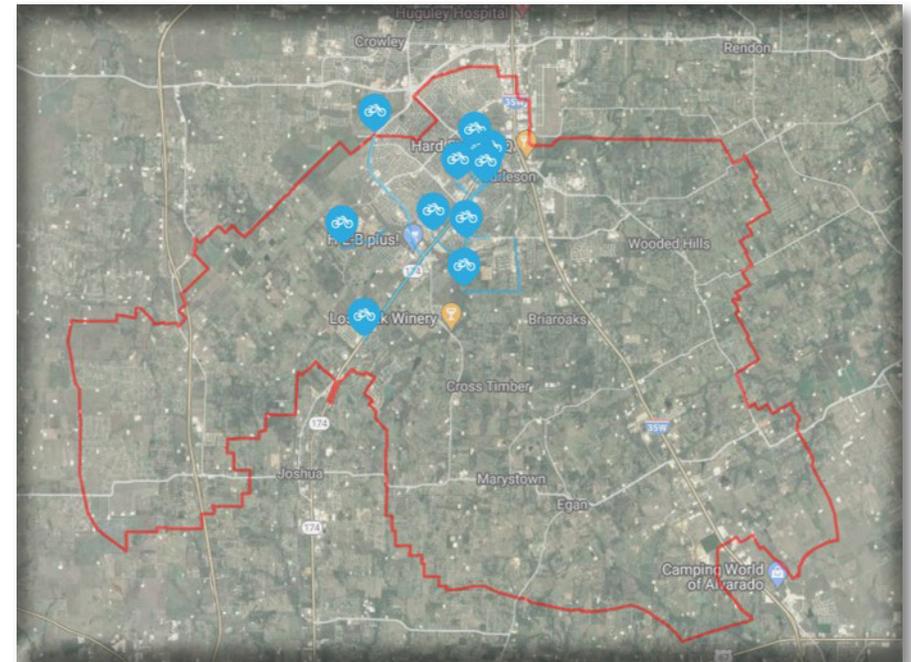
**New Bicycle Route Needed (11 comments)** - Many of the bicycle route suggestions consisted of adding connections to schools, restaurants, grocery stores, and other Burleson amenities to increase bicycling safety. **Figure 12** displays the bicycle route comments on the right.

**New Sidewalk Needed (30 comments)** - Similar to new bicycle routes, suggestions for new sidewalk included creating safe paths for pedestrians to walk, as well as repairing some of the damaged existing sidewalks. **Figure 13** displays the sidewalk suggestions on the right.

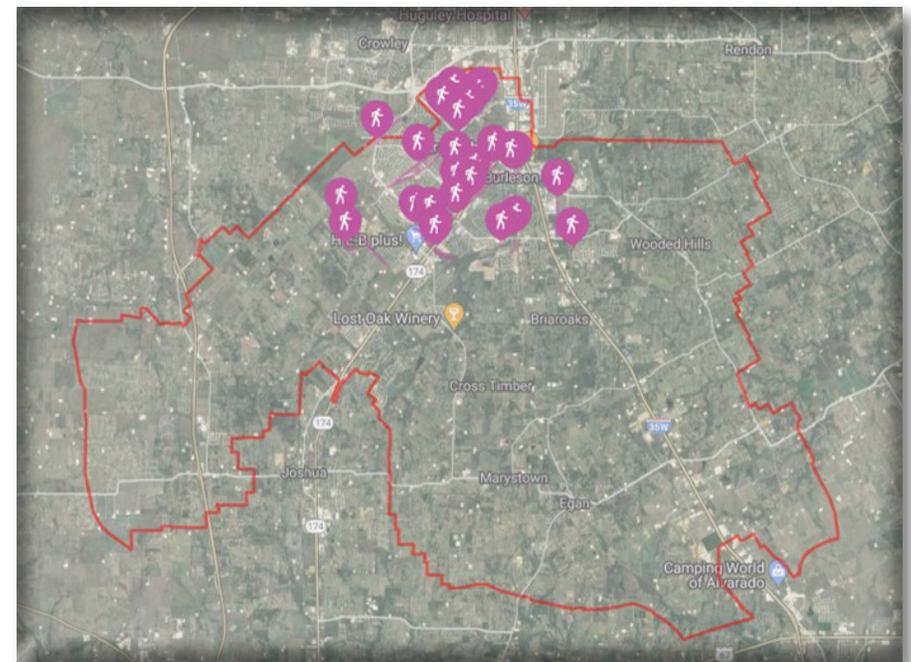
**Intersection Comment (26 comments)** - Many of the intersection comments addressed various issues participants had regarding busy intersections, dangerous intersections, signals out of sync, recommendations for a roundabout, etc. The leading intersection comments are related to the congestion along SH 174/Wilshire Boulevard. Many respondents noted the signal timing and would like to see improvements to traffic flow.

**Other Comment (23 comments)** - Additional comments addressed various purposes and discussed additional issues and recommendations not categorized. The comments included adding parking lots for trail access, addressing flooding issues, park preservation, site changes, and more lighting along trails and streets.

**Figure 12. New Bicycle Route Pindrops**



**Figure 13. New Sidewalk Needed Pindrops**



# CHAPTER 3

## Modeling and Mapping



Chapter 3 reviews the citywide travel demand model that was developed for the City of Burleson as part of the 2023 Mobility Plan Update. The model is a standalone model for the City and was developed based on the larger NCTCOG Dallas-Fort Worth Regional Travel Demand Model. The base year travel demand model was calibrated to Existing Conditions to accurately forecast future year scenarios. Scenario modeling was performed using the future year travel demand models to determine system performance and impacts related to various transportation projects. The travel demand model was created in TransCAD 8.0.

The following chapter provides a general overview of the full model documentation and results.



# MODELING SCENARIOS OVERVIEW

## MODELING METHODOLOGY

The success of a travel demand model is highly dependent on the quality and accuracy of the inputs. A travel demand model uses a gravity model, which follows the assumption that trips produced at an origin and attracted to a destination are directly proportional to the total trip productions at the origins and the total trip attractions at the destinations. The four basic steps of the gravity model include; Trip Generation – the total number of trips to be made, Trip Distribution – where these trips go, Mode Choice – the mode of travel for each of the trips, and Trip Assignment – predicting the route that each trip takes.

Existing and build out demographics were calculated for this travel demand model using existing land uses, floor area ratios, and estimates for employees or residents per square feet. The build out demographics utilized future land uses integrated from the *Imagine Burleson 2020 Midpoint Update Comprehensive Plan*. However, the build out demographics do not project to a specific year, but rather they look at future land uses and estimate the population and employment sectors based on if the entire city were built out to its fullest potential.

## MODELING SCENARIOS

Several modeling scenarios were calculated for this project. The purpose of creating these modeling scenarios was to use current travel behaviors to predict future travel patterns, and predict how changes in the size and character of the population will impact the future transportation system. The model results can assist local elected officials and policy makers in making informed transportation planning decisions.

Overall, the project team conducted four scenario model runs to hone in on the right approach for the 2023 Thoroughfare Plan. The first scenario analyzed existing transportation conditions in Burleson using existing roads and existing demographics. The second model

run used the previously adopted *2015 Master Mobility Plan* with future build out demographics, which reflect what the population would look like if current population trends continued on into the future.

Because the City of Burleson does not have primary control over improvements made to roads outside of their city limits, the third scenario was conducted by removing all roads from the model that fall outside of the Burleson city limits (except for key corridors). This scenario then informed where key connectors outside of the city limits should be included in the travel demand model.

The final model run included the recommended 2023 Thoroughfare Plan coupled with build out demographics. **Table 2** below compares the different scenarios that were used in the modeling analysis. For more detailed information about each modeling scenario and the results, please see **Appendix B: Modeling Methodology and Scenario Modeling Analysis**.

**Table 2. Scenario Modeling Overview**

Scenario	Demographics Used	Roadways Used
Base Year Model	Existing (2020)	Previously adopted 2015 Master Mobility Plan
2015 Master Mobility Plan Build Out	Build Out Demographics	Previously adopted 2015 Master Mobility Plan
Build Out without ETJ Roads	Build Out Demographics	2023 Thoroughfare Plan with very limited ETJ roadway connections
2023 Thoroughfare Plan	Build Out Demographics	2023 Thoroughfare Plan with key ETJ connections added back in to the model

# UPDATING THE THOROUGHFARE PLAN

The map on the next page provides a summary of changes from the 2015 Master Thoroughfare Plan that have been incorporated into the new 2023 Thoroughfare Plan. These changes include proposed roadways, roadway realignments, and isolated intersection improvements. These changes were based on a review of the 2015 plan and the scenario modeling analysis. A detailed summarization of the modeling analysis can be found in **Appendix B: Modeling Methodology and Scenario Modeling Analysis**.

A new functional classification is introduced in the 2023 Thoroughfare Plan called Major Arterial. The identified existing Major Arterials in the 2023 Thoroughfare Plan were previously identified as Principal Arterials in the 2015 Master Mobility Plan. This new functional classification designation maintains the 2015 Master Thoroughfare Plan's Principal Arterial right-of-way (ROW) of 120' to provide enhanced aesthetics and landscaping, and to also maintain the ability to expand the road to six-lanes in the future if needed.

**Table 3** below details the arterials that have undergone a functional classification change from the 2015 plan. The 2023 build out volume ranges were used as a guide to modify the functional classification, however, the functional classification also preserves right-of-way, so all 2015 MMP identified Principal and Minor Arterials maintain a minimum of Major Collector status. A series of roadways within the ETJ are removed from the 2023 Thoroughfare Plan but will remain as local roadways.

**Table 3. 2023 Thoroughfare Plan Functional Classification Changes**

Segment	Roadway	Limits	2023 Build-Out Volume Ranges	Functional Classification	
				2015 MTP	2023 TP
1	Hulen Street (CR 920)	North Limits to Greenridge Drive	9,600 - 29,400	Principal Arterial	Minor Arterial
2	FM 731	CR 802 to Southern Extent	26,000 - 29,000	Principal Arterial	Minor Arterial
3	Renfro Street	Hurst Road to CR 602	16,800 - 26,900	Principal Arterial	Major Arterial
		CR 602 to Southern Limits		Principal Arterial	Minor Arterial
4	Hurst Road	Northern Limits to Renfro Street	2,000 - 6,000	Principal Arterial	Major Collector
		Renfro Street to IH-35	6,800 - 11,800	Minor Arterial	Major Collector
5	CR 1016	FM 1902 to FM 731	16,500 - 22,400	Minor Arterial	Major Arterial
6	CR 531	Renfro Street to Eastern Limits	5,600 - 8,600	Minor Arterial	Major Collector
7	CR 602	Renfro Street to IH-35	8,300 - 9,500	Minor Arterial	Major Collector
8	CR 802	FM 731 to FM 917	6,400 - 6,700	Minor Arterial	Major Collector
9	N-S Roadway	CR 518 to FM 917	6,300 - 6,900	Minor Arterial	Major Collector
10	CR 914/Lakewood Drive	SH 174 to Western Limits	10,400 - 22,700	Principal Arterial	Major Arterial
11	CR 913	Western Limits to FM 1902	4,000 - 16,700	Principal Arterial	Minor Arterial
12	Alsbury Boulevard	FM 731 to CR 914	19,600 - 29,900	Principal Arterial	Major Arterial



# ALIGNMENT EVALUATION

Several alignments were studied in more detail for the 2023 Thoroughfare Plan update. Seven Thoroughfare Plan roadways were further evaluated as separate projects and have been incorporated into the overall 2023 Mobility Plan. The identified alignments were studied to provide the City of Burleson with additional information about alignment feasibility and right-of-way needs to prepare for design plans for the road segment's construction. The following seven road segments in the 2023 Thoroughfare Plan were given further evaluation. **Table 4** below displays the alignments and limits that were furthered studied in this process. The 2023 Mobility Plan's priority roadway projects consist of important projects needed to improve vehicular mobility throughout Burleson with a particular focus on the detailed alignments that were further studied and summarized in this section.

**Table 4. 2023 Alignment Evaluations**

Segment	Roadway	Limits
1	Lakewood Drive	From CR 1016 to Alsbury Boulevard
2	Wicker Hill Road	SH 174/Willshire Boulevard to FM 731/John Jones Drive
3	Greenridge Drive	From Hulen Street to Lakewood Drive
4	Hidden Creek Parkway	From Renfro Street to Houston Street
5	Alsbury Boulevard	From FM 731/John Jones Drive to Alsbury Court
6	Hulen Street	From Dobson Street to Hidden Creek Parkway/CR 602*
7	Hulen Street Bridge	BNSF Bridge Crossing

Below and on the next page display several examples of the evaluations that were completed for these alignments. The full roadway alignment documentation for each road segment can be found in **Appendix C: Alignment Evaluations**. **Figure 14**, **Figure 15**, and **Figure 16** display some examples of the work that has been completed for the alignment evaluations.

**Figure 14. Alignment Evaluation for Hulen Street\***

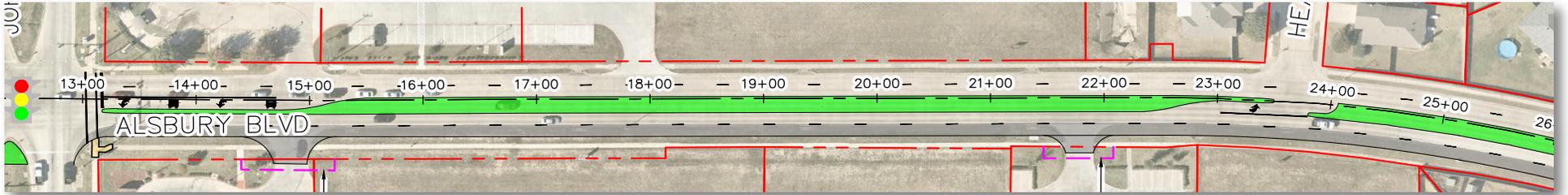
*This alignment evaluated the potential connection of Hulen Street from SH 174 across IH-35W to enhance east/west mobility through the area. The purpose of this alignment evaluation was to coordinate with TxDOT on ongoing IH-35W schematics.*



\*See **Appendix C: Alignment Evaluations** for alternative alignment evaluations.

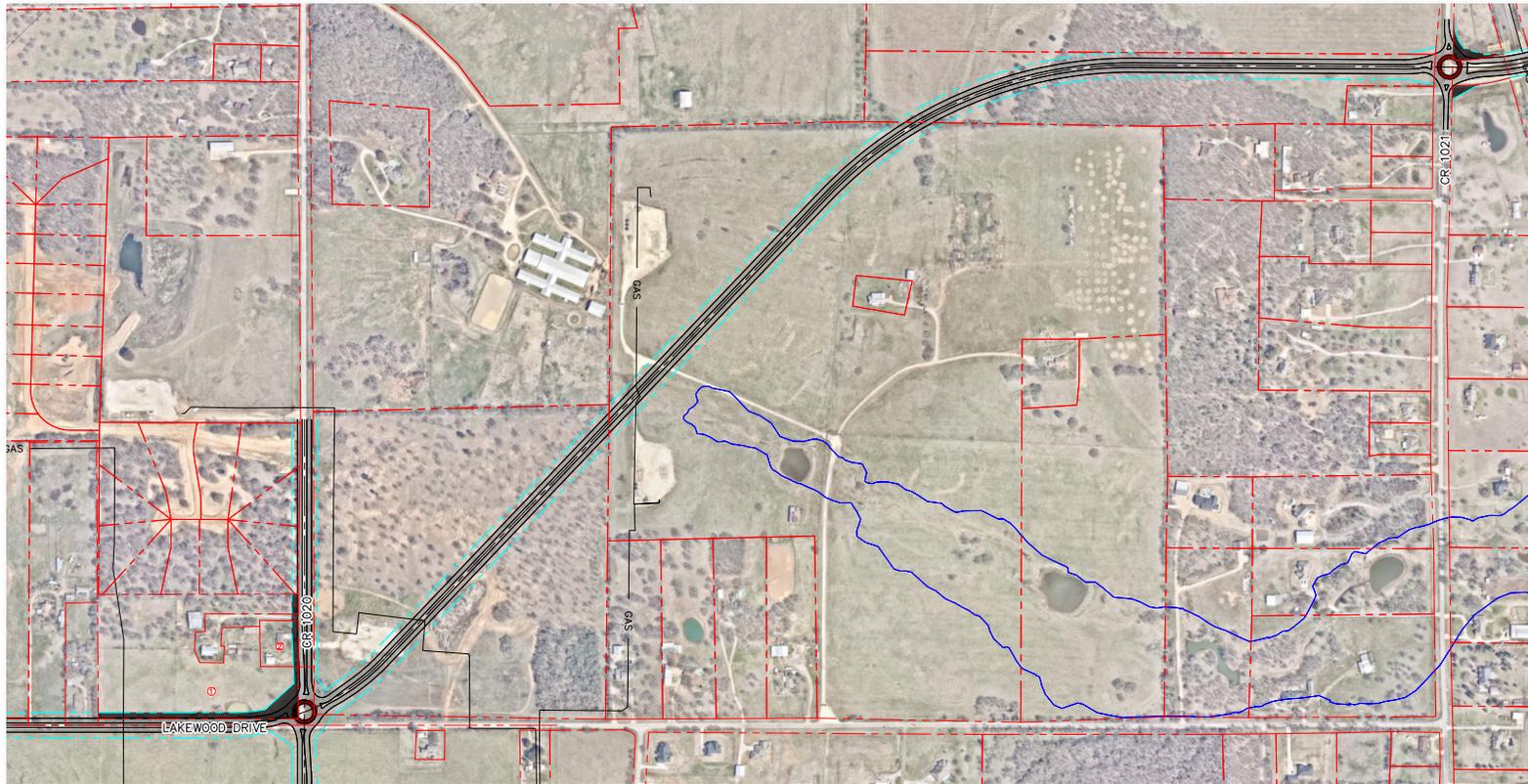
### Figure 15. Alignment Evaluation for Alsbury Boulevard

Alsbury Boulevard east of John Jones Drive/FM 731 is identified as a critical bottleneck. This alignment looks at the addition of medians to enhance capacity and improve safety along the corridor. This enhancement would also allow for the installation of future signals along Alsbury Boulevard at future median openings that currently do not allow for a signal.



### Figure 16. Alignment Evaluation for Lakewood Drive

This alignment was evaluated to potentially connect Lakewood Drive to CR 914. A roundabout was included at CR 1021 to provide for an alternative route along the existing roadways until this connection can occur. It is projected that the existing roads can support the traffic in the near-term.



# 2023 THOROUGHFARE PLAN

## DESCRIPTION

The 2023 Thoroughfare Plan is a comprehensive planning process to evaluate the needs of Burleson's mobility system. The map on the following page incorporates all of the discussed changes to the 2015 Master Thoroughfare Plan. The 2023 Thoroughfare Plan eliminated many connections from the 2015 Master Thoroughfare Plan that were in Burleson's ETJ. Removing these connections on the Thoroughfare Plan allows for focused investments to roads specifically in the City of Burleson. The 2023 Thoroughfare Plan also identifies Hulen Street as a major east/west connection for the City of Burleson. Even though a portion of Hulen Street is in the ETJ, it is still a critical road to improve for traffic flow and connectivity.

The 2023 Thoroughfare Plan also identifies existing and future intersection enhancements. Intersection enhancements can consist of signal timing coordination, lane reconfiguration, roundabout construction, or any improvements that will facilitate traffic flow, resulting in an increased roadway Level of Service.

The City has plans to construct several roundabouts throughout the roadway network, including at the following locations:

- FM 1020 at FM 914
- FM 1016 at FM 914
- Lakewood Drive at CR 1021
- FM 531 at Brooks Road

*To view a larger complete map of the 2023 Thoroughfare Plan, click the box on the bottom left of the next page titled, "Click here to access full scale map."*



Source: City of Burleson Website



# CROSS SECTIONS

The City's cross sections have been reevaluated from the *2015 Master Mobility Plan*. The updated cross sections are listed in the sections below. Each cross section is provided a range for future capacity analysis. Existing capacity analyses in a traffic study should be completed using the numbers on **Table 17** in **Appendix B: Modeling Methodology and Scenario Modeling Analysis** that outline existing lane configuration and capacity values. A new cross section has been introduced for the Major Arterial functional classification. A main goal of the cross section update aims to create roads that are safer for both motorists and pedestrians alike. The modified classifications and right-of-way (ROW) widths will allow for wider sidewalks and sidepaths which will enhance multimodal safety.

Specific roadway cross sections should be evaluated on a case-by-case basis during the planning stage of the roadway improvement process to determine the appropriate section that will support the specific segment's ultimate build out volumes. The typical cross sections provided in this section are general guidelines on how Burleson's future roadway improvements should be constructed in order to support the future volumes forecasted in the modeling process. However, the final implemented cross section will be determined through an evaluation of location-specific constraints, and the flexibility in design should be determined based upon the land use context in the area.

## *PRINCIPAL ARTERIALS*

**Figure 17** and **Figure 18** display existing Principal Arterials in Burleson. Principal Arterials are roadway facilities that carry the highest capacity and often are used to reach destinations in other cities. These facilities provide connectivity to other lower classification roadway facilities. They are often limited in access and have higher speeds.

The recommended ROW for a Principal Arterial remains 120'. However, the lane width has been reduced to 11' to add more parkway space, increasing the safety of the pedestrian and cyclists. The median width is recommended to be 18' wide, further increasing the safety of pedestrian crossings and also increasing the safety for turning movements at median openings for drivers. This section would allow for landscaping mainly within the median. Opportunities for pockets of parkway landscaping should be evaluated, however, given the speeds of the roadway, maintaining a minimum of 5' of clear zone should be considered the length of the roadway. This section is appropriate for roadways such as Hulen Street south of Greenridge Road where build out volumes warrant six lanes.

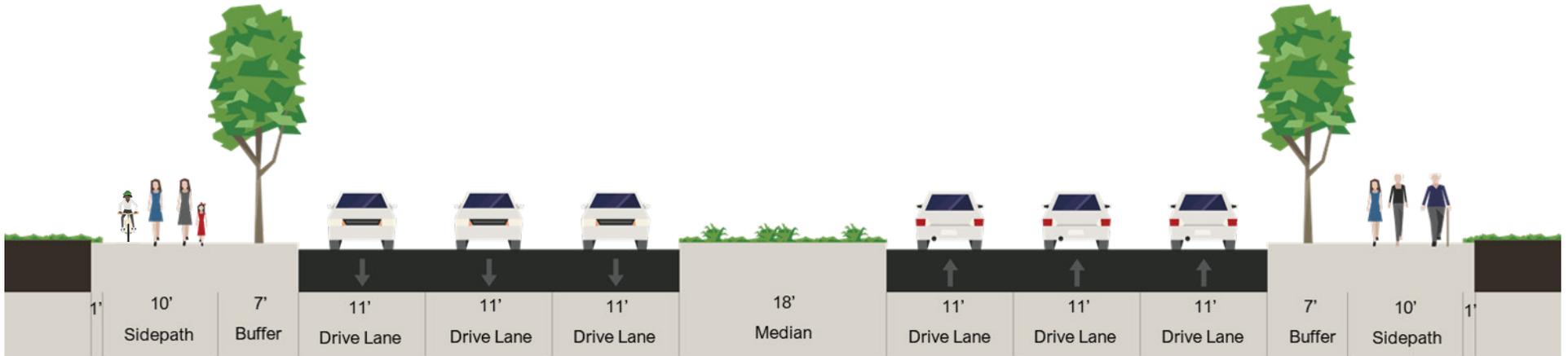
**Figure 17. Principal Arterial in Burleson**



Source: Google Earth

# PRINCIPAL ARTERIAL CROSS SECTION - 120' ROW

**Hourly Lane Capacity: 680 - 850**  
**Daily Capacity: 40,800 - 51,000**



**Figure 18. Principal Arterial in Burleson**



Source: Google Earth

## MAJOR ARTERIAL

The cross section below displays the Major Arterial cross section. The Major Arterial section would allow for more separation from the roadway and the addition of 12' sidepaths would increase the safety of the pedestrian and cyclists. The median would remain 18' wide, enhancing the safety of pedestrian crossings and also increasing the safety for turning movements at median openings for drivers. This section also allows for enhanced landscaping increasing the overall experience of all users. The section would be appropriate for Thoroughfare Plan roadways planned through residential sections of the city where pedestrian and cyclist activity is higher. Additional traffic calming measures should be considered during the planning stages of the roadway.

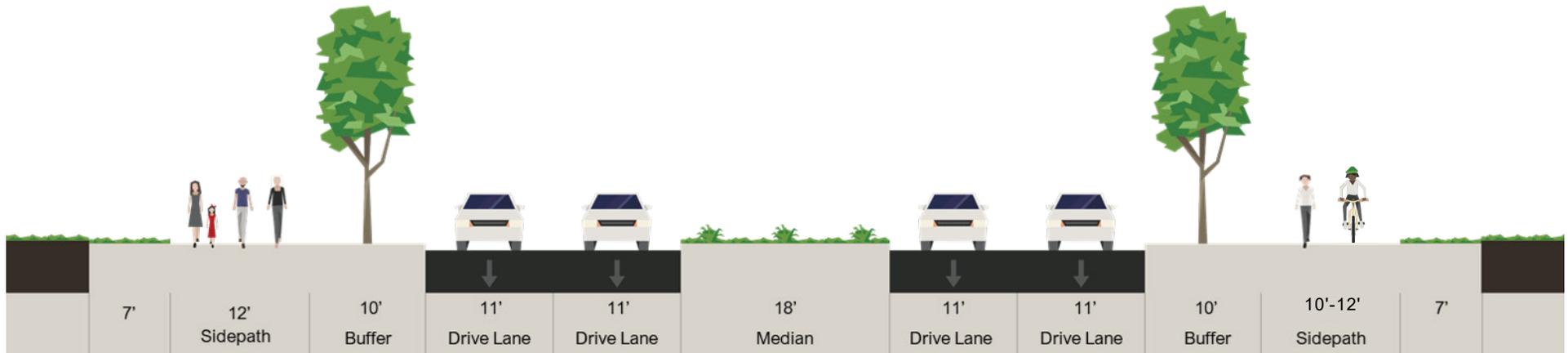
Specific roadways in Burleson that would support this cross section include the following:

- **Lakewood Road:** This planned Minor Arterial will be adjacent to new residential development. Therefore, to naturally calm traffic and to provide for high levels of sidewalk usage, this cross section would be the most appropriate treatment.
- **Alsburry Road:** This Minor Arterial is a key connector to nearby commercial and activity areas in Burleson. Due to this, this cross section would provide increased pedestrian safety and comfort, while also still supporting efficient capacity flow without impeding new burdens on additional traffic.

## MAJOR ARTERIAL\* CROSS SECTION - 120' ROW

**Hourly Lane Capacity: 600 - 750**

**Daily Capacity: 24,000 - 30,000**



*\*Previously called out as Principal Arterial - retains 120' ROW for enhanced overall multimodal experience and intended for areas of high pedestrian and cyclist use.*

## MINOR ARTERIAL

**Figure 19** displays an existing Minor Arterial in Burluson. The ROW for Minor Arterials is recommended to be increased from 90' to 100' to create wider parkways and to allow for 10' sidepaths and buffers to separate pedestrians and cyclists from vehicle traffic. The lanes are reduced to 11' creating a natural traffic calming effect.

This section should be incorporated into existing roadways sections where appropriate. Additional traffic calming measures should be considered during the planning stage as these roadways typically are found in residential areas with higher pedestrian and cyclist activity.

**Figure 19. Minor Arterial in Burluson**

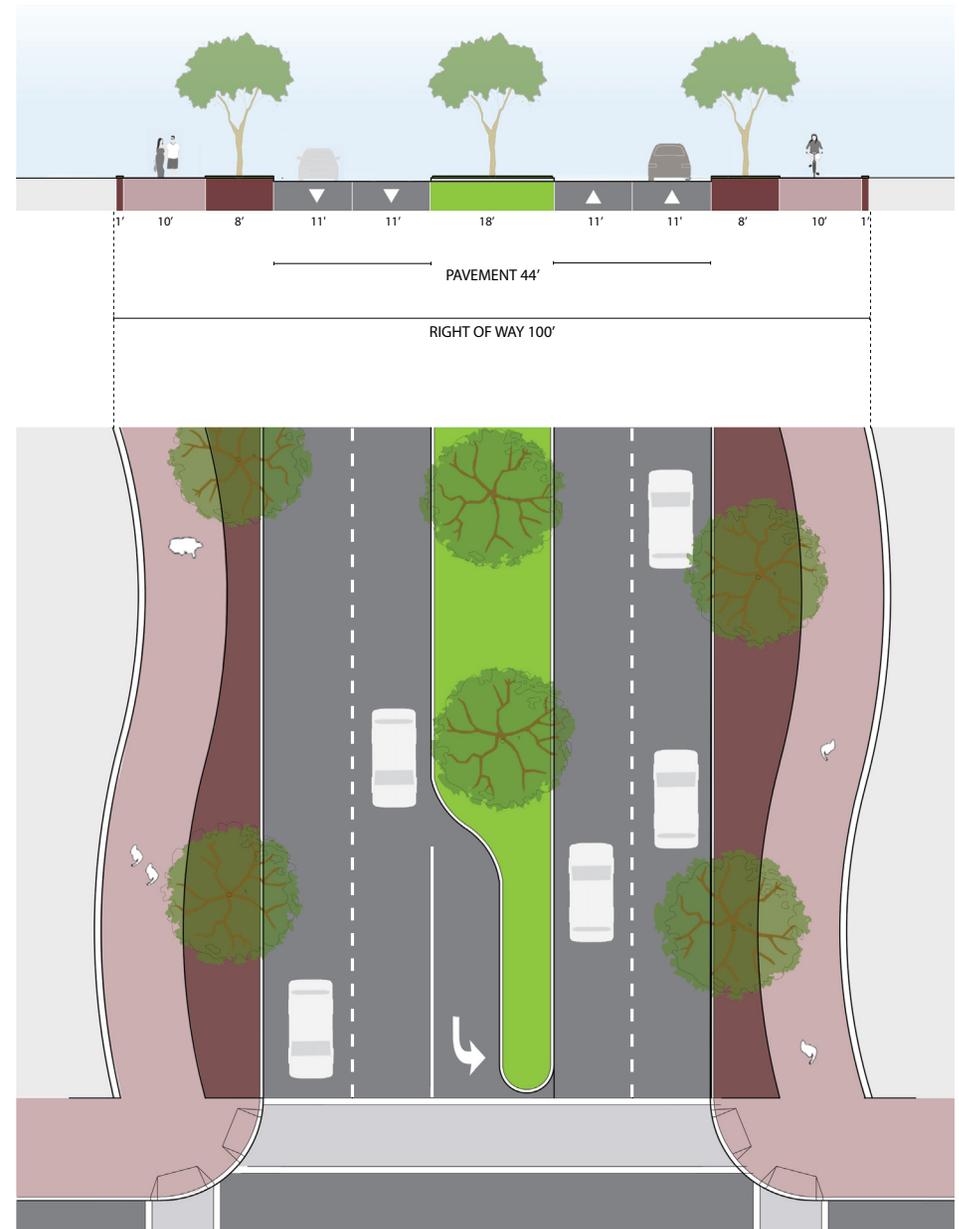


Source: Google Earth

## MINOR ARTERIAL CROSS SECTION - 100' ROW

**Hourly Lane Capacity: 600 - 750**

**Daily Capacity: 24,000 - 30,000**



## MAJOR COLLECTORS

**Figure 20** displays an existing Major Collector in Burleson. Although it is not recommended to increase the ROW width, it is recommended to reduce the number of lanes down to two and the lane width to 11' to provide for 10' sidepaths and 7' buffers to increase the safety of pedestrians. Since these roadway facilities often connect to residential neighborhoods, the 10' sidepath would also remove the need for on-street shared bike lanes and would increase the safety of cyclists. Consideration should be given during the planning stage for increased ROW at key intersections to provide for safe crossings for both pedestrians and cyclists.

The largest difference between the existing Major Collectors and the proposed are the reduction of total lanes. New Major Collectors will mostly contain two lanes, with some exceptions. Based on the capacity analysis, when a road is projected to exceed 15,000 vehicles per day, a four-lane facility should be considered.

**Figure 20. Major Collector in Burleson**

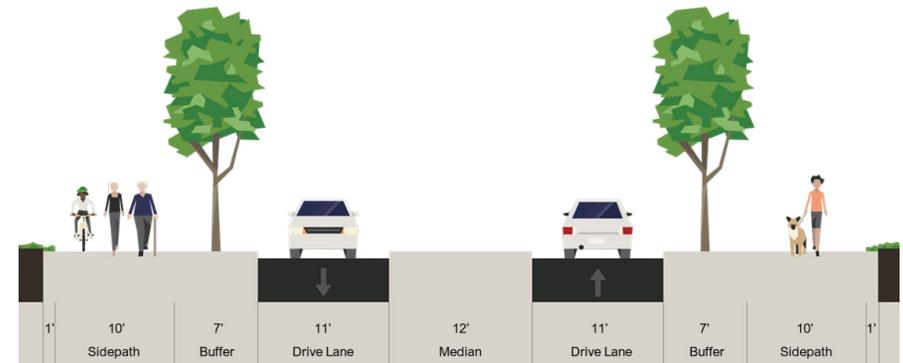


Source: Google Earth

## MAJOR COLLECTOR CROSS SECTION - 70' ROW

**Hourly Lane Capacity: 600 - 750 Daily Capacity: 12,000 - 15,000**

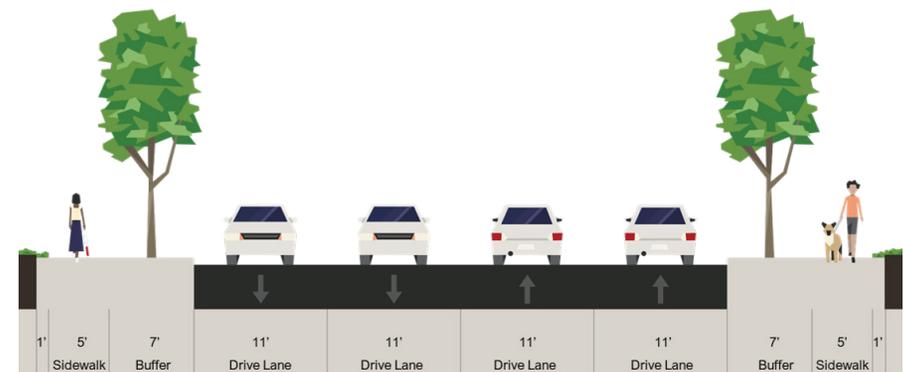
The proposed typical section for Major Collectors in Burleson would consist of a two-lane facility with 11' lanes and a 12' median. The recommended section increases the safety of all multimodal users and creates a more aesthetically pleasing experience allowing for landscaping of the median and parkways. This section removes the need for on-street bicycle facilities increasing cyclists and reducing the potential for accidents.



## MAJOR COLLECTOR FOUR-LANE OPTION CROSS SECTION - 70' ROW

**Hourly Lane Capacity: 440 - 550 Daily Capacity: 8,800 - 11,000**

Major Collectors in Burleson also have an option to be four lanes if a traffic study warrants it. This cross section is appropriate for areas that have low speeds and high pedestrian activity. Removing the median will allow for enough room for four 11' mainlines. This option can be completed and still provide 5' sidewalks on either side of the mainlanes. However, this cross section should only be constructed where right-of-way constraints or other special considerations exist.



## MINOR COLLECTOR

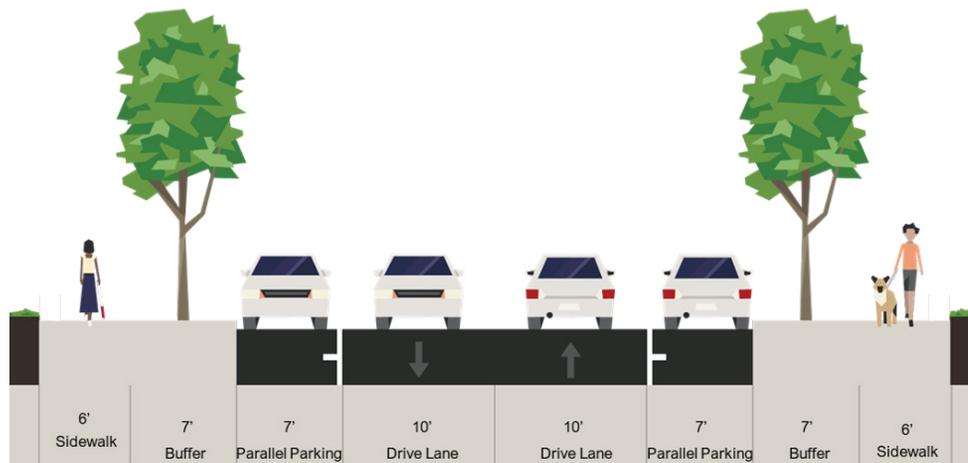
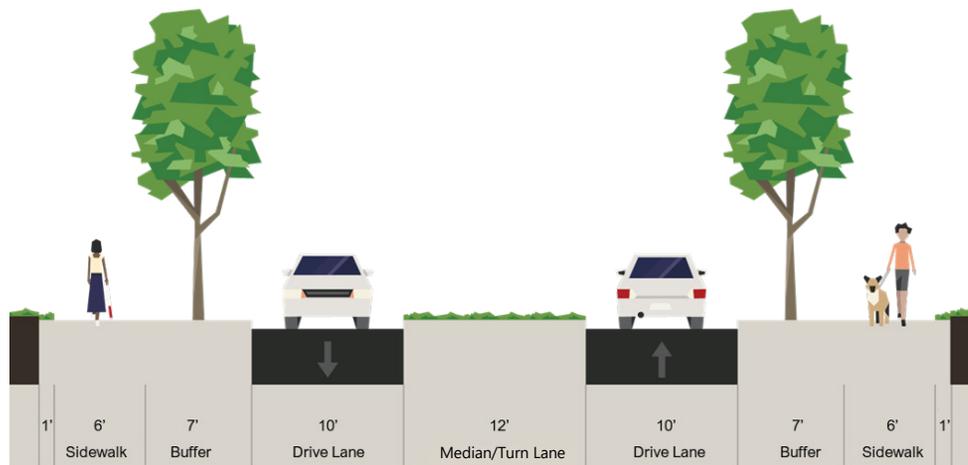
**Figure 21** displays an existing Minor Collector in Burleson. The recommended Minor Collector cross sections allow for greater flexibility and context-sensitive construction. The new cross sections allow for medians or parallel parking to be constructed while also increasing the sidewalk and buffer length. The 6' sidewalks could potentially be aggregated to a 10' sidepath on one side of the street to encourage flexibility in design.

Minor Collectors have multiple options of how to allocate the space between the curbs. Below are two examples of how the space is allocated. One example shows a two lane section with a median/turn lane. The other example shows on-street parking. To determine the appropriate cross section, a traffic study should be completed to evaluate the projected volumes of each roadway.

**Figure 21. Minor Collector in Burleson**



Source: Google Earth



## MINOR COLLECTORS - 60' ROW

**Hourly Lane Capacity: 580 - 725 Daily Capacity: 11,600 - 14,500**

The proposed typical section for Minor Collectors in Burleson would be a two-lane facility with a 12' median. The ROW for all Minor Collectors would be 60', which would be the same as the current typical sections. The 14' lanes would be reduced to 10' lanes and the buffer and sidewalk widths would be increased.

## MINOR COLLECTOR CROSS SECTION WITH PARALLEL PARKING - 60' ROW

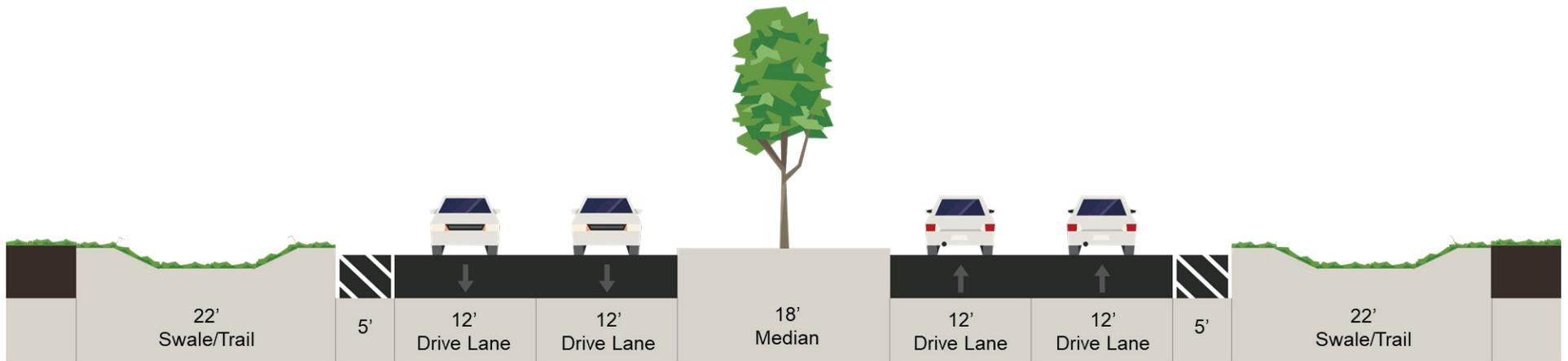
**Hourly Lane Capacity: 340 - 425 Daily Capacity: 6,800 - 8,500**

Another option for Minor Collectors could include 7' parallel parking lanes on either side of the roadway. This cross section would be a viable option near popular destinations where parking is limited. The buffers, sidewalk widths, and lane widths would be the same as the typical section.

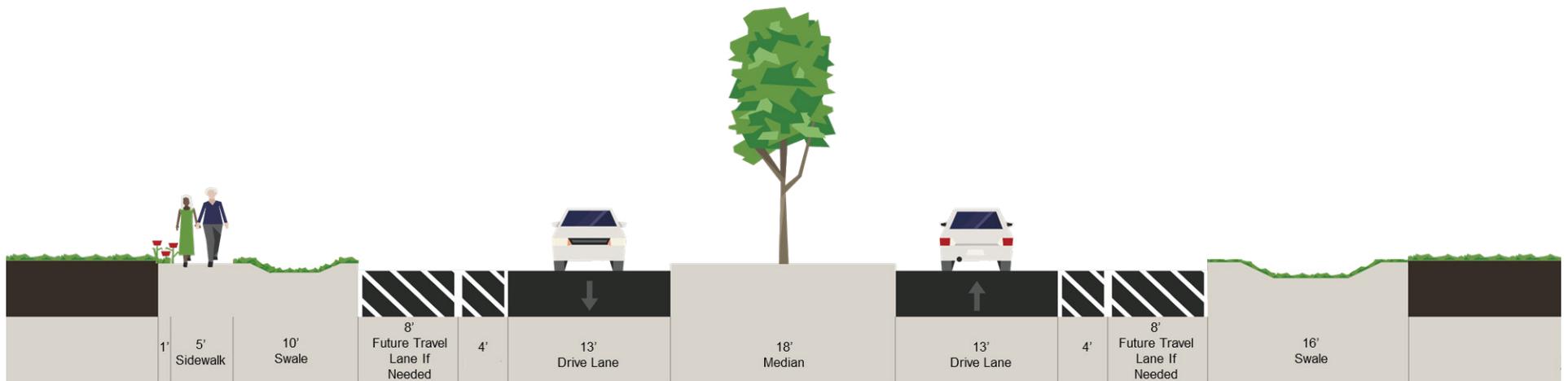
# RURAL CONTEXT

It is important to approach cross section application on a land use and context-based approach. Flexibility in design is needed in order to align with the existing or future roadway's surrounding land uses. The cross sections provided below demonstrate how thoroughfare design should be altered in rural areas, providing cross sections for rural Major Arterials, Minor Arterials, Major Collectors, and Minor Collectors.

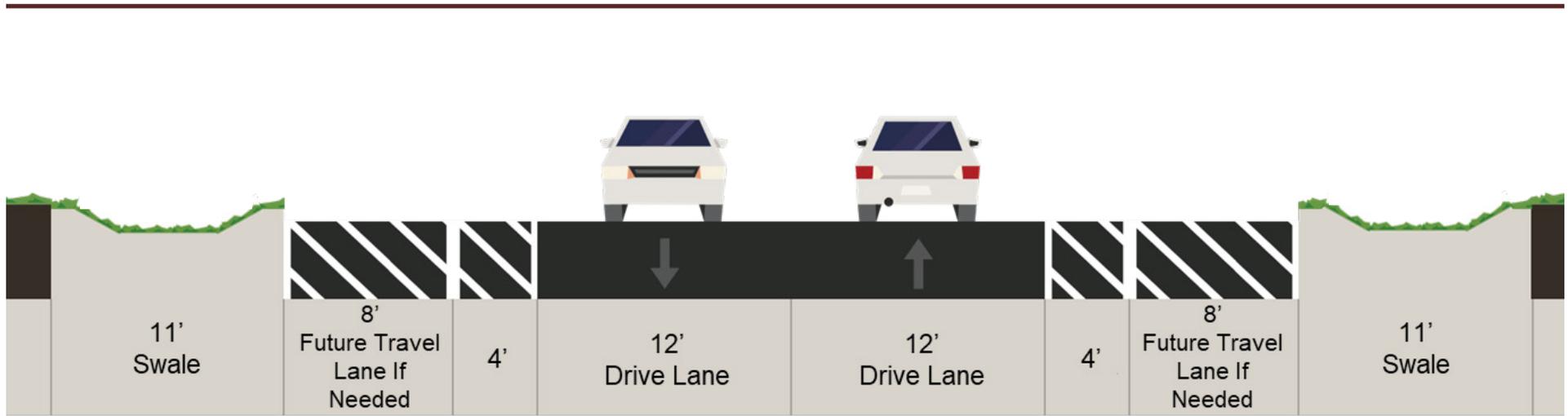
## *RURAL MAJOR ARTERIAL - 120' ROW*



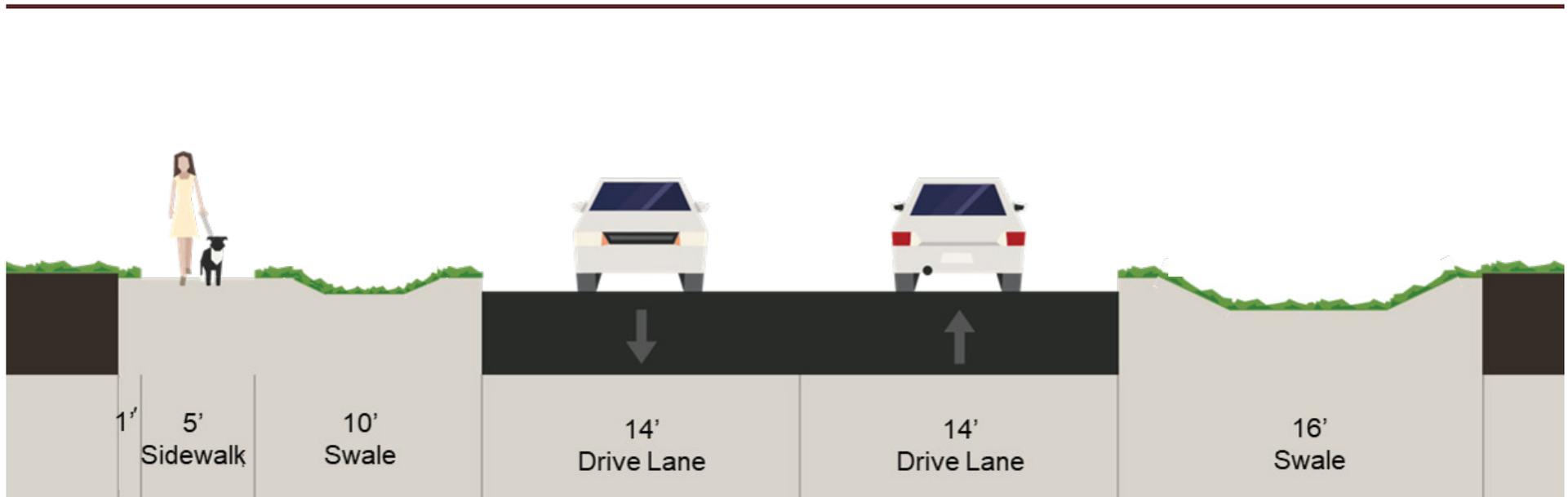
## *RURAL MINOR ARTERIAL - 100' ROW*



*RURAL MAJOR COLLECTOR - 70' ROW*



*RURAL MINOR COLLECTOR - 60' ROW*



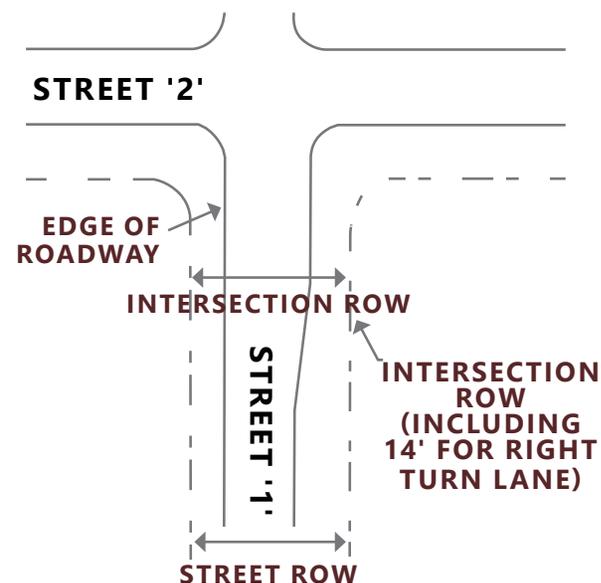
# INTERSECTIONS ANALYSIS

**Figure 22** illustrates the minimum length for right and left-turn lanes and ROW at intersections.

Right-turn lanes are anticipated to be recommended at all major intersections identified on the 2023 Thoroughfare Plan Intersection Analysis Map. An additional 14' of ROW will be recommended, as indicated in **Table 5**. Dual left turn lanes are also recommended to be constructed all Arterial/Arterial intersections. An additional 14' of ROW is recommended.

As seen in the map on the following page, an intersection analysis was conducted over all the 2023 Thoroughfare Plan roadways. Every intersection on the Thoroughfare Plan should be carefully considered and use context-sensitive solutions when either in the beginning design stage, or when retrofitting an existing intersection. There are a total of 125 intersections identified in the City's Thoroughfare Plan. Of these, currently 30 are signalized, 39 are all-way stops, 7 are roundabouts, and 49 are intersections whose traffic control will be evaluated in the future. These 125 signalized intersections will be included as a critical part of the transportation system and will be evaluated for implementation and included in future capital improvement planning (see Chapter 6). Future intersection design should always incorporate safe pedestrian crossings that are ADA compliant. Opportunities exist to upgrade existing Thoroughfare Plan stop-controlled intersections in the future once it is warranted by additional traffic volumes.

**Figure 22. Intersection ROW**



**Table 5. ROW Width at Intersection**

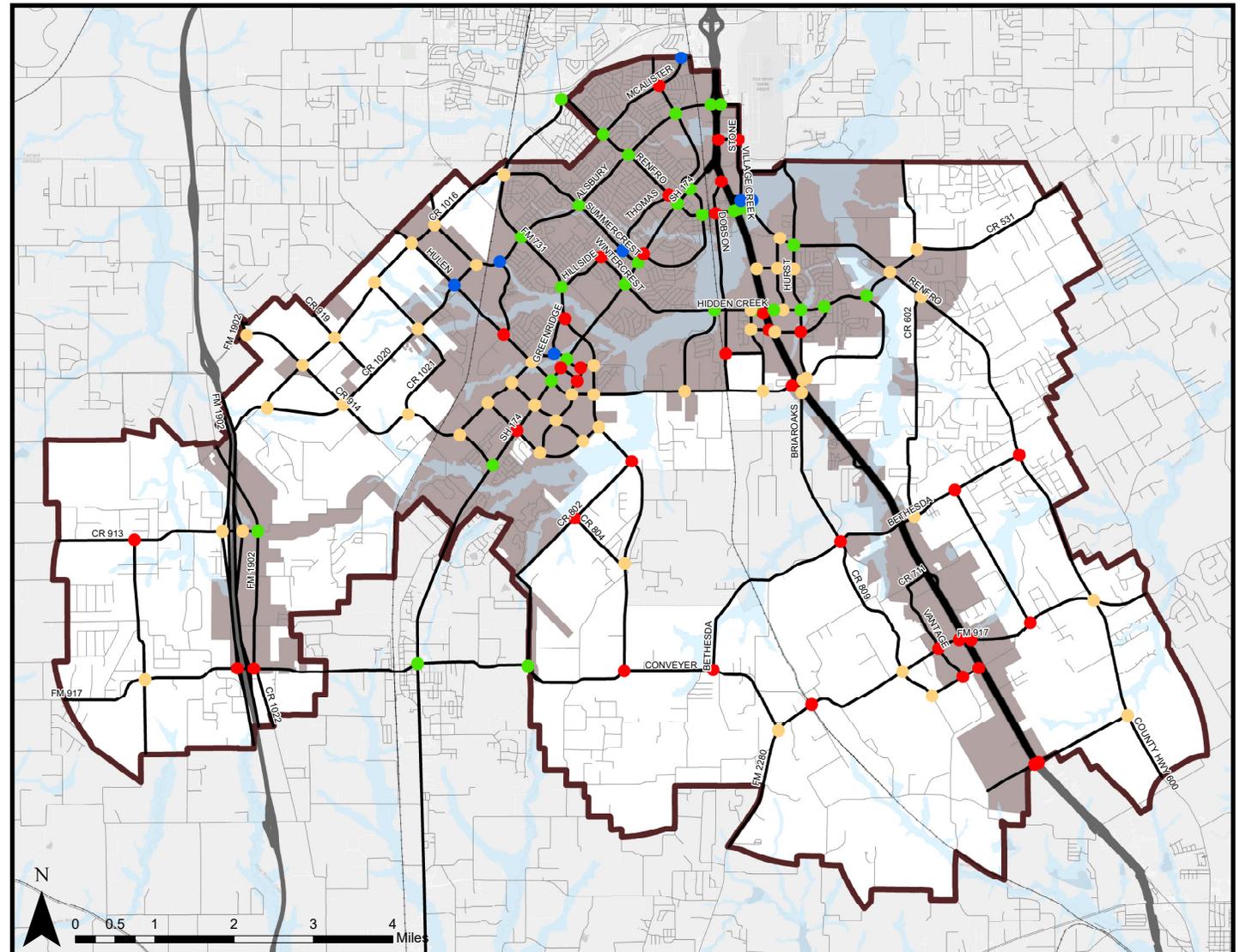
RECOMMENDED RIGHT-OF-WAY WIDTH AT INTERSECTIONS					
<b>STREET '1'</b>	PRINCIPAL/MAJOR ARTERIAL	148'	148'	134'	134'
	MINOR ARTERIAL	128'	128'	114'	114'
	MAJOR COLLECTOR	84'	84'	84'	84'
	MINOR COLLECTOR	74'	74'	74'	74'
		PRINCIPAL ARTERIAL	MINOR ARTERIAL	MAJOR COLLECTOR	MINOR COLLECTOR
<b>STREET '2'</b>					

# 2023 THOROUGHFARE ROADS INTERSECTION ANALYSIS

## LEGEND

### DAILY VOLUMES

-  2023 Thoroughfare Plan Roads
-  Existing Signalized Intersection (30)
-  Existing Stop-Controlled Intersection (39)
-  Existing Roundabout (7)
-  Future Intersection (49)
-  Floodplains
-  Planning Area
-  Burleson City Limits



[Click here to access full scale map](#)

# LANDSCAPE STYLE

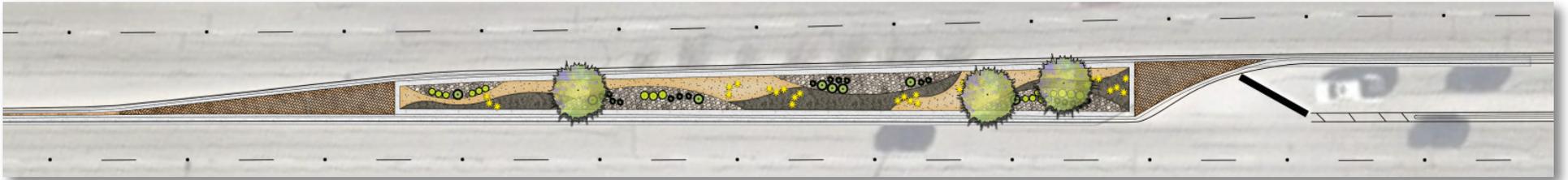
Below suggests some ways Burleson can create a consistent and unique brand through high quality and well-maintained landscaping along their streets and sidewalks. A citywide plant and hardscape palette have been created for Burleson, and an Old Town-specific outdoor furniture and hardscape palette have been created as well.

The City of Burleson should consider adopting a requirement that minimal amounts of landscaping be required any time a Thoroughfare Plan roadway is constructed or redeveloped. Minimum landscaping requirements should include street trees, minimal ornamental trees, and shrubs and/or ornamental grasses at key intersections or along medians. The sections below provide examples of typical landscape options.

## *MEDIANS*

**Figure 23** and **Figure 24** display examples of median design on Burleson's streets. Medians in the City of Burleson feature an undulating mixture of plants and hardscape materials. The medians feature a native plant palette, including ornamental and canopy trees, and xeric design that gives them natural form and sustainability. The organic rolling pattern is suited to the driver experience traveling parallel to the medians and provides an aesthetically pleasing buffer for two-way traffic.

**Figure 23. Landscaped Median Example - Plan View**



**Figure 24. Landscaped Median Example - Street View**



## PARKWAY

**Figure 25** and **Figure 26** display examples of parkway design on Burleson's streets. Enhanced parkway landscaping in the City consists of organic swaths of native plantings and xeric hardscapes that mimic the forms of the median landscape. This landscaping can also feature ornamental and canopy trees. Parkway landscaping serves as a physical and visual buffer for vehicular traffic and can create separation between pedestrian and vehicular users.

**Figure 25. Landscaped Parkway Example - Plan View**



**Figure 26. Landscaped Parkway Example - Street View**



## CORNERS

**Figure 27** and **Figure 28** display examples of intersection design on Burleson's streets. Parkway corners in the City of Burleson convert turf area into interesting, colorful spaces by adding a mixture of hardscape and hardy, native plants. The variety of height and texture of the plants create a visually appealing moment in the parkway. The ornamental and canopy trees located within corners are strategically placed to provide clear sight lines for pedestrian and vehicular traffic.

**Figure 27. Landscaped Corner Example - Plan View**



**Figure 28. Landscaped Corner Example - Street View**



# EXAMPLES OF CITY-WIDE PLANT PALETTE AND HARDSCAPE MATERIAL

## TREES



Crape Myrtle



Live Oak



Indian Hawthorn



Glossy Abelia



Compact Texas Ranger



Lemon Lime Nandia



Creeping Juniper



Color Guard Yucca

## SHRUBS

## OTHER



Seasonal Color



Bermuda Turf

## HARDSCAPE



River Rock



Decomposed Granite



Landscape Boulders



Stamped Concrete

## ORNAMENTAL GRASSES



Hameln Dwarf Fountain Grass



Weeping Love Grass



Gulf Coast Muhly



Pink Muhly

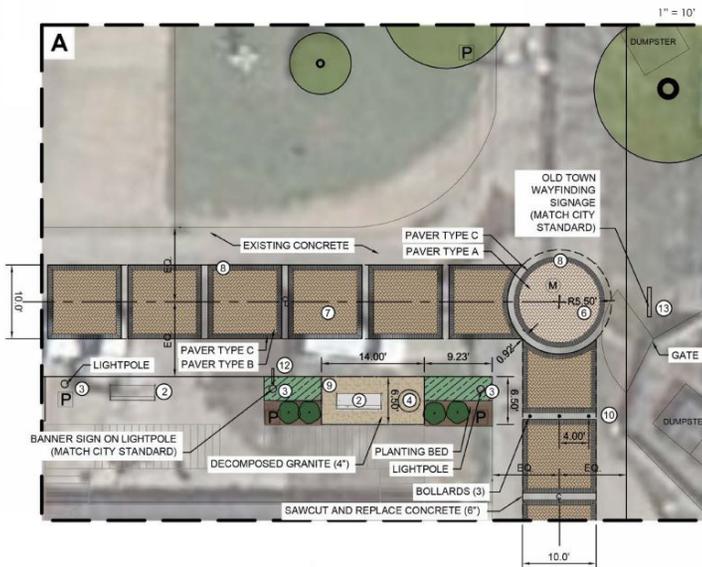


Mexican Feathergrass

## OLD TOWN

**Figure 29** displays a landscape design for Old Town. Old Town Burleson features unique historic elements that enhance the character of the district. This area includes clay pavers, laid in crosswalks and other pedestrian areas in order to create visual cues for both vehicular and pedestrian traffic. The district landscaping consists of the same native species used in the medians, parkways, and corners. In addition to landscape and hardscape enhancements, the Old Town Burleson district includes a cohesive palette of outdoor furnishings and lighting.

**Figure 29. Old Town Landscape Design Example**



### OLD TOWN OUTDOOR FURNITURE PALETTE:

- Madrax Orion Bike Rack – Black
- Landscape Forms Scarborough Bench – Black, Slats
- City Standard Light Poles and Banner Signs
- Landscape Forms Scarborough Receptacle – Black, Slats, Top Opening
- Landscape Forms Plaza Planter – 28" d x 18" h x 28" l
- Landscape Forms 6" Removable Annapolis Bollard

### OLD TOWN OUTDOOR HARDSCAPE PALETTE:

- Endicott Clay Pavers – Interior, Herribone Pattern Mix (60/40)
  - Paver A: Medium Ironspot 77 (60%)
  - Paver B: Medium Ironspot 46 (40%)
- Endicott Clay Pavers – Border, Soldier Course
- Paver C: Manganese Ironspot

## LIGHTING

Lighting is an important safety element for both vehicles and pedestrians. Similar to landscaping improvements, lighting should be considered on a case-by-case basis. Pedestrian lighting should be considered on Arterials that are part of the 2023 Bicycle and Trails Plan. Arterial and neighborhood street lighting requirements should be considered with different requirements, which can be evaluated in the proposed update to the Burleson Design Standards Manual.



Source: Google Earth

# CHAPTER 4

## Pedestrian Network



The 2023 Mobility Plan is a long-range mobility plan that prioritizes providing a safe pedestrian network for all users. Chapter 4 examines the sidewalk network in the City of Burleson and focuses on the following elements:

1. Establish a screening analysis to be utilized in the selection of priority sidewalk projects.
2. Prioritize the sidewalk projects into short-, mid-, and long-term projects based on proximity to major destinations and key missing connections.
3. Provide policy recommendations to ensure the City is able to implement a safe and comfortable pedestrian network.



Source: City of Burleson Website

# 2023 PEDESTRIAN PRIORITY ANALYSIS

An effective sidewalk network provides pedestrians with a safe and connected system that is protected from vehicular traffic. A pedestrian network provides multiple benefits for residents, such as opportunities for physical activity and reducing dependency on traditional automobile trips. In terms of traffic and mobility, sidewalks are important assets that could improve health for residents, reduce congestion, and reduce the city's carbon emissions.

The City of Burleson has over 200 miles of existing sidewalks and approximately 122 miles of missing sidewalks. The Existing and Missing Sidewalks map on page 50 displays Burleson's existing and missing sidewalk network, and **Figure 30** displays an existing sidewalk facility. Most of Burleson's sidewalks are located in the northern part of the city, as the southern parts of Burleson are more rural in nature. Many subdivisions in the northwest side of the city already contain neighborhood sidewalks. However, there are a few neighborhoods that are missing sidewalk connections. Due to limited funding, the missing sidewalk is prioritized in this plan. The 2023 Pedestrian Analysis identified the key missing connections throughout Burleson and ranked the projects based on priority. This prioritization should be reviewed annually and updated as funding becomes available.

The following sections describe the criteria used to determine the overall list of projects as well as the methodology created to rank the overall list of projects.

**Figure 30. Existing Burleson Sidewalk Facility**



*Source: Google Earth*



## METHODOLOGY

In order to determine the overall list of key pedestrian projects for the City of Burleson, several factors were taken into consideration to identify sidewalk improvement projects. These factors were considered screening criteria that focused on identifying missing sidewalks key for neighborhood connections and connections to major destinations, as well as projects that improved pedestrian safety. Below describes the factors that were used in this screening process:

- **Neighborhood Sidewalks:** Pedestrian projects in neighborhoods that do not currently have any sidewalks were a top priority in the pedestrian analysis. Key connections were identified in these neighborhoods and added to the overall list of recommended pedestrian improvements.
- **Major Connections to Destinations:** Connecting sidewalks to major destinations can improve quality of life for nearby residents by reducing car dependency and improving multimodal connectivity. Examples of major destinations reviewed in this analysis included the following:
  - *Schools* – Schools are key destinations that should be prioritized with the upmost importance. It is essential for the health of a community to provide safe sidewalk routes to schools, especially for elementary and middle schools.
  - *Community Facilities* – Sidewalk connections between existing neighborhoods and community facilities should be made available to residents. Community facilities such as the Burleson Recreation Center, existing parks, and existing trail systems are seen as key destinations where sidewalk connections should be present.
  - *Old Town Burleson* – Old Town is a major destination that provides residents with many shops, restaurants, and activity centers that should be connected to nearby neighborhoods via a connected sidewalk network.
  - *Major Employment Centers* – Commercial corridors, such as Burleson’s SH 174/Wilshire Boulevard, were considered important destinations to join with adjacent neighborhoods through the pedestrian network.
  - *Major Shopping/Activity Destinations* – Other destinations included in the project screening process attempted to connect major shopping or other key activity centers to nearby neighborhoods, schools, or other major destinations.
- **Pedestrian Safety:** Pedestrian projects were also selected based on those that had the highest contribution to improving pedestrian safety. A reliable pedestrian network ensures the highest safety is prioritized for vulnerable roadway users.

**Table 6. Pedestrian Project Types**

This screening criteria assisted in identifying the list of overall pedestrian projects. Once the full list of pedestrian projects was identified, the projects were then sorted into one of three categories – short- (3 < years), mid- (4-7 years), and long-term (7+ years) pedestrian projects based on priority. The pedestrian project types and descriptions are summarized in **Table 6**. Multiple factors were selected to determine the priority ranking and focused on how the overall improvement would positively affect surrounding residents’ quality of life. For example, sidewalks in neighborhoods that had little to no sidewalk connections to large destinations, schools, and other activity centers were given a higher priority.

The map on the following page displays the Burleson 2023 Sidewalk Improvement Plan which shows the prioritized pedestrian projects that were identified through the analysis. The following sections breaks down the project list by priority and describes in detail project limits and estimated project cost.

Pedestrian Project Type	Description
Short-Term Pedestrian Projects	Short-Term Pedestrian Projects are high priority projects that should be completed within the next three years.
Mid-Term Pedestrian Projects	Mid-Term Pedestrian Project are anticipated to be completed within four to seven years.
Long-Term Pedestrian Projects	Long-Term Pedestrian Projects should be completed in the next seven years or more.

**Figure 31. Existing Sidewalk in Old Town**



Source: Google Earth

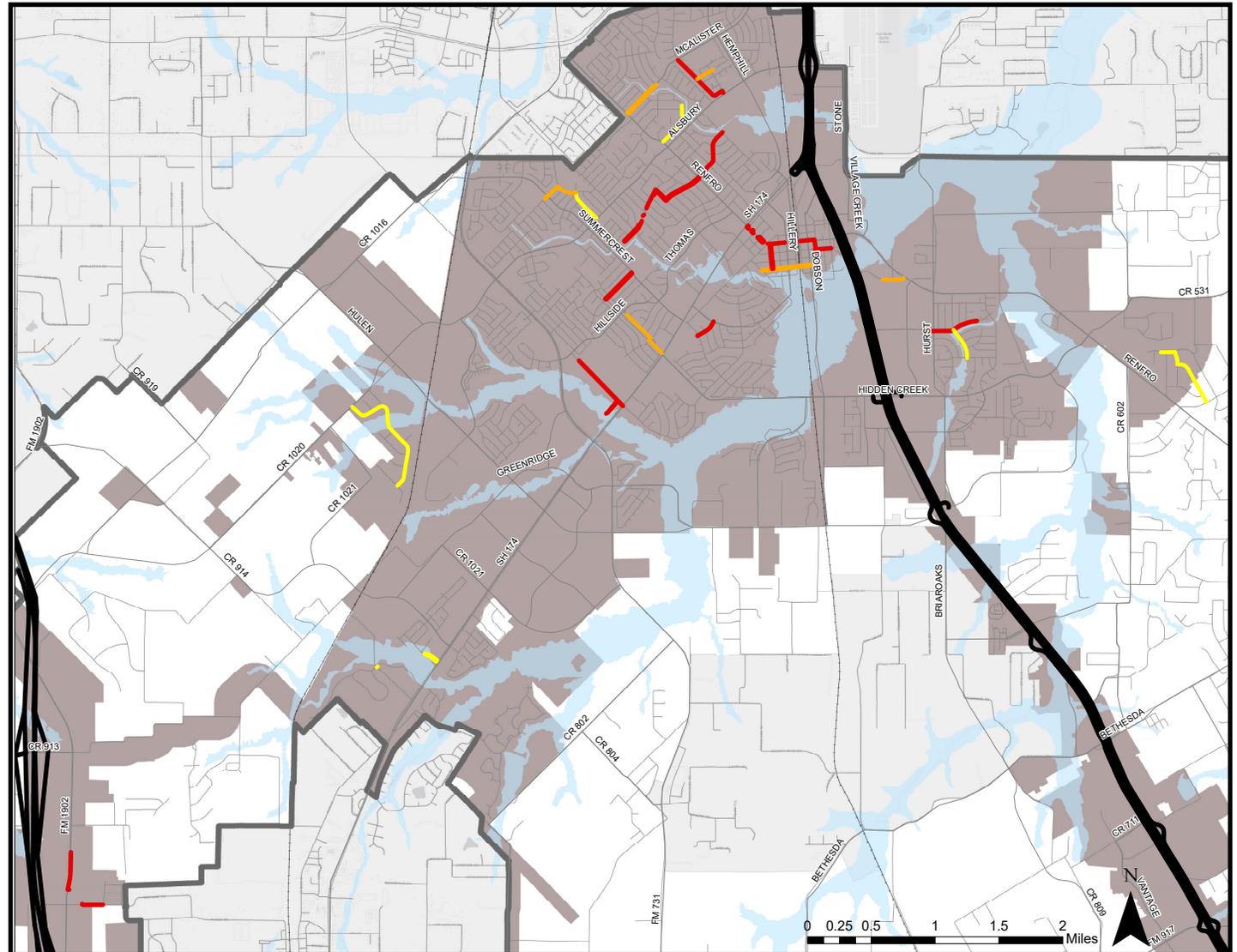
# 2023 BURLESON SIDEWALK IMPROVEMENT PLAN

## LEGEND

### 2023 PEDESTRIAN PROJECTS

- Short-Term Pedestrian Projects
- Mid-Term Pedestrian Projects
- Long-Term Pedestrian Projects
- 2023 Thoroughfare Plan Roads
- Floodplains
- Planning Area
- Burleson City Limits

[Click here to access full scale map](#)

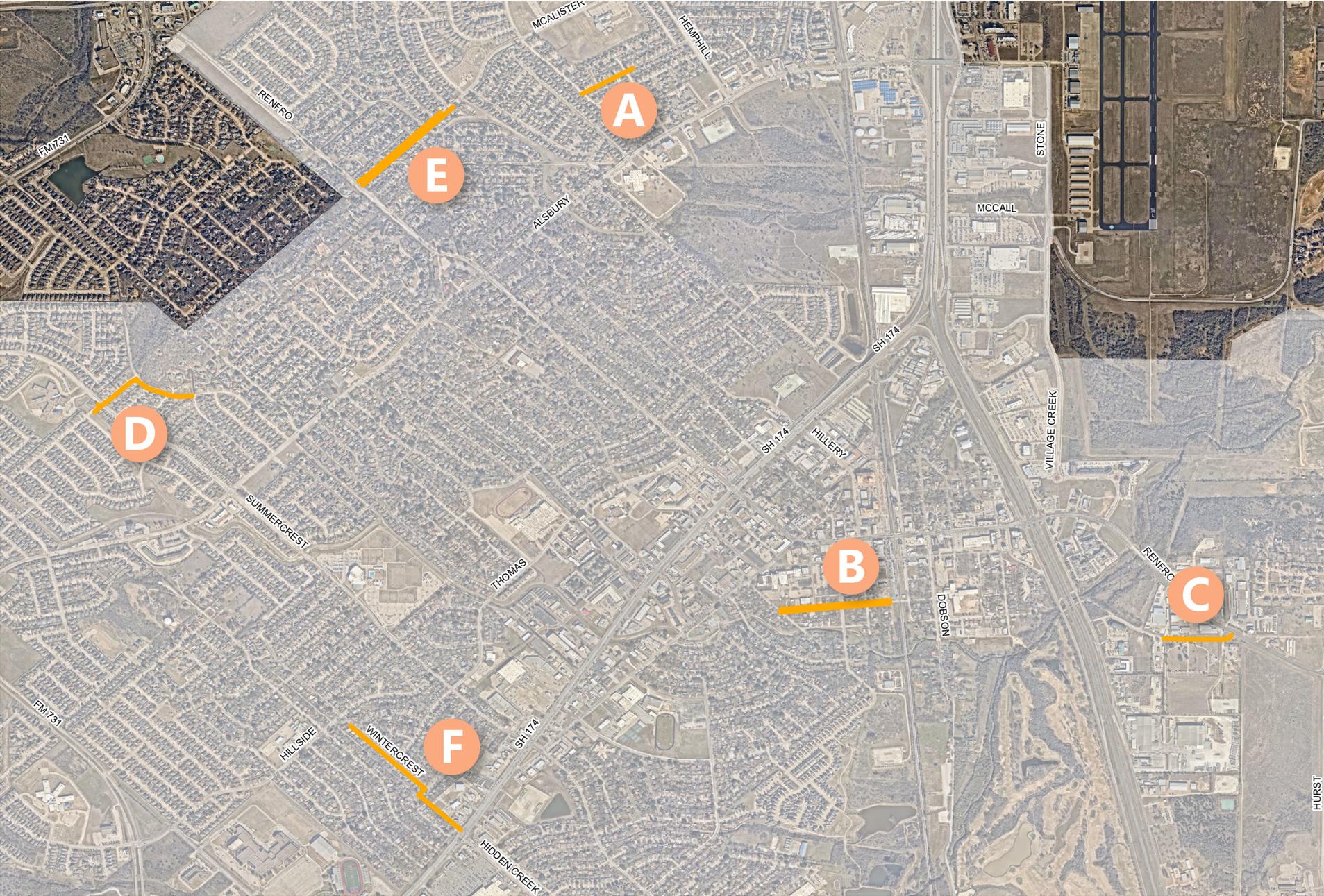




**Table 7. Short-Term Pedestrian Project**

LETTER	PROJECT NAME	PROJECT LENGTH (IN MILES)	PROJECT DESCRIPTION	SCORING CRITERIA
<b>A</b>	<b>Park Meadow Lane</b>	0.49	Connect southwest sidewalk to existing facilities from Alsbury Boulevard to McAlister Road.	This connection unifies Judy Hajek Elementary with the neighborhoods to the south.
<b>B</b>	<b>Rand Street, Newton Street, and Cindy Lane</b>	1.84	Fill sidewalk gaps to connect Summercrest Boulevard to Renfro Street. Alignment overlaps with a portion of the existing 10-Mile Loop bicycle and trail route.	This is a key pedestrian and bicycle connection between the Burleson Recreation Center and the surrounding neighborhoods.
<b>C</b>	<b>Elk Drive Driveway</b>	0.21	Add a sidewalk connection from a driveway on Elk Drive to the existing Village Creek Trail.	This sidewalk will complete the sidewalk network by connecting an existing trail back to the existing sidewalk network on Elk Drive.
<b>D</b>	<b>Clark Street</b>	0.11	Connect existing sidewalks on Renfro Street to the sidewalk adjacent to Nola Dunn Elementary School.	Filling this sidewalk gap will create a needed connection between the school and the surrounding neighborhoods.
<b>E</b>	<b>Ellison Street</b>	0.12	Complete the existing sidewalk gap between Clark Street and Scott Street.	This missing sidewalk connection is needed for the high pedestrian area of Old Town as well as students trying to reach Nola Dunn Elementary.
<b>F</b>	<b>Bransom Street</b>	0.36	Connect existing Renfro Street sidewalks to southern neighborhood.	This sidewalk is needed for the high pedestrian activity in Old Town.
<b>G</b>	<b>Maple Avenue</b>	0.17	Connect southern neighborhood to the existing sidewalks adjacent to the Burleson Collegiate High School.	It is important to complete the sidewalk network between the high school and the southern neighborhoods.
<b>H</b>	<b>Vaughn Drive</b>	0.58	Add sidewalk connections in a neighborhood with no existing sidewalks. Connect existing sidewalks on the south to the Burleson Recreation Center in the north.	This neighborhood does not have sidewalks, so a connection is needed for residents to reach the Burleson Recreation Center and surrounding destinations.
<b>I</b>	<b>Hollow Creek Road</b>	0.37	Complete the south sidewalk connection to connect the new trail project (to the west) and the existing sidewalk facilities (on the east).	The sidewalk network should be completed, and this gap should be filled to connect Hurst Road sidewalks to the existing sidewalks on Hollow Creek Road.
<b>J</b>	<b>Renfro Street</b>	0.38	Complete both north and south sidewalk gaps along Renfro Street.	Renfro Street sees high pedestrian activity and all sidewalk gaps should be filled.
<b>K</b>	<b>Elk Drive (Currently Funded)</b>	0.49	Fill sidewalk gap between SH 174 and existing sidewalk near Hillside Drive.	This critical connection will connect the Burleson High School to SH 174 and the surrounding pedestrian network.
<b>L</b>	<b>FM 1902 and CR 910 (Currently Funded)</b>	0.47	Construct sidewalk on east side of FM 1902 and fill sidewalk gap to connect facility to CR 910.	This sidewalk is needed to connect the RC Loflin Middle School to the adjacent subdivision.

# MID-TERM PEDESTRIAN PROJECTS



**Table 8. Mid-Term Pedestrian Projects**

LETTER	PROJECT NAME	PROJECT LENGTH (IN MILES)	PROJECT DESCRIPTION	SCORING CRITERIA
<b>A</b>	<b>Arbor Lane</b>	0.15	Complete sidewalk gap between existing sidewalk terminus to Park Meadow Lane.	This is a key neighborhood connection and will link up with the short-term priority sidewalk project recommended for Park Meadow Lane.
<b>B</b>	<b>Eldred Street</b>	0.44	Construct sidewalk on both sides of Eldred Street from Tarrant Avenue to Main Street to connect neighborhood to Nola Dunn Elementary School.	No sidewalks exist in this Old Town neighborhood, and due to the high pedestrian activity, the sidewalk network should be completed here.
<b>C</b>	<b>Memorial Plaza</b>	0.17	Add sidewalk from existing sidewalk facility terminus to Renfro Street.	The sidewalk network should be expanded from its current limits to connect back to Renfro Street and the surrounding destinations.
<b>D</b>	<b>Edgehill Road/ Cedar Ridge Lane</b>	0.30	Connecting surrounding neighborhoods to Frazier Elementary School by completing the sidewalk network.	This sidewalk will help connect neighborhoods to the Fraizer Elementary School and will link up with the long-term project Blue Ridge Drive.
<b>E</b>	<b>McAllister Road</b>	0.62	Fill sidewalk gaps from Renfro Street to existing sidewalks on both sides of McAllister Road.	Sidewalks are needed in this neighborhood so residents can connect to the existing walking trail.
<b>F</b>	<b>McNairn Road/ Wintercrest Road</b>	0.43	Connect SH 174/Wilshire Boulevard to Hillside Drive existing sidewalks, which connects to the STEAM Middle School.	This key connection is needed to fill the sidewalk gaps to connect residents to the STEAM Middle School and other destinations along SH 174/Wilshire Boulevard.

**Figure 32. Project Street Views**



(Source: Google Earth)



**Table 9. Long-Term Pedestrian Projects**

LETTER	PROJECT NAME	PROJECT LENGTH (IN MILES)	PROJECT DESCRIPTION	SCORING CRITERIA
<b>A</b>	<b>Rosamond Street</b>	0.36	Connect existing Renfro Street sidewalks to existing Oncor trail facility.	This connection is needed to connect residents to the existing trail facility, which in turn connects to Jack Taylor Elementary School and other surrounding destinations.
<b>B</b>	<b>Ranchway Drive</b>	0.01	Construct an ADA compliant crosswalk between existing sidewalks on either side of Ranchway Drive at the intersection of Mockingbird Lane.	This connection is needed to complete the surrounding sidewalk network for resident use.
<b>C</b>	<b>Hawks Ridge Trail</b>	0.22	Connect SH 174/Wilshire Boulevard to existing sidewalk facilities.	This is a key connection that can carry pedestrians to destinations along SH 174/ Wilshire Boulevard.
<b>D</b>	<b>Parkridge Boulevard</b>	0.25	Connect future sidewalk facility on Hollow Creek Road to Oak Valley Park North.	This is an important neighborhood connection that is needed to connect residents to the Oak Valley Park to the south.
<b>E</b>	<b>Blue Ridge Drive</b>	0.26	Connect surrounding neighborhoods to Frazier Elementary School.	Connecting neighborhoods to the Fraizer Elementary School is a high priority.
<b>F</b>	<b>Mary Ann Lane/ Carol Lane/ Ladonna Avenue</b>	0.60	Extend existing sidewalks down Ladonna Avenue for adjacent residents.	This neighborhood currently does not have a sidewalk connection to the Stribling Elementary School, so this connection is needed.
<b>G</b>	<b>Prairie Timber Road</b>	1.01	Create sidewalk facility for surrounding residents.	This is a neighborhood connection that is needed for resident use.
<b>H</b>	<b>Eldred Street</b>	0.33	Enhance pedestrian railroad crossing and improve Eldred Street roadway drainage from Main Street to Dobson Street.	Due to the high pedestrian activity in Old Town, the sidewalk network should be completed here. This is identified as a long-term project due to railroad coordination.

**Figure 33. Project Street Views**



(Source: Google Earth)

# PEDESTRIAN POLICY RECOMMENDATIONS

While specific sidewalk projects have been identified within the short-, mid-, and long-term pedestrian project lists, citywide policies should be incorporated into Burleson's pedestrian improvement process. These policies should be integrated into all projects pertaining to sidewalk improvements, including specific projects listed in the Capital Improvement Plan, bicycle and pedestrian planning, municipal operations, Development Services plan review, and building permit compliance. The recommended policies for Burleson's pedestrian network are listed below.

## **ADA COMPLIANCE**

The City of Burleson should ensure full compliance with ADA standards in all future pedestrian improvement projects and retrofits. To further study the status of ADA conformity on Burleson's sidewalk network, the City should consider creating an ADA Transition Plan to analyze existing infrastructure. The City can aim to exceed these accessibility standards for all new and repairing sidewalks by providing:

- Proper directional ramps at intersections
- Curb extensions (bulb-outs) for shorter crossings where necessary
- Consistent pedestrian clearance devoid of street furniture, utility infrastructure, etc.
- A minimum of seven feet of landscaped buffer space from the curb to the sidewalk
- Edge protection along all sidewalks
- Proper ADA slope (2:1) for all curb ramps
- Curb ramps at all crossings
- Temporary pedestrian access routes (TPAR) where sidewalks are not traversable

## **NEIGHBORHOOD CONNECTIVITY**

The City should continue to fund pedestrian projects that provide sidewalks to neighborhoods where the existing sidewalk network is limited. The City should continue to promote neighborhood connectivity by:

- Prioritizing sidewalk improvements in neighborhoods that do not have an existing sidewalk network. New sidewalks in these neighborhoods should be constructed starting with the major neighborhood streets that are most widely used.
- Constructing sidewalks that connect to the 2023 Sidewalk Improvement Plan and the Bicycle and Trails Plan (detailed in Chapter 5) to make key residential connections to the multimodal network.
- Completing the sidewalk network in residential neighborhoods that connect to key destinations including schools, parks, trails, and other activity centers.

## **PEDESTRIAN SAFETY**

Vulnerable roadway users must be given proper space and street crossing facilities to ensure the sidewalk network is comfortable for users. All future pedestrian improvement projects should be marked with visible crosswalks that are well-maintained. If an area experiences high pedestrian volume, construct additional pedestrian safety measures such as a pedestrian rapid flashing beacon or additional signage for passing cars.

## **REDEVELOPMENT AND RETROFITS**

The City should require new development or anytime redevelopment occurs, especially in key activity areas such as Old Town, to retrofit nonconforming sidewalks with redevelopment that requires a building permit. In all of the City of Burleson's future development or retrofit projects, the City should require a seven-foot minimum landscaped separation from the curb to the sidewalk.

Additionally, the City should also encourage the continuation of the Old Town sidewalk and streetscape pattern along urban core employment areas including, but not limited to, the following:

- Boundaries of Renfro Street to the north, Burleson Boulevard to the east, Town Creek to the south, Tarrant Avenue to the southwest, and Johnson Avenue to the west.
- Include enhanced paving (brick, decorated concrete) along sidewalks and alleys in key areas, such as adjacent to the Mayor Vera Calvin Plaza and Scott Street.

## **COORDINATION WITH THE BICYCLE AND TRAILS PLAN**

All pedestrian improvement projects in Burleson should be coordinated with the Bicycle and Trails Plan (detailed in Chapter 5). If the 2023 Sidewalk Improvement Plan is amended to include additional sidewalk projects, review the Bicycle and Trails Plan first to ensure there is no overlap. If projects are identified where there is overlap between the identified sidewalk improvement and the Bicycle and Trails Plan, **defer to the Bicycle and Trail Plan standards** to ensure a wider sidepath is constructed.



(Source: Google Earth)

# CHAPTER 5

## Bicycle and Trail Network



Chapter 5 focus on the following objectives:

- Incorporate and update the previous bicycle plan based on previously completed projects
- Simplify the previous bicycle plan to identify future projects as either "on-street" or "shared use path" with a focus on providing bicycle facilities that have separation from vehicles.
- Develop a list of priority projects that will have the highest impact in the immediate future.
- Provide policy recommendations to ensure the City is able to implement safe and comfortable bicycle facilities for users of all ages and abilities.



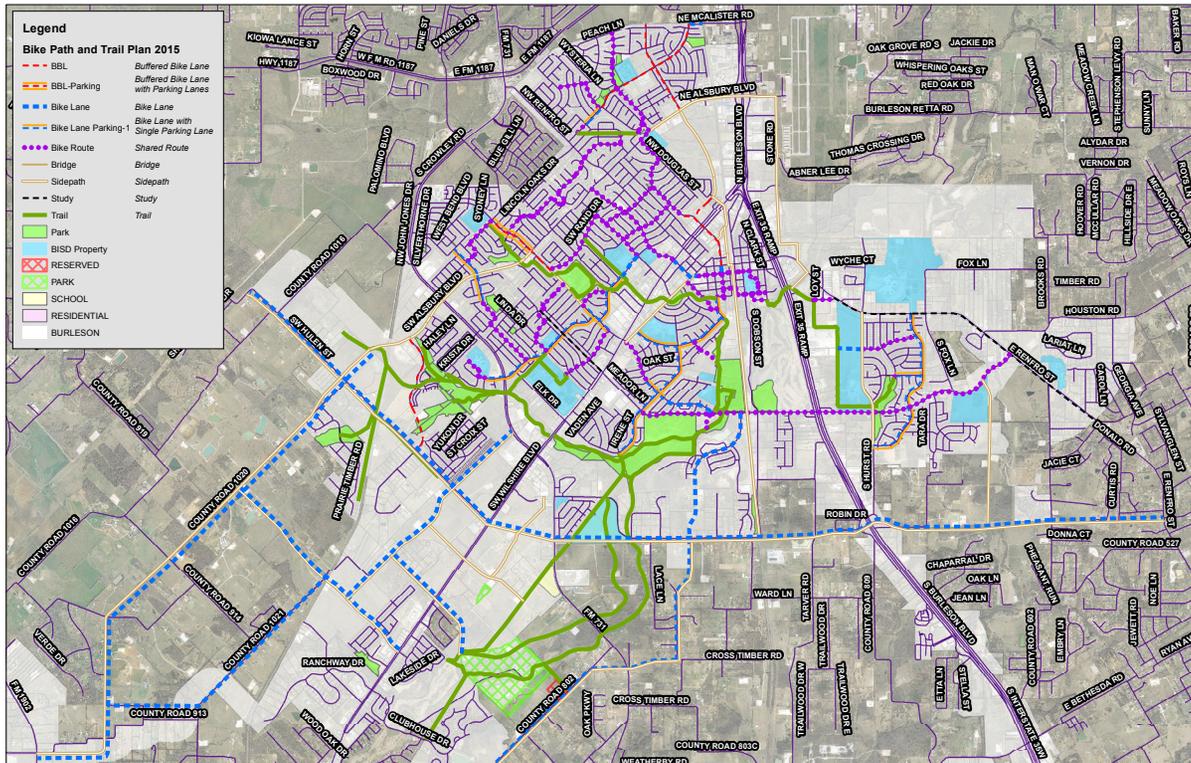
(Source: Google Earth)

# 2023 BICYCLE PLAN UPDATE

The second piece of the active transportation network in Burleson, along with sidewalks, is bicycle and trail facilities. Active transportation provides many benefits for residents, including positive impacts on physical and mental health, convenient access to major destinations, and a more resilient environment due to decreases in vehicular emissions. It is a goal of the 2023 Mobility Plan to provide residents with a bicycle and trail network that is complete, connected, and comfortable.

The 2023 Bicycle and Trail Plan update began by reviewing the previously adopted 2015 Bicycle Plan. This plan prescribed specific bicycle facilities based on the context and available facility ROW at that time. However, it became necessary to revise these recommendations in 2023. A map of the adopted 2015 Bicycle Plan is shown below in **Figure 34.**

**Figure 34. 2015 Bicycle Master Plan Map**



(Source: Google Earth)

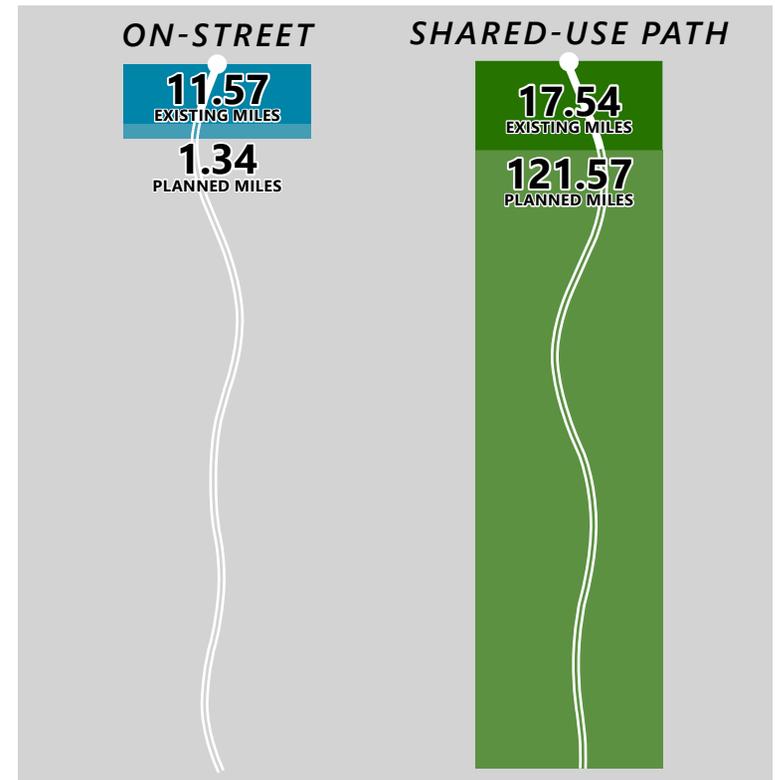
# BICYCLE AND TRAIL NETWORK RECOMMENDATIONS

The 2023 Bicycle and Trails Plan development process can be divided into four steps:

- Simplify the recommended future facilities into two categories: On-Street or Shared Use Path (displayed in **Figure 35** to the right, and **Figure 36** and **Figure 37** below), in order to give the City maximum flexibility in the final facility design during the project implementation phase.
- Incorporate the recommended 10-Mile Loop trail alignment proposed, which provides residents with a core network that circulates around the central areas of Burleson.
- Expand on the City's arterial shared use path network recommended in the updated cross sections.
- Highlight the results of the Pedestrian Priority Analysis wherever the new network and pedestrian projects overlap.

The final network recommended in the 2023 Mobility Plan includes 13 miles of on-street facilities and 139 miles of side paths. The 2023 Bicycle and Trails Plan moves away from on-street facilities, and focuses on separated shared use paths, except in a few constrained locations. A full breakdown of the existing and planned facilities is presented in the figure to the right. This new network enhances comfort for residents by providing more of off-street facilities as well as expanding the network's trail system. The resulting final 2023 Bicycle and Trails Plan is shown on page 65.

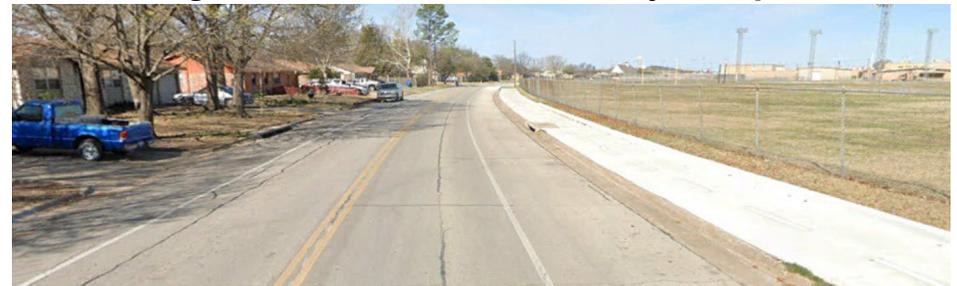
**Figure 35. Future Bicycle Facilities by Mile**



**Figure 36. On-Street Bicycle Facility Example**



**Figure 37. Shared Use Path Facility Example**





# BICYCLE AND TRAIL PRIORITY PROJECTS

The full scope of implementing the proposed bicycle and trail network is much larger than the available funding, therefore the total list of potential projects needed to be filtered down. This section details which projects have been prioritized for the City of Burleson to implement first in order to maximize available funding in the short-term. More information on these projects can be found on **Table 10** on page 68.

## 10-MILE LOOP CONNECTIONS

The following four projects were identified as high priority due to their location along the City's 10-Mile Loop - a core network of bicycle facilities and trails designed to connect residents to major destinations in Burleson.

- A** Stone Road from Alsbury Boulevard to McCall Street - Shared Use Path
- B** Village Creek Trail Extension - Shared Use Path
- C** Shannon Creek Trail Extension (North) - Shared Use Path
- D** Shannon Creek Trail Extension (South) - Shared Use Path

## OTHER PRIORITY PROJECTS

The remaining bicycle and trail priority projects were identified using the methodology applied in the Pedestrian Priority Analysis. These projects were shown to overlap with the 2014 Bicycle Master Plan and were attributed to elements that warrant a high importance in active transportation planning.

- E** Heberle Park Trail - Shared Use Path
- F** Johnson Avenue/Tarrant Avenue/Miller Street - Shared Use Path
- G** Hurst Road - Shared Use Path

## THOROUGHFARE PLAN PROJECTS

The projects listed below were identified during the Thoroughfare Plan development process. The recommended cross section for arterials in this plan includes a 12-foot shared-use path, thereby adding more connections to the active transportation network.

- H** Hemphill Street from McAllister Road to Alsbury Boulevard - On-Street Bicycle Lane
- I** Alsbury Boulevard from FM 731/John Jones Drive to IH-35 W - Shared Use Path
- J** Hulen Street from CR 1016 to SH 174/Wilshire Boulevard - Shared Use Path
- K** Alsbury Boulevard from CR 914 to Hulen Street - Shared Use Path
- L** Lakewood Drive/CR 914 from Alsbury Boulevard to SH 174/Wilshire Boulevard - Shared Use Path

# BICYCLE AND TRAIL PRIORITY PROJECTS

## LEGEND

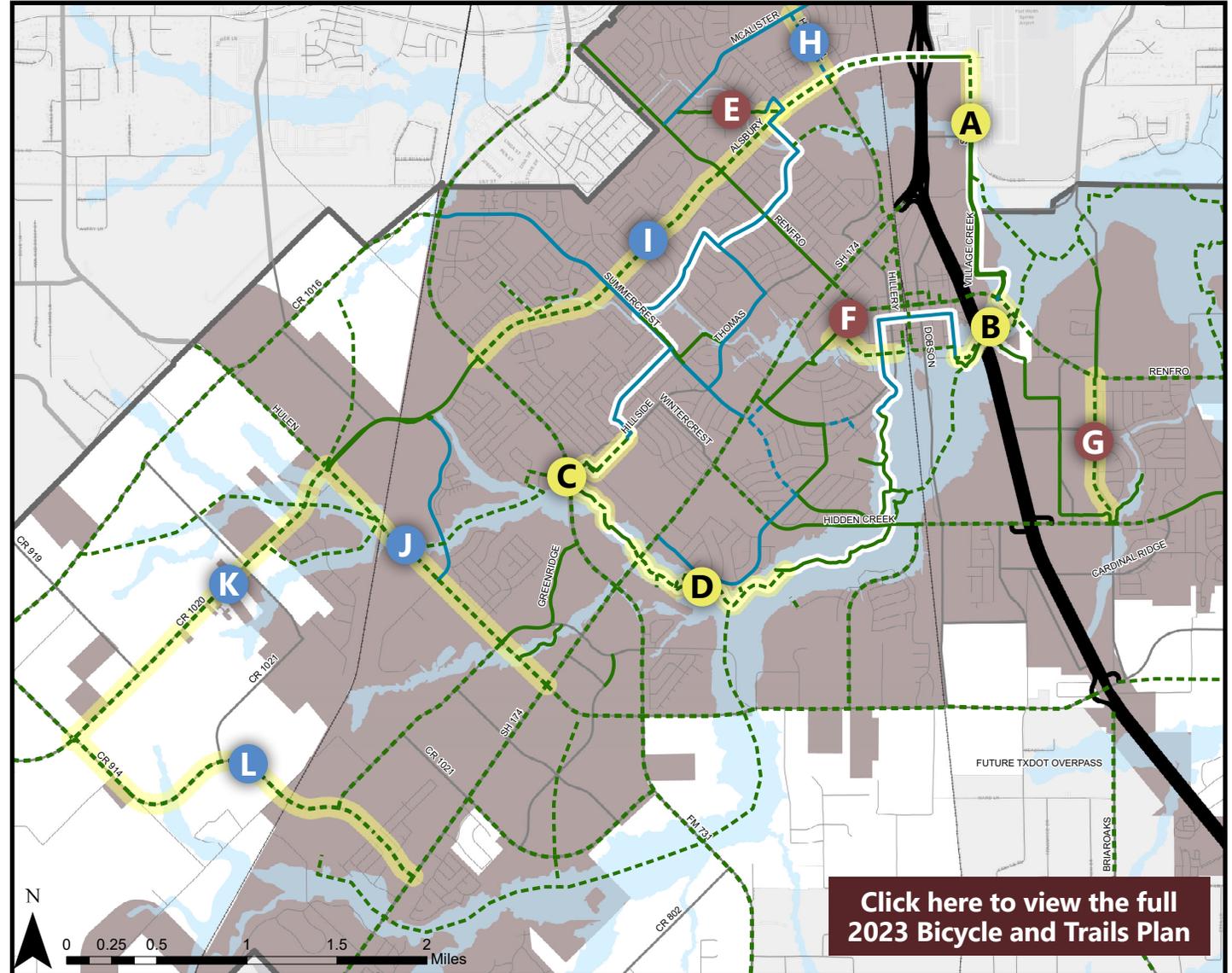
### FACILITY TYPE/STATUS

-  Existing On-Street Bicycle Facility
-  Existing Shared-Use Path Facility
-  Proposed On-Street Bicycle Facility
-  Proposed Shared-Use Path Facility
-  Priority Project
-  10-Mile Loop Highlight

### PRIORITY PROJECT TYPE

-  10-Mile Loop Connections
-  Thoroughfare Plan Projects
-  Other Priority Projects
-  Planning Area
-  Burleson City Limits

[Click here to access full scale map](#)



[Click here to view the full 2023 Bicycle and Trails Plan](#)

**Table 10. Bicycle and Trail Priority Projects**

PRIORITY PROJECT TYPE	LETTER	PROJECT NAME	PROJECT TYPE	PROJECT LIMITS	PROJECT LENGTH (IN MILES)
<b>10-Mile Loop Connections</b>	<b>A</b>	Stone Road	Shared Use Path	From Alsbury Boulevard to McCall Street	0.42
	<b>B</b>	Village Creek Trail Extension	Shared Use Path	From Village Creek Parkway to existing trail	0.42
	<b>C</b>	Shannon Creek Trail Extension (North)	Shared Use Path	From Existing Hillside Drive trail (intersection of Hillside Drive and Linda Drive) to Shannon Creek Trail Extension South priority bicycle project letter D	0.8
	<b>D</b>	Shannon Creek Trail Extension (South)	Shared Use Path	From Shannon Creek Trail Extension North priority bicycle project letter C to existing 10-Mile Loop trail	1.12
<b>Other Priority Projects</b>	<b>E</b>	Heberle Park Trail	Shared Use Path	From existing trail facility terminus to Alsbury Boulevard	0.09
	<b>F</b>	Johnson Avenue/Tarrant Avenue/Miller Street	Shared Use Path	From the intersection of Johnson Avenue and Tarrant Avenue to the intersection of Miller Street and Main Street	0.34
	<b>G</b>	Hurst Road	Shared Use Path	From Renfro Street to Hidden Creek Parkway	0.78
<b>Thoroughfare Plan Projects</b>	<b>H</b>	Hemphill Street	On-Street Bicycle Lane	From McAllister Road to Alsbury Boulevard	0.41
	<b>I</b>	Alsbury Boulevard	Shared Use Path	From FM 731/John Jones Drive to IH-35 W	3.15
	<b>J</b>	Hulen Street	Shared Use Path	From CR 1016 to SH 174/Wilshire Boulevard	1.71
	<b>K</b>	Alsbury Boulevard	Shared Use Path	From CR 914 to Hulen Street	2.12
	<b>L</b>	Lakewood Drive/CR 914	Shared Use Path	From Alsbury Boulevard to SH 174/Wilshire Boulevard	2.41

# BICYCLE AND TRAIL POLICY RECOMMENDATIONS

## *NEIGHBORHOOD WAYFINDING*

The majority of the projects recommended in the updated bicycle network were identified due to their ability to connect residents from their neighborhood to major destinations. This network of spines and connectors across the city are best suited for longer distance routes, however, it does not carry the users directly to their homes. Just like how arterials and collectors are built for mobility and not access in thoroughfare planning, spines and connectors operate the same way.

In order to provide residents in Burleson with the highest level of access onto the city's bicycle network, it is recommended that the City adopt a system of wayfinding at the neighborhood level. This system is best utilized by directing users from the local roads in their neighborhood to the nearest on-street facility or shared-use path. This can be employed through the implementation of "bicycle dots" on these roads that have a directional arrow pointing users towards major facilities. Neighborhood wayfinding systems are best implemented by examining neighborhoods individually to come up with a network of dots and signage that best fit the needs of nearby residents.

## *UPDATED DESIGN STANDARDS*

In addition to the projects recommended in this chapter, it is recommended that the City of Burleson conduct an update to their roadway design standards after this plan is adopted. The new facility types recommended for bicyclists will need to be standardized and memorialized through this process in order to be fully implemented on a policy level.

With regards to bicycle facility design, a standard shared use path design should be created that ensures at least 10 to 12 feet of dedicated width to provide a comfortable experience for users. As for the on-street facilities, it is recommended that separate bike lane and buffered bike lane design standards are adopted to give the City flexibility to choose which type is most appropriate project-to-project.

## *COORDINATION WITH THE SIDEWALK IMPROVEMENT PLAN*

All bicycle improvement projects in Burleson should be coordinated with the Sidewalk Improvement Plan (in Chapter 4). If the 2023 Bicycle and Trail Plan is amended to include additional sidepath or shared use projects, review the Sidewalk Improvement Plan to ensure there is no overlap. If projects are identified where there is overlap between the identified bicycle improvement and a project identified on the Sidewalk Improvement Plan, **defer to the Bicycle and Trail Plan standards** by amending the Sidewalk Improvement Plan as well to ensure a wider sidepath is constructed.

# CHAPTER 6

## Implementation



Chapter 6 focus on the following objectives:

- Incorporates roadway, pedestrian, and bicycle project recommendations identified previously in Chapters 3 - 5.
- Creates a prioritized list of multimodal projects for the City of Burleson to implement over the next several years.
- Identifies projects for the City to incorporate into their Capital Improvements Program (CIP).
- Outlines a list of strategies and actions the City of Burleson can implement to help complete and enhance all of the recommendations made for Burleson's multimodal mobility network.

## INTRODUCTION

This Implementation Chapter captures the recommendations made for Burleson's multimodal mobility network and summarizes them in a cohesive list for City Staff to use as a guidebook for implementation. Prioritized roadway, pedestrian, and bicycle projects found in Chapters 3 – 5 have been identified based on criteria that would provide for the community of Burleson advancement towards improved mobility. Completing these projects will assist the City's congestion mitigation efforts, improve safety for both vehicles and active transportation users, and will encourage people to walk and bike.

This chapter will identify and map all priority projects identified and will provide funding options from federal, state, regional, and other key funding partnerships. The chapter is concluded with a list of strategies and action items the City can implement to improve overall mobility in Burleson.

The following page provides a map of the priority projects for Burleson's roadway, sidewalk, and bicycle network. Several of the bicycle and roadway projects overlap. The priority bicycle projects that have been identified as falling under a future or existing Thoroughfare Plan road will be constructed at the same time as the roadway itself.

# BURLESON MOBILITY PLAN PRIORITY PROJECTS

## LEGEND

### PRIORITY PROJECT TYPE

- Priority Roadway Project
- Priority Pedestrian Project
- Priority Bicycle Project

*P = Pedestrian Projects*

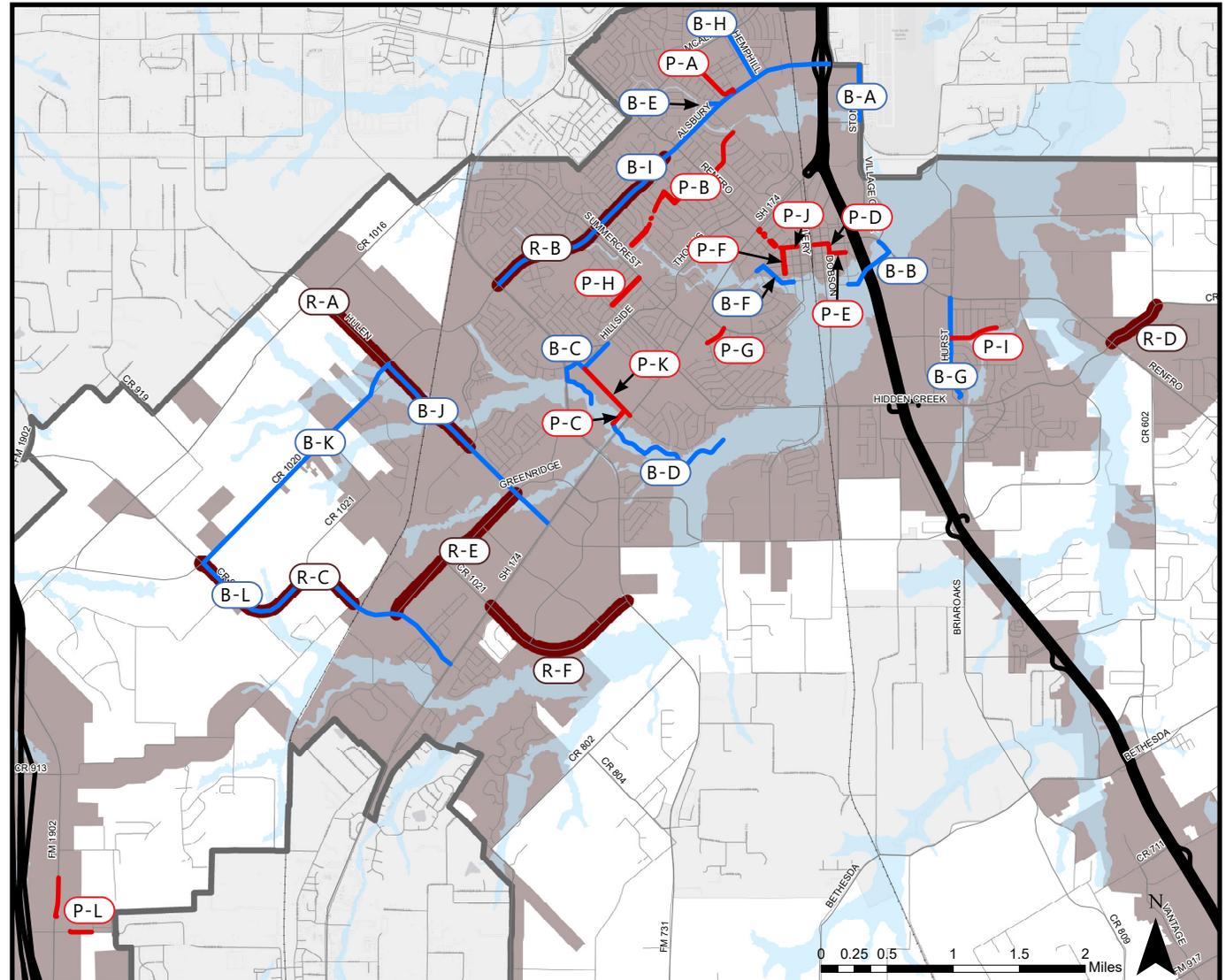
*B = Bicycle and Trail Projects*

*R = Roadway Projects*

*Project letters are provided after the project type as identified in previous chapters.*

- Planning Area
- Burleson City Limits

[Click here to access full scale map](#)



# PRIORITY PROJECT DETAILS

The roadway, pedestrian, and bicycle projects that have been identified in this planning process are categorized and detailed in the tables below and on the following page. Priority roadway projects consist of the most important roadway projects needed to improve vehicular mobility throughout Burleson with a particular focus on the detailed alignments that were further studied and summarized, detailed in Chapter 3. The priority pedestrian projects consist of the short-term projects identified in Chapter 4. Additionally, the priority bicycle projects were also previously identified in Chapter 5.

The final list of prioritized project recommendations consists of six roadway projects totaling approximately 7.74 miles of improvements, 12 pedestrian projects totaling approximately 5.59 miles of sidewalk improvements, and 12 bicycle and/or trail projects totaling approximately 13.77 miles of trail improvements. **Table 11**, **Table 12**, and **Table 13** summarize the projects below and on the following page.

**Table 11. Priority Roadway Projects**

PROJECT ID	PRIORITY ROADWAY PROJECT NAME	PROJECT LIMITS	PROJECT LENGTH
R-A	Hulen Street Realignment/Construction	From SH 174/Wilshire Boulevard to Hidden Creek Parkway	1.57 miles
R-B	Alsbury Boulevard Reconstruction	From FM 731/John Jones Drive to Alsbury Court	1.63 miles
R-C	Lakewood Drive	From CR 1016 to Alsbury Boulevard	1.50 miles
R-D	Hidden Creek Parkway	From Renfro Street to Houston Street (Existing Road Ending)	0.45 miles
R-E	Greenridge Drive	From Hulen Street to Lakewood Drive	1.30 miles
R-F	Wicker Hill Drive	From SH 174/Wilshire Boulevard to FM 731/John Jones Drive	1.29 miles

**Table 12. Priority Pedestrian Projects**

PROJECT ID	PRIORITY PEDESTRIAN PROJECT NAME	PROJECT LENGTH
P-A	Park Meadow Lane Sidewalk	0.49 miles
P-B	Rand Street/Newton Street/Cindy Lane Sidewalk	1.84 miles
P-C	Elk Drive Driveway Connection	0.21 miles
P-D	Clark Street Sidewalk	0.11 miles
P-E	Ellison Street Sidewalk	0.12 miles
P-F	Bransom Street Sidewalk	0.36 miles
P-G	Maple Avenue Sidewalk	0.17 miles
P-H	Vaughn Drive Sidewalk	0.58 miles
P-I	Hollow Creek Road Sidewalk	0.37 miles
P-J	Renfro Street Sidewalks	0.38 miles
P-K	Elk Drive Sidewalk	0.49 miles
P-L	FM 1902/CR 910 Sidewalks	0.47 miles

**Table 13. Priority Bicycle and Trail Projects**

PROJECT ID	PRIORITY BICYCLE/TRAIL PROJECT NAME	PROJECT LENGTH
B-A	Stone Road Shared Use Path	0.42 miles
B-B	Village Creek Trail Extension Shared Use Path	0.42 miles
B-C	Shannon Creek Trail Extension (North) Shared Use Path	0.8 miles
B-D	Shannon Creek Trail Extension (South) Shared Use Path	1.12 miles
B-E	Heberle Park Trail Shared Use Path	0.09 miles
B-F	Johnson Avenue/Tarrant Avenue/Miller Street Shared Use Path	0.34 miles
B-G	Hurst Road Shared Use Path	0.78 miles
B-H*	Hemphill Street On-Street Bicycle Lane*	0.41 miles
B-I*	Alsbury Boulevard Shared Use Path*	3.15 miles
B-J*	Hulen Street Shared Use Path*	1.71 miles
B-K*	Alsbury Boulevard Shared Use Path*	2.12 miles
B-L*	Lakewood Drive/CR 914 Shared Use Path*	2.41 miles

\*Project falls on a Thoroughfare Plan roadway. These projects will be completed simultaneously when the Thoroughfare Plan project is constructed.

# PARTNERS AND FUNDING SOURCES

The graphs below identify a variety of Burleson’s strategic partners and funding mechanisms that are available for the City to access. It is essential for the City of Burleson to take full advantage of coordinating efforts with overlapping and adjacent agencies who have a stake in the future of Burleson’s mobility network performance. Strategic partners can be beneficial to help fund additional projects identified in the Burleson Mobility Plan. Partners are accessible at all agency levels, including federal, state, regional, county, and local. Some of Burleson’s key mobility partners consist of, but are not limited to, the following:

- US Department of Transportation (USDOT)/Federal Highway Administration (FHWA)
- Texas Department of Transportation (TxDOT)
- North Central Texas Council of Governments (NCTCOG)
- Tarrant and Johnson County
- Local Developers

## FEDERAL FUNDING

The US Department of Transportation (USDOT) and the Federal Highway Administration (FHWA) offer a variety of grant funding opportunities to assist municipalities with their mobility improvement efforts. Grants can be applied for and used to help fund transportation projects at various stages of the project, including the planning, design, and construction phases.

In addition to the USDOT and the FHWA, other federal-level grants exist that the City could capitalize on to help fund additional transportation improvement projects, specifically active transportation projects (including sidewalks and trails). There are many grant or match programs the City should consider applying for to help fund the multimodal transportation projects identified in the Burleson Mobility Plan, including the sources listed to the right.

### FHWA Grants

- Highway Safety Improvement Program (HISP)
- Transportation Alternatives Set-Aside Program (TA)
- Advanced Transportation Technologies and Innovative Mobility Deployment
- Safe Streets and Roads for All
- Congestion Mitigation and Air Quality Improvement Program

### USDOT

- RAISE Discretionary Grants
- BUILD Grants (also known as TIGER or RAISE grants)

### Other Federal Grant Resources

- Land and Water Conservation Fund Outdoor Recreation Legacy Partnership (LWCF) – City Parks Alliance and Land and Water Conservation Fund
- Community Development Block Grants – US Housing and Urban Development (HUD)
- Resilient Communities – National Fish and Wildlife Foundation

## **STATE FUNDING**

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TxDOT is a key partner for the support of Burleson’s mobility network. Since TxDOT maintains several key arterials in the City (such as SH 174/Wilshire Boulevard and IH-35) it is very important to continually coordinate transportation improvement efforts with this entity. TxDOT maintains several grant programs to assist local governments by either matching local dollars or by providing grant assistance to transportation improvement projects. To the right are several TxDOT funding sources the City should consider utilizing when updating their transportation network.

- Local Government Assistance Programs (City and County Roads)
- Traffic Safety Grants (funded by the National Highway Traffic Safety Administration and administered through TxDOT)
- State Infrastructure Bank
- Transportation Alternatives-Set Aside Program (funded by TxDOT, administered through NCTCOG)

## **REGIONAL FUNDING**

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The NCTCOG provides funding for local and regional implementation grants. They also administer the Transportation Alternatives-Set Aside Program, which is funded through TxDOT. General project types eligible under this program include on-and off-road pedestrian and bicycle facilities and multimodal connections to existing pedestrian and bicycle infrastructure associated with Safe Routes to School (SRTS) projects that will substantially improve safety and the ability for students to walk and bicycle to school.

## **CITY FUNDING**

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Local government funding mechanisms also exist to help Burleson fund their identified transportation projects. The City already utilizes many different types of funding programs, including their Capital Improvements Program (CIP) and city bond programs. However, additional programs can be implemented to provide funds for the Mobility Plan projects, including:

- Street Maintenance Fees
- Special Districts, i.e., Public Improvement Districts (PID), Tax Increment Finance (TIF) or Tax-Increment Reinvestment Zones (TIRZ)

## **DEVELOPER CONTRIBUTIONS**

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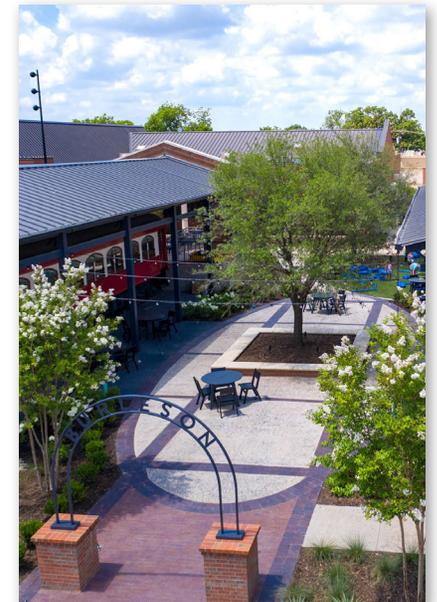
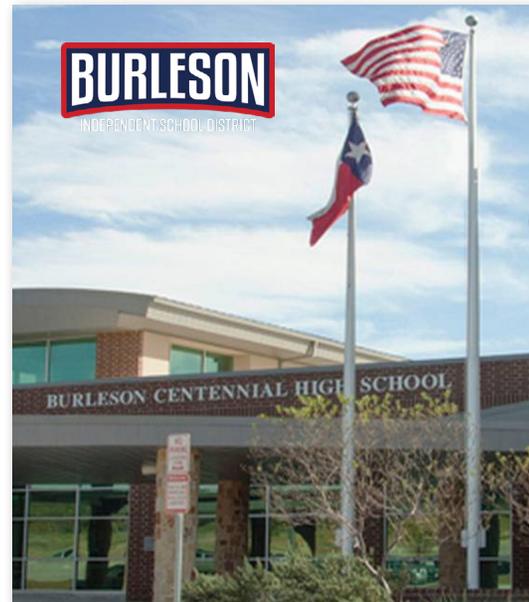
Projects located in areas experiencing growth and new development (especially in southwest Burleson) may have an opportunity to include developer contributions in the construction of city streets, sidewalks, and trails. The City already partners with developers, and should continue that partnership as development comes to Burleson. To the right outlines specific developer contribution examples.

- Roadway Impact Fees
- Traffic Impact Analyses (TIAs)
- Chapter 380 Agreements (Developer Agreements)
- In-Lieu Fees

## OTHER LOCAL PARTNERS

Continual coordination with Burleson organizations is essential to the long-term success of Burleson's mobility network. The City should frequently reach out to key stakeholders to gauge local transportation needs. Effective public engagement is needed in every step of the process, from the long-term visioning to the specific alignments and construction of each transportation improvement project. During the planning phase, engagement with stakeholders ensures that the City provides a chance for the public to weigh in on key transportation decisions. Following this, it is important to keep the stakeholders involved through the implementation phase of each project to provide transparency to the public about the project's timeline, funding, and mobility benefits. Several of Burleson's key stakeholders include:

- Residents and neighborhood organizations
- Faith-based communities
- Local ISDs (elementary, intermediate, and high schools) and private school institutions
- Local businesses – including business owners and employees
- Local municipal boards – including the Planning and Zoning Commission, City Council, Parks Board, Building Codes and Standards Board, etc.
- City Staff
- Advocacy and special interest groups (i.e., walking and biking organizations, non-profits, charities, etc.)



# UPDATES AND AMENDMENT PROCEDURE

The 2023 Burleson Mobility Plan envisions a multimodal transportation network to connect residents and visitors to destinations in a safe and sustainable manner. The proposed recommendations were created to achieve a healthy transportation mode mix that realizes the vision set forth in this plan. Given this, unforeseen circumstances might require amendments to this plan. City Staff has the authority to make modifications to this plan over the next several years. However, the Thoroughfare Plan is used to create the capital projects that are included in the Roadway Impact Fee analysis. Therefore, to continually reflect the community's transportation needs and goals as development comes in and demographics shift, the City of Burleson should conduct a full update of their Mobility Plan approximately every five years with the Roadway Impact Fee. It is important to note that the 2023 Mobility Plan is a living document and should be updated as actions and transportation projects are completed over the years. The 2023 Mobility Plan should also be re-evaluated by staff on a yearly basis based on development trends and sections should be updated if warranted.

## ACTION IMPLEMENTATION MATRIX

In addition to the specific roadway, pedestrian, and bicycle improvement projects identified throughout this document, the City should implement additional policies, strategies, and actions to help support this plan's overall vision. The following pages provide a detailed list of action items City Staff can use as a toolbox to help guide them to complete the 2023 Mobility Plan. Responsible parties to complete these actions include Burleson City Staff and all of the local municipal boards, including City Council and the Planning and Zoning Commission. Policy recommendations are also included in this action matrix. All future transportation decisions should follow and support these policy recommendations outlined in the action matrix. The actions provided in the matrix are organized in the following categories:

- **Citywide Policy Updates:** These actions are suggestions to modify some of Burleson's existing policies, standards, and codes.
- **Roadway Network:** These actions consist of recommendations to complete the identified priority roadway project and to enhance Burleson's roadway mobility, accessibility, safety, and access.
- **Pedestrian Network:** These actions consist of recommendations to complete the identified priority pedestrian projects and to enhance the overall walking experience on Burleson's sidewalks.
- **Bicycle and Trail Network:** These actions consist of recommendations to complete the identified priority bicycle and trail projects and to enhance the overall cycling experience on Burleson's bicycle and trail network.

# CITYWIDE POLICY UPDATES

## ***Strategy 1 - Adopt and implement the 2023 Mobility Plan.***

**Action 1.1** Adopt the updated Thoroughfare Plan map presented on page 33.

Continue to use the principles identified in the pedestrian and bicycle prioritization methodology as guides for future multimodal improvements. Specifically, multimodal improvements should be prioritized where the most benefit will be realized in terms of safety and connectivity, including:

- Action 1.2**
- a. Connecting neighborhoods to schools;
  - b. Connecting neighborhoods to nearby shopping, dining, religious, and/or recreational destinations; and
  - c. Ensuring high multimodal connectivity in key pedestrian activity areas, such as Old Town.

## ***Strategy 2 - Plan for growth in southwest Burleson.***

**Action 2.1** Adopt a policy that emphasizes multimodal connectivity in new developments coming into south Burleson. New development should be designed with an interconnected network of streets. Additionally, the City should consider additional methods to ensure multimodal connectivity, including a maximum block length and grid street construction.

**Action 2.2** Require new development to connect to the adjacent street network. Additionally, require new roadway development to include the multimodal shared use paths required on the Thoroughfare Plan roads, which should connect to any existing multimodal infrastructure.

## ***Strategy 3 - Focus on congestion mitigation on existing streets for future traffic in central Burleson.***

**Action 3.1** Explore and encourage innovative transportation solutions that improve the operations of traffic signals.

**Action 3.2** Conduct a neighborhood wayfinding study to direct pedestrians to key nearby destinations and activity areas.

## ***Strategy 4 - Emphasize multimodal connectivity in east Burleson (east of IH-35).***

**Action 4.1** Partner with Tarrant and Johnson County to identify funding sources needed for the redevelopment of Renfro Street and other roadways that fall in the City's ETJ to be upgraded to the Thoroughfare Plan's cross section standards.

# ROADWAY NETWORK

## ***Strategy 5 - Make updates to Burleson's other planning and policy documents to align with the recommendations in this Mobility Plan.***

<b>Action 5.1</b>	Update the Burleson Design Standards Manual to take into account the updated roadway functional classifications, right-of-way requirements, and other standards that have been identified in the 2023 Burleson Mobility Plan. Require the construction of shared use paths on both sides of the street for new and retrofitted Principal Arterials, Major Arterials, and Minor Arterials.
<b>Action 5.2</b>	Update the Burleson Design Standards Manual to allow for roadway and intersection congestion levels to be considered acceptable operating at a Level of Service D.
<b>Action 5.3</b>	Implement a new requirement in the Burleson Design Standards Manual stating that minimal landscaping (including ornamental trees along thoroughfares and shrubs and/or ornamental grasses at key intersection or along medians) should be required any time a Thoroughfare Plan roadway is redeveloped or constructed.
<b>Action 5.4</b>	Update the Burleson Design Standards Manual to require additional ROW at intersections as outlined in <b>Table 5</b> .
<b>Action 5.5</b>	Update all Code requirements and standard details to reflect new right-of-way standards. Modify functional classification ROW requirements based on the new roadway classifications identified in Chapter 3.
<b>Action 5.6</b>	Update the Burleson Design Standards Manual to incorporate lower design speeds on Major and Minor Collector facilities. Additionally, develop criteria to achieve these appropriate speeds. These design speeds are intended to be the highest speeds a vehicle should operate and appropriate speed management designs are recommended to be included to achieve these desirable speeds.
<b>Action 5.7</b>	Update the City's Traffic Impact Analysis (TIA) requirements to include a pedestrian and bicycle analysis with a focus on how neighborhoods connect to schools. For the development of schools, require a Traffic Management Plan to be on file and enforced.
<b>Action 5.8</b>	Update the Street Light standards in the Design Standards Manual. This update should consider different standards for neighborhood streets versus City thoroughfare facilities (such as Arterials and Collectors). The update should require the preparation of photometrics to determine the placement of lighting poles, utilizing the latest version of Illuminating Engineering Society (IES) RP-8 standards. If the thoroughfares are located on the City's trail network, pedestrian lighting should be considered.

## ***Strategy 6 - Retrofit existing Thoroughfare Plan roadways that cause potential safety issues for roadway users.***

<b>Action 6.1</b>	Mitigate left turns by implementing a policy to replace continuous center turn lanes on existing arterials and collectors with a well-landscaped median.
<b>Action 6.2</b>	Monitor high crash intersections and roadway segments as new data becomes available. As new roadway projects are implemented, continue this monitoring so new high crash locations can be identified, and solutions can be determined.

- Action 6.3** Develop a neighborhood traffic calming program and traffic calming toolbox as part of the Design Manual update.

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- Action 6.3** Continue to conduct safety analyses on thoroughfares with high crash rates to identify future projects to reduce number of fatalities and crash severity. Examples include signal timing adjustments, signal phasing, median construction projects, enhanced ped crossings, etc.

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- Action 6.4** Encourage the Burleson City Council to adopt a vision statement to strive to eliminate roadway fatalities on Burleson's roadway network. Consider conducting a Safety Action Plan to support the Council's vision.

***Strategy 7 - Incorporate context sensitive measures into Burleson's roadway design.***

- Action 7.1** Update City access management criteria to include context-specific locations, such as SH 174.

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- Action 7.2** Evaluate driveway spacing requirements with a focus on access management to enhance safety for all roadway users. Requirements for distances to all intersections and distance between driveways should be evaluated during the Design Manual update.

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- Action 7.3** Conduct further traffic analyses to determine the appropriate design speed for neighborhood streets.

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- Action 7.4** Update the Burleson Design Criteria Manual to include traffic calming requirements for new neighborhoods as well as an identified process to add traffic calming measures to existing neighborhoods.

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- Action 7.5** Develop flexible design criteria for context sensitive areas such as Old Town and rural as part of the update to the Burleson Design Standards Manual.

***Strategy 8 - Identify innovative funding strategies and partners to implement the 2023 Mobility Plan's recommendations.***

- Action 8.1** Partner with developers to implement funding strategies such as impact fees, construction of facilities in lieu of fees, payment in lieu of fees, or other policies.

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- Action 8.2** Identify a preferred alignment for Hulen Street between IH-35 W and Hidden Creek Parkway.

***Strategy 9 - Identify innovative funding sources for multimodal improvements.***

- Action 9.1** Apply for federal, state, and regional funding opportunities, including Safe Routes to School funding, to complete the construction of the identified priority pedestrian projects.

# PEDESTRIAN NETWORK

## ***Strategy 10 - Continue to prioritize pedestrian safety in all multimodal infrastructure projects or retrofits.***

- |                    |   |
|--------------------|---|
| <b>Action 10.1</b> | Develop a funding strategy to ensure that all Thoroughfare Plan roadway intersection crossings contain visible crosswalks, working pedestrian push buttons, and ADA accessible curb ramps. Special emphasis should be placed on areas with high pedestrian activity.  |
| <b>Action 10.2</b> | Require new Thoroughfare Plan roadway development or redevelopment to construct sidewalks up to ADA standards, especially near schools and key pedestrian activity areas (such as Old Town).  |
| <b>Action 10.3</b> | Conduct an ADA Transition Plan study to identify key locations on Burleson's sidewalk and trail network where accessibility improvements are needed.  |
| <b>Action 10.4</b> | If an area experiences higher than normal pedestrian activity, conduct additional studies to ensure high pedestrian safety is achieved. Possible additional pedestrian measures could be warranted including a pedestrian rapid flashing beacon, a midblock crosswalk, or additional signage for motorized vehicles and/or pedestrians. |
| <b>Action 10.5</b> | Require new roadway development or redevelopment projects to include a seven-foot minimum landscaped separation between the curb to the sidewalk.   |

## ***Strategy 11 - Promote multimodal connectivity.***

- |                    |  |
|--------------------|--|
| <b>Action 11.1</b> | Prioritize and construct additional multimodal improvements in neighborhoods that do not have an existing network.   |
| <b>Action 11.2</b> | Identify additional pedestrian connections needed to connect neighborhoods without sidewalks to surrounding schools.   |
| <b>Action 11.3</b> | Identify several locations that experience high pedestrian activity where new public art, sculptures, and branded wayfinding signage can be installed.                                       |
| <b>Action 11.4</b> | Strongly encourage new street trees to be planted within parkways and medians to enhance the overall pedestrian experience.  |
| <b>Action 11.5</b> | Identify new locations in Old Town and at key intersections with high pedestrian activity where enhanced paving (such as brick or stamped concrete) would enhance the pedestrian experience. |

# BICYCLE AND TRAIL NETWORK

## *Strategy 12 - Where possible, separate bicycle and roadway infrastructure.*

- Action 12.1** Continue to view the Burleson bicycle network as both bicycle infrastructure and the City's trail network. The bicycle network should be inclusive of the trail network and should aim for constructing shared use paths, rather than on-street bicycle facilities.
- 
- Action 12.2** Update the Burleson Design Standards Manual to include flexible off-street bicycle lane facility types where special ROW constraints exist and a full 10' – 12' shared use path cannot be constructed.
- 
- Action 12.3** Complete the construction of the priority bicycle and trail projects identified in the 2023 Mobility Plan, including the projects along the City's 10-Mile Loop alignment.

## *Strategy 13 - Enhance the bicycling experience in Burleson.*

- Action 13.1** Create additional neighborhood wayfinding signage along local streets directing bicyclists to existing shared-use paths, trail facilities, and surrounding destinations.
- 
- Action 13.2** Design and implement a 10-Mile Loop branded wayfinding signage package to implement along the bicycle corridor.
- 
- Action 13.3** Create a standard trailhead design to apply throughout the major trail corridors.
- 
- Action 13.4** Identify several key locations along the 10-Mile Loop and other major trail corridors where trailheads can be constructed.
-

**BTX**

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# Burleson Mobility Plan

2023 Update

**MOVES**

# APPENDIX A

## 2015 Master Mobility Plan Recommendations

## Chapter 5 – Implementation

### Corridors Approach

The corridor planning approach is a method to comprehensively address the transportation and land use needs along a specific thoroughfare. With public and stakeholder involvement, the process is intended to arrive at a long-range corridor vision. This vision will guide how the City of Burleson will look, function and feel over the next decades.

The following pages outline the application of the corridor planning approach on specific thoroughfares in the City of Burleson as part of the process to achieve the vision of the overall Master Mobility Plan.

### Corridor Plans

#### Renfro Street

- Identified study area: Renfro between Wilshire and I-35
- Located in Burleson’s Old Town district, the corridor was determined to have a Mixed-Use/Main Street/Downtown context.
- An internal workshop with city staff and stakeholders was conducted as a sample corridor exercise. This developed ideas and alternatives to better serve all users of this corridor and complement the intended land use context. Ideas included wide sidewalks for pedestrian comfort, medians for aesthetic improvement opportunities and left turning traffic, and optional on-street parking. Improved pedestrian and bicycle connections were identified with future crossings, bike lanes and shared-use lanes along adjacent streets.
- Refinement of the ideas led to a preferred alternative and compiled into a concept plan, which is shown in Figure 7.

#### SH 174 (Wilshire Boulevard)

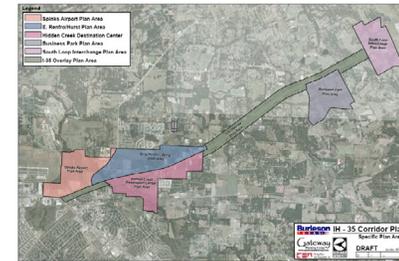
- Completed over 2009 and 2010, the plan addresses SH 174 from I-35 to the southern city limits.
- A series of public meetings addressed visual character, roadway design, connectivity and mobility. These resulted in identifying opportunities for future development and priority elements for improving the aesthetics and function of the corridor.
- The vision addresses two distinct zones that the roadway serves: the Wilshire Commercial District along the northern end that addresses already developed sections and the Wilshire South District concerning largely undeveloped property to the south.
- Recommendations for land use, zoning, architectural character, streetscape and access management are made to achieve desired goals.

#### Summercrest Boulevard

- Identified as a priority route to improve pedestrian and bicycle facilities
- Design options are currently being studied

#### IH-35

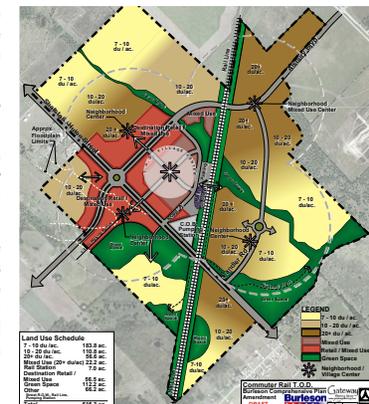
- This plan addresses the nine-mile stretch of Interstate Highway 35W between Alsbury Boulevard to FM 917.
- This corridor is identified as both an important transportation connector and an asset to the local economy.
- The plan identifies the strengths and weaknesses of the corridor and outlines goals for guiding future land use, open space, and transportation opportunities.
- In addition, special planning areas were studied that act as strategic nodes for economic development. They include Spinks Airport, E Renfro Street/Hurst Road, Hidden Creek Destination Center, Business Park, and the FM 917 Interchange.



IH-35 Corridor Plan

#### Burleson West TOD District

- With the annexation of land along the Burlington Northern Santa Fe rail line, the City of Burleson adopted a plan to guide transit-oriented development that would be compatible with a proposed commuter rail station.
- This site is centered around the planned intersection of two major roadways, Alsbury Boulevard and Hulen Street.
- The plan outlines goals to guide land use, a pedestrian network, and multi-modal transportation connectivity compatible with mixed-use and higher density residential development.
- A conceptual plan was included in the City’s Comprehensive Plan in 2006, and a full TOD Master Plan study was completed in 2012. This study was funded by a Sustainable Development Grant from the North Central Texas Council of Governments (NCTCOG). The Master Plan included a real estate development market analysis, station design concepts, and a transportation analysis.

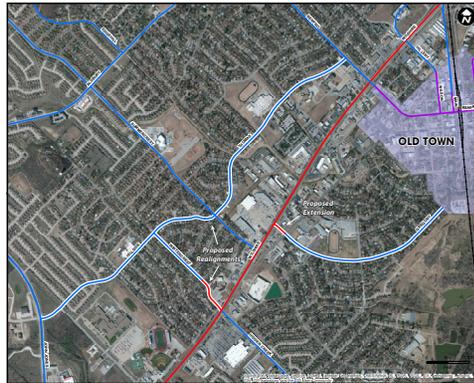


Burleson West TOD Master Plan

## Thoroughfare Recommendations

### Wilshire Corridor Connectivity: Gregory Street Extension

The existing section of Gregory Street is recommended to be added to the thoroughfare plan as a minor collector. A future extension of Gregory, west to Wilshire Blvd (SH 174), would create a continuous minor route to Old Town and add connectivity to the Wilshire commercial corridor.



### Hidden Creek Parkway-Wintercrest Road

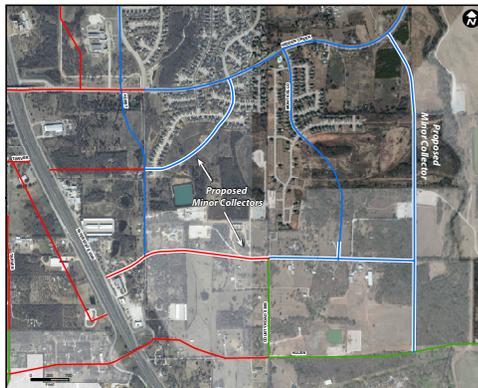
The existing section of Wintercrest Road east of Hillside Drive is recommended to be added as a thoroughfare with an extension aligning with the existing Hidden Creek Parkway signalized intersection. This will increase connectivity across Wilshire Blvd and provide additional access to future commercial development.

### Hillside Drive-Thomas Street

Hillside Drive and Thomas Street between John Jones Drive (FM 731) and Renfro Street are recommended to be added to the thoroughfare plan as minor collectors. A realignment to connect the two streets at Summercrest Blvd would create an alternate neighborhood-context parallel route to Wilshire Blvd.

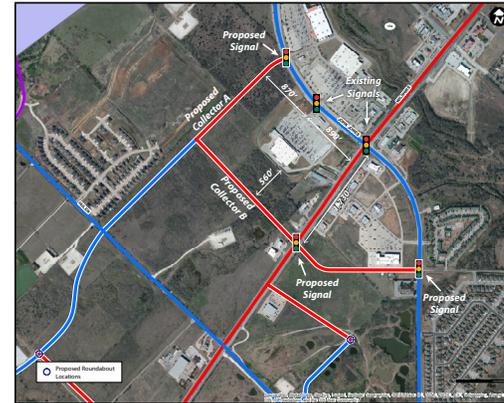
### Hidden Creek-Hulen Connectors

New minor collectors are proposed to serve the Hidden Creek and Hulen area, which is expecting future residential and commercial development. These collectors will provide alternate connections to the businesses along I-35 and an additional north-south route east of the interstate.



### FM 731-Hulen Commercial Connectors

Two collectors are proposed in the commercial area near the intersection of FM 731 and Wilshire Boulevard. This option would provide backage connections to HEB and new developments along Wilshire and Hulen St. The installation of a hooded left turn median opening should be considered at the existing signal on FM 731.

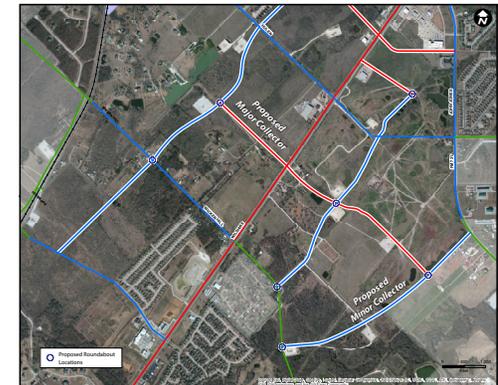


#### Benefits

- Collector A aligns with existing median opening.
- New signal at Collector B intersection evenly splits FM 731 and Hulen St.
- Developable land behind the existing HEB would be served by Collector B.

### Wilshire (SH 174)-Forrest Connectors

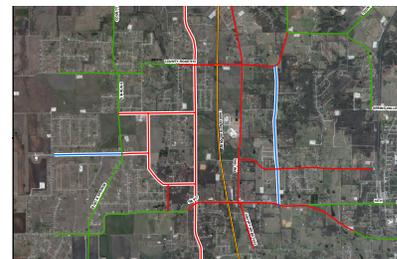
Additional connections are proposed for the developing area along Wilshire (SH 174) and south of John Jones. A major collector would provide service to future commercial developments along the east and west sides of Wilshire. This would connect to a minor collector serving future residential areas south of John Jones. This collector would provide an additional east-west route in this area, along with the future extension of Hulen. Backage collectors and roundabouts at minor intersections are proposed to serve new development and reduce the traffic impacts along Wilshire for local trips.



## City of Burleson

### Chisholm Trail Parkway/SH 121 Connectivity

A system of collectors are proposed in the expected growth area near the newly constructed Chisholm Trail Parkway (CTP). These thoroughfares would provide backage connections to future commercial and residential development and provide alternate routes for shorter, local trips.



# APPENDIX B

## Modeling Methodology and Scenario Modeling Analysis

### MODELING METHODOLOGY AND OVERVIEW

#### TRAVEL DEMAND MODELING OVERVIEW

A travel demand model is a tool used to support the urban transportation planning process and help identify and forecast future transportation needs of the community. The model is developed to use current travel behaviors to predict future travel patterns and can predict how changes in the size and character of the population will impact the future transportation system. The model results can assist local elected officials and policy makers in making informed transportation planning decisions.

#### MODELING METHODOLOGY

The success of a travel demand model is highly dependent on the quality and accuracy of the inputs. A travel demand model uses a gravity model, which follows the assumption that trips produced at an origin and attracted to a destination are directly proportional to the total trip productions at the origins and the total trip attractions at the destinations. The four basic steps of the gravity model include; Trip Generation – the total number of trips to be made, Trip Distribution – where these trips go, Mode Choice – the mode of travel for each of the trips, and Trip Assignment – predicting the route that each trip takes. The following provides more detail for each step in the gravity model:

- **Trip Generation** is developed based on existing land use characteristics within the model study area. This step accounts for the number and size of households, automobile ownership,

types of activities (residential, school, industrial, commercial, etc.) and the density of developments (in employment numbers). This data determines the magnitude of travel flows to/from a specific zone within the model, which is a geographical area called a Traffic Analysis Zone (TAZ). For each zone, the number and size of households, employment, and school enrollment are determined using parcel data, aerial photography, and other supporting data provided by the agency.

- **Trip Distribution** is the model process of determining which zones the trips are assigned to. The process involves looking at the attractiveness of each zone based on the number of attractions and travel time from other zones. The step produces an idea of trip origins and destinations within the model and the scale of trip attraction between two individual zones.
- **Mode Choice** looks at the mode of transportation used to distribute a trip between two zones, whether it's a single-occupant automobile, carpooling, or transit. More complex models dive deep into the transit component, looking at transit occupancy, schedules, and fare levels to determine how, when, and where people use transit.
- **Trip Assignment** determines the route that people take from their origin to their destination. The model generally assumes that a trip is made along the fastest path route between two zones. This routing accounts for road conditions, congestion levels, transit schedules and fares, etc.

Once the existing roadway network is developed and the demographic information is summarized, the existing model is calibrated/validated to ensure that the model is predicting travel patterns appropriately based on real world condition. This process involves discussion with local agencies to make sure that the model values make sense and to cross check those values to highway vehicle traffic counts. Once this is completed, the travel demand model process is completed for existing conditions.

The calibrated existing travel demand model can then be used to forecast future travel patterns based on changes in the roadway network and demographics.

**Table 14. Model Demographics**

Demographics	Existing (2015)	Build-Out	Net Increase from Existing
Households	23,523	54,226	30,703
Population	80,356	153,185	72,829
Employment	36,323	88,321	51,998

## BASE YEAR TRAVEL DEMAND MODEL

The first step in the modeling process is to develop a base year travel demand model, which is based on the existing thoroughfare roadway characteristics and demographics. The following section describes the development and calibration/validation of the Existing Conditions travel demand model.

### BASE YEAR MODEL DEVELOPMENT

#### MODEL ROADWAY NETWORK

The model roadway network was developed for all roadways with a functional classification of Minor Collector or higher, based on the adopted 2015 Master Thoroughfare Plan (MTP). Based on aerial photography, and supplemented with a windshield survey, the roadway network attributes were updated to include the functional classification, existing roadway cross sections (number of lanes and divided vs. undivided median), and existing travel speed.

#### MODEL DEMOGRAPHICS

The model demographics were developed based on a review of existing parcel data from Tarrant and Johnson County Appraisal Districts and supplemented with information provided by the City. The demographic information included number of households, population, employment, and school enrollment. **Table 14** provides a summary of the existing demographic information used for the Existing Conditions model. Demographic information was validated by comparing it to population and employment estimates from 2020 provided by the City. **Table 15** on the next page provides a short description of each category.

For the demographic information, the travel demand model groups that information into Traffic Analysis Zones (TAZs). For this model, the TAZ boundaries were created using the thoroughfare roadways as the boundary. **Figure 40** shows an example of the TAZ boundaries. For the Burleson sub-area model, there were approximately 150 zones developed to account for the households and employment with City limits and the ETJ. Developing the sub-area model provided much more flexibility in the location and number of zones as compared to using the NCTCOG regional Dallas-Fort Worth travel demand model.

## BASE YEAR MODEL CALIBRATION AND VALIDATION

The model validation process is a series of measures used to determine the model's accuracy in replicating observed traffic conditions. This is a critical step in having the confidence that the base model is appropriate for future transportation planning decisions. The calibration and validation process was based on FHWA's *Model Validation and Reasonableness Checking Manual, Second Edition (2011)* and *NCHRP Report 716; Travel Demand Forecasting: Parameters and Techniques (2012)*. Based on the guidelines, the model was calibrated by comparing model volumes to existing ground counts for each functional classification. These percentages are generally around 15% for Arterials and 25% for Collectors. **Table 16** provides a summary of the Base Year model calibration. The Burleson Base Year travel demand model was successfully calibrated to FHWA standards.

**Table 15. Model Demographic Assumptions**

- **Number of Households** – Combined number of single-family and multi-family residential units.
- **Population** – Number of people, based on an assumed density of 3.0 - 3.5 people per household.
- **Employment** – Number of employees based on square footage of building area, broken down into four categories:
  - **Basic** – Industrial and warehouse land uses, with an assumed density of one employee per 900 square feet.
  - **Retail** – Land uses that provide for the retail sale of goods, such as grocery stores, shopping centers, and restaurants. Density of one employee per 500 square feet.
  - **Service/Office** – Land uses that provide personal and professional services such as government, schools, and other office-type facilities. Density of one employee per 300 square feet.
  - **School Enrollment** – Number of students for each school.

**Table 16. Existing Conditions Model Calibration**

Functional Classification	Observed Counts	Model Counts	Percent Difference
Freeway	175,500	176,250	0.4%
Major Arterial	774,774	738,282	-4.7%
Minor Arterial	269,144	296,293	10.1%
Collector	84,875	93,495	10.2%
<b>Total</b>	<b>1,304,293</b>	<b>1,304,321</b>	<b>0.0%</b>

**Figure 38. Existing Conditions Model TAZs**



**BASE YEAR MODEL SUMMARY AND RESULTS**

The map on the next pages provides the overall Base Year model area. Included in the figure is the daily traffic volumes from the model and the Level of Service (LOS) based on volume-to-capacity ratio. **Table 17** provides a summary of hourly and daily volume capacities based on existing lane configuration. These capacity volumes should be used when evaluating existing roadway capacity.

Based on the current City Ordinance, roadways are considered failing if the level of service exceeds LOS C. For this project, it is assuming that LOS C or better is where the v/c is less than 0.65, LOS D is between 0.65 and 0.80, and LOS E/F is anything where there v/c exceeds 0.80. The figure on the following page provides a yellow background on roadway links that are operating at LOS D and a grey background on roadway links that are operating at LOS E/LOS F.

**Table 17. Hourly and Daily Volume Capacities**

Roadway Type	Description	Typical Functional Classification	Hourly Lane Capacity	Daily Capacity
6D	Six-Lane Divided	Principal Arterial	850	51,000
4D	Four-Lane Divided	Major/Minor Arterial	750	30,000
4U	Four-Lane Undivided	Major Collector	550	22,000
3U	Three-Lane Undivided (Two-Way, Left-Turn Lane)	Major Collector or existing two-lane county road with turn lanes.	550	11,000
2U-TxDOT	Two-Lane Undivided - TxDOT	FM two-lane roadways	725	14,500
2U	Two-Lane Undivided	Minor Collectors or existing two lane county roads without turn lanes.	425	8,500



# ADOPTED 2015 MTP BUILD OUT MODEL

Building off the calibrated Base Year travel demand model, a future model was developed that evaluates the currently adopted 2015 MTP with full build-out demographics of both City limits and ETJ.

The Base Year model network was updated to reflect the full build-out of the 2015 MTP, including ultimate cross-sections of existing roadways, new roadways, and realignments of existing roadways. The future demographics were developed under the assumption that any current undeveloped parcel would be developed according to the future land use plan. Specific development information provided by the City was also incorporated into the build-out demographics.

**Table 14** on page 87 provides a summary of the build-out demographics. Based on the forecast, the number of households is anticipated to increase by 30,703 units and the total employment is anticipated to increase by 51,998 employees between existing conditions and full build-out.

Roadways that could potentially be downgraded in functional classification based on the forecasted travel volumes and anticipated LOS were identified as part of the 2015 MTP model scenario. **Table 18** provides a list of these roadway segments:

**Table 18. Functional Classification Changes**

Segment	Roadway	Limits	2023 Build-Out Volume Ranges	Functional Classification	
				2015 MTP	2023 TP
1	Hulen Street (CR 920)	North Limits to Greenridge Drive	9,600 - 29,400	Principal Arterial	Minor Arterial
2	FM 731	CR 802 to Southern Extent	26,000 - 29,000	Principal Arterial	Minor Arterial
3	Renfro Street	Hurst Road to CR 602	16,800 - 26,900	Principal Arterial	Major Arterial
		CR 602 to Southern Limits		Principal Arterial	Minor Arterial
4	Hurst Road	Northern Limits to Renfro Street	2,000 - 6,000	Principal Arterial	Major Collector
		Renfro Street to IH-35	6,800 - 11,800	Minor Arterial	Major Collector
5	CR 1016	FM 1902 to FM 731	16,500 - 22,400	Minor Arterial	Major Arterial
6	CR 531	Renfro Street to Eastern Limits	5,600 - 8,600	Minor Arterial	Major Collector
7	CR 602	Renfro Street to IH-35	8,300 - 9,500	Minor Arterial	Major Collector
8	CR 802	FM 731 to FM 917	6,400 - 6,700	Minor Arterial	Major Collector
9	N-S Roadway	CR 518 to FM 917	6,300 - 6,900	Minor Arterial	Major Collector
10	CR 914/Lakewood Drive	SH 174 to Western Limits	10,400 - 22,700	Principal Arterial	Major Arterial
11	CR 913	Western Limits to FM 1902	4,000 - 16,700	Principal Arterial	Minor Arterial
12	Alsbery Boulevard	FM 731 to CR 914	19,600 - 29,900	Principal Arterial	Major Arterial

The model was run to understand where capacity constraints may exist even with the full build-out of the 2015 MTP, considering full build-out demographics. The roadway capacity was calculated by comparing the future model volume to the roadway capacity values provided in **Table 14** from the Base Year model section on page 89. The following list in **Table 19** provides all roadway segments that are anticipated to operate below LOS C at full build-out:

**Table 19. 2015 MTP Build Out Model - LOS D-F Roads**

Road Segment	Limits	Volume	Capacity	Volume/ Capacity	LOS
Alsbury Boulevard	FM 731/John Jones Drive to Summercrest Boulevard	29,900	30,000	0.99	E/F
Alsbury Boulevard	Summercrest Boulevard to Hemphill Street	24,100	30,000	0.80	D
SH 174/Wilshire Boulevard	FM 919 to FM 731/John Jones Drive	38,600	51,000	0.76	D
SH 174/Wilshire Boulevard	FM 731/John Jones Drive to IH-35W	48,100	51,000	0.94	E/F
Hulen Street	SH 174/Wilshire Boulevard to IH-35W	40,300	51,000	0.79	D
Renfro Street	SH 174/Wilshire Boulevard to Stone Road	36,100	51,000	0.71	D
Hidden Creek Parkway	Dobson Street to Hurst Road	23,400	30,000	0.78	D
FM 917	FM 2280 to FM 809	35,400	51,000	0.69	D
Dobson Street	Renfro Street to Hidden Creek Parkway	6,800	8,500	0.80	E/F

# 2015 MASTER THOROUGHFARE PLAN BUILD OUT MODELING RESULTS

## LEGEND

### DAILY VOLUMES

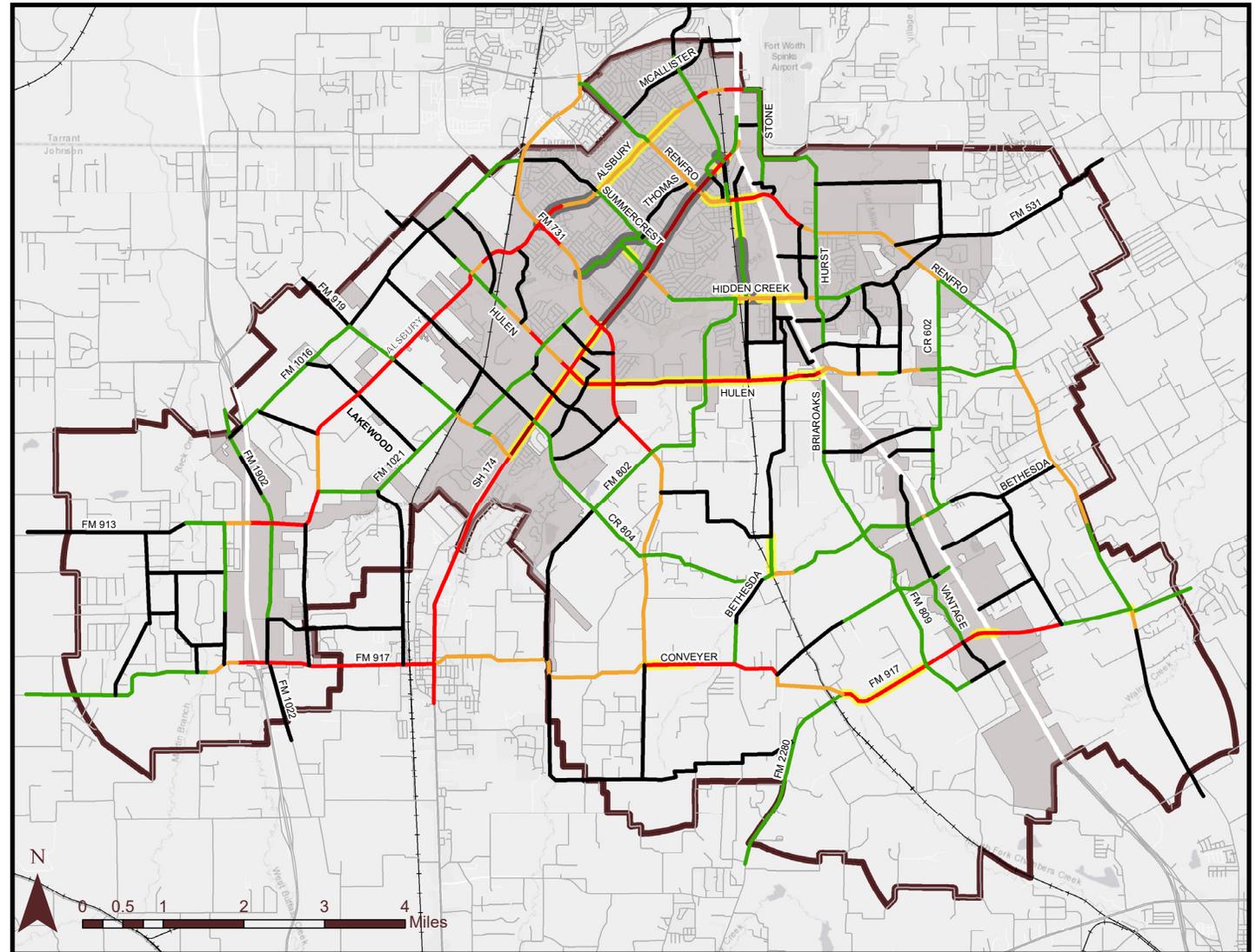
-  0 to 4,999 Vehicles Per Day
-  5,000 to 14,999 Vehicles Per Day
-  15,000 to 24,999 Vehicles Per Day
-  25,000 to 39,999 Vehicles Per Day
-  40,000 or Greater Vehicles Per Day

### VOLUME/CAPACITY

-  LOS A - C (< 0.65)
-  LOS D (0.65 - 0.80)
-  LOS E & F (> 0.80)

 Burleson City Limits

 Planning Area



[Click here to access full scale map](#)

# SCENARIO MODELING

## DESCRIPTION

The development of the 2023 Thoroughfare Plan is based around the results of the 2015 Master Thoroughfare Plan modeling, considering roadways anticipated to operate below acceptable LOS and recommended downgrades in functional classification, but also direction from the City to exclude new thoroughfare roadways outside of the City limits due to the 2017 legislative changes regarding involuntary annexation. Because of this recent legislation change, the City provided direction to exclude most roadways in Burleson's ETJ to determine the effects on the City's roadways. Key corridors were kept in the analysis for connectivity purposes. Once this scenario was complete, vital ETJ thoroughfares were added back into the scenario modeling until the LOS returned to a C.

The map presented on the next page provides a summary of traffic volumes and LOS for the future scenario modeling. The following conclusions were made based on the scenario modeling:

**Table 20. Scenario Modeling Recommendations**

Corresponding Map Number	Recommendation
1	Hulen Street connection between SH 174 and Alsbury Boulevard is critical in providing enough capacity for east-west traffic at build-out.
2	The Lakewood Drive/Alsbury Boulevard connection between FM 1902 and SH 174/Wilshire Boulevard will operate at an acceptable LOS as a Major Arterial (four-lane divided facility), where previously that connection was designated as a Principal Arterial, assuming the connection between Alsbury Boulevard and CR 1016 is constructed as a four-lane facility.
3	Consideration should be given to a north/south connection between FM 913 and FM 917 in the City's ETJ to maintain the city's desired LOS as development continues. Coordination with the county should be considered.
4	Consideration should be given for a north/south connection between Betheda Road and FM 917 east of IH-35 in the City's ETJ to maintain desired LOS. Coordination with the county should be considered.
5	Consideration should be given for an east/west connection between FM 731/John Jones Drive and Betheda Road west of IH-35 in the City's ETJ to maintain desired LOS. Coordination with the county should be considered.

# 2023 MASTER THOROUGHFARE PLAN BUILD OUT WITHOUT ETJ MODELING RESULTS

## LEGEND

### DAILY VOLUMES

- 0 to 4,999 Vehicles Per Day
- 5,000 to 14,999 Vehicles Per Day
- 15,000 to 24,999 Vehicles Per Day
- 25,000 to 39,999 Vehicles Per Day
- 40,000 or Greater Vehicles Per Day

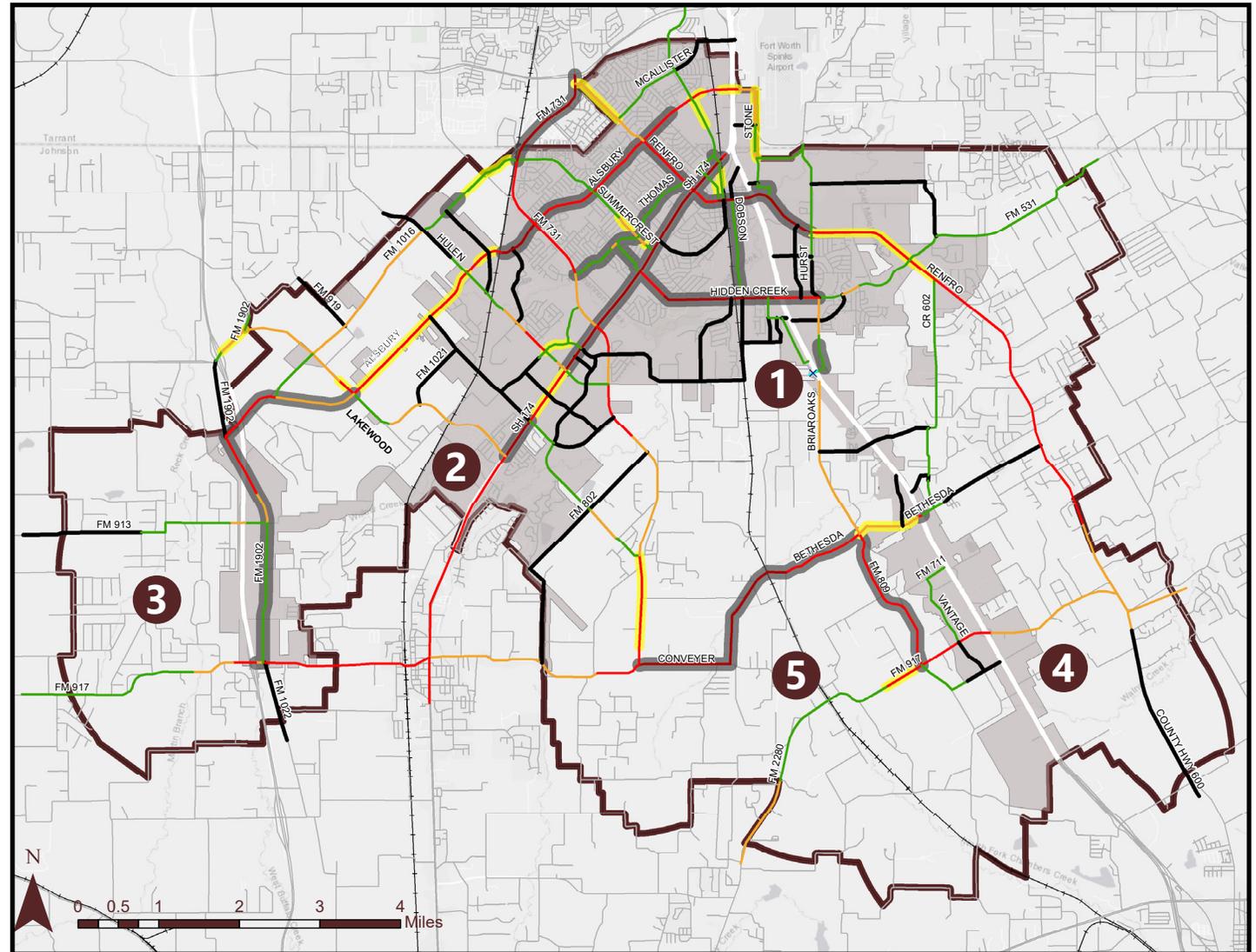
### VOLUME/CAPACITY

- LOS A - C (< 0.65)
- LOS D (0.65 - 0.80)
- LOS E & F (> 0.80)

Burleson City Limits

Planning Area

[Click here to access full scale map](#)



# 2023 THOROUGHFARE PLAN MODELING

## *DESCRIPTION*

The 2023 Mobility Plan model run without the ETJ improvements was reconfigured to include the recommendations made from the last model run. Significant connectivity improvements were seen when incorporating the five changes from the map (page 95) and the table (page 94) from the previous section. The map on page 97 only show roads that are performing under a LOS D, which include SH 174/Wilshire Boulevard, Hillside Road, a portion of Hidden Creek Parkway, and a small segment of Renfro Street in Old Town.

SH 174/Wilshire Boulevard will still experience significant delays from IH-35 to Lakewood Drive. However, this is expected due to high traffic volume and regional significance to the City's ETJ and surrounding cities, including Joshua and Cleburne. It will be necessary to coordinate with these neighboring communities, as well as regional, county, and state-wide opportunities to identify funding for future improvements in order to maintain high mobility in this region. Other considerations could be reviewed in the future to reduce congestion on SH 174/Wilshire Boulevard such as transit. These options could be explored as population in Burleson continues to grow and congestion increases.

Overall congestion will be reduced if Hulen Street (from FM 731/John Jones Drive to IH-35) is constructed as a critical east-west connection for Burleson. This connectivity improvement will allow more options for drivers trying to reach the east side of Burleson. It also improves the overall LOS for Hidden Creek Parkway and Renfro Street. If the Hulen Street project is not constructed, then Hidden Creek Parkway will operate below an acceptable LOS in the build out scenario. Hulen Street is expected to experience more than 40,000 cars on an average day.

Overall, the Burleson 2023 Thoroughfare Plan will reduce congestion and improve connectivity throughout the City. It is recommended that this thoroughfare plan be adopted, and is shown on the following page.

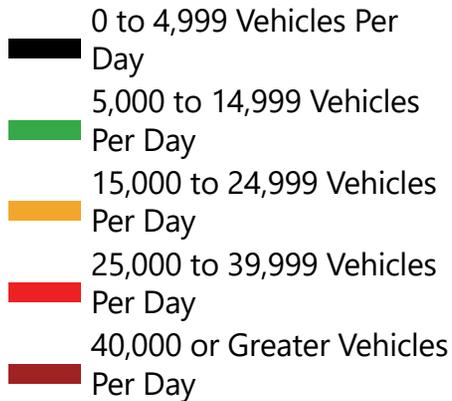
A comparison between the 2015 MTP and the 2023 TP was done, to show the level of performance on the roadway network within the City limits and ETJ. However, this comparison might be misleading because, as it seems, the 2023 model looks as if it is not performing as well as the 2015 model. Most of the roadway connections in the Burleson ETJ were removed in the 2023 model, so comparing the two side-by-side might not be an informative analysis.

While the vehicle miles traveled (VMT) of the 2023 Thoroughfare Plan increased by 15% from the 2015 Master Thoroughfare Plan, the vehicle hours traveled (VHT) only increased by 5%; showing that the 2023 TP is an improvement from the 2015 MTP. In addition, the average travel speed has increased by roughly 5%, also showing that the 2023 TP provides more free flowing moving throughout the study area.

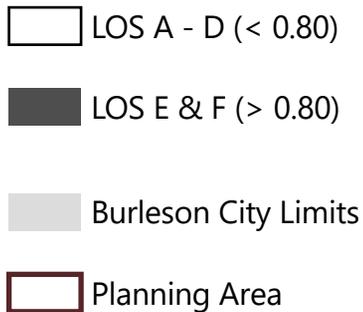
# 2023 THOROUGHFARE PLAN BUILD OUT MODELING

## LEGEND

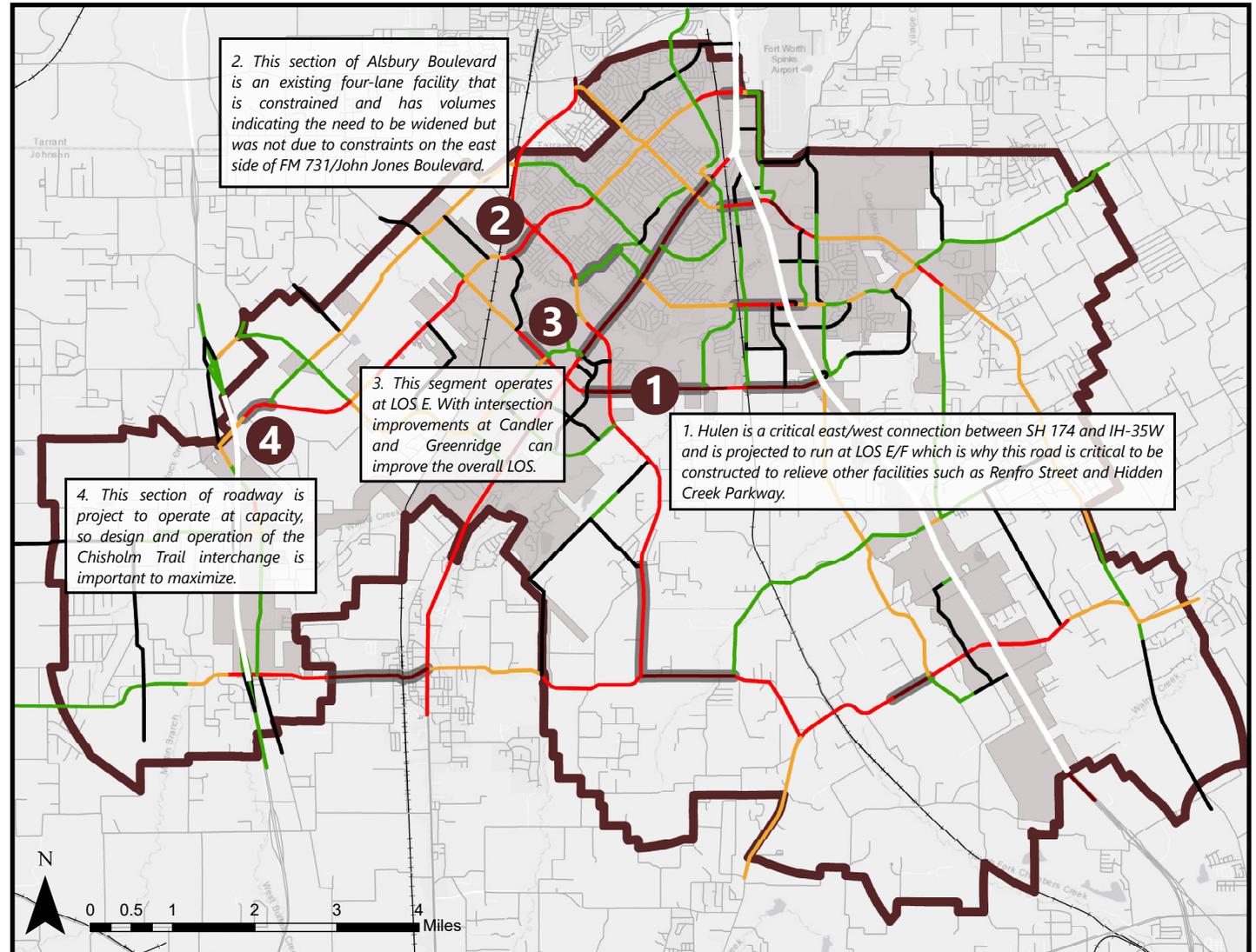
### DAILY VOLUMES



### VOLUME/CAPACITY



[Click here to access full scale map](#)



# APPENDIX C

## Alignment Evaluations

**Table 21. 2023 Alignment Evaluations**

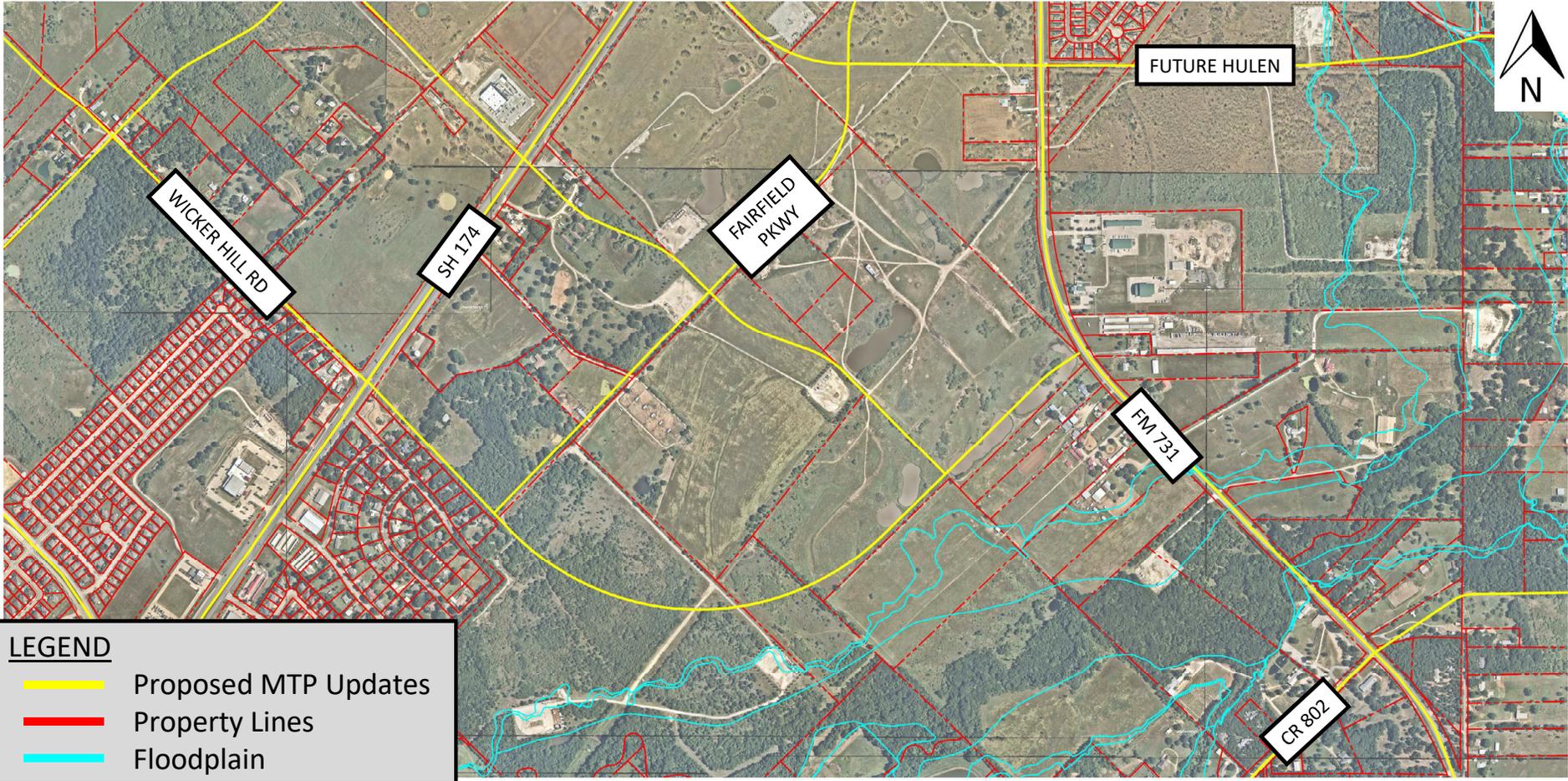
Segment	Roadway	Limits	Alignment Goal
1	Lakewood Drive	From CR 1016 to Alsbury Boulevard	This alignment was evaluated to potentially connect Lakewood Drive to CR 914. A roundabout was included at CR 1021 to provide for an alternative route along the existing roadways until this connection can occur. It is projected that the existing roads can support the traffic in the near-term.
2	Wicker Hill Road	SH 174/Willshire Boulevard to FM 731/John Jones Drive	Wicker Hill's alignment was to provide a connection between SH 174 and FM 731 considering future development as well as the removal of a connection to CR 802.
3	Greenridge Drive	From Hulen Street to Lakewood Drive	A Greenridge Drive alignment was a considered between Hulen Street and Lakewood Drive considering future development.
4	Hidden Creek Parkway	From Renfro Street to Houston Street	This alignment will connect the intersection of Houston Street and Brooks Road to Hidden Creek Parkway and Renfro Street.
5	Alsbury Boulevard	From FM 731/John Jones Drive to Alsbury Court	Alsbury Boulevard east of John Jones Drive/FM 731 is identified as a critical bottleneck. This alignment looks at the addition of medians to enhance capacity and improve safety along the corridor. This enhancement would also allow for the installation of future signals along Alsbury Boulevard at future median openings that currently do not allow for a signal.
6	Hulen Street	From Dobson Street to Hidden Creek Parkway/CR 602	This alignment evaluated the potential connection of Hulen Street from SH 174 across IH-35W to enhance east/west mobility through the area. The purpose of this alignment evaluation was to coordinate with TxDOT on ongoing IH-35W schematics.
7	Hulen Bridge	BNSF Bridge Crossing	The Hulen Bridge alignment was created to understand the impact of building a new bridge across the BNSF railroad and the impact on adjacent land.



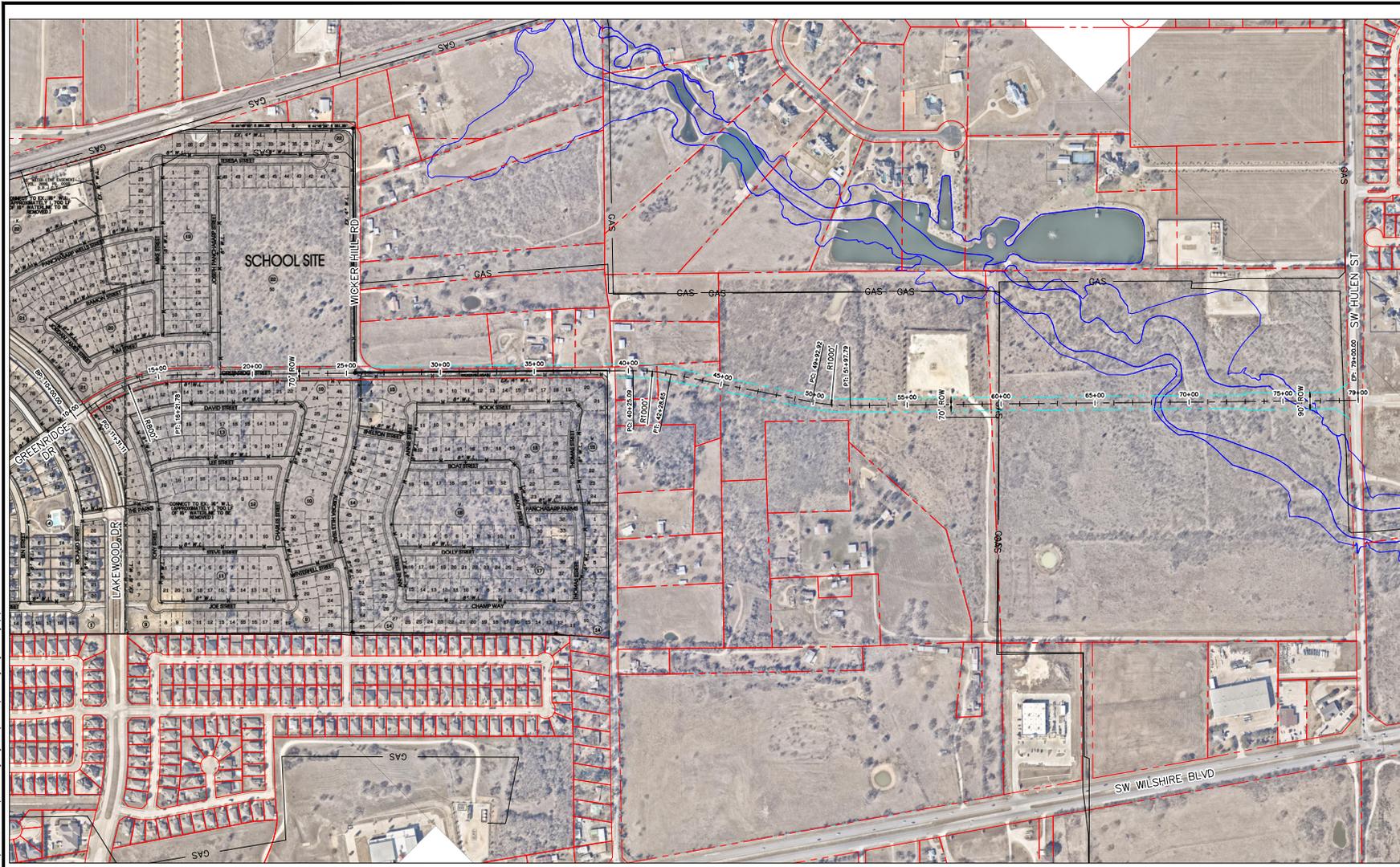


# WICKER HILL ROAD

## Future Wicker Hill Road – SH 174 to FM 731



# GREENRIDGE DRIVE

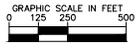


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THE CITY OF  
**BURLESON**  
 TEXAS

### LEGEND

- EX RIGHT OF WAY
- PROP RIGHT OF WAY
- GAS
- FLOODPLAIN

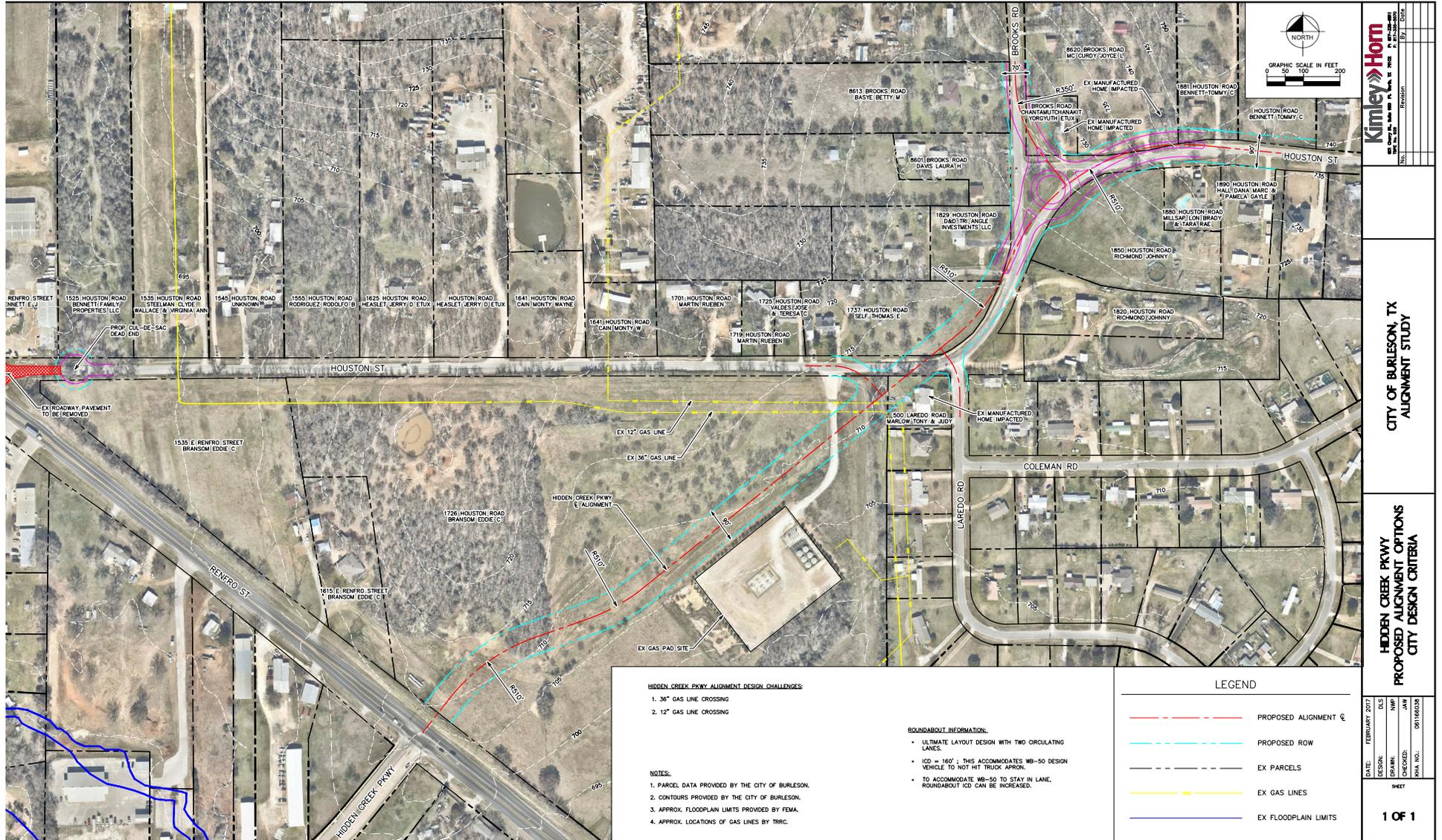


NOTES:  
 1. ALL PROPOSED DESIGN HAS BEEN DONE FOR A 45 MPH DESIGN SPEED.

<b>Kimley-Horn</b>				
800 GENTRY ST., SUITE 200 PL. BURLESON, TX 79402 TEL: 817-330-0811 FAX: 817-330-0812 WWW.KIMLEY-HORN.COM	PROJECT NO. 17-2022 SHEET NO. 102	ROADWAY DATE	DATE	DATE
<b>CITY OF BURLESON, TX GREENRIDGE ALIGNMENT</b>				
<b>GREENRIDGE DRIVE ALIGNMENT OPTIONS</b>				
DATE: JUNE 2022	DESIGN: DLS	DRAWING: MTR	CHECKED: DLS	RHA NO.:
SHEET				
<b>1 OF 2</b>				



# HIDDEN CREEK PARKWAY



**HIDDEN CREEK PKWY ALIGNMENT DESIGN CHALLENGES:**

1. 36" GAS LINE CROSSING
2. 12" GAS LINE CROSSING

**NOTES:**

1. PARCEL DATA PROVIDED BY THE CITY OF BURLESON.
2. CONTOURS PROVIDED BY THE CITY OF BURLESON.
3. APPROX. FLOODPLAIN LIMITS PROVIDED BY FEMA.
4. APPROX. LOCATIONS OF GAS LINES BY TRRC.

**BOUNDARY INFORMATION:**

- ULTIMATE LAYOUT DESIGN WITH TWO CIRCULATING LANES.
- ICD = 100' : THIS ACCOMMODATES WB-50 DESIGN VEHICLE TO NOT HIT TRUCK APRON.
- TO ACCOMMODATE WB-50 TO STAY IN LANE, ROUNDABOUT ICD CAN BE INCREASED.

**LEGEND**

- PROPOSED ALIGNMENT &
- PROPOSED ROW
- EX PARCELS
- EX GAS LINES
- EX FLOODPLAIN LIMITS

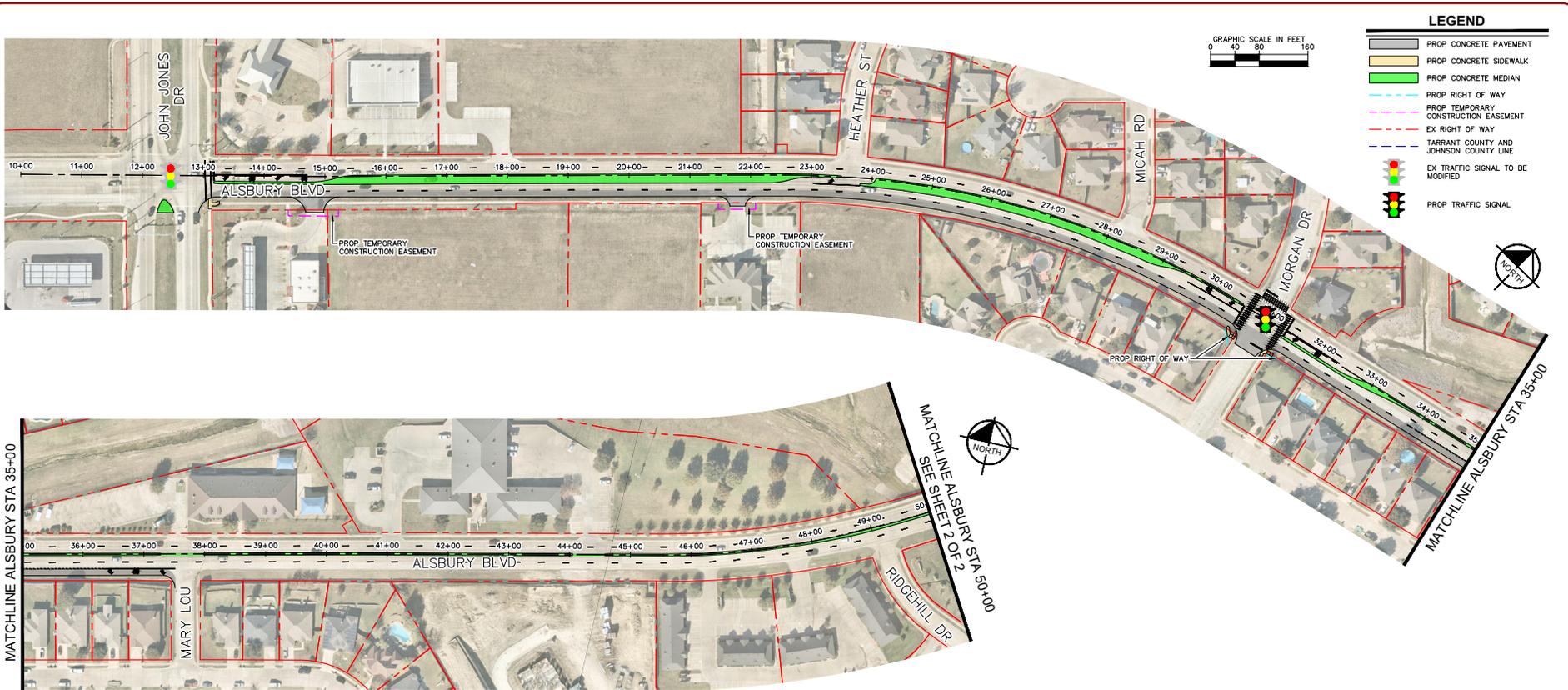
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**CITY OF BURLESON, TX  
 ALIGNMENT STUDY**

**HIDDEN CREEK PKWY  
 PROPOSED ALIGNMENT OPTIONS  
 CITY DESIGN CRITERIA**

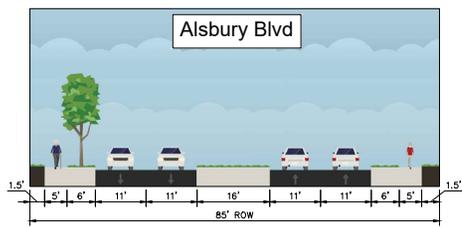
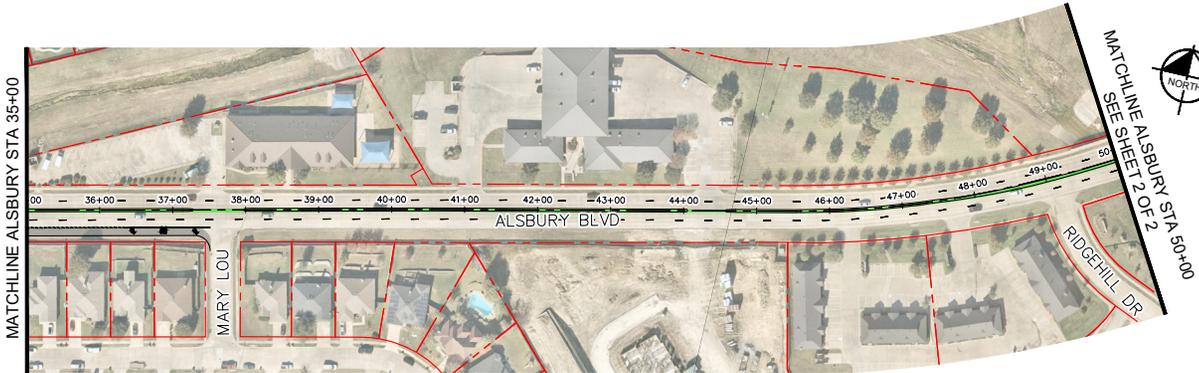
DATE:	FEBRUARY 2017
DESIGN:	DLS
DRAWN:	NMP
CHECKED:	JAV
INVA. NO.:	001100030
SHEET	<b>1 OF 1</b>

# ALSBURY BOULEVARD

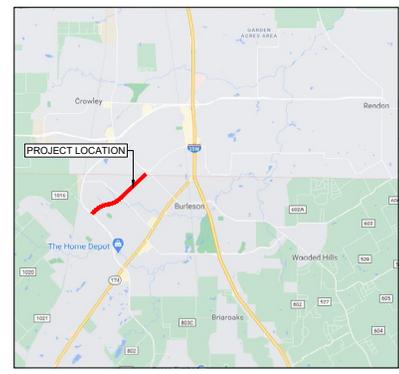


**LEGEND**

	PROP CONCRETE PAVEMENT
	PROP CONCRETE SIDEWALK
	PROP CONCRETE MEDIAN
	PROP RIGHT OF WAY
	PROP TEMPORARY CONSTRUCTION EASEMENT
	EX RIGHT OF WAY
	TARRANT COUNTY AND JOHNSON COUNTY LINE
	EX TRAFFIC SIGNAL TO BE MODIFIED
	PROP TRAFFIC SIGNAL



**ALSBURY BOULEVARD - FROM JOHN JONES DRIVE TO ALSBURY COURT - CONCEPTUAL LAYOUT**  
**SHEET 1 OF 2**



- NOTES:**
1. ALL PROPOSED DESIGN HAS BEEN EVALUATED AT A CONCEPTUAL LEVEL TO ILLUSTRATE THE INTENDED PROPOSED CROSS SECTION AND/OR INTERSECTION IMPROVEMENTS.
  2. A DETAILED SURVEY AND FURTHER ENGINEERING ANALYSIS WILL BE PERFORMED DURING THE PRELIMINARY AND FINAL DESIGN STAGE.
  3. THE EXISTING AND PROPOSED RIGHT-OF-WAY LINES ARE APPROXIMATE. THE NEEDED RIGHT-OF-WAY WILL BE FURTHER EVALUATED DURING THE PRELIMINARY AND FINAL DESIGN STAGE. THE ENGINEER WILL ANALYZE THE FEASIBILITY TO REDUCE OR AVOID IMPACTS TO ADJACENT PROPERTIES.

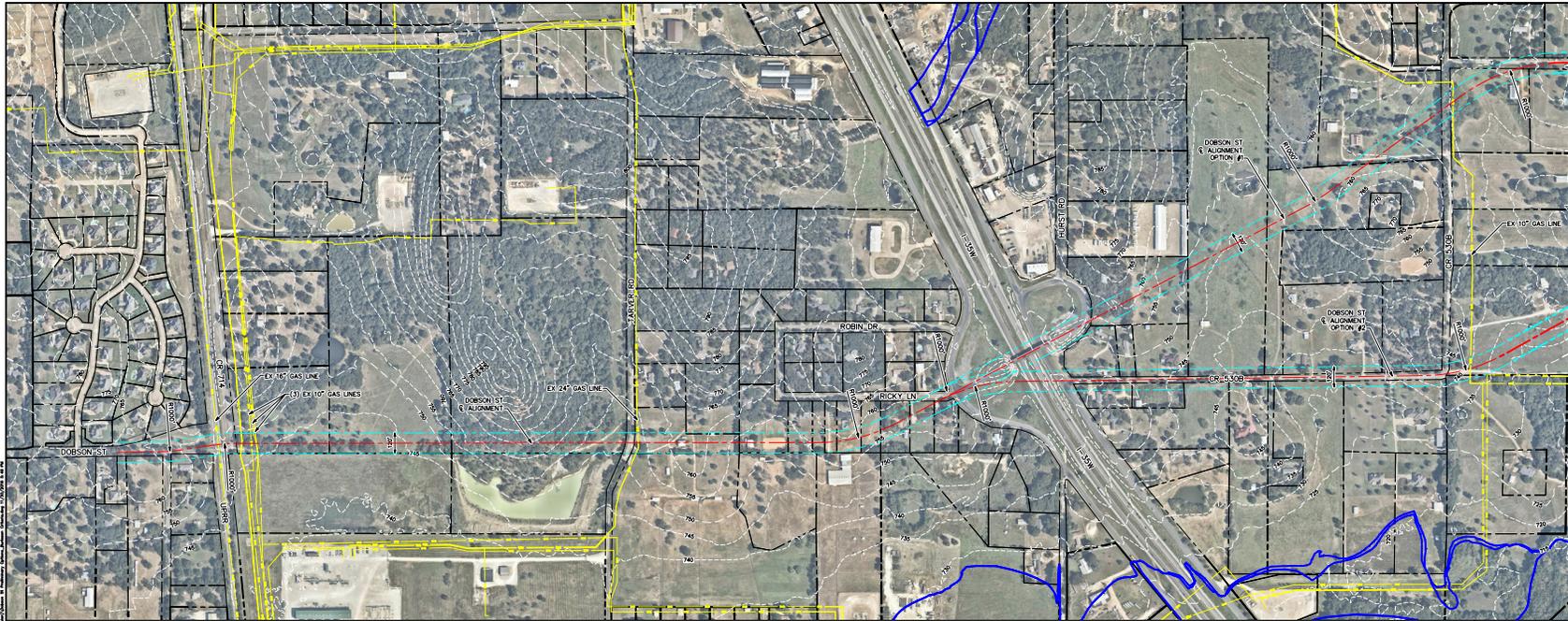




**ALSBURY BOULEVARD - FROM JOHN JONES DRIVE TO ALSBURY COURT - CONCEPTUAL LAYOUT**  
**SHEET 2 OF 2**







MATCHLINE

**Kimley-Horn**  
INCORPORATED

PROJECT:	CITY OF BURLESON, TX ALIGNMENT STUDY	DATE:	11/15/2011
CLIENT:	CITY OF BURLESON, TX	DESIGNED BY:	11/15/2011
DRAWN BY:		CHECKED BY:	
DATE PLOTTED:		DATE PLOTTED:	

**CITY OF BURLESON, TX  
ALIGNMENT STUDY**

**DOBSON STREET (ALLEN)  
PROPOSED ALIGNMENT OPTIONS  
CITY DESIGN CRITERIA**

DATE:	NOVEMBER 2011	DATE:	11/15/2011
DATE:		DATE:	
DATE:		DATE:	
DATE:		DATE:	

**DOBSON ST ALIGNMENT DESIGN CHALLENGES**

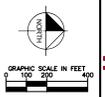
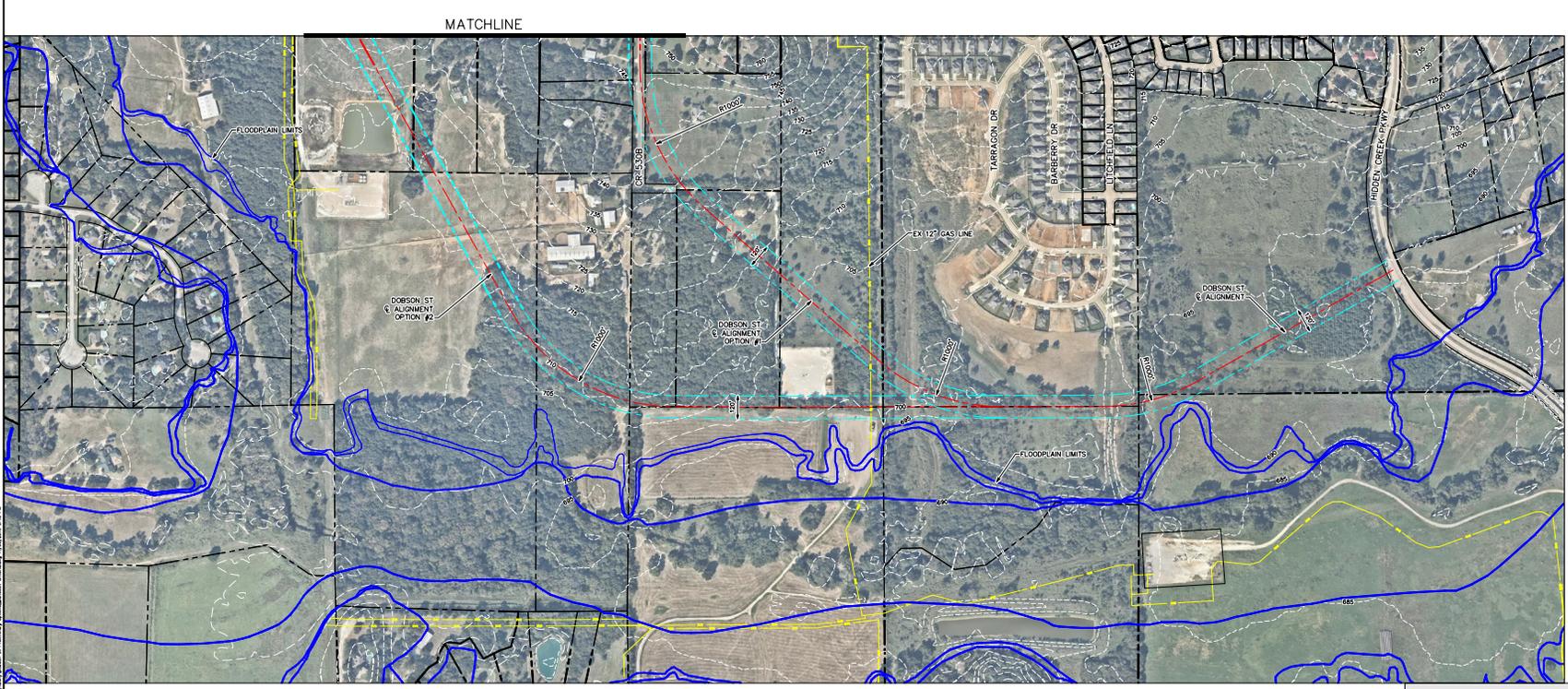
1. MULTIPLE 10", 16", & 24" GAS LINE CROSSINGS
2. UNION PACIFIC RAILROAD CROSSING
3. GRADE SEPARATION IMPROVEMENTS REQUIRED FOR INTERSTATE CROSSING

**NOTES:**

1. PARCEL DATA PROVIDED BY THE CITY OF BURLESON.
2. CONTOURS PROVIDED BY THE CITY OF BURLESON.
3. APPROX. FLOODPLAIN LIMITS PROVIDED BY FEMA.
4. APPROX. LOCATIONS OF GAS LINES BY TRAC.

**LEGEND**

	PROPOSED ALIGNMENT #1
	PROPOSED ROW
	EX PARCELS
	EX GAS LINES
	EX FLOODPLAIN LIMITS



<b>Kimley-Horn</b>	
DATE: _____	BY: _____
DRAWN: _____	CHECKED: _____
DESIGN: _____	APPROVED: _____

**CITY OF BURLESON, TX  
ALIGNMENT STUDY**

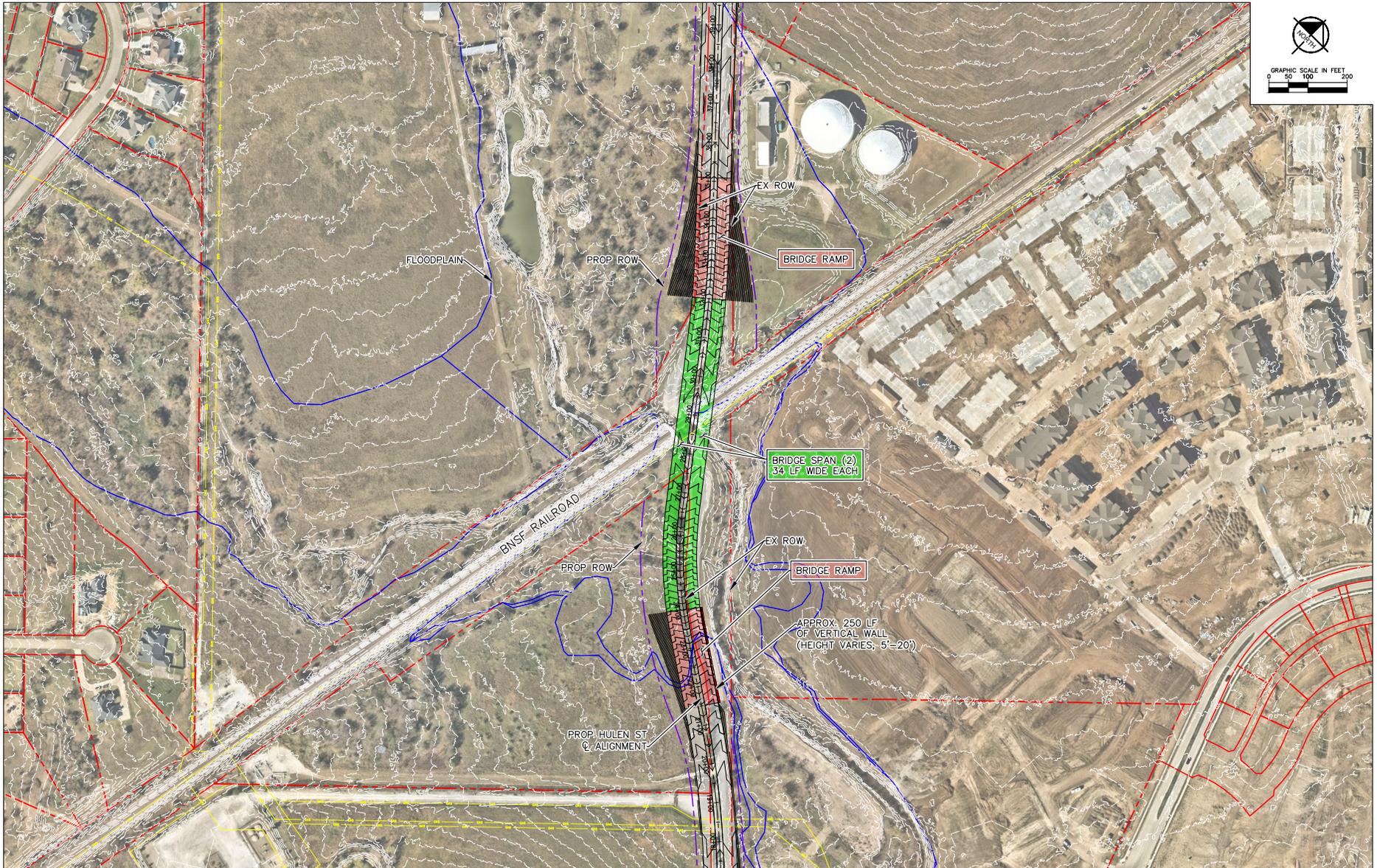
**DOBSON STREET (ALLEN)  
PROPOSED ALIGNMENT OPTIONS  
CITY DESIGN CRITERIA**

DATE:	NOVEMBER 2024
DESIGN:	DLS
DRAWN:	HW
CHECKED:	JAN
DATE:	01/16/2025

- DOBSON ST ALIGNMENT DESIGN CHALLENGES:**
- MULTIPLE 10", 16", & 24" GAS LINE CROSSINGS
  - UNION PACIFIC RAILROAD CROSSING
  - GRADE SEPARATION IMPROVEMENTS REQUIRED FOR INTERSTATE CROSSING.
- NOTES:**
- PARCEL DATA PROVIDED BY THE CITY OF BURLESON.
  - CONTOURS PROVIDED BY THE CITY OF BURLESON.
  - APPROX. FLOODPLAIN LIMITS PROVIDED BY FEMA.
  - APPROX. LOCATIONS OF GAS LINES BY TRIC.

LEGEND	
	PROPOSED ALIGNMENT C
	PROPOSED ROW
	EX PARCELS
	EX GAS LINES
	EX FLOODPLAIN LIMITS

# HULEN STREET BRIDGE



BURLESON - HULEN STREET - CONCEPTUAL BRIDGE SPAN LAYOUT - 12/2020



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CALVIN PLAZA  
N, TEXAS

BURLESON

124  
VISITORS  
CENTER  
&  
MUSEUM

OPEN  
FREE!  
MUSEUM  
TROLLEY  
TOURS



Kimley & Horn





## Population Density

### Legend

#### Population Per Square Mile

- 0 - 400
- 401 - 1,500
- 1,501 - 3,500
- 3,501 - 5,500
- 5,500 +

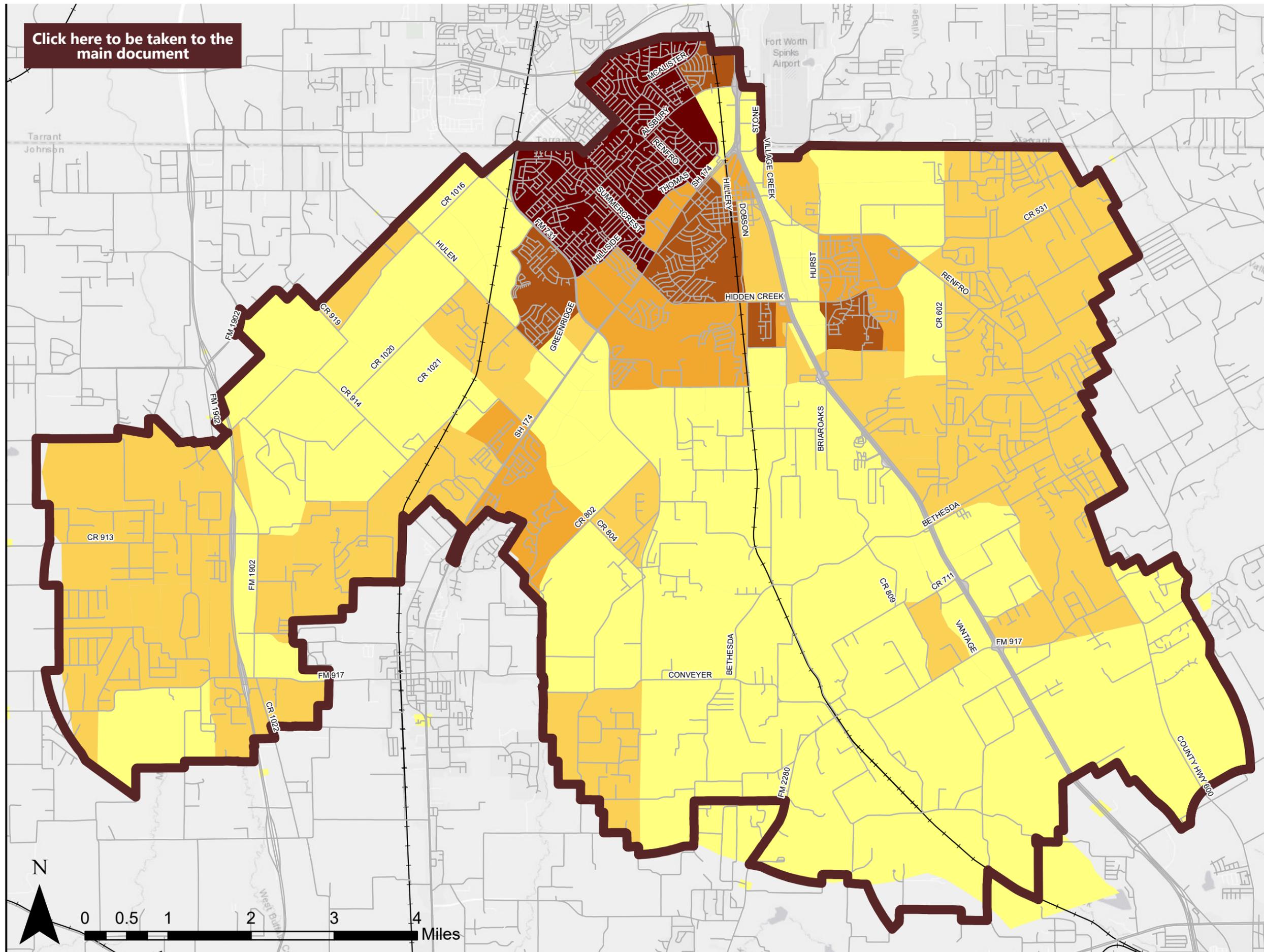
- Planning Area
- Streets
- Railroads
- Burleson City Limits
- Burleson ETJ

**BIX**

**MOVES**

Kimley»Horn

[Click here to be taken to the main document](#)



# Changes to the 2015 Master Thoroughfare Plan

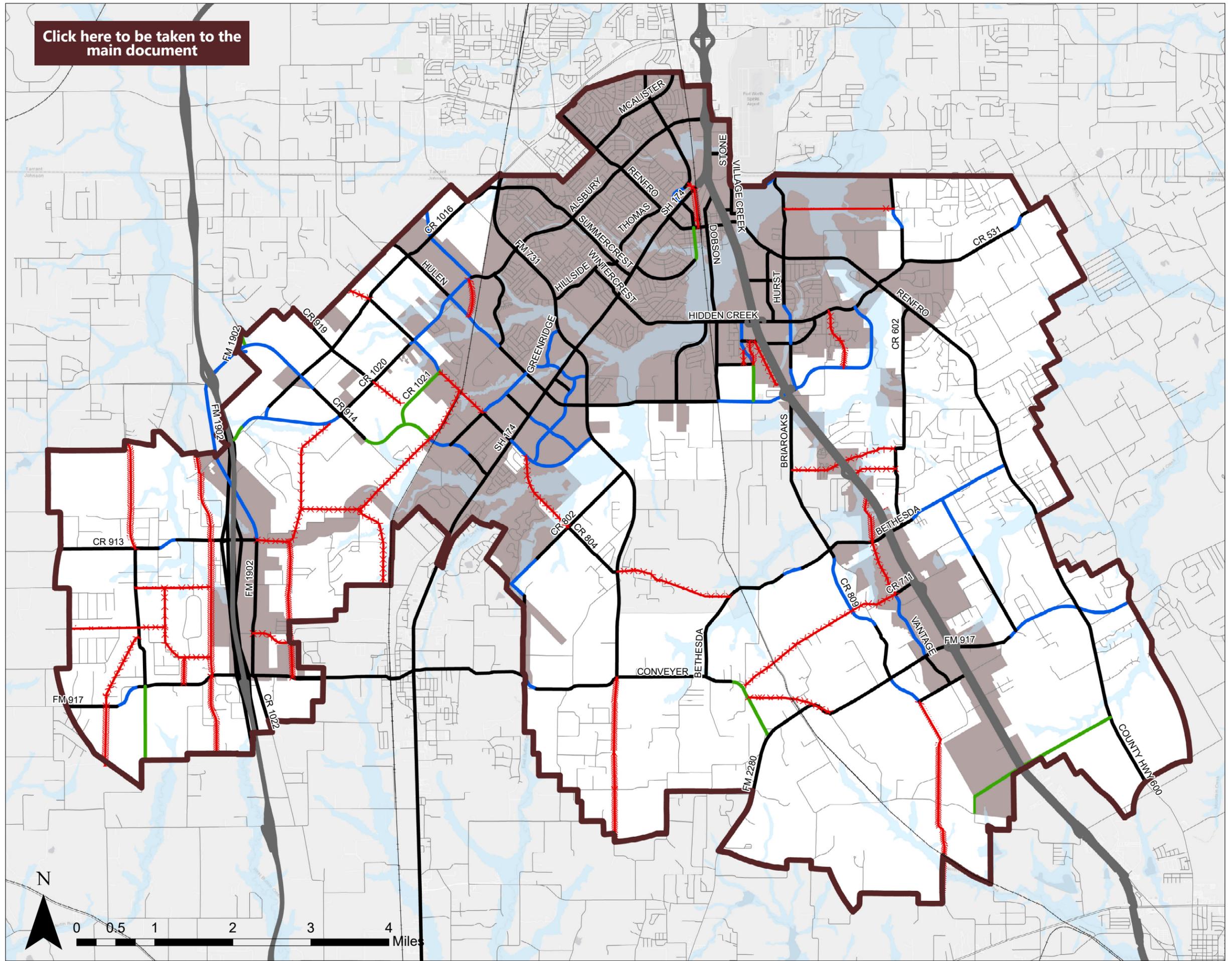


## Legend

### 2023 Thoroughfare Plan Changes

- 2015 MMP Road
- New
- Realignment
- Removed
- Floodplains
- Planning Area
- Burleson City Limits
- Burleson ETJ

[Click here to be taken to the main document](#)











# 2023 Bicycle and Trails Plan



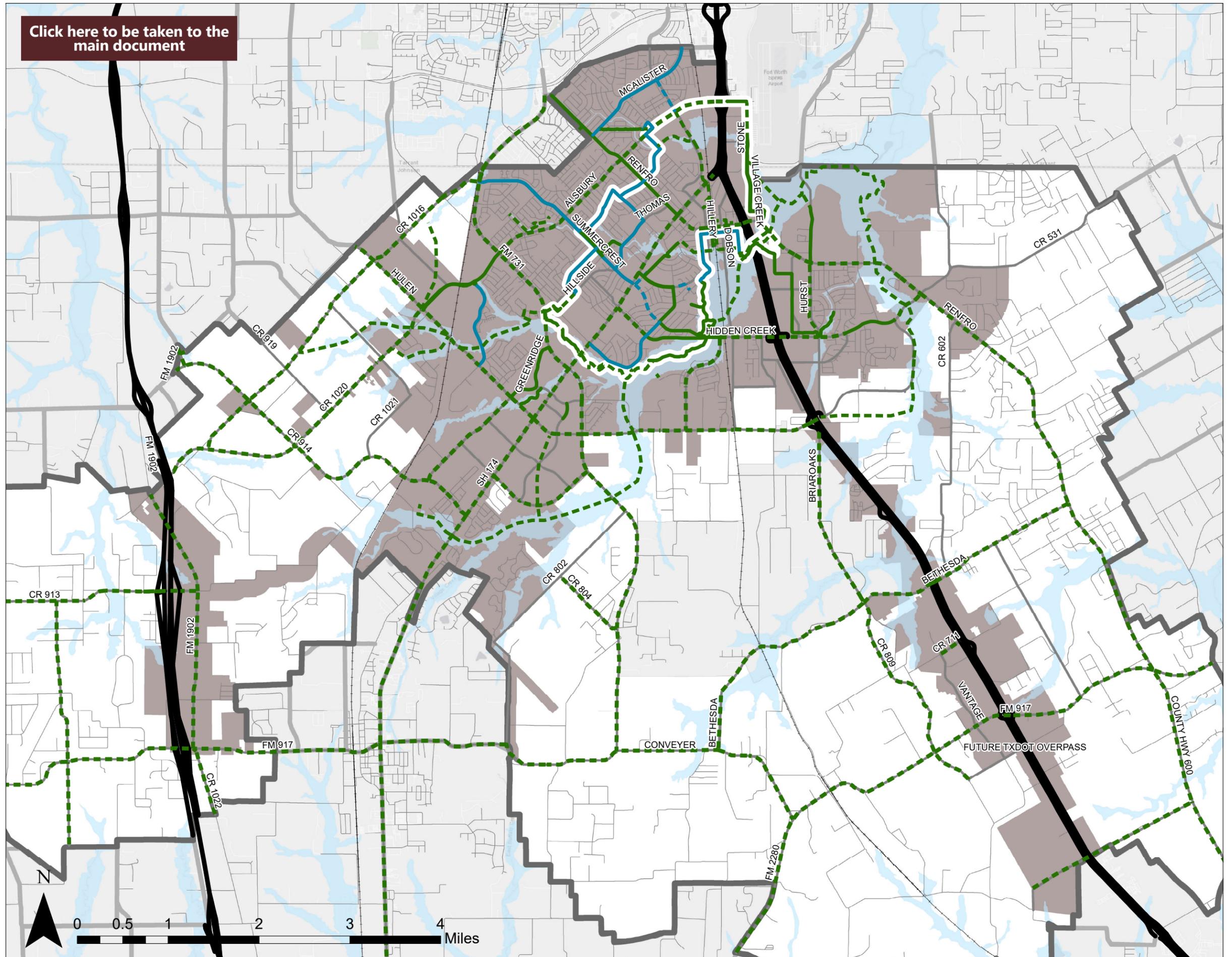
# BIX MOVES

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## Legend

- On-Street Bicycle Facility
- Shared-Use Path Facility
- Existing Facilities
- Proposed Facilities
- 10-Mile Loop Highlight
- Planning Area
- Streets
- Rail
- Burleson City Limits
- Burleson ETJ
- Floodplains

[Click here to be taken to the main document](#)



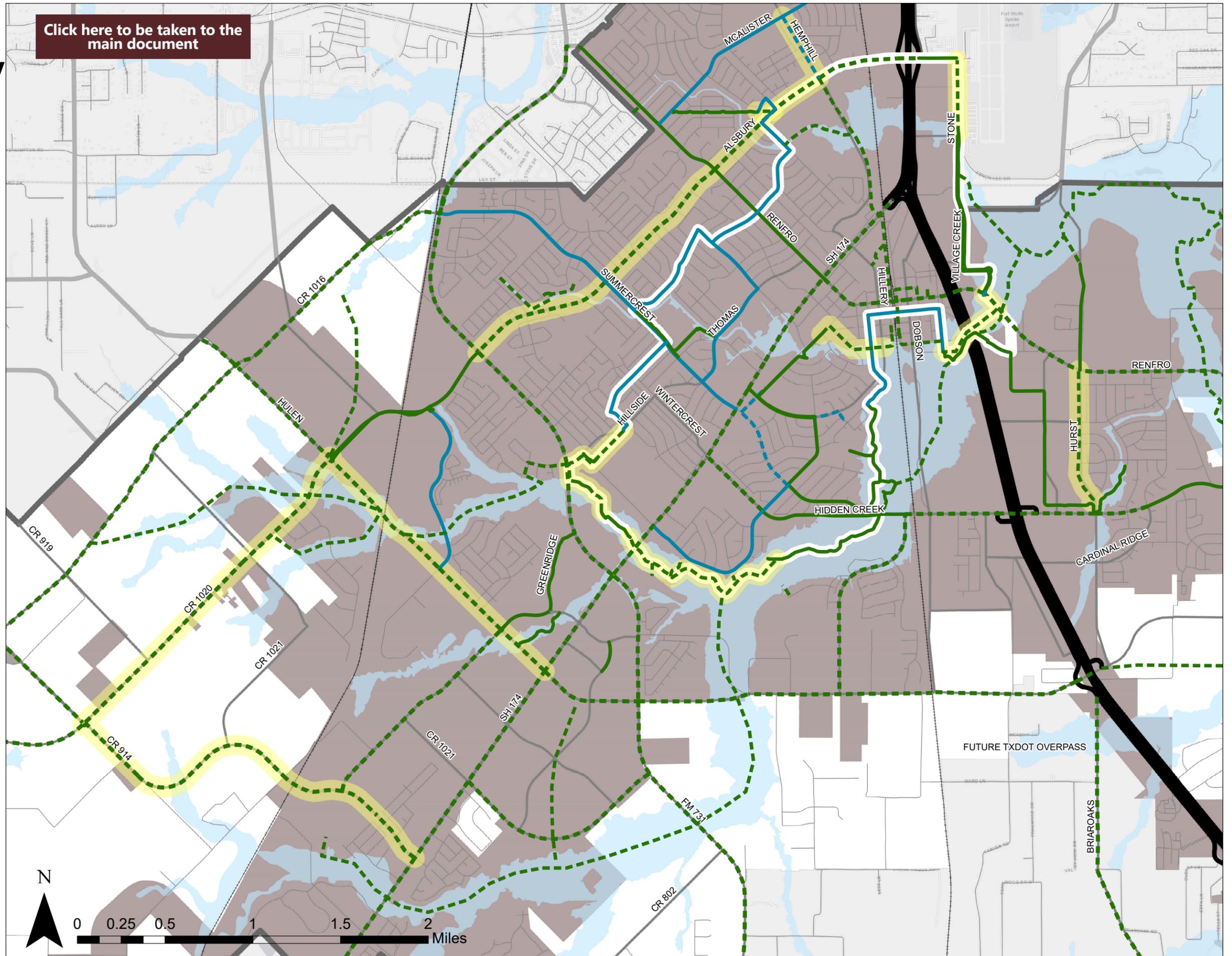
# Burleson 2022 Bicycle Priority Projects



[Click here to be taken to the main document](#)

## Legend

- Existing On-Street
- Proposed On-Street
- Existing Shared-Use Path
- Proposed Shared-Use Path
- Priority Project
- 10-Mile Loop Highlight
- Planning Area
- Streets
- Rail
- Burleson City Limits
- Burleson ETJ
- Floodplains



# Burleson Priority Projects

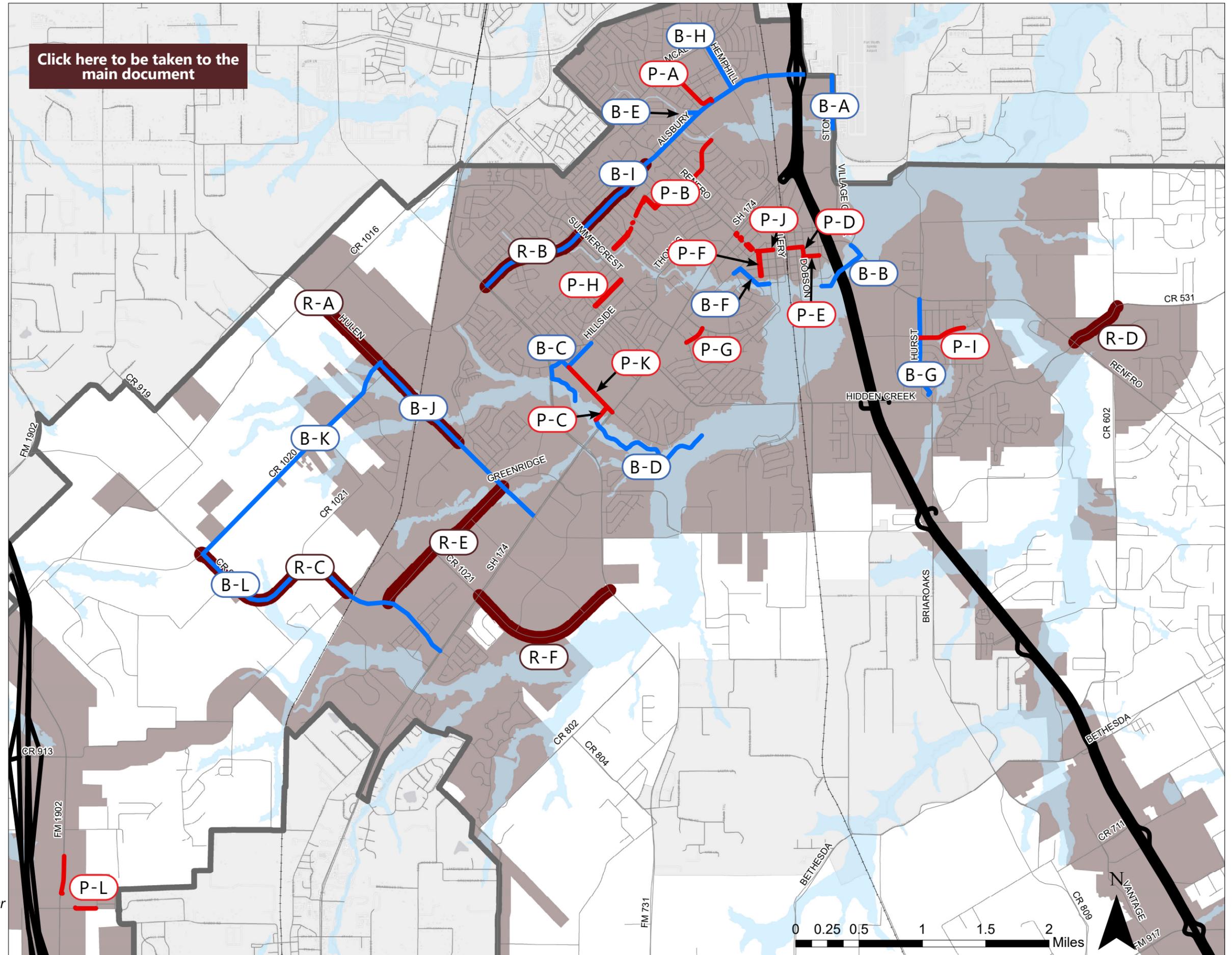


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## Legend

- Priority Pedestrian Projects
- Priority Bicycle and Trail Projects
- Priority Roadway Projects
- Planning Area
- Streets
- Rail
- Burleson City Limits
- Burleson ETJ
- Floodplains

*P = Pedestrian Projects  
 B = Bicycle and Trail Projects  
 R = Roadway Projects  
 Project letters are provided after the project type as identified in previous chapters.*



[Click here to be taken to the main document](#)

**Existing Conditions  
Modeling Results**

**Legend**

-  0 to 4,999 Vehicles Per Day
-  5,000 to 14,999 Vehicles Per Day
-  15,000 to 24,999 Vehicles Per Day
-  25,000 to 39,999 Vehicles Per Day
-  40,000 or Greater Vehicles Per Day

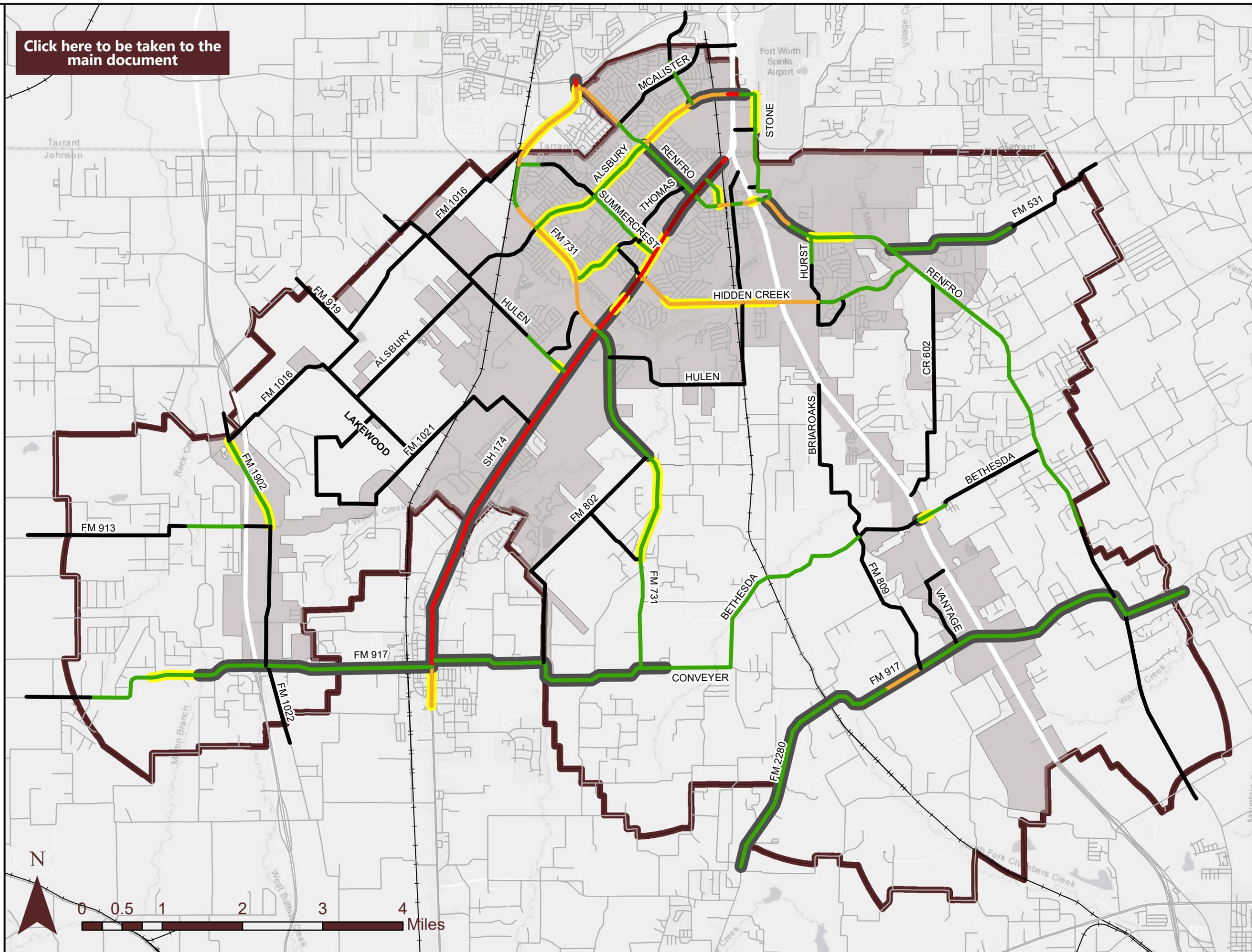
**Volume/Capacity**

- V\_C**
-  LOS A-C
  -  LOS D
  -  LOS E&F
  -  Streets
  -  Railroads
  -  Burleson City Limits
  -  Burleson ETJ
  -  Planning Area

**BIX**

**MOVES**

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**Adopted 2015 MTP  
Build Out Modeling  
Results**

**Legend**

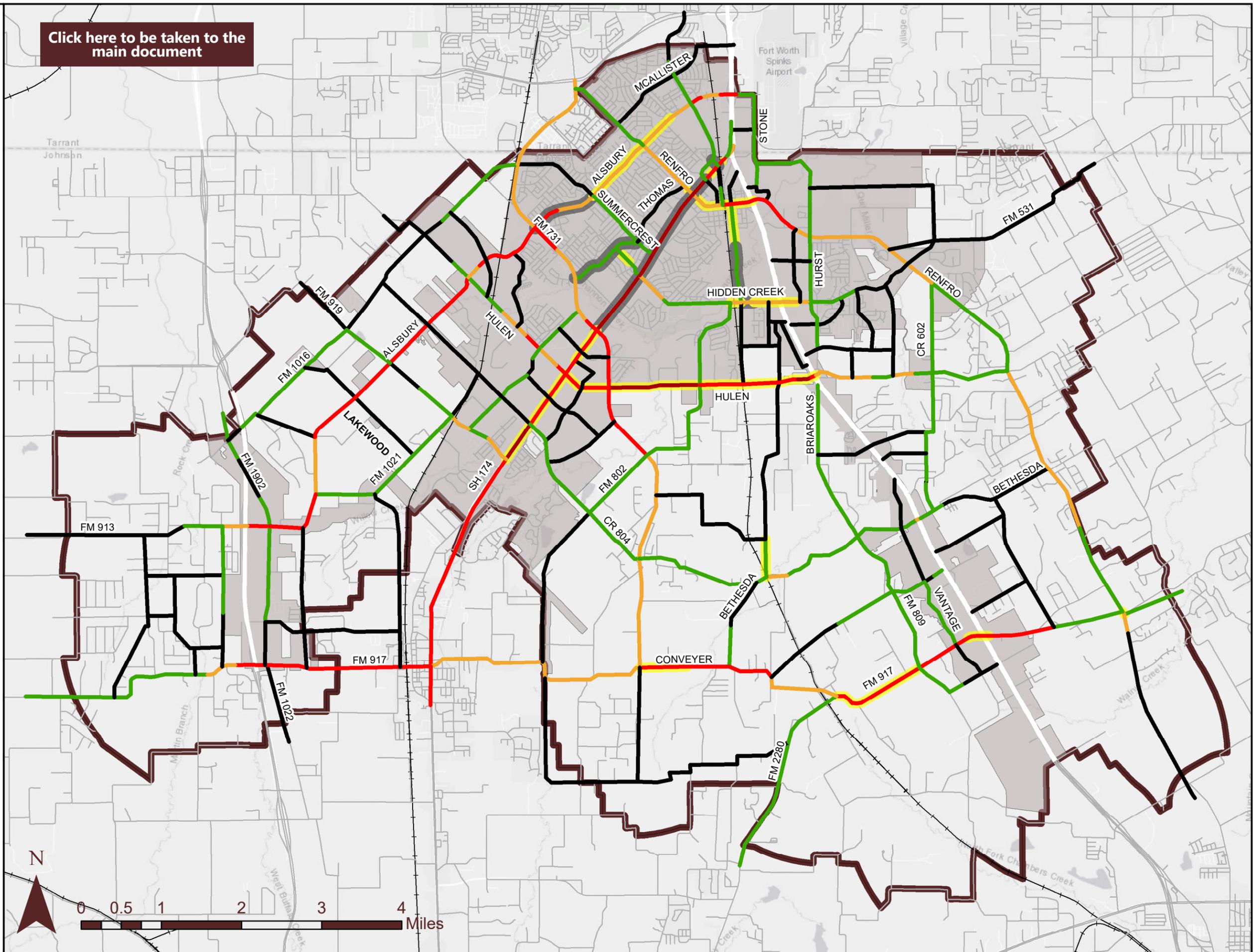
**Daily Volumes**

- 0 to 4,999 Vehicles Per Day
- 5,000 to 14,999 Vehicles Per Day
- 15,000 to 24,999 Vehicles Per Day
- 25,000 to 39,999 Vehicles Per Day
- 40,000 or Greater Vehicles Per Day

**LOS**

- LOS A - C
- LOS D
- LOS E&F
- Highways
- Streets
- Railroads
- Burleson City Limits
- Burleson ETJ
- Planning Area

[Click here to be taken to the main document](#)





**2022 TP  
Build Out**

**Legend**

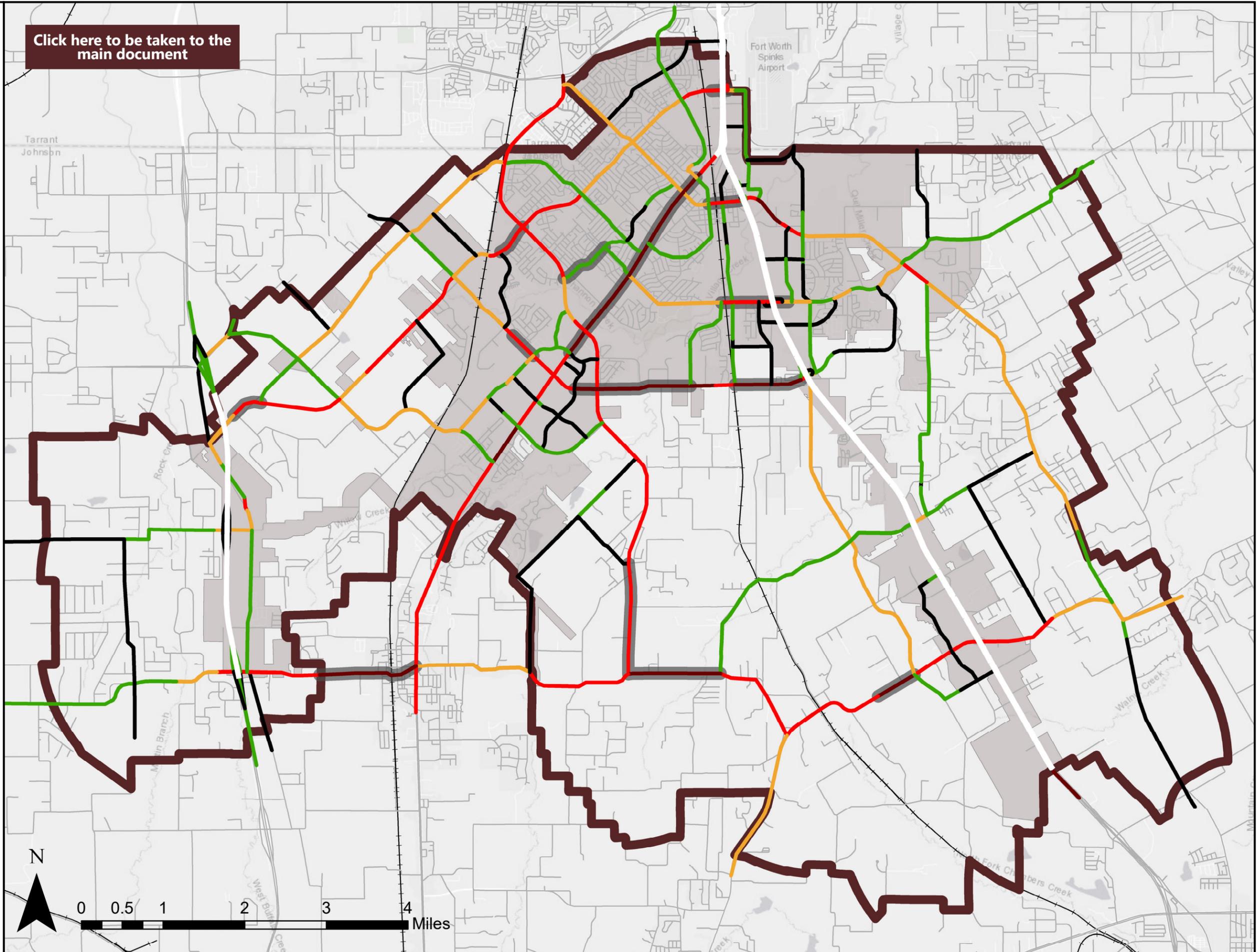
**Daily Volumes**

- 0 to 4,999 Vehicles Per Day
- 5,000 to 14,999 Vehicles Per Day
- 15,000 to 24,999 Vehicles Per Day
- 25,000 to 39,999 Vehicles Per Day
- 40,000 or Greater Vehicles Per Day

**LOS**

- LOS A - D
- LOS E & F
- Planning Area
- Streets
- Railroads
- Burleson City Limits
- Burleson ETJ

[Click here to be taken to the main document](#)



**BIX**

**MOVES**

Kimley»Horn