

CITY OF DRIPPING SPRINGS

# TRANSPORTATION MASTER PLAN (3)

2021



**DRAFT** 

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# INTRODUCTION

#### **OVERVIEW**

Dripping Springs is experiencing significant growth with many new developments planned for the next ten years and beyond. This rapid growth is creating transportation challenges within the community. Mobility within Dripping Springs is highly dependent on state and county transportation infrastructure. HDR Engineering was retained to develop the Dripping Springs Transportation Master Plan with a goal to identify and prioritize mobility improvements within the City Limits and extraterritorial jurisdiction through the year 2040.

#### **PURPOSE**

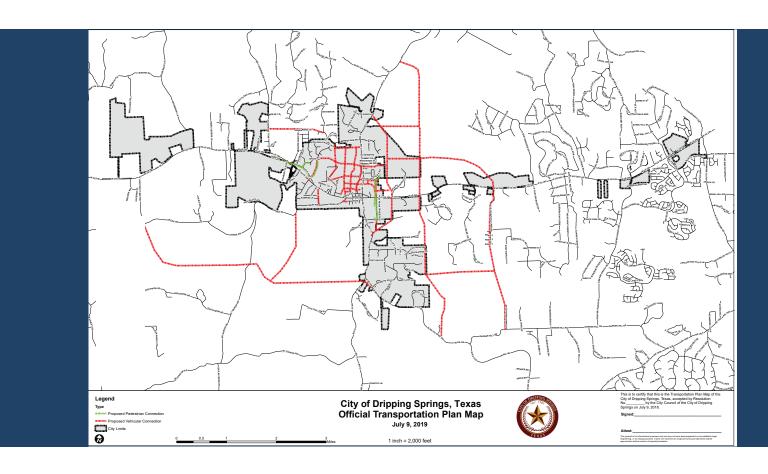
The purpose of the Dripping Springs Transportation Master Plan Update is to identify and prioritize mobility improvements that encourage safe and efficient travel. The City's 2016 Comprehensive Plan defined an infrastructure goal of developing a Mobility Plan: "A Mobility Plan would build on the existing Transportation Plan and Trails Master Plan to provide a holistic approach to addressing transportation needs in and around Dripping Springs. It would explore all options for moving people to include pedestrians, transit users, cyclists, and drivers." This Transportation Master Plan will serve as this Mobility Plan and holistically evaluate transportation needs.





#### PREVIOUS TRANSPORTATION MASTER PLAN

Dripping Springs previously developed a Transportation Plan map, depicting proposed transportation routes within Dripping Springs and the City's extraterritorial jurisdiction. The map is continually updated by the City, and it was most recently amended in 2019. This map is continually updated by the City. This Transportation Master Plan will inform the existing 2019 Master Transportation Plan map and support the recommended routes with a technical evaluation of existing and future conditions. Additional recommendations for enhancing existing facilities and providing multimodal connectivity will be incorporated into the plan. In addition, this Transportation Master Plan document will provide policy guidance and best practices.



#### TRANSPORTATION MASTER PLAN PROCESS

A successful Transportation Master Plan follows a defined process.

This TMP will document each of these steps required to develop a TMP that meets community needs.

#### ✓ Develop Goals.

Define goals that will inform recommendations in the Transportation Master Plan.

#### Document Conditions.

Document existing transportation conditions and inventory infrastructure.

#### Gather Feedback.

Engage the community and incorporate feedback throughout the planning process.

#### Partner with Agencies.

Coordinate planning efforts and partner with other regulatory agencies such as the County and State.

#### Analyze Future Growth.

Use a model to develop a future scenario that reflects the anticipated level of growth.

#### Plan For the Future.

Develop a Thoroughfare Plan and recommendations that meet the future needs of the City.

#### TRANSPORTATION MASTER PLAN GOALS

The following goals were established by the City of Dripping Springs to guide the development of the Transportation Master Plan and recommendations within the City limits and extraterritorial jurisdiction.



Identify deficiencies in the existing transportation network.



Support growth through transportation infrastructure investment.



Build on recommendations from the City's Comprehensive Plan, Hays County Transportation Plan, and TxDOT's Statewide Long-Range Transportation Plan.



Identify opportunities for improved connectivity.



Establish policy that guides developers in planning for a cohesive transportation network.



Adopt a Thoroughfare Plan to identify preliminary alignments and right-of-way needs for future transportation facilities.



Develop a plan that meets future mobility needs.



Encourage safe and efficient travel for all modes of transportation.



Leverage available funds for improving transportation efficiency and safety.





# EXISTING CONDITIONS EVALUATION

# DOCUMENTING EXISTING INFRASTRUCTURE AND ANALYZING TRANSPORTATION OPERATIONS AND SAFETY IS AN IMPORTANT FIRST STEP IN DEVELOPING A TRANSPORTATION MASTER PLAN.

Existing conditions data is analyzed and evaluated to provide the foundation on which to plan and build for the future needs of a community. Developing a Transportation Master Plan is a process that involves many steps.

#### Gather the data

Collect data relevant to the transportation system and needs of the surrounding community to begin analyzing the existing transportation network.



Assess traffic operations, mobility and connectivity for motorized and non-motorized travel.

Identify roadway deficiencies, safety issues and projected employment and population growth.



#### Evaluate the data

Evaluate the data to begin identification of needed improvements throughout the transportation network.

Data is analyzed as a whole to build a complete picture of community needs and to understand how the transportation network is responding to current demand.

#### Several types of data are collected from many sources.



#### Existing transportation network

Existing roadway capacity, 24-hour roadway volumes, multimodal facilities and crash history are all used to assess the roadway network.



#### Intersection operations

Intersection geometry, intersection peak period counts, and traffic signal timing plans provide a basis to evaluate intersection operations at key locations within the City.



#### Future growth rates and demand

Data documenting growth rates within the community and surrounding region is collected.

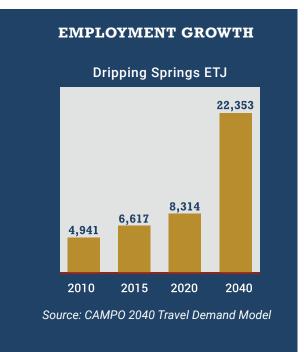
- » Expected future developments in the Dripping Springs area
- » Population data from the Texas State Data Center and U.S.Census Bureau
- » Capital Area Metropolitan Planning Organization (CAMPO)2040 Travel Demand Forecasts

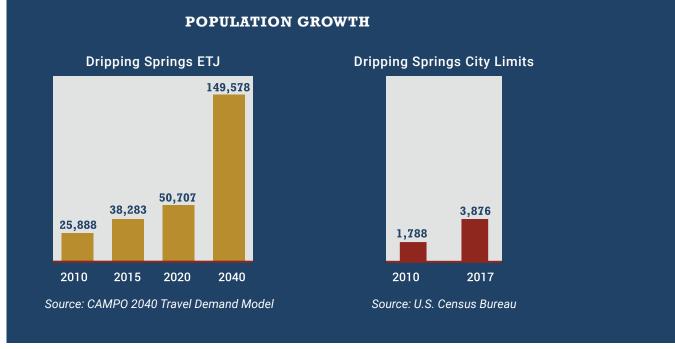
#### **AREA OVERVIEW**

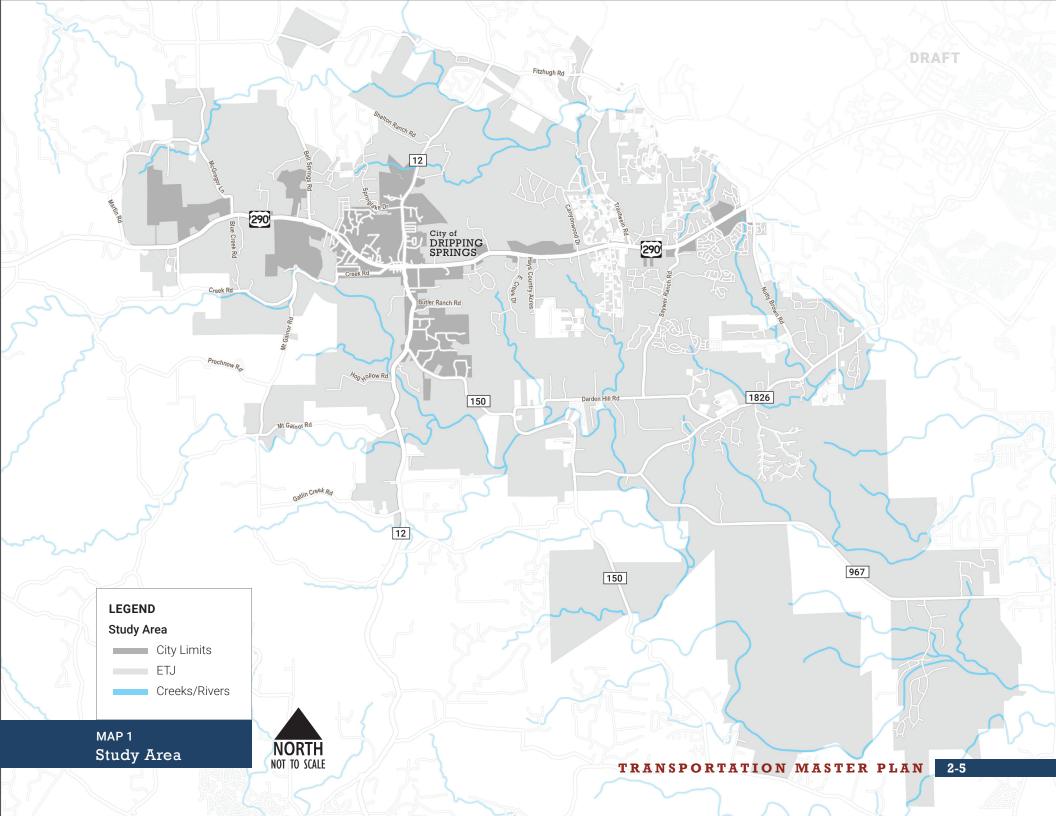
The study area for the Dripping Springs Transportation Master Plan includes the City Limits and its extraterritorial jurisdiction (ETJ).

#### **DEMOGRAPHICS**

Dripping Springs' unique location situated at the outskirts of Austin within the Hill Country allows for ideal access to both urban and natural environments. It has experienced high growth in recent years, with many newly built and proposed residential and commercial developments in the area. Over 40 new developments are planned for Dripping Springs and the surrounding area in the near future.



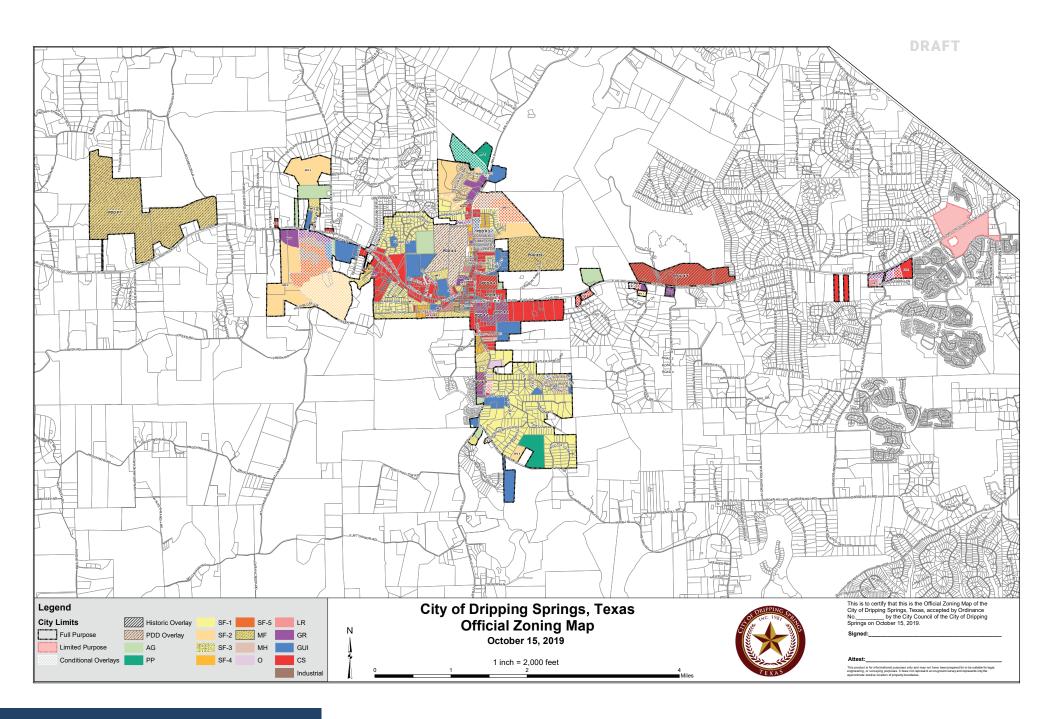




#### LAND USE AND ZONING

Dripping Springs currently includes residential, commercial, and institutional land uses. Commercial land uses are generally concentrated in Downtown Dripping Springs, in the Belterra Development, and along US 290.





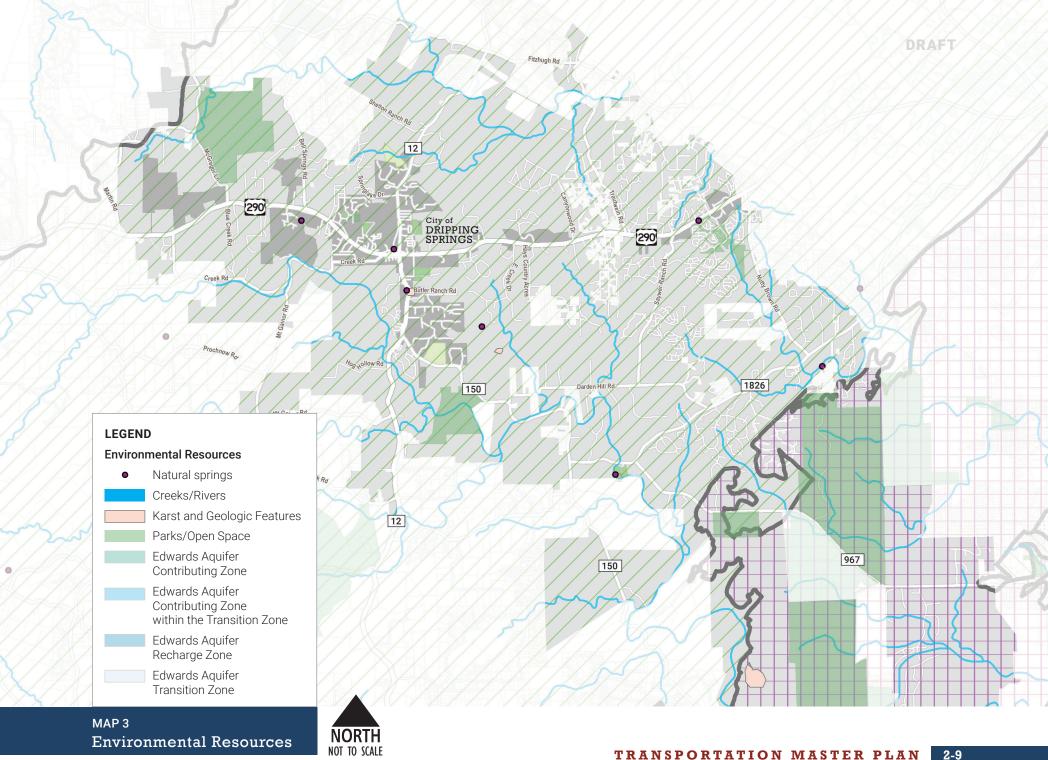
#### **ENVIRONMENTAL RESOURCES**

Impacts to the environment should be analyzed before new infrastructure is built. The Dripping Springs area lies within the Contributing and Recharge Zones of the Edwards Aquifer, an important water source for the Central Texas region. The hilly topography and creeks throughout the area may affect future development and expansion of the transportation network.

Low water crossings occur in some locations where creeks meet roads. Heavy rain can sometimes cause flooding, impacting some exit routes for certain areas of the City. The City's namesake, the Dripping Springs, lies downtown in the heart of the City, and there are other springs located within the ETJ.

Wildlife habitat is abundant through the Texas Hill Country and potential impacts will be evaluated as Dripping Springs implements the Transportation Plan.







#### **EXISTING ROADWAY NETWORK**

Roadway functional classifications describe the interaction and dynamics of the roadway with the surrounding land uses and other connecting roadways. Classifications define the level of mobility and access control of the roadway.

Dripping Springs currently follows Hays County roadway classifications. The 2013 Hays County Transportation Plan classifies the existing roadway network into the following categories:

#### » Arterial Streets (Principal and Minor)

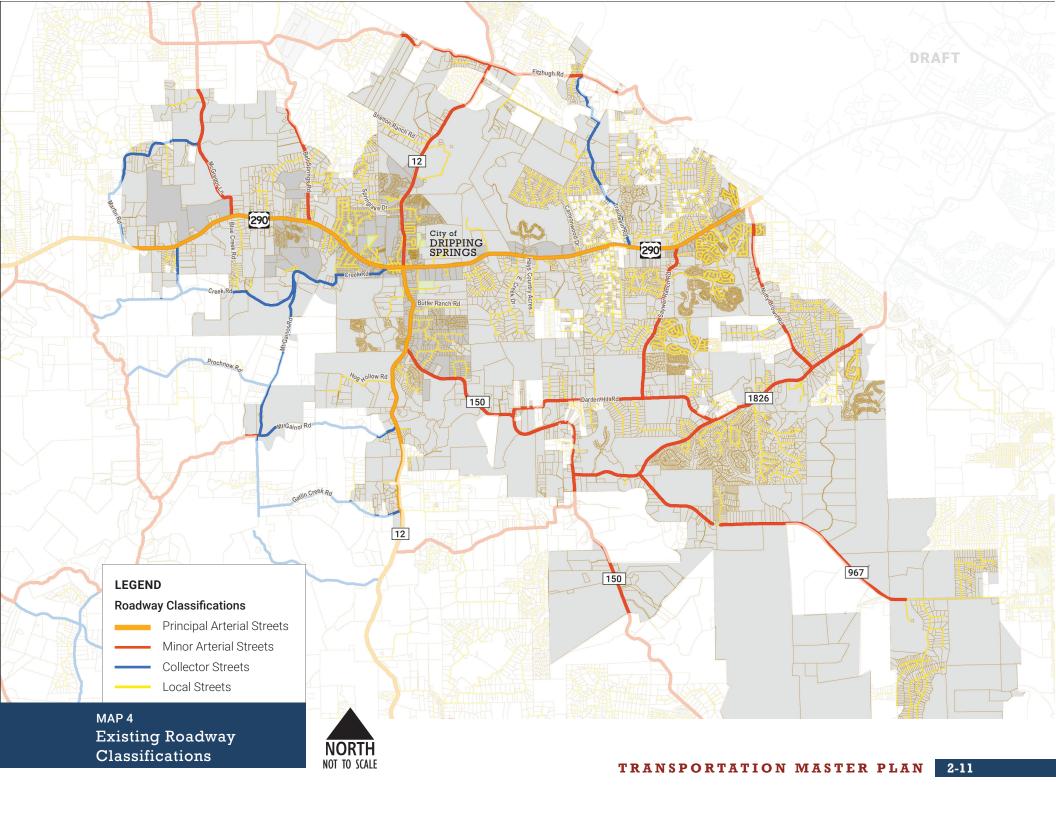
Serve both local and regional traffic by connecting cities and rural areas to the highway system while limiting access.

#### » Collector Streets

Provide equal levels of mobility and access by connecting local roads and the arterial network and by providing direct access to developments.

#### » Local Streets

Provide primary land access and connectivity between land parcels and other streets and collectors.



#### **FACILITY OWNERSHIP**

Roadways throughout Dripping Springs and its ETJ are operated and maintained by TxDOT, Hays County, Dripping Springs, neighborhoods and other private entities.

### MAJOR ROADWAYS ARE THE PRIMARY THOROUGHFARES PROVIDING REGIONAL CONNECTIVITY TO COMMUNITIES.

#### These major roadways connect the neighborhoods and businesses of Dripping Springs.



US 290 is one of the primary TxDOT roadways that connects Dripping Springs with the City of Austin and other outlying regions. A four-lane divided principal arterial throughout the majority of Dripping Springs, it transitions to a three-lane divided arterial west of McGregor Lane.



RM 12 is a TxDOT roadway connecting Dripping Springs with Fitzhugh Road to the north and with RM 150 to the south. RM 12 is a two-lane undivided principal arterial south of US 290 and a two-lane undivided minor arterial north of US 290.

#### RM 150

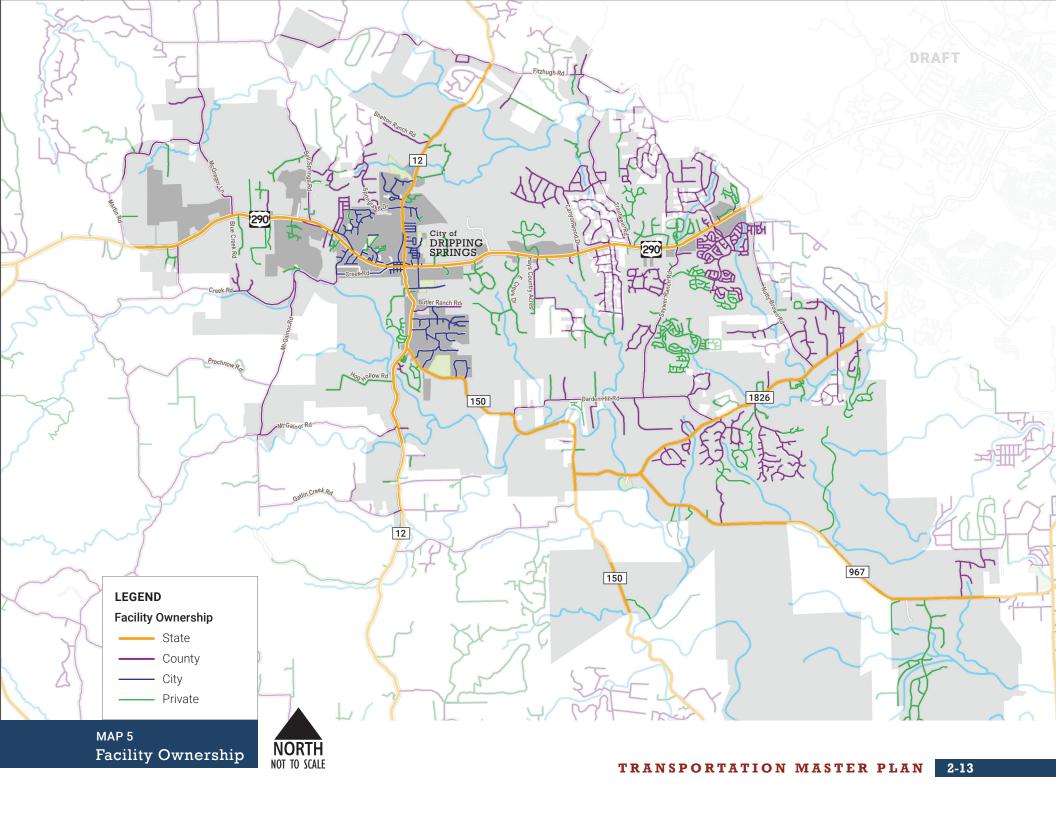
RM 150 is a major route from Dripping Springs to Driftwood and San Marcos. RM 150 is a two-lane undivided minor arterial maintained by TxDOT connecting RM 12 to RM 1826.

#### RM 1826

RM 1826 is a two-lane undivided minor arterial between RM 150 to US 290. The roadway is maintained by TxDOT and provides connectivity between Dripping Springs and Austin.

#### Fitzhugh Rd.

Fitzhugh Road is a two-lane undivided minor arterial maintained by Hays County. The roadway connects Dripping Springs with Johnson City to the west and Austin to the east.



#### **MULTI-MODAL TRANSPORTATION**

In the historic Downtown Dripping Springs, sidewalk connectivity along Mercer Street provides convenient pedestrian facilities for popular Downtown businesses. There is opportunity to extend pedestrian facilities throughout the rest of the Downtown business and recreation area. Beyond Downtown Dripping Springs, portions of sidewalks and trails have been built with recent developments.

Park trails are provided in several Dripping Springs Parks, including the Dripping Springs Sports and Recreation Park, Founders Memorial Park and Dripping Springs Ranch Park. The Dripping Springs area currently does not provide designated bike lanes, shared-use paths, or a transit system.

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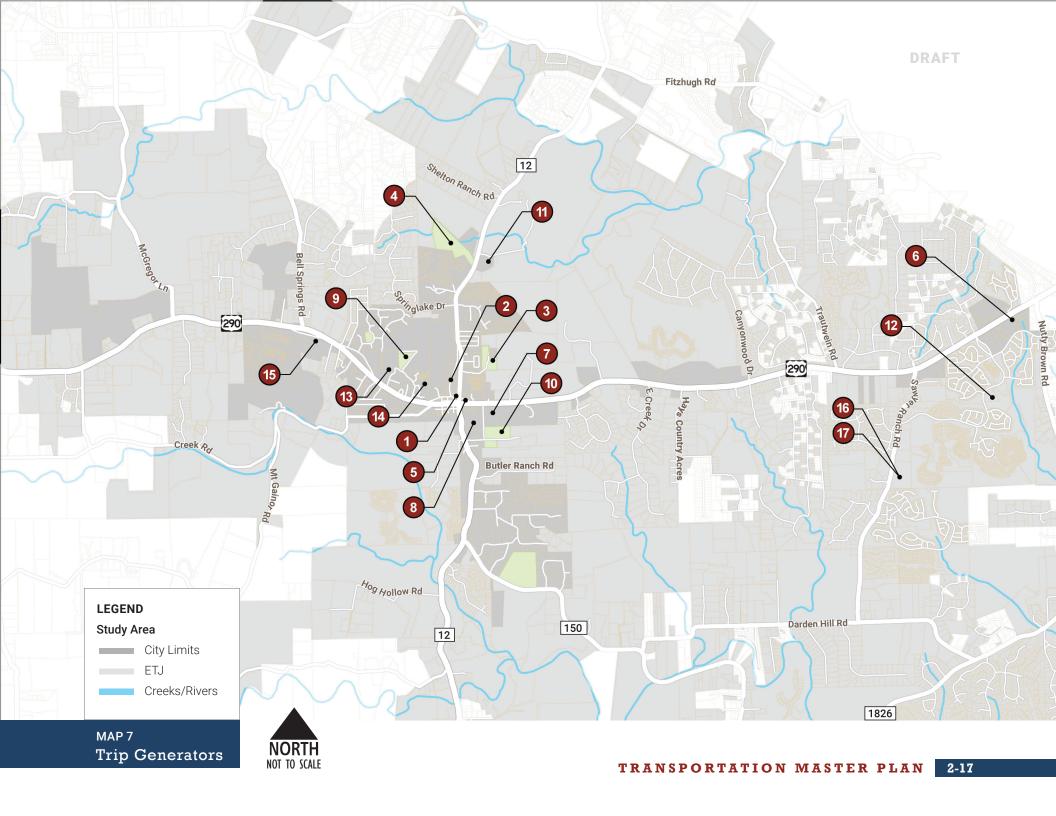


#### TRIP GENERATORS

A trip generator is a development or destination that creates a high number of vehicular trips. Several trip generators in Dripping Springs impact traffic operations in the area.

#### These include:

- 1 Downtown Dripping Springs/Mercer Street
- 2 Old Fitzhugh Road
- 3 Founders Memorial Park
- 4 Dripping Springs Ranch Park
- 5 Dripping Springs Farmers Market at the Triangle
- 6 Belterra Commercial Development
- **7** H-E-B
- 8 The Home Depot
- 9 Dripping Springs Youth Sports Association Baseball Fields
- 10 Dripping Springs Sports and Recreation Park
- 11 Dripping Springs Elementary School
- 12 Rooster Springs Elementary School
- 13 Dripping Springs High School
- 14 Walnut Springs Elementary School
- 15 Dripping Springs Middle School
- 16 Sycamore Springs Middle School
- 17 Sycamore Springs Elementary School



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#### **CRASH DATA**

Crash records for Dripping Springs and its ETJ were obtained for years 2013 through 2019 from TxDOT.

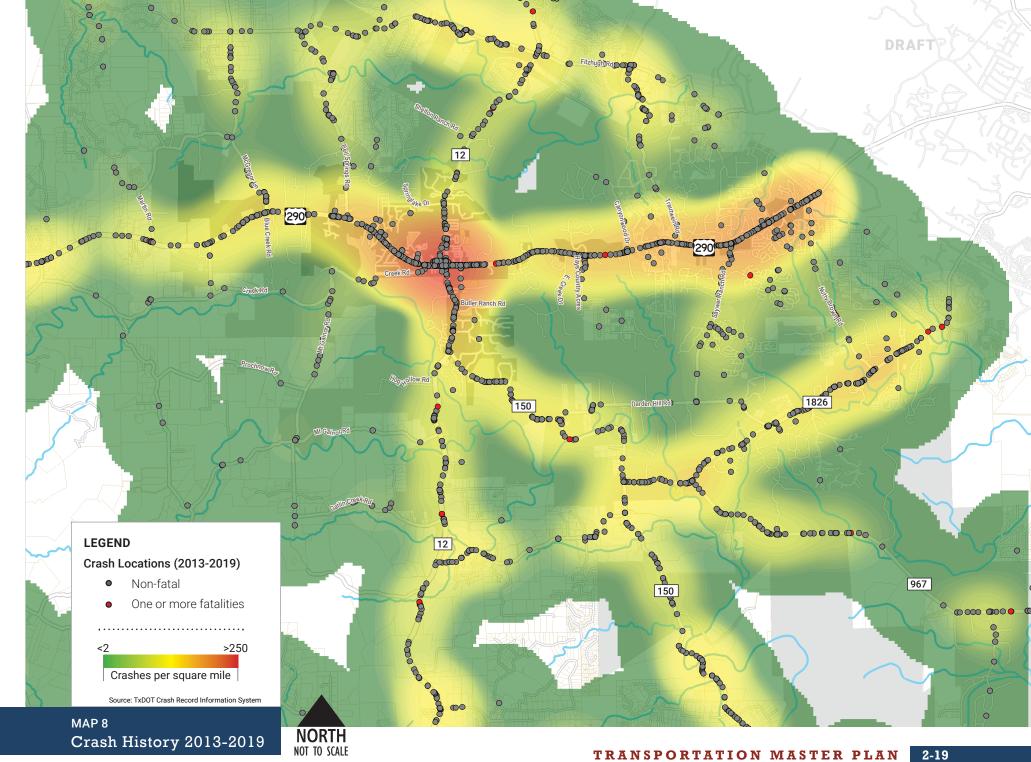
Several crashes with fatalities have occurred on US 290 in recent years, increasing awareness for the need for transportation improvements.

#### Total Crashes per Year

**Dripping Springs ETJ** 



Source: TxDOT Crash Records Information System (CRIS)





#### TRAFFIC VOLUMES

Current traffic volumes form the foundation for long-term transportation projections and planning.

Traffic volumes help identify high volume roadways where problems may exist. Daily volumes were obtained for several major corridors in Dripping Springs and its ETJ.

Peak traffic conditions occur within Dripping Springs during typical peak traffic hours and during school pick-up periods at key locations.

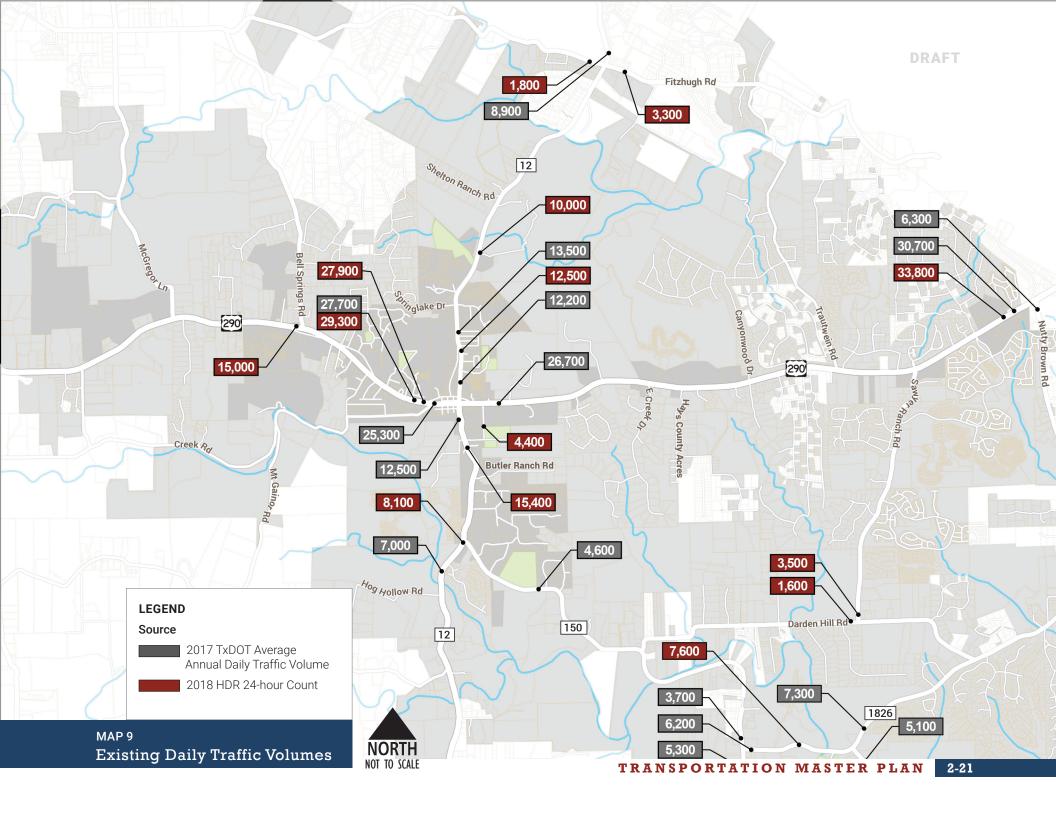


AM Peak Period 7:45 am - 8:45 am



School Peak Period 3:45 pm - 4:45 pm





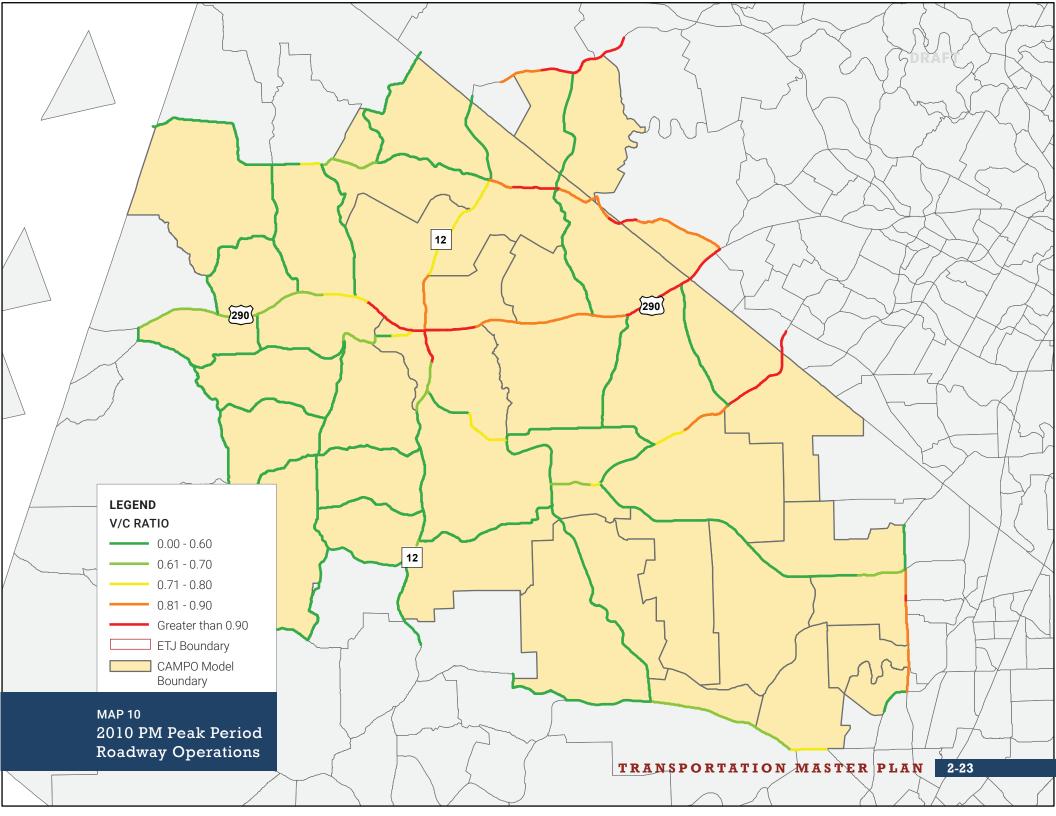
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#### **ROADWAY OPERATIONS**

Roadways are designed to serve the projected number of vehicles that will use the road through its design life. A roadway is designed with an established vehicular capacity. When roadway volumes exceed the capacity, congestion will occur.

The volume-to-capacity (V/C) ratio documents level of congestion of area roadways. Operations degrade once the V/C ratio reaches 1.0, or 100 percent of the roadway capacity.





#### INTERSECTION OPERATIONS

To identify deficiencies in the network, intersection level of service is assessed. Level of Service (LOS) measures how well an intersection operates, and is expressed using a grading system. Grades A through D are generally considered acceptable, while grades E and F are considered unfavorable or failing. Poor LOS at intersections can be addressed through a variety of infrastructure improvements.

Key intersections along US 290 operate at LOS D during the peak periods. However, the documented LOS at several intersections in Dripping Springs do not convey the extent of vehicular congestion and queuing experienced on US 290 due to the short duration of the peak periods (often less than one hour).

#### Several factors are analyzed together to determine how well an intersection operates.

# Traffic progression

When traffic forms into "platoons" of cars that pass through intersections when the signals at those intersections are green.

## Lane geometrics

How a facility is striped or divided, and how those lanes serve the traffic negotiating any given facility.

## Signal timing

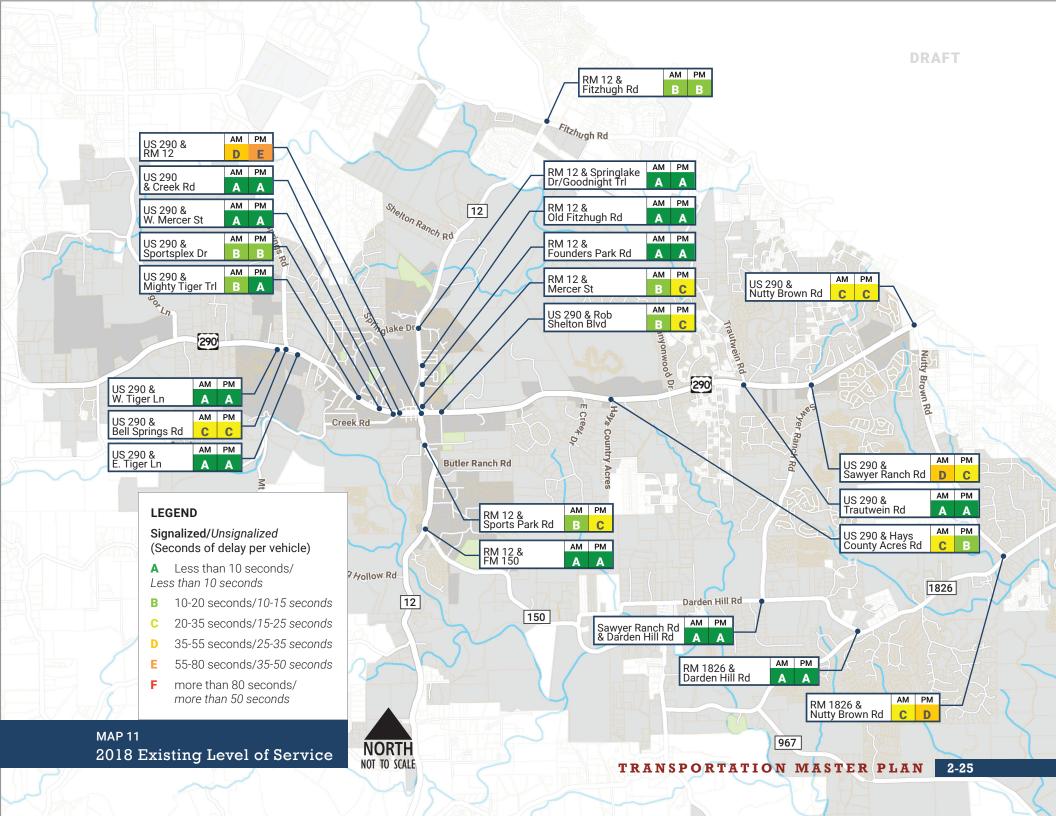
How much red time or green time each movement gets, and how well signals are coordinated.

# Traffic volumes

The number of vehicles passing through any given intersection.

### Pedestrian volumes

The number of pedestrians crossing over any given facility.





# PUBLIC INVOLVEMENT

#### **OUTREACH**

Public input is an important part of the planning process for growth in communities. Feedback provides valuable insight that City officials and planners can use while developing goals and recommendations for the transportation network. Community outreach began at the outset of the planning process for the Transportation Master Plan.

#### TRANSPORTATION MASTER PLAN SURVEY

A survey was developed to provide the public with an opportunity to share feedback about the transportation facilities in Dripping Springs. The Transportation Master Plan survey was presented at the first Open House and to interested residents at the Dripping Springs Farmers Market at the Triangle on February 6, 2019. A link to the survey was also posted on the Dripping Springs website, and the survey was publicized on the Dripping Springs Facebook page and on Nextdoor. Approximately 170 surveys were completed. The community feedback provided valuable insight for consideration during the development of the Transportation Master Plan, its goals and its vision.

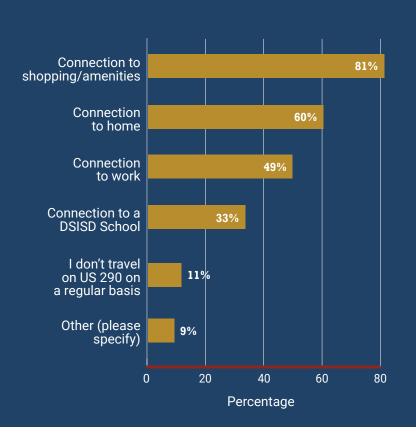


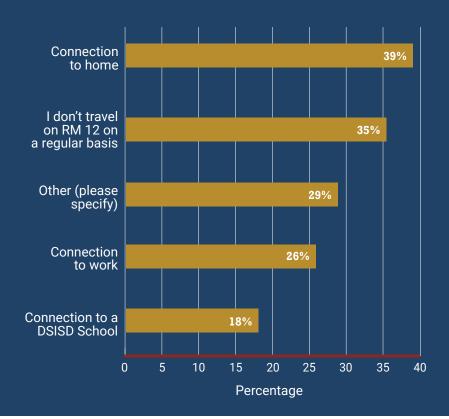
# Residents were able to answer questions about daily travel patterns, travel preferences, roadway concerns, and their transportation priorities.

# How do you use US 290 in your daily travel? (Select all that apply)

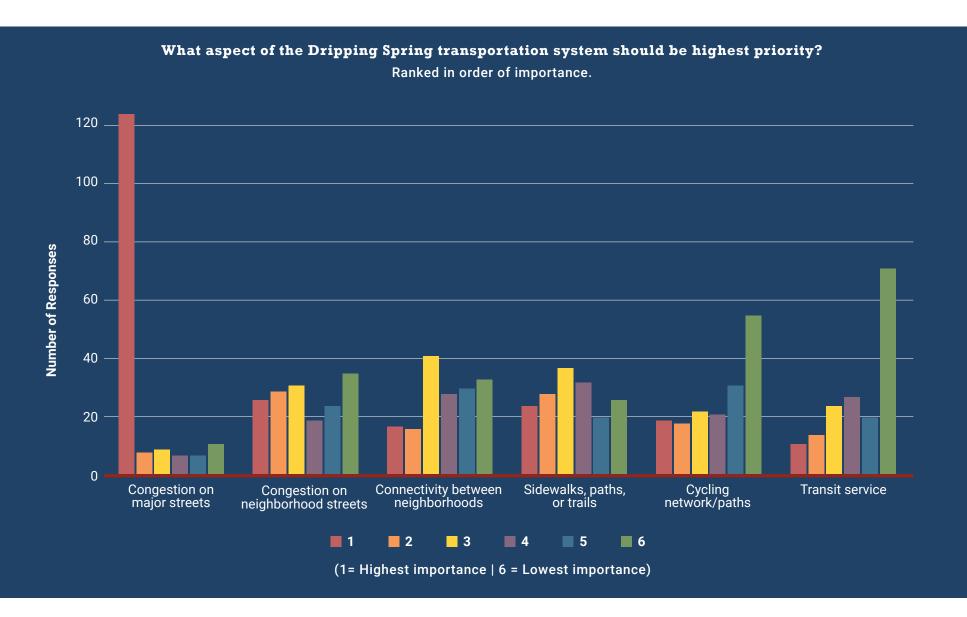
How do you use RM 12 in your daily travel? (Select all that apply)

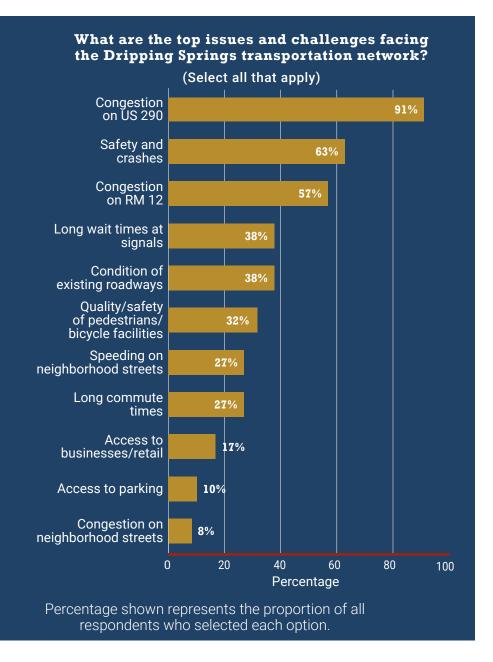
Percentage shown represents the proportion of all respondents who selected each option.





#### Over 120 people ranked congestion on major streets as their highest priority.





# FIRST TRANSPORTATION MASTER PLAN OPEN HOUSE

The first public open house for the Transportation Master Plan was held at the Dripping Springs City Hall on January 17th, 2019. Attendees were able to sign in and pick up a flier describing the purpose and process of developing a Transportation Master Plan. City officials were on hand to answer questions and discuss concerns. Approximately 100 community members attended the event.

Materials and exhibits displayed at the open house provided information about the surrounding transportation network, existing roadway and trail plans, crash history in the area, and future developments in Dripping Springs.



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Attendees were able to take the Transportation Master Plan Survey and fill out comment cards to share any other feedback.

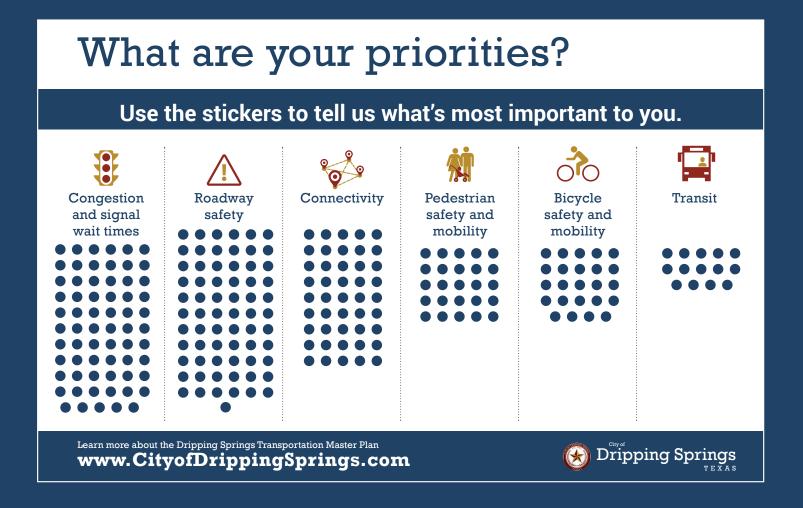
A large-scale aerial map of the Dripping Springs area was provided for visitors to write comments and feedback on locations of concern and ideas for improvements. Comments were geo-located digitally and an exhibit summarizing the comments was developed after the open house.

Public input collected at the open house informed and guided the recommendations in the Transportation Master Plan.





Participants used stickers at the Open House to indicate their priorities for the transportation network.



# SECOND TRANSPORTATION MASTER PLAN OPEN HOUSE

The second open house for the Transportation Master Plan was conducted virtually online in the face of 2020 COVID-19 pandemic. For three weeks, between November 17th, 2020, and December 8th, 2020, attendees were able to go online to review the goals of the TMP, learn about the factors and requirements of the planning process, and view the proposed Thoroughfare and Multimodal Plans alongside a sample of recommended cross-sections.

An interactive website was developed to convey information, graphics, and maps where users could navigate through the virtual open house at their own pace and convenience. Dynamic maps for the Thoroughfare Plan and Multimodal Plan allowed visitors to zoom and scroll through the proposed improvements, noting the location and type of improvement for each thoroughfare.

Attendees were able to add virtual comments to the Thoroughfare Plan and Multimodal Plan maps, and add open-ended feedback to any location on the maps. A survey was also included as part of the virtual open house to allow participants to share their feedback about the draft Transportation Master Plan improvements and the effectiveness of the virtual open house.

The feedback received at the virtual open house helped refine the improvements and develop the final Transportation Master Plan. Many proposed thoroughfare alignments were eliminated, modified, or brought for further discussion and consideration based on the comments received in the second open house.



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#### Transportation Plan Development

The Thoroughfare and Multimodal Plans wer developed through a systematic process. Tasks included incorporating feedback and consideration of the public's priorities, coordinating with other agencies, and highlevel planning and analysis.

What we Heard [click here]
The first Dripping Springs TMP Open House
took place on January 17, 2019. Priorities,
concerns, and feedback from residents and
guests were taken into account when
damplaging the Thorographics of this

What we Considered [click here]
Existing plans and geographic condition
formed the foundation of the Dripping



Public involvement, agency coordination and guiding policy are essential components that go into final recommendations for the transportation network and future projects.



#### **Dripping Springs TMP Virtual Open House Survey**

Please help the Dripping Springs Transportation Master Plan process by providing feedback on the information presented at this Virtual Open House.

#### How well does the plan address congestion for vehicles?

Select an answer between 1 and 5, with 1 being "not well at all" and 5 being "very well".



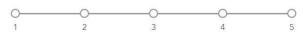
#### How well does the plan support alternative modes of transportation (pedestrian and bicycle)?

Select an answer between 1 and 5, with 1 being "not well at all" and 5 being "very well".

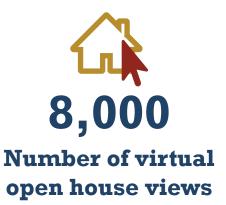


#### How well does the plan improve alternate routes to US 290?

Select an answer between 1 and 5, with 1 being "not well at all" and 5 being "very well".



#### THE VIRTUAL OPEN HOUSE WAS OPEN FOR FEEDBACK FROM NOV. 17 TO DEC. 8, 2020





Number of comments received on the Thoroughfare Plan and Multimodal Plan

The second open house provided the public with Transportation Master Plan updates.



#### **Review Process**

The goals and Transportation Master Plan process were presented to inform the public of the development of the plans and the next steps ahead.



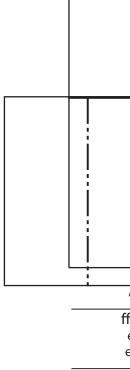
#### Reveal Draft Plans

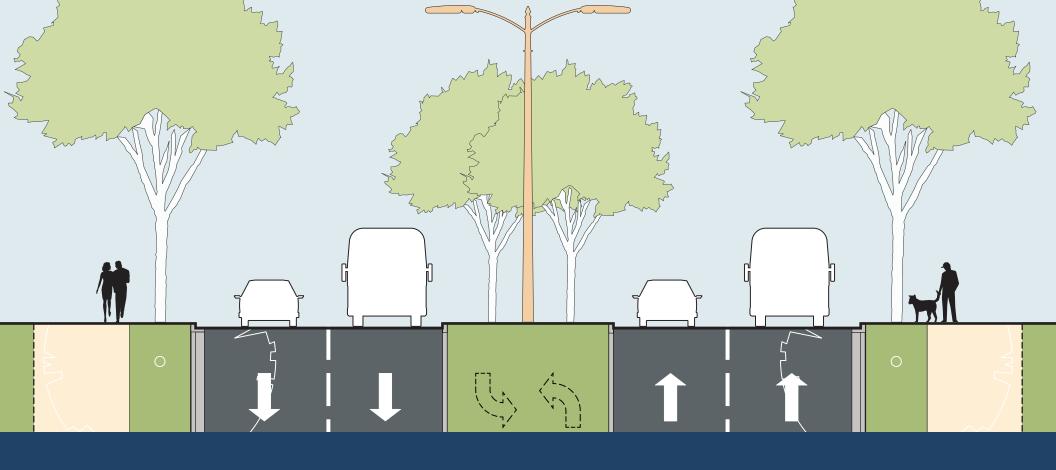
The draft Thoroughfare Plan and Multimodal Plan were revealed for public review and feedback.



#### **Present Cross-Sections**

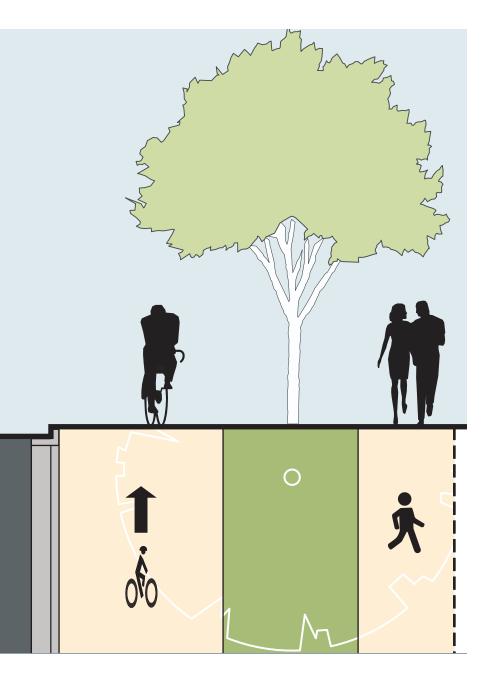
A selection of recommended crosssections were presented, and the Complete Streets concept that formed the foundation of the cross-sections was discussed.





# FUTURE CONDITIONS

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#### **OVERVIEW**

The year 2040 was analyzed to assess future conditions. The following scenarios were used to evaluate traffic operations with the projected traffic growth:

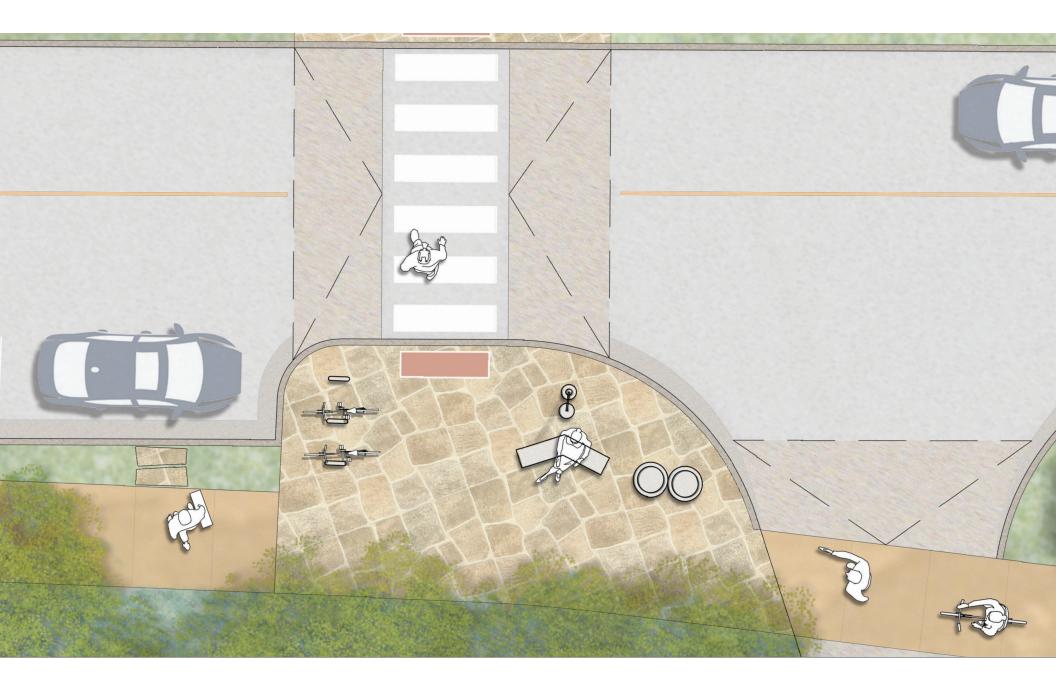
#### » 2040 No Build

These traffic conditions can be expected if no additional roadway improvements are constructed.

#### » 2040 Build

These traffic conditions can be expected if the recommended improvements identified as part of this Transportation Master Plan are implemented.

2040 traffic conditions required the development of a travel demand model fine-tuned to represent the expected growth in the Dripping Springs area. Proposed residential and commercial developments in the Dripping Springs area were used as the basis for calibrating the model to forecast future traffic conditions.



# TRAFFIC GROWTH AND FUTURE DEVELOPMENTS

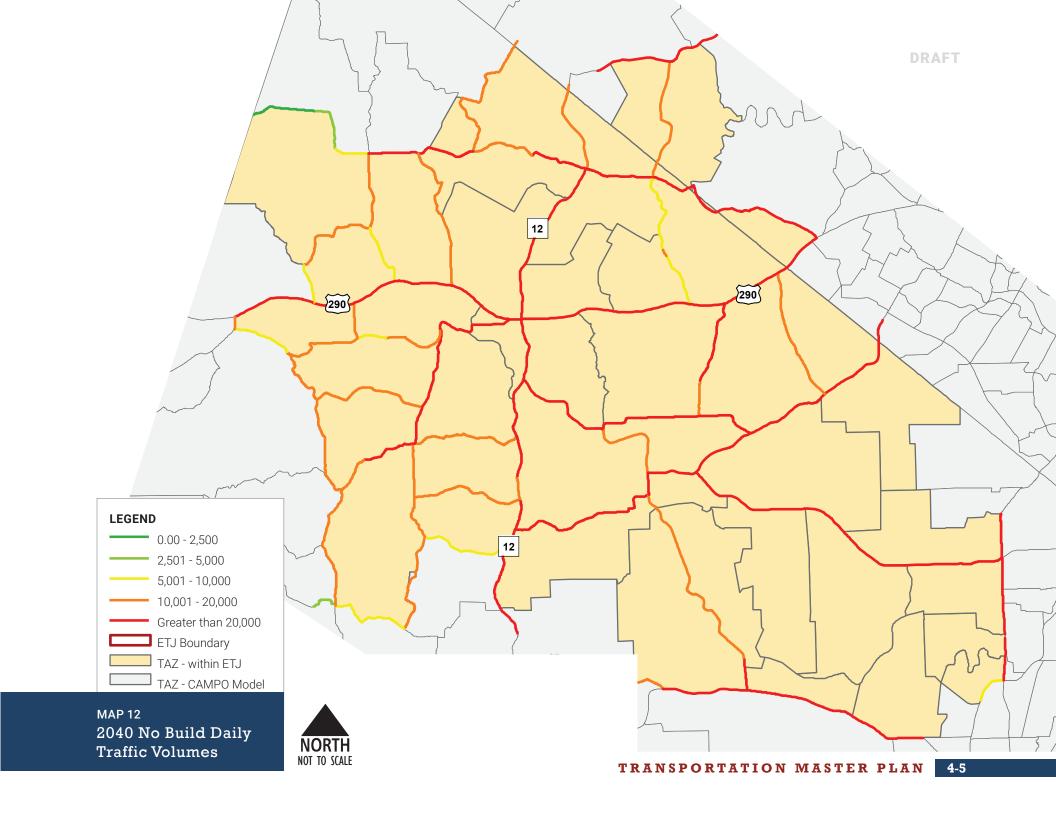
Traffic growth rates for Dripping Springs were determined using a variety of resources:

- » CAMPO 2040 forecasted traffic volumes
- » Historic traffic count data
- » Anticipated future developments

Future developments in the Dripping Springs area expected to be built out by 2040 were evaluated by land use, size, and trips generated to determine the additional traffic impact from the future growth in Dripping Springs. Over 10,000 new homes and commercial development are planned in the area.

Historic traffic growth in Dripping Springs has been approximately two percent annually. With the impact of the numerous planned developments, the growth rate is anticipated to increase to six percent annually over the next 20 years.

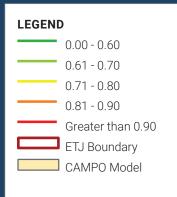


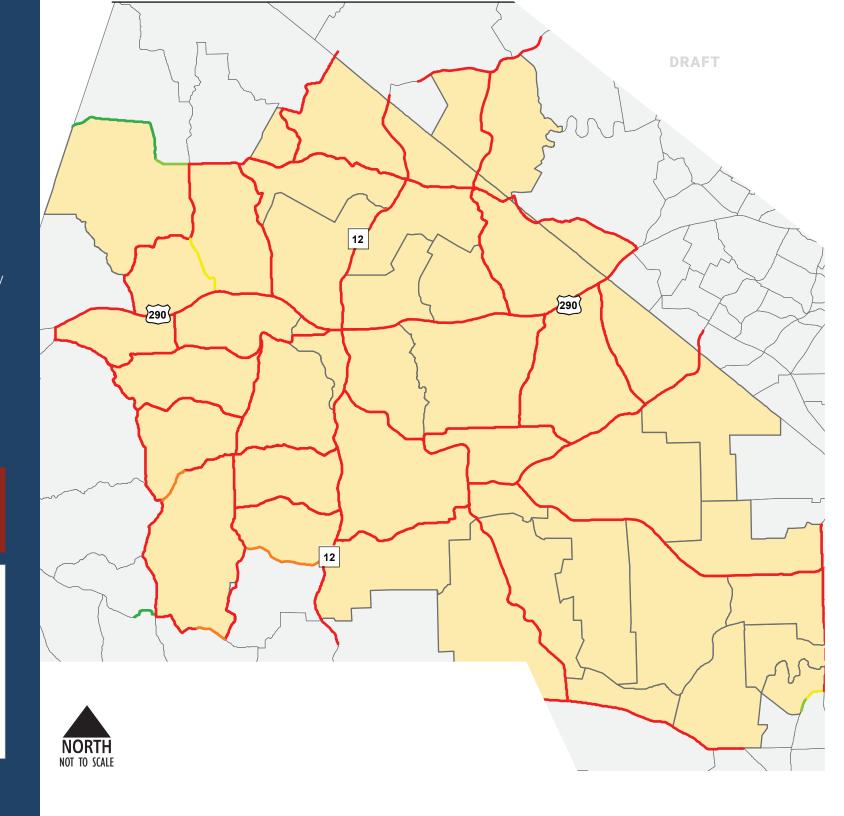


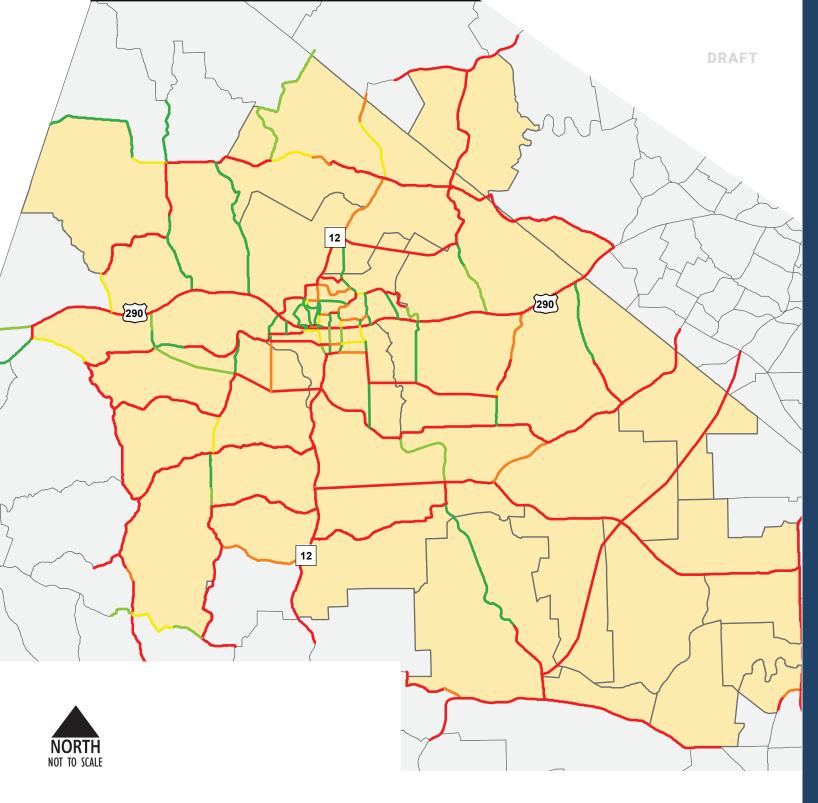
# 2040 NO BUILD CONDITIONS

2040 No Build conditions evaluate operations of existing roadways without transportation improvements. Most roadways in the Drippings Springs area will operate with vehicle capacity ratios greater than 0.90, indicating that the capacity of the existing roadway will be exceeded with the projected traffic growth.

MAP 13 2040 No Build PM Peak Period Roadway Operations







# 2040 BUILD CONDITIONS

2040 Build conditions evaluation includes improvements to the transportation system. Roadway widening to add lanes that increase capacity and the construction of new roadways to improve connectivity are recommended. By incorporating new roadways into the Dripping Springs transportation network, the vehicular demand on existing roadways was reduced and traffic congestion decreased. V/C ratios decreased with the recommended improvements, though some roadways are still forecasted to operate over capacity.







# RECOMMENDATIONS

#### THOROUGHFARE PLAN

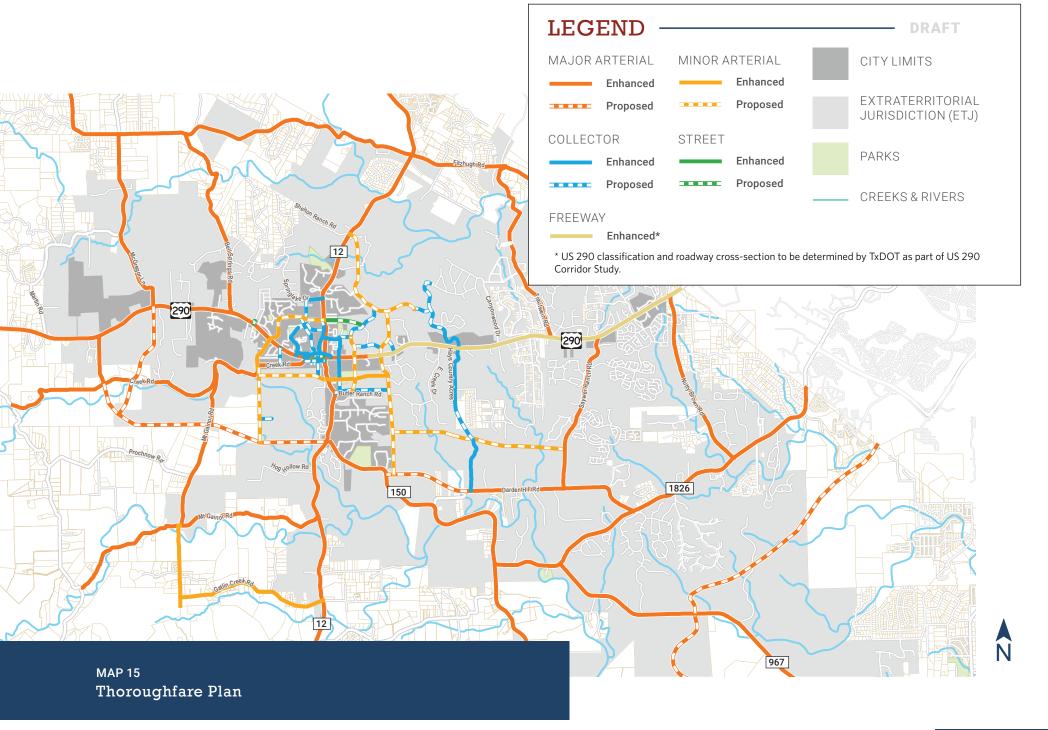
The proposed Thoroughfare Plan aims to improve existing thoroughfares, propose additional network connections, and accommodate future automobile, pedestrian, and bicycle demand for the Dripping Springs area. Coordination was required between Dripping Springs, Hays County, and TxDOT to develop a Thoroughfare Plan that aligns with each agency's planning efforts.

#### ROADWAY NETWORK IMPROVEMENTS

The roadway network in the Thoroughfare Plan promotes network connectivity in the Dripping Springs area to increase mobility and decrease strain on the existing network. The Thoroughfare Plan also identifies cross-sections for each roadway based on its location and character.

Roadways in recreational or commercial areas are designed to encourage safe pedestrian and bicycle activity while still providing mobility and access. Roadways in suburban or rural areas are designed with a focus on throughput while still providing safety measures and multimodal facilities. Cross-sections were developed with the goal of creating Complete Streets—streets that provide safe and convenient transportation facilities regardless of mode of transport.





# SPECIAL CONSIDERATION AND COORDINATION WERE NEEDED TO DEVELOP TRANPORTATION RECOMMENDATIONS FOR DOWNTOWN DRIPPING SPRINGS AND US 290.

#### **DOWNTOWN DRIPPING SPRINGS**

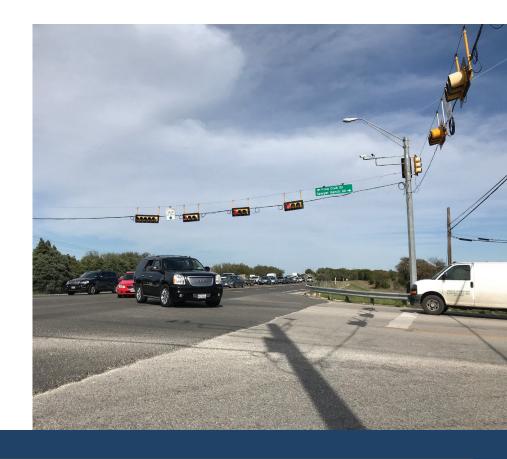
Downtown Dripping Springs is characterized by historic, narrow roadways lined by restaurants, bars, retail, and a variety of other businesses. The roadway cross-sections for this area had to be unique to accommodate the limited right-of-way while maintaining and promoting the historic nature and thriving center of Dripping Springs. The Thoroughfare Plan proposes cross-sections that maximize the available right-of-way while providing a balance between improving the pedestrian experience and maintaining vehicular access.



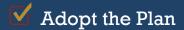
#### **US 290**

US 290 provides mobility between Dripping Springs and Austin and access to roadside businesses. Balancing capacity and throughput with access was a considerable challenge to address when considering the future of the roadway.

Coordination was required between Dripping Springs, TxDOT, and Hays County to consider existing and developing plans for the corridor. Feasibility studies for US 290 by TxDOT are ongoing, and long-term plans for the roadway continue to evolve. Long-term coordination between Dripping Springs, TxDOT, and Hays County will be required to plan for the future traffic demand and right-of-way needs of US 290.



#### NEXT STEPS



Adopt the Thoroughfare Plan. Continue to update the plan based on evolving City needs.

## Improve progression

Coordinate with TxDOT to install traffic signals along US 290 and RM 12 to reduce congestion and improve traffic progression through Dripping Springs.

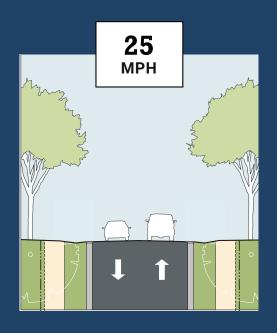
## Plan Long-Term

Coordinate with DSISD for longterm planning to strategically position proposed schools with the goal of minimizing traffic and providing sufficient access.

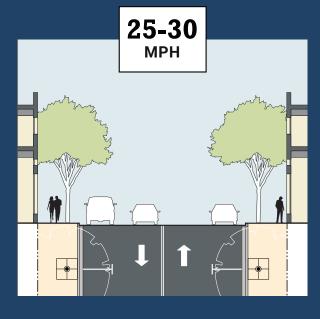
### Align goals

Continue to work with surrounding municipalities and agencies such as Hays County and TxDOT to align transportation goals and enhance transportation improvement impacts.

#### PROPOSED CROSS-SECTIONS



20-30 MPH



Roads

Serve low-volume routes

**Residential Streets** 

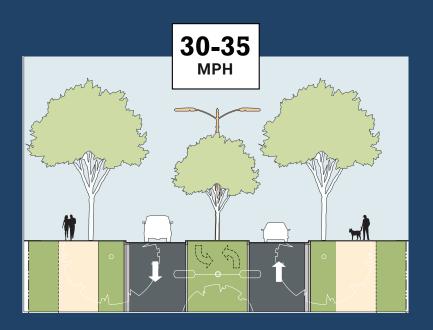
Provide direct access to residential areas

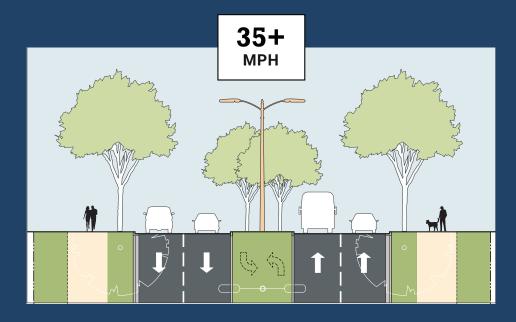
#### **Commercial Streets**

Provide direct access to commercial land uses, often with on-street parking

Recommended cross-sections developed as part of the Transportation Master Plan are intended to improve roadway conditions for drivers, pedestrians, and cyclists.

#### PROPOSED CROSS-SECTIONS





#### **Collectors**

Balance vehicular mobility and land use access

#### **Arterials**

Prioritize vehicular mobility and throughput

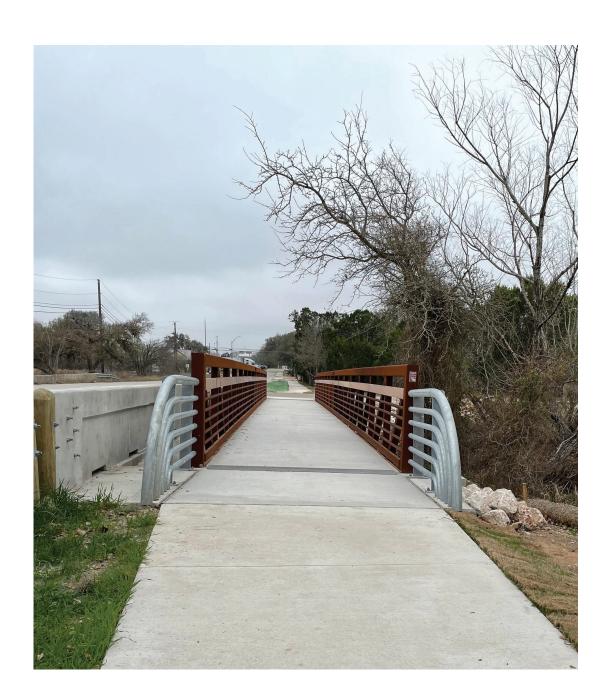
The recommended cross-sections provide flexibility and offer key elements that can inform the design of enhanced and proposed thoroughfares.

# MULTIMODAL IMPROVEMENTS

Dripping Springs recognizes the value of balancing growth and quality of life with the use of open spaces, parks, and trails. Multimodal facilities can improve the quality of life of area residents by providing recreation and an alternate travel mode.

Providing multimodal improvements may offset some of the traffic increase caused by explosive population growth. Safe options for different types of transportation such as cycling and walking can promote health, reduce congestion, and improve quality of life.

The recommendations in this section are provided to improve mobility for the residents of Dripping Springs while preserving the character of the City and promoting the enjoyment of outdoor spaces.



Several studies and plans have identified goals and improvements for convenient and safe pedestrian and bicycle facilities in Dripping Springs.



2013 Sustainable Places Project (SPP)

Focuses on planning for desirable growth in central Dripping Springs, with land development and multimodal improvements designed in harmony. The SPP identified the need for off-street hike and bike trails along creeks.



2014-2024 Parks, Recreation, and Open Space Master Plan

Aims to complement existing plans and build upon proposed improvements to the City's parks. The plan identified several on-street pedestrian routes, including along RM 12, RM 150, RM 1826, RM 967, and Sawyer Ranch Road. Off-street pedestrian routes were proposed along several creeks throughout the Dripping Springs area.



2015 Dripping Springs City Wide Trails Plan

Identifies the need for a convenient hike and bike trail system to provide recreation, exercise, and pedestrian transportation in Dripping Springs. The Trails Plan incorporated proposed land and roadway developments into the trail system network.



2016 Dripping Springs Comprehensive Plan

Prioritizes the construction of sidewalks on Old Fitzhugh Road, as the street has become a major destination in Dripping Springs for dining, shopping, and recreation in the historic Downtown area.

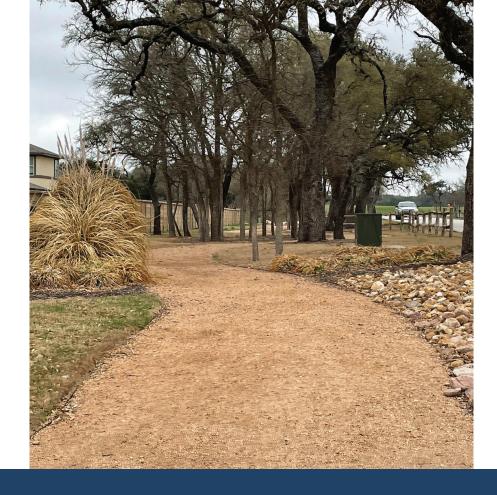
#### **DRAFT**

#### **BICYCLE AND PEDESTRIAN NETWORKS**

The Transportation Master Plan incorporates recommendations and initiatives from previous studies. The Multimodal Plan supports the best practices of Complete Streets, providing better pedestrian and bicycle improvements on enhanced or proposed roadways. The plan recommends and identifies the following facilities:

Sidewalks » Shared-Use Paths » Raised Bicycle Lanes

To enhance safety and provide an alternate transportation choice, sidewalks at a minimum are recommended on all Dripping Springs roads. Raised cycle tracks are proposed on roadways with high traffic volumes, available right-of-way, and popular cycling routes. A shared-use path should be considered to accommodate both pedestrians and cyclists where space is limited.





#### NEXT STEPS



Adopt the Multimodal Plan and Complete Streets cross-sections. Continue to update the plan based on evolving City needs.



Review the existing pedestrian network for ADA compliance.



# Plan

Coordinate with developers to identify opportunities for sidewalks and trails.



Construct new sidewalks to fill existing gaps to form a connected pedestrian network with access to schools, parks, and nature preserves.

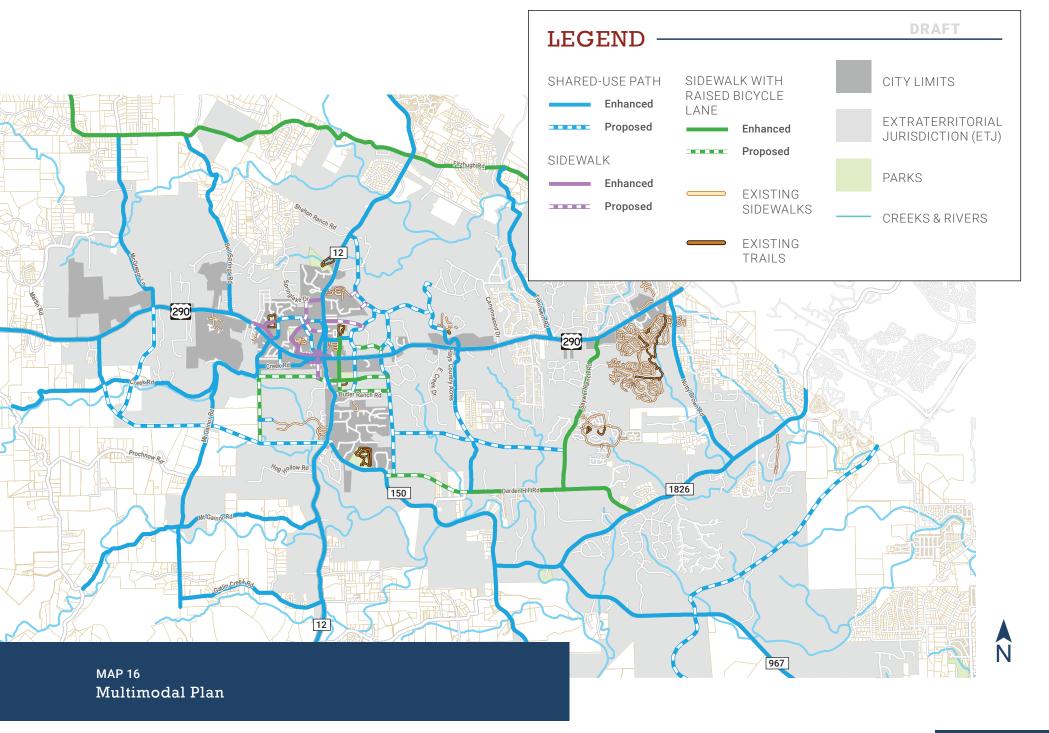


#### Design for schools

Coordinate with DSISD to provide safe pedestrian and bicycle facilities between residential



Plan trail connections to the proposed Phase III of the Violet Crown Trail and Emerald Crown Trail.



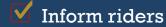
#### TRANSIT/PUBLIC TRANSPORTATION

Many Dripping Springs residents work outside the City, including the 36 percent of Dripping Springs residents working in Austin, based on survey results from the first Transportation Master Plan Open House. With significant growth and increasing traffic volumes, transit can help manage the traffic load on the City's roadway network while providing residents an alternate method of getting around for work, errands, or recreation.

Transit in Dripping Springs is currently provided by the Capital Area Rural Transportation System (CARTS). Dripping Springs residents may schedule on-demand Origin to Destination Routes to the Capital Area region within a limited schedule and frequency using the CARTS Country Bus. Although the on-demand transit service provides a valuable service for those in need, the scope of service it provides does not impact the daily needs of commuters.

Transit and public transportation relates to the school busing system as well. DSISD includes seven public schools, and busing is available to students. A combination of increased school bus use and improved pedestrian route connectivity would reduce vehicular demand on roadways.





Improve awareness of available on-demand CARTS services for Dripping Springs residents, particularly for elderly and persons with disabilities.

#### Increase routes

Coordinate with CARTS to evaluate the feasibility of increased service levels for on-demand routes to and from Dripping Springs.

#### Partner up

Discuss with Capital Metro about the potential for a Park-and-Ride and/ or transit center in Dripping Springs.

## Bus to school

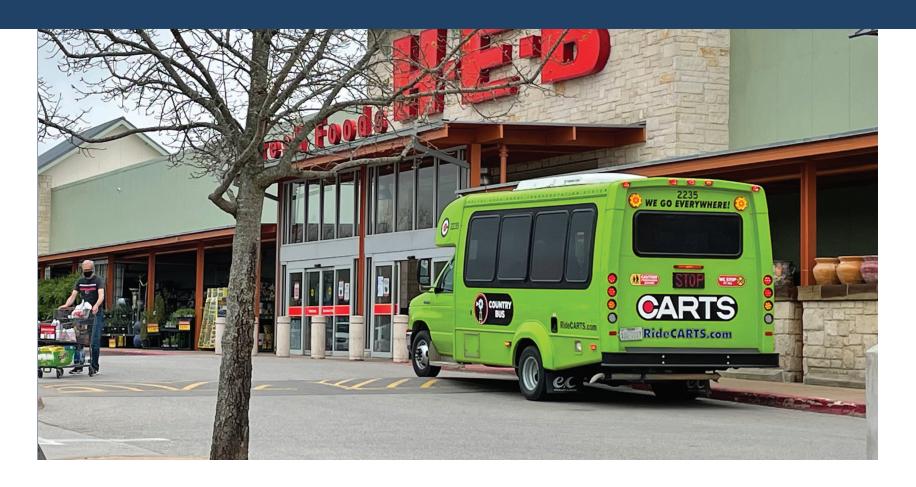
Promote ridership of school bus use within DSISD through awareness and system improvements.

### Plan ahead

Evaluate the potential for on-demand mobility services, potentially through a public-private partnership, to provide improved connectivity and access within the area.

# Public transportation services should provide regular and frequent trips for travel to work or school. Flexibility is key for trips related to errands or recreation.

For increased service levels to be financially viable, complementary actions such as improving pedestrian connectivity, developing walkable, mixed-use communities and expanding bicycle networks can all work together to increase the viability of public transportation and reduce the need for automobile use.





# IMPLEMENTATION PLAN

#### PRIORITIZATION OF IMPROVEMENTS

Funding and resources are not available to implement all recommended projects immediately. Project prioritization helps identify critical and/or short-term projects while initiating planning and coordination for design and implementation of mid- and long-term improvements.

Implementation of projects in the Thoroughfare Plan and Multimodal Plan will occur over the next 20+ years. The identified transportation improvements were assessed based on project scope and the transportation impact to help prioritize projects by need and feasibility.

Smaller and more critical projects, such as safety improvements to a local roadway, are prioritized for shortterm implementation. Projects with large scopes and complex planning requirements or those aimed at addressing future traffic demands are identified for long-term implementation. Projects requiring additional right-of-way, environmental assessments, and partner-agency coordination will occur in the mid- to long-term time periods. Ultimately, project time frames will be dependent on several factors such as agency coordination, funding, and the rate of development.



Short-term (next 10 years)

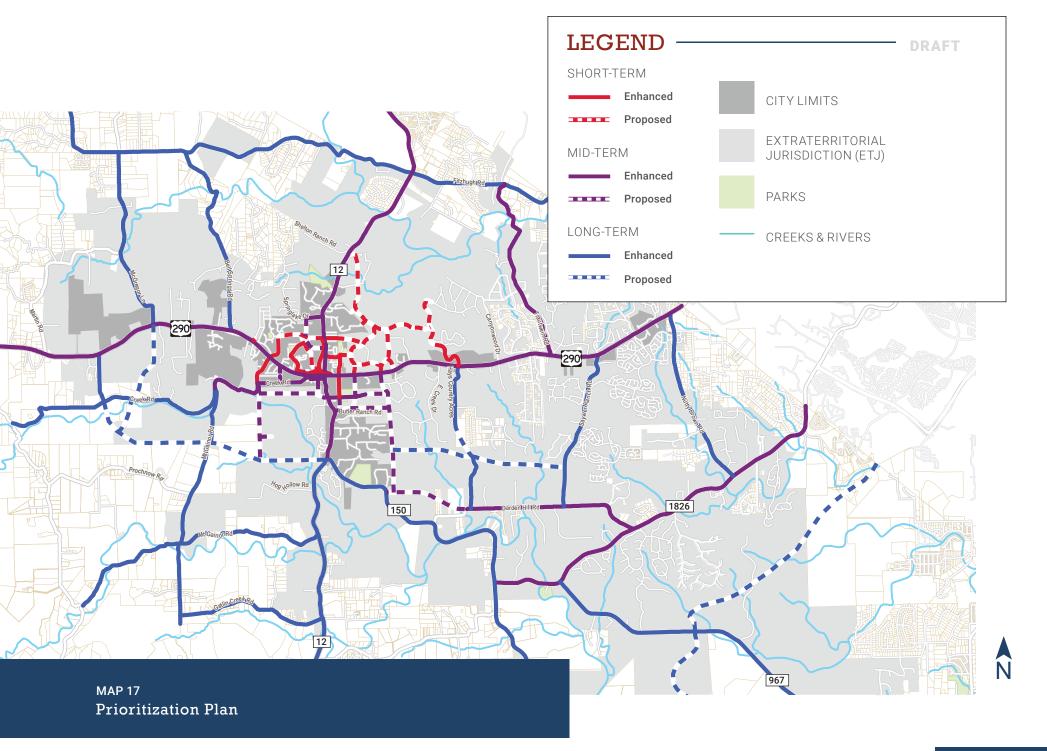


Mid-term (10-20 years)



Long-term (20+ years)







# FUNDING PLAN AND COORDINATION STRATEGIES

The implementation of improvements identified in the Thoroughfare Plan and Multimodal Plan will consider available funding sources for project design, construction, and long-term maintenance and operations.

Many of the roadways Dripping Springs residents use daily are operated and maintained by TxDOT and Hays County. Coordination must be maintained between the City and these agencies to plan for the recommended projects and identify available funding sources. Hays County anticipates adopting a Transportation Plan in 2021 that prioritizes transportation improvements on County roadways. In 2019, TxDOT initiated feasibility studies on US 290 throughout the City Limits.

The Thoroughfare Plan and Multimodal Plan also propose new facilities in areas identified for future development. This Plan enables the City to be proactive in the planning of transportation facilities that will serve these areas. The City will negotiate with developers to build roadways within and adjacent to their developments along the alignments proposed in the Thoroughfare and Multimodal Plans. Additional traffic impact fees should also be fairly assessed to be used for funding for other needed transportation projects.

Grant funding is available regularly from TxDOT and CAMPO, and the City has had success applying for and acquiring funding through TxDOT grant programs. The City should continue to take advantage of this creative funding source for future projects.

Additional funding sources that can be leveraged for transportation projects include:

- » Property taxes
- » Local and state partnerships
- » Tax Increment Reinvestment Zones (TIRZ)
- » Public-Private Partnerships
- » Developer Implemented Projects
- » Development Impact Fees
- » TxDOT and CAMPO grant funding programs
- » Grant funding opportunities (e.g., RAISE, FASTLANE)
- » Transportation Infrastructure Finance and Innovation Act (TIFIA) loan/credit program
- » State Infrastructure Bank (SIB) loans





# SUMMARY & CONCLUSIONS







#### RECOMMENDATIONS AND STRATEGIES

The Dripping Springs Transportation Master Plan identifies and prioritizes multimodal transportation improvements to promote efficient and safe travel and enhance the quality of life of Dripping Springs residents. The TMP document and Thoroughfare and Multimodal Plan aim to plan for the existing and future mobility needs of the City and surrounding ETJ and should continuously be updated with the evolving transportation and lifestyle needs of the growing City. The plan should be updated every 5 years to adapt to regional transportation thoroughfare plan updates and the rapid development in Dripping Springs and its ETJ.

#### **COMPLETE ROADWAY NETWORK**

Dripping Springs has developed a plan with a network of enhanced and proposed thoroughfares in the Thoroughfare Plan. The plan helps promote connectivity and reduce future congestion by providing more routes for travel and improvements to existing routes of travel.

#### **BYPASS ROUTE IDENTIFICATION**

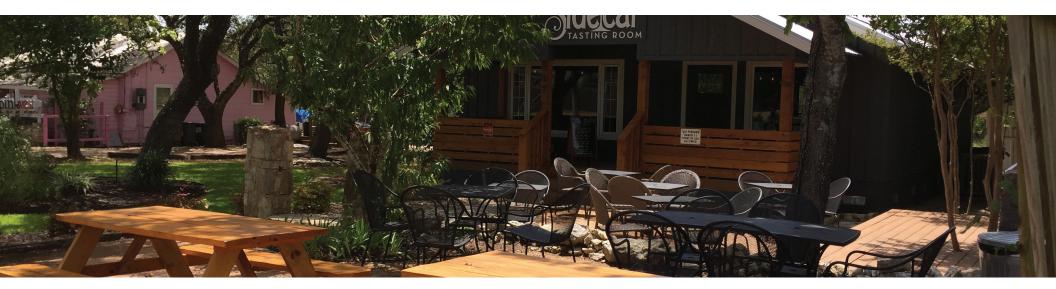
US 290 currently serves as the primary access for many neighborhoods, developments, and businesses within Dripping Springs. It also serves a major regional facility connecting Austin to Johnson City, Fredericksburg, and beyond. The Thoroughfare Plan recommends enhanced and proposed alternate routes to US 290 to the north and to the south. These routes serve both as a local bypass to the US 290 and RM 12 intersection and a regional bypass to central Dripping Springs. By establishing bypass routes to the Dripping Springs area, the US 290 thoroughfare will be more capable of serving those traveling within Dripping Springs.

#### **EMBRACE THE CHARACTER OF DRIPPING SPRINGS**

Dripping Springs is growing rapidly and relying on limited transportation infrastructure to move people through the community. The Thoroughfare Plan has prioritized transportation enhancements in areas with existing congestion and prioritized new thoroughfares in areas with imminent growth. The goal is to support growth as it occurs by investing in transportation infrastructure. As feasibility studies are initiated for new roadways, careful evaluation of the new roadway impacts on the community, its character, and the environment must be undertaken.

#### PRESERVE AND ENHANCE DOWNTOWN DRIPPING SPRINGS

Downtown Dripping Springs, at the heart of the City, is continuously evolving in land use, becoming a greater attraction for residents and visitors alike. Dripping Springs' Historic Preservation Ordinance has preserved many historic land buildings along the US 290 corridor. Enhancements to US 290 consider the limited right-of-way in Downtown Dripping Springs, and the recommended cross-sections for downtown streets provide visitor parking and a safe pedestrian environment within the available right-of-way. Dripping Springs should continue to work with TxDOT to maintain the character of Downtown Dripping Springs as US 290 evolves in the future.





#### **COMPLETE STREETS FOR ALL**

The recommended cross-sections are designed for complete streets—promoting safe and efficient travel for all users. Enhanced and future thoroughfares improve vehicular travel while providing sidewalks, shared-use paths, and raised bicycle lanes for pedestrians and cyclists outside of roadway travel lanes. These facilities are critical to moving people throughout Dripping Springs while providing a mobility option that supports health and recreation for residents.

#### **GROWING THE TRANSIT SYSTEM**

Dripping Springs should initiate coordination for future transit service through partnerships with service providers such as CARTS and Capital Metro. The City should work towards a Park and Ride system, establishing a convenient location and working towards a reasonable schedule based on Dripping Springs residents' existing and future transit needs.

#### **SCHOOL TRAFFIC**

School campuses generate a high volume of trips within Dripping Springs. Student pick-up and drop-off operations have a notable impact on traffic congestion. The City should work to implement complete streets cross-sections to provide safe routes to schools and encourage walking/bicycling trips to campuses. The City should work with DSISD to identify and prioritize routes that capture the demand for pedestrian connectivity. The City should also continue discussions with DSISD to encourage students to ride the bus, helping to reduce the number of individual pick-up and drop-off trips within the transportation network.

#### **AGENCY COORDINATION**

The City will continue to coordinate with TxDOT and Hays County as each agency moves forward with planned infrastructure improvements. A close relationship with these agencies will help maintain consistency in transportation planning and infrastructures improvements to provide a stronger foundation to meet the future transportation needs of the City.





CITY OF DRIPPING SPRINGS

# TRANSPORTATION MASTER PLAN (di)

2021



DRIPPING SPRINGS
Texas