

Post Office Box 384 511 Mercer Street Dripping Springs, Texas 78620

# Agenda Item Report from: Leslie Pollack, Transportation Engineer

Meeting Date:	October 12, 2021	
Agenda Item Wording:	Discuss and consider recommendations related to an Ordinance amending Article 22.04 – Transportation Plan, Section 22.04.001 - Adopted adopting the 2021 Transportation Master Plan.	
Agenda Item Requestor:	Leslie Pollack, Transportation Engineer	
<b>Staff Recommendation</b>	Provide recommendations related to the City of Drippings Springs Transportation Master Plan.	
	THOROUGHFARE PLAN  September 10, 202 DRAF  DRIPPING SPRINGS  Leves  Leve	

# Summary/Background:

The City of Dripping Springs initiated development of a Transportation Master Plan and a Thoroughfare Plan Update in 2018. A Transportation Master Plan is a long-range planning document that defines goals and policies for transportation system and develops recommendations to prepare for future needs of the community. The City has an adopted "Transportation Plan" map, last amended in July 2019. This map depicts existing and proposed vehicular connections within the City of Dripping Springs ETJ. Key pedestrian connections are also shown on this map. This transportation map will be referred to as the "Thoroughfare Plan" from here forward. The City does not have an approved Transportation Master Plan report.

# **Project Purpose**

The purpose of the project is to:

- Update the Thoroughfare Plan
- Complete traffic analysis supporting routes identified on the Thoroughfare Plan
- Develop recommended cross-sections
- Identify cross-section and right-of-way needs on new and existing roads
- Prepare a Transportation Master Plan documenting analysis, recommendations, and best practices

Four documents are included for adoption of the Transportation Master Plan.

- 1. Transportation Master Plan This Plan documents existing transportation conditions, analyzes future conditions, documents the public involvement process, and presents recommendations for adoption.
- 2. Thoroughfare Plan, Multimodal Plan, Prioritization Plans These maps identify recommended vehicular and multimodal enhancements and new routes throughout the Dripping Springs ETJ.
- 3. Cross-Sections The cross-sections provide the geometric configuration for new roadways to be constructed within the City of Dripping Springs. Cross-sections will be coordinated with Hays County within the ETJ.
- 4. Traffic Study The traffic study is a mesoscopic evaluation of traffic operations in the City and identifies intersection level improvements and recommendations at key locations throughout the City.

### **Transportation Master Plan**

The Transportation Master Plan identifies and prioritize mobility improvements that encourage safe and efficient travel in Dripping Springs. Nine goals were established at the initial stage of the transportation planning process. The assessment, traffic analysis, and recommendations are developed to align with these goals.

# **Existing Conditions Evaluation**

An assessment of the existing transportation network documented roadway classifications, ownership, and vehicular operations. An inventory of pedestrian facilities is included. Data was collected on traffic volumes and crashes within the study area.

#### **Future Conditions**

Roadway operations were modeled for the Year 2040. The Capital Area Metropolitan Organization's Regional Travel Demand Model was modified to incorporate detailed information on future developments, and corresponding population and employment growth within the City of Dripping Springs. The resulting traffic operations are presented in a No Build Roadway Operations map. Most modeled roadways are projected to be over capacity in 2040. The widening of existing roadways and the construction of new roadways were evaluated in the Build Roadway Operations map. With the proposed enhancements, many roadways are still forecasted to operate over capacity, but connection of new routes provides congestion relief on many of the existing facilities.

# Recommendations

Recommendations include the adoption of proposed cross-sections, implementation of the proposed Thoroughfare and Multimodal Plans, and expansion of existing transit services.

The Thoroughfare Plan identifies enhanced and proposed roadways within the City of Dripping Springs ETJ. The alignment of proposed roadways will need to be determined through a Preliminary Engineering Study.

The Multimodal Plan identifies recommended pedestrian and bicycle amenities within the transportation system. These include sidewalks, shared-use paths, and raised bicycle lanes. The Multimodal Plan ties into the City's off-street trails system; however new trails are not included on this plan.

The Prioritization Plan prioritizes enhancements and construction of proposed roadways into short-, mid-, and long-term improvements. This Prioritization Plan map is for planning purposes and the location of new developments and availability of funding will ultimately determine the timeline for enhancement or construction of transportation facilities.

## **Public Involvement**

Three opportunities for Public Involvement were documented:

- 1. An Open House in January 2019 summarized existing conditions on area roadways and sought feedback on transportation priorities within Dripping Springs. The number one priority of residents was indicated as congestion on major streets.
- 2. A draft Thoroughfare Plan and Multimodal Plan was presented to the public in an online, virtual open house. Participants left feedback in an online forum for three weeks in November/December of 2020.
- 3. A virtual Town Hall with a City presentation was conducted via Zoom in February of 2021. A question-and-answer session was conducted to address public concerns on the Thoroughfare Plan.

The City reviewed, considered, and evaluated feedback from each of these events. Modifications were made to the Thoroughfare Plan based on public feedback.

## **Cross-Sections**

Several proposed cross-sections were developed for application within the City of Dripping Springs. These cross-sections follow these roadway classifications:

<u>Roads</u> – Roads serve low-volume rural routes. These are narrow, two-lane facilities with ribbon curb, no parking, and sidewalks located at the back of the right-of-way behind open-ditch drainage.

- 50' ROW
- 25 mph
- 0-1,000 vehicles per day

<u>Residential streets</u> – Residential streets provide direct access to driveways in residential areas. These are two-lane 30'-40' sections with varying parking configurations. The provision of parking will need to be approved by City staff. Residential streets typically provide sidewalks but may include wider, shared-use paths depending on the location and context.

- 65'-75' ROW
- 20-30 mph
- 0-3,000 vehicles per day

<u>Commercial Street</u> – Commercial Streets provide direct access to commercial land uses, typically with on-street parking provided. These are intended for use in Downtown Dripping Springs and provide sidewalk facilities from the curb line to the back of right-of-way; the width will vary depending on space available.

- 50'-60' ROW
- 25-30 mph
- 0-2,000 vehicles per day

<u>Collectors</u> – Collector roadways balance vehicular mobility and land use access. A neighborhood collector is typically the "spine" road through a neighborhood. These are two-lane divided roadways with pedestrian and bicycle amenities, often a shared-use path. Commercial collectors provide direct connection to arterials and carry higher traffic volumes than commercial streets but still have adjacent commercial land use. Commercial collectors typically provide parking and have pedestrian and bicycle amenities. Major collectors provide connections between communities. Major collectors may have parking, but always provide pedestrian and bicycle amenities.

- 90'-110' ROW
- 30-35 mph
- Neighborhood Collector: 0-6,000 vehicles per day
- Commercial and Major Collectors: 0-10,000 vehicles per day

<u>Arterials</u> – Arterials prioritize vehicular mobility and throughput. Direct access should be discouraged on arterials. Major arterials carry higher traffic volumes than minor arterials. The maximum separation of vehicular, pedestrian, and bicycle components are essential to these facilities.

• 90'-155' ROW

- 35+ mph
- 2-Lane Minor Arterial: 0-15,000 vehicles per day
- 2-Lane Major Arterial: 0-18,000 vehicles per day
- 4-Lane Minor Arterial: 0-20,000 vehicles per day
- 4-Lane Major Arterial: 0-35,000 vehicles per day

# **Traffic Study**

The Traffic Study serves as an update to the previous Dripping Springs Traffic Study, completed in 2015. This study is intended to supplement the Transportation Master Plan and provides an evaluation of traffic operations at an intersection level. The Traffic Study evaluated 23 intersections on TxDOT, Hays County, and City roads. Intersection level improvements including the construction of turn bays, signalization, restriping, and traffic signal timing optimization are recommended under short- and mid-term scenarios. These transportation improvements will be considered as recommendations in future Traffic Impact Analyses reviewed and approved by the City of Dripping Springs.

### **Stakeholder Coordination**

Key roadways within the City of Dripping Springs are operated and maintained by TxDOT, including US 290, RM 12, RM 150, FM 1826, and FM 967. Any recommendations within the Transportation Master Plan or Traffic Study on TxDOT roadways will be subject to final review and approval by TxDOT and will follow TxDOT standards and specifications.

Many roadways within the ETJ are operated and maintained by Hays County. Enhancements to these roadways will be subject to review and approval by Hays County. New roadways within the ETJ will be coordinated with Hays County to meet City and County needs. Hays County adopted an update to their Thoroughfare Plan on July 13, 2021. The City's Thoroughfare Plan was closely coordinated with Hays County to provide complimentary routes. While all routes are not shown on both plans, key routes are consistent between the plans. The City and Hays County will continue coordination throughout implementation of these plans.

Dripping Springs Independent School District was identified as a key stakeholder, as traffic operations around campuses impact mobility within the City. The City will continue to coordinate with DSISD to improve access and circulation around school sites.

Commission Recommendations:	Transportation Committee met multiple times related to the 2021 Transportation Master Plan and recommends approval.
Actions by Other Jurisdictions/Entities:	The Transportation Master Plan was coordinated with DSISD, Hays County, and TxDOT.
Previous Action:	

Recommended Action:	Provide specific recommendations related to the proposed 2021 Transportation Master Plan.
Budget/Financial Impact:	The City will have priorities related to the construction of roads and related amenities.
Attachments:	<ul> <li>Thoroughfare Plan</li> <li>Multimodal Plan</li> <li>Prioritization Plan</li> <li>Cross Sections</li> <li>Traffic Study</li> <li>Transportation Master Plan</li> </ul>
Related Documents at City Hall:	Draft documents
Public Notice Process:	Notice has been placed on the City Website.
Public Comments:	Comments have been received and are uploaded to the agenda.