



TRAFFIC IMPACT STUDY MANUAL

Project Name: PROJECT NAME
Location: LOCATION
Owner's Agent: FIRM NAME
NAME OF ENGINEER

Date: July 1, 2026
Phone: XXX-XXX-XXXX

Scope must be approved and signed by staff prior to submittal of a Traffic Impact Statement (TIS).

Introduction

As part of the City's commitment to maintaining a safe, efficient, and well-connected transportation network, the evaluation and management of development-generated traffic is a critical component of the development review process. The purpose of this document is to establish the criteria, methodology, and reporting requirements for the preparation of Traffic Impact Study (TIS) associated with proposed new developments and expansions to existing developments. This guidance is intended to ensure that potential transportation impacts are adequately identified, evaluated, and addressed, while also providing a consistent framework for the format, scope, and technical analysis expectations of such studies.

General Requirements

1. The TIS shall be prepared by a professional engineer licensed to practice in Texas and trained and experienced in the application of traffic engineering.
2. A scoping meeting shall be scheduled with Hutto Engineering staff prior to starting the TIS process. Email correspondence with applicable attachments may be acceptable in lieu of a meeting.
3. Any previous traffic statement relating to the development that is more than 2 years old may be required to be updated unless the City Engineer determines the conditions have not changed significantly.
4. TIS shall incorporate, at minimum, the following traffic counts and associated determinations:
 - a. Completion of the initial phase of construction
 - b. 5 years after the opening of the initial phase
 - c. Completion of the final phase of construction
 - d. 5 years after the final phase of construction
5. Additional analyses may be required depending on the project. City Engineer has the authority to modify a-d items of the preceding list as the project and city traffic volumes may dictate.
6. TIS shall conform to these requirements, the Engineering Design Manual, Unified Development Code, and Transportation Master Plan in effect in Hutto at the time of the scoping.

7. City Engineer may waive the requirement for a TIS if it deems that the development won't have impact on the roadway
8. City engineer has the absolute authority to determine the key location(s) for analysis.

Report contents

1. An executive summary covering
 - a. The proposed site development
 - b. Methodology
 - c. Data used
 - d. Major findings of the analysis
 - e. Recommended mitigation measures proposed, if necessary.
2. A vicinity map showing the location of the proposed development in relation to the transportation system or the area and location maps with turn counts broken down with AM and PM peaks. A complete description of the proposed development including:
 - a. A site plan
 - b. The total size and nature of the entire proposed development
 - c. The proposed location and traffic control of choked points that was identified in the scope meeting.
3. A brief description of the current (and proposed, if applicable) land users adjacent to the site.
4. A description of the proposed TIS study area shall include:
 - a. Roadway names, locations and functional classifications
 - b. Intersection type, lane configurations and traffic control
 - c. Pedestrian, bicycle, and transit facilities
5. Discussion of Assumptions and Methodology:
 - a. Distributions. Default value is to assume site distribution will be the same split as existing conditions. Call out any exceptions to this.
 - b. Cap on total combined trip reduction (pass-by and internal capture)
 - c. Growth factors – provide analysis of both 0% growth rate and estimated growth rate.
6. Existing traffic volumes (measured within the previous six (6) months and adjusted to reflect current conditions) and operational analysis for all study intersection including:
 - a. Average intersection delay
 - b. Level of Service
 - c. Volumes/capacity ratios
 - d. Queue length analysis
7. If a recent traffic count for an affected street is not available, the City Engineer may require the applicant to conduct a traffic count.
8. Accident data summary and analysis within the study area for the most recent available three-year period.
9. Complete trip generation estimates for all phases and land uses of the proposed development should be calculated with the following requirements:
 - a. The most recent edition of the ITE publication "Trip Generation Manual" should be used.

- b. The specific trip generation figures that are used for calculations should be noted in the report.
 - c. Follow the ITE manual for trip generation.
- 10.** Trip distribution of the trip generation information should be performed using directional trip distribution patterns based on historical data. Provide maps in both Excel file and PDF file (aerial view) showing Project trips distribution and percentages (inbound/outbound for both AM/PM peak hours) at the project driveways, study intersections, and freeways as an attachment(s).
- 11.** Study Intersections selection: To select the study intersections for analysis, the below guidelines should be followed to determine which existing and future intersections are to be analyzed. Documentation of this process should be submitted with the scope for review.
- a. Driveways or access points that seems critical to a proposed development shall be included, regardless of the number of peak-hour trips.
- 12.** A Queueing Analysis may be required. A Queueing Analysis should identify the project's queues and ensure that on-site storage can contain the queue generated by the development.
- 13.** Forecast traffic volumes and conduct intersection performance evaluations (including average delay, level of service, and volume-to-capacity ratios) for all study intersections under the following conditions:
- a. Opening Year (No-Build) – five years from the date of analysis without the proposed development;
 - b. Opening Year (Build) – with the proposed development in place; and
 - c. Horizon Year (Build-Out + 5 Years) – five years beyond full build-out of the proposed development.
- 14.** Analysis of the right-and-left turn-lane warrants, queue lengths, acceleration lanes, throat lengths, channelization, and other characteristics of the site-access driveways as appropriate.
- 15.** Comparison of the location and spacing of the proposed site-access driveways with City of Hutto standards and the standards of the Texas Department of Transportation, if necessary.
- 16.** Description and analysis of mitigation measures necessary to bring identified intersections and locations into compliance with the applicable standards, including signal, turn lane, or other warrant analysis as appropriate. Provide figures of: existing peak hour volumes, site generated peak hour volumes, future peak hour volumes, trip distribution.
- 17.** An appendix which includes:
- a. Copies of raw traffic count data used in the analysis
 - b. Calculation sheets and/or computer software output for Levels of Service, delay and volume to capacity ratio calculations in analysis
 - c. Warrant worksheets for signals, turn lanes, signal phasing, all-way stops, and other proposed measures as appropriate.
- 18.** Appendix reports and raw data files of printouts, warrant studies, count data shall be submitted in digital format and not by paper submittal. So shall models within HCS or Synchro.

Standard accepted Guidelines

- 1.** Use the most recent version of HCM for the capacity analysis of roundabouts. All roundabout intersections shall operate at a Level of Service "C" or better at build plus five years, with a

volume/capacity ration of 0.85 or less. The roundabout operational analysis shall account for possible phasing of capacity expansion, whereby an interim scheme may be established if the analysis reveals that single lane entries are adequate for a period of up to ten years. Traffic analysis results shall be submitted with the concept design including opening year, opening plus 10 years, and design year volumes, percent of trucks and turning movements on all approaches by movement. Overbuilding roundabout capacity has been shown to contribute to higher crash incidence.

2. All signalized and all-way stop controlled intersections shall operate at a Level of Service “C” or better with a volume/capacity ratio of 0.85 or less at the design year traffic demands. Other un-signalized intersections (including un-signalized private accesses) shall operate at Level of Service “D” or better for major street left turns on side street approaches. Although lower Level of Service may be acceptable if the movement has a low volume/capacity ratio and there are no known safety problems at the intersection.
3. Acceptable analysis methods shall only be the latest version of Highway Capacity Manual or Synchro.
4. Signal timing used in capacity or progression analysis shall use the same cycle length as is currently in use at the intersection. Unless specifically noted otherwise, and shall not exceed 120 seconds. Signal timing shall provide adequate green time for pedestrian crossings.
5. Peak Hour factors less than 0.75 or greater than 0.90 shall not be used unless justified by specific counts at that location.
6. All tube counts shall be a minimum of 48 hours.
7. The traffic impact statement shall take into account the city’s Transportation Master Plan.

Submittal Requirements

A complete TIS submittal shall be provided through the GovWell portal and must include the following items. Individual files may be combined and submitted as ZIP archives (e.g., all Synchro files may be submitted as one ZIP file) in lieu of separate uploads.

- a. An electronic (PDF) copy of the Traffic Impact Statement (TIS) report.
- b. Synchro files representing a connected roadway network for all scenarios analyzed (existing, background, no-build, and build-out conditions).
- c. Excel spreadsheets containing trip generation calculations, pass-by and internal capture analyses, site traffic distribution and assignment, and driveway-level traffic summaries for each analysis scenario.

This scope and study is based upon the assumed development uses and intensities in the TIA Determination sheet in **Attachment B**. Any change in these assumptions may require a change in the scope.

Approved by (City of Hutto):

Date: _____

Include TxDOT if project is altering or adding access to a TxDOT facility.

Approved by (TxDOT):

Date: _____

Include Williamson County if project is in the ETJ.

Approved by (Williamson County):

Date: _____

PROJECT NAME – TIS scope

Attachment A

**INSERT EXHIBIT WITH SITE LOCATION AND STUDY INTERSECTIONS MATCHING LABELS
BELOW HERE**

Existing Intersections

A. LIST ALL EXISTING INTERSECTIONS

Future Intersections/Study Points:

A. LIST ALL PROPOSED STUDY POINTS

PROJECT NAME – TIS scope

Attachment B



CITY OF HUTTO
TRAFFIC IMPACT ANALYSIS (TIA) DETERMINATION WORKSHEET
APPLICANT MUST FILL IN WORKSHEET PRIOR TO SUBMITTING FOR TIA DETERMINATION

PROJECT NAME: PROJECT NAME
LOCATION: PROJECT LOCATION
APPLICANT'S AGENT: FIRM NAME (ENGINEER NAME) TELEPHONE NO.: XXX-XXX-XXXX
APPLICATION STATUS: DEVELOPMENT ASSESSMENT:___ZONING___SITE PLAN: ___

EXISTING:

PARCEL NUMBER	BLDG SQ.FT.	LAND USE	ITE CODE	DAILY TRIP RATE/EQ	DAILY TRIPS

PROPOSED

TRACT NUMBER	BLDG SQ.FT.	LAND USE	ITE CODE	DAILY TRIP RATE/EQ	DAILY TRIPS	AM / PM TRIP RATE/EQ	AM TRIPS	PM TRIPS
1 (Phase)								
2 (Phase)								
				Total				

ABUTTING ROADWAYS

STREET NAME	PROPOSED ACCESS?	PAVEMENT WIDTH	CLASSIFICATION*

*Classification reflects Mobility Master Plan, 2024

NOTE: A TIA determination must be made prior to submittal of any zoning or site plan application. Therefore, this completed and reviewed form MUST ACCOMPANY any subsequent application for the IDENTICAL project. CHANGES to the proposed project will REQUIRE a new TIA determination to be made.