

## ORDINANCE NO. 2019-05

**AN ORDINANCE AMENDING ORDINANCE NO. 2007-63, AMENDING THE REQUIREMENTS FOR THE COMPLETION OF A TRAFFIC IMPACT ANALYSIS PRIOR TO THE APPROVAL OF DEVELOPMENT RELATED PROCESSES; SETTING DEFINITIONS; PROVIDING CRITERIA FOR TYPES OF ANALYSIS; SETTING FORTH MITIGATION PARAMETERS AND LIMITATIONS ON MITIGATION; SETTING MINIMUM VALUES FOR LEVEL OF SERVICE; PROVIDING FOR EXEMPTIONS; PROVIDING FOR A VARIANCE; AND ESTABLISHING A PROCESS FOR DETERMINING ROUGH PROPORTIONALITY**

**WHEREAS**, the City Council finds that to protect the health, safety, property and welfare of the public it is necessary to determine the effect of proposed subdivisions, developments or proposed changes in zoning uses on the transportation system within the community;

**NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOERNE, TEXAS THAT:**

### **Section 1: General**

The specific intent of a Traffic Impact Analysis is to: Ensure that traffic impacts are identified early and incorporated into the development planning of sites at the earliest possible stage ~~when the approximate potential~~ **based on the anticipated** full build-out of a development project; ~~is known. Determine the appropriate local transportation network in accordance with the Master Plan and the Major Thoroughfare Plan and;~~ **and;** ~~Allow~~ **Avoid or mitigate** negative impacts from **development related** traffic ~~to be avoided or mitigated through the implementation of planning and design solutions. for the development. If required, as determined by the TIA threshold worksheet, the TIA shall be prepared by a Professional Engineer licensed in Texas with experience in traffic and transportation engineering.~~

### **Section 2: Purposes**

- (1) To ~~ascertain the~~ **evaluate projected** operational conditions on the adjacent roadway network ~~with~~ **when** a proposed development is accommodated within the existing transportation infrastructure. ~~along with other proposed developments (as reflected in the Comprehensive Master Plan)~~
- (2) To identify transportation improvements required to maintain the ~~existing~~ **acceptable** operational conditions **(as defined in Section 5).**
- (3) To determine whether **proposed** access **locations** to the proposed development will ~~impede~~ **impact** traffic operations ~~and safety~~ near the site.
- (4) To identify ~~present or future~~ transportation system deficiencies **both** with and without the ~~new~~ **proposed** development.

- (5) To provide decision makers with a basis for assessing the transportation implications of approving proposed zoning changes and development applications.
- (6) To provide a basis for estimating the cost of proposed ~~mitigating~~ mitigation measures. ~~Consequently, a traffic impact analysis can be used to determine the "fair share" of the improvement cost to be paid by the developer.~~
- (7) To establish a process for determining what mitigation will be required of the proposed development and how a determination of rough proportionality will be made.

### **Section 3: Definitions**

Average Day – A ~~non-holiday~~ Tuesday, Wednesday or Thursday ~~during the school year~~ for most uses. The average day may be a Saturday for uses that have higher peak-hour traffic volumes on a Saturday rather than mid-week.

~~Boundary~~ **Border** Street – A public street that is adjacent to and/or abutting one or more sides of a proposed site. ~~A border street could be an existing facility or a planned/proposed street included on the Major Thoroughfare Plan.~~

City Manager – The City Manager and/or his/her duly authorized representative.

Development – a site plan, subdivision or re-subdivision, condominium project, redevelopment, reuse or expansion of a use or building; ~~or other change in use that results in an increase in traffic volumes.~~

Impact Area - The limits of the area for which the analysis is to be conducted. This area shall be determined by the Engineering Firm conducting the study and City Manager prior to the start of the study.

**ITE – Institute of Transportation Engineers.** An international educational and scientific association of transportation professionals that conducts research on trip generation characteristics of various development types and establishes industry best practices for the preparation of traffic studies.

Level of Service (LOS) – A measure of the level of congestion experienced on roadways. ~~The acceptable methodologies for calculating level of service are:~~ **LOS shall be calculated using methodologies consistent with the latest edition of the Highway Capacity Manual published by the Transportation Research Board.**

- ~~A. Operational Analysis from the transportation Research Board Special Report 209, Highway Capacity Manual, latest edition.~~
- ~~B. PASSER III-90 from the transportation Institute.~~
- ~~C. The Texas Model, version 3.0, from the University of Texas.~~
- ~~D. Other methodologies approved by the City Manager or his/her duly authorized representative~~

In addition, the following characteristics shall be addressed when evaluating levels of service:

- A. Physical Configuration – Intersection and roadway geometry

- B. Traffic Characteristics – peak hour factor
- C. Traffic Control – signalized and unsignalized control
- D. Environmental Condition – topography, sight distance and other safety hazards
- E. Capacity – as determined in the latest ~~addition~~ **edition** of the Highway Capacity Manual, ~~Transportation Research Board~~.

Master Plan – The plan adopted by the City of Boerne which illustrates the intended future land use patterns. ~~and the Thoroughfare Plan which describe roadway functional classifications and intended improvements to the transportation system.~~

Peak Hour – A one hour period representing the highest hourly volume of traffic on the adjacent street system during the morning (~~a.m.~~ **AM** peak hour); during the afternoon or evening (~~p.m.~~ **PM** peak hour); or representing the hour of highest volume of traffic entering or exiting a site (peak hour of generator).

Peak Hour Trips Generated – (PHTG) -The number of vehicle trips generated by the proposed land use(s) in the development, during the peak hour of adjacent street traffic (defined as one hour **during the AM or PM peak hour**, ~~between 7-9 AM or 4-6 PM~~ whichever is higher).

Thoroughfare Plan – **The plan adopted by the City of Boerne** which describes roadway functional classifications and ~~intended improvements to the transportation system~~ **alignments for the existing and future planned roadway network.**

Traffic Impact Analysis (TIA) – Study prepared to project the anticipated impact of a proposed development and determine the need for any improvements to the roadway network to maintain acceptable operational conditions.

Traffic Improvements – Any transportation improvement required to support the proposed development. Improvements will be identified during the TIA process and may include, but are not limited to, improvements such as construction of thoroughfare facilities, improvement of substandard streets, installation of traffic signals or construction of turn lanes.

Transportation Criteria Manual (TCM) – City transportation guidelines addressing access management, TIA preparation process and documentation requirements, and roadway operational capacity guidelines.

#### **Section 4: Traffic Impact Analysis (TIA) Overview**

- (a) ~~Traffic Impact Analysis (TIA).~~ No Subdivision, **Master Development Plan**, Development Plat, change in zoning, Planned Unit Development submission, ~~Petition for Annexation, City Council approval of a use as required by the City of Boerne Zoning Ordinance~~ **or building permit application** shall be approved unless a traffic impact analysis (TIA) or peak hour trip PHT generation form is completed **by the applicant** and approved **by the City of Boerne** as provided for in this ordinance. A traffic impact analysis (TIA) or a PHT generation form shall be performed by the property owner (or its agent) according to the format established in ~~Appendix “A”~~ **the most recent City of Boerne**

**Transportation Criteria Manual (TCM).** The type of submittal shall be based upon the number of peak hour trips (PHT) generated by the proposed development, as set forth in Table 1.

**Table 1: TIA Categories**

Peak Hour Trips	Submittal Category (see Section 1)
1,001 or more	Level 3 TIA
<del>251</del> 300 – 1,000	Level 2 TIA
<del>101</del> 150 – <del>250</del> 299	Level 1 TIA
<del>75</del> 100 or less	PHT Generation Form (no TIA is required), Turn Lane Evaluation Form, Border Street Evaluation Form

**Note:** Categories are for the purposes of review fee assessment only

When an activity on, or change to, property is proposed to occur that varies from the previous activity on the property, and the new activity generates an increase of at least 100 PHT relative to the previous use, the property owner (or its agent) shall perform and submit to the city a TIA (or an amended TIA, whichever applies) **consistent with the format outlined in the City of Boerne TCM** under the formats specified in Appendix “A”, to determine if the increase in the PHT impacts capacity and requires additional mitigation as defined herein.

**A Master Plan Level TIA may be prepared for multi-phased developments for which all land uses have not yet been determined.**

- (b) Rezoning. A TIA shall be required any time a property owner seeks to rezone property in a manner that would result in the PHT under the proposed zoning and use exceeding by more than 100 PHT the maximum PHT that could have been generated by uses permitted in the existing zoning, or results in a TIA level different from that derived from the existing zoning.

The requirement to perform a TIA under this subsection shall not apply if the existing zoning is a temporary zoning resulting from annexation.

- (c) Impact Area. The impact area is the area within which any analysis is conducted in order to determine a compliance with the level of service standards. This area shall be based on the **size of the development and the distribution patterns of the** PHT projected to be generated by the proposed development. **The specific intersections for analysis will be established in coordination with City staff according to the criteria set forth in the TCM. The impact area is defined as those intersections with 75 or more peak hour trips on any single approach within two (2) miles of the boundary of the site along the roadway network.** ~~impact area studied shall be determined by City Manager based on the points of access and key streets and intersections that may be affected by development of the subject tract. Table 2 shall be used to assist the City Manager in the determination of the impact area to be studied:~~

**Table 2**

Category	Impact Area
Level 1 or 2	<del>The site, and the area within a one-quarter (1/4)</del>

TIA	mile radius from the boundary of the site
Level 2 TIA	The city traffic engineer may require the area of the study to be extended up to a maximum area of one (1) mile radius
Level 3 TIA	The site, and the area within a two-mile radius from the boundary of the site, this distance may be reduced to one mile as determined by the City Manager

(d) TIA Longevity. As long as a development is being incrementally implemented in general conformance with the TIA, a TIA will remain valid for five (5) years beyond the projected build out year of the last phase of the development. General conformance is defined as trip generation characteristics that do not increase by more than 10% than the uses originally proposed.

(e) TIA Preparation. TIA shall be prepared consistent with the process outlined in the most recent City of Boerne TCM.

## Section 5: **Mitigation Requirements**

If the Turn Lane Evaluation Form and Border Street Evaluation Form indicate that an auxiliary lane or border street improvement is required, that mitigation shall be provided consistent with Section 7 even if a TIA was not required. The applicant may propose mitigation measures as described in Section 7.b as an alternative to deferral denial of approval of the activities.

Mitigation measures may be permitted which would allow the LOS to be achieved by permitting the transportation network to function more efficiently, or which advance the construction of necessary transportation facilities so that they are available concurrent with the impacts of the development.

Roadways and intersections, within the study area, that are expected to operate at level of service D, E, or F, under traffic conditions including projected traffic plus site-generated traffic must shall be identified and viable recommendations made for raising the traffic conditions to level of service C or better. If the existing level of service is already below LOS C, the intersection shall be mitigated to within 20% of the projected background delay value.

In the case of a land use that generates queues – such as fast food uses where a drive-through is present or a school – a queue analysis shall be prepared as part of the TIA process and mitigation incorporated to contain all projected queues on-site. The roadway network may not be used to store vehicle queues.

As depicted in Table 4, roadways and intersections within the project site and along its boundary streets which are projected to operate at level of service D, E, or F, without site-generated traffic, need not to be brought up to level of service C by the proposed development. Such roadways and intersections, under conditions which include such site-generated traffic, must be brought up to the projected level of service that would exist without the site-generated traffic, i.e. reducing the amount of traffic from the development so that the LOS is

maintained at an acceptable level or by altering mitigation improvements within the project site and along its boundary streets so that the LOS is maintained.

**Table 4 Minimum Acceptable Level of Service**

Projected Level of Service	Level of Service Without development						
		A	B	C	D	E	F
	A	NA	-	-	-	-	-
	B	B	NA	-	-	-	-
	C	C	C	NA	-	-	-
	D	C	C	C	NA	-	-
	E	C	C	C	D	NA	-
	F	C	C	C	D	E	NA

## **Section 6: Border Street Requirements**

The applicant shall dedicate right-of-way and construct or improve border streets associated with the parcel being developed to build out the roadway half of the width of the ultimate cross section, measured from the centerline of the ultimate right-of-way. If a street or planned thoroughfare bisects the parcel, the applicant shall improve or construct the entire facility.

## **Section 6 7: Implementation of Mitigation**

For phased construction projects, Implementation and acceptance of these traffic improvements must shall be completed concurrent with the phase of development that triggers the improvement, accomplished no later than the completion of the project phase for which the capacity analyses show that they are required. If applicable, plans for project subsequent phases subsequent to a phase for which a traffic improvement is required may be approved only if the traffic improvements are completed or bonded.

## **Section 7 8: Limitations on Traffic Impact Mitigation**

- A. Voluntary efforts. Beyond those herein required, to mitigate traffic impacts are encouraged as a means of providing enhanced traffic handling capabilities to users of the land development site as well as others.
- B. Traffic mitigation tools include, but are not limited to, pavement widening, turn lanes, median islands, access controls, curbs, sidewalks, traffic signalization, traffic signing, pavement markings, etc.

## **Section 8: Exemptions**

- A. The city hereby finds that traffic patterns and infrastructure within the area identified on the attached map are established. Further, if the city finds that there is little opportunity to expand transportation capacity in this area, without

~~destroying the city's historic built environment, the development may be exempt from certain provisions of this Ordinance.~~

~~B. In addition, the City Manager may waive the requirement to submit a TIA. The City Manager must include the reason for the waiver in the City Managers decision on the PHT Generation Form, and the applicant must mitigate adverse effects of the traffic generated from the proposed development to qualify for the TIA waiver.~~

#### **Section 9: Rough Proportionality**

- A. If the City requires as a condition of approval that the developer bear a portion of the costs of infrastructure improvements, the developer's portion of the costs may not exceed the amount required for infrastructure improvements that are roughly proportionate to the proposed development.
- B. A developer who disputes the determination may appeal to the City through the City Manager within 30 days of the rough proportionality determination. A developer may further appeal the determination of the City Manager to the Board of Adjustments and Appeals. At the Board of Adjustments and Appeal review, the developer may present evidence and testimony under procedures adopted by Board. After hearing any testimony and reviewing the evidence, the Board of Adjustments and Appeals shall make the applicable determination within 30 days following the final submission of any testimony or evidence by the developer.

#### **Section 9 10: Variances**

- A. Following the decision to deny a development by the appropriate authority, and the decision was solely based on the anticipated increase in traffic that cannot be mitigated, the owner or agent may make application to the City Council for a variance. The application shall be filed with the City Manager, accompanied by the appropriate fee established by City Council.
- B. Conditions of Variances. The Variance application shall describe the rational why the variance should be granted and should be supported by empirical data. The City Council may grant a variance to this ordinance and direct that the development be approved by the appropriate authority if the Council determines the development is in the best interest of the community. The City Council may impose such conditions or requirements in a variance that in the City Council's judgment are necessary to protect the general health, safety and welfare of the public and the variance will not negatively impact efficient development of the land and surrounding areas based on sound planning principles.

PASSED and APPROVED on first reading this the 26<sup>th</sup> day of February, 2019.

PASSED, APPROVED and ADOPTED on second reading this the \_\_\_\_ day of February, 2019.

APPROVED:

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Mayor

ATTEST:

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City Secretary

APPROVED AS TO FORM:

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City Attorney