AN ORDINANCE

AMENDING CHAPTER 35, UNIFIED DEVELOPMENT CODE
OF THE CITY CODE OF SAN ANTONIO, TEXAS ADOPTING
PROVISIONS FOR ESTABLISHING A PROCESS, AS A
CONDITION OF APPROVAL FOR A PROPERTY
DEVELOPMENT PROJECT, THAT THE DEVELOPER BEAR
A PORTION OF THE COSTS OF MUNICIPAL
INFRASTRUCTURE IMPROVEMENTS IN AN AMOUNT
THAT IS ROUGHLY PROPORTIONATE TO THE PROPOSED
DEVELOPMENT.

* * * * *

WHEREAS, in 2005 Texas legislation was adopted establishing procedures for a municipality,
requiring as a condition of approval for a property development project that the developer bear a
portion of the costs of municipal infrastructure improvements, to limit the portion of the costs a
developer pays to not exceed the amount that is roughly proportionate to the proposed
development as approved by a professional engineer; and

WHEREAS, the Planning & Development Services Department partnered with the Public
Works Department, City Attorney’s Office and Bexar County to implement the state’s new
requirements; and

WHEREAS, the proposed ordinance will require applicants for new development to provide
both on and off-site improvements within a one and one-half mile study radius based on
individualized findings of traffic studies; and

WHEREAS, an applicant will be required to provide both a preliminary cost estimate for the
improvements identified in the traffic study as well as a second cost estimate of the impact that
the new development will have on the city’s roadway system. The basis for the improvements
will be based on the lesser of the two amounts; and

WHEREAS, City Council now desires to amend the Unified Development Code to adopt
procedures for determining the roughly proportionate costs to be paid incident to development;

NOW THEREFORE; BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF
SAN ANTONIO:

SECTION 1. Chapter 35 of the City Code of San Antonio, Texas is hereby amended by adding
language that is underlined (added) and deleting the language that is stricken (deleted) to the
existing text as set forth in this Ordinance.

SECTION 2. Chapter 35 of the City Code of San Antonio, Texas is hereby amended as follows:

1
Chapter 35, Section 35-501 is amended by adding a new Subsection 35-501(b) and renumbering remaining subsections accordingly:

Sec. 35-501. General Provisions.

(b) Roughly Proportionate Determination

(1) A roughly proportionate determination (determination study) shall be made at the time that a Master Development Plan (MDP), Planned Unit Development (PUD), Subdivision Plat, or request for Building Permit is submitted in accordance with §35-502(a). The determination study shall be made by the applicant's Licensed Professional Engineer which shall include a comparison of the total capacity of the existing public infrastructure system utilized by the applicant to the total capacity of the infrastructure improvement being dedicated by, constructed by or contributed to by the applicant. The study shall be completed using standard measures of capacity for the applicable public facilities system.

(2) The roughly proportionate determination is not made to a mathematical certainty, but is intended to be used as a tool to fairly assess the roughly proportionate impacts of a development. The determination study shall be completed in accordance with generally recognized and approved measurements, assumptions, procedures, formulas, and development principles that shall be applied in the best interests of the public and the property owner to result in roughly proportionate costs to the property owner in dedications, the payment of fees and/or, the construction of a useable and workable public facilities system that is roughly proportionate to the impact of the proposed development.

(3) A Licensed Professional Engineer retained by or an employee of the City, shall approve the determination study provided that all the necessary infrastructure improvements required by this Chapter related to the MDP, PUD, Subdivision Plat, or Building Permit have been identified. The director may individually or as requested by the Director of Public Works determine that additional improvements attributable to and necessitated by the development need to be provided in addition to those identified by the applicant, so long as the total off-site transportation-related improvements remain roughly proportionate to the impact of the proposed development on the transportation system. The Director may require that the applicant, at applicant's expense, submit additional information or studies pertaining to the roughly proportionate determination that may assist the City's Licensed Professional Engineer in approving the determination study.

(4) The Director shall identify in a written statement all the infrastructure improvements to be made in conjunction with the MDP, PUD, Subdivision Plat, or request for Building Permit as a result of the proposed activity and shall identify specific infrastructure improvements to be made by the applicant that are roughly proportionate to the impact of the proposed Development. The infrastructure improvement requirements may include a combination of dedications, payment of fees, and payment of construction costs.

(5) The requirements of this Code may be altered with a variance in accordance with Article IV, Division 10 that is supported by the written determination of the Director in order to satisfy the roughly proportionate determination.

(6) This Section does not diminish the authority or modify the procedures specified by Chapter 395, TEXAS LOCAL GOVERNMENT CODE.
(d) **Roughly Proportionate Appeal**

(1) An applicant may appeal to the City Council the determination of the Planning and Development Services Director and the City's approved determination study, made in accordance with §35-501(b), that improvements attributable to and necessitated by the development can be required in addition to those proposed by the applicant. The purpose of the appeal is to determine whether the infrastructure improvements required by the Director are roughly proportionate to the proposed development.

(2) **Roughly Proportionate Appeals Procedure**

A. If an applicant wishes to appeal the roughly proportionate determination, then the applicant shall file a written notice of appeal of the director's determination and the City's approved determination study to both the Director and City Clerk, 100 Military Plaza, Second Floor, City Hall, P. O. Box 839966, San Antonio, Texas 78283-3966 no later than thirty (30) days after the date of the written statement specified in 35-501(b)(4) is made by the director that imposes costs on the applicant for public infrastructure improvements as a condition of development approval, through the making of dedications, payment of fees, or payment of construction costs.

B. The appeal shall specify and in detail state the reasons that the director's determination and the approved determination study that require infrastructure improvements as a condition of development approval, through the making of dedications, payment of fees, or payment of construction costs, exceed those that are roughly proportionate to the proposed Development.

C. Not later than twenty (20) working days after filing written notice of appeal, the applicant shall file an appeal request and fifteen (15) copies of each of the following items with the City Clerk and one (1) copy with the director:
   i. an appeal; and
   ii. a written list of witnesses, expert witnesses and Licensed Professional Engineers, and alternates for these witnesses; and
   iii. a written synopsis of the expected testimony, address, phone number, and professional licenses of each witness, expert witness, and Licensed Professional Engineer; and
   iv. written evidence, description of anticipated evidence, along with materials, software programs, maps, charts, graphs, studies, reviews, and reports of professionals in support of the appeal with respect to each specific portion of the Directors' determination and the City's approved determination study that requires as a condition of approval for a property development project that has the developer bear a portion of the costs of municipal infrastructure improvements by the making of dedications, the payment of fees or the payment of construction costs.

D. Upon receipt by the director of all items listed in 35-501 (d) (2) C from the applicant, the Director shall file fifteen (15) copies of a response and submission of each of the items listed in 35-501 (d) (2) C with the City Clerk and one (1) copy of each with the applicant. The director's response shall be issued no later than thirty (30) days after receipt of applicant's appeal submission.

E. Upon receipt of the response of Director, the City Clerk shall schedule a time and date for the City Council to consider the appeal not sooner than thirty (30) calendar
days but no later than sixty (60) calendar days after receipt of the Planning and Development Services Director response and submission.

F. The applicant or the Director, as parties to the appeal, shall be afforded the opportunity to make a one (1) time amendment to the items required by Section 35-501 (d) (2) C by filing fifteen (15) copies of an amendment with the City Clerk and one (1) copy with the other party to the appeal. Such amendment shall be filed no later than the fourteenth (14th) day before the date the City Council is scheduled to consider the appeal.

G. Upon receipt of the other party's amendment to items required by Section 35-501 (d) (2) C the director or applicant shall file fifteen (15) copies of any amendment response with the City Clerk and one (1) copy of any amendment response with the other party no later than twenty (20) calendar days after receipt of the other party's one (1) time amendment.

H. After receipt of the Director's or applicant's amendment response the City Clerk shall reschedule a time and date for the City Council to consider the appeal not sooner than thirty (30) calendar days but no later than sixty (60) calendar days from the last date upon which a response shall be filed for the City Council to consider the appeal.

I. The City Council will not consider any written evidence, materials, software programs, maps, charts, graphs, studies, reviews, and reports that are received or presented to the City Clerk and/or the director within thirty (30) days of the date City Council is scheduled to consider the appeal. The City Council shall consider testimony from the applicant and the City presented at City Council.

J. The City Council shall hold a public appeal hearing to act upon the applicant's appeal. The City Council shall determine whether the Director's written statement identifying all the infrastructure improvements dedications, payment of fees, and payment of construction costs to be made in conjunction with the Development are roughly proportionate to the Development. The City Council shall decide whether or not to grant the appeal, grant the appeal with conditions, or deny the appeal.

K. The applicant and Director shall be allotted no more than one (1) hour each to present evidence and testimony before City Council.

L. After hearing any testimony and reviewing any evidence, the City Council shall make the applicable determination within thirty (30) days following the final submission of any testimony or evidence by the applicant.

Chapter 35, Section 35-502 is amended by deleting existing Section 35-502 and replacing with a new Section 35-502 as follows:

DIVISION 2. INFRASTRUCTURE STANDARDS

35-502 Traffic Impact Analysis and Roughly Proportionate Determination Study

(a) The following are the steps to be undertaken by the applicant and the City of San Antonio and/or Bexar County as part of the traffic impact analysis (TIA) and roughly proportionate determination study.

(1) The applicant evaluates, using a trip analysis, what type of traffic impact analysis, if any, is required for the development application and submits such evaluation to the Director for approval.
(2) If a detailed traffic impact analysis is required, then the applicant shall undertake the following steps:

A. Conduct a meeting with City Public Works and Planning and Development Services staff to determine the scope of the traffic impact analysis. If the development is located outside the City Limits, the County Engineer's staff shall also be included;

B. Complete the traffic impact analysis in accordance with this Chapter;

C. Identify mitigation improvements and thoroughfare plan implementation requirements from §35-506(e)(8), if any, that are needed to support the development; and

D. Identify the total approximate cost, including design, engineering and construction, to deliver the mitigation improvements identified in Step 2.C, if any.

(3) The applicant, using the approved methodology of the City of San Antonio, shall determine the probable maximum amount of mitigation improvements (measured in dollars) that may be attributable to the development.

(4) The applicant shall compare the cost of the mitigation improvements determined in Step 2d to the maximum amount of mitigation improvements identified in Step 3.

A. If the cost of the improvements identified in Step 2d is less than or roughly equal to the maximum amount of mitigation improvements identified in Step 3, then the mitigation improvements identified in the traffic impact analysis are said to be roughly proportionate to the impact of the development.

B. If the cost of the improvements identified in Step 2d is greater than the maximum amount of mitigation improvements identified in Step 3, then the mitigation improvements identified in the traffic impact analysis must be limited by the City to an amount roughly equal to the costs identified in Step 3.

(b) Traffic Generation Reports

(1) Neither a Traffic Impact Analysis nor a Peak Hour Trip Generation Form is required as a result of a change in zoning district boundaries for the following applications:

A. Commercial Retrofits, Traditional Neighborhood Developments or Transit- Oriented Developments as specified in Table 201-1 and Section 206(e);

B. Developments located in the “D” Downtown or “IDZ” Infill Development Zone zoning districts; or

C. Where the existing zoning is temporary resulting from annexation and no building permit has been previously requested;

(2) Trip Analysis. The property owner, or owner's agent, shall submit one of the following three types of reports listed below based on the number of Peak Hour Trips (PHT) generated by the proposed development as determined from the most recent version of the ITE Trip Generation Manual when the property is part of a master development plan (MDP), planned unit development (PUD), plat, building permit, or is subject to an application to rezone. PHT analyzed may be the AM, Midday, PM, Saturday, and/or Sunday peak hours, based on the peak hour trip generation for that given day.

A. Peak Hour Trip Generation Form and Turn Lane Assessment. The form shall be required for developments generating less than 76 PHT (inbound and outbound peak hour trips)
during its highest trip generating peak hour. The form shall be supplied by the property owner, or owner's agent, identifying the trip generation information specified in Appendix "B", §35-B122(a)(6). A development may generate enough trips to require the installation of a turn lane without requiring the need for a traffic impact analysis, therefore the form supplied by the property owner, or owner's agent, shall also address the need for turn lanes, as described in §35-502(d)(2).

B. Study Level Traffic Impact Analysis (TIA). For MDPs or PUDs greater than 500 acres in gross size, the purpose of a study level TIA is summarized below. The study shall include the information specified in Appendix "B" §35-B122(b) and shall be submitted to accompany the MDP and/or PUD for submission to the City, County, and/or TxDOT, as appropriate. Plats will be studied on an individual basis in accordance with TIA requirements.

i. Review the existing transportation network to determine the general needs associated with the proposed development;
ii. Identify planned transportation projects and roadway improvements in the area;
iii. Project future trips generated by the proposed development;
iv. Distribute and assign expected trips onto the study area roadway network generated by the proposed development;
v. Recommend the transportation network required to accommodate the proposed development;
vi. Define roadway hierarchies; and
vii. Define right-of-way requirements for both roadway segments and intersections identified at the required TIA scoping meeting.

C. Traffic Impact Analysis and Proportional Mitigation Determination Report. A Traffic Impact Analysis (TIA) and a Proportional Mitigation Determination Report shall be required when the property is subject to master development planning, development permitting, or rezoning:

i. The proposed development generates 76 PHT or more;
ii. The change to an existing TIA or existing zoning results in an increase of at least 76 PHT or 10% of the total PHT for the proposed development, whichever is greater;
iii. (When a building permit submitted for the development is of an intensity at least 5% greater (in the number of PHT) than assumed in the previously completed TIA;
iv. A previously completed TIA for the subject area was completed more than five years prior to the submittal date of current application; or
v. When the number of access points are reduced or relocated.

TIA Requirements. A TIA shall be performed by the property owner (or its agent) according to the scope and format established in Appendix "B", §35-B122(a).

TIA Levels and Study Areas

<table>
<thead>
<tr>
<th>TIA Level</th>
<th>PHT</th>
<th>Study Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDY LEVEL</td>
<td>N/A</td>
<td>Within limits of MDP and/or PUD and those major thoroughfares immediately surrounding the MDP and/or PUD.</td>
</tr>
<tr>
<td>1</td>
<td>76 - 250</td>
<td>All intersections of the proposed development with the adjacent roadway system and those roadways and</td>
</tr>
</tbody>
</table>

6
(d) Traffic Impact Analysis

(1) For all developments where a TIA is required, a TIA Scoping Meeting shall be required. The purpose of the scoping meeting shall be to establish the TIA requirements in accordance with generally accepted practice (as described in the most recent version of the ITE Recommended Practice Transportation Impact Analyses for Site Development). During the scoping meeting, the following elements will be determined: type of study, study area, trip generation, trip distribution and assignment, time period(s) of analysis (e.g. AM, PM, Saturday), analysis scenarios (e.g. opening day, build out, build out plus five years), and growth rate assumptions for background traffic. The TIA scoping meeting shall be attended by the engineer performing the TIA, the property owner, or owner’s agent, City Staff (from both Public Works and Planning and Development Services), and County Staff, if applicable.

(2) In no case shall the amount of time between the existing traffic scenario and the next time period to be analyzed exceed seven (7) years. For projects where the time to build out exceeds seven (7) years, an interim phase that occurs prior to year seven (7) of the development shall be analyzed.

Fig. 502-1
Trip Distribution Network Diagram

Note: PHT shown in Figure 502-1 presents outbound trips.
PHT will be distributed through the adjacent roadway network based on the trip distribution identified in the TIA Scoping Meeting. The PHT will be distributed to subsequent intersections until the minimum 76 PHT or the one and one half (1.5) mile maximum distance is reached.

(3) The existing and projected levels of service for each analysis scenario for signalized intersections, controlled approaches of unsignalized intersections, and associated roadway segments within the study area shall be identified during the TIA scoping meeting. Unsignalized intersections include two-way stop controlled (TWSC) and all-way stop-controlled (AWSC) intersections identified within the study area.

A. The appropriate Level of Service (LOS) (using Highway Capacity Manual (HCM) delay values in seconds per vehicle) shall be determined for each analysis. Each analysis shall, at a minimum, include the following scenarios: existing traffic, "no build" traffic (existing plus anticipated growth of existing traffic plus neighboring development activity), and projected total ("no build" plus site generated) traffic.

B. Mitigation improvements for each intersection shall be identified, for each time period of analysis, (with a preliminary cost estimate to implement the improvements) to either maintain a minimum intersection level of service of C or, when the projected background traffic delay value measured in seconds per vehicle is already below level of service C, to maintain the projected background delay value within 10 percent of the projected background traffic delay for unsignalized intersections and to within 20 percent of the projected background traffic delay for signalized intersections and roadway segments.

C. For the controlled movements at two-way stop controlled intersections, the delay experienced for these side streets may operate at a level of service at or below C. If the controlled approach has already been widened to at least two lanes for three-legged intersections (to accommodate dedicated left-turn and right-turn lanes) or to at least three lanes for four-legged intersections (to accommodate dedicated left-turn, thru, and right-turn lanes) and the intersection does not meet warrants for the installation of a traffic signal (typically when the side street controlled approach volumes are at or below 100-200 PHT), a delay value at or below level of service C may be deemed acceptable due to the lack of available mitigation improvements.

D. If no mitigation improvements are available based on the determination of both the applicant and the City, the intersection or roadway segment shall be deemed non-compliant and identified as such within the traffic impact analysis. Non-compliant intersections and roadway segments are those that have been fully constructed to their ultimate master planned configuration and no improvements could be implemented without significant right-of-way acquisition or grade separations.

(e) Roadway Classification, Turn Lanes, and New Traffic Signal Construction.

(1) Roadway Classification. The following vehicles per day (vpd) will provide clarification to the roadway classification system for streets within conventional subdivisions exclusive of Traditional Neighborhood Developments (TND) as related to master development plans, plats, zoning and building permits:

A. Local A Street: Function of roadway UDC 35-506 (Table 506-1: Functional Classification System Description) and Appendix "A" (Definitions). Daily traffic volumes shall range between 500-1000 vehicles per day vpd.
B. Local B Street: Function of roadway UDC 35-506 (Table 506-1: Functional Classification System Description) and Appendix A (Definitions). Daily traffic volumes range from 1,000 to 4,000 vpd (houses fronting) and 4,000 to 8,000 vpd (no houses fronting).

C. Collector: Function of roadway UDC 35-506 (Table 506-1: Functional Classification System Description) and Appendix "A" (Definitions). Daily traffic volumes shall range from 8,000 to 10,000 vpd.

D. Secondary Arterial shall follow UDC 35-506 (Transportation and Street Design) and the City of San Antonio Major Thoroughfare plan, Ord. No. 98282. Daily traffic volumes shall range from 14,000 to 16,000 vpd for a two lane road and 30,000 to 34,000 vpd for a 4 lane.

E. Primary Arterial shall follow UDC 35-506 (Transportation and Street Design) and the City of San Antonio Major Thoroughfare Plan, Ord. No. 98282. Daily traffic volumes shall range from 14,000 to 16,000 vpd for a two lane road, 30,000 to 34,000 vpd for a 4 lane and 6 lanes for greater than 46,000 vpd.

(2) Turn Lane Requirements at Site Access Locations

A. The construction of turn lanes may be limited due to topographic conditions or the need to obtain right-of-way from adjacent property owners. The applicant must show that all reasonable efforts have been made to implement turn lanes when required by this Chapter. This may include relocating driveways or roadways to allow for the construction of turn lanes and/or offers to purchase right-of-way from adjacent property owners.

B. Right turn lanes shall be required:
   i. At all driveways or streets with a daily entering right-turn traffic volume of 500 vehicle trips or 50 vehicle peak hour trips;
   ii. At street and driveway intersections in TxDOT right of way at the option of TxDOT; or
   iii. Where unsafe conditions such as limited sight distance, high travel speed, uneven grade, etc. may exist.

C. Left turn lanes shall be required:
   i. At all median openings;
   ii. At all driveways or streets with an average daily entering left-turn traffic volume of 500 vehicle trips or 50 vehicle peak hour trips if no median;
   iii. At street and driveway intersections in TxDOT right of way at the option of TxDOT; or
   iv. Where unsafe conditions such as limited sight distance, high speed, uneven grade, etc. may exist.

(f) Mitigation Improvements and Roughly Proportionate Determination

(1) The purpose of the Traffic Impact Analysis is to identify if any mitigation improvements are necessitated by and attributable to the proposed development. Required mitigation improvements may include the following.

A. Implementation of the Major Thoroughfare Plan; including right of way dedication and/or construction in accordance with §35-506(e)(8).
B. Improvements identified in §35-502(c) Traffic Impact Analysis.

C. Identification of other improvements. The applicant shall propose improvement measures for the items listed in Table 502-2. Other improvements include, but are not limited to, pavement widening, turn lanes, median islands, access controls, curbs, sidewalks, traffic signalization, traffic signing, pavement markings, etc.

Table 502-2
Minimum Areas to be Addressed in Roughly Proportionate Determination

<table>
<thead>
<tr>
<th>Item</th>
<th>ROUGHLY PROPORTIONATE DETERMINATION ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right of way dedication for adjacent exterior streets</td>
<td>506(d)(1)</td>
</tr>
<tr>
<td>Improvements to substandard streets</td>
<td>506(d)(9)</td>
</tr>
<tr>
<td>Projecting Streets</td>
<td>506(e)(2)</td>
</tr>
<tr>
<td>Right of way dedication and construction of designated Major Thoroughfare Plan streets</td>
<td>506(e)(8)</td>
</tr>
<tr>
<td>Dedication of Arterial</td>
<td>506(g)</td>
</tr>
<tr>
<td>Upgrade Existing Traffic Signals</td>
<td>506(k)</td>
</tr>
<tr>
<td>New Traffic Signal Construction</td>
<td>506(k)</td>
</tr>
<tr>
<td>Other improvements identified in the TIA</td>
<td>502(c)</td>
</tr>
<tr>
<td>Right of way dedication and construction of left and/or right turn lanes</td>
<td>502(d)(2)</td>
</tr>
</tbody>
</table>

(2) For all phased development projects, implementation of the mitigation improvements must be completed no later than the completion of the project phase for which the traffic impact analysis show that they are required. Plats for project phases subsequent to a phase for which a mitigation improvement is required may be approved only if the mitigation improvements are completed or bonded by the developer.

(3) Following the identification of mitigation improvements and any other improvements necessitated by and attributable to the development, the applicant shall utilize the methodology developed and approved by the City to determine if the mitigation improvements identified are roughly proportionate to the impact of the proposed development.

A. At the conclusion of the TIA, the applicant will summarize all of the mitigation improvements identified in the TIA and the approximate total cost of all mitigation improvements including design, engineering and construction. Mitigation improvements that only serve the proposed development (such as site plan related recommendations and right-turn lanes into and out of a development) that provide minimal benefits to the study area roadway network shall not be included in the cost of the mitigation improvements (when compared to the maximum amount of improvements attributable to the proposed development).

B. The applicant will utilize the approved methodology made available by the City to determine the maximum amount of improvements (measured in Dollars) that may be attributable to the proposed development.

C. The applicant shall then compare the cost of the mitigation improvements to the maximum probable amount of improvements that may be attributable to the development.

i. If the cost of the mitigation improvements is less than or equal to the maximum amount of improvements that may be attributable to the development, then the mitigation improvements identified in the traffic impact analysis are said to be roughly proportionate to the impact of the development.
ii. If the cost of the mitigation improvements is greater than the maximum amount of improvements that may be attributable to the development, then the mitigation improvements identified in the traffic impact analysis are limited to an amount roughly equal to the maximum amount of improvements that may be attributable to the development.

D. The methodology utilized by the City shall be as follows. The maximum amount of improvements attributable to a development is roughly proportional to the demand created by a development. This value shall be determined (measured in Dollars) by multiplying the following values together:

i. Intensity of the development (using independent variable identified in the ITE Trip Generation Manual, e.g. number of dwelling units, number of 1,000 square feet of leasable floor area, etc.);

ii. Number of vehicles - the peak hour trip generation rate for the applicable peak hour (from the most current version of the ITE Trip Generation Manual Information);

iii. Length of the trip - the anticipated trip length to/from the development on the City's thoroughfare network (a minimum value of 1.0 miles and a maximum value of 1.5 miles shall apply); and

iv. Cost per vehicle-mile - the average cost per vehicle-mile for the City of San Antonio to deliver a typical roadway capacity improvement project based upon the latest Average Unit Price List posted on the City Website by the Director of Capital Improvements Management Services (CIMS) Department. The Average Unit Price List shall be reviewed by the Director of CIMS on a regular basis to ensure the Average Unit Price List is consistent with current construction costs.

E. The methodology shall be reviewed by the director on a regular basis to ensure the methodology is consistent with current construction costs and engineering criteria.

F. Projects within a valid Master Development Plan or Planned Unit Development where mitigation improvements have been previously constructed at the cost of the applicant shall receive credit for these improvements. The credit for improvements shall be determined using the cost of the improvements at the time they were constructed. This value shall be included with the total cost of the mitigation improvements required to serve the development. The land uses previously constructed or planned for shall also be included in the calculation of the maximum probable amount of improvements that may be attributable to the development.

(g) Limitations on Traffic Impact Mitigation. Limitations on traffic impact mitigation requirements are as follows:

1. Improvements that have been planned and funded through a capital improvement project that exceed the proposed mitigation measures recommended in the TIA are not required. The capital improvement must be planned to be awarded to a contractor for construction within one (1) year following the completion of the project phase requiring the improvement to be considered as a mitigation improvement.

2. Requirements for mitigation for City sponsored land development projects located inside Interstate Highway 410 will be considered on a case-by-case basis and may be waived by the City Council.

(h) Exemptions. The city finds and determines that certain factors, such as interconnected street systems, mixed uses, and the availability of pedestrian facilities, can result in fewer trips than isolated, low-density subdivisions. Certain development patterns produce fewer trips and shorter
trips than developments subject to conventional zoning or located on the fringe of the metropolitan area. The city hereby finds that traffic patterns and infrastructure within its urban core are established, and that there is a strong public policy to encourage reinvestment in the city's downtown areas. Further, the city hereby finds that there is a strong public policy to encourage infill development and that there is little opportunity to expand transportation capacity in many infill areas without destroying the city's historic built environment. Accordingly, the following are exempt from the provisions of this section:

1. Applications for development approval within the "D" Downtown district.
2. Any development within an "IDZ" infill Development Zone.
3. Any Traditional Neighborhood Development (TND) or any Transit-Oriented Development (TOD).

Sec. 36-502. Traffic Impact Analysis.

(a) Specific Requirements for Transportation LOS.

1. Traffic Impact Analysis (TIA). No permit shall be approved unless a traffic impact analysis (TIA) or PHT generation form is completed and approved as provided in this section. 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 "B", section 36-B122. 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 502-1.

<table>
<thead>
<tr>
<th>Peak Hour Trips</th>
<th>Submittal Category (see Appendix B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,001 or more</td>
<td>Level 3 TIA</td>
</tr>
<tr>
<td>501-1,000</td>
<td>Level 2 TIA</td>
</tr>
<tr>
<td>101-500</td>
<td>Level 1 TIA</td>
</tr>
<tr>
<td>100 or less</td>
<td>PHT-Generation Form (no TIA is required)</td>
</tr>
</tbody>
</table>

When an activity on, or change to, property occurs that varies from the activity on which a previous TIA was submitted and accepted, and the new activity places the project into a level different from that of the previous TIA or generates an increase of at least one hundred (100) PHT (or ten (10) percent for a Level 3 TIA) relative to the previous TIA, the property owner (or its agent) shall perform and submit to the city an amended TIA under the formats specified in Appendix "B", section 36-B122. For the purposes of this section, the amendment will be satisfactory to determine if the increase in PHT impacts capacity and requires additional mitigation as defined herein.

2. Permits or Development Orders. The appropriate level TIA as required by subsection (a) of this section may only be required by the city as part of the approval process for the activities described in Table 502-2 for each respective category of property, as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Point at Which TIA is Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-</td>
<td>Property which is not the subject of a valid master</td>
<td>May be required as a</td>
</tr>
</tbody>
</table>
development plan.~

<table>
<thead>
<tr>
<th>development plan.~</th>
<th>condition of acceptance of master development plan.~</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Pre-Plating</th>
<th>Property which is the subject of a master development plan.~</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>May be required at the time of platting, as a part of the plat approval process.~</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Platted</th>
<th>Property which is the subject of a valid plat which has been accepted and approved by the city.~</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>May be required at the time a building permit is requested.~</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post</th>
<th>Property which is the subject of a TIA provided at one (1) of the points identified above (or for which the director of public works has determined no TIA is needed) or voluntarily provided by the developer.~</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No further TIA required.~</td>
</tr>
</tbody>
</table>

(3) Rezoning.

A. A TIA may be required any time a property owner seeks to rezone property that is the subject of a master development plan in a manner that: (i) would change the character of use (i.e., commercial, multi-family, residential etc.) of the property from the use(s) proposed in the master development plan; and (ii) results in the PHT under the proposed zoning and use exceeding by more than one hundred (100) PHT the maximum PHT that could have been generated by uses permitted in the existing land use classification, or results in a TIA level different from that derived from the existing master development plan.

B. A TIA may be required any time a property owner seeks to rezone property that is not the subject of a master development plan in a manner that would result in the PHT under the proposed zoning and use exceeding by more than one hundred (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.

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

M. Impact Area. The impact area is the area within which any analysis is conducted in order to determine compliance with the level of service standards. This area shall be based on the size of the development and the PHTs projected to be generated by the proposed development. The impact areas shall be established as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Impact Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 or 2 TIA</td>
<td>The site, and the area within a one quarter (1/4) mile radius from the boundary of the site.~</td>
</tr>
<tr>
<td>Level 2 TIA</td>
<td>The city traffic engineer may require the area of the study to be extended up to a maximum area of one (1) mile radius.~</td>
</tr>
<tr>
<td>Level 3 TIA</td>
<td>The site, and the area within a one (1) mile radius from the boundary of the site.~</td>
</tr>
</tbody>
</table>

(5) Mitigation. The applicant may propose mitigation measures as described in subsections (8) through (10) herein as an alternative to deferral or permits or denial of the application. 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.

A. 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 be identified and viable recommendations made for raising the traffic conditions to level of service C or better.

B. As depicted in Table 502.4, 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, by altering on-site and/or off-site traffic demands and/or capacities. Level of service notwithstanding, required traffic impact mitigation improvements are limited to those that can be implemented within the project-site and along its boundary streets.

Table 502.4 Minimum Acceptable Level of Service

<table>
<thead>
<tr>
<th>Projected Level of Service</th>
<th>Level of Service Without Development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>A</td>
<td>NA</td>
</tr>
<tr>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>D</td>
<td>C</td>
</tr>
<tr>
<td>E</td>
<td>C</td>
</tr>
<tr>
<td>F</td>
<td>C</td>
</tr>
</tbody>
</table>

(6) Implementation. For phased construction projects, implementation of these traffic improvements must be accomplished no later than the completion of the project phase for which the capacity analyses show that they are required. Plans for project phases subsequent to a phase for which a traffic improvement is required may be approved only if the traffic improvements are completed or bonded.

(7) Limitations on Traffic Impact Mitigation.

A. Additional limitations on traffic impact mitigation requirements are as follows:

1. Off-site traffic impact mitigation improvements are not required on public streets for which a funded capital improvement project is scheduled to be accomplished within three (3) years of the TIA review.

2. Requirements for mitigation for land development projects located inside the circumferential freeway, Interstate Highway 410, will be considered on a case-by-
case-basis and may be waived by the city council for city-sponsored infill development project.

B. 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.

C. 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.

D. Left and right turn lanes are required off of arterials and may be required off of collectors based on a minimum sixty (60) PHT right or left turning movements entering into a driveway or street. For TxDOT ROW, right and left turn lanes may be required according to traffic volumes per TxDOT’s current edition of the Roadway Design Manual.

(g) Exemptions: The city finds and determines that certain factors, such as interconnected street systems, mixed uses, and the availability of pedestrian facilities, can result in fewer trips than isolated, low-density subdivisions. Certain development patterns produce fewer trips and shorter trips than developments subject to conventional zoning or located on the fringe of the metropolitan area. The city hereby finds that traffic patterns and infrastructure within its urban core are established, and that there is a strong public policy to encourage reinvestment in the city’s downtown areas. Further, the city hereby finds that there is a strong public policy to encourage infill development and that there is little opportunity to expand transportation capacity in many infill areas without destroying the city’s historic built environment. Accordingly, the following are exempt from the provisions of this section:

A. Applications for development approval within the “D” downtown district.

B. Any development within an “IDZ” infill development zone.

C. Any traditional neighborhood development (TND) or any transit-oriented development (TOD).

(9) The following vehicles per day (vpd) will provide clarification to the roadway classification system for streets within conventional subdivisions exclusive of traditional neighborhood developments as related to master development plans, plat, zoning and building permits:

A. Residential Streets: Function of roadway UDC section 35-506 (Table 506-1: Functional Classification System Description) and Appendix “A” (Definitions). Daily traffic volumes shall range between five hundred (500) to one thousand (1,000) vehicles per day (vpd). Street design standards shall follow section 35-506 (Transportation and Street Design). Spacing of local A streets should range from one hundred seventy-five (175) to eight hundred (800) feet.

B. Residential Local B Street: Function of roadway section 35-506 (Table 506-1: Functional Classification System Description) and Appendix “A” (Definitions). Daily traffic volumes range from one thousand (1,000) to four thousand (4,000) vpd (houses fronting) and four thousand (4,000) to eight thousand (8,000) vpd (no houses fronting). Street design standards shall follow section 35-506 (Transpomtion and Street Design). Spacing of local B streets should range from eight hundred (800) feet to one-half (1/2) mile.

C. Collector: Function of roadway section 35-506 (Table 506-1: Functional Classification System Description) and Appendix “A” (Definitions). Daily traffic volumes shall range from eight thousand (8,000) to ten thousand (10,000) vpd. Street design standards
shall follow section 35-506 (Transportation and Street Design). Spacing of collector streets should be one half (1/2) mile.

Note: All secondary and primary arterials shall follow section 35-506 (Transportation and Street Design) and the City of San Antonio Major Thoroughfare Plan, Ordinance No. 98282.

Chapter 35, Section 35-A101 is amended by alphabetically adding the following definitions:


Licensed Professional Engineer. An engineer licensed by the Texas Board of Professional Engineers pursuant to Chapter 1001, Occupations Code.

Street, substandard. A substandard street is an existing street that does not meet the requirements of Table 506-3 or 506-4, including but not limited to minimum right-of-way widths and/or pavement cross-sections. See also definition for street, paper.

TIA. See Traffic Impact Analysis.

Chapter 35, Section 35-B122 is amended by inserting a new Section 35-B122 and deleting the existing 35-B122 as follows:

35-B122 Traffic Impact Analysis

The TIA shall be signed and sealed by a Licensed Professional Engineer with a demonstrated expertise in Traffic Engineering. The following information shall be provided in the following format:

(a) All TIAs shall consist of the following. For Study Level TIAs, see §35-B122(b).

(1) Executive Summary
A. Site location
B. Development description
C. Principal findings
D. Conclusions
E. Recommendations

(2) Table of Contents

(3) Introduction
A. Project description

B. Project location

C. Purpose of project

D. Study Procedure

(4) Existing Conditions

A. Project Location Map with Site Plan and Study Intersections Identified

B. Roadway Network
   i. Street Descriptions including number of lanes, posted speed limit, intersection geometry and traffic control at study intersections.
   ii. Transit Service

C. Land use and zoning

D. Data Collection/Analysis Periods – Weekday AM (7 to 9 AM), Midday (11 AM – 1 PM), and PM (4 to 6 PM) periods should be used for traffic counting at intersections. However, Saturday peak hours should be included for retail uses or weekend generators. Analysis periods coinciding with the peak periods of special land uses where peak traffic typically occurs at non-traditional times, e.g., major sporting venues, schools, or other land uses, should also be included.

E. Existing Peak Hour Traffic Volumes - Existing traffic volumes are the turning movement volumes and ADT collected at the study intersections or along the roadways at the time the TIA is prepared, prior to the beginning of construction of the land development project. If data is collected during non-school periods, a seasonal adjustment factor should be applied. The factor should be based on actual traffic count data for non-school vs. school periods.
   i. Existing Peak Hour Volumes and ADT Figure

(5) "No Build" Condition

A. Future Roadway/Intersection Improvement Projects

B. Background Peak Hour Volumes – Re-route Background volumes if future roadway improvement project would alter travel patterns.
   i. Annual Growth Factor Calculation
   ii. Modify traffic volumes to account for change in traffic patterns due to roadway projects, if appropriate.
   iii. Figure of Background Volumes in Appendix

C. Other Project Traffic
   i. Identification and description of other nearby development projects. Provide copies of relevant pages from TIAs if appropriate. Figure of Other Project Traffic to be included in Appendix.

D. No Build Peak Hour Volumes – calculate “No Build” Peak hour volumes by combining Other Project Volumes with Background Volumes.
i. No Build Peak Hour Volumes Figure.

(6) **Total Traffic Condition**

A. Phasing plan for the development to include expected completion date

B. Project Traffic

i. Trip Generation Calculation – including ITE land use codes, rates, peak hour entering and exiting volumes by land use, and daily volumes by land use

ii. Pass-By and/or Internal Trip Calculations and reductions

iii. Modal Trip Adjustments

iv. Trip Distribution by intersection

v. Trip Distribution Figure by Land Use (when different land uses have unique distributions)

vi. Trip Assignment by intersection

vii. Site Generated Peak Hour Entering and Exiting Volumes Figure

viii. Future Roadway Network ADT and Classification - provide future ADT for proposed site roadways and identify Classification, right of way, and lanes.

C. Proposed Site Access Locations – identify proposed site access locations and proposed traffic control, configuration and identify sight distance limitations if appropriate.

(7) **Capacity Analysis**

A. Capacity analysis will follow the principles established in the latest edition of the Transportation Research Board's Highway Capacity Manual (HCM), unless otherwise directed by the Planning and Development Services Director. Capacity will be reported in quantitative terms as expressed in the HCM and in terms of traffic level of service and measures of effectiveness (MOE) in seconds of delay. Capacity Analysis worksheets shall be provided in the appendices and shall include level of service (LOS), delay, signal timing/phasing, volumes and geometry. An electronic copy of software analysis will also be provided.

B. Existing Condition Intersection Capacity Analysis – Analysis of existing conditions at study intersections should be based on existing volumes, geometry, traffic control and signal timing/phasing.

C. Signalized Intersections - Provide overall level of service and intersection delay in seconds per vehicle for study intersections for all peak hours analyzed.

D. Unsignalized Intersections – Provide overall level of service, intersection delay and controlled approach delay for all-way stop-controlled intersections; provide approach level of service and delay for stop-controlled approaches at two-way stop-controlled intersections for all peak hours analyzed.

E. Provide Description of level of service Results and Identify Problems.

F. Future Condition Intersection Capacity Analysis – Analysis of No Build and Total Traffic Conditions at study intersections should be based on future volumes, geometry, traffic control, and signal timing/phasing. There should not be any changes to software input data for No Build vs. Total Traffic Condition with the exception of the project traffic volumes. All other variables (i.e. signal timing) should remain consistent unless identified and justified in text.

G. Provide overall level of service and intersection delay in seconds per vehicle for study intersections and site access intersections for all peak hours analyzed for both No Build and Total Traffic Conditions.
H. Unsignalized Intersections — Provide overall level of service and intersection delay for study intersections, as defined under section 502(c)(3), and site access intersections for both No Build and Total Traffic Conditions; provide approach level of service and delay for all controlled approaches at study intersections and site access locations for all peak hours analyzed for both No Build and Total Traffic Conditions.

(8) **Identification of Impacts**

A. Identify degradation in level of service results when comparing No Build level of service to Build level of service for all peak hours.

B. Impacts that require mitigation improvements are identified based on Section 35-502(c)(3)(b) of the UDC.

(9) **Mitigation Improvements**

A. Identify improvements to mitigate impacts at study intersections.

B. Provide level of service analysis results with proposed mitigation improvements in place.

C. Provide construction cost estimate for proposed mitigation improvements.

(10) **Conclusions and Recommendations**

A. A summary of level of service and appropriate Measures of Effectiveness (MOE) quantities of impacted facilities with and without mitigation measures.

B. Mitigation phasing plan if project has planned phasing.

(11) **Appendices.** The following general categories and specific items should be considered for discussion in the Traffic Impact Analysis:

A. **Traffic Volumes:**
   i. Current and historical daily and hourly volume counts
   ii. Recent intersection turning movement counts (no older than six months for undeveloped areas or one year for fully developed areas)
   iii. Seasonal variations
   iv. Projected volumes from previous studies or regional transportation plans

B. **Land Use:**
   i. TIA Threshold Worksheet
   ii. TIA Scoping Agreement
   iii. Approved development projects and planned completion dates, densities, and land use types, if available or identified by the City (or County) during the scoping meeting
   iv. Zoning in study area

C. **Trip Generation:**
   i. Trip Generation Calculation
   ii. Pass-by and/or Internal Trip Calculations

D. **Other Transportation Data:**
i. **Origin-destination or additional trip distribution data**

ii. **Accident history adjacent to site and at nearby major intersections and major driveways if potential safety condition is identified by the City (or County) during the scoping meeting**

E. **Photographs:**

   i. **Photographs of approaches for each study intersection.**

F. **Capacity Analysis Worksheets:**

   i. **Worksheet printouts showing volumes, geometry, level of service, signal timing/phasing etc.**

G. **Additional Analysis Worksheets:**

   i. **Worksheets used in analyses (i.e., signal warrant study, all-way stop warrant study, level of service and delay output, weaving and merge analysis, sight distance, queue length analysis, etc.)**

(b) Study Level TIAs shall consist of the following:

(1) **Executive Summary**

   A. **Site location**

   B. **Development description**

   C. **Principal findings**

   D. **Conclusions**

   E. **Recommendations**

(2) **Table of Contents**

(3) **Introduction**

   A. **Project description**

   B. **Project location**

   C. **Purpose of project**

   D. **Study Procedure**

(4) **Study Area Information**

   A. **Boundaries of the study area**

   B. **Existing major roadways and intersections serving the site in the study area**

   C. **Planned major roadways and intersection improvements in the study area**
D. Relevant information regarding planned improvements from the City, County, and/or TxDOT

E. Available existing and historical traffic count information at major roadway segments and intersections in the study area from the City, County, TxDOT, or previously completed traffic studies.

F. Identification of the existing and future roadways and intersections that are relevant to the project and would likely be included in the future TIAs performed for individual plats.

(5) Feasibility Study for Potential Land Uses

A. Determination of the potential land uses, densities, and resulting intensities that may be developed on the property (i.e., using existing topography and comparable properties to determine realistic floor-to-area ratios); and

B. Determination of the resulting trip generation from the subject property for daily and peak hour trips.

(6) Trip Distribution, Assignment, and Proposed Roadway Network

A. Develop a global trip distribution within the study area for the proposed development;

B. Determine if trips will be generated by other developments or background growth that may impact the study area roadway network;

C. Develop a conceptual roadway network to serve the proposed development;

D. Assign the site generated traffic, background traffic, and/or neighboring development traffic to the study area roadway network;

E. Determine the number of lanes along major roadway required to serve the proposed development;

F. Analyze the adequacy of the proposed roadway network; and

G. Determine the amount of right-of-way required along major roadway segments and at major intersections to support the proposed development.

H. Identify approximate phase(s) or unit(s) where infrastructure improvements are to be implemented or restudied.

(7) Conclusions and Recommendations

A. A summary of the conclusions and recommendations for the transportation network required to serve the proposed development.

B. A statement that each subsequent TIA submitted for the proposed development will be compared to the results of the Study Level TIA to determine if the overall roadway network remains adequate to serve the proposed development.


The TIA shall be signed and sealed by a professional engineer, registered to practice in Texas. The following information shall be provided in the following format:
(a) Level 2 and 3 TIA Format. A Level 2-TIA and a Level 3-TIA, when required, shall consist of:

1. Traffic Analysis Map:
   A. Land use, site and study area boundaries, as defined (provide map).
   B. Existing and proposed site uses.
   C. For TIAs that use land use as a basis for estimating projected traffic volumes, existing and proposed land uses on both sides of boundary streets for all parcels within the study area (provide map).
   D. Existing and proposed roadways and intersections of boundary streets within the study area of the subject property, including traffic conditions (provide map).
   E. All major driveways and intersecting streets adjacent to the property will be illustrated in detail sufficient to serve the purposes of illustrating traffic function; this may include showing lane widths, traffic islands, medians, sidewalks, curbs, traffic control devices (traffic signs, signals, and pavement markings), and a general description of the existing pavement condition.
   F. Photographs of adjacent streets of the development and an aerial photograph showing the study area.

2. Trip Generation and Design Hour Volumes (provide table):
   A. A trip generation summary table listing each type of land use, the building size assumed, the average trip generation rates used (total daily traffic and a.m./p.m. peaks), and the resultant total trips generated shall be provided. The number of trips generated shall be based on the average rate for land uses as provided in the Institute of Transportation Engineer's "Trip Generation", latest edition.
   B. Generated vehicular trip estimates may be discounted in recognition of other reasonable and applicable modes, e.g., transit, pedestrian, bicycles. Furthermore, trip generation estimates may also be discounted through the recognition of pass-by trips and internal site trip satisfaction.
   C. Proposed trip generation calculations for single story commercial properties shall be based on the following: (A) the floor area ratio (FAR) requested in the application, or (B) if no FAR is requested in the application, the maximum FAR permissible in the zoning district, if any, or (C) if no FAR is requested in the application and the property is not subject to Article III of this chapter, a floor-to-area (building size to parcel size) ratio 0.25 shall be used.

3. Trip Distribution (provide figure by site exit). The estimates of percentage distribution of trips by turning movements from the proposed development.

4. Trip Assignment (provide figure by site entrance and boundary street). The direction of approach of site attracted traffic via the area's street system.

5. Existing and Projected Traffic Volumes (provide figure for each item). Existing traffic volumes are simply the numbers of vehicles on the streets within the impact area during the time periods listed below, immediately prior to the beginning of construction of the land development project. Projected traffic volumes are the numbers of vehicles, excluding the site-generated traffic, on the streets of interest during the time periods listed below, in the build-out year.
   A. A.M. Peak hour site traffic (including turning movements).
   B. P.M. Peak hour site traffic (including turning movements).
   C. A.M. Peak hour total traffic (including site-generated traffic and projected traffic) (including turning movements).
   D. P.M. Peak hour total traffic (including site-generated traffic and projected traffic (including turning movements).
   E. For special situations where peak traffic typically occurs at non-traditional times, e.g., major sporting venues, large specialty Christmas stores, etc., any other peak hour necessary for complete analysis (including turning movements).
   F. Total daily existing traffic for street system in study area.
   G. Total daily existing traffic for street system in study area and new site traffic.
   H. Total daily existing traffic for street system in study area plus new site traffic and projected traffic from build-out of study area land uses.

6. Capacity Analysis (the applicant shall provide analysis sheets in appendices).
A capacity analysis shall be conducted for all roadway segments within the TIA study area and for all public street intersections and junctions of major driveways with public streets which are significantly impacted (within the study area boundary as defined in this chapter (as agreed to by the developer's engineer and the city traffic engineer). A capacity analysis is required as shown below:

<table>
<thead>
<tr>
<th></th>
<th>Boundary Street Within Study Area</th>
<th>Non-Boundary Street Within Study Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Conditions</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Phase 1</td>
<td>Required</td>
<td>Not Required</td>
</tr>
<tr>
<td>Intermediate Construction Phases</td>
<td>Required</td>
<td>Not Required</td>
</tr>
<tr>
<td>Final Phase/Build-Out Year (Existing Construction)</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Final Phase/Build-Out Year (Proposed Infrastructure)</td>
<td>Required</td>
<td>Required</td>
</tr>
</tbody>
</table>

B. Capacity analysis will follow the principles established in the latest edition of the Transportation Research Board's Highway Capacity Manual (HCM), unless otherwise directed by the director of development services. Capacity will be reported in quantitative terms as expressed in the HCM and in terms of traffic level of service.

C. Capacity analysis will include traffic queuing estimates for all critical applications where the length of queues is a design parameter, e.g., auxiliary turn lanes, and at traffic gates.

(7) Conclusions and Requirements. Conclusions and requirements shall be included consistent with subsection 35-502(f) of this chapter.

(b) Level 1-TIA Format. A Level 1-TIA, when required, shall consist of:

(1) Traffic Analysis Map:
   A. Site and study area boundaries, as defined (provide map).
   B. Existing and proposed site uses.
   C. All major driveways and intersecting streets adjacent to the property will be illustrated in detail sufficient to serve the purposes of illustrating traffic function; this may include showing lane widths, traffic islands, medians, sidewalks, curbs, traffic control devices (traffic signs, signals, and pavement markings), and a general description of the existing pavement condition.

(2) Peak Hour Trip Generation:
   A. The estimates of peak hour trips generated by the development and
   B. The percentage distribution of such trips from each site exit and to each site entrance.
   C. The estimates of distribution of trips by turning movements from each site exit and to each site entrance.

SECTION 3. All other provisions of Chapter 35 of the City Code of San Antonio, Texas shall remain in full force and effect unless expressly amended by this ordinance.

SECTION 4. Chapter 35 of the City Code of San Antonio, Texas is hereby amended to reflect the reorganization of City Departments by changing the term Director of Development Services or Development Services Director to Director of Planning and Development Services throughout the Chapter.

SECTION 5. Chapter 35 of the City Code of San Antonio, Texas is hereby amended to reflect the reorganization of City Departments by changing the term Department of Development
Services or Development Services Department to Department of Planning and Development Services throughout the Chapter.

SECTION 6. Chapter 35 of the City Code of San Antonio, Texas is hereby amended to reflect the reorganization of City Departments by changing the term Director of Planning or Planning Director to Director of Planning and Development Services throughout the Chapter.

SECTION 7. Chapter 35 of the City Code of San Antonio, Texas is hereby amended to reflect the reorganization of City Departments by changing the term Department of Planning or Planning Department to Department of Planning and Development Services throughout the Chapter.

SECTION 8. Should any Article, Section, Part, Paragraph, Sentence, Phrase, Clause, or Word of this ordinance, for any reason be held illegal, inoperative, or invalid, or if any exception to or limitation upon any general provision herein contained be held to be unconstitutional or invalid or ineffective, the remainder shall, nevertheless, stand effective and valid as if it had been enacted and ordained without the portion held to be unconstitutional or invalid or ineffective.

SECTION 9. The City Clerk is directed to publish notice of these amendments to Chapter 35, Unified Development Code of the City Code of the City of San Antonio, Texas. Publication shall be in an official newspaper of general circulation in accordance with Section 17 of the City Charter.

SECTION 10. The publishers of the City Code of San Antonio, Texas are authorized to amend said Code to reflect the changes adopted herein and to correct typographical errors and to index, format and number paragraphs to conform to the existing code.

SECTION 11. This ordinance shall become effective the 1st day of March 2010.

PASSED AND APPROVED this the 21st day of May, 2009.

ATTEST: [Signature]
City Clerk

APPROVED AS TO FORM: [Signature]
City Attorney