

## **ST CHARLES PARISH**

### **Traffic Impact Analysis (TIA) POLICY**

This policy establishes requirements for studies that provide information on traffic projected to be generated by all proposed developments. The purpose and intent of these requirements is to protect the health, safety, and welfare of the citizens and visitors of St Charles Parish (hereinafter "The PARISH") by ensuring the provision of safe and adequate transportation facilities. The objective of the policy is to establish requirements for the identification of potential traffic impacts, operational and/or safety, of proposed developments and potential mitigation where required. Traffic Impact Policies are a standard method utilized by all levels of government to address the contribution to traffic congestion by new or expanded development. A list of references utilized to develop this policy based on best practices is attached.

The landowner, developer and/or engineering representative (hereinafter "The APPLICANT") must provide an engineering study to document the anticipated impact of the proposed development on the existing transportation network. All information and analysis submitted by the APPLICANT must follow the requirements and methods outlined in this policy.

Developments seeking access to state roadways where a review of a traffic impact study is performed by the Louisiana Department of Transportation and Development (hereinafter "The LADOTD") are not exempt from the requirements in this policy.

#### **Procedures**

The PARISH Department of Planning and Zoning (hereinafter "the DPZ") should be contacted prior to all new development applications, Plat Plan and Building Permit Applications, to arrange for a Pre-Application Meeting. At this meeting, a representative of the Department of Public Works (hereinafter "the DPW") will determine the level of traffic impact analysis required. This policy does not apply to an individual requesting a single family or two-family residential access.

If required, the APPLICANT shall submit a Traffic Scoping Information Form and the required supporting documentation to the DPZ two weeks (14 days) prior to the Pre-Application Meeting. The scope of the traffic impact study, required format, and required supporting documentation will be determined by the DPW Representative at the Pre-Application Meeting. A subsequent Traffic Scoping Meeting may be scheduled with the DPW Representative if more specific information or analysis are required.

In instances where the APPLICANT is requesting access to a state roadway and/or where a traffic impact study is required by the LADOTD Traffic Impact Policy, the PARISH process should be initiated first. LADOTD should not be contacted until after the PARISH Pre-Application/Traffic Scoping Meeting unless the PARISH requests LADOTD attend. When the LADOTD process is initiated separately, the APPLICANT shall inform and invite the designated PARISH representative to LADOTD traffic impact meetings and copy him/her on subsequent correspondence. If the designated PARISH representative is not available or elects not to attend any meetings with LADOTD regarding traffic impacts /access connections, the APPLICANT shall provide him/her minutes of the meeting(s).

The APPLICANT shall be solely responsible for the cost of preparation of any required Traffic Impact Studies. The APPLICANT should provide the required stamped and signed TIA and supporting data to the DPW, or their designee, for review and approval. Review fees will be assessed in accordance with the St Charles Parish Fee schedule. The DPW, or their designee, shall provide a TIA Approval Letter to the APPLICANT that clearly outlines any required mitigation.

The TIA Approval Letter shall be included in the packet provided to the commissioners for projects requiring approval by the Planning Commission.

When required by the DPW, the TIA Approval Letter shall be submitted with the Permit Application for projects requiring a building permit. A building permit will not be issued unless the APPLICANT receives a TIA Approval Letter.

Required mitigation measures, if any, shall be in place prior to issuance of a Certificate of Occupancy.

### **Traffic Scoping Meeting**

The APPLICANT shall submit a Traffic Scoping Information Form to the DPW prior to the Pre-Application Meeting. At this meeting, the DPW, or their designee, shall discuss and develop the following Traffic Impact Analysis requirements based on project specific conditions:

- TIA Threshold
- Study area
- Data Collection Requirements which could include, but not be limited to:
  - Traffic Signal Inventory /phasing/timing
  - Seven-day, 24-hour volume counts
  - Turning movement counts
  - Daily volume counts
  - Classification counts

- Field observations
- Crash history
- Travel times
- Speed data
- Trip generation and distribution which could include, but not be limited to:
  - Land Use Category
  - Daily trips
  - Peak hour trips
  - Internal Capture percentages
  - Pass by percentages
- Analysis requirements which could include, but not be limited to:
  - Capacity Analysis
  - Turn Lane Warrant Analysis
  - Signal Warrant Analysis
  - Safety Analysis
  - Roundabout Study
  - AutoTurn Analysis
  - Simulation Modeling
- Incorporation of trips for other proposed developments within the study area and/or growth rate usage and methodology

### **Trip Generation Rates**

In general, applicants shall use the trip rates (use fitted equation if available) contained in the most recent edition of the Institute of Transportation Engineers' (ITE) *Trip Generation* manual or count data from an equivalent site.

### **Traffic Impact Analysis Threshold Levels**

A TIA shall be required for all subdivisions (new or expansions), all new commercial/industrial developments requiring a building permit, and all multi-family developments (townhomes, apartments, and multiplexes). Individual single-family and two-family residences are exempt from this requirement. Where expansion of an existing commercial/industrial facility will increase an existing building or paved area by 50% or more, the expansion shall also be subject to a traffic study.

Generally, three (3) threshold levels of Traffic Impact Studies (Thresholds 1, 2, and 3) are defined to include, but not be limited to, the following requirements. The exact requirements based on site-specific and project specific elements will be defined at the Pre-Application Meeting.

Threshold 1 (Traffic Impact Analysis Statement Required) - If the proposed development results in less than forty (<40) peak hour trips, either AM or PM (whichever is greater) the APPLICANT will be required to submit the following items:

- a. The proposed trip generation and distribution with source of information;
- b. Traffic Scoping Information Form with Required Additional Information (may include revisions per the Pre-Application Meeting);
- c. Sight distance evaluation at proposed driveway locations.

Threshold 2 (Traffic Impact Analysis Study Required) - If the proposed development results in greater than forty (>40) and less than four hundred (<400) peak hour trips, either AM or PM (whichever is greater) the APPLICANT will be required to submit the items for Threshold 1 plus the following additional items:

- d. Capacity analysis for existing and proposed conditions at intersections within the study area established during the Pre-Application Meeting;
- e. Capacity analysis for proposed conditions at the development driveways;
- f. Left turn lane, right turn lane and signal warrants at the development driveways;
- g. Recommendations for mitigating improvements to maintain or improve the existing Level-of-Service, as well as recommendations for driveway locations and configurations.

Threshold 3 (Limited Traffic Impact Analysis Study Required) - If the proposed development results in greater than four hundred (>400) peak hour trips, either AM or PM the APPLICANT will be required to submit the items for Thresholds 1 and 2 plus the following items:

- h. Obtain summary of the crash history within the study area;
- i. Review crash reports and provide recommendations to improve safety.

The peak hour trips are not the only threshold factor in deciding the analysis that will be required. At the discretion of the DPW, or their designee, other items which significantly influence the traffic movements or safety may require a higher level of study. These include but are not limited to the following:

- High volumes on surrounding roads affecting access to a proposed development
- Proximity of proposed access points to existing drives or intersections
- Areas currently experiencing excessive traffic congestion
- Developments that include drive-through operations
- Lack of existing left turn lanes on adjacent roadways
- Areas currently undergoing substantial growth

- Inadequate sight distance at access points
- High-accident areas

The APPLICANT shall meet all applicable requirements found in the Parish Zoning and Subdivision Ordinance Code. The PARISH has the right to require mitigating improvements for which the APPLICANT will be the financial responsible.

### **Documentation**

Threshold 2 and 3 Traffic Impact Analysis studies shall be stamped and signed by an approved registered Louisiana Professional Engineer who is a certified PTOE.

### **Contents and Format**

The contents of a TIA, as well as the TIA study area limits shall vary depending on the site and prevailing conditions. Content requirements shall be established by the DPW, or their designee during the Pre-Application Meeting.

Each TIA must take into account other proposed developments in the study area for which a TIA has been submitted or approved. This information shall be obtained and provided by the DPW, or their designee, and/or the LADOTD. A growth rate may be applied to existing traffic data in lieu of estimated trips for specific developments if approved by the DPW in the Pre-Application Meeting.

The TIA study shall be prepared in the following format:

1. Description of Study Area: A vicinity map and description of the study area shall be provided. The map shall include roadways that allow access to the site and are included in the study area. Documentation of the study area development established during the Pre-Application Meeting shall be included in the appendix.
2. Description of the Project: This description shall include the size of the parcel, access to the site, onsite circulation, and the existing and proposed uses of the site. In addition, the square footage of each use or number and size of units proposed shall be specified. A proposed site plan proposed shall be included.
3. Existing Conditions: The existing conditions, in the vicinity of the project, shall be described including field observations. Existing traffic controls and geometrics (number of lanes, intersection configurations, etc.) on roadways or at intersections within the study area shall be described in detail.

4. Existing Traffic Volumes: Traffic data shall be collected/conducted at study area intersections during peak hours and dates approved by the DPW, or their designee. The TIA shall include a description of traffic count type, location of count and date of collection. A figure that presents AM and PM peak hour counts with turning movements and average daily traffic shall be included when applicable. Raw count data shall be included in the appendix.

Unless approved by the DPW at the Pre-Application Meeting, the counts shall be conducted during the school year (September through May) and during weeks that have no major school holidays. (These holidays shall include, but are not limited to, Thanksgiving, Christmas Break, Spring Break, Mardi Gras, Labor Day, and Exam weeks.) Counts shall not be conducted during special events in the area unless for a specific purpose.

5. Trip Generation Estimates: Traffic volumes expected to be generated by the proposed development shall be estimated. Trip generation calculations shall be included in the appendix.
6. Trip Distribution: Trips generated by the site must be distributed and assigned to the roadway network to determine the project's impacts. The methodology and assumptions which are used in the determination of trip distribution shall be described. For projects with several phases to be developed over several years, the trip distribution shall be estimated for the completion of each phase of the development as well as the final build-out of the development. A figure that presents the new trips distributed and assigned to the roadway network shall be included.
7. Projected Traffic Volumes within the TIA Study Area: Project generated, and distributed trips shall be estimated for intersections in the study area, including proposed driveways. A figure that presents AM and PM peak hour projected volumes with turning movements shall be included. A detailed description shall be included of how the trips generated from other proposed developments are incorporated in the model or how the use of the growth rates approved by the DPW, or their designee, at the Pre-Application Meeting are being applied in the model.
8. Capacity Analysis: Capacity analyses provide an indication of how well the study area intersections serve existing and future traffic demands. A description of the methodology and Level of Service (LOS) definitions shall be included within the TIA. For existing and future conditions, LOS at all study intersections, inclusive of the site access locations, shall be calculated for signalized and unsignalized intersections using procedures contained in the *Highway Capacity Manual*. The LOS and delay shall

be reported for each turning movement at each approach, each overall approach and the overall intersection as applicable in tabular format. Capacity analysis documentation shall be included in the appendix.

The objective of the APPLICANT shall be to maintain or improve the existing LOS. An overall LOS "D" shall be considered acceptable. Where LOS "D" is not existing or the existing LOS cannot be achieved with improvements /mitigation, a description of impacts, constraints, mitigation measures analyzed, and results shall be provided.

9. Warrant Analysis: Traffic signal and/or left/right turn lane warrants may be conducted and storage lengths recommended where applicable. Meeting warrants is not the only consideration for signalization and/or left/right turn lanes, engineering judgment must also be applied. Warrant analyses documentation shall be included in the appendix.
10. Crash Data: When required, three years of the most current crash data shall be obtained for intersections within the study area. The details of the safety analysis shall be determined on a project specific basis by the DPW, or their designee.
11. Traffic Improvements: Improvements to the network should be developed to address deficiencies. Improvements shall be analyzed to determine the expected impact.
12. Conclusions and Recommendations: The equivalent of an executive summary should be provided to describe the proposed project, the data collected, the analysis conducted, improvements considered and resulting recommendations.

### **Actions Based on TIA/ Mitigation**

A proposed development which is subject to the TIA requirements of this policy may be disapproved when the results of the required TIA demonstrate that the proposed project will overburden the existing roadway system by causing a reduction in service of affected roadways, negatively impacts the safety of the roadway, or is below the adopted Level of Service (LOS) "D". In the case where the existing Level of Service (LOS) is below "D", the required mitigating improvements shall improve the LOS to "D" or better. An APPLICANT, in coordination with the DPW, or their designee, may modify the development proposal to reduce traffic-related impacts. Modifications to applications for projects may include, but shall not be limited to:

- Dedication of additional right of way
- Re-routing of traffic and proposed access points serving the proposed project
- Traffic signal timing and/or phasing adjustments (with coordination and approval from the owner of the signal)

- Restriping or reconfiguration of intersections
- Construction of additional lanes
- Installation of a roundabout
- Installation of a signal
- Providing funding for infrastructure improvements
- Any other recommendations by the DPW upon review.

APPLICANTS will be responsible for the cost and implementation of identified improvement(s) to mitigate the traffic impact of their proposed development unless funding can be provided through a grant mechanism.

If traffic mitigation is part of an approved Traffic Impact Analysis, all approved traffic improvements must be implemented prior to issuance of an occupancy permit that it is to be completed within construction of a subsequent phase.

Mitigation shall comply with the St Charles Parish Master Plan in place at the time of application, if any. The APPLICANT shall verify with the DPW whether a Master Plan proposed route or improvement will affect the subject property. If so, access through the property and/or require Right-of-Way, may be required to be dedicated to the Parish as part of the APPLICANTS's mitigation efforts.

The Parish has the right to place moratoriums in areas where reasonable operational conditions, as determined by the DPW, or their designee, are not able to be achieved with mitigation.

### **Waiver of/Exemption from TIA Requirements**

The Planning Commission may not waive the traffic impact analysis submittal requirements of this policy without the consent of both the Department of Planning and Zoning and the Department of Public Works.



## REFERENCE PUBLICATIONS

- A. Traffic Impact Policy for New Access Requests Affecting Traffic on State Routes, Louisiana Administrative Code, State of Louisiana Division of Administration
- B. Access Connection Permits, Louisiana Administrative Code, State of Louisiana Division of Administration
- C. Access Connection Policy, Louisiana Department of Transportation and Development (LADOTD)
- D. Traffic Impact Policy for New Access Requirements, LADOTD
- E. Trip Generation Manual, 9<sup>th</sup> Edition, Institute of Transportation Engineers
- F. Highway Capacity Manual, Special Report 209, Transportation Research Board
- G. Manual on Uniform Traffic Control Devices for Streets and Highways, US Department of Transportation, Federal Highway Administration
- H. Engineering Directives and Standards VI.1.1.9, Department of Transportation and Development, Office of Highways
- I. Traffic Impact Analysis, St. Tammany Regulatory Ordinance, 2014
- J. Public Infrastructure Design Standards, Lafayette Consolidated Government, Department of Public Works, 2015