SECTION 4

4.0 TRAFFIC IMPACT STUDIES

4.1 TRAFFIC IMPACT STUDY REQUIREMENTS

The City has established Traffic Impact Study (TIS) requirements for the purpose of ensuring that both the quantitative and qualitative aspects of traffic circulation impact on the citizens, neighborhoods and businesses of the City are considered and properly mitigated. Application of these standards is intended to appropriately regulate and balance the increased traffic flow generated by development with the need to reasonably preserve the quality of life and the environment within our community and to reasonably ensure pedestrian and bicycle safety as alternate modes of transportation.

4.1.1 General

The transportation impact report shall identify the traffic impacts and potential problems to be generated by a proposed use, and improvements required to ensure safe ingress and egress from a proposed development, maintain street capacity, and eliminate hazardous conditions. The following requirements have been established for the preparation of TIS for development proposals of all land use types. These policies exist to ensure consistent and proper traffic planning and engineering practices are followed when land use actions are being considered. The requirements provide a standard process, set of assumptions, set of analytic techniques, and a presentation format to be used in the preparation of the TIS. The TIS shall be submitted with or before the DRT plan submission.

4.1.2 Applicability

Developers and/or property owners shall be required to conduct TIS, as described herein, for all proposed development that meet any or all of the following:

- When traffic generated by the proposed development would cause the daily or peak hour traffic volumes on adjacent streets that serve as access for the development to exceed the limits outlined in this Manual in Section 5.0 "Roadway Design" in Table 5.1 "Maximum Roadway Volumes by Classification";
- When a development proposes to access a collector or arterial roadway and the proposed development is larger than the thresholds shown in Table 4.1 "Traffic Impact Study Thresholds by Land Use". The threshold shall be determined by the full buildout of the project, not by individual phases of the project. If a developer completes a project that does not meet the threshold established in Table 4.1, and later either builds subsequent phases of that project or builds a separate project on an adjacent or contiguous parcel of land to the previous project, the combined development size shall be used to determine if a TIS is required; or
- When in the opinion of the City Engineer, significant operational deficiencies, capacity deficiencies, and/or safety concerns on the surrounding roadways and

intersections currently exist or would be created as a result of the development's expected project.

- When a development build-out is not completed within 10-years of initial TIS analysis, an update to the TIS will be required for any new phases. The updated TIS will need to include updates for full build-out scenarios.

TABLE 4.1
Traffic Impact Study Thresholds by Land Use

Land Use	Size
Residential – Single Family	70 dwelling units
Residential – Townhomes/Condos	120 dwelling units
Residential – Apartments	100 dwelling units
Residential – Assisted Living	285 beds
Shopping Center	17,500 SF
Fast Food Restaurant with drive-thru	1,500 SF
High Turnover Sit-down Restaurant	5,900 SF
Quality Restaurant	8,300 SF
Gas/Service Station w/ convenience market	5 fueling positions
Bank with drive-thru	2,200 SF
Pharmacy with drive-thru	8,500 SF
Hotel/Motel	95 rooms
General Office	45,500 SF
Medical/Dental Office	21,000 SF
General Light Industrial	102,000 SF
Manufacturing	137,000 SF

The thresholds for land uses that are not depicted in Table 4.1 shall be based upon the level of development expected to generate approximately one hundred (100) peak hour trips or seven hundred fifty (750) daily trips, whichever is less.

Developers who are proposing projects are strongly encouraged to contact the City to discuss traffic impact requirements prior to submitting a rezoning application or subdivision/site plans to determine the TIS requirements for each project.

4.1.3 Applicant Responsibility

The responsibility for conducting a TIS and assessing the traffic impacts associated with an application for development approval rests with the Applicant. The assessment of these impacts shall be contained within a TIS report as specified herein. It shall be prepared under the supervision of, and sealed by, a licensed professional engineer in the State of Alabama with experience in traffic engineering and transportation planning/engineering.

For all State Highways within the study area, the Applicant is required to meet the requirements of ALDOT in addition to those of the City.

4.1.4 Capacity and Safety Issues

Development of property has a direct impact on transportation, including vehicular, transit, bicycle, and pedestrian traffic. In order to meet capacity and safety needs as they relate to the traffic generated from a particular land use, specific traffic circulation improvements should be made. The goal of the TIS is to address traffic related issues that result from development and to determine the improvements required to address and mitigate those issues such that street maximum capacities are not exceeded and traffic and pedestrian safety is maintained. The competing objectives of vehicular movement, pedestrians, bicyclists, and others must be balanced in the development review process. The TIS will provide information and guidance as plans are developed and decisions made for the proposed development plan.

4.1.4.1 Vehicular Traffic Improvements

Examples of traffic capacity and safety improvements to mitigate development impacts include: road widening, turn lanes, deceleration lanes, intersection through lanes, traffic signals, stop signs, design speed adjustments, modifications to access points, roundabouts and other traffic calming techniques as approved by the City.

4.1.4.2 Pedestrian Traffic Considerations and Improvements

Examples of street conditions that promote safe, comfortable and convenient pedestrian environments include: short blocks; lower prevailing travel speeds; sidewalks; well-defined crosswalks, median refuge areas and islands at street intersections. Walkway tunnels and overhead structures are examples of safety improvements that afford maximum protection for pedestrians.

4.1.4.3 Bicycle Traffic Improvements

The addition of on-street bicycle lanes or off-street bicycle paths may be needed to achieve connectivity between the proposed project and the existing bikeway system.

4.2 TRAFFIC IMPACT STUDY PROCEDURES AND CRITERIA

The following procedures have been established to outline the manner in which a TIS is to be conducted in the City.

4.2.1 Scoping Meeting/Telephone Conference

A scoping meeting/telephone conference prior to the submittal of a request for rezoning or site/development plan will be required and used to determine the study area, study parameters and documentation requirements for conducting a TIS for specific development proposals. The parameters determined in the scoping meeting/telephone conference represent general agreement between the City and the Applicant's consulting engineer, but they may not be all-inclusive. The City retains the right to require additional information and/or analysis to complete an evaluation of the proposed development project.

The Applicant is required to contact the City to arrange for a scoping meeting/telephone conference to discuss the TIS requirements and determine the base assumptions. It is incumbent upon the Applicant to discuss the following:

- Previous TIS prepared for the site, if any;
- Location of the site;
- Proposed access and its relationship to adjacent properties and their existing/ proposed access;
- Preliminary estimates of the site's trip generation and trip distribution at build-out;
- Identification of proposed year of build-out;
- Anticipated growth in traffic volumes between current and build-out conditions;
- Anticipated roadway improvements required to mitigate development impact;
- Phasing plan proposed, if any;
- Special analysis needs; and
- Other developments within the study area.

The scoping meeting/telephone conference shall conclude with the City and Applicant in mutual agreement with regard to determining the level of detail and extent to which the TIS will need to address each of the following:

- Study area for the impact analysis;
- Other developments within the study area;
- Existing intersection counts;
- Intersections and roadway segments to be studied in detail;
- Existing traffic volume forecasts;
- Anticipated growth in traffic from existing to build-out conditions;
- Location of the nearest bicycle and pedestrian facilities; and
- Special analysis needs (non traditional peak hour volumes for some uses, neighborhood impacts, access management plans, etc.).

4.2.2 Evaluation Elements

The key elements of the project TIS shall be specified by the City from the following list:

- Conformity with the transportation related policies of the City, including any other adopted access plans.
- Peak hour intersection and roadway level of service.
- Appropriateness of access locations;
- Location and requirements for left turn lanes or deceleration lanes at accesses or intersections. Taper lengths, storage length and deceleration lengths for turn lanes shall be designed as outlined in this Manual in Section 5.0 "Roadway Design";
- Sight distance evaluations and recommendations (intersection, stopping, passing);
- Continuity and adequacy of pedestrian and bike facilities;
- Recommended traffic control devices for intersections which may include two (2) way stop control, four (4) way stop control or yield signs, school flashers, school crossing guards, crosswalks, traffic signals or roundabouts.
- Traffic signal and stop sign warrants.
- Other items as requested by the City Engineer and agreed to in the scoping meeting/telephone conference.
- Neighborhood and public input issues.
- Classify streets within a development.
- Internal site circulation and flow.

4.2.3 Roadway Traffic Volumes/Traffic Counts

Current morning and afternoon commuter peak hour (7-9 A.M. and 4-6 P.M.) traffic counts as specified by the City Engineer shall be obtained for the roadways and intersections within the study area for one (1), non-holiday Tuesday, Wednesday, or Thursday. Each peak hour count shall be conducted over the designated hours (or as specified by the City Engineer) and shall include fifteen (15) minute count data to clearly identify the peak hours.

Weekend counts and/or average daily counts may also be required where appropriate and when required by the City Engineer. ALDOT Average Weekday Traffic (AWT) counts may be used when available. Pedestrian counts and bike usage should be obtained. Vehicle classification counts may be required.

In any case, these volumes shall be no more than two (2) years old (from the date of application submittal) unless otherwise deemed acceptable by the City Engineer. In areas that have experienced significant growth, the volumes shall be no more than one (1) year old from the date of application submittal.. The source(s) of each of the existing traffic volumes shall be explicitly stated (ALDOT counts, new counts by Applicant, etc.). Summaries of current traffic counts shall be provided. The City will require counts while both Auburn

University and Auburn City Schools are in normal school operation. If this cannot be done it must be approved by the City Engineer. The City will require the use of adjustment factors for data collected when either of these facilities is not in operation. Adjustment factors proposed for use in any TIS shall be submitted along with all supportive data to the City Engineer for review and approval. If in the opinion of the City Engineer, the proposed adjustment factors will not accurately reflect traffic conditions that would be in place during school operations, traffic count data will not be accepted and will require collection during those periods when the educational facilities are in operation.

In most cases, the actual completion of developments will occur at some time in the future. As part of the TIS, an annual growth rate of adjacent roadways and intersections will be developed. Growth rates utilized in the preparation of a TIS must be based on historical traffic growth, use of a regional travel demand model or other methods as approved by the City Engineer. Application of traffic growth shall be applied for buildout conditions and other interim development levels as required and approved by the City Engineer.

4.2.4 Intersection and Approach Level of Service

As a minimum, A.M. and P.M. peak hour intersection and approach Levels of Service (LOS) shall be determined for the existing signalized and unsignalized intersections at all study intersections and roadways. Additional intersections should be included in the analysis where post development conditions are considered by the City to be significant. The analysis shall use procedures as described in the *Highway Capacity Manual*, latest edition. Capacity analyses for intersections shall be based on individual approach lane LOS whereas impacts on roadways shall be based on daily traffic volumes and the specific roadway classification.

4.2.5 Trip Generation Rate

Trip generation rates utilized for conducting TIS in the City should be taken from actual rates developed and generated from land uses in the Auburn area. When data is not available for a proposed land use or for a land use unique to the Auburn area (University housing served by transit, etc.) is proposed, the Applicant must conduct a local trip generation study following procedures prescribed in the ITE *Trip Generation Handbook* and provide sufficient justification for the proposed generation rate. This rate must be approved by the City Engineer prior to its use in the TIS.

Dr. Brian Bowman, a professor at Auburn University, has conducted several studies to determine trip generation rates based on existing off-campus student housing within the City. The analysis included counting ingress and egress trips at existing developments and obtaining information about the ridership of Tiger Transit service to develop rates for student housing with transit service. The rates for apartment developments with no transit service were derived from the same developments, based on the assumption that if no transit service were available each transit rider would generate one (1) trip. The trip generation rates summarized in Table 4.2 "Trip General Rates for Off-Campus Student Apartments in Auburn" are based on previous studies from 2001 – 2006 and may be used as trip generation rates for student apartment developments within the City. Trip generation rates must be approved by the City Engineer prior to use in the TIS.

TABLE 4.2
Trip Generation Rates for Off-Campus Student Apartments in Auburn

Description	Trip Generation Rates*					
	AM Peak			PM Peak		
	Total	% In	% Out	Total	% In	% Out
Apartment development with no transit service	*0.24*	*17%*	*83%*	*0.49*	*54%*	*46%*
Apartment development with Tiger Transit service	*0.18*	*21%*	*79%*	*0.40*	*50%*	*50%*

* Trip Generation Rates based on number of beds in the Apartment development

If, in the opinion of the City Engineer, trip generation rates found in the ITE *Trip Generation Handbook*, latest edition, or other industry publications accurately reflect the trip generation characteristics of a particular land use proposed, that trip generation rate may be used in forecasting traffic to be generated by a development.

The ITE *Trip Generation Handbook* reports the weighted average rate and minimum and maximum observed rates, in addition to fitted curve equations for the various land uses. Typically, either the weighted average rate or the fitted curve equation is utilized. The development intensity should be compared to the minimum and maximum values to ensure the data falls within the range of information in the ITE *Trip Generation Handbook*, latest edition. The guidance provided by the ITE *Trip Generation Handbook* (2004) for selecting between the average rate and equation are summarized below.

Use the fitted curve equation when:

- A fitted curve equation is provided;
- The independent variable is within the range of data; or
- Either the data plot has at least twenty (20) points or the correlation coefficient R^2 is greater than or equal to 0.75, equation falls within the data cluster in the plot, and standard deviation is greater than one hundred ten (110%) percent of the weighted average rate.

Use the weighted average rate when:

- There are at least three (3) (preferably six (6)) data points;
- The independent variable is within the range of data;
- The standard deviation is less than or equal to one hundred ten (110%) percent of the weighted average rate;
- R^2 is less than 0.75 or no equation is provided; or
- The weighted average rate falls within the data cluster in the plot.

4.2.6 Preliminary Land Use Assumptions

The trip generation values contained in studies submitted prior to the establishment of a site

development plan shall be based on the maximum number of dwelling units permitted by the Zoning Ordinance for the approved land uses, and/or the maximum trip generation rates for the nonresidential development proposed land use action. When a TIS is being developed for a project with an established site development plan, trip generation shall be based on actual dwelling unit counts and square footage(s) proposed on the final plan.

4.2.7 Trip Generation Table

The Applicant shall prepare a Trip Generation Table, listing at a minimum, each type of land use within the site at build-out, the size and unit of measure for each land use, trip generation rates (total daily traffic, A.M. and P.M. peaks), and the resultant total trips generated.

4.2.8 Trip Distribution

The distribution of site generated traffic must be documented in the TIS. The procedures and rationale used in determining the trip distributions for proposed developments must be fully explained and documented. It is recommended the Applicant coordinate with the City to establish an acceptable distribution pattern.

4.2.9 Requirements for Additional Lanes

Within the study area of a TIS, as established by agreement between the City and the Applicant, additional lanes may be required on streets where minimum LOS are exceeded for existing cross sections based on post development conditions. If such additional lanes are required, as established as part of the TIS, they can include general purpose through lanes, left turn lanes and right turn lanes. Additional lanes, when determined by a TIS and in the opinion of the City Engineer of the need for such lanes is established, shall be provided by the Applicant. Such improvements must be designed and constructed to City and/or ALDOT standards. Generally, the cost of such improvements will be borne entirely by the Applicant.

During the design phase of providing additional lanes on public streets and roadways, if it is determined that additional right-of-way is required to construct such additional lanes, the Applicant shall provide additional right-of-way along their property frontage as directed by the City Engineer. If the construction of such additional lanes requires right-of-way beyond the property frontage of the Applicant, the Applicant shall work with the City to devise a method to provide the additional right-of-way and related roadway improvements or modify their development plan to remove the requirement for such additional lanes.

4.2.10 Intersection Delay

An A.M. and P.M. commuter peak hour intersection LOS analysis shall be conducted for each intersection analyzed in the TIS for existing conditions and those that reflect post development conditions. This analysis shall be based on procedures specified in the *Highway Capacity Manual*, latest edition. In those areas adjacent to or in close proximity to City schools or Auburn University, additional peak hour analyses shall be conducted for those afternoon hours which reflect the peaks for those facilities. The intent of this analysis is to establish the existing and post development intersection delays and related LOS for comparison and determination of impacts on operations.

4.2.11 Driveway Access

Site driveways shall be analyzed to determine the LOS for each access point. If a driveway capacity analysis demonstrates a LOS of a "D" or worse, the TIS shall address this issue by analyzing if a traffic signal is warranted or if an operational change is acceptable (such as a turn restriction), and whether it will interfere with the adjacent street traffic.

Driveway plan concepts for a development shall be submitted to the City for approval prior to development of construction plans. An access permit is required on those routes maintained by ALDOT. The City shall be copied on all ALDOT permit applications within the City and its planning jurisdiction. Because frequent curb cuts and driveways providing access to numerous adjoining properties are an impediment to the proper functioning of major streets, on-site circulation and cross-access agreements between lots are encouraged. Minimum spacing of driveways and other curb cuts shall conform to the minimum standards outlined in this Manual in Section 5.0 "Roadway Design".

4.2.12 Traffic Signals

Any traffic signals proposed for installation on City streets shall meet the minimum criteria as outlined in the MUTCD, latest edition. A signal warrant analysis for potential signal locations shall consist of a review of the applicable signal warrants contained in the MUTCD. On roadways controlled by ALDOT, procedures for meeting traffic signal warrants as established by the Department shall be followed.

Proposed and existing access points, proposed intersections, and existing intersections effected by the land use that have any potential for traffic signalization will be reviewed and discussed during the scoping meeting/telephone conference. During the scoping meeting/telephone conference, an outline of locations for signal warrant analysis will be agreed upon. Alternatives to signalization at potential signal locations will be discussed in the scoping meeting/telephone conference and the TIS report. The alternatives to adding new intersections would include added access points, limited movements at access points, frontage roads, joint use access points, roundabouts and other such designs as required and/or approved by the City.

If any signal timing and/or phasing changes are proposed as a mitigation measure of a TIS, an appropriate analysis of the intersection where the signal exists shall be conducted to demonstrate the potential implications of the suggested modifications. Such modifications to existing traffic signals shall require submittal of a request for such change with supportive documentation of analysis and findings and shall not be undertaken without approval from the City Engineer.

Sight distance concerns that are anticipated or observed which may impact driveway, intersection, or roadway operation and safety need to be discussed in the TIS. Recommendations regarding stopping sight distance, intersection sight distance, and passing sight distance needs should be provided by the Applicant's traffic engineer for detailing on the final development, site plan, or final construction plans. Intersection sight distance requirements for driveways and intersections shall meet the criteria as set forth in this Manual in Section 5.0 "Roadway Design".

4.2.13 Mitigation Thresholds and Measures

The City has determined that the daily and peak hour traffic volumes on all streets designated as a collector, local commercial, local residential or alley shall not have a LOS below a "C". Arterials shall not have a daily or peak hour LOS below a "D".

When the TIS indicates the roadway(s) within the study area exceed the minimum acceptable LOS standard, the TIS shall include feasible measures which would mitigate the project's impacts. Additionally, if the analysis included in a TIS establishes the LOS for an intersection, intersection approach or roadway dropping one (1) level, however, not below the minimum criteria for a specific roadway classification, mitigation will not be required. If for any reason, the TIS illustrates the reduction in LOS for an intersection, intersection approach or roadway dropping two (2) LOS, mitigation will be required.

An appropriate measure of traffic mitigation would be the ability of roadway, intersection and traffic control improvements to maintain acceptable LOS for the impacted facility. Mitigation measures include the addition of through lanes (roadway widening), left turn lanes, right turn lanes, improved traffic control, access management and other such measures as deemed appropriate by analysis and in accordance with the City.

A waiver may be submitted for relief from mitigation requirements upon approval from the City Engineer. Mitigation is not required on approaches where existing and future conditions require mitigation but the proposed development has little to no impact on said approach lane.

4.2.14 Traffic Signal Operations Improvements

Traffic signal improvements shall include upgrading signals to include additional signal phases and timing plans, signalization of an unsignalized intersection and/or implementation of a coordinated traffic system. Signal improvements and/or installations on City streets must be approved by the City Engineer. Traffic signals recommended to be installed on ALDOT roadways shall be jointly approved by ALDOT and the City. Generally, the cost of such improvements will be borne entirely by the Applicant.

4.2.15 Geometric Improvements

Mitigation measures, which include street widening, and other physical improvements must be demonstrated to be physically feasible and must meet minimum City standards for both on-site and off-site improvements. As part of the basic TIS analysis, a determination of the need for left and right turn lanes as a result of development generated traffic should be undertaken. The analysis techniques utilized shall include procedures and methods outlined in this Manual in Section 5.0 "Roadway Design" or other methodologies as approved by the City Engineer.

The needs for turn lanes and other auxiliary lanes shall be determined for each development access and study intersection included in the TIS. The basis of design for such devices shall be as outlined in this Manual in Section 5.0 "Roadway Design", AASHTO or ALDOT as applicable. All proposed project entrances onto arterial and collector streets shall be evaluated as to whether they require deceleration lanes as outlined in this Manual in Section

5.0 "Roadway Design".

4.2.16 Pedestrian/Bicycle Improvements

If high pedestrian and/or bicycle traffic is expected to be generated by a development, as determined by the City Engineer, the TIS must consider improvements and connectivity to existing and proposed facilities. The *Highway Capacity Manual* contains LOS criteria for various pedestrian and bicycle facilities. Similar to roadways and intersections, pedestrian and bicycle facilities shall not have a LOS below a "C". When a project's impacts are determined to exceed the minimum acceptable LOS standard, the TIS shall include feasible measures to improve pedestrian and bicycle safety within the study area.

4.3 TRAFFIC IMPACT STUDY REPORT CONCLUSIONS

The findings of the TIS should be provided in summary format, including the identification of any areas of significant impacts and recommended improvements/mitigation measures to achieve the maximum volume standards for all modes.

4.3.1 Geometric Improvements

The TIS shall include recommendations for all geometric improvements such as pavement markings, signs, adding through or turn lanes, adding project access and assorted turn lanes and changes in medians. Sufficient dimensions/data shall be identified to facilitate review. Anticipated right-of-way needs shall also be identified. This information shall be made available to the project civil engineer for use in preparing engineering plans.

4.3.2 Responsibility

The TIS shall describe the location, nature and extent of all transportation improvements required to achieve the required post development LOS within the study area. The responsibility for implementation of the post development mitigation measures shall rest with the Applicant.

4.4 TRAFFIC IMPACT STUDY REPORT OUTLINE

The following outline has been developed to serve as a guide for the organization of the Traffic Impact Study report.

- ☐ INTRODUCTION (Purpose of report and study objectives)

- ☐ PROPOSED DEVELOPMENT
  - ☐ Site Description (include small version of site plan in appendices)
  - ☐ Site Location (include site location map)
  - ☐ Zoning (Current and proposed)
  - ☐ Time Frame of Development (include any phasing of development which is anticipated)

- ☐ BACKGROUND INFORMATION
  - ☐ Background Traffic Growth Rate (include projected traffic growth rate for the development time frames included in the proposed development and include method for traffic growth projections)
  - ☐ Off-Site Developments (description of other significant development in the vicinity which could impact traffic conditions in the study area)
  - ☐ Planned and Programmed Roadway Improvements (description of any Planned or Programmed Roadway Improvements within the study area which could impact traffic conditions within the study area during the time frame for development of the proposed project)

- ☐ EXISTING TRAFFIC CONDITIONS
  - ☐ Traffic Count Data (introduce and illustrate current traffic counts for the study area roadways and intersections)
  - ☐ Existing Conditions Capacity Analysis (evaluate study area roadways and/or intersections based upon industry standard capacity analysis methods)
  - ☐ Summary of Existing Traffic Conditions in the study area

- ☐ FUTURE TRAFFIC CONDITIONS
  - ☐ Background Traffic Growth (apply the background growth rate for the time frame for a give phase of development)
  - ☐ Inclusion of Planned or Programmed Improvements (in the event any of the Planned or Programmed improvements are to be included in the analysis of future traffic conditions, a status of the projects and time frame of the projects should be demonstrated)
  - ☐ Trip Generation Estimates (estimate trip generation potential for each level of development)
  - ☐ Trip Distribution (describe the anticipated routes for traffic expected to be generated by the proposed development and illustrate the findings in graphic format)

- ☐ Traffic Assignment (assign traffic expected by the proposed development to the study area roadways based upon the distribution patterns established)
- ☐ Future Conditions Capacity Analysis (evaluate the study area roadways and intersections as well as site accesses with post-development traffic volumes)
- ☐ Identify Capacity Deficiencies (identify roadways and/or intersections in which capacity deficiencies are expected for future traffic conditions)
- ☐ Recommended Roadway and Traffic Control Improvements (develop and test potential improvements for the study area roadways and intersections aimed at mitigation of traffic impacts resulting from development traffic)
- ☐ Internal Circulation (demonstrate the ability of the site's internal circulation pattern to handle site generated traffic that includes trucks)
- ☐ Capacity Analysis with Recommended Improvements (demonstrate the effectiveness of Recommended Roadway and Traffic Control Improvements and resultant levels of service)

Note: These steps should be taken for each level of development within the corresponding time frame.

☐ SUMMARY AND CONCLUSIONS – Provide a summary of the findings of the study effort to include existing traffic conditions, future traffic conditions for each level of development, and the recommended improvements aimed at mitigating potential traffic impacts resulting from the proposed development for each level of development.