

COUNTY OF IMPERIAL

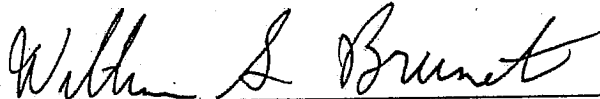
DEPARTMENT OF PUBLIC WORKS

TRAFFIC STUDY AND REPORT POLICY

Date: March, 12, 2007

Revised June 29, 2007

APPROVALS:



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TRAFFIC STUDY ADMINISTRATIVE PROCEDURES
FOR NEW DEVELOPMENT PROJECTS
OR IMPROVEMENTS TO AN EXISTING CONDITION

For New Development Projects:

With a completed application to the County, the Public Works (PW) Staff and Planning Development Services (ICPDS) Staff will review the Preliminary Environmental Review to assess initial potential traffic impacts.

For A Proposed Improvement To An Existing Condition:

When traffic impacts are expected, the level of traffic study will be determined by ICPDS and PW Engineering in accordance with the Traffic Study and Report Policy.

For Either Situation:

The staff will determine the significance of the needed study in order to fully comply with the California Environmental Quality Act (CEQA). When the study is determined to be highly significant, the County can take responsibility for the traffic study, using the following:

1. The procedures that will be followed provide for the County staff that implement the traffic study and report policy to develop a consistent scope of work for each traffic study and still allow for project specific variations.
2. The developer (applicant) or his/her representative will be provided a scope of work by the County or will provide a scope of work to the County and there will be a staff level opportunity for a review of the scope of work.
3. The County staff may select the consultant for significant projects and will approve the scope of work for the professional services; County staff will determine the cost of the proposed work for County contracts, in accordance with State law and County guidelines.
4. The developer (applicant) or his/her representative will either conduct the approved study scope of work at their cost or deposit the estimated study cost amount with the County. There are also review and administrative fees which will be charged to the applicant and deposited with the County. The PW review only fee will be \$1,500 for up to three review checks of the report. Beyond three checks, the fee will be at time and materials rates for a County consultant. The administrative fee will be a minimum of 15 percent of the estimated study cost for

County administered studies, unless a different fee is adopted by the County. The review and administrative fees are non-refundable.

TRAFFIC STUDY PROCEDURES

PAGE TWO

5. The County will coordinate the study, and the developer (applicant) or his/her representative will have no unapproved contact with the consultant.
6. When the study report is in the draft stage, the developer (applicant) or his/her representative will provide three copies of the report for review by the County and will attend a review session at the County with the County staff and the consultant to discuss any comments or concerns generated by the review.
7. The results of the review checks will be: 1) preparation of a formal comments letter for items to be addressed while preparing the final report; 2) additional work required and to be paid for by the developer (applicant) and included in the final report; and/or 3) acceptance of the draft report and preparation of the final report to be submitted for the applicant's project.
8. The final report, when approved by the Department of Public Works and the ICPDS becomes the traffic impact study, applicable to the project, along with any supporting data or studies available from the County staff.

DISCLAIMER: The County is not responsible for, nor liable to the developer (applicant) for any costs associated with additional engineering fees, construction costs, project delay costs, loss of anticipated profits, etc. as a result of complying with this policy and procedures.

COUNTY OF IMPERIAL

DEPARTMENT OF PUBLIC WORKS

TRAFFIC STUDY AND REPORT POLICY

Date: 3/12/2007

AUTHORITY

The County of Imperial regulates land use development through the Planning and Development Services Department (ICPDS) in accordance with State Law, the Land Use Ordinance Title 9 and County Policies (see also P.3.).

A. INTRODUCTION

This policy and procedures paper is prepared to serve as a guide for the preparation of traffic reports and to assist the developer and the engineer in preparing information and plans that meet the criteria of the County of Imperial. In accordance with the County Board Action, this document can be amended by the joint action of the above Department. The user should thoroughly review this document and determine that the latest dated policy is being used prior to beginning the work. Questions relating to procedures, intent or specific details that may arise before or during the study should be addressed to the Director of Public Works or County Traffic Engineer in writing for clarification and resolution

This report does not replace any County Engineering Standards and is not intended to be all inclusive. It provides the expected minimum level of work for a project. All studies must be based on sound transportation principles, techniques and engineering judgment, be in accordance with current standards of practice in the engineering profession, and must also

be acceptable to the Planning and Development Services Department, the Department of Public Works, including the County Traffic Engineer and other County staff, as identified in the Imperial County Codes or required by State Law.

As County growth continues, the El Centro Urbanized area will cause the County to fall within the Congestion Management Program law. The enactment of the Congestion Management Plan (CMP) law (Government Code Sections 65088 and 65089) also requires the preparation of a CMP Traffic Impact Analysis Report for all projects which will meet the local criteria for preparing a traffic impact study in the counties with an urbanized area over 50,000 population. Based on AB 2419, implementation of the CMP Program is a local option but eligibility for State or Federal CMP funds may require such a program. When an urbanized area of over 50,000 population is recognized, guidelines for a CMP Traffic Impact Analysis Report would be required to be developed and implemented.

The County of Imperial has an adopted General Plan with a Circulation Element, which serves as the basis for Traffic and Circulation determinations. The County has its own Standard Drawings for Public Works Improvements and the County uses as standard reference the Manual on Uniform Traffic Control Devices for Streets and Highways, California Edition, the current Institute of Transportation Engineers (ITE) Trip Generation Informational Report, the Institute of Transportation Engineers Parking Generation Report, the Caltrans Design Manual (non-metric), the 2000 Highway Capacity Manual (HCM) with revisions, the AASHTO Manuals, the "Standard Specifications for Public Works Construction" (Green Book) (non-metric) and Caltrans Standard Specifications. *The exceptions to the ITE Informational Report for Trip Generation are specified in Section 2. Report Contents.*

B. MINIMUM REQUIREMENT POLICY

This policy is established as the minimum requirement of the County of Imperial with all material subject to the review and approval of the Director of Public Works and the Public Works Engineering Division (as required by State Law) for conformance to acceptable principles, practices and sound engineering judgment. All reports must receive the approval of the Department of Public Works and the Planning and Development Services Department prior to approval of the project. In accordance with current State Law, traffic study reports which identify or recommend any Public Works improvements (traffic signals, geometric design changes, road widening with land dimensioning, driveway relocation, etc.) will be required to be stamped and signed by the California Registered Civil Engineer responsible for the report. A Registered Traffic Engineer will be allowed to sign and stamp the report if it contains only general recommendations for the mitigation of traffic impacts or general recommendations for engineering improvements.

C. TRAFFIC REPORTS

As a part of the project review process the County will identify if there is a need for a traffic study and report to be prepared for the proposed development unless the Title 9 Land Use Ordinance criteria already requires such a study. The Director of Public Works, or his designee, and his advisory staff, and/or the Planning Director, will make the final decision on the need for a traffic study as a condition of the development. These reports may be made necessary by the size, configuration or potential impact of the proposed development. In some cases, it may be

necessary to develop a traffic report that determines whether the traffic study general criteria have been met.

In the case of significant development, it may be necessary to hold one or more scope of work meetings which would be attended by a ICPDS staff, the County Traffic Engineer or other County Advisory Staff, the individual who will be responsible for preparing the traffic study report and the Traffic and/or Civil Engineer responsible for the report and its recommendations. The individual preparing the traffic study should be familiar with the project site and the local conditions which may affect any final conclusions and recommendations.

Listed below are the basic criteria that will be used to make the determination for providing a complete traffic study as a part of the project review process. The criteria are not a complete or exhaustive list, but they are intended to define when such a report is to be prepared and to indicate the necessary components of the study report to be submitted.

1. General Criteria

- a. Any project that adds more than 8% of the total existing vehicle trips on the adjacent road system at full build-out of the project.
- b. Any project that generates more than 400 daily residential trip ends, 800 commercial or industrial trip ends or 200 peak hour trip ends, as determined by the average trip rates contained in the ITE Trip Generation Informational Report or the **Imperial County local exceptions in Section 2.**
- c. Any project that has the potential to degrade an existing road section, an existing signalized intersection, or an existing unsignalized intersection to below the existing level of service or to cause it to be lower than a level of service (LOS)

"C" during any peak hour, using the HCM Methods of analysis on any individual, existing traffic movement.

- d. Any project, within Section C. 1. b. above, which generates more than 10% of its total traffic in the form of truck traffic.
- e. Any project that intensifies the usage of the site above the level currently allowed by zoning codes and requires a GPA; and/or CUP, zone change, variance or other discretionary permit.
- f. Any project that may cause an existing or proposed intersection to meet traffic signal warrants or cause a proposed intersection to be lower than LOS "C."

2. Report Contents

Traffic Reports submitted for review and approval must contain the following items as a minimum:

- a. Total number of trips anticipated from the project based on the average trip generation rates as specified in this section for single family residential use or those contained in the ITE Trip Generation Informational Report for other residential, commercial and industrial uses for total build out of the project (minimum of 5 years), or by using fully documented (and previously approved by the County Engineer) data for a similar or like facility. Passer-by trips for commercial/retail projects will not be more than 35 percent of the total generated site traffic without Public Works/Engineering and Planning staff approval (see

Section B. above). Passer-by trips, over 35 percent and internal trips, over 5 percent, must be justified, if used. Reference to another report or another source of data will not be adequate justification.

For traffic studies carried out for presentation to the County of Imperial, single family residential trip generation of less than 10.0 trip ends per D.U. per weekday must be justified by documentation, including the age or maturity of the development producing the trip ends. Normally, new development, that is not fully an infill project, will have a trip generation rate of at least 10 trip ends per D.U. per weekday. Studies carried out by local agencies in other areas have shown the trip generation rate to be at least 15 trip ends per dwelling unit for a development at full occupancy (at project build out), at 10 years of age and at least 15 trip ends per D. U. at 20 years after build out. The local sample studies showed that a residential development trip generation rate may be as high as 20 trip ends per D.U. per weekday. The estimated build-out, 5-year or 20-year peak hour trip ends generation rate will be 1.55 for the a.m. peak hour, and the p.m. peak hour trip ends generation rate will be 1.68 trip ends per dwelling unit for the same single family residential use at 15.0 trip ends per dwelling unit per weekday. The County of Imperial requires the use of the local exceptions, unless the report preparer provides previously approved data to support using other rates. The I.T.E. Trip Generation Report will not be accepted for single family residential daily and peak hour trip ends per dwelling

unit, unless it is for urban infill development, within one half mile of major retail and commercial developmentt.

- b. Existing traffic on the adjacent road system and projected traffic on the adjacent road system, projected for a minimum of five (5) years, to project build-out, or both, depending on the project and the area; larger projects or high traffic generation may require future year build-out, currently Year 2030. Future CMP TIA reports would require additional traffic projection information.
- c. Traffic projections on the adjacent road system for both the project and "normal background growth" (demonstrated growth, as detailed in the general plan, or as agreed upon with County staff). Normally, traffic will be projected to Year 2030 or later for an updated future year condition.
- d. Traffic projections shall include the additional impact of undeveloped land or new development within an area surrounding the proposed development site (project) as agreed to by the County Director of Public Works, the County Planning Director and advisory staff.
- e. Projected impacts on intersections adjacent to or within the defined impact area of the project, using intersection capacity analysis - Highway Capacity Manual Operations Delay Method. Right turn-on-red volumes and changes in signal timing can be incorporated in a signalized intersection analysis, but any signal timing changes must be specifically identified in the study recommendations with additional cautions or impact conclusions identified if the timing changes are not

made. Signal timing/phasing changes on a signal coordinated road (or a road planned for signal coordination) will require significant report information.

- f. Trip distribution and assignment with description of how the percentages for directional travel analysis and/or turning movements were determined. The report shall present figures showing project site trip distribution.
- g. Analysis of pedestrian movements and/or generation and the need for additional crossings, crossing protection or other facilities, if required.
- h. Parking analysis is required for any multi-family dwelling projects. All non-residential projects should show parking demand, show how County Regulations will be met, and document how demand will be met.
- i. Existing and proposed signal phases, progression and/or coordination, if applicable.
- j. Traffic counts. Automatic or electronically recorded (machine) traffic counts should be current, within one year, subject to confirmation by the County Engineering staff. Automatic traffic recorder (machine) counts must be suitable in duration for the size of the project and be recorded at least hourly. Traffic signal warrant counts should be recorded at 15-minute intervals. Traffic counts for the project area may be available from other County reports and, if available, can be provided at no charge with a minimum seven (7) day advance written request.

Manual intersection turning movement counts must be current, within one year, covering all appropriate peak hours. These counts must show right turn-on-red movements for signalized intersections as well as truck and bus movements.

If current traffic queues do not clear the intersection, queue counts by lane will be required for an accurate analysis and for accurate level of service determination. Fifteen minute counts are appropriate for intersections that clear the traffic queues, indicating the peak hour factor or providing each fifteen minute volume for the peak hour(s). Queue counts, required for already congested intersections, would be recorded by lane for each phase of the signal cycle.

- k. Recommendations and conclusions of the report with the proposed mitigation measures listed in priority order. The estimated total cost of each measure must be provided, with full data documenting development of the estimate. Mitigation measures reflecting impacts on a State Highway or adjacent community will require evidence of coordination with Caltrans and all other appropriate agencies.
- l. Traffic signal warrants shall be established using both existing traffic at the intersection and then adding the project traffic. The current Caltrans warrant procedures in effect at the time of the study will be used, including a minimum of 10 hours of actual counts that include the 8 highest hours at the intersection. Intersections with arterials carrying significant peak hour volumes will require the necessary analysis for the Interruption of Traffic warrant as well as the Volume Warrants. The counts shall be made simultaneously on all approaches.

- m. Traffic counts, calculations, other basic information, and supporting data shall be included in an Appendix to the report or provided as a separate Technical Appendix. All actual traffic count data will be provided to the County in a useful summary form, digital and paper format, as specified by the County.

3. Analysis Methodology

The build-up method of traffic analysis will be followed, showing:

- a. Existing traffic;
- b. Existing traffic and normal background growth (rate and time to be agreed to by County staff);
- c. Existing traffic and normal background growth (see C. 3. b. above) and project build-out traffic;
- d. Existing traffic and normal background growth (see C. 3. b. above) and new development traffic (see C. 3. b. above);
- e. Existing traffic and 5 year normal background growth (see b. above) and new development (see b. above) and project build out, if longer than 5 years to build out of project.

If the study period to build-out is longer than 5 years, the future projection time period appropriate for a new development will be determined by the County staff. Significant projects may require a future projection time period of 20 years or General Plan build out. The future year is currently year 2030 as of the date of adopting this Policy. State Highway traffic projections will usually be carried to the year 2030 or to Caltrans current policy and procedures.

4. Format of Reports

In general, the following should be clearly presented in the report, along with other report materials:

- a. Identification of the project name, location and reference to County identification or tracking numbers.
- b. Identification of the Company and the registered "Traffic Engineer" and/or registered "Civil Engineer" taking responsibility for the report.
- c. Identification of existing traffic conditions, the existing transportation system, and the existing level of traffic service.
- d. Volumes of traffic to be generated by development, by type: ADT, a.m. peak hour, p.m. peak hour, pedestrian, vehicular, percent and type of trucks.
- e. Traffic distribution by generator type.
- f. Projected background growth traffic and combined total of growth plus development traffic with level of service list for roads and intersections. (See Analysis Methodology).
- g. Identified impacts on the transportation system from any source. Identify system segments and/or intersections which degrade to a level of service below level of service "B". This is for identification of changing conditions and not for mitigation.

- h. Mitigation measures recommended to address impacts of the developments and development plus growth traffic. Larger projects may have to examine the time period to General Plan build-out or later for CMP reports.
- i. Transportation Demand Management measures to be carried out in compliance with Air Quality requirements or with any County ordinance adopted for these purposes.

D. REEVALUATION OF SIGNIFICANT PROJECTS

If, in the opinion of the Public Works Staff and/or the Planning Staff, the potential impacts or the proposed mitigation measures are not adequately addressed, additional study and analysis shall be required before the project will be approved. The contact person for these additional requirements will be the Director of Public Works or his/her designee.

Examples of inadequately addressed impacts or mitigation measures would be:

- a. Inadequately identified feasibility of proposed mitigation measures. The adequate identification of mitigation measures will be required for measures that entail the acquisition of additional right-of-way or relocation of existing structures, or are contingent upon actions to be taken by an entity other than the project applicant, e.g. the County, another project, Caltrans, etc.
- b. On a project with a high employment base, a Transportation Management Plan (TMP) will be required to comply with the current Air Quality Management regulations.

- c. Traffic reports supporting an EIS or an EIR will be required to 1) recommend feasible monitoring mechanisms and frequencies for the mitigation measures once the construction and operating phases of the project are started and 2) identify the means of financing the monitoring mechanisms, e.g. ongoing County program, developer funded program, etc.
- d. On larger, significant development projects, additional analysis for pedestrian and bicycle circulation and for transit service will be required. In the instance of a high employment base, an overall Transportation System Management (TSM) Plan may be required if mitigation measures do not achieve level of traffic service "C" (LOS "C").
- e. Intersection improvements (additional lanes or revised geometrics, etc.) or road widening (right turn lanes, acceleration-deceleration lanes, etc.) will be required to be identified on figures showing the following:
 - 1) Existing and committed travel lanes (with dimensions);
 - 2) Intersection approach geometrics, including existing and committed improvements and dimensions for all intersection approaches;
 - 3) Locations of through streets (roads) and recommended stop signs in accordance with the California Vehicle Code and County Policies and Ordinances.

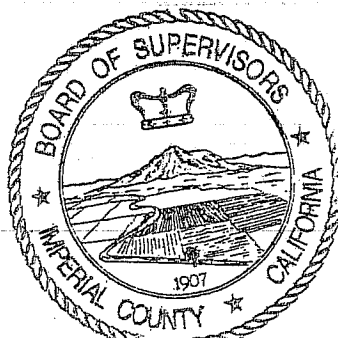
f. The study area for the project will be expected to encompass an adequate surrounding area to ensure that all impacts are identified to a sufficient extent that any mitigation measures, regardless of importance are shown, e.g. stop signs, yield signs, etc.

APPENDIX A

SAMPLE DEVELOPMENT PROJECT TRAFFIC IMPACT REPORT OUTLINE

- A. INTRODUCTION
1. Project location, with vicinity and location maps.
 2. Project Description.
- B. EXISTING CONDITIONS
1. Identify existing road network, with a map.
 2. Identify existing traffic volumes, with diagrams.
 3. Identify existing traffic controls and intersections with signals warranted.
 4. Describe current general plan of roads.
- C. TRAFFIC FORECAST
1. Identify related projects.
 2. Estimated traffic growth rates.
 3. Estimated project trip generation.
 4. Estimated project trip distribution.
 5. Assign project traffic to roadway networks.
- D. TRAFFIC IMPACTS
1. Identify major intersections.
 2. Identify roadway capacities.
 3. Identify impacts of off-site improvements.
 4. Calculate HCM service levels and signal warrants using existing plus project by phases, existing plus project plus growth factors for a 20 year build-out, including AM and PM peak hours.
- E. MITIGATION MEASURES
1. Recommended roadway improvements.
 2. Suggested general plan improvements.
 3. Signal locations and signing and striping proposals and locations.
- F. CONCLUSION

Note: The above outline is not all inclusive. It is an outline for a sample report of normal complexity, without a TDM element.



Approved and/or authorized by the Board of Supervisors
of the County of Imperial

Date 08-07-07 Minute Order No. 37

SYLVIA BERMUDEZ
Clerk of the Board of Supervisors

By: [Signature] 08-13-07
Deputy