

CITY OF EDINA

TRANSPORTATION IMPACT ANALYSIS INITIATION AND REVIEW POLICY

CITY OF EDINA TRANSPORTATION COMMISSION

April 2007

- Edina Transportation Commission - Consideration on February 15, 2007
- Edina Transportation Commission - Approved April 19, 2007

I. Introduction

The purpose of this document is to provide guidance to applicants and/or consulting engineers assessing the potential transportation impacts of a new development or a redevelopment proposed within the City or which may result from related changes in zoning or Comprehensive Plan amendments. Development applications will not be deemed complete until a final approved Transportation Impact Analysis (TIA) has been received by the City. The following guidelines have been developed to provide for clear, orderly, and consistent analysis by establishing minimum standards for all Transportation Impact Analysis. City staff and the Edina Transportation Commission will review the TIAs based on these criteria herein.

II. Transportation Impact Analysis (TIA)

A TIA is a study which assesses the effects that a particular development will have on the transportation network in the community. These studies vary in their range of detail and complexity depending on the type, size and location of the development. Transportation impact studies should accompany developments which have the potential to impact the transportation network. These studies can be used to help evaluate whether the development is appropriate for a site and what type of transportation improvements may be necessary.

For the purposes of the TIA, all land at one location, including existing developments or available land for building development under common ownership or control by an applicant shall be considered when determining if required criteria are met. An application shall not avoid the intent of this criterion by submitting a partial or segmented application or approval request for building permits, development plans, subdivision, etc.

III. Transportation Impact Analysis Triggers

- a. A TIA is **required** for any development meeting any or all of the following criteria:
 - i. generating approximately 1,000 or more vehicle trips per day
 - ii. generating approximately 100 or more vehicle trips in any one hour period
 - iii. if associated roadway traffic is increased by 50% or more

The trip rates in the most current edition of the Institute of Transportation Engineers (ITE) Trip Generation should be used in determining the amount of traffic a particular development will generate. If the proposed use is an expansion of an existing facility then existing traffic patterns should be extrapolated to the proposed improvement. If no ITE rates exist for a particular type of development or there is some uncertainty regarding the need to conduct a study, the City traffic engineer will determine if a TIA is required.

If an applicant believes a TIA is not necessary then a written justification will be required. The Edina Transportation Commission (ETC) and City staff will review the document and determine how to proceed.

- b. A TIA is **not required** when a development falls below the above mentioned threshold. A traffic study is required in lieu of a TIA.

The ETC shall consider the following four effects in the evaluation of traffic studies that are warranted by certain zoning, land-use, conditional use permits and final development plan applications prior to the application being submitted to the Planning Commission and Council for consideration:

- i. Does the development significantly affect the operation and congestion of the adjacent roadways or intersections and/or result in a traffic hazard?
 - ii. Does the development significantly affect pedestrian safety?
 - iii. Does the development provide opportunities for enhanced transit usage, van pooling or car pooling?
 - iv. Does the development provide feasible opportunities to address an existing traffic issue or safety problem?
- c. Sound engineering practices and applicable regulatory standards shall be used to evaluate any development proposal, regardless of the development size or scope.
 - d. Developments adjacent to another jurisdictional entity (road or city) shall submit the traffic study to the respective agency for their information.

IV. Transportation Impact Analysis Study Area

- a. The transportation consultant and project manager shall meet with the city traffic engineer to establish the study area, to discuss critical issues, and to determine the complexity of the report to be submitted. A preliminary site plan showing the planned development, internal circulation, and connection to the public roadway system shall be provided to the City at the initial meeting. The study area shall be approved by City staff.
- b. All site access drives, adjacent roadways, and adjacent major intersections, plus the first signalized intersection in each direction from the site shall be analyzed. Additional areas may be added based on development size and specific site or local issues and policies. A general guideline for setting the project study boundary will be when a development's traffic using any particular intersection falls below 20%.

V. Transportation Impact Analysis Requirements

A TIA shall be completed by a qualified Professional Traffic Operations Engineer (P.T.O.E.).

All traffic analysis shall utilize traffic modeling software compatible with the City of Edina's software program, *Syncro/Traffic*.

The TIA report will usually include the following:

Transportation Impact Analysis Initiation and Review Policy – April 2007

- a. Report Letter
 - i. Identify the person(s) to whom the report is addressed
 - ii. Summarize the findings and recommendations
 - iii. Clearly define peak traffic periods
- b. Proposed Development and Study Area
 - i. Describe proposed development
 - ii. Map of site and street network
 - iii. Identify intersections/highway links to be analyzed
- c. Existing Traffic Conditions
 - i. Figures showing ADTs, peak hour turning movements and levels of service (for all applicable peak hour and peak hour of development unless otherwise directed by the City traffic engineer)
 - ii. Indicate roadway/intersection geometrics, street right-of-way, type of traffic control at intersections, traffic regulations (i.e. no parking zones, posted speed limit), and bus stops
 - iii. Determine queue lengths at controlled intersections that may affect project
- d. Future Projected Traffic Conditions Without Development (City staff may provide base data)
 - i. Figures showing future projected ADTs, peak hour turning movements and level of service
 - ii. Identify changes in road network and land use expected under full development conditions
 - iii. Determine queue lengths at controlled intersections that may affect project
- e. Existing Site Traffic
 - i. Site-generated traffic – ADT and peak hours
 - ii. Figure showing distribution by direction of approach
 - iii. Figure showing assignment (volumes and turning movements) to each link in the network analyzed
- f. Proposed Site Traffic
 - i. Site-generated traffic – ADT and peak hours (if development is to be completed in phases, show cumulative traffic for each phase added)
 - ii. Figure showing distribution by direction of approach
 - iii. Figure showing assignment (volumes and turning movements) to each link in the network analyzed
 - iv. "Pass-by" trip assumptions, distribution and assignment
- g. Traffic Impact of Proposed Development
 - i. Figures showing ADTs, peak hour turning movements and level of service for present conditions with proposed development
 - ii. Figures showing ADTs, peak hour turning movements and level of service for future projected conditions with proposed development
 - iii. Determine queue lengths at controlled intersections that may affect the project
 - iv. Review ingress/egress sight distance, capacity and safety
 - v. Review on-site circulation for vehicles and pedestrians
 - vi. Review driveway and parking lot design for compliance with City standards and codes

- h. Problem Areas
 - i. Identify congestion or safety problems for present conditions with proposed development
 - ii. Identify congestion or safety problems under full development conditions with proposed development
- i. Travel Demand Management Plan
 - i. A travel demand management plan shall be included as part of the analysis
 - ii. Bicycle and Pedestrian Facilities (provide for access to, from and through development for bicyclists and pedestrians; recommend designated bicycle paths, lanes and facilities)
- j. Transit Facilities
 - i. Identify existing bus turn-outs, park and ride lots and/or bus stops
 - ii. Analyze the need for additional transit facilities
- k. Recommended Improvements and Solutions
 - i. Identify possible short-term improvements and solutions
 - ii. Identify possible long-term improvements and solutions
 - iii. Recommended improvements and solutions
- l. Appendices
 - i. Capacity analysis calculations, data and assumptions (provide sufficient information for reviewer to follow analysis and to be able to spot check results)
 - ii. Queue length analysis calculations, data and assumptions
 - iii. Provide other pertinent information that may be needed to explain or justify data used in the report (i.e., if data from an actual field study of sites in the metro area is used in place of ITE trip generation rates, then a report of the field study results should be included in the appendix)

The TIA must be submitted at the same time as the development application. However, the developer may find it advantageous to have the TIA completed several weeks prior to the submittal of the development application in order to incorporate recommendations from the traffic report on the development plan.

The TIA will be reviewed by City staff, independent traffic engineer and the ETC for final approval.

Any recommended improvements or solutions for the study area infrastructure as suggested by the TIA will be the responsibility of the developer. The developer shall work with the appropriate agencies to construct the infrastructure prior to completion of the project.

Fourteen (14) color copies of the report should be produced on standard 8½" x 11" letter size paper. Figures can be plotted on 11" x 17" size paper format for legibility. One (1) copy submitted electronically in portable document format (PDF). Electronic files of the computer traffic modeling analysis will also be required.

Reference Material:

Institute of Transportation Engineer's, Trip Generation Manual
Transportation Impact Analyses for Site Development, ITE - 2006