

CARVER COUNTY PUBLIC WORKS DEVELOPMENT REVIEW PROCESS

Revised: August 3, 2016

Purpose

The intent of this document is to clarify how the County review process works for land development projects that affect the county highway system. It identifies who is responsible for submittals to the county, and the basis for which proposals will be reviewed. The review process applies to all development actions adjacent to county highways or those that have a direct effect on the operation of a county highway. Minnesota State Statutes MS 505.021, 505.03 and 462.358 stipulate that cities need to submit plats to the county for review and comments. These statutes also specify what items of information and what timeline schedules apply. This process assumes the appropriate City planning action has been taken and environmental review is complete or underway. However, the criteria and guidance herein can be used in analyzing transportation impacts in an EAW, AUAR or similar environmental review procedure.

Who should submit development proposals and plats?

For formal review, the county does not accept development plat submissions from third parties. All plats should be submitted through the city. City submission is important to ensure completeness of the submission, provide consistency in the process, and to assure good communications.

Prior to a formal submittal the county strongly encourages an early review meeting (ERM) with the city and development proposer to examine concept layouts, preliminary site plans, or sketch plans. Cities, developers, project consultants, or property owners can submit this type of draft information and request a meeting. The benefit of early review is that many issues can be identified and possibly resolved prior to the formal plat review process (often speeding up all subsequent reviews). This early review also allows the county to determine application requirements upfront of the formal process.

What development projects require review by the County?

Submittal to the county for review is required if:

- There will be new access onto a county highway.
- There is a modification or improvement of existing access onto a county highway.
- The development proposal is adjacent to an existing or proposed, county highway or has a direct effect on the operations of a county highway. By State Statute, all proposed preliminary plats within a city or town adjacent to a county highway must be submitted to the County Engineer for review and comment.
- The development is likely to cause a reduction in Level of Service (LOS) of a county highway or intersection.

Basis of Review

Each proposal will be reviewed and approved based on the standards and/or guidelines identified in the Carver County Roadway Systems Plan (RSP), Carver County Comprehensive Plan, Carver County Ordinances, MnDOT State Aid Design Manual, and any other current applicable county documents.

Development proposals will be reviewed based on their impact to the current and future highway system as follows:

Current – The development will be reviewed to ensure the safety and efficiency of the current County Highway System is maintained.

Future - The development will be compatible with the future highway system as outlined in the RSP.

Development Review Criteria

Development plans and plats submitted will be evaluated based on the following criteria. Each criteria outlined is not necessarily a requirement for each project and may not apply to all situations, but gives a general basis as to what will be evaluated when determining mitigation measures.

1. Geometric design
 - a. Minimum Requirements
 - i. County State Aid Highways (CSAH) and County Roads (CR) will both need to be designed to meet County State Aid Standards or supplemental documents.
 - ii. Carver County RSP provides minimum typical sections for roadway types.
2. Right of Way
 - a. Right of way width requirements for county highways are shown in the RSP or supplemental documents
 - b. For development adjacent to county highways the proposed right of way width shown in the RSP or supplemental documents should be dedicated to the public with the platting process. If it is determined infeasible to dedicate the right of way the development shall be planned to conform to set back requirements to the proposed right of way line. In these situations outlots should be used wherever possible to preserve the future right of way area.
3. Roadway Network Continuity
 - a. Where possible streets in individual developments should align with access to other developments, and provide right-of-way for future connections to adjacent developments
 - b. Internal site circulation and cross easements should promote internal site circulation using shared access points and cross easements between private residential (e.g. townhome) and commercial developments.
 - c. Parallel street systems for local traffic – utilization of parallel street systems along Principal and Minor Arterials to provide local access and carry shorter local trips.
 - d. Collector streets should provide continuity and connectivity with other street systems.
 - e. New county highway corridors – Carver County RSP identifies the future countywide highway corridor vision. Any plat or development adjacent to a proposed corridor shall recognize and accommodate the corridor.
4. Access Management - The first priority is to avoid introducing any new access points onto the County and State Highway System. If access does need to be introduced, it shall be taken on the lower-function or lower-volume roadway. Full-access intersections may be considered based on access management guideline outlined in the Carver County RSP. Access standards to be incorporated into development proposal:
 - a. Access spacing.
 - b. Intersection lighting – installation may be required at any new or existing county highway intersection affected by development.
 - c. Realign offset or dogleg intersections and driveway approaches.
 - d. Consolidate or reduce driveway access.
 - e. Restrict turning movements to reduce conflicts.
 - f. Driveway and intersection design characteristics such as:
 - i. Proper driveway width and turning radii
 - ii. Proper corner clearance

- iii. Adequate approach grade
- iv. Alignment of intersecting roadways at right angles to the county roadway to maximize sight lines, minimize the time a vehicle is in the conflict area and facilitate turning movements.
- v. Proper grading of entrance inslopes and culvert openings.
- vi. Keeping sight triangles and clear zones free of obstructions.
- g. Minimum Requirements
 - i. Access Spacing Guidelines as outlined in the Carver County RSP as shown in the table below.

5. Intersection Traffic Control and Channelization
 - a. Minimum Requirements
 - i. Intersection Control Evaluation (ICE) will need to be complete for any intersection proposed to be controlled by all way stop, traffic signals, or roundabout
 - ii. Turn lanes/bypass lanes will be determined as needed by County Engineer.
6. Transportation Impact Analysis (TIA) – As a rule of thumb, the following will trigger the need for a TIA:
 - i. Development generates 750 or more vehicle trips per day.
 - ii. Development generates 100 or more vehicle trips in any one hour period.
 - iii. Associated roadway traffic is increased by 50% or more.
 - iv. Development is determined to create a potential hazard to public safety as determined by the County Traffic Engineer.
 - v. Development traffic could substantially affect an intersection or roadway segment already identified as operating at a level of service D or worse.

Information obtained from the TIA will play an integral part of the site plan development and review process. Since traffic circulation patterns are an integral part of the site plan and are dependent upon county highway access locations, the County will strive to make a decision to require a TIA early in the review process. If a TIA is determined to be required the county will provide guidelines to what is necessary within the TIA process. The TIA process is described in detail in Appendix A of this document.

Construction Plan Review

All improvements needed to county roadways will be designed to County State Aid Highway standards by a Professional Engineer registered in the State of Minnesota. Detailed construction plans will be submitted to Carver County Public Works for engineering review.

Development Review Schedule

County staff will review complete development proposals, plats and plans within 30 days of receiving documents. Appendix B illustrates the Development Review Process and timelines.

Development Review Contacts

Carver County contact information for each step of the Development Review Process can be found in Appendix C.

Appendix A

Traffic Impact Analysis Process

I. Introduction

The purpose of this process is to provide guidance to applicants assessing the potential transportation impacts of a new development or a redevelopment. The following guidelines have been developed to provide a clear, orderly, and consistent analysis by establishing minimum standards for all Traffic Impact Analysis (TIA). County staff will review the TIAs based on these criteria.

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. TIAs should accompany developments which have the potential to impact the transportation network. It will be determined in the early review meeting if a TIA is necessary. 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 of the following criteria:
 - i) generating approximately 750 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.
 - iv) development will likely create a hazard to public safety.
 - v) development traffic will substantially affect an intersection or roadway segment already identified as operating at an unacceptable level of service as determined by the County.

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 County 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. County 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 may be required in lieu of a TIA.

Carver County will consider the following 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:

- 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 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 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 County 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 County at the initial meeting. The study area shall be approved by County staff.
- b) All site access drives, adjacent roadways, and adjacent major intersections, plus the first affected 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 Engineer (P.E.). All traffic analysis shall utilize *Syncro/SimTraffic*. The TIA report will usually include the following:

- 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 County 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 (Utilize County Travel Demand Model or historical growth information)
 - 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.
- 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.
 - iii) Identify crash experience and expectancy.
- 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) Recommended Improvements and Mitigation Measures
 - i) Identify possible short-term improvements and mitigation measures.
 - ii) Identify possible long-term improvements and mitigation measures
 - iii) Recommended improvements and mitigation measures
- k) 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 appropriate development application to the City. However, the developer may find it advantageous to have the TIA completed and submitted to the County several weeks prior to the submittal of the development application in order to incorporate recommendations from the traffic report on the development plan. The completed TIA meeting the above requirements will be reviewed by County staff and written comments will be provided within 30 days.

Appendix B
Development Review Process Flow Charts

Appendix C

Carver County Public Works Development Review Process Contacts

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