City of Edgewood – Concurrency Review & Traffic Impact Analysis Guidelines

The City of Edgewood requires that development applications meet the City's requirements related to transportation system impacts and improvements. The City's Comprehensive Plan and associated Development Regulations set forth the minimum standards for approval of a development application. These guidelines cover the following elements:

- Transportation Concurrency,
- Development Review, and
- State Environmental Policy Act (SEPA), as applicable

These review elements are interrelated and build from the basic development application information used to estimate the new traffic generated from a proposed development. The traffic generation information is used to determine if the proposal meets the City's concurrency requirements and evaluate the potential for adverse traffic impacts under SEPA. The trip generation information also is directly tied to defining the transportation impact fee for the development application.

Attachment A illustrates the transportation-related development review process for the City of Edgewood. The initial phase reviews the application under the City's Transportation Concurrency Program requirements (EMC 18.105). The concurrency review is used to determine if the City's representative set of roadways and intersections meet the minimally acceptable level of service standards. Concurrency must be achieved prior to review of the development project under SEPA and as part of the development review process to confirm it meets applicable access, frontage, and parking requirements. Payment of Transportation Impact Fees (TIF) would be a requirement of final building permit approval. Potential credits against the TIF may be available pursuant to EMC 4.30.100.

Step 1 — Project Information and Trip Generation

The applicant shall provide the Public Works Director, or their designee, with a summary of the project, which generally includes the following:

- Developer and Applicant Information
- A narrative description of the project
- Location (vicinity map and site plan)
- Type and size of proposed development (number of residential units and/or square footage and use(s) of building(s))
- Existing uses, if any (number of residential units and/or square footage of building), and identification of what existing uses are to remain, if any
- Horizon year (year of completion and projected full occupancy/build-out)
- PM peak hour trip generation based on the City's transportation impact fee rate schedule, or other method acceptable to the Public Works Director.

This information will be used in Step 2, the concurrency evaluation, and may also be used in subsequent steps.

Step 2 — Concurrency Evaluation

Based on the information submitted in Step 1, any development that generates either a) one or more new trips that will pass through an intersection or roadway section identified with a level of service below the acceptable level noted in the Transportation Element of the City's Comprehensive Plan, or b) 10 or more PM peak hour trips, will need to complete a concurrency application and pay the associated fee. Once the application is received by the City, a concurrency evaluation is performed to ensure that all concurrency intersections and roadways will operate as described in EMC Chapter 18.105.

The City (or their designated consultant) will use the information provided in Step 1 and as part of the concurrency application to conduct the concurrency evaluation. Developments generating less than 10 PM peak hour trips will typically not be required to pass concurrency, unless:

- the development is located near a concurrency intersection or roadway that is close to reaching the LOS standard as documented in the Annual Concurrency Report, or
- The Public Works Director deems it necessary

Concurrency Evaluation Process

In general, the procedure for evaluating concurrency can be summarized as follows:

- Begin with existing traffic counts for the PM peak hour (latest baseline concurrency model)
- Add known City pipeline development traffic to the latest intersection counts
- Add known other agency pipeline development traffic to the latest counts plus City pipeline volumes
- Grow all existing counts by one percent per year to account for other background growth based on the City's Comprehensive Plan and Travel Demand Model
- Test the intersections to determine if they meet adopted LOS standards:
    - LOS E for intersections along Meridian Avenue (State Route 161)
    - LOS D for all other intersections in the City
- Calculate roadway volume to capacity ratios and see if they meet LOS standards
    - LOS C is standard for City minor arterials and collector streets as outlined in the Transportation Element. LOS C is a volume to capacity ratio of 0.80, or 80% of capacity.

The concurrency evaluation analyzes six years in the future (Baseline), to capture developments already approved and transportation projects that are funded and will be completed within that timeframe. Two concurrency scenarios are evaluated:

Baseline (Without Project) Conditions. This includes all traffic from pipeline (vested) development projects within the City and known development projects in the surrounding communities. To account for smaller developments not subject to concurrency requirements and other changes in regional traffic, an annual 1% growth rate is applied to the existing traffic counts.

The transportation system assumptions include all future improvement projects that are funded and identified in the City's 6-year Transportation Improvement Program.

Future (With Project) Conditions. Includes everything from the baseline conditions scenario and adds the proposed project trips. The trips generated by the proposed project trip shall be distributed onto each roadway based on the City's travel demand model developed as part of the Transportation Element.

Concurrency Approval

If all road segments and intersections are forecasted to operate above the LOS standard, then the Public Works Director (or designee) will approve concurrency for the application and issue a certificate of concurrency.

If any road segment or intersection is forecasted to operate below the LOS standard, the Public Works Director (or designee) will notify the applicant that concurrency has not been met. The applicant has the option to change their proposed development to decrease the number of trips generated or propose mitigation that will resolve the transportation deficiency defined during the concurrency review.

If acceptable concurrency mitigation is defined, then the Public Works Director (or designee) will issue the certificate of concurrency with the identified conditions of approval. The concurrency mitigation and conditions of approval will be carried forward with the formal development application and associated review processes.

Concurrency Denial
If acceptable concurrency mitigation is not agreed to by the City and applicant, then the Public Works Director (or designee) will provide the applicant a denial of concurrency. The applicant may appeal the denial of concurrency, as outlined in Chapter 18.105 of the EMC.

Step 3 — Scoping Meeting

Following completion of the concurrency evaluation (with or without requirements for concurrency mitigation), a scoping meeting should be held to determine the type of traffic impact analysis (TIA) that will be required. The meeting (or conference call) is necessary for all proposed developments generating 10 or more PM peak hour vehicle trips, or for developments located near non-currency roadways or intersections that are approaching the LOS standards adopted in the City's Comprehensive Plan. The purpose of the meeting is to obtain additional information about the proposal, clarify issues surrounding the project, and determine which level of traffic study is necessary.

Table 1 summarizes the steps to be completed based on the number of PM peak hour trips generated by the proposed development. The Public Works Director (or designee) may, however, override the threshold guidelines for preparation of a TIA to address specific potential impacts of a development application. The Public Works Director (or designee) will also consider prior applications and potential for cumulative traffic impacts in establishing the scope for a TIA for a specific development application.

Table 1. Traffic Impact Analysis Thresholds

TIA Type	Traffic Generation	Residential Land Use Example	Commercial Land Use Example	Steps to be Completed[1]
I	Less than ten PM peak hour vehicle trips	16-unit Apartment Complex	Specialty Retailer less than 4,000 sqft	1, 2
II	10 to 50 PM peak hour vehicle trips	17 to 80-unit Apartment Complex	Specialty Retailer between 4,000 sqft and 18,000 sqft	1, 2, 3, 4
III	51 or more PM peak hour vehicle trips	82-unit Apartment Complex	Specialty Retailer greater than 18,000 sqft	1, 2, 3, 5

1. The Public Works Director (or designee) can modify the steps to be completed based on specific issues and/or potential for cumulative impacts that should be addressed.

Step 4 — Limited Traffic Impact Analysis for SEPA

For developments generating between 10 and 50 PM peak hour trips, a limited TIA will be required. The TIA will need to address the following items:

A. Site Access Roadways/Driveways

- Site plan depicting on-site circulation and connections to other properties and roadways

- Sight distance requirements and adequacy of site access location(s) (per AASHTO requirements)
- Level of service analysis for site access intersection(s)
- Channelization evaluation of site access intersection(s)
- Vehicle storage/queuing analysis of site access intersection(s)
- Traffic control warrants for site access intersection(s)
- Collision history analysis (only required within the vicinity of the proposed access locations to the development, unless otherwise directed by the City)

B. Other Travel Modes

- Identify safe walking routes to school and/or routing to the nearest school bus stop, along with any potential mitigation to address safety

This information should be documented in a report, similar in organization to the outline in Attachment B, but including only the information described previously. The Public Works Director (or designee) will review the TIA for accuracy and completeness. The Public Works Director (or designee) will make a determination of completeness of the study pursuant to EMC 18.40.150. If the TIA is deemed incomplete, the Public Works Director (or designee) shall identify in writing the specific requirements, needs, and additional information needed to complete the TIA.

If the study is deemed complete, the City will use its findings in establishing potential mitigation needs and conditions of approval for the development application, including the appropriate transportation impact fee.

Step 5 — Full Traffic Impact Analysis for SEPA

For developments that generate more than 50 PM peak hour trips, or those otherwise required by the Public Works Director, a full traffic impact analysis will be required. The full TIA is required to address the following:

C. Site Access Roadways/Driveways

- Site plan depicting on-site circulation and connections to other properties and roadways
- Sight distance requirements and adequacy of site access location(s) (per AASHTO requirements)
- Level of service analysis for site access intersection(s) and any arterial/arterial or arterial/collector intersection impacted by 10 or more PM peak hour trips that weren't evaluated during concurrency
- Channelization evaluation of site access intersection(s)
- Vehicle storage/queuing analysis of site access intersection(s)
- Traffic control warrants for site access intersection(s)
- Collision history analysis (only required for access to arterials and collectors, unless otherwise directed by the City)

D. Existing and Forecast Traffic Volumes

- Estimate traffic volumes for arterial intersections that are modeled to have 10 or more new peak-hour trips as a result of the project (or as otherwise identified by the City)
- Provide existing intersection turning movement counts for study time periods (traffic volumes should be less than one year old, unless otherwise approved by the City). The weekday PM peak hour shall be used unless otherwise defined during scoping meeting.

- Attach actual traffic count sheets
- Future peak-hour intersection turning movement volumes without project traffic based on:
  - Annual background traffic growth factor/rates (provided by City from the concurrency evaluation)
  - Background or "pipeline" traffic from other future development projects (provided by the City from the concurrency evaluation)
- Forecast peak hour turning movements for with-project conditions based on trip generation, distribution, and assignments per scoping meeting and concurrency evaluation

E. Level of Service Analysis

Level of service analyses shall be based on the current edition of *Highway Capacity Manual*, Transportation Research Board, and related software, or methods approved by City. The following criteria should be used in the analysis:

- Evaluate arterial/arterial or arterial/collector intersections impacted by 10 or more peak-hour project trips that were not evaluated as part of concurrency (or as otherwise identified by the City)
- Evaluate existing and future conditions with and without project (other planned developments impacting study area must be factored into the Level of Service [LOS] calculations)
- Assumptions/variations to standard analysis default values shall be noted and justification provided for their use
- Compare the resulting future with-project LOS to the City's adopted LOS standards
- Attach LOS calculation sheets

F. Other Travel Modes

The TIA shall include an evaluation of impacts on and potential improvements to other travel modes that serve the site. These may include, but are not limited to, the following:

- Public Transit
- Pedestrian
- Bicycle
- Identify safe walking routes to school and/or routing to the nearest school bus stop, along with any potential mitigation to address safety

G. Parking

A parking supply and demand analysis may be required by the Community Development Director, or other designee, in situations where parking may become an issue or could impact an adjacent business or neighborhood. Off-street parking design and study requirements are detailed under EMC 18.90.130(C)(8).

H. Mitigation Recommendations

The TIA should include recommendations to mitigate project impacts consistent with City standards. Mitigation may include construction of, or contribution toward, improvements to roadways, intersections, non-motorized facilities, traffic controls, transit, and others, as appropriate. Other mitigation could include Travel Demand Management (TDM) strategies and/or more aggressive Commute Trip Reduction (CTR) targets. Payment of the transportation impact fee also shall be noted.

I. TIA Report

The applicant shall submit the complete Traffic Study to the Public Works Director (or designee) at the same time of the submission of an application for the proposed development to the City Community Development Department.

The report shall generally be formatted per the outline in Attachment B. The report should include the sections and figures detailed in the attached outline. The completed report shall be stamped by a professional engineer that prepared or directly supervised the TIA.

The following must be submitted to the City:

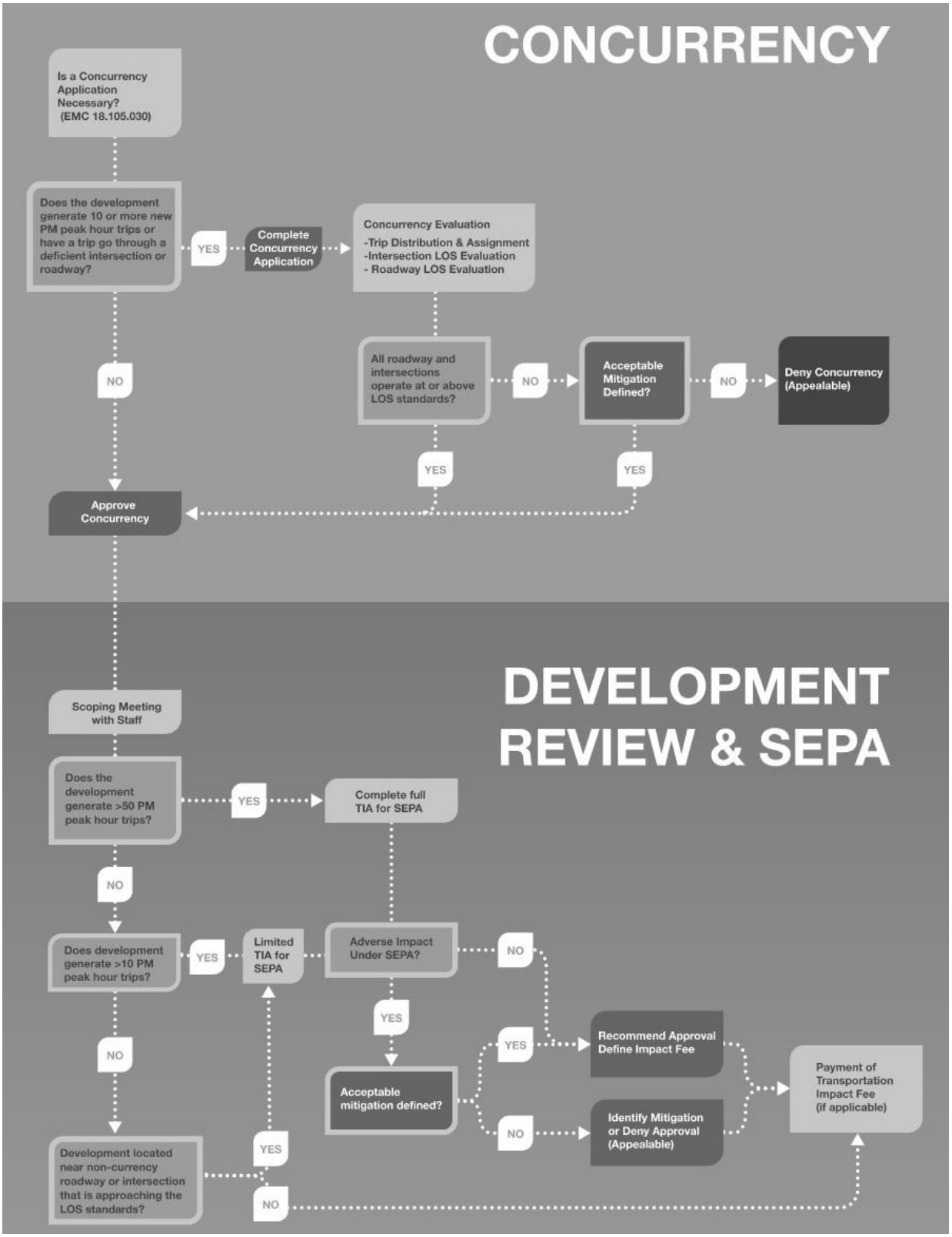
- One hard copy of the TIA and all documentation
- Copy of the TIA, including appendices, in PDF format
- Electronic copy of Synchro output and data files
- Electronic copy of the trip generation table in Excel format

J. City Review

The Public Works Director (or designee) will review the TIA for accuracy and completeness. The Public Works Director (or designee) will make a determination of completeness of the study pursuant to EMC 18.40.150. If the TIA is deemed incomplete, the Public Works Director (or designee) shall identify in writing the specific requirements, needs, and additional information needed to complete the TIA.

If the study is deemed complete, the City will use it and its findings in establishing potential mitigation needs and conditions of approval for the development application, including the appropriate transportation impact fee.

Attachment A
Transportation Development Review Flow Chart



Attachment B
Traffic Impact Study Report Outline

The following information shall be included in each traffic impact study report:

1. Cover sheet (include name and location of project, applicant, engineer and date).
    A. Engineer's stamp and signature.
2. Table of contents.
3. Introduction.
    A. Type of development.
    B. Size of development.
    C. Location map, including depiction of major streets and intersections in the study area.
    D. Site plan, including proposed driveways, streets, parking facilities, and internal circulation for vehicles, pedestrians, and bicyclists.
4. Summary of Existing Conditions.
    A. Description and map of the existing roadway system within project site and surrounding area.
    B. Map of study area with weekday peak hour turning movements.
    C. Table of existing weekday peak hour levels of service.
    D. Accident rate analysis for the study area.
    E. Traffic control devices in the study area.
    F. Description and map of the location and routes of the public transit system servicing the area.
    G. Description and map showing the location and routes of the bicycle and pedestrian facilities serving the area.
5. Summary of Future Baseline Conditions (without project).
    A. Summary of planned improvements in the area.
    B. Summary of future pipeline projects assumed in the analysis.
    C. Map of study area with future baseline weekday peak hour turning movements.
    D. Table of future baseline weekday peak hour levels of service.
6. Summary of Future Plus Project Conditions.
    A. Description and table of the trip generation assumptions.
    B. Map of the trip distribution assumptions.
    C. Map of the project trip assignment peak hour turning movements.
    D. Map of study area with future with project weekday peak hour turning movements.
    E. Table of future with project weekday peak hour levels of service.
    F. Transit analysis.
    G. Bicycle and pedestrian analysis.
    H. Parking analysis.
    I. Site access analysis.
7. Findings and Recommendations.
    A. Findings of needed improvements.
    B. Proposed mitigation recommendations.
    C. Transportation impact fee estimate.
8. Appendix.
    A. Raw turn data movement counts.
    B. Level of service calculation worksheets.
    C. Detailed trip generation worksheet(s).