

## TRAFFIC IMPACT ANALYSIS GUIDELINES

**A. General.** When required by the County Engineer, a Traffic Impact Analysis (TIA) shall be prepared and stamped by a professional Civil Engineer licensed in the State of Washington, with expertise and experience in transportation engineering. The TIA shall be prepared generally consistent with the following guidelines and will be used by county staff to review project proposals.

### **1. Introduction/Description/Summary**

- a. Project identification and overview
- b. Analysis scope and purpose
- c. Project location and study area
- d. Developer/representative information
- e. Development description
- f. Phasing and timing
- g. Summary of transportation operation and mitigation

### **2. Existing Site Conditions/Site Services Inventory**

- a. Zoning and Land Use
- b. Transportation network
  - i. Critical intersections and roadway segments
  - ii. Traffic signals and controls
  - iii. Roadway classifications
  - iv. Constraints or problems
  - v. Traffic type, volumes & levels of service
  - vi. Area roadway pavement conditions
  - vii. Transit service
  - viii. Rights-of-way and pavement widths
  - ix. Pedestrian, bike, and equestrian facilities
- c. Safety
  - i. Accident history (number, type, severity, rate)
  - ii. Sight distance (at all site access points)
  - iii. Access spacing to adjacent driveways/roads (including both sides of road)
- d. Parking (if applicable)

### **3. Proposed Project Improvements**

- a. Overview
- b. Study area conceptual plan
- c. County six year TIP elements relevant to project
- d. Major & Minor circulation elements

#### **4. Traffic Projections/Design Year Analysis**

- a. Level of analysis and methodology
- b. Trip Generation (latest edition ITE Trip Generation with codes used or source acceptable to Whatcom County Engineering Services)
- c. Trip distribution and assignment
- d. Total traffic volumes (with and without project)
  - i. ADT and AWDT
  - ii. Peak-hour
- e. Peak hour considerations (a.m./p.m.)
- f. Capacity and design year LOS analysis
- g. Pass-by and diverted link with trip factors and assumptions
- h. Internal capture for multi-use developments
- i. Through traffic
- j. Transportation safety
- k. Site access, circulation, and parking

#### **5. Non-site Traffic**

- a. Background growth - % provided by County; typically for small projects, less than 5 years for build out
- b. Pipeline developments - approved larger projects; typically 5 - 10 year build out, adds 100 or more total p.m. peak hr trips
- c. Regional or Sub-regional transportation plan - large projects, develop over long period

#### **6. Concurrency Evaluation**

The traffic analysis shall, at a minimum, provide the following information for the identified Transportation Facilities:

- a. Number of p.m. peak hour trips generated by the development according to the ITE Trip Generation or other source approved by the County Engineer;
- b. Anticipated trip distribution;
- c. The current calculated level of service of all impacted transportation facilities;
- d. The future calculated level of service of all impacted transportation facilities, as identified by the County, incorporating traffic volumes from the proposed development.
- e. Any proposed mitigation; and
- f. The future calculated level of service of all impacted transportation facilities with the incorporation of proposed development traffic volumes and any proposed mitigation.

Refer to WCC 20.78.050 for further information.

## 7. Impacts and Mitigation

- a. Frontage improvements and rights-of-way dedication
- b. Turn lanes at access points and impacted intersections
- c. Possible improvements to restore system capacity
- d. Access improvements
- e. Safety – corrective measures
- f. Bicycle/pedestrian/equestrian improvements
- g. Demonstrate compliance with LOS
- h. Level of Service changes at intersections (measured by delay)
- i. Capacity restoration on alternative corridors
- j. Pro-rata share contribution to road improvement projects

## 8. Conclusions & Recommendations

- a. Need for improvements
- b. Compliance with applicable local codes and standards
- c. Site access/circulation plan
- d. Roadway improvements (preliminary geometric design elements)
  - i. On-site
  - ii. Off-site
  - iii. Phasing, if appropriate
- e. Transit, pedestrians and bicycles
- f. Transportation System Management Actions-onsite and offsite
- g. Variances, if any, from the Whatcom County Development Standards
- h. Other

**B. Study Area:** Study area shall include area of influence, area of significant transportation impact, access, roadways, and/or critical intersection(s) serving site.

**C. Report Format:** Report should typically be 8 ½” x 11” pages with text, tables, and maps. Provide electronic PDF copy of report and supporting data.

**D. Review and Approval by the County Engineer.** The TIA shall be submitted to Whatcom County Engineering Services for review and approval.

**E. Use of Traffic Study for Other Phases of the Development.** The TIA submitted during one permit/approval process may be modified as required by the County Engineer and subsequently submitted for use with future permit or project applications.