

CITY OF THE DALLES
POLICY FOR TRAFFIC IMPACT STUDIES

POLICY

The purpose of this policy is to provide consistency in the preparation of traffic impact studies using certain established criteria. It has been prepared for the purpose of assisting consultants, developers, and other interested parties in evaluating traffic impacts within the City of The Dalles. Consultants are encouraged to discuss proposed projects with City staff prior to beginning the analysis. Doing so will provide an opportunity to discuss and determine parameters to be used and open a communication link between City staff and the developer/consultant. This communication will help in creating land uses with traffic characteristics that are in the best interest of the entire community.

TRAFFIC ANALYSIS

The City Engineer will require a traffic impact study as determined by the type of development and its potential impact to the existing street system. A traffic analysis will generally be required for a development which 1) will generate 400 average daily vehicle trips or more, or 2) when a development's location, proposed site plan, and/ or traffic characteristics could affect traffic safety, access management, street capacity, and/ or when known traffic problems and deficiencies exist in the development's study area.

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All traffic studies shall address the following required information:

Introduction

The introduction should provide a summary of the purpose and objectives of the traffic impact study.

Proposed Development

This section of the study should provide a thorough description of the proposed development including land use and intensity, site location, study area, and project phasing. A vicinity map shall be included to provide a clear graphical representation of the site location and study area.

Existing Area Conditions

The section that covers area conditions shall include a brief description of the following subtopics:

- Existing Land Uses
- Existing Zoning
- Other Developments
- Existing Street Network
- Site Access Location(s)
- Committed or Planned Street Improvements
- Existing Traffic Volumes and Conditions
- Local and State Programs, Policies, and Regulations

Projected Traffic

Site Generated Traffic and Trip Generation Rates

Trip generation rates should be obtained from the "Trip Generation Manual" published by the Institute of Transportation Engineers (ITE), most recent edition, unless otherwise approved by the City Engineer.

Trip Distribution and Assignment

Trip distribution and assignment can be estimated from the most recent Average Daily Traffic (ADT) data provided by the City, if available and directional volumes obtained from recent manual intersection turning movement counts. The consultant performing the traffic study shall be required to obtain this information if current data is not available. The City will also consider allowing research information provided by the developer so long as it clearly demonstrates a directional distribution specific to the development. A figure shall be included to show the estimated trip distribution as it is applied to each intersection within the study area.

Annual Growth Rate

An annual growth rate will need to be established for the purpose of estimating projected traffic volumes at both the time of project completion and in the forecast analysis. According to the City of The Dalles Transportation System Plan (TSP) completed in 1997, the estimated average annual growth rate is 1%. This value shall be verified with current data to see if the 1% growth rate continues to be a valid estimate.

Traffic Analysis

Intersection Operations

The intersection conditions to be analyzed are:

- **Existing** peak hour traffic operations based on a current manual turning movement count at the intersection(s) in the study area. Manual turning movement counts may be considered valid for a period of one year, so long as no developments or road construction has occurred within the study area that has the potential to alter traffic patterns.
- **Background** peak hour traffic operations at time of project completion. Background traffic is the estimated traffic volumes based on current manual intersection turning counts, plus trips generated from other proposed developments within the study area. A growth factor shall be applied to the background traffic volumes if the development is scheduled to open more than a year from the time of the study.
- **Total** peak hour traffic operations at time of project completion. Total traffic is background traffic plus site generated traffic.
- **Forecast background** peak hour traffic operations. A minimum forecast analysis is 5-years from the time of project completion; however, certain circumstances may require a longer forecast time and shall be considered on an individual basis. It should also be noted that intersections under ODOT's jurisdiction may require a 20-year forecast analysis.
- **Forecast total** peak hour traffic operations. Forecast total traffic is the background traffic plus site generated traffic, taking into consideration the average annual growth rate for both.

Typically, the peak hour of traffic operations is between 4:00 p.m. and 6:00 p.m. on a weekday, but each site and use should be evaluated to determine if there are circumstances which make the peak hour occur at other times. Extended manual turning movement counts may need to be performed to determine what the most appropriate time for analysis should be.

The traffic analysis needs to include figures for each of the intersection conditions analyzed; existing, background, total, forecast background, and forecast total. The figures should clearly show the traffic volumes applied to each turning movement for the study area intersections.

Level-of-Service and Capacity

At the time the City's TSP was completed, it was found that intersections in The Dalles operated at a Level of Service (LOS) C or better during non peak hours. LOS D is considered to represent the minimum acceptable design standard for signalized and unsignalized intersections during peak hour traffic operations. Computer generated capacity analysis reports shall be included as appendices to the report.

Mitigation Measures

Mitigation measures shall be addressed for each of the study area intersections that fail to operate at the minimum acceptable LOS under both background and total traffic conditions. Mitigation measures will be sufficient when peak hour traffic operations are functioning at or above LOS D. Mitigation measures which include the placement of stop controls will need to demonstrate that they meet the criteria established in the most recent edition of the Manual on Uniform Traffic Control Devices.

Site Access and Circulation

The proposed site access and internal circulation for vehicular, bicycle, and pedestrian traffic will need to be clearly identified in the study. The site access locations will need to include a detailed analysis for sight distance, right and left turn lanes, and intersection traffic operations. Proposed site access locations will need to comply with the access management standards as set in the City of The Dalles Land Use and Development Ordinances (LUDO).

Sight Distance: Stopping Sight Distance, Passing Sight Distance, and Intersection Sight Distance

Sight distance analysis shall follow the guidelines established in the most current edition of A Policy on Geometric Design for Highways and Street, AASHTO.

Right and Left Turn Lanes

The need for right and left turn lanes shall be considered at each of the site access locations and at any intersections in which turn lanes are recommended for mitigation measures.

Traffic Accidents

Traffic accident data can be obtained from the Oregon Department of Transportation crash records. The City of The Dalles Police Department and Wasco County Sheriff may also have accident data available. Accident reports shall be included as appendices to the traffic study.

Summary of Findings and Recommendations

All final submittals for traffic studies and/or reports shall be signed and sealed by an Oregon Registered Civil Engineer.