City of SeaTac

Traffic Impact Analysis

Engineering Review Division (ER-1) Revised Feb. 2022

What is a traffic impact analysis?

A traffic impact analysis (TIA) is a study of the potential traffic impacts of a development on the surrounding transportation system. The purpose of the study is to document the effects as required by city codes and state environmental law (SEPA) and to recommend mitigation for those impacts.

When is a TIA required?

Generally, a TIA is required when the development is anticipated to generate ten (10) or more new PM peak-hour trips, according to the Public Works Department's adopted trip rates. Engineering Review Division staff can tell you about your trip generation when you provide information about the size and type of your project.

In some circumstances, staff may require this analysis when it appears that the development may cause difficulties for traffic operations in the vicinity of the project, even if the 10-trip threshold is not reached.

Who does the analysis?

The applicant's consultant provides the analysis, with the concurrency portion supplied by the City (see below and ER-2 regarding concurrency). The consultant must be a professional engineer licensed to practice traffic engineering in the State of Washington.

What is the TIA based on?

The Public Works Department has created computer models of traffic volumes and street segments to aid in traffic impact analysis. These models contain information about traffic volumes of street and intersection improvements for different years. The model assumes growth in traffic volumes in the City based on economic and census data.

The Public Works Department staff have agreed on the appropriate trip generation figure, using the City's adopted trip generation rates. The Engineering Review team will handle the City's computer model to apply the concurrency test.

What is included in a traffic impact analysis?

Typically, a TIA looks at three snapshots in the life of a development: short-term (operational), mid-range (concurrency), and long-term (horizon). The operational analysis looks at traffic operations in the vicinity of the development in the anticipated year of opening and access locations.

The concurrency analysis looks at traffic volumes and street improvements anticipated to be in place in approximately six (6) years.

The horizon analysis looks at anticipated conditions for approximately twelve (12) years in the future. It compares the development proposal with the land use growth assumptions in the City's adopted programmatic SEPA document, the Transportation Master Plan (TMP).

If the proposal is within the range of the TMP growth assumptions, the City will adopt the TMP Environmental Impact Statement to fulfill the SEPA requirement for disclosure of long-term traffic impacts.

Additional transportation planning resources are available on the City of SeaTac website: www.seatacwa.gov/government/city-departments/public-works/engineering-review-division/forms-and-fees