SECTION 1 INTRODUCTION

What are the primary features of the Tukwila to Renton Project?

WSDOT is proposing to construct the I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 – Phase 2), referred to as the Tukwila to Renton Project, to relieve congestion. The Tukwila to Renton Project extends approximately four miles along I-405, from I-5 to SR 169, and approximately two miles along SR 167, from I-405 to SW 43rd Street. The project will:

- Add capacity to both I-405 and SR 167.
- Replace bridges over the Green River and Cedar River and add one new bridge over the Green River.
- Improve the SR 181 and SR 169 interchanges.
- Reconstruct the SR 167 interchange consisting of new general-purpose direct-connector ramp from I-405 southbound to SR 167 southbound, HOV direct-connector ramps from SR 167 northbound to I-405 northbound and from I-405 southbound to SR 167 southbound, and a split-diamond interchange at Lind Avenue and Talbot Road with connecting frontage roads.
- Replace the two local street accesses to Renton Hill.

These improvements represent the second phase of the I-405 Corridor Program for this portion of I-405. The first phase consists of improvements in the Renton Nickel Improvement Project.

What is the purpose of this report?

This Transportation Discipline Report presents the results of our detailed study of the effects of the Tukwila to Renton Project on the transportation system. The report identifies the meaningful differences between the No Build Alternative and the Build Alternative in terms of freeway and local street performance, safety, and effects to transit and non-motorized facilities.

What topics are included In the Transportation Discipline Report?

The report includes results from our freeway and local street operations analysis including the number of vehicles and persons moved, changes in freeway congestion, and intersection level of service (LOS). We conducted a safety study for the freeway corridor and examined the effects project construction will have on the transportation system. Effects on transit service and facilities are identified as well as the effects on the non-motorized facilities.

Why is transportation important to consider?

Transportation is vital to the health of the region's economy and affects everyone's quality of life. I-405 plays a crucial role in moving people and goods through the Puget Sound region. As the population and employment of the Puget Sound region increases, it is important to continually improve our transportation system. We need to understand the likely effects of transportation improvements to I-405 before we can efficiently design the project and get approvals from federal agencies.

What studies were completed?

In October of 2005, the Transportation Discipline Report for the I-405 Renton Nickel Improvement Project documented the project's effects on the transportation system. The I-405 Renton Nickel Improvement Project is included in the 2014 baseline conditions for this project.

I-405 is an important link in the region's transportation system.

In March 2006, the Renton to Bellevue Project, SR 169 to I-90, Transportation Discipline Report documented the project's effects on the transportation system north of the Tukwila to Renton Project study area.

The Puget Sound Regional Council (PSRC) four-county travel forecast model was used as a starting point for determining future travel demand. This model predicts traffic volumes and travel patterns based on adopted land use plans within the region.

What are the key messages from this report?

The key messages in this report include the following:

- The study area currently experiences congestion during the morning and afternoon peak travel periods.
- Projected future regional population and employment growth will increase freeway demand compared to 2005 existing conditions. By 2014, for most locations in the study area, we forecast the baseline conditions/No Build Alternative will experience slower travel speeds than the 2005 existing conditions.
- The Build Alternative will add capacity to I-405 and SR 167, and rebuild the majority of the I-405/SR 167 interchange allowing more people to travel on the freeway and generally increasing 2014 average travel speeds 10 to 15 miles per hour compared to the No Build Alternative. The rebuilt I-405/SR 167 interchange will remove a bottleneck in the center of the study area and improve the efficiency of the freeway system.
- The Build Alternative will improve safety compared to the No Build Alternative by reducing congestion, and in turn, congestion related accidents. The Build Alternative will also improve safety by improving roadway configurations.
- The project will construct HOV direct-connector ramps from the northbound SR 167 HOV lane to the northbound I-405 HOV lane, and the southbound I-405 HOV lane to the southbound SR 167 HOV lane. The new ramps will save transit and HOVs travel time and improve the efficiency of the HOV lanes.
- The Build Alternative will improve the surface streets at the I-405 interchanges with SR 181, SR 167, and SR 169. This will improve the local street operations in Tukwila and Renton and allow more vehicles to access I-405.
- The Tukwila to Renton Project improves a portion of the I-405 corridor. It will not offer the full solution for the I-405 corridor, but serves as a step in implementing the long-term plan (Master Plan) for the I-405 corridor. The Master Plan includes additional freeway and transit capacity and will substantially replace and upgrade interchanges along the entire length of the I-405 corridor.

What measures are proposed to avoid or reduce impacts?

The purpose of the project is to improve freeway and local street operations by adding roadway capacity. When the project is built and operational, no mitigation measures related to roadway operations will be required.

Project construction will affect the transportation system because of temporary closures and construction vehicles. The project will be constructed and staged to minimize the effects whenever possible. WSDOT will coordinate with the local agencies and other projects to prepare a Traffic Management Plan prior to making any changes to the traffic flow or allowing lane closures.

What will happen if we adopt the No Build Alternative?

By 2014, we project peak-hour traffic volumes will generally be similar to 2005 existing conditions, but travel speeds will be slower for most locations in the study area. Periods of traffic congestion will increase and the I-405/SR 167 interchange will continue to act as a bottleneck. With the No Build Alternative, the flow of traffic will become more constrained and some drivers wishing to use I-405 and SR 167 would not choose to do so. Freeway delays would force drivers to seek alternate routes on local and regional roadways, choose to travel by different means or at different times, or forego their desired trips altogether. The flow of traffic will be most constrained in the year 2030 and beyond.

The surface streets in Tukwila and Renton will become more congested, particularly near the I-405 interchanges with SR 167 and SR 169.