

A low-angle, upward-looking shot of a white and blue Sound Transit train at a station platform. The train's windows reflect the sky and platform. The Sound Transit logo is visible on the side of the train.

ST3 Expert Review Panel

November 10, 2015

Ridership Forecasting

 **SOUNDTRANSIT**

Overview

- Introduction
- Changes to Inputs
 - Demographics
 - Auto operating costs
- Sensitivity Tests
 - Highway tolling and congestion
 - Parking prices
 - Effect of demographics
- Downtown Tunnel Capacity

Introduction

- Review of July meeting
- Panel suggestions and questions
- Responses

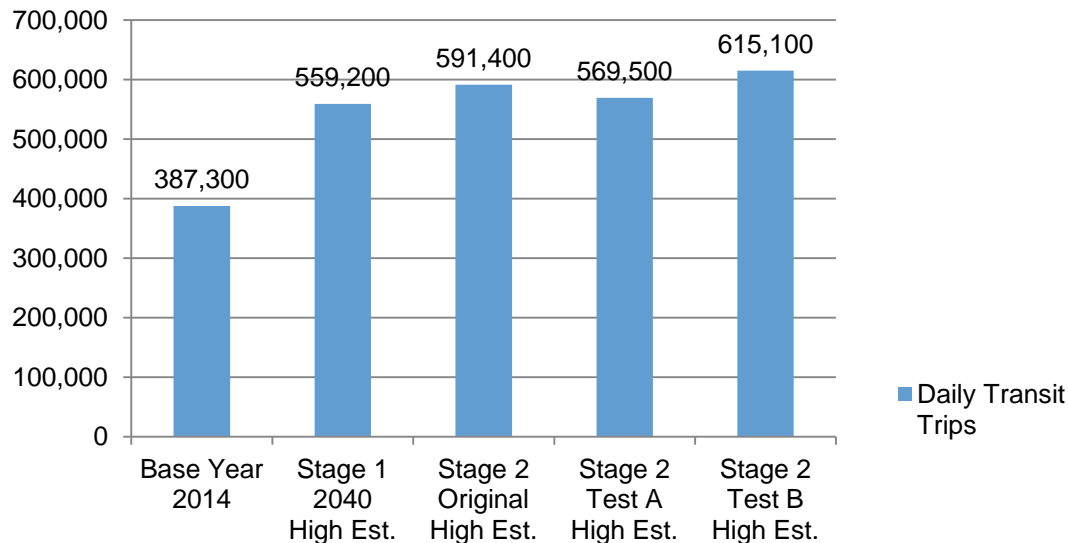
Changes to Inputs

- **Demographics**
 - ST3 to date – Land Use Targets (April 2014)
 - ST3 going forward – Land Use Vision (2015)
- **Auto operating costs**
 - ST3 to date – tolling on all limited access highways (Transportation 2040)
 - ST3 going forward – mileage fees, peak and off-peak

Sensitivity Tests – Tolling and Congestion

- **Original – Stage 2**
 - Highway tolling
 - No change in congestion
 - 6% increase over Stage 1
- **Test A – Stage 2**
 - No tolling
 - Change in congestion
 - 4% less trips than original Stage 2
- **Test B – Stage 2**
 - Highway tolling at 50% of original amounts
 - Change in congestion
 - 4% more trips than original Stage 2

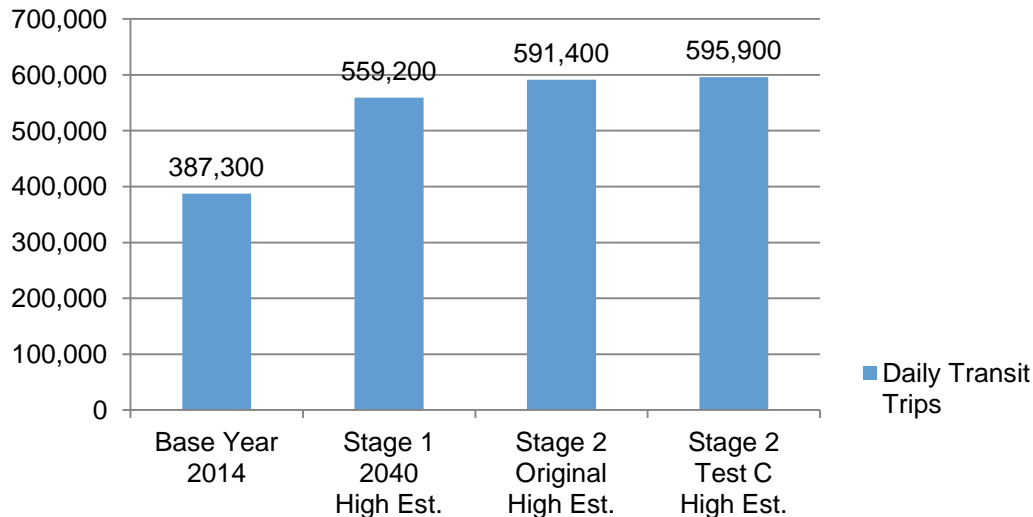
Daily Transit Trips



Sensitivity Tests – Parking Prices

- **Original – Stage 2**
 - Highway tolling
 - No change in congestion
 - Change in parking costs
- **Test C – Stage 2**
 - Highway tolling
 - No change in congestion
 - Higher incremental parking cost increase for certain zones
 - Less than 1% more trips than original Stage 2

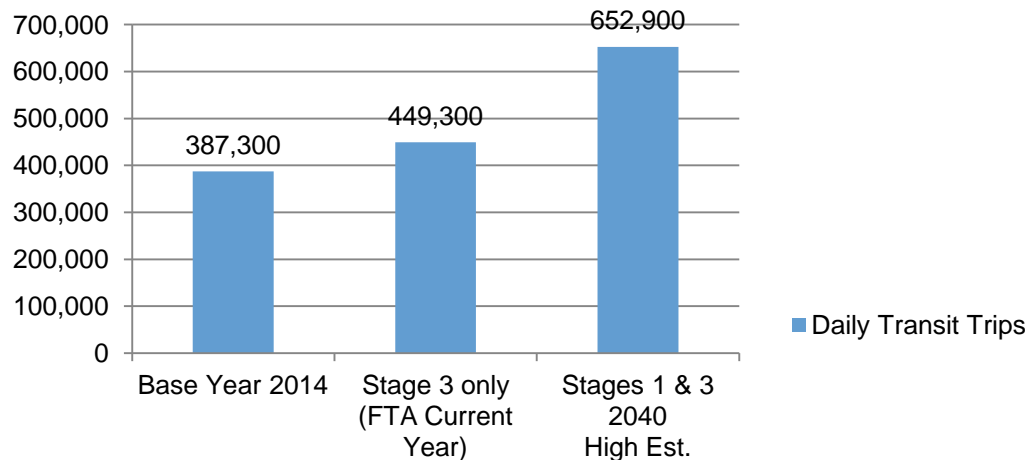
Daily Transit Trips



Sensitivity Tests – Effects of Demographics

- Base year
 - 387,300 transit trips
- Stage 3 only
 - Assumes ST2 build-out
 - 449,300 transit trips
 - 16% more trips than base year
- Stages 1 and 3 only
 - 2040 population and employment
 - Assumes ST2 build-out
 - 652,900 transit trips
 - 45% more trips than Stage 3 only
 - Growth in trips is consistent with growth in demographics.

Daily Transit Trips



Downtown Tunnel Capacity

- **ST2**
 - 4-minute headway in tunnel (downtown – Northgate)
 - 4-car trains
 - Capacity 9,000 – 12,000 per hour per direction
 - Accommodates peak passenger volume – PM northbound between Westlake and Northgate
- **ST3**
 - 3-minute headway in tunnel
 - 4-car trains
 - Capacity 12,000 – 16,000 per hour per direction
 - Passenger volumes / capacities will be studied systemwide during system plan development

