

A low-angle, close-up photograph of a white and blue Sound Transit train. The train is moving from left to right, with its windows and doors visible. The background shows a station platform with a glass roof structure. The text is overlaid on a dark grey semi-transparent banner.

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

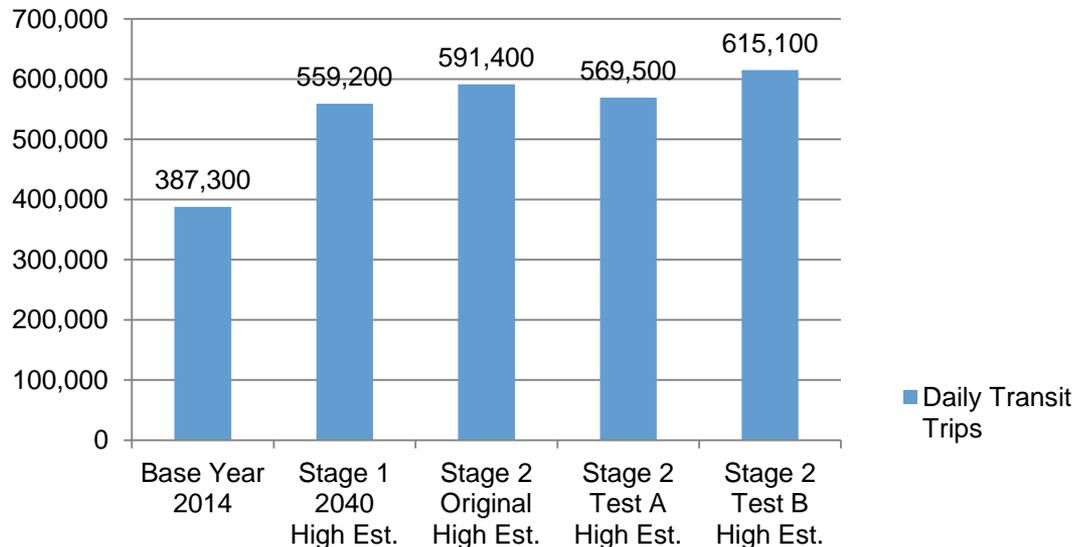
Changes to Inputs

- **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

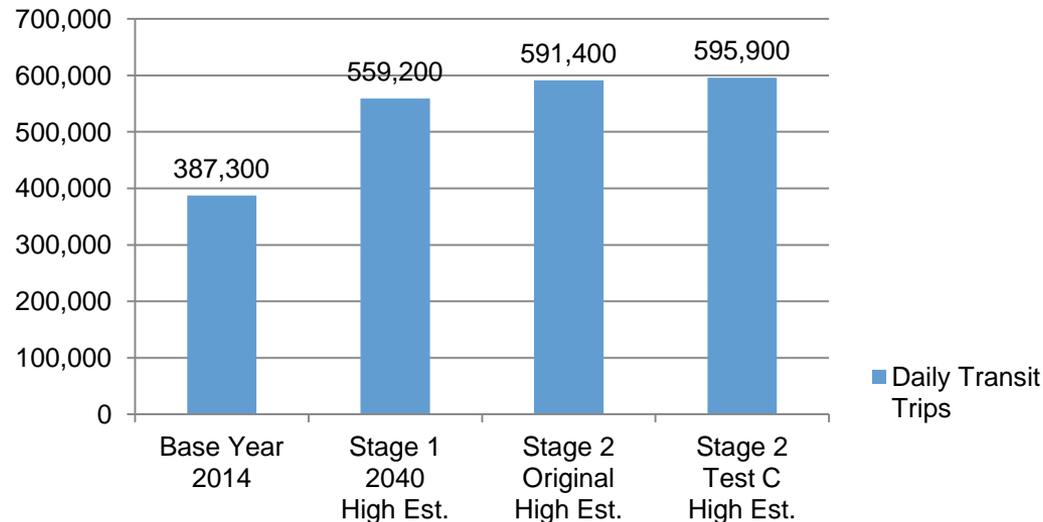
Daily Transit Trips



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

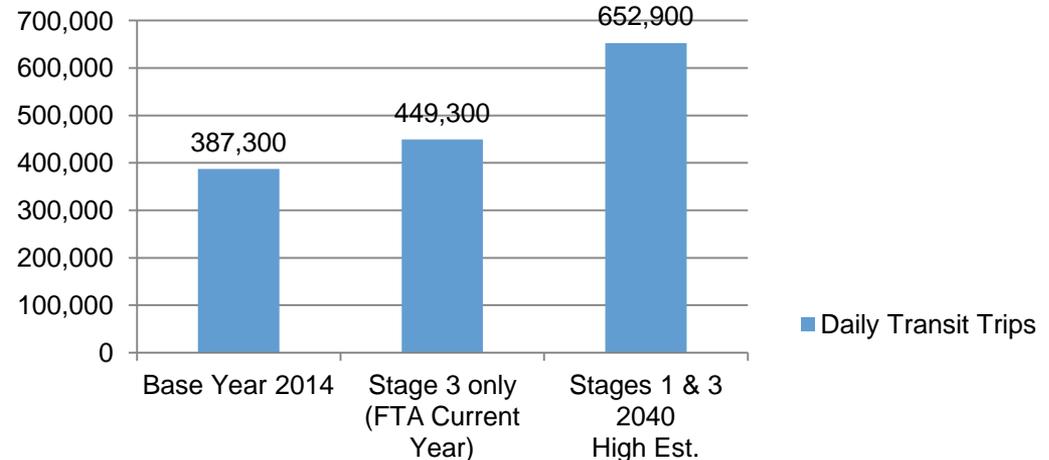
Daily Transit Trips



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



SOUNDTRANSIT
RIDE THE WAVE