



# Sound Transit Expert Review Panel

November 10, 2015



## Toll Assumptions in Sound Transit Modeling

In the Sound Transit 3 Expert Review Panel letter from August 2015, the ERP suggested that the toll inputs used in ridership forecasts should be reviewed.

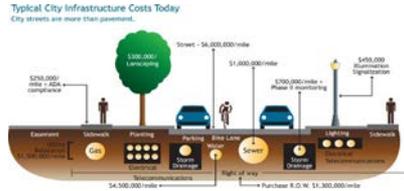
The toll assumptions in the modeling:

- Are based on Transportation 2040, the region's adopted Long Range Transportation Plan.
- Toll all lanes of the limited-access network with a higher toll rate for peak direction travel.



# Transportation 2040

## Investments to support a growing region = **\$173.6 B**



**Counties**  
**\$14.6B**



**Cities**  
**\$35.3B**



**Local Transit**  
**\$46.8B**



**Sound Transit**  
**\$32.4B**



**State Ferries**  
**\$8.2B**



**State Highways**  
**\$29.2B**



**Other Regional**  
**\$7.2B**



## Tolls help Finance the “Funding Gap”

The funding gap is approximately **\$36 B** and filling the “gap” in T2040 assumed a variety of financial sources including:

- Fares
- License & Weight Fees
- Market Based pricing of highway lanes with a focus on balancing system delay

These assumptions were made to finance the plan – and could be re-evaluated in the 2018 Update to T2040.



# Transportation Futures Task Force

## Problem Statement

*Investments in the transportation system are not keeping up with the needs of a growing region and its environment.*

*Traditional funding sources are no longer capable of maintaining or improving mobility for a growing region.*

## Charge

*Recommend a strategy to provide an equitable, financially sustainable, and environmentally responsible regional transportation system that works for people, economic development, and quality of life.*

# Transportation Futures: Scenarios

1. Transportation 2040 Plan
2. Flat-Rate Pay Per Mile Charge
3. Peak/Off Peak Pay Per Mile Charge
4. Major Emissions Fee
5. Mixed Sources

# Toll Assumptions for Sound Transit System Plan



T2040 assumes a market-based mechanism that would charge travel in the peak periods at a higher increment than the off peak periods. That assumption is not likely to change in future updates, but:

- The toll rate is a technical input that can change.
- A peak/off peak pay per mile rate can generate funding similar to T2040 and would provide a conservative estimate for longer distance transit ridership estimates in the ST3 Ridership forecasts.

# Questions on PSRC population & job projections

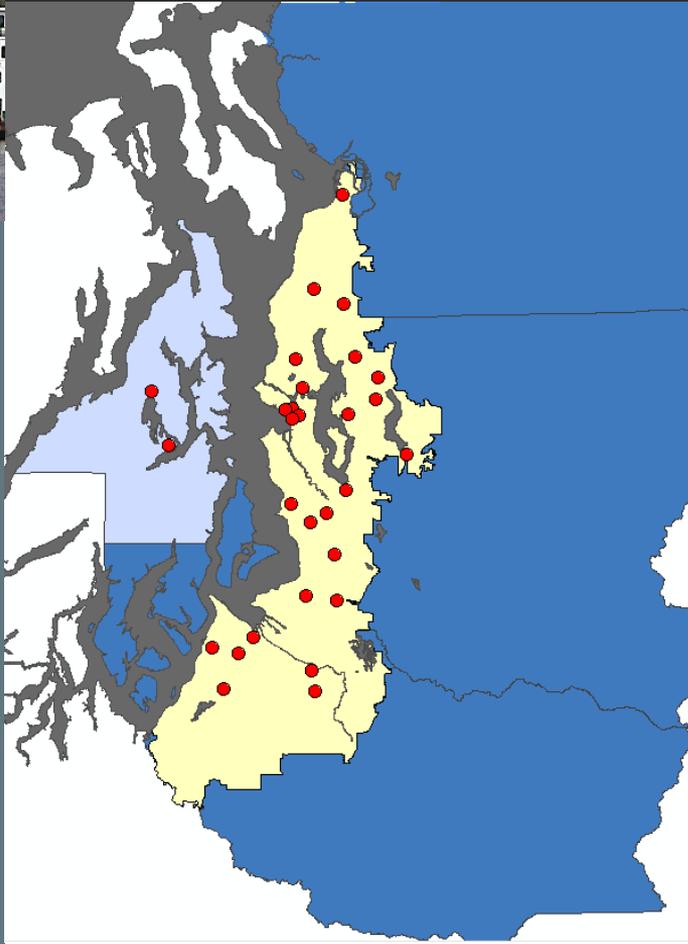
## Ratio of jobs to population (% of population working)

- Current ratio is high (0.54) versus national average of 0.465.
- Ratio rises to 0.675 in the future.
- Given this ratio, are the jobs or population projections reasonable?

## Additional details / context from PSRC

- Clarify analysis geographies
- Definition of Total Employment
- Prior trends versus projections

# Geography – Region, Three-County, Service Area



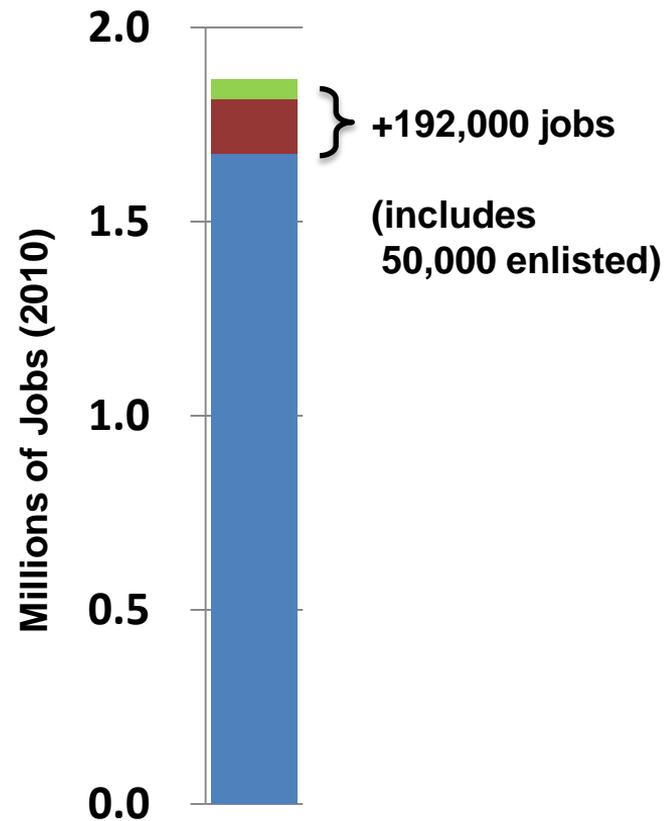
- PSRC plans for the four-county region.
- ST operates in King – Pierce – Snohomish.
- ST Service Area is a subset of those three counties.
- Every Regional Growth Center in King – Pierce – Snohomish is located in the ST Service Area.

# Jobs – what comprises “Total Employment”?



## PSRC includes more than just Wage & Salary (W&S) jobs

- Start with Covered jobs
- Non-covered jobs estimated from other sources (CES, CPS, Census)
- Add enlisted personnel (on-base and on vessels homeported in region)



# Regional Job/Population Ratios

Current levels are consistent with prior trends and comparable to the national average

- Regional W&S-based ratios range from 0.47 to 0.53

Year	Region (W&S Jobs)
2000	0.531
2010	0.474
2014	0.501

# Regional Job/Population Ratios

**Current levels are consistent with prior trends and comparable to the national average**

- Regional W&S-based ratios range from 0.47 to 0.53
- ST Service Area ratios reflect high concentration of jobs found in Regional Growth Centers
- Despite strong job growth from 2010 – 2014, Year 2000 jobs/population ratio was higher than both years

<b>Year</b>	<b>Region (W&amp;S Jobs)</b>	<b>Region (Total Emp)</b>	<b>Sound Transit Service Area</b>
2000	0.531	0.575	0.665
2010	0.474	0.505	0.586
2014	0.501	0.537	0.621

## Current versus future year totals

### Future year jobs/population levels reflect focusing growth in the Regional Growth Centers

- 2040 ratios also compare to prior trends.
- Forecast focuses job growth in centers.

Year	Region (Total Employment)	Sound Transit Service Area
2000	0.575	0.665
2010	0.505	0.586
2014	0.537	0.621
2040 (ST/LUT)	0.586	0.686



# Land Use Vision dataset

PSRC is replacing the Land Use Targets (LUT) with the Land Use Vision (LUV)

## Land Use Targets

- Policy-directed forecast dataset
- Reflects what we're planning for
- 2006/07 macro and OFM forecasts
- 2030, 2031, 2035 horizons
- Used to create land use inputs for 2014 T2040 update

## Land Use Vision

- Policy-directed forecast dataset
- Reflects what we're planning for
- 2015 macro forecast
- 2040 horizon
- Land use inputs for 2018 T2040 update

## Land Use Vision – What is the same?

- Policy-based forecast product
  - Growth focused in metro + core cities, centers
- Respects and reflects adopted regional and local policy
  - VISION Regional Growth Strategy
  - Adopted local growth targets
  - Future land use
- Used in PSRC modeling



## Land Use Vision – What is different?

- Uses latest regional forecast assumptions
  - LUT based on pre-recession forecasts
  - New forecasts are similar (83,000 fewer people & 38,000 more jobs)
- Extends to 2040, with interim years of data
  - LUT had an extrapolated 2035 horizon
- UrbanSim used to allocate growth
  - LUT was a spreadsheet model with hard weights





## Summary

ST Service Area contains a high concentration of the regional job base.

When comparing Jobs to Population, existing and forecast levels are not out of line with prior trends.

New PSRC policy-driven forecast product (Land Use Vision) maintains consistency with prior version.