



### **Overview**

- Effects of new demographics
- Light rail capacity
- Origins Destination studies
  - Lynnwood-to-Everett options
  - I-405 BRT options
- Cost effectiveness



## **Effects of New Demographics**

- Land Use Vision version 1 (LUV.1)
  - 202,000 less jobs in 2040 than Land Use Targets
  - 89,000 less jobs in 2040 after subtracting Construction/Resource jobs
  - Fewer daily transit trips:
    - Ballard
    - U District
    - Central Seattle neighborhoods including Capitol Hill
    - Redmond
    - Renton
  - More daily transit trips:
    - Seattle CBD
  - Net reduction of 12,000 daily transit trips
    - (also includes change of assumption from highway tolls to mileage fees)



# **Light Rail Capacity**

### Capacity per line

- 10 trains per hour (6-minute headway)
- 4 car trains
- Comfortable peak capacity: 6,000 passengers per hour per direction
- Standard peak capacity: 8,000 passengers per hour per direction

# Maximum passenger volume per line

- West Seattle Everett
  - Northbound north of U District
- Redmond 128<sup>th</sup>
  - Southbound in downtown tunnel
- Ballard Tacoma
  - Southbound in downtown tunnel through to Beacon Hill



## **Origin – Destination Studies**

#### Lynnwood-to-Everett options

- Similar travel patterns for riders on all options
- For Paine Field alignment
  - Reduction in project riders (- 20%) for North Everett
  - Small increase in project riders to south Everett from distant locations like Renton and Kent

### I-405 BRT options

- Similar travel patterns for riders on both options
- For Intensive Capital Investment option compared to Lower Capital
  - Increase in project riders (700) for Kirkland, especially for trips within Kirkland and to west Bellevue
  - Reduction in project riders passing through the Tukwila area
    - Bellevue SeaTac
    - Renton Seattle (via Link connection)



#### **Cost Effectiveness**

- Cost per rider
- Travel time comparisons
  - Highway travel times expected to get worse
  - Future transit travel times with ST3 are improved compared to existing
  - Future transit travel times with ST3 are better than or competitive with future highway travel times

