



# Agenda

- Overall Schedule Review
- Examine Revised Washington Code Requirements (RCW) for ST3 Planning
- Conceptual System Expansion Scenarios Development
- Next Steps



# System Plan (ST3) Timeline

#### 2015

Develop System
Plan Core Priorities
Jan. – Feb. 2015

Develop Methodology and Initial Evaluation Measures Develop and Evaluate Conceptual System Expansion Scenarios Apr. – May 2015 Develop Priority
Projects List
June – July 2015
Public Involvement

Detailed Testing and Evaluation of Priority Projects List 101y - Dec. 2015

#### 2016

Develop Draft System Plan

**Public Involvement** 

Final System
Plan Development
Apr.—May 2016

Adopt System Plan

Possible Public Vote on System Plan



# RCW 81.104 (2)c Places Requirements on ST's System Planning

#### "Analysis methods:

The local transit agency shall develop reports describing the analysis and assumptions for the estimation of capital costs, operating and maintenance costs, methods for travel forecasting, a financial plan and an evaluation methodology."



#### **Capital Cost Estimating Methodology:**

- Generate reasonable cost estimates for delivering proposed projects
- Include appropriate design allowances and contingencies
- Use Sound Transit experience in delivering similar types of projects

#### **Operating and Maintenance Cost Estimating Methodology:**

- Generate reasonable estimates of the annual cost of operating proposed transit services
- Driven by system characteristics and Sound Transit operating cost experience (or based on peer systems)



#### **Transit Ridership Forecasting Methodology:**

- Generate reasonable estimates of transit ridership and of transit service characteristics
- Examines proposed future changes in land use and non-transit transportation conditions,
- Incremental changes in the transit level of service and user costs (e.g., fares)

#### **Evaluation Methodology:**

 Describes how core priorities will be used to develop conceptual scenarios, priority project lists, and development the overall system plan



#### **Financial Modeling Methodology:**

- Detail sources and uses of funds within financial plan
- Describe methodology for forecasting key financial inputs (e.g., future tax revenues)
- Document key financial planning assumptions (e.g., assumed borrowing rate).



#### RCW 81.104.080 Requires Coordination with Vision 2040

"Regional high capacity transportation plans shall be included in the designated regional transportation planning organization's regional transportation plan review and update process to facilitate development of a coordinated multimodal transportation system and to meet federal funding requirements..."

 PSRC administrative procedures require a Benefit-Cost Analysis for transit projects with a cost greater than \$100 million.



#### **Benefit-Cost Analysis Methodology:**

Comparison of quantifiable benefits and costs that can reasonably be expected to occur from the implementation of a system of HCT rail investments.

#### **Benefits:**

- Transit user time savings and mobility benefits for non-transit users
- Auto operating and ownership cost savings; Accident reduction and safety benefit; Parking cost savings; Environmental benefits

#### Costs:

Capital expenditures; Annual operating and maintenance costs;
 Periodic rehabilitation and replacement costs.



# RCW 81.104.100 (2)b Requires HCT Options

"A do-nothing option and a <u>low capital option</u> that maximizes the current system shall be developed. Several higher capital options that consider <u>a range of capital expenditures</u> for several candidate technologies shall be developed."



# Conceptual Scenarios: Technologies (Modes)

Link light rail



**Bus Rapid Transit** 



**Rapid Streetcar** 





## **Potential Trade-offs:**

Length

Fewer Miles More Miles

**Alignment** 

Less Developed Areas More Developed Areas

Profile

At-grade, Shared Lanes Exclusive (Aerial/Tunnel)

**Supporting Projects** 

Fewer More



# **Conceptual System Expansion Scenarios**

#### **Summary**

More Spine

- Maximized Spine, Additional Corridor Investments
- Maximized Spine, Limited Additional Corridors
- Most of Spine, Some Additional Corridors
- Less Spine, More Additional Corridors
- Modest Spine Extension, Emphasis on Additional Corridors
- Medium Cost --- Progress toward Completing Spine, No Additional Corridors
- Medium Cost --- Some Progress toward Completing Spine, Modest Additional Corridors
- Low Cost --- Minor Progress toward Completing Spine
- Incremental Expansion --- Using Existing Revenue Authority



## Core Priorities for System Plan Development and Evaluation

- Completing the Link light rail Spine
- Ridership
- Connecting the region's designated centers with HCT
- Promoting transit friendly land use and supporting TOD
- Advancing "Logical Next Steps" projects beyond the Spine; within financial capacity
- Socio-economic equity
- Integration with other transit operators/transportation systems
- Multi-modal access



### **System Planning Process in 2015**

#### **CORE PRIORITIES**



→ CONCEPTUAL SYSTEM EXPANSION SCENARIOS ←



→ Scenario Evaluation Measures Based on Core Priorities ←



Initial Project Evaluation Measures Based on Core Priorities and Scenario Evaluation



**Development of Priority Projects List** 



**Project Templates** 



**Detailed Project Testing & Evaluation** 



