#### SOUND TRANSIT

#### **RESOLUTION NO. R2006-15**

A RESOLUTION of the Board of the Central Puget Sound Regional Transit Authority relating to High Capacity Transportation System Planning, setting aside from further consideration the "do nothing" and "low capital" options, identifying a preferred transportation mode for high capacity transit in the Seattle to Bellevue and Redmond via I-90 and Mercer Island corridor, and issuing for public and agency review three draft system scenarios at different investment levels

WHEREAS, the Central Puget Sound Regional Transit Authority, hereinafter referred to as Sound Transit, has been created for the Pierce, King, and Snohomish County region by action of their respective county councils pursuant to RCW 81.112.030; and

WHEREAS, Sound Transit is the designated provider of high-capacity transportation infrastructure and services to meet regional public transportation needs in the central Puget Sound area, and it possesses all of the powers set forth in Chapters 81.104 and 81.112 RCW; and

WHEREAS, on May 31, 1996, the Sound Transit Board approved Resolution 73, adopting a regional transit long-range vision to guide long-range development of the regional high-capacity transportation system, which would be implemented in a series of phases. At the same time, the Board adopted *Sound Move* as the system plan for the initial development phase of regional high-capacity transit investment, including light rail, commuter rail, regional express bus, and supportive transit facilities and services; and

WHEREAS, on November 5, 1996, at a general election held within the Sound Transit district, voters approved local funding for *Sound Move*, including a rental car tax of 0.8%, a sales and use tax of 0.4% and a motor vehicle excise tax of 0.3%; and

WHEREAS, Sound Transit has now largely completed project planning for and has built or is building most of the first phase projects identified in *Sound Move*; and

WHEREAS, on July 7, 2005—following planning, environmental review and public outreach—the Sound Transit Board approved Resolution No. R2005-14, which updated and

modified the 1996 regional transit long-range vision and adopted a Regional Transit Long-Range Plan. The 2005 Long-Range Plan sets out Sound Transit's goals, policies, and strategies to guide the long-term development of the region's high capacity transportation system; and

WHEREAS, the Board resolution adopting the Long-Range Plan directed agency staff to develop priorities for the next set of investments to be added to the regional transit system for central Puget Sound. The plan for these investments is known as "Sound Transit 2" (ST2). More than 500 candidate high capacity transportation projects were initially identified for consideration as part of the long-range planning process; and

WHEREAS, consistent with the applicable requirements of the agency's enabling legislation, Chs. 81.104 and 81.112 RCW, Sound Transit has engaged in a systematic planning process with the public, agencies and communities to evaluate potential projects and identify the projects to be carried forward for further evaluation and public comment for ST2; and

WHEREAS, the agency's evaluation process for this next set of investments has been guided by the broad goals and objectives established in the Long-Range Plan. Consistent with the statutory process for system planning, Sound Transit has developed relevant information for evaluating these investments, including information on costs (capital and operating), ridership forecasting, system integration, financing and risk; and

WHEREAS, consistent with the process used for the development of *Sound Move*, an independent Expert Review Panel was appointed pursuant to RCW 81.104.110 to review and comment on the agency's methodologies, assumptions, reports and other materials; and

WHEREAS, following the identification of the more than 500 potential projects as part of the Long-Range Plan, Sound Transit staff worked with local jurisdictions and communities throughout the region to focus the potential project list on approximately 80 candidate projects for further consideration in ST2; and

WHEREAS, information about each of these candidate ST2 projects was presented to the Board in a December 2005 briefing book, which included details on project scope, costs,

ridership, connectivity & integration, and risk. The briefing book also included preliminary financial information regarding the agency's financial capacity for ST2, using the agency's existing revenue sources and a range of new sales tax revenue scenarios; and

WHEREAS, following review of the candidate ST2 projects at a Board of Directors workshop and evaluation of each of the projects against the initial evaluation criteria identified by the Board and reviewed and commented on by the Expert Review Panel, the Board approved Motion No. M2006-03 on January 12, 2006. The motion set aside from further consideration a number of candidate ST2 projects that did not perform well under the Board's evaluation criteria. At the same time, the Board directed staff to develop a range of sample investment scenarios with the projects remaining at a range of tax rates in order to illustrate various ways that the system might be expanded in ST2; and

WHEREAS, Sound Transit staff developed a range of sample investment scenarios for Board consideration, and the Board was briefed on those scenarios and the policy issues associated with each scenario at Board meetings in May and June of 2006. Consistent with the high capacity transportation system planning process set forth in RCW 81.104.100, the scenarios developed for detailed evaluation included a "do nothing" option, a "low capital" option that maximized the current system, and several "higher capital options" that consider a range of capital expenditures; and

WHEREAS, Sound Transit currently collects sales and use tax at a rate of 0.4%, and a range of different sample investment scenarios were developed for illustrative purposes to show the Board what packages of projects could be implemented at different incremental sales tax rates varying from 0.0% to 0.5%. Under RCW 81.104.170, Sound Transit is authorized to impose a total sales and use tax of up to 0.9%; and

WHEREAS, each of the sample investment scenarios includes a different combination of candidate ST2 projects (with the exception of the "do nothing" option, which contains no new projects beyond those funded and programmed for completion as part of *Sound Move*), and

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each scenario presents a different transportation focus and sales tax rate increase. The sample investment scenarios are attached as exhibits to this Resolution. For all of the scenarios other than "do nothing", several new projects (such as bus bases and planning studies) were added at the direction of the Board; and

WHEREAS, all of the scenarios were developed using a financial model that is based on assumptions that are consistent with existing Sound Transit financial policies or direction from the Board. All of the project scope, cost, schedule and financial information contained in the scenarios is preliminary and subject to further change; and

WHEREAS, each of the scenarios was reviewed and its performance assessed under evaluation criteria identified by the Board and reviewed and commented on by the Expert Review Panel. The evaluation criteria included the key criteria described above (cost, ridership, system integration and risk), as well as transit travel time and reliability, land use and development, environmental benefits, and customer experience; and

WHEREAS, in concert with the initiation of Sound Transit's Long-Range Planning process, the Puget Sound Regional Council (PSRC) prepared the *Central Puget Sound Region High Capacity Transit (HCT) Corridor Assessment* (August 2004) to establish a basis for more detailed planning studies and environmental analysis to be conducted by Sound Transit as part of its system planning process. The PSRC's report included updated population, employment, travel demand forecasts, an assessment of updated land use and travel data, and an evaluation of various HCT technologies and corridor alternatives, and it was supported by the review and comment of an Independent Technical Review Committee; and

WHEREAS, the PSRC's assessment evaluated a range of HCT technologies, including enhanced bus, bus rapid transit, light rail, monorail, and skytrain. PSRC's assessment concluded (among other things) that the cross-lake corridor had a high potential for the near-term development of HCT; and

WHEREAS, following the PSRC's assessment, Sound Transit conducted its own indepth analysis of HCT modes and corridors for the East Corridor as part of its Long-Range Planning and environmental review processes, which included public and agency review and comment. That analysis included Board review of a number of technical reports and issue papers addressing alternative transportation modes in detail, including HOV/Bus Rapid Transit (BRT), Busway/BRT, Light Rail Transit (LRT), Monorail, and Rail-Convertible Bus Rapid Transit (RC BRT). In the issue papers, each mode was evaluated based on cost, ridership, travel times, benefits, and other criteria. Alternative East Corridor branches were also evaluated, including Seattle to S. Bellevue via I-90, S. Bellevue to Eastgate and Issaquah, S. Bellevue to Bellevue CBD and Totem Lake, and S. Bellevue to Bellevue CBD, N.E. 40<sup>th</sup> and Redmond; and

WHEREAS, following that review and analysis, the Long-Range Plan adopted by the Sound Transit Board in July 2005 identified two transportation modes for further analysis in the Seattle to Bellevue and Redmond via I-90 and Mercer Island corridor: Light Rail Transit (LRT) and Rail-Convertible Bus Rapid Transit (RC BRT); and

WHEREAS, the LRT and RC BRT modes were carried forward for additional analysis because they both provide higher levels of ridership, speed, and reliability than the other modes in this corridor, in part because of their operation in exclusive rights-of-way; and

WHEREAS, the identification of LRT or RC BRT for the Seattle to Bellevue and Redmond via I-90 and Mercer Island corridor in the Long-Range Plan was made consistent with the 1976 Memorandum Agreement (MA) regarding I-90, which called for the design and construction of the I-90 bridge and roadway so that conversion of all or part of the center roadway for fixed guideway transit use is possible, and in recognition of the 2004 Amendment to the MA, which called for the "ultimate configuration" for I-90 between Seattle and Bellevue as "high capacity transit in the center lanes"; and

WHEREAS, at the same time as the Long-Range Plan was adopted by resolution, the Sound Transit Board approved Motion No. M2005-83, which directed staff to conduct further

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transportation analysis in the Seattle-Mercer Island-Bellevue-Overlake-Redmond corridor and to present the results of that additional analysis to the Board for consideration in the ST2 planning process; and

WHEREAS, that supplemental transportation analysis was prepared, including a full scale "load test" that simulated light rail operations on the I-90 floating bridge and elevated superstructure and confirmed its capacity to support LRT, a planning level analysis of the feasibility of the "rail joint" necessary for the construction and operation of light rail on the I-90 floating bridge, a report by the Washington State Department of Transportation detailing future congestion on I-90 and the projected traffic effects on I-90 resulting from converting the center roadway to exclusive transit use, and a high-level historical review of the more than 40 years of planning studies and agreements relevant to the I-90 corridor between the Eastside and Seattle; and

WHEREAS, identifying a preferred transportation mode for high capacity transit in the Seattle to Bellevue and Redmond via I-90 and Mercer Island corridor is an important component of any potential next set of investments for ST2; and

WHEREAS, having reviewed all of the sample investment scenarios that have been developed and the transportation mode choice for the Seattle to Bellevue and Redmond via I-90 and Mercer Island corridor, and being informed by the reports, materials and analysis developed to this stage in the system planning process, and mindful of the evaluation criteria that the Board has established, the Board wishes to set aside two scenarios from further consideration, advance three of the scenarios for public and agency review and identify its preferred transportation mode choice for the Seattle to Bellevue and Redmond via I-90 and Mercer Island corridor; and

WHEREAS, LRT would provide the benefits that are derived from operating in an exclusive right-of-way separated from general purpose and HOV traffic. Those benefits include

increased reliability and predictability, shorter travel times and higher ridership than nonexclusive high capacity transit modes; and

WHEREAS, implementing light rail in the Seattle to Bellevue and Redmond via I-90 and Mercer Island corridor would use the same technology as Sound Transit's Central Link LRT line, which would build on the region's existing investment in the Downtown Seattle Transit Tunnel, LRT vehicles and LRT maintenance facilities; and

WHEREAS, light rail provides a higher level of system integration, because an East Link LRT line would be interlined with the northbound Central Link LRT line in downtown Seattle, providing riders with a direct ride between the Eastside, downtown Seattle and North corridor stations, including Capitol Hill and the University District; and

WHEREAS, light rail provides the highest projected level of ridership, the shortest travel times of all of the technologies/modes evaluated in the corridor; and

WHEREAS, the current development of a light rail system would also avoid the future closure of the exclusive guideway for a significant period of time for conversion (as would be required with RC BRT), therefore avoiding shifting BRT riders to buses using HOV and general purpose lanes during the conversion period and the intangible costs associated with that (e.g., lost ridership, lower reliability, increased travel times, impacts on local communities, etc.); and

WHEREAS, while the initial capital costs of light rail transit are higher than the initial capital costs for a RC BRT system, the long-term capital costs for the light rail system are lower when the capital cost of the conversion of the RC BRT system is included.

NOW, THEREFORE, BE IT RESOLVED by the Board of the Central Puget Sound Regional Transit Authority as follows:

Section 1. The "do-nothing" and "low-capital" options that have been developed and evaluated during the high capacity transportation system planning process as required by state law are hereby set aside from further consideration.

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Section 2. Three higher capital investment scenarios will be carried forward for further

evaluation and public comment. In each scenario light rail transit is identified as the preferred

transportation mode for high capacity transit in the Seattle to Bellevue and Redmond via I-90

and Mercer Island corridor.

Section 3. The three higher capital investment scenarios will be issued for public and

agency review and comment. Each scenario represents a potential next set of investments in

Sound Transit's regional high-capacity transportation system, consistent with the agency's

adopted Long-Range Plan. The three scenarios to be carried forward are as follows:

a. Bus/Rail (Medium); Sales Tax Incremental Increase = 0.3%

b. Rail Emphasis (Medium high); Sales Tax Incremental Increase = 0.4%

c. Rail Emphasis (High); Sales Tax Incremental Increase = 0.5%

Section 4. The candidate projects, which were retained as candidate projects as part of

Motion No. M2006-03 and are not included in any of the three scenarios, remain under serious

consideration and should also be included in the information provided for public and agency

review and comment.

ADOPTED by the Board of the Central Puget Sound Regional Transit Authority at a regular

meeting thereof held on July 13, 2006.

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John W. Ladenburg

Board Chair

ATTEST:

Mar¢ia Walker

**Board Administrator** 

# **Sound Transit 2 – Sound Transit System Expansion Sample Investment Option: Do Nothing**



**SOUNDTRANSIT** 

**Exhibit A to Sound Transit Board Resolution R2006-15** 

Sales tax increase = 0.0%



# **Building Sound Transit 2**

This sample investment option is one of a range of different investment scenarios the Sound Transit Board is evaluating as it develops a package of mass transit investments to be put to a public vote in November 2007.

The end result will be a final package – Sound Transit 2 – funding for which will be put to voters alongside a companion package of regional road investments. Both packages must be approved for either to take effect.

# Do nothing investment scenario

This scenario complies with state law to present a *Do Nothing* option for the Board's consideration. It illustrates the future baseline for high capacity transit services if Sound Transit does nothing to expand the Central Puget Sound region's mass transit system beyond current levels.

The *Do Nothing* option would complete the projects voters approved in 1996 as part of the *Sound Move* plan that are affordable under Sound Transit's current plan with existing revenues and financial policies.

This option would not increase the sales tax in the Sound Transit district for ST purposes.

#### Scenario at a glance

New park-and-ride stalls	0
New transit centers	0
<ul> <li>New/improved Sounder train stations</li> </ul>	0
<ul> <li>New/improved Sounder tracks (miles)</li> </ul>	0
New Central Link light rail/rail-convertible     PDT (miles)	0
BRT (miles)	U
<ul> <li>New fixed guideway stations</li> </ul>	0
<ul> <li>New Business Access &amp; Transit (BAT) lanes</li> </ul>	
(miles)	0
<ul> <li>New Tacoma Link miles</li> </ul>	0
<ul> <li>New Tacoma Link stations</li> </ul>	0

See <u>www.soundtransit.org/ST2/Future</u> for more information about this scenario, specific projects, and the Sound Transit 2 planning process.

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#### Scenario ridership for 2030

	Annual	Weekday
Total system ridership:	58M	192K
Central Link:	37M	120K
Tacoma Link:	1M	4K
Sounder:	4M	16K
ST Express:	15M	52K

# **Project lists**

The Do Nothing option would complete the projects voters approved in 1996 as part of the *Sound Move* plan that are affordable under Sound Transit's current plan and financial policies. Completion of these projects would require no sales tax increase.

Projects approved in *Sound Move* that will still be under construction in November 2007 include the following:

- Link light rail from the Airport to the University of Washington. The Airport to Seattle segment is scheduled to open in 2009; the Seattle to UW segment will open in 2016.
- Sounder Commuter rail extensions to Lakewood, track and signal improvements throughout the rail corridor, and new stations at Mukilteo, South Tacoma and Lakewood. Together, these projects will allow Sounder to operate a full complement of commuter rail trains, starting in 2008
- ST Express bus service transit center, freeway station, HOV enhancement, corridor and arterial improvement projects, which are planned for completion by 2009.

#### **Additional Features:**

None

# Costs (in 2005 \$)

	2008-2027
Capital Costs	\$ NA
Transit Services	\$ NA
Total	\$ NA

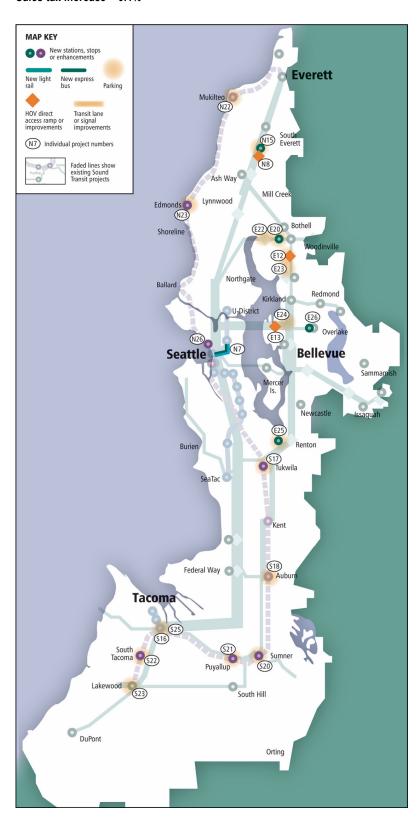
Annual new cost per household: \$0 (2007).

# Sound Transit 2 - Sound Transit System Expansion Sample Investment Option: Bus/Sounder emphasis (Low)



**Exhibit B to Sound Transit Board Resolution R2006-15** 

Sales tax increase = 0.1%



# **Building Sound Transit 2**

This sample investment option is one of a range of different investment scenarios the Sound Transit Board is evaluating as it develops a package of mass transit investments to be put to a public vote in November 2007.

The end result will be a final package – Sound Transit 2 – funding for which will be put to voters alongside a companion package of regional road investments. Both packages must be approved for either to take effect.

#### **Bus/Sounder emphasis scenario**

This scenario funds a system of mass transportation improvements focused on Sound Transit Express bus and Sounder commuter rail services. It represents a functional but limited expansion of the regional mass transit system that can be paid for with a 0.1% sales tax increase. This scenario represents the "Low Capital" option required by state law that maximizes the current system. This scenario:

- Is limited to low-cost enhancements to the current system begun in Sound Move with no light rail extensions or major capital projects.
- Sets aside additional funding (2% yearly growth) for future service enhancements to the existing ST Express bus network.
- Expands parking, improves transit centers, and enhances Sounder stations, increasing access to the regional transit system.
- Prepares for future investments in fixed guideway (light rail, commuter rail) expansion by funding a planning study and purchases of up to \$80 million in future right-of-way.

See <u>www.soundtransit.org/ST2/Future</u> for more information about this scenario, specific projects, and the Sound Transit 2 planning process.

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#### **About Sound Transit 2**

Sound Transit is working to expand the central Puget Sound mass transit system to meet the challenges facing the region with 1.2 million more people living here by 2030.

This work builds on the light rail, commuter rail and regional bus system voters approved in 1996 that is in place and under construction today.

# Scenario at a glance

•	New park-and-ride stalls	6,300
•	New transit centers	2
•	New/improved Sounder parking	10
•	New/improved Sounder tracks (miles)	1
•	New Central Link light rail/rail-convertible	
	BRT (miles)	0
•	New fixed guideway stations	0
•	New Business Access & Transit (BAT) lanes	
	(miles)	0
•	New Tacoma Link miles	0
•	New Tacoma Link stations	0

# Scenario ridership for 2030

	Annual	Weekday
Total system ridership:	61M	204K
Central Link:	37M	120K
Tacoma Link:	1M	4K
Sounder:	5M	17K
ST Express:	18M	63K

# Project list \*

#### **North Corridor**

#### Link

 N7A Enhanced Transit: Streetcar or Bus Connection between Downtown Seattle and Capitol Hill Station via First Hill (c)

# Sounder

- N22 Sounder: Joint Development of a Parking Garage at Mukilteo Sounder Station (a)
- N23a Sounder: New Permanent Sounder Station at Edmonds Crossing (b)
- N26 Sounder: New Station at Broad Street in Seattle (c)

# **North Corridor (continued)**

### **ST Express**

- N8 Express Bus: HOV Access Ramps at Mariner Park-and-Ride (c)
- N15 Express Bus: Parking garage, transit center, bus layover at Mariner Park-and-Ride (c)

#### **East Corridor**

#### **ST Express**

- E13b Express Bus: HOV/Transit Queue Jump Lane on Eastbound SR 520 to Northbound Bellevue Way NE Off-Ramp (a)
- E26 Express Bus: Pedestrian Bridge at Overlake Transit Center (a)
- E12 Express Bus: Direct Access Ramps and Parking Garage at Brickyard Park-and-Ride (b)
- E20 Express Bus: Transit Center & Parking Garage at Bothell (b)
- E25 Express Bus: Parking Garage at North 8<sup>th</sup> Street in Renton (b)
- E24 Express Bus: Parking Garage at South Kirkland Park-and-Ride (b)
- E22 Express Bus: Parking Garage and Pedestrian Bridge over SR 520 at Kenmore Park-and-Ride (c)
- E23 Express Bus: Expansion of Kingsgate Park-and-Ride (c)

#### South Corridor

#### Sounder

- S20 Sounder: Parking Garage and Pedestrian Bridge at Sumner Station (a)
- S21 Sounder: Parking Garage and Pedestrian Bridge at Puyallup Station (a)
- S17 Sounder: Permanent Station at Tukwila (b)
- S18b Sounder: Parking Garage at Auburn Station (alt.) (c)
- S22 Sounder: Parking Garage and Pedestrian Bridge at South Tacoma Station (c)
- Sounder: Parking Garage at Lakewood Station (c)
- S25 Sounder: Track and Structure Upgrades between Tacoma Dome Station and Reservation Junction (c)

#### ST Express

 S16 Express Bus: Surface Parking Expansion at Tacoma Dome Station (c)

# **Planning Studies**

E9 HCT: Planning Study on SR-520

<sup>\*</sup> The letters in parenthesis following each project represents the date range it is to be in service. Construction will start years before the service date. a = 2008-2014, b = 2015-2021, c = 2022-2027.

#### Additional features

- Subarea program reserve funds 10% of ST Express, Sounder projects.
- · Regional bus bases \$139M.
- Service Enhancement Fund 2% yearly over a 5% yearly base. Service Enhancement Fund displaces \$250-400M in capital investments.
- Right-of-Way Preservation Fund \$80M.
- With this scenario, there are opportunities to modify ST Express routes as the light rail system is expanded.

# Costs (in 2005 \$)

 2008-2027

 Capital Costs
 \$ 1.5 b

 Transit Services
 \$ 0.3 b

 Total
 \$ 1.8 b

From 2008-2027, the total program costs would be funded by an estimated \$1.4 billion (2005\$) in new tax revenue in addition to existing taxes and bonding.

Estimated annual new cost per household: \$25 (2007), or 1¢ per \$10 retail purchase.

#### **Additional Financial Information**

All project cost, schedules and financial plan information are preliminary and subject to change.

Cost estimates and schedules will be under continual refinement through summer 2007. Sound Transit's project cost estimating system establishes a baseline project budget at the completion of 30% engineering and once major project scope elements and schedules have been defined. Project costs are currently only at a conceptual level (less than 5% engineering), are for system planning purposes only and do not constitute final project cost estimates.

Until project costs and schedules are finalized, financial plans for ST2 scenarios are also provisional. Current financial plans do not include grant or fare revenues associated with ST2 projects. Financial plans will be updated in summer 2006 and 2007 for new revenue and inflation forecasts.

From 2008-2027, the total capital and operating program costs are estimated to be \$1.8 billion in constant 2005 dollars and \$2.8 billion in inflation-adjusted year-of-expenditure (YOE) dollars. These figures do not include debt service, bond reserves or administrative costs. The YOE dollar figure will change as the Sound Transit Board refines program scenarios and project schedules are updated.

# Sound Transit 2 - Sound Transit System Expansion Sample Investment Option: Bus/Rail (Medium)



Sales tax increase = 0.3%





# **Building Sound Transit 2**

This sample investment option is one of a range of different investment scenarios the Sound Transit Board is evaluating as it develops a package of mass transit investments to be put to a public vote in November 2007.

The end result will be a final package – Sound Transit 2 – funding for which will be put to voters alongside a companion package of regional road investments. Both packages must be approved for either to take effect.

#### Bus/Rail investment scenario

This scenario funds Sound Transit Express bus and Sounder commuter rail enhancements, a 19-mile expansion of the Cental Link fixed guideway network and a six-mile Tacoma Link extension. It represents a functional and productive expansion of the regional mass transit system that can be paid for with a 0.3% sales tax increase. This scenario:

- Makes moderate investments in light rail and/or bus-rapid transit (BRT) corridors.
- Expands light rail north from the University of Washington to Northgate, south to Kent-Des Moines Road and either BRT or light rail between downtown Seattle and Bellevue/ Overlake Hospital.
- Connects the urban centers of Northgate, University District, First Hill/Capitol Hill, downtown Seattle, Bellevue and SeaTac with reliable fixed guideway service.
- Extends Tacoma Link to Tacoma Community College.
- Sets aside additional funding (1% year growth) for future service enhancements to existing ST Express bus network.
- Prepares for future investments in fixed guideway (light rail, commuter rail) expansion by funding planning studies and purchases of up to \$40 million in future right-of-way.

See <u>www.soundtransit.org/ST2/Future</u> for more information about this scenario, specific projects, and the Sound Transit 2 planning process.

#### **About Sound Transit 2**

Sound Transit is working to expand the central Puget Sound mass transit system to meet the challenges facing the region with 1.2 million more people living here by 2030.

This work builds on the light rail, commuter rail and regional bus system voters approved in 1996 that is in place and under construction today.

# Scenario at a glance

•	New park-and-ride stalls 8	,000
•	New transit centers	2
•	New/improved Sounder parking	10
•	New/improved Sounder tracks (miles)	1.3
•	New Central Link light rail (miles)	19
•	New fixed guideway stations	11
•	New Business Access and Transit lanes (miles)	18
•	New Tacoma Link miles	6
•	New Tacoma Link stations	7

# Scenario ridership for 2030

	Annual	Weekday
Total system ridership:	92M	302K
Central Link:	70M	224K
Tacoma Link:	4M	12K
Sounder:	5M	18K
ST Express:	14M	48K

# Project list\*

# **North Corridor**

#### Link

- N6 Link LRT: Extension from University of Washington to Northgate (c)
- N7a Enhanced Transit: Streetcar or Bus Connection between Downtown Seattle and Capitol Hill Station via First Hill (b)

#### Sounder

- N22 Sounder: Joint Development of a Parking Garage at Mukilteo Sounder Station (a)
- N23a Sounder: New Permanent Sounder Station at Edmonds Crossing (b)
- N26 Sounder: New Station at Broad Street in Seattle (c)

#### North corridor (continued)

### ST Express

- N13 Express Bus: Transit Signal Priority on SR 99 and Evergreen Way (a)
- N11 Express Bus: Business Access and Transit Lanes on SR-99 and Evergreen Way (b)
- N15 Express Bus: Parking Garage, Transit Center and Bus Layover Facility at Mariner Park-and-Ride (c)
- N8 Express Bus: HOV Access Ramps at Mariner Parkand-Ride (c)

#### **East Corridor**

#### Link

- E1 Link LRT: Seattle to Bellevue (aerial) (b)
- E4 Link LRT: Maintenance Facility and Vehicles (b)

#### **ST Express**

- E20 Express Bus: Transit Center & Parking Garage at Bothell (c)
- E25 Express Bus: Parking Garage at North 8th Street in Renton (c)

#### **South Corridor**

#### Link

- S7 Link LRT: Tacoma Link Extension to Tacoma Community College (b)
- S27 Link LRT: Sea-Tac Airport to South 200th Street (c)
- S28 Link LRT: South 200th Street to Kent-Des Moines Road (c)

#### Sounder

- S21 Sounder: Parking Garage and Pedestrian Bridge at Puyallup Station (a)
- S20 Sounder: Parking Garage and Pedestrian Bridge at Sumner Station (a)
- S17 Sounder: Permanent Station at Tukwila (b)
- S18b Sounder: Parking Garage at Auburn Station (alt.)(c)
- S23b Sounder: Parking Garage at Lakewood Station (c)
- S22 Sounder: Parking Garage and Pedestrian Bridge at South Tacoma Station (c)
- S25 Sounder: Track and Structure Upgrades between Tacoma Dome Station and Reservation Junction (c)
- S16 ST Express: Surface Parking Expansion at Tacoma Dome Station (c)

#### **ST Express**

S12 Transit Signal Priority on SR-516 in Kent (a)

<sup>\*</sup> The letters in parenthesis following each project represents the date range it is to be in service. Construction will start years before the service date. a = 2008-2014, b = 2015-2021, c = 2022-2027.

# **Planning studies**

- N5 Link LRT: Preliminary Engineering from Northgate to King/Snohomish Line
- N3 Link LRT: Preliminary Engineering from King/Snohomish Line to Ash Way
- N2 Link LRT: Planning Study Ash Way to Everett Station
- E29 LRT Preliminary Engineering from Bellevue to Redmond (proposed new project)
- E9 HCT Planning Study on SR-520
- S3 Link LRT: Planning Study of Potential Future Corridors

#### Additional features

- Subarea program reserve funds 10% of ST Express, Sounder projects.
- Regional bus bases \$139M.
- Service Enhancement Fund 1% yearly over a 5% yearly base. Service Enhancement Fund displaces \$100-\$140M in capital investments
- Right-of-Way Preservation Fund \$40M.
- With this scenario, there are opportunities to modify ST Express routes as the light rail system is expanded.

# Costs (in 2005 \$)

	<u>2008-2027</u>
Capital Costs	\$ 5.8 b
Transit Services	\$ 0.4 b
Total	\$ 6.2 b

From 2008-2027, the total program costs would be funded by an estimated \$4.1 billion (2005\$) in new tax collections in addition to collection of existing taxes and bonding.

Estimated annual new cost per household: \$75 (2007), or 3¢ per \$10 retail purchase.

#### **Additional Financial Information**

All project cost, schedules and financial plan information are preliminary and subject to change.

Costs estimates and schedules will be under continual refinement through summer 2007. Sound Transit's project cost estimating system establishes a baseline project budget at the completion of 30% engineering and once major project scope elements and schedules have been defined. Project costs are currently only at conceptual level (less than 5% engineering), are for system planning purposes only and do not constitute final project cost estimates.

Until project costs and schedules are finalized, financial plans for ST2 scenarios are also provisional. Current financial plans do not include grant or fare revenues associated with ST2 projects. Financial plans will be updated in summer 2006 and 2007 for new revenue and inflation forecasts.

From 2008-2027, the total capital and operating program costs are estimated to be \$6.2 billion in constant 2005 dollars and \$10.0 billion in inflationadjusted year-of-expenditures (YOE) dollars. These figures do not include debt service, bond reserves or administrative costs. The YOE dollar figure will change as the Sound Transit Board refines program scenarios and project schedules are updated.

# Sound Transit 2 - Sound Transit System Expansion Sample Investment Option: Rail emphasis (Medium high)



Exhibit D to Sound Transit Board Resolution No. R2006-15

Sales tax increase = 0.4%



# **Building Sound Transit 2**

This sample investment option is one of a range of different investment scenarios the Sound Transit Board is evaluating as it develops a package of mass transit investments to be put to a public vote in November 2007.

The end result will be a final package – Sound Transit 2 – funding for which will be put to voters alongside a companion package of regional road investments. Both packages must be approved for either to take effect.

### Rail emphasis investment scenario

This scenario funds Sound Transit Express bus and Sounder commuter rail enhancements, a 30-34-mile expansion of the Central Link fixed guideway network and a one-mile Tacoma Link extension. It represents a functional and productive expansion of the regional mass transit system that can be paid for with a 0.4% sales tax increase. This scenario:

- Adds higher levels of capacity, speed and reliability through substantial system expansion, with improved connectivity between the region's urban centers.
- Expands light rail north from the University of Washington to Mountlake Terrace, south from SeaTac to the Federal Way Transit Center, with a light rail extension east as far as Bellevue or the Overlake Transit Center.
- Extends Tacoma Link to Tacoma General Hospital.
- Expands parking, improves transit centers, and enhances Sounder stations, increasing access to the regional transit system.
- Sets aside funding (0.5% year growth) for future service enhancements to existing ST Express bus network as the fixed guideway system expands.
- Prepares for future investments in fixed guideway (light rail, commuter rail) expansion by funding planning studies.

See <u>www.soundtransit.org/ST2/Future</u> for more information about this scenario, specific projects, and the Sound Transit 2 planning process.

#### **About Sound Transit 2**

Sound Transit is working to expand the central Puget Sound mass transit system to meet the challenges facing the region with 1.2 million more people living here by2030.

This work builds on the light rail, commuter rail and regional bus system voters approved in 1996 that is in place and under construction today.

#### Scenario at a glance

•	New park-and-ride stalls	8,500-10,000
•	New transit centers	1
•	New/improved Sounder parking	9
•	New/improved Sounder tracks (miles)	1.3
•	New Central Link light rail (miles)	30-34
•	New fixed guideway stations	16-19
•	New Business Access and Transit lan	es (miles) 0
•	New Tacoma Link miles	1.3
•	New Tacoma Link stations	2

# Scenario ridership for 2030 (based on East Corridor Option 1)

	Annual	Weekday
Total system ridership:	104M	344K
Central Link:	85M	277K
Tacoma Link:	2M	7K
Sounder:	5M	17K
ST Express:	13M	43K

# Project list \*

#### **North Corridor**

#### Link

- N7a Enhanced Transit: Streetcar or Bus Connection between Downtown Seattle and Capitol Hill Station via First Hill (a)
- N6 Link LRT: Extension from University of Washington to Northgate (c)
- N39 Link LRT: Northgate to Mountlake Terrace (c)
- N35T2 Link LRT Maintenance Facility and Vehicles for Northgate to Lynnwood (c)

# North Corridor (continued)

#### Sounder

- N22 Sounder: Joint Development of a Parking Garage at Mukilteo Sounder Station (a)
- N23a Sounder: New Permanent Sounder Station at Edmonds Crossing (b)

#### ST Express

 N36 Express Bus: Transit-Only Access Ramp at Ash Way Park-&-Ride (proposed new project) (c)

# East Corridor – Option 1 (Ridership forecast based on Option 1)

#### Link

- E1 Link LRT: Seattle to Bellevue (aerial) (b)
- E4 Link LRT: Maintenance Facility and Vehicles (b)
- E2 Link LRT: Bellevue to Overlake Transit Center (aerial) (c)

#### **ST Express**

- E20 Express Bus: Transit Center & Parking Garage in Bothell (b)
- E25 Express Bus: Parking Garage at North 8th Street in Renton (b)

# **East Corridor – Option 2**

#### Link

- E1 Link LRT: Seattle to Bellevue (tunnel) (b)
- E4 Link LRT: Maintenance Facility and Vehicles (b)

#### ST Express

- E20 Express Bus: Transit Center & Parking Garage in Bothell (b)
- E25 Express Bus: Parking Garage at North 8th Street in Renton (b)

#### **South Corridor**

# <u>Link</u>

- S7 Link LRT: Tacoma Link Extension to Tacoma General Hospital (variation) (b)
- S27 Link LRT: Sea-Tac Airport to South 200th Street (c)
- S28 Link LRT: South 200th Street to Kent-Des Moines Road (c)
- S29 Link LRT: Kent-Des Moines Road to Star Lake (c) (variation)
- S30 Link LRT:Star Lake to Federal Way Transit Center (c) (variation)
- S33T2 Link LRT: Maintenance Facility and Vehicles (c)

<sup>\*</sup> The letters in parenthesis following each project represents the date range it is to be in service. Construction may start several years before the service date. a = 2008-2014, b = 2015-2021, c = 2022-2027.

# South corridor projects (continued)

# Sounder

- S17 Sounder: Permanent Station at Tukwila (a)
- S21 Sounder: Parking Garage and Pedestrian Bridge at Puyallup Station (a)
- S20 Sounder: Parking Garage and Pedestrian Bridge at Sumner Station (a)
- S18b Sounder: Parking Garage at Auburn Station (alt.)
   (b)
- S16 Sounder: Surface Parking Expansion at Tacoma Dome Station (c)
- S22 Sounder: Parking Garage and Pedestrian Bridge at South Tacoma Station (c)
- S23b Sounder: Parking Garage at Lakewood Station
   (c)
- S25 Sounder: Track and Structure Upgrades between Tacoma Dome Station and Reservation Junction (c)

# Planning studies

- N2 Link LRT: Planning Study Mountlake Terrace to Everett Station (variation)
- E9 HCT Planning Study on SR-520
- E28 Link LRT: Preliminary Engineering Bellevue or Overlake Transit Center to Redmond (proposed new project)
- S34 Link LRT: Preliminary Engineering Federal Way to Tacoma Dome (proposed new project)

### **Additional features**

- Subarea program reserve funds 10%.
- Regional bus bases \$139M.
- Service Enhancement Fund 0.5% yearly over a 5% yearly base. Service Enhancement Fund displaces \$50-\$80M in capital investments.
- With this scenario, there are opportunities to modify ST Express routes as the light rail system is expanded.
- Assumes joint subarea funding of Link extensions in the North and South corridors.

# Costs (in 2005 \$)

( )	2008-2027
Capital Costs	\$ 7.5 b
Transit Services	\$ 0.3 b
Total	\$ 7.8 b

From 2008-2027, the total program costs would be funded by an estimated \$5.5 billion (2005\$) in new tax collections in addition to collection of existing taxes and bonding.

Estimated annual new cost per household: \$100 (2007), or 4¢ per \$10 retail purchase.

#### **Additional Financial Information**

All project cost, schedules and financial plan information are preliminary and subject to change.

Costs estimates and schedules will be under continual refinement through summer 2007. Sound Transit's project cost estimating system establishes a baseline project budget at the completion of 30% engineering and once major project scope elements and schedules have been defined. Project costs are currently only at conceptual level (less than 5% engineering) and are for system planning purposes only and do not constitute final project cost estimates.

Until project costs and schedules are finalized, financial plans for ST2 scenarios are also provisional. Current financial plans do not include grant or fare revenues associated with ST2 projects. Financial plans will be updated in summer 2006 and 2007 for new revenue and inflation forecasts.

From 2008-2027, the total capital and operating program costs are estimated to be \$7.8 billion in constant 2005 dollars and \$13.1 billion in inflation-adjusted year-of-expenditures (YOE) dollars. These figures do not include debt service, bond reserves or administrative costs. The YOE dollar figure will change as the Sound Transit Board refines program scenarios and project schedules are updated.

# Sound Transit 2 - Sound Transit System Expansion Sample Investment Option: High rail (High)

Exhibit E to Sound Transit Board Resolution No. R2006-15

Sales tax increase = 0.5%





# **Building Sound Transit 2**

This sample investment option is one of a range of different investment scenarios the Sound Transit Board is evaluating as it develops a package of mass transit investments to be put to a public vote in November 2007.

The end result will be a final package – Sound Transit 2 – funding for which will be put to voters alongside a companion package of regional road investments. Both packages must be approved for either to take effect.

#### Rail emphasis investment scenario

This scenario uses a 0.5% sales tax increase to fund Sound Transit Express bus expansions, Sounder commuter rail improvements, and a 44 to 47-mile extension of the Central Link fixed guideway network. It represents a substantial expansion of the regional mass transit system that can be paid for with a 0.5% sales tax increase. This scenario:

- Adds higher levels of capacity, speed and reliability through substantial system expansion, with improved connectivity between the region's urban centers.
- Expands light rail north from the University of Washington to Lynnwood and south from SeaTac to the Port of Tacoma; with a light rail fixed guideway extension east as far as Overlake Transit Center/Redmond or downtown Redmond.
- Expands parking and enhances Sounder stations, increasing access to the regional transit system.
- Sets aside a lower level of funding (0.5% per year growth) for future service enhancements to existing ST Express bus network as the fixed guideway system expands.

See <u>www.soundtransit.org/ST2/Future</u> for more information about this scenario, specific projects, and the Sound Transit 2 planning process.

continued on next page

#### **About Sound Transit 2**

Sound Transit is working to expand the central Puget Sound mass transit system to meet the challenges facing the region with 1.2 million more people living by 2030.

This work builds on the light rail, commuter rail and regional bus system voters approved in 1996 that is in place and under construction today.

#### Scenario at a glance

•	New park-and-ride stalls	12,000
•	New transit centers	1
•	New/improved Sounder stations	7
•	New/improved Sounder tracks (miles)	1
•	New Central Link light rail (miles)	44 - 47
•	New fixed guideway stations	22 - 24
•	New Business Access and Transit lane	es (miles) 0
•	New Tacoma Link miles	0
•	New Tacoma Link stations	0

# Scenario ridership for 2030

	Annual	Weekday
Total system ridership:	106M	351K
Central Link:	90M	294K
Tacoma Link:	2M	5K
Sounder:	5M	19K
ST Express:	9M	33K

# Project list \*

#### North corridor

#### Link

- N7a Enhanced Transit: Streetcar or Bus Connection between Downtown Seattle and Capitol Hill Station via First Hill (b)
- N6 Link LRT: Extension from University of Washington to Northgate (c)
- N39 Link LRT: Northgate to Mountlake Terrace (c)
- N31T2 Link LRT: Mountlake Terrace to Lynnwood Transit Center (c)
- N35T2 Link LRT Maintenance Facility and Vehicles for Northgate to Lynnwood (c)

#### North corridor (continued)

#### Sounder

- N22 Sounder: Joint Development of a Parking Garage at Mukilteo Sounder Station (a)
- N23a Sounder: New Permanent Sounder Station at Edmonds Crossing (b)

# East corridor – Option 1 (Ridership forecast based on Option 1)

#### Link

- E1 Link LRT: Seattle to Bellevue (tunnel) (b)
- E4 Link LRT: Maintenance Facility and Vehicles (b)
- E2 Link LRT: Bellevue to Overlake Transit Center (tunnel) (c)

# **ST Express**

- E20 Express Bus: Transit Center & Parking Garage in Bothell (b)
- E25 Express Bus: Parking Garage at North 8th Street in Renton (b)
- E22 Express Bus: Parking Garage and Pedestrian Bridge over SR 520 at Kenmore Park-and-Ride (c)
- E24 Express Bus: Parking Garage at South Kirkland Park-and-Ride (c)

# East corridor - Option 2

#### Link

- E1 Link LRT: Seattle to Bellevue (aerial) (b)
- E4 Link LRT: Maintenance Facility and Vehicles (b)
- E2 Link LRT: Bellevue to Overlake Transit Center (aerial) (c)
- E3 Link LRT: Overlake Transit Center to Redmond (c)

# **ST Express**

- E20 Express Bus: Transit Center & Parking Garage in Bothell (c)
- E25 Express Bus: Parking Garage at North 8th Street in Renton (c)

<sup>\*</sup> The letters in parenthesis following each project represents the date range it is to be in service. Construction may start several years before the service date. a = 2008-2014, b = 2015-2021, c = 2022-2027.

#### South corridor

#### Link

- S27 Link LRT: SeaTac Airport to South 200th Street (c)
- S28 Link LRT: South 200<sup>th</sup> Street to Kent-Des Moines Road (c)
- S29 Link LRT: Kent-Des Moines Road to Star Lake (c)
- S30 Link LRT: Star Lake to Federal Way Transit Center
   (c)
- S31 Link LRT: Federal Way Transit Center to S. Federal Way (c)
- S32 Link LRT: S. Federal Way to Port of Tacoma (c)
- S33T2 Link LRT: Maintenance Facility and Vehicles (c)

#### Sounder

- S17 Sounder: Permanent Station at Tukwila (a)
- S20 Sounder: Parking Garage and Pedestrian Bridge at Sumner Station (a)
- S18b Sounder: Parking Garage at Auburn Station (alt.)
   (b)
- S21 Sounder: Parking Garage and Pedestrian Bridge at Puyallup Station (a)
- S25 Sounder: Track and Structure Upgrades between Tacoma Dome Station and Reservation Junction (c)

# **Planning studies**

- N2 Link LRT: Planning Study Lynnwood to Everett Station
- E9 HCT Planning Study on SR-520
- S3 Link LRT: Planning Study of Potential Future Corridors
- S44 Link LRT: Preliminary Engineering from Port of Tacoma Station to Tacoma Dome Station
- E30 HCT Planning Study on I-90: South Bellevue to Issaquah

#### Additional features

- Subarea program reserve funds 10% of ST Express, Sounder projects.
- Regional bus bases \$139M.
- Service Enhancement Fund 0.5% yearly over a 5% yearly base. Service Enhancement Fund displaces \$50-\$80M in capital investments
- With this scenario, there are opportunities to modify ST Express routes as the light rail system is expanded.

# Costs (in 2005 \$)

.,	2008-2027
Capital Costs	\$ 9.9 b
Transit Services	\$ 0.9 b
Total	\$ 10.8 b

From 2008-2027, the total program costs would be funded by an estimated \$6.9 billion (2005\$) in new tax collections in addition to collection of existing taxes and bonding.

Estimated annual new cost per household: \$125 (2007), or 5¢ per \$10 retail purchase.

# **Additional Financial Information**

All project cost, schedules and financial plan information are preliminary and subject to change.

Costs estimates and schedules will be under continual refinement through summer 2007. Sound Transit's project cost estimating system establishes a baseline project budget at the completion of 30% engineering and once major project scope elements and schedules have been defined. Project costs are currently only at conceptual level (less than 5% engineering), are for system planning purposes only and do not constitute final project cost estimates.

Until project costs and schedules are finalized, financial plans for ST2 scenarios are also provisional. Current financial plans do not include grant or fare revenues associated with ST2 projects. Financial plans will be updated in summer 2006 and 2007 for new revenue and inflation forecasts.

From 2008-2027, the total capital and operating program costs are estimated to be \$10.8 billion in constant 2005 dollars and \$18.2 billion in inflation-adjusted year-of-expenditures (YOE) dollars. These figures do not include debt service, bond reserves or administrative costs. The YOE dollar figure will change as the Sound Transit Board refines program scenarios and project schedules are updated.