

Expert Review Panel for Sound Transit Phase 3 (ST3)

SUMMARY OF MEETING

April 11– 12, 2016

Courtyard Marriott Hotel, Seattle, WA

Panel members present: Jim Jacobson, Chair; Mark Hallenbeck, Susan Haupt, William Lorenz, Steve Lundin, Siim Sööt, Richard Walker, Mark Weed; **Administrator:** John Howell

Panel member absent: Kimberly Koenig

Presenters: Val Batey, David Beal, Brian Brooke, Karin Ertl, David Huffaker, Thatcher Imboden, Kathy Leotta, Brant Lyerla, Brian McCartan, Geoff Patrick, Peter Rogoff, and Chris Rule (Sound Transit); Acting Secretary Roger Millar (WSDOT); Roland Behee (Community Transit); Tom Hingson (Everett Transit); Stephen Hunt (King County Metro); Mark Scheibe (Parsons Brinckerhoff)

Members of the public who commented: Victor Bishop, Will Knedlik, Dick Nelson, John Niles, Bill Popp, Jan Young

MONDAY, APRIL 11, 2016

Welcome and Follow-up from February 2016 Meeting

Chair Jim Jacobson

- Panel activity since the February meeting:
 - **Comment letter.** The panel sent a letter of comment (3/10/16) to its appointing authorities.
 - **Sound Transit Board Meeting.** Mr. Howell attended the Board meeting on March 24 and presented the substance of the panel’s March 10 letter of comment.
 - **Conference call.** Two panel members held a conference call on March 31 with Brian McCartan from Sound Transit on ST3 financial planning. This was arranged because Ms. Koenig was unable to attend the meeting in Seattle.
- This meeting focuses on many of the issues in the March comment letter and on the Draft ST3 System Plan released by the Sound Transit Board in late March.

Update on Activities Since the Last Panel Meeting

David Beal (Sound Transit)

See presentation slides, “ST3 Expert Review Panel: ST3 Draft System Plan Overview, April 11, 2016.” Additional information and responses to panel questions were as follows:

- **Board member involvement.** Leading up to the March 24 Board meeting, Board members from each subarea asked to see how the system plan would look with various projects included or changed. The result of the iterations was the Draft System Plan released after the Board meeting.
- **Questions still outstanding:**
 - Review of subarea equity in the taxes proposed for ST3.

- Light rail from Lynnwood to Everett: whether it is routed through Paine Field or direct along I-5 possibly supplemented with bus rapid transit (BRT) to Paine Field.
- East Link: whether to have a line from Bellevue to Issaquah or north to Kirkland, or BRT to Kirkland.
- Sounder: the scope of improvements for the south commuter rail, including possibly extending to DuPont, changing to 8- or 10-car platforms, a modest increase in parking, and adding midday and/or shoulder service at least in some segments.
- **Core priorities.** The Board’s core priorities remain the same: completing the light rail spine from Tacoma to Everett and the Eastside, and serving the areas with the highest ridership.
- **Next steps.** Public outreach on the Draft System Plan will continue through the end of April. The staff will incorporate into the Draft Plan the policies and programs for transit-oriented development (TOD), the access fund, and the innovation and technology fund.

Panel comments:

- **Communication.** To help the public understand the draft plan they are commenting on, Sound Transit needs to explain two issues:
 - The ridership estimate for Ballard includes the ridership on the segment to Tacoma (as well as the costs for the downtown tunnel).
 - A key reason why the system will take 25 years to build is that it will take that amount of time for all of the sub areas to generate sufficient tax revenues to pay for projects in their sub areas.
- **Survey.** The online survey should include or link to a map so that people understand what the draft plan includes.
- **Bond capacity.** It is doubtful if Sound Transit could “use” another jurisdiction’s debt capacity to finance Sound Transit’s own projects, since any obligation on the part of Sound Transit to repay the other jurisdiction would constitute debt of Sound Transit under the state constitution.
- **Out-of-area riders.** With expansion of light rail to the ends of the Sound Transit service area, there are likely to be riders coming from outside the Sound Transit taxing area. Sound Transit might talk with Intercity Transit in Olympia about helping fund some of the parking at the DuPont Sounder station. Out-of-area riders would be a good reason to charge for parking. Paid parking would also generate additional revenues.

Overview of ST3 Draft System Plan

Planning and Project Development

Val Batey (Sound Transit)

See presentation slides, “ST Board of Directors: Draft ST3 System Plan, March 24, 2016.” Additional information and responses to panel questions were as follows:

- **Service area.** The ST3 plan would provide service in more of the Sound Transit area, with a total of 112 miles of light rail carrying approximately 500,000 daily riders, BRT serving 12 cities at 10-minute frequency, and Sounder commuter rail extending south to DuPont.
- **TOD funds.** There are two different TOD funds, each with a budget of \$20 million.

- TOD Program Fund is site-specific for property used during construction that is not needed to operate transit service. There is a process by which such property is deemed to be surplus after construction, then becomes available for TOD. The cost is for due diligence and staff work.
- Regional Equitable TOD Fund is the fund required by the Legislature to help nonprofits acquire and assemble property for affordable housing, and to create a revolving fund. The \$20 million in payments would begin in the third year of the ST3 program.
- **Access funds.** There are two types of access funds:
 - System Access Program is to help identify and correct missing links in the system, such as a bicycle connection not directly in a station footprint.
 - Project Allowances are specific to a station or project to ensure there is non-motorized access.
- **Ballard and West Seattle.** Staff have revised the costs for both lines to reflect the costs of water crossings (Ship Canal and Duwamish River, respectively). The Ballard to Downtown Seattle segment is still a hybrid, with the City of Seattle encouraging exploration of an at-grade section to reduce costs. Metro has agreed that Harrison would not be a good location for bus layovers, and given the high cost of land in the South Lake Union area, the off-street bus facilities were removed.

Panel questions:

- **Federal help and charges related to Sounder improvements.** Will Amtrak or other federal sources help pay for the improvements for Sounder? Amtrak will benefit from the station improvements. Who will own the improvements? Will Sound Transit charge Amtrak for use of the rail lines Sound Transit owns?
- **Rider options from Lynnwood.** What light rail line options will riders going south from Lynnwood have: one to West Seattle, and one to Eastside-Redmond?

Panel comment:

- **Regional equitable TOD fund.** Sound Transit will need to be cautious about how the fund the Legislature required is used, since governments are prohibited from using public funds to benefit private organizations, referred to as “gift of public funds.”

Ridership Estimates

Brant Lyerla (Sound Transit)

See presentation slides, “Ridership Forecasting, April 11, 2016.” Additional information and responses to panel questions were as follows:

- **Overall changes.** The changes in assumptions and project definitions from those used for the candidate projects have generally resulted in a moderate reduction in ridership, especially for longer trips. The ridership estimate increased in two segments: Ballard to Downtown, and Tacoma to Tacoma Community College. The changes in assumptions are from policy changes, such as land use estimates, and also changes in project definitions, such as I-405 BRT operating every 15 minutes in the off-peak instead of every 10 minutes.

- **Rider definition.** The ridership calculations use the Federal Transit Administration (FTA) definition of rider as anyone who uses the project at any point, whether for a long trip or a one-stop trip.
- **Sounder.** The ridership estimates related just to the extension of Sounder to DuPont. For this segment, ridership went down because of the change in the assumption about road pricing. The ridership growth that Sounder is experiencing would happen whether or not the DuPont extension takes place.
- **Access improvements.** It is not yet clear what impact the proposed access improvements will have on ridership. If a specific access improvement has been identified, it will be incorporated in the ridership estimate. At this point in ST3 planning, these specifics are not known since the exact locations of the stations have not yet been set.
- **Park-and-ride.** Ridership estimates are not used exclusively to estimate park-and-ride lot capacity. That capacity is estimated based on a set of factors including, but not limited to, jurisdictional policy and preferences, environmental impacts and cost.

Panel comments:

- **Extending near Sound Transit area border.** Adding stations near the Sound Transit service area border, such as extending Sounder to DuPont, enables people who are not paying Sound Transit taxes to get a choice of seats while those who are paying but who board at a later stop do not have a good choice. This is a policy decision for the Board, however.
- **Multiple factors.** It is challenging to reconcile that revised land use estimates drove ridership estimates down, while the current trends in ridership are going up.
- **Information for decision makers.** It seems most useful for the Board to have information along the lines of: extending to DuPont, or another location, will yield X number of riders, and extending the platform to accommodate longer trains will yield Y number of riders.

Transit-Oriented Development (TOD)

Thatcher Imboden (Sound Transit)

See presentation slides, “TOD within the ST3 System Plan.” Additional information and responses to panel questions were as follows:

- **Suitable surplus land.** The legislation requires Sound Transit to make available to local jurisdictions, housing authorities, and nonprofit developers 80 percent of its surplus property that is “suitable” for housing development, but does not define “suitable.”
- **Clarification on 80 percent requirements.** The law requires that 80 percent of surplus land suitable for housing development be offered to qualified entities and that if they accept, 80 percent of the units created must be affordable.
- **Land at maintenance locations.** TOD could be developed at maintenance facilities, as in Bellevue, but doing so depends on proximity to the stations. Without specific locations for the stations, it is hard to identify yet whether this would be a possibility.
- **TOD definition.** TOD can include mixed-use projects, but what the law creates is the priority for affordable housing on Sound Transit’s surplus land. Historically Sound Transit has released land that

permitted uses other than only housing. The Board will need to discuss the TOD policy in light of the recent legislation.

- **Length of time for affordability.** The law says the housing needs to be affordable “long term.” The Board will need to further define the policy.

System Access Program

Chris Rule (Sound Transit)

See presentation slides, “System Access in ST3 Draft Plan,” and tables titled “ST3 Draft Plan Parking Summary,” “ST3 Draft Plan Non-motorized Access Summary,” and “ST3 Draft Plan Bus-Rail Integration Summary.” Additional information and responses to panel questions were as follows:

- **Estimates.** Estimates for modes of access to stations in the future are less reliable than ridership estimates since there are many variables involved. Bicycle and pedestrian access depend on projects in local jurisdictions. The growth of services such as Lyft and Uber could lead to more need for drop off/pick up access. The System Access fund aims to create room for potential modes of access. The tables show cost estimates for different kinds of access by segment. Sound Transit will refine these estimates once station locations are defined and will work with local jurisdictions on the access changes they might make.
- **Bus-rail integration.** There are approximately 12 bus-rail integration facilities at new stations and corridors included in the Draft Plan. About 60 percent of the cost is for additional right-of-way to acquire property for off-street bus bays. Within each station budget, there is also a large and flexible cost allowance to design the station to meet local needs. Two to three bus bays are included at an average station, with more at stations with a high volume of boardings and transfers.
- **Transit in South Lake Union.** The new downtown tunnel is a way to avoid congestion and to speed transit rides, and may reduce the need for buses in the South Lake Union area.
- **Parking.** The total representative cost estimate for parking is up to \$661 million, which could construct approximately 9,000 new stalls, and convert others to structured parking. There is ongoing conversation with jurisdictions about “hide and ride” parking activity (i.e., when transit users park in neighborhoods surrounding stations).
- **Sound Move and ST2 improvements.** A possible use of access funds is to contribute to the accessibility improvements at existing stations that local jurisdictions are pursuing.
- **Non-motorized access allowance.** This is an additional allowance for improving bicycling and walking to the station from surrounding areas. In addition, a design allowance is already included in station costs that funds improvements for bike, pick-up and drop-off, paratransit, parking, pedestrian plazas and walkways, and buses at the footprint of the station.

Panel comment:

- **Cost.** Access dollars should be spent to get the most number of people to ride transit.

Innovation and Technology Fund

Brian Brooke (Sound Transit)

See presentation slides, “Innovation and Technology Fund – Proposed Investment in ST3.” Additional information and responses to panel questions were as follows:

- ***Prior use of technology funds.*** Sound Move’s technology fund was used for closed circuit security, the Puget Pass, Flex Pass and integrated, seven-agency ORCA card. ST2 technology funds added real-time arrival, One Bus Away, trip planner, ORCA business passport, ORCA Lift, parking permits and electric vehicle charging, and exploration of ways to mine ORCA data.
- ***Data privacy.*** Sound Transit takes data privacy seriously. In combining ORCA data with other sources of travel data, Sound Transit is taking steps to protect privacy and to comply with accepted standards for such research projects.
- ***Souder-bus integration.*** Sound Transit is researching how these connections are working and how many people might be added through improvements.
- ***Wi-fi.*** The intent for the new downtown tunnel is to have cell coverage.
- ***Innovative partnerships.*** Sound Transit is interested in working with Uber/Lyft and other businesses in understanding the broader market and how changes occur. Actions could include more/different loading zones or ways to accommodate driverless vehicles. Sound Transit is looking more broadly to understand how people move and the role of high-capacity transit.

Results of Risk Assessment Workshops

Kathy Leotta (Sound Transit)

See presentation slides, “Sound Transit 3 Risk Assessment.” Additional information and responses to panel questions were as follows:

- ***Acceptable level of risk.*** Sound Transit does not have a policy for defining what risk level is acceptable. However, risk needs to be viewed in total—one large risk might not be as bad as multiple small risks. Risks identified at the 3 percent design stage might be avoided entirely. As design progresses and the project becomes more certain, the risks are clearer. Once the project begins and risks unfold, the agency needs mitigation strategies. Sometimes even severe risks can be managed with mitigation.
- ***Communication with the Board.*** Risk is communicated in various ways, often on a case-by-case basis. The staff briefed the Board about changes made to projects as a result of the recent risk assessment. The risk assessment also identified some opportunities to reduce cost.
- ***Discussion with jurisdictions.*** Some of the changes to projects made as a result of the risk assessment were discussed with local jurisdictions, but this was not done with all project changes. Once project development begins, all the details, including risks, will be discussed with jurisdictions.
- ***Unknown risks.*** In Sound Move, concerns were discovered about unstable soils for tunneling. Sound Transit learned from this experience and did better to account for these conditions in ST2. Risks such as these are not known until engineering work begins.
- ***Collaboration on geotechnical issues.*** Sound Transit already knows a good deal about the conditions for building in the region. As specific alignments are identified, the agency will work with other

agencies, such as the Washington State Department of Transportation (WSDOT), that can provide additional insights on sensitive areas.

- **Future risk assessments.** There are no plans for a third risk assessment workshop. If the ballot measure passes, each project will have its own risk assessment.

Panel comments:

- **View of risk.** Risks are uncertainties that give planners a way to estimate potential delays and costs.
- **Good practice.** Conducting risk assessment at this early stage of planning is a good practice.

WSDOT Acting Secretary Roger Millar

- Acting Secretary Millar thanked the panel for providing their time and expertise, and for asking useful questions.
- **Partner with transit.** WSDOT is a willing partner with Sound Transit on integrating transit and exploring opportunities for using right-of-way, such as bus on the shoulder of highways and BRT on Highway 522.
- **Concerns.** The Acting Secretary said he is always concerned about the integration of transportation and land use. Investments need to consider equity, the economy and the quality of life.
- **Capacity.** Although there is a possibility that agencies will “steal” staff from each other, the work force will show up for construction. Organizations across the world are looking to Washington for the activity here. Sound Transit has a good record for staying on schedule and on budget.
- **Federal funding opportunities.** Federal funding is increasingly not available; there will not be 50 percent federal funding anymore. If a project makes sense, local voters will have to fund it.
- **Plan complexity.** The easy projects have been done. The ST3 program is robust and can pivot to keep work going as needed.
- **Agency collaboration.** Sound Transit has done a good job collaborating with other jurisdictions. WSDOT can provide additional training in innovations with partners.

Assumptions on Operations, Maintenance Bases and Yards

See presentation slides, “Operations and Administration Committee: ST3 Draft System Plan.”

Light Rail

David Beal (Sound Transit)

- **Facilities for complete ST3 plan.** By 2041 when ST3 is complete, there will be four maintenance facilities (Forest Street, Bellevue, and a new facility each in the north and south) for a total of 460 light rail vehicles. Two facilities will be heavy maintenance facilities, including paint and body shops, and two will be satellite facilities.

ST Express and BRT

David Huffaker (Sound Transit)

- **Connections with light rail.** ST Express platform hours will decrease as light rail service increases from 724,000 platform hours now to 600,000 platform hours maintaining today’s existing level of

service. Some Pierce County service will continue to go to downtown Seattle, and Lakewood service will continue to go to SeaTac.

- **Integration at Kent-Des Moines.** Sound Transit is incorporating the lessons from the University of Washington station and planning for more comprehensive bus-rail transfer facilities at Kent.
- **Partners and maintenance.** The transit partners for bus service are King County Metro, Pierce Transit and Community Transit. Each has its own maintenance facilities. Sound Transit has been using their excess capacity. However, since each partner expects to need more of its own facilities, Sound Transit will add one bus base in ST2 and plans one for ST3. Sound Transit is also exploring other possible partner opportunities and private operations.
- **Risks.** The risks include finding a location for a new bus base and the timing of having to vacate the bus bases owned by partner agencies.

Passenger Access and Integration with Transit Partners

Stephen Hunt (King County Metro), Roland Behee (Community Transit), Tom Hingson (City of Everett – Everett Transit), Chris Rule (Sound Transit)

King County Metro

See presentation slides, “Integration with Transit Partners: King County Metro and Sound Transit.” Additional information and responses to panel questions were as follows:

- **Connections with light rail.** Metro is aiming to extend the reach of light rail in all directions with bus service. It assumes many riders to the Northgate station will not end their trip there.
- **Ending bus routes in downtown Seattle tunnel.** The changeover of buses from the tunnel to the street will be complete before ST3 projects are implemented. The City of Seattle is coordinating a Center City Mobility Plan with transit partners on integrating service to maintain mobility once buses are on city streets.
- **ST3 early investments.** Several early investment possibilities would help increase bus ridership. These include capital improvement for Rapid Ride, and bus-on-shoulder routing.
- **Budget for integration.** There is not enough in the ST3 budget for full integration. To realize the full long-range plans for all local transit providers (including Metro’s Long-Range Plan) will require additional funding, both for the service levels envisioned and the supporting capital infrastructure. These plans will help improve integration. The question is how do we share the responsibility of integration and support each other’s role?

Community Transit

- **Long-range planning.** Community Transit has been looking at its future market, major employment centers and residential areas, and the opportunity to reconfigure bus service when light rail begins serving Snohomish County. The agency is now invested in I-5 commuter bus service to downtown Seattle and the University of Washington. When Lynnwood station opens, the agency would reconfigure the I-5 service to better connect centers inside Snohomish County and to serve LRT at Lynnwood.

- **Discussions with Sound Transit.** Community Transit is providing information on the number of routes and buses that will serve light rail stations, and the need for bus bays and bus staging areas for both ST2 and ST3. Discussions have included the infrastructure for east-west service to bring riders to stations.
- **Continuing ST Express service.** Community Transit is a strong advocate of ST Express level of service and its importance to feed light rail stations. The light rail stations will double or triple the number of passengers at some locations, requiring both Community Transit and Sound Transit bus services to meet demand.
- **Bus-rail integration.** Community Transit is concerned that the bus transfer facilities at light rail stations be scaled adequately and understands that Sound Transit’s modeling shows the preponderance of riders will come by bus. The intermodal facilities need to be well designed to make transfers easy and efficient. The N-07 and N-08 projects for bus-only or bus-bike overpasses are vital infrastructure. Without these overpasses, buses serving stations will get stuck in traffic. The \$5 million allocated for bus transfer facilities does not address these projects. In scenarios that would serve Boeing/Paine Field, future integration planning should work to connect with the multi-agency bus connections established at the new Seaway Transit Center in southwest Everett.
- **Early implementation.** Community Transit is encouraged to see early implementation projects such as the I-5 hard shoulder running described in ST3.
- **Integrating transit as light rail is developed.** Community Transit has not planned to provide significant service to the Northgate station, but the recent performance of I-5 traffic suggests that the agency may continue to evaluate this option as we get closer to the 2021 Northgate Link opening. Once light rail starts serving Lynnwood, Community Transit will need additional staging areas—which Sound Transit is designing into the Lynnwood station. The big need, though, will be for east-west infrastructure.
- **Ridership at Lynnwood.** Sound Transit projects 18,000 people per day will come through the Lynnwood station and that 80 percent will come by bus. There are currently fewer than 2,000 parking spaces there. Some riders will be new, but also many current Community Transit riders will use the light rail to get a faster ride. Community Transit sees a need for ST Express to help serve the number of connecting bus riders.

City of Everett – Everett Transit

- **Everett station integration.** This is an active transfer facility served by five transit agencies. Everett Transit is well integrated with the station but will need a good transition from bus to light rail. Everett Transit will have to double its fleet size and more than double its parking to serve the projected number of Sound Transit riders. The City would also be supportive of a station closer to downtown Everett.
- **Development at Everett station.** The business owners in the area have formed the Everett Station District Alliance to promote development. The city’s Comprehensive Plan increases the area’s height limit to 80 feet and allows multifamily development. Vibrant growth is expected in the area.
- **Everett Transit’s role.** The agency is a “first and last” transit for many riders. North of the Sound Transit area, Everett Transit connects riders to Everett Community College.

Panel comments:

- **New riders.** Information on ridership has been on total ridership. It would help to know the number of new riders expected, especially given the discussion about transfers between bus and light rail.
- **Integration needs.** Someone needs to own the need to integrate bus and rail or it will not happen. It is not clear how the needs identified translate to set-asides in ST3. People who might use light rail, such as at Ash Way, will be looking for parking. Is it possible to work with nearby property owners, such as strip malls?

Peter Rogoff, Sound Transit CEO

- **Comment period.** The comment period for the ST3 Draft Plan is bringing input from the public and local jurisdictions. Sound Transit is urging that all comments be submitted in April so the Board can review them in May and be ready to make final decisions and send documents to the attorney general in June to get on the fall ballot.
- **Concerns so far.** The major concerns expressed to date are:
 - **Delivery times.** The estimated schedule is based on Sound Transit's experience and the capacity of other transit agencies. The agency is reminding jurisdictions that they can help speed up siting and environmental processes, and by allowing multiple shifts to work, even if it creates noise in residential areas temporarily.
 - **Financial capacity.** The ability to generate tax revenue in each subarea is a limiting factor in terms of the overall schedule. For example, the construction of the new downtown Seattle tunnel for the expansion to Ballard depends on the tax capacity in North King County. It might also be possible to develop public-private partnerships or other ways to finance projects more quickly.
- **Scale of the work.** Because the Draft Plan involves multiple projects taking place at the same time, Sound Transit will need to involve many third parties, such as contractors and public-private partnerships.
- **Bus-rail integration.** Sound Transit has a good working relationship with transit partners. The joint public open houses on ST3 and King County Metro for its Long-Range Plan have worked well. There is clearly a need for more robust bus-rail integration, as the number of riders at the University of Washington station wanting to take light rail to the Mariners' opening game demonstrated.
- **Parking.** Sound Transit is talking with the University now on what they might allow in the adjacent parking areas. The Board will be discussing charging for parking at stations. Sound Transit will look at cost effectiveness measures for parking. Ideally, riders would connect by transit from home, but sufficient bus service has to be available. Also, many riders need a car to take children to child care and school, visit elders in nursing homes, etc. Sound Transit does not want to lose riders because parking is not available.
- **Infill stations.** Graham Street and Boeing Access Road are two possibilities for infill stations. However building on existing lines is challenging. It is easier to add more parking where Sound Transit already has some.

Panel request:

- **Request for Communication with the Citizen Oversight Panel.** Panel members were interested in seeing any relevant reports or comments from the Citizen Oversight Panel.

Public Comment

Victor Bishop, Eastside Transportation Association

- Mr. Bishop provided two papers. The paper titled “How People Really Choose to Travel Today” is from July 2015. It discusses ridership and risk factors, looking at Central Link light rail from downtown Seattle to SeaTac, and comparing the ridership to the capacity of buses on the high-occupancy vehicle (HOV) lanes of I-5. It concludes that Link carried 1,900 people per hour in the PM peak period, while HOV lane buses and carpools carried 6,950 people.
- Mr. Bishop said that the second paper gives the Eastside Transportation Association’s estimates of the capacity of the HOV lanes, and concludes that the lanes already carry the number of people Sound Transit says light rail will carry in the future.

John Niles

- Mr. Niles said he has been influenced by the Coalition for Effective Transportation and articles on transportation planning of the Puget Sound Regional Council (PSRC). He said the coalition asked local officials five questions and has posted the results at a website called soundtransit3.us
- Mr. Niles questioned whether it is a good idea to plan ST3 given that ST2 is not yet done, and asked where the no-build option is for ST3. He said that we do not yet know whether our region needs a light rail system with four-car trains or a BART-sized system. He said that Sound Transit promised 100,000 riders in 2010 but has not yet achieved that number.

Jan Young, Save our Trail

- Ms. Young said her organization has met with Sound Transit in the last two months about their concerns about putting transit on the Cross Kirkland Corridor in Kirkland and has suggested alternatives. They are concerned that a Wilburton station and Kirkland park-and-ride appear to put transit on the trail. They question the cost per rider for this project.
- She said her organization is pleased with the early deliverable of BRT on the shoulder of I-405. Her organization suggests extending the BRT to Kingsgate park-and-ride, and conducting a high-capacity transit study to extend it to Totem Lake.
- Ms. Young said she would not support ST3 if it includes any plans or studies that support transit on the Cross Kirkland Corridor.

TUESDAY, APRIL 12, 2016

Project Scheduling and Phasing

Mark Scheibe (Parsons Brinckerhoff)

See presentation slides, “ST3 Expert Review Panel: Overview of Project Schedules” and a handout titled “Phase Gate.” Additional information and responses to panel questions were as follows:

- **Phase gate.** The phase gate process sheet shows the phases of a Sound Transit project and the Board information and action steps in each phase. Right-of-way acquisition usually begins about halfway through final design. Sound Transit does not begin construction until all the right-of-way has been acquired. However, there may be an early works program while right-of-way is being acquired. The project schedules include 10 to 15 months of float as a contingency for use at any point.
- **Contracts.** Sound Transit has assumed the design-bid-build approach in producing these schedules. There are usually separate civil and systems contracts, often with multiple civil contracts.
- **Segmenting longer projects.** Sound Transit has divided Lynnwood to Everett into two segments: Lynnwood to 128th SW and 128th SW to Everett Station. The initial project development and Environmental Impact Statement (EIS) for the two segments would be done together. If transit service were started on the first segment, it would probably not increase the time for the whole project since the front end development for both segments would be done together and the construction of the second segment would be underway when the first segment opened.
- **Timing for downtown tunnel.** Work on the second downtown Seattle tunnel for the Ballard segment would start before other parts of that segment since tunneling takes a long time. It would involve multiple stations—one deep mined and the others cut-and-cover. The work would have timing limitations around holidays. Using two boring machines might be a way to speed up the tunneling, but that approach would be the contractor’s decision. The machines are not an off-the-shelf item and not easy to put in and out of the ground.
- **Comparison to typical light rail project.** Sound Transit’s scheduling is similar to what is typical nationally for light rail (10 to 11 years). However, Lynnwood to Everett is estimated to take about 19 years since the segments is three times as long as other segments and a lot of the alignment is at-grade and aerial. Regarding other time elements, the FTA has recently streamlined its process to seek funding. The State Environmental Policy Act (SEPA) process takes about the same length of time as the National Environmental Policy Act (NEPA) process.
- **Construction for BRT projects.** For the BRT projects, the construction includes widening the state highway to run BRT on SR522, and building station areas and parking.
- **Opportunities for streamlining.** The schedules are based on Sound Transit’s experience. There are opportunities to do more streamlining, however. Sound Transit’s CEO is leading in-house meetings on ways to shorten the projects’ duration. The cumulative effect of streamlining methods might be to shave off four to five years of the entire ST3 program, but probably not more than that.
- **Work in waterways.** Both the West Seattle and Ballard segments involve work in the water—Duwamish River and Salmon Bay, respectively. This work has to be scheduled in the winter so that it does not interfere with fish passage. If one of the projects missed its winter window, it would have to wait a year to continue.

Panel comments:

- **Construction time.** The 19 years for Lynwood to Everett seems different than other information the panel has seen.
- **Streamlining.** The schedules look like a worst case. There should be opportunities for innovative scheduling. The panel would be interested to learn about Sound Transit's approaches to streamline or tighten the schedules. It might be useful to get information from WSDOT on scheduling for complex projects and their methods for streamlining.
- **Public information on timing.** The "Project Delivery" sheet is a good communication with the public. It would be even better if it included examples of some of the timing challenges, such as the fish window for work in the water. The public's desire to speed up Sound Transit projects should also translate to interest on the part of jurisdictions to speed up the permitting process.

Current and Planned Public Outreach Activities

Geoff Patrick (Sound Transit)

See presentation slides, "ST3 Draft Plan Public Involvement." Additional information and responses to panel questions were as follows:

- **Online survey.** There have been approximately 18,000 responses to the survey so far. Much of it is a rating scale to choose the highest priority projects. There is also an open-ended opportunity to comment.
- **Virtual public meeting.** Sound Transit has tried this technique in the past and did not find that it worked well. The agency points people who cannot come to a public meeting to the website and online survey.

Panel comments:

- **Communicating bonding limits.** The information for the public on why the projects will take so long does not mention the limits of bonding and that this is a constitutional limitation. The community does not understand that this is one reason why Sound Transit cannot begin all the projects immediately.
- **Ballard light rail project costs.** The information for the public also does not explain that the cost of the new downtown Seattle tunnel is part of the Ballard project, though it would benefit the entire light rail line running south from downtown to Tacoma.

ST3 Financial Planning

Brian McCartan (Sound Transit)

See presentation slides, "March 24 Draft ST3 Plan for Public Comment: Financial Plan." Additional information and responses to panel questions were as follows:

- **Tax revenues.** Regarding the rental car tax, there would be no increase for ST3. Regarding an employer tax, the Board did not want to pursue using this tax. ST3 would use the Sales and Use Tax, MVET, and property tax.

- **Federal funds.** The assumption of 11 percent federal funds is \$4.6 billion, with \$4.1 billion in capital funds and the rest in FTA formula funds.
- **Cost to households in taxes.** For communications with the public, Sound Transit is providing a cost in increased taxes for a typical adult and a typical household per year and month. There may be other ways of looking at the cost to taxpayers, but Sound Transit's experience is that it is better to put out a consistent number and to answer specific questions as they arise.
- **Stress tests.** Initial stress tests have shown that the program for ST3 could absorb the level of recession seen in 2008. In that recession, taxes dipped 15 percent from prior years. Sound Transit is now building a dynamic model (Monte Carlo) risk assessment to test multiple variables. This will be done in May.
- **Capacity issues.** Initial analysis shows that even though the ST3 projects overlap, most of the overlap is when projects are still in the planning and development stage. The peaks would be in 2021 for Ballard and 2025-26 for Everett. Staff have started to review staff and consultant capacity and found that the peaks are similar to those in the capital spending chart but shifted earlier for the design and planning activities. It will require good hiring and mobilization.
- **Jurisdiction capacity.** Another possible constraint is the capacity of other jurisdictions and partners. WSDOT, for example, has their own capital programs staff.
- **Construction capacity.** PSRC data on projected construction retail sales show that Sound Transit is a small percentage of the overall construction work in the region. The key is how fluidly the appropriate private sector resources would flow into the region. Not all industry capacity is appropriate for constructing large transportation projects. Public-private partnerships are a possible way to get new capacity through encouraging larger international firms to bid.
- **Fare revenues.** Fares are distance-based up to \$3, with many variations in the region. Currently, Sound Transit has between 20 percent and 30 percent farebox recovery, although University Link so far is closer to 40 percent. For ST3, farebox revenues are estimated by multiplying the number of riders by the average fare per boarding, rather than a trip-level calculation. With ST3 the percentage might decrease because there will be fewer riders going to the ends of the system. Transfers have not been figured in.
- **Financing and scheduling.** Ballard and Everett light rail are the two big projects that will push both the capacity of the industry and the financial constraints. To do them both in 15 years would reach Sound Transit's debt limit. The program as identified now has some room to tighten the timelines, but tightening Everett and Ballard would change the financing costs. The staff is running scenarios for the Board to help them understand the financial constraints.

Panel comments:

- **National context.** It would be useful to overlay a national economic and construction forecast on the graphs of the regional outlook to get a broader picture.
- **Vocational education.** It might be useful for Sound Transit to work with regional vocational/technical schools on an education program for construction jobs. Given the long time period of Sound Transit construction, these jobs could be good options for young people.

Environmental Processes

Karin Ertl (Sound Transit)

See presentation slides, “ST3’s Environmental Context.” Additional information and responses to panel questions were as follows:

- **Discussions with FTA.** In the context of “linking planning and NEPA” regulations, Sound Transit has had meetings with FTA on how Sound Transit’s long-range plan and ST3 processes are meeting the requirements set forth in the regulations, and has also talked with them on ways to streamline the future NEPA process for ST3 projects, such as a carryover of plan-level ST3 decisions on purpose and need, and alternatives (e.g., mode) into project-level environmental review.
- **Work on I-405.** WSDOT has been creating NEPA documents by project as they are implemented.
- **Work in navigable waters.** Sound Transit will coordinate with the Coast Guard as early as possible on the bridges for the West Seattle and Ballard projects.
- **No Action.** A No Action alternative is required by SEPA and NEPA, and was evaluated as part of the Long-Range Plan Supplemental EIS (a plan-level EIS required by SEPA).

Panel comments:

- **Review documents.** Using independent review documents is an important tool for advancing segments of a large project, especially where some segments might be controversial, as it enables advancing on the noncontroversial segments.
- **Importance of purpose and need.** In moving from planning to NEPA, the purpose and need are key so that the agency identifies the usefulness of alternatives based on the purpose and need.
- **Baseline.** The baseline needs to be established as soon as possible so the agency can identify how far the plans are reaching. It is FTA’s prerogative to establish the baseline, and best to do early.
- **No-build alternative.** Sound Transit should clearly define the no-build alternatives but do so at the plan and program level.
- **Partnerships.** Sound Transit should create strategic partnerships with local jurisdictions and agencies to maximize opportunities for partnering on mitigation, land-banking and resources.
- **Water permits.** Sound Transit should link NEPA to Section 404 permits (Clean Water Act) as early as possible for the projects that involve work in water.

Public Comment

Dick Nelson

- Mr. Nelson said that the letters to the panel from Sound Transit and PSRC show a misunderstanding of least-cost planning and its fundamental principle of a fair comparison of all reasonable alternatives. The costs and benefits of each alternative across all modes should be assessed; the alternative that gives the most benefit for the least cost should be the one preferred; and the public should be informed about all the alternatives.
- Mr. Nelson believes that ST3 does not meet these requirements of least-cost planning. He offered to hold a seminar for the panel, Sound Transit and PSRC on least-cost planning.

Will Knedlik

- Mr. Knedlik thanked the panel for their service and for focusing on cost transparency.
- Mr. Knedlik said he was concerned that the panel cannot fulfill its duties required by state law. His concerns included that the panel was suggesting campaign advice for an ST3 ballot measure and had blamed the legislature for inadequacies of the plan, and that the chair had suppressed questions on these issues.
- He said that Sound Transit's Citizen Oversight Panel had received a briefing by staff on construction costs, and was concerned that given industry capacity, the cost of Sound Transit bids will increase by 20 – 30 percent, as have bids for other government projects.
- He was concerned that the panel's analysis of the ST3 finance plan was superficial, as evidenced by notes of a conference call that some panel members had with Sound Transit staff on the finance plan, and that the panel has not reviewed the likely adverse impacts on the region. He said that the panel was violating state law and suppressing information.
- Mr. Knedlik said that ST3 was not ready and not reasonable, and questioned whether the panel's work was part of a cover-up.
- He urged the panel to hold its meetings at Sound Transit's offices, instead of incurring the expense of renting a hotel meeting room, and that it should televise its meetings.
- Mr. Knedlik will provide the panel with materials he provided to PSRC.

John Niles

- Mr. Niles said that the \$8 billion from ST2 that Sound Transit proposes rolling into ST3 should be used to fund the no-build alternative or other important uses.

Bill Popp

- Mr. Popp said he was concerned about the capacity of the proposed system and that it is not high-capacity compared to bus.
- He said different numbers have been given for the light rail system's capacity—16,000 and 12,000. He said that the downtown Seattle tunnel can handle only 12,000 passengers and that 16,000 would be "crush load," which is not the type of system people will want to ride. However, the bus system in the tunnel can handle 15,800.
- Mr. Popp had a similar concern about the capacity for East Link, since the maximum number of light rail passengers would be less than the number that the current BRT system can carry.
- He suggested that the funds from ST2 be used for the current bus and park-and-ride system.

Panel Discussion and Next Steps

- **Number of cars for light rail trains.** Regarding changing the light rail system to six-car trains to accommodate more passengers, Mr. Beal said that the current Seattle tunnel can only handle four-car trains, as it was built as a bus tunnel. Longer trains can also be more challenging for at-grade alignments. The staff does not believe the Ballard line would need more than four cars. The system needs to be interoperable.

- **Panel letter.** Mr. Howell reviewed his notes and listed the following topics as comments from this meeting that the panel might want to put in a letter to its appointing authorities:
 1. Transparency in public information, including:
 - Greater clarity for ridership numbers, particularly for the Ballard light rail project
 - Explaining that financial requirements impact the phasing of projects
 - Clarifying that taxes for Sound Move and ST2 would continue, and the new taxes for ST3 would be in addition
 - Provide the travel time and fares for sample trips.
 - Provide multiple levels of information to the public, for those who want a quick overview and for those who want a detailed look.
 2. Comments on the importance of allowing mixed use development as part of the TOD policy.
 3. Positive comments on the risk assessment work.
 4. The level of communication with jurisdictions and agencies about the risks.
 5. The possibility of work sharing agreements for integration of staff between agencies.
 6. Requesting more information about the impact of taking buses out of the downtown Seattle tunnel in ST2.
 7. Whether the ST3 plan accommodates the bus-rail integration that local transit will need.
 8. Positive comments on Sound Transit’s discussion and work with local transit partners.
 9. An information request about how people will arrive at the light rail stations—the mode split.
 10. Estimated travel times for the draft system plan; the panel requested in an earlier letter.
 11. Request for a summary or notes from the Citizen Oversight Panel’s discussion of ST3 plans.
 12. Comment that the Board needs to understand the cost of providing different access modes to stations—parking stalls vs. pedestrian/bike vs. bus access.
 13. Request for the cost estimate of the SODO maintenance facility vs. the actual cost.
 14. Comparison of schedule-to-actual for large projects in Sound Move and ST2, and for similar large projects of WSDOT.
 15. Approaches Sound Transit is considering to streamline the schedules, and any examples the panel can offer from other jurisdictions.
 16. Have an outside analysis done on the schedules of four of the biggest ST3 projects, and a review of all ST2 and ST3 projects by phase and how they overlap.
 17. The opportunity to leverage jobs, training and education to increase the local labor pool and benefit the local economy.
 18. Early agency collaboration on environmental processes.
 19. Interest in getting information on the expected number of new riders.

There was agreement to draft an initial letter highlighting several issues that the Chair could present at the April Sound Transit board meeting. A second more detailed letter would follow. Mr. Howell will consult with the Chair and draft the first letter and circulate it to the panel members next week.

- **April Board meeting.** Mr. Jacobson and/or Mr. Howell will make a presentation to the April Sound Transit Board meeting on the main issues and comments that will be in the panel’s letter.

- ***Next panel meeting.*** It is anticipated that the written ST3 plan and finance plan will be presented to the Sound Transit Board at their May meeting. Holding a panel meeting in early June would give the panel access to these documents and the opportunity to comment before the June 23 Board meeting.