



West Seattle and Ballard Link Extensions

Stakeholder Advisory Group Meeting #5 – May 30, 2018

Meeting Notes

Agenda Item #1 – Welcome and introductions

Diane Adams, Facilitator, welcomed the Stakeholder Advisory Group (SAG) members to the group's fifth meeting. She recognized the group's work and progress since February 2018 and thanked members for their continued participation.

Agency directors, project leads and staff in attendance were:

- Cathal Ridge, Central Corridor Director, Sound Transit
- Diane Adams, Facilitator
- Jim Parsons, Consultant Project Manager, HNTB
- Ron Endlich, Project Director, Sound Transit
- Kate Lichtenstein, Senior Project Manager, Sound Transit
- Stephen Mak, High Capacity Transit Development Manager, Sound Transit
- Leda Chahim, Government & Community Relations Manager, Sound Transit
- Carrie Avila-Mooney, Government & Community Relations Manager, Sound Transit
- Andrea Burnett, Community Outreach Supervisor, Sound Transit
- Sandra Fann, High Capacity Transit Development Manager, Sound Transit
- Wesley King, Central Corridor Operations Director, Sound Transit
- Jeanne Krikawa, Station Area Planning, The Underhill Group
- Sloan Dawson, Sound Transit
- Lauren Swift, Sound Transit
- Robin Gold, Sound Transit
- KaDeena Yerkan, External Engagement, Envirolssues

SAG members in attendance were:

- Andres Arjona, Community Representative – Ballard
- Becky Asencio, Seattle Public Schools
- Brian King, Community Representative – West Seattle
- Bryce Yadon, Futurewise
- Colleen Echohawk, Chief Seattle Club
- Dave Gering, Manufacturing Industrial Council
- Deb Barker, Community Representative – West Seattle
- Erin Goodman, SODO Business Improvement Area
- Ginny Gilder, Force 10 Hoops/Seattle Storm
- Greg Nickels, Former Mayor of Seattle
- Hamilton Gardiner, West Seattle Chamber
- Jon Scholes, Downtown Seattle Association
- Katie Garrow, Martin Luther King Labor Council
- Larry Yok, Community Representative – Chinatown-International District



- Maiko Winkler-Chin, Seattle Chinatown-International District Preservation & Development Authority
- Mark Nagle, Expedia
- Mike Stewart, Ballard Alliance
- Paul Lambros, Plymouth Housing
- Peter Schrappen, Northwest Marine Trade Association
- Robert Cardona, Community Representative – Uptown
- Savitha Reddy Pathi, Wing Luke Museum of the Asian Pacific American Experience
- Scott Rusch, Fred Hutchinson Cancer Research Center
- Walter Reese, Nucor Steel
- Warren Aakervik, Community Representative – Freight
- Willard Brown, Delridge Neighborhood Development Association

NOTE – the following SAG members were not in attendance:

- Abigail Doerr, Transportation Choices Coalition
- Julia Park, Community Representative – Ballard
- Ron Severt, Space Needle
- Steve Lewis, Alliance of People with disAbilities

Agenda Item #2 – Previous meeting summary

Diane noted that the summary of SAG meeting #4, which includes the SAG’s recommendations on which alternatives should be carried forward into Level 2 evaluation, was added to SAG members’ binders.

Agenda Item #3 – Level 1 feedback

Andrea Burnett, Sound Transit, provided an overview of recent community outreach efforts, and previewed upcoming events.

Approximately 300 people in total participated in the first round of neighborhood forums, which were held in six locations along the WSBLE project corridor in April and May 2018. The next round of neighborhood forums is being planned for September 2018.

In addition to the neighborhood forums, Sound Transit held more than 30 community briefings in March, April and May. Key themes of comments that emerged from the briefings included:

- Support for visualizations of alternatives in Level 2 screening.
- Concern about preserving unique neighborhood characteristics.
- Encouragement to look at multimodal connections at each station.
- Concern about service delays with a moveable bridge over Salmon Bay.

The project team will be sharing information about the project at a variety of fairs and festivals this summer and fall, as listed in the [PowerPoint presentation](#). Andrea encouraged SAG members to stop by the Sound Transit booth at events in their respective neighborhoods.



Agenda Item #4 – Level 1 recommendations

Cathal Ridge, Sound Transit, introduced the Level 1 alternatives evaluation process, before handing it over to the segment leads to review each segment in detail. This included summaries of feedback received during Level 1, the Elected Leadership Group's (ELG) recommendations of which alternatives should be carried forward into Level 2, and potential refinements to be studied.

Per the ELG's recommendations, the alternatives listed below were carried forward into Level 2. These alternatives will be refined based on feedback received at the neighborhood forums, as well as from the SAG and ELG.

West Seattle and Duwamish

- Oregon Street/Alaska Junction
- Pigeon Ridge/West Seattle Tunnel
- West Seattle Golf Course/Alaska Junction (tunnel)

SODO and Chinatown-International District

- Surface E-3
- Massachusetts Tunnel Portal
- First Ave alignment
- Alternative station location

Downtown

- 5th/Harrison
- 6th/Boren/Roy

Interbay and Ballard

- Elliott/15th/16th/fixed bridge
- West of BNSF/20th/17th/fixed bridge
- East of BNSF/14th/movable bridge
- West of BNSF/20th/17th/tunnel
- Elliott/Armory Way/14th/tunnel

Questions (Q) from SAG members and answers (A) provided by Sound Transit staff are shown below.

Q: What is the feasibility of using Kinnear Park as a tunnel portal location?

A: Sound Transit is currently analyzing potential tunnel portal locations in that area. There would likely be 4(f) considerations if Kinnear Park would be affected.



Q: What conversations did the ELG have prior to recommending that the 20th Avenue tunnel alternative not be carried forward into Level 2?

A: The ELG discussed some of the additional challenges of the Ballard Station at 20th Avenue (such as a longer tunnel) and noted greater potential in other alternatives to carry forward.

Q: What is the status of a movable bridge over Salmon Bay?

A: The movable bridge is part of the representative alignment and will continue to be analyzed.

Q: What feedback themes has Sound Transit heard from the Queen Anne community?

A: Station access has been a common theme heard from the Queen Anne community.

Q: How does the potential removal of the Magnolia Bridge impact the current suite of alternatives?

A: Sound Transit is aware of the City of Seattle's Magnolia Bridge planning study, and is working with the city to understand the compatibility of the projects.

Agenda Item #5 – What to expect in Level 2

Cathal Ridge reviewed the community engagement and collaboration schedule and highlighted recent schedule updates. An additional SAG meeting will be scheduled in September to provide time to process the Level 2 results before making recommendations.

Cathal then walked through the project's purpose and need statements, and shared updates to the Level 2 evaluation criteria and measures. The Level 2 evaluation criteria and measures are included in the [PowerPoint presentation](#).

Next, Diane Adams transitioned the meeting into small group presentations and discussions. SAG members worked in groups of four to six to discuss the Level 2 evaluation criteria, measures and methods.

Questions (Q) and comments (C) from SAG members and answers (A) provided by Sound Transit staff during the breakout group discussions included the following:

Reliable service

Q: Is there a crossover location between the lines?

A: Sound Transit is evaluating locating a crossover in the SODO section.

Q: Does this measure include station infrastructure, like when an escalator goes out?

A: This measure is focused on reliability of train operations. Escalator reliability is not addressed by this measure. That issue will be addressed as part of station design.

Travel times

Q: Will travel times incorporate the variance of a bridge opening?

A: This measure focuses on travel times when the bridge is not open. Travel time variance due to potential bridge openings is addressed in a separate measure (Reliable service).



Q: Travel times will change if you have at-grade elements, right?

A: Potentially. This is dependent on whether the track right-of-way is exclusive (i.e. no grade crossings).

Q: How does the grade of a non-movable bridge vs. a tunnel affect travel times?

A: The grades are likely to be similar and, therefore, travel times would likely be similar.

Q: How are surface crossings measured?

A: These are addressed by the reliability measure noted above. If the guideway is at grade, grade crossing gates would typically be required, speeds would be slower and travel times would typically be longer.

Q: Except for downtown, the stations are about 2 minutes apart, right?

A: It varies by segment.

Q: Do you run extra trains when there are Mariners games?

A: Yes, and longer trains.

Q: How much have you learned from your earlier lines with regards to how frequently car-train collisions occur? Is there a solution Sound Transit is looking at?

A: With the exception of the existing grade crossings in the SODO section, the representative project assumes full grade separation between train and vehicle traffic. Some of the alternatives in SODO include potential elimination of existing grade crossings.

Regional connectivity

No comments or questions.

Transit capacity

Q: Will headways change?

A: Headways in the existing tunnel will be reduced to three minutes.

Q: Does any of this duplicate the future north/south connections?

A: No. The new tunnel is consistent with the long-range vision for the system which is addressed in a subsequent measure (Accommodates future LRT extension beyond ST3).

C: It would be nice if these two measures reference one another in this document.

Projected transit demand

Q: Is the 10-minute walkshed as the bird flies?

A: No, this measure considers potential travel paths along existing roadways.

C: Walksheds in SODO are not realistic. I think the stations in SODO/Stadium are the most under-utilized and I think it's because the walksheds are unrealistic.

Q: Will you provide maps of the walksheds in future meetings?

A: Yes, this information can be provided.



Q: Do walksheds take topography into account?

A: Yes.

Q: Is that the same for the downtown stations?

A: Yes.

Q: Is PSRC's 2040 forecasted population used or the City's population forecast?

A: PSRC data.

C: The criteria should reflect that the PSRC is being used if it is indeed a PSRC forecast.

Q: Does the forecast consider all the new development in Seattle and that people don't own the same number of cars as they used to?

A: The Level 2 assessment only examines population and employment. The Level 3 assessment of ridership will also factor in projected vehicle ownership.

Regional centers served

C: In addition to future land use and density, current density in Ballard should be considered.

C: The goal should be to capture the current density and updating urban centers. The area around 20th Avenue has limited additional development potential. There is still the potential for additional development on and around 15th Avenue.

ST3 consistency

Q: When we talk about mode, route and general station locations, what types of variances are allowed?

A: A number of factors inform the response to this question including the items noted plus cost, schedule and operational considerations.

Q: Will costs be the most important evaluation measure?

A: The evaluation measures are not weighted.

Q: What is the importance of terminating in West Seattle with a north-south station alignment? Even if the station is oriented east-west, that would not preclude Sound Transit from extending south in the future.

A: Correct, although a north-south orientation might better facilitate a convenient future connection to the south.

Technical feasibility

Q: Regarding weighing and/or prioritizing criteria, what is the plan during Level 2 screening?

A: The evaluation criteria and measures will not be weighted. The goal is to understand the strengths and weaknesses of each alternative.

Financial sustainability



Q: How are costs for linear track determined?

A: We will be applying unit costs to estimated lengths of track to develop cost estimates.

Q: Will the analysis be done using 2018 dollars?

A: Yes, likely. The ST3 budget numbers will be inflated to the same year for comparison.

Q: How does Sound Transit plan to measure life cycle costs qualitatively?

A: O&M costs will be compared qualitatively among alternatives based on system operational requirements. Quantitative costs will be evaluated when there are end-to-end alternatives in Level 3.

Q: How does Sound Transit plan to budget for construction costs that will occur many years in the future?

A: The cost estimates will be based on the most recent cost data and the ST3 budget numbers will be inflated to the same year of data for comparison. The goal is to compare the costs of the various alternatives to each other.

Historically underserved populations

C: Transit oriented development (TOD) should be carefully balanced with maintaining existing businesses and land use, especially in industrial areas in SODO and near the Duwamish.

Q: What are the measures for improved access to opportunities?

A: Examples of opportunities include major employers, education centers and social service providers.

C: The list of opportunities should be expanded to be more exhaustive.

C: The SODO station would serve a limited number of residents. In order to capture the workers that SODO, and other stations, would serve, the criteria should be expanded — or separated into another criteria — to account for improved access to employment centers for working populations.

Q: The proposed station locations in Delridge are not within a 10-minute walkshed for historically underserved populations. Is there potential to move station locations to better serve these populations?

A: The stations would be within a 15-minute ride on connecting high-frequency transit.

Q: What are the 10-minute walkshed and 15-minute ride on connecting high-frequency transit based on?

A: They are used as the industry standard for time spent walking or taking transit to stations.

C: The City of Seattle's Race and Social Equity Toolkit is a good framework that should be leveraged by Sound Transit during the alternatives development phase.

C: In addition to walksheds and connections to high frequency transit, a 10-minute bike ride should be included in the analysis.

C: Construction costs are high in SODO and Interbay due to soil conditions and often make it infeasible to build affordable housing.

C: Walksheds should consider elderly populations who may walk slower than the industry standard.



Q: What is the end goal for the impacts to low income and historically underserved populations?

A: Station areas which serve a higher percentage of low income and historically underserved populations would score higher under this criterion.

C: If impacts to churches are included, the language should be modified to be more inclusive of other religions.

Station area land use plan consistency

Q: How do you apply percentages of those Urban Center and Villages that fall within that station's walkshed?

A: Using the Alaska Junction Station as an example, the amount of the West Seattle Hub Urban Village that falls within each option's 10-minute walkshed will vary. Industrial areas are not included in the percentage due to having a separate designation than urban centers and villages.

Q: How do you measure the rate of a 10-minute walk from the station?

A: A 10-minute walk at about a pace of 3 miles per hour is a consistent standard within the industry.

Q: Is there a specific definition for activity nodes?

A: Activity nodes are points of interest, gathering spaces, food banks, parks, museums, etc. They represent the cultural and civic fabric of the community.

Q: Is the exclusion of manufacturing or industrial areas from this measure of activity nodes deliberate?

A: Yes, as far as City of Seattle designated Urban Villages go, industrial/manufacturing areas are not included. This measure – compatibility with Seattle-designated Urban Centers and Villages – is about sustainable urban growth through support of TOD, station access, and modal integration.

Q: How are you identifying activity nodes? Especially with cultural institutions and cultural importance, how are you figuring out how that's considered?

A: We receive data from the City and as well as from King County mapped in GIS. In terms of identifying activity nodes, they are generally public facilities and do not include your favorite coffee shop or Red Mill burgers.

Modal integration

C: Bikes must be able to access station locations easily.

Q: Why are these factors measured in a percentage?

A: It's a proxy to evaluate how bike-friendly and pedestrian-friendly the network is. Quantitatively, the measure looks at the percentage of urban miles that will fit those criteria relative to overall roadway miles.

Q: What about areas that don't have bike infrastructure?

A: Measuring bicycle accessibility can also help identify the gaps in current bicycle infrastructure. Often if a station is in a good location based on other factors but the location does not currently provide good connectivity for bicyclists, there still may be ways to improve bicycle accessibility.



Q: Are there facilities on trains for bikes?

A: Yes.

Q: Are you looking at bike-share programs at these stations?

A: There is not a lot of capacity for bikes on transit currently, but there will be in the future service vehicles. Bike sharing is becoming popular and the assumption is that more riders would be biking to a station and either locking up bikes or using a bike share and leaving the bike at the station. In future phases, work will be done to identify space needs at the stations for bikes and bike shares.

Q: Do these measures overlay with the bicycle master plan?

A: Yes.

C: Timing of light rail against other modes of transit should be included in the evaluation. For example, you should take into account getting off light rail and missing the next connection by a small amount of time.

Q: Is modal integration looking at current versus future projections?

A: The evaluation is looking at the projected integration. In a given location, if you are close to a major corridor that suggests you will be able to seamlessly connect to the train, versus being three or so blocks away from a major transit corridor, then that transit environment is not as healthy without rerouting buses.

C: Barriers to completing the transfer are another consideration. For example, if you must cross a major street to get to transfer.

C: Need to define what "ease" is in relation to passenger transfers. For example, using Orca cards.

C: You cannot have people dropped off at a station and expect a 5-minute walk to a bus. That is very alarming.

C: There is a need to consider the experience from community members to evaluate this measure, and not just rely on a number/percentage.

C: The Federal Transit Administration (FTA) calculates the walkshed at 3 miles, another is 15 minutes. Maybe move towards 15 minutes for more consistency against what Sound Transit does so we can understand why Sound Transit is choosing certain metrics across projects. Consistency is a big issue.

C: If light rail is known to be more reliable and faster than the bus, I would walk longer than 10 minutes to a station.

Q: Why not a 15-minute walkshed?

A: A 10-minute walkshed is the industry standard and is considered to be the threshold most people are willing to walk. How far apart the stations are located is also a factor. For example, in Downtown, we are looking at five minutes because the walksheds overlap one another and it becomes difficult to see the differences with so much overlap.



Q: Does this evaluation consider grade?

A: Yes, grades are factored in the walkshed. For example, in Delridge, if your station is near a big hill, the walkshed is different whether you are on the flat end or the hill end.

Q: Is it worth adding Lyft, Uber or autonomous vehicles that are around the corner into modal integration?

A: That could be considered in the ease of passenger transfer, i.e., transfers between modes. The challenge is that TNC (transportation network company) vehicles can drop you off anywhere which is not like a particular bus route that is fixed. The challenge is in picking the point where the TNC vehicle drops a passenger off.

Station area development opportunities

C: The evaluation measures need to consider the flexibility in use of land. For example, in Interbay, there are certain developments that would not have happened if you chose a different location especially within a land use area that can change easily.

C: No area within the corridor should be exempt from TOD considerations.

Q: Is this evaluation measuring zoning changes?

A: Essentially zoning capacity as well as what the market could deliver.

C: Essentially, TOD is coming, and height limits are going higher.

C: Need to consider what happened after ST1 and ST2. Sound Transit knows TOD is going to happen and can see how it has impacted the areas near stations.

C: Need to identify what can be done around a station area that can benefit the community beyond transit and affordable housing, such as swimming pools or libraries.

C: The evaluation should not put affordable housing legislation enacted, such as Multifamily Tax Exemption (MFTE), in the same discussion and measures as legislation that has not been enacted, such as Mandatory Housing Affordability (MHA).

C: Affordable housing is everyone's goal.

C: The evaluation measures for affordable housing production need to be consistent (i.e. number of units or assigning a score).

C: In considering zoning in Ballard and Delridge, even though residential, these neighborhoods are zoned for multi-use. Sound Transit will have to hurry up. For example, in Delridge, multi-story developments have just replaced an entire neighborhood of single family homes. Sound Transit is going to have to recast the model by the time light rail is in service in 2030.

C: It has taken 20 years, but along the light rail route in South Seattle, the Othello Station is finally there, but it took a very long time.



C: Examining current affordable housing needs to be in the Level 2 criteria.

C: Sound Transit should examine development potential versus density.

Q: Are these requirements under Housing Affordability and Livability Agenda (HALA)?

A: Yes, MHA is essentially HALA. The measure is taking what is currently proposed in HALA up zones and the framework and applying that to development potential.

Q: Is Sound Transit looking at current affordable housing?

A: Affordable housing accessibility will be considered in the Level 3 evaluation.

Environmental effects

C: The impact to registered historic places should be consistent throughout the criteria. There are currently references to city, county and national registers.

C: Impacts of columns to adjacent properties should be included in the analysis.

C: The soils in Interbay and SODO are mostly fill and could present challenges during tunneling.

Q: What are archeological areas and how are the alternatives measured against each other?

A: They are areas that have a high probability for finding archeological artifacts. The measure looks at the total length of an alternative within these high probability areas.

Traffic operations

Q: Is reducing carbon emission due to reducing car capacity and parking considered?

A: Reductions to carbon emissions will not be quantified at this level of design and is not expected to be a key differentiator. This will be evaluated as part of the environmental impact statement.

Q: Do all boats have the right of way in the Duwamish and Salmon Bay?

A: There are limits on crossings during peak hours and exceptions for boats above a certain tonnage.

C: Turning radius limits for freight and buses must be considered when considering column locations.

C: The representative project in the Delridge area would significantly impact the 100 to 200 trucks per day driving through that area. Given how close the impacts would be to Harbor Island, it is difficult to imagine how they would be mitigated.

C: The evaluation of traffic impacts should be specific enough to compare lane restrictions to eliminating lanes.

Economic effects

C: It seems as though there is a focus on negative economic impacts. There are a lot of benefits, such as increased access to businesses, which should be considered as well.



Q: In terms of displacement, is the intent to focus on construction impacts or permanent impacts?

A: Both will be considered in the evaluation.

C: There is a wealth of quantitative research from the Freight Master Plan that could be used to inform the evaluation.

Q: What sorts of impacts will be considered under economic impacts?

A: Examples of impacts include business displacement and permanent access impacts to businesses.

C: Businesses that are dependent on their location for operations should be prioritized in the analysis.

C: Lost street parking, and its potential impacts on economic development, is balanced with the additional potential of customers arriving by public transit.

Q: What are the criteria and measures for economic impacts?

A: Scoring is based on considerations such as potentially blocked driveways, limits to access for businesses and restrictions to freight movement.

Q: What are Sound Transit's plans to coordinate with King County Metro?

A: We are working with them throughout the process and will continue to have conversations until transit restructures are in place.

Q: How are construction impacts measured?

A: They are qualitative during Level 2 screening and primarily covered under Environmental Effects.

Q: Are economic effects considering impacts that occur during construction? Or long-term impacts?

A: In this section, the focus is long-term impacts. Other criteria evaluate construction impacts.

C: Business impacts are important and should be quantified as early in the process as possible. One potential way to analyze business impacts would be to look at sales tax revenue to businesses located near construction projects of a similar scale.

Agenda Item #6 – Overview of ST3 operating assumptions

Cathal Ridge provided an overview of several key operating assumptions that impact the West Seattle and Ballard projects. While the SAG has focused primarily on the immediate project area thus far in the process, there is a suite of regional projects that set the context in which the West Seattle and Ballard Link Extensions will operate. Cathal provided an overview of the following:

- Operating plan: The ST3 plan includes three separate lines, truncating at Tacoma, Everett and Redmond. Transfers between these lines are facilitated at the SODO, International District-Chinatown and Westlake stations.
- Spine segmentation: To provide reliable service system-wide and reduce potential for delays, Sound Transit plans to split the longest line (Tacoma to Everett) into two segments.
- Balanced loads: Spine segmentation also allows for the passenger load to be spread out between the tunnels, adding capacity for future growth and improving reliability.



- Maintenance capacity: For the West Seattle extension to come online, it must be connected to a maintenance facility. Future maintenance facilities to the north and south will provide additional maintenance capacity when the full ST3 system is in operation.

SAG members asked the following questions and Sound Transit staff provided answers:

Q: Would the planned Everett extension serve Boeing's facilities?

A: Yes. The intent is to serve Paine Field.

Q: Does the maintenance yard between Federal Way and Tacoma need to be completed for the West Seattle extension to come online?

A: Yes. The planning process and construction is scheduled to be completed before the West Seattle extension is operational.

Agenda Item #7 – Next steps and next meeting

Diane Adams thanked SAG members for attending the group's fifth meeting. The next SAG meeting is scheduled for June 20 at Union Station.