

28 January 2016

Sound Transit Union Station, 401 S. Jackson Street Seattle, WA 98104

Dear Boardmembers:

We appreciate the opportunity to comment on the Sound Transit Phase 3 (ST3) system plan and governing policies. Sierra Club supports transportation policies that strengthen local communities, towns and urban centers, and promote equal opportunity, while reducing emissions of greenhouse gases (GHGs) and promoting transit systems that are well coordinated with convenient intermodal connections. We support a bold and visionary ST3 system plan that brings convenient, reliable, sustainable, and cost-effective transportation options throughout the entire Puget Sound service region. We urge the Sound Transit Board to develop a plan that is able to serve more neighborhoods of all incomes and demographics. The environmental, health, and fiscal costs of continued dependence on a fossil fuel and single-occupant-vehicle-based transportation system vastly overwhelm the expense of building quality mass transit for our future.

A set of policies and projects for ST3 that we can support enthusiastically will contain the following elements:

- * Invest in Multi-modal access funding to reduce reliance on Park and Ride access
- * Price Park and Ride spaces to better manage parking space demand
- * Select non-freeway alignments, which provide highest potential for transit oriented development (TOD) and affordable housing
- * Strategic phasing of projects to deliver timely benefits where need for transit and expected ridership are greatest, while subsequent expansions add value over time
- * Ballard/Downtown grade-separated project (C-01b with suggested modifications) is highest priority to provide the highest ridership in the system
- * West Seattle Alaska Junction/Downtown option C-03a initially, including a station at Delridge to connect with a Delridge BRT line best serves in a timely way both high-density West Seattle and Delridge corridor
- * Redirect SR-522 BRT to light rail connection at 130th Street Station via NE 125th Street to better connect Lake City Urban Village to light rail

- * Lynnwood/Everett option N-02b along Evergreen Way/SR 99 with connection to Paine Field via light rail spur or BRT
- * I-405 BRT option E-02b which includes more stops to enable higher ridership
- * Eastside rail corridor used for frequent electrified all-day transit service (either electric bus or light rail)
- * All-day every day Sounder service is most productive South Corridor service improvement

Key policies we believe should be part of the governing principles of the ST3 plan are described in more detail below. We then provide comments on specific candidate projects that offer rationale for the summary statements above.

Increase multimodal access funding

Sound Transit should increase funding for local transit and non-motorized access to high capacity transit by increasing both the overall allocation for the system access fund and the specific allocation for transit integration, access, and information.

Sierra Club helped Sound Transit to establish the concept of system or station access and dedicated funding to support it during the assembly of ST2 in 2008. Funds for this purpose were rolled back when revenues plunged relative to expectations during the Great Recession and its aftermath in 2009-11. It is clearly time to renew this effort with investment in system access that prioritizes local transit and non-motorized access.

Investments in transit and non-motorized access are an affordable, effective, and sustainable way to attract riders. Research shows that encouraging riders to access transit on foot or by bike can be a lower-cost way to increase ridership, and that in some locations, local bus service has potential to bring the most riders to stations. Parking, on the other hand, has a greater environmental footprint, and promotes automobile reliance. Evidence abounds that excessive parking leads to more driving.

http://www.citylab.com/commute/2016/01/the-strongest-case-yet-that-excessive-parking-causes-more-driving/423663/ https://www.washingtonpost.com/news/wonk/wp/2016/01/15/the-problem-

https://www.washingtonpost.com/news/wonk/wp/2016/01/15/the-problem-with-parking/

Pricing of parking is needed to better match smart investments with demand

We urge Sound Transit to decrease allowance for parking in each project and use pricing to better determine the quantity of provided parking spaces. Unpriced parking attracts too much vehicle traffic and reduces the attractiveness and likelihood of transit oriented development. Less space devoted to parking allows for changes in density around station areas over time as the light rail network is

built out. Excessive spending on parking disproportionately benefits higher-income commuters who choose to use transit. Low-income households in Washington are much less likely to own a car. Priced parking revenues contribute to multi-modal access funding.

Find ways to use existing capacity before building new capacity. Lease parking from partner agencies, jurisdictions, or nearby businesses, rather than building new structures, wherever possible. This is typically cheaper than construction, and becomes easier to dispose of parking when supply exceeds demand or station areas transform with dense, walkable residential and commercial development.

Price and manage parking at all park-and-ride structures and lots—existing and new, while building minimal additional parking capacity. In addition to encouraging carpooling and reducing the need for increased parking capacity, parking management can spread passenger loads throughout the day. This can lower operating costs by requiring fewer vehicles and drivers during peak periods. Pricing and managing parking can also help achieve social equity goals by providing predictable access to available parking and defraying the costs of building and operating park-and-rides. Without fees, these costs are fully borne by all users, including those arriving by foot, bike, or bus. Consistent with principles of equitable access, low income ORCA LIFT riders should pay a lower parking rate.

Region needs to implement full-cost, priced Road Usage Charge (RUC) system.

Sound Transit needs to work with partners such as Puget Sound Regional Council and Washington State Department of Transportation (WSDOT) along with elected officials to implement a RUC system that more accurately incorporates the cost of operations and maintenance of area roadways. This system needs to include congestion time-of-day tolling on all limited-access highways in the central Puget Sound area. Congestion pricing will enable BRT service on area highway HOV lanes to function more reliably. To be most effective and gain acceptance, the RUC would need to encourage fuel-efficient vehicles, mitigate burden on low-income drivers, and protect privacy.

Maximize Ridership and Potential for Equitable Transit-Oriented Development and Density

The ST3 system plan needs to explicitly include in its policies, projects, investments, and alignment decisions the means to maximize potential for equitable TOD and to create compact, walkable communities. Prioritizing equitable TOD also decreases reliance on travel by car, reducing single occupancy vehicles and greenhouse gas emissions. Sound Transit should maximize potential for equitable TOD in its project selections by:

• Selecting alignments and investing in station locations that can support mixed development.

- Building in sufficient funds for multimodal access and TOD development at each station.
- Connecting areas characterized by an existing mix of development and wellconnected street grids with frequent transit service.
- Prioritizing contracting with developers that will build affordable housing.
- Actively working to prevent residential and commercial displacement among lower-income households.
- Assembling land purchases to enable future development at an appropriate scale and adopting disposition policies that ensure land can be developed when stations are built or soon after completion.
- Considering access costs when evaluating alignments. Freeway alignments and other access-challenged alignments will require inclusion of multimodal access costs as mitigation.
- Selecting projects using criteria that place emphasis on ridership numbers and TOD potential around station locations.

Sound Transit can best provide reliable transit service that connects the most users with the most destinations if it focuses on reaching and connecting dense urban areas across the region. Sound Transit should focus on serving transit nodes with ample interconnection of services, as well as schools, hospitals, and large employment centers with high ridership potential.

Project phasing is equally important as project selection.

The need to meet climate and growth management goals through reducing GHG emissions and promoting compact, walkable communities with abundant transit options require delivery of major projects in the first decade of the plan. Strategic phasing of projects is necessary to deliver timely benefits to regional residents and enable subsequent expansion with extended lines and new junctions. An ambitious 25 year plan where nearly all projects come on line in years 22 to 25, for example, won't help the region achieve crucial near-term climate and growth management objectives. We need some major projects ready for service in a 6 to 10 year horizon even if the entire plan is staged over a longer period of implementation.

Early planning can inform decision making in ST3 and assist with priority phasing of projects to deliver cost-effective benefits to riders and the region's environment and activity centers. A focus on ridership and potential for equitable TOD will deliver beneficial projects in a timely way. Planning for contingent funding to further build out the system as opportunities allow through cost savings or matching funds can improve project delivery.

Climate mitigation objectives demand focus on GHG emissions reductions.

Since all transportation accounts for about 46 percent of state GHG emissions (http://www.ecy.wa.gov/climatechange/docs/2012GHGtable.pdf), substantial emissions reductions will be needed in the next few decades to enable the region to

meet targets the state has set for reducing GHGs by 2035 and 2050. A transit system powered by clean energy and low-carbon biofuels that empowers residents to shift away from fossil fuel and automobile dependence will greatly assist our efforts to reduce climate impacts. Land use changes that encourage compact, walkable communities coupled with deployment of clean, effective transit need to rank high on the set of criteria Sound Transit uses to select projects and associated implementation policy.

Below, we offer comments on the specific candidate projects, arranged by area as presented in Sound Transit phase 3 public documents.

North Corridor

Lynnwood to Everett light rail: We strongly favor alignment **N-02b** with direct routing of line to Everett with TOD potential along Evergreen Way/ Hwy 99 or other nearby arterial corridors north of Alderwood Mall into Everett. The out-of-direction squiggle should be avoided on the main corridor connecting to Everett.

Instead, serve Paine Field industrial area with a spur that connects from the main north-south line. This added service could be either BRT or light rail, with the potential ridership and cost determining the appropriate mode. If a light rail spur is used, it can interline with the north segment for a one-seat ride to Everett and convenient transfer station for riders in the corridor traveling to/from the south.

N-01: Include this LRT extension into north Everett from Everett Station as a subsequent phase after implementing N-02b. This segment serves neighborhoods characterized by a well-connected street grid and can provide access to Everett Community College.

N-03: Sound Transit funds should not be directed to an Edmonds permanent station project so long as the Sounder north corridor continues to generate anemic ridership. Allow WSDOT to proceed with this project based on the needs of the ferry system.

N-04: The station at 130th Street on the North Link Corridor should be constructed as part of implementing ST2 because it is such a high priority station location. We consider this station as a higher priority than the south Shoreline station (145th or 155th) in the initial build out of the North Link Corridor in ST2. Definitely build the 130th station regardless of the source of the funding, and do so expeditiously. Do not build a parking structure at 145th St (this proposed station along the north corridor should be relocated to 155th St.), and shift funds from parking at Northgate to both 130th and Graham Street (**C-08**) infill stations. We do point out, however, that the N-04 ridership estimates are way too low in the ST3 project description. The area around the 130th station will be an urban village in Seattle Comprehensive Plan 2035 update, so ridership is going to be more consistent with that of other urban villages.

N-05: Build this additional station only if an urban village with TOD is designated by local jurisdictions. This infill station makes sense only if its surroundings will maximize ridership and potential for TOD.

N-06: Garage – no, do not consider this option for the package; exclude it from any and all project lists.

N-09 + N-10: In the SR-522 BRT option, the N-09 segment should be revised to serve the Lake City neighborhood and connect to LRT at $130^{\rm th}$ St. Station, which we presume to be completed as part of ST2 implementation. BRT service via NE $125^{\rm th}$ St., which has less traffic than NE $145^{\rm th}$ St., serves more riders by going through the Lake City neighborhood urban village. We favor omitting any structured parking at the south Shoreline station, and relocating it to $155^{\rm th}$ Street from the poorly sited $145^{\rm th}$ Street location, the latter of which suffers from too much vehicle traffic due to the interchange with I-5.

Central Section (mostly in Seattle)

Downtown Seattle to Ballard. Among the candidate alignments presented for the Downtown Seattle to Ballard light rail project, we find alternative **C-01b** to be most favorable for its reliable travel time, large ridership, and better cost effectiveness per rider than the other presented grade-separated alternative. This high ridership corridor is the highest priority project within the entire ST3 plan for its ability to support urban density with reliable, frequent, and quick mobility between the largest employment center in downtown Seattle and a burgeoning neighborhood well served by local transit with a complete street grid that encourages easy walk up and bike up ridership. C-01b serves important locations and offers ease of continuation north toward Crown Hill among the existing proposed options in this corridor.

However, we have several concerns, and offer suggestions for modifications to the considered options that allow for a more accurate and representative comparison with other proposed alignments in this corridor.

- We strongly recommend Sound Transit analyze a different routing through Fremont other than the mostly surface C-01d option. An alignment option that is mostly tunneled following a route via Fremont is needed to accurately compare with the grade-separated Interbay route options. This modified option could use the tunnel route of C-01b in downtown, but instead of turning west toward Seattle Center continue north along a Dexter/ Westlake corridor crossing underneath the Ship Canal to serve Fremont. The alignment could transition to limited surface and mostly elevated sections once it reaches the vicinity of Leary Way. ST should explore several possibilities for how and where this modified alignment would enter the activity center of Ballard.
- Another concern about option C-01b as proposed is that it omits serving Belltown, the state's second densest residential neighborhood (behind only

First Hill). A dense neighborhood such as Belltown should be served by a light rail line to generate large ridership and serve a dense residential market. A different alignment immediately north of downtown should be studied for C-01b to determine how it might better serve Belltown while still including a station in the southwest corner of the South Lake Union area.

- A modified Fremont alignment should be considered which serves both Belltown and South Lake Union. The mostly grade-separated alignment we suggest via Fremont could be routed to serve both Belltown and South Lake Union by following 4th or 5th Ave. northwest from Westlake Plaza, then turning northeast to reach the South Lake Union area along Dexter, 9th, or Westlake Avenues. Such an alignment could accommodate a Belltown station in the vicinity of 4th or 5th Ave. and Bell or Battery Street. Sound Transit might even consider repurposing a portion of the Battery Street Tunnel for this alignment if, indeed, a deep bore tunnel is ever completed successfully and SR 99 is shifted out of the Battery Street Tunnel.
- In order to expedite light rail to Ballard, Sound Transit should also consider an interim alignment that connects to the existing 3rd Ave/Pine St tunnel by way of an underground right-of-way at the Convention Place site. This could allow for light rail service to operate between Ballard and Downtown Seattle while a second transit tunnel through Downtown is constructed to add much needed capacity for intersecting and parallel transit corridors. In the initial phase, a Ballard line would diverge from the existing University Link toward South Lake Union and/or Belltown and Fremont. Once a second downtown tunnel is operational in a subsequent phase, the Ballard line could be routed there, leaving the system with a cross-over connection to improve flexibility and meet peak demand in both the existing and second downtown transit tunnels.

C-01g The extension to the Ballard alignment north to NW 65th St. could be surface or elevated north of Market Street. This project is a good addition to the basic Downtown Seattle-Ballard light rail corridor and should be seen as an additional piece to eventually continue the alignment to Crown Hill (vicinity of NW 85th St.)

C-02: Ballard-University District cross town should be one of the main proposals, not relegated to a second tier of additional projects. This corridor has high ridership and serves key activity centers. We suggest that C-02 be interlined at its west end in Ballard with LRT to/from the north for continuation of service toward Crown Hill. A connection with the Downtown Seattle-Ballard alignment could allow sharing of maintenance facilities. Sound Transit should also consider options for a modified Downtown Seattle-Fremont-Ballard alignment and its connections with Ballard-University District cross-town routing. The C-02 alignment could interline to Fremont and follow a more southerly routing to the U District as an alternative to a Market Street/45th Street corridor alignment.

The east end of C-02 project alignment should be configured to allow for a connection with SR 520 cross-Lake light rail. We strongly urge Sound Transit to include SR 520 light rail in the set of ST3 candidate projects. Light rail on the new SR 520 bridge enables a complete corridor to extend between Crown Hill, Ballard University District, South Kirkland, and Redmond.

West Seattle to Downtown Seattle: The preferred option among those presented for this corridor is initially C-03a, but light rail only as far as Alaska Junction is insufficient. The C-03a option is better viewed as the first step of a multi-phased set of projects to extend high-capacity transit to West Seattle, White Center, and Burien. The Delridge corridor should be served in the initial phase with BRT/RapidRide Plus that includes an easy connection to the C-03a light rail line. More boarding locations on a BRT line relative to surface light rail will enable increased access along Delridge Way SW. Light rail to Alaska Junction will enable local bus service to be more effective, which makes C-03a the leading project to implement first in this corridor.

In subsequent phases, we favor an extension of light rail similar to project *C-13* that continues the alignment from Alaska Junction to White Center and on to Burien. This phased approach offers the most mobility for the number and location of riders served, with good TOD potential that serves a diverse mixed-income community near both light rail stations and BRT stops. A conversion of the Delridge corridor to light rail can then be added if ridership warrants it.

C-08 Graham Street Infill Station: The station at Graham Street along the Central Link Corridor should be constructed as part of implementing ST2 because it is such a high priority station location. This station can be funded by deemphasizing ST2 parking garages at Northgate. The Seattle Comprehensive Plan calls for non-motorized and local transit access at non-terminal stations in the city. As noted for 130th Street station (**N-04**), the large potential for local transit transfer and walk-up and bike-up access are benefits to realize by the end of ST2 implementation. Graham Street is well located along a good potential east-west local transit corridor as well as being a good candidate for TOD and affordable housing. Definitely build the Graham station regardless of the source of the funding, and do so expeditiously.

C-09 & C-10 are contingent on all-day Sounder South service.

C-11 Madison Street BRT: This corridor is highly ranked in Move Seattle plans and the long-range plan for expansion of RapidRide by King County Metro. While we favor this corridor for enhanced frequency and reliability using clean quiet electric vehicles, given the emphasis by other jurisdictions the Madison Street corridor is not a high priority use of Sound Transit funds. However the implementation of Madison Street BRT should be considered in the larger network of connections among modes that is possible in Downtown Seattle.

C-12 garage: No, do not consider this option for the package; exclude it from any and all project lists. Manage parking demand at T.I.B. station through pricing.

Sea-Tac airport: The Airport is the 3rd largest activity area in the region, and needs better service to/from a variety of destinations. We recommend Sound Transit install a moving sidewalk at Sea-Tac airport connecting from the station entrance to the terminal building.

East Corridor

Add SR 520 light rail to candidate projects. Ensure the completion of the SR 520 westside project continues to include provision for adding light rail (wow out separating eastbound and westbound lanes for LRT alignment transition to tunnel or elevated segment for crossing of Montlake Cut). A light rail connection across Lake Washington via SR 520 should be considered in the context of a continuous line connecting with the Ballard - University District (C-02) alignment which together would serve South Kirkland and Redmond/Bellevue.

E-01 Continuation of East Link LRT into Redmond: Completing the route into Redmond is a high priority for east King County. We offer two recommendations to improve the LRT project:

- add East Link station at NE 51st St. This relatively inexpensive surface station allows connections with local bus routes on an east-west corridor, and is less congested than NE 40th St. for access to/from the north along 148th Ave NE.
- more direct alignment needed into downtown Redmond. The East Link routing should enter Redmond from the west such as near Leary Way with the Downtown Redmond station reached first, and then route East Link to a terminus station near the intersection of SR 520 and Redmond Way. The proposed hairpin alignment of E-01 is ludicrous.

E-02b I-405 BRT: The I-405 BRT corridor would operate more effectively with congestion pricing in place along this limited-access highway. We support the higher capital cost version of option **b** that includes more station stops along the route to enable higher ridership and more destinations served. However, one BRT station that we recommend be eliminated from E-02b is the NE 85th St. station because it suffers from technical challenges that will prove not to be cost effective nor a convenient connection for riders. The Burien Transit Center is preferred as the southern terminus because it is an activity location with a reasonably good street grid that has potential for further TOD. It would also be a likely light rail terminus in the full build-out of project **C-13**.

Eastside north-south corridor: Sound Transit should use the Eastside Rail Corridor (ERC) for frequent electrified transit service all day. This corridor serves a different market than I-405 BRT and is complementary, not an alternative to the longer distance I-405 travelshed. The ERC mode, either light rail or electrified

(battery or trolley) BRT, should be selected based on cost effectiveness given the projected ridership. Sierra Club supports a combination of quiet electrified transit and a bicycle and pedestrian commuter and recreational trail in the "green corridor" of the ERC.

E-03 Totem Lake – Issaquah light rail: We urge Sound Transit to eliminate the section on the east side of I-405 at south end of Bellevue. Instead, interline the E-03 project on the same track as East Link from the vicinity of NE 12th St. and Wilburton Station through downtown Bellevue to South Bellevue Station, then split and travel east along I-90.

We consider the Totem Lake – Bellevue section of this alignment to be more cost effective and ready for potential TOD sooner than the Bellevue-Issaquah segment. As such, we encourage earlier implementation of the Totem Lake – Bellevue connection, while the eastern extension toward Issaquah be phased in later. Local jurisdiction zoning changes to promote greater density around stations areas can affect the timing of light rail implementation. As an interim measure, express bus service for Issaquah would be improved by funding the addition of center access ramps to and from the west from I-90 at SR 900 (17th Ave NW) in Issaquah for quick bus access into the Issaquah Transit Center.

E-06 Totem Lake – Bellevue electrified BRT on eastside rail corridor We support use of electric (either trolley or battery-electric) buses on the eastside rail corridor as a backup alternative to the light rail option of E-03. The corridor is closer to residents and employment centers than proposed BRT on I-405 and will be an effective way to move people between Totem Lake, Kirkland, and Bellevue without the congestion of local arterial streets. This corridor should definitely include both transit and trail in a quiet and clean "green corridor" connecting eastside communities.

South Corridor

The highest priority project in the South Corridor should be Sounder service all day weekdays and on weekends (S-08). This should rank higher than completion of the light rail spine (S-01 through 04). The Kent Valley cities served by Sounder south have reasonably complete street grids that promote easy walk-up, bike-up, and local transit transfer access to the Sounder stations. In contrast, much of the area near I-5 where the light rail spine is proposed to go is characterized by large blocks, strip malls, and cul-de-sacs, and is much less conducive to non-motorized access and local transit transfers. The ridership per unit cost along with TOD potential should be major factors in prioritizing which projects to include in the plan and to implement first.

S-01: Revise to place alignment on Hwy 99. This segment which extends Link LRT from the vicinity of Highline Community College (Kent-Des Moines Rd.) to S. 272nd St. is the next highest priority of the light rail options in the south corridor after the Tacoma Link extension to Tacoma Community College (**S-11**).

S-02: Revise to place alignment on Hwy 99. This segment which extends Link LRT from S. 272^{nd} St. to the vicinity of the Federal Way Transit Center (S. 317^{th} St.) is the third highest priority of the light rail options in the south corridor after S-11 and the S-01 segment immediately north of it.

S-04 (SR 99 alignment) is preferred over *S-03* (I-5 envelope) of the presented options for the light rail connection between Angle Lake station and Tacoma. However, the segment covered by both options S-04 and S-03 is the least cost effective of the proposed light rail segments and should be lowered in priority after extensions to the existing Tacoma Link system and the revised segments (shifted to SR 99 from I-5) that extend south to Federal Way T.C.

S-05 Tacoma Mall LRT extension: Prioritize after all-day Sounder service and the Tacoma Community College Link extension (**S-11**), but ahead of completion of the light rail spine, especially the segment between Federal Way and Tacoma.

S-06 Expand Sounder South Train Platforms to 8 cars We suggest this project be done concurrently with the expansion of service in the Sounder South corridor, but added train length should not be used as a substitute for increased frequency of service.

Increased Sounder service (**S-08**) should be accompanied by an arrangement among Sound Transit, WSDOT, Amtrak, Federal Railroad Administration, Burlington Northern Santa Fe, and Union Pacific that ensures more passenger rail frequency along the Sounder/Amtrak corridor between Seattle and Tacoma by shifting some BNSF freight traffic to the UP line. Also Sound Transit should consider self-propelled railcars (DMUs) for mid-day service and for the Tacoma – Lakewood segment of the Sounder route to save on fuel costs by better matching the equipment to the passenger demand. Frequent service all day long needs to be the objective along Sounder south. Use of hybrid-electric locomotives and DMUs powered by cleaner biofuels should be a priority until such time as electrification of the Sounder/Amtrak corridor becomes feasible.

S-09 and S-10 station access improvements are a good investment as long as they don't add structured parking in the downtown areas of valley cities.

S-11: LRT extension to Tacoma Community College from the expanded ST2 Tacoma Link is the leading project for light rail in Pierce Co. This corridor adds reliability to travel in a well connected street grid and can support equitable TOD.

Among the Bus Capital Enhancement projects, *S-12* along Pacific Avenue is the best of the candidate projects. The Sounder extension to DuPont (*S-17*) would generate more ridership than the proposal for a line from Puyallup to Orting. Use of DMUs might be considered for DuPont-Lakewood-Tacoma service with well-timed transfers to full locomotive-drawn train sets at Tacoma.

Regionwide Projects

More funds need to be allocated for the System Access Program (Pedestrian and bicycle access, bicycle parking, transit connections). Sound Transit should be more willing to fund local transit service that brings riders to ST express buses and trains than to fund increased parking capacity at the stations and transit centers. Finally, we urge at least a tripling of the funds dedicated to the Transit Oriented Development program (R-07) with a major emphasis placed on affordable housing for low income residents.

Thank you for this opportunity to shape the ST3 plan to help support a more sustainable region knit together with frequent, reliable transit service.

Sincerely,

Tim Gould

Chair, Transportation & Land Use Committee

Sierra Club Washington Chapter

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