07/23/2026 Board of Directors Meeting Written Public Comment Submissions

Submissions

Betty Lau

Public Comment at Sound Transit Board Meeting by Betty Lau, Thursday, July 23, 2026, 1:30 p.m., Union Station

I'm Betty Lau, co-founder of Transit Equity for All, board member of the Chong Wa Benevolent Association, and member of the ST Citizens Accessibility Advisory Committee.

It's ironic this month is Disability Pride Month. King County reaffirmed its commitment ***"to the principles of justice, equity, and "Nothing About Us Without Us"*** given the fact that Sound Transit has no way to give timely information to or get feedback from its own Accessibility Committee on any of its projects. Any information the Accessibility Committee gets is always after the fact so all we can do is give cosmetic feedback.

This board needs to improve racial and disability equity.

At the May 7, 2026 Executive Committee meeting, staff response to your question about using the Racial Equity Toolkit was: "The agency did not conduct a formal racial equity toolkit for the proposed ST3 system plan update, **but these toolkits are being used on all extensions in the ST3 plan**" (May 7, 2026 Video 58:38).
Not applying the Sound Transit Racial Equity Tool in Enterprise Initiative planning is horrifying. It signals lack of concern for vulnerable groups: the under-served, low income, limited English proficient, communities of color, and those with disabilities.

Racial Equity analyses are vitally important to consider as you make further decisions about ST3. Therefore:

- Require staff to present racial and disability equity findings at board meetings.
- Require staff to post racial and disability equity analyses online for the public
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Finally, require staff to evaluate environmental and related social and economic effects of proposed actions in or on nearby communities of color.

That's how to build trust.

Thank you.

Brien Chow

Public Comment by Brien Chow, Sound Transit Board Meeting, Thursday, 7/23/26 at Union Station, 1:30 p.m.

Good afternoon, Chair and Board Members.

I'm Brien Chow, Co-Founder of Transit Equity for All.

Today, I ask the Board to defer the **Second Downtown Seattle Transit Tunnel** before committing billions of additional taxpayer dollars.

The question is not whether Ballard Link should be built…

The question is whether it should be built through a second downtown tunnel or by using the existing tunnel.

Sound Transit's own Second Downtown Tunnel Feasibility Assessment… identifies interlining as a technically feasible alternative with targeted upgrades and ***savings of $1.3 to $5 billion***.

That is not insignificant.

Since ST3 was approved… the financial situation has changed to a $35 billion budget hole. Don't burden taxpayers further with 75 year bonds.

The existing downtown tunnel successfully handled record ridership during the **2026 FIFA World Cup**, proving it does have capacity for future needs.

Defer ***the second downtown tunnel!***

Commission a national engineering Request for Information (RFI)

to get new ideas on new options that provide the greatest benefits without a budget busting second tunnel.

Thank you.

Brien Chow

Co-Founder Transit Equity for All - FOR MORE INFORMATION... linktr.ee/TransitEquityforAll_MFo4th

Martin Westerman

Note: The attachment corresponding to this comment can be found at the end of this document.

Greetings Board Members,
It surprises us that you have come this far down the Ballard and West Seattle light rail tracks. You have been repeatedly advised that better, less expensive, lower carbon, less destructive, faster delivery options are available for deployment now. And we have urged you to truthfully state that you are not delivering what 2016 voters approved in ST3.
Voters did not approve your spending $2 billion per mile to build the world's most expensive light rail stub to West Seattle.
Yet, you have approved significant increases beyond approved WSLE and BLE budgets, **delays beyond approved time lines, routing changes not approved**, irreparable environmental damage, and carbon footprints that will not be mitigated. For this, viters will not get the aggregate increases in public transit ridership or decreases in regional traffic congestion that they expected.
You have helped drive Sound Transit into a $35 billion "budget gap" (debt), despite getting ST2 passed to pay off ST1, ST3 to pay off ST2, and considering a ST4 proposal and long-term bonds to pay off ST3. As Seattle Times columnist Danny Westneat and former SDOT Director Scott Kubly have suggested, let's be satisfied with completing work on ST2, and rethink how regional public transit will look in the future, and how your board is constituted.
We have provided our transit expert EIS-C to all of you board members during the past year. It summarizes the DEIS and FEIS, lays out the data, rationales and non-rail alternatives for you. Specifically:

- we support expanding exclusive bus lanes, using BRT, on-demand transit options, and urban gondolas (as used in cities around the world), and electrifying the Metro transit fleet
- we oppose allowing Sound Transit to use 75-year bonds for financing. As recipients of $6 million per day in tax revenues, sitting on a $6 billion cache, yet facing a $35 billion debt, Sound Transit are proven bad financial managers who cannot be trusted with more public money
- we support interlining in the existing Seattle tunnel — which successfully handled record ridership during the 2026 FIFA World Cup,, and oppose building a second costly, destructive, and useless tunnel

Please see further details in the EIS-C, attached.
We look forward to seeing you choose options that will increase transit ridership, decrease traffic congestion, and help mitigate climate change.
All the best,
Martin Westerman and
Regional transit colleagues

Materials received during verbal comment

Note: Additional materials and/or letters were received during verbal comment. They can be found at the end of this document.

West Seattle Light Rail Environmental Impact Statement-Conclusion (EIS-C)
Citizen Comment for Entry into the WSLE Record of Decision
With FTA Response Respectfully Requested

An independent assessment of the environmental impact
of the Sound Transit West Seattle-Link Extension (WSLE) light rail proposal
Submitted by Rethink The Link (RTTL) and Regional Transit Colleagues
Revision 5.1 November 14, 2024 | Replaces earlier versions
Hot linked documents should be considered as attached to this document.
Comments or Questions? Contact RTTL at contact@rethinkthelink.org

Section 1: Executive Summary

The Ballard-Downtown-West Seattle light rail discussion started from the premise that roadway-based modes could not handle peak period passenger demand in that corridor. Thus, in 2016, Sound Transit presented a West Seattle-Ballard link extension (WSBLE) light rail proposal in its ST3 transportation package. It offered simple criteria for voters to consider:

- improve public transit,
- encourage economic development, equity, community-building and social justice,
- protect the environment.

Sound Transit's January 2022 WSBLE Draft Environmental Impact Statement (DEIS) was designed to show:

- the simple criteria outlined in ST3 would be satisfied, and
- WSBLE's proposed advantages would outweigh its disadvantages.

In the 2016 ST3 package, and the 2022 Draft EIS, the West Seattle and Ballard light rail segments were combined into one project routed through downtown Seattle. As changes to the Ballard portion required additional work, Sound Transit and the USDOT Federal Transit Administration (FTA) separated Ballard into its own project, and moved forward with a discrete West Seattle (WSLE) environmental review process. WSLE has been separated again into West Seattle-SODO and SODO-downtown segments, and ST has now initiated a new EIS review process for the Ballard-downtown portion.

Independent transit experts present their findings here, based on:

- researching and analyzing information from the West Seattle sections of the 2022 WSBLE DEIS, public comments submitted about the DEIS, and the Final EIS (FEIS) released September 20, 2024,
- related transit studies and historical records, (see Appendix of this document), and
- comments to Sound Transit's Board of Directors after their selection of a WSLE trackway route on October 24, 2024.

With Sound Transit estimating a $6.5-$7.1 billion cost for WSLE alone, funding for the Ballard project's estimated $12 billion cost could be delayed or even canceled. This stems from Sound Transit historically underestimating costs, over-estimating ridership, delaying projects, and now approaching its debt ceiling horizon in the next few years.

Given these circumstances, Sound Transit cannot confirm when and whether WSLE may tie into the larger light rail network. In the FEIS, it forecasts 27,000 daily riders on WSLE, but it will not deliver that many until 2042, when the SODO-downtown tunnel segment is completed – requiring additional funds and creating additional impacts. Between 2032 (expected WSLE delivery date) and 2042, King County Metro will continue running its West Seattle-downtown buses. This led ST to inform the FTA (by email 5/12/23) that expected WSLE ridership will be 5400 per day for the 2032-2042 period.

Thus, WSLE will not deliver on claims summarized in FEIS ES.2.3, that it "is expected to reduce dependency on single-occupancy vehicles, slow down growth in vehicle miles traveled, conserve energy, and reduce greenhouse gas emissions." It will not "reduce daily vehicle miles traveled by approximately 17,000 by 2042, helping to achieve Washington state's greenhouse gas emissions goals."

The environmental process and analysis for this project is also flawed by Sound Transit never having conducted a Modal Alternatives Analysis or Major Investment Analysis.

This analysis would have informed the decisions that Sound Transit's Board made in choosing high-capacity transportation (HCT) mode(s) for the Downtown-SODO-West Seattle corridor. Items the analysis would have likely revealed:

1. light rail is less cost effective on a per rider basis than bus and bus rapid transit (BRT). With no evidence of Sound Transit conducting this analysis, it has failed the board, and called the board's choice of light rail into question (See **Section 5, Item 4** for details).
2. Bus alternatives could be deployed to serve the corridor for less than $1 billion, and would most likely attract more transit riders than the additional 2000 that Sound Transit's FEIS predicts will ride WSLE by 2042 (see Section 2, Ridership 2.d. below).

Sound Transit's environmental review process has revealed more disadvantages than advantages with the WSLE. With its overwhelmingly negative social, economic and environmental impacts, the West Seattle Link Extension does not satisfy the ST3 and DEIS criteria and should not be built. Expert evaluation of the environmental record shows that:

- WSLE transit times and therefore ridership will degrade West Seattle transit service, not improve it after the WSLE and Ballard LE open in 2032 and 2042 respectively
- The construction-generated carbon will be more than passenger loads on WSLE trains and TOD land use effects can mitigate over five future decades of WSLE operation.
- Acres of forest and habitat will be eliminated, and much more of it irreparably damaged
- Choosing the light rail investment over more effective transit modes presents opportunity costs for the City of Seattle, and the regional transit network:
  - Economic development in West Seattle will be set back for at least a decade
  - Equity, community-building and social justice will be set back at least a decade,
  - -- raising the question, based upon the newest, September 2024 WSLE cost estimate: "How can six to seven billion dollars be better spent to improve public transit?"

The Sound Transit Board can and should choose the No Build option for the WSLE.

- Section 2, Paragraph 3 of the ST3 ballot proposition that voters approved in 2016, allows the board to reconsider and make adjustments to projects that are unaffordable, infeasible, or impracticable for any reason. The WSLE is all three. This action does not require a public vote.
- ST Executive Corridor Director Cahill Ridge's told the November 2017 West Seattle Transportation Coalition public meeting that ST "has no Plan B" for WSLE if financial, disruptive technology or other factors arise. He was incorrect. ST has several Plan B options available.
- Lower carbon, less expensive and less disruptive and destructive public transit options than WSLE have been studied by Sound Transit, are available now, and serving West Seattle riders better than rail will in the future. Options include, but are not limited to:
  a. Rebuild of SR99-West Seattle Bridge interchange to add exclusive bus lane
  b. Add north and south Busway exits from east end of West Seattle Bridge
  c. Add to exclusive bus lanes in West Seattle
  d. Complete the Metro Transit initiative to electrify its bus fleet

- No Build is a legitimate, legal, and responsible choice, included under federal and state law in all environmental reviews of large, disruptive transit construction projects. ST3 project sponsors can and should consider this option and should note that the facts overall point to selection of No Build.

This document addresses the West Seattle link extension specifically, and the WSBLE generally. It contributes summary information to the decision-making processes for:

- local and state government officials who regulate and influence Sound Transit decision making, and
- citizens who pay significant taxes (see "revenues vs. costs" below) to fund Sound Transit, in the expectation that their government will provide improved mobility services.
- government decision makers who have to decide what the WSLE Record of Decision (ROD) will finally state as the result of the environmental process for WSLE.

Section 2: Current Transit Ridership and Forecasts for West Seattle-Downtown Corridor, and Region

1. **The WSLE light rail plan will not improve transit or rider experience on the Downtown-West Seattle corridor. It will make them worse.**
   a. RapidRide buses deliver passengers between downtown and West Seattle on a one seat, no-transfer ride, in about 20 minutes, though it may take longer if traffic is heavy.
   b. A WSLE light rail + bus ride over the same route may take up to 35 minutes, depending on transfer times in West Seattle and SODO (see "transfer penalty" in Equity 1.b. below). Traffic may still be a factor causing bus rides to take longer.
   c. Travel between West Seattle and Downtown, and points north and east will require two, possibly three transfers.

2. **Whether the WSLE gets built (Build option) or not (No Build option), the same number of people will be riding West Seattle public transit.**
   a. ST's 2013 study estimated a daily ridership of up to 58,000 riders per day for the West Seattle Link Extension (WSLE). The 2016 ST3 plan reduced daily ridership to approximately 37,000 riders by 2042, and the WSLE DEIS reduced ridership estimates again to 27,000 for this segment.
   b. The September 2024 Final EIS estimates 26,000-28,000 riders per day, (Appendix 3, Transportation Environment And Consequences)
      i. The FEIS sorts ridership forecasts based on several options:
         (a) M.O.S. (Minimum Operable Service), in which only the Delridge station (minimum rail line extension) is built
         (b) Two station scenario, without Avalon station
         (c) Three station scenario with Delridge, Avalon and Junction stations
      ii. Appendix 2 of Sound Transit's Transportation Technical Report shows virtually no difference between Build vs. No Build options in Downtown-West Seattle peak hour ridership and mode shares.
   c. The only way WSLE can reach 27,000 riders per day is by taking bus riders from Metro Transit, whose 2020 West Seattle-Downtown corridor count was 27,000 riders per day.
   d. The Final EIS on page 3-2 states, "The addition of the West Seattle Link Extension to the regional transit system would result in about 2,000 net new daily transit trips by 2042." This number is:
      i. not mentioned in the FEIS Executive Summary and is not otherwise publicized by Sound Transit on its website or in any other documents,
      ii. contradicted by ST's 5/12/23 email to FTA.
   e. Non-rail transit modes serving the downtown-West Seattle corridor now deliver more passengers than the proposed WSLE will in 20 years. They deliver more efficiently, with lower carbon footprint and fewer environmental, economic and residential impacts.

i. The steady reduction of Sound Transit ridership estimates is due to work from home (WFH) + hybrid office arrangements, COVID, and movement of employment and commerce centers elsewhere than downtown Seattle (see **Appendix 6.**, "**Per Capita Transit Ridership Is Declining"**).

3. **Sound Transit is not building what voters approved as ST3 in 2016**:

Voters are getting a different rail plan than Sound Transit presented as ST3 in 2016:

i. The original Ballard-West Seattle line (WSBLE) is now two separate lines – BLE and WSLE
ii. **The $1.7 billion ST3 budget for WSLE is now $6-$7 billion.** Listed Rapid Ride corridor improvements have not been made, and WSLE's 2030 delivery date will not be met.
iii. The ST3 proposal did not describe Pigeon Point deforestation, "irreparable" habitat damage, or give any notice of a large carbon footprint from construction as documented in earlier Sound Transit projects.
iv. Additional carbon and pollution generated from 5-8 years of traffic congestion is not specified in the DEIS but may be tallied in SDOT's (Seattle Dept. of Transportation) annual carbon assessment.

4. **Few people who voted for ST3 in 2016 understood WSLE's significant negative impacts.**

a. Until 2015, Sound Transit's ST3 plans only included a light rail connection to Ballard.
b. Changing course in 2016, Sound Transit included a short light rail line to West Seattle in ST3. It promised that if voters approved ST3, bus and rapid transit service would be improved, and detailed light rail planning and public outreach would follow.
c. The ST3 proposal did not mention negative impacts that WSLE would generate on voters' transit experiences, the environment, and losses of homes, businesses and jobs.

5. Puget Sound Regional Council (PSRC) and Sound Transit data show that by 2050, light rail will only carry 3% of all regional trips, and buses only about 5% -- despite PSRC expecting 1.8 million more residents living in the Kitsap-Snohomish-King-Pierce region.

a. PSRC expects that:
   i. buses and trains together will carry just 15% of trips In Seattle.
   ii. most trips in the four-county region will be carried by shared and single occupancy vehicles.
b. The Metro Transit rationale for supporting WSLE is that transferring passengers onto the four-mile rail line will free buses it can redeploy for more frequent local service.
   i. Data and experience, including "transfer penalty" and truncated bus routes, do not appear to support this rationale.
   ii. Metro Transit stated to the West Seattle Transportation Coalition in 2014 that it will cancel a bus route costing more than $7 per rider (about $10 in 2024 dollars). The September 2024 WSLE cost estimate of $6-$7 billion to serve 27,000 riders, puts its per rider expenditure on its 2032 opening day at $222,000-$260,000 per rider (see Economics 3.2.a. below).
      1. Using ST estimates of 4 million WSLE riders per year and adding $40 million per year cost for operations and maintenance, per rider cost may decrease to $1500 for the first year, and eventually plateau at $600 per rider in perpetuity.
      2. If rail does not replace bus, and per-trip cost from point A to point B is not reduced, then moving riders from bus to rail is not beneficial. If only the rider's trip is measured, without including distance, the result may be misleading. For example:

a. Neither Metro Transit nor Sound Transit appear to have made cost-benefit calculations to assess the transit cost effectiveness of WSLE.
b. Metro's plan for WSLE to replace four miles of bus corridor means it will deliver $10 /rider passengers to one station of a $1500 /rider rail line, then use another $10 /rider bus to pick up the portion of those riders who don't continue on rail.
c. Passengers who ride further on rail may also transfer to bus at the end of their rail segment.

iii. Electrification of the Metro bus fleet, and expansion of flexibly routed bus service that would connect riders more efficiently to destinations within and beyond West Seattle, and would yield a far better cost-benefit ratio. It could be funded with a fraction of the $6-$7 billion estimated for a single, four-station SODO-WSLE route.

iv. Improving bus service should also include City of Seattle exercising its municipal authority to eliminate road bottlenecks and give buses more priority in traffic.

6. **The ST3 package included funding to improve bus rapid transit (BRT) services during the light rail study and planning phase.**
   a. ST's WSBLE DEIS outlined non-rail improvements that could be made on West Seattle-Downtown corridor, such as roadway upgrades, and bus, van and other transit additions to increase service.
   b. But the City of Seattle, King County Metro and Sound Transit now focus only on building light rail, not on improving West Seattle bus and BRT routes for the West Seattle-SODO-Downtown corridor.
   c. Presently, public and private roadway buses, vanpools and ride-share services can carry more riders than light rail, often faster and less expensively.
   d. Unlike fixed rail, routes for non-rail options can be modified as conditions change, because roadways provide transit flexibility and redundancy options that rail cannot.
      1. As the Seattle area grows, transit alternatives other than light rail can, and according to PSRC, will provide better rider experiences, including more direct service, shorter wait times, and fewer transfers
      2. King County Metro:
         a. is planning to transition its entire fleet of buses to electric power.
         b. has committed to serving all West Seattle neighborhoods with public transit after WSLE is built in 2040-42. Until then, Metro is deploying on-demand Metro Flex van service in some, but not all underserved WS areas.

7. **The unique light rail bridge – that has not yet been designed, would extend 1.5 miles from SODO to Pigeon Point at a minimum 100-foot height over the Spokane St. viaduct, SR99, and the Duwamish River. This presents risks of rising expenses and construction delays:**
   a. No passenger railroad bridge of this length and consistent height has ever been built.
   b. The bridge will run over the Seattle Fault earthquake and liquefaction zone, creating engineering challenges and downstream risks.
      i. Structural shifting caused by the 2001 Nisqually earthquake contributed to the 2022 failure of the West Seattle high bridge, and its 2-1/2 year closure for repairs. The proposed WSLE bridge follows the same pathway at a generally higher elevation.

Section 3: Economics

1. **At the present $6-$7 billion estimate, Sound Transit will have spent $1.1-$1.3 million per rider to put each passenger on the train for WSLE's opening day** (including construction, interest payment, operations, and maintenance costs).
    a. Opening day per rider WSLE cost is based on ST's May 12, 2023, email to the Federal Transportation Administration, estimating 5,400 boardings per day between 2032 and 2042, during the 10-year period Metro Transit continues to run its C, H and 21X bus lines on the West Seattle-Downtown corridor, until the SODO-Downtown segment is complete in 2042.
        i. After Year 1, expecting approximately 194,000 riders per year, per rider cost may drop to $3107-$3621 per rider, and by 2042, drop to $381-$330 per rider.
    b. By 2042, it is estimated that Sound Transit will have spent an additional $2 billion (or possibly more) for the SODO-Downtown segment, including a second tunnel. Metro Transit will terminate Rapid Ride C, H and 21X bus service on the corridor. From that point, Sound Transit estimates WSLE ridership will increase to 27,000 boardings per day. Cost on opening day may thereby drop to $296,000-$334,000 per rider, calculating a $8-$9 billion total for the complete extension.
        i. Depending on Sound Transit's amortization schedule for the $8-$9 billion total WSLE + Downtown segment construction expenditure, plus interest payments, plus $40 million estimated annual WSLE operations & maintenance cost, overlaying annual ridership estimates of 4 million, per rider cost may plateau between $600-$1500 in perpetuity.
    c. **In advocating for WSLE rail to replace buses on the 4-mail SODO-WS corridor, Metro Transit is advocating to deliver $10 per rider passengers to a $600 to $1.3 million per rider WSLE train station, for a four-mile ride, to a stop where they may transfer to another $10 per rider Metro bus.**
    d. The non-profit Transportation Choices Coalition testified at Sound Transit's September 26, 2024, board meeting that price should be no object. Between Washington's powerful Congressional delegation able to funnel debt-relief capital to Sound Transit, and the perpetual $1780 minimum per year in Sound Transit taxes that every Pierce, King and Snohomish County household has been paying since 2017, TCC believes money will be perpetually available for light rail projects.
    e. In 2022, Sound Transit reported a $12 billion budget shortfall, then recast its accounting to appear $6 billion in debt. At ST's September 19, 2024, board meeting, ST CEO Goran Sparrman and Deputy CEO of Megaproject Delivery Terri Mestas asserted that the $6-$7 billion cost for WSLE can be managed.
    f. It would appear that, if cost were no object, Sound Transit could spend any amount needed for WSLE, and tunnel from SODO to the east bank of the Duwamish, use an immersed tube or other tunnel to cross beneath the Duwamish, then tunnel from the west bank to the West Seattle Junction, reducing most impacts listed here.
        i. This project revision would require Sound Transit to generate a separate EIS.

2. **At $6-$7 billion ($1.5 billion-$1.75 billion per mile) for 4 miles (Seattle Transit Blog), WSLE is the world's second-most expensive urban rail project**, behind NYC's subway upgrade ($2.8 billion /mile), but a ahead of San Francisco's subway ($920 million /mile)
    a. The $6-$7 billion estimate covers only the SODO-West Seattle light rail segment
    b. Additional cost will be incurred to build the SODO-Downtown Seattle tunnel link.

3. **WSLE may present revenue losses and opportunity costs for transit across the region (Snohomish, King, and Pierce counties), and for the key light rail city of Seattle.**
    - **a.** While city and county revenues have decreased, Sound Transit will eliminate businesses, services and properties that pay into municipal tax rolls.
        - **i.** Neither ST, Seattle nor King County has run cost-benefit analyses to judge whether trading a decade's worth of WSLE-caused tax revenue losses for anticipated future revenue will pencil out – given that:
            1. Neither ST nor the City of Seattle has calculated what net economic benefits WSLE will create for West Seattle, the CID and SODO, and
            2. While light rail creates benefits in some areas, West Seattle commerce and real estate markets up to now have not significantly suffered, even during the pandemic.
    - b. Rejecting more economical transit options presents substantial opportunity costs. For the same budgetary outlay, lower cost options could likely manage prospective demand, and deliver more services for more people (See "Overlooked transport project planning process…" **Appendix Item 3.**).
        - i. The study found that the 'do-minimum' option (e.g., buses to serve a corridor vs. more expensive options such as light rail) generates a Ridership to Cost Ratio (RCR) nine times higher than the Locally Preferred Alternative (LPA – light rail in our locality), and the second-best alternative produced an average RCR that was 86% higher than the LPA.
    - c. **The FEIS states that WSLE may displace up to 133 businesses, employing 1,230 people. The final number will be uncertain until ST chooses a final WSLE alignment.**
        - i. The business (commercial and service), and job losses will be spread between West Seattle (70-100 businesses, up to 1000 jobs), SODO industrial and Chinatown-International District (CID) areas.
        - ii. The number of businesses displaced will depend on the WSLE preferred alignment finally chose. West Seattle blogger Marie McKinsey offered this list of possible business displacements in 2022, extending from Jefferson Square (37 closures) to Delridge (West Seattle Athletic Club, Uptown Espresso, Skylark Cafe), to West Marginal Way. As ST focuses more on a preferred alignment, losses will become more clear.
        - iii. Patronage estimates by affected businesses (e.g., 7-11, Taco Time, Starbucks) average 1000 customers per day, with more for larger enterprises (e.g., Trader Joe's, Safeway).
        - iv. Businesses forcibly relocated have low survival rates, particularly in minority and low-to-middle income neighborhoods: 1974 Urban Renewal study: (https://www.kcdc.org/wp-content/uploads/2022/10/A-Case-Study-of-the-Consequences-of-Displacement-Caused-by-Urban.pdf. "The non-survival rate was highest among the small eating and drinking, food stores, and miscellaneous retail and services."
        - v. Demographic trends show upscale, primarily White workers moving back to urban centers of employment and commerce, and non-White workers and businesses moving or (immigrants) taking up residence in suburban areas (see "'Great Inversion,"Appendix 7).
            1. As these trends continue, it is even less likely minority businesses will be able to successfully relocate, and even less likely the employees of these businesses will find places they can afford to live.
            2. While light rail helps move people to areas of the city where they can recreate and consume, it does not support people who are providing the businesses and jobs for the more metropolitan population.
    - d. Rather than allowing WSLE to create an estimated $6-$7 billion in opportunity costs for Seattle and the region, the money could be better invested in other transit options within the WSBLE

corridor and beyond, yielding a lower carbon footprint, and fewer environmental, social and economic impacts.

4. **Freight, public transit, emergency services and commuters will be disrupted, and productivity impacted for 5-8 years, as West Seattle's main roads north, west and south of the WS High Bridge are blocked during construction.**

Section 4: Local Environment and Global Climate

1. As climate change worsens, Sound Transit's FEIS forecasts that WSLE preferred alignment construction will generate more carbon (greenhouse gas/GHG) emissions than it can mitigate by:

- **attracting new riders, and**
- **expanding walkable, car-free urbanism near three new West Seattle light rail stations.**
  a. The original 614,000 metric tons of greenhouse gas output from construction (MT CO2e) forecast in the DEIS (Table 4.2.6-3), has been reduced to 509,544 MT CO2e **(**Table 4.6-3, "Greenhouse Gas Emissions during Construction, Build Alternative: High-cost"**),** then 380,181 MT CO2e ("Total…Build Alternative: Preferred") and finally re-stated as 140,952 MT CO2e (FEIS Table 4.6-3, "Adjusted Total…").
     1. The restatement is used to extend the mitigation period by at least 50 years – to 2080, or later.
     2. The FEIS offers no information on where these tons of emissions will go, over what period, or how ecosystems will absorb and/or dissipate them.
     3. The FEIS offers no information on how loss of carbon-absorbing forest resources will affect mitigation period
     4. The FEIS recalculation method is not transparent. It apparently assigns major carbon output to concrete manufacturers, and only assigns a small percentage of total industrial output to Sound Transit.
     5. Sound Transit has zeroed-out energy required for station operations (including heating, ventilation and air conditioning (HVAC)) because the 60 metric tons of carbon it will annually consume, will be supplied by 100% renewable energy
        i. ST will displace 3,001 metric tons of emissions, resulting from people riding light rail and not driving 5.6 million vehicle miles per year in their petroleum fueled cars for the 50 years following WSLE opening in 2032.
        ii. **Sound Transit's carbon reduction strategy can only succeed by assuming that gasoline fueled cars will outnumber electric cars through 2080.**
        iii. Subtracting 60 tons of carbon generated from 3,001 tons displaced yields a net annual carbon reductio of 2,941 tons.
           1. Dividing the re-calculated, annualized 140,952 construction tons generated by 2,941 tons per year reduced, yields a payback period of 48 years – until the year 2080, to mitigate WSLE construction carbon.
  b. **The Build option will only reduce car and light truck miles traveled by 0.02%** compared to the No Build option (reduction of 15,400 from 85,366,700 vehicles total – Table 4.6-1, "Regional Vehicle Miles Traveled and Average Daily Traffic Change"). The Table shows no reductions in heavy duty truck miles, and 1.3% reduction in bus traffic.
  c. **Sound Transit has not done a proper impact evaluation of light rail alignments vs. other possible modes.** This would involve using tools such as the Embodied Carbon in Construction Calculator (EC3) (developed by the nonprofit, Building Transparency) and be conducted in close consultation with objective environmental science organizations like the Carbon Leadership Forum (CLF), a nonprofit, industry- academic organization at the University of Washington.

d. **The WSLE becomes even less attractive from a carbon reduction perspective when Sound Transit's construction carbon output is recalculated using the 2021 Transit Cooperative Research Program (TCRP) Report 226 (**"An Update on Public Transportation's Impacts on Greenhouse Gas Emissions.")
   - TCRP 226 outlines a "land use effect" of carbon reduction from people driving less because of (1) walkability in the higher density areas that would presumably develop around WSLE train stations, and as before, (2) the impact of new train riders. (See also ¨below, and Appendix 2. "Station Development…")
   - The WSLE FEIS references compact development and TCRP 226 on page 4.6.10. Applying TCRP 226 GHG impact methodology to the 2,000 daily additional transit riders that result from the WSLE preferred alignment yields only 1,930 tons per year of carbon reduction benefit, vs. the 2.941 tons generated by the methodology Sound Transit uses in the WSLE FEIS.
   - This lower carbon reduction number raises the years of payback on the construction carbon from 48 years (2032 to 2080) to 73 (extending out to 2105). Again, to mitigate its construction carbon footprint this quickly, ST assumes electric cars will be adopted very slowly.
   - While the DEIS Appendix L4.6 states that "general FTA estimates" have been applied, no federal project the size of WSLE's 2+ mile,-160 foot-tall, elevated light rail bridge has ever been built or fully calculated.

e. DEIS Chapter 4.2.6.3 and Table 2-9 cite a daily reduction of 117,000 miles of vehicular use per day for the region. This figure is re-stated in FEIS Chapter 4, but it is not clear how this figure was computed, nor how accurate it is.

f. The DEIS Chapter 1.2.2.6 states the need to reduce vehicle miles by 30% by 2035, and the City of Seattle's and King County's goals are to achieve carbon neutrality by 2050.
   - However, light rail will not connect West Seattle to the SODO light rail station until 2032, and won't be extended farther until 2042. The 8 to 18 years of construction period for the full ST3 light rail project delays the WSLE opportunity for drivers to reduce their personal vehicle use.
   - As Table 4.6-1 of the FEIS notes, the forecast volume of car and light truck vehicle travel in 2042 without light rail is 11,994,200 daily trips, and with light rail, 11,991,900 trips. The ST forecast regional difference between the No Build and Build options is a relatively small 2,300 trips per day.
   - Given likely imprecision, or margin of error in the calculations, these numbers signify virtually no change in driving volumes, and insignificant reductions in carbon, whether light rail is built or not.

g. **The FEIS does not calculate the quantity of carbon absorption lost as forest and green space areas are eliminated.** Sound Transit has already cut about 16,000 trees (apx. 140 acres) for its north-south line, according to a count from TreePAC.org. Those trees would have absorbed an estimated 64,000 tons of carbon a year (City of Seattle & One tree Planted) – nearly half the carbon output from WSBLE construction.

2. **The City of Seattle can ill afford to lose more tree canopy.** Seattle has lost 255 acres of trees since 2017 (acreage cut by Sound Transit within city limits may be included in the Seattle count). Globally in 2023, forests and other land ecosystems emitted almost as much carbon dioxide as they absorbed, due to fires, deforestation, and other factors.
   a. Eliminating acres of forest will exacerbate Seattle's heat islands, which are worst around light rail stations, areas where the city's commerce and employment are concentrated, and within its low income and of-color communities. Lower economic areas are more prone to suffer from adverse

heat conditions, fewer parks and less tree cover. They are less economically able to afford air conditioning or other means to keep cool.

- Heat sink areas, King County Executive (& ST Chair) Dow Constantine's "Three Million Trees Initiative", City of Seattle's Trees for Neighborhoods program, KC Land Conservation Initiative: https://kingcounty.gov/en/legacy/elected/executive/constantine/news/release/2021/june/23-heat-mapping-results (June 23, 2021)

b. The WSLE will eliminate three acres of north Pigeon Point Forest, plus 1-3 more acres of West Seattle green space, and beaver, salmon, heron and other species habitats there and on the Duwamish River and Longfellow Creek.
   - Sound Transit has not calculated costs for man-made elements to replace erosion control, storm water management, oxygen production, carbon sink, shade, and other ecosystem services provided by green infrastructure.

c. As Sound Transit runs its modest program to replace trees it has eliminated, and Seattle's recent $13 million in federal grants will help fund planting trees in Delridge and the Chinatown International District, the two entities will simply be working back from the deficit ST will cause with WSLE.

d. Replacing mature trees with saplings is what Nature does after a natural disaster. Sound Transit is imitating a natural disaster.

3. **Under Washington's Climate Commitment Act (CCA), Sound Transit's claimed level of carbon emissions in the FEIS – 146,000 metric tons over five to six years of construction – qualify it as a "large quantity carbon emissions generator" (LQG). The LQG threshold is 25,000 metric tons of carbon per year.**
   a. The best way to avoid emission is not to generate them (see **Minnesota** below).
   b. The WSBLE DEIS does not address purchases of carbon offsets, or other high-quantity mitigation plans for this massive output.
   c. The Puget Sound Clean Air Agency's (PSCAA) analysis finds ". the Chinatown International District and Duwamish Valley neighborhoods facing disproportionate air pollution impacts, impacts from WSBLE construction, and more sensitive health outcomes in the form of higher air quality-related hospitalizations."
   d. PSCAA AQ Director Kathy Strange commented in 2022 on Sound Transit's WSBLE DEIS, that "…transportation emissions will be improved in the long-term because of light rail…" The data prove otherwise.
   e. Currently, Minnesota is the only U.S. state holding its agencies accountable to its climate goals. A provision in its 2024 transportation law requires both state and municipal transportation planning agencies to take the state's climate goals into account when assessing new projects. **And it provides a guideline Washington State could emulate.**

4. **Overall, from a carbon reduction standpoint, Sound Transit itself makes the case for choosing the No Build option for WSLE.**

5. **Since the 1980s, federal transportation agencies and transit experts, including former ST CEO Peter Rogoff, have questioned the value of light rail for most urban areas. (**See **Appendix 9).**

Section 5: Equity

1. **Sound Transit's WSLE proposal does not prioritize equity.**
   a. The WSLE will serve the more affluent parts of West Seattle, while travel from less affluent, more diverse areas with more mobility disadvantaged citizens will require more transfers and take longer

b. A "transfer penalty" will affect riders arriving at stations by bus at ground level. They must either ride or climb multiple levels up or down to reach a train. At the Junction station, walk time may add five minutes to the transfer, and the wait time for the next train may add another 10.
c. Light rail will not improve access for residents who live in West Seattle's transit deserts (those lacking convenient access to transit within ¼ mile walk).
   a. Metro buses re-deployed after the 2042 opening of WS-CID service will not deliver residents in West Seattle to new locations of businesses and services that WSLE will have displaced.
      i. Building WSLE will instead encourage more use of private vehicles to reach these new business, service and shopping locations.
d. Elimination of the Frye Business Center and commercial properties to the north and south for construction of the Delridge and Avalon light rail stations will:
      i. exacerbate the "food desert" of grocery and prepared food providers between North Delridge and California Ave SW, for the area's mixed demographic communities
      ii. eliminate the walkable/15-minute Delridge-Avalon neighborhood, and deprive these communities of gathering places, and medical, social, business and recreational services

2. To make way for light rail, WSLE will eliminate over one hundred houses and apartments.

a. The full number of residential buildings to be razed cannot be estimated. While Sound Transit's Directors have selected a route, until construction plans and budgets are set, there will be uncertainties. Current documentation indicates that Sound Transit will bulldoze everything from single houses in Delridge to 92 apartments in Jefferson Square. The Executive Summary of the WSLE FEIS indicates that the Preferred Alternative will require displacing 165 to 173 residential properties.
b. Despite large numbers of new housing units and apartments built in West Seattle since 2014, rent and purchase costs have increased, not decreased. That has pushed out less wealthy residents (see *Seattle Times* May 12, 2024) and increased their needs to travel longer distances for work, shopping and entertainment, most often by car. Many have moved to other cities.
c. Transit-oriented development (TOD -- dense housing, such as apartments, multiplexes, and ADUs) has been built along the Delridge, Avalon and East Junction bus routes of Rapid Ride H and C, and 21 and 128. Sound Transit will bulldoze a significant portion of existing bus-served TOD for the rail line, and not replace it for up to 10 years, further depriving West Seattle of affordable housing, while wasting public resources.

3. The Sound Transit Board has the authority to choose the No Build option for WSLE.

a. Under Section 2 of the ST3 package that voters approved in 2016, the board must reconsider projects that are infeasible, unaffordable and/or unbuildable. WSLE is all three.
b. Contrary to what regional and city leaders are saying, the WSBLE and WSLE light rail proposals can be re-considered, and better transit options can be chosen – under the No Build option
c. No Build is a legitimate, legal, and responsible choice, which is included, under federal and state law, in all environmental reviews of large, disruptive transit construction projects. Based on the findings of the environmental process through this date, project sponsors should adopt the No Build option.
d. The No Build option for WSLE will only affect the West Seattle corridor:
   i. other ST3 projects could continue to be studied and implemented, as they are subject to a separate environmental process, and
   ii. Sound Transit will still be able to get Federal Capital Investment Grants for non-light rail transit, and for expansion of high-capacity fixed-route bus transit.

4. Since no Modal Alternatives Analysis (MAA) was ever done, the environmental process and analysis for this project are flawed. This makes the Sound Transit board's choice of light rail questionable.

1. The decision to use light rail, rather than other, lower-carbon, less expensive, disruptive and destructive alternatives, was made prior to EIS analysis. Generally, an alternatives analysis is required to assure that the best and second-best options are considered, especially when benefit-to-cost ratios vary significantly across the alternatives.
2. Sound Transit and partner agencies conducted an MAA analysis to justify selecting Stride BRT for the I-405 corridor. The 2014 modal analysis for the Downtown Seattle to West Seattle corridor, however (South King County HCT Corridor Study) was completed with ST2 funding, and aimed at justifying extension of the ST3 light rail program to the exclusion of all other modes.
    a. This ten-year-old, pre-ST3 work does not present an up-to-date, objective modal alternatives analysis. It did not weigh all potential BRT features and characteristics, or justify more than $7 billion expenditure for a four-mile light rail line, with massive, adverse construction impacts.
    b. ST's 2024 FEIS forecast that WSLE light rail would attract an additional 2,000 transit riders per day in the 2040s, presents an insignificant level of customer growth for a $7 billion public outlay. Until Sound Transit completes an objective environmental process, that compares all reasonable modal alternatives for this corridor, further development of high-capacity transit should be put on hold.
3. In not listing any modal alternatives to light rail, the FEIS bases its rationale on funding, not comparative analysis:
    a. **"The [West Seattle light rail extension] project was included in the Sound Transit 3 Plan, financing for which was approved by voters in November 2016.** The Representative Project in the Sound Transit 3 Plan identified mode, corridor, and station areas. The mode identified for this corridor was light rail." [Comment response 4 on citizen comment 0672 in Appendix O of the WSLE FEIS]
    b. Page 6.2 of the FEIS explains further that alternative bus modes were not considered: "A purpose of the project, as identified in Chapter 1, "Purpose and Need for West Seattle and Ballard Link Extensions," is to provide high-quality rapid, reliable, and efficient light rail transit service to communities in the project corridor as defined through the local planning process and reflected in the Sound Transit 3 Plan. **The mode (bus) was considered in the Level 1 analysis but was not carried forward since it was not identified and analyzed in the Sound Transit 3 Plan."**

Concluding Summary:

1. The Downtown-West Seattle (WSLE) light rail line should not be built (No Build option). Within the No Build option, the Ballard-Downtown segment should also be reconsidered.
2. Sound Transit's WSLE presents more disadvantages than advantages, including overwhelmingly negative social, economic and environmental impacts. As such, it fails to satisfy basic criteria set forth by ST3 and its FEIS for improving corridor transit. The costs, and negative environmental, economic and residential impacts of WSLE outweigh the benefits of building it
3. Current transit modes carry more passengers now, without transfers and wait times, than light rail promises to carry when completed. WSLE will degrade rather than improve the ridership experience.
4. The 146,000 tons of carbon that WSLE construction will generate – reduced from 614,000 tons in the Draft EIS -- plus elimination of and damage to acres of carbon absorbing forest and habitat, will be more than what a short light rail line can mitigate through year 2105.
5. Choosing the light rail investment over more flexible, effective and cheaper transit modes presents significant opportunity costs for the City of Seattle, and the regional transit network.

6. Sound Transit can achieve better ridership by continuing to expand and electrify King County Metro and ST Regional Express bus services, on the West Seattle peninsula, W. Seattle-Downtown corridor, and beyond.

Any Sound Transit taxing district resident opposed to the construction of the West Seattle light rail extension has three paths of action:

1. Use emailtheboard@soundtransit.org to contact all board members. As 17 of its 18 members are elected officials, and accountable to voters, each can be contacted directly by their own constituents.
    - The Seattle members include City Council Member Daniel Strauss, Mayor Bruce Harrell, Council Member Rob Saka **, ST Board Chair Dow Constantine **, and King County Council Member Girmay Zahilay. (** indicates lives in West Seattle). City Council Member Rob Saka chairs the City Council's Transportation Committee. King County Council Member Teresa Mosqueda also lives in West Seattle.
    - Include specific information from this document in messages to officials
    - Contact board and council members by letter, phone and email, and urge (or demand) that they:
        - Stand up for businesses, jobs, housing, communities, and the environment in Seattle.
        - Call for adopting the **No Build Option** still listed in both the 2024 WSLE FEIS and the 2022 WSBLE DEIS.
        - Require Sound Transit to consider cheaper, less destructive, lower carbon transit options than rail for the Downtown-West Seattle corridor.
        - Support using other modes, including buses, bus rapid transit, and other transit service connections to the regional rail network
2. Contact Port of Seattle Commissioners Fred Felleman, Ryan Calkins, Toshiko Hasegawa, and Hamdi Mohamed, Regional Transportation Manager Geraldine Poor, Chief of Staff Aaron Pritchard, and management staff LeeAnne Schirato, Kathy Roeder and Sabrina Bolieu.
    - Ask them to object vigorously and officially to impacts the WSLE bridge will cause, and remind them of what the Port of Seattle has opposed – obstruction of the East and West Duwamish waterways, impairment of maritime traffic and businesses, damage to the Duwamish River and Longfellow Creek ecosystems, and a huge carbon footprint.
3. Email local business organizations that will be affected:
    *West Seattle Chamber of Commerce
    *West Seattle Junction Association

Appendix
Additional Considerations from Research Literature

1. Consumer willingness to fund light rail development decreases as cost increases

Economists at the Federal Reserve Bank of St Louis showed that when consumers understand the actual costs of getting light-rail services, the amount is generally more than they are willing to pay.

Nationwide, annual light-rail operating costs ($778.3 million) far exceed fare revenue ($226.1 million). The balance ($552.2 million) is paid for with tax dollars. Examples (see also Snohomish-King-Pierce below): Fare revenues cover only 28.2% of system operating costs for St. Louis, 19.4% for Baltimore and 21.4% for Buffalo. If construction costs are added, losses become so large, no light-rail system can possibly recoup its costs.

Based solely on dollar cost, economists at the Federal Reserve Bank of St. Louis suggest that annual light-rail subsidies in St. Louis could instead be used more efficiently to buy a hybrid Toyota Prius every five years and pay annual maintenance costs of $6,000 for 7,700 low-income transit riders – with minimal pollution increases, and only a 0.5 percent increase in traffic congestion. Funds would still be left for all other MetroLink riders to pay for ride-share and bus fares.

Houston: When Houston Metro proposed the Purple line in 2008, it estimated a $591 million cost, and 28,750 weekday riders. By September 2020, costs reached $822 million, with daily expected ridership decreased to 5,230, meaning a per rider cost of about $150,000 to build the Purple Line.

Snohomish-King-Pierce Counties:

1. Sound Transit revenues do not cover its operating expenses
    a. Sound Transit farebox revenues in 2023 covered only 16% of Link light rail operating costs (lower than the 40% minimum policy threshold), 9% of ST Express bus operating costs (below the 20% threshold), and 7% of Sounder costs (below the 23% threshold).
    b. Revenue vs. cost gaps widen more when construction costs are added. Examples:
        i. Adding together operations, maintenance and construction costs, light rail fare revenues cover less than 3%.
        ii. For Sounder North commuter rail, ST over-estimated ridership by 90%, and underestimated total costs vs. farebox revenue by 95%.
    c. As regional revenues will never cover or recoup its full costs, Sound Transit must add millions of dollars in federal grants and borrowed money to cover them.

2. Three factors drive excessive U.S. transit project costs

As Sound Transit cost overruns have become chronic, the New York experience provides a cautionary tale about how to structure transit projects, and how to avoid pitfalls.

Factors that add approximately 85% to costs include extra money going to red tape, wasted contingencies, paying workers during delays, defensive design, and profit. Specific factors include:

- Lack of design standardization: this leads to fewer economies of scale, the inability to replicate station designs quickly without incurring more design costs, and difficulty in applying lessons learned from one station to another during the construction process.
- Labor: 40-60% of the project's hard costs in the U.S. Labor costs in low-cost cases: Turkey, Italy, and Sweden are in the 19-30% range; Sweden, the highest-wage case among them, is 23%.
- U.S. procurement norms: pervasive culture of secrecy and adversarialism between agencies and contractors; lack of agency internal capacity to manage contractors; insufficient competition; a desire to privatize risk that leads private contractors to bid higher.

3. Selection of urban transit alternatives shows bias toward light rail over alternative modes, even when rail serves fewer riders at higher cost.

"The overlooked transport project planning process — What happens before selecting the Locally Preferred Alternative?" by Yadi Wang & David Levinson, in **Transportation Research Interdisciplinary Perspectives**, Volume 19, May 2023, 100809 // https://www.sciencedirect.com/science/article/pii/S2590198223000568

Analyzing 43 U.S. light rail projects, the study found that on average, the 'do-minimum' option generates a Ridership to Cost Ratio (RCR) nine times higher than the Locally Preferred Alternative (LPA), and the average RCR produced by the second-best alternative is 86% higher than that of the LPA, indicating **substantial opportunity costs of rejecting more economical courses of action,** which could have likely managed prospective demand at much lower costs and delivered more services for more people at the same budgetary outlay.

Yet, transit agencies and officials only compared the preferred light rail mode against the traditional bus mode in the Transportation Systems Management (TSM) base option, indicating selection bias and discrimination in early-stage appraisal and decision-making.

4. Station development does not generally benefit low-income transit users

A 2019 University of Houston study finds mixed effects on the welfare of neighborhoods after light rail construction. Researchers estimated an $11,000 average increase in median income for neighborhoods near the new rail line development; but most gains go to high-income neighborhoods, while low-income neighborhoods see their income decline. The observed income polarization may be explained by poverty magnet and gentrification effects occurring simultaneously across the treated neighborhoods.

Light Rail Transit (LRT) does not appear to consistently deliver on its progressive policy goals of alleviating labor-skill mismatch, creating time cost savings, and increasing income mobility.

5. Light rail development does not reduce congestion

Los Angeles: While light rail investments may increase transit accessibility and ridership within high-demand corridors, it does not reduce congestion.

6. Per Capita Transit Ridership Is Declining

Since 2013, U.S. transit ridership has declined, despite continued growth in population.

Ridership has peaked and decreased seven different times since 1980, but overall, transit ridership per capita has decreased by nearly 15%. Researchers are evaluating economic considerations, fuel price, changing modal choices, and other areas as possible causes for the decline.

Demographic trends help to explain declining transit usage:

a. The U.S. population is aging. While young age cohorts have a higher propensity for transit use, they represent a lower share of the population.

b. Simultaneously, significant population declines in some of the counties with high-quality transit service and use is being mirrored by population growth in counties with lower levels of transit service and use. Rapidly growing counties had half the rate of commuting to work by transit as did rapidly declining counties.

c. Over 90% of U.S. population growth in 2023 occurred outside of its 124 largest cities**.** Among the 124 cities that the U.S. Census Bureau reports with populations over 200,000, about a third have lost population except 14 over 200,000 populations cities in Texas, and nine in Florida. Medium-sized cities in Florida, the Carolinas, and Las Vegas suburbs also added to the population. Americans are presently trading dense, urban, transit-oriented cities for less expensive, more spacious living elsewhere. How this will play out in transit development and politics are key questions.

7. The Great Inversion: socio-economic status and race re-sort urban-suburban residency

Suburbia increasingly sorted on bases of socio-economic status and race (Nijman, 2020; Nijman & Clery, 2015). As suburbs continue growing:

a. based on economic affordability (Kolko, 2017),
b. central-cities appear to revive and renew growth, as city as "the office," especially for growing numbers of self-employed and freelancers, in the new urban, knowledge transfer and networking economy, that thrives in a high density and high circulation environment (Carlino, 2015; Kloosterman, 2020; Scott, 2017).

Cities and city centers as preeminent sites of consumption, consumer services, and amenities: Glaeser, Kolko, and Saiz (2000). Also, rise of cities as sites of *consumption* (Jayne, 2005)

Significance of actual vs. relative numbers of workers, types of workers, incomes, and vulnerabilities of 'gig economy' and 'sharing/platform economy': (Graham, Hjorth, & Ledonvirta, 2017; Davidson & Infranca, 2016; Shambaugh, Nunn, & Bauer, 2018).

8. Public transit is losing its customer base

During the pandemic, people formed new mobility habits, and most are not returning to regular use of urban buses and trains. In a 2022 survey of 38 transit agencies worldwide, researchers found a 10% loss in the transit customer base, as reported by the International Association of Public Transit.

As of spring 2024, Sound Transit has not yet consistently reached its original 2010 light rail ridership target to the University District, even including the extension to Northgate, according to the U.S. Federal Transit Administration's National Transit Database (NTD). ST's original goal was an average of 2.7 million boardings per month. It has touched that level in a few months since 2018, such as for the Taylor Swift events in SODO. But it has not reached this ridership level on average in 2024. Across all central Puget Sound transit agencies, NTD reports transit ridership as of April 2024 was 30% lower than in pre-pandemic 2019.

9. Federal transit agencies and experts have questioned the value of urban light since the mid-1980s:

Ken Orski, Urban Mobility Corp. transportation management consultant, quoted in mid-1986:
"Mass transportation is the way the other fellow is supposed to get to work."

Sam Zimmerman, USDOT Urban Grants Manager, quoted in June, 1986 (Zimmerman helped Approve Seattle's 3rd Ave tunnel project):

- "No city is a paradigm. Good transit solutions are showing up differently in different locations. Transit agency people are … *involved in selling a product that is obsolete for the emerging market.* (emphasis added). The traditional transit market is relatively small, not growing, and travels mainly downtown, which is where buses and trains do the best job."

Rick Setner, UMTA Deputy Director (now FTA), quoted at Washington, DC, in June 1986:

- Determining cost effectiveness and overall cost per hour of user benefit is a complex formula. It reckons all costs (capital, interest, operations, maintenance), divided by hours of benefit — including travel time savings to existing & new riders, plus net additional new riders.
- Transit agencies want benefit hours to increase, to make the most benefit for most people. Moving people from bus to rail is not beneficial if:
  - rail doesn't replace bus, and
  - the agency is just measuring per-trip cost of a single trip from point A to point B, without including full trip distance. The result may be misleading.
- Light rail is not flexible; it's the equivalent of a Maginot Line (see France post-World War 1). Each NYC line in 1938 carried more than all three subway lines do now — because population has shifted to suburbs.

Alan Pisarski, author of Commuting in America, quoted in June 1986:

- "A low density, highly dispersed market without substantive corridors is not something traditional transit can respond to. One of the great games is defining the notion of what comprises "transit." It gets broader every year. Today, it's basically everything that is not an individual car: HOV lanes (Shirley Highway HOV lane, VA, is America's busiest transportation corridor outside NYC), taxis, car & van pools."
- "Many city officials look at light rail as a panacea: it's new, glitzy, and makes them a "world class" city. In some cities it's appropriate, in many more, it has very limited application, or it is not appropriate at all, because it's cost prohibitive."
    - "If you have six miles to do, it makes no sense to build six miles of tunnel, and/or lay six miles of track and wire. Instead of looking to be "world class" (a PR purpose), look to move people around (transit purpose)."
- "Traditional transit service is suburb to downtown office. Suburban 1980s jobs grew three times more than downtown areas, creating a dispersed pattern of commuter travel, which cannot be easily and conveniently served. It's the reason why there's so much traffic congestion: we're more dependent on cars."
- <u>As of the mid-1980s</u>:
    - Only 6-8% of employees working in station-based office developments use rail to commute to work. Up to 94% use SOVs (single occupancy vehicles). While rail stimulates development, it will create more traffic congestion than before, not reduce congestion.
    - Rail transit successfully stimulates development around suburban rail stations, but only plays a modest role in serving people who work in station-based offices.
        - Building new rail lines may actually have the perverse effect of exacerbating congestion & inequity (see **3. and 4.** above).

<u>USDOT Undersecretary Peter Rogoff, May 18, 2010**,** addressing Federal Reserve Bank of Boston, MA (Rogoff is former Sound Transit CEO)</u>

- Financial difficulties facing mass transit networks are partially due to an "unnecessary focus" on rail expansion over bus improvements. Using the flexibility of buses, "you can move a lot of people at very little cost compared to rail."
- "Paint is cheap, rails [sic] systems are extremely expensive". He further stated, "…paint a designated bus lane on the street system. Throw in signal preemption, and you can move a lot of people at very little cost compared to rail."

UMTA 1995 COMPARISON OF SELECTED RAIL SYSTEM COSTS, RIDERSHIPS ^

	<u>LENGTH</u>	**<u>COST</u>**		**<u>AVG. RIDERS PER DAY</u>**	
	<u>miles</u>	<u>estmt'd</u>.	<u>actual</u>	<u>estmt'd</u>.	<u>actual</u>
Buffalo, NY	6.4	$336M	$536M	184,000 (1995)	35,000
Baltimore	14.0	$450M	$990M	206,000 (1980)	55,000*/**
Wash., DC	70	$2.5B	$10B	800,000 (1990)	500,000**
Portland, OR	15	$143M	$214M	42,500 (1995)	20,000
Sacramento	18	$136M	$196M	20,000 (1990)	13,000
San Francisco	71	$700M	$1.7B	255,000 (1975)	200,000**
San Diego	20	$***	$258M	12,000 (1981)	30,000
Atlanta	32	$1.37B	$2.9B	578,000 (1995)	195,000**
Miami, FL	20	$795M	$1.05B	202,000 (1995)	36,000**

M = million / B = billion

Atlanta & Washington figures assume full system in place

* Baltimore did not open until 1984

** Indicates heavy rail system. Systems are generally funded with 75% federal, 25% local money.

*** San Diego had no federal funding for its first 15.9-mile line
^ Source: Urban Mass Transit Administration

10. **City of Seattle critique of ST3 DEIS** (quote of excerpts)**:**

- Sound Transit is considering cost savings refinements in response to its 2021 ST3 Realignment. Some of these proposed strategies are drastic.
    - We discourage scope reductions that do not bring commensurate benefit to the system and its riders, and that are not consistent with what was committed to voters.
    - We do not support strategies that would reduce access to the system.
- The City supports studying refinements that help control costs and provide meaningful benefits to local communities and the broader transit system and its riders, including:
    - Mix-and-match refinements for flexibility to choose segment alternatives that provide greatest benefit or fewest impacts;
    - Refinements to stations that would improve safe, non-motorized access;
    - Refinements that would avoid, minimize, or mitigate adverse project impacts.

11. Pandemic-caused vacancy rate increases in downtown areas

Between April 2019 and January 2023, Seattle had the second-highest downtown commercial vacancy rate in the U.S. (14.2%). "Seattle's office vacancy rate reached **23.2%** in July 2024, according to a recent report by Commercial Edge Research, highlighting the city's struggle to adapt to post-pandemic market conditions,"

While Metro Transit ridership in 2024 has recovered to 75% of pre-COVID levels, full ridership recovery is questionable as work from home + hybrid structures continue, and central employment and commerce locations diversify from downtown Seattle.

Carpenters Local 206

25120 Pacific HWY S, Suite 102, Kent, WA 98032

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July 23, 2026

Dow Constantine
CEO
Sound Transit
401 S Jackson St
Seattle, WA 98104
dow.constantine@soundtransit.org

Re: W200 Duwamish River Crossing & Aerial Guideway - Status Request Review Regarding Barnard Construction, Inc.

On behalf of members of Carpenters Local 206 (herein "Local 206"), please accept this request for review of Barnard Construction, Inc. as a responsible bidder for Sound Transit's W200 Duwamish River Crossing & Aerial Guideway ("Project").

In addition to our other duties as a labor organization, Local 206 monitors local construction projects to help ensure that fair and open competitive bidding practices are utilized and that taxpayers get the best value for their tax dollars. Proper enforcement of these laws results in more responsible contractors bidding and performing construction jobs, reduces instances of health and safety problems, promotes the timely completion of the contracted work, and helps to ensure the final product is of the highest quality and value for the taxpayer dollar.[1]

Local 206 understands that Barnard Construction, Inc. ("Barnard") submitted a Statement of Qualifications ("SOQ") for the Project. Local 206 does not know whether Sound Transit has completed its Request for Qualifications ("RFQ") stage and short-listed Barnard as a qualified finalist for the Project.

The purpose of this request is to provide Sound Transit with information regarding Barnard's questionable project completion history, lack of ties to local hiring halls and joint apprenticeship

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[1] *Domar Electric, Inc. v. City of Los Angeles* (1994) 9 Cal.4th 161, 170-171.

programs, and qualifications in comparison to other prequalified and eligible contractors, all of which raises doubts about whether they are a responsible and qualified bidder on this Project.

After Significant Price Increases & Delays on Multiple Barnard Projects, Rates Increased

Barnard has a history of cost overruns and project delays, as represented below by the Keeyask Generating System project in Manitoba, Canada and the Chimney Hollow Reservoir project in Colorado. After the projects experienced cost overruns and delays, water users in those areas saw rates increase.

Keeyask Generating System

In March 2014, Barnard. (as part of the joint venture BBE Hydro Constructors L.P.) began working on the General Civil Contract ("GCC") portion of the Keeyask Generating System ("KGS") project in Manitoba, Canada. At the time of award, the KGS GCC value was CAD$1.4 billion. [2]

By 2017 the total project "control" budget, including the GCC, **increased by CAD$2.2 billion or approximately 33%** from the initial approved budget of CAD$6.5 billion to CAD$8.7 billion.[3]

The KGS project was the subject of review by independent expert consultants and public hearings held by the Manitoba Public Utilities Board ("PUB"). In a 2017 report from MGF Project Services ("MGF")[4], an independent expert retained by Manitoba PUB, MGF states that "the cost increases are due to the performance of the General Civil Contract (GCC) contractor. The GCC contractor is behind schedule which causes delays and cost increases on other services and scopes of work related to the project, therefore raising the total project cost."

In 2018, the conclusion of the Manitoba PUB was that the primary reason the KGS project's cost increase was due to:

> ... unachievable productivity levels in the general civil contractor's bid, slow start up in the 2016 construction season when the first permanent concrete was poured, and geotechnical issues with the river bed. The [PUB] finds the root cause for the cost overrun relates to the nature of the cost reimbursable payment structure in the ... [GCC], which was not sufficient to drive the general civil contractor to achieve the productivity levels contained in its original bid for the Keeyask work. ... Once the [GCC's] profit eroded to zero, with no chance of re-establishing profit, the contractor had little or zero motivation to progress the project expediently... Underpinning the reason for the profit eroding to zero so early in the project was the fact that the general

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[2] https://keeyask.com/wp-content/uploads/Keeyask_GCC_Award.pdf
[3] https://www.hydro.mb.ca/articles/2017/03/control_budget_for_keeyask_generating_station_revised/
[4] https://www.pubmanitoba.ca/v1/proceedings-decisions/appl-current/pubs/2017%20mh%20gra/mgf%20exhibits/mgf-2-1%20-%20mgf%20report%20revised%20v2%20-%20public%20redacted%20-%20jan%2019.pdf

> civil contractor bid unachievable productivity levels. Those unachievable productivity levels formed the basis for an unrealistic target price and an unrealistic original cost estimate."[5]

The project was completed **2.5 years after its initial intended completion date.** According to independent experts quoted by the Manitoba PUB:

> BBE's schedule has over one thousand activities with 'negative float' (i.e., activities that have not or will not meet a scheduled or specifically identified date) while the GCC requires the schedule to have no negative float.[6]

Additionally, a review by outside consultant Klohn Crippen Berger concluded: "[t]he original unit prices were optimistically low, thus the original Target Price was optimistically low," "[t]he contractor would probably not have been able to do the work for the original Target Price," and "[t]he Actual Costs are not based on the quantities and unit prices."[7]

According to Manitoba Hydro's 74th Annual Report[8] which provides an overview of its performance for the year ending March 31, 2025, Manitoba Hydro had higher electricity revenues than the prior year. One of the factors cited for the increase was: "an electric rate increase effective September 1, 2023, along with a subsequent electric rate increase effective April 1, 2024."

Written comments submitted to the Manitoba PUB during the rate setting process for FY 26-27 from the "General Service Small and General Service Medium Customer Classes" state:

> Morrison Park Advisors Report, page 11 states: The Keeyask Generating Station is a case in point: the facility was constructed not because it was immediately necessary to serve domestic load (it was forecast to be eventually necessary to serve domestic load, but not for the first number of years after its planned in-service), but because it was believed that the energy produced could be sold at a profit in export markets, therefore delivering benefits to Manitobans. **Instead, the project was late, over-budget, and has not been profitable. The result was significant upward pressure on domestic rates, as compared to what would have been the case had the project not been undertaken.**[9]

Chimney Hollow Reservoir

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[5] https://www.pubmanitoba.ca/v1/proceedings-decisions/orders/pubs/2018%20orders/59-18.pdf
[6] ibid
[7] https://www.pubmanitoba.ca/v1/proceedings-decisions/appl-current/pubs/2017%20mh%20gra/mgf%20exhibits/mgf-6%20-%20kcb%20presentation%20(public%20redacted).pdf
[8] https://www.hydro.mb.ca/docs/corporate/annual_report_2024_25.pdf
[9] https://www.pubmanitoba.ca/v1/proceedings-decisions/appl-current/pubs/2025-mh-gra/gss-gsm-coalition-1-16.pdf (emphases added).

In December 2019, Barnard was selected as the General Contractor for the construction of the Chimney Hollow Reservoir Project, including the main dam, saddle dam, inlet/outlet tunnel, spillway, conveyance piping and valve house. According to the Contract Summary Form filed with the Northern Water Municipal Subdistrict [Attachment A], the final completion date for the project at its inception was May 4, 2024.

In a September 15, 2025 – more than a year after the Chimney Hollow Reservoir Project was estimated to be completed – a news article published by Northern Water on its website titled "Chimney Hollow Main Dam Topped Off" reported:

> On Friday, Aug. 8, at Barnard Construction's monthly all-site safety meeting, crews celebrated the topping off of the 350-foot-tall main dam. This milestone is a culmination of more than 1,000 days and 3.3 million work hours.
>
> Many areas of the construction site are being demobilized as project components are completed, including the asphalt batch plant occupied by WALO, who was the Switzerland-based asphalt-core subcontractor. The aggregate processing facility has also been demobilized, which included a jaw crusher, cone crusher, vertical shaft impact crusher and wash plant.[10]

An April 2024 article in the Greeley Tribune[11] discusses cost increases on the Chimney Hollow Reservoir project noting "When Northern Water signed the contract in 2019, the cost was estimated at $480 million, but it jumped to $561 million at some point." Reportedly, costs increased on the project during "the two year gap in which they had to deal with a federal lawsuit." But Northern Water Public Information Officer Jeff Stahla also told the Greeley Tribune that crews underestimated the amount of rock to be loaded off site.

The article also focuses on the impact of the additional costs of the two stakeholders in the Chimney Hollow Reservoir project – Broomfield and Platte River Power Authority. The two stakeholders "absorbed the extra costs in its 2025 rates" or "incorporated [them] into [their] overall operating expenditures."

Local 206 believes that Barnard's SOQ score for the Project, specifically under Criterion 3—Qualifications of the Proposer and Past Performance—should be reduced based on the significant cost increases and delays on the above projects. We urge Sound Transit to follow up with the relevant public agencies, independent experts, ratepayers and large users for a full and accurate accounting of Barnard's performance of the KGS and Chimney Hollow Reservoir projects.

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[10] Northern Water, "Chimney Hollow Main Dam Topped Off," https://www.northernwater.org/Home/NewsArticle/29e98163-43c1-4a7e-96d5-4d88d02f9f47, Accessed: 03/10/2026

[11] Greeley Tribune, "Chimney Hollow costs rise by $65 million; cities asked to cover their share," August 28, 2024

Barnard Lacks Public Works Experience in Washington State

A search of the Washington Department of Labor & Industries' Prevailing Wage Intents & Affidavits database identifies only one public works project in Washington State that Barnard has completed, and that project, the Wanapum Dam Future Unit Infill Project, was completed 16 years ago.[12]

Local 206 believes that Barnard's SOQ score for the Project, specifically under Evaluation Criterion 8—Qualifications of the Proposer and Past Performance (Knowledge of Local Market)—should be reduced accordingly. We urge Sound Transit to investigate Barnard's lack of experience in the Washington State market and its effect on Barnard's status as a responsible and qualified bidder.

Barnard Lacks Ties to Local Hiring Halls and Joint Apprenticeship Programs

Barnard is a Montana-domiciled contractor with no ties to the local community or its workforce. Barnard lacks relationships with all local area hiring halls which will be necessary to supply the skilled workforce the Project demands. Barnard lacks relationships with all reputable joint apprenticeship programs which will be necessary both to train new workers, and to assess and provide journeypersons with any necessary skills development.

Case Study: Keeyask Generating System Project

The report from independent expert MGF noted concerning labor and supervisorial practices by Barnard and the GCC team on the KGS project:

> MGF reviewed BBE's Progress Payments for May and June 2017 and noted that some personnel were working greater than 16 hours per day. There were 73 instances of personnel working greater than 16 hours per day. In some instances, there are personnel working up to 21 hours per day and, in some cases, working 16 hours per day for three consecutive days. **These extended hours will not be as productive** as straight time hours and will result in diminishing output for every hour worked. This **raises concerns about personnel safety**. Note: In May and June 2017, the total hours worked were 726,354, of which 326,000 were overtime. [13]

In addition, the MGF report noted that Barnard and the GCC team had a high ratio of supervisory employees compared to the industry, leading to higher labor costs.

> On reviewing BBE's October 2017 Construction Monthly Report, the ratio of Craft to Foreman is 3.97:1. This appears to be high... Typical ratios for similar construction projects have higher craft to supervision ratios. MGF has allowed for a craft to foreman ratio of 6:1. This ratio is applied to the total

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[12] https://secure.lni.wa.gov/wagelookup/affidavit/289380.

[13] https://www.pubmanitoba.ca/v1/proceedings-decisions/appl-current/pubs/2017%20mh%20gra/mgf%20exhibits/mgf-2-1%20-%20mgf%20report%20revised%20v2%20-%20public%20redacted%20-%20jan%2019.pdf (emphasis added).

> project direct hours to determine the variance in supervision hours. An average blended labour rate for foreman is used to determine the extra cost.
>
> Ratio of 6:1 versus actual Ratio of 3.97:1
>
> Applying these ratios to the total 7,078,000 direct labour hours will result in a 603,205 hours' variance at a rate of$ 76.32, which will result in: Order of Magnitude Estimate $91,600,000." [14]

Excessive overtime and high supervisor ratios can result when an out-of-area contractor has little or no connection to the local workforce and to area hiring halls and training centers. Increased reliance on an out-of-area workforce adds uncertainty and risk to the Project.

Local 206 believes that Barnard's SOQ score for the Project, specifically under Evaluation Criteria 3 and 8—Qualifications of the Proposer and Past Performance (Knowledge of Local Market) and Labor Relations: EEO, Apprentice, Priority Hire—should be reduced based on Barnard's lack of knowledge of the local market and inability to meet apprenticeship utilization goals given its lack of ties to local union hiring halls and joint apprenticeship programs. We urge Sound Transit to investigate Barnard's qualifications in these criteria and their effect on Barnard's status as a responsible and qualified bidder.

CONCLUSION

We strongly encourage Sound Transit to consider the findings presented above when determining whether Barnard is a responsible bidder qualified to bid on this Project. We also encourage Sound Transit to further investigate Barnard's performance of projects like the Keeyask Generating System by following up with the respective independent experts, public utilities boards, ratepayers and large users for full and accurate accounting of the projects and their aftermaths. Pursuant to Section 4.1 of the RFQ for the Project, such independent investigation is permissible as Sound Transit reserved the right to consider not just a proposer's SOQ and references but also "other relevant information obtained from additional sources, including publicly available information and Sound Transit's prior experience with the Proposer."

Local 206 would appreciate notification of what steps you will take to determine whether Barnard is a qualified bidder on the Project, and we look forward to your response.

Thank you for your time and consideration.

Sincerely,

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[14] https://www.pubmanitoba.ca/v1/proceedings-decisions/appl-current/pubs/2017%20mh%20gra/mgf%20exhibits/mgf-2-1%20-%20mgf%20report%20revised%20v2%20-%20public%20redacted%20-%20jan%2019.pdf

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[Enclosures]

Cascadia Transit Authority (CTA)
Mass Transit Vision and Plan

One State. One Card. Unified Rapid Transit. > Target System

Opening: June 1, 2035

Prepared for the Sound Transit Board of Directors

2. Three Core Pillars

- **Pillar 1: The Cascadia Transit Authority (CTA) Consolidates regional transit into one statewide network. Unifies existing light rail assets into the high-capacity CTA Subway system.**
- **Pillar 2: Fast-Track Delivery Deploys single-window state permitting preemption and a 45,000-worker Transit Construction Corps running 32 Tunnel Boring Machines simultaneously on 24/7 schedules.**
- **Pillar 3: Speculation-Proof Land Acquisition Establishes a 125% pre-announcement baseline property valuation buffer to eliminate land speculation, ensure fair compensation for property owners, and prevent court delays.**

3. The CTA Subway Network

THE 9-LINE RAPID TRANSIT GRID:

Pink Line: Tacoma to Lynnwood Spine

Red Line: Everett to SeaTac Spine

Blue Line: Mariner to Woodinville Loop

Purple Line: Ballard to Redmond/Issaquah Grid

Orange Line: SLU & Lake City Loop to Renton

Brown Line: Bothell to Renton Beltway

Green Line: Woodinville to SeaTac Spine

Gold Line: Fauntleroy to Seward Park Connector

Grey Line: West Seattle to Issaquah South Lake Line (2040 Delivery)

ACCELERATING DELIVERY & SECURING EQUITY > Structural & Statutory Toolkits (Section 7) ---

2. System Highlights (Top / Middle Section)

- **Unified ORCA Fare Equity: Automated $0.00 Universal Equity Passes for eligible residents, 100% free Youth Transit Waivers (ages 0–18), student/apprentice discounts, and distance-based fare capping across all transit tiers.**
- **Zero-Displacement Housing Trust: High-density, mixed-income transit villages constructed directly above station boxes.**
- **Freight-Isolated Commuter Rail: Two dedicated, electrified passenger tracks for CTA Sounder running from Olympia to Bellingham, completely separated from private freight congestion.**

3. Call to Action

1. **Form a Joint Study Committee: Partner with state legislative leaders to evaluate the Cascadia Transit Authority (CTA) unification framework.**
2. **Adopt Section 7 Toolkits: Direct executive leadership to examine single-window permitting and the 125% baseline property valuation buffer to protect future right-of-way acquisitions.**
3. **Advance Fare Integration: Coordinate regional ORCA fare-capping and intermodal timetables across all local systems.**

CTA

CTA Logo

Scan to view full plan