Seattle Department of Transportation

April 28, 2022

Lauren Swift
Central Corridor Environmental Manager
Sound Transit (Sent via email)

Dear Ms. Swift,

The West Seattle and Ballard Link Extensions (WSBLE) project is the largest infrastructure investment in Seattle's history. The project brings tremendous transformative opportunity to further City and regional goals to expand equitable access to residential and job centers, support thriving neighborhoods and economic prosperity, and encourage sustainable and climate-friendly transportation choices. However, as its many miles of new light rail track and multiple stations are constructed through existing Seattle neighborhoods, WSBLE also brings the real potential for significant temporary and permanent adverse impacts to Seattle residents and all users of the City's transportation network.

The DEIS is a critical early juncture to evaluate project alternatives so that future project decisions may optimize long-term benefits and outcomes, while ensuring that we avoid, minimize, and mitigate adverse project impacts. The City commends Sound Transit for its enormous and time-consuming effort to develop an environmental document for a light-rail project of this scale through a largely built-out city, including coordination with participating and cooperating agencies and the Tribes. As a Cooperating Agency under NEPA and an Agency of Jurisdiction under SEPA, and in support of our 2018 Partnering Agreement with Sound Transit, the City submits formal comments from the DEIS review with primary goals to:

- Help advance the best possible project that maximizes benefits, minimizes impact and harm, and best meets local community and regional interests.
- Ensure the environmental review process adequately evaluates project impacts and proposes appropriate mitigation measures to provide community members and policymakers with a clear understanding of project choices and trade-offs.
- Raise any potential conflicts or concerns related to City codes, regulations, or Director's rules, or related to adequate mitigation for project impacts, that could impede streamlined permitting and construction of the eventual project.

A City team of nearly 100 subject matter experts from 15[1] City departments contributed to the review of the WSBLE DEIS. The City's formal DEIS comments are compiled in *Attachment A: City Consolidated Comments* and summarized in the sections and attachments below.

[1] Review staff from 15+ City departments included: City Budget Office, Department of Construction and Inspections, Department of Neighborhoods, Department of Transportation, Finance and Administrative Services, Office of Civil Rights, Office of Economic Development, Office of Emergency Management, Office of Housing, Office of Planning and Community Development, Office of Sustainability and the Environment, Seattle Center, Seattle City Light, Seattle Fire Department, Seattle Parks and Recreation, Seattle Police Department, Seattle Public Library, and Seattle Public Utilities.

KEY DEIS FINDINGS

Racial equity and Environmental Justice

Sound Transit and the City have partnered since 2018 to develop a project-wide multi-year equity analysis using the City's Racial Equity Toolkit (RET). The RET furthers the City's and Sound Transit's shared goal to advance equitable outcomes for communities of color, particularly the RET-identified communities of Chinatown-International District and Delridge. While separate from the DEIS, the RET aims to inform key project analysis, milestones, and decisions—including the DEIS Environmental Justice (EJ) analysis, the formal analysis required by federal regulation developed to ensure equitable distribution of project benefits and avoid disparate impacts to communities of color and low-income populations.

With the RET analysis and process in mind, the City's DEIS review found the EJ analysis incomplete for measuring and mitigating impacts and benefits to minority and low-income populations. The City strongly disagrees with conclusions in the EJ analysis that the project has adequate offsetting benefits, and/or mitigation that the project would not result in high and adverse effects on environmental justice populations. The City requests a more complete evaluation in the FEIS to fully understand and avoid, minimize, or adequately mitigate the project impacts on EJ populations. Absent this complete evaluation, it is difficult to confirm a Preferred Alternative in RET communities.

In this overdue era of racial equity reckoning, the City believes it is critical that we go above past practice to advance equitable outcomes. See *Attachment B: Racial Equity Toolkit and Environmental Justice* for discussion and additional examples of how Sound Transit can strengthen the EJ analysis for the FEIS through additional analysis, expanded methodology, and the development of a mitigation plan to address potential adverse impacts. The City is committed to supporting this additional analysis through ongoing partnership with Sound Transit and continued development of the RET.

Compliance

The City of Seattle is responsible for issuing local permits for the WSBLE project. The City and Sound Transit share the goal to streamline the WSBLE project permit process. The City cannot permit the project if it does not comply with City codes, rules, plans, and regulations. In addition, where City code would not otherwise ensure mitigation for impacts, the City's substantive SEPA authority allows the City to condition or deny project permits to mitigate impacts based on adopted SEPA polices, plans, rules, and regulations. The DEIS demonstrates several instances in which compliance with local regulations is unclear, and raises additional concerns that, if not adequately addressed and resolved in the FEIS, will likely result in additional analysis and mitigation at the time of permitting. For example:

- **Stormwater**. Seattle Public Utilities (SPU) cannot permit the project as shown in the DEIS designs because the proposed alignments do not comply with regulations for stormwater management related to guideways. Sound Transit asserts that guideways are non-pollution-generating surface. This is incorrect; the Washington State Department of Ecology (Ecology) has judged guideways to be pollution-generating surfaces. Unless Ecology revises that determination based on new data, the project must meet the City's Stormwater Code (SMC 22.800-22.808).

- **Geology and soils**. The Prospect Street portal, Smith Cove Station site, and alignments along the west side of Queen Anne are in Environmentally Critical Areas (ECA), defined by steep slope and potential slide areas. These project components will likely require considerable efforts to provide complete stabilization to protect the facility from landslides emanating from the ECA Steep Slope Area.
- **ADA guidelines**. Evaluation of accessibility conditions around the station areas does not include detailed assessment of curb ramps and sidewalk conditions (including slope, pavement irregularities, obstructions, widths) that may be noncompliant with ADA guidelines. Additional analysis and mitigation may be needed at the time of permitting if these are not adequately addressed in the FEIS.

These compliance issues must be resolved and documented in the FEIS to avoid potential cost and delay in the project permitting process. See *Attachment C: Compliance* for additional examples and discussion of these compliance issues.

Impacts

It is essential for the environmental review to accurately evaluate potential project impacts to inform appropriate mitigation measures and understanding of alternatives and their trade-offs. While the DEIS provides a tremendous amount of information, the City finds that many sections of the DEIS are missing key information and analysis necessary to understand the full complement of project impacts. Without this information it is difficult to fully compare alternatives and develop appropriate mitigation. We also found several areas where we did not agree with the methodology or assumptions used to evaluate impacts. For example:

- **Missing information/analysis: Business displacement**. Impacts to minority-owned businesses and employees, particularly BIPOC businesses and employees, have not been fully evaluated throughout the corridor.
- **Missing information/analysis: Visual quality and aesthetics**. Impacts to specific public views of natural and human made features along SEPA corridors and of historic landmarks have not been fully evaluated.
- **Methodology: Transportation**. Many standards and conditions—such as speed limits, pedestrian level of service data, and transit boarding numbers—used for assumptions have changed since the DEIS was written. The FEIS analyses should reflect updates to these assumptions.
- **Methodology: Design/safety**. The standards for Seattle Fault and earthquake parameters are changing and the FEIS should use most current standards.

See *Attachment D: Methodology and Analytics* for a discussion of areas where additional information is needed, and examples of analyses with assumptions or methodologies with which the City disagrees.

In addition, there are numerous instances throughout the DEIS where the City finds that the analysis underestimates or omits the extent of project impacts and/or proposes insufficient mitigation to address impacts. For example:

- **Transportation**. The City finds that the DEIS does not adequately assess the impacts of full or partial closures to arterials during construction. The analyses largely focus on congestion

impacts, and underestimate the need for reduced vehicle trips, compelling the public to change behavior during the construction period and SDOT operations to actively manage construction impacts throughout construction of the project. In addition, the focus on peak-time impacts fails to fully assess impacts to freight mobility which often rely on non-peak travel times. The insufficient capture of these potential construction impacts impedes the understanding of whether mitigation measures will adequately address impacts, which in turn, limits evaluation of alternatives when construction impacts are an important factor. See *Attachment E: Transportation Impacts* for additional examples and a broader discussion of transportation impacts and mitigation.

- **City assets and properties**. The DEIS does not fully document potential impacts to City assets and properties—including buildings, utility and transportation infrastructure, and parks and open space—making it difficult to understand completely the trade-offs between project alternatives and identify appropriate mitigation actions. Many impacts will require acquisition in fee or by easement, utility relocation, right-of-way use through street use permitting, or other legal conveyance—all processes that take substantial time, and in many cases City Council action. Impacts to City assets and properties should be fully examined in the FEIS to prevent later delays to the project. See *Attachment F: City Assets and Properties* for additional examples and a broader discussion of impacts and mitigation related to City assets and properties.
- **Section 4(f) Impacts**. The Section 4(f) analysis performed by Sound Transit lacks necessary specificity and detail on the scope, duration, and mitigation of impacts to parks and park facilities, certain historic resources, and Seattle Center for any of the alternatives. Seattle Parks and Recreation (SPR) and Seattle Center cannot concur as to whether project impacts are de minimis under Section 4(f) without this additional analysis, including adequate demonstration of completed planning to minimize harm to SPR properties and Seattle Center. See *Attachment G: Section 4(f) Impacts* for additional examples and a broader discussion of impacts and mitigation to parks, recreational spaces, and wildlife habitat.
- **Section 106 Impacts**. The DEIS does not sufficiently assess the construction and permanent visual, physical, and operational impacts of the WSBLE project on historic resources. A thorough understanding and analysis of these impacts (effects) is necessary to meaningfully compare alternatives, inform a decision on a Preferred Alternative, and avoid costly conflicts and limited mitigation opportunities. Successful Section 106 consultation depends on the City having this information to evaluate impacts and trade-offs. See *Attachment H: Historic and Archaeological Resources/Section 106* for additional examples and a broader discussion of impacts and mitigation to historic, cultural, and archaeological resources.
- **Business and residential displacement**. The DEIS does not sufficiently examine the full range of impacts to businesses and residents, including loss of community cultural identify and cohesion resulting from displacements and changes in land use. Expanded evaluation is necessary to fully inform strategies to avoid, minimize, and mitigate these project impacts. See *Attachment I: Business and Residential Displacement* for additional examples and a broader discussion of impacts and mitigation for displacement.

In addition to the Attachments highlighted above, see the City's formal comments in *Attachment A: City Consolidated Comments* for examples of additional analysis and mitigation needed to address potential project impacts.

Mitigation

NEPA requires consideration of direct, indirect, and cumulative impacts of a project on the environment and development of potential measures to mitigate adverse environmental effects. Typically, a DEIS describes options for mitigation, while an FEIS includes the decisions on mitigation that would be implemented. However, we found the DEIS to be lacking in consistent and clear mitigation for the potential adverse project impacts, many of which may be unmitigable. Without adequate proposed mitigation, it is not possible to understand the full impact of the project, differences in alternatives, and potential permitting concerns. For example:

- **Business displacement**. Several WSLBE alternatives would impact businesses that are highly location-dependent and may not have relocation options if displaced. For example, many maritime businesses rely on access to shorelines, intermodal infrastructure, and industrial lands. Many businesses in the Chinatown-International District rely on the community's regional draw as a cultural hub. The DEIS does not make clear how to mitigate impacts, especially displacement, of these location-dependent businesses.
- **Streetcar impacts**. All WSBLE alternatives would have varying impacts on the Seattle streetcar network. The streetcar cannot be easily rerouted or curtailed without major capital work and associated environmental documentation. This might include installation of temporary tracks, turnbacks, and switches, to maintain access to the fleet and maintenance facilities at Charles Street (FHS) and 318 Fairview (SLU) and provide for safety during such operations. The DEIS does not detail the modifications to the streetcar system that will be needed to provide for continued, if disconnected, service.
- **Environmental impacts**. Several WSBLE alternatives would have impacts to Environmentally Critical Areas or other environmentally sensitive areas that could result in significant tree loss, wildlife habitat degradation, and steep slope and potential landslide area destabilization. The DEIS does not demonstrate how—or in some cases, whether—these impacts can be sufficiently avoided, minimized, or mitigated.

Constructing a light rail system though existing communities in a built-out city will necessarily cause impacts. Sound Transit must work with community members, the City, and other stakeholders and partners to develop a mitigation plan with sufficient detail in advance of the FEIS to inform actions on a Project to be Built and FTA Record of Decision, and to avoid future delays to project permitting. See *Attachment J: Mitigation* for additional examples and a broader discussion related to mitigation.

Comparison of alternatives

A core purpose of the environmental review is to provide information necessary to understand and compare potential project impacts to inform the selection of a Preferred Alternative and the eventual Project to Be Built. In our review of the DEIS, we find that in most segments, the analysis provides important information to support this comparison. However, in several places the City finds that absent a more complete impacts analysis and mitigation proposal, there is not sufficient information to confirm or modify a Preferred Alternative for the FEIS.

Chinatown-International District. The CID-1a/b alternative options at 4th Avenue South would require multiple road closures in a constrained section of the south Downtown transportation grid, significantly impacting local access and regional mobility networks during an 8 to 11-year construction period. They

would also require significant additional costs associated with the replacement of the 4th Avenue S bridge and elements of connection to the Midtown Station. The CID-2a/b alternative options at 5th Avenue South would cause significant disruption in the heart of the Chinatown-International community, including the displacement of up to 19 location-sensitive businesses in the corridor that may not have relocation options. The City finds that without an understanding of how—and whether—these impacts could be mitigated it is not possible to fully understand the trade-offs. Furthermore, due to the vocal concerns from residents and organizations from this RET-identified community, the City believes before an action on a Preferred Alternative there should be additional community process and analysis on how to avoid/minimize impacts, advance RET outcomes, and address historic harm. See *Attachment B* for additional discussion.

South Interbay and the north portal of the downtown tunnel. The large, elevated guideway structures of the SIB-1 and SIB-2 alternatives would weave across Elliott Way three times between the Republican portal and the Smith Cove station. It is unclear how the project would mitigate the resulting construction and permanent transportation impacts and visual quality impacts or how it would comply with local noise regulations. Meanwhile, both the SIB-2 and SIB-3 alternatives would encroach on steep slope and slide-prone Environmentally Critical Areas of the Queen Anne greenbelt and would also present noise regulation compliance concerns.

Seattle Center. For the Seattle Center station, the City is not only a project reviewer and regulator, but also the primary property owner and landlord to the many arts and cultural resident organizations that call the 74-acre campus home. The City has many concerns with the impacts associated with both the DT-1 and DT-2 alternatives, including:

- Impacts to protected features, including legacy trees, historic assets, and recreation space.
- Temporary and permanent noise and vibration impacts to sensitive cultural venues including performance halls and recording studios.
- Displacement affecting resident organizations and the long-term performance of the campus.
- Impacts to historic assets, including the Northwest Rooms, International Plaza, and Cornish Playhouse.
- Transportation and access impacts affecting events and operations for years.

Development of a full mitigation plan as part of the FEIS will be necessary to fully understand the trade-offs of these alternatives. See *Attachment K: Seattle Center* and *Exhibits 1*, *2*, and *3*, for a broader discussion of impacts and mitigation related to Seattle Center campus, resident organizations, and the surrounding community, and a comparison of Seattle Center station alternatives.

ADDITIONAL CONSIDERATIONS

In addition to the comments highlighted above and detailed in *Attachment A* regarding the analysis and mitigation of potential project impacts and comparison of DEIS alternatives, the City also found that the DEIS information and concurrent project discussions of refinements to the DEIS alternatives has informed comments, discussed below, regarding future planning to optimize station access and transit integration, refinements to the DEIS alternatives, and third-party funding.

Planning for station access and transit integration

WSBLE stations will create new neighborhood mobility patterns as people access new stations on foot, bicycles, and other transit modes. Siting and designing stations for safe non-motorized access and seamless bus-rail integration is necessary for passenger safety, user experience, and overall ridership, and an essential step toward the City's Vision Zero goals to end traffic fatalities and serious injuries. The DEIS analysis reveals that some alternatives do not optimize access and bus integration. If unaddressed in early project planning, there will be added costs and impacts—in time, dollars, ridership, and human safety—later to the project. It is imperative that in the next phase of station planning and preliminary engineering, Sound Transit, the City, King County Metro, and other agencies work with community to ensure that we design—or in some cases, *refine*—stations to include essential components for safe station access and seamless transit integration. See *Attachment E* for a discussion of access and integration concerns in the context of transportation impacts and mitigation and *Attachment L* for a broader discussion of access and integration and the importance of upcoming station planning work.

Third-party funding

The City recognizes that some WSBLE alternatives may ultimately require funding partnerships with third-party agencies or organizations. Once critical factors such as project impacts, mitigation costs, and projected revenue are better understood and key decisions have been made to complete the FEIS and establish the Project To Be Built, the City intends to work jointly with Sound Transit and other partners explore third-party funding options.

Refinements to the DEIS alternatives

During the DEIS period, Sound Transit introduced additional refinements that strive to reduce costs, avoid impacts, reduce risk, or achieve other benefits to the system would reduce project costs. The City supports examination of refinements that would provide meaningful benefits to the local communities and the broader transit system and its riders, including: mix-and-match refinements that would allow greater flexibility to choose segment alternatives that provide the greatest benefit or fewest impacts; refinements to stations or station entrances that would improve safe non-motorized station access; and refinements that would help avoid, minimize, or mitigate adverse project impacts. As with the current DEIS alternatives, any refinements will need appropriate environmental review to inform their consideration.

NEXT STEPS

To advance the project to the FEIS—as well as to reach subsequent necessary project milestones of the FTA Record of Decision, the City Council ordinance adopting the Project to be Built and amending the Transitway Agreement, and eventual project permitting—it is critical that Sound Transit work with the City, community members, and other stakeholders and local and regional partners, to ensure that the issues raised in the DEIS process are adequately resolved. These steps will necessarily include:

- **Board action on a Preferred Alternative**. Mayor Bruce Harrell and the City Council intend to put forward a Joint Council resolution that articulates a City position on a WSBLE Preferred Alternative for study in the FEIS, as well as additional bodies of work to support ongoing planning and environmental review.

- **Development of the FEIS**. Between the DEIS and the FEIS, the City staff team will work with Sound Transit staff to carry out the following necessary work to support the FEIS analysis:
    - *Technical comment resolution*. The City commits to a process for issue resolution with technical teams, including responses to technical comments, assistance with additional analyses, and continued development of design refinements.
    - *Mitigation planning*. The City commits to supporting a joint process to develop appropriate mitigation measures and strategies to inform a comprehensive mitigation plan for potential project impacts in the FEIS.

Relationship to permitting

The City has and retains substantive SEPA authority to the full extent provided in applicable statutes, codes and regulations, including but not limited to SMC 25.05.660, SMC 25.05.665, SMC 25.05.670, and SMC 25.05.675. The City's DEIS review found many issues that, if not adequately addressed and resolved in the FEIS, will likely result in additional analysis and mitigation at the time of permitting. These comments include, but are not limited to:

- Transportation impact examples that have no clear code path to mitigation
- Accessibility conditions in the station context where existence of curb ramps and other sidewalk conditions (slope, pavement irregularities, obstructions, widths) may be noncompliant with ADA guidelines
- Unclear mitigation for pedestrian facilities that may be temporarily or permanently impacted by placement of columns associated with right-of-way elevated guideway segments

Other examples may be found in the City's detailed comments in *Attachment A*. To avoid delays in the permitting phase, it is critically important that Sound Transit work with community members, the City, and other stakeholders and partners to develop a mitigation plan with sufficient detail in advance of the FEIS to inform actions on a Project to be Built and FTA Record of Decision.

Meaningful community engagement

The City appreciates Sound Transit's commitment to community engagement, and the extensive effort its staff has made to engage with communities along the entire WSBLE alignment during the DEIS Comment Period. Continuing this intensive engagement effort will be key as the environmental work advances—including the Board action on a Preferred Alternative, development of a mitigation plan and other analysis and issue resolution in advance of the FEIS, and exploration of refinements to the DEIS alternatives. All these steps must be carried out in partnership with community through sustained and robust two-way engagement. It is critical the engagement be transparent by sharing out what Sound Transit is hearing from community and stakeholders, as well as how the agency is applying engagement findings to project decisions. Furthermore, methods of engagement should be tailored for different communities; what will work for Downtown or Seattle Center might not work in Chinatown-International District or Delridge.

The City will continue to offer its resources and assistance to ST in this effort. See *Attachment M: Community Engagement* for further discussion of community engagement opportunities. We look forward to partnering in this engagement work, through both the FEIS development process and the update to the Racial Equity Toolkit.

In closing, the City remains a strong supporter of the WSBLE project and partner to Sound Transit on its planning, permitting, and eventual service delivery. We are committed to working with Sound Transit, community members, and other partners before the FEIS to ensure appropriate resolution on these outstanding issues.

Sincerely,

Kristen Simpson (Apr 28, 2022 12:21 PDT)

Kristen Simpson, Interim Director, Department of Transportation, City of Seattle

Marshall Foster, ST3 Designated Representative, Office of the Waterfront and Civic Projects, City of Seattle

Attachments

Attachment A: City Consolidated Comments
Attachment B: Racial Equity Toolkit and Environmental Justice
Attachment C: Compliance
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Attachment E: Transportation Impacts
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Exhibit 1: Event uses throughout Seattle Center campus and facilities in a typical year
Exhibit 2: Event-related curbside loading uses on streets near the Seattle Center campus
Exhibit 3: WSBLE DEIS Noise and Vibration Review Report for Seattle Center

CC:

Seattle Mayor Bruce Harrell
Seattle City Council President Debora Juarez
Seattle City Councilmember Lisa Herbold
Seattle City Councilmember Andrew Lewis
Seattle City Councilmember Tammy Morales
Seattle City Councilmember Teresa Mosqueda
Seattle City Councilmember Sara Nelson

Seattle City Councilmember Alex Pedersen
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Mark Assam, USDOT Federal Transit Administration
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City of Seattle Comments on the West Seattle and Ballard Link Extensions (WSBLE) Project Draft Environmental Impact Statement

Attachments B-M

April 28, 2022

Contents

Attachment A: City Consolidated Comments

See comment matrix for the City's formal comments, separately attached.

ID	DEIS Chapter/Section	Page No.	Section No.	Comment Made by:	City Department	Comment (Limit to One Item Per Row)	Project Segment
1	Acquisitions, Displacements, and Relocations	6	4.3.1.3.4	K. Tassery	FAS	Alignments SIB-2 and SIB-3 would displace the Seattle Animal Shelter. There is no mention of this displacement or mitigation measures in this chapter. a. The Seattle Animal Shelter (SAS) is critical infrastructure as the City has an obligation under the Seattle Municipal Code (SMC 9.25.040) to provide an animal shelter. This facility is the only City-operated shelter. In addition to a shelter, this facility also serves as the headquarters for the City's Animal Control function, which is an important part of the City's Public Safety response. b. According to the Sound Transit valuation formula this property would be a full acquisition for two of the proposed alignments, which would necessitate a full replacement of the facility and property acquisition. c. The existing 10,375 s.f. facility was constructed in 1981 and sits on a 19,800 s.f. parcel of land owned by the City of Seattle. The central location is important since this shelter is the only one operating and serves all of Seattle. d. FAS estimates that to replace the existing facility, the cost for property acquisition, hard costs and soft costs would be approximately $21.7 million. e. In addition, FAS estimates that 5-7 years would be needed for full replacement (from community input, programmatic design, site acquisition, design, construction and move in). If the City does not have sufficient time to complete a replacement facility, a temporary site would be needed.	Interbay-Ballard
2	Acquisitions, Displacements, and Relocations	192	4.3.14.4.1	K. Tassery	FAS	Any limitation of access to and from the Fire Station may necessitate a temporary station for the City's emergency response. The City of Seattle will need adequate time to site, construct and equip a temporary fire station. The temporary site must be geographically close to the permanent station, and must have sufficient space for vehicles, bunking equipment, living quarters, and specialized fire equipment. The most recent temporary fire station in Northgate, required approximately 24 months to operationalize. In addition, the City would need funding to site, construct and equip a temporary fire station. The most recent temporary fire station during construction of Fire Station 31 in Northgate has cost the City approximately $5.6, over the course of three years. Most of this cost is due to the one-time costs associated with construction and siting, however there are some ongoing costs associated with the lease. A longer duration would require additional funding.	All (Systemwide)
3	Acquisitions, Displacements, and Relocations	192	4.3.14.4.1	K. Tassery	FAS	In the Public Services, Safety and Security section of the Ballard Acquisitions, Displacements and Relocations Chapter, under "Other Government Facilities", the Seattle Animal Shelter is not mentioned. Alignments SIB-2 and SIB-3 would displace the Seattle Animal Shelter. The Seattle Animal Shelter (SAS) is critical infrastructure as the City has an obligation under the Seattle Municipal Code (SMC 9.25.040) to provide an animal shelter. This facility is the only City-operated shelter. In addition to a shelter, this facility also serves as the headquarters for the City's Animal Control function, which is an important part of the City's Public Safety response.	Interbay-Ballard
4	Acquisitions, Displacements, and Relocations	194	4.3.14.4.5	K. Tassery	FAS	In the Public Services, Safety and Security section of the Ballard Acquisitions, Displacements and Relocations Chapter, the Seattle Animal Shelter is not mentioned. Alignments SIB-2 and SIB-3 would displace the Seattle Animal Shelter. The Seattle Animal Shelter (SAS) is critical infrastructure as the City has an obligation under the Seattle Municipal Code (SMC 9.25.040) to provide an animal shelter. This facility is the only City-operated shelter. In addition to a shelter, this facility also serves as the headquarters for the City's Animal Control function, which is an important part of the City's Public Safety response. In addition, access to FS 20 may be limited. Any limitation of access to and from the Fire Station may necessitate a temporary station for the City's emergency response. The City of Seattle will need adequate time to site, construct and equip a temporary fire station. The temporary site must be geographically close to the permanent station, and must have sufficient space for vehicles, bunking equipment, living quarters, and specialized fire equipment. The most recent temporary fire station in Northgate, required approximately 24 months to operationalize. In addition, the City would need funding to site, construct and equip a temporary fire station. The most recent temporary fire station during construction of Fire Station 31 in Northgate has cost the City approximately $5.6, over the course of three years. Most of this cost is due to the one-time costs associated with construction and siting, however there are some ongoing costs associated with the lease. A longer duration would require additional funding.	Interbay-Ballard

5	Acquisitions, Displacements, and Relocations	194	4.3.14.4.6	K. Tassery	FAS	Fire Station 18 would be within a block of all alternatives. Sound Transit has committed to maintain access to the station at all times. If, for some reason, Sound Transit were not able to maintain access, the City may need to temporarily relocate the fire services. The City of Seattle will need adequate time to site, construct and equip a temporary fire station. The temporary site must be geographically close to the permanent station, and must have sufficient space for vehicles, bunking equipment, living quarters, and specialized fire equipment. The most recent temporary fire station in Northgate, required approximately 24 months to operationalize. In addition, the City would need funding to site, construct and equip a temporary fire station. The most recent experience with a temporary fire station during construction of Fire Station 31 in Northgate has cost the City approximately $5.6, over the course of three years. Most of this cost is due to the one-time costs associated with construction and siting, however there are some ongoing costs associated with the lease. A longer duration would require some additional funding.	Interbay-Ballard
6	Acquisitions, Displacements, and Relocations	195	4.3.14.6	K. Tassery	FAS	In the Public Services, Safety and Security section of the Ballard Acquisitions, Displacements and Relocations Chapter, the Seattle Animal Shelter is not mentioned, and there are no mitigation measures listed for the facility. Alignments SIB-2 and SIB-3 would displace the Seattle Animal Shelter. The Seattle Animal Shelter (SAS) is critical infrastructure as the City has an obligation under the Seattle Municipal Code (SMC 9.25.040) to provide an animal shelter. This facility is the only City-operated shelter. In addition to a shelter, this facility also serves as the headquarters for the City's Animal Control function, which is an important part of the City's Public Safety response.	Interbay-Ballard
7	Acquisitions, Displacements, and Relocations	209	4.3.16.3.4	K. Tassery	FAS	Fire Station 14, which is on a parcel of property impacted by the DUW-2 alignment is landmarked by the City of Seattle, but is not identified by Sound Transit as a historic site. The building was landmarked in ORD 122463. Designation materials on the website here: https://www.seattle.gov/Documents/Departments/Neighborhoods/HistoricPreservation/Landmarks/RelatedDocuments/fire-station-14-designation.pdf	SODO/CID
8	Acquisitions, Displacements, and Relocations	194	4.2.14.4.1	K. Tassery	FAS	Any limitation of access to and from the Fire Station may necessitate a temporary station for the City's emergency response. The City of Seattle will need adequate time to site, construct and equip a temporary fire station. The temporary site must be geographically close to the permanent station, and must have sufficient space for vehicles, bunking equipment, living quarters, and specialized fire equipment. The most recent temporary fire station in Northgate, required approximately 24 months to operationalize. In addition, the City would need funding to site, construct and equip a temporary fire station. The most recent experience with a temporary fire station during construction of Fire Station 31 in Northgate has cost the City approximately $5.6, over the course of three years. Most of this cost is due to the one-time costs associated with construction and siting, however there are some ongoing costs associated with the lease. A longer duration would require some additional funding.	West Seattle (DUW, DEL, WSJ)
9	Acquisitions, Displacements, and Relocations	196	4.2.14.4.3.1	K. Tassery	FAS	The City of Seattle will need adequate time to site, construct and equip a temporary fire station. The temporary site must be geographically close to the permanent station, and must have sufficient space for vehicles, bunking equipment, living quarters, and specialized fire equipment. The most recent temporary fire station in Northgate, required over a year to operationalize. In addition, the City would need funding to site, construct and equip a temporary fire station. The most recent experience with a temporary fire station during construction of Fire Station 31 in Northgate has cost the City approximately $5.6, over the course of three years. Most of this cost is due to the one-time costs associated with construction and siting, however there are some ongoing costs associated with the lease. A longer duration would require some additional funding.	All (Systemwide)
10	Acquisitions, Displacements, and Relocations	197	4.2.14.6	K. Tassery	FAS	The City of Seattle will need adequate time to site, construct and equip a temporary fire station for FS 36. The temporary site must be geographically close to the permanent station, and must have sufficient space for vehicles, bunking equipment, living quarters, and specialized fire equipment. The most recent temporary fire station in Northgate, required approximately 24 months to operationalize. In addition, the City would need funding to site, construct and equip a temporary fire station. The most recent experience with a temporary fire station during construction of Fire Station 31 in Northgate has cost the City approximately $5.6, over the course of three years. Most of this cost is due to the one-time costs associated with construction and siting, however there are some ongoing costs associated with the lease. A longer duration would require some additional funding.	West Seattle (DUW, DEL, WSJ)

11	L4.1 Acqusitions, Displacements, and Relocations	219	L4.1	K. Tassery	FAS	Alignments SIB-2 and SIB-3 would displace the Seattle Animal Shelter. There is no mention of this displacement or mitigation measures in this chapter. a. The Seattle Animal Shelter (SAS) is critical infrastructure as the City has an obligation under the Seattle Municipal Code (SMC 9.25.040) to provide an animal shelter. This facility is the only City-operated shelter. In addition to a shelter, this facility also serves as the headquarters for the City's Animal Control function, which is an important part of the City's Public Safety response. b. According to the Sound Transit valuation formula this property would be a full acquisition for two of the proposed alignments, which would necessitate a full replacement of the facility and property acquisition. c. The existing 10,375 s.f. facility was constructed in 1981 and sits on a 19,800 s.f. parcel of land owned by the City of Seattle. The central location is important since this shelter is the only one operating and serves all of Seattle. d. FAS estimates that to replace the existing facility, the cost for property acquisition, hard costs and soft costs would be approximately $21.7 million. e. In addition, FAS estimates that 5-7 years would be needed for full replacement (from community input, programmatic design, site acquisition, design, construction and move in). If City does not have sufficient time to complete a replacement facility, a temporary site would be needed.	Interbay-Ballard
12	L4.1 Acqusitions, Displacements, and Relocations	227	L4.1	K. Tassery	FAS	Alignments SIB-2 and SIB-3 would displace the Seattle Animal Shelter. There is no mention of this displacement or mitigation measures in this chapter. a. The Seattle Animal Shelter (SAS) is critical infrastructure as the City has an obligation under the Seattle Municipal Code (SMC 9.25.040) to provide an animal shelter. This facility is the only City-operated shelter. In addition to a shelter, this facility also serves as the headquarters for the City's Animal Control function, which is an important part of the City's Public Safety response. b. According to the Sound Transit valuation formula this property would be a full acquisition for two of the proposed alignments, which would necessitate a full replacement of the facility and property acquisition. c. The existing 10,375 s.f. facility was constructed in 1981 and sits on a 19,800 s.f. parcel of land owned by the City of Seattle. The central location is important since this shelter is the only one operating and serves all of Seattle. d. FAS estimates that to replace the existing facility, the cost for property acquisition, hard costs and soft costs would be approximately $21.7 million. e. In addition, FAS estimates that 5-7 years would be needed for full replacement (from community input, programmatic design, site acquisition, design, construction and move in). If City does not have sufficient time to complete a replacement facility, a temporary site would be needed.	Interbay-Ballard
13	L4.1 Acqusitions, Displacements, and Relocations	96	L4.1	K. Tassery	FAS	Fire Station 14 in SODO would be partially acquired by Sound Transit in alignment DUW-2. Below are considerations which may impact the acquisition fee calculation for this parcel: a.The building was landmarked in ORD 122463. Designation materials on the website here: https://www.seattle.gov/Documents/Departments/Neighborhoods/HistoricPreservation/Landmarks/RelatedDocuments/fire-station-14-designation.pdf b.The portion of property with potential impact is the back/East parking area. There are underground utilities and storage located here, including vaults to collect water. Sound Transit should include an underground survey prior to construction. c.This area is used as a training facility for SFD. Substantial loss of space may require permanent relocation of training facilities.	West Seattle (DUW, DEL, WSJ)
14	Ch 4 Affected Enviornment and Environmental Consequences	4.2.8-4	4.2.8.1.3	TJ McDonald	OEM	Floodplains: I do not see any consideration of sea level rise nor urban flooding hazards which are expected to worsen as extreme rainfall events increase in frequency and magnitude. A project of this scope and magnitude must build for the future. We recently experienced flooding in the South Park neighborhood in which tides were 1-2 feet over predicted levels. This project must include the best available science about what the flood hazard will be in the future. I recommend Sound Transit work with the Cosmos Project at the United States Geologic Service (https://www.usgs.gov/centers/pcmsc/science/ps-cosmos-puget-sound-coastal-storm-modeling-system). Additionally it should work with the Climate Impacts Group (https://cig.uw.edu) at the University of Washington to develop models to show flood risk over the life of the project. City of Seattle utilities have worked with CIG to better understand streamflows and snowpack.	
15	Ch 4 Affected Enviornment and Environmental Consequences	4.2.8-8	4.2.8.3.3	TJ McDonald	OEM	I don't see that any consideration will be given to sea level rise and how it is anticipated to change the floodplain. The City of Seattle is using sea level rise analysis in the siting of its own critical facilities. Sound Transit should do the same.	SODO/CID

16	Ch 4 Affected Enviornment and Environmental Consequences	4.2.11-1	4.2.11.1.1	TJ McDonald	OEM	This section mentions seismic sources, but fails to mention expected frequency of earthquakes from these sources nor the possible magnitudes. The USGS conducted a probabilistic seismic hazard assessment for Seattle with the results here - https://www.usgs.gov/node/102471. Additionally, the M9 Project has developed new models of Cascadia Subduction Zone ground motions and research into the effects of long period waves on structures. Their site is at https://hazards.uw.edu/geology/m9/.	SODO/CID
17	Ch 4 Affected Enviornment and Environmental Consequences	4.2.11-2	4.2.11.1.3	TJ McDonald	OEM	The comment that "No evidence of fault movement was observed in the available soil boring exploration logs" seems to downplay the complexity with which the Seattle Fault expresses itself on the surface. Geologists have been attempting to better understand the paleoseismic history of the Seattle Fault for some time. They have found evidence of movement in other parts of the fault and we know the Duwamish was uplifted approximately 6 meters during the event 1100 years ago. Glaciation has removed a lot of the evidence for seismic activity.	SODO/CID
18	Ch 4 Affected Enviornment and Environmental Consequences	4.2.11-2	4.2.11.1.3	TJ McDonald	OEM	The statement about tsunami is vague and incomplete. The most impactful tsunami source for Seattle is the Seattle Fault. A large regional event would cause high velocity currents but unlike a Seattle Fault tsunami, would not run up on land. Tsunami can also be caused by landslides. including submarine landslides. Landslide caused tsunami have occurred in Tacoma and the Tacoma Narrows. A 2003 NOAA model of worst case Seattle Fault tsunami show .5 to 2 meters of inundation in parts of the all alignments. Washington State Department of Natural Resources is updating the tsunami model for the Seattle Fault. The project should incorporate their findings into design work. Link has the potential to be a valuable vertical evacuation structure. Vertical evacuation is needed because the wave arrival times from a Seattle Fault tsunami would be within minutes.	SODO/CID
19	Ch 4 Affected Enviornment and Environmental Consequences	4.2.11-4	4.2.11.3.1	TJ McDonald	OEM	From ADEIS: The frequency of earthquakes and tsunamis is very uncertain but it is known that in approx. 900AD an earthquake of about M 7.3 occurs on the Seattle Fault which runs roughly parallel to the alignment through the Duwamish Valley. The earthquake produced 6 meters of uplift on the southern side of the fault and generated a tsunami inside Elliott Bay which produced deposits on West Point in Magnolia. A 2003 NOAA model (OAR PMEL-124) estimated a repeat would inundate much of the area covered by the alignment in the Duwamish, SODO and Interbay Areas. This earthquake is considered a worst case. The Seattle area's climate and geologic history have obscured the paleoseismic record making estimates of the frequency of earthquakes and accompanying tsunami hard to estimate. The lack of data makes strong Seattle Fault earthquakes appear infrequent when we really don't know the frequency. The 'infrequency' lowers the Seattle Fault in design considerations. Given the uncertainty and the potential impacts, it would benefit the project to explicitly include the Seattle Fault in design.	
20	Executive Summary	ES-12-2-29	ES 12	TJ McDonald	OEM	ES.12. At Smith Cove / W Galer Station, all alignments pass through areas that a NOAA model predicts could be inundated by a Seattle Fault generated tsunami (https://www.pmel.noaa.gov/pubs/PDF/tito2572/tito2572.pdf). Such an event is very unlikely, but would be very dangerous. Provided the elevated track and station are built capable of weathering a tsunami, having an elevated refuge is a great benefit. Because a Seattle Fault tsunami would strike the Interbay area within minutes of an earthquake, it would be critical for people to have immediate access to high ground. The preferred alignment (SIB-1) is the better option because it is higher, further from the hillside of Queen Anne, and closer to the water. The preferred alignment is exposed to tsunami inundation at W Republican St / 5th Ave W. See https://seattlecitygis.maps.arcgis.com/apps/MapSeries/index.html?appid=0489a95dad4e42148dbef571076f9b5b for an interactive map.	Interbay-Ballard
21	Acquisitions, Displacements, and Relocations	1	4.2.1.3	Bin Jung	OH	"There would be affected parcels that currently have income-restricted housing under the Multifamily Tax Exemption Program or that are managed by Seattle Housing Authority." The information necessary to identify impacts and compare alternatives is missing. Missing is reference to OH-funded buildings, which are all rent- and income-restricted housing (RIRH). ST must cross-check the OH's portfolio of RIRH units with the parcels affected to determine which alternative is the least harmful. Failure to do this makes the false claim that MFTE, MHA, and SHA buildings are the only affordable housing programs in the City. If this analysis has already been done, the language "OH-funded rent- and income-restricted affordable housing" should be incorporated throughout the report and clarified in map legends. It currently is not.	All (Systemwide)
22	Acquisitions, Displacements, and Relocations	1	4.2.1.3	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Tables should show the number of parcels affected and displaced that have RIRH units through City-funded portfolio, MFTE, and SHA. This is critical to determine the least harm done by each alternative.	All (Systemwide)
23	Acquisitions, Displacements, and Relocations	6	4.2.1.3.3	Bin Jung	OH	"Alternative DEL-3 would acquire buildings within the Edge Apartments, displacing some residential units." The information necessary to identify impacts and compare alternatives is missing. The Edge Apartments is one building, and displacing residential units would mean tearing down the whole building and all residential units.	West Seattle (DUW, DEL, WSJ)
24	Acquisitions, Displacements, and Relocations	2	4.2.1-1	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Missing is income restrictions of a residential unit needs to be included on all charts outlining parcels affected and displacement, specifically if it is rent- and income-restricted, aka affordable housing.	All (Systemwide)
25	Ch 6 Alternatives Evaluation	6	6.2.2.1.2	Bin Jung	OH	The methodology does not capture complete impacts of the project including housing impacts and displacements. Missing in the evaluation are analyses of these impacts. The City of Seattle uses this methodology to evaluate these impacts: Including RIRH as a Resource Impact Measure, including RIRH to the presented table, and disaggregating information into affordable and market rate housing.	All (Systemwide)
26	Ch 2 Alternatives Considered	6	2.1.1.1.2	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Missing is the use of each parcel, including rent- and income-restricted housing, which must be included in this analysis.	All (Systemwide)
27	Acquisitions, Displacements, and Relocations	3	4.1.1.2	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Missing is clarification of what partial acquisition mean when there is a building on site?	All (Systemwide)

28	Social Resources, Community Facilities, and Neighborhoods	5	4.1.4	Bin Jung	OH	The methodology does not capture complete impacts of the project including affordable housing. Missing in the evaluation are analyses of the impact to affordable housing. This impact should be explicitly listed in either definition, or separately, as the loss of affordable housing would be an impact on the human environment and neighborhood.	All (Systemwide)
29	Social Resources, Community Facilities, and Neighborhoods	2		Bin Jung	OH	The methodology does not capture complete impacts of the project including affordable housing. Missing in the evaluation are analyses of the impact to affordable housing. The impact of transportation investments on affordable housing, specifically the displacement of rent- and income-restricted units, will be a critical question asked by the public when evaluating in the impact and overall harm of the infrastructure investments. An analysis must be done comparing the parcels for each alternative and the RIRH parcels (OH-funded, MFTE, SHA) to understand how many RIRH units are being displaced by each alternative. If this analysis has already been done, it must be more explicit.	All (Systemwide)
30	Social Resources, Community Facilities, and Neighborhoods	2	4.2.1-1	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Missing is the number of RIRH units in these figures.	All (Systemwide)
31	Social Resources, Community Facilities, and Neighborhoods	9	4.2.1.8	Bin Jung	OH	The information used is incomplete. Supportive housing is a type of affordable housing. When discussing Relocation Opportunities, rent- and income-restricted affordable housing must be included in addition to supportive housing.	All (Systemwide)
32	Social Resources, Community Facilities, and Neighborhoods	9	4.2.1.8	Bin Jung	OH	"Research indicates that there are adequate opportunities for most residents and businesses to successfully relocate within the project vicinity." The information necessary to identify impacts and compare alternatives is missing. Missing are definitions and sources to the terms "research," "adequate," and "project vicinity," especially given Seattle's tight real estate market. If relocation is far from the original location, disruption to the social network and human environment and needs to be considered.	All (Systemwide)
33	Social Resources, Community Facilities, and Neighborhoods	47	4.2.4-1	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Missing is MFTE buildings from Figure 4.2.4-1. These buildings have rent- and income-restricted units and should be included.	All (Systemwide)
34	Social Resources, Community Facilities, and Neighborhoods	52	4.2.4.1.5	Bin Jung	OH	The information used is outdated. Updated information is that the MFTE program now has a renewal option where buildings can opt-in the exemption for up to 24 years. The phrasing, "…although buildings currently in the program will likely no longer qualify by the time the project opens in 2032" should be reassessed. (https://senatedemocrats.wa.gov/das/2021/05/03/das-bill-expanding-affordable-housing-development-becomes-law/)	All (Systemwide)
35	Social Resources, Community Facilities, and Neighborhoods	54	4.2.4.3.1	Bin Jung	OH	"The Build Alternatives would not displace existing or currently planned buildings with income-restricted M.H.A. housing units." The information necessary to identify impacts and compare alternatives is missing. Missing is other programs provide RIRH units, such as the OH-funded portfolio, MFTE program, and SHA buildings. These programs should also be included in this statement.	All (Systemwide)
36	Social Resources, Community Facilities, and Neighborhoods	58	4.2.3.5	Bin Jung	OH	The information used is outdated. Updated information is that the MFTE program now has a renewal option where buildings can opt-in the exemption for up to 24 years. "However, the income restricted units in each building are commitments through their participation in the M.F.T.E. program and are assumed to expire 12 years after the building was constructed." The MFTE program has been renewed to 24 years after building's construction. This statement should be reassessed. (https://senatedemocrats.wa.gov/das/2021/05/03/das-bill-expanding-affordable-housing-development-becomes-law/)	All (Systemwide)
37	Social Resources, Community Facilities, and Neighborhoods	58	4.2.4.3.5	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Missing is OH-funded rent- and income-restricted units and SHA buildings.	All (Systemwide)
38	Acquisitions, Displacements, and Relocations	1	4.3.1.3	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Missing is reference to OH-funded rent- and income-restricted housing along the alignments in the write up describing types of affordable housing.	All (Systemwide)
39	Acquisitions, Displacements, and Relocations	6	4.3.1.3.3	Bin Jung	OH	"It could also require temporary relocation of about 120 residential tenants and the emergency shelter at the Y.W.C.A. on 5th Avenue as a result of construction noise. Some of these units receive M.H.A. funding from the City." The YWCA received OH funding and is now a completely 100% affordable housing building.	Downtown
40	Acquisitions, Displacements, and Relocations	8	4.3.1.8	Bin Jung	OH	"Property availability will change over time, but research indicates that there are adequate opportunities for most residents and businesses to successfully relocate within the project vicinity." Missing are definitions and sources to the terms "research," "adequate," and "project vicinity," especially given Seattle's tight real estate market. If relocation is far from the original location, disruption to the social network and human environment and needs to be incorporated.	All (Systemwide)
41	Acquisitions, Displacements, and Relocations	12	4.3.2.1.2	Bin Jung	OH	"Much of the Chinatown-International District study area has Mandatory Housing Affordability zoning." The information necessary to identify impacts and compare alternatives is missing. Missing is the other affordable housing programs available such as OH-funding and MFTE. The repeated emphasis on MHA and MHA zoning in each section is distracting and a narrow view of affordable housing development. It presents MHA as the only, or most effective, affordable housing program the City has, which is false.	SODO/CID
42	Economics	38	4.3.3.4.3	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Missing is a statement that C-ID businesses serve primarily Asian Americans, low-income communities, and seniors. This is important when stating that construction could cause permanent relocation.	SODO/CID
43	Social Resources, Community Facilities, and Neighborhoods	45	4.3.4-2	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Missing is clarification if the "income-restricted housing" here OH-funded RIRH housing, or just MHA housing. Please clarify and include all types of RIRH if not already done. This applies to all figures in both WS and B sections.	All (Systemwide)

44	Social Resources, Community Facilities, and Neighborhoods	55	4.3.4.1.5	Bin Jung	OH	"Some multi-family residential buildings in the study area also currently have rent- or income-restricted units through Seattle's Multifamily Tax Exemption (M.F.T.E.) program, although buildings currently in the program will no longer qualify by the time the project opens in 2037." The information used is outdated. Updated information is that the MFTE program now has a renewal option where buildings can opt-in the exemption for up to 24 years. This comment should be reassessed. (https://senatedemocrats.wa.gov/das/2021/05/03/das-bill-expanding-affordable-housing-development-becomes-law/)	All (Systemwide)
45	Social Resources, Community Facilities, and Neighborhoods	57	4.3.4.3.1	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Missing is the number of units of income-restricted housing in figures that present them.	All (Systemwide)
46	Social Resources, Community Facilities, and Neighborhoods	57	4.3.4.3.1	Bin Jung	OH	"The Build Alternatives would not displace any existing or currently planned affordable M.H.A. housing units." The information necessary to identify impacts and compare alternatives is missing. Missing is all RIRH, including OH-funded portfolio, MFTE, and SHA buildings.	All (Systemwide)
47	Social Resources, Community Facilities, and Neighborhoods	64	4.3.4.4.3	Bin Jung	OH	"Alternative CID-1a* could have approximately 120 residential displacements due to the loss of access to the ICON Apartment building during construction. This building includes 24 rent- and income-restricted units as a condition of the building's participation in the M.F.T.E. program. However, the building was constructed in 2015, which means the M.F.T.E. program requirements would expire by 2027, which is before the relocations would occur." The information used is outdated. Updated information is that the MFTE program now has a renewal option where buildings can opt-in the exemption for up to 24 years. This comment should be reassessed. (https://senatedemocrats.wa.gov/das/2021/05/03/das-bill-expanding-affordable-housing-development-becomes-law/)	SODO/CID
48	Social Resources, Community Facilities, and Neighborhoods	64	4.3.4.4.3	Bin Jung	OH	The methodology does not capture complete impacts of the project. Missing in the evaluation is all forms of RIRH (OH-funded portfolio, MFTE, MHA, SHA) when discussing affordable housing units. Failure to do so is incomplete and misleading.	All (Systemwide)
49	Social Resources, Community Facilities, and Neighborhoods	65	4.3.4.4.4	Bin Jung	OH	"Construction of the Midtown Station entrance on 5th Avenue for Alternative DT-2 could require temporary relocation of tenants (**126 units, 114 of which are M.H.A.-funded**) and the shelter functions at the Y.W.C.A. (1118 5th Avenue) due to construction noise." This sentence is incorrect, the YWCA building is now a fully affordable OH-funded building.	Downtown
50	Appendix G - Environmental Justice	92		Bin Jung	OH	"Sound Transit anticipates that residential displacements would impact environmental justice populations to a greater degree because the only residential displacements would occur in a building that participates in the City of Seattle Multifamily Property Tax Exemption Program, where a number of units within the building have income restrictions." This sentence is unclear. But if ST is evaluating impact to RIRH, it must include all affordable housing programs, not just MFTE.	All (Systemwide)
51	Appendix G - Environmental Justice	101		Bin Jung	OH	"The project could displace low-income housing that is unknown to Sound Transit (for instance, rental units that accept housing vouchers)." The information is incomplete. Has ST confirmed that it cannot get this information from SHA? If the information is obtainable, the only low-income housing that is unknown would be private market, "naturally occurring" affordable housing.	All (Systemwide)
52	Appendix G - Environmental Justice	102		Bin Jung	OH	"The Goodwill Seattle Outlet and residents of the ICON Apartment (which includes affordable housing) would be displaced by Alternative CID-1a*." The information necessary to identify impacts and compare alternatives is missing. Missing is information for all affordable housing programs (OH-funded, MFTE, MHA, SHA).	SODO/CID
53	Appendix G - Environmental Justice	21	3.1.2	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Missing is explicit mention of affordable housing, and/or rent- and income restricted housing, in Study Area and Demographics in the environmental justice section. Affordable housing serves predominately low-income households color and has been identified as an EJ issue by low-income communities of color.	All (Systemwide)
54	Executive Summary	41	Table ES-5	Bin Jung	OH	The analysis is incomplete. Several significant impacts have not been identified. Has ST mapped all affordable housing program investments onto the alignments to conclude the number of residential displacements in all alternatives? If not, the chart here and describing the other sections could be incorrect and misleading.	SODO/CID
55	Executive Summary	55	ES.6.2	Bin Jung	OH	"The adverse effects associated with displacement of businesses and residences would be effectively mitigated by implementation of Sound Transit's real property acquisition and relocation policy and design measures, and best management practices would reduce the severity of potential construction impacts." This sentence is an aspirational and subjective statement written as fact.	All (Systemwide)
56	Executive Summary	55	ES.6.2	Bin Jung	OH	"The project would result in adverse impacts to the environmental justice populations in the Chinatown-International District during both operations and construction…" The information necessary to identify impacts and compare alternatives is missing. Missing is if this qualifies as "disproportionately high and adverse as defined in EO 12898 and the US DOT Order 5610.2(a)? Other alternatives were described as not being disproportionately high and adverse, the same benchmark should be applied here.	SODO/CID
57	Executive Summary	56	ES.9	Bin Jung	OH	The information necessary to identify impacts and compare alternatives is missing. Missing is mention that the C-ID 5th Avenue option is controversial and has received strong community and agency feedback due to its disproportionately high and adverse impact.	SODO/CID
58	Appendix J - Conceptual Design Drawings			Kyle Ho	SCL	Conflicts indicated will be addressed once a final design has been decided as currently not addressed yet besides E3 busway	All (Systemwide)
59	Appendix J - Conceptual Design Drawings			Kyle Ho	SCL	Confirm/finalize TPSS locations so any needed feeder upgrades to serve TPSS can done ahead of time	All (Systemwide)

60	Ch 2 Alternatives Considered	2-55	2.1.2.2.2	Kelly Purnell	SCL	**5th Ave Shallow (CID-2a)** This is the most impactful alternative to the Denny-Mass Transmission line project. The preferred alignment shares the same pathway along 6th Ave starting just north of S. Massachusetts St. (SB-S 95+00) up to Airport Way/Seattle Blvd., and then along 5th Ave from Airport Way all the way to Jefferson St.(SB-S 47+00)	SODO/CID
61	Ch 2 Alternatives Considered	2-55	2.1.2.2.2	Kelly Purnell	SCL	**5th Ave Shallow (CID-2a)** The shallower depth (90') would be a cut and cover which could cause complications for the overhead portion the transmission line given the width the proposed track lines. The T-line conflicts here are along 6th Ave from just south of Royal Brougham Way (SB-S 89+00) to approximately (SB-S 95+00). The crossing at Massachusetts St may also complicate the overhead transmission crossing	SODO/CID
62	Appendix J - Conceptual Design Drawings	140-141	B01-ASX100	Kelly Purnell	SCL	**5th Ave Shallow (CID-2a)** The shallower depth (90') as a cut and cover would be a significant problem for the underground portion of the t-line from the above point on 6th Ave (SB-S 95+00) all the way along 5th Ave to approximately Jefferson St (SB-S 47+00) where the t-line and ST route deviate. In particular, the construction of the station would be problematic as it is likely to take up most of the ROW. There is very little room along the margins of the ROW, even using easements, to install the UG t-line and the construction impacts would not be avoidable. Concurrent construction of the tunnel/station and transmission line duct and vault would be necessary.	SODO/CID
63	Appendix J - Conceptual Design Drawings	142	B01-ASP100a	Kelly Purnell	SCL	**5th Ave Shallow (CID-2a)** Diagonal Station: While still posing many of the same complexities for the Denny-Mass Transmission line as the above option, the station itself presents fewer problems as it is aligned diagonally where existing buildings sit, and not full in the 5th Ave ROW. This is preferred from a transmission line standpoint.	SODO/CID
64	Appendix J - Conceptual Design Drawings	145	B01-ASP300	Kelly Purnell	SCL	**5th Ave Deep (CID-2b)** This alternative is marginally better than CID-2a in that it can be mined rather than a cut and cover due to it being twice the depth for both the tunnel and station. •This would still require close coordination and design collaboration with ST to ensure that there are minimal conflicts with the two projects, especially at the station location.	SODO/CID
65	Executive Summary	ES-28	ES.3.1.2.2.	Kelly Purnell	SCL	•"Construction in the station area for Alternative CID-2a would take approximately 8 to 9 years and Option CID-2b would take approximately 6.5 to 7.5 years. The construction duration for the Alternative CID-2a diagonal station configuration would be shorter. It is anticipated that construction in the station area of the diagonal station configuration would take approximately 5 to 6 years" oThe construction of either CID-2a or CID-2b is significant. With an in service date of 2032 this would at a minimum require construction to start in 2025. Coordination with ST for the transmission line needs to begin NOW. Environmental and outreach updates on the DMT needs to become a priority	SODO/CID
66	Ch 5 Cumulative Impacts	5-22	5.4.16	Kelly Purnell	SCL	City Light has committed to minimizing impacts to the CID to the extent possible. To achieve avoidance of additional cumulative impacts during the Denny-Massachusetts Transmission line build along 5th Ave, it is imperative that Sound Transit, City Light and other agencies closely coordinate the projects and work together to allocate space for the underground transmission line above the tunnel and subterranean station.	SODO/CID
67	Executive Summary	ES-28	ES.3.1.2.2.	Kelly Purnell	SCL	**5th Ave Shallow (CID-2a)** "would require utility relocations including Pigeon Alley, which houses the Sound Transit fiber optic backbone for light rail operation, along with several other utilities" – this excerpt from the executive summary is an indication that this alternative could cause pushback on SCL installing the transmission line. This alternative will require close coordination and design collaboration with the Denny-Mass t-line to eliminate as many risks and complications as possible in installation of both forms of infrastructure with the least amount of impact to the community	SODO/CID
68	Technical Report: Historic and Archaeological Resources	N.5A-17		Rebecca Ossa, SCL	SCL	Need additional information re: this property's determination of eligibility to understand the split between one area or building that is eligible vs another that is not. This is referring to item "# 5139 725921 7666205660 1924 Seattle City Light South Receiving Substation Switchyard 3839 4th Avenue South Not Eligible (pending consultation) Duwamish."	All (Systemwide)
69	Technical Report: Historic and Archaeological Resources	3-1, AE 0036-17		Rebecca Ossa, SCL	SCL	Re: the "Relocation of a 230-kilovolt power line along 6th Avenue South and Diagonal Avenue, south of South Spokane Street, leading to the Seattle City Light Substation within the Duwamish Segment," has this transmission line been evaluated for National Register eligibility?	All (Systemwide)
70	Technical Report: Historic and Archaeological Resources	10-10, AE0036-17		Rebecca Ossa, SCL	SCL	Re: "Common to all Build Alternatives in this segment is the relocation of a 230-kilovolt power line along 6th Avenue South and Diagonal Avenue, south of South Spokane Street, leading to the Seattle City Light Substation. This project element would not directly or indirectly alter or diminish any aspect of integrity of adjacent historic properties," has the transmission line been evaluated for NR eligibility?	All (Systemwide)
71	Chapter 4	Pg. 4.2.15-3	29 thru 31	William Chin/Kyle Ho	SCL	What about access to SSC for construction for permanent footing shown on SCL property?	All (Systemwide)
72	Chapter 4	Pg. 4.2.15-4	15 thru 22	SCL	SCL	Add discussion regarding major utility impacts. 230 kV relocation to 6th Ave S would/may require full/partial closures to installed drilled pier foundations and erect poles to maintain required clearances to energized lines, which would include the existing 26 kV line along the west/east side of 6th Ave S. Depending on timing of utility relocation work, may have impacts	All (Systemwide)
73	Ch 3 Transportation	3-146	3.19.6.2	SCL	SCL	Table 3-32 identifies possible long term street closures for that would be impacting 17th Ave West/Thorndyke Ave West, from West Dravus Street to 16th Ave West, which SCL has an existing property that is planned to be developed into a new proposed substation. Construction impacts, as assumed, will need to be coordinated closely with the SCL Design and future construction of the proposed Interbay Substation.	Interbay-Ballard
74	Utilities	Pg. 4.2.15.1	4.2.15	SCL	SCL	100' for all major utilities or all utilities? Need to clarify. If analysis includes all non major utilities, then 100' may need to be expanded. Please include the proposed 230 kV alignment(s) along 6th Aver S within the project area as we think it is out of the 100' analysis and needs to be evaluated as part of the project DEIS.	All (Systemwide)
75	Utilities	Pg. 4.3.15.1	4.3.15	SCL	SCL	100' for all major utilities or all utilities? Need to clarify. If analysis includes all non major utilities, then 100' may need to be expanded, as there are additional utility impacts outside of the 100' that may need to be considered, especially as design or analysis has not been completed to resolve all alignment conflicts, clearances, etc.	All (Systemwide)
76	Utilities	Pg. 4.2.15-2	4.2.15.3	SCL	SCL	This section identifies that major disruptions our outages to utility customers will be highly unlikely. The final design will dictate this and language should be changed to indicate that design elements and efforts will be focused on ensuring that service disruptions will be limited during "maintenance and operation of light rail facilities"	All (Systemwide)

77	Utilities	Pg. 4.2.15-3	4.2.15.4	SCL	SCL	This discussion identifies that temporary connections to utility customers will be established before relocation. That may not be feasible for SCL OH System and we are recommending that ST evaluate corridors with high likelihood of power outages, such as the Downtown Network Area, 6th Ave South Corridor, and the 14th Ave NW Corridor.	All (Systemwide)
78	Utilities	Pg 4.2.15-5	4.2.15.6	SCL	SCL	Add language to clarify that other alternative routes for the 230 kV line relocation may be considered, such as along 4th Ave S and language to relocate major utilities, if feasible, to ensure that they meet minimum standards and avoid conflicts that may hinder safe and normal electrical maintenance and repair operations, as well as ST Light Rail Maintenance and Operations. This effort in ongoing and SCL supports the effort	All (Systemwide)
79	Utilities	Pg 4.3.15-2	4.3 15-3	SCL	SCL	This section identifies that major disruptions our outages to utility customers will be highly unlikely. The final design will dictate this and language should be changed to indicate that design elements and efforts will be focused on ensuring that service disruptions will be limited during "maintenance and operation of light rail facilities"	All (Systemwide)
80	Utilities	Pg 4.3.15-3	4.3.15.4.	SCL	SCL	This discussion identifies that temporary connections to utility customers will be established before relocation. That may not be feasible for SCL OH System and we are recommending that ST evaluate corridors with high likelihood of power outages, such as the Downtown Network Area, 6th Ave South Corridor, and the 14th Ave NW Corridor.	All (Systemwide)
81	Utilities	4.3.15-6	4.3.15.4.6	SCL	SCL	Any alternate location(s) to replace the existing Interbay Substation Property will need to provide both the same system capacity, redundancy, and reliability to the SCL system that the current site, as well as proposed Interbay Substation design/improvements. SCL and ST have engaged in discussion surrounding acceptable site and design parameters	Interbay-Ballard
82	Fact Sheet	vi		Lindsay King	SDCI	The list of City of Seattle anticipated permits and approvals is incomplete. Add demolition, temporary construction staging, construction and trade permits as a separate line. These permits are separate from the Master Use Permit.	All (Systemwide)
83	Ch 2 Alternatives Considered	2-85	2.6.2	Rob McIntosh	SDCI	The last paragraph in this section needs to be revised. Please update the narrative to state that complete stabilization of ECA Steep Slope Areas and their buffers will be required for all areas of disturbance. It must also stated that the Steep Slope stabilization for the areas will be required to be the least intrusive measures possible (SMC 25.09.065). Complete stabilization of the areas to be developed will be required for all stages of construction and for the completed work. It would be a good idea to include piles, tieback anchors, and drilled shafts among the stabilization options in the last sentence.	All (Systemwide)
84	Ch 2 Alternatives Considered			Lindsay King	SDCI	The EIS identifies displacing maritime businesses/industries/moorage which are directly dependent upon their adjacency to water. Multiple sections of the ADEIS acknowledge the direct and indirect impacts of build alternatives on maritime industries: Acquisitions- 4.2.1.3.2 and 4.3.1.3.5 and Economics- 4.2.3.3.3, 4.2.3.5, 4.3.3.3, 4.3.3.3.6, 4.3.3.5. The DEIS mitigation includes relocating the businesses (4.2.1.6 and 4.3.1.6), but also acknowledges displacement of maritime business will have ripple effects on other maritime-related businesses and relocation will be difficult or impossible (ES.5-page 64). Displacement of maritime business are identified as significant and unavoidable adverse impacts. The EIS analysis should include a more detailed assessment of impacts and mitigation, including: a) Assessment of modifications to the current alternatives (e.g., modifications to the design and additional mitigation measures that can be incorporated into the alternative) to minimize and mitigate impacts to key industries that are impacted by alternatives. If a modified alternative is reasonable and would achieve additional mitigation benefits beyond the current alternatives this should be discussed in the EIS, and b) The EIS should include a more detailed discussion of the potential mitigation measures, including an assessment of the measures' effectiveness and whether these displacement impacts can be avoided. The EIS should discuss specific potential mitigation measures to address displacement, and assess whether those measures are likely to be effective in reducing or eliminating displacement impacts. The EIS should indicate whether a project's environmental impacts can be fully remedied at a reasonable cost.	All (Systemwide)
85	Technical Report: Transportation	3-3	3.2.1.1	John Shaw	SDCI	In the 8th line, the text makes a reference to 35th Avenue Southeast; this should be 35th Avenue Southwest.	West Seattle (DUW, DEL, WSJ)
86	Technical Report: Transportation	3-5	3.2.1.3	John Shaw	SDCI	Table 3-4: It's not clear how these headways and LOS were determined. If a route crossing a screenline, such as the Rapid Ride C line at the West Seattle Bridge, has LOS A, how could the existing bus service frequency at that screenline be less than that?	West Seattle (DUW, DEL, WSJ)
87	Technical Report: Transportation	3-6	3.2.1.3	John Shaw	SDCI	Footnote 1 is confusing. It notes that Link Light Rail is not included in the discussion of reliability to highlight the performance of bus service, but LLR also was not included in discussions of other LOS measures, such as frequency and span. Additionally, the last sentence in the paragraph to which the footnote refers does discuss light rail reliability. I suggest the footnote be removed or reworked.	West Seattle (DUW, DEL, WSJ)
88	Technical Report: Transportation	4-2	4.1.1	John Shaw	SDCI	In the last bullet in this section, the reference to Fauntleroy Way Southeast should be to Fauntleroy Way Southwest.	West Seattle (DUW, DEL, WSJ)
89	Technical Report: Transportation	4-19	4.2.2.2	John Shaw	SDCI	Table 4-9: The note below the table refers to the 2042 no build condition; is that meant to be 2032?	West Seattle (DUW, DEL, WSJ)
90	Technical Report: Transportation	4-72	4.2.2.3	John Shaw	SDCI	The text states, "Efforts would be made to minimize any simultaneous closures of 35th Avenue Southwest and Fauntleroy Way Southwest". Given the likely substantial impacts of simultaneous closures, Sound Transit should commit to developing an explicit plan, with City approval and perhaps included in the Construction Access and Traffic Management Plan, to mitigate the effects of closing these roadways at the same time.	West Seattle (DUW, DEL, WSJ)
91	Technical Report: Transportation	4-88	4.3.1.2	John Shaw	SDCI	Table 4-41: AM peak hour results for 15th Avenue Northwest/Northwest 54th Street and 15th Avenue Northwest/Northwest Market Street should be shaded, as they are LOS E.	Interbay-Ballard
92	Technical Report: Transportation	4-88	4.3.1.2	John Shaw	SDCI	The text referring to Figure 4-29 should note that it shows results for both the AM and PM peak hours.	Interbay-Ballard
93	Technical Report: Transportation	4-94	4.3.2.2	John Shaw	SDCI	The description of the preferred alternative for the Interbay/Ballard segment states that the northbound travel lane would be shifted west - to which roadway is this referring? (See also Option IBB-1b on the same page.)	Interbay-Ballard
94	Technical Report: Transportation	4-121	4.3.2.3	John Shaw	SDCI	The text just before Table 4-52 refers to "…volumes diverted to other roadways in the West Seattle area". This probably should be "other roadways in the SODO area".	SODO/CID

95	Technical Report: Transportation	4-144	4.3.2.3	John Shaw	SDCI	The text notes that closure of the northbound curb lane on 15th Avenue Northwest could slightly increase congestion on this roadway. As LOS at the intersections of 15th Avenue Northwest with Northwest 54th Street and Northwest Market Street are at E and F at peak hours, why would a lane closure only slightly increase congestion?	Interbay-Ballard
96	Technical Report: Transportation	5-14	5.2.2.2	John Shaw	SDCI	The discussion of construction worker parking under Impacts Common to All Alternatives is confusing. If construction worker vehicles would be limited only to the number that could park within construction staging areas, why would workers be parking on nearby streets? (See similar text on page 5-25.) Please note that Section 23.42.044 of the Land Use Code addresses permitting and impact mitigation for construction-related parking impacts.	All (Systemwide)
97	Technical Report: Transportation	5-14	5.2.2.2	John Shaw	SDCI	To the extent that construction worker parking does occur on streets near construction sites, what has Sound Transit learned in terms of likely impacts and mitigation for such impacts from past construction work that could be applied to this project to avoid or lessen these impacts? (Also applies to corresponding section on page 5-25.)	All (Systemwide)
98	Technical Report: Transportation	9-15	9.2.2.2	John Shaw	SDCI	In the Delridge segment, would alternatives DEL-1b, DEL-2a, DEL-2b, DEL-3, DEL-4, and DEL-6 affect any load zones during construction?	West Seattle (DUW, DEL, WSJ)
99	Technical Report: Transportation	9-25	9.3.2.2	John Shaw	SDCI	The last paragraph in the Interbay/Ballard Segment Preferred Alternative (IBB-1a) is an incomplete sentence.	Interbay-Ballard
100	Technical Report: Transportation	9-29	9.3.3.2	John Shaw	SDCI	The fifth paragraph states, "Sound Transit would coordinate with the City of Seattle to relocate these commercial load zones". Strike the word "commercial," and join this sentence with the text beginning "For locations," which is a sentence fragment.	All (Systemwide)
101	Acquisitions, Displacements, and Relocations		4.2.1.3 & 4.3.1.3	Lindsay King	SDCI	The information necessary to identify impacts and compare alternatives is missing. The analysis does not identify the number of partial property acquisitions by alternative. Partial property acquisitions may create remnant parcels that do not meet legal building site standards for the City of Seattle (SMC 23.84A.024 definition of "lot"). See example on Figure L4.1-8c, page 109 Appendix L.	All (Systemwide)
102	Acquisitions, Displacements, and Relocations		4.2.1.6 & 4.3.1.6	Lindsay King	SDCI	Update mitigation measures to state- Construction of the project would comply with federal and local regulations regarding relocation. City of Seattle regulations include Tenant Relocation Assistance Ordinance (22.210).	All (Systemwide)
103	Land Use		4.2.2.3 & 4.3.2.3	Lindsay King	SDCI	The information necessary to identify impacts and compare alternatives is missing. The analysis does not identify the above grade guideway segments that would be located above the maximum allowed zoning height.	All (Systemwide)
104	Land Use		4.2.2.6 & 4.3.2.6	Lindsay King	SDCI	Update mitigation measures to state- Construction of the project would comply with local regulations including the Seattle Land Use Code (SMC 23.42.044) for construction impacts.	
105	Visual and Aesthetics	4.2.5-27 & 4.3.5-19	4.5.2.6 & 4.5.3.6	Jerry Suder	SDCI	Mitigation should include anti-graffiti design of all above grade infrastructure and a commitment to on-going physical anti-graffiti monitoring and rapid-response maintenance (i.e. during both construction and long-term operation).	All (Systemwide)
106	Visual and Aesthetics	4.2.5 & 4.3.5 and Technical Report: Visual	4.2.5.3 & 4.3.5.3	Jerry Suder	SDCI	Light, glare and shadow analysis should identify light, glare and shadow impacts to the waterways, wetlands and riparian corridors and any additional analysis and local code requirements (SMC 23.60A.152 and SMC 25.09) discussed in the Ecosystems chapter.	All (Systemwide)
107	Technical Report: Visual	Page 2-1	Section 2-2	Jerry Suder	SDCI	Second to last paragraph- distinction is made between recreation trail/bike users as sensitive viewers yet pedestrians/bikes using sidewalk for trail for transportation purposes are categorized as not sensitive. Acknowledge that the recreation users may also be transportation users such that visual impact to all transportation users is not negated.	All (Systemwide)
108	Visual and Aesthetics	4.2.5-4	4.2.5.3.2	Jerry Suder	SDCI	Global comment regarding documentation of visual impacts throughout Chapter 4.2 & 4.3- Section 4.2.5.3.2 states in the SODO segment due to a lack of concentration of sensitive viewers, there is no adverse impact. While the impact may be greatly reduced, there still is an adverse impact. There will be sensitive viewers even if not in concentration.	All (Systemwide)
109	Technical Report: Visual	Page 4-1 through 4-42	Chapter 4	Jerry Suder	SDCI	Designated Scenic Routes should have a small representative sample of the photo analysis in the technical report to visually show an example of the type of impact as seen from a scenic route. This could either be done per segment or at a higher level for the alignment overall since the detail is in the technical report.	All (Systemwide)
110	Technical Report: Visual	Page 4-9		Jerry Suder	SDCI	City of Seattle Designated Scenic Routes and Public View Protection- for each alignment alternative and type of bridge design, the Technical analysis of view impacts from West Seattle Bridge should include reference to how much lower the structure would need to be constructed to avoid the visual impact from the scenic route with references to how that relates to minimum elevation needed for that structure and alignment. (See KOP WS-2 for reference)	West Seattle (DUW, DEL, WSJ)
111	Technical Report: Visual	Page 4-9		Jerry Suder	SDCI	The Scenic Route is listed as the West Seattle Bridge but SEPA SMC 25.05.675P Attachment 1 refers to the two source documents describing "routes" (Ord 97025) and "protected view right of way" (Open Space Policy). The West Seattle Bridge was constructed along the 'route' in Spokane Street 'right of way' after these documents were created. While the West Seattle Bridge is a scenic route since it was constructed in the Spokane Street alignment. Spokane Street and the lower level Spokane Street bridge, which were in existence at the time these documents were created, is also considered a Scenic Route. Some analysis of lower level Spokane Street as a Scenic Route should be included. Note years: Ord 97025 1968; Open Space Policy 1987; West Seattle high level bridge opened to traffic in 1991.	West Seattle (DUW, DEL, WSJ)
112	Visual and Aesthetics	4.2.5-28; 4.3.5-19	4.2.5.6 & 4.3.5.6	Jerry Suder	SDCI	Scenic Route Views - vegetation used as mitigations elsewhere for quality of view impacts or aesthetics should not be allowed to further intrude into scenic route views if the vegetation will obscure protected views.	All (Systemwide)
113	Visual and Aesthetics	4.2.5-28; 4.3.5-19	4.2.5.6 & 4.3.5.6	Jerry Suder	SDCI	Vegetation should be acknowledged as only a minor mitigation in most instances. Mitigation measures should include selective planting of vegetation with a range of maturity (at least some larger trees and shrubs) so as to afford more immediate mitigation than only planting juvenile plants. Vegetation mitigation should include design and maintenance plans to limit unauthorized use of landscape space by preventing the growth of 'hiding places'.	All (Systemwide)
114	Visual and Aesthetics	4.2.5-28; 4.3.5-19	4.2.5.6 & 4.3.5.6	Jerry Suder	SDCI	In addition to visual unity, mitigation plans should include efforts to prevent blocking open sightlines, especially along streets, sidewalks, and trails (See KOP WS-7 for example of failing to maintain good sightline regarding the mid-street column).	All (Systemwide)

115	Visual and Aesthetics	4.3.5-3	4.2.5.3.1 & 4.3.5.3.1	Jerry Suder	SDCI	First bullet- 'balanced set of system-wide elements and contextual elements' should allow for flexibility to incorporate site specific design elements throughout the system to increase visual interest. This section should also note that Sound Transit and the City of Seattle are in the process of developing Light Rail Specific Design Guidelines to guide project design through the permitting process.	All (Systemwide)
116	Visual and Aesthetics	4.2.5-28; 4.3.5-19	4.2.5.6 & 4.3.5.6	Lindsay King	SDCI	Mitigation Measures- Please update mitigation for all alternatives to state bridge design, column, guideways profiles and support structures (hi-rail access ramps, TPSS, vent structures) shall be studied, located, and designed to minimize view, shadow and height, bulk, and scale impacts.	All (Systemwide)
117	Visual and Aesthetics	Global	4.2.5, 4.3.5 and Technical Report	Jerry Suder	SDCI	"Design review" as a term is referenced throughout DEIS but is a confusing term since Seattle has a Design Review program (SMC 23.41) that does not apply to light rail transit facilities. Use alternate terms such as Design Commission review or other appropriate term throughout the document in place of design review.	All (Systemwide)
118	Visual and Aesthetics	4.3.5-2	4.3.5.1.3	Jerry Suder	SDCI	Interbay/Ballard segment is shown as having no concentration of sensitive users on either side of Salmon Bay yet a recreation trail crosses under the south end of the Ballard Bridge and the 14th Ave NW Boat Launch and dock are in close proximity to the north end of the bridge.	Interbay-Ballard
119	Visual and Aesthetics	4.3.5-13	Figure 3.3.5-4	Jerry Suder	SDCI	KOP B-8 references a view from Dock Street Dock. Seattle does not have a Dock Street in that location. If this is a reference to a private business or other place, it should be better labelled or otherwise described.	Interbay-Ballard
120	Visual and Aesthetics	Global	4.2.5 and 4.3.5	Jerry Suder	SDCI	The DEIS analysis lacks visual representation to support narrative. Where visual impacts are identified for City of Seattle Designated Scenic Routes and viewpoints add a representative photo from the Technical Report into main document in Chapters 4.2.5 and 4.3.5 (example KOP B-10 and the analysis on page 4.3.5-17 in section 4.3.5).	All (Systemwide)
121	Visual and Aesthetics		4.3.5	Jerry Suder	SDCI	DEIS is lacking in analysis of visual and aesthetic impacts for the Downtown Segment. Though mostly underground, new or revised headhouses, emergency escape access points, ventilation shafts and other features would have impacts that warrant analysis and proposed mitigation measures.	Downtown
122	Visual and Aesthetics		4.2.5	Lindsay King	SDCI	DEIS is lacking in analysis of visual and aesthetic impacts near City of Seattle landmarks- Duwamish Railroad Bridge and Fire Station #14 (SMC 25.05.675.P.2.b).	West Seattle (DUW, DEL, WSJ)
123	Technical Report: Visual	Page 2-4	Section 2.3	Jerry Suder	SDCI	Regulatory requirements mentions that there are several policies and regulations of relevance but only specifies details of SEPA policies. Include the Landmark Preservation Ordinance (SMC 25.12) and the Seattle Land Use Code (SMC 23).- which includes standards to minimize light and glare, shadows, height, bulk & scale, and view impacts.	All (Systemwide)
124	Noise and Vibration	109 & 102, L4.2 Land Use Plans page 23	4.2.7.3 & 4.3.7.3, L4.2	Lindsay King	SDCI	References to local codes are missing. Therefore, the potential conflict with local controls and policies cannot be determined. 4.2.7.3 and 4.3.7.3 Environmental Impacts of the Build Alternatives during Operation does not assess potential conflicts with City of Seattle Noise Ordinance SMC 25.08 and Seattle Comprehensive Plan Environment Policy MPP-En-7.	All (Systemwide)
125	Noise and Vibration		3.1 & 4.1	Noise abatement	SDCI	The methodology does not capture complete impacts of the project. The DEIS utilizes FTA standards to establish impacts and the required mitigation for operational sound levels. That FTA standard is not utilized in the Seattle Municipal Code (SMC) nor in the Washington Administrative Code (WAC). Exterior sound level limits of SMC 25.08.410 and .420 must also be used to evaluate impacts of the project.	All (Systemwide)
126	Noise and Vibration		5.2	Noise abatement	SDCI	SDCI has concerns with several technical aspects of the sound level analysis that could underestimate the noise impacts along the track way. These concerns include: 1) The location of baseline measurements taken. 2) The duration and quantity of baseline measurements taken. 3) The assumed Sound Transmission Class (STC) of adjacent structures because of year of construction, needs to be validated for proper mitigation implementation. 4) The LDN noise metric utilized by the FTA analysis method does not correlate to Seattle Municipal Code (25.08) which uses a 1-hour LEQ metric for compliance. Another difference in the analysis methods is where the measurements are taken	All (Systemwide)
127	Noise and Vibration	121 (WS), 117 (Ballard), Noise and Vibration Technical Report Page 7-16	4.2.7.6 & 4.3.7.6	Lindsay King	SDCI	Mitigation measure(s) for identified construction noise impacts near sensitive land uses are missing from the DEIS. Update mitigation to include a contractor prepared Construction Management Plan to be reviewed and approved by the City of Seattle prior to commencing construction. See https://www.seattle.gov/Documents/Departments/SDOT/Services/Permits/TemplatesAndChecklists/ConstructionManagementPlanStandardElements.pdf for details.	All (Systemwide)
128	Noise and Vibration		6.2.1	Noise abatement	SDCI	No information regarding cumulative noise impacts of simultaneous station construction and the potential combined noise impacts of rail construction occurring at the same time.	Downtown
129	Water Resources	126	4.2.8.	Eric Dripps	SDCI, Drainage	The map identifying Combined Sewer Basins appears to be showing the "CSO Basin" layer from City of Seattle GIS. This may be misleading when determining approved points of discharge for Drainage. There are significant other portions that only have Combined Sewers that are not mapped in the "CSO Basin" Layer. Also some of the CSO basins will have available Public Storm Drains. The layer is intended only to show where City-owned CSO's are located. All combined sewers go to the County Combined Sewer.	All (Systemwide)
130	Water Resources	130	4.2.8.3	Eric Dripps	SDCI, Drainage	The document states that there is an MOU between Sound Transit and Ecology to determine if water quality treatment will be required for the guideways. This must be confirmed with Seattle Public Utilities if water quality treatment will be required for guideways discharging to designated receiving waters or basins thereof.	All (Systemwide)
131	Water Resources	132 & 134	4.2.8.3.1 & 4.2.8.3.5	Eric Dripps	SDCI, Drainage	There is an ECA Peat Settlement area at Alaska and California Ave SW in proximity to the Alaska Junction Station. Groundwater collection is not permitted in these ECA's unless it can be demonstrated that it will not impact adjacent properties (SMC 25.09.110).	West Seattle (DUW, DEL, WSJ)
132	Water Resources	131	4.2.8-7	Eric Dripps	SDCI, Drainage	City code requires that all new plus replaced hard surface meet Stormwater requirements for treatment, flow control, Onsite Stormwater Management. The language "where required" is ambiguous- all new and replaced surfaces will be required to meet requirements (SMC 22.805).	All (Systemwide)

133	Water Resources	130	4.2.8-6	Eric Dripps	SDCI, Drainage	Last paragraph- SDCI is not aware of any combined sewers that will be exempt from flow control if a given site is 5,000 SF or more of new plus replaced hard surface. All combined sewer systems require flow control regardless of analyzed capacity if the threshold is exceeded (SMC 22.805.05.C).	All (Systemwide)
134	Water Resources	132	4.2.8.3.1	Eric Dripps	SDCI, Drainage	Groundwater Discharge - General Comment - See SMC 22.805.050.C.7 which details requirements for flow control based on Groundwater discharge. Flow Control may be triggered in areas where it is not otherwise required (e.g. storm basin to receiving water no creek basin) if the permanent groundwater discharge exceeds thresholds. Also see Volume 1 Section 4.4.3.7. in the Stormwater Manual	All (Systemwide)
135	Water Resources	134	4.2.8.4.1	Eric Dripps	SDCI, Drainage	The construction below water table information notes that if groundwater meets City and King County pollutant criteria it would discharge to the separated system. For clarity, Department of Ecology determines pollutant levels and treatment to the storm system if there is potential for contaminated discharge. King County determines pollutant levels to the Combined Sewer system. City of Seattle ensures these approvals are obtained and approves the discharge rates to any City owned system.	All (Systemwide)
136	L4.8 Water Resources	158	Figure 3-3	Eric Dripps	SDCI, Drainage	All of the basins highlighted as Combined are in the separated or partially separated system. This area is also considered a Creek Basin and not to receiving water bodies. Although the basin does discharge to the Duwamish, Fauntleroy creek is a tributary to the basin and thus the entire basin is a "Non-Listed Creek Basin" requiring flow control when thresholds are exceeded. Areas outside of the hatched areas are in general the Combined Sewer Basins. See prior related to basin mapping.	West Seattle (DUW, DEL, WSJ)
137	L4.8 Water Resources	163	Figure 3-7	Eric Dripps	SDCI, Drainage	For the South Lake Union Station there is an available Storm System that discharges to Lake Union. This likely will be the approved point of discharge for these stations. This will need to be confirmed with Seattle Public Utilities.	Downtown
138	Water Resources	127	4.3.8.3.1.	Eric Dripps	SDCI, Drainage	Tunnel groundwater discharge rates and locations will need to be coordinated with Seattle Public Utilities. Permanent groundwater discharge below the groundwater table may require Submetering and billing. Groundwater to the Combined Sewer may be subject to flow control. This may be able to be accomplished by oversizing a surface water flow control system to account for the groundwater flow. Flow Control may also be required for Public Storm discharge. Permanent treatment systems for groundwater discharge to the Public Storm Main (Designated receiving water) will require approval from Department of Ecology.	Interbay-Ballard
139	Water Resources	127	4.3.8.3.1	Eric Dripps	SDCI, Drainage	Note that permanent groundwater discharge to combined sewers below the groundwater table requires a sewer submeter and billing for the discharge. If this applies to a site this could be a significant ongoing charge to Sound Transit. Sewer submeter charges are administered by Seattle Public Utilities.	All (Systemwide)
140	L4.8 Water Resources	44562	1.1	Joel Lehn	SDCI	In addition to the reference to Executive Order 11988, Executive Order 13690 should also be referenced as applicable to federally funded projects anticipating the effects of climate change.	West Seattle (DUW, DEL, WSJ)
141	Water Resources	4.2.8-8		Ben Perkowski	SDCI	Discussion/analysis for the Duwamish segment should include potential impacts to water quality (e.g., pH) of in-water structures due to materials chosen and potential for disintegration/leaching over time (e.g., steel vs. concrete).	West Seattle (DUW, DEL, WSJ)
142	Water Resources	4.3.8-8		Ben Perkowski	SDCI	Discussion/analysis for Ballard segment should include potential impacts to water quality (e.g., pH, toxicity) of in-water structures due to materials chosen and potential for disintegration/leaching over time (e.g., steel vs. type of concrete; sealants used, etc.).	Interbay-Ballard
143	Water Resources	4.2.8-8	4.2.8.3.3	Rob McIntosh	SDCI	Complete stabilization of the developed areas is required by the Environmentally Critical Areas code (SMC 25.09) but stabilization of areas outside of the development is not required. This section appears to imply that drainage measures will be constructed upslope of cuts and walls along the elevated guideways to control groundwater. Drainage measures are typically used at or near the base of cuts and walls to passively collect groundwater flow. Groundwater control upslope of the minimal intrusion allowed by the ECA code (in ECA Steep Slope Areas and their buffers) will not be allowed.	West Seattle (DUW, DEL, WSJ)
144	Water Resources	4.2.8-10	4.2.8.4.1	Rob McIntosh	SDCI	It is unclear why dewatering for construction of tunnels and underground stations will be only a temporary impact. Will those structures be waterproofed and designed for full hydrostatic conditions? If so, then the impact is temporary. If not, the impact is permanent.	West Seattle (DUW, DEL, WSJ)
145	Water Resources	4.2.8-12	4.2.8.4.5	Rob McIntosh	SDCI	This section indicates that all tunnels will be tightly waterproofed, but all tunnels in the West Seattle Junction Segment would have a drainpipe to convey groundwater that may seep into the tunnel. It estimates 0.2 gallons per minute of seepage per 250 feet of tunnel. This would be a permanent impact.	West Seattle (DUW, DEL, WSJ)
146	Water Resources	4.3.8-7	4.3.8.3.1	Rob McIntosh	SDCI	This section indicates that all tunnels would be tightly waterproofed, but all tunnel alternatives would have a drainpipe to convey groundwater that may seep into the tunnel. It estimates 0.2 gallons per minute of seepage per 250 feet of tunnel. This would be a permanent impact.	Downtown
147	Water Resources	4.3.8-7	4.3.8.3.5	Rob McIntosh	SDCI	Regarding the subsurface drainage system, please include a statement in this section indicating that the subsurface drainage system would be installed using directional drilling and will not disturb the surface of the Environmentally Critical Areas (ECA) Steep Slope.	Interbay-Ballard
148	Water Resources	4.3.8-8	4.3.8.3.5	Rob McIntosh	SDCI	Please revise the sentence "This would control seepage, providing slope stability adjacent to the improvements." to read "This would control seepage and help to provide complete stabilization for the adjacent development, as required by the ECA code (SMC 25.09)."	Interbay-Ballard
149	Water Resources	4.3.8-11 & 4.2.8-12	4.3.8.6 & 4.2.8.6	Lindsay King	SDCI	Update mitigation measures to state- Operation and construction of the project would comply with federal, state, regional and local regulations related to water.	All (Systemwide)
150	Ecosystems	4.2.9-9	4.2.9.3.3	Ben Perkowski	SDCI	In-water structures do not only impact the benthic substrate (e.g., footprint) but also displace/remove aquatic/salmonid habitat due to volume of structure in water column. This should be addressed in analysis of impacts and mitigation strategies.	West Seattle (DUW, DEL, WSJ)

151	Ecosystems	4.2.9-10	4.2.9.3.3	Ben Perkowski	SDCI	Analysis of potential impacts of in-water structures and shade impacts of overwater structures should be more robust. Include best available science of impacts to salmonids and predator-prey relationships for these structure types and include a light study based on location and height of bridge crossing. In-water structures in shallow areas may have substantial impacts to migrating salmonids due to predation risk and predator habitat enhancement, which should be analyzed.	West Seattle (DUW, DEL, WSJ)
152	Ecosystems	4.2.9-13	4.2.9.4.3	Ben Perkowski	SDCI	Temporary In-water structures do not only impact the benthic substrate (e.g., footprint) but also displace/remove aquatic/salmonid habitat and could negatively impact predation risk to salmonids, which is not addressed. Over-water structures and barges also can negatively impact salmonids due to increased predation risk, which should be addressed in analysis of impacts and mitigation strategies during construction.	West Seattle (DUW, DEL, WSJ)
153	Ecosystems	4.2.9-18	4.2.9.6.2	Ben Perkowski	SDCI	A mitigation option that is not mentioned includes permanent removal of in-water or over-water structures, bulkheads, and man-made debris in substrate of Duwamish or intertidal areas.	West Seattle (DUW, DEL, WSJ)
154	Ecosystems	4.3.9-8	4.3.9.3.4	Ben Perkowski	SDCI	In-water structures do not only impact the benthic substrate (e.g., footprint) but also displace/remove aquatic/salmonid habitat due to volume of structure in water column. This should be addressed in analysis and accounting of impacts and mitigation strategies.	Interbay-Ballard
155	Ecosystems	4.3.9-9	4.3.9.3.4	Ben Perkowski	SDCI	Analysis of potential impacts of in-water structures and shade impacts of overwater structures should be more robust. Include best available science of impacts to salmonids and predator-prey relationships for these structure types and include a light study based on location and height of bridge crossing. In-water structures in shallow areas may have substantial impacts to migrating salmonids due to predation risk and predator habitat enhancement, which should be analyzed.	Interbay-Ballard
156	Ecosystems	4.3.9-11,12	4.3.9.4.4	Ben Perkowski	SDCI	Temporary in-water structures do not only impact the benthic substrate (e.g., footprint) but also displace/remove aquatic/salmonid habitat and could negatively impact predation risk to salmonids. Over-water structures and barges also can negatively impact salmonids due to increased predation risk, which should be addressed in analysis of impacts and mitigation strategies during construction.	Interbay-Ballard
157	Ecosystems	4.3.9-13	4.3.9.6.2	Ben Perkowski	SDCI	Due to the negative impacts of overwater structures and in-water structures (i.e., bridge alternative) to the salmonids and other aquatic species utilizing the Ship Canal, the King County in-lieu fee program (or other mitigation locations outside Seattle) is very likely not to be a viable or appropriate option for compensatory mitigation due to City of Seattle Shoreline Code requirements (SMC 23.60A.158 and SMC 23.60A.159). Mitigation options to be considered include permanent removal of in-water and over-water structures, bulkheads, and submerged man-made debris in the Ship Canal/Salmon Bay area.	Interbay-Ballard
158	Ecosystems	4.2.9-8	4.2.9.3.1	Christy Carr	SDCI	The long-term species (upland) viability analysis needs more detail. Does ST have a reference for the statement: Based on the urban environment of the study area, the operation of any alternatives has a low potential to affect the viability of local wildlife populations.	West Seattle (DUW, DEL, WSJ)
159	Ecosystems	4.2.9-8	4.2.9.3.1	Christy Carr	SDCI	While ambient noise is high in the project area, does ST have a reference for the statement- Therefore, the potential is low for disturbance from increased human access, noise, and light.	West Seattle (DUW, DEL, WSJ)
160	Ecosystems	4.2.9-14	4.2.9.4.3	Christy Carr	SDCI	The analysis is incomplete. How are noise impacts on terrestrial wildlife being addressed?	All (Systemwide)
161	Ecosystems	4.2.9-14	4.2.9.4.3	Christy Carr	SDCI	The analysis is not clear on the extent of tree/vegetation removal within the biodiversity area: Vegetation would be cleared within the construction footprint near known great blue heron nest trees. In addition, hazard trees would be removed in and adjacent to the construction zone. The amount of greenbelt impact would vary depending on the design option or the specific connection to the Delridge Segment, but all would require some tree removal within the great blue heron management area.	West Seattle (DUW, DEL, WSJ)
162	Ecosystems	4.2.9-15	4.2.9.5	Christy Carr	SDCI	Can more detail be provided for the conclusion that wetland hydrology will not be impacted? Elevated guideways would add impervious surfaces that have the potential to change hydrology at Longfellow Creek and the associated wetlands, and at the wetland at the north end of the West Duwamish Greenbelt. The guideways have the potential to intercept and reroute water flow. However, the Longfellow Creek wetlands receive most of their water from the creek itself and are not expected to experience any hydrology or water quality changes from the new guideway.	West Seattle (DUW, DEL, WSJ)
163	Ecosystems	4.2.9-16	4.2.9.6.1	Christy Carr	SDCI	Avoidance of construction staging placed in buffers and forested areas should be considered, not just minimization.	West Seattle (DUW, DEL, WSJ)
164	Ecosystems	4.2.9-16	4.2.9.6.1	Christy Carr	SDCI	Avoidance and minimization measures should include WDFW management recommendations and City standards in SMC 25.09.200 for great blue heron habitat.	West Seattle (DUW, DEL, WSJ)
165	Ecosystems	4.2.9-17	4.2.9.6.1	Christy Carr	SDCI	Not clear why it says "since this species is protected by the state," -- great blue heron are also protected by local City regulations.	West Seattle (DUW, DEL, WSJ)
166	Ecosystems	4.2.9-16&17	4.2.9.6.2	Christy Carr	SDCI	The Compensatory Mitigation sections do not address City of Seattle Environmentally Critical Areas mitigation sequencing priority (SMC 25.09.065.B.3). This includes the preference for mitigation location. In-project area mitigation sites should be considered before off-site and/or in-lieu fee mitigation measures. Table B for SMC 25.09.160 should be referenced regarding mitigation measures for wetlands. Has Sound Transit contacted Seattle agencies/departments, including Parks and Seattle Public Utilities, about potential local mitigation sites?	West Seattle (DUW, DEL, WSJ)
167	Technical Report: Ecosystem Resources	1.8	1.3.2	Christy Carr	SDCI	Have any other Seattle agencies/departments provided data to inform the analysis?	All (Systemwide)
168	Technical Report: Ecosystem Resources	3-9	3.1.2	Christy Carr	SDCI	WSE4 function is 4 (low).	West Seattle (DUW, DEL, WSJ)
169	Technical Report: Ecosystem Resources	3-12	3.1.2.2	Christy Carr	SDCI	Sound Transit will need to confirm that SMC 25.09.012.D.3.c does not apply - The parcel provides fish passage between fish habitat in Type S, F, Np and Ns waters per WAC 222-16-030 and 222-16-031 upstream and downstream of the parcel, whether that passage is in riparian watercourses, pipes, or culverts.	West Seattle (DUW, DEL, WSJ)

170	Technical Report: Ecosystem Resources	5-1	5.1.2	Christy Carr	SDCI	The Compensatory Mitigation sections do not address City of Seattle Environmentally Critical Areas mitigation sequencing priority (SMC 25.09.065.B.3). Also, it is not clear if these mitigation methods are for direct wetland impacts only and/or also for direct wetland buffer impacts.	West Seattle (DUW, DEL, WSJ)
171	Technical Report: Ecosystem Resources			Christy Carr	SDCI	Is there a figure that shows where the data points are located and where project area was physically accessed for wetland delineation?	All (Systemwide)
172	Ecosystems		4.2.9, 4.3.9	Christy Carr	SDCI	Global comment regarding trees and vegetation - All tree/vegetation removal within environmentally critical areas (ECAs) is regulated by SMC 25.09.070, Standards for tree and vegetation and impervious surface management. This includes trees less than 6" dbh and non-exceptional trees. Tree and vegetation removal in Environmentally Critical Areas must be mitigated based on ecological function of trees/vegetation (SMC 25.09.070).	All (Systemwide)
173	Ecosystems	4.2.9-8-11, 4.2.9-12-14	4.2.9.3, 4.2.9.4	Christy Carr	SDCI	Impact statements related to wetlands and wetland buffers should be qualified in terms of function and magnitude. No net loss of ecological functions -- one of ST's stated policy goals for mitigation -- cannot be determined without more information about impacts. Proposed mitigation measures must be tied to specific loss/reduction of ecological functions, not just area (size)- (SMC 25.09.065).	All (Systemwide)
174	Ecosystems	1.2.9-16	4.2.9.6	Christy Carr	SDCI	SMC 25.09.160 Table B should be referenced and addressed regarding direct and indirect impacts to wetlands.	West Seattle (DUW, DEL, WSJ)
175	Technical Report: Ecosystem Resources			Christy Carr	SDCI	SDCI has not verified wetland location. Any mapping discrepancies between DEIS figures and SDCI GIS will need to be addressed. SDCI Director's Rule 19-2006 states that wetland assessments are valid for a period of three (3) years. Updated wetland information will be required at time of permit submittal.	All (Systemwide)
176	Ecosystems	4.3.9-7	4.3.9.3.3	Christy Carr	SDCI	The statement below is considered an impact to wetlands. Is this impact (size/area) included in the summary table of wetland impacts? Slope drains installed along the Southwest Queen Anne Greenbelt could reduce the flow of water to the greenbelt's wetlands, which may in turn reduce the size or characteristics of these wetlands.	Interbay-Ballard
177	Ecosystems	4.3.9-7	4.3.9.3.3	Christy Carr	SDCI	The Southwest Queen Anne Greenbelt is regulated by Seattle's Environmentally Critical Areas (ECA) code per SMC 25.09.012. Impacts to the applicable ECAs and associated regulations should be addressed, including those in SMC 25.09.200.	Interbay-Ballard
178	Ecosystems	4.3.9-10	4.3.9.4.3	Christy Carr	SDCI	Adequacy of proposed mitigation measures cannot be determined because there is insufficient detail regarding impacts to ecological function and value. Mitigation needs to be tied to the loss of and/or impact to specific functions (SMC 25.09.065). Construction of Alternative SIB-3 would impact two of the greenbelt's wetlands and the Interbay Golf Center wetland at the south end and would have construction impacts to the buffers of these wetlands. There would also be impacts to an additional wetland buffer south of the golf center.	Interbay-Ballard
179	Ecosystems	4.3.9-10	4.3.9.4.3	Christy Carr	SDCI	The long-term species viability analysis is needs more detail. Does ST have a reference for the statement- These effects on wildlife are expected to be minimal, as wildlife in the greenbelt is already habituated to noise and migration barriers are already present.	Interbay-Ballard
180	Ecosystems	4.3.9-13	4.3.9.6.2	Christy Carr	SDCI	Seattle Environmentally Critical Areas code mitigation sequencing requirements should be referenced (SMC 25.09.065). This includes the preference for mitigation location. In-project area mitigation sites should be considered before off-site and/or in-lieu fee mitigation measures. Table B for SMC 25.09.160 should be referenced regarding mitigation measures for wetlands.	Interbay-Ballard
181	Ecosystems	4.3.9-13	4.3.9.6.1	Christy Carr	SDCI	Avoidance of construction staging in wetland buffers should be considered, not just minimization.	Interbay-Ballard
182	Ecosystems	4.3.9-13	4.3.9.6.2	Christy Carr	SDCI	Avoidance and minimization measures should include WDFW management recommendations and City Environmentally Critical Areas Ordinance and/or Director's Rule.	Interbay-Ballard
183	Ecosystems	4.3.9-6	4.3.9.3.1	Christy Carr	SDCI	It is not clear how the following identified impacts will be mitigated: Although the potential for adverse effects would be low, operations could impact vegetation and wildlife over the long term. For example, maintenance activities that involve the removal of vegetation during the breeding season could require removal of nests, eggs, or birds protected under the Migratory Bird Treaty Act. At-grade guideways would reduce the amount of habitat for small mammal species.	Interbay-Ballard
184	Ecosystems	4.3.9-6	4.3.9.3.1	Christy Carr	SDCI	Does ST have a reference/citation to support this statement- wildlife that use habitats adjacent to the light rail alternatives are likely accustomed to noise and human activity. Therefore, the potential is low for disturbance from increased human access, noise, and light. Some species may move farther into greenbelt habitat to avoid the immediate area of the light rail, but these minor localized movements would not affect these species' viability. No information is provided regarding change/increase in noise or degree of alteration of habitat.	Interbay-Ballard
185	Ecosystems	4.2.9-16 & 4.3.9-12	4.2.9.6 & 4.3.9.6	Lindsay King	SDCI	Update mitigation measures to state- Operation and construction of the project would comply with federal, state, and local regulations related to ecosystems.	All (Systemwide)
186	Technical Report: Ecosystem Resources		1.4.3	Lindsay King	SDCI	References to local codes are missing. Include Title 15 and Streets Illustrated for street tree removal and mitigation requirements. Title 23 Land Use Code for general permitting requirements.	All (Systemwide)
187	Energy Impacts	4.3.10-2 and	4.3.10.3 and 4.2.10.3	Duane Jonlin	SDCI	Environmental Impacts of the Build Alternative during Operation analysis is incomplete. Impacts related to the energy required to run the deep elevators and escalators, and the commuter time spent on them, for long term operation.	All (Systemwide)
188	Geology and Soils	4.2.11-2	4.2.11.1.3	Rob McIntosh	SDCI	The last sentence in the "Steep Slopes and Landslide-Prone Areas" section states "There are no slopes greater than 40 percent in the study area between Pigeon Point and SODO." That is not correct. See Figure L4.11-10. That sentence should be omitted or replaced to indicate that there are some mapped, small, isolated areas of Steep Slope between Pigeon Point and East Marginal Way South.	West Seattle (DUW, DEL, WSJ)
189	Geology and Soils	4.2.11-3	4.2.11.1.3	Rob McIntosh	SDCI	The last sentence in the "Peat Settlement-Prone Areas" section indicates that peat soils were not observed in geotechnical borings drilled for the project in the mapped ECA Peat Settlement-prone Area near the Alaska Junction. Please note that the City of Seattle mapped ECA Peat Settlement-prone Areas are not advisory (SMC 25.09.030A4). Consequently, the ECA Peat Settlement-prone Area regulations remain applicable whether or not peat is observed in subsurface explorations.	West Seattle (DUW, DEL, WSJ)

190	Geology and Soils	4.2.11-3	4.2.11.1.3	Rob McIntosh	SDCI	Please remove the sentence in Seismic Hazard Areas section that states "No evidence of fault movement was observed in the available soil boring exploration logs." The interpretation of small diameter soil boring logs does not provide sufficient information to determine if fault movement has, or has not, occurred.	West Seattle (DUW, DEL, WSJ)
191	Geology and Soils	4.2.11-4	4.2.11.3.1	Rob McIntosh	SDCI	The following statement is made in the "Slope Stability, Retaining Structures, and Landslides" section: "The extent of steep slopes in the study area is limited, and the slope ground conditions are generally stable in most areas along the Build Alternatives alignments. Land clearing in steep slope areas could increase soil erosion, but Sound Transit would implement erosion-control management practices to reduce hazards and keep the overall risk low." This needs to be fixed to indicate that areas disturbed in Landslide-prone Areas must be completely stabilized against slope instability and erosion for all areas of disturbance in those areas. Landslide-prone Areas include ECA Steep Slopes, ECA Potential Slide Areas Due to Geologic Conditions, and ECA Known Landslides. The language in this section minimizes the existence of significant areas of landslide-prone areas in the Pigeon Point area and some areas west of Pigeon Point along the alignment.	West Seattle (DUW, DEL, WSJ)
192	Geology and Soils	4.2.11-5	4.2.11.3.3	Rob McIntosh	SDCI	Alternatives DUW-1a and DUW-1b will include construction in the Environmentally Critical Area (ECA) Steep Slopes and buffers at Pigeon Point. Alternatives located in ECAs must be completed with minimal disturbance to the ECA and provide complete stabilization for all areas of disturbance to the ECA Steep Slope Areas and buffers during construction and for the completed construction. Catchment walls might be required to protect the facility from landslides emanating from the upslope ECA Steep Slope Areas. That hillside has numerous reported shallow landslides that have occurred due to the steep slopes and problematic geology. The Preferred Alternative (DUW-1a) appears to require less disturbance of ECA Steep Slopes than DUW1b.	West Seattle (DUW, DEL, WSJ)
193	Geology and Soils	4.2.11-5	4.2.11.3.3	Rob McIntosh	SDCI	The second sentence in the second paragraph states "In combination with shallow groundwater, if encountered, steep slopes along Pigeon Point could be susceptible to slope instability." Please correct this sentence to indicate that the Pigeon Point slopes are designated as ECA Steep Slopes, ECA Potential Landslide Areas Due to Geologic Conditions, and ECA Known Landslides. It should also indicate the requirement that complete stabilization of the allowed areas of disturbance against slope instability and erosion is required during construction and for the completed facility.	West Seattle (DUW, DEL, WSJ)
194	Geology and Soils	4.2.11-6	4.2.11.3.4	Rob McIntosh	SDCI	Please change the second sentence of the first paragraph to read "Alternatives DEL-3 and DEL-4* would have station access elements on the east side of Delridge Way, and require complete stabilization measures on a steep slope with known slides, for temporary and permanent conditions."	West Seattle (DUW, DEL, WSJ)
195	Geology and Soils	4.2.11-6	4.2.11.3.5	Rob McIntosh	SDCI	There is an ECA Peat Settlement-prone Area immediately to the west of the Tunnel 42nd Avenue Station Option (WSJ-3a). The first sentence of this section states that all West Seattle Junction Segment alternatives would avoid geologic hazard areas. Please confirm this or correct this section accordingly.	West Seattle (DUW, DEL, WSJ)
196	Geology and Soils	4.2.11-6	4.2.11.4.1	Rob McIntosh	SDCI	This section needs to be re-written to clearly indicate that complete stabilization is required during construction and for the completed project. Complete stabilization would be designed, and specifications prepared, to avoid creating unstable conditions that could cause landslides.	West Seattle (DUW, DEL, WSJ)
197	Geology and Soils	4.3.11-4	4.3.11.3.1	Rob McIntosh	SDCI	Please revise to include the notable exception of the Alternatives that would intrude into, or abut, Kinnear Park and/or the Southwest Queen Anne Greenbelt areas, which are highly unstable.	Interbay-Ballard
198	Geology and Soils	4.3.11-4	4.3.11.3.1	Rob McIntosh	SDCI	Revise the sentence "Land clearing in steep slope areas could increase soil erosion, but Sound Transit would implement erosion-control management practices to reduce hazards and keep the overall risk low." to state "All areas of ground development, including land clearing, are required to be completely stabilized per the ECA code (SMC 25.09). Land clearing in steep slope areas could increase slope instability and soil erosion, but Sound Transit would implement erosion-control management practices to provide complete stabilization relative to erosion control."	Interbay-Ballard
199	Geology and Soils	4.3.11-4	4.3.11.3.1	Rob McIntosh	SDCI	Please revise the last two sentences in the Section "Slope Stability, Retaining Structures, and Landslides" to indicate that relative to slope stability, Sound Transit would use measures such as slope stabilization with permanent retaining walls with catchment to provide complete stabilization of the development and to provide protection of the development from surficial landslides where the Alternatives abut Kinnear Park or the Southwest Queen Anne Greenbelt.	Interbay-Ballard
200	Geology and Soils	4.3.11-4	4.3.11.3.1	Rob McIntosh	SDCI	The last sentence in the Section "Slope Stability, Retaining Structures, and Landslides" should indicate that some structures could require permanent drilled shafts, piles, soil anchors and/or tiebacks to provide complete stabilization from seismically-induced deep-seated landslides that would extend upslope of the developed areas.	Interbay-Ballard
201	Geology and Soils	4.3.11-4	4.3.11.3.1	Rob McIntosh	SDCI	Regarding the "Seismic Hazard" section, pile foundations are often used in liquefaction-prone areas. Are they being considered? If so, please include a reference in the text. Ground improvement analysis, design, and construction does not work well for silty or clayey soils and piles are often used in that scenario.	Interbay-Ballard
202	Geology and Soils	4.3.11-6	4.3.11.3.3	Rob McIntosh	SDCI	The last sentence in this section indicates that peat soils were not observed in geotechnical borings drilled for the project in the mapped ECA Peat Settlement-prone Area. Please note that the City of Seattle mapped ECA Peat Settlement-prone Areas are not advisory (SMC 25.09.030A4). Consequently, the ECA Peat Settlement-prone Area regulations remain applicable whether or not peat is observed in subsurface explorations.	Interbay-Ballard
203	Geology and Soils	4.3.11-6	4.3.11.3.4	Rob McIntosh	SDCI	There is the potential for encountering glacially consolidated silts and clays, that are fractured and slickensided, and can result in excessive shoring deflection for deep excavations. It might be helpful to include this information in Section 4.3.11.3.4.	Interbay-Ballard

204	Geology and Soils	4.3.11-6	4.3.11.3.5	Rob McIntosh	SDCI	The tunnel portal for Alternatives SIB-1, along with Alternatives SIB-2 and SIB-3, would require considerable efforts to provide complete stabilization for the ECA Steep Slope Area and to protect the facility from landslides emanating from the ECA Steep Slope Area for the retained cut and to protect the tunnel portal from landslide damage. That hillside has numerous reported landslides that have occurred (both shallow and deep-seated) due to the steep slopes and problematic geology. An attempt to mitigate damage from a deep landslide at Galer Street required substantial grading, dewatering, and a permanent soldier pile anchored wall to provide some stability. It was not designed to the level of complete stabilization that is required for the temporary and permanent stage of the new development. Complete stabilization for retained cuts might not be technically, or financially, feasible for this alternative. Please revise this section accordingly.	Interbay-Ballard
205	Geology and Soils	4.3.11-7	4.3.11.4.1	Rob McIntosh	SDCI	Please revise this section to clearly indicate that complete stabilization is required during construction and for the completed project where disturbance is allowed in ECA Steep Slope Areas, ECA Known Landslide Areas, and ECA Potential Landslide Areas Due to Geologic Conditions. It is not sufficient to "minimize slope stability hazards".	Interbay-Ballard
206	Geology and Soils	4.3.11-8	4.3.11.4.4	Rob McIntosh	SDCI	Cut-and-cover stations for the Downtown segment are likely to encounter numerous remnant tieback anchors from previous (and ongoing?) construction projects. The anchors were required to be de-stressed.	Downtown
207	Geology and Soils	166 (WS) &159 (Ballard)	4.2.11.6 & 4.3.11.6	Lindsay King	SDCI	References to local codes citing minimum mitigation requirements is missing. Operation and construction of the project would comply with local regulations at the time of permitting. Complete stabilization will be required during construction and operation.	All (Systemwide)
208	L4.11 Geology and Soils	L4.11-1		Lindsay King	SDCI	References to local codes are missing. Update the technical appendix to list local regulations that apply at the time of permitting: SMC 25.09 Environmentally Critical Areas Ordinance, Grading Code SMC 22.170, and the Seattle Building Code.	All (Systemwide)
209	Appendix J - Conceptual Design Drawings			Rob McIntosh	SDCI	The Smith Cove Station site would likely require considerable efforts to provide complete stabilization for the ECA Steep Slope Area and to protect the facility from landslides emanating from the ECA Steep Slope Area. That hillside has numerous reported landslides that have occurred (both shallow and deep-seated) due to the steep slopes and problematic geology. The requirement for complete stabilization will be extremely problematic to accomplish at this site. Update the conceptual drawings to demonstrate the area of impact with anticipated site stabilization measures shown.	Interbay-Ballard
210	Public Services, Safety and Security	4.2.14-7 & 4.3.14-10	4.2.14.3.1 & 14.3.14.3.1	Lindsay King	SDCI	Paragraph 3: Please include Seattle Building Code in the list of standards that will need to be met for all alternatives.	All (Systemwide)
211	Historic and Archaeological Resources	4.2.16-23 & 4.3.16-48	4.2.16.5 & 4.3.16.5	Jerry Suder	SDCI	An inadvertent discovery plan should include additional measures to have archaeologist and/or cultural expert on site during ground disturbance where and when advised by State Historic Preservation Officer and Tribes.	All (Systemwide)
212	Historic and Archaeological Resources	4.2.16-23 & 4.3.16-48	4.2.16.5 & 4.3.16.5	Lindsay King	SDCI	References to local codes citing minimum mitigation requirements is missing. Operation and construction of the project would comply with national, state and local regulations at the time of permitting.	All (Systemwide)
213	Technical Report: Historic and Archaeological Resources		2.3, 11.2	Jerry Suder	SDCI	City of Seattle regulations require a Certificate of Approval for demolition of a City of Seattle Landmark or new construction in a historic district (SMC 25.12 & 23.66). Projects across the street or adjacent to any City landmark require consultation with Seattle Department of Neighborhoods for site-specific impact mitigation.	All (Systemwide)
214	Technical Report: Historic and Archaeological Resources		2.3	Lindsay King	SDCI	Paragraph 1: buildings proposed for demolition are to be referred to Department of Neighborhoods to identify structures eligible to meet landmark status per SMC 25.12. To streamline the demolition permit process this analysis should occur as part of the FEIS.	All (Systemwide)
215	Technical Report: Historic and Archaeological Resources		Table N5-A	Jerry Suder	SDCI	The information necessary to identify impacts and compare alternatives is missing. The project lacks an analysis of how many structures, eligible for City of Seattle landmark status, will be demolished with each alternative. Coordination is required with the Department of Neighborhoods who maintains a partial list of structures eligible for local nomination.	All (Systemwide)
216	Ch 3 Transportation	3-36.3-106.		Joel Hancock	SDOT	This should be truck and "commercial vehicle" load/unload zones	
217	Ch 3 Transportation	3-51.3/122.		Joel Hancock	SDOT	Won't coordination with the Army Corp of Engineers also be required in mitigation?	
218	Ch 3 Transportation	3-65.		Joel Hancock	SDOT	Per the following statement: "None of these alternatives are expected to affect public off-street parking during construction." could you add "directly" affect or clarify that off-street parking might have increase in parking due to temporary removal of on-street parking. Is this consistent with Section 3.11.6.3: "Sound Transit would work with owners and operators of garages where parking could be removed or where ingress or egress could be blocked during construction."	
219	Ch 3 Transportation	3-103.		Joel Hancock	SDOT	This statement unclear for locations: "Parking occupancy counts were not collected for station areas in the Downtown of Chinatown-International District segments."	
220	Ch 3 Transportation	3-35./3-105.		Joel Hancock	SDOT	Footnotes in Table 3-11 and Table 3-26 are not consistent on whether there would be temporary or permanent off-street parking removal by alternative.	
221	Ch 3 Transportation	3-127.		Joel Hancock	SDOT	Should this also include coordination with Metro: "As the project progresses, Sound Transit would work with the City of Seattle to minimize streetcar impacts and, where needed, develop an operational plan to minimize impacts to streetcar service and riders."	
222	Ecosystems	4.2.9-12/ 4.2.9-16		Shane DeWald	SDOT	Sound Transit impacts on existing trees in ROW under SDOT jurisdiction include impacts along corridors beyond the geographic footprint of the ST3 alignment. These include corridors planned for use as haul routes or detours during construction where existing street trees are likely to be subject to damage if not preemptively pruned in advance of the use by construction traffic (oversize truck /truck & trailer combinations) or by rerouted buses and other commercial vehicles. Preconstruction meeting(s) with SDOT Urban Forestry must be coordinated a minimum of 1 year in advance of project start dates to coordinate permitting for Registered Tree Service Providers on contract with Sound Transit to perform the tree work to meet standard clearances along affected ROW frontages and to ensure outreach is provided by Sound Transit to notify adjacent property owners of work to be done on street trees and/or to negotiate removal and replacement for street trees that are not in adequate condition to tolerate the extent of pruning necessary for public safety.	

223	Ecosystems	4.2.9-16		Shane DeWald	SDOT	Trees approved by Urban Forestry to be removed from SDOT ROW for the ST3 project must be mitigated according to meet current 2 for 1 City of Seattle standards per executive order or standards otherwise applicable at the time of project permit approval. Replacement tree size, species, and spacing to be provided as mitigation shall be subject to approval by SDOT Urban Forestry to meet ROW standards and to restore canopy cover within or geographically proximate to the project corridor and corridors impacted by use as construction haul or detour routes.	
224	Executive Summary	ES-28	ES3.1.2.2	Curtis Ailes	SDOT	Middle column, top of page. Comment states "the other segments of the streetcar" should read "SOME of the other segments" (the existing statement implies that entirety of the rest of the system is operable which is false)	SODO/CID
225	Executive Summary	ES-40	ES.4	Curtis Ailes	SDOT	Middle column, end of 1st paragraph. SDOT would like to hear more about the "Seattle Streetcar WSBLE Construction Operations Plan" and be integrated into its design	
226	Ch 2 Alternatives Considered	2-93	2.8.2.1	Curtis Ailes	SDOT	Clarify what "payback a portion of federal dollar already expended" means as this relates to streetcar	
227	Executive Summary	ES-31	ES.3.1.2.3	Alison Redenz	SDOT	Right column, bottom of page. Comment states for Alternative DT-1 "other segments of the streetcar could continue to operate but not as a connected system". With the streetcar being unable to turnback at McGraw Square it essentially makes the SLU line inoperable. The existing statement implies that the other portions of the line could operate which is false.	
228	Executive Summary	ES-32	ES.3.1.2.3	Alison Redenz	SDOT	Left column, top of the page. Comment states for Alternative DT-2 "streetcar would be closed at the Terry Avenue North and Thomas Street intersection for Alternative DT-2, which would impact northbound travel of the streetcar and could impact frequency of service". Without significant mitigation, this would essentially make the SLU line inoperable and have long-term impacts on ridership. The existing statement implies that the other portions of the line could operate, while the northern part of the line would not, which is false.	
229	Executive Summary	ES-32	ES.3.1.2.3	Alison Redenz	SDOT	Left column, top of the page. Streetcar would be interested in hearing more about the "Alternative construction approaches that could allow for single track operations of the streetcar and maintain access to the maintenance facility during construction". Approaches that could allow single track operations, would take significant investment and construction time.	
230	Ch 3 Transportation	3-133	3.19.3.2	Curtis Ailes	SDOT	Paragraph states that "Other segments of the streetcar system WOULD be able…". The word WOULD should be changed to COULD as there is not yet clarity on whether disruptions at CID and DT would be concurrent thus interrupting the streetcar system in two places rendering the "would" assumption incorrect	SODO/CID
231	Ch 3 Transportation	3-134	3.19.3.2	Curtis Ailes	SDOT	2nd paragraph states that construction would impact streetcar service. Is it possible to state in this paragraph that the streetcar could continue to operate "outbound" (or whatever directional denomination fits best) implying that the remaining portion of the existing FHS could still function outside of the construction disruption	SODO/CID
232	Ch 3 Transportation	3-134	3.19.3.2	Curtis Ailes	SDOT	For CID-2a, language is missing which relates to utility relocations potential affect on streetcar service. This is something that was discussed in engineering group meetings and potential route could travel on S Jackson St between 5th and 6th, potentially disrupting streetcar service. This is not called out in this paragraph	SODO/CID
233	Ch 3 Transportation	3-140	3.19.4.2	Curtis Ailes	SDOT	For DT-2, there is no mention of potential mitigations to the portion of affected streetcar tracks	Downtown
234	Ch 3 Transportation	3-139	3.19.4.2	Alison Redenz	SDOT	First paragraph under 3.19.4.2 Transit. For DT-1, the comment states that "With the full closure of Westlake Avenue near Denny Way, the streetcar would not be able to travel through this segment." The next sentence states, "The streetcar may be able to continue to operate in South Lake Union and Downtown/First Hill, although not as a connected system". The full closure of Westlake near Denny, would prohibit streetcar from completing its turnback at McGraw Square, and SLU would essentially be inoperable and have long-term impacts on ridership. Both statements suggest that the SLU line would be able to operate portions of the line, which is false.	Downtown
235	Ch 3 Transportation	3-151	3.19.7.1	Alison Redenz	SDOT	First paragraph, last sentence. For all DT and CID alternatives (besides Alternative CID-2a with the diagonal station configuration and Option CID-2b), the comment states that" Sound Transit would implement capital improvements, such as a crossover track or temporary passenger stations along the streetcar alignment to maintain streetcar service during construction, where feasible." Streetcar would like to weigh in on potential capitol improvements to maintain streetcar service during construction.	SODO/CID
236	Ch 6 Alternatives Evaluation	6-16	6.2.2.2.1	Alison Redenz/Curtis Ailes	SDOT	2nd paragraph under 6.2.2.2.1. Paragraph states that "Other segments of the streetcar system WOULD be able…". The word WOULD should be changed to COULD as there is not yet clarity on whether disruptions at CID and DT would be concurrent thus interrupting the streetcar system in two places rendering the "would" assumption incorrect	SODO/CID
237	Ch 6 Alternatives Evaluation	6-17	6.2.2.2.1	Alison Redenz/Curtis Ailes	SDOT	Table 6-5, 4th Column (CID-2a), 3rd bullet in Transportation Impacts. Paragraph states that "Other segments of the streetcar system WOULD be able…". The word WOULD should be changed to COULD as there is not yet clarity on whether disruptions at CID and DT would be concurrent thus interrupting the streetcar system in two places rendering the "would" assumption incorrect	SODO/CID
238	Ch 6 Alternatives Evaluation	6-18	6.2.2.2.1	Alison Redenz/Curtis Ailes	SDOT	Table 6-5, 2nd Column (CID-1a), 2nd Bullet in Transportation Impacts. Paragraph states that "Other segments of the streetcar system WOULD be able…". The word WOULD should be changed to COULD as there is not yet clarity on whether disruptions at CID and DT would be concurrent thus interrupting the streetcar system in two places rendering the "would" assumption incorrect	SODO/CID
239	Ch 6 Alternatives Evaluation	6-18	6.2.2.2.1	Alison Redenz/Curtis Ailes	SDOT	Table 6-5, 3rd Column (CID-1b), 1st Bullet in Transportation Impacts. Paragraph states that "Other segments of the streetcar system WOULD be able…". The word WOULD should be changed to COULD as there is not yet clarity on whether disruptions at CID and DT would be concurrent thus interrupting the streetcar system in two places rendering the "would" assumption incorrect	SODO/CID
240	Ch 6 Alternatives Evaluation	6-21	6.2.2.2.2	Alison Redenz/Curtis Ailes	SDOT	2nd paragraph. The paragraph states "the other segments of the streetcar" should read "SOME of the other segments" (the existing statement implies that the entirety of the rest of the system is operable which is false). Streetcar program staff are interested in involvement in the "alternative construction approaches" mentioned in this paragraph	

241	Ch 6 Alternatives Evaluation	6-22	6.2.2.2.2	Alison Redenz	SDOT	For DT-1, the comment states that "During this time, this segment of the Seattle Streetcar would be impacted. Other segments of the streetcar (through South Lake Union, Downtown, and Capitol Hill/First Hill) may continue to operate, but not as a connected system.)" The full closure of Westlake near Denny, would prohibit the streetcar from completing its turnback at McGraw Square, and SLU would essentially be inoperable and have long-term impacts on ridership. Both statements suggest that the SLU line would be able to operate portions of the line, which is false.	Downtown
242	Social Resources, Community Facilities, and Neighborhoods	4.3.4-22	4.3.4.4.3	Curtis Ailes	SDOT	For CID-2a, language is missing which relates to utility relocations potential affect on streetcar service. This is something that was discussed in engineering group meetings and potential route could travel on S Jackson St between 5th and 6th, potentially disrupting streetcar service. This is not called out in this paragraph	SODO/CID
243	Ch 5 Cumulative Impacts	Global	Global	Curtis Ailes	SDOT	All mentions of Streetcar in this chapter refer to "First Hill Streetcar" with no mention of South Lake Union streetcar. It is unclear if this is a purposeful omission or whether all uses should be converted to "Seattle Streetcar" to imply system-wide effects.	SODO/CID
244	Technical Report: Transportation	Global	Global	Curtis Ailes	SDOT	Several mentions of Streetcar in this chapter refer to "First Hill Streetcar" with no mention of South Lake Union streetcar. It is unclear if this is a purposeful omission or whether all uses should be converted to "Seattle Streetcar" to imply system-wide effects.	SODO/CID
245	Technical Report: Transportation	3-49	3	Curtis Ailes	SDOT	Figure 3-5 implies that CID construction impacts would only affect streetcar service there while the rest of the system is able to work. This is not true and graphics need to be altered to reflect the likely possibility that parallel disruptions will occur at either DT-1 or DT-2 locations further restricting the ability to operate the other sections	SODO/CID
246	Technical Report: Transportation	3-49	3	Curtis Ailes	SDOT	1st paragraph. The paragraph states "the other segments of the streetcar" should read "SOME of the other segments" (the existing statement implies that the entirety of the rest of the system is operable which is false). Streetcar program staff are interested in involvement in the "alternative construction approaches" mentioned in this paragraph	SODO/CID
247	Technical Report: Transportation	3-50	3	Curtis Ailes	SDOT	Figure 3-6 implies that CID construction impacts would only affect streetcar service there while the rest of the system is able to work. This is not true and graphics need to be altered to reflect the likely possibility that parallel disruptions will occur at either DT-1 or DT-2 locations further restricting the ability to operate the other sections	SODO/CID
248	Technical Report: Transportation	3-50	3	Curtis Ailes	SDOT	Figure 3-7 implies that CID construction impacts would only affect streetcar service there while the rest of the system is able to work. This is not true and graphics need to be altered to reflect the likely possibility that parallel disruptions will occur at either DT-1 or DT-2 locations further restricting the ability to operate the other sections	SODO/CID
249	Technical Report: Transportation	3-54	3	Curtis Ailes	SDOT	Figure 3-8 implies that DT-1 construction impacts would only affect streetcar service there while the rest of the system is able to work. This is not true and graphics need to be altered to reflect the likely possibility that parallel disruptions will occur at CID further restricting the ability to operate the other sections	Downtown
250	Technical Report: Transportation	3-55	3	Curtis Ailes	SDOT	Figure 3-9 implies that DT-2 construction impacts would only affect streetcar service there while the rest of the system is able to work. This is not true and graphics need to be altered to reflect the likely possibility that parallel disruptions will occur at CID further restricting the ability to operate the other sections	Downtown
251	Technical Report: Transportation	3-55	3	Curtis Ailes	SDOT	The 3rd bullet point relates to service disruptions as a result of closing the Terry & Thomas intersection. The resulting disruption is phrased "the streetcar would not be able to travel northbound through the intersection (which is true), which could impact the frequency and headway of the streetcar system". If this intersection is closed, it WILL impact operations, not COULD. No mention of potential mitigation at this location is made that would result in the "could impact" statement	Downtown
252	Technical Report: Transportation	11-2	11	Curtis Ailes	SDOT	There is no mention in this document regarding the potential for significant disruptions to the City's contractual obligations for streetcar operations. For instance, the following passage would cover the City's interests related to streetcar service disruptions, "if Seattle streetcar service is forced to close for any amount of time, this will result in financial impacts to the City of Seattle which include, but are not limited to, contractual obligations to operate the streetcar, ability to retain skilled labor, ability to recruit and train skilled labor when service resumes, and other unforeseen administrative impacts that would not exist otherwise"	SODO/CID
253	Appendix G - Environmental Justice	Global	Global	Alison Redenz	SDOT	Statements throughout Appendix G reiterate some of the previously corrected statements. As stated earlier all mentions of DT-1 and DT-2 stating that streetcar "may continue to operate, but not as a complete system" are incorrect until further construction mitigation is finalized.	Downtown
254	Technical Report: Transportation	3-66	3.3.3.2	Alison Redenz	SDOT	2nd paragraph. Document states that, "Sound Transit would implement capital improvements such as a crossover or other track work or temporary passenger stations along the streetcar alignment to maintain streetcar service during construction, where feasible. For example, under Alternative DT-2, additional track could be installed in the vicinity of Westlake Avenue North and Harrison Street to maintain streetcar service during construction." This statement does not acknowledge the service impacts of constructing these mitigation measures. Streetcar Program staff would also like to weigh in on any "Construction Operations Plan" elements mentioned throughout the document.	Downtown
255	Executive Summary	ES-28	ES 3.1.2.2.	Chris Eilerman	SDOT	The analysis is incomplete. "The other segments of the streetcar system would still be able to operate but not as a connected system, which could impact the frequency of service." Analysis and mitigation of assertion that other streetcar segments could operate under CID-1a CID-1b, and CID-2a is inaccurate and missing details. Center City Connector (C3) alignment is not operable with a closure at Jackson Street. Access to maintenance and operations activities at the FHS OMF is cut off and there is not ability to turn streetcars back up Jackson to 1st Ave. Construction of new trackwork to achieve this would be needed. Only FHS would be operable in such a closure.	SODO/CID
256	Executive Summary	ES-29	Table ES-5	Chris Eilerman	SDOT	The analysis is incomplete. Analysis and mitigation of assertion that other streetcar segments could operate under CID-1a CID-1b, and CID-2a is inaccurate and missing details. Center City Connector (C3) alignment is not operable with a closure at Jackson Street. Access to maintenance and operations activities at the FHS OMF is cut off and there is not ability to turn streetcars back up Jackson to 1st Ave. Construction of new trackwork to achieve this would be needed. Only FHS would be operable in such a closure.	SODO/CID

257	Executive Summary	ES-31-32	ES 3.1.2.3	Chris Eilerman	SDOT	Description of streetcar impact is inaccurate and mitigation measures are missing. Denny Station Construction under DT-1 and DT-2 would close streetcar operations for 4 years. Other segments could not operate as construction closures of Westlake (DT-1) for Denny Station would cut off access between the streetcar mainline alignment as constructed by C3 and the SLU Operations and Maintenance Facility (OMF) for the majority of the streetcar fleet. SLU streetcar would also be closed as access between SLU OMF and turn around track at McGraw Square would be removed.	Downtown
258	Executive Summary	ES-32	ES 3.1.2.3, Table ES-6	Chris Eilerman	SDOT	Description of streetcar impact is inaccurate and mitigation measures are missing. Denny Station Construction under DT-1 would close streetcar operations for 4 years. Alternative construction methods allowing single track operations of streetcar would still have significant impacts to streetcar service frequency, safety, and configuration. New special track, signaling, and safety certification of such changes by WSDOT would be required.	Downtown
259	Executive Summary	ES-32	ES 3.1.2.3, Table ES-6	Chris Eilerman	SDOT	Description of streetcar impact is inaccurate and mitigation measures are missing. Denny Station Construction under DT-2 would close streetcar operations for 4 years as it would cut off access between the streetcar mainline alignment as constructed by C3 and the SLU Operations and Maintenance Facility (OMF) for the majority of the streetcar fleet. SLU streetcar would also be closed as access between SLU OMF and turn around track at McGraw Square would be removed. Streetcar operates on single, one-way track along Westlake and Terry. Closure at Terry would not provide for continuous track to operate.	Downtown
260	Executive Summary	ES-40	ES.4	Chris Eilerman	SDOT	Information needed to identify mitigation is missing. Closure of streetcar service during construction is unacceptable. A WSBLE Construction Operations Plan to evaluate operational scenarios and capital investments to minimize impacts should be included as part of the DEIS to allow for an understanding of the actual impacts and proposed mitigation to maintain streetcar service during construction.	SODO/CID
261	Executive Summary	ES-41	ES.5.2	Chris Eilerman	SDOT	Information needed to identify mitigation is missing. Closure of streetcar service during construction is unacceptable. A WSBLE Construction Operations Plan to evaluate operational scenarios and capital investments to minimize impacts should be included as part of the DEIS to allow for an understanding of the actual impacts and proposed mitigation to maintain streetcar service during construction.	SODO/CID
262	Ch 3 Transportation Enviornment and Consequences	3-78	3.12.1	Chris Eilerman	SDOT	The information necessary to identify impacts and compare alternatives is missing. This section describes Metro bus service in the study area but no discussion of Seattle Streetcar service or mention of Rapid Ride J Line, which will replace Route 70 service and is a federally-funded, reasonably foreseeable project, is offered throughout the discussion of the Affected Environment in this section.	SODO/CID
263	Ch 3 Transportation Enviornment and Consequences	3-80	3.12.2	Chris Eilerman	SDOT	The analysis is incomplete. What are the assumptions in the No-Build Alternative regarding Seattle Streetcar and Center City Connector? No discussion is offered in the description of environmental impacts.	SODO/CID
264	Ch 3 Transportation Enviornment and Consequences	3-81	3.12.3.1.3	Chris Eilerman	SDOT	The analysis is incomplete. What are the assumptions in the Build Alternative regarding Seattle Streetcar and Center City Connector? How will the removal of lanes on 4th Ave S as part of the CID-1a and CID 1b options affect Seattle Streetcar?	SODO/CID
265	Ch 3 Transportation Enviornment and Consequences	3-82	3.12.3.2	Chris Eilerman	SDOT	The analysis is incomplete. How will Seattle Streetcar travel times be affected by the Build Alternatives?	SODO/CID
266	Ch 3 Transportation Enviornment and Consequences	3-89	3.13.1.1	Chris Eilerman	SDOT	The methodology is inconsistent and incomplete throughout the document. This section notes that the First Hill Streetcar runs on Jackson St., but later, the document states that it is assumed that the Center City Connector project is completed as part of the No-Build alternative. Discussions of streetcar impacts throughout the document should reflect this assumption and operational needs of the Seattle Streetcar under the completed Center City Connector configuration.	SODO/CID
267	Ch 3 Transportation Enviornment and Consequences	3-127	3.19.1.2.1	Chris Eilerman	SDOT	The analysis is incomplete. The document notes that the C3 project is assumed to be complete and construction activities would impact the Seattle Streetcar system. It states that ST would work with the City to develop an operational plan to minimize impacts to streetcar service. Absent major capital modifications to the track and signaling, the proposed closures would effectively shut down operation of the Seattle Streetcar entirely. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
268	Ch 3 Transportation Enviornment and Consequences	3-133	3.19.3.2	Chris Eilerman	SDOT	The analysis is incomplete. The document notes that the C3 project is assumed to be complete and construction activities would impact the Seattle Streetcar system but the streetcar would still be operable though not as a connected system. Significant modifications to the streetcar infrastructure would be necessary for this to occur. Absent major capital modifications to the track and signaling, the proposed closures would effectively shut down operation of the Seattle Streetcar entirely. No discussion of the mitigation proposed to achieve this is offered. The document states that ST would work with the City to develop an operational plan to minimize impacts to streetcar service. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
269	Ch 3 Transportation Enviornment and Consequences	3-133	3.19.3.2	Chris Eilerman	SDOT	The analysis is incomplete. Operation of truncated streetcar service from the CID area to Capitol Hill east of the proposed closure of 5th Ave. (under CID-2a) is only possible if the closure footprint does not impact the streetcar station stop at 5th and Jackson. This mitigation should be identified for this option. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID

270	Ch 3 Transportation Enviornment and Consequences	3-139	3.19.4.2	Chris Eilerman	SDOT	The analysis is incomplete. The document notes that the C3 project is assumed to be complete and construction activities for DT-1 and related Westlake closure would impact the Seattle Streetcar system but the streetcar would still be operable though not as a connected system. Significant modifications to the streetcar infrastructure, including capital improvements and maintenance of access to the SLU maintenance facility, where the majority of the streetcar fleet is to be housed, would be necessary for this to occur. Absent major capital modifications to the track and signaling, the proposed closures would effectively shut down operation of the Seattle Streetcar entirely. The streetcar could not operate on the alignment north of Westlake as it would have no access to the SLU OMF. Streetcar headway and frequency would absolutely be impacted by the DT-1 closures. Further, traffic diversions to Stewart St. and 1st Ave. resulting from the construction activity would likely also impact streetcar operations on those streets. No discussion of the mitigation proposed to achieve this is offered. The document states that ST would work with the City to develop an operational plan to minimize impacts to streetcar service. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
271	Ch 3 Transportation Enviornment and Consequences	3-139	3.19.4.2	Chris Eilerman	SDOT	The analysis is incomplete. Alternative construction methods allowing for single track access would still have impacts to streetcar frequency, service, and possibly, safety. Absent major capital modifications to the track and signaling, the proposed closures would effectively shut down operation of the Seattle Streetcar entirely. The DEIS should include a technical memorandum and analysis describing this alternative, including track and signal configuration and how it would mitigate these impacts. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
272	Ch 3 Transportation Enviornment and Consequences	3-140	3.19.4.2	Chris Eilerman	SDOT	The analysis is incomplete. Closure of Terry Ave. as proposed under DT-2 would still have major impacts to streetcar frequency, service, and possibly, safety as it would prevent access to the SLU OMF. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	Downtown
273	Ch 3 Transportation Enviornment and Consequences	3-150	3.19.7.1	Chris Eilerman	SDOT	The analysis is incomplete. The document notes that the C3 project is assumed to be complete and construction activities would impact the Seattle Streetcar system. Absent major capital modifications to the track and signaling, the proposed closures would effectively shut down operation of the Seattle Streetcar entirely. It states that ST would work with the City to develop an operational plan to minimize impacts to streetcar service. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
274	Technical Report: Transportation	3-28	3.3.1.1	Chris Eilerman	SDOT	The methodology is inconsistent throughout the document. Table 3-21 lists the SLU and FHS streetcar lines as existing service, but not the complete Seattle Streetcar system as expanded by the Center City Connector alignment. However, the document states repeatedly throughout that it is assumed that the Center City Connector is complete by the time the project begins. This should be reflected in the discussion of existing streetcar service and impacts caused to streetcar by the project.	SODO/CID
275	Technical Report: Transportation	3-45	3.3.2.2	Chris Eilerman	SDOT	The analysis is incomplete. The document notes that the C3 project is assumed to be complete and construction activities would impact the Seattle Streetcar system but the streetcar would still be operable though not as a connected system. Significant modifications to the streetcar infrastructure would be necessary for this to occur. No discussion of the mitigation proposed to achieve this is offered. The document states that ST would work with the City to develop an operational plan to minimize impacts to streetcar service. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
276	Technical Report: Transportation	3-48	3.3.2.2	Chris Eilerman	SDOT	The analysis is incomplete. The document notes that the C3 project is assumed to be complete and construction activities would impact the Seattle Streetcar system but the streetcar would still be operable though not as a connected system. Significant modifications to the streetcar infrastructure would be necessary for this to occur. No discussion of the mitigation proposed to achieve this is offered. The document states that ST would work with the City to develop an operational plan to minimize impacts to streetcar service. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
277	Technical Report: Transportation	3-49	3.3.2.2	Chris Eilerman	SDOT	The analysis is incomplete. The document notes that the C3 project is assumed to be complete and construction activities would impact the Seattle Streetcar system but the streetcar would still be operable though not as a connected system. Significant modifications to the streetcar infrastructure would be necessary for this to occur. No discussion of the mitigation proposed to achieve this is offered. The document states that ST would work with the City to develop an operational plan to minimize impacts to streetcar service. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID

278	Technical Report: Transportation	3-49	3.3.2.2.	Chris Eilerman	SDOT	The analysis is incomplete. Operation of truncated streetcar service from the CID area to Capitol Hill east of the proposed closure of 5th Ave. (under CID-2a) is only possible if the closure footprint does not impact the streetcar station stop at 5th and Jackson. This mitigation should be identified for this option. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
279	Technical Report: Transportation	3-54	3.3.2.2	Chris Eilerman	SDOT	The analysis is incomplete. Alternative construction methods allowing for single track access would still have impacts to streetcar frequency, service, and possibly, safety. Absent major capital modifications to the track and signaling, the proposed closures would effectively shut down operation of the Seattle Streetcar entirely. The DEIS should include a technical memorandum and analysis describing this alternative, including track and signal configuration and how it would mitigate these impacts. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
280	Technical Report: Transportation	3-55	3.3.2.2	Chris Eilerman	SDOT	The analysis is incomplete. Description of streetcar impact is inaccurate and mitigation measures are missing. Denny Station Construction under DT-2 would close streetcar operations for 4 years as it would cut off access between the streetcar mainline alignment as constructed by C3 and the SLU Operations and Maintenance Facility (OMF) for the majority of the streetcar fleet. SLU streetcar would also be closed as access between SLU OMF and turn around track at McGraw Square would be removed. Streetcar operates on single, one-way track along Westlake and Terry. Closure at Terry would not provide for continuous track to operate.	Downtown
281	Technical Report: Transportation	3-66	3.3.3.2	Chris Eilerman	SDOT	The analysis and discussion of mitigation is incomplete. The DEIS notes repeatedly that the streetcar will be impacted to varying degrees under almost all DT and CID alternatives yet will still operate though not as a connected system. The analysis and mitigation are incomplete as they do not sufficiently detail the degrees to which streetcar will be impacted - the likely potential impact of the proposed closures will be to shut down streetcar operations throughout the streetcar system-- nor does the DEIS detail the mitigation needed to allow for continued streetcar operations. The streetcar cannot be easily rerouted or curtailed without major capital work to reconfigure the alignment, install temporary tracks, maintain access to the maintenance facilities at SLU and FHS, and provide for safety during such operations. Such work and operations are subject to safety certification by WSDOT as the Washington State Rail Safety Oversight Agency. Absent major capital modifications to the track and signaling, the proposed closures would effectively shut down operation of the Seattle Streetcar entirely. Such modifications are conditioned in the DEIS as "where feasible." The DEIS should include a technical memorandum and analysis describing the mitigations that are feasible to avoid shutdown of the streetcar system, including track and signal configuration and how it would mitigate these impacts. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
282	Ch 4 Affected Enviornment and Environmental Consequences	4.3.4.-21	4.3.4.4.3	Chris Eilerman	SDOT	The analysis and discussion of mitigation is incomplete. The DEIS notes repeatedly that the streetcar will be impacted to varying degrees under almost all DT and CID alternatives yet will still operate though not as a connected system. The analysis and mitigation are incomplete as they do not sufficiently detail the degrees to which streetcar will be impacted - the likely potential impact of the proposed closures will be to shut down streetcar operations throughout the streetcar system-- nor does the DEIS detail the mitigation needed to allow for continued streetcar operations. The streetcar cannot be easily rerouted or curtailed without major capital work to reconfigure the alignment, install temporary tracks, maintain access to the maintenance facilities at SLU and FHS, and provide for safety during such operations. Such work and operations are subject to safety certification by WSDOT as the Washington State Rail Safety Oversight Agency. Absent major capital modifications to the track and signaling, the proposed closures would effectively shut down operation of the Seattle Streetcar entirely. Such modifications are conditioned in the DEIS as "where feasible." The DEIS should include a technical memorandum and analysis describing the mitigations that are feasible to avoid shutdown of the streetcar system, including track and signal configuration and how it would mitigate these impacts. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
283	Ch 4 Affected Enviornment and Environmental Consequences	4.3.4-22	4.3.4.4.4.	Chris Eilerman	SDOT	The analysis and discussion of mitigation is incomplete. The DEIS notes repeatedly that the streetcar will be impacted to varying degrees under almost all DT and CID alternatives yet will still operate though not as a connected system. The analysis and mitigation are incomplete as they do not sufficiently detail the degrees to which streetcar will be impacted - the likely potential impact of the proposed closures will be to shut down streetcar operations throughout the streetcar system-- nor does the DEIS detail the mitigation needed to allow for continued streetcar operations. The streetcar cannot be easily rerouted or curtailed without major capital work to reconfigure the alignment, install temporary tracks, maintain access to the maintenance facilities at SLU and FHS, and provide for safety during such operations. Such work and operations are subject to safety certification by WSDOT as the Washington State Rail Safety Oversight Agency. Absent major capital modifications to the track and signaling, the proposed closures would effectively shut down operation of the Seattle Streetcar entirely. Such modifications are conditioned in the DEIS as "where feasible." The DEIS should include a technical memorandum and analysis describing the mitigations that are feasible to avoid shutdown of the streetcar system, including track and signal configuration and how it would mitigate these impacts. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID

284	Ch 4 Affected Enviornment and Environmental Consequences	4.3.6-4	4.3.6.3.2	Chris Eilerman	SDOT	The analysis is incomplete. The DEIS has repeatedly noted that that the Center City Connector project is assumed to be complete in both the Build and No-Build Alternatives. It does not appear that the VMT numbers reflect that assumptions.	
285	Ch 4 Affected Enviornment and Environmental Consequences	4.3.10-2	4.3.10.3	Chris Eilerman	SDOT	The analysis is incomplete. The DEIS has repeatedly noted that that the Center City Connector project is assumed to be complete in both the Build and No-Build Alternatives. It does not appear that the VMT numbers reflect that assumptions.	SODO/CID
286	Ch 5 Cumulative Impacts	5-10	5.4.4.1	Chris Eilerman	SDOT	The analysis is incomplete. The closures The DEIS notes repeatedly that the streetcar will be impacted to varying degrees under almost all DT and CID alternatives yet will still operate though not as a connected system. The analysis and mitigation are incomplete as they do not sufficiently detail the degrees to which streetcar will be impacted - the likely potential impact of the proposed closures will be to shut down streetcar operations throughout the streetcar system-- nor does the DEIS detail the mitigation needed to allow for continued streetcar operations. The likely impact of these closures will require a shutdown of streetcar operations. The economic impacts of this closure is not discussed in the DEIS. There would be impacts to streetcar staff and funding, as well as the need to rebuild the staffing infrastructure upon resumption of streetcar operations.	SODO/CID
287	Ch 6 Alternatives Evaluation	6-16	6.2.2.2.1	Chris Eilerman	SDOT	The analysis and discussion of mitigation is incomplete. The DEIS notes repeatedly that the streetcar will be impacted to varying degrees under almost all DT and CID alternatives yet will still operate though not as a connected system. The analysis and mitigation are incomplete as they do not sufficiently detail the degrees to which streetcar will be impacted - the likely potential impact of the proposed closures will be to shut down streetcar operations throughout the streetcar system-- nor does the DEIS detail the mitigation needed to allow for continued streetcar operations. The streetcar cannot be easily rerouted or curtailed without major capital work to reconfigure the alignment, install temporary tracks, maintain access to the maintenance facilities at SLU and FHS, and provide for safety during such operations. Such work and operations are subject to safety certification by WSDOT as the Washington State Rail Safety Oversight Agency. Absent major capital modifications to the track and signaling, the proposed closures would effectively shut down operation of the Seattle Streetcar entirely. Such modifications are conditioned in the DEIS as "where feasible." The DEIS should include a technical memorandum and analysis describing the mitigations that are feasible to avoid shutdown of the streetcar system, including track and signal configuration and how it would mitigate these impacts. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
288	Ch 6 Alternatives Evaluation	6-17, 6-18	Table 6-5	Chris Eilerman	SDOT	The analysis and discussion of mitigation is incomplete. The DEIS notes repeatedly that the streetcar will be impacted to varying degrees under almost all DT and CID alternatives yet will still operate though not as a connected system. The analysis and mitigation are incomplete as they do not sufficiently detail the degrees to which streetcar will be impacted - the likely potential impact of the proposed closures will be to shut down streetcar operations throughout the streetcar system-- nor does the DEIS detail the mitigation needed to allow for continued streetcar operations. The streetcar cannot be easily rerouted or curtailed without major capital work to reconfigure the alignment, install temporary tracks, maintain access to the maintenance facilities at SLU and FHS, and provide for safety during such operations. Such work and operations are subject to safety certification by WSDOT as the Washington State Rail Safety Oversight Agency. Absent major capital modifications to the track and signaling, the proposed closures would effectively shut down operation of the Seattle Streetcar entirely. Such modifications are conditioned in the DEIS as "where feasible." The DEIS should include a technical memorandum and analysis describing the mitigations that are feasible to avoid shutdown of the streetcar system, including track and signal configuration and how it would mitigate these impacts. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
289	Ch 6 Alternatives Evaluation	6-21	6.2.2.2.2., Table 6-6	Chris Eilerman	SDOT	The analysis and discussion of mitigation is incomplete. The DEIS notes repeatedly that the streetcar will be impacted to varying degrees under almost all DT and CID alternatives yet will still operate though not as a connected system. The analysis and mitigation are incomplete as they do not sufficiently detail the degrees to which streetcar will be impacted - the likely potential impact of the proposed closures will be to shut down streetcar operations throughout the streetcar system- nor does the DEIS detail the mitigation needed to allow for continued streetcar operations. The streetcar cannot be easily rerouted or curtailed without major capital work to reconfigure the alignment, install temporary tracks, maintain access to the maintenance facilities at SLU and FHS, and provide for safety during such operations. Such work and operations are subject to safety certification by WSDOT as the Washington State Rail Safety Oversight Agency. Absent major capital modifications to the track and signaling, the proposed closures would effectively shut down operation of the Seattle Streetcar entirely. Such modifications are conditioned in the DEIS as "where feasible." The DEIS should include a technical memorandum and analysis describing the mitigations that are feasible to avoid shutdown of the streetcar system, including track and signal configuration and how it would mitigate these impacts. A technical memorandum identifying a plan to maintain streetcar service during construction should be prepared by ST. Given the magnitude of these impacts, this plan should be developed as part of the DEIS and should identify and address the potential for C3 construction to overlap with WSBLE construction so that the proposed mitigation can be fully understood.	SODO/CID
290	Appendix J - Conceptual Design Drawings	117	L-50-GSP714	Yuling Teo	SDOT	Missing callout or legend for the lines on the elevation view to understand the alignment in elevation perspective.	All (Systemwide)
291	Appendix J - Conceptual Design Drawings	117	L-50-GSP714	Yuling Teo	SDOT	The existing structures foundations are not shown to demonstrate any conflict or not to the proposed alignment/structure	SODO/CID

292	Appendix J - Conceptual Design Drawings	116		Yuling Teo	SDOT	Missing callout or legend for the lines on the elevation view to understand the alignment in elevation perspective.	All (Systemwide)
293	Ch 2 Alternatives Considered	2-63	2.1.2.2.4	Yuling Teo	SDOT	Last paragraph on the page - "The West Galer Street flyover pedestrian facility would be modified to maintain its function in approximately the same location, providing access to the station". Please provide information on the impact to the users during the modification of this facility.	Interbay-Ballard
294	Geology and Soils	4.3.11-4	4.3.11.3.1	Yuling Teo	SDOT	Seismic Hazard, 3rd bullet - please include lateral spreading as an identified potential seismic hazard	All (Systemwide)
295	Economics	4.3.3-8	4.3.3.3.3	Yuling Teo	SDOT	Chinatown-International District Segment - it is stated that no impacts are expected to affect the rail, truck, or marine freight movement. For Alternative CID-1a which is the shallow tunnel alternative along 4th Ave S., the 4th Ave S. viaduct is expected to be demolished and reconstructed according to this DEIS(Section 2.1.2.2.2). Can it say for sure there is no impact?	SODO/CID
296	Public Services, Safety and Security	4.3.14-10	4.3.14.3	Yuling Teo	SDOT	It is stated that police vehicles are not anticipated to experience increased response times. Is this based on a study comparing a roadway without and with visual obstruction such as the guideway columns in the roadway as proposed for alternatives SIB-1 & SIB-2?	Interbay-Ballard
297	Geology and Soils	4.2.11-4	4.2.11.3.1	Yuling Teo	SDOT	Seismic Hazard, 3rd bullet - please include lateral spreading as an identified potential seismic hazard	All (Systemwide)
298	Public Services, Safety and Security	4.3.14-16	4.3.14.4.5	Yuling Teo	SDOT	Please address the interim traffic impact when Sound Transit performs routine maintenance of the guideway structures within the Elliott Way W as proposed in Alternative SIB-1 & SIB-2, for the remaining service live of the Sound Transit Link.	Interbay-Ballard
299	Ch 3 Transportation	3-54	3.11.1	Yuling Teo	SDOT	Please address construction impact to bridges immediate and long term serviceability, structural performance, and service life.	All (Systemwide)
300	Ch 3 Transportation	3-126	3.19.1	Yuling Teo	SDOT	Please address construction impact to bridges immediate and long term serviceability, structural performance, and service life.	
301	Ch 3 Transportation	3-54	3.11.1	Yuling Teo	SDOT	How would pre-construction activities such as subsurface exploration boring and potholing for a project this size be impacting the City? Where is this discussed?	
302	Ch 3 Transportation	3-126	3.19.1	Yuling Teo	SDOT	How would pre-construction activities such as subsurface exploration boring and potholing for a project this size be impacting the City? Where is this discussed?	
303	Technical Report: Transportation	6-3, 6-25	6.3.1.1, 6.4.1.1	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Missing are: sidewalk conditions (including slope, pavement irregularities, obstructions, widths), curb ramp locations (currently missing) and conditions, and accessible paths mapped within 1/4 mile of the station. The inventory should contain all relevant information to evaluate ADA compliance and impacts within the station area. DEIS pedestrian facility maps cover a much broader scale, and should also focus on the 1/4 mile station area	All (Systemwide)
304	Technical Report: Transportation	6-32, 6-51, 6-12, 6-9, 6-24, 6-32	6.4.2.2, 6.4.3.1, 6.1.1, 6.3.2.2, 6.3.3.1, 6.4.2.2,	Justin Panganiban	SDOT Street Use	Mitigation measure(s) for identified impacts are missing from the DEIS. Rebuild of non-motorized facilities and intersection areas need to be communicated as minimum requirements, and trigger restoration requirements in accordance to SDOT's Right-of-Way Opening and Restoration Rule (ROWORR), SDOT ADA Transition Plan, and other applicable sidewalk and pavement restoration requirements at time of permitting -- including replacement and upgrade of impacted ADA curb ramps and receiving companion curb ramps.	All (Systemwide)
305	Ch 3 Transportation Enviornment and Consequences	3-38, 3-41, 3-113	3.7.3.1, 3.7.4, 3.15.4	Justin Panganiban	SDOT Street Use	Mitigation measure(s) for identified impacts are missing from the DEIS. Rebuild of non-motorized facilities and intersection areas need to be communicated as minimum requirements, and trigger restoration requirements in accordance to SDOT's Right-of-Way Opening and Restoration Rule (ROWORR), SDOT ADA Transition Plan, and other applicable sidewalk and pavement restoration requirements at time of permitting -- including replacement and upgrade of impacted ADA curb ramps and receiving companion curb ramps.	All (Systemwide)
306	Technical Report: Transportation	10-2	10.5	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. No measures are provided as to how the project is evaluating 'Americans with Disabilities Act accessibility'. This information is crucial for understanding whether all factors related to ADA were documented as part of the analysis.	All (Systemwide)
307	Technical Report: Transportation	6-23, 6-50	6.3.3.1, 6.4.3.1	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. The DEIS notes that to the extent feasible, impacted bike facilities would be rebuilt to a similar level of protection and comfort. All stations, noted on Page 3-43 of Chapter 3, would be designed to include appropriate non-motorized facilities to accommodate increased levels of activity around stations. Yet it is unclear if existing bike facilities within the station area have sufficient capacity for increased bike demand and trips to and from the station.	All (Systemwide)
308	Technical Report: Transportation	4-14, 4-91	4.2.2.2, 4.3.2.2	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. It is unclear how TNCs are incorporated into pick-up/drop-off calculations, and there is a lack of specific analysis on long-term TNC impacts (as a different type of trip generator than typical pick-up/drop-off). The document also does not describe other first-last mile TNC options that may influence station ridership and station area mobility	All (Systemwide)
309	Technical Report: Transportation	5-5, 5-7, 5-9, 5-18, 5-20	Figure 5-1, Figure 5-2, Figure 5-3, Figure 5-4, Figure 5-5	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. As noted in Page 4-23 of the Transportation Technical Analysis methodology, data will be collected by parking type (e.g., time-limited parking, free parking, loading zone, or private) and location (e.g., block face). Exhibits only show where these are located, not what type. DEIS parking maps cover a much broader scale, and should include map exhibits focused on the 1/4 mile station area where parking conditions are more likely to change and/or be impacted by station area planning and construction	All (Systemwide)
310	Ch 3 Transportation Enviornment and Consequences	3-18, 3-85	3.4.3.4, 3.12.3.4	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Disaggregated bike trip data can better identify sizing and configuration of bike parking, as well as bike-specific impacts to the existing and proposed facilities. Will a separate study/methodology be developed for bike-only trips?	All (Systemwide)
311	Technical Report: Transportation	6-14, 6-16, 6-20	6.3.2.2	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. The DEIS notes alternatives with elevated guideway columns that could encroach on existing sidewalks and that Sound Transit would rebuild the affected facilities to the extent possible. It is possible that encroachments may preclude sidewalks from being rebuilt to standard if there is not sufficient ROW space; constrained conditions should be identified.	West Seattle (DUW, DEL, WSJ)

312	Technical Report: Transportation	6-44, 6-46, 6-47	6.4.2.2	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. The DEIS notes alternatives with elevated guideway columns that could encroach on existing sidewalks and that Sound Transit would rebuild the affected facilities to the extent possible. It is possible that encroachments may preclude sidewalks from being rebuilt to standard if there is not sufficient ROW space; constrained conditions will need to be identified.	Interbay-Ballard
313	Technical Report: Transportation	6-24	6.3.3.1	Justin Panganiban	SDOT Street Use	Mitigation measure(s) for identified impacts are missing from the DEIS. Column encroachments can trigger additional restorations beyond sidewalk rebuild as described in the Right-of-Way Opening and Restoration Rules (ROWORR), such as adding/upgrading curb ramps to meet minimum ADA standards, street tree protections (and/or replacement), signals replacement, and utilities relocation; these will need to be considered as part of impacts and mitigation.	West Seattle (DUW, DEL, WSJ)
314	Technical Report: Transportation	6-50	6.4.3.1	Justin Panganiban	SDOT Street Use	Mitigation measure(s) for identified impacts are missing from the DEIS. Column encroachments can trigger additional restorations beyond sidewalk rebuild as described in the Right-of-Way Opening and Restoration Rules (ROWORR), such as adding/upgrading curb ramps to meet minimum ADA standards, street tree protections (and/or replacement), signals replacement, and utilities relocation; these will need to be considered as part of impacts and mitigation.	Interbay-Ballard
315	Utilities	4.2.15-4	4.2.15.4.1	Justin Panganiban	SDOT Street Use	Mitigation measure(s) for identified impacts are missing from the DEIS. Any above ground utility relocations within the ROW need to meet minimum standard clearances and design. Utility work in the ROW, as well as utility relocation on adjacent ROW, may trigger other improvements. For example, utility impacts at intersections will trigger ADA curb ramps under SDOT's Right-of-Way Opening and Restoration Rule (ROWORR), and companion curb ramp policy requirements	West Seattle (DUW, DEL, WSJ)
316	Utilities	4.2.15-5, 4.3.15-6	4.2.15.6, 4.3.15.6	Justin Panganiban & Steve Hou	SDOT Street Use	Mitigation measure(s) for identified impacts are missing from the DEIS. It is unlikely that the analysis of major utilities would result in no impacts to major utilities, even with the appropriate pre-construction measures. Further elaborate what types of pre-construction measures would result in no mitigations, and what a typical mitigation approach would be for impacted utilities.	All (Systemwide)
317	Technical Report: Transportation	6-1, 6-16, 6-14, 6-20, 6-46	6.1, 6.3.2.2, 6.4.2.2	Justin Panganiban	SDOT Street Use	Mitigation measure(s) for identified impacts are missing from the DEIS. What does Sound Transit see as the potential limits to rebuilding facilities "to the extent possible", and when and under what forum would the agreement with the City of Seattle on rebuild of facilities take place?	All (Systemwide)
318	Technical Report: Transportation	6-2	6.2	Justin Panganiban	SDOT Street Use	The methodology does not capture complete impacts of the project. Areas around each station that are accessible to pedestrians and bicyclists did not include an assessment of accessible curb ramps, which are an integral part of an accessible pedestrian network. Follow guidance in SDOT's Right-of-Way Improvements Manual to perform an assessment of accessible crossings within 1/4 mile of transit stations. SDOT maintains curb ramp data in public-facing databases, such as: https://seattlecitygis.maps.arcgis.com/apps/webappviewer/index.html?id=8eab0a1cc9e647319131a66cc9b8ce5c	All (Systemwide)
319	Technical Report: Transportation	4-138	Table 4-58	Justin Panganiban	SDOT Street Use	Mitigation measure(s) for identified impacts are missing from the DEIS. Given West Galer Street Flyover's impact to the transportation network, provide more specificity on mitigation to maintain ingress/egress for cruise ship terminal with nearby arterial roadway closures; for example, limiting work to close this route only off-season / not impacting cruise traffic.	Interbay-Ballard
320	Utilities	4.2.15-3, 4.3.15-3	4.2.15.4.1, 4.3.15.4.1	Justin Panganiban	SDOT Street Use	Mitigation measure(s) for identified impacts are missing from the DEIS. Pole relocations trigger pavement restoration requirements and ADA improvements such as curb ramps, which are not captured as a project impact. A number of poles also include street lighting, and therefore would need to be coordinated with roadway lighting design standards and standard clearances.	All (Systemwide)
321	Ch 6 Alternatives Evaluation	6-33	6.2.2.3	Justin Panganiban	SDOT Street Use	The analysis is incomplete. Cost factors related to above-ground utilities relocation, required curb ramp upgrades, rebuild and restoration of pedestrian and bike facilities, and accessibility improvements where R.O.W. exists may be significant for any elevated alternatives in West Seattle and Interbay/Ballard, and do not appear to be referenced or considered.	All (Systemwide)
322	Utilities	4.2.15-5, 4.3.15-6	4.2.15.6, 4.3.15.6	Justin Panganiban	SDOT Street Use	Mitigation measure(s) for identified impacts are missing from the DEIS. Describe potential mitigations when relocating utilities to adjacent ROWs or private properties isn't feasible -- including for minor utilities (which were not part of the scope of the DEIS analysis)	All (Systemwide)
323	Ch 3 Transportation Enviornment and Consequences	4-96, 4-19	Table 4-42, Table 4-10	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Per the Technical Report for Transportation Technical Memorandum, specific pick-up/drop-off curb space requirements for non-transit vehicles were validated and adjusted through the DEIS analysis. It is unclear how pick-up/drop-off quantities in the Trip Generation Forecasts are reflected in quantity/location of designated pick-up/drop off spots in Appendix J	All (Systemwide)
324	Technical Report: Transportation	3-10	3.2.2.2	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. It is unclear how bus stop and layover locations were validated with existing ROW conditions to ensure minimum sidewalk requirements and design standards for loading, ADA, and queuing; these transit facility needs may be more extensive depending on type of transit service, # of routes served, frequency, and # of boardings/alightings. Such standards are discussed in Section 3.10: Transit of Streets Illustrated.	All (Systemwide)
325	Technical Report: Transportation	AE 0036-17		Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. The focus of transit integration impacts are primarily operational, and do not account for potential neighborhood access and ped/bike facility impacts that emerge from utilizing neighborhood streets for turnaround, layover and/or new routing -- particularly in the West Seattle segment.	West Seattle (DUW, DEL, WSJ)
326	Fact Sheet	iv	Anticipated Permits and Approvals	Justin Panganiban	SDOT Street Use	References to local codes citing minimum requirements is missing. Be specific that Street Improvement Permits (SIP) are required for this project for both station and guideway segments. "Street use permit" is too broad of a categorization, as there will be multiple types of street use permits issued for street improvements, utilities work, ROW staging, etc.	All (Systemwide)
327	Fact Sheet	iv	Anticipated Permits and Approvals	Justin Panganiban	SDOT Street Use	References to local codes citing minimum requirements is missing. Other approvals: Historically, SDOT requires a project construction permit (PCP) as part of the Street Use Permit, which references the permit plans, scope of work and additional permit conditions. Section 7 of the PCP includes additional permits that may be required to complete this work that are not described in this list and should be referenced, including Seattle Fire, King County Health, etc.	All (Systemwide)

328	Ch 2 Alternatives Considered	2-91	2.6.8	Justin Panganiban	SDOT Street Use	References to local codes citing minimum requirements is missing. Restoration in the ROW impacted by construction activities would trigger restoration requirements per SDOT's Right-of-Way Opening and Restoration Rule (ROWORR), in addition to other related restoration requirements by SDOT, Seattle Public Utilities, Seattle City Light, etc. that are applicable during time of permitting. These includes bringing impacted curb ramps to ADA compliance, not restoration to existing pre-construction conditions.	All (Systemwide)
329	Ch 3 Transportation Enviornment and Consequences	3-56, 3-128	3.11.1.4, 3.19.1.4	Justin Panganiban	SDOT Street Use	The information used is not accurate. Existing curb ramps (both compliant and non-compliant with ADA) may be expected to be removed or impacted as part of the project; rephrase to indicate that impacted curb ramps will need to be replaced with ADA-compliant curb ramps, and may trigger companion curb ramp requirements per SDOT's companion ADA ramp policy and Right-of-Way Opening and Restoration Rule (ROWORR)	All (Systemwide)
330	Ch 6 Alternatives Evaluation	6-4, 6-10, 6-14, 6-17, 6-21, 6-23, 6-27	Table 6-1, Table 6-3, Table 6-4, Table 6-5, Table 6-6, Table 6-7, Table 6-8	Justin Panganiban	SDOT Street Use	The analysis is incomplete. Several significant impacts have not been identified. Key transportation impacts for each segment, starting on Table 6-1 generally leave out any major impacts that relate to non-motorized modes (pedestrian and bicycle facilities). The DEIS identifies pedestrian and bike detours where existing pedestrian and bicycle facilities are impacted by closures, as well as pedestrian and bike facility impacts as a result of guideway placement; these are key differentiators between alternatives.	All (Systemwide)
331	Utilities	4.3.15-3, 4.2.15-3	4.2.15.4.1, 4.3.15.4.1	Justin Panganiban	SDOT Street Use	The analysis is incomplete. Several significant impacts have not been identified. Utilities construction may require significant pavement and sidewalk restoration in the ROW as triggered by the Right-of-Way Restoration and Opening Rules (ROWORR), especially if these restorations extend the full length of the block	All (Systemwide)
332	Utilities	4.3.15-3, 4.2.15-3	4.2.15.4.1, 4.3.15.4.1	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. How does Sound Transit define and differentiate "minor utility" from major utilities as part of the utility impacts analysis? For the purposes of permitting utility work in ROW, SDOT defines minor and major utilities as such: http://www.seattle.gov/transportation/permits-and-services/permits/utility-work-in-the-right-of-way	All (Systemwide)
333	Utilities	4.3.15-3, 4.2.15-3	4.2.15.4.1, 4.3.15.4.1	Justin Panganiban	SDOT Street Use	The analysis is incomplete. Minor utilities may incur costs, relocation challenges (if not feasible to relocate utilities in adjacent ROW or private property) and/or restoration work as a project impact, and should be encompassed in the DEIS	All (Systemwide)
334	Technical Report: Transportation	6-22, 6-23	6.3.2.2	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Where the DEIS identifies closure of crosswalk or pathway, and a specific alternative path/crosswalk for access, include distance/time taken to get to alternate crossing locations. This is done in some sections of the DEIS (such as on Page 6-49 of the Technical Report), but not in all sections.	West Seattle (DUW, DEL, WSJ)
335	Technical Report: Transportation	4-3, 4-6. 4-71, 4-72, 4-74	Table 4-1, Table 4-2, Table 4-4, Table 4-30, Table 4-31, Table 4-32, Table 4-33	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Beginning with Table 4-1, the table denotes presence of bike lane and sidewalk along local roadway segments. Is 'bike lane' inclusive of all facility types, and can information be provided on the length and facility type(s) (i.e. protected, in-lane, etc.)? Additionally, how is presence of sidewalk measured (i.e. does it capture any gaps in sidewalk coverage, does it count if sidewalk is only on one side of the street etc.)	All (Systemwide)
336	Technical Report: Visual	2-30	Figure 2-7f	Justin Panganiban	SDOT Street Use	An existing sidewalk is present on the south side of Genesee St that appears to be removed in the DEL-3 rendering. We expect major pedestrian mobility impacts that have not been accounted for if the guideway precludes the ability to build a sidewalk there.	West Seattle (DUW, DEL, WSJ)
337	Ch 3 Transportation Enviornment and Consequences	3-38, 3-41, 3-113	3.7.3.1, 3.7.4, 3.15.4	Justin Panganiban	SDOT Street Use	References to local codes citing minimum requirements is missing. The Standard Plans for Municipal Construction apply whenever any public or private construction is performed within the Rights-of-Way. Streets Illustrated and the Right-of-Way Opening and Restoration Rules (which inform potential restoration in the R.O.W. as a result of construction impacts) point to these drawings, and R.O.W. would need to be built to these standards	All (Systemwide)
338	Technical Report: Transportation	6-32, 6-51, 6-12, 6-9, 6-24, 6-32	6.4.2.2, 6.4.3.1, 6.1.1, 6.3.2.2, 6.3.3.1, 6.4.2.2,	Justin Panganiban	SDOT Street Use	References to local codes citing minimum requirements is missing. The Standard Plans for Municipal Construction apply whenever any public or private construction is performed within the Rights-of-Way. Streets Illustrated and the Right-of-Way Opening and Restoration Rules (which inform potential restoration in the R.O.W. as a result of construction impacts) point to these drawings, and R.O.W. would need to be built to these standards	All (Systemwide)
339	Ch 3 Transportation Enviornment and Consequences	3-38, 3-41, 3-113	3.7.3.1, 3.7.4, 3.15.4	Justin Panganiban	SDOT Street Use	References to local codes citing minimum requirements should be updated. Revise language to include "at time of permitting", and remove any references to dates (i.e. Streets Illustrated 2020). Street Illustrated design standards, as well as other applicable documents that inform project requirements, may be updated prior to when the project goes in for permitting and would be held to those requirements	All (Systemwide)
340	Technical Report: Transportation	6-32, 6-51, 6-12, 6-9, 6-24, 6-32	6.4.2.2, 6.4.3.1, 6.1.1, 6.3.2.2, 6.3.3.1, 6.4.2.2,	Justin Panganiban	SDOT Street Use	References to local codes citing minimum requirements should be updated. Revise language to include "at time of permitting", and remove any references to dates (i.e. Streets Illustrated 2020). Street Illustrated design standards, as well as other applicable documents that inform project requirements, may be updated prior to when the project goes in for permitting and would be held to those requirements	All (Systemwide)
341	Ch 5 Cumulative Impacts	5-20	5.4.12	Steve Hou	SDOT Street Use	The analysis is incomplete. Several significant impacts have not been identified. DEIS needs to address long term impacts to the slope stability, such as vibration, etc.	All (Systemwide)
342	Utilities	4.3.11-6	4.3.11.3.5	Steve Hou	SDOT Street Use	The analysis is incomplete. Several significant impacts have not been identified. In the Smith Cove segment, ensure City subsurface drainage system installed from W Garfield St landslide mitigation project at east side of Magnolia bridge ramp will not be impacted by the project.	Interbay-Ballard

343	Appendix J - Conceptual Design Drawings	65	B05-ASP100	Justin Panganiban	SDOT Street Use	The conceptual drawing does not capture project impacts: The proposed bicycle storage shown at back of sidewalk on Pine Street in DT-1 is likely not appropriate with density of pedestrians at this location, and will require further review and discussion. This applies to any high ped-volume location where bicycle storage may be proposed to be located in the R.O.W.	Downtown
344	Appendix J - Conceptual Design Drawings	55, 58, 62, 65, 69, 73	B05-ASP700, B02-ASP300, B02-ASP700, B05-ASP100, B02-ASP100, B07-ASP100	Justin Panganiban	SDOT Street Use	The analysis is incomplete. It does not appear that station footprints on 6th Ave allow for sidewalk widths required downtown under Map 1C in SMC 23.49, or with guidance found in Streets Illustrated. Reference this section of the code when reviewing all downtown station sidewalk widths.	Downtown
345	Appendix J - Conceptual Design Drawings	79	B09-ASP100	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is inaccurate. The channelization on Dexter Ave at the station entrance for DT-1 does not match current channelization and locates transit and paratransit loading inside the bike lane, which is currently at the curb. This is not a best practice, and the project should evaluate conflicts this arrangement may lead to, and propose additional improvements to minimize mode conflicts	Downtown
346	Appendix J - Conceptual Design Drawings	35	B01-ASP100a	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. CID-2a is missing a reference to 2-way PBL on west side of 5th Ave next to existing light rail plaza in the base map, and may impact planned improvements for multimodal integration.	SODO/CID
347	Appendix J - Conceptual Design Drawings	52	L50-CYX103	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Provide typical cross-sections for Delridge Way (only shown for Genesee St) to illustrate DEL-3 and DEL-4. Guideway column placement may impact multiple aspects of R.O.W. (sidewalk, utilities, intersections)	West Seattle (DUW, DEL, WSJ)
348	Appendix J - Conceptual Design Drawings	52	L50-CYX103	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Provide typical cross-sections for Genesee St showing placement of guideway columns on the north side of Genesee in DEL-2B. Guideway column placement may impact multiple aspects of R.O.W. (sidewalk, utilities, intersections)	West Seattle (DUW, DEL, WSJ)
349	Appendix J - Conceptual Design Drawings	All cross sections	All cross sections	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Provide typical dimension for "column buffers" wherever the guideway column is located on both sidewalks and medians. References to typical 10x10 footprint of guideway columns from 2.1.1.1 of DEIS should be called out in these drawings as a point of reference on how wide these column buffers will be in order to accommodate columns	West Seattle (DUW, DEL, WSJ)
350	Appendix J - Conceptual Design Drawings	All cross sections	All cross sections	Justin Panganiban	SDOT Street Use	Cross-sections throughout the drawing set should represent typical above-ground utilities between existing vs. proposed so extent of impacts to utility relocations within the R.O.W. are clear and what an appropriate mitigation might be (placed on private property, separate R.O.W., etc.)	All (Systemwide)
351	Appendix J - Conceptual Design Drawings	133	L50-CYX115	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Provide typical cross-section for IBB-1a and IBB-1b showing 14th north of NW 51st St when the guideway shifts to parcels along the east side of 14th. Guideway column placement may impact R.O.W. sidewalk cross-section.	Interbay-Ballard
352	Appendix J - Conceptual Design Drawings	52	L50-CYX103	Justin Panganiban	SDOT Street Use	The conceptual drawing does not capture project impacts: Cross-section for DEL-1a, DEL-2a, DEL-3, and DEL-4 shows the sidewalk removed on the south side of Genesee St (arterial) and expect major pedestrian mobility impacts that have not been accounted for if the guideway precludes the ability to build a sidewalk there. Confirm status of sidewalk.	West Seattle (DUW, DEL, WSJ)
353	Appendix J - Conceptual Design Drawings	8	L50-CYX107	Justin Panganiban	SDOT Street Use	The analysis is incomplete. ADA improvements (including curb ramps) and other restoration requirements may be triggered by relocation of 230kv transmission poles along 6th Ave between Massachusetts St and substation south of Spokane St	SODO/CID
354	Appendix J - Conceptual Design Drawings	12	W01-ASP100	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Unclear what the safety and operational tradeoffs are of consolidating paratransit, pick-up/drop-off, bus pickup, and layover on a single loop off of single street (SODO-1b and SODO-2) vs. separate drop-off accessed off of 4th and 6th (SODO-1a) in the DEIS.	SODO/CID
355	Appendix J - Conceptual Design Drawings	9	W01-ASP700	Justin Panganiban	SDOT Street Use	The conceptual drawing does not capture project impacts: Potential safety conflicts are present if transit and paratransit loading directly fronts SODO Trail in SODO-2, and appropriate mitigations may need to be identified if this alternative is carried further.	SODO/CID
356	Appendix J - Conceptual Design Drawings	115	B13-ASP700	Justin Panganiban	SDOT Street Use	The conceptual drawing does not capture project impacts: Prospect Street Station/Central Interbay Alternative (SIB-3) locates pick-up/drop-off adjacent to busy freight route, as well as across the street. If this alternative is carried further, loading areas need to be relocated.	Interbay-Ballard
357	Appendix J - Conceptual Design Drawings	44	L50-GSP423	Justin Panganiban	SDOT Street Use	The conceptual drawing does not capture project impacts: Guideway and station within the Delridge Way R.O.W. in DEL-3 will likely trigger utility relocations and ADA sidewalk and intersection improvements along a substantial portion of Delridge Way	West Seattle (DUW, DEL, WSJ)
358	Appendix J - Conceptual Design Drawings	44	L50-GSP323	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Provide typical cross-section for Andover St and Avalon Way in the Andover Station alternatives (DEL-5) showing how the placement of guideway columns on the median affect the R.O.W.	West Seattle (DUW, DEL, WSJ)
359	Appendix J - Conceptual Design Drawings	76	L50-CYX102	Justin Panganiban	SDOT Street Use	The conceptual drawing does not capture project impacts: Bike lanes are built on only one side of Fauntleroy and are not grade-separated in WSJ-2. Proposed cross-section would potentially preclude opportunity to rebuild Fauntleroy SW with planned raised protected bike lanes on both sides of street per the Fauntleroy SW Boulevard Project	West Seattle (DUW, DEL, WSJ)
360	Appendix J - Conceptual Design Drawings	General	General	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. For on-street parking spaces that are proposed to convert into pick-up/drop-off, confirm that the quantities in the DEIS are accurately reflected in Appendix J drawings. Allocated zones should be shown explicitly and consistently across different alternatives (parking space footprints are marked in some alternatives, and not others).	All (Systemwide)
361	Appendix J - Conceptual Design Drawings	General	General	Justin Panganiban	SDOT Street Use	For consistency across ST3 planning documents, Legend/key should use "Station Footprint" or "Station Limit-of-Work" (or other term) rather than "Station Area Footprint". Station Area references the 1/2 mile planning area around each station.	All (Systemwide)

362	Appendix J - Conceptual Design Drawings	General	General	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Bike storage footprints vary between stations without rationale of how bike quantity and storage sizing is determined (i.e. Smith Cove is tiny, Midtown is missing bike storage, Avalon takes up a small footprint within a much larger parcel, CID's bike storage takes up three parcels east of the station entrance, Westlake is located along sidewalk frontage zone). Provide estimated parking quantities per station and describe basis of design for siting bike facilities.	All (Systemwide)
363	Appendix J - Conceptual Design Drawings	57	W03-ASP400	Justin Panganiban	SDOT Street Use	The conceptual drawing does not capture project impacts: Passenger loading that does not front station entrances may encourage midblock crossings and may require ADA or other crossing treatments. For example, passenger loading midblock on south side of Dakota St (in DEL-3 and DEL-4) opposite station appears to incentivize or encourage midblock pedestrian crossings.	West Seattle (DUW, DEL, WSJ)
364	Appendix J - Conceptual Design Drawings	9, 10, 12, 14,	W01-ASP700, W01-ASP1200, W01-ASP100, W01-ASP600	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Several alternatives at SODO Station propose new roadway loops for pick-up/drop-off, paratransit, and transit loading. These new intersections may require new/upgraded traffic infrastructure for mobility and pedestrian crossings, and it is unclear if these roadway loops are sized appropriately for frequency of transit and pick-up/drop offs during peak hours.	SODO/CID
365	Appendix J - Conceptual Design Drawings	111, 113, 115	B13-ASP100, B13-ASP300, B13-ASP700	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Several alternatives at Smith Cove Station propose new roadway loops for pick-up/drop-off, paratransit, and transit loading. These new intersections may require new/upgraded traffic infrastructure for mobility and pedestrian crossings, and it is unclear if these roadway loops are sized appropriately for frequency of transit and pick-up/drop offs during peak hours.	Interbay-Ballard
366	Appendix J - Conceptual Design Drawings	General	General	Justin Panganiban	SDOT Street Use	The information necessary to identify impacts and compare alternatives is missing. Site plans should make distinction between retained bus loading locations and proposed new bus loading locations.	All (Systemwide)
367	Parks and Recreational Resources	229	4.2.17.1.2	Joel Miller	SDOT Street Use	The analysis fails to account for Shoreline Street End (SSE) sites within the project area of the Duwamish crossing. This includes the SW Hinds St SSE, the Chelan Ave SW SSE, the SW Spokane ST SSE sites. The SW Spokane St sites, also called the fishing bridge, are well-used areas for community fishing and water exploration.	West Seattle (DUW, DEL, WSJ)
368	Parks and Recreational Resources	146	4.2.9.3.3	Joel Miller	SDOT Street Use	This analysis fails to account for potential impacts to the planted pollinator garden that is part of the Spokane St Shoreline Street End. Shading or other changes could have negative outcomes for this pollinator garden.	West Seattle (DUW, DEL, WSJ)
369	Ch 3 Transportation	3-34	3.6.3	Jonathan Williams	SDOT T&M	Report states " Consistent with all existing light rail stations in Seattle, Sound Transit expects that the City of Seattle would manage parking within the vicinity of new stations by placing restrictions (including time limits or permit restrictions) where they do not already exist." which is not true at SODO or Stadium stations	SODO/CID
370	Ch 3 Transportation	3-35	3.6.3.1	Jonathan Williams	SDOT T&M	ST defines the potential "walkshed" for hide and ride users as 0.25 miles from the station, but on page 3-37 defines the walkshed of a station to be 0.5 miles. Using consistent methodology, if users will walk 0.5 miles to the station, this walkshed should also constitute the area of review for potential hide and ride impacts.	All (Systemwide)
371	Appendix J - Conceptual Design Drawings	169	B02	Jonathan Williams	SDOT T&M	This figure and others depict Sound Transit Maintenance vehicle spaces in the public ROW where no curb parking exists and sidewalk width requirements limit curb or channelization modification. If this level of parking access is required at station entrances, Sound Transit must identify off-street locations to serve this function and remove these assumed ROW spaces from project documents.	Interbay-Ballard
372	Appendix J - Conceptual Design Drawings	172	B02	Jonathan Williams	SDOT T&M	The figure depicts Sound Transit Maintenance/Service vehicle parking impacts/removes an existing load zone that has no identified relocation area. Sound Transit cannot assume that their service/maintenance vehicle stalls can be met within the public right-of-way, particularly downtown.	Interbay-Ballard
373	Appendix J - Conceptual Design Drawings	165	B02	Jonathan Williams	SDOT T&M	This figure calls out paratransit loading designated on a street segment with 11% running slope, and an alternate location or other modifications may need to be evaluated.	Interbay-Ballard
374	Ch 3 Transportation	3-56	3.11.6.3	Jonathan Williams	SDOT T&M	Mitigation measure(s) for identified impacts are missing from the DEIS. Page 3-56 indicates that Sound Transit expects that construction employee vehicles would be limited only to the number that could park within the construction staging area, but then notes they may park on-street during heavy construction periods which may impact local curb space. Mitigation measures for construction worker parking during "heavy construction periods" may potentially include worker shuttle service or additional off-street accommodation, which are not described.	All (Systemwide)
375	Ch 3 Transportation	3-98	3.13.3.2	Jonathan Williams	SDOT T&M	The methodology does not capture traffic impacts from utilization of private pay lots as a mode of access and generation of vehicle trips. Experience from other end-of-line stations (i.e. University of Washington) indicates that transit ridership will lead to increased utilization of private pay lots where available.	All (Systemwide)
376	Ch 3 Transportation	3-86	Table 3-20	Jonathan Williams	SDOT T&M	Methodology to determine pick up / drop off volumes, and subsequent outcomes is unclear and appears inconsistent. Appendix N1 (p 4-17) references the volume source as the not-provided "Sound Transit Incremental Ridership Model." Page 6-40 of N1 says at the Westlake station, "the number of additional riders on the surface streets would be limited; these people would be walking, biking, or being picked up or dropped off." Yet table 3-20 in Chapter 3 indicates building new light rail to Ballard would add zero drop offs at Westlake station even though ridership increases by 40%, and is unclear from the methodology why no pick up or drop off trips would be added. This methodology needs to be transparently provided to allow for understanding need for pick up / drop off accommodations on City streets where curb space may be limited or not available.	All (Systemwide)
377	Ch 3 Transportation	3-24, 5-1, 3-104	Table 3-25	Jonathan Williams	SDOT T&M	In multiple places, the report says there are no unrestricted parking spaces within 0.25 miles of the Chinatown ID station, but this is incorrect. There are unrestricted parking spaces on Lane S St and Maynard Ave S within 1,000 feet of proposed alternatives. Please include in analysis and potential mitigation.	SODO/CID

378	Ch 3 Transportation, Technical Report: Transportation	5-16, 3-36	5.2.3.1, 3.6.4	Jonathan Williams	SDOT T&M	The information necessary to identify impacts and compare alternatives is missing. Relocation of existing designated ADA spaces or commercial load zones need to be explicit about proximity to specific destinations it serves, as well as curb ramp proximity, as parameters for relocation. The study does not specifically disclose where existing ADA spaces or commercial zones are - simply including them with other more-flexible restricted spaces. It is not possible then to understand impacts or if mitigation exists.	All (Systemwide)
379	Appendix J - Conceptual Design Drawings	55, 57, and others	W03-ASP200, W03-ASP400, and others	Jonathan Williams	SDOT T&M	Most station-adjacent ADA accessible loading areas (paratransit) are shown with a recessed curb, presumably to accommodate a 5' access aisle in line with PROWAG / Access board guidelines, but no such access aisle is shown along Columbia in DT-1. If implemented on Columbia, it would narrow the distance between recessed curb and property line to only 7'. Narrower sidewalks and added pedestrian volumes here would have significant impact on pedestrian level of service and safety and would not be consistent with minimum requirements for sidewalk widths in downtown Seattle. Project team should clarify design intent of these areas to clarify where sidewalk space will be reduced	All (Systemwide)
380	Ch 3 Transportation	Page 3-10	3.3.2	Lizzie Moll	SDOT	The methodology or information used is outdated. Updated information should state that alternative CID-1a* could [not would] prohibit vehicles from traveling north along 4th Avenue, since there has been no transportation management plan developed for this area and with alternative CID-1a* there will be a partial closure south of Jackson (not a full closure).	SODO/CID
381	Appendix J - Conceptual Design Drawings			Lizzie Moll	SDOT	The methodology does not capture complete impacts of the project including: sidewalk and ADA pedestrian infrastructure improvements necessary to connect paratransit loading areas and bus loading areas to new station entrances. Having accessible pathways is essential to the function of the project and should be included in the WSBLE project.	All (Systemwide)
382	Ch 3 Transportation	Page 3-109	3.15.3.1	Lizzie Moll	SDOT	Mitigation measures for event surges are missing from the DEIS including impacts of elevator only stations versus stations that can also be accessed by stair or escalator. Study impacts on community, transportation operations, and right-of-way impacts of surge events on CID-1b and CID-2b options. Longer queues for elevators during major surge events or bus-light rail or rail-light rail transfers could necessitate additional entrances to disperse capacity. Include in methodology the time it will take for folks to get on an elevator at each entrance as well as surge numbers. This should include major stadia events as well as the arrival of a full Sounder train.	SODO/CID
383	Appendix G - Environmental Justice	Page 5-31	Table 5-4	Lizzie Moll	SDOT	Mitigation measure for pedestrian Level of Service (L.O.S.) is not described under "Best Management Practices and Mitigation". Consider pedestrian L.O.S. as studied in Chapter 3 to inform pedestrian mitigation needs.	
384	Appendix J - Conceptual Design Drawings	Page 137-138		Lizzie Moll	SDOT	The methodology does not capture complete impacts of the project including: the impact on a person with disabilities needing to take three elevators to reach the station platform. Especially during surge events, the impact on customer experience, may be unacceptable. Also not captured in Appendix G: Environmental Justice.	Downtown
385	Appendix J - Conceptual Design Drawings			Lizzie Moll	SDOT	The analysis is incomplete. Impacts on public right-of-way are beyond what is indicated for utility relocation necessary by the project. Include areas for relocating utilities as part of indicated "construction limits".	All (Systemwide)
386	Ch 3 Transportation	Page 3-114 to 3-117		Lizzie Moll	SDOT	The analysis is incomplete. Significant impacts of introducing new points of interest (station entrances) have not been factored into safety impacts for non-motorized travel. Consider the introduction of a new destination with SDOT's Vision Zero Bicycle and Pedestrian Safety Analysis and key findings: http://www.seattle.gov/Documents/Departments/SDOT/VisionZero/SDOT_Bike%20and%20Ped%20Safety%20Analysis_Ph2_2420(0).pdf	All (Systemwide)
387	Appendix J - Conceptual Design Drawings	172		Ellie Smith	SDOT	The analysis is incomplete. Impacts related to pedestrian safety in the walkway proposed between Westlake Center and proposed West station entrance have not been identified. It is currently proposed seemingly without CPTED-informed design, with narrow walkway and no visual permeability of the head house along diagonal face.	
388	Appendix J - Conceptual Design Drawings	172		Ellie Smith	SDOT	The analysis is incomplete. Impacts related to safe access to existing bicycle infrastructure has not been identified, including how the proposed bicycle facilities at station locations will be connected with proposed bicycle facilities (as part of the Pike/Pine Renaissance) on Pike and Pine between 4th and 6th. These are essential for bicycle safety and connecting people on bicycles to the stations and should be included as part of the WSBLE project. (See also similar comment directed at all stations.)	
389	Appendix J - Conceptual Design Drawings	172		Ellie Smith	SDOT	The information necessary to identify impacts is missing. Missing are sidewalk dimensions outside of station entrances. Provide standard space/frontage zone at all entrances in downtown. Provide at least 18' sidewalks at frontage, 24’ wide sidewalks at station entrances, and 28' at bus integration locations. Provide high transparency at street façade. These items are essential for wayfinding, pedestrian safety and comfort and should be include as part of the WSBLE project. (See also similar comment directed at all stations.)	
390	Appendix J - Conceptual Design Drawings	172		Ellie Smith	SDOT	The analysis is incomplete. Impacts related to future street design and operation are not represented. Integrate/coordinate special design treatments with Pike/Pine Renaissance project. All streets impacted by construction will be reconstructed to an agreed upon design between SDOT and Sound transit. Pike and Pine between 4th and 5th are pedestrian priority streets, therefore restrict vehicle access. These impacts and reconstructions should be included within the WSBLE project area.	
391	Appendix J - Conceptual Design Drawings	172		Ellie Smith	SDOT	The information necessary to identify impacts is missing. Missing is a description of the type and location of bike parking facilities. It is essential to provide sufficient end of trip bicycle parking facilities that are conveniently accessed off of Pike St and Pine St to support safe and convenient bicycle-rail transfers. Provide bicycle parking, both long term bicycle storage as well as on street short term parking on/near Pike and Pine near station entrances. Provide bicycle parking at 5th and Pike headhouse on north side. This bicycle parking should be included as part of WSBLE project.	
392	Appendix J - Conceptual Design Drawings	180		Ellie Smith	SDOT	The analysis is incomplete. Missing is analysis of the impact of number and location of station entrances from the street, particularly when station entrances are not provided on all frontages. Examples include Denny, Westlake, and 9th Ave for the north headhouse in addition to Blanchard, 8th, and Westlake. Direct access to the station will alleviate impacts of pedestrian congestion on downtown's congested sidewalks. (See also similar comment directed at all stations.)	

393	Appendix J - Conceptual Design Drawings	180		Ellie Smith	SDOT	The analysis is incomplete. Missing is analysis of the impact of not including station entrances on both sides of arterial streets. Explore adding entrance on north side of Denny at Discovery Center with new Vulcan development and on the east side of Westlake at the Whole Foods Plaza. This is essential to accommodate PM and AM peak commuter surge, improve pedestrian safety and reduce potential vehicular and pedestrian/bicycle conflicts at intersections and should be included as part of WSBLE project.	
394	Appendix J - Conceptual Design Drawings	180		Ellie Smith	SDOT	The information necessary to identify impacts is missing. Missing are sidewalk dimensions outside of station entrances. Provide standard space/frontage zone at all entrances in downtown. Provide at least 18' sidewalks at frontage, 24’ wide sidewalks at station entrances, and 28' at bus integration locations. Provide high transparency at street façade. These items are essential for wayfinding, pedestrian safety and comfort and should be include as part of the WSBLE project. (See also similar comment directed at all stations.)	
395	Appendix J - Conceptual Design Drawings	180		Ellie Smith	SDOT	The information necessary to identify impacts is missing. Missing is a description of the location of a safe all ages and abilities bicycle connection to existing bicycle facilities on 9th Ave and include as part of the WSBLE project. This connection is essential for people to safely bicycle to the station.	
396	Appendix J - Conceptual Design Drawings	183		Ellie Smith	SDOT	The analysis is incomplete. Missing is analysis of the impact of not including station entrances on only one side of key streets. This is essential to enhance the safety of the pedestrian connection to the station and avoiding requiring crossing Denny Way and Thomas St. This also reduced impacts to downtown's congested sidewalks. An access point on both sides of key streets should be included as part of the WSBLE project.	
397	Appendix J - Conceptual Design Drawings	183		Ellie Smith	SDOT	The information necessary to identify impacts is missing. Missing is clarity on if station footprints are designed to accommodate adequate publicly available space for bicycle and micromobility parking for customers accessing WSBLE stations without impinging on required pedestrian clear zones along station frontages or impacting the pedestrian network. Sound Transit's approach towards accommodating bicycle and micromobility parking should be included as an essential element of the WSBLE project for safe multimodal access to and from WSBLE stations. (See also similar comment directed at all stations.)	
398	Appendix J - Conceptual Design Drawings	183		Ellie Smith	SDOT	The information necessary to identify impacts is missing. Missing is clarity on how Terry and Denny intersection would accommodate pedestrians and bicyclists accessing the light rail station. Improvements are essential for bicyclist and pedestrian access to the station and should be included as part of the WSBLE project. (See also similar comment directed at all stations.)	
399	Appendix J - Conceptual Design Drawings	183		Ellie Smith	SDOT	The information necessary to identify impacts is missing. Missing are sidewalk dimensions outside of station entrances. Provide standard space/frontage zone at all entrances in downtown. Provide at least 18' sidewalks at frontage, 24’ wide sidewalks at station entrances, and 28' at bus integration locations. Provide high transparency at street façade. These items are essential for wayfinding, pedestrian safety and comfort and should be include as part of the WSBLE project. (See also similar comment directed at all stations.)	
400	Appendix J - Conceptual Design Drawings	183		Ellie Smith	SDOT	The analysis is incomplete. Impacts related to a publicly accessible hill climb between Terry St and John St should be included as an essential element of the WSBLE project. This would provide accessible/step free/level pedestrian access to and from the station to the surrounding neighborhood, and relieve pedestrian loading on sidewalks immediately adjacent to the station.	
401	Appendix J - Conceptual Design Drawings	183		Ellie Smith	SDOT	The analysis is incomplete. Impacts related to pedestrian and bicyclist space and access on Terry Ave is not included. Reconstructing Terry Ave per Seattle's Street Concept plan guidelines is essential to provide sufficient pedestrian and bicyclist space and a ‘shared street’ environment and should be included as part of the WSBLE project.	
402	Appendix J - Conceptual Design Drawings	186		Ellie Smith	SDOT	The analysis is incomplete. Impacts related to adequate access and connection to key bicycle and pedestrian facilities from the Seattle Center are not addressed. Explore adding entrance off of Thomas St. to facilitate strong bicycle/ped connection and serve as main entry for access from Seattle Center. This is essential for connection from planned Thomas St Green Street and should be included in the WSBLE project.	
403	Appendix J - Conceptual Design Drawings	186		Ellie Smith	SDOT	The information necessary to identify impacts is missing. Missing are sidewalk dimensions outside of station entrances. Provide standard space/frontage zone at all entrances in downtown. Provide at least 18' sidewalks at frontage, 24’ wide sidewalks at station entrances, and 28' at bus integration locations. Provide high transparency at street façade. These items are essential for wayfinding, pedestrian safety and comfort and should be include as part of the WSBLE project. (See also similar comment directed at all stations.)	
404	Appendix J - Conceptual Design Drawings	186		Ellie Smith	SDOT	The information necessary to identify impacts is missing. Missing is a description of the type and location of bike parking facilities. It is essential to provide sufficient end of trip bicycle parking facilities that are conveniently accessed off of Dexter at north headhouse This is essential because Dexter is a major bicycle route that connects to the station. (See also similar comment directed at all stations)	
405	Appendix J - Conceptual Design Drawings	186		Ellie Smith	SDOT	The analysis is incomplete. Impacts related to adequate and necessary pedestrian and bicyclist facilities at the intersection of Harrison and Dexter are not identified. This is essential for safe bicycle access to bicycle and pedestrian facilities on Dexter and should be included as part of the WSBLE project. (See also similar comment directed at all stations.)	
406	Appendix J - Conceptual Design Drawings	186		Ellie Smith	SDOT	The analysis is incomplete. Impacts related to adequate and necessary pedestrian and bicyclist facilities at the intersection of Harrison and Dexter are not identified. This is essential for safe bicycle access to bicycle and pedestrian facilities on Dexter and should be included as part of the WSBLE project. (See also similar comment directed at all stations.)	
407	Appendix J - Conceptual Design Drawings	186		Ellie Smith	SDOT	The analysis is incomplete. Impacts related to access to the station are not accurate because it does not reflect the fact that Thomas Street is a Green Street with a Street Concept Plan. Identified impacts should align with planned street improvements along Thomas between 6th and 7th and be included as part of WSBLE project.	

408	Appendix J - Conceptual Design Drawings	186		Ellie Smith	SDOT	The analysis is incomplete. Impacts related to access to the station do not account for the use of the existing plaza to the west of the southern headhouse. Reconfiguring that existing plaza is essential to create sufficient space to accommodate surge volumes from major events at the Seattle Center and should be included as part of the WSBLE project.	
409	Appendix J - Conceptual Design Drawings	190		Ellie Smith	SDOT	The information necessary to identify impacts is missing. Missing is a description of how the station will accommodate major event surges from Seattle Center (e.g., there may need to be wider sidewalks, and larger openings at entrances). This is essential for safe access during events and should be included as part of WSBLE project. (See also similar comment directed at all stations.)	
410	Technical Report: Transportation	6-1		Ellie Smith	SDOT	The methodology does not capture complete impacts of the project because the proximal bicycle and pedestrian analysis is limited to one block beyond station entrance. There may be instances where improvements are necessary beyond 1 block from the station, such as at key intersections, bus stop locations/connections, connections to bicycle network.	
411	Technical Report: Transportation	6-1		Ellie Smith	SDOT	The methodology does not capture complete impacts of the project because the bikeshed is limited to 1.5 miles. FTA recommended methodology states 3 miles as appropriate bikeshed.	
412	Technical Report: Transportation	6-1		Ellie Smith	SDOT	The methodology does not capture complete impacts of the project because the proximal bicycle and pedestrian analysis is limited to only the presence of facilities. The methodology should also assess standard or quality of facility i.e. whether it meets City of Seattle standards for width, design, and accessibility etc. Current analysis only reviews the presence or absence of facility which is an inadequate assessment.	
413	Ch 3 Transportation	Page 3-133	3.19.3.2	Lizzie Moll	SDOT	This information used is outdated. Please refer to King County Metro's comments from the ADEIS to estimate the number of bus routes predicted on 4th Avenue South.	
414	Ch 3 Transportation	Page 3-135	3.19.5	Lizzie Moll	SDOT	The information presented is inaccurate and unfounded as stands. Diverting volumes does not determine increase of collisions. If there is a study that shows this is true, please include. Collisions are mostly linked to speed and roads that are designed for high speeds. (See Vision Zero principles)	All (Systemwide)
415	Acquisitions, Displacements, and Relocations	Page 4.3.1-1	Table 4.3.1-1 to table 4.3.1-5	Lizzie Moll	SDOT	The methodology does not capture complete impacts of the project. The tables do not differentiate between properties affected by construction and access to the building will mean temporary closure vs. permanent acquisitions of properties and displacement of businesses and residential units.	All (Systemwide)
416	Acquisitions, Displacements, and Relocations	Page 4.3.3-8	4.3.3.3	Lizzie Moll	SDOT	The information necessary to identify impacts and compare alternatives is missing. Some properties are mentioned by name (e.g., Ryerson Bus Base, a Goodwill outlet), while others are not. Be consistent in naming business and employee displacements, especially in the CID where business type is integral to the historic district.	
417	Appendix J - Conceptual Design Drawings	114-147	All CID Options	Jonathan Lewis	SDOT	The methodology does not capture complete impacts of the project. Customers must be able to access both (existing and future CID stations) stations from any entrance. It is essential that customers not be required to travel up to street level and then back down again to transfer between lines to avoid unnecessary pedestrian traffic in a heavily congested area and should be included as part of WSBLE project.	
418	Appendix J - Conceptual Design Drawings			Lizzie Moll	SDOT	References to local codes citing minimum mitigation requirements is missing for Non-motorized facilities. Therefore, the project is out of compliance with current code and the City will not be able to issue permits. Project limits should include intersection and pedestrian improvements. The City's right-of-way Improvements manual design standards require pedestrian improvements within 1/4 mile of station entrance including tactile warning strips at legal crosswalks, smooth accessible sidewalks within a quarter mile of station entrance, with the minimum dimension of clear unobstructed sidewalk width. See design standards here: https://streetsillustrated.seattle.gov/design-standards/transit/	All (Systemwide)
419	Appendix J - Conceptual Design Drawings	114-147		Lizzie Moll	SDOT	Mitigation measures for identified impacts are missing from the DEIS. The S Weller St connection between Weller Street pedestrian bridge through 6th Ave S is an essential element of the project for pedestrian transfers between Sounder to light rail or for pedestrian access during stadium events. Necessary improvements to this connection should be included as part of the WSBLE project.	
420	Appendix J - Conceptual Design Drawings	114-147		Lizzie Moll	SDOT	The analysis is incomplete. Impacts to the current light rail plaza at 5th Ave S and S Jackson have not been identified. Include enhancements to the existing light rail plaza in the WSBLE project. The existing light rail plaza will be essential for pedestrian access and customer transfers from existing northbound light rail station to Ballard link extension project and for accommodating surges of pedestrians from major events. (See also similar comment directed at all stations.)	
421	Appendix J - Conceptual Design Drawings	139, 142, 145		Lizzie Moll	SDOT	The analysis is not complete. S Jackson St street frontage improvements between and including 4th Ave S and 6th Ave S should be included in the WSBLE project as an essential pedestrian connection to the station for bus-light rail transfers and light rail-street car transfers. (See also similar comment directed at all stations.)	
422	Appendix J - Conceptual Design Drawings	133-135, 136-138		Lizzie Moll	SDOT	The project does not meet the City's Historic District Standards and the placement of vent and egress at Union Station plaza on 4th and Jackson does not capture complete impacts of the project and must be moved. The identified location compromises sight lines for pedestrians and drivers at the intersection. Also refer to Historic District standards.	
423	Appendix J - Conceptual Design Drawings	133-135, 136-138		Lizzie Moll	SDOT	The analysis is incomplete. Study alternative station entrance locations for the western entrance on 4th Ave S. The constrained sidewalk with expected high pedestrian volumes from WSBLE station and Sounder station will create pedestrian congestion, especially during major events and when Sounder Trains arrive. Study shifting entrances north to straddle S Jackson. There is potentially more street capacity because 4th Ave is currently one way north of S Jackson and potential for less conflation with pedestrians using the Weller Street bridge. There would still be an opportunity for Sounder integration at the north Sounder entrance	
424	Appendix J - Conceptual Design Drawings	114-147		Lizzie Moll	SDOT	The analysis is incomplete. The CID station is one of the largest transfer hubs in the Pacific Northwest. Create larger, legible station entrance at existing Central Link entrances to facilitate pedestrian flow to both Link lines.	

425	Appendix J - Conceptual Design Drawings	133, 136		Lizzie Moll	SDOT	The methodology does not capture complete impacts of the project including the increase of passengers transferring below ground between light rail lines and passengers waiting for their train heading south to East Link or West Seattle. Expand the existing southbound platform into the private garden space east of Union Station to accommodate riders heading from S Jackson St to the Ballard Link Extension station mezzanine as well as riders waiting for East Link or West Seattle.	
426	Appendix J - Conceptual Design Drawings	133-138		Lizzie Moll	SDOT	The analysis is incomplete. Several significant impacts have not been identified for pedestrian movement and queuing space on the west side of 4th Ave. Include study of cantilever/partial lidding or full lidding of BNSF tracks for additional pedestrian space for western 4th Avenue entrance for Ballard Link Extension and Sounder customer queuing. Additional pedestrian space on the west side of 4th Ave S is essential for customer safety and should be included as part of the WSBLE project.	
427	Appendix J - Conceptual Design Drawings	133, 136		Lizzie Moll	SDOT	The analysis is incomplete. The bus stop on 2nd Ave Extension S is essential for bus/Sounder/light-rail integration and stop improvements should be included in the WSBLE project. Additional sidewalk space will be necessary for bus waiting area as well as clear pedestrian space for accessing the station entrance on the west side of 4th Ave.	
428	Appendix J - Conceptual Design Drawings	133, 136		Lizzie Moll	SDOT	The analysis is incomplete. Include a study of additional pedestrian crossing at 2nd Ave Ext S and 4th Ave S for improving L.O.S. F for crossing at S Weller St (as referenced in Chapter 3: Transportation).	
429	Appendix J - Conceptual Design Drawings			Lizzie Moll	SDOT	The analysis is incomplete for determining design. Include areas for both long term and short term bicycle and scooter parking for personal as well as shared fleets/micromobility devices. Define parking areas that avoid impacts on the pedestrian network, sidewalks, and plazas adjacent to station entrances.	
430	Appendix J - Conceptual Design Drawings			Lizzie Moll	SDOT	The analysis does not capture complete impacts of the project. All streets impacted by construction will be reconstructed to an agreed upon design between SDOT and Sound Transit. These impacts and reconstructions should be included within the WSBLE project area.	
431	Appendix J - Conceptual Design Drawings	139, 142, 145		Lizzie Moll	SDOT	The analysis does not capture complete impacts of the project. Without a public concourse cut through Union Station, Weller pedestrian connections between 5th Ave S and 4th Ave S and pedestrian connections along S Jackson Street are essential to the WSBLE project and light rail to bus or Sounder/Amtrack transfers.	
432	Appendix J - Conceptual Design Drawings	172		Ellie Smith	SDOT	The methodology does not capture complete impacts of the project. Customers must be able to access both (existing and future) stations from any entrance. It is essential that customers not be required to travel up to street level and then back down again to transfer between lines to avoid unnecessary pedestrian traffic in a heavily congested area and should be included as part of WSBLE project.	
433	Visual and Aesthetics	4.3.5-4	4.3.5.3.2	Lizzie Moll	SDOT	References to local codes is missing. Therefore, the potential conflict with local controls cannot be determined. Evaluate access to and views of contributing historic buildings and structures in the CID including the more than 40 foot tall tunnel ventilation and vertical circulation structure in front of Union Station and any Environmental Justice impacts.	
434	Ch 3 Transportation	Page 3-101	3.13.4 Mitigation for Operation Impacts	Lei Wu	SDOT	Mitigation measures for addressing identified impacts are missing. Missing are mitigation measures that address intersection vehicle delay at intersections. This section states that 'Sound Transit would continue to work with the City of Seattle and FTA as the Ballard Link Extension project design progresses to minimize project-related intersection delays. Where additional project-related delays are unavoidable, Sound Transit would work with the City of Seattle and FTA to review potential mitigation at intersections identified in Table 3-24, with the intent of either meeting agreed-upon L.O.S. thresholds during the a.m. and p.m. peak hours or attaining a similar vehicle delay as under the No Build Alternative.' Mitigation measures for this impact are missing from this draft EIS. Identify and include effective mitigation measures to address intersection vehicle delay in the EIS.	
435	Ch 3 Transportation	Page 3-108	3.15.3.1 Impacts Common to All Alternatives	Lei Wu	SDOT	The methodology does not capture the complete impacts of this project. This section states that No long-term impacts to bicycle parking are expected under any of the Build Alternatives. This is misleading because biking has been identified as a mode of accessing light rail stations. Accordingly bicycle parking should be identified as impacts; Identify and include effective mitigation to address this impact including clarifying bike parking capacity and access and circulation at light rail stations and ensuring that the capacity to be provided meets the expected demand including those for micromobility.	
436	Ch 3 Transportation	Page 3-116	3.16.3.5 South Interbay Segment	Lei Wu	SDOT	The analysis is incomplete in identifying impacts. Missing impacts are: with Preferred Alternative SIB-1 and Alternative SIB-2, the guideway between West Mercer Place and West Republican Street would cross Elliott Avenue West twice, with Preferred Alternative SIB-1 crossing an additional time south of West Galer Street. These alternatives would place guideway columns within the roadway, requiring elimination of some midblock turns and potentially reducing conflicts. Restriction of mid block turning movements causes property access impacts. Identify those impacts and identify and include effective mitigation measures in the EIS such as improvements at upstream intersections to accommodate U turn.	
437	Ch 3 Transportation	Page 3-125	3.18.4 Mitigation for Operation Impacts	Lei Wu	SDOT	The methodology does not capture the complete impacts of this project. This section states that None of the Ballard Link Extension alternatives would have long-term freight impacts that require mitigation during light rail operations. This statement is misleading as the DEIS identifies impacts to circulation and operations for businesses along this edge of the bay as well local access to businesses located in the Ballard Interbay North end Manufacturing/Industrial Center especially by large trucks. Correct this statement and identify and include mitigation solutions properly address those impacts in the EIS.	
438	Ch 3 Transportation	Page 3-125	3.19 Ballard Link Extension Construction Impacts	Lei Wu	SDOT	The analysis is incomplete in identifying impacts and mitigation measures. All streets impacted by construction will be reconstructed in compliance with City of Seattle codes and regulations. These impacts and specific reconstruction design are in general missing from the EIS. In one specific instance, the EIS is misleading in that the callouts on conceptual design drawings, e.g., L50-CYX115, indicates that roadway and sidewalk reconstruction will replace the surfacing materials in kind. This is misleading because the surfacing materials need to be compliant with what is required per City of Seattle standards. Include and identify reconstruction design compliant with pertinent City of Seattle codes and regulations in the EIS. This is a general comment applicable to all alternatives though the section reference is only for the Ballard Link Extension.	

439	Ch 3 Transportation	Page 3-43	3.8.3.1 Impacts Common to All Alternatives	Lei Wu	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Missing are mitigation measures that address the safety of the transportation system. This section states that "the safety of the transportation system is expected to be minimally affected by the project or improve because of mitigation measures including station access improvements (such as proposed signaled crossings)." This statement is not supported by the identification of effective and specific mitigation measures for alternatives in the EIS. Identify and include effective mitigation measures and improvements for safe station access in the EIS for all alternatives especially preferred alternatives.	
440	Ch 3 Transportation	Page 3-43	3.8.3.1 Impacts Common to All Alternatives	Lei Wu	SDOT	The information is missing in identifying impacts of the project. Missing are impacts and mitigation measures related with all alternatives with elevated stations. All elevated alternatives to light rail stations include columns in the roadway that may block sight line in addition to creating space under the elevated guideway, which can hinder safety and convenience to pedestrians and cyclists especially in areas proximate to the station. Identify this impact and identify and include effective mitigation measures, e.g., design to make it appealing for people walking underneath the guideway with good lighting, arts elements, landscaping and appropriate vegetation and trees, to improve safe station access for people walking and bicycling for all elevated alternatives. This comment applies to all alternatives with elevated guideways even though the section reference is for the Ballard Link Extension.	
441	Ch 3 Transportation	various	3.12-3.16	Lei Wu	SDOT	The analysis is incomplete in identifying impacts and mitigation measures. Missing are significant impacts and mitigation measures of the Interbay Station at 15th Ave W and W Dravus St. The alternative with the Interbay station at 15th Ave W and W Dravus St has significant deficiencies. First, it straddles Dravus, an already very constrained and busy street, and doesn't provide good opportunities for ADA access, pick-up / drop-off, bicycle connections, or bus transfers. Second, 15th is a freight route with considerable transit and personal vehicular movement as well; the guideway columns along 15th pose a challenge to the movement of those vehicles. Identify and include those impacts and identify and include mitigation measures in the EIS, e.g., via analyzing the station design and location and propose mitigation that alleviate those challenges.	
442	Appendix J - Conceptual Design Drawings	L50-GSP109 - L50-GSP110; B17-ASP100		Lei Wu	SDOT	The methodology does not capture complete impacts of the project. As identified in this DEIS, Alternatives: PREFERRED ELEVATED 14TH AVENUE ALTERNATIVE (IBB-1a) AND ELEVATED 14TH AVENUE ALIGNMENT OPTION (FROM PROSPECT STREET STATION/15TH AVENUE) (IBB-1b) remove significant number of parking spaces. Properly identify impacts of this loss of parking through relevant sections of the EIS and identify and include effective mitigation measures or improvements to address this impact in the EIS via working with City and businesses.	
443	Ch 3 Transportation	page 3-114	3.16.3 Environmental Impacts of the Build Alternatives	Lei Wu	SDOT	The methodology does not capture complete impacts of the project. This section, 3.16.3.1 Impacts Common to All Alternatives, states that 'Light rail design that adheres to both light rail and roadway standards to minimize impacts on transportation safety -Reduction in modal conflicts on the transportation system (such as rail-to-rail transfer activity within the station).' Both points are misleading. Vision Zero has been broadly adopted by communities/agencies including FHWA, WSDOT, and SDOT, across this nation, which recognize that merely adhering to design standards is Not effective in eliminating fatal and serious crashes. Correct this statement and include effective countermeasures that proactively minimize risks to future riders of the light rail system in the EIS. Regarding the second bullet point, while with all conditions equal, the light rail system is expected to transfer some of today's vehicular trips to transit trips, there is an increase in modal conflict due to increased level of pedestrians and cyclists traffic. Correct this statement and identify and include mitigation measures/improvements for all alternatives in order to address modal conflicts in the EIS.	
444	Ch 3 Transportation	various	3.12-3.16	Lei Wu	SDOT	The information is missing in identifying mitigation measures. The missing are mitigation measures for effectively addressing multimodal safety, access, and circulation to and from the station in the study area. The DEIS identifies significant ridership for the Ballard station, which is expected given that Ballard is the terminus station in a densely population area. The ridership accesses the station via walking, biking, taking transit, and via PUDO, which significantly changes the travel patterns and necessitates the need to ensure safe and convenient multimodal access to the Ballard station in the study area of the Ballard Station beyond just the immediate area of the station frontage under all alternatives per Sound Transit System Access Policy. Identify and include mitigation measures/improvements that effectively encourage convenient and safe connections to the Ballard Station under all alternatives for both intersections right next to the station and corridors/intersections in the study area including measures such as improving signalized intersections for pedestrian priority and bicycle movement at 15th Ave and 53rd, 15th and Market, and 14th and Market. Provide description of those mitigation measures in Chapter 3 and all other relevant sections and on conceptual design drawings.	
445	Appendix J - Conceptual Design Drawings	various		Lei Wu	SDOT	The analysis is incomplete. The missing are pedestrian circulation details and station amenity layout information at stations, e.g., B17-ASP200 for the PREFERRED TUNNEL 14TH AVENUE ALTERNATIVE (IBB-2a). This information is needed to ensure safe and convenient access to light rail stations. Include pedestrian circulation details and station amenity layout information, e.g., long-term bike storage and short-term micromobility storage, in the EIS so that the station area accommodates circulation space, visibility, and "landing space" for transit riders to pause and figure out which way to go in order to avoid loading on the sidewalks. This comment applies to all alternatives especially preferred alternatives.	

446	Ch 3 Transportation	Page 3-112	3.15.3.6 Interbay/Ballard Segment	Lei Wu	SDOT	The information is incomplete for identifying impacts. The missing are specific impacts/gaps to walking and biking access to the Interbay Station in the study area. This section states that 'All walksheds around the Interbay Station are constrained by topography and the railroad tracks' and 'Cyclists could access the Interbay Station via the Magnolia Connector Trail, the Ship Canal Trail, and protected bicycle lanes connecting the Ship Canal Trail to Gilman Avenue West.' This analysis is incomplete identifying specific impacts/gaps to walking and biking access to the Interbay Station in the study area. Furthermore, effective mitigation measures are missing from the DEIS. Identify specific gaps in bike access to the station in the study area and identify effective improvements to address those gaps. One effective mitigation improvement to be included in the EIS is that for PREFERRED ELEVATED 14TH AVENUE ALTERNATIVE (IBB-1a), connecting Nickerson to Emerson to Thorndyke (in collaboration with SDOT) for cyclists to access the station from the Emerson Street trail. Another specific impact to be identified is that bicycle and pedestrian access from Queen Anne neighborhood is very challenging to the Interbay station. Include pedestrian and bicycle access improvements along Dravus or on a new bicycle/ped bridge in this EIS. A third specific impact is that sidewalks on 17th Ave are not compliant with current City of Seattle codes and standards. Identify this specific impact and mitigation measure, i.e., installing compliant sidewalks on 17th Ave in the EIS for pedestrians to safely access the station.	
447	Ch 3 Transportation	Page 3-113	3.16.1 Affected Environment	Lei Wu	SDOT	The information is missing in identifying impacts. Missing are impacts regarding the environment of the Interbay Station on Thorndyke, e.g., PREFERRED TUNNEL 14TH AVENUE ALTERNATIVE (IBB2a) AND PREFERRED TUNNEL 15TH AVENUE ALTERNATIVE (IBB2b). Significant impacts include that the preferred station location is in an obscured, industrial location. The area is surrounded by substandard streets, missing sidewalks, and very little human activity aside from employees driving to their jobs. Headhouse and entry are not located on the primary access street, Dravus St. Include those impacts in the EIS and identify effective mitigation measures to address those impacts, e.g., providing design to humanize the area to make it feel welcoming, with an equal emphasis toward safety and visibility; Providing safety measures such as improved lighting and station visibility from Dravus St particularly in the dark and rainy seasons; and analyze the relocation or reconfiguration of headhouse and entry locations for maximum visibility from Dravus and direct/intuitive connections.	
448	Ch 3 Transportation	Starting from Page 3-98	3.13.3.3 Arterial and Local Street Operations	Lei Wu	SDOT	The methodology does not capture complete impacts of this project. Missing are that SDOT professional staff's experience is that Dravus Street is very constrained from the perspective of traffic operations between 15th Avenue W and 20th Avenue W. Include this impact in the EIS and identify and include effective mitigation measures in the EIS including on Dravus Street, providing signal optimization, improved walk and bicycle crossings at intersections, protected bicycle lanes and an enhanced pedestrian experience between 15th and 20th; placing Pick-up and drop-off and transit layover off Dravus Street.	
449	Ch 3 Transportation	Page 3-108	3.15.2 Environmental Impacts of the No Build Alternative	Lei Wu	SDOT	The methodology does not capture complete impacts of this project. This section states that 'Under the No Build Alternative, projects included in Seattle's Bicycle Master Plan (City of Seattle 2014a), Pedestrian Master Plan (City of Seattle 2017d), and the West Seattle Link Extension are assumed to be built.' This statement is misleading because not all planned projects in the City of Seattle's plans are fully funded. Correct this statement and relevant sections of the EIS to reflect project with funding committed and implemented by the time light rail is expected to operate.	
450	Ch 3 Transportation	Various	3.13, 3.15, 3.16	Lei Wu	SDOT	The information is missing in identifying impacts. Missing are significant impacts of the station located at 15th Ave W and Dravus Street. Significant impacts include that this station location is problematic in several ways. It straddles Dravus, an already very constrained and busy street, and doesn't provide good opportunities for ADA access, pick-up / drop-off, walk and bike connections especially across the Dravus Bridge over 15th Ave W, or bus transfers. In addition, the grade challenges at this station make it difficult for people with disabilities to access the station on Dravus particularly east of 15th. And transit connections would be a challenge as well. Furthermore, 15th is a freight route with considerable transit and personal vehicular movement as well; the guideway columns along 15th pose a challenge to the movement of those vehicles. Identify and include those impacts in the EIS and identify and include effective mitigation measures addressing those impacts especially including deficiencies on Dravus Bridge if this alternative is chosen as the preferred alternative.	
451	Ch 2 Alternatives Considered	Various	2.1.2.2.4 South Interbay Segment	Lei Wu	SDOT	Investigate the possibility of an elevated station at Galer on the east side of Elliot that is further north than the current location and does not need to snake over Elliot. This would alleviate significant transportation impacts on Elliott that the current preferred alternative poses. This location could allow space for better transit circulation and bus layover and bicycle parking. Safe street crossings at Elliot would be critical. Bicycle connections to existing trails and future bicycle facilities would be essential to the station development. A pedestrian and bicycle overpass at the south end of the station should be examined.	
452	Ch 3 Transportation	Page 3-38 to 3-39	3.7.3.2 SODO Segment	Lei Wu	SDOT	Mitigation measures necessary to address identified impacts are missing. Missing information is additional mitigation measures for providing effective pedestrian and bike connections that 'Encourage convenient and safe non-motorized access to stations, such as bicycle and pedestrian connections, consistent with Sound Transit's System Access Policy (Sound Transit 2013), Section 1.2.1, Page 1-5.' Those additional mitigation measures are: 1. Design SODO Trail in the plaza area so it is a safe mixing zone for passenger / pedestrians with the movement of cyclists passing through the plaza area. Provide adequate calming measures, channelization, pavement treatments, and signage, so cyclists and pedestrian movement is not in conflict. Pay particular attention to ADA needs for legibility and safety in design; 2.Holgate and Lander over-crossings need to provide at-grade connection from 6th Ave to the SODO trail; 3.Continue multi-use path treatment on north side of Lander through the station area; 4.Provide ped access on both sides of 4th Ave S. (between Lander and Stacy); and 5. Create accessible connections from 4th and 6th along northern station end	
453	Ch 3 Transportation	Page 3-36	3.7.1 Affected Environment	Lei Wu	SDOT	The information necessary to identify impacts is missing. Missing are that much of sidewalks around intersections adjacent to the Sodo Station are narrow and out of compliance with current codes. Identify and include this impact in the EIS and identify and include effective mitigation measures in the EIS, which include intersection improvements at 4th and 6th at Lander.	

454	Ch 3 Transportation	Page 3-38 to 3-39	3.7.3.2 SODO Segment	Lei Wu	SDOT	The information necessary to identify impacts is missing. Missing are that ridership from shared mobility, e.g., e-bicycles. Identify and include this impact and include effective mitigation measures to address this impact, e.g., providing space for predictable shared-mobility (e-bicycles and e-scooters, etc.) that is easily visible, well-organized, and well-defined; and providing short-term bicycle parking to ensure convenient and safe access to the bicycle parking at the station entrances.	
455	Ch 3 Transportation	Page 3-14	3.4.3.1.2 SODO Segment	Lei Wu	SDOT	The information necessary to identify impacts is missing. Missing are that Sodo Station can serve as a hub station, not only for West Seattle transfers, but also transfers from South Park/Georgetown, whose routes don't have great frequency and passengers may need to wait for periods. Identify and include this impact in the EIS and identify and include mitigation measures, i.e., amenities to improve the comfort and security of transfer riders.	
456	Ch 3 Transportation	NA	3.2 Introduction and Methodology and Assumptions	Lei Wu	SDOT	The analysis is incomplete in identifying impacts. Missing are the impacts of potential multimodal conflicts in a constrained area on the new overpass. Identify this impact and identify and include mitigation measures in addressing this impact, e.g., creating separated pathways for pick-up / drop-off vehicles arriving and departing from designated curb spaces from bus transit; In alternative with a new overpass, use curb space for active bus bays and create design where they are separated from other modes.	
457	Appendix J - Conceptual Design Drawings	114-145	All CID Options	Jonathan Lewis	SDOT	The analysis is incomplete and does not capture the impacts of surge events. Mitigation measures for identified impacts are missing from the DEIS. Customers must be able to access both (existing and future CID stations) stations from any entrance. It is essential that customers not be required to travel up to street level and then back down again to transfer between lines to avoid unnecessary pedestrian traffic in a heavily congested areas around the CID Stations.	
458	Appendix J - Conceptual Design Drawings	All CID and Westlake Station Options		Jonathan Lewis	SDOT	The analysis is incomplete and does not capture the impacts of surge events. Mitigation measures for identified impacts are missing from the DEIS. Customers must be able to access both (existing and future CID and Westlake stations) stations from any entrance. It is essential that customers not be required to travel up to street level and then back down again to transfer between lines to avoid unnecessary pedestrian traffic in a heavily congested areas around the CID and Westlake Stations.	
459	Appendix J - Conceptual Design Drawings	All stations		Jonathan Lewis	SDOT	All streets impacted by construction will be reconstructed to an agreed upon design between SDOT and Sound transit. This should include streets that are opened to access subterranean portions of the project, and streets closed and impacted by construction of elevated guideway within street ROW. These impacts and reconstructions should be included within the WSBLE project area. WSBLE project area.	
460	Appendix J - Conceptual Design Drawings	All stations		Jonathan Lewis	SDOT	The analysis is incomplete. References to local codes requiring bicycle parking is missing. For all stations, frontage improvements, new bus stop and enhancements to existing stops, curbside changes to provide for PUDO, pedestrian and bicycle infrastructure necessary to make a connection to a nearby city bicycleway, and other elements necessary for safe and comfortable station access are essential for managing station impacts on the sidewalks, ensuring safer connections between the existing bicycle and pedestrian network and the stations, and should be included to mitigate impacts of the project.	
461	Appendix J - Conceptual Design Drawings	All stations		Jonathan Lewis	SDOT	The analysis is incomplete. References to local codes requiring bicycle parking is missing. For all stations, EIS should analyze bicycle parking needs, projected need based on mode split vs. what is required by code and provide at each station entry. This is essential for understanding bicycle parking needs (long term v short term) for each station. It is essential to provide bicycle parking in consistent and predictable locations close to station entrances. If not nearby, customers will not use the bicycle parking and may impact pedestrian and disabled access to stations.	
462	Technical Report: Transportation	6-1 to 6-47	throughout section	Jonathan Lewis	SDOT	The analysis is incomplete. There is no assessment of disabled access to the planned stations. Assessment is needed along with documentation of the impacts on people with disabilities attempting to travel to/from the stations. Infrastructure that is essential for people with disabilities to access the station and proximal to the station, should be included to fulfill code requirements contained within Seattle's ROWIM (Streets Illustrated) and to mitigate the negative impacts of the station on people with disabilities.	
463	Technical Report: Transportation	6-1 to 6-47	throughout section	Jonathan Lewis	SDOT	The analysis is incomplete. There is no assessment of project impacts during major events/surge events. Pedestrian traffic to and from the stations during major events will overwhelm surrounding sidewalks and impact nearby residences and businesses. While the overall impact of the WSBLE project on motor vehicle traffic and reliable trip choices will be positive, there will be local impacts to the sidewalks and nearby streets that is caused by the introduction of the new light rail stations and these impacts should be assessed and mitigated. Stations that will be impacts by major events include the potentially rebuilt Stadium Station, CID Station, Westlake Station, South Lake Union Station, and Seattle Center Station. This assessment should include the arrival of a full Sounder Commuter Train as a surge event at the CID Station.	
464	Appendix J - Conceptual Design Drawings	Entirety	throughout section	Radcliffe Dacanay	SDOT	The analysis does not capture complete impacts of the project. All streets impacted by construction will be reconstructed to an agreed upon design between SDOT and Sound Transit. These impacts and reconstructions should be documented in the EIS and the reconstruction should be identified as a mitigation.	
465	Visual and Aesthetics	Page 3-4	West Seattle - Avalon - Delridge stations	Radcliffe Dacanay	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Around the elevated Fauntleroy Way Station (WSJ-2), the approximate area with concentration of sensitive viewers is missing. The elevated station likely impacts views of recent multi-story developments adjacent to the station and the guideway.	
466	Appendix J - Conceptual Design Drawings	60, 62, and 64	West Seattle - Avalon - Delridge stations	Radcliffe Dacanay	SDOT	The analysis is incomplete. Study need for a new traffic signal and pedestrian access improvements at the intersection of Delridge and Dakota. This may be necessary for safe pedestrian access to the station.	

467	Appendix J - Conceptual Design Drawings	98	West Seattle - Avalon - Delridge stations	Radcliffe Dacanay	SDOT	The analysis is incomplete. There is sufficient space around the north station entrance to consider including bicycle storage facilities. Facilities for cyclists should be available near any station entrance.	
468	Appendix J - Conceptual Design Drawings	100, 102, 104	West Seattle - Avalon - Delridge stations	Radcliffe Dacanay	SDOT	The analysis is incomplete. Pedestrian access to these underground station options spill transit system users immediately onto the sidewalk. Ensure safe crossing for pedestrians at intersection of SW Alaska St and 41st Ave SW. This intersection improvement is necessary to ensure safe access to the station and should be included in the WSBLE project, especially during peak volume usage of the station.	
469	Acquisitions, Displacements, and Relocations	4.3.1-5	4.3.1 Acquisitions, Displacements, and Relocations	Richard Pedowitz	Seattle Center	The analysis is missing information necessary to identify impacts and compare alternatives. The acquisition of part of the Seattle Rep parcel does not address the project's impact on the ADA ramp on August Wilson Way between 2nd Avenue North and Warren Avenue North (Parcel 1985200010). Loss of this wheelchair portal eliminates ADA access to and from the campus from the NW. Identification of this impact and mitigation to restore the displaced ADA access in coordination with Seattle Center needs to be included in the FEIS.	Downtown
470	Acquisitions, Displacements, and Relocations	4.3.1-5	4.3.1 Acquisitions, Displacements, and Relocations	Richard Pedowitz	Seattle Center	The analysis is missing information necessary to identify impacts and compare alternatives. Acquisition of part of the Seattle Rep parcel does not address the project's impact upon the breezeway between Vera Project and SIFF on August Wilson Way between 2nd Avenue North and Warren Avenue North . (Parcel 1985200010). Identification of this impact and mitigation, including completion of a Landmarks Certificate of Approval process in coordination with Seattle Center and affected tenants must be included in the FEIS.	Downtown
471	Acquisitions, Displacements, and Relocations	4.3.1-5	4.3.1 Acquisitions, Displacements, and Relocations	Richard Pedowitz	Seattle Center	The analysis is missing information necessary to identify impacts and compare alternatives. Acquisition of part of the Seattle Repertory Theatre parcel does not address its impact upon the ADA and Bus parking stalls on Warren Avenue North. Identification of the impact and mitigation to restore displaced ADA and Bus parking in coordination with Seattle Center should be included in the FEIS.	Downtown
472	Acquisitions, Displacements, and Relocations	4.3.3-12	4.3.3.4.1	Richard Pedowitz	Seattle Center	Full closure of Republican Street from Warren Avenue North to Queen Anne Avenue North has multiple impacts to Seattle Center including: loss of access for summer festival trucks; loss of ADA and bus parking near venues that regularly require ADA and bus access; loss of access to campus venues and grounds through breezeway at NW rooms and at campus Gate 5; loss of access to ADA ramp at Gate 5; and increases in traffic congestion on vicinity streets. Mitigation to include relocation of ADA and bus parking and coordination with Seattle Center and its tenants to preserve access.	Downtown
473	Acquisitions, Displacements, and Relocations	4.3.3-15	4.3.3.4.4	Richard Pedowitz	Seattle Center	Weekly coordination meetings with construction representatives and Seattle Center stakeholders will be required to develop strategies that mitigate effects of construction impacts on area constituents. Weekly engagement should match the effort undertaken during the Mercer Corridor improvement project, and reflect best practices learned during that project. Care must be taken to ensure closures are minimized with attention paid to phasing and re-routing as much as possible.	Downtown
474	Acquisitions, Displacements, and Relocations	4.3.3-15	4.3.3.4	Richard Pedowitz	Seattle Center	Acquisition of part of the Seattle Rep parcel does not address the impact of this project upon the theatre's operating schedule. Although this is mentioned there is no mentioning of the plan for how to properly address this for Seattle Center Arts organizations. It is not only Seattle Rep that will be impacted, but Cornish Playhouse, ANT Gallery, Vera Project, KEXP, SIFF, and potentially others by the acquisition and subsequent construction. It is only mentioned and the impacted groups need a plan that accommodates their interests.	Downtown
475	Acquisitions, Displacements, and Relocations	4.3.3-15	4.3.3.4	Richard Pedowitz	Seattle Center	Mitigation is insufficiently detailed to compare alternatives. There appear to be insufficient mitigation efforts for support of Seattle Center venue operations during construction. Mitigation to include agreement to pause impact work during major events on the Seattle Center campus, and further mitigation to include replacement of lost revenues, and/or temporary relocation of an event or festival if accommodation cannot be made.	Downtown
476	Acquisitions, Displacements, and Relocations	4.3.3-15	4.3.3.4	Richard Pedowitz	Seattle Center	Analysis is missing information to identify impacts. Acquisition of part of the Seattle Repertory Theatre parcel does not address its impact upon the public art piece at Gate 5 (August Wilson Way and Warren Avenue North). Mitigation to include temporary removal, safe storage, and restoration of the art piece in coordination with Seattle Center. Removal and replacement of this art piece seems to be referenced in Chapter 4, on page 4.3.17-20, but slightly misidentifies the location.	Downtown
477	Acquisitions, Displacements, and Relocations	4.3.3.-15	4.3.3.4.4	Julia Levitt	Seattle Center	Description of process to acquire Seattle Center campus property, and associated mitigation, is incomplete. Acquisition of property within the Seattle Center campus would require an ongoing partnership and agreement between Sound Transit and the City to establish the expectations and responsibilities for security, management, operations, cleanliness, accommodation of events, and other considerations. Typically Seattle Center does not sell campus land, but rather executes long term ground leases. Mitigation to include market rent for property converted to transit use to guarantee Seattle Center operating revenue.	Downtown
478	Acquisitions, Displacements, and Relocations	4.3.1-5	4.3.1.3.3.	Julia Levitt	Seattle Center	Analysis is missing detail to identify an impact. Displacement of outdoor events at this location may result in elimination of Seattle Center jobs, including union labor, an impact that would require mitigation.	Downtown
479	Acquisitions, Displacements, and Relocations		Table: Historic Preservation	Julia Levitt	Seattle Center	The analysis is lacking information. The DEIS statement that DT-1 will create less surplus property and less likelihood for TOD versus DT-2 is true; however, the FEIS should also acknowledge for clarity that City ownership of the land and its nature as a public recreational resource and arts/cultural hub is also a main factor that will limit TOD on the campus.	Downtown

480	Appendix G - Environmental Justice	Page 5-49	5.2	Valancy Blackwell	Seattle Center	The analysis is missing information needed to identify impacts and compare alternatives. Add to Social Resources - Downtown Segment row, Impacts to Minority and Low-Income Populations column: "Construction impacts to free and subsidized events at Seattle Center and a reduction of on-street parking may result in decreased access for minority and low-income people to cultural resources and festivals located on campus." Mitigation to include a Construction Mitigation Plan for Seattle Center station that addresses equity impacts with measures including funding multi-lingual outreach in all communications regarding access, closures, detours, etc. The plan should prioritize mitigation of construction impacts to free and subsidized events.	Downtown
481	Appendix H - Section4(f) Evaluation	4-42		Delia Tyrrell	Seattle Center	The analysis materially understates the likely impact to Seattle Rep. The DEIS states that the Seattle Repertory Theatre is expected to remain open during construction. This is unlikely due to the noise and vibration impacts from the adjacent construction. Seattle Rep had to close down due to impacts of noise and vibration during the construction of Climate Pledge Arena, which is significantly further from the Theatre than the ST3 construction in Alternative DT-1. Sound Transit will need to consider temporary relocation to a suitably equipped space for this tenant if alternative DT-1 is chosen.	Downtown
482	Appendix H - Section4(f) Evaluation	4-42		Delia Tyrrell	Seattle Center	Information necessary to identify impacts and compare alternatives is missing. There is no mention of "Playhouse - Century 21 Exposition", also known as the Cornish Playhouse, in the analysis of Alternative DT-1. This is an historic building eligible for the National Register that is directly adjacent to the construction footprint. This building was built for the 1962 World's Fair and there are concerns that excavation for the construction of the DT-1 station may impact the structural integrity of the Playhouse, which includes an historic structural wall below grade that is sensitive to geological effects at Theater Commons. Seattle Center requests that Sound Transit perform a structural analysis of this building to ensure this 4(f) resource will not sustain any permanent damage from construction or operations of the light rail.	Downtown
483	Appendix H - Section4(f) Evaluation	4-42		Delia Tyrrell	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. Missing are: the use and importance of the Donnelly Gardens, steps, and plaza. This space is used both as a passive open space and an event space, and contributes to the recreation space at Seattle Center, a 4(f) resource. The removal of this space from Seattle Center campus in DT-1 impacts both a passive public open space and the ability of Seattle Center to produce events.	Downtown
484	Appendix H - Section4(f) Evaluation	4-42		Delia Tyrrell	Seattle Center	The methodology does not completely describe the adverse impacts of the project, including: the removal of numerous mature trees, designated as Exceptional Tress by the City of Seattle and Legacy Trees in the Seattle Center Century 21 Master Plan, from August Wilson Way. Tree removal should be categorized as a permanent significant and adverse impact to Seattle Center Campus, a 4(f) resource.	Downtown
485	Appendix H - Section4(f) Evaluation	4-44		Delia Tyrrell	Seattle Center	This page states that "Playhouse-Century 21 Exposition" will not be impacted by either Downtown Segment alternative. This statement has not considered the possible structural damage this historic building could sustain based on its direct proximity to the construction zone in Alternative DT-1. This building was built as a temporary building for the 1962 World's Fair. There is no description of the methodology to protect and support the historic building during construction, even though the proposed station would be less than 3' from the building face. Provide a construction feasibility study so that the actual effects can be assessed.	Downtown
486	Appendix H - Section4(f) Evaluation	4-42		Delia Tyrrell	Seattle Center	The analysis is missing information necessary to identify impacts. Missing is: a construction feasibility study of the landmarked Northwest Rooms, constructed in 1962. The proximity of the construction and the plan to excavate directly below the building, Seattle Center requests a structural analysis to ensure there will be no permanent damage, settling, or instability of the Northwest Rooms as a result of the light rail construction. The buildings have limited waterproofing in this area which has a shallow water table. They will require careful monitoring during construction and reinforcement of building waterproofing if needed.	Downtown
487	Appendix H - Section4(f) Evaluation	4-41	4.2.3.1	Delia Tyrrell	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. Missing is the inclusion of the Donnelly Gardens as a permanently impacted area in DT-1. The Donnelly Gardens are used as an event space and for stormwater management.	Downtown
488	Appendix H - Section4(f) Evaluation	4-42	4.2.3.1	Delia Tyrrell	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. Missing are: the noise, vibration, and other construction related impacts on the north fountain lawn and other public outdoor spaces on Seattle Center campus. The analysis for DT-1 states that the greens would not be impacted adversely by project construction, but there hasn't been an analysis of noise, dust, debris, and access impacts that may affect the use of this space. The International Fountain and surrounding green space are a popular destination for free outdoor public recreation, and is also the site of programming and events, including festivals.	Downtown
489	Appendix H - Section4(f) Evaluation	4-42		Julia Levitt	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. Missing are: ongoing operational impacts to campus including access, security, maintenance, and sanitation. The permanent operation of a transit facility inside the boundaries of this active civic center will require a long term operations and maintenance agreement between Seattle Center and Sound Transit, which is not referenced in this document. Without this agreement, it cannot be determined that there will not be permanent impacts to the park and recreation features of Seattle Center campus.	Downtown
490	Appendix H - Section4(f) Evaluation	4-41		Julia Levitt	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. Missing is that construction of the Seattle Center DT-1 alternative will temporarily remove vehicle access from the Cornish Playhouse back of house for loading. This will impact an event venue that contributes to the recreation features that make Seattle Center a 4(f) facility.	Downtown
491	Appendix H - Section4(f) Evaluation	4-41	Figure 4-4	Julia Levitt	Seattle Center	Figure is incorrect, please change for FEIS. Legend to change "Park Boundary" to "Seattle Center Campus Boundary" or "Seattle Center Boundary." The properties north of Mercer are incorrectly identified as Seattle Center property. The property on Roy St. is a rented premises for Seattle Center maintenance shops but is not City-owned campus property. The Center Steps Plaza fronting Mercer between 3rd Ave N. and the mid-block connection is Seattle Center property, but not the adjacent Plymouth Housing development site. (See Comment 59, same comment in another chapter)	Downtown

492	Appendix J - Conceptual Design Drawings	191		Gretchen Lenihan	Seattle Center	Note that the East station entrance structure is blocking emergency egress from Seattle Rep/Leo K, in multiple areas. It is also blocking ADA access around the side of the Seattle Rep (that walkway that leads around the building between Leo K entry and Bagley Wright entry). In addition, the station would block any sightlines/views from the Rep's expansive lobby windows, dramatically reducing the attractiveness and value of that interior space. This is inconsistent with Sound Transit's conclusion of no adverse temporary or permanent impacts for the Seattle Center DT-1 alternative, as stated in Appendix H, page 4-42.	Downtown
493	Appendix J - Conceptual Design Drawings	191		Julia Levitt	Seattle Center	The east entrance in the DT-1 alternative, represented in this diagram, is inconsistent with the planning and design principals adopted in the 2008 Seattle Center Century 21 Master Plan. The entrance building and back of house features are out of scale with Seattle Rep and other campus buildings nearby. The headhouse encroaches into campus open space more than necessary. If DT-1 alternative is pursued, and an entrance is built within the boundaries of Seattle Center, the architecture must be designed in collaboration with Seattle Center and subject to successful review by the Seattle Design Commission. As mitigation, Seattle Center prefers for the station entrance to be moved further from the intersection of August Wilson Way/2nd Ave N. so as to not so severely impact use of the roadways, intersection congestion, and Seattle Rep's lobby space. The mass of the entrance should be broken up, and the design should not place back-of-house uses including ventilation in prominent public spaces.	Downtown
494	Ch 2 Alternatives Considered	2-91	2.68	Donna Golden	Seattle Center	Analysis is missing information necessary to identify impacts and compare alternatives. The Staging Areas and Construction Easements section does not address Seattle Center Station.	Downtown
495	Ch 2 Alternatives Considered	2-58	2.1.2.2.3	Donna Golden	Seattle Center	Cut and cover construction at 2nd and August Wilson Way may impact Seattle Center onsite utilities serving Seattle Repertory Theatre and Cornish Playhouse and other surrounding buildings. If impacted, Sound Transit must coordinate with Seattle Center and tenants to relocate utilities as part of enabling work prior to construction start.	Downtown
496	Ch 2 Alternatives Considered	2-58	2.1.2.2.3	Donna Golden	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. Missing is that pavers on vacated 2nd Ave N. between August Wilson Way and Mercer Street are carefully designed for stormwater management and cannot handle heavy loads. The road and ecological systems will need to be fully restored after construction.	Downtown
497	Ch 2 Alternatives Considered	2-62	2.1.2.2.3	Donna Golden	Seattle Center	Businesses along Mercer Street, such as Seattle Rep, will be impacted during construction of Seattle Center DT-2 alternative.	Downtown
498	Ch 2 Alternatives Considered	3-139	3.19.4.1.5	Donna Golden	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. Missing is that 2nd Avenue North is not only a pedestrian walkway within Seattle Center; it is a multi-modal internal road used constantly for maintenance and operations vehicles. Construction closure and operations spill-out at the east station entrance of the DT-1 Seattle Center station would impact Seattle Center operations and event vehicle access from Gate 5 at Warren/August Wilson Way and Gate 6 at 2nd Ave and Mercer. FEIS to consider this a permanent impact to Seattle Center as well as a temporary construction impact, and describe mitigation including moving the station entrance further from the intersection; breaking up and reducing its mass; taking measures to control spill-out of operations on campus in a mutually acceptable way; and executing a long term operating agreement between Sound Transit and Seattle Center.	Downtown
499	Ch 2 Alternatives Considered	2-85	2.6.2	Jae Lee	Seattle Center	Analysis is missing information necessary to identify impacts. FEIS should describe potential construction impacts and permanent impacts of enabling work identified for Seattle Center campus, including utility relocation.	Downtown
500	Ch 2 Alternatives Considered	2-88	2-66 Tunnel Light Rail Construction	Julia Levitt	Seattle Center	Analysis is missing information needed to compare alternatives. 2nd paragraph states that cut-and-cover construction "could be used for" stations including the Seattle Center station. FEIS should contemplate mining the station as an alternative, and summarize the environmental construction impacts of mining compared to those of cut-and-cover. This is necessary for comparing alternatives because construction impacts of both Seattle Center station alternatives have significant adverse impacts that are understated in the DEIS.	Downtown
501	Ch 2 Alternatives Considered	2-88	2-66 Tunnel Light Rail Construction	Julia Levitt	Seattle Center	The analysis is missing a description of impacts. In the third paragraph from the bottom, the analysis states, "For all proposed tunnel construction methods, the need for fresh air requires that a mechanical ventilation system and fans be in place. Fans could run for 24 hours a day and could be audible at tunnel portals, stations, or access locations." In FEIS, please describe the level of noise expected to be audible at stations. In the case of the Seattle Center station alternative DT-1 east entrance, the vent fans appear certain to create significant adverse noise impacts at Seattle Rep, and potentially at other nearby venues.	Downtown
502	Ch 2 Alternatives Considered	2-88	2-66 Tunnel Light Rail Construction	Julia Levitt	Seattle Center	Description of impacts and mitigation are incomplete. In the construction mitigation plan for construction of the Seattle Center station, the exact location of staging areas and acceptable haul hours and routes will need to be approved by Seattle Center. Please see EXHIBIT SC-2 describing current curbside uses around Seattle Center for school buses and event loading needs, and campus event schedule.	Downtown
503	Ch 2 Alternatives Considered	2-84	2.6.1	Julia Levitt	Seattle Center	Construction 5-6 days per week, between 7am-10pm will impact performances and recordings on Seattle Center campus. Ending the day earlier when there are evening performances would be a mitigation required to make business operation viable during construction of the Seattle Center station preferred alternative D-1. The construction hours are inconsistent with the statement in DEIS Appendix H that says tenants including Seattle Rep, Cornish Playhouse, and the Northwest Rooms tenants can operate during construction of the Seattle Center DT-1 station.	Downtown
504	Ch 3 Transportation	3-154	3.19.7.7	Donna Golden	Seattle Center	The analysis is missing information necessary to identify impacts and compare alternatives. Need plan for oversized truck access. Seattle Center Station is currently not addressed in this section.	Downtown
505	Ch 3 Transportation	3-137	3.19.4.1	Gretchen Lenihan	Seattle Center	Transportation impacts from construction are understated, and mitigation is missing. Full closure of Harrison between Dexter-6th for construction of the SLU DT-1 station will block vehicles that are exiting SR-99 and trying to come to Seattle Center. This will affect attendance at Seattle Center events. Closing Harrison St. -- which has already become a very busy street since its recent reconnection across 99 -- will push vehicle traffic to Mercer and Denny. Suggested mitigation: temporarily re-routed traffic exiting SR-99 to another cross street that isn't Mercer or Denny, and phasing construction closures so that other closures impacting Mercer and Denny are not happening simultaneously.	Downtown

506	Ch 3 Transportation	3-137	3.19.4.1	Gretchen Lenihan	Seattle Center	Mitigation is missing from the analysis. The Harrison closure would temporarily prevent any major Citywide Special Events from being able to use a route involving Hwy 99 and Seattle Center. The tactic of routing on 99 has been used in the past to reduce the impact of special events, especially large runs, on City streets. Mitigation to include coordination between Seattle Center and Sound Transit's construction team to arrange to pause work or route special event access around the construction site as much as possible to allow special events to continue.	Downtown
507	Ch 3 Transportation	3-141	3.19.4.5	Gretchen Lenihan	Seattle Center	Impacts described are understated, and unrealistically minimal. The multi-year closure of Republican from Queen Anne Ave - Warren does the following: removes emergency vehicle access to KEXP, VERA, the upper NW Courtyard and buildings along that roadway; removes any vehicle/delivery access to the businesses on those blocks (esp. between 1st/Warren); removes a major curb use asset for Seattle Center business operations - ADA parking, artist loading and parking for KEXP & VERA, school bus staging and parking for all facilities, and Arena, Festival, and Walk & Run staging & curb use. The closure impacts are inconsistent with the statement in DEIS Appendix H that says tenants including Seattle Rep, Cornish Playhouse, and the Northwest Rooms tenants can operate during construction of the Seattle Center DT-1 station.	Downtown
508	Ch 3 Transportation	3-137	3.19.4.1	Gretchen Lenihan	Seattle Center	The closure of Republican at the 1st Ave N intersection for more than a year will cripple N-S transportation west of the Seattle Center campus and to/from the Uptown neighborhood. The transportation impacts involved in moving that vehicle traffic west to side streets will affect a huge number of small businesses and residences in Uptown that don't seem big enough to accommodate those impacts efficiently. Mitigation for these impacts is missing from the DEIS. Missing mitigation includes: financial compensation to affected businesses; signage and communication to signal that businesses are open during construction; phasing of the intersection closure and shortening its duration as much as possible.	Downtown
509	Ch 3 Transportation	3-99	3.13.3.3.4	Richard Pedowitz	Seattle Center	Description of impacts is understated. Partial closure of Mercer Street over 3.5 years would have significant impact on traffic congestion as traffic diverts elsewhere, as well as dramatic impact upon arts organizations and other entertainment venues along the corridor. Mitigation to include ongoing, robust communication and coordination with Seattle Center, affected organizations, and the community at a level similar to what was done for the Mercer Corridor improvement project and the Climate Pledge Arena renovation. Mitigation must also include reducing the closure as much as possible; re-routing traffic to locations other than Denny Way, and careful phasing to minimize cumulative impacts of construction closures throughout downtown as much as possible.	Downtown
510	Ch 3 Transportation	3-109	3.15.3.1	Richard Pedowitz	Seattle Center	Daily boardings for both South Lake Union and Seattle Center Stations do not account for event related demand surges at Seattle Center. Include more detailed information about surge crowds and pedestrian flows in the FEIS.	Downtown
511	Ch 3 Transportation	3-109	3.15.3.1	Richard Pedowitz	Seattle Center	Peak hour trips do not reflect event related demand surges at both South Lake Union and Seattle Center Stations. Include more detailed information about surge crowds and related pedestrian flows in the FEIS.	Downtown
512	Ch 3 Transportation	105	3.14.3.3	Richard Pedowitz	Seattle Center	Temporary and permanent removal of on street parking will have negative impact on those not able to afford higher parking rates found in off street locations--further limiting access to events at Seattle Center to those of lower income and possibly having an equity impact	Downtown
513	Ch 3 Transportation	3-108	3.15.3.1	Deborah Daoust	Seattle Center	Analysis is missing information needed to identify impacts and compare alternatives. Under Impacts Common to All Alternatives, analysis needs to consider long-term impacts to outdoor event pedestrian circulation on the Seattle Center campus grounds near the DT-1 Seattle Center station.	Downtown
514	Ch 3 Transportation	3-109	3.15.3.1	Deborah Daoust	Seattle Center	Analysis is missing information needed to identify impacts. This section needs to more clearly consider cumulative attendance on the grounds (not just surge events). As stated earlier, a typical Saturday night can generate substantial combined event attendance. Data on campus attendance is included in Seattle Center Arena FEIS and Uptown/Seattle Center Parking Study (2018)	Downtown
515	Ch 3 Transportation	3-110	3.15.3.4	Deborah Daoust	Seattle Center	Impacts are missing and mitigation is missing from the analysis. This section should address the impacts of pedestrians entering/exiting using the DT-1 Seattle Center Station east entrance during large events using that part of the grounds. 2nd Ave N on campus is frequently used as a portion of the race course for certain races, walks and fun runs, and access for these events will be in conflict with patrons trying to access or exit the station. Proposed mitigation: move the station entrance outside of the campus perimeter. If entrance cannot be built outside the perimeter, make the entrance more compact, and execute a long-term agreement between Sound Transit and Seattle Center to establish responsibilities for operations during large events, mitigating impacts to Seattle Center organizations, and keeping the entrance clean and safe for all transit users and campus visitors.	Downtown
516	Ch 3 Transportation	3-85	3.12.3.4	Deborah Daoust	Seattle Center	Analysis is missing information needed to identify impacts. FEIS to include discussion of the traffic impacts of TNCs (transportation network companies), which could increase substantially around the Seattle Center station. Mitigation to include policies and designated zones for TNC activity that complement those in use by Seattle Center and Climate Pledge Arena.	Downtown
517	Ch 3 Transportation	3-103	3.14.1	Deborah Daoust	Seattle Center	The analysis is missing information needed to identify impacts. The parking section needs to consider impacts of night and weekend road closures on access to 5th Ave N and Mercer St Garages. Reduced access to the garages will financially affect Seattle Center and its resident organizations.	Downtown
518	Ch 3 Transportation	3-140	3.19.4.4	Deborah Daoust	Seattle Center	The Non-motorized Facilities section needs to consider pedestrian movement on/through the Seattle Center grounds.	Downtown
519	Ch 3 Transportation	3-136	Table 3-30	Deborah Daoust	Seattle Center	Construction closures on Harrison St (6th to Dexter) must consider impacts to parking access to 5th Ave N Garage and vehicle access to/from SR-99, which is a major access route to Seattle Center.	Downtown

520	Ch 3 Transportation	3-138	3.19.4.1.5	Jae Lee Deborah Daoust	Seattle Center	Closure of West Republican Street will impact services to the tenants of the Northwest Rooms at Seattle Center (KEXP, Vera and SIFF). Construction will disrupt daily loading/unloading for regular event operations; emergency access, and trash removal. Without mitigation, impacts may result in the tenants needing to temporarily relocate. This closure is inconsistent with the statement in Appendix J that the tenants of the Northwest Rooms will be able to continue operations throughout construction.	Downtown
521	Ch 3 Transportation	3-90	3.13.1.2	Deborah Daoust	Seattle Center	Analysis is missing information necessary to identify impacts. The Intersection Operations analysis needs to include an analysis of pre- and post- event conditions at Seattle Center. Many of the largest spectator events, including those at Climate Pledge Arena, often begin after the PM peak and end after 10pm.	Downtown
522	Ch 3 Transportation	3-105	Table 3-26	Deborah Daoust	Seattle Center	In table 3-26, displaced on-street parking during operations and construction should be considered an impact to Seattle Center events and resident organizations. Especially during construction, a substantial number of parking places will be displaced in vicinity of 5th/Harrison in DT-1 and 6th and Mercer in DT-2	Downtown
523	Ch 3 Transportation	3-152	3.19.7.3	Deborah Daoust	Seattle Center	Did analysis of curb use management take into consideration impacts on accessible parking around Seattle Center such as on Warren St between Mercer and Republican streets?	Downtown
524	Ch 3 Transportation Enviornment and Consequences	3-86	Table 3-20	Julia Levitt	Seattle Center	The PM Peak boardings and alightings for Seattle Center don't reflect Climate Pledge Arena surge events, which are anticipated to be frequent and will often conflict with weekday PM peak.	Downtown
525	Ch 3 Transportation Enviornment and Consequences	3-109	3.15.3.1	Julia Levitt	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. Surge crowds of pedestrians at the Seattle Center station will be a frequent event, and a thorough analysis of the impacts and the capacity of pedestrian impacts and the station design to accommodate surge crowds will be an important factor in deciding between the two Seattle Center station alternatives. Please include drawings in the FEIS showing flows of surge crowds, areas of queuing, and estimates of time required to clear the queues after an event.	Downtown
526	Ch 3 Transportation Enviornment and Consequences	3-111	3.15.3.5	Julia Levitt	Seattle Center	The analysis is missing information necessary to compare alternatives. This page highlights that DT-2 requires patrons of CPA and Seattle Center events to "cross at least one roadway" to access the campus. This is technically true; however, Warren Ave. N. is not a difficult crossing for pedestrians, and the extra distance between the DT-2 station entrance and Climate Pledge Arena may be beneficial for surge crowd dispersal.	Downtown
527	Ch 3 Transportation Enviornment and Consequences	3-115	3.16.3.4.	Julia Levitt	Seattle Center	Analysis is misleading. It is not reasonable to assume there will be adverse pedestrian safety impacts from DT-2 versus DT-1 at Seattle Center, because Warren Ave. N. is a quiet street with low volumes of traffic.	Downtown
528	Ch 3 Transportation Enviornment and Consequences	3-139	3.19.4.1.5	Julia Levitt	Seattle Center	Analysis is missing information necessary to compare alternatives. For Alternative DT-2, please study additional options for re-routing vehicular traffic during partial closures of Mercer St., including diversion to Roy St. Diversion to Denny alone is unlikely to be enough mitigation in this area.	Downtown
529	Ch 3 Transportation Enviornment and Consequences	3-151	3.19.7.2	Julia Levitt	Seattle Center	Add Monorail to list of transit that will remain operational during construction.	Downtown
530	Ch 3 Transportation Enviornment and Consequences	3-126	3.19.1	Julia Levitt	Seattle Center	The methodology does not capture complete transportation impacts of the project, including cumulative transportation impacts of construction throughout the Downtown segment. For example, closure of Republican St. or Mercer St. for the Seattle Center station that happen simultaneously with closure of Harrison St. for SLU station will have a greater cumulative impact to Seattle Center campus events and tenants than either closure on its own. As a result, there is not sufficient information to identify the full extent of the impact, and the impact to downtown Seattle is understated in the DEIS.	Downtown
531	Ch 3 Transportation Enviornment and Consequences	3-126	3.19.1	Julia Levitt	Seattle Center	Mitigation for transportation impacts to the campus and resident organizations should include investment in transportation and access infrastructure to ensure options for multi-modal transportation reaching the campus during construction.	Downtown
532	Ch 3 Transportation Enviornment and Consequences		Table 6-6	Julia Levitt	Seattle Center	Mitigation measures are not thoroughly described. In coordination with Seattle Center, Sound Transit to develop a Construction Transportation and Access Plan that includes subsidized parking and Monorail fares for patrons of campus events, as well as wayfinding and security support for patrons.	Downtown
533	Ch 5 Cumulative Impacts	5-10	5.4.4.1	Donna Golden	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. Missing is that operational impacts also include an economic impact in terms of how businesses will operate in the future. Seattle Center's loss of land for festivals and outdoor events would result in lost revenues and lost jobs. The above-ground east entrance of the DT-1 Seattle Center station would create an aesthetic impact on the surrounding businesses including Seattle Rep, SIFF and the Vera Project, which may result in lost or diminished revenues for those organizations. Cars, trucks, and other motorized transportation access at 2nd and Mercer would be impacted. Measures would be required to ensure safety for pedestrians coming out of the station, as 2nd Ave would be shared with motorized transportation.	Downtown
534	Ch 5 Cumulative Impacts	5-11	5.4.4.2	Richard Pedowitz	Seattle Center	Include lost revenues at Seattle Center among the impacts. Seattle Center and its resident organizations contribute more than $1.0 billion of economic impact annually.	Downtown
535	Ch 5 Cumulative Impacts	10	5.4.3.2	Lance Miller	Seattle Center	No mention of KEXP, Vera, SIFF who will clearly be unable to operate or displaced during construction	Downtown
536	Ch 5 Cumulative Impacts	11	5.4.4.2	Lance Miller	Seattle Center	No mention of economic impacts to KEXP, Vera, SIFF who will clearly be unable to operate or displaced during construction	Downtown
537	Ch 5 Cumulative Impacts	17	5.4.8.2	Lance Miller	Seattle Center	No mention of noise and vibration impacts to KEXP, Vera, SIFF , Seattle Rep, Cornish, Seattle Ballet or McCaw Hall.	Downtown
538	Ch 5 Cumulative Impacts	23	5.4.18.2	Lance Miller	Seattle Center	No mention of construction impacts to Seattle Center in Parks and Recreation section	Downtown
539	Ch 5 Cumulative Impacts	23	5.5	Lance Miller	Seattle Center	No mention of mitigation for Seattle Center during construction.	Downtown

540	Ch 6 Alternatives Evaluation	6-22	6.2.2.2.2	Gretchen Lenihan	Seattle Center	Add North Fountain Lawn to the list of facilities which may be impacted by vibration, and add North Fountain Lawn to the list of facilities impacted by construction noise. The lawn is a programmed outdoor facility. For DT-2 construction noise/vibration impacts, add Exhibition Hall/Phelps Center, Cornish Playhouse to the list of facilities which will be impacted.	Downtown
541	Ch 6 Alternatives Evaluation	6-22	6.2.2.2.2	Gretchen Lenihan	Seattle Center	Please add all historically significant properties at Seattle Center to the list. While it is not itself an historic district, the Seattle Center campus was built in 1962 for the World's Fair and therefore its role in Seattle has historic prominence.	Downtown
542	Ch 6 Alternatives Evaluation	6-22	6.2.2.2.2	Richard Pedowitz	Seattle Center	Closure of Harrison Street reduces access to and from I-99 both north and south for inbound and outbound traffic from Seattle Center event attendees. Construction mitigation plan to address how traffic impacts will be mitigated, and also address cumulative impacts if Seattle Center station and SLU station will be under construction simultaneously.	Downtown
543	Ch 6 Alternatives Evaluation	6-22	6.2.2.2.2	Richard Pedowitz	Seattle Center	Closure of Harrison Street increases exiting time from the Seattle Center garages and environs following events as more cars compete for access on already congested streets.	Downtown
544	Ch 6 Alternatives Evaluation	6-22	6.2.2.2.2	Richard Pedowitz	Seattle Center	Closure of portions of Harrison Street for 4 years will reduce access to Seattle Center's 5th Avenue North Garage and the Memorial Stadium parking lot. This will impact a significant of the off-street parking supply serving Seattle Center's daily visits and major events. The 5th Ave N. Garage contributes 15% of Seattle Center net revenue, and revenues from parking are currently critical to Seattle Center's operating budget. Construction should be coordinated to keep the off-street parking supply open and point drivers there to assist with cars circling.	Downtown
545	Ch 6 Alternatives Evaluation	6-22	6.2.2.2.2	Richard Pedowitz	Seattle Center	Construction, noise and vibration impacts do not consider Climate Pledge Arena	Downtown
546	Ch 6 Alternatives Evaluation	6-22	6.2.2.2.2	Richard Pedowitz	Seattle Center	Closure of Urban Triangle Park affects access to Seattle Center skatepark	Downtown
547	Economics	4.3.3-15	4.3.3.4.4	Donna Golden	Seattle Center	In addition to temporarily displacing Seattle Repertory Theatre, Cornish Playhouse, SIFF, VERA, and KEXP, and permanently displacing event space in front of Seattle Repertory Theatre, which is a major economic impact for the theatre arts community, the Preferred Alternative DT-1 would create access challenges around the campus especially for larger vehicles that typically use the intersection at 2nd and August Wilson Way to reach the Founders Court area between Cornish Playhouse and Exhibition Hall as well as access to Kreielsheimer Promenade for events. This could potentially limit the economic viability of those spaces during construction. The intersection at 2nd Ave and August Wilson Way is a major access point for vehicular accessibility to the northern portion of the campus. Access from the gate at Republican and 4th Ave N presents issues at the narrow and steep ramp as well as turning radius issues for larger vehicles.	Downtown
548	Economics	4.3.3-8	4.3.3.3.4	Delia Tyrrell	Seattle Center	Construction of the DT-1 campus station will impact the value of the Seattle Rep building and lobby areas as an asset by blocking views from the windows and permanently removing landscaped and hardscaped spaces, including the Donnelly Gardens, directly adjacent to the Seattle Rep.	Downtown
549	Economics	4.3.3-15	4.3.3.4.4	Gretchen Lenihan	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified, missing are the event power and utilities located within the construction area for the Seattle Center station in DT-1. Disruption of access to these power and utility sources would hinder Seattle Center's ability to put on events during construction. This would impact attendance and revenue.	Downtown
550	Economics	4.3.3-8	4.3.3.3.4	Gretchen Lenihan	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified, missing are, the proposed DT-1 east station entry obstructs of one of the last remaining plaza spaces on Seattle Center campus that is hospitable to larger activations/events (roughly 20'x30' or 20'x40'), in addition to obstructing space controlled by the Seattle Rep. The site is also one of the primary locations for large sponsors on the campus during major festivals. Removing this plaza space has a significant impact on the ability of festival producers, Seattle Center and Climate Pledge Arena to activate large sponsorships at events, and will create a significant financial impact to Seattle Center, possibly impacting business and employment. Potential mitigation should include building the station entrance further north or west at the campus perimeter to avoid obstruction of the plaza.	Downtown
551	Economics	4.3.3-15	4.3.3.4.4	Gretchen Lenihan	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified, missing are, locating a station entrance inside the Seattle Center campus perimeter becomes a public safety hazard for any large on-campus event such as a major festival during construction and operations. In such cases, the entrance inside the campus would need to be turned into an official festival entry, or the festival footprint would need to be reduced dramatically to exclude the station. Allowing access from the station into a large enclosed gathering on the campus raises other security and safety concerns, including the need to close/secure the station in the event of a direct threat like an active shooter situation. This is one reason why a long-term operating agreement between Seattle Center and Sound Transit would be necessary to operate the station if this design is selected. Sound Transit to provide the following operational mitigations: accommodate and pay for the ability to gate the campus for large outdoor events; provide permanent security staffing at Seattle Center station that complements Seattle Center outdoor event security; provide surge event queuing plan and adequate staffing and support for large events at the Climate Pledge Arena and other facilities on campus. These comments are in response to both construction and operations impacts of the DT-1 alternative.	Downtown
552	Economics	4.3.3-15	4.3.3.4.4	Delia Tyrrell	Seattle Center	DT-1 could temporarily displace two performance theatres, one movie theatre, and a radio station due to construction noise.	Downtown
553	Economics	4.3.3-15	4.3.3.4.4	Gretchen Lenihan	Seattle Center	Although construction in this area may not affect Arena attendance, it will absolutely impact the events of resident organizations in the northwest rooms. [The] Vera [Project] especially serves a diverse range of youth and we should be concerned with the equity impacts of once again reducing or removing the ability of this organization to provide its services to the community.	Downtown
554	Economics	4.3.3-15	4.3.3.4.4	Julia Levitt	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. How was it determined that there would not be impacts to attendance at large events, but there may be impacts to attendance at smaller events? This is not a logical determination.	Downtown

555	Economics	4.3.3-15	4.3.3.4.4	Julia Levitt	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. Please provide a plan for detour routes through Seattle Center campus for pedestrians, ADA access, operations vehicles, emergency access and event related curb side loading.	Downtown
556	Economics	4.3.3-13	4.3.3.4.1	Deborah Daoust	Seattle Center	Add "event attendance" to sentence containing "reduced sales"	Downtown
557	Economics	4.3.3-15	4.3.3.4.4	Deborah Daoust	Seattle Center	Add "Event related revenue" to sentence containing sales revenue to reflect loss to orgs/businesses in close proximity to DT-1 station construction.	Downtown
558	Economics	4.3.3-14	9	Deborah Daoust	Seattle Center	In this instance and throughout the DEIS document, add "and other Seattle Center amenities, including open space, low-cost family-friendly programming, and cultural festivals" to reflect that impacts will be experienced by venues beyond Climate Pledge Arena on the grounds. Cumulative event attendance (not including CPA) at Seattle Center on an active Saturday evening can approach 15,000.	Downtown
559	Economics	4.3.3-4	38-43	Deborah Daoust	Seattle Center	The consideration for businesses must include place-based, audience-reliant businesses to include resident organizations in close proximity to DT-1 construction in economic impact analysis.	Downtown
560	Economics	4.3.3-14	4.3.3.4.3.	Julia Levitt	Seattle Center	Delete "construction is not expected to notably affect attendance at events." Event attendance at venues affected by construction noise and disruption will unquestionably suffer during the 6-year construction period. Careful planning and weekly communication and coordination will be required to minimize impacts to events on campus during construction. FEIS will need to contain specifics of these plans.	Downtown
561	Economics	4.3.3-18	4.3.3.6	Julia Levitt	Seattle Center	Mitigation measures for businesses and organizations significantly disrupted by construction are not thoroughly described. The construction impacts of the project are understated, and more thought will need to be given to mitigation. Missing mitigation measures include: A robust marketing and outreach campaign, comparable to Downtown Waterfront, to develop strategies that mitigate the financial and effects of long-term construction impacts to Seattle Center campus, tenants, and event producers.	Downtown
562	Electromagnetic Fields	4.3.13-1	4.3.13.1	Gretchen Lenihan	Seattle Center	Users of Seattle Center outdoor event space frequently operate sensitive equipment such as wireless microphones, radio transmissions and wi-fi usage that are unshielded by buildings. EMF analysis should include analysis of outdoor event operations in the station vicinity including the Northwest Courtyards, Climate Pledge Arena outdoor pavilions, Seattle Rep, vacated 2nd Ave N., and the International Fountain lawn, Memorial Stadium, the Fisher lawn, Fisher Rooftop, Artists at Play playground, and MoPOP.	Downtown
563	Executive Summary	E8-31	ES.3.1.2.3.	Gretchen Lenihan	Seattle Center	DT-1 tunneling may also impact MoPOP, which houses performance space.	Downtown
564	Executive Summary	E8-31	ES.3.1.2.3.	Gretchen Lenihan	Seattle Center	DT-2 tunneling could also impact Classical KING FM, event activity in Exhibition Hall, Phelps Center and Cornish Playhouse.	Downtown
565	Executive Summary	ES 41	ES.5	Lance Miller	Seattle Center	No mention of Seattle Center in Significant and Unavoidable Adverse Impacts. See Seattle Center comments.	Downtown
566	Executive Summary	ES-5	25-32	Deborah Daoust	Seattle Center	The analysis, which takes a commuter focus, needs to consider impacts on non-peak commuter times, when high volume activities typically happen on the grounds. Cumulative event attendance can approach 15,000.	Downtown
567	Executive Summary	ES-6	43	Deborah Daoust	Seattle Center	Add "cultural" to employment and educational opportunities to include Seattle Center opportunities.	Downtown
568	Historic and Archaeological Resources	4.3.16-1	Figure 4.3.16-1	Julia Levitt	Seattle Center	The analysis is incomplete. The Area of Potential Effect cuts through Seattle Center campus, which is a recreational public facility with historic and cultural significance. The APE boundary should be expanded to include the entire campus because the entire campus will be affected by the construction and long-term impacts in the APE.	Downtown
569	Historic and Archaeological Resources	4.3.16-9	Table	Julia Levitt	Seattle Center	The analysis is incomplete. The historical and archaeological resources study does not consider the Mercer Garage or Memorial Stadium as part of the affected resources. FEIS must consider potential impacts to these structures from ground borne noise/vibration both during construction and permanently. Construction or permanent noise/vibration impacts above sustainable thresholds would threaten the financial sustainability and long-term viability of the Playhouse and the Phelps Center because of their uses as performance venues. SEE EXHIBIT SC-3 FOR THRESHOLDS	Downtown
570	Historic and Archaeological Resources	4.3.16-27	Table	Julia Levitt	Seattle Center	The analysis does not capture complete impacts of the project to the Century 21 Playhouse. Figure 4-4 of Appendix H shows a construction footprint that extends into vacated 2nd Ave N. for the length of the Playhouse. Construction and excavation in this area could cause significant adverse impacts to the historic structure both above- and below-grade; and the station could cause both construction and permanent noise and aesthetic impacts to the Playhouse and its tenant, Cornish College of the Arts. Please update this table with accurate impacts to the Playhouse for the FEIS.	Downtown
571	Historic and Archaeological Resources	4.3.16-30	Table	Julia Levitt	Seattle Center	International Commerce and Industry Building, Sweden Pavilion and Key Arena are now known by other names: Northwest Rooms (KEXP, SIFF, Vera Project); International Fountain Pavilion; and Climate Pledge Arena, respectively. These commonly used names must be noted in the document so that members of the public can easily find the analysis.	Downtown
572	L4.1 Potentially Affected Parcels	L4.1-36	Table L4.1-7.	Gretchen Lenihan	Seattle Center	Table is missing information. Seattle Center is a campus that assembles approx. 23 parcels of property, including the parcels owned and managed by the City of Seattle and adjacent entities including Seattle Public Schools, Pacific Science Center, and the Space needle. All parcels at Seattle Center including Parcel 1985200305 (North Fountain Lawn), Parcel 1985200010 (Northwest Rooms), and parcel 1988200440 (Cornish Playhouse) should be listed as parcels affected by the proposed D-1 project because of the construction site and permanent entrance located within the campus boundaries.	Downtown
573	L4.1 Potentially Affected Parcels	L4.1-36	Table L4.1-7.	Gretchen Lenihan	Seattle Center	Table is missing information. Please list all affected properties at Seattle Center (including street addresses for KEXP, Vera, SIFF, Seattle Rep, Cornish, Ex Hall/Phelps, McCaw, Opera, MoPOP) on this chart.	Downtown
574	L4.17 Parks	4.3.18-4	4.3.18.2.3	Julia Levitt	Seattle Center	Section 4(f) summary -- City of Seattle does not concur with conclusions for Seattle Center in the 4(f) summary. The analysis is incomplete and identification of impacts is missing.	Downtown
575	L4.1A Maps of Affected Parcels	L4.1-28i	Figure L4.1-28i	Julia Levitt	Seattle Center	The methodology used to identify potentially affected parcels misses some significant impacts. Seattle Center is a campus that assembles approx. 23 parcels of property, including parcels owned and managed by the City of Seattle and adjacent entities including Seattle Public Schools, the Pacific Science Center and the Space Needle. The DT-1 project will impact the full functioning campus, and all campus parcels should be identified as affected.	Downtown

576	L4.4 Social Resources	4.3.4-9	4.3.4	Julia Levitt	Seattle Center	Error found in text. DEIS text says that Seattle Center is a designated Arts and Cultural District. Actually it is the Uptown neighborhood -- of which Seattle Center is part -- that is a designated Arts and Cultural District.	Downtown
577	L4.4 Social Resources	4.3.4-18	4.3.4.3.4	Julia Levitt	Seattle Center	DEIS indicates that the need for passengers to "cross a roadway to access Seattle Center," in the DT-2 alternative. Seattle Center review team believes this conclusion is overstated and the need to cross Warren from the south entrance of the Mercer St. station alternative does not detract from the passenger experience.	Downtown
578	Land Use	4.3.2-8	4.3.2-3	Gretchen Lenihan	Seattle Center	Table 4.3.2-3 incorrectly states there is 0 potential conversion of City-owned open space to transportation-related space. City-owned public open space at Seattle Center would be permanently converted to transit use in the DT-1 preferred option. This conversion will significantly affect events and operations on the Seattle Center campus.	Downtown
579	Land Use		4.3.2.3.1	Julia Levitt	Seattle Center	Analysis is missing information needed to identify impacts and compare alternatives. The list of land use plans checked for consistency does not include Seattle Center's adopted master plan. Please add Seattle Center Century 21 Master Plan (Adopted 2008) and check for consistency with this proposal, which includes a station and entrance inside the Seattle Center campus.	Downtown
580	Noise and Vibration	4.3.7-12	4.3.7.3.3	Donna Golden	Seattle Center	Analysis is missing information necessary to identify impacts and compare alternatives. The analysis of vibration impacts to the historic Cornish Playhouse is missing. Considering its location across from Seattle Rep and next to the construction area, vibration impacts to the Playhouse are likely.	Downtown
581	Noise and Vibration	4.3.7.-17	44	Julia Levitt	Seattle Center	The analysis is missing information needed to identify impacts and compare alternatives. Climate Pledge Arena and outdoor venues at Seattle Center including the Northwest Courtyards, Theater Commons, and the International Fountain will be affected by noise and vibration during long periods of DT-1 construction. Seattle Rep will likely experience noise and vibration impacts from DT-2 construction. McCaw Hall, Seattle Opera, KING-FM, Cornish Playhouse, and Pacific Northwest Ballet may also experience noise and vibration impacts during construction of DT-2.	Downtown
582	Parks and Recreational Resources	4.3.17-19	4.3.17.4.4	Donna Golden	Seattle Center	Temporary impacts for DT-1 up to 6 years plus restoration would be a significant impact economically and operationally to these noise and vibration sensitive businesses. In addition, it would impact Seattle Center events reducing the footprint of which Seattle Center can produce events as well as for operations/maintenance access around the site, as 2nd and August Wilson Way is a major intersection for north/south access. Closure of the 2nd/Mercer Access could possibly impact ADA access to Seattle Repertory Theatre. The description of the project is inconsistent with the statements in Economics and Appendix H claiming that Seattle Center event attendance will not be affected during construction; and resident organizations can continue operations throughout construction.	Downtown
583	Parks and Recreational Resources	4.3.17-23	4.3.17.5.4	Donna Golden	Seattle Center	Alternative DT-2 could have an indirect effect of activating underserved areas in the surrounding Queen Anne Neighborhood, which would benefit from increased accessibility.	Downtown
584	Parks and Recreational Resources	4.3.17-6	4.3.17.1.3	Valancy Blackwell	Seattle Center	Add detail to description of Seattle Center, as follows: Seattle Center is a publicly owned recreational area, arts hub, and tourist destination attracting 12 million annual visits. The active 74-acre civic, arts, and family gathering place was originally built for the 1962 World's Fair and includes numerous properties with State and local historic designations. Operated by the City of Seattle and part of the Uptown Arts and Cultural District, the Center is home to several performance and arts venues, tourist attractions, and open spaces. It accommodates numerous community activities, charitable events and festivals throughout the year.	Downtown
585	Parks and Recreational Resources	4.3.17-19	4.3.17	Valancy Blackwell	Seattle Center	The analysis is missing information about impacts. Missing impact: Pedestrian access from Mercer Street to August Wilson Way on the east side of the Seattle Rep Theatre would be closed during construction. This is the most direct, flat, ADA-friendly route to the Rep and from the north end of Seattle Center Campus to the interior of campus.	Downtown
586	Parks and Recreational Resources	4.3.17-19	4.3.17	Valancy Blackwell	Seattle Center	The analysis is missing information about impacts. Missing impact: Closure of Mercer Street would affect traffic in this area and could make vehicle access to parking, passenger and event loading areas for Seattle Center more difficult.	Downtown
587	Parks and Recreational Resources	4.3.17-19	4.3.17	Valancy Blackwell	Seattle Center	The analysis is missing information about impacts. Missing impact: 6 van-accessible ADA parking stalls located at Seattle Repertory Theater must be preserved throughout construction and operations, or mitigated by ST	Downtown
588	Parks and Recreational Resources	4.3.17-10	4.3.17.3.3	Jae Lee	Seattle Center	The analysis is missing information about impacts. Missing impact: August Wilson Way (Republican St) closure will impact loading and access to tenants of the Northwest Rooms and International Fountain Pavilion, and Seattle Rep's loading area.	Downtown
589	Parks and Recreational Resources	4.3.17-20	4.3.17.4.4	Julia Levitt	Seattle Center	Mitigation measures for the identified impacts are missing. Mitigation for impacts to significant Legacy Trees on Seattle Center campus to include taking measures to preserve as many trees as possible during construction; providing financial compensation to Seattle Center for removed legacy trees; replacing any removed Legacy Trees on campus pedestrian pathways with mature specimen trees approved by the Seattle Center Director; and 2:1 replacement overall according to City policy. Trees that must be removed are to be salvaged and relocated to the Woodland Park Zoo, or otherwise reused/repurposed.	Downtown
590	Parks and Recreational Resources	4.3.17-23	4.3.17.5.4	Julia Levitt	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. As a result, the analysis does not fully describe impacts to Seattle Center events, public open space, and support space by extensive crowd queuing associated with DT-1 placement of an entrance in the heart of campus. FEIS to include drawings of the flows of passengers to the DT-1 and DT-2 Seattle Center alternatives during surge events including festivals and large events at Climate Pledge Arena, which typically occur several days per week. Drawing to include analysis of where pedestrian crowds will stand and how long the queues will take to clear.	Downtown
591	Parks and Recreational Resources	4.3.17-10	Figure 4.3.17-6	Julia Levitt	Seattle Center	Figure is incorrect, please change for FEIS. Legend to change "Park Boundary" to "Seattle Center Campus Boundary" or "Seattle Center Boundary." Two properties north of Mercer are incorrectly identified as Seattle Center property. The property on Roy St. is a rented premises for Seattle Center maintenance shops but is not City-owned campus property. The Center Steps Plaza fronting Mercer between 3rd Ave N. and the mid-block connection is Seattle Center property, but not the adjacent Plymouth Housing development site.	Downtown

592	Parks and Recreational Resources	4.3.17-10	4.3.17.3.3	Julia Levitt	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. Please include a figure, or revise Figure 4.3.17-6 to include the footprint of station operations, not just the description of above ground and below ground permanent elements. The above ground structure may require a secure area around its walls for security bollards, maintenance access, security vehicles, micro-mobility and bike parking; crowd queuing, and other accessory uses. The facility will significantly affect views not only Seattle Rep, but also views of the International Fountain from the Theatre Commons entrance. The structure described in the DEIS will have permanent aesthetic impacts on Seattle Center. The removal of rows of mature Legacy trees from August Wilson Way will be a permanent impact that is not fully replaced with newly planted landscaping. Seattle Center's ability to operate as civic center and host to numerous free and subsidized public events will be affected by economic impacts from permanent loss of space for events, festivals, and campus operations. Please include a thorough description of all impacts from the DT-1 and DT-2 alternative stations to Seattle Center in the FEIS.	Downtown
593	Parks and Recreational Resources	4.3.17-20	4.3.17.4.4	Julia Levitt	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. The analysis says, "Mature trees along August Wilson Way would be removed for construction." There are a total of 46 mature London Plane trees in the areas affected by construction of DT-1 at Seattle Center. These mature trees are considered to be Legacy Trees in Seattle Center's Century 21 Master Plan, and their canopy provides shade and ecosystem benefits, as well as an important part of the Seattle Center campus aesthetic. The description of the impact in the FEIS should include potential impacts to trees on vacated 2nd Ave. N. as well as August Wilson Way, and a description of the aesthetic and ecosystem impacts. Please require an expert valuation of the trees and ecosystem habitat to be performed for inclusion in the FEIS.	Downtown
594	Parks and Recreational Resources	4.3.17-24	4.3.17.6	Julia Levitt	Seattle Center	Mitigation measures for the identified impacts are missing. The displacement of Seattle Center events, public open space, and support space by extensive crowd queuing associated with DT-1 placement of an entrance in the heart of campus will require site-specific mitigation plan for Seattle Center. Mitigation to include the replacement of displaced space with comparable space for Seattle Center's use; and a long-term operating agreement between the City of Seattle and Sound Transit to govern the management of issues like safety, security, maintenance, and crowd queuing for this station entrance.	Downtown
595	Parks and Recreational Resources	4.3.17-19	4.3.17.4.4	Julia Levitt	Seattle Center	Analysis is incomplete. Several significant impacts are missing. Missing impacts include temporary loss of event-related parking and loading on adjacent streets including Republican St. between 1st Ave. N. and Warren St., and Warren Ave. N. between Republican St. and Mercer St. during DT-1 construction. These parking and loading areas are important for ADA access, school bus access, and event equipment and artist/performer access particularly for campus events and tenants of the Northwest Rooms.	Downtown
596	Parks and Recreational Resources	4.3.17-19	4.3.17.4.4	Julia Levitt	Seattle Center	The analysis of impacts to Seattle Center tenants is incomplete and inadequately described. Seattle Rep, KEXP, SIFF and Vera Project will not be able to maintain operations during construction of the DT-1 Seattle Center station as stated in the analysis. Detailed construction impact mitigation plan, schedule coordination and robust communication will be needed to ensure operation of KEXP, SIFF, Vera Project and Seattle Rep during the construction period. Coordination and investment will need to begin months or years in advance to facilitate temporary relocation that is sufficient to allow these tenants to continue their highly specialized and technical operations including live theater performance, audio and video recording, broadcasting,. and live music performance.	Downtown
597	Parks and Recreational Resources	4.3.17-19	4.3.17.4.4	Julia Levitt	Seattle Center	The analysis of impacts to Seattle Center is incomplete and inadequately described. Seattle Center campus, outdoor public recreational space, outdoor event space, Seattle Rep, the Northwest Rooms, and Cornish Playhouse will experience permanent impacts if the DT-1 station and east entrance are built as described in the DEIS Appendix J. The large station box and its mechanical and circulation structures will permanently obstruct Seattle Rep and inhibit the theater company's full use of their building. Seattle Center campus will experience permanent loss of space that is heavily used for operations and events. The campus will experience permanent operational impacts in order to accommodate the needs of a light rail station entrance close to the heart of the grounds.	Downtown
598	Parks and Recreational Resources	4.3.17-19	4.3.17.4.4.	Julia Levitt	Seattle Center	The information provided is inadequate to fully describe temporary impacts of street closures during construction. Full closure of Republican St. for up to 6 years, partial closure of Mercer St. for 3.5 years, and closures on Harrison between 6th Ave N. and Dexter will generate traffic impacts that may decrease attendance and revenues for Seattle Center and its resident arts and cultural organizations to the point where these organizations cannot remain solvent. Displacement of loading areas will impact events and festivals for Seattle Center, and the core operations of resident organizations including KEXP and The Vera Project. Impacts to parking garages will cause loss of operating revenues for Seattle Center and decreased attendance at large events. Mitigation must include adequate temporary replacements for displaced loading and bus parking spaces.	Downtown
599	Parks and Recreational Resources	4.3.17-19	4.3.17.4.4.	Julia Levitt	Seattle Center	Mitigation is not thoroughly described. Impacts of street closures during construction will cause financial impacts to Seattle Center and its resident arts and cultural organizations and will require financial mitigation in the form of replacement for lost revenues. Please include analysis of financial impacts to tenants that may be relocated or experience significant construction disruption, and mitigation of these impacts, in the FEIS.	Downtown
600	Public Services, Safety and Security	4.3.14-15	4.3.14.4.4	Gretchen Lenihan	Seattle Center	Road closures for construction of the Seattle Center station for DT-1 would block fire access to Vera & SIFF. I believe there may also be standpipes that may be affected by cut-and-cover construction in this area.	Downtown
601	Public Services, Safety and Security	4.3.14-1	Table 4.3.14-1.	Gretchen Lenihan	Seattle Center	Seattle Center should be included as a service provider on this table. The Armory in particular provides services to the public, as do the grounds and Alki restrooms. Seattle Center operates emergency shelter facilities for the community as needed.	Downtown
602	Social Resources, Community Facilities, and Neighborhoods	Page 4.3.4-23	4.3.4.4.4	Delia Tyrrell / Gretchen Lenihan	Seattle Center	Information necessary to identify impacts and compare alternatives is missing. Construction of the east entrance to the D-1 Seattle Center station would displace outdoor event activity and severely impact the functionality of the 2nd Ave N./August Wilson Way intersection for large vehicles that support events at Theatre Commons, North Fountain Lawn, and elsewhere on the north end of campus. These are critical operational corridors for Seattle Center crews. Access for event and maintenance vehicles must be maintained through that intersection in all directions throughout construction. This loss could be permanent once the construction of this station entry is completed.	Downtown

603	Social Resources, Community Facilities, and Neighborhoods	Page 4.3.4-23	4.3.4.4.4	Delia Tyrrell	Seattle Center	When discussing the construction impacts of DT-1, our noise and vibration analysis has found that the noise and vibration levels proposed by Sound Transit during construction and operations are significantly higher than the existing noise and vibration thresholds at Seattle Rep, The Cornish Playhouse, The Vera Project, SIFF, and K.E.X.P. Because of this, please change language to state that these facilities will be affected by construction noise and vibration and temporary relocation may be a necessary mitigation.	Downtown
604	Social Resources, Community Facilities, and Neighborhoods	4.3.4-23	4.3.4.4.4	Gretchen Lenihan	Seattle Center	DEIS claims that D-2 cuts off access to Seattle Rep from the west; however, Mercer Garage and all audience access points are on the east side of the Seattle Rep building, which would be much more directly impacted by DT-1 station construction. Construction impacts of the east entrance for DT-1 would be significantly more disruptive for more organizations on the campus than DT-2 construction. Suggest that the DEIS de-emphasize the perceived impacts to Seattle Center of D-2 compared to D-1.	Downtown
605	Social Resources, Community Facilities, and Neighborhoods	4.3.4-23	4.3.4.4.4	Gretchen Lenihan	Seattle Center	2nd Ave N is a significant vehicle as well as pedestrian corridor across campus and links several vital resources for Seattle Center operational crews and large community events.	Downtown
606	Social Resources, Community Facilities, and Neighborhoods	4.3.4-18	4.3.4.3.4	Deborah Daoust	Seattle Center	Delete "particularly with Preferred Alternative DT-1" since the statement is not necessarily true given the small distance between the two proposed stations.	Downtown
607	Social Resources, Community Facilities, and Neighborhoods	4.3.4-23	4.3.4.4.4	Deborah Daoust	Seattle Center	Add Cornish Playhouse, Pacific Northwest Ballet (Phelps Center), Exhibition Hall, and Classical KING FM to list of organizations potentially impacted by vibration in DT-2.	Downtown
608	Social Resources, Community Facilities, and Neighborhoods	4.3.4-18	4.3.4.3.4	Julia Levitt	Seattle Center	The description of transportation benefits in the analysis is misleading. The analysis states, "The Alternative DT-2 Seattle Center Station would require passengers to cross a roadway to access Seattle Center, whereas the Preferred Alternative DT-1 Seattle Center Station would not." If the DT-2 Seattle Center alternative is built, there will be an entrance south of Mercer St. that would allow passengers to walk to Seattle Center on Warren Ave N., which is a quiet side street. Access for passengers from DT-2 involves a few more feet of distance versus DT-1, but it is not meaningfully more difficult or dangerous. Please revise the analysis in the FEIS by deleting the phrase "particularly with Preferred Alternative DT-1" and revising the following sentence to more accurately describe the condition on Warren Ave. N., or deleting.	Downtown
609	Social Resources, Community Facilities, and Neighborhoods	4.3.4-18	4.3.4.3.4	Julia Levitt	Seattle Center	The analysis is missing references to impacts at Seattle Center. DT-1 would permanently impact social/cultural resources on the Seattle Center campus, including cultural institutions on the grounds. These institutions provide significant services to the public, including educational programs and free/reduced rate programming, and contribute greatly to the artistic and cultural life of the region. Successful operation of events at Seattle Center also affects patronage of nearby small businesses in Uptown. The station entrance will significantly impact Seattle Rep and the Northwest Rooms with ground borne vibration and permanent entrance-related noise, aesthetic and access impacts. Without mitigation, construction impacts; permanent noise/vibration impacts; and displacement of events associated particularly with the DT-1 Seattle Center station alternative will impact institutions, events, and public space at Seattle Center campus.	Downtown
610	Technical Report: Noise and Vibration	N.3E-22h		Delia Tyrrell	Seattle Center	There should be a vibration impact outline around Seattle Rep and Cornish Playhouse in this figure.	Downtown
611	Technical Report: Noise and Vibration	5-11	Table 5-1	Seattle Center	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. The WSBLE DEIS does not includes the following list of sensitive receivers with the Seattle Center Campus: Climate Pledge Arena, 401 Mercer Street, Live music and sports venue MoPOP, 363 Mercer Street, Museum of popular culture, live music and other performances, recording Memorial Stadium, 321 Mercer Street, Live music performances, sports venue Seattle Repertory Theater, 155 Mercer Street, Additional noise-sensitive rehearsal space not included KEXP, 472 1st Ave N, Number of recording suites not correct A/NT Art Gallery, 305 Harrison Street, Art Gallery By excluding the above facilities, the noise and vibration assessment cannot be considered complete for assessment of impacts. The above facilities need to be included for a full assessment of noise and vibration impacts from the construction and operation of alternatives DT1 and DT2.	Downtown
612	Technical Report: Noise and Vibration	6-37	6.2.3	Seattle Center	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. The WSBLE DEIS assessment of noise and vibration impacts from construction and operation of DT1 and DT2 has not been completed for the following facilities: -Climate Pledge Arena -MoPOP -Memorial Stadium -Seattle Repertory Theater rehearsal space (DT1) and Bagley Wright Theater (DT2) -KEXP additional recording spaces -A/NT Art Gallery An assessment of potential for significant impacts to these facilities and/or spaces within these facilities should be completed of operation and construction of DT1 and DT2. Therefore, the DEIS noise and vibration assessment of both operations and construction is considered incomplete.	Downtown

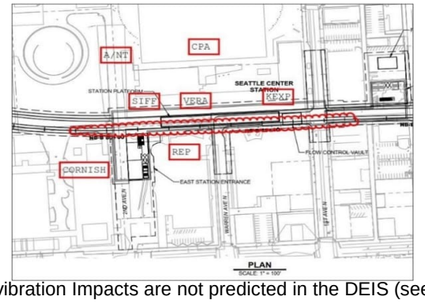
613	Technical Report: Noise and Vibration	6-37	6.2.3	Seattle Center	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. Missing are exhaust fans. The WSBLE DEIS includes a list of construction equipment that were evaluated for airborne construction noise impact (see DEIS Appendix N.3, Table 6-7, p. 6-30). The equipment are based on the FTA 2018 Manual. Excluded from the list of equipment is noise emission levels from exhaust fans that would operate up to 24 hours per day. From DEIS Section 2.6.6, p 2-88: "fans could run for 24 hours a day and could be audible at tunnel portals, stations, or access locations" Further, DEIS Appendix N.3, From DEIS Section 6.2.3.2, p 6-8: "Ventilation fans may also run 24 hours per day at tunnel portals, stations, and access areas to supply fresh air into the tunnel." DT1 tunnel portals would be located very close to Seattle Center tenants The Rep and Cornish Playhouse. Access areas are not yet defined. Fans therefore would operate at these portals and access area to exhaust air up to 24 hours per day during this construction phase. Therefore, the DEIS construction airborne noise impact assessment is considered incomplete because it does not identify the sound level of this source, or further assess how they would operate and where they would operate within the portal. Mitigation measures for fans should be included in an updated assessment that includes exhaust fan noise. Such mitigation measures could include quieter fan models, strategic placement of fans, silencers, barriers, or other measures. Further, the EIS should include specific language within the Construction Noise and Vibration Control Plan regarding exhaust fan noise.	Downtown
614	Technical Report: Noise and Vibration	6-37	6.2.3	Seattle Center	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. Missing are haul routes. Haul routes are not analyzed in the DEIS. Airborne noise from trucks moving spoils away from the DT1 or DT2 tunnel portals could represent a major source of noise during excavation. WSBLE DEIS Section 2.6.6 p. 2-88 states "truck hauling would require a loading area, staging space for trucks awaiting loading, and provisions to prevent tracking soil on public streets. Truck haul routes and trucking hours would require approval by the City of Seattle. Surface hauling could occur at night during off-peak traffic periods or could be concentrated during the day to minimize noise in noise-sensitive areas." Although it may be too early in the process to define haul routes or hours of hauling, the assessment does not address the potential for noise impact from trucks moving within the vicinity of the Seattle Center. Therefore, the DEIS construction airborne noise impact assessment is considered incomplete because it does not include an assessment of noise from haul trucks. Mitigation measures should be included in an updated assessment that includes haul truck noise. Mitigation measures could include enforcing truck hauling hours that minimize the potential for noise impact during sensitive hours. Further, mitigation measures should include coordination with Seattle Center resident organizations. Finally, the EIS should include specific language within the Construction Noise and Vibration Control Plan regarding haul routes.	Downtown
615	Technical Report: Noise and Vibration	6-37	6.2.3	Seattle Center	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. Missing are staging areas. Noise from construction staging areas are not analyzed in the DEIS. Airborne noise from equipment moving within and to/from staging areas could represent a major source of airborne noise during construction. Although it may be too early in the process to define staging areas, the assessment does not address the potential for noise impact from staging areas or which areas are currently being considered by Sound Transit. Therefore, the DEIS construction airborne noise impact assessment is considered incomplete because it does not address construction staging areas. Mitigation measures should be included in an updated assessment that includes staging area noise. Mitigation measures could include strategic location of staging areas to minimize impact from noise emissions related to staging areas, noise barriers, and other measures as defined under WSBLE DEIS Section 7.2.	Downtown

616	Technical Report: Noise and Vibration	6-38	6.2.3.2	Seattle Center	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. Missing are cut and cover. The WSBLE DEIS Appendix N.3, Section 6.2.3.2, p. 6-38, indicates that cut-and-cover construction of DT-1 would likely result in airborne construction noise impacts at Northwest Rooms, including KEXP, SIFF Film Center, Vera, and A/NT Art Gallery, as well as The Rep and Cornish. Construction noise impacts from DT2 would result in impact to The Rep and Cornish. WSBLE DEIS Appendix N.3, Table 6-8, p. 6-31, identifies predicted sound level from types of construction activities. Included is Cut-and-Cover Station Construction, where sound levels at 50 feet would range from 84 dBA to 88 dBA. Equipment that would generate these levels of noise include excavators, backhoes, haul trucks, and vibratory rollers. WSBLE DEIS Appendix N.3, Table 6-30, p. 6-70, summarizes vibration predictions at several Seattle Center facilities include KEXP, Vera, SIFF, The Rep, and Cornish. For each, Table 6-30 indicates equipment could operate as near as 8 feet from these buildings. Adjusting for distance from 50 feet based on an approximate increase of 6-dBA per halving of distance to a stationary noise source, the range of sound levels from equipment identified in Table 6-8 during cut-and-cover construction, when 8 feet away from Seattle Center facilities, would range from 100 to 104 dBA. This could result in impacts at interior spaces of KEXP, Vera, SIFF, The Rep, and Cornish. The DEIS assessment of airborne noise impact during cut-and-cover construction is considered incomplete because it does not address potential for high levels of noise at Seattle Center buildings that could exceed the City of Seattle noise limits for construction, as identified in the Seattle Municipal Code and as are summarized in WSBLE DEIS Appendix N.3, Table 3-4, p. 3-7.	Downtown
617	Technical Report: Noise and Vibration	6-65	Table 6-25	Seattle Center	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. WSBLE DEIS Appendix N.3, Table 6-25 (p. 6-65) and Table 6-27 (p. 6-67), summarize vibration and groundborne noise impacts from construction, respectively. There are multiple elements regarding the assessment of tunneling groundborne noise and vibration that are incomplete or warrant a more detailed assessment. Missing are tunneling equipment. WSBLE DEIS Appendix N.3, Section 6.4.1.2 and Table 6-26 (p. 6-66) identify equipment that would generate the highest levels of vibration during tunneling, including the boring machine cutterhead, thrust-jack retraction, and supply trains with steel wheels. In the footnote of Table 6-27 (p. 6-67), the DEIS states: “The predicted levels for the thrust-jack is more than 5 dB below the impact threshold for all sensitive receivers.” Groundborne noise level predictions for thrust jack retraction is not provided in the DEIS. However, a range of levels is provided, as measured between 0 and 200 feet, in Table 6-26 (p. 6-66). The range of levels is 13 to 29 dBA. The range of levels for supply trains on steel tracks is 24 to 28 dBA. While the average levels of groundborne noise for supply trains is clearly higher that for thrust jack retraction, there is potential for thrust jack retraction to generate levels as high as supply trains, according to Table 6-26. The DEIS does not assess further the potential for impact from thrust jack retraction on vibration or groundborne noise. Therefore, the DEIS assessment of vibration and groundborne noise from tunneling equipment is considered incomplete.	Downtown
618	Technical Report: Noise and Vibration	6-65	Table 6-25	Seattle Center	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. WSBLE DEIS Appendix N.3, Table 6-25 (p. 6-65) and Table 6-27 (p. 6-67), summarize vibration and groundborne noise impacts from construction, respectively. There are multiple elements regarding the assessment of tunneling groundborne noise and vibration that are incomplete or warrant a more detailed assessment. Missing are vibration limits. WSBLE DEIS Appendix N.3, Table 6-25, p. 6-65, identifies vibration limits for sensitive receivers at Seattle Center. The limits for the Rep are identified as 72 VdB based on FTA thresholds for “theaters”, as summarized in the DEIS Appendix N.3, Table 3-8 (p. 3-10). However, Seattle Center notes that the Leo K. Theater has a very low threshold for impact from vibration, akin to more stringent limits that would apply to concert halls (i.e., 65 VdB). Because the impact assessment is based on the potential for disruption of use, the vibration limit for The Rep should be corrected to more accurately represent this space. Correcting to a more appropriate vibration limit at The Rep would results in impacts from DT1 during supply train operation. Therefore, the DEIS assessment of vibration from tunneling equipment is considered incomplete and needs to be corrected and then re-evaluated, including considerations for mitigation.	Downtown

619	Technical Report: Noise and Vibration	6-67	Table 6-27	Seattle Center	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. WSBLE DEIS Appendix N.3, Table 6-25 (p. 6-65) and Table 6-27 (p. 6-67), summarize vibration and groundborne noise impacts from construction, respectively. There are multiple elements regarding the assessment of tunneling groundborne noise and vibration that are incomplete or warrant a more detailed assessment. Missing are groundborne noise limits. WSBLE DEIS Appendix N.3, Table 6-27, p. 6-67 includes groundborne noise limits for Seattle Center spaces. The limits are summarized in the DEIS Appendix N.3, Table 3-8 (p. 3-10) and based on the type of use. The limits identified for SIFF and Vera are 40 dBA, assumed to be considered Category 3 buildings (see DEIS Appendix N.3, Table 3-9, p. 3-11), which are institutional lands with primarily daytime use. The limit for The Rep is not accurate and should have been set to 25 dBA, the FTA Special Buildings limit for a concert hall, and not based on the 35 dBA limit for a theater. Experience from The Rep during construction of the Climate Pledge Arena suggest the Leo K. Theater is highly sensitive to groundborne noise intrusion due to the low ambient noise levels. The DEIS measurements in Attachment N.3H Table 7-1 (p. 7-3) indicated ambient levels were 30 dBA, 5-dBA lower than what was applied in Table 6-27. Further, measurements taken recently in 2022 indicate ambient levels are 25 dBA. The limit for Vera is incorrect and should have been set to 30 dBA, the FTA limit for an auditorium. Section 8.1.2 of Attachment N.3H states: “The FTA criteria for auditoriums were applied to the [Vera] recording spacer” The limit for SIFF is incorrect and should have been set to 35 dBA, the FTA limit for a theater. Section 8.1.3 of Attachment N.3H states: “The FTA criteria for theaters were applied to the [SIFF Jewelbox] theater” Further at SIFF, ambient noise levels measured in 2022 indicated baseline levels are 30 dBA, suggesting an ever lower groundborne noise limit may be appropriate for the SIFF Film Center. Regardless, correcting the limits for groundborne noise for Vera and SIFF would result in groundborne noise impact at both facilities. Impacts are Vera were already predicted, but the degree to which impacts may occur needs to be corrected and mitigation measures appropriately identified. Further, impacts would occur from both cutterhead and supply trains. In addition, the assessment of impact from thrust-jack retraction should be reevaluated based on corrected thresholds for these spaces. That is, not evaluating thrust-jack groundborne noise because it would be “more than 5 dB below the impact thresholds	Downtown
620	Technical Report: Noise and Vibration	6-67	Table 6-27	Seattle Center	Seattle Center	The analysis is incomplete. Several significant impacts have not been identified. WSBLE DEIS Appendix N.3, Table 6-25 (p. 6-65) and Table 6-27 (p. 6-67), summarize vibration and groundborne noise impacts from construction, respectively. There are multiple elements regarding the assessment of tunneling groundborne noise and vibration that are incomplete or warrant a more detailed assessment. Missing are discrepancy on groundborne noise limits. WSBLE DEIS Appendix N.3, Table 6-13 (p. 6-52) and Table 6-14 (p. 6-54) identify groundborne noise limits for light rail operation as follows: -Cornish: 35 dBA -The Rep Leo K Theater: 35 dBA -SIFF Film Center: 35 dBA -Vera Recording Booth: 30 dBA The limits identified for the same receivers in Table 6-27 are as follows: -Cornish: 35 dBA -The Rep Leo K Theater: 35 dBA -SIFF Film Center: 40 dBA -Vera Recording Booth: 40 dBA While the limits for Cornish and The Rep are the same under both operation and construction, the limits for SIFF and Vera are higher for construction than for operation. Section 6.4 p 6-63 states: “The vibration from tunneling muck and support trains are compared to the FTA criteria for operations because this can be a long-term activity” and “Category 1 and special-use buildings are evaluated using the FTA criteria for operations for all construction activities, because exceedances of those limits may interfere with operations inside the building”. The same criteria should be applied for both construction and operation. The DEIS assessment of groundborne noise from tunneling equipment is therefore considered incomplete because it does not apply correct limits consistent with FTA policy.	Downtown

621	Technical Report: Noise and Vibration	6-67	Table 6-27	Seattle Center	Seattle Center	The analysis is incomplete. There are errors in distances to receivers. WSBLE DEIS Appendix N.3, Table 6-25 (p. 6-65) and Table 6-27 (p. 6-67) include distances from receivers to tunnel centerlines that appear incorrect: -Table 6-25. Distance from KEXP to centerline at DT-1 listed at 11 feet. -Table 6-27. Distance from Vera and KEXP to centerline at DT-1 listed at 507 feet Although these errors may be simply typos, the analysis should be reviewed to ensure errors were not carried through calculations of impact. The DEIS assessment of groundborne noise from tunneling equipment is therefore considered incomplete because there are clear errors that need to be resolved.	Downtown
622	Technical Report: Noise and Vibration	6-67	Table 6-27	Seattle Center	Seattle Center	The analysis is incomplete. There are missing sensitive receivers. MoPOP, The Climate Pledge Arena, Memorial Stadium, and A/NT Air Gallery are considered potentially sensitive receivers to groundborne noise during tunneling operations and neither were included in the assessment of impacts. Climate Pledge Arena is approximately 175 to nearest DT-1 track, and approximately 225 feet to farther track. Further, the Climate Pledge Arena is below grade and would have a more direct linear path to the tunnelling equipment than surface-level buildings. MoPOP is approximately 150 feet to nearest track, approximately 200 feet to farther track. MoPOP host exhibits and performances that may be impacts by groundborne noise. Memorial stadium is located approximately 75 feet directly above the DT-1 alignment and could experience impacts from tunnel construction. AN/T Art Gallery is located approximately 115 feet from the DT-1 alignment and could be impacted from DT-1 tunnel construction. The DEIS assessment of groundborne noise from tunneling equipment is therefore considered incomplete because not all sensitive spaces within the Seattle Center have been included in the assessment.	Downtown
623	Technical Report: Noise and Vibration	6-70	Table 6-29	Seattle Center	Seattle Center	The analysis is incomplete. WSBLE DEIS Appendix N.3, Table 6-29, p. 6-70, identifies distances for impact to special use buildings. The minimum distance for least sensitive spaces (i.e., V.C.-A) is greater than would be realized at KEXP, Vera, SIFF, The Rep and Cornish for the equipment identified in this table. Section 6.4.2.2, p. 6-70 states that: “Surface construction vibration has not been assessed for Category 1 or special-use buildings neat tunnel alignments, However, vibration from surface construction may be of concern if these buildings are close to the tunnel portals or station construction. These activities should be assessed in the Construction Vibration Control Plan” Given the degree of impact that may occur from surface vibration during construction (see Table 6-29 and 6-30), a more detailed assessment of mitigation measures should have been included in the DEIS beyond requiring future assessments. The DEIS assessment of surface vibration from construction therefore considered incomplete because it does not adequately address the potential for high levels of impact at nearby facilities including KEXP, Vera, SIFF, The Rep, and Cornish.	Downtown
624	Technical Report: Noise and Vibration	6-52	Table 6-13	Seattle Center	Seattle Center	WSBLE DEIS Appendix N.3, Table 6-13 (p. 6-51) and 6-14 (p. 6-53) identifies vibration limits for sensitive receivers at Seattle Center during operation. The limits for the Rep are identified as 72 VdB based on FTA thresholds for “theaters”, as summarized in the DEIS Appendix N.3, Table 3-8 (p. 3-10). However, Seattle Center notes that the Leo K. Theater has a very low threshold for impact from vibration, akin to more stringent limits that would apply to concert halls (i.e., 65 VdB). Because the impact assessment is based on the potential for disruption of use, the vibration limit for The Rep should be corrected to more accurately represent sensitivities of this space that are germane to it use. Correcting to a more appropriate vibration limit at The Rep would results in impacts from DT1 during operation of DT-1. Therefore, the DEIS assessment of vibration from operation is considered incomplete and needs to be corrected and then re-evaluated, including additional considerations for mitigation.	Downtown

625	Technical Report: Noise and Vibration	6-52	Table 6-13	Seattle Center	Seattle Center	The groundborne noise limit for The Rep is incorrect and should have been set to 25 dBA, the FTA Special Buildings limit for a concert hall, and not based on the 35 dBA limit for a theater. Experience from The Rep during construction of the Climate Pledge Arena suggest the Leo K. Theater is highly sensitive to groundborne noise intrusion due to the low ambient noise levels. The DEIS measurements in Attachment N.3H Table 7-1 (p. 7-3) indicated ambient levels were 30 dBA, 5-dBA lower than what was applied in Tables 6-13 and 6-14. Further, measurements taken recently in 2022 indicate ambient levels are 25 dBA. At SIFF, ambient noise levels measured in 2022 indicated baseline levels are 30 dBA, suggesting an ever lower groundborne noise limit may be appropriate for the SIFF Film Center. Correcting to a more appropriate groundborne noise limit at The Rep and SIFF would results in a higher degree of impacts at The Rep and SIFF for DT-1. For DT-2, correcting the limit at The Rep would result in impacts to this space. Therefore, the DEIS assessment of groundborne noise from operation is considered incomplete and needs to be corrected and then re-evaluated, including additional considerations for mitigation.	Downtown
626	Technical Report: Noise and Vibration	6-51	Table 6-13	Seattle Center	Seattle Center	WSBLE DEIS Appendix N.3, Table 6-13 (p. 6-51) and 6-14 (p. 6-53) identify the train speeds that were assume in the calculations of groundborne noise and vibration. There are some inconsistencies or potentially errors or further clarifications required. For DT1, train speed through the Seattle Center campus is assumed to be 45 mph at all receivers except: -30 mph at The Rep Leo K and Vera -55 mph at KEXP For DT2, train speed through the Seattle Center campus is assumed to be 45 mph at all receivers except: -30 mph at KEXP DJ booth The DEIS assessment of groundborne noise and vibration from operation is considered incomplete and needs to be corrected or further detailed to ensure that calculations made to predict groundborne noise and vibration were based on appropriate train speeds.	Downtown
627	Technical Report: Noise and Vibration	6-51	Table 6-13	Seattle Center	Seattle Center	MoPOP, The Climate Pledge Arena, Memorial Stadium, and A/NT Air Gallery are considered potentially sensitive receivers to groundborne noise during tunneling operations and neither were included in the assessment of impacts. Climate Pledge Arena is approximately 175 to nearest DT-1 track, and approximately 225 feet to farther track. Further, the Climate Pledge Arena is below grade and would have a more direct linear path to the DT-1 rail line. MoPOP is approximately 150 feet to nearest track, approximately 200 feet to farther track. MoPOP host exhibits and performances that may be impacts by groundborne noise from rail operation. Memorial stadium is located approximately 75 feet directly above the DT-1 alignment and could experience impacts from operation. AN/T Art Gallery is located approximately 115 feet from the DT-1 alignment and could be impacted from DT-1 operation. The DEIS assessment of groundborne noise from operation therefore considered incomplete because not all sensitive spaces within the Seattle Center have been included in the assessment.	Downtown
628	Technical Report: Noise and Vibration	7-16	7.2	Seattle Center	Seattle Center	Mitigation measure(s) for identified impacts are missing from the DEIS. WSBLE DEIS Appendix N.3, Section 7.2 (p. 7-16) identifies standard mitigation measures for construction noise. Not included in the list of mitigation measures are: -Tunnel ventilation fans: potential options include silences, barriers, or other measures -Material haul truck: haul trucks routes require a detailed assessment to determine if mitigation is warranted	Downtown
629	Technical Report: Noise and Vibration	7-31	7.4.1	Seattle Center	Seattle Center	Mitigation measure(s) for identified impacts are missing from the DEIS. WSBLE DEIS Appendix N.3, Section 7.4.1 (p. 7-31) identifies surface vibration mitigation measures including pre-construction surveys, construction timing, equipment location, continuous monitoring, and alternative construction methods. These measures should be very clearly detailed and updated once a more detailed assessment of surface vibration measures is completed. Given the high level of potential surface vibration impact that could occur, mitigation of surface vibration will be of paramount importance for organizations at Seattle Center.	Downtown

630	Technical Report: Noise and Vibration	7-32	7.4.2	Seattle Center	Seattle Center	Mitigation measure(s) for identified impacts are missing from the DEIS. WSBLE DEIS Appendix N.3, Section 7.4.2 (p. 7-32) identifies tunneling vibration mitigation measures to reduce the potential for vibration and groundborne noise impact during tunneling. Efforts are focused on mitigating supply train vibration, including reduced supply tarin speeds, smooth running surfaces, reduce gaps between rail sections, adding rubber pad between ties, and using rubber tire supply trains. Given the high level of impact that may occur due to the supply train, a more thorough assessment migration measures should be evaluated. Thrust-jack mitigation may also be warranted (i.e., slower retraction) once a more detailed assessment of the potential for impact from this activity is completed. Further, The Construction Vibration Management Plan should be prepared to consider scheduling tunneling activities that avoid impact to nearby facilities including KEXP, Vera, SIFF, The Rep, Cornish, and possibly additional facilities such as MoPOP or Climate Pledge Arena. The mitigation section for tunneling does not address additional items such as the expanded tunnel area under the Northwest Rooms that could result in impact to KEXP, Vera, and SIFF. This DEIS should include detailed assessment of potential mitigation options that are specific to this location as it is unique in nature and has several sensitive uses that operate during all hours.	Downtown
631	Technical Report: Noise and Vibration	7-27	7.3.2.2	Seattle Center	Seattle Center	WSBLE DEIS Appendix N.3, Section 7.3.2.2 (p. 7-27) identifies DT1 operational groundborne noise and vibration mitigation measures to mitigate impacts at “recording studios and performances spaces in Seattle Center” (Section 7.3.2.2., p.7-26). Included are: -DT-1: High Resilience Fasteners along a limited stretch of 900 feet of track Impacts are predicted at KEXP, Rep, Vera, and SIFF, up to 13 dBA per Table 6-13 (p. 6-52). If using corrected thresholds, impacts could reach 23 dBA over limits. Mitigation using high resilience fasteners is insufficient. Assessment should consider additional or alternative measures such as floating slabs and thicker concrete under the track. The following figure provides an illustration of the approximate extent of operational groundborne noise and vibration mitigation for DT-1 (high resilience fasteners). This location could be expanded if needed, and could include more effective means of mitigation such as floating slabs or thicker concrete under the tracks.  For DT2, operational vibration Impacts are not predicted in the DEIS (see Table 6-14) and no mitigation is proposed through the Seattle Center. However if the groundborne noise limit for The Rep is corrected to 25 dBA, impacts may occur. And therefore, an assessment of mitigation measures would be warranted such as through use of high resilience fasteners.	Downtown
632	Utilities	4.3.15-5	4.3.15.4.4	Donna Golden	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. Missing is that DT-1 would conflict with utilities provided by Seattle Center Utility Plant to Seattle Repertory Theatre, Cornish Playhouse, SIFF, The VERA Project and KEXP. It would also affect fiber optic telecommunications, combined sewer, and water.	Downtown
633	Utilities	4.3.15-2	4.3.15.3	Jae Lee	Seattle Center	Seattle Center's sewer, water main, and chilled water/steam lines may need to be relocated prior to the construction. Mitigation for campus impacts could include working with the City to upgrade the Seattle Center Central Utility Plant to electricity, in line with the Mayor's city-wide electrification initiative.	Downtown
634	Utilities	4.3.15-1	Table 4.3.15-1	Jae Lee	Seattle Center	Seattle Center has its own central utility plant and utilities on the campus (sewer, water main and chill/steam lines), managed separately from SPU. Seattle Center can provide documentation of those systems to Sound Transit for study if information is needed.	Downtown
635	Utilities	4.3.15-2	4.3.15.3	Jae Lee	Seattle Center	DT1 would require relocation of existing Seattle Center utilities. Please also confirm whether enabling work for DT-1 Seattle Center station will impact the Seattle Center campus.	Downtown
636	Visual and Aesthetics	4.3.5-4	4.3.5.3.2	Gretchen Lenihan	Seattle Center	Station entry and tunnel vents as shown for DT-1 would block views and aesthetics between Seattle Center campus and Seattle Rep lobby spaces that were designed with views in mind.	Downtown
637	Water Resources	4.3.8-5 & 4.3.8-6	4.3.8.3 & 4.3.8.3.4	Donna Golden	Seattle Center	Due to glacial till in the area, there are concerns that cut-and-cover sites as well as new structures would change the subsurface groundwater flow as well as perched groundwater causing unanticipated subsidence at the fill areas.	Downtown

638	Water Resources	4.3.8-5 & 4.3.8-6	4.3.8.3 & 4.3.8.3.4	Donna Golden	Seattle Center	Description of impacts and mitigation are missing information. Missing information includes: Because the project will increase impervious surface areas, there will be opportunities to incorporate bioswales and pervious pavements in the station design to maintain some of the groundwater infiltration and reduce the installation of pollutant-generating surfaces. This would also assist in stormwater management without the use of flow control boxes or detention type systems, and be consistent with the sustainability principle of the Seattle Center Master Plan.	Downtown
639	CH 3 Transportation	3-109	3.15.3.1	Gretchen Lenihan	Seattle Center	If DT-2 option for Seattle Center station is pursued, mitigation for surge crowds and access to Seattle Center station could be accomplished by Sound Transit coordinating with Seattle Center and Seattle Rep to provide improvements to Warren Ave N, with careful thought and attention paid to the opportunity to redevelop the NW corner of the campus to create a more open plaza and welcoming environment at the northwest corner of campus. DT-2 east station entry is significantly more compatible with Seattle Center events and activity than the east entry for DT-1. If DT-1 tunnel alignment is selected, it would be very functional if the DT-1 line could be paired with the DT-2 Seattle Center east station entry location via underground tunnel.	Downtown
640	Parks and Recreational Resources	4.2.17-1	4.2.17.1	David Graves	SPR	There are six (6) trails, not five, in the West Seattle Link Extension study area. The Longfellow Creek Legacy Trail should be included with the other five trails listed.	West Seattle (DUW, DEL, WSJ)
641	Parks and Recreational Resources	4.2.17-21	4.2.17.6	David Graves	SPR	Junction Plaza Park was acquired with a King County Conservation Futures grant, mitigation would need to be replacement property in the West Seattle Junction, not just a cash payment.	West Seattle (DUW, DEL, WSJ)
642	Parks and Recreational Resources	4.2.18-1	4.2.18.1	David Graves	SPR	There are six (6) trails, not five, in the West Seattle Link Extension study area. The Longfellow Creek Legacy Trail should be included with the other five trails listed. The Legacy Trail is used for recreation and should be identified as a recreational resource.	West Seattle (DUW, DEL, WSJ)
643	Parks and Recreational Resources	4.3.14-16	4.3.14.4.5	David Graves	SPR	The Seattle Parks and Recreation Department West Central Maintenance Warehouse would also be displaced by Alternative SIB-3 and require relocation within the surrounding area. This facility is also critical to maintenance of the Central Waterfront as that facility comes on line. To avoid disruption of park maintenance, and park maintenance staff during construction, temporary or permanent relocation should be in place before construction starts in this area if Alt SIB-3 (permanent) or SIB-2 (temporary) are selected.	Interbay-Ballard
644	Parks and Recreational Resources	4.3.14-17	4.3.14.6	David Graves	SPR	Mitigation should be explicitly stated/listed for impacts to Seattle Parks and Recreation's West Central Maintenance Warehouse from Alternative SIB-2 and/or SIB-3 in this section.	Interbay-Ballard
645	Parks and Recreational Resources	4.3.17-6	4.3.17.1.2	David Graves	SPR	Hing Hay Park is comprised of two parcels plus an alley totaling approximately 0.7 acres	SODO/CID
646	Appendix H - Section4(f) Evaluation	(2-12)	2.3.1.3	David Graves	SPR	SPR does not support option DEL-2a due to the permanent significant impacts of the tunnel portal on the West Seattle Golf course.	West Seattle (DUW, DEL, WSJ)
647	Appendix H - Section4(f) Evaluation	(2-12)	2.3.1.3	David Graves	SPR	SPR does not support option DEL-4 due to the permanent significant impacts of the tunnel portal on the West Seattle Golf course.	West Seattle (DUW, DEL, WSJ)
648	Appendix H - Section4(f) Evaluation	(2-15)	2.3.1.4	David Graves	SPR	SPR does not support option WSJ-3b due to the permanent loss of Junction Plaza Park associated with the construction of the Alaska Junction Station. Junction Plaza Park has been designed to provide both a destination and pass-through park in the junction of the traditional business and the growing mixed use area to the east. The park has also been designed as a resource for the community to be used for Junction Association festivals like the West Seattle Festival and intermittent programs.	West Seattle (DUW, DEL, WSJ)
649	Appendix H - Section4(f) Evaluation	(3-1)	3.1	David Graves	SPR	There are six (6) trails, not five, in the West Seattle Link Extension study area. The Longfellow Creek Legacy Trail should be included with the other five trails listed. The Legacy Trail is used for recreation and should be identified as a recreational resource.	West Seattle (DUW, DEL, WSJ)
650	Appendix H - Section4(f) Evaluation	Figure 3-1g		David Graves	SPR	Junction Plaza Park is not identified on the figure as a public park.	West Seattle (DUW, DEL, WSJ)
651	Appendix H - Section4(f) Evaluation	Figure 3-1h		David Graves	SPR	Junction Plaza Park is not identified on the figure as a public park.	West Seattle (DUW, DEL, WSJ)
652	Appendix H - Section4(f) Evaluation	(3-19)	3.2.2.1	David Graves	SPR	The value of the West Duwamish Greenbelt lies in the mature trees and forested nature of the park around Pidgeon Point. Permanent loss of mature trees and the inability to replant the trees completely takes the value of this area and it will be effectively converted to a transportation use. SPR does not concur with the de minimis determination. If this area was acquired with a King County Conservation Futures grant or a grant from RCO, mitigation would need to be replacement property in the area, not just a cash payment.	West Seattle (DUW, DEL, WSJ)
653	Appendix H - Section4(f) Evaluation	(3-21)	3.2.2.1	David Graves	SPR	The value of the West Duwamish Greenbelt lies in the mature trees and forested nature of the park around Pidgeon Point. Permanent loss of mature trees and the inability to replant the trees completely takes the value of this area and it will be effectively converted to a transportation use. SPR does not concur with the de minimis determination.	West Seattle (DUW, DEL, WSJ)
654	Appendix H - Section4(f) Evaluation	(3-35)	3.2.3.1	David Graves	SPR	The elevated tracks at the north end of the golf course could be at risk from hit golf balls, depending on the option chosen. Once a preferred option is selected, additional study is necessary to determine the potential for golf balls to hit the trains or train tracks and appropriate measures incorporated into the project design to address this potential.	West Seattle (DUW, DEL, WSJ)
655	Appendix H - Section4(f) Evaluation	(3-35)	3.2.3.1	David Graves	SPR	Golf revenues at West Seattle Golf Course are driven by players and number of tee times available - Loss of playing time during construction will have a direct impact on golf revenues and will need to be addressed with appropriate mitigation.	West Seattle (DUW, DEL, WSJ)
656	Appendix H - Section4(f) Evaluation	(3-51)	Table 3-8	David Graves	SPR	SPR does not agree with the de minimis determination of the impacts to the West Duwamish Greenbelt	West Seattle (DUW, DEL, WSJ)
657	Appendix H - Section4(f) Evaluation	Figure 4-1c	Figure 4-1c	David Graves	SPR	The west half of Hing Hay Park is not identified as a park.	SODO/CID
658	Appendix H - Section4(f) Evaluation	(4-15)	Table 4-2	David Graves	SPR	Hing Hay Park is comprised of two parcels plus an alley totaling approximately 0.7 acres	SODO/CID
659	Appendix H - Section4(f) Evaluation	(4-38)	4.2.3.1	David Graves	SPR	Portion(s) of Freeway Park were improved with a grant from RCO, If those areas of the park are impacted, mitigation would need to be replacement property in the area, not just a cash payment.	Downtown

660	Appendix H - Section4(f) Evaluation	(4-49)	4.2.4.1	David Graves	SPR	If area(s) within Kinnear Park were acquired with a King County Conservation Futures grant or improved with a grant from RCO, mitigation would need to be replacement property in the area, not just a cash payment and the covenant added to the new property.	Interbay-Ballard
661	Appendix H - Section4(f) Evaluation	(4-54)	4.2.4.1	David Graves	SPR	The elevated tracks along the west side of the golf course could be at risk from hit golf balls, depending on the option chosen. Once a preferred option is selected, additional study is necessary to determine the potential for golf balls to hit the trains or train tracks and appropriate measures incorporated into the project design to address this potential.	Interbay-Ballard
662	Appendix H - Section4(f) Evaluation	(4-54)	4.2.4.1	David Graves	SPR	Will the trains running along the west edge of the golf course cause noise and/or vibrations of the existing net and net poles that would adversely impact the experience of playing golf at the Interbay Golf Course?	Interbay-Ballard
663	Appendix H - Section4(f) Evaluation	(4-54)	4.2.4.1	David Graves	SPR	Golf revenues at Interbay Golf are driven by players and number of tee times available - Loss of playing time during construction will have a direct impact on golf revenues and will need to be addressed with appropriate mitigation.	Interbay-Ballard
664	Appendix H - Section4(f) Evaluation	Figure 4-6	Figure 4-6	David Graves	SPR	If area(s) within the Southwest Queen Anne Greenbelt were acquired with a King County Conservation Futures grant or a grant from RCO, mitigation would need to be replacement property in the area, not just a cash payment and the covenant added to the new property.	Interbay-Ballard
665	Appendix H - Section4(f) Evaluation	Attachment H.1	Table H.1-2	David Graves	SPR	Hing Hay Park is comprised of two parcels plus an alley totaling approximately 0.7 acres	SODO/CID
666	Appendix H - Section4(f) Evaluation			David Graves	SPR	Part of the mitigation for impacts to park resources should be the reimbursement of Seattle Parks and Recreation staff time associated with any real estate transactions and legislation required as part of any mitigation package.	All (Systemwide)
667	Utilities	4.2.15-5	4.2.15.6	PATTERSON	SPU	Disagree that "no impacts on major utilities are expected…and no mitigation would be needed."	All (Systemwide)
668	Utilities	4.3.8-5	4.3.8.3.1	PATTERSON	SPU	Footnote 1: when will the study be completed considering the final design is to begin in 2023?	All (Systemwide)
669	Utilities	4.2.8-6	4.2.8.3.1	PATTERSON	SPU	Footnote 1: when will the study be completed considering the final design is to begin in 2023?	All (Systemwide)
670	Utilities	4.2.8-6	4.2.8.3.1	PATTERSON	SPU	Statement that guideways are non-pollution-generating is incorrect. The Washington State Department of Ecology (Ecology) has judged them to be pollution-generating surfaces pending results of the study referenced in Footnote 1. The default at this point is that they are pollution-generating and that should be stated clearly in the text. Sound Transit must comply with the City's Stormwater Code (SMC 22.800-22.808) based upon the most current determination by Ecology.	All (Systemwide)
671	Utilities	4.3.8-5	4.3.8.3.1	PATTERSON	SPU	Statement that guideways are non-pollution-generating is incorrect. The Washington State Department of Ecology (Ecology) has judged them to be pollution-generating surfaces pending results of the study referenced in Footnote 1. The default at this point is that they are pollution-generating and that should be stated clearly in the text. Sound Transit must comply with the City's Stormwater Code (SMC 22.800-22.808) based upon the most current determination by Ecology.	All (Systemwide)
672	Ch 2 Alternatives Considered	2-14	2.1.1.3.7	PATTERSON	SPU	Department of Ecology considers light rail as pollution generating and the design needs to account for water quality treatment of guideway runoff.	All (Systemwide)
673	Ch 2 Alternatives Considered	2-88	2.6.6	PATTERSON	SPU	SPU prefers in-tunnel ground treatment instead of at the ground surface for soil freeze technique. At surface too disruptive and high risk for utility movement and subsequent damage due to soil heave.	All (Systemwide)
674	Ch 2 Alternatives Considered	2-85	2.6.2	PATTERSON	SPU	Note that temporary disruptions of utility services to customers is an impact of utility relocation	All (Systemwide)
675	Ch 2 Alternatives Considered	2-88	2.6.6	PATTERSON	SPU	Provide more discussion of why stabilizing the ground is necessary - potential for damage to utilities and other structures.	All (Systemwide)
676	Ch 2 Alternatives Considered	2-85	2.6.2	PATTERSON	SPU	Provide discussion of potential ground movement resulting from dewatering and effective mitigation methods that may be employed.	All (Systemwide)
677	Utilities	4.2.15-3	4.2.15.4.1	PATTERSON	SPU	"Sound Transit did not evaluate or inventory impacts to minor utilities but will evaluate and inventory them as the project design progresses from preliminary to final design." The document should note that extensive impacts to "minor utilities" may be expected.	All (Systemwide)
678	Utilities	4.3.15-6	4.3.15.6	PATTERSON	SPU	Disagree with statement of "no impacts on major utilities". Example - 14th Ave NW has a major storm drain that may be impacted. Example - all alternatives impact large combined sewer in Royal Brougham Way S during construction.	All (Systemwide)
679	Ecosystems	Various	4.2.9. Ecosystems	ANTIEAU	SPU	This section contains various statements regarding tree removals . These statements refer to a tree diameter threshold of 6 inches; for example: "Removing street trees with trunks larger than 6 inches in diameter during maintenance activities would require coordination with the City of Seattle." These statements are imprecise and misleading. There is no diameter threshold for the removal of street trees. ("Street trees" are located only in street rights-of-way.) Further, it appears these statements do not successfully capture the intended concept. All tree removals would be reviewed by the City of Seattle if those removals occur in street rights-of-way ("street trees") and in environmentally critical areas (ECAs) on non-right-of-way parcels. Depending on the specific trees to be removed, the City may also review proposed tree removals outside of ECAs on non-right-of-way parcels. For trees to be removed in street rights-of-way and in ECAs, the City requires mitigation in the form of tree replacement. For tree removal ins ECAs, the City requires evidence the applicant has undertaken mitigation sequencing and is providing mitigation that achieves replacement of lost ecological function.	West Seattle (DUW, DEL, WSJ)
680	Water Resources	4.2.8-1	4.2.8.1	ANTIEAU	SPU	Statement "...West Seattle Greenbelt, a vegetated slope….." is imprecise and misleading. Statement should more specifically highlight the importance of this feature: " …West Seattle Greenbelt, the City of Seattle's largest contiguous forest…"	West Seattle (DUW, DEL, WSJ)

681	Water Resources	4.2.8-4	4.2.8.1.4 Floodplains	ANTIEAU	SPU	Subsidence, previous pavement repairs, and cracked pavement suggest Genesee Dam is in poor condition and perhaps in a structural failure mode. The DEIS should acknowledge this evidence and potentiality and disclose impacts related to Sound Transit's possible repair, replacement, or removal of the dam as may be required for construction and operation of the project. SDOT's SW Genesee Street Detention Dam is regulated by the Washington State Department of Ecology (Dam #KI9-380) and was completed in 1974.	West Seattle (DUW, DEL, WSJ)
682	Ecosystems	4.2.9-4	4.2.9.1.1 Aquatic Species and Habitat	ANTIEAU	SPU	Paragraph 4: The statement "The City regulates development in or over the creek." is imprecise and misleading. Per SMC 25.09, the City regulates all development activity in the Riparian Corridor, which includes the riparian watercourse and an associated riparian management area (100 feet of the ordinary high water mark on either side of the riparian watercourse).	West Seattle (DUW, DEL, WSJ)
683	Geology and Soils	4.2.11-1	4.2.11 Geology and Soils	ANTIEAU	SPU	Section is silent on stability of Genesee Dam and the proposal's potential impacts and mitigation. Subsidence, previous pavement repairs, and cracked pavement suggest Genesee Dam is in poor condition and perhaps in a structural failure mode. The DEIS should acknowledge this evidence and potentiality and disclose impacts related to Sound Transit's possible repair, replacement, or removal of the dam as may be required for construction and operation of the project. SDOT's SW Genesee Street Detention Dam is regulated by the Washington State Department of Ecology (Dam #KI9-380) and was completed in 1974.	West Seattle (DUW, DEL, WSJ)
684	Water Resources	4.3.8-4	4.3.8.1.2 Shorelines	ANTIEAU	SPU	This section lacks context for most readers. Should be revised to be more similar to Section 4.2.8.1.2 and see previous ANTIEAU Comment above.	Interbay-Ballard
685	Ecosystems	4.3.9-8	4.3.9.3.4	ANTIEAU	SPU	The referenced 200-foot zone is the Shoreline Management District, not a buffer. See previous ANTIEAU Comment.	Interbay-Ballard
686	Ecosystems	4.3.9-9	4.3.9.4.1	ANTIEAU	SPU	This subsection 4.3.9 .4.1 contains this statement regarding tree removals: "Removing street trees with trunks larger than 6 inches in diameter or any...." The statement is imprecise and misleading. There is no diameter threshold for the removal of street trees. ("Street trees" are located only in street rights-of-way.) Further, it appears these statements do not successfully capture the intended concept. All tree removals would be reviewed by the City of Seattle if those removals occur in street rights-of-way ("street trees") and in environmentally critical areas (ECAs) on non-right-of-way parcels. Depending on the specific trees to be removed, the City may also review proposed tree removals outside of ECAs on non-right-of-way parcels. For trees to be removed in street rights-of-way and in ECAs, the City requires mitigation in the form of tree replacement. For tree removal ins ECAs, the City requires evidence the applicant has undertaken mitigation sequencing and is providing mitigation that achieves replacement of lost ecological function.	Interbay-Ballard
687	Utilities	Page 4.2.15-4	4.2.15.4.2 SODO Segment	Eugene Mantchev	SPU	If part of 6th Ave S is rebuilt, the existing water line must be replaced, protection in place is not feasible for a full street rebuild in the poor soils of SODO.	SODO/CID
688	Utilities	Page 4.2.15-5	4.2.15.6 Mitigation Measures	Eugene Mantchev	SPU	Please explain the intent of the statement "Through pre-construction measures and coordination with utility providers, no impacts on major utilities are expected during construction of the West Seattle Link Extension and no mitigation would be needed. " and possibly rephrase to make it clearer.	All (Systemwide)
689	Water Resources	4.2.8-6	Water Quality	Reed Blanchard	SPU	Second Paragraph: City of Seattle Drainage Code defines guideways as pollution generating surface and the evaluations, discussion, summaries and design must reflect this..	All (Systemwide)
690	Water Resources	4.2.8-6	Water Quality	Reed Blanchard	SPU	Third Paragraph: Note, there are no CSO basins within the project vicinity that have capacity to receive additional flow.	West Seattle (DUW, DEL, WSJ)
691	Water Resources	4.2.8-9	Water Quality	Reed Blanchard	SPU	Note that Longfellow Creek is also Piped Creek Basin and will require flow control along with water quality.	West Seattle (DUW, DEL, WSJ)
692	Public Services, Safety and Security	4.2.7-21	4.2.7.6.1	Rich Richardson	SFD	Noise impacts during construction will have to be fully mitigated within fire stations from 10 P.M. to 7 A.M., the designated sleeping hours for firefighters.	All (Systemwide)
693	Public Services, Safety and Security	4.2.7-23	4.2.7.6.2	Rich Richardson	SFD	Vibration impacts during construction will have to be fully mitigated within fire stations from 10 P.M. to 7 A.M., the designated sleeping hours for firefighters.	All (Systemwide)
694	Public Services, Safety and Security	4.2.14-10	4.2.14.4.1	Rich Richardson	SFD	During construction and when complete, emergency vehicle access is required for all existing buildings, construction sites, and for travel through/around construction sites. Restrictions to access must be coordinated with Seattle Fire Department	All (Systemwide)
695	Public Services, Safety and Security	4.3.7-17	4.3.7.4.1	Rich Richardson	SFD	Noise impacts during construction will have to be fully mitigated within fire stations from 10 P.M. to 7 A.M., the designated sleeping hours for firefighters.	All (Systemwide)
696	Public Services, Safety and Security	4.3.7-23	4.3.7.4.1	Rich Richardson	SFD	Vibration impacts during construction will have to be fully mitigated within fire stations from 10 P.M. to 7 A.M., the designated sleeping hours for firefighters.	All (Systemwide)
697	Public Services, Safety and Security	4.3.14-4	4.3.14.4.1	Rich Richardson	SFD	During construction and when complete, emergency vehicle access is required for all existing buildings, construction sites, and for travel through/around construction sites. Restrictions to access must be coordinated with Seattle Fire Department	
698	Public Services, Safety and Security	4.3.14-16	4.3.14.4.5	Rich Richardson	SFD	Construction impacts affecting response times from Fire Station 20 and Station 18 shall be coordinated with Seattle Fire Department	
699	Public Services, Safety and Security	4.3.14-17	4.3.14.4.5	Rich Richardson	SFD	Construction impacts affecting response times from Fire Station 3 shall be coordinated with Seattle Fire Department	
700	Public Services, Safety and Security	3.0-23	3.5.3.1.1	Rich Richardson	SFD	During construction and when complete, emergency vehicle access is required for all existing buildings, construction sites, and for travel through/around construction sites. Restrictions to access must be coordinated with Seattle Fire Department	
701	Public Services, Safety and Security	3.0-51	3.13.3.1	Rich Richardson	SFD	During construction and when complete, emergency vehicle access is required for all existing buildings, construction sites, and for travel through/around construction sites. Restrictions to access must be coordinated with Seattle Fire Department	

702	Public Services, Safety and Security	3.0-127	3.19.1.1.2	Rich Richardson	SFD	During construction and when complete, emergency vehicle access is required for all existing buildings, construction sites, and for travel through/around construction sites. Restrictions to access must be coordinated with Seattle Fire Department	
703	Public Services, Safety and Security	4.2.1-5	4.2.1.3.2	Rich Richardson	SFD	Any negative impact to Fire Stations 36 or 14 shall be coordinated with Seattle Fire Department	
704	Ch 4 Affected Enviornment and Environmental Consequences	4.1-9	4.1.16, and Various locations throughout Chapter 4	Sarah Sodt	DON	References to local codes are missing related to implementation of the City's Historic Preservation regulations - specifically the references to when a Certificate of Approval (SMC 25.12 and SMC 23.66) is required for alterations within historic districts (demolition, construction of stations, venting structures, head houses etc.) or to individual landmarks. Additionally the regulations regarding referral to the Landmarks Preservation Board of nominations for potentially eligible resources that are proposed for demolition or substantial alteration is not address (SMC 25.05.675H2c and SMC 25.12). Therefore, the potential conflict with local controls cannot be determined.	All (Systemwide)
705	Ch 4 Affected Enviornment and Environmental Consequences	4.2.16-6	4.2.16.3.1	Sarah Sodt	DON	The information necessary to identify impacts and compare alternatives is missing. Missing is the definition of what is meant by "directly modified" in the context of potential changes requiring a Certificate of Approval for individual landmarks/historic districts.	All (Systemwide)
706	Ch 4 Affected Enviornment and Environmental Consequences	4.3.16-6	4.3.16.3.1	Sarah Sodt	DON	The information necessary to identify impacts and compare alternatives is missing. Missing is the definition of what is meant by "directly modified" in the context of potential changes requiring a Certificate of Approval for individual landmarks/historic districts.	All (Systemwide)
707	Ch 4 Affected Enviornment and Environmental Consequences	4.3.18-8	4.3.18.4.2	Sarah Sodt	DON	The information necessary to identify impacts and compare alternatives is missing. Missing is the definition of what is meant by "directly modified" in the context of potential changes requiring a Certificate of Approval for individual landmarks/historic districts.	All (Systemwide)
708	Ch 4 Affected Enviornment and Environmental Consequences	4.3.18-9	4.3.18.4.2	Sarah Sodt	DON	The information and methodology in the Least Harm Analysis does not capture complete construction and permanent impacts of the project including: impacts of demolition, detour routes, staging areas, venting, head houses and other visual and aesthetic impacts etc. Missing in the evaluation are analyses of some of these impacts, particularly with regard to ancillary structures associated with the stations as well as detour routes and staging areas. The City of Seattle uses the Certificate of Approval process and procedures associated with SMC 25.05.675H to evaluate impacts.	All (Systemwide)
709	Technical Report: Historic and Archaeological Resources	2.2- 2.3	2.3	Sarah Sodt	DON	References to local codes are missing related to implementation of the City's Historic Preservation regulations - specifically the references to when a Certificate of Approval (SMC 25.12 and SMC 23.66) is required for alterations within historic districts (demolition, construction of stations, venting structures, head houses etc.) or to individual landmarks. Additionally the regulations regarding referral to the Landmarks Preservation Board of nominations for potentially eligible resources that are proposed for demolition or substantial alteration is not address (SMC 25.05.675H2c and SMC 25.12). Therefore, the potential conflict with local controls cannot be determined.	All (Systemwide)
710	Historic and Archaeological Resources	232	Table 4.3.16-5	Erin Doherty	DON	Seattle Center's International Commerce & Industry Building (Northwest Rooms) ID 1396a is identified as "adversely affected" both during construction and permanently due to proximity of DT-1 "Preferred Alternative". The remainder of this Seattle Landmark includes the International Plaza (Northwest Rooms Plaza) ID 1396c, and the Sweden Pavilion (International Fountain Pavilion) ID 1396d. These resources should be collectively identified as "adversely affected".	Downtown
711	Historic and Archaeological Resources	232	Table 4.3.16-5	Erin Doherty	DON	Portions of the Key Arena (Climate Pledge Arena) ID 1396b structure and program reside beneath or directly adjacent to the International Plaza (Northwest Rooms Plaza) ID 1396c which may be adversely impacted by DT-1 "Preferred Alternative" and should be analyzed further.	Downtown
712	Historic and Archaeological Resources	205	Table 4.3.16-1	Erin Doherty	DON	Identifies the number of designated Seattle Landmarks within the Ballard APE, but does not illustrate how many are impacted by DT-1 vs. DT-2. This type of comparison is done for properties listed on the National Register of Historic Places, and should be done for Seattle Landmarks related to both the Ballard and West Seattle APEs, by segment.	All (Systemwide)
713	Ch 5 Cumulative Impacts		5.2.2	Erin Doherty	DON	This section describes the historic significance of Ballard in terms Nordic and maritime heritage, and does not represent an inclusive history. The historic significance of Native Peoples to this area is missing.	Interbay-Ballard
714	Technical Report: Historic and Archaeological Resources	37	2.3	Erin Doherty	DON	This section outlines regulatory requirements. Although it discusses the Landmarks process and SEPA adjacency review, it is missing a reference to the SEPA referral process for individual buildings per SMC 25.05.800, Tables A & B for Footnote (1) for 25.05.800.B.6 and 25.05.800.B.7.	All (Systemwide)
715	Technical Report: Historic and Archaeological Resources		3.2	Erin Doherty	DON	The Area of Potential Effect boundary should encompass the entire Seattle Center campus, as there may be more adverse impacts than those related to a 200' dimension. In addition, include all of the Seattle Center information collected and assessed to inform the determination of eligibility for a potential district.	Downtown
716	Technical Report: Historic and Archaeological Resources		5.1	Erin Doherty	DON	Additional records should include King County property records / title searches.	All (Systemwide)
717	Technical Report: Historic and Archaeological Resources	53	5.2.2	Erin Doherty	DON	Note that building dates on King County Tax records may not be accurate and need to be verified through additional sources.	All (Systemwide)
718	Technical Report: Historic and Archaeological Resources	146	9.9	Erin Doherty	DON	Paramount Theatre should be identified as a City of Seattle Landmark.	Downtown

719	Technical Report: Historic and Archaeological Resources	228	10.5.2.4	Erin Doherty	DON	This section notes the proposed removal of the “north façade canopy” for the International Commerce & Industry Building (Northwest Rooms) ID 1396a. Provide clarification of the “canopy”. This building has a character defining, 4’ deep roof overhang on all sides of the building, that is not a canopy. It appears to be comprised of the extended top chord of each roof truss, which supports the building’s roof deck. If this what is being described as a canopy, revise to reflect removal of roof overhang and alteration of roof trusses. Provide a description of the other proposed alterations to building systems/utilities, circulation, etc. on the north side of the building, both short and long term as a result of DT-1 “Preferred Alternative”.	Downtown
720	Technical Report: Historic and Archaeological Resources	228	10.5.2.4	Erin Doherty	DON	The identification of potential adverse effects on the Seattle Center’s International Commerce & Industry Building (Northwest Rooms) ID 1396a / International Plaza (Northwest Rooms Plaza) ID 1396c / Sweden Pavilion (International Fountain Pavilion) ID 1396d as a result of DT-1 “Preferred Alternative” is incomplete. Missing information includes construction methods for open cut directly adjacent to and beneath this Seattle Landmark with direct physical/proximity impacts, and additional potential adverse structural impacts due to vibration, settlement and water table (as demonstrated by recent Arena expansion project), both in the short and long term. As shown in the drawings, the immediate adjacency of the multi-storied open cut will impact the structural foundation of the building. There is no description of the methodology to protect and support the Seattle Landmark during construction, even though the proposed station would be less than 3’ from the building face. Provide a construction feasibility study so that the actual effects can be assessed.	Downtown
721	Technical Report: Historic and Archaeological Resources	261	11	Erin Doherty	DON	Due to the cumulative impacts on this Seattle Landmark, identify measures to avoid adverse effects on the Seattle Center International Commerce & Industry Building (Northwest Rooms) ID 1396a, International Plaza (Northwest Rooms Plaza) ID 1396c, and the Sweden Pavilion (International Fountain Pavilion) ID 1396d.	Downtown
722	Appendix J - Conceptual Design Drawings	86		Erin Doherty	DON	Page 86 / Sheet 193 – Site plan shows building Section C cut through the end of the Seattle Center’s International Commerce & Industry Building (Northwest Rooms) ID 1396a and the Sweden Pavilion (International Fountain Pavilion) ID 1396d. Section C on Page 88 / Sheet 195 does not show Sweden Pavilion.	Downtown
723	Historic and Archaeological Resources	229	Table 4.3.16-5	Erin Doherty	DON	Seattle Center’s Historic Playhouse ID 359a may be adversely impacted by DT-1 “Preferred Alternative” and should be analyzed further as there are no drawings illustrating the adjacent construction and means and methods.	Downtown
724	Technical Report: Historic and Archaeological Resources	228	Section 10.5.2.4	Erin Doherty	DON	The identification of potential adverse effects on Seattle Center’s Historic Playhouse ID 359a as a result of DT-1 “Preferred Alternative” is incomplete. There is no information about the open cut construction and means and methods that will be directly adjacent to this historic building. Provide a construction feasibility study so that the actual effects can be assessed.	Downtown
725	Appendix J - Conceptual Design Drawings	86		Erin Doherty	DON	Page 86 / Sheet 193 –Site plan shows conceptual building sections through portions of the proposed construction but does not address the historic Playhouse. Provide an east/west section that illustrates the relationship of the head house and below-grade construction to the Playhouse on the east, and the Repertory Theatre to the west.	Downtown
726	Technical Report: Historic and Archaeological Resources	66 of Attachment N.5A	Table N.5A.1	Erin Doherty	DON	The International Fountain is not a Seattle Landmark. The International Fountain Pavilion is a Seattle Landmark, and you are referring to this resource as the Sweden Pavilion.	Downtown
727	Executive Summary	ES44	6	Genna Nashem	DON	The vent and egress structure built in the plaza of the Union Station has been a controversial issue in prior meeting issue identification, and still needs to be analyzed. "Avoidance" is required to be considered. Not only is avoidance not considered in the document, but overall impacts to Union Station and to the CID and the Pioneer Square historic districts are not acknowledged in the document.	SODO/CID
728	Ch 2 Alternatives Considered	13	2.2.2.36	Genna Nashem	DON	A photo of a typical vent structure is needed, therefore information is missing that would be required for analysis. The description is not sufficient to give a reader of the document the understanding size, scale and visual appearance of the vent structure. This will be a permanent significant feature. When the description of the vent without a photo or graphic follows a description of a truck with a photo of a truck, that could falsely imply that the vent structure is a less significant feature than a truck.	SODO/CID
729	Historic and Archaeological Resources	10	4.1.16	Genna Nashem	DON	The paragraph mentions the Landmark Preservation Board and SMC 25.12 but does not mention the CID section passes through two historic district - The Pioneer Square Preservation District and the International District Special Review District. It doesn’t state that all alterations to the District including any new construction or demolition will be reviewed by respective Board according to SMC23.66 and would require a Certificate of Approval.	All (Systemwide)
730	Ch 5 Cumulative Impacts	14	5.4.6	Genna Nashem	DON	The permanent visual and aesthetics effects are not efficiently discussed or assessed especially in historic district. Effects do not seem to use the methodology noted in 4.1. If studied, In the situation of the vent structure at the shared entry point to both Pioneer Square and International historic districts, the large utilitarian structure would lower the visual quality of the area.	All (Systemwide)
731	Ch 5 Cumulative Impacts	23	5.4.17.1	Genna Nashem	DON	Paragraph refers to the city changing zoning, is this hypothetical? if so then those changes should be identified and impacts should be analyzed in this document. If the document is referring to some specific recent zoning changes, then those should be referenced. Historic Preservation is about managing change, not preventing it, but this does not accurately reflect the existing regulatory framework or mitigation impacts methodology relating to historic preservation in the city, especially with regard to cumulative impacts to historic districts.	All (Systemwide)

732	Technical Report: Visual	10	3.2.1	Genna Nashem	DON	High Visual Quality – Areas with high visual quality must be outstanding in terms of being very memorable, distinctive, unique (in a positive way), and/or intact—they can be natural, park-like, or urban, with urban areas displaying strong and consistent architectural and urban design features. Historic Districts should be considered High Visual Quality, these qualities are why they are designated historic districts. This paragraph does not recognize the visual experience of being in the district of looking at the District and seems to only be considering the views of other things as seen from the District. The paragraph also does not consider the extent of the prominence of a venting and egress structure at the scale and location that it is proposed on the District and on the Union Station.	SODO/CID
733	Historic and Archaeological Resources	4.2.16.1	4.2.16.1	Genna Nashem	DON	APE should include the King Street Station. The proposed 4th Ave Station is directly across the tracks of King Street Station; bike facilities that would serve the ST station are proposed behind the station and the use of the plaza at King Street station could be affected by the presence, noise and smell of the ventilation shaft.	SODO/CID
734	Technical Report: Historic and Archaeological Resources		2.3	Genna Nashem	DON	Include City Historic Districts -Pioneer Square Preservation District and International Special Review District and regulation SMC 23.66	SODO/CID
735	Ch 4 Affected Enviornment and Environmental Consequences	4.3.18.4	4.3.18.2.2	Genna Nashem	DON	Use of Union Station requires consideration of avoidance alternatives, which are not included in the document. Change of use is regulated in both the International Special Review District and the Pioneer Square Preservation District.	SODO/CID
736	Ch 4 Affected Enviornment and Environmental Consequences	4.3.5.4	4.5.3.2	Genna Nashem	DON	Not enough information has been included to evaluate whether 40 feet in height tunnel vent structures would be less prominent than station entrances. Freestanding vent structures at 40 feet would be a visual intrusion that would cause permanent diminishment of setting, feeling and integrity to Union Station and to the International District and Pioneer Square historic districts. Design would not be able to mitigate the effect. Consideration of avoidance is required.	SODO/CID
737	Ch 4 Affected Enviornment and Environmental Consequences	4.3.5.1	4.3.5	Genna Nashem	DON	Consideration of sensitive view of landscape is not appropriate in the urban area is a flawed methodology for an urban area. The people who live, work and spend time here should be the people who we are most concerned about how they see the visual and aesthetic character of the area effected.	SODO/CID
738	Executive Summary	throughout		Rebecca Frestedt	DON	The acronym M.O.S. (minimum operable segment) is used throughout the Executive Summary, but the origin is not easy to locate for individuals who are jumping ahead to particular segments within the alignment. I suggest spelling out the full name "minimum operable segment" on the header pages, such as sheet ES-24, for the Ballard Link Extension	All (Systemwide)
739	Executive Summary	ES-43	ES.6.2	Rebecca Frestedt	DON	The analysis is incomplete. There is mention of the CID as the Asian American hub, but the mention of impacts is focused on the immediate areas of impact, rather than addressing the short and long-term disruption of the cultural cohesion and economic impact of the District more broadly.	SODO/CID
740	Ch 4 Affected Enviornment and Environmental Consequences		4.3.2.1.2	Rebecca Frestedt	DON	This section does not sufficiently reference the degree to which certain uses within the International Special Review District are given preference in the land use code under SMC 23.66, to support cultural fabric of the neighborhood and how changes to those uses could disrupt the supportive fabric of the neighborhood.	SODO/CID
741	Ch 4 Affected Enviornment and Environmental Consequences		4.3.2.6	Rebecca Frestedt	DON	There is not enough information about proposed land use impacts to determine the need for mitigation within the study area. As noted above, specific uses within the historic districts in the Chinatown International District and Pioneer Square area reviewed to ensure that proposed changes are compatible with and support the character of the districts. The need for some degree of mitigation is anticipated in order to ensure that changes to the station area are compatible with the 1/4-1/2 area around the Station Area.	SODO/CID
742	Ch 2 Alternatives Considered		2.1.2.2.2	Rebecca Frestedt	DON	The information necessary to identify impacts and compare alternatives is missing. Due to the cost and construction duration constraints of the 4th Ave S. alternatives and the significant economic and cultural impacts to the CID community that would result from the 5th Ave S. alternatives CID 2a and CID-2b, an option that explores moving the station north on 5th to the currently vacant parcel in the NE corner of the 5th Ave S. and S. Jackson St. intersection should be studied in the EIS.	SODO/CID
743	Ch 4 Affected Enviornment and Environmental Consequences	4.2.2-11	4.2.2.5	Rebecca Frestedt	DON	I concur with comments submitted by Geoff Wentlandt, OPCD when he stated, "There is not enough information to compare alternatives or assess the degree of impact because there is not enough information on indirect land use impacts. The only type of indirect land use impact assessed is the degree of TOD potential, but there are other critical types of indirect land use impact besides the degree of TOD potential. The EIS does not discuss the indirect land use compatibility impacts of land use changes that would occur over time due to introduction of a light rail station. There is no information on the compatibility impacts to land use outside of the project's footprint (outside of direct acquisitions and conversions to transportation uses). The indirect impacts analysis should review the existing land use pattern and built environment within 1/2 mile of the station locations. The analysis should contemplate the degree of incompatibility that would be created by introduction of TOD and induced development pressures associated with new light rail stations. Resulting land use incompatibilities that would be created should be characterized qualitatively. Land use incompatibilities include discordant patterns of: building scales, activity patterns, and times of day/night activity." This will be a significant impact within the historic districts, specifically Pioneer Square Preservation District and the International Special Review District, where historically significant and contributing properties in the surrounding areas are unlikely to be redeveloped and where the existing architectural character of the District is dominant and where the cultural and economic base of the surrounding neighborhood will be deeply impacted by the presence of a station, through construction and beyond.	SODO/CID
744	Appendix J - Conceptual Design Drawings	9-40		Rebecca Frestedt	DON	The information necessary to identify impacts and compare alternatives is missing. The plans show the ventilation and egress tower and station entrance on the east of Union Station in plan view, but not in elevation from the north and south or from S. King Street looking west. The visual impact of the ventilation stack in this alternative will have an adverse effect on the primary facade of Union Station, a public safety and sightlines and the visual continuity and architectural character of the International Special Review District and the Pioneer Square Preservation District.	SODO/CID

745	Appendix J - Conceptual Design Drawings	28		Rebecca Frestedt	DON	The information necessary to identify the impacts and compare alternatives is missing. For example, the graphics do not show the full extent of the visual impact of the siting of the proposed ventilation stack adjacent to the Union Station entrance in the 5th Ave S. alternatives. The upper 25' of the stack would be opaque, but the way it is shown here as x'd out does not accurately reflect the impact. The conceptual drawings throughout lack specifics about placement and height of headhouses and venting stacks in relation to other properties.	SODO/CID
746	Ch 4 Affected Enviornment and Environmental Consequences	4.1-9	4.1.16	Rebecca Frestedt	DON	The analysis is incomplete. This section addresses National Register and local Landmark eligible properties, but omits mention of designated historic districts and the regulatory considerations that are required when changes within designated districts are proposed. See Chapter 23.66 of the Seattle Land Use Code, for proposed work in the Pioneer Square Preservation District and the International Special Review District.	All (Systemwide)
747	Economics	4.3.3-8	4.3.3.3.3	Rebecca Frestedt	DON	The analysis is incomplete. The statement that "Businesses displaced with either Alternative CID-2a or Option CID-2b would include some retail and services businesses that serve the local community" is inaccurate. The CID is a regional hub for the Asian-American and Pacific Islander community. Businesses rely on one another and rely on customers who "trip chain" by shopping at several places throughout the greater CID, especially on weekends. Many patrons have elder family members who reside in the neighborhood and/or consider the CID as a cultural home or "third place." There will be a significant economic ripple from construction impacts and displacements.	SODO/CID
748	Economics	4.3.3-8	4.3.3.3.3	Rebecca Frestedt	DON	The analysis is incomplete. Information is needed about the cumulative impact of transportation of goods and services to business and service providers (like International Community Health Services and Kin On) throughout the CID and Pioneer Square.	SODO/CID
749	Visual and Aesthetics	4.3.3.-14	4.3.3.4.3	Rebecca Frestedt	DON	Information necessary to identify impacts and compare alternatives is missing. Additional information is needed about the extent of work that would be involved in the "structural improvements" to the American Hotel (417 6th Ave S.) and Buty Building (402 5th Ave S.) under the CID-2a Diagonal alternative. Both buildings are contributing buildings within the Seattle Chinatown National Register District and the International Special Review District.	SODO/CID
750	Land Use	4.3.3.-14	4.3.2.6	Rebecca Frestedt	DON	References to local codes citing minimum mitigation requirements is missing. As a result, the analysis of alternatives is incomplete. This section states that "…the Ballard Link Extension would not result in inconsistencies with adopted land use plans." However, there is no reference to the historic district requirements under SMC Chapter 23.66. It anticipated that there will be inconsistencies with the adopted land use code and mitigation may be required, as a result.	All (Systemwide)
751	Social Resources, Community Facilities, and Neighborhoods	4.3.2-14	4.3.3.4.3	Rebecca Frestedt	DON	The analysis is incomplete. Several significant impacts have not been identified. Missing is discussion of the impacts to residents/tenants of the Addison on 4th, adjacent to ICON (which could be vacated if CID-1a is selected) or impacts to tenants of the Publix Hotel, which abuts 5th Ave S. and the proposed new station elements under CID-2a and 2b.	SODO/CID
752	Social Resources, Community Facilities, and Neighborhoods	4.3.4-8	4.3.4.1.1	Rebecca Frestedt	DON	The information included in this section is incomplete. This section is missing institutions including Summit Sierra School, the Chinese Language school at Chong Wa Benevolent Association and the Puget Sound Community School. There is also no mention of Theatre Off Jackson. Donnie Chin International Children's Park is misidentified and Kobe Terrace Park and the Danny Woo Community Garden are omitted. The King Street Greenway, which is part of the citywide bicycle network is also located within the CID.	SODO/CID
753	Social Resources, Community Facilities, and Neighborhoods	4.3.4-16&17	4.3.4.3.3	Rebecca Frestedt	DON	The analysis is incomplete. Several significant impacts have not been identified. Missing is discussion of the indirect impacts to neighborhood social and cultural cohesion outside of the immediate station area. The range of study should be extended 1/2 mile from the station, as neighboring businesses, residents and social agencies or institutions will be impacted. See earlier mention of the area as a regional hub for the Asian-American and Pacific Islander (AAPI) community and the reliance that business have on one another from customers who shop at multiple businesses when in the neighborhood. The cumulative impact to the AAPI cultural community will be significant. Additionally, the analysis does not take into consideration who will benefit from the proximity of the station and new house close to the downtown core and whether or not existing residents, who are mostly BIPOC and largely elders, will benefit.	SODO/CID
754	Economics	4.3.3-17-18	4.3.3.6	Rebecca Frestedt	DON	Mitigation measures for identified impacts are missing from the DEIS. As noted within the DEIS, impacts to the CID community will be significant. The degree of impacts, to businesses, property owners, residents and community stakeholders in the CID is disproportionate and the mitigation measures are not one-size-fits all. The community should be engaged in discussion, with outcomes potentially resulting in investments elsewhere in the neighborhood and Community Benefits Agreement(s), acknowledging that public investments have historically contributed to harm in the neighborhood and the short and long-term impacts will impact the CID as a whole, not just the immediate station area.	SODO/CID
755	Visual and Aesthetics	4.3.5-3-4	4.3.5.3.1	Rebecca Frestedt	DON	The analysis is incomplete. When discussing vegetation along the alignment, ST does not recognize that all changes within the right-of-way within the Pioneer Square Preservation District and the International Special Review District will require a Certificate of Approval. This includes, but is not limited to: paving, street furnishings, bicycle parking, signage, lighting and landscaping. A one-scheme-fits-all-stations within the alignment is not appropriate in the PS and ISRD, due to the importance of visual continuity within the right-of-way within these districts. See SMC 23.66.030.	SODO/CID
756	Visual and Aesthetics	4.3.5-4	4.3.5.3.2	Rebecca Frestedt	DON	The analysis is incomplete and appears not to be compliant with SMC 23.66. When discussing visual impacts of station entrances and related components, headhouses, venting, bike parking, etc. there should be further analysis of the siting of these elements in consideration of visual cohesion and architectural character within the Pioneer Square Preservation District and International Special Review District. All elements above grade, including, but not limited to: paving, street furnishings, bicycle parking, signage, lighting and landscaping will require a Certificate of Approval from the Department of Neighborhoods, following review and a recommendation by the respective historic review Boards, pursuant to Chapter SMC 23.66. Perspective from multiple vantage points should be considered as "sensitive viewers", including the Chinatown Gate and views from the public right-of-way, given the pedestrian-oriented character of the Asian Design Character District, within the ISRD.	SODO/CID
757	Ch 4 Affected Enviornment and Environmental Consequences			Rebecca Frestedt	DON	Information necessary to identify impacts and compare alternatives is missing. The DEIS lacks details about staging and impacts to historic resources and the visual character of the Pioneer Square Preservation District and International Special Review District under each of the alternatives.	SODO/CID

758	Appendix J - Conceptual Design Drawings	16		Rebecca Frestedt	DON	Information necessary to identify impacts is missing. The Inscape/INS Building located at 815 Seattle Blvd S. and adjacent property to the east are within the boundaries of the International Special Review District. It appears that there may be station elements adjacent to and across the street from this building, but it's unclear what work is proposed in this area. Salvation Army William Booth Center (811 Maynard Ave S.) housing is located due east of the "TPSS" box. Information is needed about the visual impact of work that would result as part of this alternative, and the impacts to the users of the Center.	SODO/CID
759	Technical Report: Visual		3.2.1	Rebecca Frestedt	DON	The methodology does not capture complete impacts of the project. Due to the designation of the CID Station Area within two overlapping historic districts, consideration of visual impacts within 100-500 feet is insufficient. The determination that the visual quality of views in the area ranges from "average to low average" does not take into account the proximity of the Asian Design Character District, running up the spine of S. King St. nor the importance of the visual cohesion of the historic districts, more broadly, to prevent adverse effects on the character of the districts, which reflect "memorable, distinctive, unique (in a positive way) and/or intact" High Visual Qualities not taken into account in this methodology.	SODO/CID
760	Ch 4 Affected Enviornment and Environmental Consequences	4.2.16-23	4.2.16.5	Sarah Sodt	DON	Mitigation measure(s) for identified impacts are missing from the DEIS. Many of the mitigation measures identified are the typical menu related to mitigating impacts to resources that are historically valued by the dominant culture. Mitigation measures should be considered that specifically support cultural preservation impacts, particularly in the CID and elsewhere along the various segments. Additionally, mitigation measures that support generational/community wealth building in underrepresented communities should be explored - this could include seismic retrofit mitigation measures, cleaning (including due to construction and graffiti impacts),weatherization, and other measures that support both historic preservation and climate resiliency. It will be important to discuss types of mitigation measures during Section 106 consultation meetings that presumably will eventually be held.	All (Systemwide)
761	Ch 4 Affected Enviornment and Environmental Consequences	4.3.16-48	4.3.16.5	Sarah Sodt	DON	Mitigation measure(s) for identified impacts are missing from the DEIS. Many of the mitigation measures identified are the typical menu related to mitigating impacts to resources that are historically valued by the dominant culture. Mitigation measures should be considered that specifically support cultural preservation impacts, particularly in the CID and elsewhere along the various segments. Additionally, mitigation measures that support generational/community wealth building in underrepresented communities should be explored - this could include seismic retrofit mitigation measures, cleaning (including due to construction and graffiti impacts), weatherization, and other measures that support both historic preservation and climate resiliency. It will be important to discuss types of mitigation measures during Section 106 consultation meetings that presumably will eventually be held.	All (Systemwide)
762	Technical Report: Historic and Archaeological Resources	10-69/242	10.5.2.5	Sarah Sodt	DON	Regarding the Cape Flattery Apartments the impact of having a vacant building during the duration of the construction should be analyzed. A long-term vacancy can potentially directly cause the owner to pursue demolition of the building and redevelopment.	Interbay-Ballard
763	L4.1 Acqusitions, Displacements, and Relocations	6	4.3.1.3.3	Sarah Sodt	DON	Regarding the YWCA building currently in process of a major rehabilitation and conversion from SRO occupancy to apartments. Due to federal funding this project itself is going through section 106 review. Coordination with the property owner regarding the potential impacts to this property must be done. It appears that there may be impacts that have not been adequately analyzed related to construction and displacement. The chart on 10-62 in the Appendix N says that the building is not adversely affected.	Downtown
764	Executive Summary	ES-32	Line 12	Rick Sheridan	SPL	Please use the "Seattle Public Library - Central Library" to describe the downtown facility instead of "Seattle Public Library Central Branch". It would be consistent with the building's name elsewhere in the document.	Downtown
765	Ch 4 Affected Environment and Environmental Consequences	4.3.14-14	Line 36	Rick Sheridan	SPL	In "Other Governmental Facilities" The Seattle Public Library would appreciate a sentence comparable with the one for USPS stating that ST will ensure that access and egress would be maintained and that the closure of an access point would be remedied with an alternative one. The Library processes all physical materials (books, DVDs, etc.) at the Central Library. If the Library can't access its loading dock, it cannot process books and move them to its 26 branches.	Downtown
766	Ch 4 Affected Environment and Environmental Consequences	4.3.4-23	Line 28	Rick Sheridan	SPL	States "See Section 4.3 14 for more information on noise impacts to the library." But that section doesn't address noise impacts.	Downtown
767	Ch 3 Transportation Enviornment and Consequences	3-15	3.4.3.1.2	Benjamin Smith	SDOT	Because of the permanent or construction closure of the SODO Busway, Sound Transit shall coordinate with the City of Seattle and King County Metro, and detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate for the displacement of this transit roadway to 4th and/or 6th Aves S, as well as siting all lost layover along the Busway.	SODO/CID
768	Ch 3 Transportation Enviornment and Consequences	3-59	3.11.2.4	Benjamin Smith	SDOT	During the construction closure of the SODO Trail, Sound Transit shall coordinate with the City of Seattle and King County Metro, and detail the specific reroute pathway including turns to 4th and/or 6th Aves S, including safe bus-bicycle interactions on these corridors shared by buses displaced from the SODO Busway.	SODO/CID
769	Ch 3 Transportation Enviornment and Consequences	3-64	3.11.4.2	Benjamin Smith	SDOT	Alternative DEL-5 includes a full closure of Avalon Way SW for 1 year, impacting RapidRide C line as well as routes 21, 21x & 55. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	West Seattle (DUW, DEL, WSJ)
770	Ch 3 Transportation Enviornment and Consequences	3-64	3.11.4.2	Benjamin Smith	SDOT	Alternatives DEL-1a, -1b & -3 include a full closure of for 3 years, impacting Route 50. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	West Seattle (DUW, DEL, WSJ)
771	Ch 3 Transportation Enviornment and Consequences	3-71	3.11.5.2	Benjamin Smith	SDOT	Alternative WSJ-2 includes a full closure of SW Alaska St for 3 years, impacting RapidRide C line as well as Route 50. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	West Seattle (DUW, DEL, WSJ)

772	Ch 3 Transportation Enviornment and Consequences	3-97	3.13.3.1.2	Benjamin Smith	SDOT	Alternatives CID-1a* & -1b* assume a permanent loss of the northbound bus-only lane on 4th Ave S between Seattle Blvd S and S Jackson St. This change impacts the speed & reliability of many local and regional services from South Seattle, South King County and Pierce County (even in a horizon year of 2042), many of which would already lose the advantages of the SODO Busway due to that facility's closure. Sound Transit shall coordinate with the City of Seattle and King County Metro on the future channelization of 4th Ave S and will redesignate any lanes only upon the assent of SDOT.	SODO/CID
773	Ch 3 Transportation Enviornment and Consequences	3-127	3.19.1.2.1	Benjamin Smith	SDOT	For all CID alternatives, impacts to Metro's trolleybus system could be critical, and impact pathways such as 6th Ave S, Seattle Blvd S, and 5th Ave S needed for all trolleybus trips scheduled in the course of a day. Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating trolleybus service through these pathways as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway. Because of the long lead time in overhead catenary system infrastructure, this work should commence as soon as possible.	SODO/CID
774	Ch 3 Transportation Enviornment and Consequences	3-132	Table 3-29	Benjamin Smith	SDOT	Alternatives CID-1a* & -1b* assume a full closure of 2nd Ave Ext S for 2 or 6 1/2 years, respectively, impacting multiple routes continuing from 2nd Ave in Downtown Seattle to points south. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	SODO/CID
775	Ch 3 Transportation Enviornment and Consequences	3-133	3.19.3.2	Benjamin Smith	SDOT	Alternative CID-1b includes a full closure of 4th Ave S from Seattle Blvd S to S Jackson St for 6 1/2 years, impacting many local and regional services from South Seattle, South King County and Pierce County which would already lose the advantages of the SODO Busway due to that facility's closure. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	SODO/CID
776	Ch 3 Transportation Enviornment and Consequences	3-133	3.19.3.2	Benjamin Smith	SDOT	Alternative CID-1a includes a full closure of Seattle Blvd S for 2 years, impacting many routes traveling to and from Metro's bases in the SODO area. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	SODO/CID
777	Ch 3 Transportation Enviornment and Consequences	3-134	3.19.3.2	Benjamin Smith	SDOT	Alternative CID-1a includes a full closure of 4th Ave S from S Jackson to S Main Sts for 4 years, impacting many local and trolley routes, including the future RapidRide R Line, as well as regional services from South Seattle, South King County and Pierce County which would already lose the advantages of the SODO Busway due to that facility's closure. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	SODO/CID
778	Ch 3 Transportation Enviornment and Consequences	3-134	3.19.3.2	Benjamin Smith	SDOT	Alternative CID-2a includes a full closure of 5th Ave S from S Jackson to S Weller Sts for 9 months, impacting many local and most trolley routes. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	SODO/CID
779	Ch 3 Transportation Enviornment and Consequences	3-134	3.19.3.2	Benjamin Smith	SDOT	Alternatives CID-1a* & -1b* assume a full closure of S Jackson St from 2nd Ave Ext S to 5th Ave S for 2 years, impacting many local and trolley routes, including the future RapidRide R Line. With few viable reroutes available and the direct connection to C-ID Station at risk, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	SODO/CID
780	Ch 3 Transportation Enviornment and Consequences	3-134	3.19.3.2 & 3.19.3.2	Benjamin Smith	SDOT	Due to disruptions to trolley service on 5th Ave S, proposals to relocate trolley wire to 7th or 8th Aves S is proposed. (Section 3.19.3.2 mentions both, section 3.19.3.2 mentions 8th Ave S.) 8th Ave S is used by the Seattle Streetcar's non-revenue connection to the Charles St yard and already features streetcar-related overhead catenary infrastructure, and both are local streets with stop-controlled intersections and generally slow speeds, generally unsuitable to frequent transit operations. Sound Transit shall coordinate with the City of Seattle and King County Metro, along with thorough engagement with the International District/Chinatown community, on accommodating trolley service through the neighborhood, and shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	SODO/CID
781	Ch 3 Transportation Enviornment and Consequences	3-136	Table 3-30	Benjamin Smith	SDOT	Alternative DT-1 includes a full closure of 4th Ave from Pine to Olive Sts for 2 years, impacting local and regional routes. With few viable reroutes available and the direct connection to Westlake Station at risk, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	Downtown
782	Ch 3 Transportation Enviornment and Consequences	3-136	Table 3-30	Benjamin Smith	SDOT	Alternative DT-1 includes a full closure of Madison St from 4th to 5th Aves for 1-3 years, impacting the under-construction RapidRide G line. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	Downtown

783	Ch 3 Transportation Enviornment and Consequences	3-136	Table 3-30	Benjamin Smith	SDOT	Alternative DT-1 includes a full closure of Republican St by Queen Anne Ave N for 5 years, including the intersection at 1st Ave N for 15 months, impacting local and trolley routes. With few viable reroutes available and congested traffic conditions due to Climate Pledge Arena and other Seattle Center activities, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	Downtown
784	Ch 3 Transportation Enviornment and Consequences	3-138	3.19.4.1.1	Benjamin Smith	SDOT	Under Alternative DT-1 construction of Midtown Station, among other roadways traffic is expected to divert to Seneca St, potentially impacting RapidRide G line and trolley Route 2. Sound Transit shall coordinate with the City of Seattle and King County Metro on maintaining transit performance on this pathway, and shall detail any necessary transit priority treatments to ensure the continued viability of this transit pathway.	Downtown
785	Ch 3 Transportation Enviornment and Consequences	3-138	3.19.4.1.1	Benjamin Smith	SDOT	Under Alternative DT-1 construction of Midtown Station, among other roadways traffic is expected to divert to James St, potentially impacting trolley Routes 3 and 4. Sound Transit shall coordinate with the City of Seattle and King County Metro on maintaining transit performance on this pathway, and shall detail any necessary transit priority treatments to ensure the continued viability of this transit pathway.	Downtown
786	Ch 3 Transportation Enviornment and Consequences	3-139	3.19.4.1.3	Benjamin Smith	SDOT	Under Alternative DT-1 construction of Denny Station, among other roadways traffic is expected to divert to Dexter Ave N, potentially impacting Route 62 and local bicycle travel. Sound Transit shall coordinate with the City of Seattle and King County Metro on maintaining transit performance on this pathway, and shall detail any necessary transit priority treatments to ensure the continued viability of this transit pathway.	Downtown
787	Ch 3 Transportation Enviornment and Consequences	3-139	3.19.4.1.3	Benjamin Smith	SDOT	Under Alternative DT-1 construction of Denny Station, among other roadways traffic is expected to divert to Fairview Ave N, potentially impacting future trolley RapidRide J line and other regional routes. Sound Transit shall coordinate with the City of Seattle and King County Metro on maintaining transit performance on this pathway, and shall detail any necessary transit priority treatments to ensure the continued viability of this transit pathway.	Downtown
788	Ch 3 Transportation Enviornment and Consequences	3-139	3.19.4.2	Benjamin Smith	SDOT	Alternative DT-1 includes a full closure of the future transit pathway on Harrison St for 4 years, impacting several routes which would only have been recently established in this corridor. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	Downtown
789	Ch 3 Transportation Enviornment and Consequences	3-139	3.19.4.2	Benjamin Smith	SDOT	Alternative DT-1 includes a full closure of Westlake Ave from 7th Ave to Denny Way for 4 years, impacting not just the Seattle Streetcar but RapidRide C line, Route 40 (a future RapidRide line) and several regional services. With few viable reroutes available and high levels of transit priority already established along Westlake, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	Downtown
790	Ch 3 Transportation Enviornment and Consequences	3-139	3.19.4.2	Benjamin Smith	SDOT	Alternative DT-1 includes a full closure of Pine St from 4th to 5th Aves for 6 years, impacting local and trolley routes. With few viable reroutes available and the direct connection to Westlake Station at risk, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	Downtown
791	Ch 3 Transportation Enviornment and Consequences	3-140	3.19.4.2	Benjamin Smith	SDOT	Alternative DT-2 includes a full closure of Pine St from 5th to 6th Aves for 4 years, impacting local and trolley routes. With few viable reroutes available and the direct connection to Westlake Station at risk, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	Downtown
792	Ch 3 Transportation Enviornment and Consequences	3-140	3.19.4.2	Benjamin Smith	SDOT	Alternative DT-2 includes a full closure of Taylor Ave N from Mercer to Roy Sts for 4 years, impacting trolley routes 3 and 4. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific reroute pathway including turns, and proposed transit priority treatments to mitigate the displacement of this transit pathway.	Downtown
793	Ch 3 Transportation Enviornment and Consequences	3-141/142	3.19.5.1	Benjamin Smith	SDOT	Alternatives SIB-1 & -2 assume partial closures of Elliott Ave W and/or 15th Ave W for up to 1 1/2 years, impacting the RapidRide D line and several local and peak routes. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on prioritizing transit through these restrictions as much as practical, and shall detail the proposed transit priority treatments to ensure the continued viability of this transit pathway.	Interbay-Ballard
794	Ch 3 Transportation Enviornment and Consequences	3-147	3.19.6.2	Benjamin Smith	SDOT	Alternatives IBB-1b & -3 assume full closures of the ramps to and from 15th Ave W to W Dravus St for 3 1/2 years, impacting the RapidRide D line and potentially other routes. With few viable reroutes available, Sound Transit shall coordinate with the City of Seattle and King County Metro on accommodating transit through this pathway as much as practical, or shall detail the specific proposed transit priority treatments, alternate stop locations, or alternate service connections to mitigate the displacement of this transit pathway.	Interbay-Ballard
795	Ch 3 Transportation Enviornment and Consequences	3-150	3.19.7.1	Benjamin Smith	SDOT	The coordination of transit service impacts due to the West Seattle and Ballard Link Extensions are potentially severe, increasing operational cost, decreasing reliability, and harming the viability of key transit routes as a transportation mode in the City of Seattle. Due to these crucial factors, Sound Transit shall coordinate with the City of Seattle and King County Metro on maintaining transit operations as much as practical, and prepare a full transit operations plan with specific proposed projects as part of mitigation for the Extension projects, and include those in the Final Environmental Impact Statement. Because of the long lead time in planning and documenting these needs, this work should commence as soon as possible.	All (Systemwide)

796	Ch 3 Transportation Enviornment and Consequences	3-150	3.19.7.1	Benjamin Smith	SDOT	Besides coordination related to the under-construction RapidRide G line, Sound Transit shall coordinate with the City of Seattle and King County Metro, as well as the Federal Transit Administration where applicable, to ensure continued viability of all federally-funded transit projects within Seattle, past, present or future.	All (Systemwide)
797	Acquisitions, Displacements, and Relocations	4.2.1-1	4.2.1.3	Vera Giampietro	OPCD	Please update tables 4.2.1-1 to 4.2.1-4 to differentiate between acquisitions for construction vs those for operations. This information is relevant to Land Use and other neighborhood impacts. Rainier Valley acquisitions that may have been intended for construction but not operation are still fenced off 13 years after station opening. This significant impact to the neighborhood streetscape, land use, visual quality, social resources, and more should be avoided on future projects including WSBLE. It is important that partner agencies and communities understand Sound Transit's intent to develop or otherwise repurpose smaller/suboptimal TOD parcels in a timely manner. We can't differentiate between alternatives or recommend suitable mitigation without this information.	West Seattle (DUW, DEL, WSJ)
798	Acquisitions, Displacements, and Relocations	4.2.1-3	4.2.1.3	David Goldberg	OPCD	Table 4.2.1-3. Number of Potential Parcels Affected and Displacements by Alternative – Delridge Segment - The table should include acreage by land use type as well as the number of parcel. Ideally, the area would also be expressed as a percent of the area within 1/2 of a mile (where traditional ETOD would otherwise occur). The table should also identify the impact, expressed as existing units and development potential (emp/hh) under current zoning, using CoS development capacity model.	West Seattle (DUW, DEL, WSJ)
799	Acquisitions, Displacements, and Relocations	4.2.1-6	4.2.1.3.3	David Goldberg	OPCD	"Option DEL-1b and Option DEL-2b* would acquire a portion of the Longfellow Creek Legacy Trail and Natural Area, but the use of the acquired area would not affect the function of the natural area or trail." PLEASE DESCRIBE WHY.	West Seattle (DUW, DEL, WSJ)
800	Acquisitions, Displacements, and Relocations	4.2.1-9	4.2.1.7	Vera Giampietro	OPCD	Acquisitions and displacements mitigation should include right of return to TOD projects within the station area, for all segments and alternatives in both the Ballard and West Seattle Link Extensions.	All (Systemwide)
801	Acquisitions, Displacements, and Relocations	4.2.1-9	4.2.1.8	David Goldberg	OPCD	"In a location generally not less desirable than the location of the displaced person's dwelling with respect to public utilities, facilities, services, and the displaced person's place of employment." The Federal relocation guidelines will not be sufficient to address the relocation needs of BIPOC communities who would be inequitably burdened be disrupting place-based social connections. Please mitigate for unique impacts to BIPOC communities.	West Seattle (DUW, DEL, WSJ)
802	Acquisitions, Displacements, and Relocations	4.3.1-5	4.3.1.3.2 and Table 4.3.1-2	Magda Hogness	OPCD	The information necessary to identify impacts and compare alternatives for acquisitions, displacements, and relocations is missing. As noted in previous comments, some of the alternatives impact special review districts and contributing historic buildings more than others. For each alternative, clarify displaced buildings and parcels in the special review districts and which properties contain contributing historic buildings. Seattle Chinatown National Register District abuts 5th Ave S. 5th Ave S. is also the western boundary of the Asian Design Character District and Retail Core, where street-level uses, and design character have added importance within Chapter 23.66. 5th & Jackson and 5th & King are significant focal points and gateways into the Historic Core of the ISRD. Analyze which alternatives has a greater direct and indirect impact and identify potential mitigation strategies or measures to adequately respond to historic and archaeological resources.	SODO/CID
803	Acquisitions, Displacements, and Relocations	4.3.1-5	4.3.1.3.2, and Table 4.3.1-2	Magda Hogness	OPCD	The information necessary to identify impacts and compare alternatives for acquisitions, displacements, and relocations is missing. As requested in previous comments include demographic and socio-economic data for each listed displacement. Also include a footnote note in the table explaining the information listed in the section 4.3.1-5 "while residential displacements would occur due to a loss of access during construction are considered a long-term impact, the building would remain and could be used for housing following construction."	SODO/CID
804	Appendix G - Environmental Justice	general	general	Katy Haima	OPCD	Since the analysis also "considers the potential for benefits and impacts to minority and/or low income people outside of the study area", expand the study area, especially for Delridge station. Study area currently leaves out areas that will access stations by bus. Expand to include more of the transit network that serves each station. Consider a Transit Access Study Area, which would include 0.5 mile to frequent transit that serves the station.	West Seattle (DUW, DEL, WSJ)
805	Appendix G - Environmental Justice	Page 2-1	2 Intro	Andrew Tran	OPCD	Per Level 3 (page 16), indirect economic and cultural displacement is highlighted. Provide more information on the indirect economic and cultural impacts of the project as stated in the Level 3 RET.	SODO/CID
806	Appendix G - Environmental Justice	Page 3-1	3.1	Andrew Tran	OPCD	Provide description and a table of social resources impacted by the project resources (per table 5.2 through 5.4) to accompany figures 3-1 and 3-2. Include organization name and descriptions and clients served.	All (Systemwide)
807	Appendix G	3-12	3.2.	Andrew Tran	OPCD	Include culturally significant community landmarks and destinations as identified by residents and community members through outreach and engagement.	All (Systemwide)
808	Appendix G - Environmental Justice	Page 3-17	3.2.1	Andrew Tran	OPCD	Per Level 2 and Level 3 RET, the historical harm caused by infrastructure projects were highlighted. Include in this section and refer to Level 3 RET page 20.	SODO/CID
809	Appendix G - Environmental Justice	Page 3-18	3.2.2	Andrew Tran	OPCD	Provide not just a narrative but relevant data on people who are unsheltered, such as number of shelters (incl. number of beds) in the study area and by segments	All (Systemwide)
810	Appendix G - Environmental Justice	Page 3-5, 3-17	3.1.1/3.1.2 3.2.1/3.2.2	Andrew Tran	OPCD	Please include a separate section that intersects data between low-income populations and minority populations	All (Systemwide)
811	Appendix G - Environmental Justice	Page 3-6	3.1.3	Lucien Ong	OPCD	Add " For people with limited English proficiency," in front of the sentence that reads "The most common languages spoken at home…". The current phrasing means all home speakers of the language, not just speakers with LEP.	All (Systemwide)
812	Appendix G - Environmental Justice	Page 5-11	Table 5-2 (Economics)	Andrew Tran	OPCD	Per Sound Transit's ETOD Policy 2.1.3: "Make equitable TOD an integral component of and supportive of transit planning and delivery" and 2.2.4b "Community TOD: Support and promote TOD within the area around a Sound Transit facility (generally ½ mile, or a 10-15 minute walk, and along corridors that provide key connections to the regional transit system). Strategies that support community TOD may be identified and facilitated by Sound Transit or by others and may include partnerships." Please provide mitigation efforts to address ETOD and Community TOD as defined by Sound Transit's ETOD policy R2018-10.	All (Systemwide)

813	Appendix G - Environmental Justice	Page 5-54	Table 5-x (Air Quality)	Andrew Tran	OPCD	For Air Quality resource, there are no listed impacts on Minority and Low-income People, particularly in Chinatown International District. Per Puget Sound Clean Air Agency's report on toxics in the CID, the neighborhood has among poorest air quality in Seattle, primarily due to pollutants from diesel fuel. Please describe the impacts of the influx and concentration of construction vehicles required in the CID for the project and their contribution to cumulative impacts.	SODO/CID
814	Appendix K - Present and Future Development, Transportation, and Public Works Projects in the Study Area	K-4	Table K-1a	Lucien Ong (ADEIS: Aaron Hursey)	OPCD	Include details on unit count and unit size for foreseeable future developments in Table K-1a. Should include number of market rate and affordable housing units, as well as unit sizes (studio, 1-bdrm, 2-bdrm, etc.)	All (Systemwide)
815	CH 2	Page 2-51	2.1.2.2.2	Magda Hogness	OPCD	Provide more information on the direct underground connection opportunities and challenges given that the direct underground passenger transfer to the other direction of travel could be provided at these stations but would require mining under the existing Central Link line.	SODO/CID
816	CH 4	Page 4-2	4 (Intro)	Lucien Ong (ADEIS: Janet Shull)	OPCD	would the M.O.S. also conceivably have impacts of Visual and Aesthetic resources due to tail tracks at Smith Cove and at Delridge for example? Please study and disclose those impacts.	All (Systemwide)
817	Ch 4 Affected Enviornment and Environmental Consequences	4.2.1-2	4.2.1	Lucien Ong (ADEIS: Aaron Hursey)	OPCD	All summaries and tables should include information on unit size and unit quantity for each multi-family development as well as affordable housing developments, that are affected/displaced. Summaries should include information by segment. Without this information we can't differentiate between alternatives.	All (Systemwide)
818	Ch 4 Affected Enviornment and Environmental Consequences	4.2.1-9	4.2.1.8	Katy Haima	OPCD	References 'research' but no data is shown in appendix that indicates there are adequate opportunities for relocation in the project area; only data given is for city as a whole. Need to disaggregate this data. Also needs to consider the size and qualities of spaces.	All (Systemwide)
819	Ch 5 Cumulative Impacts	General	General	Vera Giampietro	OPCD	Cumulative impacts need to address the confluence of impacts at CID that displace businesses, bring long term construction impacts, closures, and perceived closure of the western entrance to the community in an area that is more sensitive to disturbance. p. 4.3.3-13 Potential Adverse Economic Impacts from Construction "Businesses in the study area near construction... could be negatively affected by construction activities... patrons might choose to avoid construction areas or have greater difficulty accessing businesses near construction activity... This type of impact affects cultural, retail, and service businesses most directly because they generally rely on easy customer access... the type of affected business would... influence the degree of economic effects to local businesses from construction." Understanding the degree of economic effects from construction and displacements by understanding more about the businesses being displaced and their relative importance to the local community is necessary in order to differentiate between CID alternatives and to recommend proper mitigation. Are the 13 CID businesses car dependent for customers? Are the remaining CID businesses also car-dependent and therefore subject to significant impacts from construction-related parking?	SODO/CID
820	Ch 5 Cumulative Impacts	Page 5-14	5.4.6.1	Valerie Kinast	OPCD - SDC	The level of visual impact is being understated. Elevated stations that are being placed in the right of way between fully developed mixed use properties are not visually compatible - Zoning models anticipated the light and air of the right-of-way between buildings. Guideways of any height placed in the right of way present bulk that is not anticipated in our City plans. (Any object placed in the right of way in Seattle, from skybridges to art objects, is carefully reviewed as to its compatibility.) Above grade ancillary elements such as vent and utility structures, of underground stations in dense, intact, urban parts of the city are not compatible.	All (Systemwide)
821	Ch 5 Cumulative Impacts	Page 5-22	5.4.16.2 and Appendix K, Table K-2	Magda Hogness	OPCD	The information necessary to identify impacts and compare alternatives is missing. The Denny Mass Transmission Line project is not included in the Table K-2 or in the cumulative impacts section, 5.4.16. The Denny Mass Transmission Line is a foreseeable future action that underwent EIS in 2015 and is proceeding forward with design. Demonstrate that the project will be fully coordinated to avoid direct and indirect cumulative construction impacts or alternatively identify potential mitigation strategies or measures to adequately respond to direct and indirect impacts associated with transportation; acquisitions, displacements, and relocations; land use; economics; social resources, community facilities, and neighborhoods; air quality; public services, safety, and security; utilities; and historic and archaeological resources.	SODO/CID
822	Economics	4.2.3-12	4.2.3.3.4	Vera Giampietro	OPCD	In "Businesses and Employee Displacements" there is not enough information to differentiate between the alternatives in terms of the scale of economic impact of the business displacements to the community as a whole. What percentage of the community- and culturally-supportive business do the business displacements represent? What do community members say about how important these businesses are to their collective economic success? Without that information it is difficult to differentiate between the alternatives to understand how important these businesses are to the overall economic health of Delridge communities. Please apply a narrative and catalog of businesses displaced similar to the one applied to the Interbay/Ballard Segment on pages 4.3.3-9 - 4.3.3-12.	West Seattle (DUW, DEL, WSJ)
823	Economics	4.2.3-13	4.2.3.4.1	Vera Giampietro	OPCD	Notably both of the cost estimates described in Economics sections for West Seattle and Ballard Link chapters (e.g. on p. 4.2.3-13 under Potential Economic Impacts from Construction) have a single common alternative in the cost scenarios presented - for West Seattle it's DUW-1a and for CID it's CID-2a. Should we request that they use entirely different variables for each comparison set?	West Seattle (DUW, DEL, WSJ)
824	Economics	4.2.3-16	4.2.3.4.4	David Goldberg	OPCD	This section should mention that the relative impact to businesses in the Delridge station area is quite high. Some of the alternatives would displace the ONLY community-serving businesses in the area.	West Seattle (DUW, DEL, WSJ)

825	Economics	4.2.3-17	4.2.3.5	Vera Giampietro	OPCD	Narratives provided in this section Indirect Impacts of the Build Alternatives should also be included in the Ballard Link Extension equivalent section of the Economics chapter. These narratives include: "Development of the project would likely bring more dense and mixed-use land uses to station areas consistent with adopted land use plans, which could result in increased economic activity, increase development and redevelopment potential of surrounding properties, and increased property value of parcels near the station." Include statements about potential economic displacement due to rising rents for both businesses and residences. This is substantiated below where it says "Many case studies have found that residential and commercial properties within the vicinity of light rail stations typically experience an increase in property values and are ultimately valued higher than similar properties not near light rail stations (Transportation Research Board 2004, Nelson 2017)..." and on p. 4.2.3-18 "Indirect displacement might occur as a result of new development patterns that increase rents or saturate local market area with similar- businesses, drawing away sales from existing businesses." Combine this discussion with the Comp Plan Equity Analysis that presents theories around displacement risk. Without this information we cannot recommend appropriate mitigation for displacements expected to occur as a result of increasing property values.	West Seattle (DUW, DEL, WSJ)
826	Economics	4.2.3-17	4.3.3.5	Vera Giampietro	OPCD	Apply the logic here to the CID station and community, where the DEIS asserts that "heavier pedestrian activity near surrounding stations and important nodes of economic activity would increase the number of potential customers to retail businesses in the area and synergy between businesses, which occurs when individual business [sic] benefit from clustering near each other, allowing customers to shop more efficiently." The reverse of this benefit will occur during construction in the CID with CID-2a and CID-2b alternatives, where businesses are displaced, foot traffic is discouraged due to construction, and business synergies are potentially lost indefinitely. Without identifying this cumulative impact for CID we cannot recommend appropriate mitigation for impacts to CID communities.	SODO/CID
827	Economics	4.2.3-18	4.2.3.5	Jim Holmes	OPCD	Relocation assistance to may mitigate displacement of maritime businesses, but if those relocations are two industrial shorelines in other Cities (Everett, Tacoma) then that will undermine existing maritime economic clusters in Seattle.	West Seattle (DUW, DEL, WSJ)
828	Economics	4.2.3-19	4.2.3.6	David Goldberg	OPCD	Given the impacts at Andover for some Delridge Alternatives, the proposed mitigations seem inadequate. Something in the order of acquiring land in the area to support local relocation of community serving businesses, would help.	West Seattle (DUW, DEL, WSJ)
829	Economics	4.2.3-19	4.2.3.6	Katy Haima	OPCD	Insufficient mitigation. Remove "as much as possible". Businesses must retain, at minimum, pedestrian access, as well as vehicular access if pedestrian access is limited or if the business operation require vehicular access.	All (Systemwide)
830	Economics	4.2.3-5	4.2.3.3.1	Katy Haima	OPCD	While the total number of businesses or jobs may not decrease due to ST's mitigation of providing relocation assistance, the temporary loss of revenue for business owners and jobs for workers is significant for those individuals, and timing of relocation must be such that time not in operation is minimal. Please include more detail about mitigation for these impacts. (Also applies to Ballard Link Extension)	All (Systemwide)
831	Economics	4.2.3-6	4.2.3.3.1	Katy Haima	OPCD	Table 4.2.3-2: To better understand relative impacts to each area, include the affected industries, ratio of total businesses and employee displacements to the total in the segment. What is the total % that is being displaced? What kind of jobs are these (pay, level of education), especially those that may be difficult to relocate that are dependent on water?	All (Systemwide)
832	Economics	4.3.3-16	4.3.3.5	Vera Giampietro	OPCD	This would be a good place to present research that demonstrates recent property value changes during light rail construction and following time of station opening. Displacement risk is a key focus of the City's Equity Analysis for the most recent Comprehensive Plan. This body of work should be presented alongside research showing property value impacts of light rail so that we can recommend appropriate mitigation.	All (Systemwide)
833	Economics	4.3.3-5	4.3.3.3.1	Vera Giampietro	OPCD	"…businesses that rely on a localized customer base might have more difficulty finding a suitable new location to serve the same population." Apply this concept to businesses proposed to be displaced in RET communities by analyzing which are more dependent on a localized customer base and therefore would be difficult to relocate while continuing to serve the same customers. Without this information we can't differentiate between Delridge alternatives nor can we assess what type of mitigation would be required above and beyond Sound Transit's relocation assistance program.	All (Systemwide)
834	Economics	4.3.3-5	4.3.3.3.1	Vera Giampietro	OPCD	"Potential business displacements that affect specific populations are evaluated in Section 4.3.4, Social Resources, Community Facilities, and Neighborhoods." In 4.3.4 section 4.3.4.3.3 page 4.3.4-17 "Alternative CID-2a and Option CID-2b would have the most business displacements... There would be 13 business displacements at the edge of the neighborhood east of 5th Ave South for both Alternative CID-2a and Option CID-2b. These displacements may include businesses important to the community because of the history, strong cohesion, and long-standing community connections in the neighborhood." Though this reference describes "the community" it does not describe in any detail how "potential business displacements... affect specific populations." Apply the concept described in 4.3.3-5 section 4.3.3.3.1 page 4.3.3-5 that "businesses that rely on a localized customer base might have more difficulty finding a suitable new location to serve the same population" and describe those populations who might be reliant on the businesses proposed to be displaced, analyze who the 13 businesses serve, and share that information in the FEIS so that we can differentiate between the CID alternatives and recommend mitigation that would be required to successfully relocate the displaced businesses so that they continue to serve populations that they rely on for viability, and which rely on these businesses for cultural and community cohesion. With the information provided we don't know if cultural and community cohesion will be impacted beyond repair, which would be significant and adverse impact for a community of color.	SODO/CID
835	Economics	4.3.3-7	4.3.3.3.1	Vera Giampietro	OPCD	"…the total taxable assessed valuation of real property for Ballard Link Extension acquisitions is equal to 1.1 percent of the city of Seattle's overall assessed valuation in 2019." Please provide context and some detail about how different alternatives would vary in the amount of assessed land acquired for the project. 1.1% of City property tax revenue about $4 million annually. Spread over the years of construction projected this amounts tens of millions of dollars in potential loss of property tax revenue. Without information about how different alternatives will yield property tax revenue for the City, we cannot differentiate between the alternatives.	All (Systemwide)

836	Economics	4.3.3-8	4.3.3.3.3	Magda Hogness	OPCD	The information necessary to identify impacts and compare alternatives is missing. For each potentially displaced business and affected property, provide information on the economic loss associated with the length of construction impact in relation to demographic and socio-economic data. Per SMC23.66.302, the International District is the urban focal point for the Asian American community and was established to promote, preserve and perpetuate the cultural, economic, historical, and otherwise beneficial qualities of the area, particularly the features derived from its Asian heritage. Without this analysis, potential conflicts with local controls cannot be determined for each of the alternatives and this information is needed to adequately compare the alternatives. Demonstrate that the project avoids all direct and indirect economic impacts or alternatively identify potential mitigation strategies and measures to ensure the International District neighborhood cohesion remains intact throughout construction.	SODO/CID
837	Economics	4.3.3-8	4.3.3.3.3	Vera Giampietro	OPCD	In "Businesses and Employee Displacements" there is not enough information to differentiate between the alternatives in terms of the scale of economic impact of the business displacements to the community as a whole. What percentage of the community- and culturally-supportive business do these 13 businesses represent? What do community members say about how important these businesses are to their collective economic success? Without that information it is difficult to differentiate between the alternatives to understand how important these businesses are to the overall economic health of CID communities. Please apply a narrative and catalog of businesses displaced similar to the one applied to the Interbay/Ballard Segment on pages 4.3.3-9 - 4.3.3-12.	SODO/CID
838	Executive Summary	ES-29	Table ES-5	Magda Hogness	OPCD	The information necessary to identify impacts and compare alternatives is missing. Provide referenced assessments related to the third-party funding for reconstruction of the 4th Avenue South Viaduct. Demonstrate the added construction years for alternative CID-1a and CID-1b, due to reconstruction of the 4th Avenue South Viaduct. Clarity if the projects could be sequenced to limit and decrease construction timing impacts.	SODO/CID
839	Executive Summary	ES-29	Table ES-5	Magda Hogness	OPCD	The information necessary to identify impacts and compare alternatives is missing. Provide information on why ridership is the same for all option, given that each influence northbound vs southbound travel patterns differently.	SODO/CID
840	Executive Summary	ES-29	Table ES-5	Magda Hogness	OPCD	The information necessary to identify impacts and compare alternatives is missing. Under potential displacement, provide information on the severity of each impact with demographic and socio-economic data for each item listed.	SODO/CID
841	Executive Summary	ES-29	Table ES-5	Magda Hogness	OPCD	The information necessary to identify impacts and compare alternatives is missing. Under historic properties and historic district with adverse effect, provide information on each of the three impacts and include details on onsite or offsite impact to each historic property/district as well as the magnitude of the impact.	SODO/CID
842	L4.1 Acqusitions, Displacements, and Relocations	general	general	Katy Haima	OPCD	Please break down the data to show which acquisitions are full and which are partial.	All (Systemwide)
843	L4.1 Acqusitions, Displacements, and Relocations	L4.1-54	L4.1.2	Katy Haima	OPCD	Businesses are often dependent on locations and size of space; cannot assume that there is adequate retail space unless include data about the locations and available sizes of retail and industrial spaces.	All (Systemwide)
844	L4.3 Economics	L4.3-3	Fig. L4.3-1	Katy Haima	OPCD	The Forecast Analysis Zone for the Delridge Segment should include more of the Delridge corridor to the south, to include the communities and geographic area that will connect to the station via bus; especially since this is an equity area, need to understand the potential impacts	West Seattle (DUW, DEL, WSJ)
845	Land Use	4.2.2-1	4.2.2.1	Geoff Wentlandt	OPCD	To provide enough information to compare alternatives and assess impacts, the land use study area should be expanded to address all areas within 0.5 mile of stations locations, not just those which include permanent project improvements and areas needed for project construction. A larger study area is needed to assess the indirect land use impacts.	All (Systemwide)
846	Land Use	4.2.2-10	4.2.2.3.4	Vera Giampietro	OPCD	Station heights are identified here but guideway heights are not explicitly called out. Land uses adjacent to guideways will be impacted differently by varying guideway heights. Please include guideway heights relative to existing zoning and describe potential impacts to land use resulting from disparity between zoned heights and proposed guideway heights. Without this information we cannot differentiate between alternatives or recommend appropriate mitigation.	West Seattle (DUW, DEL, WSJ)
847	Land Use	4.2.2-11	4.2.2.5.1	Jim Holmes	OPCD	Clarify if TOD policy (Board Resolution R2018-10) requires 80% of surplus land four housing applies in aggregate or at each station.	All (Systemwide)
848	Land Use	4.2.2-11	4.2.2.5	Geoff Wentlandt	OPCD	There is not enough information to compare alternatives or assess the degree of impact because there is not enough information on indirect land use impacts. The only type of indirect land use impact assessed is the degree of TOD potential, but there are other critical types of indirect land use impact besides the degree of TOD potential. The EIS does not discuss the indirect land use compatibility impacts of land use changes that would occur over time due to introduction of a light rail station. There is no information on the compatibility impacts to land use outside of the project's footprint (outside of direct acquisitions and conversions to transportation uses). The indirect impacts analysis should review the existing land use pattern and built environment within 1/2 mile of the station locations. The analysis should contemplate the degree of incompatibility that would be created by introduction of TOD and induced development pressures associated with new light rail stations. Resulting land use incompatibilities that would be created should be characterized qualitatively. Land use incompatibilities include discordant patterns of: building scales, activity patterns, and times of day/night activity. In the West Seattle segment, this analysis would likely identify relatively greater indirect land use impacts near some of the Delridge station locations. In the Ballard segment this analysis would likely identify some relatively greater land use impacts for some of the Chinatown/ID station locations, and Seattle Center station locations.	All (Systemwide)
849	Land Use	4.2.2-12	4.2.2.5.2	David Goldberg	OPCD	References to station area development should clearly distinguish between "Agency TOD", Equitable TOD, and other TOD	All (Systemwide)

850	Land Use	4.2.2-12	4.2.2.5.2	David Goldberg	OPCD	"All station alternatives within the Delridge Segment have some TOD potential based on current zoning and project footprints, except the two Delridge Way station alternatives (Alternatives DEL-3 and DEL-4*), which are primarily constructed within the right-of-way". This statement is incorrect. There is TOD and ETOD opportunity at DEL-3 and DEL-4, just less Agency TOD.	West Seattle (DUW, DEL, WSJ)
851	Land Use	4.2.2-13	4.2.2.6	Geoff Wentlandt	OPCD	This does not adequately identify the need for mitigation. The conclusion that the "WSLE would not result in inconsistencies with adopted land use plans" is not correct per the comment above. There is likely to be needed mitigation for inconsistencies with plans created, and for indirect land use impacts for some or all of the Delridge station locations to address the transition of this area to a high-density TOD-supportive environment.	West Seattle (DUW, DEL, WSJ)
852	Land Use	4.2.2-13	4.2.2.5.2	David Goldberg	OPCD	"No mitigation would be required for land use impacts during operation or construction of the West Seattle Link Extension. In general, the West Seattle Link Extension would not result in inconsistencies with adopted land use plans." This statement is incorrect. As described in the section describing existing plans. each of the station area is designated and planned for additional growth in housing and community supportive uses. The acquisition of land and likely impact to redevelopment during construct, could negatively impact the development environment during lengthy construction phase. Sound Transit has a history of holding land that it doesn't need permanently. The DEIS should identify ways to track development impacts and integrate mitigation that encourages the development envisioned under city plans.	West Seattle (DUW, DEL, WSJ)
853	Land Use	4.2.2-3	4.2.2.1.2	Jim Holmes	OPCD	When referring to the industrial area identify it as the Duwamish MIC or the BINMIC. There is no 'Industrial District' in addition to those designations.	West Seattle (DUW, DEL, WSJ)
854	Land Use	4.2.2-4	4.2.2.2	Jim Holmes	OPCD	Regional MIC policies do not currently call for TOD in MICs.	West Seattle (DUW, DEL, WSJ)
855	Land Use	4.2.2-4	4.2.2.3.1	Jim Holmes	OPCD	Make the distinction about where Vision 2050 encourages growth of more and diverse types of affordable housing. Vision 2050 does not encourage housing in MIC's	All (Systemwide)
856	Land Use	4.2.2-5	4.2.2.3.1	Jim Holmes	OPCD	Potential need to relocate City Light Transmission lines to accommodate the proposed transportation use located along the busway to 6th Avenue South could result in limits on redevelopment of adjacent parcels to provide clearance for transmission lines.	SODO/CID
857	Land Use	4.2.2-5	4.2.2.3.1	Katy Haima	OPCD	Please include diagram showing entire segment and portions of the alignment that are in the ROW and those that are not.	All (Systemwide)
858	Land Use	4.2.2-5	4.2.2.3.1	Katy Haima	OPCD	Please include the total percentage of each type of land use in each station area, as well as what percent of the land in the study area that land converted to a transportation use; using the citywide total does not adequately describe impacts in relation to the local context and neighborhood scale.	All (Systemwide)
859	Land Use	4.2.2-9	4.2.2.3.2 - 4.2.2.3.5	Geoff Wentlandt	OPCD	These sections do not include enough information to compare consistency with plans between the alternatives because they do not discuss the City of Seattle's future land use map designation around the proposed station locations. Some future land use map designations are more appropriate for the location of high capacity transit stations than others. For example regionally-designated urban centers are the most appropriate locations, and City of Seattle designated urban villages are also appropriate locations for the demands associated with high capacity transit stations. It should be noted as an inconsistency with plans where a station location would be located outside of an urban center or urban village, as in the case of Delridge station locations.	West Seattle (DUW, DEL, WSJ)
860	Land Use	4.2.2-9	4.2.2.3.4	Katy Haima	OPCD	Analysis only discusses direct impacts of land to transportation uses, not impacts to adjacent land due to conversion to transportation uses. Please discuss potential impacts and mitigation to land that is adjacent to converted transportation uses, especially residential and park land.	West Seattle (DUW, DEL, WSJ)
861	Land Use	4.2.2-9	4.2.2.3.4	Katy Haima	OPCD	Please discuss impacts on residential uses adjacent to station, especially those residential lots at the southeast corner of the block.	West Seattle (DUW, DEL, WSJ)
862	Land Use	4.3.2-1	4.3.2.1.2, Table 4.3.2-2	Magda Hogness	OPCD	The information necessary to identify impacts and compare alternatives is missing. For the Chinatown-International District Segment alternatives, provide more information on the specific land that would convert to a transportation use and how this would meet the goals of the special review districts, specifically per SMC23.66. Without this analysis, the potential conflict with local controls cannot be determined. Provide information on how the existing pattern of land use would change along with indirect land use impacts in context with the special review districts.	SODO/CID
863	Land Use	4.3.2-10	4.3.2.3.3, 4.3.2.5.2	Geoff Wentlandt	OPCD	See previous comment above about indirect land use impacts. There is not enough information about indirect land use impacts to compare the impact of the alternatives. Of note, any discussion of the indirect land use impacts from the Chinatown/ID station locations is absent. An indirect land use impact analysis that looks at land uses within 1/2 mile of station locations could identify the degree to which community-oriented and civic land uses would be affected by the alternatives for the C/ID station.	SODO/CID
864	Land Use	4.3.2-11	4.3.2.4	Geoff Wentlandt	OPCD	There is not enough information to understand the land use impacts during construction. The degree to which the alternatives disrupt land use due to construction is not provided. It may not be true that impacts during construction "would not affect the land use types unless the property became vacant". Construction effects such as access closures, loud construction noises, and movement of heavy construction vehicles would affect the viability of adjacent and nearby land uses. Different alternatives could have different patterns of these affects. Construction activity is more likely to impact land uses with street level retail and civic and open space uses that are closely linked to access by pedestrians to visits for leisure.	All (Systemwide)
865	Land Use	4.3.2-14	4.3.2.6	Geoff Wentlandt	OPCD	This does not adequately identify the need for mitigation. There is likely to be needed mitigation for indirect land use impacts near some station locations. Indirect land use impacts would likely be found near some or all of the C/ID station locations if the land use pattern after construction would impact a concentration of community-oriented or civic uses. Equitable development measures to ensure retention of community-oriented and civic uses in the neighborhood could be needed.	SODO/CID

866	Land Use	4.3.2-5	4.3.2.3.1	Jim Holmes	OPCD	Make the distinction about where Vision 2050 encourages growth of more and diverse types of affordable housing. Vision 2050 does not encourage housing in MIC's	All (Systemwide)
867	Land Use	4.3.2-6	4.3.2.3.1	Vera Giampietro	OPCD	This will require coordination with the City: "The project is a 'regional transit authority facility' and is, therefore, explicitly recognized as an essential public facility in the Growth Management Act (RCW 36.70A.200). Once a Ballard Link Extension alternative is selected, jurisdictions have a duty to accommodate the project in their land use plans and development regulations."	All (Systemwide)
868	Land Use	4.3.2-7	Table 4.3.2-2	Lucien Ong (ADEIS: Aaron Hursey)	OPCD	Table 4.3.2-2 should include a row for CID-2A-Diagonal option	SODO/CID
869	Land Use	4.3.4-1	4.3.1.1	Jim Holmes	OPCD	Refer to the Duwamish MIC not 'industrial district'	West Seattle (DUW, DEL, WSJ)
870	Social Resources, Community Facilities, and Neighborhoods	4.2.4-12	4.2.4.3.4	Vera Giampietro	OPCD	This conclusion seems incorrect. Please clarify methodology that supports the following conclusion. City of Seattle does not agree, and without sufficient rationale we cannot accurately distinguish between alternatives, nor recommend proper mitigation. "Alternative DEL-3 and Alternative DEL-4* would also displace homes in the southeast corner of the Youngstown area, but three would be fewer displacements, and displacements would be closer to the arterial roads; therefore, neighborhood cohesion would not be affected."	West Seattle (DUW, DEL, WSJ)
871	Social Resources, Community Facilities, and Neighborhoods	4.2.4-16	4.2.4.4.2	Vera Giampietro	OPCD	Identify mitigation for closure of the SODO trail between Royal Brougham Way and South Forest Street.	SODO/CID
872	Social Resources, Community Facilities, and Neighborhoods	4.2.4-4	4.2.4	David Goldberg	OPCD	Sound Transit has characterized the Delridge Station as a transfer station where most riders arrive by bus. This section should also include demographics of the RapidRide h line ridershed.	West Seattle (DUW, DEL, WSJ)
873	Social Resources, Community Facilities, and Neighborhoods	4.3.4-16	4.3.4.3.3	Magda Hogness	OPCD	The information necessary to identify impacts and compare alternatives is missing. Provide more information on how the light rail stations would be more integrated into the Chinatown-International District with these alternatives given the existing station and the degree to which some of the alternatives connect underground, while most require an above grade transfer connection and that project would increase ridership by about 50 percent compared to the No Build Alternative, largely due to rail-to-rail transfers between the two International District/Chinatown Station platforms. Demonstrate that the project avoids all direct and indirect impacts to neighborhood cohesion or alternatively identify potential mitigation strategies and measures to ensure the International District neighborhood cohesion remains intact throughout construction.	SODO/CID
874	Social Resources, Community Facilities, and Neighborhoods	4.3.4-16	4.3.4.3.3	Katy Haima	OPCD	Are any of the acquisitions cultural anchors (may be businesses), and if so, how would acquisition of these properties may impact neighborhood cohesion.	SODO/CID
875	Social Resources, Community Facilities, and Neighborhoods	4.3.4-16	4.3.4.3.3	Vera Giampietro	OPCD	Please explain the process by which it was determined that the project would not directly impact neighborhood cohesion. Throughout the document there have been examples of impacts that are not described here as contributing factors to cohesion, such as potential for both direct and indirect displacement, closure of the Chinatown Gate for a number of years, decreases in foot traffic, increases in construction impacts such as noise, vibration, utility shutoffs, fencing, dust, and more. It would help to include community member and business owner narrative about perceptions of impacts to help substantiate the claim that there is no direct impact to neighborhood cohesion. Without more information we cannot differentiate between alternatives or recommend appropriate mitigation for impacts to CID communities.	SODO/CID
876	Social Resources, Community Facilities, and Neighborhoods	4.3.4-18	4.3.4.3.5	Vera Giampietro	OPCD	The analysis applied to the South Interbay segment here should be applied to Delridge alternatives where the guideway runs alongside low-rise and single family development that is not proposed for acquisition and will sit in the shadow of a new multi-story light rail structure. "This alternative would place guideway columns across the southwest corner of the Interbay Golf Center property, permanently impacting playable area at the southwest corner of the golf course. This alternative would have the most impacts to social resources in this segment." The impacts could be greater than social cohesion alone, and could potentially include adverse property value impacts and compromised redevelopment potential in areas immediately adjacent to guideway structures. This impact should be studied. If these areas are re-zoned, we should know if it is likely for developers to see value in properties immediately adjacent to guideway columns, or if those properties would become undesirable and therefore limit ETOD potential within the community. Without information about how existing and potential future residences next to guideways will be impacted it is not possible to adequately differentiate between alternatives or recommend appropriate mitigation for impacts to Delridge communities.	All (Systemwide)
877	Social Resources, Community Facilities, and Neighborhoods	4.3.4-19	4.3.4.3.6	Vera Giampietro	OPCD	The statement that neighborhood cohesion would not be impacted because there are "few residences" near the Ballard elevated alternatives is not accurate - there are multiple large multifamily housing developments within the immediate vicinity of both 14th and 15th Ave elevated alternatives. Also it is unclear in this paragraph if the analysis is referring to the Interbay or Ballard stations. Please revise this language.	Interbay-Ballard
878	Social Resources, Community Facilities, and Neighborhoods	4.3.4-21	4.3.4.4.3	Vera Giampietro	OPCD	For impacts to business access within the CID, please identify appropriate mitigation so that businesses can continue to operate and so that the project does not create conditions for cultural displacement of this regionally unique cultural hub: "Closure of a portion of 5th Ave South for Alt CID-2a could inconvenience access between the existing International District/Chinatown Station and the Chinatown-International District community to the east... These roads would be closed for several years, which could inconvenience people traveling between the existing International District/Chinatown Station and the Chinatown-International District community to the east." Removal of parking, impediments to foot traffic flowing near retail businesses, noise, and presence of construction activity and machinery are examples of conditions that could impact access to businesses in the CID and therefore viability of this unique regional cultural hub.	SODO/CID

879	Social Resources, Community Facilities, and Neighborhoods	general	general	Katy Haima	OPCD	Does not discuss how DEL-5 and DEL-6 displace one of the only convenience stores/options for food access in the station area. Address this impact and propose mitigation for community.	West Seattle (DUW, DEL, WSJ)
880	Social Resources, Community Facilities, and Neighborhoods	general	general	Katy Haima	OPCD	Does not disclose potential reduced cohesion due to perceived barrier during construction and during operation. Please address community cohesion, study and disclose impacts, and propose mitigation. Without these impacts we can't differentiate between alternatives.	All (Systemwide)
881	Social Resources, Community Facilities, and Neighborhoods	General	General	Vera Giampietro	OPCD	Changes to existing transit service will affect access to jobs for some, and those impacts are missing and should be added.	SODO/CID
882	Technical Report: Visual	General	Geneareal	Lyle Bicknell	OPCD	Visual impact analysis is not sufficient for the tunnel stations. Impacts from above-grade components need to be assessed. This includes stand-alone station head houses, and any other above-grade facilities such as vent structures and traction substations.	Downtown
883	Technical Report: Visual	p 2-1	2.2	Valerie Kinast	OPCD - SDC	Outdated methodology was used, and our request in ADEIS comments to use the most up to date 2015 FHWA VIA Guidelines fully was ignored. Visual impacts are not completely disclosed. A too narrow definition of “sensitive viewers” is used, and viewers have not been involved in the process as recommended in the 2015 FHWA VIA Guidelines. The visual compatibility with existing conditions is portrayed as higher than it actually would be. In some places the baseline visual quality is placed lower than it should be. If impacted communities had been involved the baseline visual quality might be rated higher and impacts would be more substantial.	All (Systemwide)
884	Technical Report: Visual	p 3-1	3.1.2	Valerie Kinast	OPCD - SDC	Per 2015 FHWA VIA Guidelines use the “public involvement approach” to determine visual impacts. Viewers from the recreation, Indigenous, fishing, maritime industrial, and river clean-up communities should be involved.	West Seattle (DUW, DEL, WSJ)
885	Technical Report: Visual	p 3-1	3.1	Valerie Kinast	OPCD - SDC	Visual impacts are not completely disclosed. A too narrow definition of “sensitive viewers” is used, and viewers have not been involved in the process as recommended in the 2015 FHWA VIA Guidelines. The visual compatibility with existing conditions is portrayed as higher than it actually would be. In some places the baseline visual quality is placed lower than it should be. Vent structures and entrance buildings with ancillary elements such as vent structures are not being considered.	West Seattle (DUW, DEL, WSJ)
886	Technical Report: Visual	p 3-10	3.2.1	Valerie Kinast	OPCD - SDC	The placement of entrance buildings with ancillary elements such as vent structures in established dense, urban environments such as downtown, Ballard, and West Seattle Junction will result in visual impacts that should be disclosed, minimized, and mitigated.	SODO/CID
887	Technical Report: Visual	p 3-10	3.2.2	Valerie Kinast	OPCD - SDC	The placement of entrance buildings with ancillary elements such as vent structures in established dense, urban environments such as downtown, Ballard, and West Seattle Junction will result in visual impacts that should be disclosed, minimized, and mitigated	Downtown
888	Technical Report: Visual	p 3-10	3.2.1	Valerie Kinast	OPCD - SDC	Per 2015 FHWA VIA Guidelines use the “public involvement approach” to determine visual impacts. Many, various viewers should be involved in a well tailored, participatory process. The process should be designed and carried out by people with high cultural competence. Experts in visual and aesthetics and culture in the public realm should be involved.	SODO/CID
889	Technical Report: Visual	p 3-10	3.2.2	Valerie Kinast	OPCD - SDC	Per 2015 FHWA VIA Guidelines use the “public involvement approach” to determine visual impacts. Viewers from the various communities that use our downtown should be involved. Communities of color should be involved.	Downtown
890	Technical Report: Visual	p 3-10	3.2.3	Valerie Kinast	OPCD - SDC	Per 2015 FHWA VIA Guidelines use the “public involvement approach” to determine visual impacts. Viewers from the various communities that live and work within proximity and will pass by or use the facility frequently should be involved. Communities of color should be involved.	Interbay-Ballard
891	Technical Report: Visual	p 3-11	3.2.4	Valerie Kinast	OPCD - SDC	The placement of entrance buildings with ancillary elements such as vent structures in established dense, urban environments such as downtown, Ballard, and West Seattle Junction will result in visual impacts that should be disclosed, minimized, and mitigated	Interbay-Ballard
892	Technical Report: Visual	p 3-11	3.2.4	Valerie Kinast	OPCD - SDC	Per 2015 FHWA VIA Guidelines use the “public involvement approach” to determine visual impacts. Viewers from the various communities that live and work within proximity and will pass by or use the facility frequently should be involved. Communities of color should be involved.	Interbay-Ballard
893	Technical Report: Visual	p 3-2	3.2	Valerie Kinast	OPCD - SDC	Visual impacts are not completely disclosed. A too narrow definition of “sensitive viewers” is used, and viewers have not been involved in the process as recommended in the 2015 FHWA VIA Guidelines. The visual compatibility with existing conditions is portrayed as higher than it actually would be. In some places the baseline visual quality is placed lower than it should be.	All (Systemwide)
894	Technical Report: Visual	p 3-5	3.1.3	Valerie Kinast	OPCD - SDC	Per 2015 FHWA VIA Guidelines use the “public involvement approach” to determine visual impacts. Viewers from the community should be involved.	West Seattle (DUW, DEL, WSJ)
895	Technical Report: Visual	p 3-6	3.1	Valerie Kinast	OPCD - SDC	The placement of entrance buildings with ancillary elements such as vent structures in established dense, urban environments will result in visual impacts that should be disclosed, minimized, and mitigated.	All (Systemwide)
896	Technical Report: Visual	p 3-6	3.1.4	Valerie Kinast	OPCD - SDC	Per 2015 FHWA VIA Guidelines use the “public involvement approach” to determine visual impacts. Viewers from the community should be involved.	West Seattle (DUW, DEL, WSJ)
897	Technical Report: Visual	p 4-1	4.1.2.1	Valerie Kinast	OPCD - SDC	In this broad summary, please add that a very large bridge and several miles of very large guideways would be added to the environment in all alternatives.	All (Systemwide)
898	Technical Report: Visual	p 4-10	4.1.2.3	Valerie Kinast	OPCD - SDC	The impacts are underreported and should be reevaluated using the community involvement methods recommended in the more up to date FWHA 2018 VIA methodology.	West Seattle (DUW, DEL, WSJ)
899	Technical Report: Visual	p 4-10	4.1.2.3	Valerie Kinast	OPCD - SDC	The full visual impacts of elevated guideways and stations is being underreported.	West Seattle (DUW, DEL, WSJ)

900	Technical Report: Visual	p 4-10	4.1.2.3	Valerie Kinast	OPCD - SDC	In the Delridge section the impacts for alternatives and locations where many straddle bents will be needed were not adequately visualized, disclosed and mitigated.	West Seattle (DUW, DEL, WSJ)
901	Technical Report: Visual	p 4-22	4.1.2.4	Valerie Kinast	OPCD - SDC	The impacts are underreported and should be reevaluated using the community involvement methods recommended in the more up to date FWHA 2018 VIA methodology.	West Seattle (DUW, DEL, WSJ)
902	Technical Report: Visual	p 4-22	4.1.2.4	Valerie Kinast	OPCD - SDC	The placement of entrance buildings with ancillary elements such as vent structures in established dense, urban environments, including the West Seattle Junction, will result in visual impacts that should be disclosed, minimized, and mitigated	West Seattle (DUW, DEL, WSJ)
903	Technical Report: Visual	p 4-22	4.1.2.4	Valerie Kinast	OPCD - SDC	Identification of visual impacts of elevated Avalon stations are not adequate.	West Seattle (DUW, DEL, WSJ)
904	Technical Report: Visual	p 4-22	4.1.2.4	Valerie Kinast	OPCD - SDC	In the West Seattle Junction section the impacts for alternatives and locations where many straddle bents will be needed were not adequately visualized, disclosed and mitigated.	West Seattle (DUW, DEL, WSJ)
905	Technical Report: Visual	p 4-25	4.1.2.4 and figures 2-14a &b	Valerie Kinast	OPCD - SDC	It is wrong that alternative WSJ-2 would be a beneficial visual change to the neighborhood consider it would be a 70-80 foot bulky concrete structure in the right-of-way.	West Seattle (DUW, DEL, WSJ)
906	Technical Report: Visual	p 4-29	4.2.2.1	Valerie Kinast	OPCD - SDC	The impacts are underreported and should be reevaluated using the community involvement methods recommended in the more up to date FWHA 2018 VIA methodology.	All (Systemwide)
907	Technical Report: Visual	p 4-29	4.2.2.2	Valerie Kinast	OPCD - SDC	The impacts are underreported and should be reevaluated using the community involvement methods recommended in the more up to date FWHA 2018 VIA methodology.	SODO/CID
908	Technical Report: Visual	p 4-29	4.2.2.2	Valerie Kinast	OPCD - SDC	The placement of entrance buildings with ancillary elements such as vent structures in established dense, urban environments, including the Chinatown International District, will result in visual impacts that should be disclosed, minimized, and mitigated	SODO/CID
909	Technical Report: Visual	p 4-30	4.2.2.3	Valerie Kinast	OPCD - SDC	The impacts are underreported and should be reevaluated using the community involvement methods recommended in the more up to date FWHA 2018 VIA methodology.	Downtown
910	Technical Report: Visual	p 4-30	4.2.2.4	Valerie Kinast	OPCD - SDC	The impacts are underreported and should be reevaluated using the community involvement methods recommended in the more up to date FWHA 2018 VIA methodology.	Interbay-Ballard
911	Technical Report: Visual	p 4-30	4.2.2.3	Valerie Kinast	OPCD - SDC	The placement of entrance buildings with ancillary elements such as vent structures in established dense, urban environments, including Downtown, SLU, and Uptown, will result in visual impacts that should be disclosed, minimized, and mitigated	Downtown
912	Technical Report: Visual	p 4-30	4.2.2.4	Valerie Kinast	OPCD - SDC	In the South Interbay section the impacts for alternatives and locations where many straddle bents will be needed were not adequately visualized, disclosed and mitigated.	Interbay-Ballard
913	Technical Report: Visual	p 4-36	4.2.2.5	Valerie Kinast	OPCD - SDC	The impacts are underreported and should be reevaluated using the community involvement methods recommended in the more up to date FWHA 2018 VIA methodology.	Interbay-Ballard
914	Technical Report: Visual	p 4-36	4.2.2.5	Valerie Kinast	OPCD - SDC	The placement of entrance buildings with ancillary elements such as vent structures in established dense, urban environments, including Ballard, will result in visual impacts that should be disclosed, minimized, and mitigated	Interbay-Ballard
915	Technical Report: Visual	p 4-36	4.2.2.5	Valerie Kinast	OPCD - SDC	The visual impacts of a large bridge over the Duwamish river are underreported.	Interbay-Ballard
916	Technical Report: Visual	p 4-36	4.2.2.5	Valerie Kinast	OPCD - SDC	The visual impacts of miles of elevated guideways is being underreported.	Interbay-Ballard
917	Technical Report: Visual	p 4-44	4.3.3	Valerie Kinast	OPCD - SDC	The City of Seattle's Design Guidelines are administrated within the Design Review (Design Review Board) Program. This project is not subject to Design Review Board review it is subject to Design Commission Review.	All (Systemwide)
918	Technical Report: Visual	p 5-1	5.2	Valerie Kinast	OPCD - SDC	The aesthetics of stations and other structures will be reviewed by the Seattle Design Commission.	All (Systemwide)
919	Technical Report: Visual	p 5-1	5.2	Valerie Kinast	OPCD - SDC	Sound Transit will work collaboratively with the City of Seattle and communities from pre-design through 100% design of above, at, and below grade stations to minimize visual impacts by developing a civic aesthetic for each station that is aligned with the community vision.	All (Systemwide)
920	Technical Report: Visual	p 5-1	5.2	Valerie Kinast	OPCD - SDC	Any new Sound Transit design criteria for WSBLE should provide for substantial input by the City of Seattle and be coordinated with the City of Seattle Design Guidelines for WSBLE.	All (Systemwide)
921	Technical Report: Visual	p 5-1	5.2	Valerie Kinast	OPCD - SDC	Design stations, guideways, and other structures to meet community defined aesthetics.	All (Systemwide)
922	Technical Report: Visual	p 5-1	5.2	Valerie Kinast	OPCD - SDC	Any new Sound Transit design criteria for WSBLE should provide for substantial input by the City of Seattle and be coordinated with the City of Seattle Design Guidelines for WSBLE.	All (Systemwide)
923	Technical Report: Visual	p 5-1	5.2	Valerie Kinast	OPCD - SDC	The Sound Transit criteria and design process must allow for local input on systemwide elements, not just contextual elements. "Elements of continuity" make up much more of the station than "elements of distinction," so allowing local jurisdiction influence over only the elements of distinction prevents them from being able to address the bulk and scale of the facilities.	All (Systemwide)
924	Technical Report: Visual	p 5-1	5.2	Valerie Kinast	OPCD - SDC	Prior to 15% station design, solicit input from the OPCD and the Seattle Design Commission on the "kit" of systemwide elements.	All (Systemwide)
925	Technical Report: Visual	p 5-1	5.2	Valerie Kinast	OPCD - SDC	If a consistent architectural theme is developed for segments of WSBLE or the whole line, provide OPCD and the Seattle Design Commission substantial opportunity to provide input.	All (Systemwide)
926	Technical Report: Visual	p 5-1	5.2	Valerie Kinast	OPCD - SDC	Where joint development is anticipated, analyze development potential and set design parameters for the station and partner building that optimize urban design outcomes.	All (Systemwide)
927	Technical Report: Visual	p 5-2	5.3.1	Valerie Kinast	OPCD - SDC	To mitigate the height, bulk and scale of the guideways, provide a process for input on guideway design, including columns and substructures, at 15% when City of Seattle (including Seattle Design Commission) input on aesthetics can be addressed in a more substantive manner than adding embellishment and color during final design. Provide opportunity for City input on aesthetics of the guideways from 15% through 90% design. If design build is employed, provide for City of Seattle (including Seattle Design Commission) input on RFP content and design decisions related to urban design and aesthetics in all design and construction phases.	West Seattle (DUW, DEL, WSJ)

928	Technical Report: Visual	p 5-2	5.3.2	Valerie Kinast	OPCD - SDC	To mitigate the height, bulk and scale of the guideways, provide a process for input on guideway design, including columns and substructures, at 15% when City of Seattle (including Seattle Design Commission) input on aesthetics can be addressed in a more substantive manner than adding embellishment and color during final design. Provide opportunity for City input on aesthetics of the guideways from 15% through 90% design. If design build is employed, provide for City of Seattle (including Seattle Design Commission) input on RFP content and design decisions related to urban design and aesthetics in all design and construction phases.	All (Systemwide)
929	Technical Report: Visual	p 5-2	5.3.1	Valerie Kinast	OPCD - SDC	To mitigate the height, bulk and scale of the new Duwamish bridge, provide a process for input on guideway design, including columns and substructures, at 15% when City of Seattle input on aesthetics can be addressed in a more substantive manner than adding embellishment and color during final design. Provide opportunity for City input on aesthetics of the guideways from 15% through 90% design. If design build is employed, provide for City of Seattle (including Seattle Design Commission) input on RFP content and design decisions related to urban design and aesthetics in all design and construction phases.	West Seattle (DUW, DEL, WSJ)
930	Technical Report: Visual	p 5-2	5.3.2	Valerie Kinast	OPCD - SDC	To mitigate the height, bulk and scale of a Salmon Bay bridge, provide a process for input on guideway design, including columns and substructures, at 15% when City of Seattle input on aesthetics can be addressed in a more substantive manner than adding embellishment and color during final design. Provide opportunity for City input on aesthetics of the guideways from 15% through 90% design. If design build is employed, provide for City of Seattle (including Seattle Design Commission) input on RFP content and design decisions related to urban design and aesthetics in all design and construction phases.	All (Systemwide)
931	Technical Report: Visual	p 5-2	5.3	Valerie Kinast	OPCD - SDC	The proposed mitigation is lacking. Other infrastructure projects in the region in recent years have provided participatory processes for guiding aesthetic development of projects with special panels of community members and experts to mitigate the visual impacts of introducing very large transportation infrastructure into such complex environments with both natural features and longstanding, built urban fabric.	All (Systemwide)
932	Technical Report: Visual	p 5-2	5.3.1 & 2	Valerie Kinast	OPCD - SDC	To mitigate the height, bulk and scale of the stations, provide a process for input by the City of Seattle on the aesthetics of the columns and substructures of stations at 15%.	All (Systemwide)
933	Technical Report: Visual	p 5-2	5.3.1 & 2	Valerie Kinast	OPCD - SDC	To mitigate the height, bulk, scale and nature of the Traction Power Substations provide opportunity for input by the City of Seattle, including the Seattle Design Commission, on design of prototypes and the TPSS themselves.	All (Systemwide)
934	Technical Report: Visual	p 5-2	5.3.1 & 2	Valerie Kinast	OPCD - SDC	Develop with the City a tool, or process prior to FEIS, such as the Visual Quality Management Plan noted in the FHWA 2015 VIA Guidelines, to establish with communities viewer preferences, verify and modify them, and determine joint aesthetic goals for the corridor.	All (Systemwide)
935	Visual and Aesthetics	4.2.5-3	4.2.5.3.1	Valerie Kinast	OPCD - SDC	The aesthetics of stations and other structures will be reviewed by the Seattle Design Commission.	All (Systemwide)
936	Visual and Aesthetics	4.2.5-3	4.2.5.3.1	Valerie Kinast	OPCD - SDC	Sound Transit should work collaboratively with the City of Seattle and communities from pre-design through 100% design of above, at, and below grade stations to minimize visual impacts by developing a civic aesthetic for each station that is aligned with the community vision.	West Seattle (DUW, DEL, WSJ)
937	Visual and Aesthetics	4.2.5-3	4.2.5.3.1	Valerie Kinast	OPCD - SDC	Any new Sound Transit design criteria for WSBLE should provide for substantial input by the City of Seattle and be coordinated with the City of Seattle Design Guidelines for WSBLE.	West Seattle (DUW, DEL, WSJ)
938	Visual and Aesthetics	4.2.5-3	4.2.5.3.1	Valerie Kinast	OPCD - SDC	Develop with the City a tool, or process prior to FEIS, such as the Visual Quality Management Plan noted in the FHWA 2015 VIA Guidelines, to establish with communities viewer preferences, verify and modify them, and determine joint aesthetic goals for the corridor.	West Seattle (DUW, DEL, WSJ)
939	Visual and Aesthetics	4.2.5-3	4.2.5.3.1	Valerie Kinast	OPCD - SDC	Where joint development is anticipated, analyze development potential and set design parameters for the station and partner building that optimize urban design outcomes.	West Seattle (DUW, DEL, WSJ)
940	Visual and Aesthetics	4.2.5-3	4.2.5.3.1	Valerie Kinast	OPCD - SDC	Prior to 15% station design, solicit input from the OPCD and the Seattle Design Commission on the "kit" of systemwide elements.	West Seattle (DUW, DEL, WSJ)
941	Visual and Aesthetics	4.2.5-3	4.2.5.3.1	Valerie Kinast	OPCD - SDC	If a consistent architectural theme is developed for segments of WSBLE or the whole line, provide OPCD and the Seattle Design Commission substantial opportunity to provide input.	West Seattle (DUW, DEL, WSJ)
942	Visual and Aesthetics	4.2.5-3	4.2.5.3.1	Valerie Kinast	OPCD - SDC	The Sound Transit criteria and design process must allow for local input on systemwide elements, not just contextual elements. “Elements of continuity” make up much more of the station than “elements of distinction,” so allowing local jurisdiction influence over only the elements of distinction prevents them from being able to address the bulk and scale of the facilities.	West Seattle (DUW, DEL, WSJ)
943	Visual and Aesthetics	4.3.5-10	4.3.5.3.4	Valerie Kinast	OPCD - SDC	In the Interbay to Ballard segment the impacts are underreported and should be reevaluated using the methodology of the more up to date FWHA 2018 VIA guidelines. The impacts to viewers other than the narrowly defined "sensitive viewers" must also be considered. There is substantial impact from adding an elevated guideway for a long distance. Elevated stations have substantial visual impacts. The bridge has greater visual impacts than reported. Areas where there are straddle bents, especially several of them, have substantial visual impacts. These must all be adequately visualized, disclosed, and mitigated. Impacts of the bridge should be evaluated using the participatory process as recommended in the FWHA 2018 guidelines.	Interbay-Ballard
944	Visual and Aesthetics	4.3.5-19	4.3.5.6	Valerie Kinast	OPCD - SDC	The proposed mitigation is lacking. Other infrastructure projects in the region in recent years have provided participatory processes for guiding aesthetic development of projects with special panels of community members and experts to mitigate the visual impacts of introducing very large transportation infrastructure into such complex environments with both natural features and longstanding, built urban fabric.	All (Systemwide)

945	Visual and Aesthetics	4.3.5-19	4.3.5.6	Valerie Kinast	OPCD - SDC	To mitigate the height, bulk and scale of the guideways, provide a process for input on guideway design, including columns and substructures, at 15% when City of Seattle (including Seattle Design Commission) input on aesthetics can be addressed in a more substantive manner than adding embellishment and color during final design. Provide opportunity for City input on aesthetics of the guideways from 15% through 90% design. If design build is employed, provide for City of Seattle (including Seattle Design Commission) input on RFP content and design decisions related to urban design and aesthetics in all design and construction phases.	Interbay-Ballard
946	Visual and Aesthetics	4.3.5-19	4.3.5.6	Valerie Kinast	OPCD - SDC	The proposed mitigation is lacking. Other infrastructure projects in the region in recent years have provided participatory processes for guiding aesthetic development of projects with special panels of community members and experts to mitigate the visual impacts of introducing very large transportation infrastructure into such complex environments with both natural features and longstanding, built urban fabric.	Interbay-Ballard
947	Visual and Aesthetics	4.3.5-19	4.3.5.6	Valerie Kinast	OPCD - SDC	To mitigate the height, bulk and scale of the elevated stations provide a process for input on the columns and substructures at 15% when City of Seattle (including Seattle Design Commission) input on aesthetics can be addressed in a more substantive manner than adding embellishment and color during final design. Provide opportunity for City input on aesthetics of the guideways from 15% through 90% design. If design build is employed, provide for City of Seattle (including Seattle Design Commission) input on RFP content and design decisions related to urban design and aesthetics in all design and construction phases.	Interbay-Ballard
948	Visual and Aesthetics	4.3.5-3	4.3.5.3.1	Valerie Kinast	OPCD - SDC	The Sound Transit criteria and design process must allow for local input on systemwide elements, not just contextual elements. “Elements of continuity” make up much more of the station than “elements of distinction,” so allowing local jurisdiction influence over only the elements of distinction prevents them from being able to address the bulk and scale of the facilities.	All (Systemwide)
949	Visual and Aesthetics	4.3.5-3	4.3.5.3.1	Valerie Kinast	OPCD - SDC	If a consistent architectural theme is developed for segments of WSBLE or the whole line, provide OPCD and the Seattle Design Commission substantial opportunity to provide input.	All (Systemwide)
950	Visual and Aesthetics	4.3.5-3	4.3.5.3.1	Valerie Kinast	OPCD - SDC	Prior to 15% station design, solicit input from the OPCD and the Seattle Design Commission on the "kit" of systemwide elements.	All (Systemwide)
951	Visual and Aesthetics	4.3.5-3	4.3.5.3.1	Valerie Kinast	OPCD - SDC	Where joint development is anticipated, analyze development potential and set design parameters for the station and partner building that optimize urban design outcomes.	All (Systemwide)
952	Visual and Aesthetics	4.3.5-3	4.3.5.3.1	Valerie Kinast	OPCD - SDC	Develop with the City a tool, or process prior to FEIS, such as the Visual Quality Management Plan noted in the FHWA 2015 VIA Guidelines, to establish with communities viewer preferences, verify and modify them, and determine joint aesthetic goals for the corridor.	All (Systemwide)
953	Visual and Aesthetics	4.3.5-3	4.3.5.3.1	Valerie Kinast	OPCD - SDC	Develop with the City a tool, or process prior to FEIS, such as the Visual Quality Management Plan noted in the FHWA 2015 VIA Guidelines, to establish with communities viewer preferences, verify and modify them, and determine joint aesthetic goals for the corridor.	All (Systemwide)
954	Visual and Aesthetics	4.3.5-3	4.3.5.3.1	Valerie Kinast	OPCD - SDC	The aesthetics of stations and other structures will be reviewed by the Seattle Design Commission.	All (Systemwide)
955	Visual and Aesthetics	4.3.5-4	4.3.5.3.2	Valerie Kinast	OPCD - SDC	The impacts are underreported and should be reevaluated using the community involvement methods recommended in the more up to date FWHA 2018 VIA methodology.	SODO/CID
956	Visual and Aesthetics	4.3.5-4	4.3.5.3.2	Valerie Kinast	OPCD - SDC	In the CID the placement of entrance buildings with ancillary elements such as vent structures in this established dense, urban environments will result in visual impacts that should be disclosed, minimized, and mitigated.	SODO/CID
957	Visual and Aesthetics	4.3.5-4	4.3.5.3.2	Valerie Kinast	OPCD - SDC	In the CID, per 2015 FHWA VIA Guidelines use the “public involvement approach” to determine visual impacts. Many, various viewers should be involved in a well tailored, participatory process. The process should be designed and carried out by people with high cultural competence. Experts in visual and aesthetics and culture in the public realm should be involved.	SODO/CID
958	Visual and Aesthetics	4.3.5-4	4.3.5.3.3	valerie Kinast	OPCD - SDC	In the South Interbay segment the impacts are underreported and should be reevaluated using the methodology of the more up to date FWHA 2018 VIA guidelines. The impacts to viewers other than the narrowly defined "sensitive viewers" must also be considered. There is impact from adding an elevated guideway for a long distance. Elevated stations have visual impacts. The portal will have visual impact. Areas where there are straddle bents, especially several of them, have visual impacts. These must all be adequately visualized, disclosed, and mitigated.	Interbay-Ballard
959	Visual and Aesthetics	p 4.2.5-1	4.2.5	Valerie Kinast	OPCD - SDC	Outdated methodology was used, and our request in ADEIS comments to use the most up to date 2015 FHWA VIA Guidelines fully was ignored. Visual impacts are not completely disclosed. A too narrow definition of “sensitive viewers” is used, and viewers have not been involved in the process as recommended in the 2015 FHWA VIA Guidelines. The visual compatibility with existing conditions is portrayed as higher than it actually would be. In some places the baseline visual quality is placed lower than it should be. If impacted communities had been involved the baseline visual quality might be rated higher and impacts would be more substantial.	West Seattle (DUW, DEL, WSJ)
960	Visual and Aesthetics	p 4.3.4-8	4.3.4.1.1	Valerie Kinast	OPCD - SDC	In the CID, the Seattle Indian Health Board's Leshi Center is an 11 min walk from the station. It serves the region. The Chief Seattle Club is a seven minute walk from the station.	SODO/CID
961	Visual and Aesthetics	p 4.3.5-1	4.3.5.1	Valerie Kinast	OPCD - SDC	Outdated methodology was used, and our request in ADEIS comments to use the most up to date 2015 FHWA VIA Guidelines fully was ignored. Visual impacts are not completely disclosed. A too narrow definition of “sensitive viewers” is used, and viewers have not been involved in the process as recommended in the 2015 FHWA VIA Guidelines. The visual compatibility with existing conditions is portrayed as higher than it actually would be. In some places the baseline visual quality is placed lower than it should be. If impacted communities had been involved the baseline visual quality might be rated higher and impacts would be more substantial.	All (Systemwide)
962	Visual and Aesthetics	p 4.3.5-1	4.3.5.1.1	Magda Hogness	OPCD	The information necessary to identify impacts and compare alternatives for visual and aesthetic resources is missing. Provide information on the size, location and visibility of the vents for each alternative. Demonstrate that the project avoids all impacts or alternatively identify potential mitigation strategies.	SODO/CID

963	Visual and Aesthetics	p 4.3.5-1	4.3.5.3.1	Valerie Kinast	OPCD - SDC	Sound Transit should work collaboratively with the City of Seattle and communities from pre-design through 100% design of above, at, and below grade stations to minimize visual impacts by developing a civic aesthetic for each station that is aligned with the community vision.	All (Systemwide)
964	Visual and Aesthetics	p 4.3.5-1	4.3.5.3.1	Valerie Kinast	OPCD - SDC	Any new Sound Transit design criteria for WSBLE should provide for substantial input by the City of Seattle and be coordinated with the City of Seattle Design Guidelines for WSBLE.	All (Systemwide)
965	Visual and Aesthetics	p 4.3.5-10	4.3.5.3.4	Valerie Kinast	OPCD - SDC	The impacts are underreported and should be reevaluated. The impacts to viewers other than what was narrowly defined with the term "sensitive viewers" must also be considered. There is impact from adding an elevated guideway for a long distance. Elevated stations have visual impacts. Areas where there are straddle bents, especially several of them, have visual impacts.	Interbay-Ballard
966	Visual and Aesthetics	p 4.3.5-19	4.3.5.6	Valerie Kinast	OPCD - SDC	To mitigate the height, bulk and scale of the guideways, provide a process for input on guideway design, including columns and substructures, at 15% when City of Seattle (including Seattle Design Commission) input on aesthetics can be addressed in a more substantive manner than adding embellishment and color during final design. Provide opportunity for City input on aesthetics of the guideways from 15% through 90% design. If design build is employed, provide for City of Seattle (including Seattle Design Commission) input on RFP content and design decisions related to urban design and aesthetics in all design and construction phases.	Interbay-Ballard
967	Visual and Aesthetics	p 4.3.5-19	4.3.5.6	Valerie Kinast	OPCD - SDC	Mitigation should be provided for visual impacts in the CID and Downtown.	SODO/CID
968	Visual and Aesthetics	p 4.3.5-19	4.3.5.6	Valerie Kinast	OPCD - SDC	To mitigate the height, bulk and scale of the elevated stations provide a process for input on the columns and substructures at 15% when City of Seattle (including Seattle Design Commission) input on aesthetics can be addressed in a more substantive manner than adding embellishment and color during final design. Provide opportunity for City input on aesthetics of the guideways from 15% through 90% design. If design build is employed, provide for City of Seattle (including Seattle Design Commission) input on RFP content and design decisions related to urban design and aesthetics in all design and construction phases.	All (Systemwide)
969	Visual and Aesthetics	p 4.3.5-4	4.3.5.3.2	Valerie Kinast	OPCD - SDC	The impacts are underreported and should be reevaluated using the community involvement methods recommended in the more up to date FWHA 2018 VIA methodology.	SODO/CID
970	Visual and Aesthetics	p 4.3.5-4	4.3.5.3.3	Valerie Kinast	OPCD - SDC	The impacts are underreported and should be reevaluated. The impacts to viewers other than what was narrowly defined with the term "sensitive viewers" must also be considered. There is impact from adding an elevated guideway for a long distance. Elevated stations have visual impacts. Areas where there are straddle bents, especially several of them, have visual impacts.	Interbay-Ballard
971	Executive Summary	ES-6	ES 3.1.1.1	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. A statement about why Smith Cove was selected as the terminus for the Ballard Link Extension MOS options (similar to the explanation for why Delridge was identified as the terminus for the West Seattle Link Extension MOS). Given the land use and expected ridership, the Interbay station seems like a more effective place to terminate service compared to Smith Cove station.	Interbay-Ballard
972	Executive Summary	ES-8	ES 3.1.1.1	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. The CID section mentions that most buses using the SODO Busway today will be "replaced with light rail service currently under construction". Clarify if this statement also true for the SODO segment or if there are additional buses that will be impacted in this segment and additional mitigation required.	SODO/CID
973	Executive Summary	ES-8	Figure ES-9	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. The graphic representation of the proposed overpasses at Holgate and Lander are misleading as they are proposed to extend all the way between 4th Ave and 6th Ave as shown in Appendix J.	SODO/CID
974	Executive Summary	ES-8	ES 3.1.1.1	Elisabeth Wooton	SDOT	The analysis is incomplete. Impacts related to both freight mobility and non-motorized mobility as a result of the proposed grades of the Holgate and Lander overpasses are not discussed. Based on the information available in Appendix J, which does not include roadway grade details, it can be assumed that the grades would be approaching 10% which is above guidance for both truck streets and pedestrian routes. Both streets are major truck routes and Holgate is a heavy haul route. In addition, the pedestrian facilities would be above the recommended for accessible route and additional mitigation may be required (such as a grip rail, landings, or other features).	SODO/CID
975	Executive Summary	ES-9	Table ES-1	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Please provide an estimated duration of the SODO Trail detour. Providing a comparable facility on a parallel street may require reallocating vehicle lanes and may impact operations, including transit and freight mobility, for extended construction durations. These impacts need to be identified and named in order for appropriate mitigation to be developed.	SODO/CID
976	Executive Summary	ES-12	ES 3.1.1.2	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. In order to understand the feasibility of mitigating impacts to maritime businesses, there needs to be more information on what potential mitigation might include if any (relocating to another county or state?). Need to be more explicit about the significance of the impacts locally/regionally/nationally if businesses cannot relocate within Seattle. For comparison purposes, the table could indicate the number of business displacements that would be difficult to relocate within Seattle by alternative.	All (Systemwide)
977	Executive Summary	ES-12	ES 3.1.1.2	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. There is no reference to the steep slopes of Pigeon Point or the proximity to the West Seattle Bridge structure for DUW-1a and DUW-1b.	West Seattle (DUW, DEL, WSJ)
978	Executive Summary	ES-18	Table ES-3	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Duration of the Delridge Way SW partial closure is not included for the DEL-1b* alternative.	West Seattle (DUW, DEL, WSJ)
979	Executive Summary	ES-32	Table ES-6	Elisabeth Wooton	SDOT	Correction. Preferred Alternative for the Downtown segment (DT-1*) should be shown with pink heading in the table.	Downtown
980	Executive Summary	ES-32	Table ES-6	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: bus and bike mitigation needed with a closure on 4th Ave between Pine and Olive Way. This closure would disrupt the bike network in downtown and would need to be mitigated by providing an equivalent all ages and abilities (AAA) connection through downtown or a westward connection to the existing 2nd Ave PBL.	All (Systemwide)

981	Executive Summary	ES-32	Table ES-6	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. ST and SDOT need to analyze each street closure, with corresponding tables of closures, duration, and extents as well as a map visual to understand the network impacts and ensure mitigation. SDOT will need to approve Traffic Control Plans. ST should not assume that the streets will be returned to existing channelization / condition post-construction.	All (Systemwide)
982	Executive Summary	ES-32	Table ES-6	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Curbspace and business delivery needs will need to be mitigated with any street closures to ensure businesses and resident's can still receive goods and materials.	All (Systemwide)
983	Executive Summary	ES-32	Table ES-6	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: A clear understanding of why city ROW would need to be used for an entrance plaza for Denny Station. Closure of 9th Ave in DT-1 could be rebuilt as public ROW differently than how it operates now. Need more information.	Downtown
984	Executive Summary	ES-34		Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Tiny house community displacement will need to be relocated to ensure harm is not introduced to vulnerable populations to the construction of SIB-1.	Interbay-Ballard
985	Executive Summary	ES-34		Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Business access will need to be better analyzed and determined where turn pockets can be designed to accommodate necessary turning movements or specific focus at (new or existing) signalized intersection for U-turns.	All (Systemwide)
986	Executive Summary	ES-34		Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. SIB-1 has the potential to provide a multi-use trail under/adjacent to the elevated track that would ensure safe walking and biking facilities to the west of 15th Ave W and east of the BNSF RR tracks in order to access the Interbay or Smith Cove stations. It would connect up to the existing Elliott Bay Trail. This should be considered mitigation for station access. If this is not part of the mitigation package for this station, then expansion of the existing Dravus St bridge over the RR tracks will be included.	Interbay-Ballard
987	Executive Summary	ES-34		Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: additional evidence that the Smith Cove station should be the M.O.S. in the Ballard extension. There are zero non-motorized connections or transit service to Smith Cove from the Queen Anne neighborhood. Mitigation will need to be identified to allow people to access this M.O.S.	Interbay-Ballard
988	Executive Summary	ES-35	Table ES-7	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Missing are: the need for the station at "Smith Cove." Is the primary purpose to be a M.O.S before the rest of the Ballard extension can open? Prefer the Interbay Station to act at the M.O.S. and not include the Smith Cove station at all. With a cost of $1.3B and ridership of 2,600, it seems that investment could be used to ensure non-motorized access for those 2,600 users to get to the Interbay station in a safe and predictable manner or dedicate those funds to a tunnel crossing of the Ship Canal or other "third-party" funding ideas in the DEIS.	Interbay-Ballard
989	Executive Summary	ES-36		Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: the broader regional impacts of maritime/water-dependent businesses that would be displaced and permanently closed. That industry is important to Seattle's diversified economy and important to take a closer look at the impacts of business closures to determine alignment. Water-dependent / maritime business impact with the tunnel option IBB-2a and b seem to be less than a bridge. Please elaborate. Fewer permanent impacts to treaty-fishing areas and maritime industries should be the goal in determining best alternative to cross the water. An equity lens should be the north star with this analysis.	Interbay-Ballard
990	Executive Summary	ES-38		Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Interesting that there is mitigation mentioned for the displacement of 14th Ave NW Boat Ramp prior to construction, but no mention of potential mitigation for any other displacements mentioned, especially "Seattle Housing Authority low-income housing building" and it seems that ST could also ensure equivalent number of housing units are available in some other capacity. ST can look to incorporate a new grocery store within its land at the Ballard Station as the Safeway is well used by community.	Interbay-Ballard
991	Executive Summary	ES-39	Table ES-8	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Impact of "limited pedestrian and bicycle access" is identified, but no mitigation proposed to ensure safe mobility during construction. Identify mitigation for trail closures with the same equivalent all ages and abilities (AAA) bike facility standard.	Interbay-Ballard
992	Executive Summary	ES-39	Table ES-8	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Mitigation for the extended 14th Ave NE street closure is a different street channelization all together. The future vision could be similar to that installed north on 14th Ave NW between NW 59th St and NW 61st St - Gemenskap Park. The future of that street is not a four-lane cross section, even if parking is two of those lanes. The City, ST, and community should design the street together for the best outcome.	Interbay-Ballard
993	Executive Summary	ES-40	ES.4	Elisabeth Wooton	SDOT	Language choice. Need to be more consistent with terms used to describe impacts throughout the document (temporary, construction, operational, short-term, long-term, etc.). In particular, "long-term" and "short-term" are relative terms that need to be defined. The use of "long-term" in the first paragraph of this section seems to relate to permanent, operation impacts. However, many of the construction impacts and closures last multiple years and are also referred to as 'long-term'. In the third paragraph of this section, it is unclear if 'long-term' is referencing permanent, operational impacts or construction impacts with long durations.	All (Systemwide)
994	Executive Summary	ES-40	ES.4	Elisabeth Wooton	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Need clarification on what parties are expected to fund the mitigation required to reroute buses to nearby streets due to construction impacts. The mitigation should take into account paving needs on these detour routes that may not have been designed for transit vehicles and also any OCS relocation as needed.	All (Systemwide)
995	Executive Summary	ES-40	ES.4	Elisabeth Wooton	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. When providing detours through/around construction zones, meeting ADA standards alone is insufficient as that law is strictly related to buildings/facilities access and does not provide standards for public ROW or bicycle facilities. Detour routes or temporary access should at a minimum comply with the ADA's Proposed Public Rights-of-Way Accessibility Guidance (PROWAG), the City's Streets Illustrated, MUTCD, and any other City requirements (such as 10-2015: Pedestrian Mobility in and around Work Zones).	All (Systemwide)

996	Executive Summary	ES-40	ES.4	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Commit to funding affected bicycle facilities alternates that meet the AAA design standard, like ST committed to funding ped facilities. "Existing or planned designated bicycle facilities or routes may be permanently impacted by the project. Sound Transit would work with the City of Seattle to rebuild affected facilities or develop alternate facilities or routes. Pedestrian facilities would also be permanently impacted, and Sound Transit would fund improvements to mitigate these impacts, such as widened sidewalks or new walkways, as well as associated treatments that may be required for safe operations."	All (Systemwide)
997	Executive Summary	ES-40	ES.4	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. With the blanket statement of "Sound Transit would develop Construction Access and Traffic Management Plans for the overall project ..." when does this occur and how is it wrapped into the regulatory process of the EIS and MUP decision to guarantee mitigation occurs as a result of the MUP decision? It feels like mitigation for numerous construction impacts and roadway reconstruction after construction should be called out in the FEIS.	All (Systemwide)
998	Executive Summary	ES-40	ES.4	Elisabeth Wooton	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Please include crossing enhancements as mitigation and be clear about any restrictions on what ST would fund in terms of either scope or geography.	All (Systemwide)
999	Executive Summary	ES-40	ES.4	Elisabeth Wooton	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Statement "During construction, ST would minimize potential effects on pedestrian and bicycle facilities by providing clearly marked detours within construction areas" needs further explanation of what "within construction areas" means. Also, need further explanation of what "ST would work with the City of Seattle to develop and implement a construction management plan" means in terms of funding and cost sharing.	All (Systemwide)
1000	Executive Summary	ES-41	ES.5.2	Elisabeth Wooton	SDOT	The analysis is incomplete. Several significant impacts have not been identified. In addition to CID and Downtown segments, Ballard and Interbay segments would have construction impacts related to closures of major arterials for long durations (15th Ave, Elliott Ave) with limited detour routes available.	Interbay-Ballard
1001	Ch 2 Alternatives Considered	2-2	2	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Need further justification for why Smith Cove was selected as the terminus for the Ballard Link Extension MOS options. Given the land use and expected ridership, the Interbay station seems like a more effective place to terminate service compared to Smith Cove station.	Interbay-Ballard
1002	Ch 2 Alternatives Considered	2-8	2.1.1.2	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Very non-committal statements in the DEIS about mitigation and access to stations and maybe Sound Transit would make improvements. "Sound Transit could make, or partner with other local agencies on, road improvements (such as sidewalks, bike lanes, or widening) or road realignments at some stations." Stronger commitment to access for people walking and biking will be necessary and required, as appropriate to ensure ridership projections.	All (Systemwide)
1003	Ch 2 Alternatives Considered	2-11	2.1.1.2	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: a re-assessment of secured bike parking at the station areas. From past experience, it is difficult for Sound Transit to appropriately size and place bike parking for all sizes of bikes. Secure bike parking areas need to be a first-thought in station design as very few, if any different-sized bikes cannot reliably be taken on Light Rail due to lack of capacity and with more people buying e-bikes; safe storage will be critical for high ridership numbers and user comfort within the trains. Request Sound Transit to do additional secure bike parking analysis with ideas for each station area to expand secure bike parking capacity within Sound Transit-owned land.	All (Systemwide)
1004	Ch 2 Alternatives Considered	2-22		Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Would like this to be stated as mitigation as the relocation of the SODO Trail is a big impact and would have to ensure its connections and amenities are improved and meets our standards of a multi-use trail width. "The SODO Trail would be relocated east of the station area, adjacent to the existing light rail line."	SODO/CID
1005	Ch 2 Alternatives Considered	2-45		Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. In analyzing the SIB segment, location preference is to the west of 15th Ave W and not elevated along 15th Ave W, due to freight mobility and business access restrictions. With an elevated line on the west, that may present an opportunity to include a non-motorized connection in a great location and should be considered as part of a final mitigation package to ensure access to the Interbay and South Interbay stations achieve the anticipated ridership numbers.	Interbay-Ballard
1006	Ch 2 Alternatives Considered	2-46, 2-49	Table 2-2	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Unsure of how Sound Transit will get to a preferred alternative for CID segment? What criteria will be used that was not used in the DEIS process?	SODO/CID
1007	Ch 2 Alternatives Considered	2-63, 2-65	2.1.2.2.4	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: The West Galer Street flyover pedestrian facility would be modified to maintain its function in approximately the same location, providing access to the station. Please include access for people biking to this station to determine mitigation needed. A multi-use trail below the elevated section should be considered.	Interbay-Ballard
1008	Ch 2 Alternatives Considered	2-63, 2-65	2.1.2.2.4	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Missing are: impacts with bus layover at the station; assuming that the buses would be off-street and not utilizing on-street opportunities. Prefer to have the buses out of the ROW when on layover.	Interbay-Ballard
1009	Ch 2 Alternatives Considered	2-67	2.1.2.2.5	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Many of the streets in this station area are not built to standards and Sound Transit should ensure enough funding to upgrade all streets to SDOT standards.	Interbay-Ballard
1010	Ch 2 Alternatives Considered	2-67	2.1.2.2.5	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Missing are: include in the discussion of alternatives, the importance of the maritime industry and necessity to maintain and preserve it, so the tunnel should be thought of as more viable part of the WSBLE project without needing third-party funding. Many fewer impacts to mitigate with the tunnel option vs bridge options.	Interbay-Ballard
1011	Ch 2 Alternatives Considered	2-78	2.4.2.1	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Missing are: access from NW Seattle is not accurate as the goal should be how to get riders to use non-motorized transportation options to access each station - the Smith Cove station is in the middle of a vehicular environment that may have non-motorized access from the west side, but not the east side of Elliott Ave W.	All (Systemwide)

1012	Ch 2 Alternatives Considered	2-78	2.4.2.1	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Missing are: off-street bus layover is the only acceptable solution for a new station. There should be no mention of on-street bus layover in the DEIS.	Interbay-Ballard
1013	Ch 2 Alternatives Considered	2-78	2.4.2.1	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Missing are: arguments made to establish M.O.S at Smith Cove is not satisfactory and should be more fully vetted to ensure the M.O.S should not be at the Interbay Station.	Interbay-Ballard
1014	Ch 2 Alternatives Considered	2-95	2.8.2.1.2	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Missing are: the need for third party funding for a tunnel at the Ship Canal - the cost estimates are the equivalent to the elevated bridge structure.	Interbay-Ballard
1015	Ch 3 Transportation	3-1, Multiple	3.1, Multiple	Elisabeth Wooton	SDOT	Word choice. In the opening paragraph, using the phrasing "short-term" as the over-arching term to describe construction impacts is not reflective of some of the extended closures and construction durations (multiple years, up to 10 years in the case of the SODO Busway closure). The phrasing minimizes what are potentially very disruptive and long-lasting construction impacts. Suggest simply using 'construction' and 'operation' to signify the type of impact throughout the document. If the phrase 'short-term' is to be used, it should be defined more clearly and used to distinguish relative duration of impact related to construction activities (weeks/months versus years).	All (Systemwide)
1016	Ch 3 Transportation	3-1	Table 3-1	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Impacts to regional roadways as defined in section 3.3.1 need to be named, even if only construction impacts. Impacts to freeway ramps as well as the potential for detour traffic should be included in this table.	All (Systemwide)
1017	Ch 3 Transportation	3-2	Table 3-1	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. For Arterials and Local Street Operations, provide further quantification of construction impacts, especially for closures with long durations or closures that are overlapping. If potential detour routes are limited (either not available or already near/at capacity), then the DEIS needs to be explicit that capacity will be constrained and mitigation efforts will need to focus on partnerships to develop and implement TDM strategies, mode shift incentives, public awareness campaigns, transit service improvements, etc. If there are differences in the level of impact between alternatives, this needs to be made more clear.	All (Systemwide)
1018	Ch 3 Transportation	3-3	Table 3-1	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Missing are: the fact that the Interbay Station has zero pedestrian or bicycle infrastructure and would need all upgraded streets. Mitigation should also include the creation of a Ship Canal Trail extension directly to the Interbay Station (on the east side of the BNSF RR tracks).	Interbay-Ballard
1019	Ch 3 Transportation	3-3	Table 3-1	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. If a key finding states "other stations would have less non-motorized activity" - that means there was no mitigation identified to increase non-motorized customers to access the station. Mitigation needs to be identified.	All (Systemwide)
1020	Ch 3 Transportation	3-3	Table 3-1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Non-motorized impacts during construction will be need to be mitigated to ensure most vulnerable travelers will have safe access around construction sites. Will need to learn more about "some street connections would be permanently closed, requiring pedestrian and cyclists to use alternate routes." This is unacceptable unless mitigation for such closures is confirmed.	All (Systemwide)
1021	Ch 3 Transportation	3-3	Table 3-1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Event surge pedestrian LOS at Seattle Center station - this should be identified and mitigated on the train access platforms and surrounding street environment.	Downtown
1022	Ch 3 Transportation	3-3	Table 3-1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: This section should also contain bus on- vs off-street layover impacts / key findings. In general, all the station areas that are anticipating high level of bus ridership transfers should have an off-street bus layover plan.	All (Systemwide)
1023	Ch 3 Transportation	3-4	Table 3-1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Access improvements and what the curb space should look like at stations entrances, generally. We have no sense of how you plan to situate the access of customers to the station in any station area yet. So unsure of what impacts are needed to mitigate.	All (Systemwide)
1024	Ch 3 Transportation	3-5	Table 3-1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: we do not have a true sense of access to the station area needs as "the study area generally extends 0.5 mile from the project alternatives (including stations)." The analysis should include the standard walk- and bike shed to high capacity transit to fully identify impacts and subsequently mitigation to ensure customers can get to the station safely and by walking or biking. Recommend using 1-mile for walkshed and 3-miles for bike shed as we know e-bikes are in the now and future. Also ensure the 18-foot sidewalk requirement adjacent to a station entrance is met - See SDOT Streets Illustrated 3.2 sidewalks and footnote #2: "Sidewalks adjacent to light rail stations shall be a minimum of 18 feet wide."	All (Systemwide)
1025	Ch 3 Transportation	3-6	3.3.1	Elisabeth Wooton	SDOT	Correction. The West Seattle Bridge would be repaired (not replaced) prior to construction of the WSLE. Language used may confuse the public about the timing of the West Seattle High Bridge replacement which is expected to occur after light rail is extended to West Seattle.	West Seattle (DUW, DEL, WSJ)
1026	Ch 3 Transportation	3-10	Table 3-2	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. It is good to see that you included additional metrics to show what the project built would produce to reduce VMT. The change between "No Build" and "Build Alternative" is not that impressive, but at least it helps inch our way to climate action goals. Sound Transit should also discuss other actions that the region should take to further reduce VMT that other partners could move forward, such as congestion pricing. Sound Transit could also expand the study area even slightly to identify impacts to station access and provide mitigation that will help people access the stations in sustainable ways as recommended in previous comments.	All (Systemwide)
1027	Ch 3 Transportation	3-10	3.3.1	Elisabeth Wooton	SDOT	The analysis results are unclear. In existing conditions, “all five screen lines are over capacity in the peak travel direction” (pg. 3-7, 3.3.1) but in future conditions they are “at or near capacity with or without the project” (pg. 3-10, 3.3.1.2.2) even though only “modest vehicle volume decreases (0 to 3 percent)” in the Build alternative and presumably no decrease in the No Build alternative.	All (Systemwide)

1028	Ch 3 Transportation	3-10	3.3.2	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. The first sentence has a parenthetical station "regional transportation (roadway and transit) facilities would not be not be noticeably impacted during the West Seattle Link Extension construction period." is inconsistent with the information included in Section 3.11.3.1 which states that there will be impacts to SR 99 and the West Seattle Bridge in the Duwamish segment, both of which are defined as regional roadways in this section.	West Seattle (DUW, DEL, WSJ)
1029	Ch 3 Transportation	3-10	3.3.2	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. The first sentence has a parenthetical station "regional transportation (roadway and transit) facilities would not be not be noticeably impacted during the West Seattle Link Extension construction period." Regional transit was not previously defined. Based on the content of this section, it seems narrowly defined as light rail. The SODO Busway, which serves regional bus routes and is expected to be impacted in the SODO segment during construction and operations, should be considered a regional transit facility. Recommend either defining 'regional transit facilities' in section 3.3.1 in the same way that regional roadways were defined OR removing discussion of transit from this section and include any regional transit impacts in section 3.4.	SODO/CID
1030	Ch 3 Transportation	3-10	3.3.2	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. For impacts to regional facilities as a result of the Ballard Link Extension, need to further define what "limited short-term impacts" means. Durations for the closures and impacted ramps should be provided. Also, it should be stated whether identified detour routes have capacity to accommodate additional traffic or not. If detour route are unavailable or at capacity, mitigation efforts will need to focus on partnerships to develop and implement TDM strategies, mode shift incentives, public awareness campaigns, transit service improvements, etc.	SODO/CID
1031	Ch 3 Transportation	3-11	3.3.3	Elisabeth Wooton	SDOT	Mitigation measures for identified impacts are missing from the DEIS. Mitigation is not named for the construction impacts named in 3.3.2. Impacts to highway ramps need will need detour routes that can accommodate additional capacity. If detour route are unavailable or at capacity, mitigation efforts will need to focus on partnerships to develop and implement TDM strategies, mode shift incentives, public awareness campaigns, transit service improvements, etc.	SODO/CID
1032	Ch 3 Transportation	3-11	3.3.3	Elisabeth Wooton	SDOT	Mitigation measures for identified impacts are missing from the DEIS. Mitigation is not named for the construction impacts named in 3.3.2. The closure of the Stadium Station for up to 2 years under Alternative CID-1a*. Describe mitigation needed to ensure that sports and event attendees have alternative ways to travel to the stadiums while the Stadium Station is out of commission.	SODO/CID
1033	Ch 3 Transportation	3-11	3.3.3	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. There needs to be more detail about each station area construction impacts and mitigation, as there will definitely be mitigation needed while certain streets are closed or modified to allow for construction. There is a lot of missing information.	All (Systemwide)
1034	Ch 3 Transportation	3-13	3.4.1.3.1	Elisabeth Wooton	SDOT	The methodology used is misleading. Averaging the headways by number of buses inflates the existing headway value. Better to average headways by riders to reflect the fact that most riders are using the higher frequency routes.	West Seattle (DUW, DEL, WSJ)
1035	Ch 3 Transportation	3-14	3.4.3.1.1	Elisabeth Wooton	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are impacts to pavement, roadway configuration, and curb space management as a result of rerouting of bus routes to serve the Link stations. Mitigation needs to be identified for relocating loading zones and accessible parking space that are impacted, paving to support heavy transit vehicles, and any roadway modifications that might be needed to facilitate efficient transit service on roadways that currently don't serve transit. The City needs to be included in any coordination efforts related to rerouting of buses to ensure the City streets can sufficiently support transit operations.	SODO/CID
1036	Ch 3 Transportation	3-14	3.4.3.1.2	Elisabeth Wooton	SDOT	Mitigation measures for identified impacts are missing from the DEIS. If the closure of the SODO busway will eliminate all existing layover areas and relocation of those layover areas is required, there will be impacts to curb space that will need to be mitigated. In particular, impacts to loading zone and accessible parking will need to be relocated to the greatest extent possible.	SODO/CID
1037	Ch 3 Transportation	3-15	3.4.3.1.3	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is incomplete. Summary of buses being rerouted in the Delridge segment should be provided in this Chapter without having to reference Appendix N.1.	West Seattle (DUW, DEL, WSJ)
1038	Ch 3 Transportation	3-16	3.4.3.2	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Provide transit travel times under the MOS condition on the West Seattle Link Extension. Considering that Delridge Station would directly serve less than half of the potential ridership, most riders would be transferring from other transit service which are still operating on congested roadways or they would use the one-seat bus option provided under the MOS.	SODO/CID
1039	Ch 3 Transportation	3-16	3.4.3.2	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Need to justify the assumption that using an elevator would reduce or eliminate the walk time as there is additional waiting time associated with elevator use, especially for deep stations.	SODO/CID
1040	Ch 3 Transportation	3-19	3.4.3.5.2	Elisabeth Wooton	SDOT	Formatting. Seems like Table 3-6 should be moved up into section 3.4.3.4 where it is referenced.	West Seattle (DUW, DEL, WSJ)
1041	Ch 3 Transportation	3-23	3.5.3.1.1	Elisabeth Wooton	SDOT	The analysis is incomplete. Significant impacts have not been identified. Missing are the impacts of the permanent closure of the SODO Busway (SODO-1a and SODO-1b). Depending on which street the remaining buses are rerouted to, there may be a need to include a bus only lane which could impact operations and increase delay for vehicles and freight on the corridor. Need to clarify what the base assumptions were in the Build condition for lane allocation on 4th and 6th Avenues and identify any potential impacts associated with dedicated bus facilities on these corridors, if needed.	SODO/CID
1042	Ch 3 Transportation	3-23	3.5.3.1.1	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Information about the expected grades of the Lander St overpass should be provided (as it may impact freight mobility) and the area of expected impact should be provided (will the intersections at 4th and 6th Aves need to be raised).	SODO/CID

1043	Ch 3 Transportation	3-23	3.5.3.1.3	Elisabeth Wooton	SDOT	The analysis is incomplete. Significant impacts have not been identified. Many of the Delridge alternatives would require vehicles to recirculate off of main arterials onto lower volume, local streets. SW Nevada St, SW Dakota St, 30th Ave SW, and 32nd Ave SW are all residential, one-lane streets with parking on both sides. They are short segments with connectivity constraints and mostly uncontrolled intersections. As a result, they would be limited in their ability to safely and efficiently accommodate detour traffic. In addition, 26th Ave SW is an existing Neighborhood Greenway that is meant to remain low-volume to maintain safety for people biking. The volume of expected detour traffic needs to be quantified, including for the MOS condition, so that impacts and mitigation can be identified. Mitigation measures could include new intersection control, alternative Neighborhood Greenway route, traffic calming on residential streets, parking removal, crossing enhancements, etc. Some alternatives may be more or less disruptive and/or require more or less mitigation which would be helpful information when deciding a preferred alternative.	West Seattle (DUW, DEL, WSJ)
1044	Ch 3 Transportation	3-25	3.5.3.3.2	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Provide information about what assumptions were made in regard to accommodating buses on 4th Ave or 6th Ave under alternatives SODO-1a and SODO-1b where the SODO Busway is closed permanently. If bus lanes are provided to improve transit service, there would be impacts to operations on the detour corridors that need to be identified.	SODO/CID
1045	Ch 3 Transportation	3-26	3.5.3.3.3	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Information about the assumptions of lane allocation on the West Seattle Bridge would help to understand impacts. There is an existing eastbound transit only lane on the bridge. Is that assumed in the Build condition? What about in the MOS condition when there are still buses operating on the bridge to provide a one-seat ride option?	West Seattle (DUW, DEL, WSJ)
1046	Ch 3 Transportation	3-26	3.5.3.3.5	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Further consideration needs to be given to the street closures associated with Alternatives WSJ-4 and WSJ-5. There are potentially many impacts related to 'dead-ending' a street (such as right-of-way maintenance, emergency access, traffic diversions, pedestrian safety and access, etc.).	West Seattle (DUW, DEL, WSJ)
1047	Ch 3 Transportation	3-27	3.5.3.3.4	Elisabeth Wooton	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Many of the Delridge alternatives would require vehicles to recirculate off of main arterials onto lower volume, local streets. SW Nevada St, SW Dakota St, 30th Ave SW, and 32nd Ave SW are all residential, one-lane streets with parking on both sides. Many of the potentially impacted intersections are uncontrolled and were therefore not included in the LOS analysis. The volume of expected detour traffic needs to be quantified, including for the MOS condition, so that impacts and mitigation can be identified. Traffic control should be considered for both increased vehicle and pedestrian activity at currently uncontrolled intersections or unmarked crossings using SDOT's Pedestrian Crossing Policy (dated 1/4/22).	West Seattle (DUW, DEL, WSJ)
1048	Ch 3 Transportation	3-32	3.6	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Please use a two-block radius of the stations for the on-street parking analysis as that existing condition will be useful in better aligning curb space allocation at the stations for all the various uses.	All (Systemwide)
1049	Ch 3 Transportation	3-35	3.6.1	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Table 3-11 should include information about the number of commercial load zones and ADA parking spaces that would be displaced and will need to be considered for relocation. There may be differences in impacts depending on alternatives that would be helpful information for selecting a preferred alternative. At the very least, provide a reference the freight chapter which discussed loading zones.	All (Systemwide)
1050	Ch 3 Transportation	3-36	3.7	Sara Zora	SDOT	The information necessary to identify impacts and compare alternatives is missing. Evaluating LOS at sidewalks, crosswalks, and intersections corners within one block of station entrances during the PM peak hour may not be sufficient to capture the potential safety and operational impacts of the project in certain locations where there are strong origin-destination correlations (such as near large employment centers or sports complexes) or limited pedestrian network (such as Delridge).	All (Systemwide)
1051	Ch 3 Transportation	3-36	3.7.2	Elisabeth Wooton	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Both the Bike Master Plan (2014) and Pedestrian Master Plan (2017) were developed before the WSBLE project was defined and therefore do not consider future station locations in their evaluation of the non-motorized network. In addition, the assumption that recommended networks will be complete when the West Seattle Link Extension goes into construction is not valid. Additional analysis has to be completed to determine appropriate bike and pedestrian access to each station area.	All (Systemwide)
1052	Ch 3 Transportation	3-38	3.7.3.1	Elisabeth Wooton	SDOT	The analysis is incomplete. Several significant impacts have not been identified. SDOT's Georgetown to Downtown Protected Bike Lane project is planning to install protected bike lanes on 6th Ave S by 2024. This may offer an alternative to the SODO Trail for WSBLE construction but it needs to be coordinated with the Seattle City Light project to relocate high voltage power lines to 6th Ave S. If SCL and WSBLE overlap, there may be no safe biking route through SODO.	SODO/CID
1053	Ch 3 Transportation	3-39	3.7.3.2	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. The anticipated grade of the new overpass structures (Lander and Holgate) are unlikely to meet ADA standards for an accessible route (5% or less). Additional mitigation, such as the installation of grip rails or landings as feasible, may need to be identified pedestrian facilities on the overpass.	SODO/CID
1054	Ch 3 Transportation	3-39	3.7.3.2	Elisabeth Wooton	SDOT	The analysis is incomplete. It should not be assumed that planned bicycle facilities in the SODO area will be implemented prior to WSBLE construction or that these projects are the best possible way to provide access to the ultimate station location. Further analysis needs to be done to identify the desired access network for people biking. Also, need to consider the Georgetown to Downtown Protected Bike Lane project on 6th Ave S which is planned to be constructed by 2024.	SODO/CID

1055	Ch 3 Transportation	3-39	3.7.3.4	Elisabeth Wooton	SDOT	The analysis is incomplete. It should not be assumed that planned bicycle facilities in Delridge area will be implemented prior to WSBLE construction or that these projects are the best possible way to provide access to the ultimate station location. Further analysis needs to be done to identify the desired access network for people biking. Also, if the permanent condition increases traffic to existing Neighborhood Greenways, such as 26th Ave SW, then mitigation needs to be identified to maintain the safety of people biking.	West Seattle (DUW, DEL, WSJ)
1056	Ch 3 Transportation	3-40	3.7.3.4	Elisabeth Wooton	SDOT	The analysis is incomplete. The statement "The remaining riders would access the station by walking or biking" seems inconsistent with the data presented in Table 3-6. Under the MOS, the number of drop-offs/pick-ups is expected to increase by 100% (from 50 to 100) compared to the full extension to WSJ. No additional walking or bike trips are expected as a result of the MOS. Need to confirm that the LOS results are correct and are reflective of the significant increase in transit transfers under the MOS condition.	West Seattle (DUW, DEL, WSJ)
1057	Ch 3 Transportation	3-40	3.7.3.5	Elisabeth Wooton	SDOT	The analysis is incomplete. It should not be assumed that planned bicycle facilities in the WSJ area will be implemented prior to WSBLE construction or that these projects are the best possible way to provide access to the ultimate station location. Further analysis needs to be done to identify the desired access network for people biking.	West Seattle (DUW, DEL, WSJ)
1058	Ch 3 Transportation	3-40	3.7.3.5	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Need information on the projected pedestrian LOS for the West Seattle Junction station area which is expected to serve 1,800 riders during the PM peak hour. Seems unlikely that the existing sidewalks and intersections will not be impacted by this increase in pedestrian activity.	West Seattle (DUW, DEL, WSJ)
1059	Ch 3 Transportation	3-43	3.8.3.1	Elisabeth Wooton	SDOT	The analysis is incomplete. Lower vehicle volumes do not always equal improved safety. Many cities, including Seattle, experienced increases in fatal crashes (particularly pedestrian fatalities) as volumes decreased during COVID. Also, the estimated reduction in both VMT and vehicle trips as a result of the WSBLE is very small and should not be overstated. Increasing pedestrian activity near historically high crash arterials will more likely increase the rate of collisions and mitigation (such as lighting, curb extensions at intersections, crossing enhancements, and traffic calming) should be identified.	West Seattle (DUW, DEL, WSJ)
1060	Ch 3 Transportation	3-43	3.8.3.1	Elisabeth Wooton	SDOT	The analysis is incomplete. Need to provide justification for the statement that expected increases in ped/bike activity near stations is relatively small as not all station areas are currently dense and congested with people walking, biking, and rolling (SODO, DEL, SIB). The proposed mitigation is incomplete in terms of ensuring safe access for people biking, walking, and rolling to access new stations. Additional mitigation could include, but is not limited to, additional lighting, curb extensions at intersections, crossing enhancements, upgraded bicycle facilities, and traffic calming, etc.	All (Systemwide)
1061	Ch 3 Transportation	3-44	3.8.3.4	Elisabeth Wooton	SDOT	The analysis is incomplete. Several significant impact have not been identified. Need to consider geometric changes, bus rerouting, or pick-up/drop-off activity that might increase traffic on adjacent residential streets to identify potential safety mitigation. Also, additional consideration should be given to crossing enhancements for all alternatives, not just DEL-5 and DEL-6. For instance, a new signalized crossing on Delridge Way SW at SW Dakota St to ensure people walking, biking, and rolling can safely access the station without out of the way travel or crossing a wide arterial at an uncontrolled location (See DEL-1a/b, DEL2a/b, DEL-3, and DEL-4 in Appendix J, pages 60-65).	West Seattle (DUW, DEL, WSJ)
1062	Ch 3 Transportation	3-44	3.8.3.5	Elisabeth Wooton	SDOT	The analysis is incomplete. Many transit users will be coming from or going to the commercial corridors and arterials, even if the station is not located there. Driver expectations and infrastructure on commercial corridors may create safer operations for people walking compared to increasing pedestrian activity on non-arterial streets. Further consideration of safety enhancements need to be identified for several alternatives such as crossing enhancements at 41st Ave SW and SW Edmunds St (WSJ-4 in Appendix J, page 104).	West Seattle (DUW, DEL, WSJ)
1063	Ch 3 Transportation	3-45	3.8.4	Elisabeth Wooton	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Increased numbers of people walking, biking, and rolling near stations will require additional mitigation to promote safe operations. Safety mitigation measures (which may overlap with non-motorized mitigation) include treatments such as street lighting, sidewalk extensions at crossings, speed cushions on non-arterial streets, crossing enhancements, upgraded bicycle facilities, etc.	West Seattle (DUW, DEL, WSJ)
1064	Ch 3 Transportation	3-50	3.9.3.1	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Please clarify if there are advantages to the bridge types that impact the navigational channel and/or tribal fishing rights that are not discussed. Otherwise, consider removing this bridge types from further consideration.	West Seattle (DUW, DEL, WSJ)
1065	Ch 3 Transportation	3-52	3.10.3.2	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. The document needs to be clear about what the area of impact would be to ensure grades on the planned overpasses that meet truck street standards, especially for Holgate St which is a part of the heavy haul network. The recently constructed Lander St overpass, which has similar vehicle compositions, was required not to exceed 7% grades. Need to determine if it is feasible to achieve similar grades and if so, what would it entail in terms of roadway reconstruction to tie into the existing street network at 4th and 6th Aves.	SODO/CID
1066	Ch 3 Transportation	3-53	3.10.3.4	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Table 3-11 indicates that between 5 and 95 parking spaces would be permanently displaced in the DEL segment. Please confirm that none of these represent load zones and that it takes into consideration the rerouting of buses.	West Seattle (DUW, DEL, WSJ)
1067	Ch 3 Transportation	3-53	3.10.3.5	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Table 3-11 indicates that between 30 and 135 parking spaces would be permanently displaced in the WSJ segment. Please confirm that none of these represent load zones and that it takes into consideration the rerouting of buses, especially under the MOS condition.	West Seattle (DUW, DEL, WSJ)
1068	Ch 3 Transportation	3-57	3.11.1.5	Elisabeth Wooton	SDOT	The analysis is incomplete. Need justification for the statement "the overall number of collisions in the area is not expected to substantially change as the total traffic volumes in the area would be similar." Is traffic volume the only factor that influences crash rates? What about changing or unexpected roadway conditions during construction?	All (Systemwide)
1069	Ch 3 Transportation	3-58	3.11.2.1	Elisabeth Wooton	SDOT	The analysis is incomplete. Need to consider that a bus lane on 4th Avenue may be warranted which may impact operations for other roadway users. Also, depending on where the alternate facility for the SODO Trail is located, that may also require reallocation of travel lanes on the corridor.	SODO/CID

1070	Ch 3 Transportation	3-59	3.11.2.4	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Need to provide information about the assumed configuration of the rerouted SODO Trail on 4th or 6th Aves. How would provide comparable safety (two-way with signalized crossings? one-way protected pairs?). What assumptions were made about lane removals (or parking removals) on the detour route to accommodate a comparable facility? Will the relocation of the SCL infrastructure from the SODO Busway to 6th Avenue require any street width reductions or create barriers to temporary ped/bike facilities?	SODO/CID
1071	Ch 3 Transportation	3-59	3.11.3.1	Elisabeth Wooton	SDOT	The analysis is incomplete or inconsistent. State Route 99 and the West Seattle Bridge are defined as regional roadways in Chapter 3.3. Impacts to these facilities should be included there. More detail about the duration of impacts and area of impacts (will it impact both the West Seattle High Bridge and the Swing Bridge? Which sections or ramps of SR 99?) would help to determine the relative impact between alternatives.	West Seattle (DUW, DEL, WSJ)
1072	Ch 3 Transportation	3-64	3.11.4.1	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Need to provide more detail about the estimated detour volume as a result of the Genesee St closure and identify specific detour routes that can accommodate that demand. Just stating that they will be diverted to other streets in Youngstown is insufficient as these are predominantly local, residential streets with limited connectivity/capacity and potentially insufficient traffic control to handle the traffic. Detour traffic will have on impact on residents in the neighborhood. A specific detour route should be identified and mitigation should be named to ensure safe operations that minimize impacts (such as signage, parking removal, temporary intersection control, traffic calming, etc.). Also, if detour traffic is expected to use 26th Ave SW, a neighborhood greenway, additional mitigation will be required to ensure safety for people biking.	West Seattle (DUW, DEL, WSJ)
1073	Ch 3 Transportation	3-64	3.11.4.2	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Need to provide more detail about the anticipated detour route of for the Metro Route 50 that currently operates on Genesee St. Detour options are predominantly local, residential streets with limited connectivity/capacity. Mitigation for the reroute needs to be named to limit impacts to the neighborhood and maintain sufficient transit operations.	West Seattle (DUW, DEL, WSJ)
1074	Ch 3 Transportation	3-74	3.11.6.2	Elisabeth Wooton	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Provide mitigation for the impacts related to Haul Route and Construction Traffic as identified in Section 3.11.1.1 1. Mitigation should include pavement restoration after construction is complete as well as any special considerations for areas sensitive areas, such as Pigeon Point, and/or streets not part of the designated freight network.	All (Systemwide)
1075	Ch 3 Transportation	3-81	3.12.3.1.2	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: the impacts of the 30-50 transit routes with SODO Busway being permanently closed is huge; the 4th Ave corridor or another one would have to be totally rebuilt to accommodate exclusive lanes for transit, pavement upgrades, and upgraded signals. Additional impacts and thus mitigation should be identified.	SODO/CID
1076	Ch 3 Transportation	3-83	3.12.3.3.1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: More explanation is needed as to why the MOS for the Ballard extension is Smith Cove when the ridership will be less than if Sound Transit immediately opened up to Interbay and Ballard stations. "In 2042, daily trips range between 132,000 - 173,000. Under MOS, Ballard extension ridership would decrease to between 132,000-140,000 daily riders." To have the MOS on the north side of the Ballard is preferred to ensure that full ridership forecast is realized sooner than 2039/2042.	Interbay-Ballard
1077	Ch 3 Transportation	3-83		Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Explain the different types of station platforms/track alignment options for the Seattle Center station, in case extra train capacity is needed to service post-event pedestrian surges that could be pulled from a tail track immediately.	Downtown
1078	Ch 3 Transportation	3-85		Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: multi-use trail station access opportunities to Smith Cove station on the east side of the BNSF railroad tracks. Please add.	Interbay-Ballard
1079	Ch 3 Transportation	3-89	3.12.4	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Describe the specific process and timeline to determine the appropriate transit corridor changes that need to occur prior to construction starting. Funding to be provided by ST as part of their mitigation package for the SODO / Downtown portion of the project.	Downtown
1080	Ch 3 Transportation	3-94	figure 3-10	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Intersection LOS in numerous locations is LOS F; will need to mitigate for this and could be in the form of providing better non-motorized facilities to access the station as well as intersection modifications.	Downtown
1081	Ch 3 Transportation	3-97	3.13.3.1.3	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Please provide reasoning why the City Right-of-Way needs to be used as part of the station entrance for the Denny Station. And identify the process of ownership transfer and what public benefit mitigation will be included for the use of the ROW. Closure of 9th Ave in DT-1 could be rebuilt as public ROW differently than how it operates now. Need more information.	Downtown
1082	Ch 3 Transportation	3-97	3.13.3.1.4	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Business access is very important along this corridor as existing on-street parking may be removed one day to ensure bus / freight-only lanes. Additional work will have to be done to see how to preserve business access within the design of the columns and during construction of the columns. Recommend Sound Transit allocate funding for small-business sustainability during construction.	Interbay-Ballard
1083	Ch 3 Transportation	3-97	3.13.3.1.5	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: unsure where the proposed bridge to access the station would land. Mitigation idea is to install a ped/bike bridge across the BNSF RR tracks to ensure non-motorized access from the Magnolia neighborhood. Non-motorized mitigation is also needed for Queen Anne access - PBL on the east side of W Dravus St to future Neighborhood Greenway. Non-motorized mitigation is needed to expand ped/bike facilities on existing bridge over 15th Ave W at W Dravus St.	Interbay-Ballard
1084	Ch 3 Transportation	3-99	3.13.3.3.3	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. If higher volumes of people walking and biking are forecast, Sound Transit should mitigate the 5th Ave midblock crossing to a raised intersection to ensure the most vulnerable travelers are made more visible and driver's slower.	SODO/CID

1085	Ch 3 Transportation	3-99	3.13.3.3.4	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Ensure all signalized intersections (whether LOS F or not) are upgraded with LPI and APS for better accessibility, and enforcement improvements - repaint stop bars, add "no not block box" cameras to ensure all technology is deployed to minimize delay, ensure ADA curb ramps at all intersection within 0.5-mile. Mitigation for this could be in the form of providing better non-motorized facilities to access the station as well as intersection modifications.	Downtown
1086	Ch 3 Transportation	3-99	3.13.3.3.5	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Mitigation needs to be identified for the LOS F at Elliott Ave W/W Galer St Flyover. Could be in the form of a new access bridge.	Interbay-Ballard
1087	Ch 3 Transportation	3-99	3.13.3.3.5	Sara Zora	SDOT	The analysis is incomplete. Missing are: Would like the comparison of analysis to have to MOS at Smith Cove Station vs at Interbay Station for the impacts identified with the MOS proposed for Smith Cove.	Interbay-Ballard
1088	Ch 3 Transportation	3-101	3.13.4	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Please document the process and timeline for such a process to "continue to work with the COS and FTA as Ballard Link Extension project design progress to minimize project-related intersection delays." All mitigation measures have to be included in each Master Use Permit decision, so this process would have to occur prior to MUP drafting by the City.	Interbay-Ballard
1089	Ch 3 Transportation	3-102	Table 3-24	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Mitigation for 5th Ave S midblock could be a raised intersection; mitigation for 4th Ave /loss of SODO Busway could be signal optimization channelization changes or congestion pricing, pavement upgrades, transit re-routing.	All (Systemwide)
1090	Ch 3 Transportation	3-102	3.13.4	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Please be aware that there is proportional share mitigation and there is also mitigation that is fully borne by the Sound Transit project. Each mitigation will have to be determined if proportional share or full share.	All (Systemwide)
1091	Ch 3 Transportation	3-102	3.14	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Please use a two-block radius of the stations for the on-street parking analysis as that existing condition will be useful in better aligning curb space allocation at the stations for all the various uses.	All (Systemwide)
1092	Ch 3 Transportation	3-105	3.14.3.3	Elisabeth Wooton	SDOT	The information necessary to identify impacts and compare alternatives is missing. Table 3-26 should include information about the number of commercial load zones and ADA parking spaces that would be displaced and will need to be considered for relocation. There may be differences in impacts depending on alternatives that would be helpful information for selecting a preferred alternative. At the very least, provide a reference the freight chapter which discussed loading zones.	All (Systemwide)
1093	Ch 3 Transportation	3-106	3.15.1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: The Interbay station does not have a sidewalks or other pedestrian or bicycle infrastructure. This should be called out specifically. Mitigation is to rebuild all the streets via Streets Illustrated standards that Sound Transit touches to ensure walk and bike access to this station.	Interbay-Ballard
1094	Ch 3 Transportation	3-108	3.15.2	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: an updated understanding of necessary bike access to stations. The Bike Master Plan was developed prior to any knowledge of ST3 and bike access has to be re-thought. It is not acceptable to use the 2014 BMP and assume that the bike facilities make sense for these new destinations. Additional analysis has to be completed to determine bike access to each station area.	Interbay-Ballard
1095	Ch 3 Transportation	3-108	3.15.3	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Sound Transit can fund and install a catalyst project in the BMP that calls for a new multi-use trail on the east side of the BNSF RR tracks and west of 15th Ave W. This pathway can be along the elevated structure columns. This will be an important part of the project to promote bike access to the Interbay Station, especially if no Smith Cove station.	Interbay-Ballard
1096	Ch 3 Transportation	3-108	3.15.3	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. People riding bikes have no safe access from Magnolia to Interbay station to mitigation this, Sound Transit can install a ped/bike bridge across the BNSF RR track to the station. From Queen Anne, the extended planting strip on the south side of Dravus St could be reallocated for non-motorized use. The Dravus St bridge over 15th Ave W would also need to have upgraded to standard sized pedestrian and bicycle facilities to access the Interbay Station.	Interbay-Ballard
1097	Ch 3 Transportation	3-108	3.15.3.1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Again the bike network has to be updated to ensure access to these new stations that were not a part of the 2014 BMP. Sound Transit will need to install bike access projects that are not in the 2014 BMP, but as a result of SDOT access discussions.	All (Systemwide)
1098	Ch 3 Transportation	3-108	3.15.3.1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Sound Transit will need to upgrade and increase their bike parking spaces. As more e-bikes are bought, users will not be able to take bikes on the train and people will need a secure place to lock it know that it will be there when they return and can ride home up the hills of QA or Magnolia. All the new bike parking at Northgate and other recent stations will not be adequate for the amount of people biking that will need to occur in the future for both access and climate change ideals.	All (Systemwide)
1099	Ch 3 Transportation	3-109	3.15.3.1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Expand the analysis to include two blocks away from the station access for ped improvements. Sound Transit can voluntarily provide additional pedestrian facility upgrades.	All (Systemwide)
1100	Ch 3 Transportation	3-109	3.15.3.1	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. The City of Seattle requests that Sound Transit use funding from the non-motorized access allowance for Seattle projects.	All (Systemwide)
1101	Ch 3 Transportation	3-110	3.15.3.4	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Analysis and mitigation to envision a different Seattle Center station area and more holistic roadway changes that could occur with a station at Seattle Center and Republican St. If Sound Transit was planning on also using City ROW for sidewalks or to achieve required widths, then a raised festival street (or other type of pedestrian and bike friendly design slow/low vehicles) should be implemented.	Downtown

1102	Ch 3 Transportation	3-111	3.15.3.4	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Yes to the mitigation idea of implementing the "catalyst" bike trail project in the 2021 BMP. The alignment would be identical to the connection that is desired and to allow people riding bikes to be separate and away from 15th Ave W.	Interbay-Ballard
1103	Ch 3 Transportation	3-112	3.15.3.4	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: new access is needed to be explored and a new ped/bike bridge across the BNSF RR tracks should be analyzed to promote non-motorized travel to access the station or expansion of the existing Dravus St RR bridge on one side of the structure to ensure safe and predictable space for people walking and biking to get across the RR tracks. Current sidewalk widths are minimal. There needs to be an AAA bike facility to access each station.	Interbay-Ballard
1104	Ch 3 Transportation	3-112	3.15.3.4	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. What is the process for ensuring walking and biking access mitigation are within the MUP decision on time. And when is the anticipated MUP part of the process to occur?	All (Systemwide)
1105	Ch 3 Transportation	3-112	3.15.4	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Sound Transit needs to work with City of Seattle to establish AAA bike facilities to access the stations. As we have commented in the ADEIS, Sound Transit should not be using the 2014 Bicycle Master Plan to assume that the recommendations in that plan would bring people biking to the station as these stations were not part of the analysis as ST3 stations / destinations were unknown. Much more work needs to be done to ensure mitigation of ensure vulnerable travelers have safe and protected spaces to be.	All (Systemwide)
1106	Ch 3 Transportation	3-116	3.16.3.5	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Please explain if an "outside of roadway guideway" can be used to have an underneath or adjacent multi-use trail along the same route. This would be particularly important to ensure bicycle connectivity and access to the Smith Cove and Interbay Station and connect future land uses that have new riders.	Interbay-Ballard
1107	Ch 3 Transportation	3-116	3.16.3.6	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. This is a false statement - there are very few pedestrian or bicycle facilities in the Interbay Station area - and there would be huge impacts to getting people walking and biking to the station from Magnolia or Queen Anne. There is no safe and accessible way for people riding bikes to access the Station. Sound Transit will have to provide an expansion of the existing Dravus St bridge for people walking and biking or a new ped/bike bridge over the BNSF RR tracks to allow for non-motorized access from Magnolia.	Interbay-Ballard
1108	Ch 3 Transportation	3-120	3.17.3.1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing are: Provide an understanding of the third-party funding needed for a tunnel, when there are no impacts that need to be mitigated from a navigational perspective and maritime business perspective, and it costs the same as the elevated options. Such a tunnel would avoid impacts, as stated in the DEIS, and should be given more considerable thought as a preferred alternative.	Interbay-Ballard
1109	Ch 3 Transportation	3-123	3.18.1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Because the Interbay station access has not been accurately analyzed as there are major gaps in both the pedestrian and bicycle facilities to access the station from either Magnolia or Queen Anne. Sound Transit will have to access BNSF permits to install a ped/bike bridge or widening of the existing Dravus St bridge.	Interbay-Ballard
1110	Ch 3 Transportation	3-128	3.18.1.4	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Because people walking, biking, and rolling are our most vulnerable travelers, it would be beneficial to include any road/facility closures of 6 months and over (rather than 1 year closures as the threshold) to ensure adverse construction impacts are mitigated.	All (Systemwide)
1111	Ch 3 Transportation	3-129	3.19.1.7	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Construction impacts along major freight corridors need to be identified and mitigated. Good to focus on station area construction and access/curb space, but there is additional freight mobility that needs to be analyzed.	All (Systemwide)
1112	Ch 3 Transportation	3-130	3.19.2.1	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. It is not clear how all the Metro buses that use SODO busway would be relocated to 4th Ave or 6th Ave (60-80 buses) and the analysis states that it "would not substantially affect general traffic conditions on these roadways." I do not understand how this would be possible to not have a negative impact or mitigable solution for all the buses that need efficient speed and reliability while Sound Transit is in construction.	All (Systemwide)
1113	Ch 3 Transportation	3-131	3.19.2.4	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. With both the SODO busway and SODO trail closed for a number of years, both transit and people walking/riding bikes may not be able to be accommodated on 4th and 6th Ave's without a major redesign of both streets. Mitigation needs to be identified.	SODO/CID
1114	Ch 3 Transportation	3-133	3.19.3.1	Wes Ducey	SDOT	The information necessary to identify impacts and compare alternatives is missing. Provide more information to compare the construction impacts to the arterial and local street operations in the CID segment. More specifically, when option CID-1a & CID-1b note the need to divert large amounts of traffic to parallel streets, there needs to be more information provided to compare these impacts to those of CID-2a & CID-2b. With the additional information, there should also be a process of discussing the Maintenance of Traffic strategies proposed with SDOT to see if there are any unconsidered opportunities to reduce construction impacts, particularly for options CID-1a & CID-1b.	SODO/CID
1115	Ch 3 Transportation	3-136	Table 3-30	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. All of the 4th Ave street closures have enormous impacts to transit service and AAA bike network for the 5th Ave preferred alternative. Madison St closure will impact BRT routing. Pine St will impact transit and bike facilities. Republican St closure will have impacts for Seattle Center tenants. Westlake and Harrison closure will impact the Streetcar. Construction mitigation needs to be determined prior to the Master Use Permit decision. Mitigation should include travel behavior change campaigns, led by Sound Transit, to ensure people traveling into the City will not do so by private vehicle.	Downtown
1116	Ch 3 Transportation	3-136	Table 3-30	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. For the streets with a number of blocks that have long partial or full closures should be analyzed for how to be channelized in the future and ensure becomes part of Sound Transit mitigation - SIP design process. Republican St - post construction could and should look very different than it looks now. Mitigation is for Sound Transit to perform an assessment of all the street closures for the number of blocks, extent of closure (time), and severity (partial vs full) in a table. This would allow us to better assess the "fairness" or "equity" of mitigation during construction and post-construction. (table for all of the segments)	Downtown

1117	Ch 3 Transportation	3-140	3.19.4.4	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Mitigation need to be identified for the 7th Ave PBL, Pine St, 4th Ave PBL, and Thomas St multi-use trail closures.	Downtown
1118	Ch 3 Transportation	3-141	3.19.4.6	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. An alternative route from Harrison St for trucks is not John St and should be removed from this section. Denny Way is a more appropriate street for large trucks to traverse. It will be difficult relocate up to 21 load zones that businesses and people rely on, so thoughts on curb space reallocation should be discussed with SDOT and adjacent businesses/properties to determine best solutions.	Downtown
1119	Ch 3 Transportation	3-141	3.19.4.6	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. It was identified that drivers would likely divert to Gilman Dr W and W Olympic Pl or to W Nickerson St - from Elliott Ave W - and these three corridors should be analyzed to determine if any mitigation is needed, such as safety and pedestrian crossing improvements if more drivers will be using these streets.	Interbay-Ballard
1120	Ch 3 Transportation	3-145	Table 3-32	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. A full closure of 14th Ave NW for numerous blocks for 3 years is a big impact for that neighborhood. Mitigation and detour routes need to be determined. Post-construction, Sound Transit should install the Park Blvd. design for the blocks they closed during construction. Need to promote bicycle and pedestrian access to the Ballard station.	Interbay-Ballard
1121	Ch 3 Transportation	3-145	Table 3-32	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. From table 3-32, it still appears that the tunnel option has fewer impacts and definitely less adverse impacts than any of the bridge options. Please explain why the tunnel needs 3rd-party funding to move that alternative forward? Preferred tunnel is a great option.	Interbay-Ballard
1122	Ch 3 Transportation	3-147	3.19.6.4	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. It is rare that we allow even short-term multi-use trail closures. Sound Transit will have to find a way to mitigate and detour the Ship Canal trail (example at 3rd Ave W and Ship Canal Trail currently in detour route configuration as diverting people riding bikes to use Nickerson St was not acceptable. Another example is along the BGT at Fred Meyer - there is a detour for people waling and biking, which does not meet minimum standards, but keeps travelers along the same route.	Interbay-Ballard
1123	Ch 3 Transportation	3-151	3.19.7.2	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Concern that the "Construction Access and Traffic Management Plan" is a document that will only be mentioned in the FEIS with no details as to what mitigation may look like. When is this plan expected to be finalized? And how nimble is it allowed to be as a mitigation of the station MUP decisions vs a list of required interventions via the MUP?	All (Systemwide)
1124	Ch 3 Transportation	3-151	3.19.7.2	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Add bullets to the "potential measures to minimize construction impacts" that says "install pedestrian and bicycle facilities where construction adversely impacts existing facilities or network connectivity."	All (Systemwide)
1125	Appendix J - Conceptual Design Drawings	L50-14	CYX105	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. The elevated diagram should have a smaller footprint. Perhaps the design should match that of the Lander St bridge that SDOT installed recently. Unclear why there is a left turn lane, unless that is supposed to represent an intersection off the elevated structure?	SODO/CID
1126	Appendix J - Conceptual Design Drawings	L50-15	CYX107	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. It has been stated in the document that 6th Ave S maybe need to hold transit and people riding bikes, but the proposed cross section does not show this. There should be Protected Bike Lanes and Transit lanes on 6th Ave S if this corridor is to be used as both during- and post-construction mitigation. And of course, the pedestrian realm would have to be upgraded if it was now used for transit with transit stops.	SODO/CID
1127	Appendix J - Conceptual Design Drawings	WO1-16	ASP700	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Bike storage should be expanded to assume a very high future demand. Please show the analysis about number of bike spaces needed per station.	All (Systemwide)
1128	Appendix J - Conceptual Design Drawings	L50-50	CYX103	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. The columns on SW Genesee St remove the south side sidewalk. The north side sidewalk needs to be upgraded to a standard concrete sidewalk and with a width wider than standard 6-feet pedestrian clear zone since it will need to accommodate all people walking for mitigation of the loss of existing sidewalk.	West Seattle (DUW, DEL, WSJ)
1129	Appendix J - Conceptual Design Drawings	L50-82	CYX101	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Explain how the proposed Fauntleroy Way SW cross section does or does not match the Fauntleroy green Blvd. that SDOT has designed and put on hold until final station locations were determined. SDOT design included protected bike lanes; this diagram does not. Explain why not.	West Seattle (DUW, DEL, WSJ)
1130	Appendix J - Conceptual Design Drawings	L50-83	CYX102	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Again, explain the cross section proposed and how it does not does not meet the multi-modal expectations that SDOT has for Fauntleroy Way SW. This cross section is unacceptable.	West Seattle (DUW, DEL, WSJ)
1131	Appendix J - Conceptual Design Drawings	L50-130	CYX114	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. It has been stated in the document that 4th Ave S maybe need to hold transit and people riding bikes, but the proposed cross section does not show this. There is no future transit lane even though transit will still need to have some routes on 4th Ave S post-Link opening? There should be Protected Bike Lanes and Transit lanes on 4th Ave S if this corridor is to be used as both during- and post-construction mitigation. Appears that the station plaza in in the City ROW, so which permit process is Sound Transit going to pursue - a street vacation?	SODO/CID
1132	Appendix J - Conceptual Design Drawings	B-02-167	Asx301	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Propose customer user experience mitigation while ascending down below to the deep Downtown stations. Examples to consider: lighting, CPTED design, interactive art, planted walls - alive and green, etc.	Downtown
1133	Appendix J - Conceptual Design Drawings	B-11-193	ASP100	Sara Zora	SDOT	Mitigation measure(s) for identified impacts are missing from the DEIS. Republican St post-construction needs to be designed to be a completely different-feeling and experience street. Should be included as mitigation to increase the user experience to access Seattle Center from either station exit.	Downtown
1134	Appendix J - Conceptual Design Drawings	L50-216	CYX109	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. It is unclear why both sections of Elliott Ave W proposed cross sections have different sidewalk designs. The sidewalk with a planting strip and trees is the standard - not a widen sidewalk on a principal arterial. Need to provide a buffer for people walking.	Interbay-Ballard

1135	Appendix J - Conceptual Design Drawings	B13-218	ASP100	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. The bike storage location needs to be relocated to be closer to where people riding bikes will access the station from (the west side multi-use trail).	Interbay-Ballard
1136	Appendix J - Conceptual Design Drawings	L50-240	CYX115	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. The proposed 14th Ave NW roadway design does not include bicycle facilities for access to the station. This design will not be accepted. Can the design incorporate the Park/Road blocks on 14th Ave NW that was the vision of the future via neighbors. Please accommodate a design that creates a safe and predictable multi-modal street. North of NW 59th St is the Gemenskap Park - and the roadway configuration that is preferred for the extent of the more residential-focused portion of 14th Ave NW. ST needs to work on how the design of 14th Ave NW can still support the Park between NW 59th St to NW 61st St and extend that park-corridor as the light rail is built, if the preferred alternative or option b is selected. Shifting the NB travel lane is it, and the area under the guideway should match the park design that is already in place.	Interbay-Ballard
1137	Appendix J - Conceptual Design Drawings	L50-241	CYX116	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. 15th Ave NW is already a horrible environment to be a pedestrian. This project should make improvements that better the walking environment, not worsen it. The proposed guideway column adjacent to the sidewalk is not pleasant and the other sidewalk should be upgraded with a planting strip as people will be accessing the station from both sides of 15th Ave NW.	Interbay-Ballard
1138	Appendix J - Conceptual Design Drawings	B15-242	ASP100	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Find an off-street location for bus layover needs. Move the on-street bus layover to off-street. Will design trigger Dravus St RR Bridge upgrades as the elevated structure columns looks very close. If so, will need to be upgraded to meet SDOT standards for sidewalk and bike access.	Interbay-Ballard
1139	Appendix J - Conceptual Design Drawings	B17-250	ASP100	Sara Zora	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Explain the need for a ped/bike bridge across 14th Ave NW. 14th Ave NW should still be a fairly light volume access street for the station with a multi-modal focus and safe pedestrian crossings. Proposed design for 14th Ave NW needs to be changed and not the 4-lane cross section for cars (travel or storage) as shown in the diagrams.	Interbay-Ballard
1140	Appendix G - Environmental Justice	Page 5-3 to 5-28 and page 5-31 to 5-66	Table 5-2, Table 5-4	Lizzie Moll	SDOT	The analysis is incomplete. Several significant impacts have not been identified. Missing is: "Best Management Practices and Mitigation" reflecting the findings from the "Build Alternative Impacts" and "Impacts on Minority and Low-income Populations."	
1141	Appendix G - Environmental Justice	Page 5-3 to 5-28 and page 5-31 to 5-66	Table 5-2, Table 5-4	Lizzie Moll	SDOT	The information necessary to identify impacts and compare alternatives is missing. Missing are: Specific impacts, benefits, or best management practices and mitigation that are associated with each build alternative for columns 3, 4, and 5 (as expressed in column 2 "Build Alternatives Impacts"). For one example on page 5-33, not all alternatives would impact Metro's Ryerson Bus Base in the same way. Note which alternatives impact the Base or note that the impact or mitigation is common to all segments.	
1142	Appendix J - Conceptual Design Drawings	133-135, 136-138		Lizzie Moll	SDOT	The analysis is incomplete. Study alternative station entrance locations for the western entrance on 4th Ave S. The constrained sidewalk with expected high pedestrian volumes from WSBLE station and Sounder station will create pedestrian congestion, especially during major events and when Sounder Trains arrive. Study shifting entrances north to straddle S Jackson. There is potentially more street capacity because 4th Ave is currently one way north of S Jackson and potential for less conflation with pedestrians using the Weller Street bridge. There would still be an opportunity for Sounder integration at the north Sounder entrance	
1143	Executive Summary	13	ES.3.1	Dorothy Kim	SPD	DEL-3/4 Elevated station in middle of Delridge Wy SW. Traffic and pedestrian concerns because of high use roadway, proximity to playground and entrance to West Seattle Bridge.	West Seattle (DUW, DEL, WSJ)
1144	Executive Summary	17	ES.3.1	Dorothy Kim	SPD	For the Delridge station- from a CPTED perspective, DEL-2a/b is preferred for visibility to the station from the street and surrounding homes/businesses. Crime in this area is notable, and this should be taken into consideration	West Seattle (DUW, DEL, WSJ)
1145	Executive Summary	19	ES.3.1	Dorothy Kim	SPD	For the Junction stations- from a CPTED perspective, WSJ-2 is preferred for visibility and access to the station. An underground station is not recommended for this location, due to crime/safety risks.	West Seattle (DUW, DEL, WSJ)
1146	Public Services, Safety and Security	192	4.2.14	Ryan Beck	SPD	This section states that additional police and security staff will be needed for station response. I would recommend utilizing a metric to determine the number of additional personnel that will be necessary to provide adequate response times.	All (Systemwide)
1147	Public Services, Safety and Security	192	4.2.14	Ryan Beck	SPD	This section states that police could have difficulty accessing platforms. This has already proved to be an issue at other stations, such as Northgate. I would recommend that emergency personnel be given 24-hour access to platforms, via proxy card or other means.	All (Systemwide)
1148	Public Services, Safety and Security	192	4.2.14	Ryan Beck	SPD	Given that CCTV cameras will be installed at these stations, there should be a point of contact for patrol officers to access footage after incidents occur. This access would allow officers to identify and apprehend suspect more efficiently.	Interbay-Ballard
1149	Public Services, Safety and Security	194	4.2.14	Ryan Beck	SPD	This section states that police response will not be delayed, however, the removal of parking spaces and increased population density could mean that officers may have difficulty parking vehicles when responding to incidents. I would recommend the emergency vehicle parking be allotted each station.	All (Systemwide)
1150	Public Services, Safety and Security	190	4.2.14	Ryan Beck	SPD	Officers have encountered situations where individuals have walked onto tracks. Clear WARNING signage should be posted near rail track access points.	All (Systemwide)
1151	Public Services, Safety and Security	190	4.2.14	Ryan Beck	SPD	Officers have encountered incidents where power to the light rail tracks needed to be cut for public safety reasons. I would recommend a clear protocol be put in place to address this issue safely and with minimal service disruption.	All (Systemwide)
1152	Public Services, Safety and Security	192	4.2.14	Ryan Beck	SPD	CPTED-The recommend that lighting should be extended to nearby parking areas in an effort to minimize criminal activity for individuals accessing their vehicles near light rail stations.	Interbay-Ballard
1153	Public Services, Safety and Security	192	4.2.14	Ryan Beck	SPD	Sound Transit has stated that they will coordinate emergency response with local law enforcement. I would suggest that a specific rail station response training be developed specifically for law enforcement and fire personnel.	All (Systemwide)

1154	Ch 2 Alternatives Considered	68	2.1.2	Ryan Beck	SPD	Constructing the Ballard Station at the 15th AVE NW location could negatively impact the neighborhood during the construction and operational phases. Because 15 AVE NW is the primary arterial through the neighborhood, long term construction could negatively impact both traffic and quality of life for residents and businesses. The removal of sidewalks could pose hazards for pedestrians during the construction phase.	Interbay-Ballard
1155	Ch 2 Alternatives Considered	68	2.1.2	Ryan Beck	SPD	A light rail station at 15th AVE NW would permanently impede the flow of traffic. Given that the Ballard station is expected to have 13,000 daily boardings, high vehicle traffic from 15th AVE NW could pose a hazard for pedestrians.	Interbay-Ballard
1156	Ch 2 Alternatives Considered	69	2.1.2	Ryan Beck	SPD	From a CPTED perspective, building the station at the 14th AVE NW location would expand foot traffic in the neighborhood, and could have a crime reduction impact.	Interbay-Ballard
1157	Ch 3 Transportation	104	3.14.3.2	Ryan Beck	SPD	All the station alternatives call for the permanent removal of parking spaces in the Ballard neighborhood. This change could result in residents parking in areas that are further out, more secluded, and poorly lit. This could put them at risk of becoming victims to criminal activity. I would recommend that lighting and sidewalk conditions be improved in the general vicinity.	Interbay-Ballard
1158	Public Services, Safety and Security	192	4.2.14	Ryan Beck	SPD	The construction sites(s) and staging areas will potentially attract theft and other criminal activity. Will there be a specific security plan/protocol for these sites during the construction phase?	Interbay-Ballard
1159	Public Services, Safety and Security	192	4.2.14	Ryan Beck	SPD	The Ballard neighborhood has experienced a rise in crime and calls for police service. To reduce opportunities for criminal activity to take place at the rail station, the following should be considered in the station design process: Restricting access to secluded areas, providing open lines of sight from street level, limiting areas for groups to congregate, providing multiple points of egress for passengers, lighting that extends beyond the station footprint, parking for police vehicles.	Interbay-Ballard
1160	Acquisitions, Displacements, and Relocations	1	4.21	Ryan Beck	SPD	Residential and commercial units that were acquired for the project may be a potential destination for squatters before they are demolished. This could lead to increased criminal activity in the neighborhood. I would recommend that a plan be implemented to determine which agency will be responsible for ensuring routine security checks of the properties and the frequency with which this will occur.	All (Systemwide)
1161	Ch 3 Transportation	144	3.19.6.2	Ryan Beck	SPD	The deactivation of Metro lines along NW Market St. will likely increase pedestrian traffic, which could cause additional safety hazards. Residents with mobility difficulties will be the most severely impacted.	All (Systemwide)
1162	Ch 3 Transportation	185	3.12.3.3.6	Ryan Beck	SPD	The Ballard station is being developed to offer passenger drop-off/pick-up accessibility. I would recommend that an area be designated to this function to minimize disruptions of traffic-flow.	Interbay-Ballard
1163	Ch 3 Transportation	106	3.14.3.2	Ryan Beck	SPD	To reduce "hide-and-ride" activity, metered parking spaces have been proposed. I would recommend that zone parking be considered to accommodate residents and reduce conflict over parking spaces.	Interbay-Ballard
1164	Ch 2 Alternatives Considered	Ch 2 Alternatives Considered	Pages 2-8/Line 30	Sage Farwell	SPD	In addition to road/sidewalk improvements, Sound Transit's partnership with local agencies (City of Seattle) should extend to lighting improvements to walkways and sidewalks approaching the SODO station as riders transferring from other forms of transit (busses) will be approaching the SODO station from streets other than the SODO busway (E-3) as they are currently.	
1165	Ch 2 Alternatives Considered	Ch 2 Alternatives Considered	Pages 2-91/Line 20	Sage Farwell	SPD	Round the clock security of Staging Area(s) in the SODO neighborhood would need to be coordinated by Sound Transit through private, SPD and KCSO resources to ensure mitigation of theft and vandalism. Construction equipment/supplies and raw material theft in the SODO neighborhood is very prevalent and would be exacerbated by the addition of these Staging Area(s).	
1166	Executive Summary	Executive Summary	Slide 19	Sage Farwell	SPD	The proposed S. Lander St. overpass in the Preferred At-Grade Alternative is a positive traffic mitigator (upon completion) as S. Lander St is a major East-West thoroughfare that can be identified as a primary passage for emergency vehicles.	
1167	Executive Summary	Executive Summary	Slide 20	Sage Farwell	SPD	Closing the SODO Busway to transit busses during and after construction will significantly increase traffic congestion on adjacent streets (4th Av S/6th Av S) due to displaced transit busses. This will be exacerbated during rush hour and will also affect the flow of the on/off-ramp to I-5 at S. Spokane St as transit will no longer be in/egressing from a single roadway but from multiple roadways.	
1168	Public Services, Safety and Security	Public Services, Safety and Security	Page 192/Line 1	Sage Farwell	SPD	During construction, police vehicles ***WILL*** experience increased response times due to construction along the SODO Busway effecting East/West traffic as well as increased traffic congestion from transit busses being re-routed onto 4th Av S and 6th Ave S from the SODO (E-3) busway during and after construction.	
1169	Executive Summary	ES-12		S. O'Donnell	SPD	Would the Public Safety resources (SPD/SFD/POS) responsible for emergency response to marine issues be affected by bridge construction closures?	
1170	Executive Summary	ES-29		S. O'Donnell	SPD	There is only a "general terms" discussion or traffic impacts and projected efforts to mitigate the traffic impacts and emergency vehicle access for each segment. An example is the closure for 6-10 years of 4th Ave. So. from approx. So. Royal Brougham to So. Main St., This is a major N/S arterial into and from downtown), or another is the related overflow traffic to the nearest freeway access, (James St. Cherry St., 4th. So. and approx. 1000 Block). There are only limited N/S corridors in this geographically/infrastructure limited Pioneer Square/International District area and more specific traffic mitigation and reroute efforts should be discussed.	
1171	Noise and Vibration	101	4.2.7	S. O'Donnell	SPD	Police officers are frequently dispatched to noise complaints resulting from construction. In order to utilize personnel resources as efficiently and effectively as possible, I recommend these complaints be routed directly to SDCI. A construction Point of Contact should be identified for the (CSCC) City of Seattle Communications Center (911) and SPD.	
1172		4.2.14-10	4.2.14.4.1	S. O'Donnell	SPD	(Police) Sound Transit would coordinate with the City of Seattle, King County and Washington State Patrol to provide adequate police services.	
1173		4.2.14-10	4.2.14.4.1	S. O'Donnell	SPD	(Per current Inter-Police Department Agreement/Memos) Seattle Police Department would normally respond to assist/support Sound Transit Police or King County Transit Police at potential emergencies at the construction sites. Clarity is needed for this responsibility as it relates to considerable additional staffing.	

1174		4.3.14-14	4.3.14.4.1	S. O'Donnell	SPD	(Police) Sound Transit would coordinate with the City of Seattle, King County and Washington State Patrol to provide adequate police services.	
1175		4.3.14-14	4.3.14.4.1	S. O'Donnell	SPD	(Per current Inter-Police Department Agreement/Memos) Seattle Police Department would respond to assist/support the Sound Transit Police or King County Transit Police at potential emergencies at the construction sites. Clarity is needed for this responsibility as it relates to considerable additional staffing.	
1176		4.3.14-16	4.3.14.4.6	S. O'Donnell	SPD	Seattle Police Harbor Patrol has some joint initial fire fighting responsibility.	
1177		4.23	4.23	S. O'Donnell	SPD	2042 Build Alternatives (Para 3) Although the Stadium Station is north of the SODO Segment under all Build Alternatives, this station would be served by the West Seattle Link Extension. Ridership at this station is relatively low today and no noticeable change in vehicle trips is expected during the peak hour under any of the Build Alternatives compared to the No Build Alternative. Traffic operations around the station are therefore not expected to be impacted under any of the Build Alternatives. **Consideration of Stadium, (Lumen and T-Mobile) special events and significant crowds related to them, - should be included in this statement relevant to the "Stadium Station."**	
1178	Executive Summary		Slide 33	Jennifer Danner	SPD	For the Junction stations- from a CPTED perspective, WSJ-2 is preferred for visibility and access to the station. An underground station is not recommended for this location, due to crime/safety risks.	
1179	Economics	47	12 through 16	Jennifer Danner	SPD	This section discusses how construction might adversely impact the businesses in the area, and lists potential solutions. This section does **not** mention the impact construction has on crime, and the potential mitigating options for this. It is important to consider crime prevention, especially associated with construction zones	
1180	Social Resources, Community Facilities, and Neighborhoods	53	13 through 32	Jennifer Danner	SPD	It is important to note that the West Seattle Junction area has a Business Block Watch (in collaboration with the Seattle PD's SW Precinct), which could be impacted by the future light rail, and should be consulted/included in outreach. The Business Block Watch is a great place to get feedback and push out information.	
1181	Social Resources, Community Facilities, and Neighborhoods	58	9 & 10	Jennifer Danner	SPD	"WSBLE is not anticipated to have safety and security impacts" - disagree with this statement. I believe the new light rail stations will have an immense impact on safety and security in the neighborhoods in which they will reside	
1182	Public Services, Safety and Security	183	35 through 37	Jennifer Danner	SPD	"Police could have difficulty responding to calls at elevated or tunneled sections of guideway or at stations not easily accessible from the existing roadway network" - Officer access to the terminal should be considered, as well as Officer parking. Perhaps each station could have designated SPD parking spots?	
1183	Public Services, Safety and Security	183	40 through 41	Jennifer Danner	SPD	"All build alternatives would require additional police…" - staffing at the SW Precinct needs to be considered.	
1184	Public Services, Safety and Security	184	17 through 18	Jennifer Danner	SPD	SPD Crime Prevention Coordinator team should be requested for the CPTED assessments, and be involved in crime prevention consultations going forward in the process	
1185	Public Services, Safety and Security	186	15 through 23	Jennifer Danner	SPD	SPD staffing and availability of resources need to be considered	
1186	Parks and Recreational Resources	219	38 & 39	Jennifer Danner	SPD	It should be noted that there is an immense history of criminal and suspicious activity within Junction Plaza Park.	
1187	Parks and Recreational Resources	224 & 225	1 through 16	Jennifer Danner	SPD	From a crime prevention perspective, landscaping and visibility should be considered when looking at overall height of train- generally speaking, the closer to the ground, the better	
1188	Parks and Recreational Resources	227 & 228	7 through 40	Jennifer Danner	SPD	From a crime prevention perspective, landscaping and visibility should be considered when looking at overall height of train- generally speaking, the closer to the ground, the better	
1189	Parks and Recreational Resources	233	7 through 12	Jennifer Danner	SPD	With the potential for increased use of the parks due to improved access - crime in these parks could increase. Crime prevention and safety should be considered. Perhaps additional signage, lighting, Parks Security patrols, etc. could be included in this plan	
1190	Public Services, Safety and Security	228	10 through 12	Jennifer Danner	SPD	The residents and businesses in the West Seattle Junction area might appreciate preferred option WSJ-3b*, and the removal of Junction Plaza Park due to ongoing and persistent issues in this area	
1191	Public Services, Safety and Security	234	3 through 5	Jennifer Danner	SPD	I would suggest consulting the neighborhood via local media (West Seattle Blog, Westside Weekly), community groups, Block Watch Captains, etc., regarding the effects on the West Seattle Golf Course. The West Seattle community is very involved, and would appreciate being consulted/informed of changes to their golf course	
1192	Executive Summary	-		Jennifer Danner	SPD	Using this opportunity to comment on station placement- from PowerPoint entitled "West Seattle and Ballard Link Extensions- Administrative Draft EIS Review Kick-Off"	
1193	Executive Summary	-	slide 28	Jennifer Danner	SPD	For the Delridge station- from a CPTED perspective, DEL-2a is preferred for visibility to the station from the street and surrounding homes/businesses. Crime in this area is notable, and this should be taken into consideration	
1194	Ch 2 Alternatives Considered	Page 2-6	19	Barb Biondo	SPD	Plan for active monitoring of all public access points to underground stations to deter these locations from becoming escape routes for those engaged in criminal activity common around transit hubs (theft, narcotics activity, assaults) to evade law enforcement activity on the street level	
1195	Ch 2 Alternatives Considered	Page 2-8	12	Barb Biondo	SPD	Bicycle storage locker locations should be placed in well lit, convenient for transit riders, near high pedestrian traffic zones with unobstructed sight lines for added security through natural surveillance	
1196	Ch 2 Alternatives Considered	Page 2-20	21	Barb Biondo	SPD	It looks like relocating the SODO Station closer to the intersection with Lander, (SODO 1b and SODO 2) and providing access from over-crossing will create safer pedestrian access to station	
1197	Executive Summary	Page 10	ES.3.1.1.1	Jennifer Danner	SPD	With regards to the SODO Station, and the potential of relocating, I would highly encourage the group to consult the SODO BIA. The BIA has a vested interest in the area, and safety for their businesses	
1198	Executive Summary	Page 68	ES.8	Jennifer Danner	SPD	Continuing to consult the Duwamish tribe through the design and decision making process is highly important. This could also be a good opportunity to engage the tribe to assist with public art- which could spark engagement, and a sense of ownership, and decrease potential vandalism or graffiti in the future	

1199	Executive Summary	Page 38	ES.3.1.2.2	Jennifer Danner	SPD	When it comes to displacing a shelter, and potentially impacting businesses in the CID, I would highly suggest we consult and involve Monica Ly, the CID Public Safety Coordinator to assist with outreach, and getting feedback from the community. It is important to hold community meetings and ensure the community is heard.	
1200	Executive Summary	Page 39	ES.3.1.2.2	Jennifer Danner	SPD	Also regarding the CID, given major issues at 12th and Jackson in 2021 and 2022, the light rail committees should be aware of this, and consider potential impacts to both community and law enforcement efforts in this area.	SODO/CID
1201	Executive Summary	ES-9	Table ES-1	Laura Wojcicki	SDOT	Holgate and Lander Streets should not be closed at the same time	SODO/CID
1202	Executive Summary	ES-9	Table ES-1	Laura Wojcicki	SDOT	Will the SODO trail be open under build conditions for all alternatives?	SODO/CID
1203	Executive Summary	ES-18	Table ES-3	Laura Wojcicki	SDOT	What is the reason DEL 6 is not a preferred option? It has lower impacts to residential units and lower cost than many of the alternatives.	West Seattle (DUW, DEL, WSJ)
1204	Executive Summary	ES-18	Table ES-3	Laura Wojcicki	SDOT	Clarify why DeL-2a requires third party funding when it has lower cost than other alternatives, is it due to the adjacent segment and what it connects to?	West Seattle (DUW, DEL, WSJ)
1205	Technical Report: Transportation	2-13	2	Laura Wojcicki	SDOT	Major roadway closures associated with the Ballard Link Ext will be for multiple years. Statement that there will be 'limited short-term impacts" does not sufficiently capture the level of impact	All (Systemwide)
1206	Technical Report: Transportation	3-1	3.1.1.1	Laura Wojcicki	SDOT	Clarify that the travel time savings is comparing bus (no build) to light rail (build). Clarify the start and end points of the travel time route that has this savings. For some transit riders that will need to transfer from bus to light rail, the savings would not be that high, depending on the wait time to transfer.	All (Systemwide)
1207	Technical Report: Transportation	3-1	3.1.1.2	Laura Wojcicki	SDOT	Clarify that the travel time savings is comparing bus (no build) to light rail (build). Clarify the start and end points of the travel time route that has this savings. For some transit riders that will need to transfer from bus to light rail, the savings would not be that high, depending on the wait time to transfer.	All (Systemwide)
1208	Technical Report: Transportation	3-1	3.1.1.1	Laura Wojcicki	SDOT	Define what a "direct" impact to Metro operations is to make sure that all impacts are being appropriately mitigated.	All (Systemwide)
1209	Technical Report: Transportation	3-2	3.1.1.2	Laura Wojcicki	SDOT	Modify language that construction "could" disrupt Metro bus operations. Given the number of roadway closures, construction will disrupt Metro bus operations.	All (Systemwide)
1210	Technical Report: Transportation	3-5	3.2.1.3	Laura Wojcicki	SDOT	Please clarify Table 3-4. There are frequent transit routes on the West Seattle Bridge why is the headway under West Seattle Bridge 31 minutes.	west Seattle (DUW, DEL, WSJ)
1211	Technical Report: Transportation	3-7	3.2.1.3	Laura Wojcicki	SDOT	Modify heading for Table 3-6. It includes both AM and PM data, yet is labeled PM.	West Seattle (DUW, DEL, WSJ)
1212	Technical Report: Transportation	3-9	3.2.2.2	Laura Wojcicki	SDOT	Check "All alternatives will increase transit ridership". Tables 2-11 shows that transit ridership only increases by 1% for West Seattle Link Extension compared to No build. It is a small increase in transit ridership.	West Seattle (DUW, DEL, WSJ)
1213	Technical Report: Transportation	3-9	3.2.2.2	Laura Wojcicki	SDOT	Has the H line termination been confirmed?	west Seattle (DUW, DEL, WSJ)
1214	Technical Report: Transportation	3-20		Laura Wojcicki	SDOT	Alternative pathways need to provided where there are sidewalk closures. "where feasible" should be deleted.	all (Systemwide)
1215	Technical Report: Transportation	3-20		Laura Wojcicki	SDOT	calling the roadway closures "temporary" is not sufficiently defining the impact.	All (Systemwide)
1216	Technical Report: Transportation	3-37	3.3.2.1	Laura Wojcicki	SDOT	Do not assume that transit lanes would be removed or converted to GP lanes. If transit lanes are removed, it's possible that the space would be converted to other uses than GP traffic.	Downtown
1217	Technical Report: Transportation	3-38	3.3.2.1	Laura Wojcicki	SDOT	Evaluate bus circulation that eliminates or reduces the need for crossing Elliott to transfer.	Interbay-Ballard
1218	Technical Report: Transportation	3-46	3.3.2.1	Laura Wojcicki	SDOT	calling the streetcar closures "temporary" is not sufficiently defining the impact.	Downtown
1219	Technical Report: Transportation	3-46	3.3.2.1	Laura Wojcicki	SDOT	remove "potentially" from bus impacts	Downtown
1220	Technical Report: Transportation	3-48		Laura Wojcicki	SDOT	Would Lander St also have closures in the SODO segment that aren't mentioned here?	SODO/CID
1221	Technical Report: Transportation	4-2	4.1.2	Laura Wojcicki	SDOT	Several major streets are not mentioned as having construction closures for Downtown, Interbay and Ballard segments (Mercer, 4th, Harrison)	All (Systemwide)
1222	Technical Report: Transportation	4-10	4.2.1.2	Laura Wojcicki	SDOT	Table 4-7 shows Delridge/Genesee operations at LOS F in the AM and the text above says it operates at F in PM	West Seattle (DUW, DEL, WSJ)
1223	Technical Report: Transportation	4-14	4.2.2.1	Laura Wojcicki	SDOT	A 0.4% growth in traffic per year does not align with our goals	West Seattle (DUW, DEL, WSJ)
1224	Technical Report: Transportation	4-33	4.2.2.2	Laura Wojcicki	SDOT	Did the analysis assume recent changes on Delridge?	West Seattle (DUW, DEL, WSJ)
1225	Technical Report: Transportation	4-38	4.2.2.2	Laura Wojcicki	SDOT	Modify language "with the exception of" when 3 out of 5 intersections operate at E or F, it's not the exception	West Seattle (DUW, DEL, WSJ)
1226	Technical Report: Transportation	4-50	4.2.2.2	Laura Wojcicki	SDOT	Analysis at Avalon/Genesee needs to consider signal phasing and/or modifications for added left-turn movement.	West Seattle (DUW, DEL, WSJ)
1227	Technical Report: Transportation	4-59	4.2.2.3	Laura Wojcicki	SDOT	When detouring 1000 vehicles in an hour from Lander, how was it determined that this could be adequately accommodated? Language should be revised to state that this could or would be an impact	SODO/CID
1228	Technical Report: Transportation	4-61	4.2.2.3	Laura Wojcicki	SDOT	Clarify if SODO busway closure would displace 60 to 80 buses in an hour or day	SODO/CID

1229	Technical Report: Transportation	4-61	4.2.2.3	Laura Wojcicki	SDOT	How was it determined that closing the SODO busway would not affect traffic conditions? If analysis not done that shows this, it should be stated that this could be an impact	SODO/CID
1230	Technical Report: Transportation	4-92	4.3.2.2	Laura Wojcicki	SDOT	Do not assume that transit lanes would be removed or converted to GP lanes. If transit lanes are removed, it's possible that the space would be converted to other uses than GP traffic.	Downtown
1231	Technical Report: Transportation	4-93	4.3.2.2	Laura Wojcicki	SDOT	Transit lanes have been implemented on 1st and Queen Anne	Downtown
1232	Technical Report: Transportation	4-93	4.3.2.2	Laura Wojcicki	SDOT	Do not assume that transit lanes would be removed or converted to GP lanes on 4th, 6th and Olive Way. If transit lanes are removed, it's possible that the space would be converted to other uses than GP traffic.	Downtown
1233	Technical Report: Transportation	4-93	4.3.2.2	Laura Wojcicki	SDOT	Signal installed at Alaskan Way/Galer Street flyover	Interbay-Ballard
1234	Technical Report: Transportation	4-93	4.3.2.2	Laura Wojcicki	SDOT	Include what signal modifications were assumed at Elliott Ave and West Galer Flyover. We would like to review the analysis to make sure assumption are feasible and in line with out policies	Interbay-Ballard
1235	Technical Report: Transportation	4-93	4.3.2.2	Laura Wojcicki	SDOT	Preferred option SIB-1, how would left-turn access restrictions be mitigated and access accommodated for the 10 properties?	Interbay-Ballard
1236	Technical Report: Transportation	4-94	4.3.2.2	Laura Wojcicki	SDOT	Option SIB-2 and SIB-3 , provide more details on the impacted turns and how access will be provided.	Interbay-Ballard
1237	Technical Report: Transportation	4-94	4.3.2.2	Laura Wojcicki	SDOT	IBB-1b and IBB-3 Column placement could impact operations along 14th, including at 14th/Leary. Additional intersections should be evaluated for this alternative.	Interbay-Ballard
1238	Technical Report: Transportation	4-106	4.3.2.1	Laura Wojcicki	SDOT	Noting that 6th and Spring is a major bottleneck in downtown Seattle and has access to I-5 ramps. This could be very challenging to operate with heavy pedestrian activity.	Downtown
1239	Technical Report: Transportation	4-109	4.3.2.1	Laura Wojcicki	SDOT	Aurora at Harrison should be changed to 7th at Harrison	Downtown
1240	Technical Report: Transportation	4-110	4.3.2.1	Laura Wojcicki	SDOT	Noting that additional congestion at 6th/Seneca and 6th/Spring will be challenging to operate. Mitigation could involve looking at some recirculation in the area	Downtown
1241	Technical Report: Transportation	4-110	4.3.2.1	Laura Wojcicki	SDOT	Modify language that uses "with the exception of the following" for Smith Cove area. 4 of the 5 operate at E or F.	Interbay-Ballard
1242	Technical Report: Transportation	4-124	4.3.2.3	Laura Wojcicki	SDOT	1st Ave is not a great detour route due to area ways other routes should be considered for the 4th Ave detour.	Downtown
1243	Technical Report: Transportation	4-124	4.3.2.3	Laura Wojcicki	SDOT	There is not enough capacity to detour the amount of traffic for several of the street closures. Many trips will need to mode shift, not happen, change time periods. Stating that it will result in increased congestion is not sufficient and does not appropriately capture the impacts	Downtown
1244	Technical Report: Transportation	4-126	4.3.2.3	Laura Wojcicki	SDOT	For the 4th Ave South closure, trips would also detour to SR 99 and maybe I-5.	Downtown
1245	Technical Report: Transportation	4-126	4.3.2.3	Laura Wojcicki	SDOT	For 4th Ave South, AM is the worst case and should be included.	Downtown
1246	Technical Report: Transportation	4-132	4.3.2.3	Laura Wojcicki	SDOT	DT - 1, stating that there will be increased congestion does not appropriately capture the level of impact	Downtown
1247	Technical Report: Transportation	4-132	4.3.2.3	Laura Wojcicki	SDOT	Westlake Station, stating that there will be increased congestion does not appropriately capture the level of impact from a 4th Ave closure	Downtown
1248	Technical Report: Transportation	4-135	4.3.2.3	Laura Wojcicki	SDOT	AM peak is heavier for Pine St	Downtown
1249	Technical Report: Transportation	4-136	4.3.2.3	Laura Wojcicki	SDOT	Seattle Center Station: could look into Roy St as being a detour for lane closures on Mercer. This would likely require some rechannelization and maybe some signal modifications for mitigation	Downtown
1250	Technical Report: Transportation	4-138	4.3.2.3	Laura Wojcicki	SDOT	Most trips would not be able to stay on Elliott Way if 4 lanes were closed. There would need to be significant detours, mode shift, reduction in trips and peak spreading. Need to modify language to appropriately define impact	Interbay-Ballard
1251	Executive Summary	ES-18	Table ES-3	Tom Le	SDOT	DEL-2a and WSJ-3a or WSJ-3b costs approximately $100 M more than DEL-1a and WSJ-1. If alternatives in other locations have less cost than the preferred option and that is chosen, why does these options need third party funding? Is the third party funding a carryover of the early cost estimate for this?	west Seattle (DUW, DEL, WSJ)
1252	Technical Report: Transportation	2-9	2.2.2.2	Tom Le	SDOT	Impacts to arterials, including, but not limited to full closures of arterial streets, have impacts to regional transportation facilities and travel.	All (Systemwide)
1253	Technical Report: Transportation	3-5	3.2.1.3	Tom Le	SDOT	What is Table 3-4 trying to indicate? And is this being calculated as an average of all bus routes across the screenline?	west Seattle (DUW, DEL, WSJ)
1254	Technical Report: Transportation	3-10	3.2.2.2	Tom Le	SDOT	Due to grades on Yancy and no identified road work scoping on Yancy, are these reasonable assumptions for Metro Connects 1043, 2003, 2021, and 3400 to service Delridge Station along the route identified? If not, would this increase ridership at the Alaska Junction Station if termination had to be made at the Alaska Junction Station?	west Seattle (DUW, DEL, WSJ)
1255	Technical Report: Transportation	3-20		Tom Le	SDOT	Multi-year street closures have impacts to alternative pathway streets and to the system that are not accurately depicted within the description	All (Systemwide)
1256	Technical Report: Transportation	3-20		Tom Le	SDOT	Alternatives constructed outside the roadway right-of-way, depending on proximity to the right-of-way, may still have impacts to the roadway and bus routes. This may be dependent on the space in the right-of-way that may needed to construct structures outside of the right-of-way.	All (Systemwide)
1257	Appendix G - Environmental Justice	Page 4-4	4.3.2	Nicole Kistler	DON	This refers to the Jackson Hub work. We should be sure to note what support and/or more nuance in the support. Truth-check this statement.	SODO/CID
1258	Appendix G - Environmental Justice	Page 4-6	4.3.4	Nicole Kistler	DON	These need to be updated to match the draft RET and should be updated again after we get feedback on the draft RET	All (Systemwide)

1259	Appendix G - Environmental Justice	Page 4-6	4.3.4	Nicole Kistler	DON	Need consistent use of City of Seattle Department of Neighborhoods' Community Liaisons	All (Systemwide)
1260	Appendix G - Environmental Justice	Page 5-5	Table 5-2	Nicole Kistler	DON	ST should also be coordinating with the Duwamish Tribe that uses this waterway for their canoe family.	West Seattle (DUW, DEL, WSJ)
1261	Appendix G - Environmental Justice	Page 5-5	Table 5-2	Nicole Kistler	DON	What do the asterisks denote? There is no reference on the table.	All (Systemwide)
1262	Appendix G - Environmental Justice	Page 3-19	3.2.4	Nicole Kistler	DON	How do other urban indigenous people use the waterways? How does the Duwamish use the waterways? Is there adequate outreach to these groups by ST? What outreach has been done to understand how these groups use the waterways?	All (Systemwide)
1263	Appendix G - Environmental Justice	Page 4-17	4.4.3.2	Nicole Kistler	DON	Is this true? I think this is a biased statement that not everyone would agree with.	All (Systemwide)
1264	Appendix G - Environmental Justice	Page 4-17	4.4.3.2	Nicole Kistler	DON	This section should also talk about the need for bathrooms and amenities that help make a place feel safe and accessible. The barriers to using transit were not all illuminated here.	All (Systemwide)
1265	Appendix G - Environmental Justice	Page 4-17	4.4.3.2	Nicole Kistler	DON	This is oversimplified. There are concerns about business displacement due to construction, but also due to increased rents for business owners. Using the term "gentrification" doesn't really fully explain what's happening.	All (Systemwide)
1266	Appendix G - Environmental Justice	Page 5-6	Table 5-2	Nicole Kistler	DON	The RET identifies that the majority of minority riders to the stations would have to transfer at the stations whereas now they have a one-seat ride. In addition, closures on Delridge at night and on weekends would disproportionately affect minorities in RET priority communities	West Seattle (DUW, DEL, WSJ)
1267	Executive Summary	Fact Sheet i		Kelly Obrien	DON	Noting how many times communities of color are invoked in the document.	
1268	Executive Summary	Fact Sheet i		Kelly Obrien	DON	"The Board is not bound by its identification of a preferred alternative" - Is this a thing that is ever interrogated in relation to the goals of the RET?	
1269	Executive Summary	ES-2		Kelly Obrien	DON	Urban villages: West Seattle Junction and Ballard neighborhoods" As these communities are invoked the analysis of benefits vs burdens must be balanced.	
1270	Executive Summary	ES-3	ES.2.2.	Kelly Obrien	DON	4th bullet: this all seems so perfunctory. Can we see links between this and the REOs from the RET and the content in these sections?	
1271	Executive Summary	ES-4	ES.2.3.	Kelly Obrien	DON	3rd paragraph "under the No Build Alternative…" Communities need REAL value for the disruption. Would the communities benefit?	
1272	Executive Summary	ES-4	ES.2.3.	Kelly Obrien	DON	4th paragraph 2nd column: Is there integration here? Is this improvement to access just mean transportation access? Being able to get to the door and get inside the door are 2 different things. Any accounting for this or is this just a statement of hope	
1273	Executive Summary	ES-5	ES.3	Kelly Obrien	DON	"the Board did not identify a preferred alternative in the CID" Did outreach?	
1274	Executive Summary	ES-6	ES.3.1.	Kelly Obrien	DON	1st paragraph 3rd column "the Delridge Station was identified…" All areas with significant communities of color	
1275	Executive Summary	ES-7	ES 3.1.1.1	Kelly Obrien	DON	So by page 7 I ask, is this supposed to be a general audience friendly document? Gosh it's dense!	
1276	Executive Summary	ES-12	Table ES-2	Kelly Obrien	DON	There must be some place where we know the demographics of these potential residential displacements?	West Seattle (DUW, DEL, WSJ)
1277	Executive Summary	ES-22	ES.3.1.1.4.	Kelly Obrien	DON	Why are fewer neighborhood impacts not determinative? It's like trying to balance things that may have not to be balanced! It's definitely confusing to the reader.	West Seattle (DUW, DEL, WSJ)
1278	Executive Summary	ES-27	ES.3.1.2.2.	Kelly Obrien	DON	This seems so dismissive of some real impacts! There could be more caring language here!	SODO/CID
1279	Executive Summary	ES-28	ES.3.1.2.2.	Kelly Obrien	DON	There are too many referrals to specific displacements in communities of color for some of the analysis that comes later which says there are not. Racist effects are cumulative.	SODO/CID
1280	Executive Summary	ES-29	ES.3.1.2.2.	Kelly Obrien	DON	Table ES-5, 5th Avenue Deep Station Option (CID-2b) column: this seems like an easy decision	SODO/CID
1281	Executive Summary	ES-43	ES 6.2.2.	Kelly Obrien	DON	Re: "the populations in WSLE study area (1st column 1st paragraph) " Okay... so this is the first analytical issue. There is a proportionality misunderstanding in how we approach racial equity work. we must look at the effects on those most harmed, not those most harmed compared to everybody else.	All (Systemwide)
1282	Executive Summary	ES-43	ES 6.2.2.	Kelly Obrien	DON	Re: "the populations in WSLE study area (1st column 1st paragraph final sentence) " With so many adverse impacts listed for different stations is the analytical lack of impact a mathematical issue. There aren't that many of them, so they aren't adversely affected? This is counter to the methods of our partnered RET process.	
1283	Executive Summary	ES-43	ES 6.2.2.	Kelly Obrien	DON	Re: "the populations in 1st column 3rd paragraph final sentence, The RST work should clue us into the fact the communities of color and low income populations experience disparate impacts. distribution of impacts for the general population could never equal the impact similar distribution in communities of color.	All (Systemwide)
1284	Executive Summary	ES-43	ES 6.2.2.	Kelly Obrien	DON	Re: "the populations in 1st column 4th paragraph sentences 1 & 2, What sort of contradictory stuff is this? Are there impacts or not?!?	
1285	Executive Summary	ES-43	ES 6.2.2.	Kelly Obrien	DON	RE: 2nd column 2nd paragraph, Clearly using the racial equity toolkit as a sign off for this work without acknowledging that it's supposed to affect decision making processes. This needs to be uplifted in this document. The RET is not worth just a paragrah in the ES.	
1286	Executive Summary	ES-43	ES 6.2.2.	Kelly Obrien	DON	RE: 3rd column 2nd paragraph, final 5 sentences, additional RET content could perhaps be uplifted here... how did the RET really inform this part of the process?	All (Systemwide)
1287	Executive Summary	ES-45	ES.9	Kelly Obrien	DON	RE: final two sentences of ES.9 is that it? I'm not sure that's it!	SODO/CID
1288				SCL	SCL	What about access to SSC for construction for permanent footing shown on SCL property?	West Seattle (DUW, DEL, WSJ)

1289				SCL	SCL	Add discussion regarding major utility impacts. 230 kV relocation to 6th Ave S would/may require full/partial closures to installed drilled pier foundations and erect poles to maintain required clearances to energized lines, which would include the existing 26 kV line along the west/east side of 6th Ave S. Depending on timing of utility relocation work, may have impacts	All (Systemwide)
1290	Utilities	Pg. 4.2.15-5		SCl	SCL	100' for all major utilities or all utilities? Need to clarify. If analysis includes all non major utilities, then 100' may need to be expanded. Please include the proposed 230 kV alignment(s) along 6th Aver S within the project area as we think it is out of the 100' analysis.	All (Systemwide)
1291	Utilities	Pg. 4.3.3-13		SCL	SCL	Change : "to any SCL infrastructure necessary"	All (Systemwide)
1292	Utilities	Pg. 4.3.15-1		SCL	SCL	Impacts to utility customers are not fully known as construction methods and final designs may affect SCL customers. SCL's position is that ST work to minimize, if feasible, the number of outages needed to construct all of these alternatives. Specific to the 230 kV corridor, we need to really take hard look at service disruptions and how to maintain service to our customers and system reliability during the time frame of construction to ensure that additional mitigation measures are not required.	All (Systemwide)
1293	Utilities	Pg. 4.3.15-2		SCL	SCL	Change to: "Sound Transit did not evaluate or inventory impacts to minor utilities but will evaluate and inventory as the design(s) are progressed from preliminary to final design(s)."	All (Systemwide)
1294	Utilities	Pg. 4.3.15-2		SCL	SCL	Suggest changing to "In some cases, utilities may need to be relocated to adjacent rights of way and/or require additional easement(s) from affected private properties."	All (Systemwide)
1295	Utilities	Pg. 4.3.15-5		SCL	SCL	Add language to clarify that other alternative routes for the 230 kV line relocation may be considered, such as along 4th Ave S.	All (Systemwide)
1296	Utilities			SCL	SCL	Add "major" before utilities.	All (Systemwide)
1297	Economics	General		SCL	SCL	Just curious to see how this doesn't affect businesses, especially if loading dock is blocked?	All (Systemwide)
1298	Utilities	TPSS		SCL	SCL	100' for all major utilities or all utilities? Need to clarify. If analysis includes all non major utilities, then 100' may need to be expanded. Please include the proposed 230 kV alignment(s) along 6th Aver S within the project area as we think it is out of the 100' analysis.	All (Systemwide)
1299	Utilities	L50-GSP104		SCL	SCL	Change : "to any SCL infrastructure necessary"	All (Systemwide)
1300	Utilities	L50-GSP105		SCL	SCL	Impacts to utility customers are not fully known as construction methods and final designs may affect SCL customers. SCL's position is that ST work to minimize, if feasible, the number of outages needed to construct all of these alternatives.	All (Systemwide)
1301	Utilities	L50-GSP106		SCL	SCL	115 kV UG transmission line is located in this area. As noted in the engineering work groups, SCL has commented that minimal temporary and permanent clearances need to made to these lines and ST will need to evaluate impacts to these existing UG facilities to ensure they are not impacted by the construction and operation of the preferred and alternative alignments. Transmission line outages are generally not allowed and take up to one year to schedule in advance, if even possible.	Downtown
1302	Appendix J - Conceptual Design Drawings	L50-GSP107		SCL	SCL	SCL facilities are not surveyed and included in the ST drawing. Therefore all the conflicts mentioned below may not be in direct conflict with the ST3 alignment. Where the ST3 elevated alignment is not in direct conflict with SCL OH line, proper horizontal clearance must be maintained per SCL construction standards.	All (Systemwide)
1303	Appendix J - Conceptual Design Drawings	L50-GSP107		SCL	SCL	TPSS source stated below are conceptual. Loads at this time is not provide, therefore unknown. Additional UG/OH feeder, and installation of Vista switches may be required System planning will need to study the load and require major feeder upgrade work to feed TPSS.	All (Systemwide)
1304	Appendix J - Conceptual Design Drawings	L50-GSP108		SCL	SCL	SCL double gain OH 26kV feeders on both sides of Elliott Ave W in conflict with ST3 alignment	All (Systemwide)
1305	Appendix J - Conceptual Design Drawings	L50-GSP109		SCL	SCL	SCL double gain OH 26kV feeders on both sides of Elliott Ave W, and OH feeder ties in conflict with ST3 alignment	All (Systemwide)
1306	Appendix J - Conceptual Design Drawings	L50-GSP110		SCL	SCL	ST3 alignment crossing Magnolia Bridge in conflict with double gain OH 26kV feeder	All (Systemwide)
1307	Appendix J - Conceptual Design Drawings	L50-GSP306, L50-GSP307		SCL	SCL	ST3 alignment in conflict with OH 26kV feeder on W Armory Way	All (Systemwide)
1308	Appendix J - Conceptual Design Drawings	L50-GSP706		SCL	SCL	ST3 alignment in conflict with OH 26kV feeder on W Barrett St	All (Systemwide)
1309	Appendix J - Conceptual Design Drawings	L50-GSP707		SCL	SCL	ST3 alignment in conflict with double gain OH 26kV feeder on W Dravus St	All (Systemwide)
1310	Appendix J - Conceptual Design Drawings	L50-GSP808		SCL	SCL	ST3 alignment in conflict with OH 26kV feeders and local distribution on 17th Ave W, Thorndyke Ave W, 16th Ave W, W Ruffner St, 14th Ave W,	All (Systemwide)
1311	Appendix J - Conceptual Design Drawings	L50-GSP809		SCL	SCL	ST3 alignment in conflict with OH 26kV feeders and local distribution on W Nickerson St, 13th Ave W, W Ewing St, 14th Ave W, NW 45th St, NW 46th St,	All (Systemwide)
1312	Appendix J - Conceptual Design Drawings	L50-GSP308		SCL	SCL	ST3 alignment in conflict with OH 26kV feeders and local distribution on NW Leary Way, 14th Ave W, NW 49th St, NW 50th St, NW 51st St, NW 52nd St, NW 53rd St, NW 54th St, NW Market St, NW 56th St, NW 57th St, NW 58th St,	All (Systemwide)
1313	Appendix J - Conceptual Design Drawings	L50-GSP309		SCL	SCL	ST3 alignment in conflict with double gain OH feeder on 15th Ave NW	All (Systemwide)
1314	Appendix J - Conceptual Design Drawings	L50-GSP310		SCL	SCL	ST3 alignment in conflict with OH line/feeder on 15th Ave NW and W Newton St, and W Armory Way	All (Systemwide)
1315	Appendix J - Conceptual Design Drawings	L50-GSP702		SCL	SCL	ST3 alignment in conflict with OH line/feeder on W Barrett St, and W Dravus St	All (Systemwide)

1316	Appendix J - Conceptual Design Drawings	L50-GSP104		SCL	SCL	ST3 alignment in conflict with double gain OH feeder on 15th Ave NW, W Bertona St, W Ruffner St , 14th Ave NW and the Alley Between 14th Ave NW and 15th Ave NW	All (Systemwide)
1317	Appendix J - Conceptual Design Drawings	L50-GSP106		SCL	SCL	ST3 alignment in conflict with OH 26kV feeders and local distribution on W Nickerson St, 13th Ave W, and W Ewing St,	All (Systemwide)
1318	Appendix J - Conceptual Design Drawings	L50-GSP304		SCL	SCL	ST3 alignment in conflict with OH line/feeder on 15th Ave NW, W Barrett St, W Dravus St, W Bertona St, W Nickerson St, W Ruffner St, and W Emerson St	All (Systemwide)
1319	Appendix J - Conceptual Design Drawings	L50-GSP305		SCL	SCL	ST3 alignment in conflict with OH line/feeder on W Emerson St, Shilshole Ave N, NW 46th St, and NW Ballard Way	All (Systemwide)
1320	Appendix J - Conceptual Design Drawings	L50-GSP705		SCL	SCL	ST3 alignment in conflict with OH line/feeder and underground feeder on NW Ballard Way, NW Leary Way, NW 49th St, NW 50th St, and NW 51st St, and 15th Ave NW	All (Systemwide)
1321	Appendix J - Conceptual Design Drawings	L50-GSP108		SCL	SCL	TPSS source at Southlake Station on Roy St	All (Systemwide)
1322	Appendix J - Conceptual Design Drawings	L50-GSP110		SCL	SCL	TPSS source from W Harrison ST and 4th Ave W. OH Reconductoring may be required.	All (Systemwide)
1323	Appendix J - Conceptual Design Drawings	L50-GSP808		SCL	SCL	TPSS source form 15th Ave W or W Garfield St	All (Systemwide)
1324	Appendix J - Conceptual Design Drawings	L50-GSP208		SCL	SCL	TPSS source from W Harrison ST and 4th Ave W. OH Reconductoring may be required.	All (Systemwide)
1325	Appendix J - Conceptual Design Drawings	L50-GSP210		SCL	SCL	TPSS source on Elliott Ave W	All (Systemwide)
1326	Appendix J - Conceptual Design Drawings	L50-GSP510		SCL	SCL	TPSS source on Elliott Ave W	All (Systemwide)
1327	Appendix J - Conceptual Design Drawings	L50-GSP308		SCL	SCL	TPSS source on 17th Ave W or Thorndyke Ave W	All (Systemwide)
1328	Appendix J - Conceptual Design Drawings	L50-GSP310		SCL	SCL	TPSS source on NW 52nd St. Major feeder upgrade/work in the area will be required.	All (Systemwide)
1329	Appendix J - Conceptual Design Drawings	Appendix J L50-CYX107		SCL	SCL	TPSS source on W Dravus St	All (Systemwide)
1330	Appendix J - Conceptual Design Drawings	Appendix J G50-GZK056		SCL	SCL	TPSS source on 17th Ave W or Thorndyke Ave W	All (Systemwide)
1331	Appendix J - Conceptual Design Drawings	NORTH ARROW		SCL	SCL	TPSS source on NW 52nd St. Major feeder upgrade/work in the area will be required.	All (Systemwide)
1332	Appendix J - Conceptual Design Drawings	TPSS		SCL	SCL	TPSS source on NW 52nd ST or 15th Ave NW. Major feeder upgrade may be needed	All (Systemwide)
1333	Appendix J - Conceptual Design Drawings	GENERAL		SCL	SCL	TPSS source on W Dravus St	All (Systemwide)
1334	Appendix J - Conceptual Design Drawings	L50-GSP718, L50-GSP118		SCL	SCL	TPSS source on NW 50th St. Feeder upgrade will be required.	All (Systemwide)
1335	Appendix J - Conceptual Design Drawings	L50-GSP618		SCL	SCL	230 kV transmission pole height limit should be 175' above grade. That's the tallest height SCL equipment can reach.	All (Systemwide)
1336	Appendix J - Conceptual Design Drawings	L50-GSP119		SCL	SCL	Verify 115 kV crossing impacts around south lake union station with most current SCL transmission system map, attached.	
1337	Appendix J - Conceptual Design Drawings	L50-GSP130		SCL	SCL	WOULD BE NICE TO HAVE CONSISTENCY WITH NORTH ARROW DIRECTION ON ALL DWG	All (Systemwide)
1338	Appendix J - Conceptual Design Drawings	L50-GSP120		SCL	SCL	SOURCE STATED ARE POSSIBILITIES, EXTRA WORK (EXTRA POLE, RECONDUCTOR, RELOCATE EXISTING EQUIPMENT, ETC) MAYBE REQUIRED TO SERVE TPSS. LOADS UNKNOWN.	All (Systemwide)
1339	Appendix J - Conceptual Design Drawings	L50-GSP121		SCL	SCL	SOME AREAS WHERE ELEVATED STRUCTURE NOT AFFECTING OVERHEAD WIRES BUT SUPPORTING COLUMNS MAY BE IN CONFLICT WITH POLE LINES: THIS IS WHAT IS MEANT BELOW WHEN IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1340	Appendix J - Conceptual Design Drawings	L50-GSP122		SCL	SCL	@LANDER ST: PROPOSED LANDER OVERCROSSING STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1341	Appendix J - Conceptual Design Drawings	L50-GSP619		SCL	SCL	@LANDER ST: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1342	Appendix J - Conceptual Design Drawings	L50-GSP630		SCL	SCL	@4TH AVE S: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1343	Appendix J - Conceptual Design Drawings	L50-GSP620		SCL	SCL	@6TH AVE S: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1344	Appendix J - Conceptual Design Drawings	L50-GSP621		SCL	SCL	@2ND AVE S, 1ST AVE S, COLORADO AVE S: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1345	Appendix J - Conceptual Design Drawings	L50-GSP622		SCL	SCL	@DUWAMISH AVE S, ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1346	Appendix J - Conceptual Design Drawings	L50-GSP719		SCL	SCL	@SW MARGINAL PL, POSSIBLE ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1347	Appendix J - Conceptual Design Drawings	L50-GSP730		SCL	SCL	SAME AS NOTE #3 (Comment #368 on this spreadsheet)	All (Systemwide)

1348	Appendix J - Conceptual Design Drawings	L50-GSP720		SCL	SCL	SAME AS NOTE #4 (Comment #369 on this spreadsheet)	All (Systemwide)
1349	Appendix J - Conceptual Design Drawings	L50-GSP729		SCL	SCL	SAME AS NOTE #5 (Comment #370 on this spreadsheet)	All (Systemwide)
1350	Appendix J - Conceptual Design Drawings	L50-GSP123		SCL	SCL	@DUWAMISH AVE S, ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1351	Appendix J - Conceptual Design Drawings	L50-GSP124		SCL	SCL	@SW MARGINAL PL, POSSIBLE ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1352	Appendix J - Conceptual Design Drawings	L50-GSP823		SCL	SCL	SAME AS NOTE #3 (Comment #368 on this spreadsheet)	All (Systemwide)
1353	Appendix J - Conceptual Design Drawings	L50-GSP823		SCL	SCL	SAME AS NOTE #4 (Comment #369 on this spreadsheet)	All (Systemwide)
1354	Appendix J - Conceptual Design Drawings	L50-GSP223		SCL	SCL	@2ND AVE S, COLORADO AVE S: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1355	Appendix J - Conceptual Design Drawings	L50-GSP223		SCL	SCL	@6TH AVE S, 4TH AVE S, 2ND AVE S: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1356	Appendix J - Conceptual Design Drawings	L50-GSP224		SCL	SCL	@S DAKOTA St, 25TH AVE SW: STATION CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1357	Appendix J - Conceptual Design Drawings	L50-GSP1023		SCL	SCL	@ 26TH AVE SW, SW AVALON WAY: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1358	Appendix J - Conceptual Design Drawings	L50-GSP1023		SCL	SCL	@SW ANDOVER ST, ELEVATED STRUCTURE CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1359	Appendix J - Conceptual Design Drawings	L50-GSP1023		SCL	SCL	@25TH AVE SW: STATION CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1360	Appendix J - Conceptual Design Drawings	L50-GSP1024		SCL	SCL	@SW ANDOVER ST, DELRIDGE WAY SW: ELEVATED STRUCTURE CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1361	Appendix J - Conceptual Design Drawings	L50-GSP423		SCL	SCL	@SW DAKOTA ST, 25TH AVE SW: ELEVATED STRUCTURE/STATION IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1362	Appendix J - Conceptual Design Drawings	L50-GSP423		SCL	SCL	@~SB-W-294+00 TO SB-W-298+00: ELEVATED STRUCTURE CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1363	Appendix J - Conceptual Design Drawings	L50-GSP424		SCL	SCL	@SW ANDOVER ST, DELRIDGE WAY SW: ELEVATED STRUCTURE CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1364	Appendix J - Conceptual Design Drawings	L50-GSP424		SCL	SCL	@SW DAKOTA ST, 25TH AVE SW: ELEVATED STRUCTURE/STATION IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1365	Appendix J - Conceptual Design Drawings	L50-GSP1123		SCL	SCL	@26TH AVE SW, SW GENESEE ST: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1366	Appendix J - Conceptual Design Drawings	L50-GSP1123		SCL	SCL	ALONG SW GENESEE ST: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1367	Appendix J - Conceptual Design Drawings	L50-GSP1123		SCL	SCL	@SW ANDOVER ST, DELRIDGE WAY SW: ELEVATED STRUCTURE/STATION CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1368	Appendix J - Conceptual Design Drawings	L50-GSP323		SCL	SCL	@25TH AVE SW, 26TH AVE SW: ELEVATED STRUCTURE/STATION IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1369	Appendix J - Conceptual Design Drawings	L50-GSP324		SCL	SCL	ALONG SW GENESEE ST: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1370	Appendix J - Conceptual Design Drawings	L50-GSP324		SCL	SCL	@SW AVALON WAY: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1371	Appendix J - Conceptual Design Drawings	L50-GSP523		SCL	SCL	ALONG DELRIDGE WAY SW BETWEEN 22ND AVE SW AND SW DAKOTA ST: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1372	Appendix J - Conceptual Design Drawings	L50-GSP324		SCL	SCL	@25TH AVE SW, 26TH AVE SW: ELEVATED STRUCTURE/STATION IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1373	Appendix J - Conceptual Design Drawings	L50-GSP324		SCL	SCL	ALONG SW GENESEE ST: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1374	Appendix J - Conceptual Design Drawings	L50-GSP523		SCL	SCL	@23RD AVE SW: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1375	Appendix J - Conceptual Design Drawings	L50-GSP524		SCL	SCL	ALONG SW AVALON WAY: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1376	Appendix J - Conceptual Design Drawings	L50-GSP925		SCL	SCL	@SW GENESEE ST: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1377	Appendix J - Conceptual Design Drawings	L50-GSP925		SCL	SCL	@23RD AVE SW: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1378	Appendix J - Conceptual Design Drawings	L50-GSP926		SCL	SCL	@SW YANCY ST AND ALONG SW AVALON WAY: ELEVATED STRUCTURE IN CONFLICT WITH OVER WIRES	All (Systemwide)
1379	Appendix J - Conceptual Design Drawings	L50-GSP125		SCL	SCL	@SW GENESEE ST: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)

1380	Appendix J - Conceptual Design Drawings	L50-GSP125		SCL	SCL	@SW AVALON WAY, 32ND AVE SW: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1381	Appendix J - Conceptual Design Drawings	L50-GSP126		SCL	SCL	@32ND AVE SW: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1382	Appendix J - Conceptual Design Drawings	L50-GSP126		SCL	SCL	@SW GENESEE ST: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1383	Appendix J - Conceptual Design Drawings	L50-GSP625		SCL	SCL	ALONG FAUNTLEROY WAY SW: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1384	Appendix J - Conceptual Design Drawings	L50-GSP525		SCL	SCL	@SW EDMUNDS ST: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1385	Appendix J - Conceptual Design Drawings	L50-GSP616		SCL	SCL	@SW AVALON WAY: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1386	Appendix J - Conceptual Design Drawings	L50-GSP718, L50-GSP118, L50-GSP618		SCL	SCL	@FAUNTLEROY WAY SW: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1387	Appendix J - Conceptual Design Drawings	L50-GSP620, L50-GSP720, L50-GSP729		SCL	SCL	@SW OREGON ST, 38TH AVE SW: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1388	Appendix J - Conceptual Design Drawings	L50-GSP722, L50-GSP123		SCL	SCL	@ SW ALASKA ST, SW EDMUNDS ST: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1389	Appendix J - Conceptual Design Drawings	L50-GSP1023, L50-GSP423, L50-GSP1123		SCL	SCL	@FAUNTLEROY WAY SW: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1390	Appendix J - Conceptual Design Drawings	L50-GSP323		SCL	SCL	@32ND AVE SW: ELEVATED STRUCTURE IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1391	Appendix J - Conceptual Design Drawings	L50-GSP523, L50-GSP524		SCL	SCL	@HOLGATE ST: PROPOSED OVERCROSSING IN CONFLICT WITH OVERHEAD WIRES	All (Systemwide)
1392	Appendix J - Conceptual Design Drawings	L50-GSP926		SCL	SCL	TPSS SOURCE MOSTLY LIKE FROM 6TH AVE S OR S BAYVIEW ST	All (Systemwide)
1393	Appendix J - Conceptual Design Drawings	L50-GSP126		SCL	SCL	TPSS SOURCE FROM 1ST AVE S, SOUTH OF S SPOKANE ST	All (Systemwide)
1394	Appendix J - Conceptual Design Drawings	L50-GSP226		SCL	SCL	TPSS SOURCE FROM 23RD AVE SW AND SW CHARLESTOWN ST	All (Systemwide)
1395	Appendix J - Conceptual Design Drawings	L50-GSP426		SCL	SCL	TPSS SOURCE FROM 23RD AVE SW AND SW CHARLESTOWN ST	All (Systemwide)
1396	Appendix J - Conceptual Design Drawings	L50-GSP626		SCL	SCL	TPSS SOURSE ON 38TH AVE SW AND SW YANCY ST	All (Systemwide)
1397	Appendix J - Conceptual Design Drawings	L50-GSP526		SCL	SCL	TPSS SOURCE ON SW YANCY ST	All (Systemwide)
1398	Appendix J - Conceptual Design Drawings	L50-GSP714, L50-GSP514		SCL	SCL	TPSS SOURCE FROM SW OREGON ST AND 40TH AVE SW	All (Systemwide)
1399	Appendix J - Conceptual Design Drawings	L50-GSP114, L50-GSP414		SCL	SCL	TPSS SOURCE ON SW OREGON ST AND 38TH AVE SW	All (Systemwide)
1400	Appendix J - Conceptual Design Drawings	L50-GSP314		SCL	SCL	TPSS SOURCE ON SW OREGON ST AND 41ST AVE SW	All (Systemwide)
1401	Appendix J - Conceptual Design Drawings	Pg. 4.3.1-1		SCL	SCL	TPSS SOURCE ON 42ND AVE SW	All (Systemwide)
1402	Appendix J - Conceptual Design Drawings	Pg. 4.3.1-7		SCL	SCL	TPSS SOURCE ON SW OREGON ST AND 40TH AVE SW	All (Systemwide)
1403	Appendix J - Conceptual Design Drawings	Pg. 4.2.15-3		SCL	SCL	TPSS SOURCE ON SW OREGON ST AND 41ST AVE SW	All (Systemwide)
1404	Appendix J - Conceptual Design Drawings	Pg. 4.3.2.6		SCL	SCL	TPSS SOURCE SEATTLE BLVD S: WILL REQUIRE EXTENSIVE REWORK AND VISTA SWITCH ON PRIVATE PROPERTY AND NEW DBANKS TO CONNECT TO EXISTING SYSTEM	All (Systemwide)
1405	Appendix J - Conceptual Design Drawings	Pg. 4.3.2.6		SCL	SCL	TPSS SOURCE ON 6TH AVE S AND S CHARLES ST	All (Systemwide)
1406	Appendix J - Conceptual Design Drawings	Pg. 4.3.15-6		SCL	SCL	TPSS SOURCE ON 6TH AVE S AND AIRPORT WAY S	All (Systemwide)
1407	Acquisitions, Displacements, and Relocations	12		SCL	SCL	Impacts should also include easements/property rights for required utility relocations	All (Systemwide)
1408	Acquisitions, Displacements, and Relocations	12		SCL	SCL	include "permanently" before …displace existing uses…	
1409	Utilities	63		SCL	SCL	This should also include "overhead" utilities	

1410	Land Use	66		SCL	SCL	Temporary rights over the City Light Interbay Substation will require reversion to City Light. The project will need to address project compatibility with the substation. Any permanent acquisition of the property will require a replacement site to accommodate utility system impacts	
1411	Land Use	70		SCL	SCL	Land use mitigation will be required to address impacts to the Interbay Substation	
1412	Utilities	61		SCL	SCL	Mitigation will be required to address impacts to the Interbay Substation, specifically impacts will require a replacement site and mitigation measures to address system impacts.	
1413		4.2.3-6		SCL	SCL	The actual number of major utility conflicts was not corroborated with the conceptual drawings as shown on Appendix J. SCL cannot confirm that the number of conflicts with major SCL facilities identified within Table 4.15-1 is consistent with the conceptual drawings. In addition, addition system impacts of voltages less than 230 kV need to be included for further analysis in the EIS phase.	All (Systemwide)
1414	Appendix J - Conceptual Design Drawings	4.2.3-14		SCL	SCL	1.These review comments are exclusively for SCL Network. This plan also needs to be reviewed by SCL Street Lighting, SCL Communication and SCL URD engineering and Transmission engineering groups. 2.New note: This note still applies. There are existing SCL duct banks and vaults throughout the project areas that are NOT SHOWN AT ALL in the plan design drawings. Please accurately show all SCL facilities (SHOW TO SCALE). Contact Michael.Walton@Seattle.gov from the Network GIS Mapping group to provide map data that displays the horizontal location of City Light's civil infrastructure in the Downtown, South Lake Union, First Hill, and U District areas. Previously noted by SCL (02/12/2019): There are existing SCL duct banks and vaults throughout the project areas that are NOT SHOWN AT ALL in the plan design drawings. Please accurately show all SCL facilities (SHOW TO SCALE). For information about SCL network facilities, please contact Anna Telles at email: Anna.Telles@Seattle.Gov. 3.New note: This note still applies. For acceptable clearances from SCL, please see SCL Construction Standard 0214.00. Locations, dimensions and depths of SCL's vaults, manholes, hand holes and duct banks within the plans affecting areas must be verified (e.g. pothole) prior to construction to avoid any damages to existing SCL facilities. This info will be specially needed if ST3 project intends to excavate near SCL facilities. Previously noted by SCL (02/12/2019): For acceptable clearances from SCL, please see SCL Construction Standard 0214.00. Locations, dimensions and depths of SCL's vaults, manholes, hand holes and duct banks within the plans affecting areas must be verified (e.g. pothole) prior to construction to avoid any damages to existing SCL facilities. This info will be specially needed if ST3 project intends to excavate near SCL facilities. 4.New note: This note still applies. New pavement should not affect any SCL facilities. Within design review process, please contact SCL should there be any changes in elevation of street/sidewalk/curb ramp which will require elevation change of the manhole risers. Previously noted by SCL (02/12/2019): New pavement should not affect any SCL facilities. Within design review process, please contact SCL should there be any changes in elevation of street/sidewalk/curb ramp which will require elevation change of the manhole risers.	All (Systemwide)
1415	L4.1 Potentially Affected Parcels	4.2.3-8		SCL	SCL	"…such as by loss of parking or access." Recommend deleting this statement or further qualifying; loss of access maybe a policing issue (right turn only) and would not trigger acquisition; loss of parking also may be addressed in the land use code relative to the nature of the property use.	
1416	L4.1 Potentially Affected Parcels	4.3.3-10		SCL	SCL	Temporary construction easements should be further qualified to reflect the unknowns at this stage	
1417	L4.1 Potentially Affected Parcels	4.3.3-15		SCL	SCL	The listed parcel (WS20008) is the City Light South Service Center. Any impacts to the site must be carefully mitigated as the site is severely constrained.	
1418	L4.1 Potentially Affected Parcels	5-10		SCL	SCL	Impacts to these parcels (WS20002, WS20004, WS20006) will require additional review as the design progresses.	
1419	L4.1 Potentially Affected Parcels	5-11		SCL	SCL	Parcel BD20020 is the City Light Interbay substation, any impacts to the site require replacement mitigation and must further mitigate system impacts	
1420	L4.1 Potentially Affected Parcels	5-13		SCL	SCL	This statement does not align with the current understanding of Seattle's real estate market. Additional qualifiers need to be added to address the limited housing supply (Seattle/Regionally)	
1421	Utilities	5-13		SCL	SCL	Include plans for the Interbay substation together with the additional electric service to King County's Waste treatment facility	Interbay-Ballard
1422	Ch 3 Transportation Enviornment and Consequences			Jonathan Williams	SDOT T&M	The impacts of loss of parking and loading/ADA access in certain areas (CID 5th Ave and near Seattle Center) may constitute an impact requiring mitigation to maintain local access and has not been fully detailed in the DEIS.	Downtown
1423	Appendix G - Environmental Justice	1-3	8-9	Vera Giampietro	OPCD	Statements about impacts to low income communities and communities of color should be carefully stated to be clear and nuanced so that a broad public audience can understand their implications. Please clarify in more detail what "similarly affected" means to Sound Transit. The City's RET work and leading Racial Equity efforts clearly communicate that "equal treatment" is not equitable where communities of color or other historically harmed communities are concerned. "Similarly impacted" seems to miss that key concept.	

1424	Appendix G - Environmental Justice	3-15	17-23	Vera Giampietro	OPCD	If this is meant to set the context for the CID, it needs more about the relative size of the CID, the fact that if parts of it are removed they may never return, that housing affordability within the CID may be significantly diminished as an indirect impact of the project, and that there are people who come from all over the region to be in the CID as a cultural hub.	SODO/CID
1425	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Please study the mix-and-match alternative refinements that the City has sent over to Sound Transit to date.	All (Systemwide)
1426	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Please study a Smith Cove alternative that avoids the "Elliott Snake" and avoids the significant impacts to the Queen Anne hillside that are created by the SIB-2 and SIB-3 alternatives.	Interbay-Ballard
1427	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Please study new or refined Delridge alternatives that better serve the community in terms of location and TOD potential without displacing large swathes of homes.	West Seattle (DUW, DEL, WSJ)
1428	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	For all areas under guideways, study a variety of options for how to repurpose this space so that it benefits local communities. Example studies should include multi-use trails, green recreational space (programmed or unprogrammed), and Electric Vehicle charging stations. Please also consult the Co-Planning comments for each station for additional ideas for what to study below guideways.	All (Systemwide)
1429	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	For the DEL-5 and DEL-6, study developing site plan as a transfer center. Move bus bays within the TOD site, along with waiting areas and convenience retail (if feasible) or human services. Alternatively, move bus bays to Andover, and study relocation of Nucor access point.	West Seattle (DUW, DEL, WSJ)
1430	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	DEL-5 and DEL-6, study Andover, 26th Ave and Charlestown reconstructed as low-car streets.	West Seattle (DUW, DEL, WSJ)
1431	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	DEL-1a and DEL-1b, study a vertical conveyance system that does not require a two-stage elevator journey.	West Seattle (DUW, DEL, WSJ)
1432	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	For all stations and alternatives, study joint Equitable Transit Oriented Development to the extent necessary to achieve integrated entrances within urban fabric. We encourage Sound Transit to maximize usable floor area for affordable housing, living wage jobs, and other community-supportive uses, making the most of acquired property.	All (Systemwide)
1433	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Alaska Junction WSJ- 3a, WSJ-4, WSJ-5. Study an additional entrance to station on the west side of 41st to provide access closer to and from the California Avenue commercial corridor .	West Seattle (DUW, DEL, WSJ)
1434	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Alaska Junction WSJ-2. Alaska/Fauntleroy intersection becomes major crossing with this alternative. For safer crossing, study additional upgrades that complement or are in line with Fauntleroy Street Improvement/Boulevard Project opportunities.	West Seattle (DUW, DEL, WSJ)
1435	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Study providing bike parking, either short or long term, at each entrance for each station alternative.	All (Systemwide)
1436	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Study providing dual elevators at each entrance for each station alternative to provide people with limited mobility the opportunity to enter at the most convenient entrance. Dual elevators provide redundancy in the case of an elevator out of order.	All (Systemwide)
1437	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Study providing restrooms at each station alternative to provide essential human facilities as should be expected from a public facility.	All (Systemwide)
1438	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Alaska Junction WSJ-1. Study providing a grade-separated crossing for pedestrians across Alaska.	West Seattle (DUW, DEL, WSJ)
1439	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	DEL-5 and DEL-6. Study relocation of Nucor Steel access to minimize modal conflicts for bus, ped, bike, and drop-off and organize movement at a controlled intersection.	West Seattle (DUW, DEL, WSJ)
1440	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Study providing hygiene stations and restrooms within joint development at stations and alternatives in the Downtown core.	Downtown
1441	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	DEL-1a and DEL-1b. Study making 25th transit, bike, and ped only, and TOD local access street. Create a bus zone at the center of the site. Reroute bus transfer off Delridge to avoid requiring pedestrians to cross major street. Study full and partial vacation of 25th.	West Seattle (DUW, DEL, WSJ)
1442	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Study all station alternatives providing 24' of sidewalk space (head house façade to curb edge) at station entrances.	All (Systemwide)
1443	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	All DEL-1 and DEL-2 alts. Study shifting the NE station entrance south to provide additional space at north edge, and an additional 10’ where bus bays are located.	West Seattle (DUW, DEL, WSJ)
1444	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	All DEL-1 and DEL-2 alts. Study a mid-block pedestrian access from Delridge Way to 25th between Genessee and Dakota; align with station box to improve sightlines. Study developing a “high street” with small businesses, retail (if feasible), and uses that serve both local community and bus transfer riders.	West Seattle (DUW, DEL, WSJ)
1445	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	DEL-2a and DEL-2b. Study 26th to be reconstructed as low-car or transit “slow street” with bus bays on 26th or Dakota.	West Seattle (DUW, DEL, WSJ)
1446	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Evaluate the potential for joint or co-development of all station alternatives including the following uses: potential retail, vending, busking, and other types of culturally appropriate business activity at all station alternatives, including within the paid fare zone. This could be included in the TOD study.	All (Systemwide)
1447	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	DEL-3 and DEL-4. Study shifting station to east or west of right-of-way to lessen impact on street and improve functionality of circulation. Opportunity to use space under the guideway for additional ped, bike, and bus integration.	West Seattle (DUW, DEL, WSJ)
1448	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Alaska Junction WSJ-2. Make crossing of Fauntleroy at 38th as safe as it can be; study design solutions to create safer pedestrian crossing. Explore reconfiguration of intersection to increase safety and legibility.	West Seattle (DUW, DEL, WSJ)
1449	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	For all stations and alternatives, study entrances into the station from joint development, similar to Westlake stations currently operating as Central Link.	All (Systemwide)

1450	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	SODO-2 (214). Continue multi-use path treatment on north side of Lander through the station area. Consider a transition zone to two one-way PBLs at Sodo trail intersection (or 6th depending on safety considerations) for thru trips to destinations east of station. Look at location of bike parking and evaluate how those transition zones interact with patterns described above.	SODO/CID
1451	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	SODO-2 (214). Study diverting SODO Trail slightly to allow for larger plaza space. Consider that more space could be used to increase platform widths during interim period between Ballard and WS lines, but too much space might result in unanticipated/unsafe uses.	SODO/CID
1452	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	SODO-2 (214). Study vacating public ROW so development can be built to platform edge. Would allow TOD on both sides (east side more privately driven).	SODO/CID
1453	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	SODO-1a (215). Study pedestrian/bike easement to allow for pedestrians and cyclists to access the east side of the station from 5th Place South, which connects via S. Bayview Street to 6th Avenue South. The current SODO Trail is fenced along the east side, but if the development type changes east of the station, this connection could become desirable in the future.	SODO/CID
1454	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Both Midtown Alternatives. Study adding headhouse on Spring between 4th and 5th to serve First Hill.	Downtown
1455	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Where space is constrained at stations, particularly along the Downtown segment, study below-grade bike parking options that provide direct connection to a station entrance.	Downtown
1456	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Midtown DT-2. Study connecting the Seattle Public Library tunnel/garage to a station entrance at Midtown.	Downtown
1457	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Midtown DT-2. Study streetscape improvements to Spring Street overpass to better serve First Hill.	Downtown
1458	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	For all station alternatives, study including a mezzanine or other means of moving over tracks so that a rider is not required to go a significant distance away from a given station entrance. An example is the SODO-1a station, which should include an option to cross over the tracks near a given station entrance, particularly the north entrance, so that a rider doesn't have to circumnavigate city blocks simply to go in the other direction on the light rail system. If a rider misses their stop, they should be able to re-board in the opposite direction without going a great distance.	All (Systemwide)
1459	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Both Westlake Alts. Study upgrading existing Central Link entrances to the same level of design standards and identity as new entrances.	Downtown
1460	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	For all station alternatives, study the feasibility of entrances (doorways) from each face of an entrance headhouse for better visual and physical access to the station.	All (Systemwide)
1461	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	For all station alternatives, study the feasibility of providing entrances to headhouses at building and block corners wherever possible for better visual and physical access to the station.	All (Systemwide)
1462	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	For all station alternatives, move venting and other non-active uses away from building facades.	All (Systemwide)
1463	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Denny DT-1. Study adding an entrance in Whole Foods plaza due to high volume of pedestrian traffic at this location as well as potential for better connection to adjacent land uses and high-quality public spaces per TOD policy 2.4.1.b	Downtown
1464	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Denny DT-1. Study adding an entrance on the NW corner of Denny and Westlake, at the site of the Discovery Center for better connection to adjacent land uses and high-quality public spaces per TOD policy 2.4.1.b.	Downtown
1465	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Denny DT-1. Study closing 9th Ave between Denny and Westlake to vehicles to create additional public realm space.	Downtown
1466	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Denny DT-1. Study making Blanchard a transit- and local access only street.	Downtown
1467	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Denny DT-1. Study transit-only on Westlake from 8th to Denny (especially if cut and cover).	Downtown
1468	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Denny DT-1. Study creating an improved ped environment along Westlake by widening sidewalks. Options may include moving streetcar tracks (if cut and cover) and/or reallocating flex zone.	Downtown
1469	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Denny DT-1. Study adding a bike connection to 9th Ave bike facilities - potentially along Denny to station.	Downtown
1470	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Denny DT-2. Study adding an entrance on south side of Denny, potentially at the Westlake Triangle (between 9th, Denny, Westlake), which is a preferred location for good transit integration.	Downtown
1471	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Denny DT-2. Study adding an entrance on the north side of the site at Thomas St.	Downtown
1472	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	For all station alternatives, study escalators existing at grade facing station entrance.	All (Systemwide)
1473	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	South Lake Union DT-1. Study an entry to the station environment from Thomas, helping emphasize this entrance for Seattle Center access. Thomas is a priority pedestrian corridor and links up to the front door of the arena. Extend the yellow gradient down to Thomas and wrap it to the west to emphasize that it's part of the public realm. Furthermore the entrance to the head house could move further south (the pink arrow).	Downtown
1474	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	South Lake Union DT-1. Study relocating venting at north headhouse away from street edge.	Downtown
1475	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	South Lake Union DT-2. Study adding an entrance on east side of 99/Aurora; challenging for peds to cross.	Downtown

1476	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Seattle Center 5th Avenue / Harrison Street (DT-1). Study a pedestrian prioritized street (like Bell Street) on Republican from Queen Anne Avenue to Seattle Center and on Warren Avenue between Republican and Mercer with emphasis on pedestrian and bike movements with traffic calming for vehicle access. Need to include load/unload for Seattle Center, but do not want PUDO on these streets. Study this concept also to Warren between Republican and Mercer.	Downtown
1477	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	All Seattle Center Alternatives. Study Protected Bike Lanes on Mercer.	Downtown
1478	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Smith Cove Elevated at Galer (SIB-1). Study creating a bike trail along the BNSF rail and under the new guideway through the Armory property to bring cyclists down Garfield to the station plaza without mixing with the bus layover.	Interbay-Ballard
1479	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Smith Cove Elevated at Galer (SIB-1). Study enhancing the Galer structure with pedestrian, ADA, and bike friendly crossing over both BNSF and Elliott Way. Study tying in the Galer flyover with station mezzanine. Ensure the crossing is ADA accessible and comfortable for cyclists.	Interbay-Ballard
1480	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Smith Cove All Prospect Alts (SIB-2 and 3). Study extending the Helix bridge over Elliott so people can cross safely and not have to go down to grade first.	Interbay-Ballard
1481	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Interbay All IBB alternatives. Study connecting Nickerson to Emerson to Thorndyke.	Interbay-Ballard
1482	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Interbay All IBB alternatives. Study reconfiguring north end to make connections to SPU, Fisherman's Terminal, and other destinations. Consider a grade-separated solution.	Interbay-Ballard
1483	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Interbay IBB-1a and 2a/b. Study an elevated crossing of 15th Ave at Bertona St.	Interbay-Ballard
1484	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Interbay All IBB alternatives. Study design solutions that improve congestion conditions along Dravus St bridges while allowing for more uses in the ROW, such as a bike lane. Study removing parking lane.	Interbay-Ballard
1485	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Interbay All IBB alternatives. Consider improving sidewalks on 15th to create a multiuse trail, and building another pedestrian bridge over 15th to add another connection to the station. The additional pedestrian/bike bridge could align with Bertona providing an uphill connection to Queen Anne to the east.	Interbay-Ballard
1486	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Interbay IBB-3 (211). Study one-way PBLs on either side of 15th Ave.	Interbay-Ballard
1487	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Interbay IBB-3 (211). Study incorporating public crossing across 15th with fare paid on mezzanine in lieu of rebuilding or improving Dravus St bridge.	Interbay-Ballard
1488	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Ballard 14th Alts (All). Study a PBL on 14th Ave NW.	Interbay-Ballard
1489	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	For all station alternatives, study allowing public access to elevated or below grade arterial crossings, not including them in the fare paid zone.	All (Systemwide)
1490	Ch 2 Alternatives Considered			Vera Giampietro	OPCD	Ballard 14th Alts (All). Study turning 14th Ave NW into a great pedestrian/bike street as a good complement to 15th Ave NW, which is geared towards freight, buses, and vehicle mobility and is a rough place for pedestrians.	Interbay-Ballard
1491	Executive Summary	ES-7	16-18	Vera Giampietro	OPCD	Throughout the document please include cross references to concepts introduced, particularly in the Executive Summary, so that it is easy for a reader to find information about key milestones across the project. An example is in ES.3 Alternatives Considered, there are many references to key project phases (scoping, Alternatives Development, etc.) with no direction to the reader on how to understand those more clearly.	All (Systemwide)
1492	Executive Summary			Vera Giampietro	OPCD	Please add a diagram or a reference to a diagram in the Executive Summary that shows how Central Link operations will change when the WSBLE project is complete. This key impact to community members is not clearly articulated within the Executive Summary.	All (Systemwide)
1493	Executive Summary	ES-9	13	Vera Giampietro	OPCD	Introduce the concept of the MOS within ES.3 or ES.3.1, and not where it currently is, in ES.3.1.1. The placement of a new alternative concept within an individual segment is not intuitive and may create confusion for a broad public audience. In general, please present information within the document in a more consistent fashion, such that the hierarchy of information is more intuitive. E.g. introduce the MOS concept alongside the Build Alternatives.	All (Systemwide)
1494	Executive Summary	ES-15	Table ES-2	Vera Giampietro	OPCD	For all of the Key Environmental Impacts tables within the Executive Summary, include cross references to the types of impacts described, showing the reader where to find more information about individual impact line items. E.g. it is not intuitive to a general reader to understand what "intersections impacted" means.	All (Systemwide)
1495	Executive Summary	ES-15	Table ES-2	Vera Giampietro	OPCD	Add to the Key Environmental Impacts tables for all Ballard Link stations and alternatives the changes to service for all Central Link riders, i.e. communicate that anyone who currently travels between SE Seattle and UW will need to transfer downtown to make that same trip once the project is complete.	All (Systemwide)
1496	Executive Summary	ES-28	Table ES-7	Vera Giampietro	OPCD	Please include a definition of what a "hi-rail access road" is. If this is further defined within the DEIS document, please include a cross reference to that definition and visual representation of what this is. If it is not further defined and visualized within the document, please add such a definition and visual representation to the DEIS.	All (Systemwide)
1497	Executive Summary	ES-35		Vera Giampietro	OPCD	Please note early within ES.3.1.2 the proposed change to Central Link operations, i.e. communicate that anyone who currently travels between SE Seattle and UW will need to transfer downtown to make that same trip once the project is complete.	All (Systemwide)
1498	Executive Summary	ES-36	Table ES-9	Vera Giampietro	OPCD	Study connecting CID-1a to the Massachusetts Tunnel Portal that serves all other CID alternatives. If the two cannot connect, please explain within the DEIS why they cannot connect, or in other words, describe the constraints that prevent them from connecting.	SODO/CID

1499	Executive Summary	ES-38	16-32	Vera Giampietro	OPCD	The discussion here about displacements within the CID without mention of the distinct sensitivity to cultural displacement needs to be improved upon. Please include a discussion of the displacement consequences of culturally unique and sensitive businesses within the CID. Cultural displacement is discussed within the project RET, and can easily be referenced here. Also note that on page ES-58 for the Ballard Segment, specific businesses are named for impacts, whereas for the CID no businesses are named. Please apply the same/similar approach to stations/segments across the alignment. Consider taking a more general approach to the discussion of displacement impacts in the ES and cross-reference the reader to appropriate DEIS chapters for more specific discussion of the analysis of impacts to each segment.	SODO/CID
1500	Executive Summary	ES-38	29-32	Vera Giampietro	OPCD	This series of statements feels misleading, as it brings in a qualitative, subjective, un-cited assessment that is not an actual EIS finding. Please remove or recharacterize for consistency with the RET. "Alternative CID-2a and its design option, Option CID-2, would be more integrated into the CID... but would also provide the benefit of better access to transit options."	SODO/CID
1501	Executive Summary	ES-40	11-13	Vera Giampietro	OPCD	Please note the language used in these lines seems to be inconsistently applied. "Impacting community mobility" vs "inconveniencing access between the existing CID station and the CID community" (paraphrased). These are subjective assessments that may not be consistent with the RET, particularly given that the streetcar does not seem to be a primary mode of movement between the CID and Pioneer Square. Please consult the RET and RET LT (including City staff) and relate to RET outcomes identified for the CID in particular.	SODO/CID
1502	Executive Summary	ES-40	23-24	Vera Giampietro	OPCD	Please add a reference to the impacts on culturally unique businesses in the area.	SODO/CID
1503	Executive Summary	ES-40	30	Vera Giampietro	OPCD	Study beginning construction on CID-1a during the West Seattle segment construction process. If that is already part of the project plan, please clarify how "an additional 2 to 5 years" of construction for this segment would impact project delivery. If it is still possible to deliver the project on time please state that.	SODO/CID
1504	Executive Summary	ES-54	9-10	Vera Giampietro	OPCD	Please clarify what this phrase actually means so the public is clear on the implications: "A tunnel in the Interbay/Ballard Segment was not included in the Sound Transit 3 Plan; therefore, third-party funding would be required for the tunnel alternative." The way it sounds is that a tunnel requires 3PF regardless of whether the tunnel is actually cheaper than an elevated alignment. Is that so? Either way, please clarify for ease of public understanding.	Interbay-Ballard
1505	Executive Summary	ES-62		Vera Giampietro	OPCD	Please include within the Executive Summary a high level statement about the potential impacts of bus rerouting around the new light rail stations. It is mentioned within the Executive Summary (e.g. page ES-38 lines 28 & 29, "...although Many regional routes would no longer be operating because they would be replaced with light rail service.")	All (Systemwide)
1506	Executive Summary	ES-64		Vera Giampietro	OPCD	For section ES.5, please include discussion of impacts in the CID. In general the document demonstrates greater sensitivity to visual impacts on high value residences (e.g. Queen Anne) than to a culturally unique community with disproportionately high numbers of low-income community members of color (CID). The potential for cultural displacement within the CID catalyzed by this project is not insignificant, particularly with alternatives CID-2a and 2b, and will be very difficult to fully mitigate. Note that "visual impacts to water recreationists using Salmon Bay" are elevated here, but that livelihoods, cultural cohesion, and the future of a regionally and historically unique cultural center is not elevated. This is not consistent with the project RET nor with the City-ST partnership on our commitment to Race and Social Justice for the WSBLE project. I recommend that the RET LT at the very least bring in community narratives within the CID on how CID-2a and 2b may impact the future of the CID. Please demonstrate how voices of CID community members are coming through in this document.	SODO/CID
1507	Executive Summary	ES-65	31-33	Vera Giampietro	OPCD	Please re-route discussion of disproportionate impacts to EJ communities through the RET LT prior to making statements such as this. There is not enough data presented here to substantiate this claim.	SODO/CID
1508	Executive Summary	ES-65	ES.6.2	Vera Giampietro	OPCD	Please include discussion of indirect displacement and cultural displacement as described in previous RET reports.	SODO/CID
1509	Executive Summary	ES-68		Vera Giampietro	OPCD	Please add to "Areas of Controversy…" CID Preferred Alternative (none yet selected), CID Displacements, and the SODO Busway.	SODO/CID
1510	Land Use	4.3.2-3	3	Vera Giampietro	OPCD	Throughout the document, but as shown by example in the Land Use section, please use more complete citations for City documents, and documents in general. A broad public audience needs to be able to understand what documents are being referenced. Please include the name of the document and a link to it in the citation.	All (Systemwide)
1511	Land Use	4.3.2-11	35-42	Vera Giampietro	OPCD	In general, make more use of Sound Transit's 2018 ETOD policy statements within the TOD sections of each segment's Land Use impacts discussion. In other words, include these statements in the EIS for reference. There is some potential conflict between statements as presented on page 4.3.2-11 under TOD Development Potential by Alternative, where more development potential is presented as being more desirable than less. ST's 2018 ETOD policy explicitly states that "Sound Transit commits to TOD analysis and measures early in system planning and throughout transit project delivery. Sound Transit: Identifies and pursues strategies that minimize displacement of existing businesses and individuals from properties impacted by Sound Transit." (Resolution No. R2018-10, Equitable Transit Oriented Development Policy, Section 2.4 Integrated Project Delivery Approach).	All (Systemwide)
1512	Executive Summary	ES62		Benjamin Hansen	SDOT	Should tunneling be used along the light rail line, it has the potential to lead to settlement above the tunnel. The potential need to stabilize and restore settled streets should be captured in the EIS.	

1513	Executive Summary	ES62		Benjamin Hansen	SDOT	Heavy vehicle traffic, trucks and buses, are the principal cause of structural pavement deterioration. https://pavementinteractive.org/reference-desk/design/design-parameters/loads/ https://pavementinteractive.org/reference-desk/design/design-parameters/trucks-and-buses/ https://pavementinteractive.org/reference-desk/design/design-parameters/equivalent-single-axle-load/ The Sound Transit construction, especially where it includes tunneling and trucking of spoils, will generate large volumes of heavy truck traffic to and from constructions sites that will accelerate the deterioration of City streets. The EIS should call for mitigation of these impacts. Haul routes should be designated and truck traffic should be kept on those streets throughout construction. A pavement study of the haul routes should be undertaken (by a qualified pavement engineering consultant) that quantifies the truck traffic that will be generated to and from the Sound Transit construction sites and then estimates the reduction in structural life that will occur along the haul routes. A mitigation plan to address the pavement deterioration (restoration, compensation for loss of useful life, etc.) should be developed so that the City is not left with a costly backlog of deteriorated major arterials at the close of construction.	
1514	Executive Summary	ES62		Benjamin Hansen	SDOT	Light rail construction will prompt the re-route of bus traffic to stations to feed the new high capacity line and an increase in transit service along those streets. The pavement restoration of streets around light rail stations (discussed in comment 1515) should be to a standard that can support bus traffic long term. Typically, that would mean concrete pavement at a design depth based on the projected bus loading.	
1515	Executive Summary	ES62		Benjamin Hansen	SDOT	From experience with other Sound Transit work (Northgate as the most recent example),we know that truck traffic, equipment operations, and storage movement of materials will lead to pavement deterioration at light rail stations and at construction hubs along the route alignment. The project needs to recognize these impacts in the EIS and specify pavement restoration at the that will mitigate the impact of the construction activity.	
1516	Executive Summary	ES62		Emily Burns	SDOT	Perform bike route and walkshed analysis around light rail stations to determine multi-modal, ADA accessibility impacts using sidewalk, curb ramp, and roadway conditions, type, and size. Future mitigation shall include improvement of the sidewalk, curb ramp, and roadway infrastructure to support access to the stations.	All (Systemwide)
1517	Executive Summary	ES62		Emily Burns	SDOT	In alignment with comment 1515 above, a mitigation plan to protect the city's infrastructure assets should be developed .	
1518	Ch 3 Transportation	3-1		Emily Burns	SDOT	Add bullet: Transportation asset protection	All (Systemwide)
1519	Ch 3 Transportation	3-2		Emily Burns	SDOT	How was the statement "WSBLE stations are surrounded by an accessible pedestrian and bicycle network." validated? Condition, widths within the screenline? See in 3-36 that all sidewalks w/in 1 block of the station are deemed sufficient. Is that an acceptable range and what is the criterion to determine sufficiency?	West Seattle (DUW, DEL, WSJ)
1520	Executive Summary	NA		Emily Burns	SDOT	Develop interactive web map of the city's infrastructure with the route alternative layers so that the Department representatives can validate infrastructure impacts and sufficiency statements. Use the SDOT Assets Map as a base.	All (Systemwide)
1521	Appendix H - Section4(f) Evaluation	1-4	Section 1	Delia Tyrrell	Seattle Center	Tunneling below or adjacent to Seattle Center in both DT-1 and DT-2 has potential to cause permanent noise and vibration impacts to public events, performances, and programming that are integral to Seattle Center's mission and the operations that support its 4(f) status. Per the City's comments on the Noise and Vibration Technical Report, the DEIS is missing information about construction and operational noise and vibration impacts of DT-1 to Seattle Repertory Theater, Cornish Playhouse, KEXP, SIFF, The Vera Project, A/NT Gallery, MoPOP, Memorial Stadium, and Climate Pledge Arena. DT-2 is missing information about the full extent of temporary and operational noise and vibration impacts to Seattle Rep, the Phelps Center, Seattle Opera, Classical King-FM, McCaw Hall, Cornish Playhouse, and KCTS.	Downtown
1522	Appendix H - Section4(f) Evaluation	4-41	Section 4.2	Delia Tyrrell	Seattle Center	DEIS incorrectly states that visual changes to Seattle Center campus proposed as a part of the DT-1 station would not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f). The proposed entrance location would hinder the use of the Theater Commons, which is a primary gathering place and pedestrian and event access point. The entrance would block views from and to Seattle Rep and displace portions of the campus used to hold events and gather people. The events, recreation, and gathering functions are activities that qualify this property for protection under Section 4(f). The proposed DT-1 station entrance would therefore create significant adverse visual impacts to Seattle Center. The use of the property under the DT-1 alternative is not de minimis, and a prudent and reasonable avoidance alternative must be sought.	Downtown
1523	Appendix H - Section4(f) Evaluation	4-41	Section 4.2	Delia Tyrrell	Seattle Center	DT-1 project construction would temporarily close 1.5 acres of Seattle Center property. The DEIS incorrectly determines that the attributes that qualify this resource for protection under Section 4(f) would not be adversely impacted during project construction. The 1.5 acre portion of Seattle Center campus that is proposed to be temporarily used for construction is essential to operating campus-wide events, providing equitable and ADA access to campus, providing emergency and fire access for campus arts and cultural venues. It is used for annual campus-wide events including Bumbershoot and Northwest Folklife, described in EXHIBIT SC-1. Displacement of these functions during the 5-7 years of construction of the DT-1 Seattle Center station alternative will result in civic loss and economic loss which, though temporary, is of a long enough duration to cause prolonged or permanent effects. This is a significant adverse impact.	Downtown
1524	Appendix H - Section4(f) Evaluation	4-42	Section 4.2	Delia Tyrrell	Seattle Center	The information necessary to identify impacts and compare alternatives is missing. There is not sufficient mitigation described for noise and vibration impacts to venues adjacent to the construction footprint including the Northwest Rooms and Cornish Playhouse (DT-1) and Seattle Rep (DT-1 and DT-2). These venues house core business functions that are sensitive to noise and vibration from the DT-1 construction noise and vibration impacts. We cannot analyze the impacts of construction fully without more details of proposed mitigation. Successful temporary relocation of these tenants during construction, which is mentioned in the DEIS as a potential mitigation, will be extremely challenging because the venues are purpose-built and highly specialized for live performance, film, and recording activities. The DEIS does not contain sufficient information to show how this could be achieved without causing permanent harm to the organizations.	Downtown

1525	Appendix H - Section4(f) Evaluation	4-42	Section 4.2	Delia Tyrrell	Seattle Center	The DEIS incorrectly states that Seattle Center events and activities will be able to continue during construction. Construction and staging access impacts on Seattle Center property, noise and vibration, visual impacts, dust and debris, transportation impacts on nearby streets, and displacement of curbside loading areas will displace and disrupt large portions of events that rely on unobstructed access and availability of these campus open spaces for maintenance, production, performers, gathering, and revenue-generating uses. The DEIS is missing descriptions of mitigation to address these significant impacts. With mitigation campus events may be able to continue in a diminished form, but not without adverse impacts.	Downtown
1526	Appendix H - Section4(f) Evaluation	4-42	Section 4.2	Delia Tyrrell	Seattle Center	The DEIS lacks detailed analysis of campus impacts and a detailed analysis of the mitigation needed to address these impacts. The City cannot concur with the determination of de minimis, and a prudent and feasible avoidance alternative must be sought.	Downtown
1527	Ch 4 Affected Enviornment and Environmental Consequences	4.3.5-2	4.3.5.1.2	Sarah Sodt	DON	The City of Seattle has a community garden program. P-Patches or community gardens are publicly owned spaces where neighbors come together to grow community and plan, plant, and maintain a piece of open space. There are three P-Patches along the alignment that may be impacted by the project: Interbay, Seattle Center Up Garden, and Cascade. We believe some of the P-Patches may qualify for protection under Section 4(f) given that some P-Patches are located on Parks property. It is unclear if the P-Patches have been considered in terms of impacts. A map showing locations of P-Patches is available at this webpage https://www.seattle.gov/neighborhoods/programs-and-services/p-patch-community-gardening/p-patch-map	Interbay-Ballard
1528	Technical Report: Noise and Vibration	6-51	Table 6-13	Seattle Center	Seattle Center	The DEIS is missing the following outdoor use areas at Seattle Center in its table of sensitive receivers. These venues are considered sensitive outdoor receivers that may be impacted by airborne noise during construction of either DT-1 or DT-2. These spaces are classified as FTA Category 1 noise-sensitive receivers. FTA defines Category 1 receivers as “Land where quiet is an essential element of its intended purpose.” International Fountain Lawn, used for events and accessible year-found for public enjoyment of open space and the choreographed musical fountain Theater Commons, used for festivals and events, as a gathering space and entrance to the campus International Plaza, used for outdoor performances, festivals, and public recreation (also known as the Northwest Courtyards) Fisher Lawn, used for events including speeches and outdoor concerns Founders Court, used for events and quiet public enjoyment Kreielsheimer Promenade, used for events and quiet public enjoyment Mural Amphitheater, used for concerts and screening of outdoor films More detailed information can be found in Exhibit SC-3 attached to the City’s comments.	Downtown
1529	Social Resources, Community Facilities, and Neighborhoods	5-48		Nicole Kistler	DON	Only Seattle Goodwill Outlet is specifically mentioned. Other organizations like Chong Wa Benevolent Association and The Wing Luke aren't named, and impacts related to construction are only considered. Business displacements are also in that section but not tied to success of organizations. The cultural ecosystem of the community as a whole is not considered. Additionally, there is little to no consideration of Native American cultural resources or properties in this section.	SODO/CID
1530	L4.14 Public Services, Safety, and Security	5-61		Nicole Kistler	DON	Impacts to the Indian Health Board are characterized as positive because of increased transit once the project is complete, but no other impacts are considered nor is transit proven to be a positive impact to this community. What is this characterization based upon?	SODO/CID
1531					SDOT	DT-2--South Lake Union Station at Mercer St--is isolated from nearby inter-modal connections, vs DT-1 at Harrison St, which is perfectly oriented. Adjust DT-2 design and/or associated alternative weighting.	Downtown
1532					SDOT	Many Delridge Station options would require bus service to deviate from Delridge Way and affect operations on Delridge and adjacent streets; deviations must be identified now and throughout station planning and design, not deferred.	West Seattle (DUW, DEL, WSJ)
1533					SDOT	Some alternatives show sub-optimal multi-modal access and bus integration that will add costs, reduce ridership, and reduce safety. Sound Transit must work with the City and King County Metro to successfully address these issues now and throughout project planning and design. Design modifications may include changes to station entrance siting, vertical circulation, and improvements to surface transportation integration.	All (Systemwide)

1534	L4.1 Acqusitions, Displacements, and Relocations			Sandra Gurkewitz	SDOT	We have numerous concerns that if not addressed may result in additional analysis and mitigation at the time of permitting, pursuant to City's substantive SEPA authority (WAC 197-11-660 and SMC 25.05.660)	All (Systemwide)
1535	Appendix H - Section4(f) Evaluation	3-88	3-6	Sandra Gurkewitz	SDOT	The DEIS states that Sound Transit will prepare a Least Harm Analysis to be included in the FEIS: "Following public review of and comment on the DEIS and the potential impacts of proposed alternatives, which includes this Section 4(f) evaluation; continued consultation with officials having jurisdiction on the proposed de minimis findings after public comment is received; and consultation regarding adverse effects on historic resources with the State Historic Preservation Office and consulting parties." Waiting to complete a Least Harm Analysis until the FEIS does not allow the City or the public to compare alternatives or provide comments. For 4(f) properties with adverse impacts, the City requests a 4(f) and least harm analysis be completed.	All (Systemwide)
1536	Appendix H - Section4(f) Evaluation	4-109	4-6	Sandra Gurkewitz	SDOT	The DEIS states that Sound Transit will prepare a Least Harm Analysis to be included in the FEIS: "Following public review of and comment on the DEIS and the potential impacts of proposed alternatives, which includes this Section 4(f) evaluation; continued consultation with officials having jurisdiction on the proposed de minimis findings after public comment is received; and consultation regarding adverse effects on historic resources with the State Historic Preservation Office and consulting parties." Waiting to complete a Least Harm Analysis until the FEIS does not allow the City or the public to compare alternatives or provide comments. For 4(f) properties with adverse impacts, the City requests a 4(f) and least harm analysis be completed.	All (Systemwide)
1537	Appendix G - Environmental Justice	2.3	2.2	Nicole Kistler	DON	The City challenges the assumption that people living within ½ mile will be most affected. For instance, in Delridge, Sound Transit accurately notes that the RET priority communities live South of the station alternatives. Demographic information should be used to support a coherent narrative and integrated with what Sound Transit has heard from community. Demographic data should include types of occupations, data about average numbers of children, elderly living with families or more information about people with disabilities to confirm or deny community-based narratives. The City needs more information to know how impacts will affect people in neighborhoods. For instance, "Do they mainly drive to work or take transit? When? Are they traveling with children? How will a new transfer environment impact them?" In another example, the DEIS does not provide a description of the regional communities of color in who rely on Chinatown-International District as a regional cultural hub. These communities are far-reaching and no demographics analysis was completed to understand and quantify the impact to those cultural groups. Sound Transit will need to account for and quantify the loss of a cultural hub for an entire set of regional communities.	All (Systemwide)
1538	Appendix G - Environmental Justice	3-1	3	Nicole Kistler	DON	The demographics section is an outline of many pieces of information and is difficult to wade through for experts in population geography let alone the lay person. It provides little analysis in way of providing a real story about the most underserved populations. Sound Transit should use demographic information as one piece of information to truth-check stories of experience that community members share through engagement so that Sound Transit can then understand how different communities and individuals will experience impacts. Currently, the stories or assumptions underpinning the demographics work are hidden and need transparency in the DEIS. Many conclusions in the document do not match what the City has heard from community members and in the City's work with community.	All (Systemwide)
1539	Appendix G - Environmental Justice	4-1	4	Nicole Kistler	DON	This section details the outreach Sound Transit conducted to support the project. In some sections like 4.4.2.1 Community Engagement Event Summary, Sound Transit does not indicate or summarize what community said during the outreach event. In other places like 4.4.1.2 Delridge Community Workshop or 4.4.1.4 Themes from Community Engagement a summary is provided, but there is no indication of how engineering and planning adapted or made refinements based on community feedback. The City needs to see both the summary of community feedback and how Sound Transit integrated that feedback into the project for transparency and accountability.	All (Systemwide)
1540	Appendix G - Environmental Justice	5-1	5	Nicole Kistler	DON	There is not specific information about how mitigation will be coordinated with community—mitigation plans should come from community not just be informed by community. It is not possible to know what will sustain businesses or neighborhoods without their active participation in the process.	All (Systemwide)
1541	Appendix G - Environmental Justice	5-30 and 5-43	5	Nicole Kistler	DON	On page 5-30, Sound Transit correctly notes the negative cumulative impacts of transportation projects to the Chinatown-International District, however in the tables there is incomplete assessment of impacts and assessment of impacts for minority and low-income populations related to these cumulative impacts. The District has endured major transportation and infrastructure impacts that have squeezed the geographic boundaries of the neighborhood to become smaller and smaller. City staff noted other places in the document that incorrectly characterized these impacts, for instance, Sound Transit refers to the properties impacted by the 5th Avenue station alternatives as "on the edge of the neighborhood." In fact, this is the historic heart of the neighborhood. Impacts to this portion of the neighborhood have not adequately been studied and should include a triple bottom line approach to weighing financial impacts that considers social, economic and environmental factors. Community members at Community Advisory Group Meetings and CID/Pioneer Square Workshops with Sound Transit have repeatedly raised the issue that the 5th Avenue Station alternatives would squeeze the neighborhood past a tipping point where the neighborhood would no longer function as a cultural hub. This result would occur because its businesses and cultural organizations would be eroded to the point of only being tokens to Asian culture in the Chinatown-International District. Community members have pointed to the fact that authenticity arises from Asian languages actively being spoken in Asian-owned businesses that support Asian cultural organizations. Therefore, Sound Transit needs to consider the cumulative effects that its project will have on the Chinatown-International District and the cumulative effects of racist policies in transportation and land use planning across the alignment and collaborate with community in the processes to plan for and mitigate impacts from the project.	SODO/CID

1542	Appendix G - Environmental Justice	5-43	5	Nicole Kistler	DON	Assessment of impacts and assessment of impacts for minority and low-income populations are incomplete for Chinatown-International District, and assessments of need for potential mitigation also need further study and engagement with community. There has not been adequate economic analysis or mitigation planning with community to make displacement of any businesses or residents acceptable. There should be a mitigation plan for each neighborhood impacted by the project that should be crafted in collaboration with community. The economic analysis should consider the impact that a move would have on each business both temporarily and permanently including all opportunity costs, costs not only related to interruption of business but time leading up to that and a number of years after that reflect the true time and costs required to build that business, while also taking unforeseen barriers into account. In addition to the businesses that would be directly relocated or displaced, how are the economic costs to the neighborhood as a whole being considered? These costs have not been considered in the DEIS and should be for both community and decision makers to have transparency and to make decisions. Construction impacts as detailed in the DEIS represent some of the most significant construction impacts Seattle has experienced in the 1900s. Businesses will experience lost revenue during construction as well as the time to build and regain customers after construction is complete. In Chinatown-International District, Sound Transit does not account costs associated with the erosion of the core base of businesses, business mass, that as a whole provides an anchor or attraction as a group of businesses that helps to maintain the customer base for each individual business. The value of the businesses together is greater than each one independently and should be calculated with this focus in the DEIS analysis.	SODO/CID
1543	Appendix G - Environmental Justice	5-1	5 and 7	Nicole Kistler	DON	In both section five, Project Impacts and Potential Mitigation and in the section seven, Conclusions Sound Transit makes blanket statements that there are no additional impacts for underserved populations than those for the entire community. The City does not agree with this statement in any section of Appendix G or anywhere else in the DEIS. Inadequate and incomplete studies of impacts, racially biased assumptions, and inadequate methodologies throughout the DEIS are all issues affecting Sound Transit's ability to conclude what is shown in the DEIS. Since vulnerable populations typically experience greater impacts that the overall population, the City does not agree that there would be no additional impacts. Here is an example of how inadequate methodologies led to inaccurate conclusions, specifically how the methods and assumptions in the demographic analysis led to incomplete conclusions in section five, Project Impacts and Potential Mitigation. In Appendix G on page 5-6 in the West Seattle/Delridge portion of the table, Sound Transit notes that some options for Delridge stations and alignment would close Delridge Way on evenings and weekends. Sound Transit states this would have no more impact on vulnerable populations than on other populations, however, the City has heard about RET community use of Delridge Way on evenings and weekends to get to second and third jobs during that time and it would disproportionally affect them.	All (Systemwide)
1544	Ch 6 Alternatives Evaluation	6-39	6.6	Sandra Gurkewitz	SDOT	Displacement of Public Facilities – this section is missing references to all the City properties/assets that could be affected by this project. Please include a list of all City properties and assets that could be impacted by the project.	All (Systemwide)
1545	Ch 3 Transportation Enviornment and Consequences			Sandra Gurkewitz	SDOT	NEPA requires consideration of direct, indirect, and cumulative impacts of a project on the environment and development of potential measures to mitigate adverse environmental effects. Typically, a DEIS describes options for mitigation, while the FEIS includes the decisions on mitigation that would be implemented. However, we found the DEIS to be lacking in consistent and clear mitigation for the potential adverse project impacts, many of which may be potentially unmitigable. We found it difficult to evaluate the full impact of the project and differences between alternatives as mitigation measures are peppered throughout the document. The City requests that between DEIS and the FEIS, Sound Transit work with community members, the City, and other stakeholders and partners to develop a comprehensive mitigation analysis and plan with sufficient detail to inform actions on a Project to be built and FTA Record of Decision. The mitigation plan should be co-developed with impacted communities, and should explore a wide range of mitigation tools and strategies.	All (Systemwide)
1546	Ch 4 Affected Enviornment and Environmental Consequences			Sandra Gurkewitz	SDOT	NEPA requires consideration of direct, indirect, and cumulative impacts of a project on the environment and development of potential measures to mitigate adverse environmental effects. Typically, a DEIS describes options for mitigation, while the FEIS includes the decisions on mitigation that would be implemented. However, we found the DEIS to be lacking in consistent and clear mitigation for the potential adverse project impacts, many of which may be potentially unmitigable. We found it difficult to evaluate the full impact of the project and differences between alternatives as mitigation measures are peppered throughout the document. The City requests that between DEIS and the FEIS, Sound Transit work with community members, the City, and other stakeholders and partners to develop a comprehensive mitigation analysis and plan with sufficient detail to inform actions on a Project to be built and FTA Record of Decision. The mitigation plan should be co-developed with impacted communities, and should explore a wide range of mitigation tools and strategies.	All (Systemwide)
1547	Ch 6 Alternatives Evaluation			Sandra Gurkewitz	SDOT	NEPA requires consideration of direct, indirect, and cumulative impacts of a project on the environment and development of potential measures to mitigate adverse environmental effects. Typically, a DEIS describes options for mitigation, while the FEIS includes the decisions on mitigation that would be implemented. However, we found the DEIS to be lacking in consistent and clear mitigation for the potential adverse project impacts, many of which may be potentially unmitigable. We found it difficult to evaluate the full impact of the project and differences between alternatives as mitigation measures are peppered throughout the document. The City requests that between DEIS and the FEIS, Sound Transit work with community members, the City, and other stakeholders and partners to develop a comprehensive mitigation analysis and plan with sufficient detail to inform actions on a Project to be built and FTA Record of Decision. The mitigation plan should be co-developed with impacted communities, and should explore a wide range of mitigation tools and strategies.	All (Systemwide)

1548	Appendix G - Environmental Justice	7-1, 7-2	7	Lizzie Moll	SDOT	The analysis is incomplete for both measuring and mitigating impacts and benefits to minority and low-income populations. Thus, a conclusion cannot be reached that “the West Seattle Link Extension would not result in disproportionately high and adverse effects on minority and low-income populations.” Nor can a conclusion be reached that “…impacts of the Ballard Link Extension would not be high and adverse to environmental justice populations.” The City does not agree with these findings as missing information must be addressed to capture the complete impacts of the project	All (Systemwide)

Attachment B: Racial Equity Toolkit and Environmental Justice

Seattle and Sound Transit are collaborating on the development of a racial equity analysis using the City's Racial Equity Toolkit (RET) to ensure equitable distribution of project benefits and avoid disparate impacts to communities of color and low-income populations. As the RET was being developed, Sound Transit completed an Environmental Justice (EJ) Analysis as Appendix G of the WSBLE DEIS. While the RET and EJ analyses employ different methodologies, results from each were to be integrated to help inform and solicit feedback from community. The City finds that the DEIS and the EJ Analysis is missing critical analysis and mitigation proposals to support the conclusion that with offsetting benefits the project would not result in disproportionately high and adverse effects on environmental justice populations. The City offers many comments on how to strengthen the EJ Analysis and better integrate the EJ Analysis and the RET in advance of the FEIS.

The City has valued Sound Transit's partnership on developing a joint Racial Equity Toolkit (RET) to ensure equitable distribution of project benefits and avoid disparate impacts to communities of color and low-income populations. This multi-year effort incorporates community engagement and technical analysis to help further the following RET outcomes throughout the project:

- Advance environmental and economic justice to improve economic and health outcomes for communities of color.
- Enhance mobility and access for communities of color and low-income populations.
- Create opportunities for equitable development that include expanding housing and community assets for communities of color.
- Avoid disproportionate impacts on communities of color and low-income populations.
- Create a sense of belonging for communities of color at all stations, making spaces where everyone sees themselves as belonging, feeling safe, and welcome.
- Meaningfully involve communities of color and low-income populations in the project.

In addition, the RET identifies two communities, the Chinatown-International District (CID) and Delridge neighborhoods, for additional analysis and public engagement.

Sound Transit completed an EJ Analysis as part of the WSBLE DEIS. While the RET and EJ Analysis employ different methodologies, results from each were expected to be integrated to help inform and solicit feedback from community. The City's review of the DEIS EJ Analysis finds many missing pieces, particularly connecting information from other sections of the DEIS, and missing opportunities to better align and complement the DEIS with the work of the interagency RET, including strengthening methodology, providing additional information, and partnering on next steps and community processes to further racially equitable outcomes from the project. The following summarizes our comments. More detailed comments related to racial equity and environmental justice can be found in *Attachment A: City Consolidated Comments* and *Attachment M: Community Engagement*.

The EJ Analysis is missing relevant information and analyses from other DEIS Chapters. For example:

- **Economics**. The Economics chapter is missing an analysis of the scale of economic impact from business displacements, road closures, and other construction impacts to the community in Delridge. The DEIS does not address whether displaced businesses are small businesses, cultural anchors, or other community serving businesses, and does not identify indirect effects of these displacements.
- **Acquisitions and displacements**. The DEIS proposes that most displaced businesses can be relocated 'successfully' within the project vicinity. This does not consider the impact to businesses relying on a localized customer base, the availability of suitable commercial space at comparable rates, nor the viability of Sound Transit's available funding and tools under FTA policy to support relocation. This is particularly important in the CID.
- **Social resources, community facilities, and neighborhoods**. This section of the DEIS states that in the Delridge neighborhood, the project will impact low-income housing to a greater degree, thereby affecting EJ populations. It is unclear why this is not an adverse and disproportionately high impact. Similarly, the DEIS does not look at business impacts in the CID from road closures and parking loss. It does not evaluate post-pandemic impacts, especially to small businesses.
- **Cumulative impacts**. The DEIS and EJ Analysis do not address historic harm or cumulative impacts from multiple large capital projects to neighborhood cohesion in the CID.

The EJ Analysis (DEIS Appendix G) should include additional information and analysis. For example:

- **Expand the study area for Delridge**. The study area should be extended, especially south of the Delridge station to capture communities that will access stations by bus. Sound Transit should consider a Transit Access Study to better understand the needs of the several neighborhoods to the south of the Delridge station that have been identified in the RET.
- **Identify social resources and clients served**. The analysis should include a list of social resources impacted by the project, including organization names, descriptions, and clients served.
- **Unsheltered people**. Unsheltered people are low-income EJ populations. The analysis should include a complete evaluation of unsheltered people and available shelters by segment.
- **Affordable housing**. Analyses of the impact to affordable housing is not captured. It should be explicitly listed in DEIS by federal and local definition, as the loss of affordable housing would be an impact on the human environment and neighborhood.
- **Equity**. Specific missing impacts have been provided in the consolidated comments in *Attachment A*, including more information on air quality (especially in the CID), pedestrian Level of Service, the indirect economic and cultural impacts of the project. See also *Attachment D: Methodology and Analytics*.
- **Relocation**. "Research indicates that there are adequate opportunities for most residents and businesses to successfully relocate within the project vicinity". These terms need to be defined and assumptions validated.

Findings. The City strongly disagrees with following conclusions of the EJ Analysis:

> "[With] offsetting benefits…the West Seattle Link Extension would not result in disproportionately high and adverse effects on environmental justice populations." (Appendix G, Page 7-1)

"Combined with this mitigation and the offsetting benefits, impacts of the Ballard Link Extension would not be high and adverse to environmental justice populations." (Appendix G, Page 7-2)

The DEIS and EJ Analysis, as currently drafted, do not include the level of analysis and mitigation measures needed to support these conclusions. Furthermore, additional public engagement is needed to support any conclusions about impacts to minority and low-income populations.

Next steps. In addition to written responses to the City's formal comments in *Attachment A: City Consolidated Comments*, and the subset highlighted above, the City would like to work with Sound Transit through development of the FEIS on the following:

1. **RET Report.** Update the 2022 RET Report based on DEIS comments from community and additional engagement between the DEIS and FEIS on refinements to the DEIS alternatives and project mitigation measures.

2. **Targeted Engagement in Chinatown-International District.** The City supports additional engagement with the CID community to Refine alternatives to avoid/minimize impacts, provide more complete mitigation, and develop a partnership between the public and private sectors and community to address longer-term impacts and historic harm**.**

3. **Targeted Engagement in Delridge.** The City supports additional engagement between the DEIS and FEIS with RET-identified communities in South Delridge who will rely on bus-rail integration to access the light rail station at Delridge. This engagement process should seek to confirm with community the Board action on a Preferred Alternative and look for ways to further RET outcomes and North Delridge Action Plan goals.

4. **Mitigation**. Develop together with the City, community, and other relevant stakeholders and partner agencies, a comprehensive mitigation plan in advance of the FEIS that considers strategies to mitigate impacts to RET populations throughout the entire system, including but not limited to, strategies to reduce displacement of low-income households and provide support to small businesses during construction. See *Attachment J: Mitigation*, for further discussion.

Attachment C: Compliance

The City of Seattle is responsible for issuing local permits for the WSBLE project. The City cannot permit the project if it does not comply with City codes, rules, plans, and regulations. The DEIS demonstrates several instances in which compliance with local regulations is unclear. These compliance issues should be resolved and documented in the FEIS to avoid potential cost and delay in the project permitting process.

The following list highlights compliance concerns where the DEIS is either silent on a potential compliance issue or where the DEIS presents information that suggests the project may not comply with City codes, rules, plans, and regulations. If unresolved, these compliance issues may impact the City's ability to permit project. A comprehensive inventory of these issues may be found in the City's formal DEIS comments in *Attachment A: City Consolidated Comments*.

1. **Stormwater**. The proposed alignments are not in compliance with regulations for stormwater management related to guideways. Seattle Public Utilities (SPU) cannot permit the project as shown in the DEIS designs. Sound Transit asserts that guideways are non-pollution-generating surfaces. This is incorrect. The Washington State Department of Ecology (Ecology) has judged them to be pollution-generating surfaces. Unless Ecology revises that determination based on new data, the project must meet the City's Stormwater Code (SMC 22.800-22.808).
2. **Land Use**. The information necessary to identify impacts, compare alternatives and demonstrate compliance with city code is missing. The analysis in the DEIS does not identify the above grade guideway segments that would be located above the maximum allowed zoning height (SMC 23).
3. **Noise**. References to Seattle Noise Ordinance (SMC 25.08) are missing from the operational noise impact analysis, therefore, the potential conflict with local controls and policies cannot be determined. The DEIS uses FTA methodology to establish impacts and the required mitigation for operational sound levels. That FTA standard is not used in the Seattle Municipal Code (SMC) nor in the Washington Administrative Code (WAC). Exterior sound level limits of SMC 25.08.410 and .420 must also be used to evaluate impacts of the project.
4. **Historic Preservation**. References to Seattle Municipal Code sections are missing related to implementation of the City's Historic Preservation regulations. The references to when a Certificate of Approval (SMC 25.12 and SMC 23.66) is required for alterations within historic districts (demolition, construction of stations, venting structures, head houses etc.) or to individual landmarks. Additionally, the regulations regarding referral to the Landmarks Preservation Board of nominations for potentially eligible resources that are proposed for demolition or substantial alteration are not addressed (SMC 25.05.675H2c and SMC 25.12). Therefore, the potential conflict with local controls and policies cannot be determined.
5. **Shoreline and Environmentally Critical Areas**. The Compensatory Mitigation sections in the Ecosystems chapter prioritize off-site or in lieu fee mitigation measures which do not address City of Seattle Shoreline Code requirements (SMC 23.60A.158 and SMC 23.60A.159) or the Environmentally Critical Areas (ECA) mitigation sequencing priority (SMC 25.09.065). Avoidance, minimization, and in-project area mitigation sites should be considered in advance of off-site and/or in-lieu fee

mitigation measures. Table B for SMC 25.09.160 should be referenced regarding mitigation measures for wetlands.

6. **Overwater and In-water Structures**. Due to the negative impacts of overwater structures and in-water structures (i.e., bridge alternatives) to the salmonids and other aquatic species using the Ship Canal, the King County in-lieu fee program (or other mitigation locations outside Seattle) is very likely not to be a viable or appropriate option for compensatory mitigation due to City of Seattle Shoreline Code requirements (SMC 23.60A.158 and SMC 23.60A.159).
7. **Geology and Soils**. The Prospect Street portal, Smith Cove Station site, and alignments along the west side of Queen Anne are in Environmentally Critical Areas (ECA) steep slope and potential slide. These project components will likely require considerable efforts to provide complete stabilization to protect the facility from landslides emanating from the ECA Steep Slope Area.
8. **Seattle Municipal Code Title 15**. Title 15 covers protection and repair of features in public places, including sidewalk, pavement, sewers, drain inlets, catch basins, green stormwater infrastructure, streets, trees, or any other public facility or assets, that are impacted by construction activities (SMC 15.22.080). In accordance with Title 15, the Right-of-Way Opening and Restoration Rules (ROWRR) describes references, requirements, and standards that must be met when making or restoring openings in the public right-of-way. The DEIS does not cite compliance with Title 15, the ROWRR, or City of Seattle Standard Plans and Standard Specifications for Road, Bridge, and Municipal Construction, for roadway and sidewalk facilities restored as part of construction activities. Additionally, the Utilities section of the DEIS does not describe restoration within the ROW as a project impact for utility relocations during construction.
9. **Visual Quality and Aesthetics.** The analysis is incomplete and appears not to be compliant with SMC 23.66. In order to show analysis could lead to compliance with SMC 23.55, visual impacts of station entrances and related components, headhouses, venting, bike parking, etc. require further analysis of the siting of these elements in consideration of visual cohesion and architectural character within the Pioneer Square Preservation District and International Special Review District. All elements above grade, including, but not limited to paving, street furnishings, bicycle parking, signage, lighting and landscaping will require a Certificate of Approval from the Department of Neighborhoods. This will include review and a recommendation by the respective historic review Boards, pursuant to Chapter SMC 23.66.

Next steps. The City offers continued support to explore code amendments, as appropriate, with ST and with community. Several of our codes and policies do not anticipate the unique complexity associated with constructing a linear transportation project such as the West Seattle and Ballard Link Extensions. Per the Partnering Agreement, the City continues to review development regulations and processes that will likely be applicable to the project and identify code changes and process reform actions necessary to streamline the permit review process or resolve code conflicts. Community outreach will be conducted later this year for consideration of proposed code reforms.

The need to resolve outstanding compliance issues must be addressed by release of the FEIS to avoid later delays. If the City's concerns regarding local regulations are not adequately addressed through the environmental review process, it is unlikely that the FEIS and ROD will sufficiently meet the City's needs—thereby requiring the City to request additional analysis and mitigation during the permitting process and creating unknown delays we all want to avoid. Streamlining the permitting process requires an adequate analysis of impacts and mitigation in the DEIS, FEIS, and ROD to minimize the need for identifying additional mitigation later during the permitting process.

Attachment D: Methodology and Analytics

Many sections of the DEIS are missing information and analysis necessary to understand the full complement of project impacts. Without this information or analyses it is difficult to fully compare alternatives and develop appropriate mitigation. We also found several areas where we did not agree with the methodology or assumptions used to evaluate impacts.

The following list provides representative examples of missing information, incomplete analyses, and disagreement on methodology and assumptions. A comprehensive list of these issues may be found in the City's formal DEIS comments in *Attachment A: City Consolidated Comments*.

1. **Examples of missing information or analysis:**
    - **Business and Residential Displacements.** See *Attachment I* for additional information on the City's comments related to displacement. The City finds information, analysis, and/or mitigation missing for the following:
        - Impacts to minority-owned businesses and employees, particularly BIPOC businesses and employees, have not been fully evaluated throughout the corridor.
        - Impacts to residential property owners and renters, including low-income and BIPOC communities. The information necessary to identify impacts and compare alternatives for acquisitions, displacements, and relocations is missing.
        - Demographic and socio-economic data for each displacement and impacts of acquisitions and displacements on Mandatory Housing Affordability (MHA) units.
        - The results of businesses and residential displacements needs to be further evaluated in terms of community cohesion and gentrification including impacts to low income and BIPOC communities. Mitigation measures need to be proposed.
    - **Economic and Social Impacts.** The evaluation of social resources and community cohesion in the Chinatown/International District (CID) is incomplete. Many cultural and social resources vital to the community are missing in the DEIS including Summit Sierra School, the Chinese Language school at Chong Wa Benevolent Association, and the Puget Sound Community School. There is also no mention of Theatre Off Jackson. Donnie Chin International Children's Park is mis-identified, and Kobe Terrace Park and the Danny Woo Community Garden are omitted. Missing is discussion of the indirect impacts to neighborhood social and cultural cohesion outside of the immediate CID station area.
    - **Environmental Justice and the RET**: The Chinatown-International District is a RET identified community that has historically experienced disproportionate impacts from government actions. Impacts to the community have not been fully evaluated, including the following:
        - Analysis of indirect impacts such as economic displacement resulting from potential land value increases after completion of the project.
        - Construction disruption, especially to the small businesses that are struggling in the current recession need to be included in the analysis.
        - Impact of street closures, rerouting, and transit changes to business and residents.

    - Discussion of cultural displacement and the broader consequences to culturally unique and sensitive businesses within the CID, and to the broader regional users of this cultural anchor community.
    - Removal of direct service to the Stadium Station for the Rainier Valley, Tukwila, SeaTac and Federal Way communities will likely increase the load on the CID station for transfers and pedestrian traffic, especially during Stadium events.
    - Evaluation of surge traffic impacts in the CID and on BIPOC communities is missing.
- **Land Use and Transit Oriented Development (TOD):** Potential for new development and TOD to advance gentrification has not been addressed. Need clearer comparison between type of land uses impacted by each alternative to adequately to compare alternatives. For example, in the West Seattle segments: need to demonstrate the project is consistent with the West Seattle Triangle Urban Design Framework, North Delridge Action Plan and the City of Seattle Comprehensive Plan goals and policies.
- **Parking:** Impacts to parking have not been adequately evaluated throughout the corridor, including analysis of hide and ride parking near stations, construction worker parking needs and impact to disabled parking. Inventory of commercial loading zones is not correct. Impacts to commercial load zones near stations not evaluated or mitigated.
- **Visual Quality and Aesthetics**: Visual quality and aesthetic impacts have not been fully evaluated. Missing analyses and visuals include:
    - Specific public views of natural and human made features along SEPA corridors and of historic landmarks.
    - System elements including guideways, stations, portals, straddle bents, noise walls, overhead pole (OCS), and Traction Power Substation (TPSS) numbers and locations.
    - Additional Key Observation Points (KOPs)
    - Visuals in respect to light, glare, height, bulk and scale and shading.
    - Evaluation of visual impacts from exhaust stacks and entry portals adjacent to historic landmarks and those within historic districts need to be evaluated.
- **Cultural and Historic Resources**: The Area of Potential Effects (APE) should be expanded to include detour routes through Pioneer Square. An evaluation of impacts to buildings and areaways in Pioneers Square should be added. Missing information and analysis of the CID and Pioneer Square in the context of a larger historic district should be completed. The list of properties potentially eligible for Landmarks designation, in addition to those potentially eligible for listing on the National Register of Historic Place (NRHP) is missing. See *Attachment H* for additional discussion of cultural and historic resources.

2. Examples of Methodology Disagreements:

- **Transportation**:
    - Boarding numbers need updating, especially for peak hour travel
    - Bicycle facilities analysis does not meet FTA best standards 'access to transit' of 3-mile radius from station (ST used 1.5-mile bike shed)
    - Missing pedestrian LOS data, which may have changed since DEIS analysis.
    - Traffic modeling. Sound Transit utilized Synchro and the City understands that further analysis with Vissim may be warranted between DEIS and FEIS. The City would appreciate review of this modeling work with the project team.

    - Provide signal phasing assumptions, these have changed since the DEIS was written and model assumptions need to be updated.
    - Speed limits have changed since the DEIS was written and model assumptions need updating.
- **Design/Safety:** Include Seattle Fault and earthquake parameters in design. Standards are changing and the FEIS should use most current standards. For Smith Cove/W. Galer Street Station, all alternatives pass through areas that a NOAA model predicts could be inundated by a Seattle Fault generated tsunami. The preferred alignment is exposed to tsunami inundation at W Republican St/5th Ave W. Please consider this in further design of these alternatives.
- **Visual Quality:** The DEIS does not use current FHWA 2015 Visual Quality Analysis Guidelines. Please use the most recent guidelines.
- **Air Quality:** Per Puget Sound Clean Air Agency's report on toxics in the CID, the neighborhood has among the poorest air quality in Seattle. Please incorporate PSCAA's findings in your analysis and evaluate the impact of construction vehicles for the project and their contribution to cumulative air quality impacts.

Next Steps. In addition to written responses to the City's formal comments in *Attachment A: City Consolidated Comments*, the City would like to work with Sound Transit through development of the FEIS to update or complete analyses requested by the City and provide technical assistance, information, and evaluations upon request.

Attachment E: Transportation Impacts

There are many instances in which the DEIS does not sufficiently disclose and analyze construction and operational impacts to the transportation system. Additional work is needed to understand the scope of these impacts to inform appropriate mitigation measures, action on a Project to be Built, and eventual project permitting.

The following text highlights major City concerns related to construction and permanent transportation impacts. A comprehensive inventory of these issues may be found in the City's formal DEIS comments in *Attachment A: City Consolidated Comments*.

Construction Impacts. The City notes several concerns related to construction impacts, including:

- **Road Closures During Construction.** Statements in the DEIS that full or partial closures to arterials will create more congestion do not adequately identify the true impacts on the traveling public. Several of the full and partial closures will require reduced vehicle trips, compelling the public to change behavior during the construction period. SDOT operations staff will need to actively manage construction impacts throughout construction of the project. Mitigation of impacts on bus operations due to street closures is not adequately described and should be closely coordinated with the City and King Country Metro. The insufficient capture of construction impacts impedes the understanding of whether mitigation measures will adequately address impacts, which in turn, limits evaluation of alternatives when construction impacts are an important factor.
- **Streetcar impacts.**
    - The DEIS assumes that the Center City Connector will be complete by the time WSBLE work begins in 2027 in the Downtown segment. As of April 2022, construction of C3 has not yet started and should not be assumed to be complete before WSBLE work begins in the Downtown segment in 2027. The FEIS should revise assumptions to account for C3 construction that could be concurrent with WSBLE. The FEIS should describe the impacts and propose mitigation for C3 construction, startup, and testing activities as well as the operation of the streetcar system as expanded by the C3 project.
    - The DEIS notes varying degrees of impacts to the streetcar under nearly all Downtown and CID alternatives yet will still be able to operate, though not as a connected streetcar system. This significantly understates the true impact of the WSBLE construction to the operations of the system. The streetcar cannot be easily rerouted or curtailed without major capital work and associated environmental documentation. This might include installation of temporary tracks, turnbacks, and switches, to maintain access to the fleet and maintenance facilities at Charles Street (FHS) and 318 Fairview (SLU) and provide for safety during such operations. The DEIS does not detail necessary modifications to the streetcar system to provide for continued, if disconnected, service.
- **Emergency services**. Construction impacts will have impacts to emergency transportation services. Insufficiently identifying construction impacts the ability to evaluate how construction will impact emergency transportation services.

Permanent Operational Right-of-Way (ROW) Modifications. The City notes several concerns related to permanent operational modifications to ROW, including:

- The project assumes that several transit lanes downtown will be converted to general-purpose travel lanes. This assumption is not consistent with current City vision and goals.
- Further evaluation of center column placements along Elliott/15th and 14th Ave should be performed to ensure that there are adequate sightlines and access can be maintained.
- Further evaluation is needed for SODO busway and SODO Trail closure to better identify impacts and determine appropriate mitigation with partners.

Removal of Commercial and ADA Load Zones. The DEIS does not fully detail impacts and mitigation for loss of parking and loading/ADA access in certain areas (CID 5th Ave and near Seattle Center). The DEIS acknowledges that commercial loading and ADA spaces would be displaced and relocated, which may not allow them to serve the business/residents needing those zones. The DEIS does not provide sufficient detail to evaluate and mitigate these impacts.

Access and Integration. The City notes several concerns related to access and integration, including:

- Pedestrian/bike access:
    - Information regarding improvements necessary to ensure adequate sidewalk space immediately adjacent to station entrances is missing or incomplete.
    - Station entrances should be located to improve pedestrian/bicycle/ADA station access, bus integration, equitable transit-oriented development, and station visibility/legibility. For example, for alternatives WSJ-3a, WSJ-4, and WSJ-5, consider an additional entrance on the west side of 41st Avenue SW to provide access closer to the California Avenue SW commercial corridor.
    - The walk and bikeshed analysis should be expanded upon, in terms of the number of miles for anticipated ridership and improvements using FTA standards, to identify how the customers will safely access the station by walking and biking and where facilities need to be added, upgraded, or maintained.
    - The number of secured bike parking spaces should be reanalyzed, and more work is needed to determine additional areas at each station to ensure all bikes fit and are accessible in the bike parking areas.
- Transit pathways. Many of the Delridge Station alternatives would require bus service to deviate from Delridge Way. These new bus movements would affect operations on Delridge Way (raising questions about signals, markings, and/or lane priority for transit) and on nearby non-arterial streets (pavement, ped/bike/bus interaction, noise). The associated impacts and mitigations must be identified in the DEIS and implemented during construction.
- Pick-up/Drop-off. The DEIS does not detail the methodology for determining bus pick up/drop off demand and indicates different assumptions at different stations; this is particularly troubling where curb space may be limited or unavailable. For example, the DEIS indicates that the Westlake Station would have 40% higher ridership, including passengers being dropped off, but no pickup/drop off areas are included.

Next Steps. In addition to responding to the City's formal DEIS comments in *Attachment A: City Consolidated Comments*, the City would like to partner with Sound Transit on the following actions:

- Work with SDOT Divisions, including Transportation Operations, Street Use, and Transit and Mobility, to fully identify the range of construction impacts and develop a construction management plan that anticipates schedule and phasing, needed traffic reroutes and deviations, and appropriate transportation demand management strategies during the construction period.
- Address the numerous concerns raised by the Seattle Streetcar team through additional analysis of impacts and development of a mitigation plan. Mitigation analysis for the streetcar system should include:
    - Capital facilities to allow continued operations Center City Connector and South Lake Union streetcar systems, and for First Hill service to continue to 5th and Occidental, including continued access to maintenance facilities for all lines to enable operations;
    - Analysis of limited duration shut-downs sufficient to build the capital improvements necessary to maintain safe operations of a connected streetcar system during WSBLE construction;
    - Phasing of construction impacts to avoid concurrent closures of both FHS and SLU lines and full closure of the entire streetcar system when C3 is operational; and
    - Financial mitigation for any closures to support operations and address ongoing costs during closures.
- Commit to improving station access and transit integration in the next phase of station planning before the FEIS. Ensure that the FEIS includes these updated station designs. See Attachment L: Planning for Station Access and Transit Integration for longer discussion and next steps for station planning.

Attachment F: City Assets and Properties

The WSBLE project may impact many assets and properties that the City owns and/or maintains. Many impacts will require acquisition in fee or by easement, utility relocation, right-of-way use through street use permitting, or other legal conveyance—all processes that take substantial time, and in many cases City Council action. The DEIS does not fully document potential impacts to City assets and properties, making it difficult to understand completely the trade-offs between project alternatives and identify appropriate mitigation actions.

The City owns and/or maintains infrastructure and parceled properties—including the Seattle Center, several parks, two public golf courses and greenbelts, a Seattle Parks and Recreation (SPR) maintenance facility, utility infrastructure, street right-of-way, bridges, buildings, and vacant property—that may be impacted by WSBLE. The following describes the major concerns with evaluation of impacts to and mitigation for City assets and properties. A comprehensive inventory of these issues may be found in the City's formal DEIS comments in *Attachment A: City Consolidated Comments*.

1. **Property Acquisition.** During our review we found the *Acquisitions, Displacements and Relocation* chapter, and *Appendix L.4.1* is missing information and analysis. This made it difficult for staff to fully evaluate project impacts to City assets, costs for easements, acquisition, or construction use of these properties, and identification of appropriate mitigation measures that would be appropriate. Because the process for acquiring properties and property rights varies by City Department, and all transactions require City Council approval, it is important for City staff to begin these processes as soon as possible to avoid project delays. To complete this analysis the City needs the following:
    - List of all impacted City assets.
    - Clear identification of construction easements and staging areas related to City property and a distinction between full and partial acquisitions.
    - List of proposed permanent rights-of-way needed to complete the project.
    - Summary of contamination that may occur to City assets or adjacent properties.

2. **Utilities.** We found the *Utilities Chapter* included several incorrect assumptions. In addition, along with *Appendix J – Conceptual Plans* we found the chapter missing information and/or analysis to clearly identify utility impacts. Likewise, mitigation was missing or inadequate. For example:
    - The DEIS states that 'Through pre-construction measures and coordination with utility providers, no impacts on major utilities are expected during construction and no mitigation would be needed.' We strongly disagree and given all the impacts described in the same DEIS, question the basis for this assumption.
    - The DEIS states that guideways are non-pollution-generating surfaces. This is false; the Washington State Department of Ecology has judged guideways to be pollution-generating surfaces. Unless Ecology revises that determination pending new data, the project must meet the City's Stormwater regulations to be permitted; the current design does not.
    - The DEIS describes relocations for 'major' utilities, while relocations of 'minor' utilities, which will be extensive, were not evaluated. Waiting until final design for this evaluation limits an accurate comparison of alternatives in cases where many 'minor' are in proximity

to the project. In addition, the study area of 100 feet on each side of the alignment does not address potential indirect impacts to utilities outside the corridor.

- Known alignment conflicts with overhead and underground electrical utilities have not been fully evaluated for impacts to the project.
- There are several transmission lines in the project corridor. Transmission outages are generally not allowed and take up to one year to schedule in advance. Sound Transit should evaluate the process and timeline for transmission outages.
- SCL could not verify the number of major utility conflicts with the conceptual drawings in *Appendix J* and those in the *Utilities* chapter due to omissions and inconsistencies.

3. **Right-of-Way Use and Improvements.** The DEIS presents little information on and no analysis of changes in roadway channelization, partial or full Right-of-Way (ROW) needs. To evaluate the impacts to City ROW, additional analysis and information is needed, including:
    - Multi-year street closures have impacts to alternative pathway streets and to the system that are not accurately depicted in the DEIS. This needs to be evaluated to determine whether these roadways can accommodate detoured or diverted traffic.
    - More complete list of utility relocations and 'construction limits.'
    - Proposed changes/relocations of pedestrian/bike facilities and connections at stations
    - Impacts on existing trees in ROW under SDOT jurisdiction and required 2:1 replacement
    - The information necessary to identify impacts to pedestrians and bicyclists accessing the stations. Improvements necessary for safe bicyclist and pedestrian access should be included as part of the WSBLE project. (See also similar comment directed at all stations.)
    - Impacts to SDOT structures particularly bridges have not been assessed.
    - Right-of-way changes associated with channelization, signalization, sidewalk/ADA improvements for operation of WSLBE have not been assessed in the DEIS. Also, right-of-way changes associated with detours and traffic diversion have not been evaluated.

4. **Streetcar.** The DEIS assumes that the Center City Connector (C3) Streetcar will be complete at the time of WSBLE construction. If correct, construction road closures for either alternative would require track and signal modifications to re-route the streetcar for continued service. The proposed mitigation to develop an operational plan to minimize impacts to streetcar service would be inadequate. The DEIS should also evaluate cumulative impacts to the streetcar and downtown transportation network if C3 and WSBLE construction overlap. See *Appendix A* for additional comments related to C3 streetcar, as well as SLU and First Hill streetcar networks.

Next steps. The City will assemble a City Asset Team of real property services with representation from each affected City department. The City requests that Sound Transit works with this team to:

- Develop a plan for mitigation to City assets, including the acquisition and sale of property rights related to City assets property acquisition where appropriate.
- Identify contamination on and near City assets that might affect City assets during construction.
- Provide requested additional studies and information for impacts to City assets and properties, including the Streetcar network. The City team will help identify additional impacts and design improvements or avoid or mitigate impacts.
- Update drainage design to meet current City stormwater regulations.

Summary table of impacts to City assets and properties. The following summary table compiles impacted City assets and properties, based on City staff understanding of the DEIS. This list may not be exhaustive.

DEPT	ASSET	EXAMPLES/IMPACT
SDOT	Structures	West Seattle Bridge, 4th Ave S Bridge, 5th Ave S, Seattle Blvd, Jackson St, bridges in proximity to alignments (Dravus Street Bridge, Magnolia Bridge, Gayler St Flyover, 15th Ave/Nickerson Exchange), areaways (C/ID, Pioneer Square, Downtown, Belltown)
	Bike/Ped facilities	Ship Canal Trail, SODO Trail, others?
	Street Ends	Impacts to 22nd Ave SW Street-end, 14th Ave NW Street End/Boat Ramp
	Streetcars	SLU, First Hill and possibly Center City streetcars operations. Long-term closures will result in revenue loss.
	Right-of-way condition	The overall condition and need for roadway improvements to accommodate bus traffic near stations has not been evaluated.
	Curb ramps, sidewalks	The inventory of sidewalk conditions within the station walkshed is incomplete and should be completed.
	Areaways	Need identification, possible surveying for roadway detours through Pioneer Square and CID
	Streets	Where additional/new bus service required for transit integration; Construction detours and road closures, street vacations, signal and turning movement changes; Downtown transit channelization (proposed removal/relocation of bus-only lanes and bicycle facilities).
FAS	Animal Shelter	Several alternatives would displace the Seattle Animal Shelter, a critical City function. Relocation will require ample time and funding for community engagement, site acquisition, design, and construction.
	Downtown: City Hall, SMT, Justice Center	Construction closures related to the Midtown Station and surrounding line could limit access to one or all of these critical civic facilities.
OEM	EOC: Emergency Operations Center	CID tunnels are all adjacent to EOC will have noise and vibration impacts; Access limited during construction. All alternatives will impact the EOC.
SFD (and FAS)	Stations 3, 10, 32, 3, 20, 18	Potential impact on response time. Guideways could impact access to FS 18. Temporary relocations may be needed, which are very costly and can take years to site and equip.
	Stations 14, 20 & 36	Temporary relocations will most likely be necessary, such relocations are very costly and can take years to site and equip. Noise and vibrations would affect active personnel. They are 24-hour stations.
	Station 3	Closure of waterway impact ability to respond
SPD	Harbor Patrol Unit	Closure of waterway impact ability to respond
	SPD Park 95	Lander St closure would affect response units and time

DEPT	ASSET	EXAMPLES/IMPACT
	N, W, S, and SW Precincts	Downtown closures would affect response units and time
SPU	SODO Station, Holgate and Lander	60" Royal Brougham sewer cannot be relocated or a siphon or pump station built. If it must be temporarily cut during construction, the function must be retained by a temporary pipe, and the permanent pipe must be in the same place. SPU would prefer if it could be protected in place.
	14th Ave NW Outfall	Complex permitting and construction if need to relocate
	Ship Canal Water Quality Project	The "envelope' around the CSO storage tunnel that must be avoided, per SPU provided drawings. Tunnel must be protected during construction.
	Genesee Dam	Genesee Dam may not be stable during construction
	Westlake/Denny – historic sewer	Condition unknown
	Interbay Landfill	Methane, may impact liners
SCL	Substation site	Acquisitions – relocate Interbay substation site
	South Service Center	
	Impacted properties	400 South Spokane St. (Parcel # 7666205660); 3222 17th Avenue (Parcel #2770602605); 3243 SW Genesee St. (Parcel #9297301810); 4402 35th Ave. SW (Parcel #9297301815); No address (Parcel #9297301805)
	Transmission, Distribution, Network Facilities	Utility relocations, actual area unknown, will be fully defined as design proceeds
	Service Disruptions	Electric utilities/substation and transmission service disruptions needs analysis. Need to evaluate impacts to SCL South Service Center.
SPR	23 SPR properties	Loss of habitat and greenbelts, including Queen Anne Greenbelt, West Duwamish Greenbelt. Loss of recreational function: West Seattle Golf Course, Kinnear Park, Interbay Golf Course, Interbay Playfield, and 22nd W. Street End Park. Loss of partial or complete use of SPR Central West maintenance facility on West Howe Street.
SPL	Downtown Library	Access limited during construction; Loading Dock blocked, which will block distribution to other libraries
Seattle Center	Numerous historic resources, open space, utilities, and public ROW	Numerous construction and permanent impacts including tenant relocations and displacements, road closures, noise and vibration impacts, tree removal, pedestrian access, utility relocation, and impacts to historic resources. See *Attachments A* and *K* for more detailed comments regarding impacts to Seattle Center.

Attachment G: Section 4(f), Parks & Recreation, Historic Properties

The Section 4(f) analysis performed by Sound Transit lacks necessary specificity and detail on the scope, duration, and mitigation of impacts to parks and park facilities, certain historic resources, and Seattle Center for any of the alternatives. Seattle Parks and Recreation (SPR) and Seattle Center cannot concur as to whether project impacts are *de minimis* under Section 4(f) without this additional analysis, including adequate demonstration of completed planning to minimize harm to SPR properties and Seattle Center.

The following list provides representative examples of places where additional information and details related to Section 4(f) impacts and mitigation, including impacts to parks, recreation areas, and historic resources, are needed. A comprehensive inventory of these issues may be found in the City's formal DEIS comments in *Attachment A: City Consolidated Comments*.

1. **Parks, recreation areas, and greenbelts**. Need additional analysis of the scope, duration, and mitigation for impacts to 28 SPR facilities and natural areas including Kinnear Park, Interbay Playfield, Delridge Community Center, and West Duwamish Greenbelt. For example, potential impacts to Kinnear Park and its recreational uses should be disclosed and mitigated.
2. **Golf courses**. Need additional analysis and mitigation of the impacts to playability, configuration, operations, and resultant revenue, at West Seattle Golf Course and Interbay Golf Course. For example, the tunnel portal alternatives on the south side of South Genesee Street would have significant impacts on golf course playability, operations, and revenue.
3. **Seattle Center**. Need additional analysis and mitigation of adverse impacts from the temporary closure of 1.5 acres of the Seattle Center campus during construction, including provisions for equitable and ADA access to campus; analysis to support the conclusion that Seattle Center tenants will be able to continue normal operations during construction; analysis and mitigation of permanent adverse impacts, such as displacement of Donnelly Gardens and Legacy London Place trees; and analysis and mitigation of potential permanent adverse impacts to historic facilities including the Northwest Rooms and the Cornish Playhouse. See *Attachment K* for more detailed discussion of comments related to Seattle Center.
4. **Additional historic resources**. In addition to impacts to Seattle Center historic resources referenced above, more information is needed regarding impacts on the International Special Review District/Chinatown NR District, as well as impacts to Union Station. See *Attachment H* for more detailed discussion of comments related Section 106 and historic resources.

Next Steps. The City requests work sessions with Sound Transit related *de minimis* concurrence. If we are unable to achieve agreement on concurrence on *de minimis* findings, we will request additional least harm analysis during development of the FEIS, including a more detailed mitigation discussion, negotiation, or determination based on selection of a Preferred Alternative. For 4(f) properties with adverse impacts, the City requests a 4(f) and least harm analysis. The City requests that Sound Transit provide written responses to City comments including detailed information as requested in City Section 4(f) comments in *Attachment A*.

Attachment H: Historic and Archaeological Resources/Section 106

The DEIS does not sufficiently assess the construction and permanent visual, physical, and operational impacts of the WSBLE project on historic resources. A thorough understanding and analysis of these impacts (effects) is necessary to meaningfully compare alternatives, inform a decision on a Preferred Alternative, and avoid costly conflicts and limited mitigation opportunities. Successful Section 106 consultation depends on the City having this information to evaluate impacts and trade-offs.

As noted in *Attachment C: Compliance*, the DEIS demonstrates several instances where compliance with Seattle Municipal Code sections related to implementation of the City's Historic Preservation regulations are not identified. Specifically, the references to when a Certificate of Approval (SMC 25.12 and SMC 23.66) is required for alterations within historic districts (demolition, construction of stations, venting structures, head houses etc.) or to individual landmarks.

The DEIS does not adequately address regulations regarding referral to the Landmarks Preservation Board of nominations for potentially eligible resources that are proposed for demolition or substantial alteration (SMC 25.05.675H2c and SMC 25.12). Without this information, the potential conflict with local controls and policies cannot be determined. These issues should be resolved and documented in the FEIS to avoid potential cost and delay in the project permitting process.

Related to both local and federal regulatory compliance, the DEIS does not adequately assess or describe the impacts to historic resources. Several specific examples that are of concern are the visual impacts to Union Station caused by vent stacks, the construction impacts to areaways regarding haul and detour routes, and the construction and operational impacts to Seattle Center under DT-1 Seattle Center station alternative at Republican Street. Additionally, the DEIS does not define, identify, or address impacts to traditional cultural properties (TCPs).

The City is a Consulting Party under Section 106 of the National Historic Preservation Act (NHPA). In this role, we will work towards concurrence on the area of potential effect (APE), identify historic and archaeologic resources within the City that are adversely affected and work with Sound Transit and FTA to develop a Memorandums of Understanding if appropriate. The City has not yet concurred on the project APE. We understand that the APE can change throughout the process as the project evolves. However, it is important that the APE capture all areas that will be impacted both permanently and during construction. We have specific concerns regarding the APE in the CID, Pioneer Square, and Seattle Center.

Next steps. A comprehensive inventory of these issues may be found in the City's formal DEIS comments in *Attachment A: City Consolidated Comments*. In addition to written response to those comments, the City seeks the following:

- Continued meetings of consulting parties with Sound Transit and the FTA to discuss and seek agreement on Section 106 matters.

- Clarity in the FEIS for analysis of proposed physical alterations and the resulting impacts (effects) on historic resources. This includes existing city landmarks and historic district, potentially locally eligible resources, and properties that are National Register listed or determined eligible. The FEIS must identify actions that will require a Certificate of Approval.
- Identification of actions that will require a landmark nomination must be submitted to the Landmarks Preservation Board per SMC 25.12 and SMC 25.05.675H2C.
- Identification of TCPs and analysis of impacts to those resources should be included in the FEIS.
- Analysis of impacts to areaways, particularly within Pioneer Square. Areaways have been evaluated during previous public projects, but those are not referenced in the DEIS.
- FEIS must clearly provide analysis of impacts (effects) to historic resources along haul and detour routes.
- FEIS must clearly provide analysis of visual, construction and operational impacts (effects) to Seattle Center. Specifically, construction feasibility studies for the Northwest Rooms and Cornish Playhouse to address some of the proposed alterations or nearby construction will be needed. See *Attachment K* for additional information on Seattle Center.
- Specific mitigation options relating to specific impacts to historic resources. It appears that the menu of mitigation options suggested in the DEIS is general rather than specific.

Attachment I: Business and Residential Displacement

The DEIS Preferred Alternative will acquire up to 516 parcels and displace up to 332 business, 3,000 employees and 1,002 residences throughout the project corridor. Other alternatives have similar impacts. These displacements will have significant impacts on the economic and social vitality of the City, during and after construction of the project. The impacts will be unique across different communities but will be felt hardest by BIPOC and low-income communities. The DEIS does not sufficiently examine the full range of impacts to businesses and residents, including loss of community cultural identity and cohesion resulting from displacements and changes in land use. Expanded evaluation is necessary to fully inform strategies to avoid, minimize, and mitigate these project impacts.

Following are the City's most notable comments on business and residential displacements. A comprehensive inventory of these issues may be found in the City's formal DEIS comments in *Attachment A: City Consolidated Comments*.

Business and Employee Impacts. The City finds many instances where additional analysis and mitigation is needed to fully assess project impacts on businesses and employees, including:

- Business and employee displacement and relocations—in particular, minority-owned businesses and employees—have not been fully evaluated throughout the corridor.
- Demographics of impacted business owners and employees is unknown and should be evaluated in the Environmental Justice Chapter. The DEIS should evaluate impacts on affected industry sectors that employ large percentages of BIPOC and/or low-income persons.
- Temporary revenue and job loss for businesses and employees during construction is significant and should be more fully addressed.
- While direct impacts are evaluated in the DEIS (number of parcels and businesses), missing are analyses of indirect and cumulative impacts from business displacement.
- The DEIS states that some affected properties such as assistive living and supportive housing and public facilities may be difficult to relocate and require construction of new facilities.
- Water-dependent facilities may not be able to be re-located. A full economic analysis is needed to determine potential mitigation measures and costs associated with each alternative.
- Additional information is needed to understand indirect and cumulative impacts of land use changes especially to industrial lands.
- The DEIS does not evaluate impacts from COVID-19 on businesses and potential recovery.
- An evaluation of the displacement of City facilities and operations is missing or incomplete. Also missing is appropriate mitigation for City facilities and operations (Seattle Animal Shelter, Fire Stations, SCL Substation, Seattle Center, replacement of use of parks property and Seattle Streetcar lines, utility easements).

Residential Impacts. The City finds many instances where additional analysis and mitigation is needed to fully assess project impacts on residential displacement, including:

- Impacts from displacement of residential property owners and renters, including low-income and BIPOC communities, have not been fully evaluated throughout the corridor.
- While direct impacts are included in the DEIS (# of parcels and residential units), missing are analyses of indirect and cumulative impacts from displacement.
- The impact of building acquisitions that could displace Mandatory Housing Affordability (MHA) units needs to be completed.
- Impacts to affected parcels that currently have rent- and income-restricted housing through Seattle's Office of Housing's affordable housing portfolio, other affordable programs, and the Multifamily Tax Exemption Program cannot be addressed because the information for this assessment is missing. Information for rent- and income-restricted housing managed by Seattle Housing Authority is also missing and cannot be addressed.
- Need to update mitigation measures to ensure construction of the project would comply with federal and local regulations regarding relocation. City of Seattle regulations include Tenant Relocation Assistance Ordinance (22.210) as does the State Relocation Assistance Act (Revised Code of Washington or RCW 8.26).

Safety. Residential and commercial units left vacant prior to demolition or during construction due to displacement may create safety hazards and be vulnerable to illegal activity. These safety concerns and potential for increased crime has not been discussed or evaluated in the DEIS. The FEIS should consider potential mitigation options, including strategies to monitor vacant sites and prevent crime, and identifying agencies or groups responsible for implementation. Sound Transit should work with existing community organizations and partnerships, such West Seattle Junction area's Business Block Watch (in collaboration with the Seattle PD's SW Precinct) to develop appropriate strategies.

Land Use. Additional information is needed to understand the land use impacts during construction such as access closures, loud construction noises, and movement of heavy construction vehicles on the viability of adjacent and nearby land uses in particular street level retail and civic and open space uses that are closely linked to access by pedestrians to visits for leisure. In the C/ID construction would impact and possibly disrupt a concentration of community-oriented civic uses.

Next steps. In addition to responding to the City's formal DEIS comments in *Attachment A: City's Consolidated Comments*, the City would like to partner with Sound Transit on the following actions:

- Develop a broader community development strategy with community, Sound Transit, and other partners for the Chinatown-International District that goes beyond project mitigation to address cumulative impacts and historic harm. See *Attachment B* for additional information.
- Work with affected businesses and residents to understand, minimize, and mitigate the impacts of displacement on community cohesion, encourage community safety and vitality through construction, and promote long-term opportunities for impacted businesses and community members to remain in community.

Attachment J: Mitigation

NEPA requires consideration of direct, indirect, and cumulative impacts of a project on the environment and development of potential measures to mitigate adverse environmental effects. Typically, a DEIS describes options for mitigation, while the FEIS includes the decisions on mitigation to be implemented. However, we found the DEIS to be lacking in consistent and clear mitigation for the potential adverse project impacts, many of which may be unmitigable. Without adequate proposed mitigation, it is not possible to understand the full impact of the project, differences in alternatives, and potential permitting concerns.

There are numerous areas in the DEIS where mitigation measures or strategies are absent or insufficient. Where the DEIS does propose mitigation measures, as in the Transportation chapter, they are not presented comprehensively, but scattered throughout. In Appendix G Environmental Justice, measures or strategies are not described, but only referenced in a table, for example in Table 5-2. The City believes that the level of mitigation in the DEIS is not acceptable for a project of this magnitude. The following are examples of our comments regarding mitigation. A comprehensive inventory of these issues may be found in the City's formal DEIS comments in *Attachment A: City Consolidated Comments*.

Business Displacements. The DEIS identifies significant business and employee displacements throughout every segment of the project, 332 businesses and 1,002 residences for the preferred alternative alone. Business displacements throughout the alignment are tremendous, and the DEIS proposes little mitigation. For additional details see *Attachment I: Business and Residential Displacements*.

- **Maritime businesses**. The most significant impacts are those to water-dependent facilities that may not be possible to relocate. Impacts to the maritime industry both in the Duwamish and Interbay segments are identified as unavoidable and significant impacts. This is not acceptable to the City. The FEIS should include an economic analysis to fully evaluate the impacts of losing these businesses and to determine potential mitigation measures and costs associated with each alternative.
- **Displacement of businesses and cultural anchors in Chinatown-International District**. The DEIS does not consider the relationship of displaced businesses to the community, particularly those that serve as cultural anchors in the CID. Their displacement would have ripple effects and impact the vitality of both the local CID community, but also the broader region for which the CID is a cultural hub with a regional draw. The DEIS does not propose sufficient mitigation of these location-sensitive businesses.

Residential Displacements. Mitigation for loss of low-income housing for Delridge alternatives discusses relocation. Missing however, is mitigation for: loss of neighborhood connectivity particularly from removal of housing units as guideways bisect residential streets, and potential adverse property impacts to housing left in the shadow of the guideway. For additional details see *Attachment I: Business and Residential Displacements.*

Transportation. Major transportation impacts from the project will occur during construction. While the DEIS describes where full or partial impacts to arterials will take place, it does not adequately identify detour routes or the adequacy of routes to accommodate increased traffic. These impacts will occur over several years – throughout the City. Mitigation including project phasing and coordination with the City and local transit providers will take a large effort. Development of a draft construction management plan should begin now and refined as part of the FEIS. For additional details see *Attachment E: Transportation Impacts*.

Streetcar. The streetcar cannot be easily rerouted or curtailed without major capital work and associated environmental documentation. This might include installation of temporary tracks, turnbacks, and switches, to maintain access to the fleet and maintenance facilities at Charles Street (FHS) and 318 Fairview (SLU) and provide for safety during such operations. The DEIS does not detail the modifications to the streetcar system that will be needed to provide for continued, if disconnected, service. Mitigation analysis for the streetcar system should include access to maintenance and operation activities for FHS OMF, and the operable components of the system. For additional details see *Attachment E: Transportation Impacts*.

City Property. Mitigation for direct and indirect impacts to city properties do not include adequate mitigation measures. Replacement of several city properties are missing in the DEIS. For example:

- Impacts to operations at Seattle Fire Stations 14 and 36 would require temporary or permanent relocation of the stations. This is not addressed in the DEIS.
- Acquisition and relocation of the Seattle Animal Shelter is not addressed in the DEIS.
- Relocation of Seattle Center organizations is mentioned, but analysis of suitable locations near/within Seattle Center is not addressed in the DEIS.

For additional details see *Attachment F: City Assets and Properties*.

Next steps. Constructing a light rail system though existing communities in a built-out city will necessarily cause impacts. Project decisions should be informed by impact and mitigation analyses that help community members and policymakers understand the degree to which those impacts can be avoided, minimized, or mitigated.

Between the DEIS and the FEIS, Sound Transit must work with community members, the City, and other stakeholders and partners to develop a comprehensive mitigation analysis and plan with sufficient detail to inform actions on a Project to be built and FTA Record of Decision, and to avoid future delays to project permitting. The mitigation plan should be co-developed with impacted communities, and should explore a wide range of mitigation tools and strategies, including but not limited to:

- Develop mitigation funding programs
- Utilize multi-faceted community stabilization tools
- Support community-driven, equitable transit-oriented development

The City staff are committed to developing a workplan with Sound Transit to partner in both these analyses and the engagement to inform them.

Attachment K: Seattle Center

For the Seattle Center station, the City is not only a project reviewer and regulator, but also the primary property owner and landlord to the many arts and cultural resident organizations that call the 74-acre campus home. The City has many concerns with the impacts associated with both alternatives, including: impacts to protected features, including legacy trees, historic assets, and public recreation space; temporary and permanent noise and vibration impacts to sensitive cultural venues including performance halls and recording studios; displacement affecting resident organizations and the long-term performance of the Seattle Center campus; impacts to historic assets including the Northwest Rooms, International Plaza, and Cornish Playhouse; and transportation and access impacts affecting events and operations for years. Without further analysis and a mitigation plan it is not possible to fully understand the trade-offs of these alternatives.

The City of Seattle owns and manages Seattle Center. The 74-acre campus is the top visitor destination in the region, with more than 14,000 events presented on the grounds in a typical year. Its origins as an arts and cultural hub for the region date back to 1927. Following its development as the site of the 1962 World's Fair, the campus was dedicated permanently as a City asset, intended to serve as a place for the public to continue to gather and to find common ground by sharing inspiring experiences. Today, the campus is home to several dozen arts, cultural, educational, and recreational organizations – all of which find value in the community created by their proximity to one another. Seattle Center is home to dozens of public artworks and numerous protected historic buildings and sites. Many of the annual programs are free or low-cost. Seattle Center is also a hub where critical services are provided to vulnerable populations as needed.

This central location for recreation, entertainment, and respite is in the heart of Seattle, adjacent to some of the city's densest urban centers. When Seattle Center's master plan was last updated in 2008 – a process that involved years of extensive community engagement and feedback – the consensus supported multi-modal transportation, especially public transit. A light rail station serving Seattle Center is badly needed, and once completed, it will have a transformational effect on the campus and the communities it serves. Planning for this major infrastructure project on the public campus deserves careful consideration to bring about a successful outcome for both the light rail expansion and this unique, historic public facility.

The Seattle Center Department has reviewed the DEIS and the Draft Section 4(f) Evaluation (Attachment H) and finds the proposed DEIS Preferred Alternative (DT-1), to be inconsistent with other fundamental principles of the Master Plan, including the importance of maintaining and expanding open space in the heart of the campus, and ensuring that all capital investments support fulfillment of Seattle Center's mission. In addition, Seattle Center has found that the long-term impacts to its property, its business, and its tenants from construction have not been adequately evaluated. Where impacts are clear, mitigation has not been fully vetted. Seattle Center believes that prudent and feasible alternatives are

possible, and that a station serving the campus can be built with fewer impacts than would result from the proposed Preferred Alternative. For these reasons, the City of Seattle encourages the Sound Transit Board to authorize further study of refinement options in collaboration with the City between now and the publication of the FEIS.

Below are examples of where additional information and details are needed for the FEIS in its analysis related to Seattle Center. See *Attachment A* for the complete comments from the City.

1. **Transportation**
   - Multi-year closures of Republican St. (DT-1 Seattle Center), Mercer St. (DT-2 Seattle Center) and Harrison St. (DT-1 SLU) will cause significant impacts to access for Seattle Center and its resident organizations. The DEIS misses the severity of the impacts, and the proposed mitigation is insufficient and inadequate.
   - The FEIS should include a visual analysis of pedestrian surges in the pre- and post-even peak travel periods for large events at Climate Pledge Arena, and major festivals at Seattle Center. The visualization is needed to identify the impacts to campus spaces and/or nearby pedestrian infrastructure.
2. **Acquisitions, Displacements, and Relocations**
   - The proposed acquisition of a part of the parcel where Seattle Rep is built (DT-1) will permanently displace campus open space, and spill-out activity around the new station entrance will dramatically limit the many operational and event uses of the Theater Commons at Seattle Center. The DEIS underestimates the severity of the impacts to campus events and operations. It lacks adequate mitigation or a convincing vision for how this station entrance will successfully integrate into the busy campus.
   - The DEIS fails to acknowledge or propose mitigation for permanent impact to operation of the Seattle Repertory Theater building from the east entrance of the DT-1 Seattle Center station. Impacts include loss of visibility and access to the lobby and rotunda, and noise from the adjacent station entrance, vents, and other back of house equipment.
   - The DEIS fails to acknowledge the severity of long-term temporary displacement of two important campus entrances, access for operations vehicles, access for school buses, artist loading, and other event related needs for Seattle Center and its tenants during construction. The construction footprint will also displace ADA and pedestrian access; loading functions for Seattle Rep, Cornish Playhouse, The Vera Project, and KEXP; ADA parking stalls at 2nd Ave N. and Mercer St. that serve patrons of the theater district; and the Seattle Rep theater main entrance.
3. **Economics**
   - The DEIS fails to acknowledge business impacts throughout the construction period due to reduced attendance at events including campus festivals, public programs, and programs produced by Seattle Center tenants.
   - Seattle Center will lose parking revenues throughout the construction period due to road closures on Mercer and Harrison St. Parking revenues are a critical source of operating income for the department.
   - The construction footprint of DT-1 will cause operational challenges for organizations who rely on access to Republican, Warren, and 1st Ave N., disrupting their ability to conduct business.
   - The construction footprint of DT-2 will cause operational challenges for organizations whose operations and patrons rely on access to Mercer St. Potential permanent business displacement

if an organization is no longer able to conduct its business on site due to operational ground-borne noise/vibration impacts DT-1 and DT-2 Seattle Center)

- The DEIS suggests temporary relocation as a mitigation for arts and cultural organizations at Seattle Center who are impacted by construction, including Seattle Rep, Cornish College of the Arts, SIFF, Vera Project, and KEXP. These organizations' ability to do business relies on highly specialized facilities which may not be available elsewhere in Seattle. The mitigation suggested is not thoroughly considered and is inadequate.

4. **Noise and Vibration**
    - The DEIS analysis of construction-related noise and vibration is incomplete. Several sensitive facilities at Seattle Center are not identified. Some of the facilities identified have noise and/or vibration maximum thresholds that are lower than specified in the DEIS. The DEIS analysis fails to fully disclose the severity of construction impacts to Seattle Center and its tenants, and it is lacking adequate mitigation.
    - The mitigation proposed in the DEIS may not be adequate to protect the very sensitive venues from operational noise and vibration. The FEIS should consider a higher level of mitigation such as floating slabs or thicker concrete under the tracks (DT-1) or high resilience fasteners (DT-2).
5. **Parks and Recreation/Section 4(f)**
    - Seattle Center Department does not concur with the determination of "de minimis" impacts from the DT-1 Seattle Center Station alternative.
    - The DEIS underestimates the severity of construction impacts to Seattle Center and its tenants and does not propose adequate mitigation for the long-term construction impacts to protected public recreational resources.
    - The DEIS underestimates the severity of permanent impacts to Seattle Center and its tenants and does not propose adequate mitigation for the permanent displacement of protected public recreational resources.
    - The DEIS does not provide adequate analysis to support the determination of "de minimis" impacts to historic public assets at Seattle Center. Further construction feasibility analysis and more detailed mitigation plans are needed for the FEIS.
6. **Social Resources**
    - The DEIS underestimates the severity of construction impacts to Seattle Center and its tenants and does not propose adequate mitigation.
    - The DEIS underestimates the severity of permanent impacts to Seattle Center and its tenants and does not propose adequate mitigation for the permanent displacement of campus recreational space and the programs and services produced by tenants.
    - The DEIS analysis is misleading when it states that patrons of the DT-2 Seattle Center station alternative would need to cross a major roadway to access the campus. Patrons exiting south of Mercer Street could walk to Seattle Center on Warren Ave. N., which is a quiet street adjacent to the campus.

Next steps. The City and Sound Transit should codevelop a mutually acceptable outline for collaboration between the DEIS and FEIS on the further study of prudent and feasible avoidance alternatives for the Seattle Center station. The City of Seattle looks forward to working with Sound Transit in advance of the FEID and over the next few years to inform the selection of a Preferred Alternative for the FEIS and complete Section 4(f) consultation.

Attachment L: Planning for Station Access and Transit Integration

WSBLE stations will create new neighborhood mobility patterns as people access new stations on foot, bicycles, and other transit modes. Siting and designing stations for safe non-motorized access and seamless bus-rail integration is necessary for passenger safety, user experience, and overall ridership, and an essential step toward the City's Vision Zero goals to end traffic fatalities and serious injuries. The DEIS analysis reveals that some alternatives do not optimize access and bus integration. If unaddressed in early project planning, there will be added costs and impacts—in time, dollars, ridership, and human safety—later to the project. It is imperative that in the next phase of station planning and preliminary engineering, Sound Transit, the City, King County Metro, and other agencies work with community to ensure that we design—and in some cases, *refine*—stations to include essential components for safe station access and seamless transit integration.

One of the purposes of the WSBLE project is to "Encourage convenient and safe non-motorized access to stations, such as bicycle and pedestrian connections consistent with Sound Transit's *System Access Policy* (Sound Transit, 2013)." Below, we describe the importance of optimal station access and transit integration and point to examples of current Link stations that meet or fall short of these goals, and express concerns at some WSBLE station alternatives. While the station design in the DEIS is preliminary, the City believes the system could better meet the project purpose and need by improving station designs now to prioritize safe station access and seamless transit integration and to avoid later costs and impacts.

The ideal. Optimal station and entrance siting, along with coordinated bus-rail integration planning between transit agencies and local cities, makes the transit experience seamless to riders. Reducing the friction between connecting modes—not just transit modes like Link light rail, bus, and streetcar, but also walking and rolling—ensures that carbon-free transportation is the simple and easy choice for people travelling in and around Seattle today and into the future. In addition, accessible, organized, and signed pedestrian loading areas provide clear direction to motorists, including taxis, transportation network companies, and shuttles, of where to pick up or drop off passengers proximate to the station. In addition, broader station area design and planning maintains existing loading opportunities for neighborhood businesses and institutions. Link stations with successful access and integration include:

- U District Station. A new transit pathway with trolleywire was constructed along NE 43rd St adjacent to the south station entrance, along with safe protected bicycle facilities east to the UW campus and west to 11th Ave NE.
- Beacon Hill Station. The northbound bus stop is in plain sight directly in front of the station elevators and a neighborhood greenway runs a block away.

What to avoid. Alternatively, poor planning, missed opportunities, and awkward connections in transit integration create a negative transfer environment that can take decades to fix, if ever. Spacing modal connections too far apart or out of clear sightlines, requiring crossing of busy arterials, or leaving ambiguous or confusing transfer messages from the built environment make taking and changing vehicles on transit into a chore. Many riders will disdain these poor connections that they are forced to experience on every journey, or other riders after having been confused once will give up on using transit for that journey going forward. Examples of this sub-optimal access and integration include:

- Mount Baker Station. A separately planned transit center is across busy Rainier Avenue South and hidden by recent transit-oriented development from the main station plaza.
- University of Washington Station. While including some positive features such as a pedestrian bridge and recently added northbound transit-only lane, the station is inherently limited by its siting, surrounded by wide, heavily trafficked arterials, poor adjacent land uses such as landscaping and parking facilities, and long connections to bus bays.

WSBLE concerns. The DEIS review revealed several instances where the proposed station siting and design threatens to repeat these past mistakes. In these instances, unsafe or inconvenient access and integration may cause later costs and impacts—in time, dollars, ridership, and human safety—that should be avoided. The DEIS does not adequately evaluate the long-term impacts of poor station siting and design to the system or its users. Examples include:

- South Lake Union**.** The DT-1 South Lake Union Station at Harrison Street is perfectly oriented to interface with north/south bus service on Aurora and Dexter Avenues, east/west bus service on Harrison Street, and the general walk/bike network throughout South Lake Union. The DT-2 South Lake Union Station at Mercer Street, by contrast, is isolated from connecting modes.
- Delridge. Many of the Delridge Station options require bus service to deviate from Delridge Way. These new bus movements would affect operations on Delridge Way (raising questions about signals, markings, and/or lane priority for transit) and on nearby non-arterial streets (pavement, ped/bike/bus interaction, noise). The effects of these deviations must be identified in the station planning effort and implemented in parallel with station construction, not deferred to station opening.

Next steps. Additional comments on station access and transit integration related impacts may be found in *Attachment E: Transportation Impacts*. A comprehensive inventory of these issues may be found in the City's formal DEIS comments in *Attachment A: City Consolidated Comments*. In addition to written responses to these comments, the City seeks to work with Sound Transit, King County Metro, other agencies and partners, and community members to correct station design shortcomings for Preferred Alternative stations before the FEIS. This work should consider design modifications including, but not limited to, changes to station entrance siting and vertical circulation, and assumptions about the station context access and integration improvements. Design elements for safe access and integration should not be add-on access improvements later; they should be incorporated and delivered as essential components of the project. Correcting for these design flaws now will help avoid additional time and cost later.

Attachment M: Community Engagement

The City and Sound Transit have partnered on many engagement opportunities over the last several years to support WSBLE project planning and the DEIS process. City goals for engagement include supporting project decisions and outcomes that that are centered in racial equity and that are co-created and truth-checked with community.

Engagement to date. On WSBLE project engagement, the City has offered clear advice on innovative ideas and lessons learned to deliver community engagement centered on racial equity. Sound Transit has embraced several of those practices including advancing a joint Racial Equity Toolkit, engaging with a trusted advocate model—the Department of Neighborhoods Community Liaisons program—and participating in the Jackson Hub work. In 2019 and 2020, Sound Transit conducted a series of workshops with community to advance planning efforts, and Sound Transit has reached out extensively to community to inform residents, businesses owners, and community-based organizations of its plans. In preparation for the DEIS, much of which took place during pandemic constraints on in-person meetings, Sound Transit developed a comprehensive online open house, stood up four geographic Community Advisory Groups with monthly livestreamed meetings to reach people at home, and developed a DEIS reader's guide, trans-created into multiple language, to support community access to the DEIS analyses.

Opportunities to improve engagement. While these strategies and tactics have been important in supporting community involvement in the DEIS process, the City has heard a need from community for greater transparency, collaboration, and accountability in the engagement moving forward. The DEIS does not clearly demonstrate two-way engagement by showing what Sound Transit has heard from community, and critically, how Sound Transit will respond to that engagement through project decisions. A notable exception has been the quality, two-way engagement in forums with the resident organizations at Seattle Center. The City would like to partner with Sound Transit for similarly responsive engagement activities in other parts of the WSBLE corridor, especially the RET-priority communities of Chinatown-International District and Pioneer Square station, and the Delridge station area and transit corridor to the south.

DEIS comments. The City offers many comments relating to community engagement in *Attachment A: City Consolidated Comments*. Priority comments include:

- Appendix F1 lays out three engagement goals for the WSBLE project. The City requests that Sound Transit add a fourth goal to explicitly reflect engagement findings and demonstrate how community feedback will be incorporated in the development of the project. (Appendix F1)
- City requests that Sound Transit align values and guiding principles articulated both by community and in the Partnering Agreement with the City to build a process and engagement framework. Methods of engagement need to be aligned with and specific for each community's needs. (Appendix F5.3)

Next steps. Sound Transit has committed to continuous improvement of its processes at all phases of the project to achieve its goals. This is a critical moment to reflect on lessons learned with the City and community, and to realign around community collaboration to support upcoming project milestones.

These next steps for the project—including the Board action on a Preferred Alternative, development of a mitigation plan and other analysis and issue resolution in advance of the FEIS, and exploration of refinements to the DEIS alternatives—must be carried out in partnership with community through sustained and robust two-way engagement. It is critical the engagement be transparent by sharing out what Sound Transit is hearing from community and stakeholders, as well as how the agency is applying engagement findings to project decisions.

To accomplish this, methods of engagement should be tailored for different communities; what will work for Downtown or Seattle Center might not work in Chinatown-International District or Delridge.

For the latter two communities, both prioritized in the RET, the City supports focused engagement efforts in the coming year. In Chinatown-International District, the City believes before an action on a Preferred Alternative there should be additional community process and analysis on how to avoid/minimize impacts, advance RET outcomes, and address historic harm. In Delridge, the City would like to see additional effort to engage the communities further south in the corridor who will access the Delridge station through critical bus-rail integration. See *Attachment B: Racial Equity Toolkit and Environmental Justice* for additional discussion.

The City offers resources and assistance, including Seattle Office of Civil Rights Relational Framework, Creative Placekeeping Framework developed for SPU, and SDOT's Transportation Equity Program, to support the engagement process. Community in the CID has developed the CID Community Advocacy Model as an engagement resource. The City looks forward to partnering in this engagement work, through both the FEIS development process and the update to the Racial Equity Toolkit.

City of Seattle Comments on the West Seattle and Ballard Link Extensions (WSBLE) Project Draft Environmental Impact Statement

Exhibits 1-3

April 28, 2022

Contents:

seattlecenter

Exhibit SC-1

Event uses throughout Seattle Center campus and facilities in a typical year

This exhibit contains records from Seattle Center's event booking system, intended to show the broad variety of event-related uses produced on Seattle Center property in a typical year. Event activities occur virtually every day of the year, and frequently occur during daytime as well as evening hours.

The comprehensive list includes event days and move-in and move-out days reserved between January 1 -
December 31, 2019. We chose a year prior to the COVID-19 pandemic because event business is still in a period of pandemic recovery.

Climate Pledge Arena events are excluded from this list, due to the construction of the Seattle Center Arena Renovation Project which closed KeyArena at the end of 2018. The reopened Climate Pledge Arena has not yet been operating for a full year; however, the Seattle Center Arena Renovation Project Final Environmental Impact Statement (2018) anticipated that the redeveloped Arena would host 242-257 events annually, with seating capacities ranging from approximately 17,300 for hockey games to approximately 18,600 for basketball games, and up to approximately 18,800 for concert configurations. More updated information may be available directly from Climate Pledge Arena for the purposes of FEIS analysis

seattlecenter

Exhibit SC-2

Event-related curbside loading uses on streets near the Seattle Center campus

More than 14,000 events are produced on the Seattle Center campus in a typical year. Curbside loading is a vital part of the infrastructure needed to support safe and successful event and festival production. These uses will be impacted during WSBLE DT-1 and DT-2 construction, and will require mitigation in coordination with Seattle Center and SDOT.

Seattle Center cooperates with the Seattle Department of Transportation (SDOT) on curbside use reservations according to the terms of the SDOT/Seattle Center Memorandum of Agreement for Event Curbside Management (MOA). The MOA was updated and re-executed in 2021 following the reopening of Climate Pledge Arena.

This exhibit contains a diagram showing the rights-of-way near Seattle Center where event-related vehicle staging occurs in accordance with the MOA. It also contains records of Seattle Center curb use reservations for a full year in 2017, prior to the start of Climate Pledge Arena construction, and for a partial year in 2022, following the update of the SDOT/Seattle Center MOA.

Below are some key takeaways from this data:

- Republican St between 1st Ave N & Warren Ave gets used on nearly a daily basis to support KEXP in-studio and Vera Project performers
- Major festivals tend to utilize nearly every available block around campus. Curb use is vital to these Festivals, as it provides spaces to stage production vehicles, performer vehicles, vendor vehicles (which need to be close to facilitate restocking booths during Festival hours), and things like refrigerated trucks/ice trucks. Curb use is critical to support festival production because the pedestrian-oriented Seattle Center campus does not have ample space to facilitate all event-related vehicle needs, nor would it be safe or visually appealing to do so. Festivals include:
    - NW Folklife – Memorial Day weekend in May
    - PrideFest – last weekend in June
    - Bumbershoot – Labor Day weekend in August/September
    - SeaFair TorchLight Parade

- 2nd Ave N between Thomas & John Streets is sometimes utilized to create space for trucks to be able to access the Seattle Children's Theater's loading dock to support performances
- Since reopening, Climate Pledge Arena is focusing on keeping trucks and buses out of the Lower Queen Anne/Uptown area. However, major tours that travel with 20+ trucks/buses typically need to utilize a few blocks around campus, often accommodated on 4th & Republican, and the east side of 2nd Ave between Thomas & John Streets
- The Opera also utilizes 4th & Republican to facilitate loading in/out shows throughout its season
- Some blocks around campus are reserved for school bus parking during daytime hours (these are highlighted on the MOA diagram)

Exhibit SC-3
WSBLE DEIS Noise and Vibration Review Report for Seattle Center by Landau Associates

April 20, 2022

Seattle Center
305 Harrison St
Seattle, Washington 98109

Attn: Julia Levitt

Transmitted via email to: ***Julia.Levitt@seattle.gov***

Re: Sound Transit WSBLE DEIS Review
Seattle, Washington
Project No. 2051001.010

Dear Julia:

Landau Associates Inc. (Landau) has prepared the following summary of our assessment of the noise and vibration sections of the Sound Transit West Seattle and Ballard Link Extensions (WSBLE) Draft Environmental Impact Statement (DEIS).

Seattle Center is a 74-acre public campus owned and managed by the City of Seattle's Seattle Center Department. The campus comprises public recreational space with features such as interactive fountains, displays of public art, and a skate plaza. It also includes numerous highly specialized facilities such as theaters, concert halls, and rehearsal spaces; studios for radio, film, and television production; museums; and special-event venues. Many of these facilities are operated by nonprofit organizations that are tenants of Seattle Center. Seattle Center and its tenants, known as its resident organizations, have raised concerns about noise and vibration from construction and operation of the proposed Sound Transit WSBLE project.

Seattle Center has retained Landau noise and vibration expert consultants to review the WSBLE DEIS and provide comment on the document's accuracy and completeness regarding assessment of noise and vibration impacts.

Following is our review of the WSBLE DEIS as it relates to the potential for noise and vibration impact to Seattle Center facilities and resident organizations. Provided is a summary of findings, a list of documents that were reviewed for this letter, and a detailed review of select chapters of the DEIS.

Summary

Landau finds the assumptions and methods used by Sound Transit to analyze noise and vibration impacts to be reasonably correct. However, Landau finds some elements of the WSBLE DEIS analysis to be incomplete and/or incorrect. These missing or incorrect analysis elements result in an incomplete assessment of noise and vibration impacts and mitigation. The following summarizes our key findings of this review:

- City of Seattle noise limits are not applied in the noise impact section when determining the potential for noise impacts and whether additional mitigation is warranted.
- Edits to the document are required to correct for incorrect noise and vibration limits for some facilities; these corrections will result in higher levels of impact at some sensitive receivers.
- There are missing receptors, including entire resident organizations and sensitive spaces within known resident organizations at Seattle Center as well as at select outdoor venues at Seattle Center.
- The assessment of airborne noise impacts during construction is incomplete.
- An assessment of mitigation measures is required for airborne noise impacts expected at multiple noise-sensitive facilities within Seattle Center as well as at select outdoor venues at Seattle Center.
- Additional assessments of groundborne noise and vibration impacts from construction is warranted to fully address potential impacts from both DT-1 and DT-2.
- Additional assessment of groundborne noise and vibration mitigation measures from construction is warranted to fully address impacts from both DT-1 and DT-2.
- The surface construction vibration impact and mitigation assessment is incomplete.
- Station construction methods for DT-1 include breaking a slurry wall with a hoe ram, a potential major source of groundborne noise and vibration that was not evaluated.
- East Station entrances would be located immediately adjacent to Seattle Rep and Cornish Playhouse; groundborne noise, vibration, and surface noise impacts are not fully evaluated.
- Operational groundborne noise impacts warrant additional mitigation for DT-1 beyond high resilience fasteners and beyond the linear extents identified in the DEIS.

Review Documents

Landau reviewed the following documents in support of this review letter report:

- Sound Transit and Federal Transit Administration's (FTA's) West Seattle and Ballard Link Extensions Draft Environmental Impact Statement (DEIS), Chapter 4.2.7 *Noise and Vibration* (pp. 4.2.7-1 to 4.2.7-23)
- Sound Transit and FTA's West Seattle and Ballard Link Extensions DEIS, Appendix N.3, *Noise and Vibration Technical Report*
- Sound Transit and FTA's West Seattle and Ballard Link Extensions DEIS, Attachment N.3A, *Noise Measurement Data, Site Details, and Photographs*
- Sound Transit and FTA's West Seattle and Ballard Link Extensions DEIS, Attachment N.3B, *Vibration Measurement Site Photographs*
- Sound Transit and FTA's West Seattle and Ballard Link Extensions DEIS, Attachment N.3C, *Vibration Propagation Measurement Results*
- Sound Transit and FTA's West Seattle and Ballard Link Extensions DEIS, Attachment N.3D, *Maps of Noise Impact Assessment*

- Sound Transit and FTA's West Seattle and Ballard Link Extensions DEIS, Attachment N.3E, *Maps of Vibration Impact Assessment*
- Sound Transit and FTA's West Seattle and Ballard Link Extensions DEIS, Attachment N.3F, *Tables of Noise Predictions*
- Sound Transit and FTA's West Seattle and Ballard Link Extensions DEIS, Attachment N.3G, *Tables of Vibration Predictions*
- Sound Transit and FTA's West Seattle and Ballard Link Extensions DEIS, Attachment N.3H, *Vibration Analysis of Category 1 Land Uses and Special Buildings*
- FTA's *Transit Noise and Vibration Impact Assessment Manual*, (September 2018; FTA Guidance Manual)
- Sound Transit's Design Criteria Manual, Revision 5, Amendment 11, (May 2021).

Review Format

The following review is focused on chapters within the WSBLE DEIS that are relevant to the assessment of noise and vibration impacts from DT-1 and DT-2. Headings that begin with "Chapter" refer to the corresponding chapter within WSBLE DEIS Appendix N.3, *Noise and Vibration Technical Report.*

Chapter 3. Noise and Vibration Impact Criteria

The WSBLE DEIS applies the noise and vibration impact criteria established for transit projects according to the FTA Guidance Manual. Sound Transit is a public transit authority that receives federal funding to support its projects. Landau finds the use of the FTA criteria is appropriate for the assessment of noise and vibration impact from this project. However, as detailed below, the FTA noise and vibration limits that were applied to some sensitive receiving spaces were incorrect

WSBLE DEIS Appendix N.3, Chapter 3.1.3 identifies the City of Seattle noise criteria, as established in Seattle Municipal Code (SMC) Chapter 25.08. SMC noise limits are applicable during daytime and nighttime hours for various source and receiving "Districts." Further, SMC 25.08 includes sound level limits that apply specifically to construction. Landau finds the DEIS interpretation of the City's noise criteria to be correct.

Landau finds that the assessment does not identify impacts relative to the City's noise criteria. That is, the assessment is focused only on FTA criteria (that are applicable) and whether construction or operation would meet FTA criteria. The assessment refers to the required compliance with City of Seattle construction noise limits in WSBLE DEIS Appendix N.3, Chapter 7, Construction Noise Mitigation (p. 7-16), but not when evaluating the potential for noise impacts through Seattle Center. Because City of Seattle construction noise limits apply to this project, the noise assessment should consider whether construction noise is expected to meet these limits. If the project cannot meet these limits, sufficient noise mitigation measures should be required; otherwise, alternative construction methods should be explored.

Chapter 4. Noise and Vibration Impact Analysis Assumptions and Methods

WSBLE DEIS Appendix N.3, Chapter 4 summarizes the analysis assumptions and the methods for assessment of noise and vibration impacts. This chapter reviews multiple elements that are considered when predicting noise and vibration emissions from light rail projects and includes results of vibration propagation testing and discusses noise and vibration measurements made by Sound Transit to support the noise and vibration impact assessment. Landau finds the impact analysis assumptions and methods to be reasonably correct.

Chapter 6. Impact Assessment

The following summarizes Landau's review of the WSBLE DEIS impact assessment of DT-1 and DT-2, including airborne noise from construction and groundborne noise and vibration from construction and operation, as received at Seattle Center resident organizations. Included as an Attachment A to this letter is a map of the Seattle Center campus that illustrates the locations of DT-1 and DT-2, including rail alignments, stations, and station entrances, as well as Seattle Center resident organizations, facilities, and outdoor areas.

Noise and Vibration Limits

WSBLE DEIS Appendix N.3, Chapter 6.4 (p. 6-63) indicates that noise and vibration from construction, including tunneling (cutterhead and supply train) and surface construction were evaluated against the same FTA operational noise limits "because this can be a relatively long-term activity." Landau agrees with this determination.

Landau notes that the noise limits provided in WSBLE DEIS Appendix N.3 are generally correct for most resident organizations within the Seattle Center. However, some discrepancies, errors, and omissions were noted. Table 2 of this letter (p. 5) summarizes the noise and vibration limits applied for each space, highlighting discrepancies or errors that require correction or further assessment. The list of noise and vibration limits for Seattle Center resident organizations is compiled from DEIS Appendix N.3 Attachment N.3H Tables 6-2 and 6-3 (McCaw Hall, Pacific NW Ballet, and Seattle Opera), Tables 7-2 and 7-3 (Cornish Playhouse and Seattle Rep), and Tables 8-2 and 8-3 (Vera Project, SIFF Film Center and KEXP). If a different noise or vibration limit was identified in another table within WSBLE DEIS Appendix N.3, it is noted in the center columns of Table 2 of this letter.

Noise and Vibration Limits – Discrepancies

WSBLE DEIS Appendix N.3, Section 6.3, Tables 6-13 and 6-14 identify operational groundborne noise and vibration limits for DT-1 and DT-2, respectively. For some facilities, the operational groundborne noise and vibration limits are expanded to consider different rooms within the facility. These expanded tables are found in WSBLE DEIS Appendix N.3, Attachment N.3H, and include Tables 6-2, 6-3, 7-2, 7-3, 8-2, and 8-3. For example, in Table 6-13 KEXP is identified as "KEXP DJ Booth". In Attachment N.3H, Table 8-2, KEXP spaces include the DJ Booth, Studio, and Mastering Suite.

WSBLE DEIS Appendix N.3, Section 6.4.1, Tables 6-25 and 6-27 identify vibration and groundborne noise limits for construction, respectively.

As noted above, the WSBLE DEIS indicates that groundborne noise and vibration from operation and construction were evaluated against the same FTA criteria. However, in review of groundborne noise and vibration limits provided in the tables identified above, Landau finds that there are discrepancies regarding groundborne noise and vibration limits for some facilities. That is, for some facilities, different groundborne noise and/or vibration limits were applied for construction and operation. For each instance where a discrepancy was found, the operational groundborne noise and vibration limits are correct, and the differing limits in Table 6-25 and/or 6-27 (construction vibration and groundborne noise, respectively) are incorrect. These discrepancies are summarized below in Table 1.

Table 1. Summary of DEIS Discrepancies, Noise and Vibration Limits

Resident Organization	DEIS Limits for Operation		DEIS Limits for Construction		Explanation of Discrepancy	
	Noise (dBA)	Vibration (VdB)	Noise (dBA)	Vibration (VdB)	Noise	Vibration
Pacific Northwest Ballet Studios	35 [1]	72 [1]	40 [3]	78 VdB [4]	Construction Limit is 5 dBA above Operation Limit	Construction Limit is 6 VdB above Operation Limit
Vera Project Performance Space	35 [2]	72 [2]	40 [3]	-	Construction Limit is 5 dBA above Operation Limit	n/a
Vera Project Recording Space	30 [1]	72 [1]	40 [3]	-	Construction Limit is 10 dBA above Operation Limit	n/a
SIFF Film Center Theater	35 [1]	72 [1]	40 [3]	-	Construction Limit is 5 dBA above Operation Limit	n/a

[1] Sound Transit WSBLE DEIS Appendix N.3, Tables 6-13 and 6-14

[2] Sound Transit WSBLE DEIS Appendix N.3, Attachment N.3H, Table 8-2 and 8-3

[3] Sound Transit WSBLE DEIS Appendix N.3, Tables 6-27

[4] Sound Transit WSBLE DEIS Appendix N.3, Tables 6-25

As summarized in Table 1, operational vibration and groundborne noise limits for several receivers differ from what is identified in Tables 6-25 and 6-27, respectively, of WSBLE DEIS Appendix N.3. Regarding vibration, the limit identified for the Pacific Northwest Ballet (Phelps Center) is 78 vibration decibels (VdB) in Table 6-27. The correct limit should be 72 VdB, consistent with the limit for this receiver in Tables 6-13 and 6-14 for operational vibration impacts, and consistent with the FTA "Special Building" vibration impact criteria for "theaters" (see DEIS Appendix N.3, Table 3-8).

Regarding groundborne noise, the limits identified for the Pacific Northwest Ballet, Vera Project (performance and recording spaces) and the Seattle International Film Festival (SIFF) Film Center

theater are 40 A-weighted decibels (dBA) in Table 6-27 (tunneling groundborne noise impacts table). These limits are inappropriate for the uses, and the assessment of impact based on these limits is, therefore, incorrect or misleading.

At the SIFF Film Center, correcting the groundborne noise limit to 35 dBA (as identified for light rail operation in Table 6-13) would result in predicted groundborne noise impacts due to supply train operation during tunneling (see DEIS Appendix N.3, Table 6-27). That is, an adjusted limit of 35 dBA would fall below the predicted level of 37 dBA, whereas the incorrect limit of 40 dBA is above the level. Currently, Table 6-27 does not identify impacts at the SIFF Film Center. See the following section and Table 2 for a justification to lower this limit even further to 30 dBA.

Noise and Vibration Limits – Corrections

Landau notes that adjustments to some limits are warranted following measurements by Landau staff and review of the noise and vibration-sensitive nature of select spaces. That is, for many facilities and resident organizations at Seattle Center, a quiet environment is germane to their use. Noise intrusion, such as low-frequency groundborne noise "rumbling" from nearby surface construction, tunneling, and rail operations, may negatively affect the facility's use or audience experience. Vibration impacts, even at low levels, can affect a facility's suspended lighting systems or film projectors.

If an adjustment to a groundborne noise or vibration limit is recommended by Landau, the correct limit is identified in the center two columns of Table 2 (p. 7 of this letter). Justifications for adjusted groundborne noise or vibration limits are included in the final column Table 2 and detailed further in the text following this table.

Table 2. Summary of Noise and Vibration Limit Corrections

Resident Organization	Limits for Operation and Construction [1]		Corrections (Source of Adjusted Limits) [2]		Notes Justification for Adjusted Limits
	Noise (dBA)	Vibration (VdB)	Noise (dBA)	Vibration (VdB)	
McCaw Hall Main Hall	25	65	-	-	-
McCaw Hall Lecture Hall	30	72	-	-	-
Exhibition Hall in Pacific Northwest Ballet Basement	30	72	-	-	-
Pacific Northwest Ballet Studios	35	72	-	-	-
Seattle Opera Concert Hall	25	65	-	-	-
Seattle Opera Rehearsal Hall	30	72	-	-	-
Seattle Opera Broadcast Booth (King FM)	25	65	-	-	-
Cornish Playhouse Theater	35	72	-	65 VdB [3]	Vibration limit is appropriate for "Concert Hall" per FTA Guidance Manual. DEIS noise limit appropriate, confirmed through Landau measurements
Seattle Rep Bagley Wright Theater	35	72	-	65 VdB [4]	Vibration limit is appropriate for "Concert Hall" per FTA Guidance Manual. DEIS noise limit appropriate, confirmed through Landau measurements
Seattle Rep Leo K. Theater	35	72	25 dBA [4]	65 VdB [4]	Noise and vibration limits are appropriate for "Concert Hall" per FTA Guidance Manual, confirmed through Landau measurements
Vera Project Performance Space	35	72	-	-	-
Vera Project Recording Space	30	72	-	-	-
SIFF Film Center Theater	35	72	30 dBA [4]	65 VdB [4]	Noise limit is appropriate per Landau and DEIS measurements. Vibration limit is appropriate for "Auditorium" per FTA Guidance Manual, confirmed through Landau measurements
KEXP DJ Booth	25	65	-	-	-
KEXP Studio	25	65	-	-	-
KEXP Mastering Suite	30	72	25 dBA [4]	65 VdB [4]	Noise and vibration limits are appropriate for "Recording Studio" per FTA Guidance Manual, confirmed through Landau measurements

[1] Sound Transit WSBLE DEIS Appendix N.3, Attachment N.3H, Tables 6-2 6-3, 7-2, 7-3, 8-2, and 8-3.

[2] Based on measurements made by Landau staff for Seattle Center in early 2022.

[3] Based on measurements made by Landau staff in 2021 and early 2022 under separate Landau contracts to Seattle Center resident organizations (Seattle Rep, SIFF, and KEXP). Data was shared with Seattle Center with permission of these organizations.

Cornish Playhouse

At the Cornish Playhouse, vibration measurements at the Main Auditorium by Landau staff in January 2022 indicate that a more appropriate vibration limit is 65 VdB (i.e., not 72 VdB). The adjusted and more stringent vibration limit would be appropriately evaluated under FTA criteria as a "Concert Hall" (similar to McCaw Hall and the Seattle Opera Concert Hall), reducing the potential for vibration impacts at the Main Auditorium including stability of lighting systems and the potential for perceptible groundborne noise during performances.

Seattle Rep

At the Seattle Rep, measurements at the Leo K. Theater by Landau staff in January 2022 suggest that a more appropriate limit is 25 dBA, aligning with FTA criteria for a "Concert Hall" (similar to McCaw Hall and the Seattle Opera Concert Hall). Although measurements made for the DEIS and documented in WSBLE DEIS Appendix N.3, Attachment N.3H Table 7-1 (p. 7-3) were 30 dBA for the Leo K Theater (which are still 5-dBA lower than what was applied in Tables 6-13 and 6-14), ambient measurements by Landau were 26 dBA and align with the suggested adjustment to a limit of 25 dBA. Further, Landau notes that Seattle Rep's experience during construction of the Climate Pledge Arena indicates that the Leo K. Theater is highly sensitive to groundborne noise intrusion due to the very low ambient noise levels within the theater and the sensitive use of this space (i.e., unamplified performances).

Similarly, the vibration limit at Seattle Rep is identified as 72 VdB in DEIS Attachment N.3, Tables 6-13 and 6-14. A more appropriate limit for Seattle Rep, including both the Leo K. Theater and Bagley Wright Theater, is 65 VdB, which also aligns with FTA criteria for a "Concert Hall". In addition to groundborne noise impacts during construction of the Climate Pledge Arena, vibration impacts from this same construction resulted in movement (i.e., swaying) of lighting systems. An adjusted and more stringent vibration limit should apply to the Leo K. Theater and Bagley Wright Theater, reducing the potential for vibration impacts, including stability of lighting systems on these stages.

SIFF Film Center

At the SIFF Film Center theater, noise levels measured by Landau staff in 2022 were 31 dBA, the same level measured by Sound Transit and documented in the DEIS (see DEIS Appendix N.3, Attachment N.3H, Table 8-1, p 8-4). Based on ambient noise measurements made for the DEIS and by Landau, a noise limit of 30 dBA at the SIFF Film Center would be most appropriate, especially given the low-frequency characteristics of groundborne noise compared with the ambient environment inside the SIFF Film Center. This adjusted noise limit aligns with the FTA criteria for an "Auditorium".

Ambient measured levels of vibration made by Landau at the SIFF Film Center were well below 65 VdB, which supports the measurement data reported in WSBLE DEIS Appendix N.3, Attachment N.3H, Table 8-1 (i.e., 54 VdB). Applying a limit of 72 VdB (the FTA criteria for an "Auditorium") is not appropriate; a more appropriate limit for the SIFF Film Center is 65 VdB, which aligns with the FTA criteria for a "Concert Hall". Landau recognizes that this space is a theater and not a concert hall,

however the SIFF Film Center's projector is highly sensitive to impact from vibration, which can result in film projections that are not stable, negatively impacting the audience experience. Applying a limit of 65 VdB would ensure that the theater's existing ambient environment is maintained for its intended use.

KEXP

For the KEXP mastering suite, WSBLE DEIS Appendix N.3, Attachment N.3H, Tables 8-2 and 8-3 identify a groundborne noise limit of 30 dBA. This limit is higher than what was identified for the KEXP DJ Booth and Studio (25 dBA), presumably because it was unknown to Sound Transit that the mastering suite is used for audio recording. The suite (now divided as two separate production rooms that include audio recording operations) should be evaluated against the 25-dBA noise limit because it is used for noise-sensitive audio recordings. If adjusted, groundborne noise from light rail operation under the preferred alternative DT-1 would exceed the 25 dBA limit by 10 dBA (see WSBLE DEIS Appendix N.3, Attachment N.3H, Tables 8-2). Note that Landau conducted ambient noise measurements of the existing Production Room 1 (former mastering suite) that confirmed lower ambient noise levels at 27 dBA. A limit of 25 dBA therefore is reasonable for this space.

Similarly, the vibration limit at KEXP's mastering suite is identified as 72 VdB in WSBLE DEIS Attachment N.3, Appendix N.3H, Tables 8-2 and 8-3. A more appropriate limit for the KEXP production rooms (former mastering suite) is 65 VdB, consistent with other spaces within KEXP where audio recording occurs, and consistent with measurements documented in WSBLE DEIS Attachment N.3, Appendix N.3H, Table 8-1, and confirmed by Landau staff in 2021.

Noise and Vibration – Missing Sensitive Receivers

WSBLE DEIS Appendix N.3 omits several noise-sensitive buildings and uses within the vicinity of the DT-1 and DT-2 cut-and-cover station and alignment routes within Seattle Center. Table 3 of this letter (p. 10) provides a summary of facilities and spaces that are not included in the DEIS but that should be considered for assessment of potential for noise and vibration impacts from DT-1 or DT-2.

Table 3. DEIS Appendix N.3 Missing Seattle Center Noise and Vibration Sensitive Receivers

Resident Organization Buildings	Suggested Noise and Vibration Limits [1]		Summary of Use	Potential Source(s) of Noise or Vibration Impact [2]
	Noise (dBA)	Vibration (VdB)		
Seattle Rep Leo K. Rehearsal Space	30	65	Rehearsal space for Leo K. Theater; quiet is germane to use	DT-1 and DT-2 surface construction and tunneling; DT-1 and DT-2 operation
Seattle Rep Poncho Forum	30	72	Rehearsal and performance space; quiet is germane to use	DT-1 and DT-2 surface construction and tunneling; DT-1 and DT-2 operation
KEXP Audio Editing Suites	25	65	Audio editing and recording spaces	DT-1 surface construction and tunneling; DT-1 operation
Museum of Popular Culture (MoPOP)	35	72	Live performances, studios, museum galleries	DT-1 tunneling
Memorial Stadium	40	-	Live outdoor music and sporting events	DT-1 tunneling
Climate Pledge Arena	35	72	Live indoor music and sporting events	DT-1 tunneling
A/NT Art Gallery [3]	35	72	Art gallery where high vibration can impact use	DT-1 surface construction and tunneling
International Fountain Lawn	FTA Category 1 Noise Limits [4]		Recreational Outdoor Use Area	DT-1 surface construction
Theater Commons				DT-2 surface construction
International Plaza				DT-1 surface construction
Fisher Lawn				DT-1 surface construction
Founders Court				DT-1 and DT-2 surface construction
Kreielsheimer Promenade				DT-1 and DT-2 surface construction
Mural Amphitheater				DT-1 surface construction

[1] Suggested limits based on use of space and sensitivities to noise and vibration.

[2] Potential for impact may be due to activities identified in this table and may also include activities not identified here. Full assessment required.

[3] Identified in WSBLE DEIS Chapter 6.2.3.2, p. 6-38: "Cut-and-cover construction of the Seattle Center Station for Preferred Alternative DT-1 would likely result in noise impacts at the Northwest Rooms at Seattle Center, which house several noise-sensitive spaces including … A/NT Art Gallery." No further assessment of potential impact.

[4] Outdoor use areas at Seattle Center are subject to FTA noise limits for a Category 1 receiver. Applicable noise limits are based on ambient levels; the City of Seattle construction noise limits identified in the Seattle Municipal Code (SMC) Chapter 25.08 also apply.

As identified in Table 3, Landau recommends including several outdoor use areas at the Seattle Center, each considered sensitive outdoor receivers that may be impacted by airborne noise during construction of either DT-1 or DT-2. These spaces are classified as FTA Category 1 noise-sensitive

receivers. FTA defines Category 1 receivers as "Land where quiet is an essential element of its intended purpose. Example land uses include preserved land for serenity and quiet, outdoor amphitheaters and concert pavilions, and national historic landmarks with considerable outdoor use." The following identifies the outdoor use areas that warrant consideration of impacts from the Sound Transit WSBLE project:

International Fountain Lawn

The International Fountain Lawn at Seattle Center is used for events such as Folklife and others and is accessible year-round for public enjoyment of this open space. The International Fountain Lawn is located immediately southwest of the DT-1 construction area and would be impacted by surface construction noise, including high levels of noise during initial phases of demolition and construction for DT-1.

Theater Commons

Theater Commons is located between the Seattle Rep and Cornish Playhouse. This area is a gathering space and entrance to Seattle Center during events and daily use. Although the Theater Commons would be inaccessible during construction of DT-1, it may be impacted by DT-2 construction noise.

International Plaza

Also known as the Northwest Courtyards, the International Plaza is a hardscape area between the Northwest Rooms and Climate Pledge Arena. Northwest Courtyards will be used by KEXP to host future outdoor performances. This area also includes the historic DuPen Fountain, a popular family recreation spot in the summer, and is used heavily during campus events and festivals. This area is likely to be impacted by DT-1 construction noise.

Fisher Lawn

The Fisher Lawn is located south of the International Fountain, north of the Fisher Pavilion. This space is often used for events such as speeches and outdoor concerts. The Fisher Lawn is likely to be impacted by DT-1 construction noise.

Founders Court

Founders Court is an open space located between the Cornish Playhouse and Pacific Northwest Ballet (Phelps Center). This area is used for events at Seattle Center and quiet enjoyment by the public. This area may be impacted by DT-1 or DT-2 construction noise.

Kreielsheimer Promenade

Kreielsheimer Promenade is an open space located between the Pacific Northwest Ballet (Phelps Center) and McCaw Hall . This area is used for events at Seattle Center and quiet public enjoyment. This area may be impacted by DT-1 or DT-2 construction noise.

Mural Amphitheater

The Mural Amphitheater is located south of the Fisher Pavilion. In addition to being used for outdoor events such as concerts, the Mural Amphitheater is used to screen outdoor films during evening hours. This area may be impacted by DT-1 construction noise.

Chapter 6.2. Construction Noise Impacts

The construction noise impact assessment (i.e., airborne noise) was completed using the methods described in the FTA Guidance Manual.

Chapter 6.2.1.5 (Tunneling) and 6.2.1.6 (Cut-and-Cover)

WSBLE DEIS Appendix N.3, Chapter 6.2.1.5 provides a summary of surface-level construction noise that would occur in support of tunneling operations; WSBLE DEIS Appendix N.3, Chapter 6.2.1.6 provides a summary of surface-level construction noise that would occur in support of cut-and-cover station construction.

As identified in WSBLE DEIS Appendix N.3, Table 6-30, the location of the cut-and-cover construction area could be as near as 8 feet from many of the Seattle Center resident organizations, including KEXP, the Vera Project, the SIFF Film Center, the Seattle Rep, and the Cornish Playhouse. Therefore, noise from excavation of the cut-and-cover station, as well as from station entrances, could impact operations at these facilities. Specifically, Table 6-30 identifies potential for impact at the above-listed organizations from DT-1 construction, and from both DT-1 and DT-2 construction at the Seattle Rep.

WSBLE DEIS Appendix N.3, Chapter 6.2.1.5 identifies the use of excavators and backhoes for portal and shaft excavation, and trucks and loaders for transporting spoils. In addition, WSBLE DEIS Appendix N.3, Chapter 6.2.1.5 identifies ventilation fans that "would likely run continuously to provide fresh air to construction crews working inside the tunnel." For cut-and-cover construction, Chapter 6.2.1.6 identifies haul trucks and vibratory rollers as the loudest sources of construction noise, "over 88 dBA at 50 feet."

Multiple resident organizations are in close proximity to the cut-and-cover stations (as near as 8 feet, per Table 6-30) and/or station entrances. Specifically, the following summarizes facilities that are closest to the DT-1 or DT-2 stations and East Station entrances:

- **KEXP:** Building is immediately adjacent to DT-1 station construction area
- **Vera Project:** Building is immediately adjacent to DT-1 station construction area
- **SIFF Film Center:** Building is immediately adjacent to DT-1 station construction area
- **Seattle Rep:** Building is immediately adjacent to DT-1 and DT-2 station construction areas, as well as to the East Station Entrance for DT-1 and DT-2
- **Cornish Playhouse:** Building is immediately adjacent to East Station Entrance for DT-1.

Landau finds that the DEIS does not fully evaluate the potential for impact from surface noise construction of stations or station entrances. Specifically, the following activities (i.e., sources of surface construction noise) were either not identified in the DEIS or additional information is required:

Tunnel Exhaust Fans

WSBLE DEIS Chapter 6.2.1.5 states that "Ventilation fans would likely run continuously to provide fresh air to construction crews working inside the tunnel." A similar statement is found in DEIS Chapter 2.6.6, p 2-88 that states "fans could run for 24 hours a day and could be audible at tunnel portals, stations, or access locations." Further, Chapter 6.2.1.15 states that "Sound levels near the tunnel portals may be over 86 dBA at 50 feet from construction activities."

The DEIS does not specifically address whether ventilation fans would be required near cut-and-cover station construction or station entrances. Given the high volume of air required to maintain fresh air for construction workers, and the proximity of several resident organizations to the proposed stations and station entrances, additional information is required to fully identify noise impacts from exhaust fans.

Truck Haul Routes

DEIS Chapter 2.6.6 (p. 2-88) states "truck hauling would require a loading area, staging space for trucks awaiting loading, and provisions to prevent tracking soil on public streets. Truck haul routes and trucking hours would require approval by the City of Seattle. Surface hauling could occur at night during off-peak traffic periods or could be concentrated during the day to minimize noise in noise-sensitive areas." Table 7-1 of the FTA Guidance Manual (p. 176) identifies a sound level for haul trucks of 84 dBA at 50 feet.

The DEIS does not include assessment of noise from haul trucks. Noise from haul trucks includes engine idling during loading, travel to and from loading locations, and banging noise when trucks drive over uneven or unsecured surfaces that are often found at and near construction sites. Airborne noise from haul trucks collecting and moving spoils away from the DT-1 or DT-2 stations and station entrance areas, located very near KEXP, SIFF Film Center, Vera Project, Seattle Rep, and Cornish Playhouse, could represent major sources of noise.

As indicated in the DEIS, haul trucks may operate during daytime or nighttime hours, depending on the permitted hours of hauling. Many of the resident organizations include noise-sensitive spaces that operate either 24 hours per day (i.e., KEXP), or during late evening hours (i.e., Vera Project, SIFF Film Center, Seattle Rep, Cornish Playhouse). Therefore, impacts from truck hauling may impact these facilities during most hours of the day or night.

If Mercer Street is used as a primary haul route, additional impacts from hauling should be evaluated at Seattle Center resident organizations located along Mercer Street, including Pacific Northwest

Ballet (Phelps Center), McCaw Hall, Seattle Opera, and King FM. Increased truck traffic along Mercer Street may impact usage of theaters during evening hours, especially at locations such as the Seattle Opera building, which operates the Tagney Jones Hall located at the corner of Mercer Street and 4th Avenue North. Impacts to King FM could occur during late night or overnight hours.

Construction Staging Areas

Noise emissions from construction staging areas were not evaluated in the DEIS. Airborne noise from equipment moving within and to/from staging areas could represent a major source of airborne noise during construction.

Multiple Seattle Center resident organizations are likely to be within close proximity to construction staging areas. Although the locations of the staging areas are yet to be defined, an assessment of noise impact from staging areas should be completed that evaluates equipment within the staging areas and potential routes to/from staging areas.

Tunneling and Cut-and-Cover Construction Airborne Noise

WSBLE DEIS Appendix N.3, Chapter 6.2 (p. 6-30) identifies construction activities that would produce the highest levels of airborne construction noise and includes tunneling and cut-and-cover station construction, both of which are proposed for preferred alternative at DT-1 and alternative DT-2, and which would occur near KEXP, Vera Project, SIFF Film Center, Seattle Rep, and Cornish Playhouse.

The WSBLE DEIS provides in Appendix N.3, Table 6-8 (p. 6-31) a range of sound levels, referenced to 50 feet, that are anticipated from tunneling and cut-and-cover construction. Sound levels are based on the FTA Guidance Manual. As identified in Table 6-30 (p. 6-70), and as is illustrated in DEIS Drawing B11-ASX102, construction activities could occur as near as 8 feet from the Seattle Center resident organizations identified above. The following table has been prepared to present noise levels from construction as summarized in DEIS Table 6-8, and including sound levels at 8 feet, 15 feet, and 50 feet from construction equipment, based on noise propagation from a stationary source at +6 dBA per halving of distance to the source.

Table 4. Surface Construction Airborne Noise Equipment and Sound Levels

Construction Activity [1]	Construction Equipment [1]	Sound Level at 50 feet L_{eq} (dBA) [1]	Sound Level at 15 feet L_{eq} (dBA) [2]	Sound Level at 8 feet L_{eq} (dBA) [2]
Tunneling	Excavators, backhoes, haul trucks, loaders	84 to 86	94 to 96	100 to 102
Cut-and-Cover Station Construction	Excavators, backhoes, haul trucks, loaders, vibratory rollers	84 to 88	96 to 99	102 to 104

[1] Sound Transit WSBLE DEIS Appendix N.3, Table 6-8.

[2] Calculations by Landau based on 6 dBA per halving of distance to a stationary noise source.

L_{eq} = equivalent sound pressure level

WSBLE DEIS Appendix N.3, Chapter 6.2.3.2, p. 6-38 indicates that cut-and-cover construction of DT-1 "would likely result in airborne construction noise impacts at Northwest Rooms at Seattle Center, which house several noise-sensitive spaces including KEXP, the Vera Project, the SIFF Film Center, and the A/NT Art Gallery. The construction noise would also impact spaces in the north end of the Seattle Center including Seattle Repertory Theatre and Cornish Playhouse."

For DT-2, the same page of the DEIS states that cut-and-cover construction "could result in noise impacts at the Seattle Repertory Theatre and Cornish Playhouse." Further, the same page of the DEIS states that "Most of these noise-sensitive spaces are on the perimeter of the building and face Republican Street."

As noted in the above table, for alternative DT-1, airborne noise levels from tunneling and cut-and-cover station construction could reach up to 104 dBA at the building facade of KEXP, Vera Project, the SIFF Film Center, Seattle Rep, and Cornish Playhouse. The Seattle Municipal Code sound level limits for construction, as correctly noted in WSBLE DEIS Appendix N.3, Table 3-4 (p. 3-7), is 85 dBA for a commercial district noise source affecting a commercial district receiving property, with shorter-duration increases permitted for impact-type equipment. Predicted sound levels from construction therefore could well exceed City of Seattle sound level limits at these facilities when equipment operates within approximately 50 feet of these building facades.

Noise reductions provided by the envelopes of these building (i.e., transmission loss provided by building construction materials) is not identified in the DEIS. Measurements at KEXP, taken by Landau staff, indicate that the north facade of this building provides approximately 61 dBA in reduction of exterior noise (reduction will vary depending on dominant noise frequency of the construction noise source). For sound levels at the exterior facade of 104 dBA, interior levels from exterior construction equipment could be 43 dBA.

The following table summarizes expected increases over ambient noise levels and established limits, based on surface construction noise reaching 43 dBA inside each of these spaces.

Table 5. Surface Construction Airborne Noise Impacts (DT-1)

Resident Organization	Distance to Nearest Surface Construction Activity (feet) [1]	DEIS Noise Limit (dBA) [2]	DEIS Measured Ambient Noise Level at Nearest Space (dBA) [3]	Highest Interior Airborne Noise Level from Surface Construction (dBA) [4]	Exceedance of Interior Airborne Noise Level from Surface Construction (dBA)	
					Exceedance of Limit [5]	Exceedance of Ambient Noise Level [5]
KEXP	8	25	29	43	18	14
Vera Project	8	30	24	43	13	19
SIFF Film Center	8	35	31	43	8	12
Seattle Rep	8	35	30	43	8	13
Cornish Playhouse	8	35	25	43	8	18

[1] Sound Transit WSBLE DEIS Appendix N.3, Table 6-30, p. 6-70, applies to most sensitive spaces within each facility.

[2] Sound Transit WSBLE DEIS Appendix N.3, Table 6-13, p. 6-51 (Operational noise and vibration for DT-1, applicable to WSBLE construction).

[3] Sound Transit WSBLE DEIS Appendix N.3, Attachment N.3H, Table 7-1, p. 8-3 and Table 8-1, p. 8-4.

[4] Based on worst-case impact of 104 dBA at 8 feet, assuming 61 dBA reduction to interior spaces. Actual exterior-interior reduction may be lower than 61 dBA (resulting in higher interior levels) and will vary based on sound sources. Actual distance to sensitive spaces inside buildings also may vary, and if farther will result in lower predicted levels.

[5] Based on impact at nearest portion of building. Actual impacts may be higher or lower.

As summarized above in Table 5 and in WSBLE DEIS Appendix N.3, Chapter 6.3, airborne noise from construction could reach up to 18 dBA over applicable interior sound level limits at KEXP, up to 13 dBA over the limit at Vera Project, and up to 8 dBA over limits at Seattle Rep and Cornish Playhouse.

When compared with DEIS-measured ambient noise levels, airborne construction noise could exceed existing conditions by 12 to 19 dBA at the Seattle Center resident organizations identified in Table 5. Actual increases in noise may be higher depending on exterior-interior noise reductions provided by the buildings (i.e., if less than the estimated 61 dBA reduction) and on the actual distance to the most noise-sensitive spaces within each building. Regardless, these data suggest that airborne construction noise impacts will occur, and that mitigation will be required at each of these spaces during surface construction related to tunneling and the cut-and-cover station.

It is noted in WSBLE DEIS Appendix N.3, Chapter 6.2.3.2, p. 6-38 that "the loudest construction phase is expected to be near the beginning of construction during the cutting and removal of the existing street, which would likely include the use of impact equipment such as jackhammers or hoe rams." Landau notes that during other phases construction noise levels may be lower. However, the estimates of impact provided in Table 4 are based on the DEIS estimates of excavators, backhoes, haul trucks, loaders, and vibratory rollers. Therefore, if the estimates do not represent the highest noise that could occur from jackhammers and hoe rams, actual noise impacts may, at the initial phases, be higher than is estimated in Table 5.

Landau notes that the noise limits provided in WSBLE DEIS Appendix N.3, Table 6-27 are based on the same limits applied for operational groundborne noise (as noted above). However, as noted on p. 8 of this letter, the limits applied for the Seattle Rep are unprotective, as documented by measurements taken by Landau staff in support of this review. An adjusted limit of 25 dBA would result in noise levels 23 dBA over the impact limit (i.e., predicted level of 48 dBA over limit of 25 dBA), higher still from impact-type equipment.

For DT-2, the location of the cut-and-cover excavation area would be approximately 130 feet from the Seattle Rep. Construction of the DT-2 East Station entrance would occur as near as approximately 60 feet to the west of Seattle Rep. WSBLE DEIS Appendix N.3 does not provide an assessment of airborne noise impacts from surface construction related to DT-2, as received at the Seattle Rep from construction of the East Station entrance or the area of excavation.

Impact Noise

As indicated above, the loudest construction phase would likely include the use of impact equipment such as jackhammers or hoe rams. WSBLE DEIS Appendix N.3, Chapter 3.1.3 correctly summarizes the City of Seattle construction criteria. Specifically, this section notes that impact noises, such as those noises generated by jackhammers and hoe rams, is limited to the daytime hours of 8 a.m. to 5 p.m. weekdays and 9 a.m. to 5 p.m. weekends. The Final Environmental Impact Statement (FEIS) and subsequent construction management plans should include consideration of timing restrictions for these types of impact noises.

Chapter 6.3. Operational Vibration Impacts

The operational vibration section of WSBLE DEIS Appendix N.3 includes predicted impacts from both vibration and groundborne noise during operation of the proposed DT-1 and DT-2 alternatives. WSBLE DEIS Appendix N.3, Tables 6-13 (p. 6-51) and 6-14 (p. 6-53) identify operational groundborne noise and vibration impacts for DT-1 and DT-2, respectively.

Landau finds that additional information and/or corrections are required to evaluate completely the potential for operational vibration and groundborne noise impacts to Seattle Center facilities and resident organizations. The following summarizes these findings:

Groundborne Noise Limits

Seattle Rep, Leo K. Theater

As summarized in Table 2 of this letter and described further on p. 8, the groundborne noise limit for the Seattle Rep Leo K. Theater is not protective enough and should be adjusted to 25 dBA, identified as the FTA Special Buildings limit for a "Concert Hall" (i.e., not based on the 35 dBA limit for a theater). Correcting the limit at the Leo K. Theater would result in a greater groundborne noise impact (23 dBA over limit) for operation of DT-1. Further, for operation of DT-2, correcting the limit would result in a groundborne noise impact (i.e., 3 dBA over limit of 25 dBA).

Seattle Rep, Bagley Wright Theater

WSBLE DEIS Appendix N.3, Attachment N.3H, Table 7-3 identifies groundborne noise levels from DT-2 that are higher at the Leo K Theater (28 dBA) than at the Bagley Wright Theater (19 dBA). The Bagley Wright Theater is substantially closer to DT-2 than the Leo K. Theater, and it would stand to reason that predicted groundborne noise levels at the Bagley Wright Theater would be higher under DT-2. The potential for impact at the Bagley Wright Theater should be re-evaluated to confirm whether impacts are predicted for this space under DT-2.

SIFF Film Center

As summarized in Table 2 of this letter and described further on p. 8, the groundborne noise limit for the SIFF Film Center should be 30 dBA, not 35 dBA. This limit would be similar to "Auditoriums" per FTA definition (see WSBLE DEIS Appendix N.3, Table 3-8, p. 3-10). Further, the limit would be protective of the potential for low-frequency groundborne noise impacts during film screenings, including patron experience and stability of the film projector.

KEXP

As summarized in Table 2 of this letter and described further on p. 9, the groundborne noise limit at the KEXP mastering suite should be adjusted to 25 dBA because this space (currently Production Rooms 1 and 2) is used for audio recording. After adjustment, groundborne noise from light rail operation under the preferred alternative DT-1 is predicted to exceed the limit by 10 dBA (see WSBLE DEIS Appendix N.3, Attachment N.3H, Tables 8-2).

Train Speed

As summarized in WSBLE DEIS Appendix N.3, Table 6-13 (p. 6-51) and 6-14 (p. 6-53), light rail train speeds were assessed as part of the calculation of groundborne noise and vibration. It is noted that there are inconsistencies or potential errors that warrant further clarification.

For preferred alternative DT-1, the train speed through the Seattle Center campus is identified in Table 6-13 as 45 miles per hour (mph) near all noise-sensitive receivers *except* at KEXP, where speeds

are predicted at 55 mph, and at the Seattle Rep and Vera Project where speeds are predicted at 30 mph. Appendix N.3 of the WSBLE DEIS does not provide an explanation for the discrepancy in rail speeds. It is understood that rail speeds would slow when trains are arriving at the station and would increase when trains are departing. However, the discrepancies in rail speeds suggests there may be calculation errors that are relative to the speed of train along the rail alignment. For example, at SIFF the DT-1 speed in Table 6-13 is 45 mph, but at Seattle Rep and Vera Project the speed is 30 mph. These facilities are all in close proximity to each other and one would expect the rail speeds to be similar for each, if not identical.

At KEXP, the predicted DT-1 rail speed is 55 mph, however KEXP building would be located adjacent to the station where trains would be moving at slow speeds or stopped, and not likely to be traveling 55 mph.

Given the above, additional clarification and analysis is needed to ensure that train speed calculations are correct, and that resulting operational groundborne noise impacts from rail operations are correct.

As summarized in Table 6-14, for the DT-2 alternative, the train speed through the Seattle Center campus is 45 mph at all receivers except at the KEXP DJ booth where it is predicted at 30 mph. Although impacts are not anticipated at KEXP from DJ2, the discrepancy in train speeds suggests that additional analysis may be warranted to ensure that the effect of rail speed has been adequately addressed.

Chapter 6.4 Construction Vibration Impacts

Construction-related vibration impacts, including groundborne noise, are predicted to occur from tunneling (Chapter 6.4.1) and surface construction (Chapter 6.4.2).

Chapter 6.4.1 Tunneling Vibration Impacts

During tunneling, the DEIS predicts that vibration impacts would occur only at KEXP during supply train operation (i.e., predicted vibration level of 69 VdB exceeding limit of 65 VdB), and that vibration impacts would not occur at other resident organizations during tunneling. The following summarizes adjustments in vibration and groundborne noise limits, as identified earlier in this letter (see Table 2), that would result in additional or greater impacts to sensitive spaces within Seattle Center.

Seattle Rep

As identified on p. 8 of this letter, Landau recommends adjusting the vibration limit for Seattle Rep to 65 VdB from 72 VdB for both the Leo K. Theater and Bagley Wright Theater. WSBLE DEIS Appendix N.3, Chapter 6.4.1, Table 6-25 identifies a predicted supply train level of 67 VdB at the Seattle Rep. Adjusting the limit at Seattle Rep would result in a predicted vibration level that is 2 VdB over the 65 VdB limit at the Seattle Rep during unmitigated use of the supply train with alternative DT-1.

Regarding groundborne noise, Landau recommends adjusting the groundborne noise limit at Seattle Rep to 25 dBA (see Table 2). This would result in groundborne noise impacts from both cutterhead and supply train operation that exceed what is predicted in WSBLE DEIS Appendix N.3, Chapter 6.4.2, Table 6-27. For example, unmitigated supply train groundborne noise at Seattle Rep is predicted to be 40 dBA, which would exceed the adjusted limit of 25 dBA by 15 dBA and would be clearly discernable and disruptive.

SIFF Film Center

WSBLE DEIS Appendix N.3, Chapter Table 6-25 identifies a predicted supply train level of 65 VdB at the SIFF Film Center, with a limit of 72 VdB. Adjusting the vibration limit to 65 VdB for the SIFF Film Center (as recommended on p. 8 of this letter) would result in supply train levels that just meet this limit. While this does not constitute an impact, Landau predicts that continued exposure to years of vibration from unmitigated supply trains at 65 VdB (the recommended vibration limit for the SIFF Film Center), could result in an impact to the SIFF Film Center. This is based on the SIFF Film Center having previously experienced vibration impacts to its main screening room projector due to vibration from nearby construction.

Regarding groundborne noise, Landau recommends adjusting the groundborne noise limit at the SIFF Film Center to 30 dBA from 35 dBA. This would result in groundborne noise impacts from both cutterhead and supply train operation; currently the WSBLE DEIS Appendix N.3, Chapter 6.4.2, Table 6-27 predicts no impacts at the SIFF Film Center during tunneling. Adjusting the groundborne noise limit would warrant a review of mitigation measures to shield the SIFF Film Center from groundborne noise impacts.

Vera Project

At the Vera Project, an adjusted groundborne noise limit in WSBLE DEIS Appendix N.3, Chapter 6.4.2, Table 6-27 would result in a higher degree of impact than is predicted for DT-1. Currently, Table 6-27 indicates levels of up to 44 dBA from unmitigated supply train operation, a 4-dBA increase over the incorrect 40-dBA limit that is identified in this table. Correcting the groundborne noise limit at Vera Project to 30 dBA (as applied in the DEIS for light rail operation) would result in a noise level that is 14 dBA over the limit. A 14-dBA impact at Vera Project emphasizes the need for mitigation during supply train operation.

KEXP

At KEXP, WSBLE DEIS Attachment N.3, Appendix N.3H Tables 8-2 and 8-3 identify a vibration limit of 72 VdB for the mastering suite. As identified on p. 9 of this letter, the limit should be adjusted to 65 VdB to be consistent with other audio recording spaces within KEXP, and consistent with the FTA criteria for a “Recording Studio.” Adjusting the vibration limit of the KEXP mastering suite (currently Production Rooms 1 and 2) would not change the conclusions in Table 6-25 (impact at KEXP due to supply train use for DT-1) based on predicted impacts to the DJ Booth and studio (live performance

space). However, applying the adjusted vibration limit for the KEXP mastering suite would ensure that migration efforts are equally protective for all vibration-sensitive spaces within KEXP.

Similar to vibration, adjusting the groundborne noise limit for the KEXP mastering suite would not change results identified in Table 6-27 regarding impacts at KEXP, but it would ensure that migration efforts are equally protective for all groundborne noise-sensitive spaces within KEXP.

Tunneling Equipment

WSBLE DEIS Appendix N.3, Section 6.4.1.2 and Table 6-26 (p. 6-66) identify equipment that would generate the highest levels of vibration during tunneling, including the boring machine cutterhead, thrust-jack retraction, and supply trains with steel wheels and jointed tracks.

In the footnote of Table 6-27 (p. 6-67), the WSBLE DEIS states "The predicted levels for the thrust-jack are more than 5 dB below the impact threshold for all sensitive receivers." Groundborne noise predictions for thrust jack retraction is not provided in the WSBLE DEIS. However, Table 6-26 (p. 6-66) provides a range of sound levels of 13 to 29 dBA, as measured between 0 and 200 feet from thrust-jack operation. The range in sound levels for supply trains with steel wheels and jointed tracks is 24 to 28 dBA. While the median level of groundborne noise for supply trains is clearly higher than for thrust jack retraction, there is a potential for thrust jack retraction to generate groundborne noise levels that are as high as supply trains, according to the data provided in Table 6-26. The potential for groundborne noise impact is further increased when the limits for Seattle Rep, SIFF Film Center, Vera Project, and KEXP are adjusted (i.e., lowered).

A more detailed assessment should be provided that further evaluates the potential for groundborne noise and vibration impact from thrust jack retraction.

Chapter 6.4.2. Surface Construction Vibration Impacts

WSBLE DEIS Appendix N.3, Table 6-29, p. 6-70, identifies distances for impact to Special Buildings during surface construction. The minimum distance for the least sensitive spaces (i.e., V.C.-A) is greater than would be realized at KEXP, Vera Project, SIFF Film Center, Seattle Rep and Cornish Playhouse for the equipment identified in this table. For example, the minimum distance for potential impact to a bulldozer under the V.C.-A curve is 125 feet, and the nearest distance to Special Buildings located near surface construction areas (KEXP, The Vera Project, SIFF Film Center, Seattle Rep, and Cornish Playhouse) is 8 feet, as documented in WSBLE DEIS Appendix N.3, Table 6-29.

WSBLE DEIS Appendix N.3, Chapter 6.4.2.2, p. 6-70 states that "Surface construction vibration has not been assessed for Category 1 or special-use buildings near tunnel alignments, However, vibration from surface construction may be of concern if these buildings are close to the tunnel portals or station construction. These activities should be assessed in the Construction Vibration Control Plan"

Given the degree of impact that may occur from surface vibration during construction (see Tables 6-29 and 6-30), and given the need to understand if effective mitigation to these impacts is feasible, a

more detailed assessment of the potential impacts and proposed mitigation should be included in a supplemental DEIS study, in lieu of only requiring future assessments through a control plan. Specifically, for cut-and-cover station excavation, in addition to the potential for usage impacts to tenants of the Northwest Rooms, an additional assessment should be completed that determines the potential for structural damage to KEXP, Vera Project, SIFF Film Center, Seattle Rep and Cornish Playhouse.

Slurry Wall Demolition

The south wall of the DT-1 station design includes a diagonal portion that would extend underneath the Northwest Rooms, including underneath KEXP, Vera Project, and the SIFF Film Center. A profile view of the station is presented WSBLE DEIS Appendix J, Drawing B11-ASX102. Landau understands through ongoing workshops hosted by Sound Transit, that the southern wall of the DT-1 station would be constructed first as a vertical slurry wall, and then widened below grade, toward the south, to provide sufficient space for a station platform. Further, Landau understands that construction methods to expand the station footprint include breaking large portions of the slurry wall with a hoe ram.

The WSBLE DEIS does not include a review of impacts that is specific to the breaking of the slurry wall. However, demolition of this wall would occur very near Seattle Center resident organizations including KEXP, Vera Project, SIFF Film Center, and Seattle Rep. It is anticipated that high levels of vibration would be emitted during this process, and these were not considered or included in the DEIS. Given the high levels of vibration from this activity, the likely lengthy construction schedule, and the many potentially impacted facilities that are sensitive to groundborne noise and vibration impact, there is a high potential for substantial impacts during this phase of construction.

In addition to the use of a hoe ram, excavation of materials behind the slurry wall and directly underneath the Northwest Rooms may result in additional vibration and groundborne noise impacts to these receivers.

Station Entrances

The WSBLE DEIS provides very minimal information on the potential for noise and vibration impact from construction of the station entrances. Specifically, for DT-1 the proposed East Station Entrance would be located directly between the Seattle Rep and Cornish Playhouse. Construction of this station entrance would likely require demolition of existing structures and surfaces, excavation and hauling of materials, reinforcement of station walls, and construction of the station itself. Vibration and groundborne noise impacts are likely to be experienced at both Seattle Rep and Cornish Playhouse.

As identified on p. 8 of this letter, Landau recommends adjusting the vibration limits for the Seattle Rep and Cornish Playhouse to 65 VdB from 72 VdB. Adjusting the limits to 65 VdB would be protective of these facilities during surface construction of the East Station Entrance given the low levels of

ambient vibration at both facilities (see ambient vibration measurement data in WSBLE DEIS Appendix N.3, Attachment N.3H, Table 7-1, and verified by Landau measurements in January 2022).

Given the very close proximity of the DT-1 East Station Entrance to the Seattle Rep and Cornish Playhouse, and the proximity of Seattle Rep to the DT-2 East Station Entrance, as well as the recommended adjustments of vibration limits for Seattle Rep and Cornish Playhouse, an assessment of station entrance construction should be completed to determine the potential for impacts. In addition, an assessment should be completed of the potential for structural damage to these buildings.

Chapter 7. Noise and Vibration Mitigation Measures

Chapter 7.2. Construction Noise Mitigation

DEIS Appendix N.3, Chapter 7.2 (p. 7-16) identifies standard mitigation measures for construction noise. The following summarizes mitigation measures that were not included but should be considered:

General Construction Equipment

Loud construction equipment operating within the cut-and-cover construction area could operate as near as 8 feet from many Seattle Center facilities and resident organizations including KEXP, Vera Project, SIFF Film Center, Seattle Rep, and Cornish Playhouse. As summarized in this letter in Table 4, estimated sound levels at some buildings could reach 104 dBA and could reach up to 43 dBA at interior spaces, potentially impacting noise-sensitive uses such as performances and recording operations at several facilities (see Table 5 of this letter).

Mitigation measures summarized in the WSBLE DEIS are effective strategies to reduce airborne construction noise but do not specifically target the potential for impacts.

Mitigation measures should include an emphasis on administrative controls, scheduling the noisiest activities during times that would be less likely to interfere with noise-sensitive operations. This will require coordination with Seattle Center and multiple resident organizations.

Noise barriers could be installed at locations where airborne noise impacts are predicted or anticipated, and where this is sufficient room to build a wall that is long and tall enough to be effective. Noise barriers should be required as part of the project's Construction Noise Control Plan, and should be considered for:

- The north wall of the Northwest Rooms, shielding KEXP, Vera Project, and SIFF Film Center
- The south and east walls of Seattle Rep, shielding from station and East Entrance construction
- The west wall of Cornish Playhouse, shielding from East Entrance construction
- The north end of the International Fountain Lawn

- The Northwest Rooms breezeway between KEXP and Vera Project, shielding the International Plaza.

Tunnel ventilation fans

Ventilation fans will be required to provide fresh air to crew within the tunnel and could operate 24-hours per day. The location of the fans is not yet defined but could be located very near to several noise-sensitive resident organizations. Due to the low-frequency noise generated by such fans, mitigation may be required to ensure fan noise does not result in impacts to interior performance and recording spaces.

Potential mitigation measures could include quieter fan models, strategic placement of fans, silencers, barriers, or other measures. Further, the EIS should include specific language within the Construction Noise Control Plan regarding exhaust fan noise.

Haul trucks

Noise from idling and movement of haul trucks during construction, as well as noises from driving over uneven or unsecured surfaces, may result in impacts at noise-sensitive spaces along routes accessing DT-1 or DT-2. Haul truck routes are not yet defined however an assessment should be completed to determine if mitigation of noise from haul trucks is warranted.

Further, the EIS should include specific language within the Construction Noise and Vibration Control Plan regarding permitted haul routes that minimize the potential for impact.

Landau anticipates that Mercer Street would likely serve as a primary haul route for either DT-1 or DT-2. If so, the nearest noise-sensitive space along this route with the greatest potential for haul truck impacts is the Seattle Opera Tagney Jones Hall, located at the corner of Mercer Street and 4th Avenue N. Additional impacts may occur at Seattle Rep, Pacific Northwest Ballet, and King FM. A study should be completed to identify the number of trucks per hour during various construction phases, and what the predicted impacts may be to these resident organizations and what mitigation measures are warranted (e.g., limited hauling hours, limited trucks per hour).

Staging Areas

Mitigation of staging area noise should be included in an updated noise impact assessment. Mitigation measures could include strategic location of staging areas to minimize impact from noise emissions related to staging areas, noise barriers, and other measures as defined under WSBLE DEIS Appendix N.3, Chapter 7.2.

Chapter 7.3. Operational Vibration Mitigation

WSBLE DEIS Appendix N.3, Chapter 7.3.2.2 (p. 7-26) provides DT-1 operational groundborne noise and vibration mitigation measures that would mitigate impacts at “recording studios and performance

spaces in Seattle Center" (Chapter 7.3.2.2., p. 7-26). Included are high resilience fasteners along 900 feet of new track between construction alignment stations 79+00 and 88+00.

The FTA Guidance Manual, in Table 6-11 (p. 140) states that high resilience fasteners can achieve 5-dB of reduction in groundborne noise from tracks at frequencies above 40 hertz (Hz). As stated in WSBLE DEIS Appendix N.3, Attachment N.3H, Chapter 8.4, p. 8-20, "Because Sound Transit expects at least 5 decibels of reduction from the tunnel structure that is not included in the prediction model, no additional mitigation measures beyond high-resilience fasteners are proposed."

If the above Sound Transit expectation is true, groundborne noise impacts from DT-1 operation would be mitigated only for KEXP and Vera Project, but not for the SIFF Film Center and Seattle Rep. As noted in this review, Landau recommends that for both SIFF and Seattle Rep, the groundborne noise limits be adjusted to a lower level that is more protective of the uses within these spaces (see Table 2). The result would be DT-1 operational groundborne noise that exceeds the limits at the SIFF Film Center and Seattle Rep by 15 dBA and 23 dBA, respectively. Accounting for an assumed 5-dBA reduction from high resilience fasteners and an additional 5-dBA reduction from the structure itself, the SIFF Film Center and Seattle Rep would experience increases of 5 dBA and 18 dBA above their respective limits. Therefore, because impacts would occur even with high resilience fasteners, Landau recommends that a higher degree of mitigation be considered, such as a floating slab or thicker tunnel materials.

For DT-2, WSBLE DEIS Appendix N.3, Attachment N.3H, Table 7-3 indicates that impacts may occur at the Seattle Rep Leo K. Theater when applying the adjusted groundborne noise limit identified in Table 2 of this letter (i.e., predicted level is 28 dBA; the proposed limit is 25 dBA). Further, as identified in this letter, there may be errors in the calculation of impact at the Bagley Wright Theater that result in predicted groundborne noise impacts at this space from DT-2. Sound Transit should confirm whether impacts are predicted, and the degree to which these impacts might occur. Once confirmed, a reassessment of DT-2 operational mitigation should be completed.

Chapter 7.4. Construction Vibration Mitigation

Chapter 7.4.1 Potential Surface Construction Vibration Mitigation

WSBLE DEIS Appendix N.3, Chapter 7.4.1 (p. 7-31) identifies surface vibration mitigation measures that include pre-construction surveys, construction timing, equipment locations, continuous vibration monitoring, and alternative construction methods. The following summarizes mitigation measures that are not included or that require additional detail:

Construction Vibration Control Plan

As noted in Chapter 6.4.2.2, p. 6-70, "Surface construction vibration has not been assessed for Category 1 or special-use buildings near tunnel alignments. However, vibration from surface

construction may be of concern if these buildings are close to the tunnel portals or station construction. These activities should be assessed in the Construction Vibration Control Plan."

Construction vibration measures should be updated once a more detailed assessment of surface vibration measures is completed to support a Construction Vibration Control Plan. Given the high potential for surface vibration impact during construction, mitigation of surface vibration will be critical to KEXP, Vera Project, SIFF Film Center, Seattle Rep, and Cornish Playhouse.

Slurry Wall Demolition

As indicated, the DEIS does not include detailed assessment of the potential for vibration impacts from demolition of the slurry wall underneath the Northwest Rooms. It is expected that both vibration and groundborne noise impacts would occur at KEXP, Vera Project, and the SIFF Film Center as a result of the slurry wall demolition, and therefore mitigation measures should be clearly evaluated and provided in the Construction Vibration Control Plan.

Chapter 7.4.2 Potential Tunneling Vibration Mitigation

DEIS Appendix N.3, Chapter 7.4.2 (p. 7-32) identifies mitigation measures to reduce the potential for vibration and groundborne noise impact during tunneling. The following summarize key elements of this review:

Supply Train

Details provided in DEIS Appendix N.3, Chapter 7.4.2 are focused on mitigating vibration from the supply train, including reduced supply train speeds, smooth running surfaces, reduced gaps between rail sections, adding rubber pad between ties, and using rubber tires on supply trains.

As noted, DEIS Appendix N.3, Table 6-27 (p. 6-67) summarizes impacts from construction that states unmitigated supply trains could result in groundborne noise levels inside multiple noise-sensitive spaces that are up to 44 dBA (Vera Project), and exceeding applicable noise limits by up to 17 dBA (KEXP). In addition to the mitigating effects of measures identified above, the DEIS Appendix N.3, Chapter 7.4.2, p. 7-32 suggests that rubber tires on supply trains could provide effective mitigation of vibration and groundborne noise at frequencies above 10 Hz.

Given the high level of impact that may occur due to the supply train at multiple noise-sensitive Seattle Center facilities and resident organizations, and that predictive modeling has not been completed to fully evaluate the mitigating effect of rubber tires on supply trains, the Construction Vibration Control Plan should be supported by a detailed assessment of rubber tires on supply trains. The assessment should demonstrate that impacts to each of these spaces are effectively mitigated to below ambient levels.

Thrust Jack

As indicated, mitigation of vibration from thrust jacks may be warranted through slower retraction of the jacks. This assessment should be completed once a more detailed assessment of the potential for impact from this activity is completed. If necessary, mitigation measures should be included the Construction Vibration Control Plan.

Cutterhead

As stated in the DEIS Appendix N.3, Chapter 7.4.2, p. 7-32, it is not possible to mitigate vibration from the tunneling cutterhead. However, as stated, mitigation can be achieved through vibration monitoring and coordination with organization identified as Category 1 and special use buildings. For DT-1, the list of organizations should include MoPOP, Seattle Opera, King FM, McCaw Hall, Pacific Northwest Ballet, Exhibition Hall, Cornish Playhouse, Seattle Rep, SIFF Film Center, Vera Project, and KEXP. For DT-2 the list should include Seattle Opera, King FM, McCaw Hall, Pacific Northwest Ballet, Exhibition Hall, Cornish Playhouse, and Seattle Rep. The FEIS and Construction Vibration Control Plan should specify locations/receivers to be monitored, including the number of monitors and duration of monitoring, as well as the established thresholds above which action is to be taken. Also, the Plan should include clear direction for the General Contractor to coordinate with each of the noise-sensitive resident organizations to provide sufficient advance notice to allow noise-sensitive events to be scheduled accordingly.

Refinement Designs Presented to Public

In April 2022, Sound Transit publicly presented early studies of potential design refinements to the WSBLE DEIS. A copy of slides from Sound Transit's April 2022 presentation is included as an Attachment to this letter. The refinements include an alternative double-canted concept design for the DT-1 station, a refinement that moves the DT-1 station further west, and a mix-and-match alternative that incorporates elements of the alignments of both DT-1 and DT-2. Further study of these refinements will be contingent upon direction from the Sound Transit Board. The following summarizes Landau's initial assessment of these alternative designs:

DT-1 Station Double-Canted Concept

The double-canted design would negate the need to demolish a slurry wall underneath the Northwest Rooms by constructing the station walls with cantered augered piles. The piles, driven at angles underneath the Northwest Rooms to the south, and the Expo Apartment building to the north, would form the walls of the station itself.

This station design would eliminate the need for demolishing a slurry wall underneath the Northwest Rooms. The potential for groundborne noise impacts remains, but likely at much lower levels than would occur during demolition of a slurry wall.

Airborne noise impacts would be anticipated when augers remove soils from the auger bits by shaking (a repetitive banging sound). The impact noise from augering would be limited to between 8 a.m. and 5 p.m. on weekdays, and between 9 a.m. and 5 p.m. on weekends, but could occur for up to 12 months.

As assessment of groundborne noise, vibration, and airborne noise would be required to fully evaluate whether additional mitigation measures are warranted for this alternative station design.

Moving Station DT-1 to West

Under this alternative, the location of the DT-1 station would be located between approximately Queen Anne Avenue and just west of 1st Avenue North (i.e., adjacent to the SIFF Uptown Cinema). Moving the station away from the Seattle Center, including the noise-sensitive spaces within the Northwest Rooms, as well as Seattle Rep, Cornish Playhouse, and others, would reduce the potential for impacts at these spaces and limit impacts to tunneling and operation. A full assessment of impacts would be required for Seattle Center noise-sensitive spaces to confirm impacts and mitigation requirements, but generally the expected degree of noise and vibration impacts is lower than what is presented in the WSBLE DEIS DT-1.

Under this alternative, noise and vibration impacts would occur near the SIFF Uptown Cinema and other sensitive receiving locations (mainly residential). While the SIFF Uptown Cinema is not located on the Seattle Center campus, it is directly tied to the SIFF Film Center, and so impacts under this alternative design are critical to the SIFF Film Center. Based on Sound Transit's presentation, noise and vibration impacts from the DT-1 station located further west would also include assessment of a much larger cut-and-cover footprint.

As assessment of groundborne noise, vibration, and airborne noise would be required to fully evaluate whether additional mitigation measures are warranted for this alternative design.

Mix and Match SLU-Harrison Station to Seattle Center-Mercer Station

The Mix and Match alternative would connect DT-1 to DT-2 by tunneling underneath McCaw Hall and portions of the Seattle Opera and Pacific Northwest Ballet. The depth of the connecting tunnel underneath McCaw Hall is not known but it is expected to be within the approximate range of DT-1 and DT-2 alignments in this area.

Impacts from the Mix and Match design are anticipated to occur due to both construction and operation. Further, noise and vibration impacts are expected to be greater than was predicted in the DEIS for alternatives DT-1 or DT-2 for the Seattle Opera, McCaw Hall, and Pacific Northwest Ballet. Construction impacts from tunneling would occur from cutterhead and supply train operations directly underneath these facilities, and it is very likely that rubber-tired supply trains and/or additional mitigation measures would be required to ensure continued impacts do not occur during tunneling, where groundborne noise limits are 25 dBA.

Operational impacts also are expected along the Mix and Match route. An assessment would need to be completed to determine the extent of these impacts. Mitigation required to bring operational noise and vibration impacts below the limits for Seattle Opera, McCaw Hall, and Pacific Northwest Ballet would likely include measures beyond what is currently proposed for WSBLE DEIS for DT-1 or DT-2 at Seattle Center, such as floating slabs and thicker tunnel walls.

LANDAU ASSOCIATES, INC.

Kevin Warner
Principal, Permitting and Compliance

Attachments

Figure 1. Overview Map

Figure 2. West Seattle and Ballard Link Extensions PowerPoint Presentation (Sound Transit, 4/8/2022)

West Station Entrance DT-2
Below Grade Platform
East Station Entrance DT-2
Mercer Street
Founder's Court
Kreielsheimer Promenade
Seattle Opera & King FM
Queen Anne Avenue N
1st Avenue N
Waren Avenue N
4th Avenue N
Theatre Commons
Cornish Playhouse
Pacific NW Ballet
McCaw Hall
SIFF Cinema Uptown
Seattle Repertory Theatre
Below Grade Platform
East Station Entrance DT-1
Republican Street
West Station Entrance DT-1
KEXP
The Vera Project
SIFF Film Center
International Plaza (Northwest Courtyards)
International Fountain Lawn
Memorial Stadium
Climate Pledge Arena
Harrison Street
Fisher Lawn
Museum of Pop Culture
5th Avenue N
Thomas Street
Mural Amphitheater

Note
1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Basemap source: Esri, 2022. Sound Transit. HTNB.

Legend
DT-1 Tracks
DT-1 Platform and Stations
DT-1 Construction Areas
DT-2 Tracks
DT-2 Platform and Stations
DT-2 Construction Areas

0 180 360
Scale in Feet

LANDAU ASSOCIATES

Sound Transit WSBLE DEIS
Seattle Center
Seattle, Washington

Overview Map

Figure 1

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