



DEIS Comment Letters

Ballard Link Extension Community and Arts Organizations



April 28, 2022

WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 S. Jackson St.
Seattle, WA 98104

To Whom It May Concern:

On behalf of 4Culture, we are submitting comments on the Draft Environmental Impact Statement for the West Seattle and Ballard Link Extensions Project.

4Culture, or the Cultural Development Authority of King County, is a public authority organized pursuant to RCW 35.21.730 through 35.21.759 and King County Ordinance 14482. The importance of culture in this region is codified in our charter which states:

Arts, heritage, historic preservation and public art enhance the quality of life for the region's citizens, foster creativity and an ethic of stewardship and citizenship, stimulate economic development, and attract visitors. A vibrant cultural community is an essential part of building a regional sense of place and reputation as a national and international cultural center. Therefore, the Cultural Development Authority of King County is established to support, advocate for, and preserve the cultural resources of the region in a manner that fosters excellence, vitality, and diversity.

To fulfill the obligations of our charter, 4Culture has honed our mission, vision, and values to focus on racial equity. We recognize that historic and current barriers to cultural funding and support have resulted in racially disparate outcomes in access to culture. We are actively working toward racial equity in our funding, commissioning, and other work.

4Culture's core values include a belief that "Culture is a right for all: The right to express and experience culture lies at the core of who we are individually and as a community. We protect and advance this right for everyone." 4Culture's program areas of Public Art, Preservation, Heritage, and Arts support the intersecting and evolving disciplines, forms, and places where culture is expressed and experienced.





4Culture Comments on the DEIS

We thank Sound Transit for the opportunity to comment on the alternatives for the WSBLE project. Our particular focus is on the alternatives presented for Chinatown-International District. Our review of the DEIS is shaped by 4Culture's focus on racial equity and our core value that "Culture is a right."

From our analysis and from input from our constituents, we believe that the Fifth Avenue Alternatives would pose a dire threat to the preservation and cultural continuity of Chinatown-International District. While the DEIS says the Seattle Chinatown Historic District is "historically and culturally important to the Asian community and the city of Seattle" (Page 4.3.4-8), we assert that the district is broadly historically and culturally important at the county level at which 4Culture operates, as well as at the state level as confirmed in its National Register designation. Moreover, the district has borne disproportionate impacts from major transportation and sports facility projects, as acknowledged by Sound Transit and the City of Seattle in their racial equity analysis of the WSBLE project. In consideration of these factors, we ask Sound Transit to put greater emphasis and weight on both the physical, historic fabric of the CID as well as its intangible cultural heritage and neighborhood cohesion.

Historic preservation regulations and processes tend to emphasize architectural significance and integrity in determining what is an adverse effect, and in deciding what is important to save. The 5th Avenue alignment alternatives for the CID have a greater detrimental impact by these measures, including the demolition of one contributing building to the National Register listed Chinatown Historic District (418 5th Avenue South), and one National Register-eligible building, the Seattle First National Bank-International District Branch. In comparison, the 4th Avenue alternative primarily impacts Union Station, through construction disruption and partial property acquisition.

However, beyond the straightforward physical impacts, in the CID the built environment is inextricably linked to a cultural community that has survived and thrived despite cycles of disinvestment and gentrification, as well as multiple major, disruptive public projects. The DEIS states, "Because the number of acquisitions would be relatively small and would not include major social resources, community facilities, and the project would be underground except for station entrances and on the edge of the neighborhood along existing transportation and transit facilities, the project would not directly impact neighborhood cohesion." (Page 4.3.4-16) The DEIS discounts the impacts of demolition and displacement, being at the "edge of the neighborhood." But this edge is critical as both a border and gateway; it defines the geography and identity of the neighborhood.



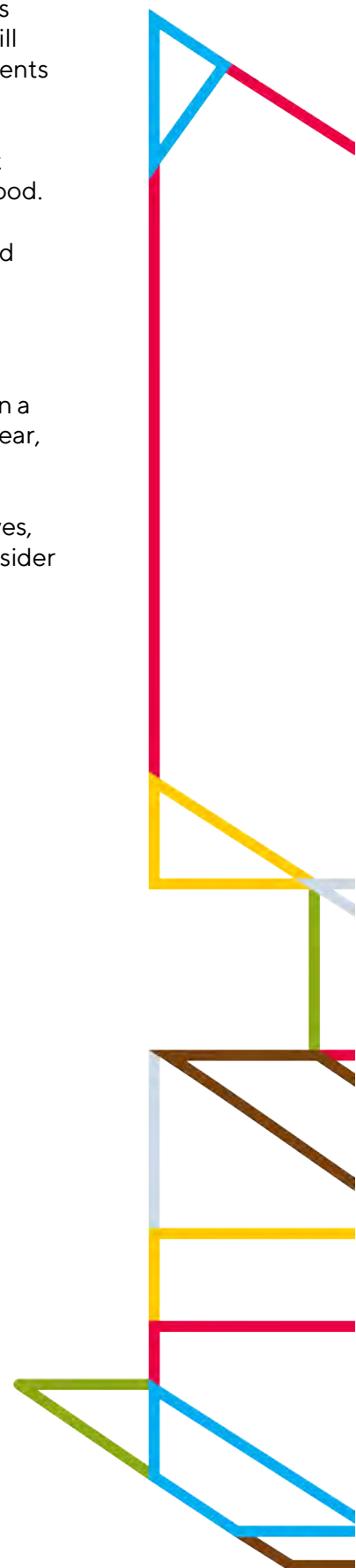


We urge Sound Transit to dig deeper in its understanding of the impacts of the 5th Avenue alternatives that will result in multiple building demolitions (including one “non-contributing” building), and other disruptions that will result in 19-27 business displacements and 170-230 employee displacements according to an analysis by Historic South Downtown. In the CID, small businesses are more than economic drivers; they **are** social resources, community facilities, and cultural anchors. Their temporary or permanent displacement will fray the social and cultural fabric of a fragile neighborhood.

While harder to measure, the anticipated impacts on cultural heritage and neighborhood cohesion are critical for Sound Transit to explore before identifying a preferred alternative. These impacts also must be more holistically understood, and community voices heard, to fairly mitigate impacts to the neighborhood. Again, we emphasize that displacement of businesses and employees will not just be felt in an economic sense, but in a cultural sense, as well. We urge Sound Transit to fully acknowledge the clear, negative impacts of the 5th Avenue alternatives on cultural heritage and neighborhood cohesion. In addition, we advocate for a more complete analysis of the impacts of displacement and disruption for **both** alternatives, so that mitigation measures can be developed that comprehensively consider the unique and highly significant cultural community of the CID.

Sincerely,

Brian Carter, Executive Director
Claire Miccio, Government and Community Relations Manager
Dana Phelan, Preservation Program Director
Chieko Phillips, Heritage Program Director





A/NT Gallery
305 Harrison St
Seattle WA 98109

Official Comment on the West Seattle and Ballard Link Extensions by the Seattle Center Resident Organization A/NT Gallery located at 305 Harrison St. The building is referred to as the International Fountain Pavilion or the Sweden Pavilion.

The following comments pertain to the “Preferred Alternative” for the Seattle Center Station in the Downtown Segment of the Ballard Extension, as referenced in Chapter Two, pages 2-61 and 2-62 and throughout the DEIS as “Seattle Center Station” in the “DT-1 and DT-2 Segments”

About A/NT Gallery

A/NT Gallery is a federal non-profit, all volunteer, co-op arts organization, that has been in continuous operation since 1988. We are one of the longest running non-profit co-ops in the Seattle Metro area. We serve, roughly, one hundred local artists each year who are our “members”. The majority of our members have no formal education in the arts and have had little, to no, access to formal galleries.

As members come and go, the proportion of local artists without formal education is maintained through our commitment to the “non-juried format”. Jurying is the process of determining a piece of artwork or an artist’s collection is worthy of public display based on a set of criteria that are usually extremely biased in favor of; racial, cultural, and economic privilege. In addition to our members, every year the gallery is host to 10 to 12 local arts organizations displaying art produced by specific populations of local underserved artists, including those who are unsheltered, disabled, blind, or those currently incarcerated in our justice system and many more. A/NT Gallery is always free admission and open to the public, including all of our events, providing access to art for over ten thousand patrons each year.

Positive Impacts of the Seattle Center Station

In general, A/NT Gallery is in support of a Link Light Rail station that can serve Seattle Center. This will increase accessibility to the arts organization on campus which is in line with A/NT Gallery’s mission of accessibility.

However, we have some serious concerns regarding the current “Preferred Alternative” location of the station being proposed in this DEIS. Please note: these comments are confined to the Seattle Center, and no other portion of the project.

Construction Concerns:

Construction impacts to A/NT Gallery. Major construction happening adjacent to our building has had significant negative effects. While work was going on for the new Climate Pledge Arena, our walk-in patronage dropped by nearly 50%. This had a direct negative effect on the gallery’s ability to execute our non-profit mission of giving underserved artists public exposure, as well as being able to sell their

artwork. The ongoing noise and disruption made retaining volunteer staff more difficult. The direct negative impacts of construction, drawn out over a longer period, could drastically decrease artists participation in our gallery.

We learned from our experience, during the construction of Climate Pledge Arena, that the EIS evaluation of anticipated impacts to A/NT Gallery's building were understated and incorrect. Unplanned impacts had a negative effect on our gallery and its mission as listed below:

- Ground water came up through the floor of our gallery and damaged 232 square feet of our flooring and had to be replaced.
- Three unplanned closures of our gallery, with little time to notify our artists and the public of the closures.
- Window damage.
- During one particularly bad day of vibration our hanging system came off the wall.
- Construction vehicles blocked our entry and exit for weeks at a time.
- Fences and construction staging blocked two of our south windows for several years.

This has been educational; we wish to go forward better informed.

Chapter 4 page 4.3.16-30 references the "Sweden Pavilion" and states it will not be adversely affected. Our facilities and operations management were not involved in the process Sound Transit used to make this determination. As listed above, the process used to determine this may not have been adequate in the past. In addition, we are the only all volunteer visual art gallery that continually serves vulnerable populations on campus (such as the elderly and the disabled) we believe that past efforts did not sufficiently account for the sensitivity of the activity going on in our building. We need to see more information regarding potential construction impacts and more direct communication from Sound Transit specific to our building and the continuation of our mission on campus during the construction.

Financial Mitigation of Construction impacts on business activities

Though there is reference to the potential financial impact on business in the Appendix L, there is no specific reference to financial mitigation for the impacted businesses. What we saw with the construction of the Climate Pledge Arena, is that preemptive investing of marketing dollars into the Seattle Center campus in order to get the word out that we are all still open and conducting events during the construction on campus is helpful to mitigating the negative impacts of construction on business activity.

Campus Impacts

We wish to convey our support of the REP, KEXP, Vera Project, and SIFF. Together we make a rich tapestry of accessible arts on the Northwest corner of campus. If the construction or lasting impacts of the station could jeopardize the ability for any one of them to thrive and/or continue to provide their programming on campus, then the price of the station in this location is too high.

Putting a public transit station on campus will have lasting, potentially negative, effect on the campus, including the loss of the heritage trees. The gallery is concerned about practical questions of safety and hygiene. There is no mention of Sound Transit providing public bathrooms in this DEIS.

Transportation consequences DEIS Chapter 3

Emergency services access: Chapter 3 (page 3-74) refers to providing updates to local emergency services. This does not adequately address concerns of Fire and Ambulance access to our corner of the campus during construction.

There is no reference to maintaining safe bicycle routes through the construction.

Cultural Impacts

Last, but not least, is the ongoing impact to the culture and feel of the campus. The above ground station will be in a space restricted area, and we are concerned about crowd control, particularly when large events let out.

This campus has always been a quiet refuge, a kind of park land. Putting this station on the Seattle Center campus is the cultural equivalent of putting a transit station right inside Central Park in New York.

In general, A/NT Gallery supports the station, however, not located within the boundaries of the Seattle Center campus. In Sound Transit Workshop #3, April 8, 2022, Potential Refinements, two alternate station locations were presented. (Reference- images (screenshots) attached on page 4, below.) A/NT Gallery would like **to request more research be done on these two options.**

Conclusion

We need more direct communication from Sound Transit. Better understanding of construction impacts.

The decision we make now will affect the generations to come after us, and it is imperative that as our wonderful city grows, we preserve the Seattle Center as a place where all of Seattle's diverse population can enjoy the arts, music, cultural activities, sports and time spent relaxing away from the din of traffic and noise of train stations.

Thank you for your time and consideration. This document was created by dedicated volunteers, not by professional legal counsel or a consulting firm.

We thank the volunteers who directly contributed to this document:

Michelle Ishimitsu (A/NT Gallery Board President)

Michael Piper (A/NT Gallery Board Vice President)

David Sokal (A/NT Gallery Board Treasurer)

Comments Submitted by

A/NT Gallery

Board Of Directors

April 27th, 2022

Alternative One: Station Box Moved West



Alt 1 – Station Box West Strengths

- Avoids permanent and construction impacts to public campus, facilities, and resident organizations
- Preserves campus scale, aesthetics, recreational space and tree canopy
- Allows for surge crowd dispersal
- Catalyze more Uptown TOD vs DT-1
- Minimal impact to DT-1 segment alignment

Alternative Two: Mercer Mix & Match



Alt 2 – Mercer Mix & Match Strengths

- Avoids permanent and construction impacts to public campus, facilities, and resident organizations
- Preserves campus scale, aesthetics, recreational space and tree canopy
- Creates a new gateway to Seattle Center
- Best surge crowd dispersal
- Catalyze more Uptown TOD vs DT-1
- Entrances both north and south of Mercer



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WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 South Jackson Street
Seattle, WA 98104

Re: Comments of Alliance for Pioneer Square on the Draft WSBLE EIS

Dear Ms. Swift:

Thank you for considering these comments of the Alliance for Pioneer Square on the Draft EIS for the West Seattle/Ballard Line Extension (“WSBLE”) of Sound Transit’s light rail system. This letter focuses on the impacts and mitigation for the Chinatown-International District (“CID”) segment, station, and track alignment because that is the part of the larger WSBLE project that directly affects Pioneer Square.¹ All alternatives for the CID segment will be within the boundaries of the Pioneer Square Historic District or directly abutting it. Construction of all alternatives will have significant adverse impacts on Pioneer Square. The choice of the preferred alternative may positively or negatively impact Pioneer Square for the next hundred years.

¹ Alliance for Pioneer Square advocates for a community process to name the future station within this segment that includes all stakeholders and integrates both neighborhoods. The boundaries of Pioneer Square encompass all of Union Station, so the Fourth Avenue station alternatives are within Pioneer Square and the Fifth Avenue alternatives immediately abut it. Passengers heading to Pioneer Square will disembark at what the EIS calls the CID station. With Pioneer Square’s employment base, including the Weyerhaeuser headquarters, numerous high tech businesses, and its active street level retail, the ridershed for the station is at least as great to Pioneer Square as to the Chinatown-International District. How the segment is named translates into how the EIS analyzes the area. Throughout the DEIS, the focus is on the Chinatown-International District and Pioneer Square is ignored, but never more so than in the Social Resources, Community Facilities, and Neighborhoods discussion, p. 4.3.4-8. There the DEIS discusses the Chinatown-International District as a hub of Asian-American community, finding that it has high neighborhood cohesion. That is undoubtedly true. But the DEIS ignores that the Pioneer Square neighborhood, which also contains

a variety of uses including, mixed-use, residential, commercial, office and parks. This area has many restaurants... The district has historic cultural attractions.... a high percentage of the population... is low income. Many social resources in this segment include senior and low-income housing...

as well as numerous social service organizations. (Paraphrasing DEIS discussion of the Chinatown-International District at 4.3.4-8.) The success of Pioneer Square depends on the interaction of street level uses with employees coming to offices from throughout the region, tourists arriving from across the world at the transportation hub formed at King Street and Union Stations, and the increasing numbers of housing units within the District. By ignoring Pioneer Square as a unique neighborhood with its own neighborhood cohesion and social resources, the DEIS ignores significant adverse impacts of the construction process, as well as the potential benefits to Pioneer Square from the selection of one versus another of the alternatives.

Who We Are

Alliance for Pioneer Square is a community and economic development organization that exists to foster and preserve the qualities and characteristics that make the Pioneer Square neighborhood historic, and that have made it one of the most unique, inviting, and exciting neighborhoods in Seattle. Alliance for Pioneer Square has helped keep the Pioneer Square neighborhood vibrant by promoting a mix of office and residential uses along with shopping, dining, and cultural attractions, with pedestrian-oriented streetscapes, human-scaled buildings, and friendly public spaces. Alliance for Pioneer Square has been the voice of the Pioneer Square neighborhood in many City and regional planning processes, including the Jackson Hub Planning process over the past several years. This planning effort was intended to address the ongoing issues associated with imminent large-scale transportation and construction projects, including Sound Transit's WSBLE, impacting the intersection of S. Jackson Street between Third and Fifth Avenues, where the Pioneer Square and Chinatown-International Districts meet. It has sought to actively partner with Sound Transit in setting goals for Jackson Hub and the ways that the WSBLE project can enhance the public realm of the area, and also avoid creating major setbacks in the neighborhood's efforts to continue its upward trajectory. It has been a forceful advocate for preservation and enhancement of the public realm within and surrounding Pioneer Square.

Over the last 30 years, the Pioneer Square neighborhood has succeeded in attracting hundreds of millions of dollars in new investments, hundreds of new residential units, and has become not just the home of the new headquarters of Saltchuck and the Weyerhaeuser Company, both regional icons, but also of many technology startups – all while continuing to host the highest concentration of social service providers in the region and a wide mix of socioeconomic groups. The entirety of Pioneer Square is within the “walkshed” of all the proposed locations for the new station, and employees at Saltchuck, Weyerhaeuser, and many high-tech companies throughout Pioneer Square will use this new regional transportation hub.

Pioneer Square is not simply an area that happens to have several historic buildings, it is a historic district, listed as such on the National Register of Historic Places. The District itself functions as an entity which must be protected, and the health of the District as a whole is critical to the survival of individual buildings. Historic buildings require regular and expensive maintenance or they will, in due course, become derelict and disappear. To be able to conduct that maintenance, buildings must be financially successful. If access is cut off to the District, buildings that are not physically touched by the project may be put at risk because without the customers and suppliers that keep the occupants of the buildings healthy, the buildings will lose the resources to keep it viable.

Pioneer Square's remarkable balance of old and new, small businesses and large employers, and all types of people, is a fragile thing, however. Pioneer Square has been forced to survive multiple decades of major public projects disrupting access to and life within the neighborhood including early projects such as the implosion of the Kingdome and construction of Lumen Field to more recent megaprojects like the Alaskan Way Viaduct Replacement Project, the Elliott Bay Seawall Replacement Project, the First Avenue water main replacement project, and the Center City Connector project. The Covid-19 pandemic, combined with the current crisis of homelessness in Seattle, has been brutal to much of downtown Seattle, including Pioneer Square. While Alliance for Pioneer Square is confident that Pioneer Square will spring back, at

this time it needs all the help that public bodies can give it. In the case of Sound Transit, that includes particular care that it minimize and mitigate the impacts of the construction of WSBLE on the neighborhood, while also selecting the alternative which will provide the greatest long-term benefit to the transportation hub at King Street and Union Stations and to the public realm where Pioneer Square and the Chinatown-International District meet.

How We Approach the WSBLE Project

Alliance for Pioneer Square expects and intends to continue to partner constructively with Sound Transit throughout the WSBLE project. We understand the importance of the WSBLE Project for the region as a whole, and for the City of Seattle. While it is a critical piece of our regional transportation infrastructure, if done well, it can have very positive long-term effect on Pioneer Square. If done badly, those impacts could have very negative long-term consequences. Regardless of the alternative chosen, the construction process will have very high negative impacts on all downtown Seattle, including Pioneer Square. The City's experience with the construction of the Third Avenue bus tunnel in the late 1980s showed that mega-transportation construction projects can inflict long-term damage on the neighborhoods where they are built. On the other hand, our experience with more than a decade of major infrastructure projects on our doorstep or through our neighborhood has demonstrated that with thoughtful and adequate mitigation, the construction disruptions can be survived with the neighborhood largely intact. That experience tells us that cooperation between Alliance for Pioneer Square and Sound Transit is essential if we are to avoid the greatest adverse consequences and achieve the greatest public benefits from this major public investment. Cooperation is, obviously, a two-way street. Alliance for Pioneer Square will expect that Sound Transit treat us as a partner in return.

Identifying a Preferred Alternative for the CID Segment

Selection of the preferred alternative for the CID segment depends on which benefits and adverse impacts one weighs most heavily. All alternatives will have significant adverse construction impacts, for which adequate mitigation is essential to prevent long-term damage to the area. The two proposed alignments (4th Avenue and 5th Avenue) would have different outcomes for transportation mode connectivity. The cost of the alternatives differs. No single alternative rises to the top as the obvious best overall choice without further design and study. Therefore we offer you our priorities, what we prefer about the proposed alignments, and what our concerns are about the project, for the Sound Transit Board to consider while selecting a preferred alternative.

Alliance for Pioneer Square has long sought to improve connectivity, transit, and transportation access to the Pioneer Square neighborhood, as well as improve public realm connections between Pioneer Square, the Waterfront, the Stadium District, and Chinatown-International District. Alliance for Pioneer Square, Historic South Downtown, and Seattle Chinatown International District PDA collaborated to define a vision for intentionally developing King Street and Union Street Stations as a cohesive transportation hub (see the Jackson Hub Concept report). Our work together sought to improve the public realm around these stations, which today serves as the largest west coast transportation hub north of San Francisco. Our shared goals include improving connections between the neighborhoods, and improving transit access to and through Pioneer Square and the CID. When we consider the alternatives for the CID segment with this priority in mind, we believe the Fourth Avenue Shallow Alternative (CID-1a) achieves these priorities. This is primarily because it offers the

most direct physical connections between light rail, Sounder, and Amtrak modes, it creates new direct light rail connections to the Pioneer Square and Chinatown-International District neighborhoods and to the Stadium District, it places light rail closer to the ferry system and the waterfront, and it centers the transportation system inside the existing Jackson Hub footprint. Sounder riders coming from Pierce, South King, and Snohomish Counties would have more direct access to light rail at the new Weller Street entrance, allowing for greater transfer ease from regional commuter rail to local light rail. Transfer ease, better connectivity than today, and more intentional transit hub development are benefits that would be shared by all regional transit users. The Fourth Avenue Shallow alternative appears to offer the prospect for the greatest long-term benefit to the City and Pioneer Square, and the greatest return on the region's enormous investment in the WSBLE project.

The Fifth Avenue Shallow alternatives (CID-2a and 2a diagonal) would add one new light rail connection inside the CID neighborhood, at a similar location as the existing light rail station today. The new station entrance would be outside the existing transportation hub, and would create a more sprawling effect between modes. While a Fifth Avenue alignment would essentially result in "no change" to Pioneer Square's existing light rail access, it would represent a lost opportunity for the region to center regional transportation improvements closer to job centers and regional attractions. Fifth Avenue Shallow alternatives may provide a more direct opportunity for transit-oriented development and for public realm improvements inside the CID, but as of writing this letter, it remains unclear in the public discourse if those opportunities are considered a benefit relative to the cost incurred by the CID neighborhood resulting from the myriad significant construction impacts and the destruction of historic buildings and displacement of businesses.

WSBLE is a hundred-year investment in mobility of the region. In its advocacy, one of Alliance for Pioneer Square's consistent themes is that public investment should enhance the public realm. The Fourth Avenue Shallow alternative would create a station mezzanine level beneath 4th Avenue, allowing transfers between modes to occur beneath the street, and separating pedestrians from traffic. Grade-separated crossings create improved safety by giving pedestrians an option to crossing an active street. Separating vehicles and high volumes of transit users can improve traffic safety and improve the flow of people to and from the transit system, especially during surge events from the nearby stadiums and event centers.²

Another consistent advocacy theme from Alliance for Pioneer Square, and from some CID neighborhood stakeholders, is that Union Station should be activated for transportation purposes and economic development opportunities, the plaza in front of Union Station should be enhanced, and the intermodal connection of the King Street Station should be tied more closely to Union Station. That is possible if a Fourth Avenue alternative is chosen. Either of the Fifth Avenue alternatives will simply increase the extent to which King Street Station and Union

² This same principle of separating people from vehicles and other modes, while creating important connections to transit is most recently illustrated at the Montlake Triangle Project. Sound Transit, Washington State Department of Transportation, and the University of Washington collaborated to deliver the Montlake Triangle Project as a solution to alleviate concerns about the volume of transit patrons crossing the Burke-Gilman trail, and provide improvements at existing crosswalks at Montlake Boulevard as part of the Montlake area improvements being made in the SR 520 Bridge Replacement and HOV project. A key distinction between the Montlake Triangle Project and the Fourth Avenue Shallow alignment is that the public realm benefits are built in to the WSBLE project, and do not require a separate project effort like the Montlake Triangle Project.

Station are divorced from each other, will fail to improve existing intermodal connectivity, will provide no direct basis to enhance the plaza in front of Union Station, and will not increase the extent to which the use of Union Station returns to transportation.

One of the disadvantages of the Fourth Avenue alternatives, viewed alone, is that they require rebuilding of the Fourth Avenue South Viaduct and other surrounding bridges. At the moment, it is tempting to put off that expense, and to defer solving the transportation challenges that come along with bridge replacement. The reality is, however, that several bridge structures abutting the Fourth Avenue South Viaduct, including the 2nd Avenue Extension and Jackson Street bridges, are currently undergoing study for replacement by the City of Seattle as part of the current Move Seattle levy Bridge Rehabilitation and Replacement subprogram. Bridges surrounding Fourth Avenue are in need of repair and replacement, and the construction impacts widely feared around a Fourth Avenue alternative, will come to pass sooner than later. The worst-case construction scenario for Pioneer Square is to have survived the last ten years of infrastructure mega-projects, survive WSBLE, and then shortly thereafter, have to face the reconstruction of 2nd Avenue Extension and Jackson Street—impacts many have touted as a negative scenario as part of the Fourth Avenue Shallow station alignment alternative. It is far better to get that infrastructure upgrade dealt with at the same time as WSBLE, so that when WSBLE is completed, the sole focus can be on moving forward.

Sound Transit disclosed in the Draft EIS that the Fourth Avenue Shallow alternative would not permanently close King County Metro Ryerson Base but would impact the bus entrance to the base during construction of the tunnel portal and reconstruction of the Stadium Station. Sound Transit also disclosed that staged construction could likely occur in a manner that would prevent closing Fourth Avenue South completely during a majority of construction, but that full closures would occur at several intersections, and along streets north of the proposed station. Sound Transit further disclosed the length of time to construct the Fourth Avenue Shallow station alternative could be years longer than the other alternatives considered in the CID segment but would not know that with certainty until final design. Without better information about the ability for Sound Transit to minimize the issues described, it is difficult to understand if the challenges presented can be reasonably solved and mitigated. Alliance for Pioneer Square requests Sound Transit advance the Fourth Avenue Shallow station alternative for more design and study, meaningfully seek to reduce the estimated time for construction, further study the extent and need for roadway and bridge rebuild along Fourth Avenue, and evaluate minimizing the impacts to traffic, King County Metro bus bases, and parking resources identified as important to meeting the Stadium District Master Use Permit conditions.

Fifth Avenue alternatives appear to have fewer traffic and transportation impacts during construction, however, construction of those alternatives would still affect important parking resources necessary to meet the Stadium District Master Use Permit, and would present challenges for King County Metro Central Base. Should Sound Transit choose to further evaluate Fifth Avenue alternatives, additional study and engineering would need to be done to minimize access impacts to parking resources required by the Stadium District, and operational impacts to King County Metro bases within the construction area.

On balance, we believe the Fourth Avenue Shallow alternative will provide the most connectivity and receive the most use by people coming to and from Pioneer Square, as well as the Chinatown-International District, and from people arriving in Seattle at King Street Station

via Sounder or Amtrak.³ Having made the enormous investment in the WSBLE project, it is important that the alternative chosen is one that will receive the most use.

The Fourth Avenue alternatives also offer far more opportunity to reactivate Union Station for transportation use – its original purpose, far more opportunity to strengthen the multi-modal hub created by the Sounder and Amtrak lines at King Street Station, the Seattle Streetcar, the Washington State Ferry terminal, and the numerous bus routes that use Second, Third, and Fourth Avenues, and to enhance the pedestrian environment at the Union Station Plaza, which is the hub joining Pioneer Square and Chinatown-International District. If the Fifth Avenue alternatives are chosen, the currently awkward and confusing links between Sounder and Amtrak in King Street Station and the light rail station on Union Station will only become more confusing. The ferry terminal will be further away and less convenient. There will be no reason to reimagine the Union Station plaza to make it more welcoming and useful—an outstanding promise made to the CID community when the existing light rail station was installed. Those will be missed opportunities to enhance the public realm.⁴

Why We Believe Other Alternatives Can Now Be Rejected

After evaluating the information presented in the Draft EIS, and considering our priorities for increasing transit access to Pioneer Square and increasing connectivity between neighborhoods, we are ready to urge Sound Transit to reject the two deep station alternatives (CID-1b and CID-2b). With deep station access depending on elevators, we do not believe they will be used as much as they should be and may even result in diversion from the station. While Sound Transit's Beacon Hill station relies entirely on elevators for access, it does not experience the sort of surge use that we would expect at the CID station. (It is also difficult to measure whether use of light rail to and from the Beacon Hill station is deterred by the fact that it is served only by elevators). Surge events would be particularly common when there are events at the stadiums and event centers or in Chinatown-International District. One of the many important functions of light rail is to move people to and from major events without their automobiles, so it is critical that individuals not be dissuaded from taking light rail by the fear they will be stuck on the platform in a crowd, waiting to get onto an elevator. Some number of people will be claustrophobic and will avoid a station that depends on an elevator. Sound Transit also has recently experienced equipment failures of its escalators and elevators at some stations. An equipment failure at a station that depends on elevators could leave many riders unwilling to use the station thereafter. We assume the deep alternatives would have emergency stair access for people to exit the station, however, many people would find needing to climb 180 to 190 vertical feet of stairs extraordinarily difficult and in some cases dangerous. So, while it is tempting to

³ Table 3-20 predicts that the Fifth Avenue alternatives will experience more PM peak hour transit transfers than the Fourth Avenue alternatives. We have found no explanation for that assumption, and do not expect it to be true. But regardless of transit transfers, we believe the Fourth Avenue alternatives will be more attractive to transit riders coming to jobs within Pioneer Square, and that transfer from Amtrak and Sounder trains in King Street Station to the Fourth Avenue station will be more convenient than to a station on Fifth Avenue.

⁴ Instead, the project will remove several contributing historic structures the Chinatown-International District, which is a loss that cannot be mitigated. The DEIS's characterization of that demolition of historic structures as an "opportunity for transit-oriented development" seems like an effort to make a silk purse from a sow's ear. Razing historic buildings will indeed place the burden on Sound Transit to make sure that the land is put back to the best possible use. But it does not mitigate an irremediable impact.

prefer the shorter construction disruption and the lower cost of the deep alternatives, we believe the end result would not justify the construction and cost benefits.⁵

We also express real concern for the construction effects and potential gentrification risk posed by the Fifth Avenue shallow alternative. We will leave it to the Chinatown-International District residents and stakeholders to explain their concerns about the demolition of historic structures, the loss of small business, the loss of on-street parking, the massive increase in heavy construction traffic through the neighborhood, and the impact on Hing Hay Park. But quite apart from the adverse impacts on the Chinatown-International District, the Fifth Avenue alternatives will do nothing to enhance the connection between Union and King Street Stations, it will do nothing to enhance the public open space in front of Union Station, and it will do nothing to enhance the multi-modal transportation network that comes together in Pioneer Square. In general, it will be a missed opportunity to develop regional transportation resources within an existing transportation hub, and it will damage the Chinatown-International District with little or no redeeming feature other than seemingly minimizing impacts to transportation during construction. If Sound Transit intends to advance Fifth Avenue Shallow alternatives to the Final EIS, it must perform additional design and study to address design questions and concerns raised by the community, to further minimize impacts, and provide the information necessary to define any mitigation needed, if mitigation for such impacts are determined possible.

Additional Analysis that Needs to Be Addressed in the Next NEPA document

39 CFR §775.11(c)(5)(iv) requires an EIS to “describe appropriate mitigation measures not considered to be an integral part of the proposed action or alternatives. The EIS is to be used, with other analyses and materials, to decide which alternative should be pursued or whether a proposed action should be abandoned or other courses of action pursued. 39 CFR § 778.9(4). Mitigation measures identified in an environmental impact statement and accepted in a decision must be implemented. 39 CFR § 778.9(7),

The Draft EIS is notable in the extent to which it reserves analysis of mitigation for later. There is very little, if any, analysis of what measures can be taken to minimize and mitigate the adverse transportation impacts of the construction process. Because under any alternative, the construction impacts will be of such a duration that they will do severe, long-term damage to both Pioneer Square and the Chinatown-International District if not minimized and mitigated, additional analysis of what mitigation is possible is required before the Sound Transit Board can make a final decision on the alternative for the CID segment. As discussed above, we believe the deep station alternatives can now be abandoned, but Sound Transit needs to use the next few months to focus on potential minimization and mitigation of the impacts of the shallow alternatives, so that a more informed decision, with further community input, can be made before the final preferred alternative is selected.

⁵ Although our objection to the deep alternatives is primarily based on their likely lack of use at critical times due to their dependence on elevators, we would also note that the fact that alternative CID-1b would eliminate the Ryerson Bus Base is a significant adverse impact that cannot easily be mitigated. Metro has to have a bus base. It requires a large area, and it needs to be close to the destination of many of Metro’s buses. There is not another six-to-seven-acre site that is likely to be available without significant displacement of other businesses. The cost and impacts of relocating the Ryerson Bus Base needs to be viewed as part of the cost and impacts of alternative CID-1b.

Mitigation That Will Be Needed Regardless of the Alternative Chosen

Identifying the mitigation that will be implemented to reduce the adverse impacts of a proposal is one of the most important components of an EIS under the National Environmental Policy Act (“NEPA”). The WSBLE DEIS is arguably deficient in its failure to identify mitigation that will be implemented. Instead, it repeatedly says in effect that mitigation will be worked out as the project progresses. While we appreciate the difficulty in getting to the fine details of mitigation at the stage of a project where its basic outlines are not yet fixed, it is not acceptable to leave the issue of mitigation to “just trust us.” The State Environmental Policy Act (“SEPA”) rules make provision for phased review, WAC 197-11-060(5), which allows the agency to focus on issues ripe for decision and exclude from consideration issues not yet ready. Phased review would be appropriate here, so that the details of mitigation could be reviewed when the project is more developed. The NEPA rules do not have a similar provision for phased review. However, if Sound Transit relies on NEPA rules for the adequacy of its EIS, it must continue to involve stakeholders, including Alliance for Pioneer Square, in the development of mitigation. Alliance for Pioneer Square is willing to work with Sound Transit to permit the process of identifying mitigation to not impede the project schedule, but it is not willing to have the scope of mitigation reduced because it was left out of the EIS.

The single largest adverse impacts from the WSBLE project are likely to be construction impacts. While it is sometimes thought that the adverse environmental impacts of constructing transportation projects are simply to be tolerated, history has shown that major urban transportation infrastructure projects can fundamentally and profoundly damage the neighborhoods through which they pass. The impacts of the construction of the Third Avenue bus tunnel in Seattle is a classic example of that truth. Before the bus tunnel construction, Third Avenue was a busy, active street lined with small shops and frequented by pedestrians. The construction put the street level businesses out of business; when the bus tunnel opened, the street itself was largely deserted and sterile. Street level crime moved in, and that further dissuaded new business. Today, thirty years after the bus tunnel opened and despite years of effort at correcting the situation, Third Avenue remains blighted.

On the other hand, with adequate mitigation, a neighborhood can emerge from a transportation mega-project relatively intact. The survival of Pioneer Square and the Waterfront from the seawall construction, the First Avenue water line replacement, the Viaduct replacement and the streetcar construction is evidence of that fact.

In planning mitigation, Alliance for Pioneer Square believes that Sound Transit must learn from the experience of the last fourteen years of regional mega-projects. We believe the following are some of the critical things we have learned about construction mitigation over the last decade:

- 1) Protection of street level small businesses is the most critical requirement for allowing a neighborhood to emerge intact from a transportation mega-project. If street level small businesses have survived, people will return when the project is over. If they have not survived, street crime will become a problem, businesses will be hesitant to return, and residents will flee. Some transportation projects have seemed to assume that because small businesses are inherently fragile, their loss is simply part of what must be accepted in the name of progress. But Third Avenue is proof that when that approach is taken, it may be decades before the neighborhood can recover.

2) Pioneer Square's experience with the last fourteen years suggests that the following mitigation is needed to have a reasonable likelihood of the neighborhood remaining intact:

a. Pedestrian access must be maintained to not only the businesses abutting the construction site, but also to Pioneer Square from the current International District/Chinatown light rail station while it is open, Amtrak, and the Sounder. That access must be safe, functional, and attractive. It is not enough that it is technically possible to reach Pioneer Square; access needs to be well-marked, comfortable to traverse, well-lit, enhanced as if it were a permanent pedestrian thoroughfare, and it has to be accessible to people with different abilities. People will not utilize temporary access routes if they are hard to navigate, feel unsafe, or do not meet the needs of all abilities. Temporary and unattractive pedestrian routes will kill small business in Pioneer Square as surely as if there were no access at all. There needs to be significant resources to make way-finding easy and to create amenity value although people are crossing a construction zone.

b. There may be times when even if access could technically be maintained to businesses abutting the construction site, it will be cheaper for the project and more successful in the long run to pay businesses to close temporarily. That happened on the Waterfront for several months during the seawall replacement. The cost and delay to the project of maintaining access to the businesses made it better for everyone to pay for a closure. The payments must allow the businesses to pay fixed costs and be able to keep core staff paid, so that the businesses can reopen at the end of the closure period.

c. Communication of changes on a current basis, and on a property-specific basis, is critical, so that businesses know as much as possible on as timely a basis as possible. The communication needs to be two-way – the contractor needs to know when things are going on that are unnecessarily harmful, just as businesses need to know what will be happening with construction. Alliance for Pioneer Square has served a critical role in being that communication conduit for the last decade and will be happy to continue in that role for Pioneer Square. It will need resources to continue that function.

d. The neighborhoods will also need resources to communicate to the public that they are open, how to get to them, and why people should want to come. Without extra promotion, people will stay away and that will starve small businesses.

e. The construction may need to modify its schedule to protect key events, such as the First Thursday Art Walk and fleet week for Pioneer Square.

f. Delay from the announced schedule can be deadly. That happened when the First Avenue water main was delayed for several months. Small businesses will be figuratively "holding their breath" throughout the process, and if they are told they can expect the project to be completed by a date, they will plan accordingly. If that date then slips several months, they may lose the investments they made in being able to return to

“normal” earlier. Although the communication discussed under item c above can mitigate some construction impacts, unexpected delay is not an impact that can be mitigated by communication alone.

g. The City and County must put a moratorium on other public projects in the rights-of-way in and adjacent to the Pioneer Square neighborhood for the duration of significant WSBLE construction. This will ensure that while the WSBLE construction disrupts a large portion of the neighborhood and access to Pioneer Square from the east, access is maintained from other directions so that Pioneer Square is not effectively cut off from Downtown or SODO.

Construction mitigation is not the only mitigation that must be considered, however. Urban design of the finished streetscape and of elements of the project must be sensitive to the character of the neighborhood. Major transportation infrastructure can end with a long swath of new concrete that has the look and feel of a gash across the city. It can be sterile and harsh. And if that is the outcome, it may take decades to repair. On the other hand, if the end result is sensitive to the neighborhood, it can quickly settle into the neighborhood as if it has always been there. Sound Transit has generally done a very good job of this in its existing stations, but it must redouble those efforts to design its facilities and the restoration of the areas it has disturbed, so that they seem to belong in the Pioneer Square Historic District, and do not become a continuing intrusion into the neighborhood.

The classic example of where sensitive design will be critical is the exhaust structures that will be needed. If the Fourth Avenue Shallow alternative (CID-1a) is chosen, we understand that an exhaust structure is needed, and is currently proposed on Union Station Plaza. Its size is likely not changeable, however, we are unsure if its location may be changed. If it is designed to be attractive and fit into the neighborhood, or to be a visual amenity to the area, it can be quickly accepted as simply part of the streetscape. If it is garish and insensitive, it will be a permanent scar.

Section 106 Considerations

Alliance for Pioneer Square is one of the principal advocates for preservation of the Pioneer Square Historic District. Pioneer Square as a home to thousands of residents, as the home of multiple job-creating companies, and as a major tourist attraction for the region, depends not on the vitality of any one building, but on the vitality and cohesiveness of the District as a whole. As the Historic and Archaeological Resources Technical Report states, p. 2-1, “historic properties” are defined for Section 106 purposes to include not just an individual site, building, structure, or object, but also any historic district that is listed on the National Register. Here the relevant “property” is the Pioneer Square Historic District as a whole. The delineation of the “area of potential effects,” Figure 3-2, is therefore too narrow. It should be expanded to include the entirety of the Pioneer Square Historic District.

That expansion is not simply a matter of definition, but is necessary to understand and address the actual adverse impacts of the WSBLE project. As discussed above, Pioneer Square achieves its success not because of any one individual building, but because of the fact that it is a

neighborhood of historic buildings, imbued with the earliest history of Seattle, dating to before European settlement, and continuing through the recovery from the Great Seattle Fire and the Alaska/Yukon gold rush and into the 20th Century. Each of the buildings survives in part because of the vitality of the district as a whole. Although WSBLE will be built on the eastern boundary of the District, if the construction cuts off the remainder of the District from the visitors essential to the survival of its street level businesses, the effect of the construction will be extremely negative on the district as a whole. Thus the analysis for purposes of Section 106 must look at the impacts on the District as a whole, not just at the impacts of specific properties directly abutting the construction site.

Construction will necessarily be disruptive to many people attempting to come to downtown Seattle, and that may be more so for Pioneer Square. Regardless of the alternative chosen for the CID segment, the construction duration will be longer than any small business can survive if its customers cannot reach it or choose not to attempt to reach it. The neighborhood will need to have resources to communicate to the broader public that the businesses are still open, and how to access the district if it is to survive without major long-term damage.

Conclusion

WSBLE is an exciting and a challenging project, and a critical piece to the overall regional transit network. The opportunities before us to intentionally create a more connected, planned, and welcoming transportation hub for all transportation users is a once-in-a-lifetime opportunity that will eventually benefit everyone. The importance of the transportation hub at King Street and Union Street Stations to the region cannot be overstated. We look forward to partnering with Sound Transit to help the WSBLE project bring its benefits to the entire region, while at the same time protecting the historic neighborhoods through which it passes.

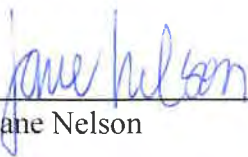
Signatures



Jan Drago



Grant Wojahn, Co-Chair



Jane Nelson



Steve VanDerhoef



Paul Swegle



Andy Wattula



Ryan Smith

Lisa Dangaard

Lisa Dangaard

Azar Koulibaly

Azar Koulibaly, Co-Chair

Leila Kirske

Leila Kirske, Treasurer

Denise Merle

Denise Merle



Adam Hasson, Secretary

Brett Phillips

Brett Phillips

Date: April 18, 2022

To: Sound Transit Board

From: Ballard Food Bank Executive Director and Board President

Subject: WSBLE Draft Environmental Impact Statement Comments: RE Ballard Link Extension Concerns for Options for IBB-1a, IBB-1b, and IBB-2a

We are writing today to give important community feedback on the Ballard Link Extension Options. Based on the Draft EIS from Sound Transit, we respectfully share that both the Preferred Elevated 14th Avenue Alternative (IBB-1a) and Elevated 14th Avenue Alignment Option (from Prospect Street Station/15th Avenue) (IBB-1b) would be devastating to Ballard Food Bank's ability to provide critical food and services to more than 7,000 individuals and families in NW Seattle and beyond. Both the IBB-1a and IBB-1b would call for a full closure of 14th Avenue Northwest for up to 3 years during construction. In addition, the Preferred Tunnel 14th Avenue Alternative (IBB-2a) closes 14th Avenue NW between 52nd and 58th for 3 years. This also puts our services at risk by reducing access to our facility and potential jeopardizing the ability for trucks to deliver food. **These routes would risk closing down our brand-new home at 14th and Leary, and prevent thousands of individuals and families from accessing health food and critical services.**

Ballard Food Bank is an important resource to our community. We are a Community Resource Hub and Food Bank. Our mission is to provide food and hope to our neighbors because there can be enough for everyone. On October 18, 2021, we opened the doors to our new home at the corner of 14th and Leary. This state-of-the-art facility includes a grocery-store style food bank where Seattle residents from across the city shop and access food. Our Kindness Café offers a welcoming space for anyone to grab a hot sandwich, cup of soup and salad. In addition, our Community Resource Hub provides vital access to resources that promote self-sufficiency and help prevent homelessness. This includes our rent and utility assistance to neighbors in 8 Seattle zip codes. Our mail program offers an address for more than 500 clients to receive mail from DSHS, Social Security, and more. We also offer DOL vouchers for identification as well as access to partner agencies where clients can connect with a variety of services from physical and mental health to tenants' rights to housing. Our new home is truly a one-stop shop for NW Seattle and the greater community. We serve more over 7,000 individuals and families.

A closure of 14th Avenue Northwest from the IBB-1a and -1b options would essentially close Ballard Food Bank for three years, which would be devastating to our community. The IBB-2a option would also impact our ability to serve our community by closing 14th Avenue NW between 52nd and 58th for 3 years. The attached diagram shows the access points for Ballard Food Bank. Specifically, the closure of 14th would impact the following aspects of our services:

- 1) Due to turning radius limitations, delivery trucks must drive North on 15th and then turn right and head East on 49th. They then access the Food Bank by backing into our driveway and depart by going East on 49th and then turning North on 14th Ave NW. Trucks must go North upon exiting as the turning radius is too tight to head South on 14th. (SEE ITEM A on Diagram and Auto Turn Study)
- 2) Clients parking to shop or individuals dropping off donations must access our parking lot. Most often, they approach from 14th St and then enter our parking lot from 49th. When our neighbors depart, they must exit our parking lot and head South on 14th. (SEE ITEM B on Diagram)

- 3) The guest entrance to Ballard Food Bank is on 14th Ave NW will be negatively impacted. For guests to enter safely, they must be able to access our front door either coming from our parking lot or any of the local street parking that can be found along 14th and elsewhere. (SEE ITEM B on Diagram)
- 4) The closure of 14th would also limit access to the food bank. Many guests and volunteers utilize street parking in addition to our lot. Parking is often found along 14th, side streets that are accessed from 14th, or in the median on 14th. In addition, any closures around Leary and 14th could impact clients accessing the food bank from Leary.
- 5) IBB-2a closes 14th Avenue NW between 52nd and 58th for 3 years. This may also jeopardize trucks being able to deliver to the Food Bank. Currently food delivery trucks leave our facility heading North on 14th all the way to Market. A closure of 52nd would impact these routes, especially with the narrow roads in and around this area.

We ask that the Sound Transit Board consider options that would not put our services at risk and would better meet the needs of our neighbors. Options along 15th including the Preferred Tunnel 15th Avenue Station Option (IBB-2b) and Elevated 15th Avenue Alternative (IBB-3) are alternatives we support.

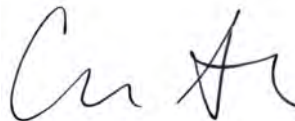
Our City, State and over 1,300 community supporters invested in building a Hub for Hope that offers a welcoming space for all our neighbors to access healthy food and critical services. They joined us in building this critical facility at this time when it is vitally needed. Thank you for considering our community and ensuring that they can access our resources when they need it the most. Please prioritize options that do minimal damage to social service agencies such as Ballard Food Bank.

If you have any questions, please contact Jen Muzia at jenm@ballardfoodbank.org or 253-372-8657.

Sincerely,



Jen Muzia
Executive Director
Ballard Food Bank



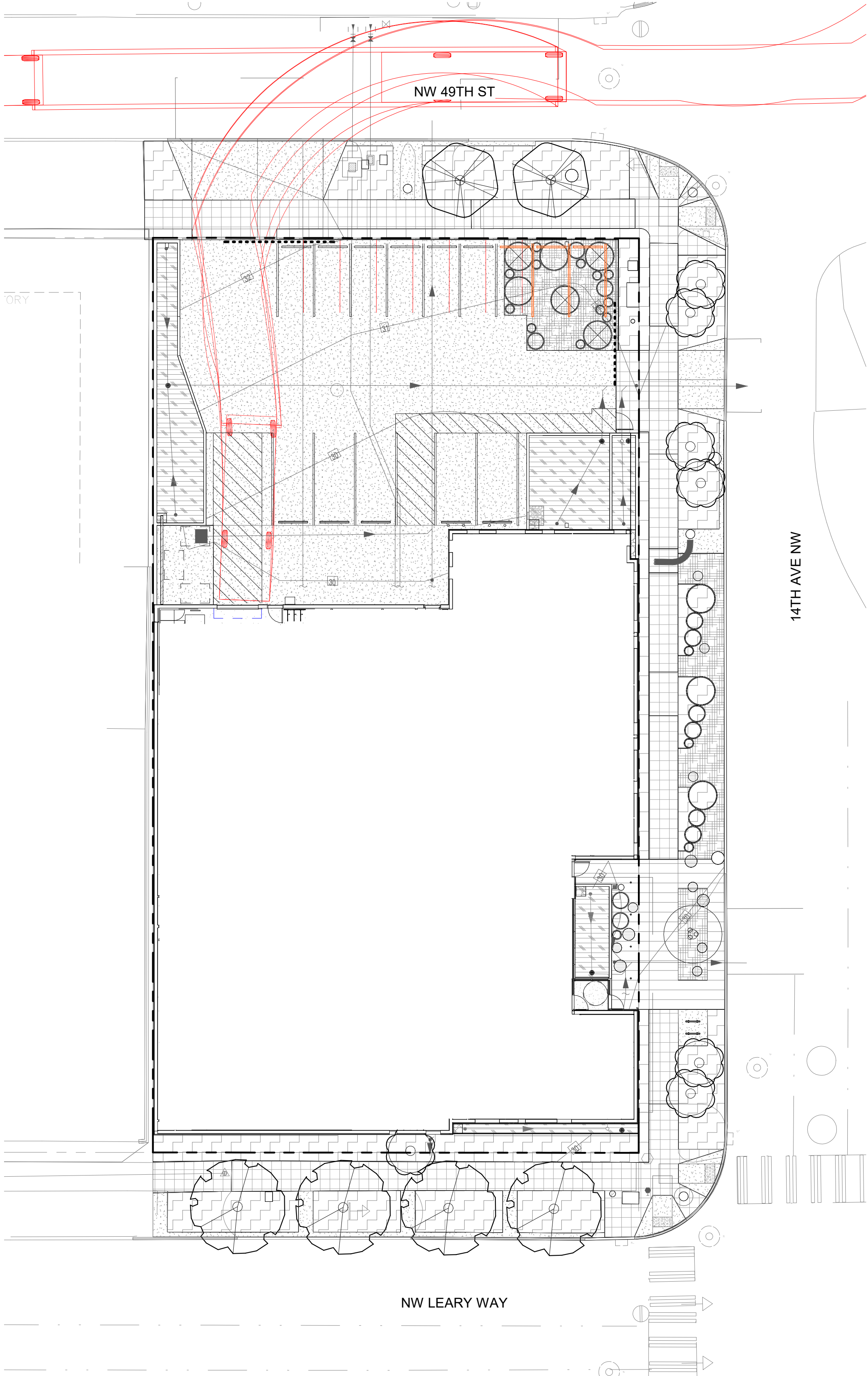
Carrie Schneider
Board President
Ballard Food Bank

Cc:

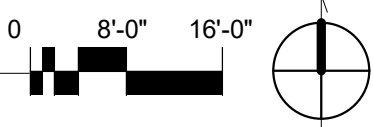
Councilmember Dan Straus, City of Seattle
Mike Stewart, Executive Director, Ballard Alliance
Ballard Food Bank Board Members

Ballard Food Bank Access Diagram





1 LANDSCAPE PLAN - AUTO TURN
1/16" = 1'-0"



WSBLE Draft Environmental Impact Statement Comments c/o Lauren Swift
Sound Transit
401 South Jackson Street
Seattle, WA 98104

Re: Comments of Chief Seattle Club on the Draft West Seattle and Ballard Link Extension (WSBLE) project draft environmental impact statement (EIS)

Dear Ms. Swift:

Thank you for considering our comments on the draft EIS. Our letter focuses on the impacts and mitigation for the Chinatown-International District (CID) segment, station and track alignment because that is the part of the larger WSBLE project that directly affects our interests in Pioneer Square. All alternatives for the CID segment will be within the boundaries of the Pioneer Square Historic District or directly abutting it. Construction of all alternatives will have significant adverse impacts on Pioneer Square. We echo the comments, issues, and mitigation ideas suggested in the letter submitted by the Alliance for Pioneer Square, and we offer the following comments specifically related to our own review.

Chief Seattle Club's work is based on the foundation of defending and advocating for livable, existing spaces in Pioneer Square and the CID that urban indigenous populations utilize on a daily basis.

Our members, local partners and staff will feel the disproportionate impact of this proposed project construction for years to come, thus stunting the ability for us to properly serve our community as one of the largest housing and human services institutions in King County.

We reiterate what many have already said to date: we believe Sound Transit should study the Fourth Avenue shallow station (CID-1a) alternative further, to reduce impacts to transit and traffic, seek to shorten construction duration, and reduce costs. We believe this alternative meets more of the regional long-term transit needs than the other alternatives. It centers the new light rail station within the existing transportation hub, closer to more existing transportation, transit, and event facilities, offering greater opportunity for infrastructure development that benefits the whole region, not just Seattle.

We request that Sound Transit communicate any alternative development studies and findings as soon as possible, and well before any formal NEPA or other environmental documents are published.

We look forward to working with the Sound Transit Board of Directors, Sound Transit, and our City of Seattle officials to inform the decision to select the right preferred alternative for this once-in-a-generation regional project.

Sincerely,

Derrick Belgarde, Executive Director
Chief Seattle Club

Dear Sound Transit Board Members and Seattle City Council Members:

We, Chinese American Civic Association (CACA), is based in Washington State, and have been focusing on improving the general welfare and happiness of the Chinese American communities. After extensive study and discussion with Chinese communities regarding the WSBLE project, we would like to offer our opinions and suggestions, especially regarding the impact to Seattle Chinatown International District (CID).

The location of a transit station serving the CID neighborhoods is beneficial to the neighborhood. We appreciate the effort Sound Transit and everyone has put into this and we look forward to seeing this new affordable, environmentally friendly public transit system being used daily to accommodate fast growth of the area.

Inevitably, this size of project will permanently change the aesthetics of the National Register Chinatown Historic District, namely the many historic buildings, Chinatown Gate and Hing Hay Park. Unfortunately, due to the language barrier, there has been very little involvement from the CID community, 65% of whom are People of Color, 1200 of whom are elderly non-English speakers. We would like your help to extend the feedback time window and achieve racially equitable outcomes.

Historically, the Chinese community has suffered from several governmental acts from the 1880s (locally, the Seattle Chinese Expulsion on February 7, 1886) to your project today. Like many Seattle neighborhoods, the CID has been devastated by the Pandemic shutdowns, the recent civic blight and the hate crimes targeting Asians. We believe the proposed Sound Transit 5th Avenue Shallow 2a and 2b will impose severe impacts on Chinatown businesses, residents and social organizations.

We, therefore, recommend the 4th Avenue options (Options 1A or 1B). These options have the least impact on Chinatown, in terms of construction activities, noise, air pollution, blocked streets, disruption of business operations, minority property ownership transfers and displacement of immigrant businesses, tenants, and residents.

Please support Chinatown and help keep it vibrant with a safe environment for our businesses, community members and residents by staying with the 4th Avenue options.

We appreciate your consideration and will be happy to continue a dialogue if needed.

Sincerely,



Board Members of Chinese American Civic Association
April 22, 2022



BRIDGING CULTURES
COMMUNITIES & GENERATIONS

611 S Lane St
Seattle WA 98104

T 206.624.5633
F 206.624.5634
cisc-seattle.org

April 26, 2022

VIA E-MAIL: WSBLEDEIScomments@soundtransit.org

RE: Comments on the DEIS for West Seattle and Ballard Link Extensions Project

Chinese Information and Service Center (CISC) is submitting our comments on the Draft Environmental Impact Statement for West Seattle and Ballard Link Extensions project.

CISC helps immigrants throughout King County achieve success by providing information, referral, advocacy, social, and support services. Fifty years ago, we were founded by community volunteers to serve older adults in Seattle's Chinatown International District (CID). Today, our main office in the CID continues to support the well-being of older adults and our programs have expanded to serve the entire family. Each day at our CID office, dozens of staff provide social services to clients who live a few blocks away and on Beacon Hill and other Seattle neighborhoods. Many of our clients have disability and mobility challenges.

The majority of our clients we serve at our CID location are low-income and speak little or no English. Hundreds of older adults in the neighborhood come to our office for services and support. Throughout the pandemic, we provided vital public health information, access to vaccines, and connection to essential needs. During the school year, 60 grade school students come to CISC for our after-school program that we have operated since 1996. We also operate a Seattle Preschool Program classroom at Yesler Community Center where we support the academic, social, and emotional growth of 20 children whose families live in the CID and surrounding area.

We are submitting this comment from the perspective of a social service agency that has cared for this community for 50 years. We are concerned about the multitude of impacts to residents, workers, business owners, organizations, and visitors to the CID. We are particularly concerned about how this project will impact the quality of life for youth, families, and older adults who live, work, and socialize in this unique cultural neighborhood.

While we believe there is not a current option that is highly desirable, we urge the Sound Transit Board to select one of the options on 4th Avenue since the anticipated impacts to the CID would be less than the 5th Avenue options.

Sincerely,

Michael Itti
Executive Director

Mary Hsu
Board President



美國西雅圖中華會館

CHONG WA BENEVOLENT ASSOCIATION

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April 26, 2022

RE: Move Forward on 4th Avenue

Dear Sound Transit Board Members and Seattle City Council:

The Chong Wa Benevolent Association and Chong Wa Education Society is a non-profit organization with over 100 years of history. It is a community-based umbrella organization for more than 20 traditional Chinese family, geographical, and fraternal organizations. The Chong Wa Education Society also operates the oldest Chinese language school in Washington State. Our pro bono board members strive to protect, improve, and maintain the vitality of Seattle's Chinatown.

The location of a new transit station serving the three neighborhoods of Chinatown International District (CID) is much-welcomed. However, the impacts from construction and subsequent re-development may have unwanted impacts to our neighborhoods. Therefore, we urge the Sound Transit Board to consider the least impactful option for the new transit station. The **4th Avenue options** are our preferred options for the new station location. These options have the least impacts to our neighborhoods and will provide transit access to the CID communities of **Chinatown, Japantown and Little Saigon**. Other location options may create unwarranted displacement and disruptions to local businesses and especially to the more than 1,200 non-English speaking elderly residents. Many of the local businesses cannot survive years of construction disruption, exacerbated by the pandemic and recent hate crimes against Asian-Americans.

美國西雅圖中華會館
CHONG WA BENEVOLENT ASSOCIATION

Sound Transit Board Members

Page 2

April 26, 2022

Additionally, we request that the public comment deadline be extended to May 28, 2022, to provide adequate time for the limited English proficient community members, both residents and immigrant businesses, to comment on the ever-changing, new found information regarding the options and their potential impact on the CID, particularly since DEIS Ch. 1 through the final Appendix and Appendix Attachments have not been translated into the languages of the CID.

We appreciate your consideration. We would be happy to provide additional community-based input in your station selection processes and look forward to hearing from you. I can be reached at (206) 679-5507 or mjl.roc@gmail.com. Thank you.

Sincerely,



Mei-Jui Lin

President

Cc:

Mayor Bruce Harrell

Nicole Kistler, ST3 Advisor

King County Executive Dow Constantine



Sound Transit Projects

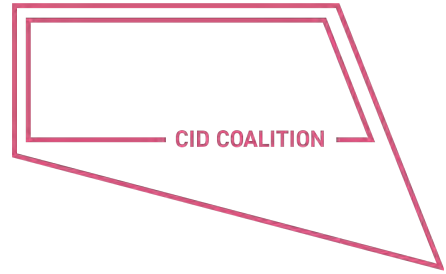
Details	Communication
#500609	F.2 Agency Coordination
Date Recieved: 4/18/2022	Appendix G, Environmental Justice, provides more information on specific targeted outreach that Sound Transit has done to date to reach people with limited English proficiency, communities of color, and people with low incomes.
Created by: Christopher Johnstone	Keep in mind the DEIS is way too difficult and technical to send limited English speakers to Google Translate. And depending on Google Translate can be frustrating in its inaccuracy. While outreach in English is pretty impressive, a way has not been found by ST to engage the limited English speakers regarding the DEIS so they cannot meaningfully participate in making comments. Meetings with simultaneous interpretation is one way with scribes to record their feedback. Or have participants write comments immediately in the target language to turn in. Such a meeting would be similar to CAGs but focus on presenting CID info from the DEIS.
Audience: General Public	
Reach:	The lack of transparency in CAG and other meetings only hurts ST's attempts to get its message across. When people are not informed, they tend to magnify rumors and wrong information, much like a horror movie holds the audience in suspense about info they don't know yet. For example, the flip answer that the ventilation shafts building is not new info; that it's in the DEIS and all one need do is read it. Well, I've read it and found there are not one but TWO ventilation shaft buildings proposed for CID 2a, plus what looks like a very large bike storage structure and a maintenance structure.
Participation:	
Engagement:	
Source: Email	Withholding information like that is not conducive to trust building, especially if the community is supposed to be a "partner. " And what about those who don't read English? How are they supposed to find that ventilation building info in a 2,000 page document?
Assigned division: Outreach	Betty Chong Wa Benevolent Assn.
Category:	
Project Phase: Planning	
Project Segment:	
Environmental phase: Draft EIS	

Sound Transit Projects

Details	Communication
<p>#499669</p> <p>Date Recieved: 4/7/2022</p> <p>Created by: Nasra Mohamed</p> <p>Audience: General Public</p> <p>Reach:</p> <p>Participation:</p> <p>Engagement: 1</p> <p>Source: Open house/public meeting</p> <p>Assigned division: Outreach</p> <p>Category:</p> <p>Project Phase: Planning</p> <p>Project Segment:</p> <p>Environmental phase: Draft EIS</p>	<p>Hello. Thank you again for having this. I'm part of the Chong Wa Benevolent Association that is located in Chinatown, and we have very large concerns about the Fifth Avenue choice. If you decide to use the Fifth Avenue, you'll have the full closure of King Street and Weller and Fifth Avenue, which creates a lot of issues. And your staging area, I'm assuming that the staging area is going to be on the empty lots that the Sound Transit purchases, which cause Sixth Avenue really bad, bad traffic and bad health and bad noise and bad everything that comes with large construction projects. And if you were to, that would basically kill that area, which will kill all of Chinatown because nobody wants to come down into a construction area. Now, if you go Fourth Avenue, all that area does not touch our neighborhood, and if you don't touch our neighborhood, then we're all good. We can exist happily together. But Fifth Avenue, we're not going to be existing happily forever. And as far as -- I found out that your ventilation tubes to let the air out and into the tunnel is going to be located right there on Weller and Sixth Avenue. And there has not been mention about that ventilation to the community, and that's a big, big, big disruption. Thank you.</p>

April 22, 2022

Submitted via Comment Portal and email
WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 S. Jackson St.
Seattle, WA 98104



RE: Request for 90-day Extension to the NEPA/SEPA Public Comment Period for the West Seattle and Ballard Link Extensions Draft Environmental Impact Statement

Dear Ms. Swift and the Sound Transit Board of Directors:

On behalf of the CID Coalition and other community members, we are requesting a 90-day extension of the comment period for the West Seattle and Ballard Link Extensions (WSBLE) Draft Environmental Impact Statement (DEIS). The CID Coalition is a multigenerational group of people who live, work, worship, and have cultural ties in the Chinatown-International District neighborhood. Together with the organizations, collectives and businesses listed below, we work to center the needs of community in decisions that impact our neighborhood, to fight displacement, to keep our history and culture alive, and to ensure that the CID remains a place where immigrant and BIPOC communities can thrive for generations to come. We are deeply concerned about Sound Transit's proposed alternatives for Chinatown-International District, as each proposed alternative will have dramatic impacts on traffic and safety in the neighborhood and will result in the displacement of small businesses and, in at least one scenario, residents.

As Sound Transit is aware, Chinatown-International District is markedly different from other neighborhoods along the WSBLE line. See Appendix G, Environmental Justice, Page 4-3 ("The Chinatown-International District is the only station area densely populated by communities of color in the WSBLE Project corridor."). As such, a different level of outreach and feedback-gathering is necessary to ensure that our community's voice is heard in this process. Our neighborhood is 63% minority and 54% low-income, with a median household income that is roughly half the amount of every other project segment (and the city of Seattle as a whole). *Id.*, Page 3-11, Table 3-4. Additionally, our neighborhood is home to many people with limited to no English proficiency, and limited access to online resources—organizing a community response to a complex project and a partially-translated, technical document that spans thousands of pages takes more time than the current comment period allows.

Sound Transit also knows that Chinatown-International District has suffered from a century of public projects that have caused displacement and negative environmental impacts. Most recently, after enduring years of construction related to Sound Transit Link light rail, prolonged construction for the First Hill Streetcar disrupted the walkability and livability of the neighborhood with little benefit to those who live and work here. As with past projects imposed on Chinatown-International District, many residents, small business owners, and non-profits in the neighborhood have heard nothing about how this project

and each of the proposed alternatives may impact their lives and livelihoods and what, if any, mitigation will be provided.

In the past, the CID Coalition has held community forums on issues that impact our neighborhood (with displacement being a regular focus) and we intend to do similar outreach regarding this project. We would use this additional time to conduct outreach with members of our community who have not had opportunities to meaningfully engage with this project, including immigrant elders for whom language and digital access is a barrier; youth who will live with the impact of the new station far longer than the rest of us; and CID residents, both housed and unhoused, and business owners who will bear the brunt of displacement. The COVID-19 pandemic and the rise in anti-Asian violence has made outreach efforts more difficult—we imagine that Sound Transit has encountered this in its own outreach—but we are adamant that all voices and perspectives be heard on a project that proposes to cut through the heart of our neighborhood. We are asking Sound Transit to continue its outreach efforts in the Chinatown-International District and to grant this 90-day extension request to ensure a more informed and equitable process.

Sincerely,

CID Coalition
Puget Sound Sage
API Coalition Advocating Together for Health (APICAT)
Japanese American Citizens League, Seattle Chapter
Pinoy Words Expressed Kultura Arts
Friends of Inscape
UNITE HERE Local 8
Filipino American Political Action Group of Washington
KOBO at Higo
Sairen
Pioneer Barber Company
Da Da Da Gallery
Trichome
OCA Asian Pacific Advocates of Greater Seattle
Egg Rolls/ChuMinh Mutual Aid
350 Seattle
Sông2Sea

Cc: Debora Juarez, Seattle City Council President
Lisa Herbold, Seattle City Councilmember
Tammy J. Morales, Seattle City Councilmember
Alexis Turla, Chief of Staff to Councilmember Morales
Kshama Sawant, Seattle City Councilmember

Alex Pedersen, Seattle City Councilmember, Transportation & Seattle Public Utilities Committee Chair
Dan Strauss, Seattle City Councilmember
Andrew J. Lewis, Seattle City Councilmember
Teresa Mosqueda, Seattle City Councilmember
Sara Nelson, Seattle City Councilmember
Monisha Harrell, Deputy Mayor
Kendee Yamaguchi, Deputy Mayor of External Affairs
Pedro Gómez, Director of External Affairs, Seattle Mayor's Office
Adiam Emery, Chief Equity Officer, Seattle Mayor's Office
Greg Wong, Director, Seattle Department of Neighborhoods
Kristen Simpson, Interim Director, Seattle Department of Transportation
Dow Constantine, King County Executive
Joe McDermott, King County Councilmember
Girmay Zahilay, King County Councilmember
Rod Dembowski, King County Councilmember
Sarah Perry, King County Councilmember
Jeanne Kohl-Welles, King County Councilmember
Dave Upthegrove, King County Councilmember
Claudia Balducci, King County Councilmember
Pete von Reichbauer, King County Councilmember
Reagan Dunn, King County Councilmember
Rep. Sharon Tomiko Santos
Rep. Pramila Jayapal
Washington State Commission on Asian Pacific American Affairs
The International Examiner
Northwest Asian Weekly
South Seattle Emerald
Real Change News
The Seattle Times
Crosscut
KUOW
The Stranger

The 5th and Madison Condominiums (5M), located at 909 5th Avenue, contains 125 condominium units with approximately 200 residents, plus one commercial unit on the first floor (Schuchart). The Ballard Link Extension will have a substantial impact on our community, especially with the 5th Avenue Alignment, which will partially or fully close both streets we have frontages along and proposes placing the midtown station north entrance immediately adjacent to us at the current Bartell's at 4th Avenue and Madison Street.

We greatly appreciate Sound Transit's (ST) two virtual meetings and walk-through with 5M and numerous public engagement events during the dEIS process. Many of our questions were addressed, but we still have some concerns that we are submitting here. We hope ST continues its excellent engagement and feedback process during the remaining EIS, design, construction, and operational phases of the Ballard Link Extension.

Since much of the comments relate to particular impacts in our area, we include previously provided station location and street closure maps on the next page for reference. Additional comparison graphics and tables from the dEIS are included at the end.

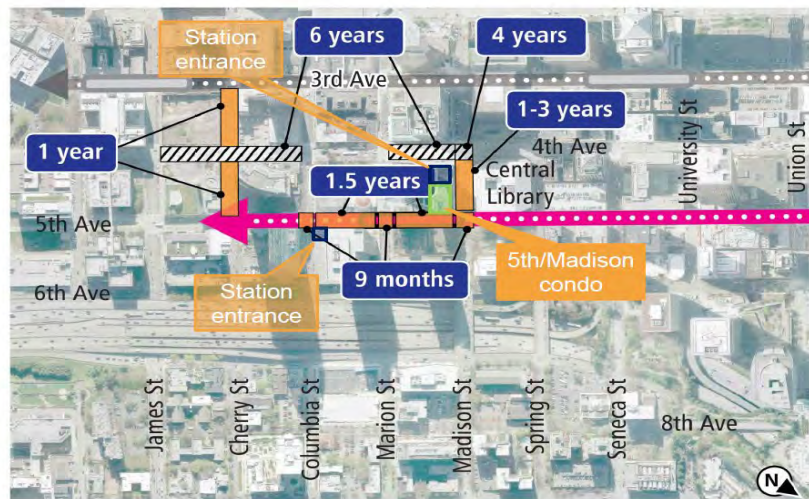
Background. 5M is a 24-story high-rise that sits atop a large underground parking structure owned by the adjacent 901 5th Avenue Building. The 901 Building granted 5M the following easements:

- Resident parking and storage areas on garage levels B, C, and D (assigned spaces).
Parking for the 5M units is accessible via:
 - Madison Street garage combined entrance/exit
 - Marion Street separate entrance and exit
- Various utility spaces throughout the garage and lower levels of the 901 building
- Use of the service tunnel (trash/recycling removal)
- Part of the outdoor plaza outside of the commercial unit (above the Bartell's)

Permanent or temporary loss of access to some of these spaces will adversely impact 5M and its occupants.

- Roadway full closure
- Roadway partial closure

Connecting to CID
4th Avenue Shallow,
4th Avenue Deep,
5th Avenue Deep



The above information is for illustration only. Please refer to DEIS for further detail.

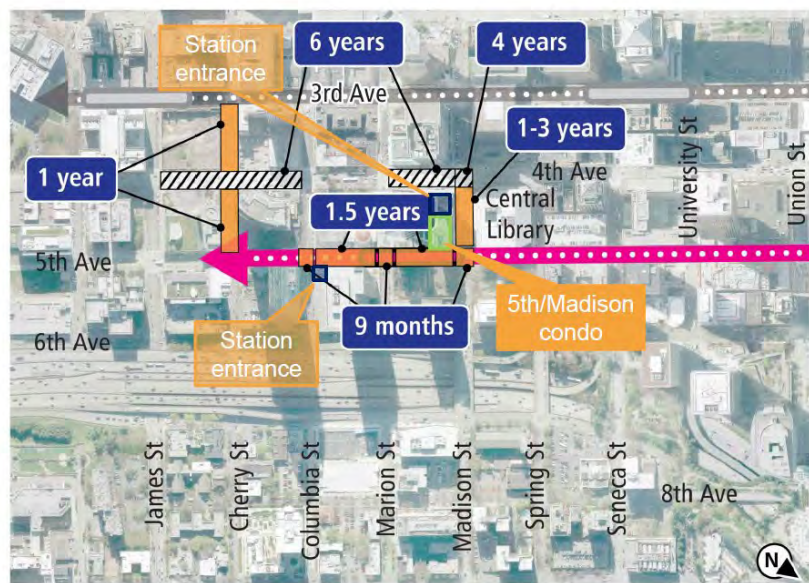
27 Midtown – 5th/Harrison



5th Avenue Alternative, Deep Tunnel

- Roadway full closure
- Roadway partial closure

Connecting to CID
4th Avenue Shallow,
4th Avenue Deep,
5th Avenue Deep



The above information is for illustration only. Please refer to DEIS for further detail.

27 Midtown – 5th/Harrison



5th Avenue Alternative, Shallow Tunnel

5M access. Partial and full street closures during construction potentially impact access to 5M pedestrians, vehicles, utilities, and services if the preferred 5th Avenue Alternative is selected.

Details of the street closures around the midtown station in the draft EIS provide insufficient information to understand the magnitude of the impact on 5M and other nearby buildings.

Except where indicated, the below issues relate to both the “shallow” and “deeper” options for the midtown station in the preferred alignment and the street closures immediately around 5M [Section N.1 4.3; Table N.1 4-55; Table N.1E-28].

- The deeper option will lead to full closures of 5th Avenue (1.5 years), Madison Street (1-3 years), and the 5th & Madison intersection (9 months), which encompasses the entire street frontage of 5M and well beyond. Concurrent closures of both streets could present significant accessibility challenges to 5M and are especially relevant to some of the below points.
- Emergency services access to 5M during partial or full street closures has not been addressed. Of particular concern is concurrent closure of both streets and whether ladder/aerial vehicles can reach our high rise in the event of a fire or other emergency.
- 5M has several utilities (gas, water, electricity, emergency generator, fire standpipes) that have the infrastructure (meters, fuel fill ports, etc.) along the Madison side of the building; whether these will remain accessible during partial or full street closures has not been fully clarified.
- 5M relies almost entirely on a street loading zone adjacent to our building on Madison Avenue for all deliveries and moving vehicles. The parking garage cannot fit large vehicles, and the garage elevator cannot fit large carts or furniture, so the main entrance near 5th and Madison is the primary entryway for these uses. If that loading zone is lost during street closures, a nearby alternative would be essential for the livability of our building.
- The commercial unit (Schuchart) has a secondary emergency egress to the plaza above Bartell’s, a proposed station entrance location; maintaining or providing a new egress path will be necessary.
- The service tunnel is one way, entering Marion and exiting Madison. If the Madison exit is closed, alternative loading bay arrangements may be necessary, and/or flaggers on the Marion side to aid in backing out vehicles.

Many of the above issues, if not addressed, will reduce the habitability of 5M and, in the case of emergency and utility access, can make 5M uninhabitable during area construction. During discussions, ST suggested that efforts will be made to provide emergency and utility access, but at this point, no access guarantees have been made; we wish to see a clearer ST commitment that properties near construction sites such as ours remain safely occupiable. We note that 5M displacement numbers and costs have not been included in the alignment alternative comparisons (e.g., Table ES-6), should safety or utility issues render our building not occupiable.

Traffic. Both 5th Ave Alternatives involve closures of major streets that will affect traffic through downtown, including access to the downtown core and access to I-5. The dEIS identified many construction-phase impacts and how vehicle traffic is likely to reroute around street closures [Section 3.19; Appendix N.1]. Appendix N.1 4.3.3.2 states the intent to develop a “Construction Access and Traffic Management Plan” and provides potential mitigation measures, but not even preliminary/conceptual traffic plans in the downtown area have been included in the dEIS. To understand the construction impact on the downtown environment, we would like to see at least some preliminary traffic management concepts and feasibility studies added to the EIS. ST has notified us that additional studies are expected to be included in the final EIS, so these comments focus on two points of concern in the 5M area, plus one area to look at for traffic rerouting:

- During a 5th Avenue closure, the nearest southbound alternatives are three blocks to either side: 2nd Avenue to the west and 8th Avenue to the east (on the other side of the freeway). This leaves a six-block gap for southbound traffic through the already congested downtown core. We expect some traffic rerouting will be necessary to bridge this gap and would like to see more studies on this condition as the potential for gridlock in the area is significant.
- While the shared 901/5M garage has entrances on both Madison and Marion, the one-way and non-public streets in the area conspire to make it difficult to get to the Marion entrance from the north or the east (including the I-5 freeway). A closure of Madison requires a 5-block detour, while a concurrent closure of Madison and 5th Avenue requires a 10-block detour; in both cases, through what we expect will be a congested downtown street grid. We would strongly prefer local access to the Madison entrance be maintained during partial or full street closures or those street directions of travel be adjusted to mitigate these rather large detours. Appendix N.1 4.3.3.2 calls these out as potential construction mitigation measures; given the large detours, we ask ST to implement one of these or another mitigation measure here.
- Reversing traffic on 6th Avenue between Madison and Marion would open up additional downtown routes to Madison traffic coming from I-5, First Hill, and beyond, as 6th is already southbound south of Marion; the northbound lane of Madison over I-5 would no longer be necessary and the traffic lights on Madison on both sides of the freeway could be reduced or eliminated during this temporary reroute. Traffic coming from downtown areas further north than Madison would not be able to access this portion of 6th Avenue without additional street flow changes. At least one bus line (12) would be impacted, but that one-block portion of 6th Avenue currently has low usage relative to other nearby streets (line 12 may no longer exist once the Madison BRT line opens).

We encourage ST and the Seattle Department of Transportation (SDOT) to provide regular updates and community engagement on the traffic issues in the coming years to keep the community informed and alleviate concerns.

Environmental quality. The 5M community has concerns with cleanliness, noise, air quality, and other environmental issues for the construction and operation of the adjacent Midtown station. While ST addressed many concerns, a few remain and/or that we wish to emphasize.

- City of Seattle construction noise limits that ST will follow [Appendix N.3 3.1.3] reduce permissible noise only after 10pm. For construction immediately adjacent to a residential building, we would like to see noise reductions begin earlier (e.g., 8pm) with limited exceptions only as needed.
- The same section [Appendix N.3 3.1.3] notes permissible sound levels as measured *within* adjacent commercial buildings. As many residents work from home, we feel **these permissible noise limits should apply to residential buildings and commercial buildings.**
- Appendix L4.6 lays out various air quality laws, regulations, and policies that ST must follow. We note that the 5M tower is immediately downwind of ventilation stacks for a proposed midtown station entrance under prevailing wind conditions, with operable windows within 100 feet or so of potential station exhaust. We wish ST to keep that in mind during station design.
- For the 4th & Madison midtown station entrance, the 5M tower is the only adjacent property fully occupied during the evenings and nights. We ask that ST take measures to limit any operating station noises (e.g., ventilation fans) in our direction during these times, such as by orienting ventilation louvers away from us. While the boisterous downtown can have high ambient noise levels during the day, we note that it is very quiet at night, and 5M residents can sleep with windows open. For the same reason, we would also request any loud emergency systems testing be done during reasonable (daytime) hours.
- ST has informed us that buildings at risk of movement or damage will be monitored. As excavation and tunneling will potentially occur on three sides of 5M, we would like to have monitoring for unexpected soil and/or structural foundation movements in the area. While cases like the Surfside condo tower in Florida and Millennium Tower in San Francisco may be rare, they do occur, and 5M would not like to join the club; a monitoring plan would help alleviate some residents' fears.

Timeline and communication. We request that ST continue with the public engagement through future project phases and request regular updates on the Ballard Link Extension continue to be provided. We also request regular construction updates for adjacent construction updates and can work with ST and site construction coordinators to develop efficient means of communication.

Additional dEIS graphics (for reference).

Figure ES-36. Downtown Segment - Preferred 5th Avenue/Harrison Street Alternative (DT-1)

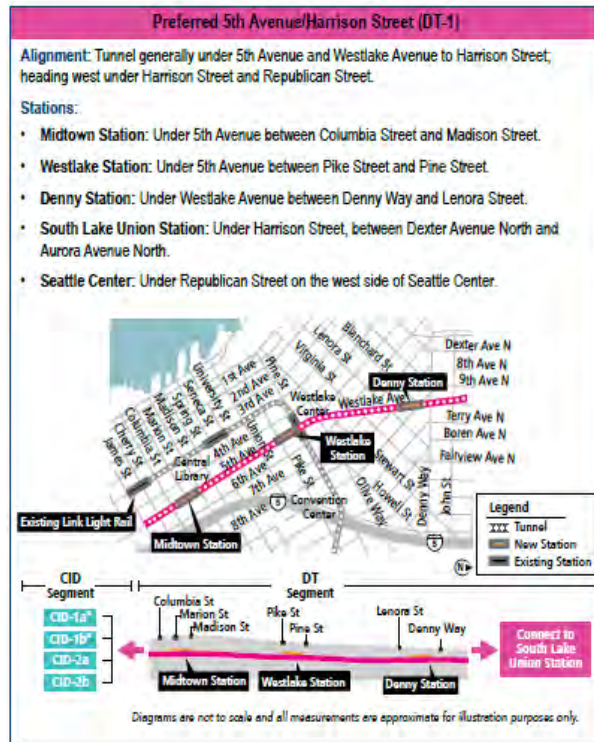
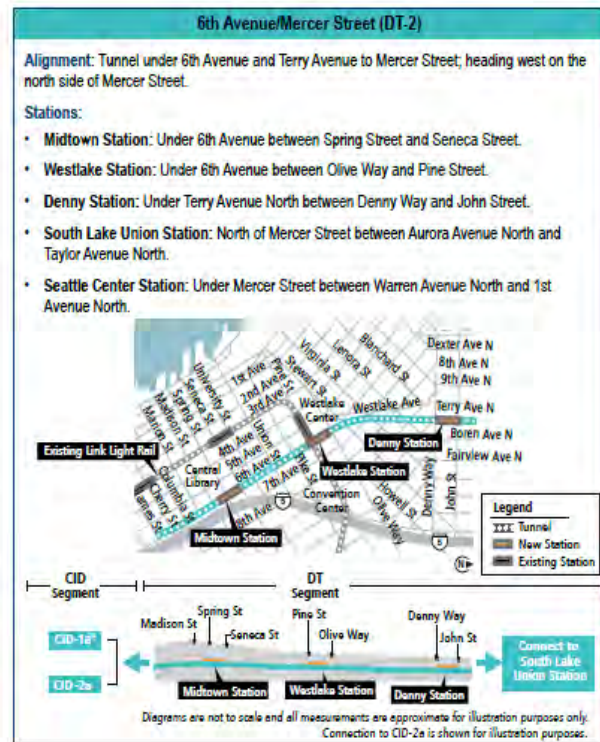


Figure ES-37. Downtown Segment - 6th Avenue/Mercer Street Alternative (DT-2)



The Sound Transit draft EIS proposes two Downtown Segment routes: The Preferred 5th Avenue Alternative (Figure ES-36) and the 6th Avenue Alternative (Figure ES-37).

Table ES-6. Key Environmental Impacts of the Downtown Segment Alternatives

Resource Impact Measure	Preferred 5th Avenue/Harrison Street Alternative (DT-1)*	6th Avenue/Mercer Street Alternative (DT-2)*
Cost	4.7 to 4.9 B	4.9 to 5.0 B
Ridership (daily boardings) †	163,700	158,700
Operational Transportation Impacts	14 intersections impacted. Permanent closure of 9th Avenue between Westlake Avenue and Denny Way to provide an entrance plaza for Denny Station.	16 intersections impacted.
Construction Transportation Impacts	Full closure of 4th Avenue (Pine Street to Olive Way) (2 years), the Interstate 5 high-occupancy-vehicle express lanes reversible ramp (9 months), Madison Street (1 to 3 years), Pine Street (6 years), Westlake Avenue (7th Avenue to Denny Way) (4 years), Harrison Street (6th Avenue North to Dexter Avenue North) (4 years), and Republican Street (5 years). Partial closure of 5th Avenue (6 years), 4th Avenue (James Street to Columbia Street and Marion Street to Madison Street) (6 years), Madison Street/4th Avenue intersection (4 years), Pike Street (6 years), Westlake Avenue (at intersections at 8th Avenue and 9th Avenue/Blanchard Street) (9 months) and Harrison Street (Dexter Avenue North to 8th Avenue North) (1.5 years). The closure of Westlake Avenue south of Denny Way would impact this segment of the Seattle Streetcar. 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. Could require short-term deactivation of Metro trolley bus wire along Pine Street, Madison Street, and 1st Avenue North.	Full closure of 6th Avenue (Olive Way to Stewart Street) (6 years), Pine Street (4 years), Terry Avenue North (4 years), and Taylor Avenue North (4 years). Partial closure of 6th Avenue (University Street to Madison Street) (1 year), the southbound Interstate 5 off-ramp to James Street (6 years), the southbound Interstate 5 mainline near Madison Street (nights), and Mercer Street (3.5 years). The closure of the Terry Avenue North and Thomas Street intersection would impact this segment of the Seattle Streetcar. Northbound travel of the streetcar would be impacted. Could require short-term deactivation of Metro trolley bus wire along Mercer Street.
Potential Displacements	Residential: 26 Business: 44 to 46 Employee: 480 to 490	Residential: 167 Business: 47 Employee: 440
Potential Operational Vibration or Groundborne Noise Impacts before Mitigation (all impacts can be mitigated) ‡	4	36
Historic Properties with Adverse Effects §	3	9
Park and Recreational Resources Impacts (acres operational/acres construction)	0.4/1.4	0.6/<0.1

* Ranges reflect differences between construction methods and differences from connecting to different alternatives in adjacent segments. Cost range is due to Preferred Alternative DT-1 costing more when connecting to Alternative CID-1a*, Option CID-1b*, and Option CID-2b. Alternative DT-2 would cost more when connecting to Alternative CID-2a.

† The ridership is the total for the new Downtown stations and the existing Pioneer Square, University Street, and Westlake stations.

* The numbers presented are the number of units, counted by individual residences, including individual units of multi-family structures, and number of structures for other uses, like schools, churches, and parks.

§ Potentially adversely affected under Section 106 (to be confirmed through consultation with State Historic Preservation Officer).

dEIS Table ES-6: Key Environmental Impacts of the Downtown Segment Alternatives

Date: **5 February 2022**

Sound Transit Board Members
emailtheboard@soundtransit.org
Union Station, 401 S. Jackson Street
Seattle, WA 98104

Ref: **Chinatown/ID Station Options**

Dear Sound Transit Board Members:

I am Paul Wu, a semi-retired Architect, and a long time community volunteer on matters involving the Chinese Community in Seattle.

The Seattle Chinatown/International District (CID) has been a cultural hub for the Asian community in the larger Seattle metropolitan area and a tourist attraction for visitors. Like many Seattle neighborhoods, the CID has been devastated by the Pandemic shutdowns, the recent civic blight and the hate crimes targeting Asians. Historically, the Chinese community suffered from several governmental acts of the 1880's (locally, the Seattle Chinese Expulsion on February 7, 1886). For the record, the Seattle Chinatown was relocated twice, first from the Seattle waterfront, then from Second and Washington Street, until the current King Street location. Since then, the Seattle Chinatown survived and was listed on the National Registry of Historic Places in 1986, with the Southern boundary on 4th Avenue South.

The location of a transit station serving the CID neighborhoods is beneficial to the neighborhood. However, the impact from construction and subsequent re-development may have unwanted impacts to the Historic District.

As such, I urge the Sound Transit Board to consider the least impactful option for the new transit station. The **4th Avenue "Shallow"** is our preferred option for the new station location. This option has the least impacts to the Historic District and will provide transit access for both the CID and Stadium communities. Other location options may create unwarranted displacement/disruptions to local businesses and residents (especially to the over 1,000 elderly non-English speakers) during construction and replace local property ownerships in subsequent redevelopments.

I appreciate your consideration and will be happy to continue a dialogue if needed.

Sincerely,



Paul Z. Wu, AIA
President, Friends of Chinatown-Seattle
Member, Transit Equity for All

Sound Transit Projects

Details	Communication
#503856	
Date Recieved: 4/28/2022	Dear Sound Transit and Link Extension Project Partners: The development of the Chinatown-International District light rail station will have long term and substantial economic and cultural impacts on the stability of the neighborhood. We are deeply concerned that these impacts have not been considered or studied fully in any of the proposed options for the West Seattle and Ballard Link Extensions. As a result, we cannot, in good faith, endorse any of the options presented.
Created by: Cecelia Gunn	Impacts from the lengthy construction, land speculation, and the resulting increase in property values will drive instability, higher rents, and increased displacement in the neighborhood, especially in the areas directly adjacent to the station. This will fundamentally change the community-makeup of the CID, forcing out people, businesses, and organizations who have defined the neighborhood, but cannot weather the substantial construction impacts nor adjust to the new economic pressures that this development will undoubtedly bring. This displacement will disproportionately impact those who already experience the most intense marginalization in our city: people of color, immigrants and refugees, people living with economic hardships, those experiencing housing instability, and our elders. By failing to address these impacts in the DEIS, Sound Transit seems to tacitly accept that these are acceptable casualties in support of building the
Audience: General Public	light rail extension, but we vehemently disagree.
Reach:	
Participation:	
Engagement:	The INScape Arts Building is the single densest concentration of working artists located within the region. Over one-hundred artists from various disciplines and backgrounds call INScape home. It is unique among spaces that foster this kind of extensive and rich creative community. In recent years, there has been an enormous burden placed on creative communities located within Seattle, as multiple studio spaces have been displaced and lost due to unmitigated development and economic pressures. Our ability to maintain this vital creative community depends on the stability of our space within the Former INS Building. Many of our artists depend on having access to affordable rents and space located within the city core. If land speculation and rising property values related to the light rail station development move forward unmitigated, the feasibility of securing a stable future for this community will evaporate.
Source: Email	
Assigned division: Outreach	
Category:	The Former INS Building is currently for sale, and even as our creative community works quickly and diligently to secure the future of this historic building as a community neighborhood space (rather than a private office or condo development), land speculation related to the potential station development is already creating hurdles to finding that path forward. Not acknowledging this potential loss as a community impact is tantamount to Sound Transit turning a blind eye to the very real determinants this project can and will have on the cultural and creative communities in Seattle. These impacts should be understood and acknowledged.
Project Phase: Planning	
Project Segment:	
Environmental phase: Draft EIS	Finally, the effects of systemic racial discrimination, deeply imbedded in the planning processes within Seattle and King County, have often placed an unfair economic and social burden on the CID and South Downtown neighborhoods. It is highly inappropriate to not consider this history with due sensitivity in all future developments within these neighborhoods. By neglecting to offer thoughtful efforts to repair these harms and refrain from causing further damage, Sound Transit and King County are demonstrating an inability to learn from past mistakes and an alarming willingness to repeat them. The DEIS document, along with the proposed station options, fails in their entirety to address these glaring discriminatory impacts and are negligent in their narrow and biased focus. The CID is a regional neighborhood, home to a large elder population, and carries deep importance to diverse communities throughout the metro area and beyond. It is a nexus for cultural connection, expression, and celebration - reaching beyond the physical boundaries of the street grid to represent something philosophically greater and more iconic. The health of this neighborhood - its livability, affordability, and cultural integrity - is essential to the health of the region's diverse Asian communities. The DEIS does not take this perspective into consideration in looking at either construction impacts (which will be numerous, extremely disruptive, and lengthy) or the potential long term effects of the development (land speculation, pricing out of current businesses/residents, loss of cultural cohesion) and thus reveals deep bias in the way this study was approached and constructed. More conversations and careful analysis - gained in partnership with the neighborhoods and the impacted communities - is needed before this process can truly claim to be fair, equitable, and in service of the greater public good. We implore Sound Transit to redefine their approach to this process with a commitment to truly listen to the communities this development will impact. Use those conversations to gain insight and understanding that can be put into action. Stand firmly in service of the public, not in service of the project.



VIA ELECTRONIC MAIL

WSBLE DRAFT ENVIRONMENTAL IMPACT STATEMENT COMMENTS
C/O LAUREN SWIFT
SOUND TRANSIT
401 S. JACKSON ST.
SEATTLE, WA 98104

RE: COMMENTS ON THE DEIS FOR WEST SEATTLE AND BALLARD LINK EXTENSIONS
PROJECT

DEAR MS. SWIFT:

The Friends of Little Saigon is a community development organization established in 2011 at the start of massive redevelopment in Little Saigon. Our mission is to preserve and enhance Little Saigon's cultural, economic, and historic vitality.

Our organization was created to serve the Little Saigon community, as well as be a partner and advocate for key investments in the broader Chinatown-International District (CID). It is from that perspective and knowledge that we submit the following comments on the Draft Environmental Impact Statement ("DEIS") for the West Seattle and Ballard Link Extensions Project ("the Project"), notice of which was issued on January 28, 2022.

About Chinatown-ID/Little Saigon

The neighborhoods that comprise the CID are at an exceptionally vulnerable point in our 100+ year histories. The COVID-19 pandemic, epidemic of anti-Asian incidents, and 2020 protests against racial injustice and police violence disproportionately affected our neighborhood. Ongoing public safety and issues related to homelessness in Seattle and the surrounding region have historically challenged our neighborhood and continue to do so.

Little Saigon in particular has been vulnerable to these challenges because of high displacement pressures due to redevelopment and limited organizing capacity compared to the rest of the CID. Until recent years, Little Saigon has been primarily a commercial district with very few residents or social services. Small businesses are the economic, social, and cultural lifeline to the Vietnamese community.

Throughout its history, the CID has experienced hugely disruptive public infrastructure projects that have imposed localized and persistent impacts to our community while providing regional benefits. These include:

- The construction of Interstate 5 (which bisected the neighborhood, separating Little Saigon to the East)
- Construction of the Kingdome
- The SR99 Deep Bore Tunnel
- First Hill and Center City Connector Streetcars
- Seawall, Seattle Waterfront and, demolition of the Alaskan Way Viaduct
- Utility construction disruptions

The CID has had a long history of cycling through disruption caused by public infrastructure construction. Each time this happens the CID works through disruptions, recovers, only for the cycle to begin again with the next infrastructure investment. As stewards of the neighborhood, FLS has advocated directly to the City, Sound Transit, and King County (along with partners) to review past outreach outcomes to understand what community members have identified in the past 20 years about our interests, needs, concerns, and priorities. The City, Sound Transit, and King County have agreed to incorporate many of these interests, needs, concerns, and priorities into future projects and plans that affect our neighborhoods—including this Project. These priorities include:

- Retain or increase community ownership of properties
- Acknowledge and address historic racism that has and continues to impact the CID
- Increasing connectivity to surrounding neighborhoods.
- Minimize cumulative harm to and displacement of existing businesses, residents, and nonprofits
- Support a thriving, place-based small business economy during the WSBLE construction and beyond
- Enhance the public realm (streets, alleys, public spaces, etc.) in and around the station area
- Enhance public health and well-being

We appreciate the effort that Sound Transit and the City of Seattle have put into listening to what we value and need. Our comments outlined in this letter are delivered in the spirit of continuing to expand Sound Transit's understanding, so its leaders may make decisions that will benefit not just the region, but the generations of people who have built and sustained these neighborhoods in the face of monumental challenges.

A. Impacts of Fifth Avenue Alternatives are existential for the Chinatown-International District

The DEIS describes and compares the impacts of the Fourth and Fifth Avenue alternatives. After carefully considering the DEIS analyses, we conclude that the impacts of the Fifth Avenue Alternatives are so great, they put many of the community priorities outlined in this letter at risk. Unless Sound Transit can identify another option that moves the construction impacts away from the cultural spine of the CID and/or identifies substantial mitigation to avoid or greatly minimize these impacts, we do not believe the Fifth Avenue Alternative and options are acceptable.

Construction of the Fifth Avenue Alternatives would be the most disruptive in the very heart of the CID. They would close key streets for commercial and cultural activity, including King Street and Weller, impacting access to retail businesses for customers and suppliers. They would create noise, dust, truck traffic, and visual impacts that would hamper or prevent community gatherings and activity in Hing Hay Park and other outdoor spaces, and affect quality of life for residents of Uwajimaya Village, Fujisada Condominium, Publix Building, and Bush Hotel—many of whom are seniors or living with disabilities. They would permanently displace the most on-street parking, which is of particular importance to the retail and small business environment in the CID.

While the potential opportunity for Transit Oriented Development (TOD) associated with the massive disruptions created by the Fifth Avenue alternative and options may be enticing, the amount of impact imposed on the CID is difficult if not impossible to put a mitigation price tag on. Sound Transit would have to find ways to further minimize the impacts described or identify other options that move construction away from the cultural spine of the Chinatown-International District. Further minimization is required before we could even begin to value the substantial mitigation required to construct these alternatives. The community would need assurance that community ownership of properties would be prioritized in any TOD opportunity associated with this project. Ensuring community ownership will be critical if the project is to reduce—not exacerbate—the CID community's risk of gentrification and displacement. These measures must be in the form of explicit legal commitments; the promise of a TOD opportunity alone is not sufficient mitigation or incentive to support a Fifth Avenue alignment.

B. Impacts and benefits from Fourth Avenue alternatives are not equally addressed

The Fourth Avenue alternatives would have direct connections to both Pioneer Square and CID neighborhoods and would facilitate more direct connections between transit modes such as Sounder, Light Rail, Amtrak and private buses. The Jackson Hub concept plans, as well as the community priorities listed in the beginning of this letter state both neighborhoods' advocacy for improving connections between the neighborhoods, improving the public realm, and activating the Jackson Hub area more intentionally. From our review of the information presented in the DEIS, there appear to be opportunities to realize long-held community goals and regional benefits from a Fourth Avenue alignment, but the analysis lacks the information we need to further understand these opportunities.

For example, no formal visual quality analysis was performed for alternatives in the CID segment. An actual visual quality analysis, complete with images and discussion, would allow us to see how station entrances and improvements along 4th Avenue South between S. Jackson Street and Seattle Boulevard would contribute to public realm goals. More visual representation of the scope and scale of proposed tunnel ventilation facilities would aid in our understanding about impacts to the public realm. It would also create an opportunity for Sound Transit to discuss opportunities to enhance connections and cohesiveness between the two neighborhoods in the Social Resources, Community Facilities, and Neighborhood conclusions. Without the more formal analysis, beneficial impacts of the proposed project and alternatives are not explicitly disclosed and are hard for the reader to conclude.

The construction of either of the Fourth Avenue alternatives would also result in major traffic pattern changes that would have a damaging impact on the CID community. DEIS Section 3.19.3.1 (Arterial and Local Street Operations) states that throughout the six-year closure of 4th Avenue South, a high volume of north-south traffic would be diverted through CID neighborhood streets—resulting in increased levels of traffic congestion. Understanding the disruptive impact of more than nine years of construction on local traffic is critical, but it is not the only important impact that the community needs to consider.

The DEIS assessment fails to account for the environmental health impacts that this increased traffic congestion would have on the neighborhood. These impacts include (but are not limited to): increased noise levels, increased exposure to automobile exhaust, and increased risk of pedestrian injuries and property damage caused by automobile crashes. The DEIS also fails to account for the disruptive impact that such an increase in pass-through traffic would have on the neighborhood's economic vitality, including making street parking more difficult and disrupting economically important community events that require street closures.

A more thorough study of both the environmental and economic impacts of the extended closure of Fourth Avenue South is required for the community to accurately compare it with other alternatives.

The DEIS also falls short of identifying any meaningful mitigation strategies to address project impacts. Without understanding how Sound Transit intends to minimize and mitigate impacts, it is difficult to provide meaningful feedback about preferences. In addition to providing more information about the impacts we reference in this letter, Sound Transit must propose appropriate mitigation measures to address impacts associated with the Fourth Avenue alternatives so that the community can weigh the alternatives and their benefits, impacts and mitigation strategies, against our own community priorities.

C. The Deep Options do not support a 100-year vision for our neighborhoods

We do not believe the deep options are viable. The elevator-only access and longer transfer times will not be able to keep up with crowds during major events (e.g., football, soccer, or baseball games or Lunar New Year), or when there are mechanical problems. Nor will they be viable if there is another global pandemic that makes it unsafe to ride in an elevator with a non-household member. We fear that most people coming to the area from other parts of Seattle or the region will choose to disembark or transfer at a different station with less onerous transfers, which would serve only as a deterrent, and not an attractant to our neighborhoods. The deep options would also make light rail transportation inconvenient for residents of the CID, greatly diminishing the Project's purpose and need.

D. Characterization of adverse effects in the DEIS do not reflect the true impact to our communities

While Sound Transit and the City of Seattle have publicly committed to equity in the project process and applying the Racial Equity Toolkit throughout, the Draft EIS has some glaring holes in the analysis that must be addressed.

Sound Transit performed neither an operational noise analysis nor a visual quality analysis for the CID neighborhood. While the methodology sections give plausible technical reasons for this approach, those rationales are inadequate. Considering the project context and the focus on race and social justice for this project, the omitted analyses are vital to inform other analysis within the EIS. Without a noise and visual quality analyses, the Environmental Justice analysts concluded "no impact" when in all reality, there was "no analysis." This lack of information served to underestimate the impacts for all the CID segment alternatives and paint a picture of impact minimization that simply is not true.

The Environmental Justice analysis acknowledges cumulative harm caused by decades of public infrastructure projects sited and constructed without centering the voices of people of color—but then fails to account for that cumulative effect and harm in the actual analysis. The Environmental Justice conclusion of no disproportionately high and adverse impact (Appendix G, Table 5-4, pages 5-31 through 5-66) further minimizes the true effect on our community. This is representative of the findings provided in many of the Draft EIS analyses—no analysis in a few key disciplines led to “no impact” conclusions, which we believe lends to the overall inadequacy of the Draft EIS.

Finally, there is growing concern that losing buildings within the Seattle Chinatown Historic District boundary that are considered “contributing” to the historic character of the neighborhood, will erode the very historic and cultural fabric we have struggled to maintain. Losing a contributing historic building within the historic district protected under Section 106 of the National Historic Preservation Act appears to be a serious impact—one that is potentially unmitigable. Sound Transit did not propose any mitigation for the loss of historic structures in the district, and did not suggest any strategies for minimizing impacts to the historic district resulting from construction. Mitigation strategies need to be discussed with the community and consulting parties as soon as possible, and those conversations must not be delayed until publication of the next environmental document.

E. Conclusion

For the reasons outlined above, we cannot support the Fifth Avenue alternative and options without substantial mitigation to avoid or minimize the impacts described in the DEIS, nor can we support the deep options.

Based on review of the current information, we believe that the CID-1a option offers the greatest potential to achieve the community priorities, create direct connections between Pioneer Square and Chinatown-International District neighborhoods, and improve transit connections between modes. Furthermore, there appears to be more opportunity to minimize and mitigate traffic impacts through design, construction phasing and staging, and other engineering technologies than have been studied for Fourth Avenue to date. We believe CID-1a is the least impactful option for the CID neighborhood.

We recommend that Sound Transit track the DEIS comment period with advance design and study of the Fourth and Fifth Avenue shallow alternatives with the goal of further minimizing the cost, the time, and area needed for construction and the impacts. Once complete, we recommend Sound Transit engage the community in discussion well before the Final EIS about the findings from this study.

By focusing time and resources only on the shallow alternatives, Sound Transit can develop the information needed by the community to support future selection of a preferred alternative. We cannot overstate the importance of Sound Transit providing the additional information requested in this comment letter prior to formal publication of the FEIS. This information will be necessary for FLS and the CID community to support a project that facilitates much needed high-capacity regional transit, transit connectivity, and serves to enhance our neighborhood. The information can help frame up subsequent mitigation conversations, a topic that many in government appear anxious to advance.

Thank you for the opportunity to provide comments on the Sound Transit WSBLE DEIS. We strongly urge Sound Transit to work closely with the City of Seattle and King County to more fully explore strategies for reducing the costs and impacts associated with the three shallow alternatives before coming back to the CID community for further discussion.

SINCERELY,

A handwritten signature in black ink, appearing to read "Quynh Pham".

QUYNH PHAM
Executive Director

Historic Chinatown Gate Foundation

4716 South Morgan Street
Seattle, WA 98118

February 5, 2022

Dear Sound Transit Board Chair Keel, Vice-chair Constantine, and Board Members Franklin, Backus, Baker, Balducci, Dammeir, Harrell, Juarez, McDermott, Millar, Prince, Roscoe, Frizzell, Somers, Upthegrove, von Reichbauer, and Walker:

I am Tuck Eng, born in one of the lower apartment in Canton Alley, grew up in Chinatown and involved with Chinatown even since. Chinatown started to deteriorate after World War II for many reasons. Since the 1960s, there are continuous community efforts to revitalize Chinatown .

The Chinatown International District Business Improvement Area (CIDBIA) was created to support Chinatown, Japantown and Little Saigon. As a CIDBIA Board member, my colleagues and I implemented sanitation, safety, and marketing programs for CID. We also organized celebratory events to promote business and invite visitors to the Chinatown International District (CID).

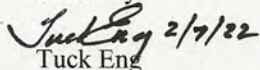
The Chong Wa Benevolent Association created the Historic Chinatown Gate Foundation to design and construct the Chinatown Gate for the Grand Entrance to Chinatown. The Chinese community raised over one million dollars for this project and donated materials, professional consulting and labor. Further maintenance of the Gate for the past ten years has cost thousands of dollars.

As co-chair of Friends of Hing Hay Park, I worked with community members to help design the Hing Hay Park expansion with an Asian flavor and made sure that the evicted Post Office will be re-located in Chinatown. As a result, it is a great pleasure to drive by and watch people of all nationalities, young and elderly enjoy the Park. Furthermore, the re-located Post Office in the Bush Hotel continues to provide multi-lingual service to the CID.

Over the decades, we have spent much time and money in an effort to re-vitalize our Chinatown. The current pandemic has given us a great challenge. Our greatest challenge now is the proposed Sound Transit CID Segment 5th Avenue Shallow and Deep Station (CID-2a & CID-2b). This proposed Fifth Avenue routes will impose severe problems to Chinatown , it's businesses and residents.

We, the Chinese Community, therefore, recommend the 4th Avenue "Shallow" Option 1A. This option has the least impact on Chinatown, in terms of construction activities, noise, air pollution, blocked streets, minority property ownership transfers and displacement of immigrant businesses, tenants, and residents. Please help us keep Chinatown vibrant with a safe environment for our businesses, community members and residents by staying on the Fourth Avenue "Shallow" Option 1A. Also the Fourth Avenue Option would better serve the Pioneer Square community.

Sincerely

 2/7/22

Tuck Eng

President

Historic Chinatown Gate Foundation



Where I'm From

I am from long days in China Town, rain or shine

Getting mango oolong Boba tea.

We are order # 16



One, two minutes go by and finally our number is called

As I slurp up the bitter, sweet tea and chew on the slimy balls of tapioca

We walk out and down the steep steps

I am from small dim sum restaurants filled with people

My mom yelling out our order



"6 baked hom bow, 2 steamed, 1 order of shumai, and an order of lotus leaf sticky rice"

Now we wait, sitting on the red, plastic, cracked bench we wait

FINALLY

Our food is ready, mom hands me the plastic bag of our food

I feel the warmth of the fresh made food on my bare hands

The smell of BBQ pork, shrimp, lap chong fills my nose

I am from dinner at my grandparents' house, just like my mother did when she was a child

I am from helping my grandpa cook in his narrow kitchen

I am from the first house built in China Town

Where my mother would have Sunday dinner with all
her cousins, aunts, and grandparents

I am from the old picture albums of my entire family

The black and white pictures that fill the walls

I am from the memories of my family who have long
passed

I am from aunties who don't speak English, and pat
your hands when you sit next to them

I am from China Town, rain or shine



Sound Transit Projects

Details	Communication
#505041 Date Recieved: 3/10/2022 Created by: Christopher Johnstone Audience: General Public Reach: Participation: Engagement: Source: Email Assigned division: Outreach Category: Project Phase: Planning Project Segment: West Seattle and Ballard: CID Environmental phase: Draft EIS	<p>Historic Chinatown Gate Foundation 4716 South Morgan Street Seattle, WA 98118 March 9, 2022</p> <p>Dear Sound Transit Board Members and Seattle City Council Members:</p> <p>I am Tuck Eng, a 37-year retired Special Processes Integration Manager for Boeing. I have been working with CIDBIA and SCIDPDA for the past decade in an effort to revitalize the Chinatown International District (CID), comprising of Chinatown, Japantown, and Little Saigon. Our Community provided a grand entry to Chinatown with the Historic Chinatown Gate and recently expanded Hing Hay Park to welcome visitors. Based on our marketing efforts, every space on the ground floor in the entire Chinatown is occupied by a business. We worked hard to provide a clean and a safe as possible environment in Chinatown. CID depends heavily on tourists, neighbors and friends traveling into Chinatown to support our businesses, and to enjoy the flavors of Chinatown. Currently, on busy days visitors have a hard time finding a parking space.</p> <p>The current proposed Sound Transit CID Segment 5th Avenue Shallow and Deep Station (CID-2a & CID-2b) will impose severe impacts to Chinatown businesses, residents and organizations.</p> <p>We, the Chinese Community, therefore, recommend the 4th Avenue options (Options 1A and 1 B). These options have the least impact on Chinatown, in terms of construction activities, noise, air pollution, blocked streets, disruption of business operations, minority property ownership transfers and displacement of immigrant businesses, tenants, and residents. Please support Chinatown like other cities and help keep Chinatown vibrant with a continued safe environment for our businesses, community members and residents by staying with the Fourth Avenue Options.</p> <p>Furthermore, a point of concern is the make-up of the soil between 5th and 6th Avenue South and South of Jackson Streets which is backfill from soil washed down from Beacon Hill many years ago. During the construction of the Historic Chinatown Gate, we had to utilize 80-foot-deep drilled piers for the foundation of the Chinatown Gate. We found that there was unstable fill dirt and had to drill an additional 20 feet in-order to secure the required foundation. These unstable subsurface conditions may cause construction problems and danger in securing the fill dirt during excavation and could substantially increase the costs for the 5th Avenue options.</p> <p>In another issue, could Sound Transit collaborate with Seattle on the 4th Avenue viaduct rebuild project for the most savings in cost and time.</p> <p>Sincerely,</p> <p>Tuck Eng President</p>

Historic Chinatown Gate Foundation

4716 South Morgan Street
Seattle, WA 98118

April 18, 2022

The Chinatown International District (CID) like many other communities, is just beginning to recover from the pandemic. Challenges remain: removal of graffiti, garbage, boarded up windows/doors and restaurants trying to survive only on take-out orders, and criminal activity. Destroyed by an arsonist, our family association building burnt to the ground, resulting in total lost in revenue. The arsonist is still at large. Nevertheless, we still have to pay the high, annual property tax.

Neither Chinatown, Japantown, nor Little Saigon can survive on the patronage of the community's low income, housed residents. We need to attract visitors and tourists to patronize our businesses in order to recover. Therefore, it is essential that to provide a clean, safe, inviting cultural environment to attract those living outside the CID.

The traditional, red columned Chinatown Gate connects visually to the modern, red arch of the recently expanded Hing Hay Park, This is the Heart of Chinatown. The disruptions of demolition of adjacent buildings next to the Gate, displaced and permanently closed businesses, excavations, loss of 150 plus parking spaces, and venting tunnel exhaust into our community, as proposed by the 5th Avenue options, would present a severe blow to Chinatown's recovery within the CID.

My concern is with excavating near the foundations of the Gate.

There is over 20 feet of fill dirt, with minimal compaction in the area. We had to drill down 60 plus feet before meeting the seismic requirement of supporting the four Gate pillars. Lateral support structures may be needed during excavation in this area. Wrapping the Gate during construction destroys the iconic image of the Gate as the grand entrance to Chinatown. The proposed wrapping to protect the Gate could also dislodge the roof tiles, the tile artwork and wear on the painted surfaces during windy conditions. We currently spend thousands of dollars cleaning and painting the Gate every other year.

Historic Chinatown Gate Foundation

4716 South Morgan Street
Seattle, WA 98118

Here is the recommendation for properly protecting the Gate during the proposed years of construction:

Protection Goals: To preserve the structural integrity and ornamental details on the Historic Chinatown Gate (herein after: Gate).


Methods and Means: To be provided by Sound Transit for Historic Chinatown Gate Foundation approvals.

Gate Protection: The Foundation consists of reinforced auger cast pilings as much as 80 ft. under each of the 4 steel columns. These pilings shall not be disturbed or undermined. Proper protection/shoring shall be implemented where required to maintain structural integrity of the foundations/piling. Rigid framework, independent of the Gate, shall be constructed around and above the Gate. This framework shall be self-supporting. No tie-backs are permitted to anchor or brace to the Gate. The framework shall be covered with 1/2" min. marine grade plywood and suitable moisture barriers. Submit structural engineering design of the framework for Gate Foundation approvals prior to any construction.

Note: The ornamental tiles and features were imported from China. These are custom made and hard to duplicate or replaced. Utmost care shall be taken to protect these ornamental features.

So that's what it would take to adequately protect the Gate. However, with other available options having less direct impacts to Chinatown available, the Chinese Community strongly urges your serious consideration for the 4th Avenue options. Please help us with Chinatown's recovery, revitalization and Move Forward on 4th Avenue!

Respectfully yours,



Tuck Eng
President
Historic Chinatown Gate Foundation



HISTORIC SOUTH DOWNTOWN

VIA ELECTRONIC MAIL

WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 S. Jackson St.
Seattle, WA 98104

RE: Comments on the DEIS for West Seattle and Ballard Link Extensions Project

Dear Ms. Swift:

The Board of Directors and staff of the Pioneer Square International District Community Preservation & Development Authority (dba Historic South Downtown, *hereinafter* HSD) are pleased to provide these comments on the Draft Environmental Impact Statement ("DEIS") for the West Seattle and Ballard Link Extensions Project ("the Project"), notice of which was issued on January 28, 2022.

On April 26, 2022, the HSD Board of Directors voted to approve the content of the following letter and appendixes, with a vote of 10 yeas with 2 abstentions.

HSD supports the extension of light rail to West Seattle and Ballard, fulfilling a key part of the Sound Transit 3 program approved by voters in 2016. The WSBLE project will transform the region's light rail system and the Chinatown-International District (CID) and Pioneer Square (PSQ). The project carries the potential to create a more connected, accessible regional transportation hub in South Downtown, improving access for commuters using light rail, the Sounder, Amtrak, Seattle Streetcar, Metro, Greyhound, Community Transit and Pierce County busses, and WSDOT Ferries. HSD supports this vision.

In the following, we outline our concerns over the serious, permanent damage posed to the CID by the 5th Ave. S. (CID-2a and 2a Diagonal) options, and the potential for the development of a vibrant, connected regional transit hub with 4th Ave. S. shallow (CID-1a) alignment. We ask the Sound Transit Board of Directors to center the priorities and needs of the equity-seeking communities of color in South Downtown. Our comment letter consists of this cover letter and three appendixes.

HSD AND SOUTH DOWNTOWN HISTORIC DESIGNATIONS

HSD was created by the Washington State Legislature in 2007 to preserve, restore, and promote Seattle's historic PSQ and CID neighborhoods. HSD exists to help the neighborhoods of PSQ and the CID mitigate and recover from the effects of large public projects. We are governed by a board of directors drawn from the community, elected to represent local businesses, residents, government, arts organizations, non-profits, and historic and cultural organizations from both neighborhoods.

Each neighborhoods contains a core area listed in the National Register of Historic Places, and an overlapping, slightly larger area protected by local historic district designations and related preservation regulations. The National Register (NR) boundaries show that Union Station, the existing ID/C light rail station, and the ID/C plaza are within the Pioneer Square NR district. Maps of the local historic districts show that these areas are contained within both the Pioneer Square Preservation District and the International Special Review District. Additionally, Union Station is individually listed in the National Register of Historic Places.

SOUTH DOWNTOWN – DIVERSE, HISTORIC COMMUNITIES

PSQ and CID are home to Indigenous people, non-English speaking households, immigrants and minorities at higher rates than other Seattle neighborhoods, and higher than any other communities along the proposed Ballard or West Seattle alignments. Both neighborhoods support a high percentage of small, locally-owned businesses, which contribute to the vibrancy of the communities and attract visitors from around the world. The core of the Chinatown historic district is strongly connected to the immigrant Chinese, Japanese, and Filipino communities. A late 2020 survey of businesses in the historic district found that more than 67% meet multiple definitions of “small business” and 88% are Black, Indigenous, or People Of Color (BIPOC)-owned.

Both neighborhoods are at an exceptionally vulnerable point in their 100+ year histories. The COVID-19 pandemic, 2020 protests against racial injustice and police violence, and an epidemic of anti-Asian incidents disproportionately impacted our neighborhoods. The crisis of houselessness that affects all of Seattle and the region is particularly acute in our neighborhoods, particularly in PSQ with its disproportionate concentration of service providers.

Both communities have experienced decades of highly disruptive public infrastructure projects. A consistent theme of these projects is that they generate benefits regionally while the burden of negative impacts is felt primarily locally. In recent years, the projects include construction and operation of two stadiums, the SR99 Deep Bore Tunnel, First Hill and Center City Connector Streetcars, Seawall, Seattle Waterfront and demolition of the Alaskan Way Viaduct, and utility upgrades. All of this has taxed our resources and exposed us more than ever to the corrosive effects of displacement and gentrification.

Despite the challenges PSQ and CID communities face, our neighborhoods are resilient. Although the COVID-19 pandemic and racialized violence have stymied small businesses and sent residents indoors for more than two years, currently we are witnessing the glimmers of an enduring community. The restaurants and cafes are seeing customers return. Neighbors are once again gathering in Hing Hay Park to practice tai chi or play a round of ping pong. Work continues to implement the Jackson Hub Concept Plan, a community-led effort to create a

welcoming, safe area at S. Jackson St. between 2nd Ave. S. and 5th Ave. S., where the two neighborhoods meet.

Although the Omicron surge in January delayed the traditional Lunar New Year celebration, community members and people from across the region will gather on April 30 to celebrate together. Long-closed upper floor businesses are returning to PSQ, and Occidental Park is filling its once empty tables with people grabbing lunch or coffee amongst the mature London Plane trees and historic buildings. The interplay between local businesses, residents, visitors, employees, and the celebrations, traditions, festivals, seasonal rhythms and stories has built two unique neighborhoods rich with intangible cultural heritage.

In the early planning of the Project, the City of Seattle and Sound Transit identified the CID as the only neighborhood within a half-mile of the representative alignment with a concentration of communities of color greater than the citywide average, and therefore subject to specific focus and support through the Racial Equity Toolkit (RET). Our neighborhoods—historic, iconic, and home to multigenerational, multilingual, socio-economically diverse Seattleites—deserve this protection and support.

RACIAL EQUITY AND ENVIRONMENTAL JUSTICE

Like communities of color across the country, the CID and PSQ have been harmed by more than a century of public projects and policies that have, at best, failed to center communities of color and low-income residents, and at worse, baked racist policies into the infrastructure of South Downtown.

Sound Transit and the City of Seattle have partnered to use the RET in the planning and construction of the Project. In relation to the CID, the RET states the joint intent of these public entities is to 1) limit harmful impacts of the project and work with impacted communities to identify opportunities to repair past harm; 2) maximize connection for all users; and 3) [ensure] community shapes decisions that impact them, through self-determination and with a 100-year vision for future generations.

The National Environmental Policy Act (NEPA) does not require an effort as detailed as the RET, but it does require an evaluation of whether the Project would result in disproportionately high and adverse effects on minority and low-income populations, and require Sound Transit's engagement with these populations to encourage their active participation in the planning process. The RET is also consistent with Executive Order 12898, and therefore with the purpose of the Environmental Justice analysis.

To ensure the RET/Environmental Justice analysis appropriately acknowledges the cumulative harm caused by more than a century and a half of public policies and infrastructure projects based in systemic racism, HSD has compiled a list of examples, attached here as Appendix A. Please note that as with many instances of systemic racism, some of these events were initiated to have positive and protective impacts but unintended consequences arose that created new barriers or disproportionate problems for the BIPOC community.

Also please note that while the Environmental Justice analysis references these impacts in the narrative, it does not include them in the documentation of the analysis that led to an Environmental Justice conclusion of no disproportionately high and adverse impact (Appendix

G, Table 5-4, pages 5-31 through 5-66). This conclusion is clearly wrong, as is made obvious by the analysis included in this submission. See *infra* and attached Appendix A.

UNDERSTANDING PAST HARMS AND BROKEN PROMISES

The RET and the Environmental Justice appendix of the DEIS both seek to address past harms and help to involve community in planning to avoid disproportionate impacts on communities of color. We believe it is important to spell out what some of those past harms have been, and to recognize how more modern projects have allowed systemic racism to overcome stated positive goals, to ignore community priorities, and to break promises made to communities of color. For that reason, we have listed examples of racist practices, attacks, incidents, redlining, and even well-intentioned policies that have increased barriers, going back more than a century. See *Appendix A*.

Union Station was built in 1911 and brought the Oregon and Washington Railroad regional rail into south downtown. It served until 1971, when Amtrak consolidated into King Street Station. Early planning in 1973 began to explore using a facility designed to handle thousands of passengers for multimodal transit. It was studied again in 1985, 1989, 1992, and finally 1998 when it became the headquarters for newly-formed Sound Transit. The building is still underutilized, even after almost 50 years of studies. While return of passenger rail access to the building is listed in the DEIS as an adverse impact due to construction disruption and partial property acquisition, we believe that a thoughtfully-designed adaptation could return integrity of use, feeling, and association to this iconic building that stands as an entrance to downtown Seattle and the intersection of two historic districts.

In numerous outreach activities over the course of the WSBLE project, Sound Transit staff have engaged the community in visioning exercises to surface community priorities and goals. *These outreach efforts were required and necessary* in the context of this ambitious transit project. However, for many people in South Downtown, the overwhelming feeling is that *we have been here before*.

In 2019, the City of Seattle, Sound Transit, and King County agreed—at the request of a coalition of South Downtown stakeholders—to partner with us to review past outreach outcomes and consolidate what community members have been saying for the past 20 years about our interests, needs, concerns, and priorities. This review revealed remarkable consistency over the course of decades. The City, Sound Transit, and King County also agreed to incorporate many of these neighborhood self-defined priorities into future projects plans that affect our communities—including this Project. These priorities are:

1. Retain or increase community ownership of properties
2. Improve public safety
3. Enhance community vitality and sustainability
4. Encourage economic development
5. Enhance public health and well-being
6. Acknowledge and address historic racism that has and continues to impact neighborhoods
7. Minimize cumulative harm to and/or displacement of existing businesses, residents, and nonprofits
8. Activate common areas

9. Increase economic diversity in businesses and residents
10. Improve mobility and connectivity
11. Retain historic and cultural character
12. Support a small business environment
13. Ensure that people across Seattle and the region continue to visit the neighborhoods, even during construction

In recent years, Seattle, King County and Sound Transit staff have worked with PSQ and CID stakeholders on implementing the Jackson Hub Concept Plan, published in 2019. This is an example of ways that governmental units are working to center community priorities and accomplishing shared goals. However, there is still no actionable result from the Concept Plan work. The RET is another opportunity for our governmental partners to illustrate support of equity-seeking communities and demonstrate that promises will be kept.

To ensure that Sound Transit and the City of Seattle meet their stated outcomes of: 1) limit[ing] harmful impacts of the project and work with impacted communities to identify opportunities to repair past harm; 2) maximiz[ing] connection for all users; and 3) [ensuring] community shapes decisions that impact them, through self-determination and with a 100-year vision for future generations, the DEIS must center the values and priorities of the people of the CID.

FIFTH AVE. S. IMPACTS

The proposed 5th Ave. S. alignments (CID-2a, CID-2b, and CID-2a Diagonal), would break the promises and stated goals of the RET. The direct, permanent impacts on four to six National Register-eligible/-listed buildings, with additional indirect and construction impacts on another four+ buildings and would constitute a significant adverse effect on two National Register-listed historic districts. With the addition of parks, it also results in a significant increase in use impacts under 4(f) (1 resource versus 3-4 resources).

There is an open question as to whether the long-term, direct, and indirect impacts of the 5th Ave. S. options could be mitigated at all. Is the loss of intangible cultural heritage something that could be addressed monetarily? Would mitigation programs accomplish their goals within a predictable timeline? HSD does not think so. Instead, this Project requires design that avoids the catastrophic impacts of carving up two blocks of the CID.

A 4th Ave. S. alignment *shifts* the impacts and trade-offs for a *regional* transportation system outside of a fragile, historic, ethnic neighborhood that was red-lined into existence. The entities who would be impacted with the siting of the station on 4th Ave. S., in general, have stronger financial infrastructure to bear the burdens. A 4th Ave. S. choice would distribute the impacts equitably across the region, be primarily economic, and suited to the current mitigation guidelines.

Additionally, a station constructed between existing transit options bears the potential to smooth the rider's experience when moving between modes of transit. The 4th Ave. S. alignment would support implementation of significant parts of the Jackson Hub Concept Plan, particularly in regard to connections between neighborhoods and transit. It would increase pedestrian infrastructure and align signals to prioritize pedestrian and transit-rider experiences in this important corridor, which would have lasting benefits to both PSQ and the CID.

DEEP STATION OPTIONS SHOULD NOT MOVE FORWARD

After careful review of the WSBLE DEIS, the HSD Board does not believe that either of the deep tunnel options, CID-1b or CID-2b, meet the stated goals of creating a user-friendly mass transit system and interconnected transit hub around Union Station and King Street Station. They also do not meet the community goals of connectivity between transit and the CID and PSQ neighborhoods.

We do not believe the deep options—with their elevator-only access and longer transfer times—serve to support the neighborhood or the region. Even a bank of eight elevators will be unable to keep up with crowds during major events (e.g., football, soccer, or baseball games, or Lunar New Year), or when there are mechanical problems. Nor will elevator-only access be viable if there is another global pandemic, making it unsafe to ride in an elevator with a non-household member. We fear that elevator-only access will lead people to disembark or transfer at a different station with less onerous transfers, undermining multiple goals for the performance of the new station. The deep options would also make light rail transportation inconvenient for residents of PSQ and the CID. With all these challenges, we believe that CID-1b or CID-2b diminish the project's purpose and need and should therefore be removed from further consideration.

DIRECT, INDIRECT, SHORT- AND LONG-TERM IMPACTS OF 5TH AVE. S. ALTERNATIVES

In 2022, if you were to stand on the plaza of the International District/Chinatown (ID/C) light rail station at S. King St., you would physically be in both the CID and the PSQ historic districts.

Around you, the ID/C station plaza is bordered by the early 20th century brick architecture of Union Station, and steel and glass architecture of early 2000s development. The 1990s ID/C plaza has brick paving and steel trellis superstructures, with art and poetry elements worked into the plaza so subtly that they have been forgotten. The steel and glass architecture of the buildings to the south and west of the station house some of the only chain food businesses within the two historic districts. The glass reflects the historic buildings across 5th Ave. S.

To the east, you see the heart of Chinatown, framed by the Historic Chinatown Gate. It is an active commercial area, but one still recovering from the coronavirus pandemic and the attendant rise in anti-Asian violence.

Storefronts along 5th Ave. S., particularly north of S. King St., have suffered from the lack of commuter and daytime business traffic, but the small storefronts along S. King St. are still active. The corner building houses Joe's Bar, a small local dive that has been a tavern or bar dating back to at least 1938 – five years after the end of prohibition - when it was Mrs. Ko Nishiyama's Beer Parlor. A few storefronts down S. King St., Seattle's Best Tea, a Taiwanese tea and boba shop that has been open since 1996 in a space that used to house a billiards parlor and a Thai market, but that now serves boba devotees. These anchors support traffic to new businesses like Chung Chun Rice Dogs, which opened in one of these smaller, affordable spaces, and which is something of an Instagram sensation

South of the Gate, the Publix is a 21st century success story, rehabilitated from its early single-room occupancy hotel configuration to a market-rate apartment rental, with a new apartment

building on the south, complementing the historically contributing architecture. Both Publix buildings, along with the commercial buildings to the north, have ground floor retail, small local businesses contributing to the vibrant entrepreneurial community of the CID.

Behind the Publix is a parking lot and a low, one-story brown stucco building with a striking blue tile roof - the old Uwajimaya grocery store - now known as the Nagomi Plaza. Behind the Nagomi Plaza is the new Uwajimaya, a multi-story building with apartments rising above the grocery store, food court, and a few other small businesses that activate the street fronts.

Most of this area is either owned or occupied by local, minority families, who have built up businesses, educated children, and passed on a commitment to the CID community.

What will this neighborhood look like in 2042?

Per the DEIS, if either CID-2a or CID-2a diagonal are built, the locally-owned parcels will have been purchased by Sound Transit. A ventilation tower and emergency exit structure will sit in the middle of what had been the Nagomi Plaza parking lot. The rest of the block between the back of the Publix, 6th Ave. S. and S. Weller St. will be vacant. The station entrance will sit across the street, on another almost completely vacant lot, with bike storage and another empty lot at the opposite corner of that block. The community will be working to define what happens next. At that point, how will the potential TOD plan incorporate the communities' long-stated priorities? Once the Historic Chinatown Gate is surrounded by empty lots, how will Sound Transit engage to restore the intangible cultural heritage that was lost along with the buildings and businesses?

Economics and Cultural Practices are Intertwined in Chinatowns

The DEIS acknowledges that the CID has strong social cohesion, as well as high risks for displacement, defining neighborhood cohesion as "the extent to which residents have a sense of belonging to their neighborhood ... consider[ing] the interactions between the residents and the resources in the neighborhood" (DEIS 4.3.4.1.1; 4.3.4.3.3).

Chinatowns have always been a combination of economic participation in white culture while being refuge from that dominant culture. The space that mediates this relationship for a group that has been deemed a perpetual "other" is imbued with intangible cultural heritage: traditions, manifestations, and living expressions of living culture, knowledge, and skills, including languages and festivals.

Seattle's CID is unique in bringing together Chinese, Japanese, Filipino, Vietnamese, and Cambodian immigrants together in a space that defined by their "otherness" but which has built that identity into a strength of community identity. Unlike any other neighborhood along the WSBL corridor, the CID provides a space for belonging through culturally-competent social services, recreational and cultural spaces, and culturally-relevant small businesses.

The CID houses a tradition of immigrant entrepreneurship, often transferred down generations, creating family wealth and stability that was otherwise impossible for Asian immigrants to access. Economic and cultural impact cannot be considered separately from one another in this neighborhood.

CID-1A, 4TH AVE. S. SHALLOW, ALIGNS WITH COMMUNITY PRIORITIES AND AVOIDS HARMFUL IMPACTS TO COMMUNITIES OF COLOR

The 4th Ave. S. shallow option, CID-1a, is the alternative that avoids, rather than attempts to mitigate, unmitigable cultural impacts. And more importantly, the 4th Ave. S. shallow option allows Sound Transit and the City of Seattle to partner in a project that will create a thriving regional transit hub and move forward important and long-delayed priorities of the surrounding communities, including ideas proposed in the Jackson Hub Concept Plan.

The benefits of a 4th Ave. S. shallow option will benefit the community and the region by truly fulfilling a 100-year vision. It will:

1. **Improve mobility and connectivity:** shallow options mean easier and more convenient transfers between light rail lines and easier access to other transportation modes. A 4th Ave. S. alignment provides direct transit connections to both the CID and PSQ neighborhoods, as well as the most direct connections to Sounder, Amtrak, and the stadiums. With the pedestrian underpass, it improves the pedestrian experience for people using light rail or just trying to get across 4th Ave. S.
2. **Activate common areas:** CID-1a would activate Union Station by reviving its original purpose as a train station. By serving as the location for the new light rail station entrance, and a connection between the existing and proposed stations, the revived Union Station would be readied for further successful activation. However, any programming activation must be fully funded.
3. **Improve public safety:** Additional activation of Union Station, the S. Weller St. Pedestrian Bridge, and the 4th Ave. S. and S. Jackson St. intersection with pedestrians will improve public safety. This serves to enhance public health and well-being by increasing pedestrian safety and connectivity between the CID and PSQ neighborhoods. The City's Station Planning Progress Report also identifies pedestrian improvements to be made around the station, which would further increase these benefits.
4. **Minimize cumulative harm to and/or displacement of existing businesses, residents, and nonprofits:** This community priority meets the RET outcome goal, as well, and a 4th Ave. S. alignment will avoid the displacement of 19-27 small businesses in the CID along 5th Ave. S., S King St., 6th Ave. S., and S. Weller St. Additionally, by moving the core construction outside of this fragile ethnic neighborhood, the impacts of the project are shared regionally rather than locally by small, minority-owned, under-capitalized businesses.

Increasing economic diversity in businesses and residents, encouraging economic development, and retaining/increasing community ownership of properties are additional goals that are best viewed under cumulative harm, as the economic and cultural life of the CID and PSQ are intertwined. These priorities will require Sound Transit to work with the communities and the City to identify needs, barriers, and opportunities to improve the long-term sustainability and viability of these important historic neighborhoods in Seattle.

HSD aims to support a small business environment and asks Sound Transit and the City to join us in this goal, which will enhance community vitality and sustainability and retain historic and cultural character. In different ways, both PSQ and CID are neighborhoods developed by small, local entrepreneurial businesses, with their mixed-use buildings and housing residents behind and above the businesses that provide employees and patrons.

5. **Ensure that people across Seattle and the region continue to visit the neighborhoods, even during construction:** By avoiding construction impacts on 5th Ave. S., S. King St., and S. Weller St., the CID is protected from massive construction disruption, allowing the businesses, non-profits, and cultural cohesion to continue on their current path, attracting locals and visitors from around the world to visit. Similarly, PSQ would not suffer the same level of construction impacts they have faced in recent projects. The design of the construction mitigation plans will be key in achieving this goal, and communities should be involved.
6. **Acknowledge and address historic racism that has and continues to impact neighborhoods:** Appendix A has a starting list for *acknowledging* past impacts of government actions on these neighborhoods. Addressing them should be incorporated into the FEIS in the cumulative effects section, along with designed mitigation and project mitigation that attempts to leave the communities with increased equity post-Project construction.

ADDITIONAL STUDY IS NEEDED TO ADDRESS 4TH AVE. S. IMPACTS

Every effort to improve our regional transit network will involve trade-offs. As discussed above, HSD does not believe the trade-offs called for in the 5th Ave. S. options provide sufficient benefit or can be effectively mitigated.

This does not mean that the CID-1a 4th Ave. S. alignment is without substantial impacts. There are many outstanding questions that remain unanswered in the DEIS. HSD is requesting that the Sound Transit board commit to a period of additional study and transparency of 4th Ave. S., to answer these many remaining questions and allow for a thorough mitigation plan to be developed. Some specific points to highlight:

- The additional study requested is not intended to delay to the WSBLE timeline. Rather, HSD requests that Sound Transit staff continue to engage with the community as it answers the questions listed below (and others that arise) so that community can be involved in the direction forward, instead of passively receiving the Final EIS next year.
- Chief among the concerns is the projected cost overrun. Sound Transit has engaged in voluntary cost refinements on other segments of the proposed alignment. It must do an aggressive refinement for the 4th Ave. S. Shallow option as well. HSD is asking Sound Transit to right size the 4th Ave. S. alignment and station within the budget and apply design strategies to shrink the cost. Apply the same kind of innovative thinking and creativity and effort used to generate the 5th Ave. S. diagonal alternative (a station proposed by Sound Transit to address the challenges they have identified for CID-2a), to explore improvements and refinements to CID-1a.

- What construction practices or design refinements can Sound Transit and City of Seattle utilize to manage detours, traffic diversions, and minimize road closures?
- Bus routes DO need to be maintained during construction. Can buses and transit be given priority on what remains of 4th Avenue during construction?
- What will the impact be on the S. Weller St. Pedestrian Bridge?
- Can the impact on Ryerson Bus Base be further reduced?
- How can haul routes be reoriented outside of the CID and PSQ neighborhoods, with their small-scale pedestrian environments, areaways, historic buildings, and concentration of human services?
- Sound Transit should address how surge events during construction can be managed. Additionally, the FEIS should address how the new CID station design will accommodate surge events in operations.

ADDITIONAL STUDY NEEDED IF 5TH AVE. S. ALTERNATIVES PROGRESS

If the Sound Transit Board decides to proceed with study of the 5th Ave. S. alignments, additional study and cost estimates for substantive, transformational mitigation must be included. These include:

- A community ownership commitment for any parcels of land designated for equitable transit-oriented development. For example, investigate the feasibility of a community land trust or other non-traditional models and creative approaches to community ownership.
- Additional study of the economic feasibility of TOD within the context of the International Special Review District regulations, considering community capacity and financing. As TOD is intended to increase density around transit hubs, but the CID and PSQ are already high-density neighborhoods, can additional density be achieved within the historic district regulations?
- An understanding of the cultural importance of small business ownership and small unofficial incubator spaces must be developed to facilitate proper mitigation and relocation packages for affected small businesses. In a small business district like the CID, businesses exist within a network of other small businesses. Relocations have ripple effects. Sound Transit needs to assess these effects or provide support for community organizations to study this, prior to settling on a mitigation package.
- Funding to support small local businesses with non-English speaking proprietors to prepare to engage in the Uniform Relocation Act, including bookkeeping and legal support, based on lessons learned engaging with Rainier Valley businesses dealing with mitigation in ST1.
- Funding for community organizations in the CID and PSQ to hire additional staffing and/or contractors and develop programs to assist their constituents and visitors to prepare for construction impacts, navigate the construction period, and advocate for community vision until the promised TOD is complete.
- Any effort to activate Union Station while siting the new station on 5th Ave. S. should include mitigation funding to operate and manage the property as long as and until the operation becomes self-supporting.
- The loss of the cultural fabric is problematic and will require creative efforts to mitigate. It is possible that community-defined metrics could be created to measure ongoing diversity and vitality of life in the CID and PSQ. Attention should be paid to forces that

promote gentrification or displacement, including median rents of residential and commercial real estate, percent of local ownership, and other indicators. Funding would be needed to define an appropriate study, to reassess periodically (every year at first, then perhaps every five years for a total of 20 years after the TOD is complete) and to provide remedies for the long-term, indirect impacts that are identified at Project outset and in the future.

Additionally, given the unique historic neighborhoods present in the CID segment of the Project, we suggest that additional analysis on cumulative effects be presented to demonstrate the impact of the largest public infrastructure project in the city of Seattle's history on the two oldest neighborhoods in the city. The past infrastructure projects in the neighborhood have benefitted a regional transportation network to the detriment of these equity-seeking communities. We applaud Sound Transit's state goal to repair past harms, and support every effort to ensure these promises are fulfilled.

CONCLUSION

Based on review of the current information, we believe that the CID-1a 4th Ave. S. shallow option offers the greatest potential to achieve community priorities, create direct connections between PSQ and CID neighborhoods, and improve transit connections between modes. However, there is a need to clarify cost, traffic and transit impacts, construction phasing and staging, and construction management plans for the 4th Ave. S. option and reengage community prior to the completion of the FEIS. We believe CID-1a comes the closest to delivering both local and regional benefit while protecting the irreplaceable cultural core of the CID neighborhoods.

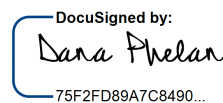
HSD is grateful for this opportunity to comment on the DEIS, and the efforts of Sound Transit staff to reach out to our diverse communities. We look forward to continuing to work with Sound Transit board and staff to ensure the successful completion of the most ambitious and costly public project undertaken in Seattle's history.

Sincerely,

DocuSigned by:

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Kathleen Barry Johnson
 Executive Director
 4/27/2022

DocuSigned by:

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Dana Phelan
 President, Board of Directors
 4/27/2022

Attachments:

- Appendix A: Listing of past racist or racially impactful policies, projects and incidents
- Appendix B: Detailed list of DEIS comments and questions
- Appendix C: Matrix of community priorities and impacts of pending options

CC: Sound Transit Board of Directors, Seattle City Council, King County Council, The Honorable Mayor Bruce Harrell and The Honorable County Executive Dow Constantine, The Honorable Representative Sharon Tomiko Santos, The Honorable Representative Kristen Harris-Talley, The Honorable Senator Rebecca Saldaña, The Honorable Senator Maria Cantwell, Senator Patty Murray, The Honorable US Representative Pramila Jayapal, The Honorable US Representative Adam Smith



HISTORIC SOUTH DOWNTOWN

APPENDIX A Harmful Government Actions

Government Policies, Actions, Inactions resulting in inequitable and/or racially-motivated negative impacts

This list was compiled in conversation with community members in South Downtown and is not intended to be a comprehensive list of impacts on these two historic neighborhoods. We have attempted to group these examples by time and type of activity, and to give some context where possible as to the impact of the actions.

We intend this list to provide examples for guidance when the City and Sound Transit state their intent to "identify opportunities to repair past harm." To repair, one must first acknowledge and name the harm. Then one must seek to understand these communities to cease causing inadvertent harm (see "Neglect & Erasure" section below)

Overtly white supremacist measures

After the Civil War, the United States began to formalize its claims on the West Coast. Governments began making laws that preferred the rights of white, European immigrants, stigmatizing the status of being non-white, and setting the stage for 1-1/2 centuries of discrimination and marginalization. Examples of these laws include:

- 1864 Alien Land Laws (state-level)
 - Initially, taking of native property by European settlers, then prohibited or took land ownership from Native Americans and, eventually, immigrants of color, who were also denied citizenship.
- 1865 Exclusion of Native Americans from living within Seattle City limits
- 1882 Chinese Exclusion Act
 - prohibited naturalization and created first immigration exclusion based on race and place of origin. Repeatedly renewed and reinforced for 8 decades.
- 1942 Executive Order 9066
 - In addition to incarcerating Japanese immigrants and Japanese-American *citizens*, this rule also forced many to sell land, businesses, and personal property at a loss. Exceedingly few people were able to reclaim their property after the end of WWII, leading to a drastic reduction in the size of Nihonmachi.

Health and safety regulations with overt white supremacist intent, racist impacts, or unintended and inequitable consequences

Public health measures have a history of being promoted as a strategy for "encouraging" non-white laborers and entrepreneurs to return to their countries of origin. Other cases, like

protective fire codes, were well-intended but imposed a sudden and unanticipated cost of operating residential units. In Chinatown, many building owners simply stopped renting residential space, leading to housing shortages that persist to this day. Examples include:

- 1885 Cubic Air Ordinance
 - Uneven enforcement in Seattle and other west coast cities specifically targeted Chinatowns.
- 1970s Fire codes resulting from the Ozark Fire
 - Measures were necessary fire safety improvements, but implementation created additional burdens on local building owners. Many owners simply stopped renting residential spaces, leaving vacant upper floors and housing shortages that continue to this day. Inequitable access to capital for code improvements exacerbated the issues then and now.
- 2012-present City discussion of unreinforced masonry buildings seismic retrofit upgrade codes, which would place an additional burden on the PSQ and CID neighborhoods with their high proportion of URM's.

Civic improvement, infrastructure, renewal projects

Publicly funded projects, beginning well before WSBLE, have too-often been the excuse to tear down parts of the CID, destroying thriving businesses and residential neighborhoods, and creating a smaller and smaller CID. All were done in the service of “progress,” and many inequitably benefitted the larger city or region but with impacts born primarily by these two small historic neighborhoods in south downtown.

By centering on values such as modernization and other white-focused ideas, public projects in the past have labeled parts of the CID as “blighted” or in need of renewal, refusing to value the ethnic livelihoods and culture that had taken root in one of the very few places that were accessible to Asian immigrants. Examples include:

- 1910 Jackson Street Regrade
 - displaced thriving Chinese and Japanese communities
- 1928 2nd Ave. Extension Construction
 - eliminated “Chinatown #2,” which had been in Pioneer Square.
- 1941 Yesler Terrace construction
 - While creating innovative integrated public housing, took large tracts of land from Nihonmachi (Japantown) and displaced immigrants who did not have the citizenship necessary to qualify for this public housing
 - Currently being rebuilt – ongoing.
- 1949 Construction of Charles Street Yard by City of Seattle
 - Displaced thriving Chinese neighborhood.
 - Similar impacts were continued/expanded during the conversion to a maintenance facility (1963) and the addition of the Seattle Streetcar spur line (2012).
- 1970s Kingdome Construction, Operation and Demolition, Replacement by new Stadiums
 - Kingdome community impacts were intended to be mitigated by the 21 Stadium Impact Resolutions passed by the City, but **funding ran out in three years**.
 - Baseball Stadium (1997).
 - Seahawks Stadium & Exhibition Center (2000-2002).

- Operation of stadiums causes traffic congestion, transit congestion, sidewalk congestion, public drunkenness, littering, and sometimes violence, with inadequate public support to mitigate the public safety hazards. The Stadiums' governing organizations participate in a community benefits process, which is helpful, but which requires ongoing staffing and funding, even to this day.
- Transportation projects cause major construction impacts and ongoing increased pollution, degraded pedestrian services, increased traffic and "surge" events. These projects definitely delivered higher levels of service to the neighborhoods of PSQ and CID, however they are also prime examples of projects that deliver the vast majority of benefits to regional or even national interests but leave the burden squarely in the impacted neighborhoods. In the past, the design of many of these projects has created new public safety concerns.
 - 1960s Interstate 5/Seattle Freeway construction
 - Demolished about half of Yesler Terrace (20 years after it was built) removing low-income housing from the neighborhood.
 - Permanently, physically divided the CID.
 - Created a dark, damp "no-man's land" beneath the highway (at least a block wide) where homelessness and drug dealing thrive.
 - Effort to turn areas around the highway structure into greenbelts created hidden (and not hidden) camping areas, led to the development of the notorious "Jungle" encampment.
 - Removed mixed housing and industrial properties throughout the 9th Ave. S. corridor.
 - 1987-1990 Construction of Downtown Seattle Transit Tunnel (now ID/C station)
 - the PSQ headhouse continues to be a public safety concern, based largely on its design.
 - 1990s construction of Interstate 90
 - More dark "no-man's lands."
 - 2009-2019 SR 99 Tunnel construction and Viaduct demolition (2019)
 - 2012-2016 Streetcar construction, utility relocation work
 - Jackson Street, 1st Ave. S., and the 8th Ave. S. spur line – which was related to Charles St. potential redevelopment, yet to happen.
 - 2017 1st Ave. S. utility relocation in preparation of City Center Connector. Both CID and PSQ neighborhoods were promised that major City Center Connector construction-related disruptions would pay off when the entire streetcar system was connected. As of the date of this letter, the City Center Connector streetcar is stalled, and is likely never going to be built.
- Ongoing Waterfront Reconstruction
 - While the eventual public amenity created by a vibrant waterfront will benefit the neighborhoods as well as the city and region, the construction impacts and detours have been onerous for small businesses and neighborhood residents. It should be noted that while PSQ is part of a taxation Local Improvement District (LID), the existing plans for redevelopment stop at Coleman Dock and start again at Railroad Ave., skipping most of the PSQ waterfront. Planning for Pier 48 seems to be constantly out of reach, as other interests and their needs are prioritized above the neighborhood's.

Zoning and land use decisions

As with public health measures, zoning and land use decisions have often provided cover for covertly white supremacist measures (e.g. redlining), but at other times have been instituted for

all the right reasons, with insufficient thought given to unintended consequences. Examples include:

- Repeated rezoning leading to instability in Little Saigon area and the neighborhood surrounding the core historic CID
 - 2012 Livable South Downtown rezoning of Little Saigon area, followed by 2017 Housing and Livability Agenda rezoning around the entire CID
 - Increased building heights in and around Little Saigon twice in a decade caused sale of properties at escalating values that priced out local organizations and long-term property owners.
 - Raised concerns for owners of industrial and warehouse properties about how long they could continue to do business with increased pressures on their properties.
 - Necessary housing is being built without the cultural connection and community ownership that will maintain the vitality and identity of Little Saigon.
 - Overall, community organizations in both PSQ and CID support additional housing affordability, but inequitably bear the burden of this increase when compared to many primarily residential neighborhoods in Seattle, with the unintended consequence of creating a concentration of low-income housing.
- Concentration of human services – city and county policies during 1960s-'70s public policy shifts, consolidated major human services, courts, public safety activities in PSQ.
- 2018 Expansion of International Special Review District
 - Expansion extended the district east from 10th Ave. S. to Rainier without sufficient outreach to local businesses and property owners, resulting in feelings of erasure, confusion, and concern within the community.

Neglect & Erasure

Many of the above examples could also be classified as attempts at erasure. As a red-lined, marginalized community, the CID and PSQ are rarely afforded the attention regularly offered to less diverse areas with fewer minorities and immigrants. Constantly needing to assert one's right to inhabit parts of the city causes generational trauma, suspicion of government intent and disenfranchisement from civic process. Examples include:

- Lack of basic maintenance – areaways, alleys, utilities, curbs and streetscapes, landscapes have not been consistently maintained by the City.
- The accidental elimination of Manilatown. In 2017, Seattle sought to define the CID by ordinance, and neglected to include the history and extant vibrancy of the Filipino community. While Manilatown was added to the bill in a subsequent measure, the need for a people to combat erasure has left an emotional toll.
- No street under Canton Alley for 100 years – paid for by community.
- Lack of culturally responsive public safety and related services – the International District Emergency Center began in late 1970s to fulfill this need.
- Failure to include PSQ in many of the measures and evaluations in the WSBL DEIS. Even though Union Station, Union Station Plaza, and the existing ID/C station are under the jurisdiction of the Pioneer Square Preservation Board, and most of PSQ is within a 10-minute walkshed, documents and presentations rarely include PSQ by name. As a result, PSQ stakeholders find themselves – in 2022 – needing to assert their existence and ask for consideration to avoid harm.

APPENDIX B: DETAILED LIST OF HSD'S DEIS COMMENTS AND QUESTIONS

Document/Section	Page or Section	Question or Comment	Question or Comment
Acquisitions, displacements, and relocations	4.3.14	C	Consideration of the impact of business displacements should be given with special attention to businesses owned by people of color, immigrants and non-English speakers. Experience in the Rainier Valley during ST 1 has showed that these types of small businesses are vulnerable to under-estimates of the business value, cost of relocation, and reimbursement for lost business. This may be due to informal accounting practices or other factors. Sound Transit's determination of Relocation Assistance or Mitigation should include a rigorous and low-barrier valuation process, with a focus on working with minority and non-English speaking business owners.
Alternatives Considered	2-88	Q	DEIS states cut-and-cover methods will be used to build CID-1a and 2a alternatives. Why does the extent of rebuilding the 4th Ave. S. bridges extend all the way to Main Street? Why not engage in mining the tunnel closer to S. Jackson St.? What is driving the bridge rebuilding north of Jackson?
Alternatives Considered	2-88	Q	DEIS states that deeper stations will be mined. What is driving the surface bridge and roadway impacts for CID-1b (4th Ave. S. deep) if the station for that segment would be mined? Why will there be more substantial impacts to 4th Ave. S. bridges if that station will be mined?
Alternatives Considered	2-91	Q, C	DEIS discloses approximate amount of area necessary for construction staging areas and easements, but the document does not indicate any construction footprint outline. Where is Sound Transit assuming construction staging COULD occur for the project within the CID segment? The property impact maps provided in Appendix L.4 do not indicate what the properties are used for, or the extent of the use (full or partial acquisitions). Where are the property impacts or assumptions for construction staging?
Alternatives Considered		Q	What is the capital cost of CID-2a diagonal? Are there cost savings realized for not having to disturb all the utilities of CID-2a? What about all those properties?
Appendix L4.1 Acquisitions	Maps and tables	Q	What is the assumed disposition of the parcels along 4th Ave. S. that would be completely disturbed for CID-1a and 1b and the site of a proposed tunnel ventilation building?
Appendix L4.1 Acquisitions	Maps and tables	Q	Would CID-2a, diagonal, or 2b result in the demolition of the Nagomi Plaza (old Uwajimaya) building? ST # BD 5021
Appendix L4.1 Acquisitions	Maps and tables	Q	Would CID-2a, diagonal, or 2b result in the demolition Seattle First National Bank building itself? ST # BD 5027
Appendix N.1	6-1, 6-25 - 6-36	C	Evaluation of transit integration at the ID/C station should be part of the decision to site the station either on 4th or 5th. Evaluation of transit integration needs to include all Link lines, all bus lines, Sounder, Amtrak and WS Ferris. The Jackson Hub Concept Report and integrating work done since 2000 should continue to be referenced and consulted during station area planning.
Appendix N.2 Visual Quality Technical Report		Q	Why wasn't Hing Hay Park and Union Station evaluated for operational impacts of having a tunnel ventilation system in the viewshed?
Appendix N.5 Historic and Archeological Resources Technical report		Q	Why wasn't the Nagomi Plaza building (eligible for listing on NHRP) evaluated under Section 106? ST # BD 5021

CE	7	Q, C	Without more detail regarding the statement that "the project would remove some of the residential and commercial land uses that created demand for this parking," it is unclear what this means for CID, which would experience a permanent loss of parking. What are the land use changes in CID that would correspondingly reduce parking demand? Or is this based on looking at parking loss vs. land use change for the entire project corridor? If its the latter, we have serious concerns, as this type of analysis is neither accurate nor relevant to EJ impacts.
CE	7	C	The conclusion that the changes to the transit system would reduce the need for parking in the study area is inappropriate without a parking study. In the C-ID, for example, anecdotal evidence suggests that short-term parking (on-street, <2 hour) is used by people making trips to the C-ID to shop, visit residents, dine in a restaurant, drive a senior resident to/from appointments, etc. Transit may not be an appropriate or reasonable alternative mode for many of these trips.
CE	8	Q	What are the construction projects that would take place in the CID and PSQ during the ST construction period? Would SDOT continue to issue street use permits for private construction that severely limit already constrained travel and parking for these neighborhoods?
CE	9	C	In response to point that relocations may not necessarily be in the same neighborhood, it must be noted that place is critical to CID; if people are relocated from CID, this could materially impact community cohesion. (on the other hand, we should examine the ICON building resident makeup and determine the extent to which this building contributes to community cohesion)
CE	10	Q	Per earlier comment, relocating in project vicinity is less important in CID than relocating within CID. What is the retail and office vacancy rate in the CID?
CE	10	C	Given history and the lack of policies to control/manage gentrification/cost increases in Seattle neighborhoods, it is likely that WSBLE would contribute a cumulative impact to already fragile businesses in CID and PSQ.
CE	11	C	In the CID and PSQ, it is as much about year after year of construction impacts--plus racialized violence and pandemic that disproportionately impacted BIPOC, seniors and unhoused people--as it is about simultaneous construction projects. This should also be addressed in Cumulative Effects.
CE	11	C	In response to the conclusion that neighborhoods becoming more expensive is an indicator of economic growth (and the implication that this is a benefit), this may be true from a macro standpoint, but from an EJ standpoint, economic growth that primarily benefits the most affluent does not offset disproportionate impacts to the least affluent.
CE	12	C	In response to this conclusion--"as neighborhoods revitalize, amenities and community resources also often improve, which can increase the quality of life for both new and remaining members of the community,"--from an EJ and community standpoint, these assumptions are highly problematic. A community value that was heard over and over again in the 20 years of plans and studies in the CID and PSQ was the importance of retaining community ownership and not displacing people descended from families who have lived in these neighborhoods for generations, and not displacing businesses that have existed for generations. From an EJ standpoint, this whole paragraph represents a high and adverse disproportionate impact, not a benefit.
CE	13	C	The conclusion that changes as a result of the project would cumulatively benefit neighborhood is only an EJ benefit if the local businesses and residents can hang on during construction and don't find themselves priced out after (or evicted for redevelopment).
CE	13	Q	Regarding relocations, need to understand if the proposal is to relocate within the "project vicinity," i.e. the whole corridor, or the neighborhood where these originated? From an EJ standpoint, these need to be relocated to the same neighborhood to continue meeting the need.
CE	14	Q	Need more detail on how ST's Equitable TOD and the City's Mandatory Affordable Housing requirements would play out in CID and PSQ. Is this a commitment, or just hopes and wishes? What--if any--proof of concept to City of Seattle and ST have with these complementary programs? How will historic district regulations impact this program?
CE	24	C	RE: "most cumulative impacts would occur during project construction," we disagree with this statement. The cumulative effects of gentrification and displacement are related as much to operations as construction and has been grossly understated in this document.

CE	Global	Q	What is the status of the viaduct structures on 2nd Ave. Ext. S. and S. Jackson St.? Sound Transit needs to include the potential foreseeable need to renovate these neighboring structures in their Cumulative Impacts analysis, including an assessment of the impact on rebuilding these bridges on the 4th Ave. S. structure and any potential need to tie back those bridges to 4th. Information from SDOT's bridge inventories should support this study.
Economics	4.3.3-14	Q	Economics analysis indicates that Uwajimaya loading dock, entry plaza, and parking garage would be affected temporarily by construction activities, but the transportation analysis doesn't disclose impacts along 5th or 6th Avenues extending south of S. Weller Street. What construction activities would occur that would disrupt the loading dock and parking garage?
Economics	4.3.3-14	Q	Is the DEIS analysis treating private parking lots (surface and sub-surface) as business displacements, or only accounting for them in the "loss of parking" analysis in the transportation section? Is the economics analysis treating the Union Station parking garage, 6th and King surface lot, and Bank of America lot as businesses? Considering it an impact? Temporary displacement?
EJ	97	C	No mention of PSQ in the economics section. Surely there are economic impacts on PSQ as a result of cumulative construction impacts, parking removal, traffic diversion, etc.
EJ	Global	C	No mention of public safety anywhere in this document. This seems like an oversight; public safety (defined in multiple ways, including safety from racialized violence, bike/ped safety) is of high importance to the CID and PSQ
EJ	102	C	Even temporary displacement of some residents could impact community cohesion. While this is a fragile neighborhood, community cohesion is strong and potentially a key factor in the neighborhood's survival. This section does not adequately address the impacts of relocations/displacements on community cohesion. That said, we are not yet convinced that displacement of ICON is going to be impactful on community cohesion, given the makeup of building residents
EJ	102	Q	Has ST met with resident from Eagle Village to understand how this relocation would impact them?
EJ	102	Q	Why PSQ is not included in this discussion. What are the potential impacts of traffic diversions, 4th ave closure, streetcar disruption to community cohesion for PSQ?
EJ	102	C	The social section should mention the risks of gentrification (see Central District as example) and how that would impact community cohesion.
EJ	106	C	RE: "No additional impacts" (Visual Effects). This is incorrect. There would be a large tunnel vent facility placed directly in front of Union Station under Options 1a and 1b.
EJ	109	C	RE: "No airborne noise impacts." This is not correct. According to the Noise and Vibration Technical Report, ST <u>did not test for noise impacts</u> in the CID because it considers it to be a "commercial district," even though it acknowledges there are residential properties nearby (e.g., Publix, Uwajimaya, Downtowner, Hirabayashi Place). We disagree with the conclusion that because City of Seattle treats residential use properties within commercial districts the same as commercial properties, Sound Transit is not obligated to test and mitigate for noise impacts to these residences. See page 127 of the Noise and Vibration Technical Report for reference.
EJ	114	C	PSQ and CID are unique along the corridor in that they host a number of public services for cultural communities and unhoused individuals. Those should be mentioned here and the potential impacts on them detailed
EJ	116	C	The conclusion that impacts to historic resources will affect minority people the same as everyone else is wrong. The CID is the only neighborhood along the alignment with impacts to historic properties (according to this table), and these properties are of particular importance to minority communities.
EJ	118	C	Construction impacts and visual impacts to the viewshed to Hing Hay Park should also be mentioned in Social section (impacts to community cohesion).
EJ	Table 5-4	C	No indirect or cumulative effects row? Why not? This is a major impact on EJ--even the RET says this.

EJ	Table 5-4	C	The economic analysis does not address the loss of cultural context for the businesses that will be relocated under CID-2, or appropriateness of replacement buildings, particularly in terms of the community priorities of local ownership, loss of affordable storefront spaces such as the existing ones that serve as an incubator for small, locally owned businesses. New ideas need old spaces because they are affordable. The "mom and pop" business needs affordable spaces too. The economic analysis of the impact on the CID, for all the CID-2 options (5th Ave S) must include the long-term impact on the type of businesses that are currently located in the CID.
EJ	Table 5-4 pg 5-40	C	The land use analysis assumes that the replacement of current buildings with new TOD buildings will be a benefit to the neighborhood and the BIPOC populations living there. This is not a reasonable conclusion when the buildings to be replaced are already owned and occupied by many minorities. Local ownership is a key priority for the community and is seen as a way to ensure the cohesiveness of the area. The land use analysis should not tout replacing minority and locally owned parcels with other developments that are unlikely to return to community and minority ownership.
EJ	125	Q	Mis-characterization of "offsetting benefits" in Environmental Justice analysis: The U.S. Environmental Protection Agency and Federal Transit Administration permit agencies to consider "offsetting benefits" when drawing a conclusion about whether a project has a disproportionately high and adverse impact on environmental justice populations. To count as an offsetting benefit, however, the positive effect needs to <u>disproportionately benefit the affected populations</u> . According to the Environmental Justice analysis, Sound Transit considers better access to transit and job centers to be an offsetting benefit for the residents of the Chinatown-International District. We disagree.
EJ	130	C	The new light rail station in the Chinatown-International District will enhance a regional transit hub, connecting people from all four corners of the region with buses, commuter rail, and Amtrak. While residents of the Chinatown-International District will partake of this benefit along with everyone else in the region, they will not gain substantially more benefit than anyone else in the region. On the other hand, they will bear the brunt of the impacts of constructing and operating this facility. Consequently, we do not believe it is appropriate to consider access to transit and job centers to be an offsetting benefit.
EJ	7-2	C	If, as the DEIS says "Sound Transit is partnering ... to evaluate strategies to maintain and enhance community cohesion" why are we not reading about existing strategies that may be considered in this? Why are we not reading about the ways in which ST and the city work together on planning in this? The lack of even rudimentary process discussions in these sections do not give community confidence in the future work of these processes.
General Analysis	Global	C	Inconsistency in use of high-cost and low-cost project assumptions: The technical analyses in the DEIS do not use the same high-cost and low-cost project assumptions. For example, the Economics analysis of the DEIS (pages 4.3.3-1 through 4.3.3-13) indicates that Sound Transit used CID-2a for both the high and low-cost project value to estimate the number of job years (employment) and direct expenditures resulting from the Project. Elsewhere in the economics analysis, CID-1a is listed as the high-cost project alternative in the CID segment. This results in an apples to oranges comparison of benefits generated from employment and local revenue. Similarly, in the Air Quality analysis of the DEIS, "CID-1a" is used as the alternative evaluated for Air Quality standards (page 4.3.6-3), but on page 4.3.6-7, the "low-cost scenario includes CID-2a..." and the "high-cost scenario includes CID-1a.". These differences result in markedly different Greenhouse Gas emissions, again resulting in an apples to oranges comparison. Sound Transit should update its analyses in the Final EIS to address these inconsistencies.
General Analysis	Global	C	Need for more clarity on construction footprint: The DEIS discloses approximate amount of area necessary for construction staging areas and easements, but does not show a construction footprint outline. The property impact maps provided in Appendix L.4 do not indicate how the properties would be used or the extent of the use (i.e., full or partial acquisitions). Without more clarity on where construction staging would occur or the assumptions of property impacts for construction staging, we cannot adequately assess or compare the impacts of construction to the Chinatown-International District.

General Analysis	Global	C	The CID-2a diagonal station configuration appears to have markedly different impacts than the CID-2a configuration, and the track path varies between the two options. There are no graphics at a reasonable scale in the draft EIS that illustrate the distinctions between the two options. More explicit treatment of 2a-diagonal as a separate condition should occur so that people can clearly see what amounts to real differences between roadway impacts, property impacts, business impacts, and so on. It is not included in all appendices.
General analysis	Global	C	The over 70 sporting events, concerts, and other events at the stadium complexes was not considered in the DEIS, despite community requests in the scoping phase of the Project. Additionally, PSQ and the CID have festivals and other events that bring thousands to the neighborhoods. These "surge" events and the traffic they create (both vehicular and transit), must be included and evaluated for their effect on the systems both during construction and long-term.
Historical/Archaeological	4.3.16	C	Area of potential effect needs to be expanded to include potential haul routes for preferred alternative in terms of mapping areaways, as the maps will help determine where haul routes can be placed without additional street reinforcement, an additional cost to the project if necessary.
Noise	127	C	"Commercial and industrial districts are in the Chinatown-International District Segment... Although there are no nearby residential districts near the segment there are mixed use properties with residences in commercial districts, such as Uwajimaya and the Publix Hotel. Residential use properties within commercial districts are treated the same as commercial properties within the city of Seattle." While this may be an acceptable policy by noise analysis standards, it should be unacceptable from a RET standpoint. ST should be expected to conduct a noise analysis of impacts to residential properties and commit to mitigation for those impacts.
Noise	4.3.7-11	Q	For Table 4.3.7-3, what is the distribution of impacts by property? The figure only shows two areas (along 5th near Weller and Washington)-- what is the distribution of impacts, and by option? 2a vs. 2a-diagonal?
Noise (N.3)	Global	Q,C	No operational noise analysis was conducted for the CID segment, and therefore for the CID neighborhood, because tunneled options were not considered in the analysis. However, tunnel ventilation systems are identified within the neighborhood, and will be a new source of noise and visual blight. What are the potential noise impacts to surrounding residents and park users from operating a tunnel system at the proposed location?
Noise (N.3)	6-37	Q	For construction noise impact analysis, ST and analysts assumed CID neighborhood is a commercial/industrial neighborhood, and treated "residential use properties the same as commercial properties" per City of Seattle codes. Does this mean that residents were not considered explicitly in the analysis in the same way they would be if their home was located in a residential neighborhood? Please explain.
Noise Figure 4.3.7-2	4.3.7-7	C	Visuals do not show the diagonal station configuration nor track alignment, which differs from CID-2a through the CID neighborhood. Difficult to discern or understand impacts without understanding the layout and analysis.
RET	10	Q	What is ST and the City's legal obligations to fulfill the commitments outlined in the RET? What mechanisms do communities have to hold them accountable?
RET	Global	Q	It is unclear whether reference to the C-ID throughout this document includes PSQ or not. Please clarify.
RET	11	C	Change: Limit harmful impacts of project and work with impacted communities to identify [AND IMPLEMENT] opportunities to repair past harm.
RET	16	C	The RET commits to an outcome of limiting harmful impacts of project and work with impacted communities to identify opportunities to repair past harm, and yet the Cumulative Effects report barely acknowledges this and it does not appear cumulative effects are even considered as part of the EJ conclusion. Not mentioned in land use, economics, or transportation sub-sections. Some acknowledgment in the Social sub-section. Included in narrative of EJ section, but not included in documentation of analysis that led to an EJ conclusion of no disproportionate high and adverse impact.
RET	39	Q	Has ST met with Chief Seattle and/or Eagle Village residents to discuss the impacts of this potential relocation? If so, what were the outcomes of those conversations? (i.e., if Eagle Village was already planning to relocate independent of this project, this is not really a project impact. On the other hand, if the project is causing them to relocate, that is an entirely different issue. Same questions apply to the newly-leased spaces along Seattle Boulevard where the Salvation Army will be expanding services for houseless community members.

RET	42	Q	Has ST gathered community feedback--particularly from commercial/retail businesses in the C-ID--about the impacts of parking losses, including differences in impacts of on-street vs. off-street parking losses? What was this feedback?
Social Resources, etc	4.3.4.3.3	C	"ST is currently partnering with the community and other agencies on a community-based planning effort for the area to evaluate strategies to maintain and enhance community cohesion" through station design. If station planning is to be considered mitigation for loss of community cohesion, additional information on structuring this "community-based planning effort" will be needed to allow communities to comment on the benefits of the process.
Transportation	Table N1.E-25	Q	If the 4th Avenue deep station is as deep as claimed, and statements in the DEIS indicated that mined stations would have less ground disturbance-- why is the extent of disturbance at the surface so long for 4th Ave deep (CID-1b), especially at 2nd Ave Extension? Why would that segment of roadway be closed for 6.5 years? There do not appear to be any bridges along 4th Avenue north of Main Street-- what is contributing to the extent of roadway disruption north of S. Jackson Street?
Transportation	Table 4-53	Q	Key roadway impact #7 for CID-2b, Is the full extent of S. Jackson St. (2nd Ave. Ext. to 5th Ave. S.) partially closed, or just the intersection?
Transportation and Transit		Q	How will alternatives CID-1a and CID-1b affect the 4th Ave. S. bus island just north of S. Jackson St.?
Transportation and Transit		Q	According to the impacted parcel maps and alternative construction descriptions, CID-2a, 2a diagonal impact parcels north of the Goodwill outlet that appear to be part of the KC Metro Central Base. According to the plan sheets, the tunnel portal and ventilation system are located on King County parcels. Construction roadway impacts listed suggest that 6th Ave S adjacent to the Central Base would sustain partial closures for 6-9 months. Based on the information presented in the DEIS, it is unclear what project activity affects each parcel. What are the explicit potential impacts to KC facilities? Is the Goodwill outlet facility impacted for all 5th Avenue Options and Alternative?
Transportation Technical Report	Table 4-53	Q	Why is the Ryerson Bus Based considered permanently closed for this alternative? The tunnel portal appears to be located further south near S. Massachusetts, and the mining appears to begin at the portal-- what is occurring at the surface or on the property that renders the base closed?
Transportation Technical Report	general	Q/C	The analysis did not include stadium events in the traffic or ridership analysis, despite data and statements in the draft indicating that stadium events for three sports teams occur more than 1/3 of the year, and acknowledging that concerts and other large events occur between sports events. Historic South Downtown stakeholders requested Sound Transit explicitly include stadium events in the analysis as a baseline condition. Please explain why this was not considered.
Transportation/Transit	4.3.17.4.3	C	Construction impacts to the Donnie Chin International Children's Park (7th Ave. S.) and/or the ID/C Community Center and Library (8th Ave. S.) need to be considered if construction diverts bus traffic to either street. 8th Ave. S. may have construction projects during the Project construction timeline, which should be considered, as well as the impacts to senior and family housing, ICHS clinic, and the Denise Louie daycare.
Transportation: Freight Mobility	N.1 9-3	Q	The Transportation Technical Report states that CID-2a would impact truck streets along 6th Ave. S. north and south of Royal Brougham way. Plan sheets and other information in the draft EIS suggest that construction of CID-2a diagonal in this vicinity is approximately the same as CID-2a, and could yield the same effects. Statements made in the transportation technical report state that the diagonal station configuration would not impact truck streets. Is this accurate, and if so, why is CID-2a diagonal different in the vicinity of Royal Brougham, than CID-2a?

APPENDIX C: MATRIX OF SOUTH DOWNTOWN COMMUNITY PRIORITIES AND IMPACTS OF PENDING OPTIONS

Community Priorities	CID 1a (4th Ave. S. shallow)	CID 2a (5th Ave. S., shallow)	CID 2a Diagonal (5th Ave. S., shallow, diagonal configuration)	Environmental Justice and Racial Equity context for Decision-Making
<i>Minimize cumulative harm to and/or displacement of existing businesses, residents, and nonprofits</i>	<p>Longest construction durations of all the options, but it would move the worst of the construction impacts away from most businesses and residential structures. Will disrupt bus service, which could negatively impact businesses, residents and visitors.</p> <p>Construction disruptions would be constant for the years of station and tunnel construction for residents at the Icon Apartments. All units of this complex (up to 120 market rate residential units) would be displaced for a year during 4th Ave. S. bridge rebuilding activity. Building is a mix of long-term rentals and hotel/Air BnB short-term housing. Building will remain standing, so housing will be available after construction.</p> <p>Fewest direct disruptions and relocations to local businesses in CID or Pioneer Square.</p> <p>No loss of on-street parking or loading zones within the CID or Pioneer Square during construction</p>	<p>Biggest loss of local retail/commercial businesses in the CID neighborhood (compared to 1a and 1b).</p> <p>Loss of commercial load zones and on-street parking during station and cut-and-cover tunnel construction (up to 9 years).</p> <p>Would displace Chief Seattle-Eagle Village Pilot (if it hasn't already relocated). Need to clarify how Chief Seattle/Eagle Village residents feel about this (e.g., if they are already planning to relocate independent of the WSBLE project, this isn't much of an impact).</p> <p>Construction disruptions would be constant for the years of station construction for residents at Uwajimaya Village, Fujisada Condominium, Publix Building, and Bush Hotel.</p>	<p>Shortest construction durations of all the options.</p> <p>Same loss of local retail/commercial businesses as 2a, but with additional "temporary" displacements of approximately 9 months.</p> <p>Loss of commercial load zones and on-street parking during station and cut-and-cover tunnel construction (up to 6 years).</p> <p>Would displace Chief Seattle-Eagle Village Pilot (if it hasn't already relocated). Need to clarify how Chief Seattle/Eagle Village residents feel about this (e.g., if they are already planning to relocate independent of the WSBLE project, this isn't much of an impact).</p> <p>Construction disruptions would be constant for the years of station construction for residents at Uwajimaya Village, Fujisada Condominium, Publix Building, and Bush Hotel.</p>	<p>Decisions regarding construction that disrupts the heart of the CID should be made only after familiarizing yourself with past harms and priorities set by the community. This project comes in the wake of numerous other projects, events, and policies that have centered the needs of regional interests rather than the needs of the equity-seeking communities who live and work in the PSQ and CID neighborhoods. While 4th Ave does require collaborative work to reduce negative impacts on buses and other constituencies, it centers the priorities of the people of the CID and PSQ, and shares burdens regionally.</p>
<i>Retain or increase community ownership of properties</i>	<p>Unknown until Sound Transit provides more information about the disposition of the 2.5 acres of urban center property displaced by this part of the project.</p> <p>No displacement of small business serving the local neighborhoods.</p>	<p>Permanent displacement of up to 13 businesses and temporary displacement of up to 8 businesses in 4 buildings. One of those buildings contributes to the local National Register district, and two others would be individually eligible for listing based on preliminary assessments during 106 review.</p>	<p>Permanent displacement of up to 13 businesses and temporary displacement of up to 8 businesses in 4 buildings. One of those buildings to the local National Register district, and two others would be individually eligible for listing based on preliminary assessments during 106 review. Additional impacts to businesses in the American Hotel and the Buty building.</p>	<p>The EIS must surface specific plans to retain or increase community ownership of parcel acquired by Sound Transit after construction is completed. Funding support for local organizations must support staffing for appropriate engagement with the planning processes. Mitigation should continue until the completion of any TOD projects.</p>
<i>Improve public safety</i>	<p>Assuming construction impacts adversely affect public safety, construction duration may be the longest of the five alternatives, but may have less direct impact on C-ID.</p>	<p>Assuming that construction impacts adversely affect public safety, shorter than 1a and 1b but longer than deep alternatives. Because of proximity to heart of C-ID, however, it will have more direct impact (noise, dust, visual impacts, etc.)</p>	<p>Shortest construction duration; however most construction would occur in the heart of CID. Noise, dust, and visual impacts could result in avoidance. Pedestrian detours will need to be provided between CID and existing light rail station; station construction could act like a "barrier" between existing light rail station and CID.</p>	<p>Based on prior work in the CID, lighting and accessible sidewalks are important aspects of community public safety and equitable access to transit. Consideration should be given to the large population of elders living in the CID.</p>
<i>Enhance community vitality and sustainability</i>	<p>Offers the most opportunities for promoting connectivity, mobility, and neighborhood connections in the "Jackson Hub" area of high transit access. Opportunities for activating Union Station first as a passenger terminal and then building on that may also offer additional activation of the surrounding plazas, as well as promotion of cultural and economic vitality of surrounding neighborhoods.</p>	<p>Property acquisition by ST for station construction and staging theoretically creates more opportunity for TOD and affordable housing post-construction than CID-1a and 1b. ST's eTOD policy requires it to "prioritize affordable housing," however, mechanisms for accountability and proof of concept are unclear. The businesses that would be displaced under this option are primarily local small businesses, many owned by POCs. Replacement is not the same as enhancement.</p>	<p>Property acquisition by ST for station construction and staging theoretically creates more opportunity for TOD and affordable housing post-construction than CID-1a and 1b. ST's eTOD policy requires it to "prioritize affordable housing," however, mechanisms for accountability and proof of concept are unclear. The businesses that would be displaced under this option are primarily local small businesses, many owned by POCs. Replacement is not the same as enhancement.</p>	<p>The benefits of eTOD to the CID and PSQ are unclear here. An activated Union Station has the potential to invigorate the transit hub, provide a welcoming entry point to the cultural and business communities in PSQ and CID.</p>
<i>Encourage economic development and increase economic diversity in businesses and residents</i>	<p>4th Ave. alternatives put Union Station directly to use as a transportation hub, by serving as the location for the new light rail station entrance, and a connection between the existing and proposed stations. Using Union Station would be a first step toward activating the building for more public-facing use.</p> <p>There would be no apparent loss of on-street parking or commercial loading zones in the CID district resulting from construction staging activities.</p>	<p>Parcel impacts inside the CID neighborhood would serve as opportunity to redevelop existing parcels and buildings within the project footprint area. TOD opportunities are possible.</p> <p>During construction of the project, full closures of S. Weller and S. King St. between 5th and 6th Avenues would adversely impact small businesses on those blocks. Businesses would have difficulty receiving deliveries. Loss of on-street parking reduces access to residents and small business in the area. Depending on the level of impact to the pedestrian environment, the retail and restaurant storefronts would likely lose foot traffic and customers.</p>	<p>Parcel impacts inside the CID neighborhood would serve as opportunity to redevelop existing parcels and buildings within the project footprint area. TOD opportunities are possible.</p> <p>During construction of the project, full closures of S. Weller and S. King St. between 5th and 6th Avenues would adversely impact small businesses on those blocks. Businesses would have difficulty receiving deliveries. Loss of on-street parking reduces access to residents and small business in the area. Depending on the level of impact to the pedestrian environment, the retail and restaurant storefronts would likely lose foot traffic and customers.</p>	<p>Construction along 5th Ave. S. minimizes traffic issues for the region while expecting them to be born by blocks of businesses in a pedestrian-friendly, small ethnic neighborhood that already bears disproportionate burdens for the regional transportation system. Construction along 4th Ave. S. moves the burden of construction to the region rather than centering it in the CID.</p>

<i>Enhance public health and well-being</i>	<p>Station construction on 4th Ave. S. would introduce opportunities to enhance and improve the pedestrian environment in the 4th Ave./2nd Ave. Ext./S. Jackson St. area, which benefits PSQ, CID, and transit riders on all modes.</p> <p>Because 1a is cut-and-cover tunnel construction, it would be among the loudest options to construct (88dBa at 50 feet from source--the equivalent of a lawnmower or motorcycle), for durations of 4-6 years.</p> <p>Depending on the extent of 4th Ave. S. reconstruction, surface construction noise could still reach 84-89 dBA for bridge construction activities within 50 feet of a receiver. The Icon apartments would be the closest residents to construction activities.</p> <p>Depending on the state of the viaduct structures beneath 2nd Ave. Ext. S. and S. Jackson St., consolidating those rebuilding efforts could prevent multiple local, major construction projects in the same area.</p> <p>A tunnel ventilation system located in front of Union Station at the corner of 4th Ave. S. and S. Jackson St. would face residents of the Icon Apartments, and</p>	<p>Because 2a is a cut-and-cover tunnel construction, it would be among the loudest of the options (88dBa at 50 feet from source--the equivalent of a lawnmower or motorcycle), for durations of 4-6 years.</p> <p>Additionally, construction on 5th Ave. S. would move noise, dust and other pollution closer to where more people live and work.</p> <p>Construction in the heart of the CID would result in prolonged increase of heavy truck traffic to excavate and build the new station. Large trucks would travel through the small streets at a rate of 10-35 trucks per hour, 5 to 6 days per week, increasing pedestrian and resident exposure to heavy vehicle traffic, truck exhaust, noise, dust, and increased pedestrian/truck conflict at intersections.</p> <p>The new station infrastructure would span across two blocks, and a new tunnel ventilation system and stair egress would be located on the Nagomi Tea House property, which faces residents at the Uwajimaya Village to the south, Fujisada Condominium to the east, and Publix building to the west.</p>	<p>2a diagonal would be a mined station with reduced traffic impacts from CID-2a. This configuration is inconsistently addressed in the DEIS materials, and its impacts are not fully understood.</p> <p>Construction in the heart of the CID would result in prolonged increase of heavy truck traffic to excavate and build the new station. Large trucks would travel through the small St.s at a rate of 10-35 trucks per hour, 5 to 6 days per week, increasing pedestrian and resident exposure to heavy vehicle traffic, truck exhaust, noise, dust, and increased pedestrian/truck conflict at intersections.</p> <p>The new station infrastructure would span across two blocks, and a new tunnel ventilation system and stair egress would be located on the Nagomi Tea House property, which faces residents at the Uwajimaya Village to the south, Fujisada Condominium to the east, and Publix building to the west.</p>	<p>It is unclear if the Downtowner and Hirabayshi Place tenants, residential and commercial, would be affected by 4th Avenue construction. An assessment of noise impacts is necessary for all the options.</p>
<i>Acknowledge and address historic racism that has and continues to impact neighborhoods</i>				<p>While this community priority is acknowledged in passing in the Environmental Justice section, Appendix A of this letter contains a list of historic racist and governmental actions that have adversely impacted the south downtown neighborhoods.</p>
<i>Activate common areas</i>	<p>4th Ave. S. Alternatives (CID-1a and 1b) put Union Station directly to use as a transportation hub, by serving as the location for the new light rail station entrance, and a connection between the existing and proposed stations. Using Union Station would be a first step toward activating the building for more public-facing use.</p>	<p>All 5th Ave. S. options create new common areas in the CID (replacing privately held properties) by building a new station entrance, ancillary building spaces, and bicycle storage along 5th and 6th Avenues S.</p>	<p>All 5th Ave. S. options create new common areas in the CID (replacing privately held properties) by building a new station entrance, ancillary building spaces, and bicycle storage along 5th and 6th Avenues S.</p>	<p>Any activation to be done by community organizations must be funded long-term.</p>
<i>Improve mobility and connectivity</i>	<p>Shallow options mean easier and more convenient transfers between light rail lines, and easier access to other transportation modes (bus routes, streetcar). 4th Ave station plans would provide station access on both the east and west sides of 4th Ave.</p> <p>4th Ave. presents the most difficulties for current bus lines during construction; prioritization of transit maintenance will be important in construction management plans.</p> <p>Provides direct transit connection to both CID and PSQ neighborhoods.</p> <p>More direct connections to bus routes serving Georgetown, and existing access to Sounder and Amtrak</p>	<p>Shallow options mean easier and more convenient transfers between light rail lines, and easier access to other transportation modes (bus routes, streetcar).</p> <p>5th Ave options provide slightly more direct connection to, streetcar, and bus routes serving Beacon Hill, Little Saigon, and Central District, but only one new entryway for the new station. Fifth Ave. S. options also require the rerouting of all Metro electric Trolley busses.</p> <p>Efforts to minimize the footprint of 5th Ave. S. station options is not compatible with the object of the Project resulting in a 100 year vision for the station, its connections, safety and activation.</p>	<p>Shallow options mean easier and more convenient transfers between light rail lines, and easier access to other transportation modes (bus routes, streetcar).</p> <p>5th Ave. options provide slightly more direct connection to, streetcar, and bus routes serving Beacon Hill, Little Saigon, and Central District, but only one new entryway for the new station. Fifth Ave. S. options also require the rerouting of all Metro electric Trolley busses.</p> <p>Efforts to minimize the footprint of 5th Ave. S. station options is not compatible with the object of the Project resulting in a 100 year vision for the station, its connections, safety and activation.</p>	<p>Maintenance of bus routes should be a priority in construction management plans regardless of the alignment chosen.</p> <p>Construction along 4th Ave. should come with the opportunity to explore ways to enhance pedestrian infrastructure.</p>
<i>Retain historic and cultural character</i>	<p>Approximately 20-foot tall tunnel vent placed in front of Union Station, which will have visual impacts and conflicts with Pioneer Square Preservation Board regulations.</p>	<p>Demolition of 418 5th Ave. S. (which houses multiple small businesses), Nagomi Plaza (519 6th Ave. S.), and 525 S. Jackson Street (Seattle 1st National Bank-International District Branch), which are considered historic buildings.</p>	<p>Demolition of 418 5th Ave. S. (which houses multiple small businesses), Nagomi Plaza (519 6th Ave. S.), and 525 S. Jackson Street (Seattle 1st National Bank-International District Branch), which are considered historic buildings. Additional impacts for this alignment include temporary closures of both the historic American Hotel and the history Buty Building for</p>	<p>A review of historic district regulations should be done to see how Union Station reuse plans and ventilation needs for the tunnel can be planned to minimize adverse effects to the historic building.</p>

<p><i>Support a small business environment</i></p>	<p>All options provide new underground connections between light rail stations, which could potentially reduce pedestrian traffic to small business in the vicinity of the stations.</p> <p>Reinvigoration of Union Station as a passenger terminal building creates feasible, sustainable options for integration of promotion of neighborhood businesses. For example, a local coffee shop could staff a coffee cart, or the Wing Luke and Klondike National Park could share a kiosk to promote their museums, offer tours.</p> <p>All stations would result in a small conversion of parking along 5th Ave. S, to passenger load for transit.</p> <p>4th Ave. S. Alternative and Option would not result in any additional on-street parking loss during construction or operations.</p> <p>This option would impact approximately 200 parking spaces of the 1,086 stall Union Station Parking Garage.</p>	<p>Air options provide new underground connections between light rail stations, which could reduce pedestrian traffic to small business in the vicinity of the stations.</p> <p>Reuse of Union Station would be harder absent an authentic need for people to walk in and out of the building. The City of Seattle, the Community and other stakeholders have - quite literally - been studying ways to reuse Union Station as a community amenity for 50 YEARS without success. It is clear that successful reuse of the building would require a great deal of expense in terms of consulting and long term operational support.</p> <p>All stations would result in a small conversion of parking along 5th Ave. S, to passenger load for transit.</p> <p>CID-2a would result in a temporary loss of on-street parking within the CID neighborhood, which is known to reduce traffic to small businesses. The complete closure of S. King St. and S. Weller St. would have direct impacts on small businesses that would not be actually displaced by construction.</p> <p>This option would impact all surface lot parking at the 6th and King parking lot, and the Bank of America parking lot on 6th Avenue. Surface level and on-street parking is important to residents and small</p>	<p>Air options provide new underground connections between light rail stations, which could reduce pedestrian traffic to small business in the vicinity of the stations.</p> <p>Reuse of Union Station would be harder absent an authentic need for people to walk in and out of the building. The City of Seattle, the Community and other stakeholders have - quite literally - been studying ways to reuse Union Station as a community amenity for 50 YEARS without success. It is clear that successful reuse of the building would require a great deal of expense in terms of consulting and long term operational support.</p> <p>All stations would result in a small conversion of parking along 5th Ave. S, to passenger load for transit.</p> <p>CID-2a would result in a temporary loss of on-street parking within the CID neighborhood, which is known to reduce traffic to small businesses. The complete closure of S. King St. and S. Weller St. would have direct impacts on small businesses that would not be actually displaced by construction.</p> <p>This option would impact all surface lot parking at the 6th and King parking lot, and the Bank of America parking lot on 6th Avenue. Surface level and on-street parking is important to residents and small</p>	<p>Construction will affect the business environment, but much less so if aligned to 4th Ave. S. than to 5th Ave. S. Indirect impacts can be addressed through support and information, while construction cutting off pedestrian access or "temporary" 9 month business closures will adversely affect the local business district.</p>
<p><i>Ensure that people across Seattle and the region continue to visit the neighborhoods, even during construction</i></p>	<p>Longer construction durations than 5th Avenue alternatives.</p> <p>No direct interruption of access from existing light rail to CID neighborhood during construction. Increased "barrier" of construction between CID and Pioneer Square neighborhoods. Pedestrian detours to get around construction may increase the walking distance and result in avoidance. Transit users may choose other stations to disembark to access Pioneer Square or Waterfront during construction.</p>	<p>Temporary but high impact (noise, dust vibration) construction effects on Hing Hay Park (construction will be across the street); temporary impacts to Uwajimaya Village, including loading dock, parking garage, and entrance plaza.</p> <p>Pedestrian detours needed from existing light rail station to CID would be long, and could potentially create a barrier to visiting CID during construction.</p>	<p>Temporary but high impact (noise, dust vibration) construction effects on Hing Hay Park (construction will be across the street) and neighborhood residents directly adjacent to station construction.</p> <p>Pedestrian detours needed from existing light rail station to CID would be long, and could potentially create a barrier to visiting CID during construction.</p>	<p>The CID and PSQ experienced disproportionate impacts from the COVID-19 pandemic, and extensive on-going public projects that preceded the pandemic. Temporary mitigation during construction would need to include signage, promotion, and other necessary support for small businesses.</p>

VIA ELECTRONIC MAIL

WSBLE Draft Environmental Impact Statement Comments

c/o Lauren Swift

Sound Transit

401 S. Jackson St.

Seattle, WA 98104

RE: Comments on the DEIS for West Seattle and Ballard Link Extensions Project

We, the staff of InterIm Community Development Association (InterIm CDA) are pleased to provide these comments on the Draft Environmental Impact Statement (“DEIS”) for the West Seattle and Ballard Link Extensions Project (WSBLE), which was made public on January 28, 2022.

InterIm CDA is a community-based nonprofit 501(C3) community development organization. We are rooted in the Chinatown-International District (CID) and provide community based real estate development services, housing services, and programmatic services for our communities. These communities include immigrant, refugee, API, and other low-income communities. We also help organize and advocate on issues that affect our fellow community members directly, both at the grassroots and grass tops levels. We do this through the lens of Equitable Development, which means that everybody should be able to participate in and benefit from the neighborhood’s growth. Our focus is on those most easily left behind from neighborhood growth, namely low-income people, immigrants, refugee’s, and other communities of color.

InterIm seeks development **outcomes** that:

- Advance economic mobility, security, and opportunity for the community
- Prevent residential, commercial, and cultural displacement
- Support and acknowledge local history and culture
- Promote transportation mobility and connectivity
- Enhance health and safety

We also recognize that Sound Transit and the city of Seattle worked together on a Racial Equity Toolkit (RET) process. We are very supportive of the identified outcomes of limiting harmful impacts, working with impacted communities to reduce past harms, maximize connections for all, community self-determination, and to support community forming a 100-year vision.

Below you will read about our thoughts, questions, and concerns around the West Seattle-Ballard Link Light Rail Extension. While we have questions, concerns, and some specific demands around all alignments, our gravest concern is around the potential for indirect displacement over time, caused by either a 4th Avenue or the 5th Avenue alignment. If a 5th Avenue South Alignment is selected, and not executed with an exceptional level of genuine community engagement and care, an eye towards the racial equity toolkit goals, and with a

large amount of resources brought to bear by Sound Transit and the local government, then a significant portion of the historic district will be beyond the reach of the CID community. This would violate every part of the RET goals and our Equitable Development goals. Our concern is so large that we are calling for a refinement to the CID segment options, and a search for better alternatives with fewer harmful impacts to the community.

We Support the Expansion of Light Rail

In general, we support the idea of public transportation. We also support light rail because of the capacity it brings to transport so much of the Seattle population to and from key locations in and around the region. We support expanded light rail over reliance on cars or even buses for meeting our transportation needs. As noted, above, transportation mobility and connectivity is one of the priorities of our Equitable Development Criteria.

Overall Concerns

The following outlines concerns that we have for all alignments. These concerns relate to Environmental Justice, the Transportation Analysis, the lack of a Noise or Site Impact Analysis, and most notably, an inadequate analysis of displacement. The city and Sound Transit working together to fully address all of these issue area's will be stepping into the RET's goals of working with the impacted community to reduce past harms and to limit negative effects of the WSBLE project.

Displacement

The DEIS only identifies direct displacement and fails to recognize the even greater and more daunting threat posed by the indirect displacement impact that will result from any of the alignments without thorough analysis and ample mitigation measures and funds. The DEIS fails to acknowledge indirect displacement and narrowly addresses only physical displacement caused by the construction itself. We call for the final EIS to include a thorough analysis of indirect displacement as detailed in the RET Report drafted by Sound Transit with the City of Seattle. A complete analysis of indirect displacement must examine economic displacement caused by rising rents and costs of living which force people to relocate, and cultural displacement wherein people chose to move because the neighborhood no longer supports a critical mass of culturally related businesses and institutions that served them and that together, create the cultural mileau that supports them and provides a sense of agency and belonging. An analysis of economic displacement must examine rising land values, rent increases, property tax and interest rate increases that together increase housing costs and force people to relocate. An analysis of cultural displacement must examine the economic displacement of culturally related businesses, cultural institutions, community based organizations, and community services that together strengthen social cohesion and create a cultural home for people, especially important for communities of color, immigrants, and refugees.

Furthermore, indirect displacement happens over time and not only during construction. The final EIS must consider impacts 5, 10, even 20 years and more, beyond the construction period to analyze indirect displacement. While the direct displacement of businesses projected for the 5th Avenue Alignment are jarring, this will be dwarfed by the long term indirect displacement caused by either alignment if left unaddressed.

The Cumulative Impacts section of the DEIS acknowledges this reality that as city planned development moves forward, there will be increased displacement pressures in the CID neighborhood. Sound Transit is contributing toward more concentrated housing and more speculative market rate housing in the CID. The people most at risk for displacement in the CID are living in naturally occurring affordable housing, most of which is affordable to households at or below 30% AMI. To truly mitigate displacement harms as the RET suggests, a community based affordable housing plan must be developed in recognition of the threat of rising rents that will displace people in naturally occurring affordable housing. And, a community based affordable commercial space plan must be developed to address the harms that rising rents have on small culturally related businesses, community based organizations and cultural institutions that together make the CID a cultural home to so many. This can happen in numerous ways, but it must be addressed by the end of the planning process for the WSBLE line.

Environmental Justice

The conclusion reached in the DEIS of “no net environmental cost” was the wrong conclusion on the part of Sound Transit. The U.S. Environmental Protection Agency (EPA) and Federal Transit Administration (FTA) define “offsetting benefits” as a case where a project’s positive effect needs to disproportionately benefit the affected environmental justice population. The claim by Sound Transit that the WSBLE project bringing better access to jobs and transit centers counts as an “offsetting benefit” is wrong. The WSBLE project will push the regional transit hub toward more connection, connecting people across the region and across multiple modes. While residents of the CID community will gain these benefits from this project, they will not gain more than other people along the line. They will indeed bear the impacts of completing the WSBLE project not to mention the devastating long-term impacts of displacement, including indirect displacement of people, businesses, and organizations. It would be wrong to consider jobs and transit as a part of the “offsetting benefits”.

Within the “Cumulative Harm” section, the DEIS Sound Transit concludes that the project will not have a “disproportionately high and adverse impact”. However, there are over 150 years of planning process’s and policies passed that were and are based in systemic racism, and without prioritizing the people of color who primarily make the community in the CID. This bulleted list is just a sample of some of those law’s,

Acts Rooted 100% in White Supremacy with White Supremacist effects:

- 1864 Alien Land Law: White immigrants can own land in Washington
- 1882 Chinese Exclusion Act

- 1865 Ordinance 5: Removal of Native people
- 1921 Alien Land Laws: Restrict ownership of land from Asian immigrants
- 1942 Executive Order 9066: Allowed for the incarceration of over 120,000 people of Japanese ancestry, 2/3rds of whom were US Citizens born in this country, for the duration of WWII
- 1949 Construction of Charles Street Maintenance Facility displaces Asian homes and businesses
- 1961 I-5 ditch cleared: Divides community in two and displaces many residents and businesses
- Unlocatable General Government and Private Sector Disinvestment: Throughout the 20th century and into the 21st the local, state, and federal governments have never invested and planned in the CID in an equitable or sufficient manner

Acts Providing a public good but that disregarded the harms on CID to the point of nearing white supremacy:

- 1970 Ozark Ordinance: Fire code legislation passed leading to the closure of hundreds of SRO units, and the loss of hundreds of units of affordable housing in the urban core
- 1972 Construction of King Dome: Stadium users begin to take significant parking from restaurant/grocery/service users

Acts which had an overall beneficial effect for mainstream populations but cause harm in CID specifically:

- 2012 Livable South Downtown Upzones: Increased potential building height, property values, brought little benefit to low-income residents
- 2015 Streetcar Construction: Beginning of multiple years of construction impacts only to have it abandoned in 2020
- 2017 Mandatory Housing Affordability Legislation: Implemented upzones that intensify gentrification and displacement pressures in the CID

We expect Sound Transit to re analyze a full list of the policies and practices that have harmed environmental justice communities in the Chinatown-International District. These are all issues which deeply affect the CID area and the environment that Sound Transit is planning in. All of these issues plus others brought to you by other groups should be considered when coming to a conclusion about the existence of a “disproportionately high and adverse impact.” Adjusting this incorrect conclusion, alongside your incorrect conclusion around “offsetting benefits” in the environmental justice section will be crucial in a full and complete Final EIS.

Noise and Visual Impact Analysis

We noticed a lack of visual impact analysis in the DEIS. Sound Transit’s claim is that this is appropriate because the CID options are below ground. However, to fully consider the visual impacts of the project on the neighborhood, issues around new structures and their impacts on

the public realm must be considered. For instance, the possibility of a vent jutting up in front of Union Station is a stark impact on the visual environment of the CID. That and other visual impacts should be fully documented and analyzed in the Final EIS. Finally, treating mixed use buildings in the same way as commercial buildings is completely inequitable and fails to consider the visual and noise impacts on the people living in mixed use buildings. Because they have people living in them, mixed use buildings must be included in any operational noise analysis based on logical and racial equity grounds. We expect this too will be included in the final EIS.

Transportation- Stadium Events

Over the years, Interlm's advocacy has called attention to the negative transportation impacts of stadium construction near the CID, first with the King Dome, then with Safeco Field (now T-Mobile Park). The transportation analysis in the DEIS does not include stadium events, even though stadium events are happening for a large portion of the year. The negative impacts of stadium events have continuously harmed the community since Interlm fought the construction of the King Dome back in 1972. We expect Sound Transit to fully document and analyze the transportation impacts of stadium events on the CID as a part of the baseline analysis for transportation conditions in the final EIS.

Design the WSBL station with Anti-Asian Hate in mind

When designing the station area and tunnel, the issue of Anti-Asian hate should be kept in mind. Sound Transit and other government bodies are likely aware of the Anti-Asian hate crimes and incidences that have happened in and around the community. One such example is the Feb 2021 attack of a woman and her partner by a stranger wielding a blunt object. This issue still threatens our community and the physical environment of the tunnel or station must be designed with an eye toward preventing these attacks.

Public Art Process

Finally, the design of the station itself should include opportunities for community driven public art through a community driven public art process plan. This would bring opportunities to engage community members who might not be involved in other community advocacy as well as opportunities to support local artists, especially those who live in the CID or consider the CID their cultural home.

4th Avenue Alignment Choices

For Sound Transit to meet the RET goals of "limiting harmful impacts" "working with the community to reduce past harms", then all these issues must be addressed fully. If the affordable housing plan is created and sound transit and local government work together with community based affordable housing developers, then the effort to address displacement can fulfill the RET goal of "community self-determination".

Displacement

While a 4th Avenue alignment removes the pressure of direct physical displacement, this alignment does not address the renters, small businesses, or community organizations, who might be displaced by rent increases connected to new growth. It still brings the even greater and more daunting threat posed by the indirect displacement impact that will result from any of the alignments without thorough analysis and ample resources to address the harm. The DEIS fails to acknowledge indirect displacement and narrowly addresses only physical displacement caused by the construction itself. Our concerns about indirect displacement and a call for a thorough analysis and refinements to address indirect displacement are outlined in the “Displacement” section under “Overall Concerns” above.

Pedestrian Safety and Connections

More planning is needed to assure the safety of the numerous pedestrians who utilize the sidewalks near the 4th avenue construction zone. This is especially important to us because Hirabayashi Place, our own affordable housing building, sits near one of the construction intersections for this alignment. We are calling for a pedestrian safety plan to be drafted for this section. The CID has a high number of non-English speaking people, many of whom are seniors, so multilingual and senior friendly signage as well as direction giving staff are needed. The CID is a regional home to a broad Asian Diaspora that is spread across the Puget Sound Region. It is important to fully analyze and develop plans around construction impacts that may make it more difficult to arrive to the CID via bus, whether it is for work, fun, cultural activities, or to receive services. It is important that a plan be created so that the important bus-based connections the CID has continue to allow people to access the services, work, or other cultural activities they seek.

Traffic

The Fourth Avenue options would partially close much of 4th Avenue South, as well as fully close a portion between S Jackson and S Main Street. This would also close a small amount of South King Street, 2nd Avenue extension, and the intersection of South Jackson and 4th Avenue South. This would send traffic along 5th Avenue S, 6th Avenue S, 7th Avenue S, 8th Avenue S, Maynard Avenue S, as well as S Main and S Washington Street. Additionally, this would impact all bus routes along 4th Avenue South and South Jackson Street. A traffic plan must be created to ensure this traffic will continue to flow and that emergency vehicles will be able to enter the area. The DEIS also needs to include a thorough analysis of the parking availability and strategy for game days, large cultural events, and other large draw activities.

Parking

The 4th Avenue alternative would result in the loss of 210-220 public parking spaces, mostly from the private garage under Union Station. The cumulative impacts section of the DEIS discusses how building the WSBLE project and will reduce the need for parking in the CID neighborhood, and so claims this alignment will remove some of the need for this parking. To us, this seems disingenuous. While transit might be a good replacement for some car trips, it is not necessarily a good alternative for trips that take under 2 hours such as trips for a doctors’

appointment, social service help, dining at a restaurant, picking up food or groceries, or any number of other trips community members make to the CID.

5th Avenue Alignment Choices

For Sound Transit to meet the RET goals of “limiting harmful impacts” and “working with the community to reduce past harms”, then all of these issues must be addressed fully. If the affordable housing and commercial space plan is created and Sound Transit and local government work together with community based affordable housing developers, then the effort to address displacement can fulfill the RET goal of “community self-determination”.

Affordable Housing and Displacement

While we are happy that this alternative provides TOD affordable housing opportunities as well as commercial space opportunities, to truly address displacement the affordable housing and commercial space must be community based and bring the land under community control. It also must be financed at a level that allows for rents that are affordable to those CID residents and businesses that are at risk of displacement. The direct displacement of neighborhood businesses is a high cost to pay. If this alignment is chosen, we expect Sound Transit and the City to develop a relocation plan for these small CID neighborhood businesses that enables them to remain in the CID or relocate to another chosen location. Additionally, as stated in the “Environmental Justice” section under “Overall Concerns” above, further affordable housing and commercial space investments beyond this TOD would be needed to address the past harms and wrongs committed upon the CID throughout history. Finally, in addition to the large amount of direct displacement addressed in this section, there is no mention of indirect displacement which poses a potentially much greater impact on the neighborhood. For a discussion of the need to analyze indirect displacement and a call for refinements to address indirect displacement, please see the “Displacement” section under “Overall Concerns” above.

Pedestrian Safety

This section needs a more in-depth analysis of safety considerations for pedestrians in the commercial zones of the construction area. The 5th Avenue construction alternatives include construction that would be bordered by 5th Avenue South, South Jackson Street, 6th Avenue South, S King Street, and South Weller Street. These streets provide an important thoroughfare for our community members, including many seniors, immigrants, and refugees, in their daily lives as they access culturally relevant services and businesses and take trips via public transit around the region for a variety of needs. Pedestrian safety planning, especially for our vulnerable community members, is critical, in addition to an analysis of any disrupted connections for trips via metro bus and the trolley. Detailed analysis must be done to account for these issues and a transportation and safe mobility plan must be drafted that centers the needs of non-English speaking and elderly community members.

Traffic

These alignments would cause traffic to reroute onto 4th Avenue South, 6th Avenue South, and South Jackson Street. While the traffic impacts for these alternatives is less than the for the Fourth Avenue options, a traffic mitigation plan must be enacted to ensure that traffic of cars buses, and emergency vehicles can freely move about the area as needed, and that any detours are clearly marked in ways that are culturally and linguistically accessible to the CID community.

Parking


These options would temporarily eliminate parking spaces, loading zones, and more along the affected parts of 5th Avenue South, South King Street, South Weller Street, and 6th Avenue South. This will push parkers to other parts of the neighborhood, which will cause a parking shortage in the neighborhood that will reduce visitors to the neighborhood and ultimately harm small businesses. A parking plan is needed to assure that parking spaces lost during construction are replaced for at least the time during which the parking space was lost.

Conclusion

In conclusion, when comparing the 4th Avenue and 5th Avenue alignment alternatives we have many questions and expectations of Sound Transit and the general process of the WSBLE project development. Since the station in our neighborhood will be a high-volume station, a deep tunnel options reliant on elevators do not align with our community's 100-year vision. To make this acceptable other non-elevator means of moving people must be added to the station. While the 5th Avenue shallow or diagonal options brings more direct and immediate harm by displacing many neighborhood businesses, much more analysis of both the 5th Avenue and 4th Avenue alignments is required in this EIS process for Sound Transit plus other government entities to achieve the stated RET goals and satisfy our own Equitable Development Criteria. Most importantly, the DEIS inadequately and narrowly addresses only direct physical displacement during the time of construction. Indirect displacement, that is completely ignored by the DEIS, remains our gravest concern for both alignments. Refinements to the preferred alignment alternatives must be developed to address indirect displacement impacts based on a thorough analysis of indirect displacement including economic displacement and cultural displacement.

This comment letter was written in the spirit of the stated RET goals and our own Equitable Development Criteria. A refinement is needed, and in any case more studies need to be done, more assurances made, and many resources need to be brought to bear to achieve the RET goals and to develop a project that improves mobility and connectivity for all and contributes to a thriving CID community.

Signed,



Pradeepta Upadhyay

Sound Transit Projects

Details	Communication
#501772	Comment on DEIS for West Seattle and Ballard Link Extension, 04-26-22
From: Stanley Shikuma	ES.3.1.2.2. Chinatown-International District Segment I write on behalf of the Japanese American Citizens League, Seattle Chapter, with a focus on the International District /Chinatown Station Segment as covered in ES.3.1.2.2, page numbers 25-29 of the Executive Summary.
Date Recieved: 4/26/2022	1. I support the CID Coalition request for a 90-day extension of the Comment Period to allow for more complete discussion and understanding from the CID community and other stakeholders in the neighborhood.
Created by:	2. This project will severely impact an already heavily impacted historic district: the Chinatown/International District. The CID will be impacted by a loss of buildings, businesses, and residents (reducing its historic footprint and displacing residents); a huge disruption to traffic, parking, and transit (in an area where many residents rely heavily on public transit and businesses rely on outside visitors); and potentially huge amounts of air, noise, ground/groundwater, and vibration pollution (harming or driving away residents, businesses, visitors to the CID).
Audience:	3. The CID is a low-income community of color with residents who speak many languages. It is difficult to make an intelligent choice without also knowing what kinds of mitigation programs are possible, planned, and funded to alleviate the many impacts listed in Point 2. I do not believe this has been adequately or completely communicated to all the stakeholders in the district. (The plan mentioned in ES.4 Avoidance, Minimization, and Mitigation Measures, pages 40-41, has no specifics about the International-Chinatown Segment; it basically states the project will do its best to stay within the law.)
Reach:	4. Given points 2 and 3, I must disagree with the statement that "...impacts would not be high and adverse to environmental justice populations." (ES.6.2. Environmental Justice, Page 42)
Participation:	5. Despite all the reservations and concerns mentioned above, if I had to choose right now, I believe the 4th Avenue Deep Station Option (CID-1b)* would be best for the CID in the long term.
Engagement:	
Source: Online open house	
Assigned division: Outreach	In closing, I would emphasize two points:
Category:	A. We are not opposed to public works projects that support equitable urban planning. We support mass transit in general as a socially and environmentally responsible alternative to individual vehicles and fossil fuels. We agree that it is an efficient means for moving people around the urban environment.
Project Phase: Planning	B. We remain concerned that the CID, a low-income community of color with a history and culture embedded in this neighborhood, is being differentially impacted once again. Starting with the riots to remove Chinese in the 1890's, to the mass removal of Japanese Americans in WWII, to the building of the I-5 freeway in the 1960's, to the construction of the Kingdome in the 1970's, to the building of the new stadiums, to the laying of the First Hill Streetcar line, there is a history of animosity or disregard for the integrity of this community. In recent times, it has been justified as a necessity for the greater good (i.e., good for those living far away from the CID). I hope the times – and the thinking – have changed.
Project Segment:	
Environmental phase: Draft EIS	



WSBLE Draft Environmental Impact Statement Comments

c/o Lauren Swift

Sound Transit

401 S. Jackson St.

Seattle, WA 98104

Email: WSBLEDEIScomments@soundtransit.org

Re: Comments on WSBLE Draft EIS

Dear Ms. Swift:

On behalf of Friends of KEXP, which is the occupant of the property located at 472 1st Ave N in Seattle, I am writing to provide comments on the Draft EIS for the West Seattle Ballard Link Extension (WSBLE) project. This letter is intended to address comments specifically related to KEXP and its uses and facilities. We also acknowledge that KEXP exists within an interconnected community of arts and culture organizations at Seattle Center, linked together through overlapping missions, values, patrons and programming. We endorse and adopt the comments provided on behalf of the larger group of Seattle Center tenants and clients by Don Marcy of Cairncross & Hempelmann.

We offer these comments with the hopes that they may be a positive contribution to the incredibly important and valuable process of bringing light rail to Seattle Center and the Uptown neighborhood, expanding access to transit throughout the region. For KEXP and the community of artists and music lovers we serve, the WSBLE project represents a once-in-a-lifetime opportunity to enhance mobility and bring greater access to arts and culture at Seattle Center.

Unfortunately, construction of the station at the preferred location at Seattle Center would render our facility unusable, potentially forcing our permanent relocation. Sound Transit's preferred location for a Seattle Center light rail stop is directly adjacent to and underneath our building. The true scope and scale of the significant impacts of construction and ongoing operation will not be known until well after a final decision regarding station location is made, but potential impacts include:

- Studio spaces rendered unusable for a half-decade or more due to digging and construction a mere 20 feet below our building and 8 feet from studio walls
- Open public facilities and free live performances enjoyed by thousands of annual visitors no longer viable due to noise and vibration
- Access to the area and the building for musicians, staff, and patrons made difficult or impossible

In our Seattle Center facility, KEXP operates 24/7, recording and publishing music discovery content that serves millions of listeners in the Pacific Northwest and around the world. Our

studios were purpose-built just 7 years ago to help achieve our mission to enrich lives by championing music and discovery. These studios are particularly sensitive to noise and vibration – even after many have gone through a recent upgrade to withstand the significant noise and vibration related to the construction of Climate Pledge Arena. A relocation would be a loss for KEXP, but more significantly a loss for the hundreds of thousands of annual visitors and millions of listeners we serve via our Seattle Center location, and the millions of visitors who come to Seattle Center every year to experience art, music, sports and culture.

The KEXP Facilities.

KEXP's facility at Seattle Center opened in April of 2016, with a free community concert that welcomed an estimated 12,000 attendees. The 28,000 sq ft facility is home to our broadcast operations, including DJ booths, production and post-production studios, audio isolation booths and more. Mere feet away from the proposed excavation are our secondary DJ booth, used for many hours every day, our isolation booths used for radio show preparation, and seven audio and video production and post-production studios. These studios are used throughout the day and evening for audio and video recording, editing, mixing, and mastering. Because these areas and uses are all highly sensitive to noise and vibration, KEXP worked closely with Seattle Center and OVG to upgrade some areas to withstand the impacts of a major project prior to construction of Climate Pledge Arena. Still, based on what is described in the Draft EIS, our broadcast and production facilities would be rendered useless throughout construction. We will describe these impacts in greater detail below.

In addition to radio broadcast operations, KEXP's facility is used to produce digital media, including podcasts, short-form video and audio content, and most significantly, KEXP's internationally recognized Live on KEXP series. Live on KEXP sessions are performances by musical acts in a wide range of genres that are recorded for video and audio distribution. These sessions reach millions of users per week on YouTube, where KEXP has built an audience of over 2.6 million subscribers and over 1.3 billion cumulative downloads. Live on KEXP is an integral component of KEXP's music discovery mission, and the WSBL project as described in the Draft EIS would render the studios used to produce these sessions completely unusable.

KEXP's Seattle Center Facility was also purpose-built to include large, accessible public space for both formal and informal use. The KEXP Gathering Space hosts hundreds of visitors per day, who come by to meet with friends while listening to the KEXP broadcast, drink coffee from the Vita @ KEXP coffee shop, buy records from the Light in the Attic Record Shop, work remotely, and more. The facility also hosts dozens of live events per year, including free live performances on our stage, workshops for artists, and informative panel discussions on topics that are important to the community. In addition, when safe by public health standards, KEXP hosts free, all-ages access to live tapings of our Live on KEXP sessions – typically over 100 times per year. The Gathering Space and Live Viewing Gallery will all be directly impacted by noise and vibration created by the WSBL project, with a strong potential that these facilities would no longer be welcoming or usable for their current purposes.

The WSBL Project.

For the WSBLE Project, Sound Transit proposes in its preferred alternative to locate a light rail station under Republican Street directly adjacent to (and, in part, beneath) the KEXP offices, studios and public gathering space.

KEXP has long supported the roll-out of light rail service throughout Puget Sound under Sound Transit's leadership. The WSBLE Project is no exception. Connecting Seattle Center and the Uptown neighborhood, as well as other locations from Ballard to West Seattle through the Center City to regional high-capacity rail service will be game-changing for the region. For a host of reasons – from climate change to quality of life – our region must make the transition from single-occupancy vehicles, and the WSBLE project will accelerate this transition. For residents from Redmond, Everett, Tacoma, Bellevue and other points throughout the region to use light rail to attend arts, cultural, entertainment and sports events at Seattle Center will be a boon to the Center, and to organizations like KEXP.

KEXP also is grateful to Sound Transit for the substantial work undertaken in the last few months to explore project alternatives and new construction strategies to address the concerns of KEXP and other organizations at Seattle Center. This partnership has already led to productive new ideas and alternatives, and we look forward to continuing this dialogue as the WSBLE Project moves forward.

However, none of those alternatives are discussed in the Draft EIS and we cannot rely on them in planning for the future. Absent a firm commitment to effective new approaches, the WSBLE Project as described in the Draft EIS may be fatal to KEXP's continued operations in its current location. It is the urgency of these issues that underscores our comments in this letter and that has encouraged Sound Transit's efforts to work with us on solutions.

Our comments are divided into two sections. First, we will discuss our concerns specifically relative to the KEXP space and operations. Second, we will identify broader issues relating to the Draft EIS.

KEXP Specific Comments

Unless fully mitigated, the impacts of the WSBLE Project will render the operations of KEXP at its current home infeasible. These impacts fall principally into the areas of noise, vibration, access and traffic congestion

Noise

The Draft EIS identifies the KEXP space as a Category 1 and Special Building Vibration-Sensitive Receiver and acknowledges that the WSBLE Project will result in noise impacts to KEXP.

KEXP has conducted a site-specific study of probable noise impacts to its space from the WSBLE Project. Exhibit A attached to this letter provides this analysis. The analysis indicates that during construction of the WSBLE Project, noise generated by the project will render most key recording and production locations in the KEXP space unusable. For example, the ambient noise level in the Audio Edit 2 studio, as measured by KEXP's consultant Landau Associates, is

24 dBA, which lines up with the applicable FTA threshold of 25 dBA for this space. The Draft EIS contemplates groundborne noise levels from tunneling at 42 dBA, a very perceptible 18-dBA increase over ambient levels. This increase would be perceived as approximately 3.5 times louder than ambient levels and the applicable FTA threshold. Similar impacts are anticipated from airborne noise generated from surface construction north of the building. Landau anticipates that groundborne noise impacts from Republican Street demolition and below-grade slurry wall demolition may be even higher, although the Draft EIS does not provide an estimate of these impacts.

Ultimately, WSBLE construction noise will cause ambient noise levels in secure recording spaces to exceed maximum tolerances by 50% or more. Under these circumstances, such spaces cease to be viable for operations. Since these impacts are projected to endure for a period of several years, and many of the spaces in question are used around the clock, the inevitable conclusion is that noise impacts alone will prevent KEXP from using our space for its necessary and intended purpose.

The Draft EIS proposes a limited and ineffective list of mitigation measures for these unavoidable impacts. Sound Transit would work with KEXP to coordinate periods of loudest noise around KEXP recording and performances. If that measure were not effective – and it will not be – then modifications to KEXP facilities or temporary relocation would be considered.

KEXP's noise-sensitive operations occur during all hours of the day and evening, so apart from limiting work to the hours between midnight and 5 a.m. – which we understand is not feasible for Sound Transit or nearby residents – coordination of work timing is not a genuine or effective mitigation measure. Improvements to the facility to mitigate noise and vibration were made in 2018-2019 in anticipation of the Climate Pledge Arena project, and there are no further physical changes or improvements to the KEXP space that would reduce these noise impacts to bring them within maximum tolerances.

And the option of relocation would be extremely expensive, assuming that a workable space could even be secured. KEXP's space is complex and purpose-designed. Off-the-shelf alternative locations are not available. The cost and complexity of preparing a relocation site for KEXP would necessitate that the site would be a permanent, not a temporary, site. The forward-looking timetable for such a permanent relocation would require several years of planning, design and construction. KEXP does not support such a result, in part because the KEXP community worked hard and incurred great cost to secure the existing space at Seattle Center and its identity is now closely associated with the cultural and arts hub at Seattle Center. The synergy KEXP enjoys at Seattle Center cannot be replicated in another location.

In short, the unavoidable noise impacts of the WSBLE Project on KEXP are not mitigatable in the current KEXP space and relocation is not a viable option. The only effective mitigation for these noise impacts is to relocate the proposed station to a different location. The Draft EIS identifies an alternative station location to the north near Mercer Street, and while this alternative would still impose other impacts on KEXP, noise impacts would be mitigated by this alternative station location. In addition, Sound Transit and KEXP have discussed the option of moving the

station to the west, away from KEXP and its associated organizations in the Northwest Rooms. Although this alternative was not studied in the Draft EIS, this alternative may provide the necessary mitigation for noise impacts to KEXP as well.

We suggest that the Final EIS review possible station locations to the west of KEXP and further refine plans for the north station alternative near Mercer to address existing community concern. We appreciate Sound Transit's willingness to explore alternative construction methods for the Seattle Center station location on Republican, and we look forward to continuing that conversation. But we remain concerned that such measures will not adequately mitigate the impacts to KEXP. Thus, the review of alternate station locations in the Final EIS is critical.

In addition, we offer the following comments:

- The discussion of noise impacts during construction of the WSBLE project makes no effort to characterize the magnitude or duration of those impacts. At page 4.3.7-17 of the Draft EIS, the best that is offered with respect to impacts to KEXP is that "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 K.E.X.P. . . ." We have provided an attached exhibit demonstrating those likely noise impacts; but it should not be the responsibility of the impacted party to provide information that is lacking in the Draft EIS.
- The Draft EIS discussion of noise mitigation at page 4.3.7-21 makes no attempt to address noise impacts during construction to KEXP. Instead, the Draft EIS offers the following conclusory statement: "Through compliance with applicable construction permits and the incorporated best management practices, . . . no mitigation for noise impacts would be needed." But this is not an evaluation of mitigation; it is just an unsupported assertion. The Draft EIS refers the reader to Appendix N.2 for a more complete explanation, but this Appendix admits (at page 4-15) that "detailed means and methods of construction are not currently available." In light of this admission, it is difficult to understand how the Draft EIS can credibly evaluate construction noise impacts.
- For sensitive receptors, the Draft EIS concludes:

"Where construction would be in close proximity to sensitive Category 1 performance or recording spaces, Sound Transit would work with the venue to coordinate periods of the loudest construction noise around their events. The loudest period of time is expected to be during construction of cut-and-cover stations boxes. If the loudest work could not be scheduled around performances, Sound Transit would coordinate with the venue regarding modifications to their facility or temporary relocation."

“The primary means of mitigating vibration from construction activities is to require the contractor to prepare and implement a detailed Construction Vibration Control Plan. Appendix N.3 provides more information on this plan. The Construction Vibration Control Plan would include Category 1 land uses and any other structures where predicted construction vibration would exceed the applicable thresholds. Where surface construction would be in close proximity to sensitive Category 1 performance or recording spaces, mitigation would be the same as described above for noise. If pile-driving is planned within 100 feet of structures, alternative methods of pile installation or vibration monitoring would be considered. Options for mitigating vibration from the supply train during tunneling are reducing the operation speed of the supply train, smoothing the running surface, or using rubber-tired supply train vehicles. Pre-construction surveys would be conducted to document the existing conditions of buildings, and the contractor would be responsible for repairing damage resulting from the project. During final design, all impacts and potential mitigation measures would be reviewed for verification.”

But this is not a mitigation plan; it is only a hopeful suggestion that a plan might be developed at some future date by some contractor – not even Sound Transit itself. At that point, the incentives for the contractor will be to minimize cost and complexity – not a good formula for development of a real mitigation plan.

As in the area of noise, this merely indicates that Sound Transit does not have a construction mitigation plan for vibration for KEXP or other sensitive receptors. The SEPA regulations suggest that under these circumstances, phased SEPA review is required in WAC 197-11-060. Sound Transit should adopt such a phased review approach.

Transportation

The Republican station location for the WSBLE Project will result in the long-term closure of Republican Street adjacent to KEXP. Republican Street is the principal load-in access location for performing groups and other events for KEXP – in a typical year there are over 300 performances taking place in the facility. Together with the planned closures on 1st Avenue W., the WSBLE Project will effectively render KEXP effectively inaccessible for a long period of time. Limited access will be available through other routes, but that access will be physically challenging and expensive. Significant reductions to access to KEXP will, together with other impacts, make the facility substantially less attractive as a production and performance venue for the musical groups on which KEXP relies on to create its highest-profile programming – online live performances that are viewed by over 1.4 million people per week. In effect, the WSBLE Project will sever KEXP’s ready access for all of its clients, patrons, listeners, staff, and musicians.

These and other closures, including the years-long closure of 1st Ave N, will also impact the accessibility of the KEXP space by transit and passenger vehicles. The Draft EIS does not detail

the local congestion impacts of street closures or the impacts to vehicle and transit travel times through the neighborhood. It is commonly known that even small impacts to the timing and reliability of transit service will affect its usage. Many patrons and employees of KEXP rely on such transit service on a daily basis in their travels to KEXP. Impacts to such service reliability and timing will further adversely affect the vitality of the KEXP operations.

Overall, the Draft EIS does not provide an adequate discussion of realistic mitigation measures for such impacts. The possible mitigation measures listed at page 4.3.3-18 of the Draft EIS are not substantive in nature. Additional signage and community meetings will not realistically address the congestion and access impacts from the WSBL Project.

The Final EIS should address these issues thoroughly, including in the following ways:

- Include a neighborhood-specific analysis of intersection and street congestion for the current alternatives and additional alternatives reviewed in the Final EIS.
- Determine the impacts of such congestion on transit and vehicular and loading access to Seattle Center and KEXP.
- Detail specific mitigation measures to address these impacts, including:
 - Limitations on the location and duration of street closures;
 - Enhancement of transit services;
 - Support for alternative transportation modes, such as subsidies for ride-share services, vanpool and carpool support for employees, interim bicycle facilities and the like;
 - Special provisions for loading and unloading at KEXP, particularly for bands and performers, including dedicated loading areas, subsidized local transport from loading zones to KEXP facilities and support for loading of goods and materials.
- The same impact and mitigation evaluation analysis should be conducted for the WSBL operating condition, post-construction. The Draft EIS is relatively opaque on these long-term operational issues. At a minimum, the following issues must be addressed:
 - Republican Street adjacent to KEXP must return to a status that includes vehicular access for loading and delivery activities. We understand that some concepts have considered conversion of Republican Street to a pedestrian-only facility. This scenario would have a devastating effect on the use and operation of KEXP facilities.
 - The resumption of transit service to the Lower Queen Anne neighborhood.
 - Identification of any other street closures or restrictions that may exist in the long-term condition.
 - Review of how Sound Transit maintenance and operation activities associated with the Seattle Center station and its entrances may affect transportation and pedestrian access, even on a temporary basis.

General Comments

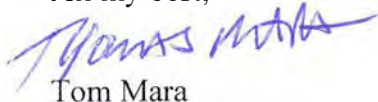
1. The quality of the evaluation in the Draft EIS is necessarily limited by the relatively preliminary nature of the plans for the WSBLE Project. This makes it difficult for the Draft EIS to properly characterize future impacts. The SEPA review process for the WSBLE Project would be benefited by a Draft EIS that was based on a more mature set of project plans. As we have noted, KEXP is grateful to Sound Transit for working to evolve a set of alternative plans for the Republican Street Seattle Center station and its alternatives, but both KEXP and the public generally would be benefited by the opportunity to review and comment on such more specific plans.
2. We are concerned that the Draft EIS does not adequately define the scope, extent or duration of construction impact areas. While proposed station locations and entrances are defined in the Draft EIS, the geographic scope of additional areas for construction staging, parking, equipment and other activities is not well-defined. The Final EIS should address this shortcoming.
3. There are significant urban design issues associated with proposed station entrances. It appears that the Draft EIS assumes that fare-box pay will occur at the street level, where it will have the greatest impact on displacement of existing and future urban uses and pedestrian patterns. The Draft EIS should explore more opportunities and options for fare-box pay to occur at a location below the street level, and for station entrances to be integrated into the urban landscape. It will be important to preserve street level spaces for uses that contribute to the urban environment and to ensure that the station entrances themselves will be subject to rigorous urban design standards.
4. We encourage Sound Transit to take careful consideration of opportunity for the creation of affordable, transit-oriented housing to be developed in Uptown as a component of the placement of a light rail station. The community that KEXP serves is in large part made up of artists and other creatives who have struggled in recent years to afford housing in the city. The creation of affordable housing – particularly housing for working-class arts and culture workers – should be a priority when considering station placement adjacent to Seattle Center, the region's foremost arts and culture hub.
5. There would be a benefit to conducting the review of the WSBLE Project as part of a phased review process under SEPA. Due to the preliminary nature of the project plans, the desire to defer actual construction decisions to some future contractor and the lack of information about many impacts, it would be appropriate to phase this SEPA review so that review of actual on-the-ground impacts can occur in the future at a time when there is adequate information to support that review. While it may be appropriate to make large-scale decisions about corridor alignment through this EIS process, future decisions about construction methodology, street closures, final station locations and their design, would benefit from future SEPA review when facts and information are available to allow that review to occur adequately.

We expect that some WSBLE supporters will call for swift action to approve the project, concerned that it has already been delayed. The time required to conduct appropriate SEPA review will only add more months to project delivery. They will argue that delays are not acceptable.

But this is a 100-year+ project. We have only one chance to get it right. The project is already over-schedule and over-budget – the commitment of additional months to undertake a complete SEPA analysis for the project will not be a hardship. The true hardship will be on future generations if we do not take the time to make the best long-term decisions for this project.

We appreciate the opportunity to provide these comments, and the opportunity to partner with Sound Transit to bring light rail to Seattle Center thoughtfully and with our full community in mind.

All my best,

A handwritten signature in blue ink, appearing to read "Tom Mara", is written over a light blue circular background.

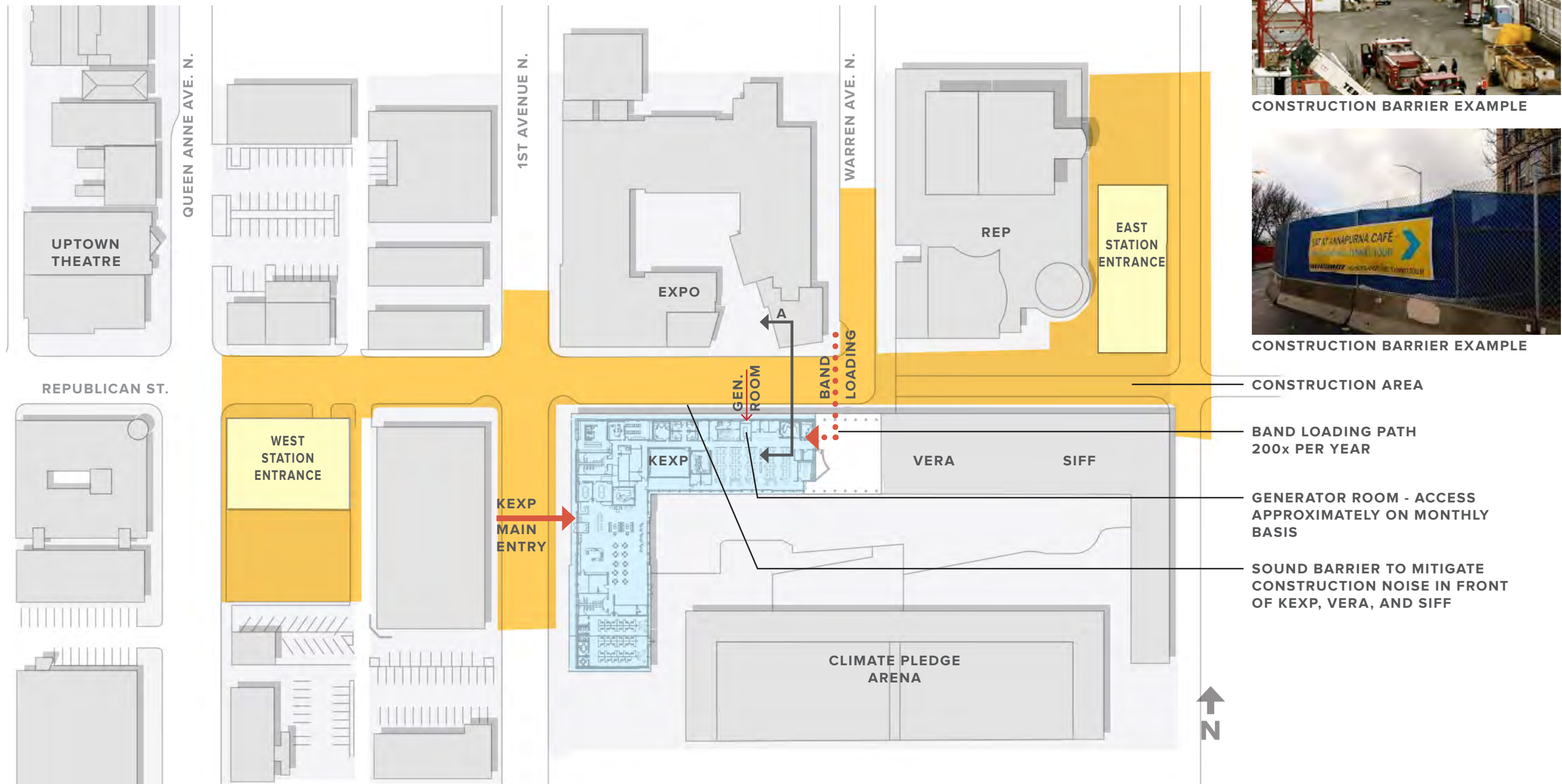
Tom Mara
CEO, Friends of KEXP

Attachment: KEXP Sound Transit Construction Impact (PDF)

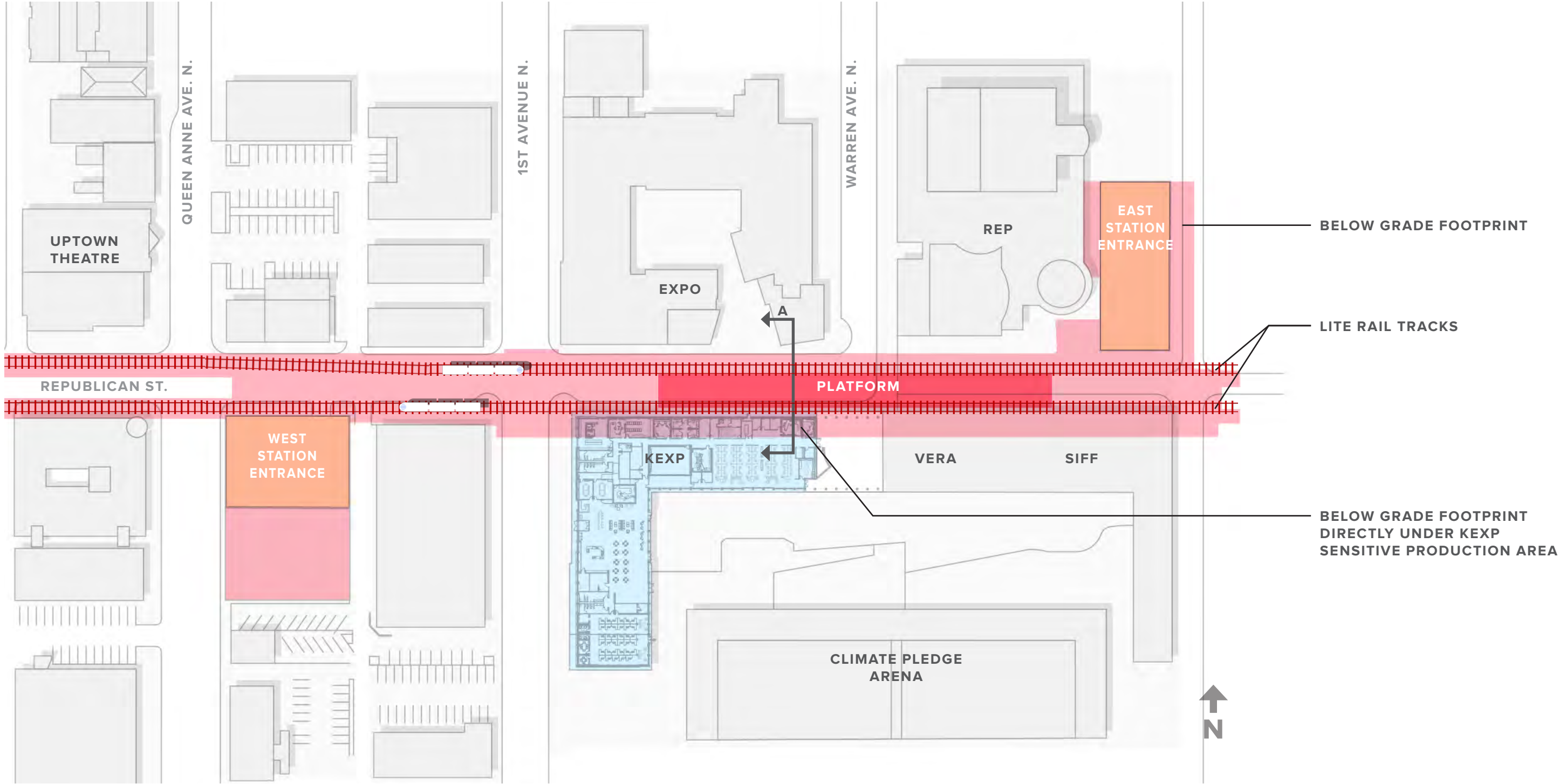


SOUND TRANSIT CONSTRUCTION IMPACT | APRIL 26, 2022





STATION AREA CONSTRUCTION AND STAGING ZONE



STATION AREA BELOW GRADE

DISRUPTION STEPS

STEPS 1-4 CONSTRUCTION OF STATION ESTIMATED 2-4 YEARS

STEP 5 TUNNELING ESTIMATED 2-2.5 YEARS



STEP 1: DEMOLITION



STEP 2: EXCAVATION



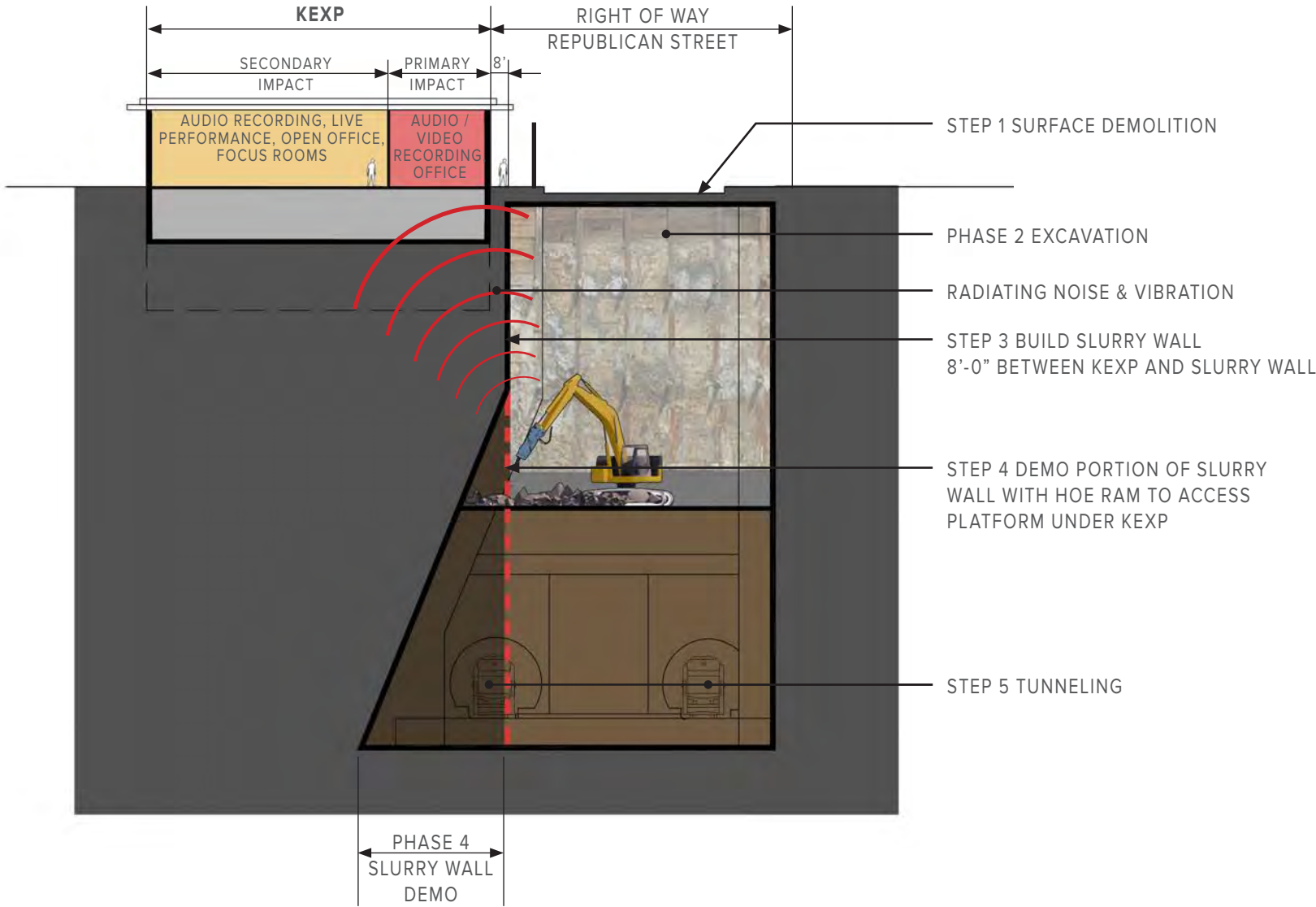
STEP 3: BUILD SLURRY WALL



STEP 4: DEMO PORTION OF SLURRY WALL BELOW KEXP



STEP 5: TUNNELING



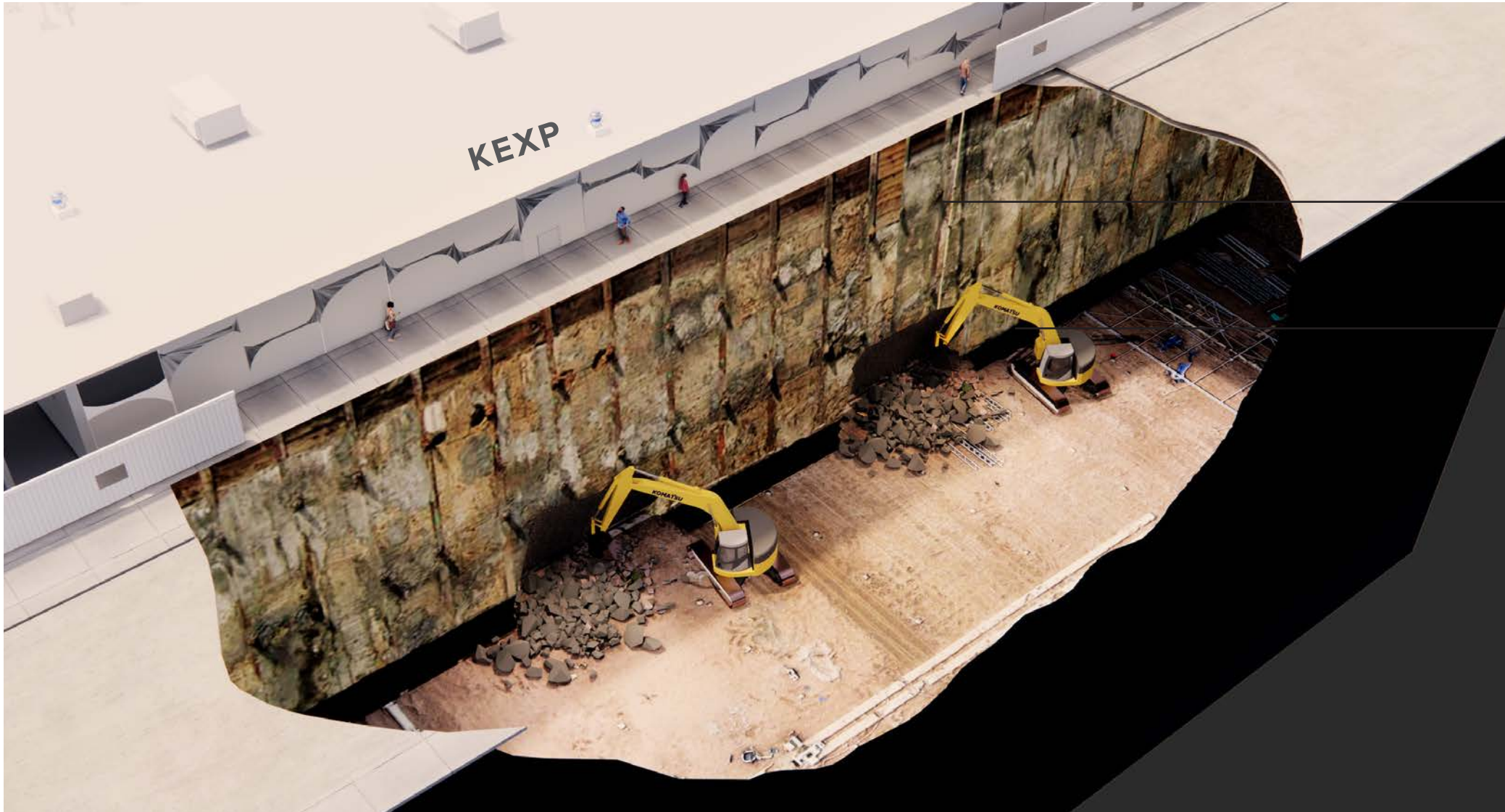
* CHAPTER 6.2.1.6 (6-33) NOTES WORST CASE NOISE LEVEL WILL BE 88 dBA AT 50' AWAY. KEXP IS 8' LOCATED FROM CONSTRUCTION AND AWAY AND ESTIMATED TO HAVE A NOISE LEVEL OF 104 dBA AT THE EXTERIOR OF KEXP.

SECTION A - SLURRY WALL DEMO



PHASE 4: DEMO PORTION OF SLURRY WALL BELOW KEXP

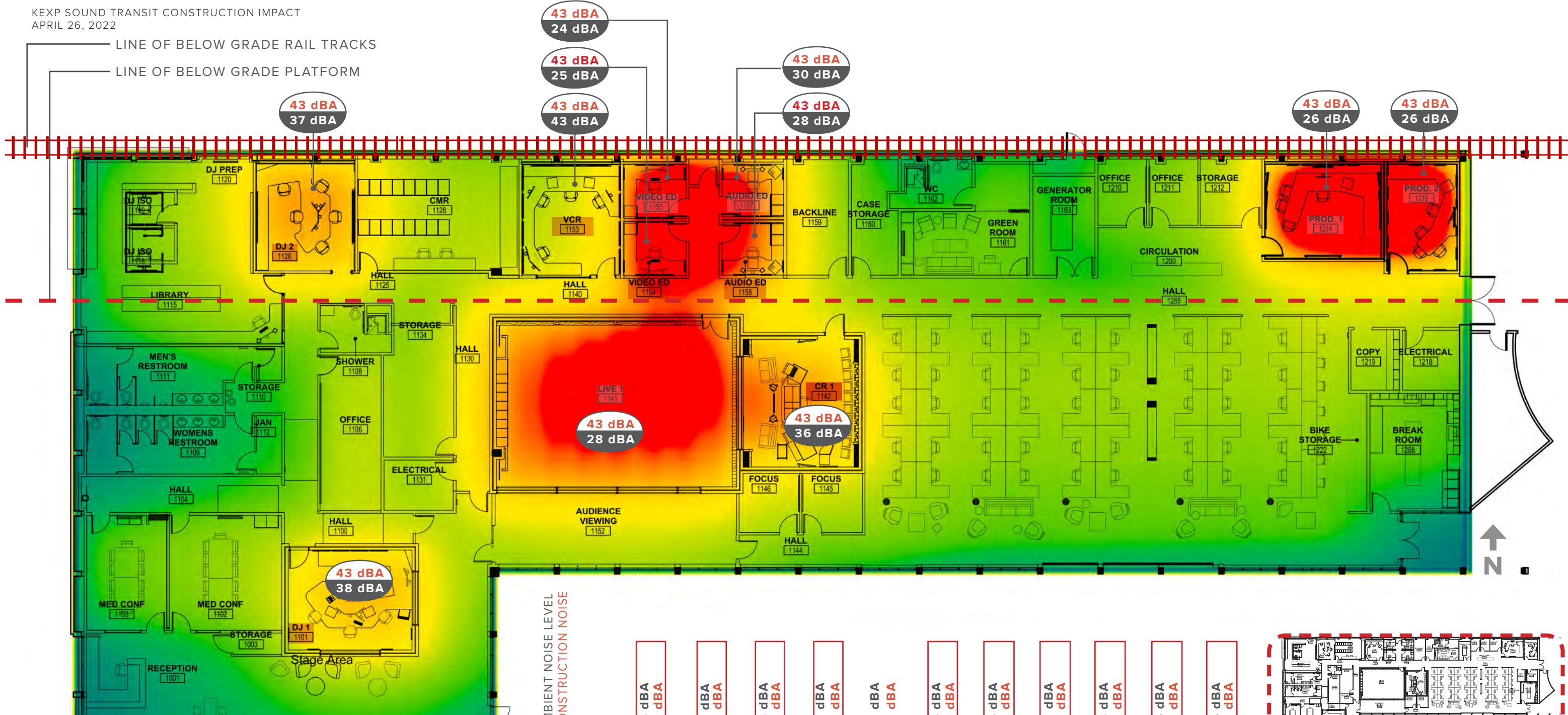
AFTER SLURRY WALL IS BUILT, DEMOLITION TO PORTION OF SLURRY WALL WILL OCCUR TO ACCESS AREA BELOW KEXP.



SLURRY WALL

HOE RAM BREAKING THROUGH SLURRY
EXPAND AND ACCOMMODATE WIDTH
REQUIRED FOR PLATFORM

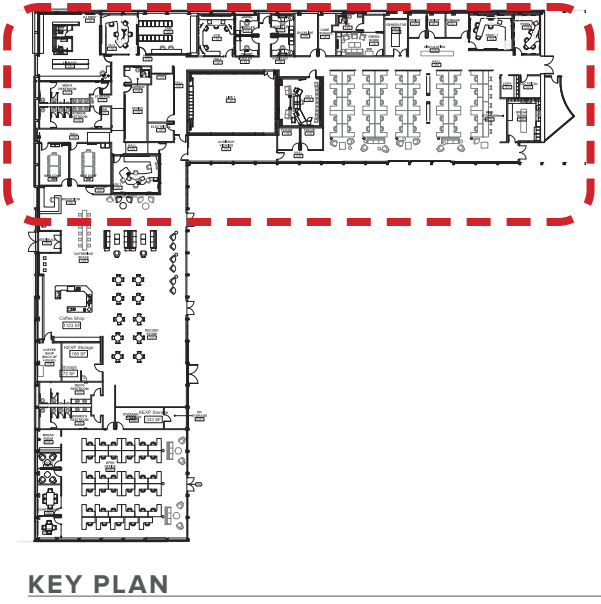
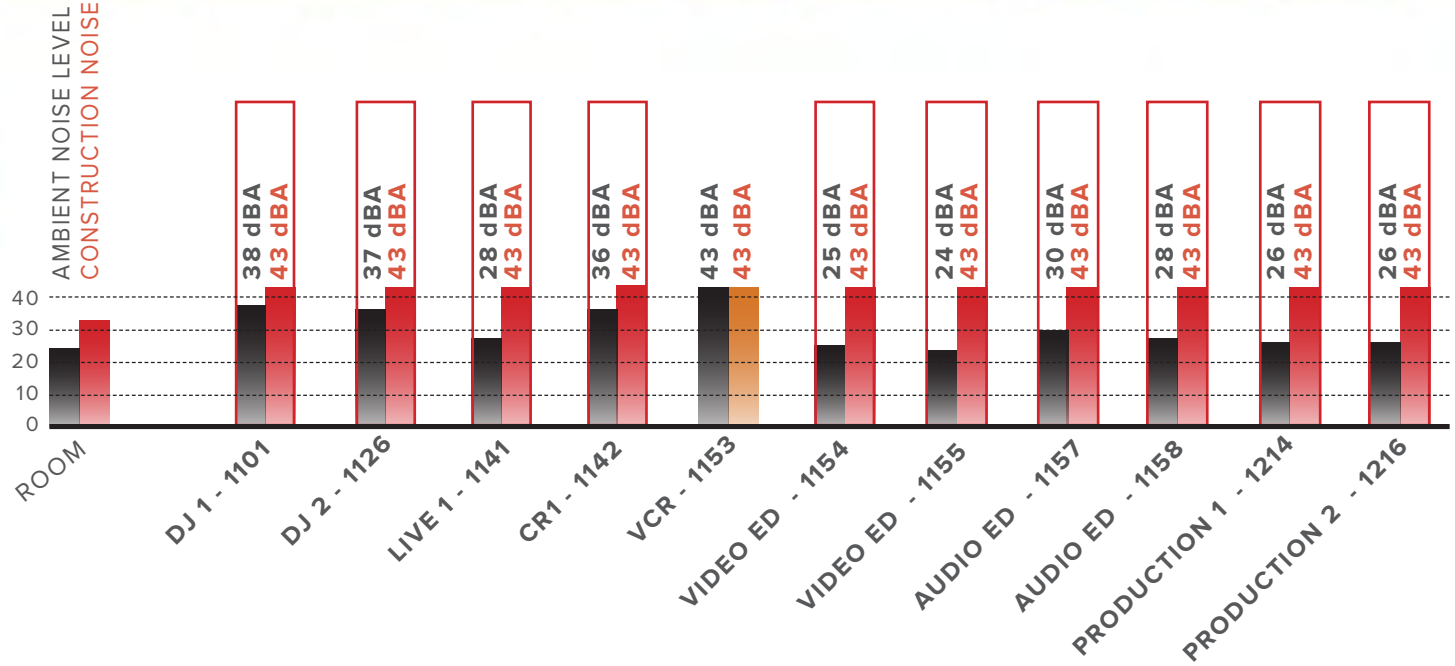
PERSPECTIVE - SLURRY WALL DEMO



PREDICTED GROUNDBORNE NOISE DURING CONSTRUCTION

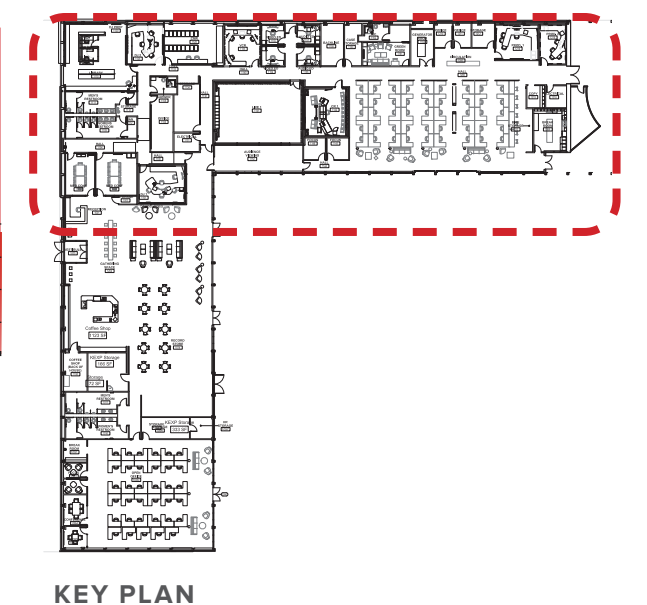
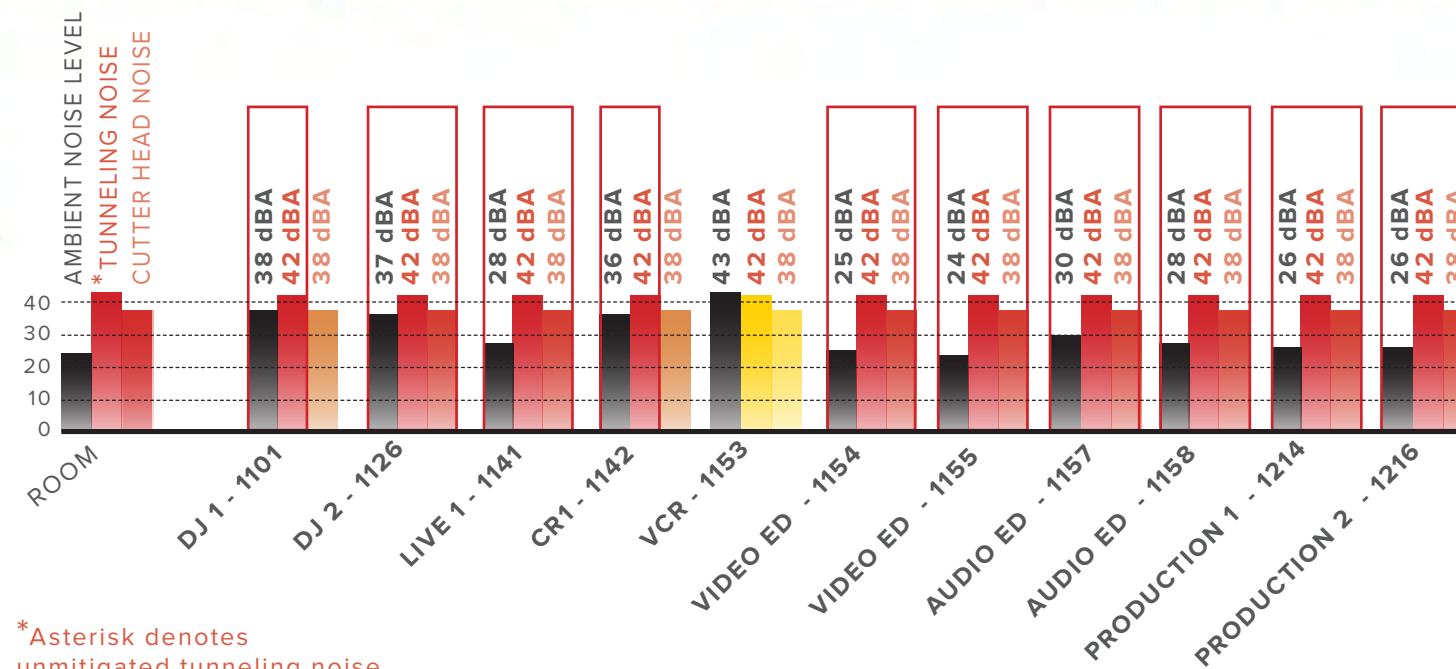
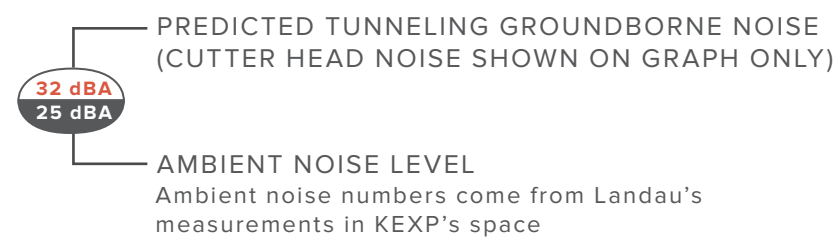
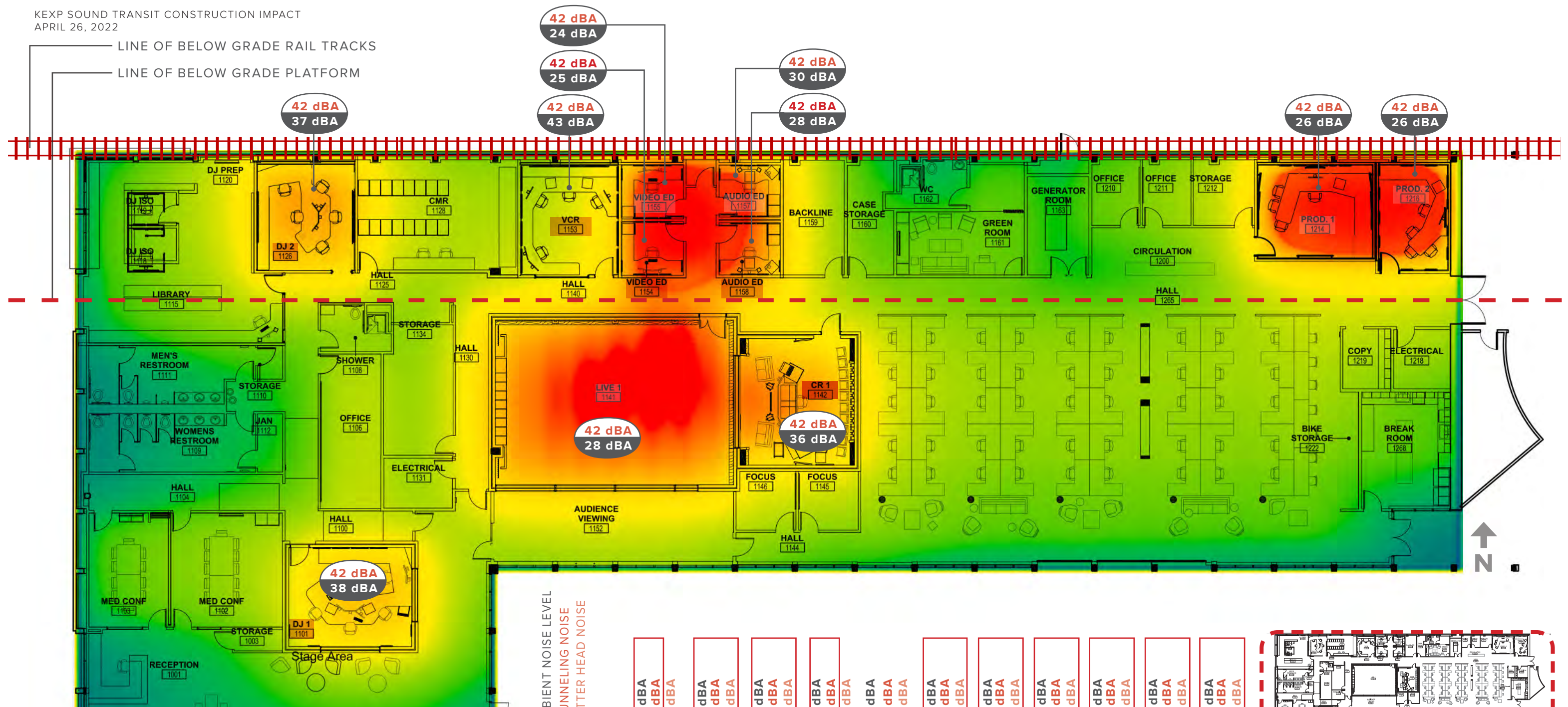
32 dBA
25 dBA

AMBIENT NOISE LEVEL
Ambient noise numbers come from Landau's measurements in KEXP's space

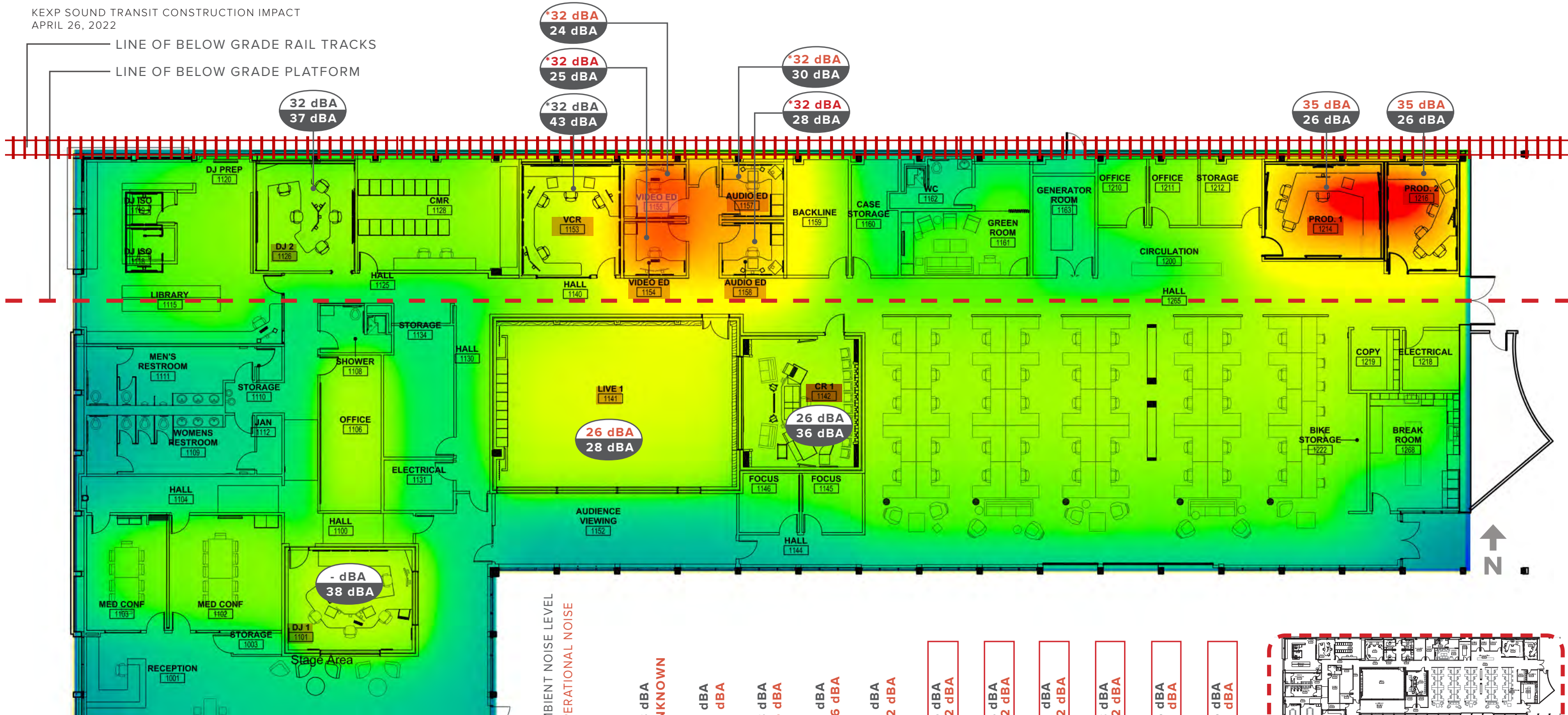


RECTANGLE DENOTES NOISE SENSITIVE SPACE

CONSTRUCTION NOISE - MULTIPLE YEARS



TUNNELING GROUNDBORNE NOISE

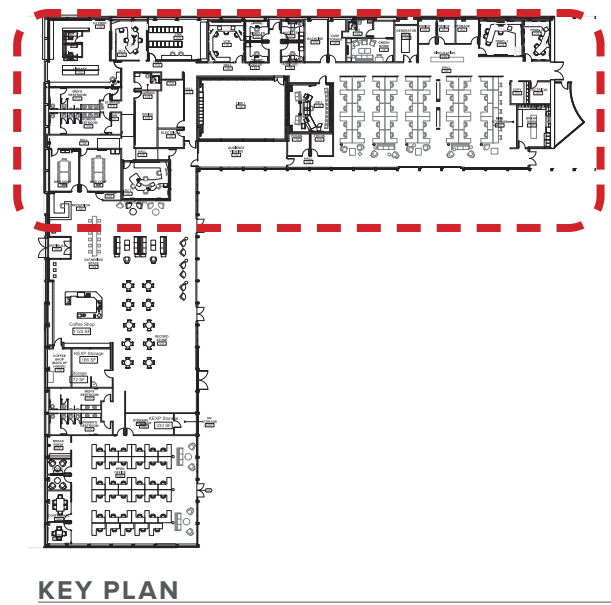
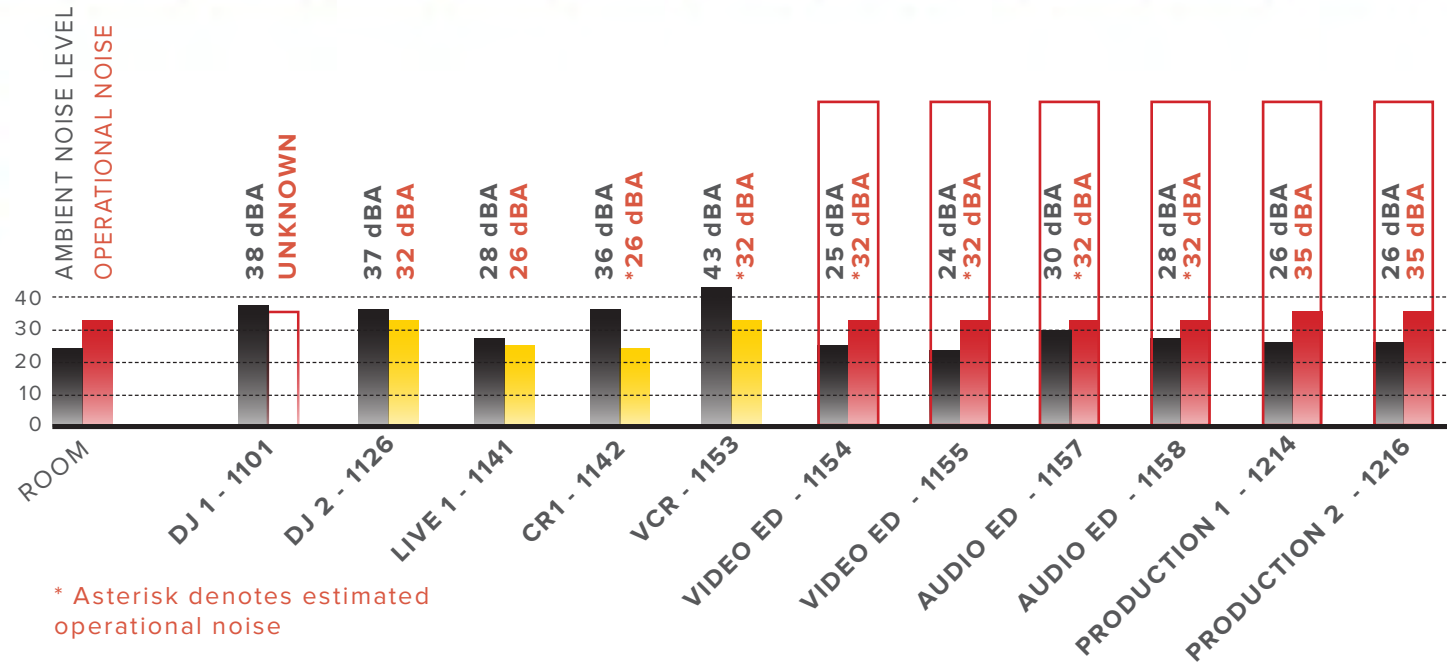


* ASTERISK WHERE OCCURS:
ASSUMED CONSTRUCTION NOISE
(INFO NOT PROVIDED BY CITY)

PREDICTED OPERATIONAL GROUND BORNE
LIGHT RAIL NOISE

*32 dBA
25 dBA

AMBIENT NOISE LEVEL
Ambient noise numbers come from Landau's
measurements in KEXP's space



ONGOING LIGHT RAIL OPERATIONAL GROUND BORNE NOISE

Thank you.

Sound Transit Projects

Details	Communication
#499496 Date Recieved: 3/22/2022 Created by: Nasra Mohamed Audience: General Public Reach: Participation: Engagement: 1 Source: Open house/public meeting Assigned division: Outreach Category: Project Phase: Planning Project Segment: Environmental phase: Draft EIS	<p>Good evening, everybody. Thank you for this time. As we shared with Mayor Harrell over the last 11 months, the Seattle Center Foundation and many Seattle Center resident organizations have been meeting weekly, studying and intensely discussing the potential impacts of the plan for the arrival of Sound Transit in 2037. We are all very supportive of the light rail opening its doors in the Uptown neighborhood and look forward to the ultimate success of the largest infrastructure project in the history of Seattle; however, we have concluded that the proposed location for the preferred alignment on Republic is untenable for Seattle Center and its resident organizations. Now that the DEIS has been released, our consultants and resident organizations, including KEXP, The Vera Project, SIFF, and Seattle Rep, have determined that they cannot stay in place and solvent during five and up to ten years of construction unless a significant change, of course, happens in the design, construction methodology, and location of the Uptown station. The impacts of noise and vibration as well as the significant known construction impacts have created a truly existential crisis. We look forward to working with Sound Transit and much appreciate their engagement with us and help a thorough examination of what the solutions can be moving forward. With much appreciation, thank you.</p>

Sound Transit Projects

Details	Communication
<div>#505247</div> <div>Date Recieved: 4/28/2022</div> <div>Created by: Nasra Mohamed</div> <div>Audience: General Public</div> <div>Reach:</div> <div>Participation:</div> <div>Engagement: 1</div> <div>Source: Email</div> <div>Assigned division: Outreach</div> <div>Category:</div> <div>Project Phase: Planning</div> <div>Project Segment:</div> <div>Environmental phase: Draft EIS</div>	<div>Dear whom it may concern.</div> <div>We, the Korean Student Association (KSA) of Central Washington University (CWU) plead and urge the City of Seattle to cease plans of building a light rail through the Chinatown Historic district. We ask that you reconsider the financial and personal impacts this will have upon the area and its inhabitants, namely business owners and community members. Not only would the development of this light rail disrupt businesses, but it would also take land away from immigrants who had found refuge in the area since the 1860s.</div> <div>We hope you consider our request as many of our members have ties to the historic Chinatown.</div> <div>Sincerely,</div> <div>CWU Korean Student Association</div>

Sound Transit Projects

Details	Communication
#503488	To Sound Transit Board & Staff:
Date Recieved: 4/27/2022	In 100 years no one will look back and mourn the disruption to traffic flow on 4th Avenue. They will look back in shame at how we did not prevent the loss of a cultural neighborhood. Our kids studying Washington state history will read another chapter about how we allowed displacement of vulnerable residents and small businesses, once again in the name of progress.
Created by: Cecelia Gunn	We build high capacity light rail to alleviate automobile traffic problems and help preserve the environment in our region. Sometimes roads are closed and automobile traffic problems are exacerbated while new solutions are put in place. That's OK. The partial destruction of Seattle's historic Chinatown International District because a road closure is inconvenient? That's not OK.
Audience: General Public	
Reach:	Please, choose the 4th Avenue route and do everything you can to help defend the CID's intangible cultural heritage during our region's growing pains. The neighborhood is vulnerable and its character may not survive without Sound Transit's support.
Participation:	
Engagement:	--
Source: Email	Sharon H. Lee Executive Director
Assigned division: Outreach	Low Income Housing Institute Please note our new address: 1253 S Jackson Street, Suite A Seattle, WA 98144
Category:	
Project Phase: Planning	(206) 443-9935, ext. 1031 (206) 443-9851 fax
Project Segment:	Celebrating 30 Years Housing is a human right!
Environmental phase: Draft EIS	Need Affordable Housing? Available units posted weekly at: http://www.lihi.org



Magnolia Community Council

MAGNOLIA'S COMMUNITY COUNCIL

OFFICERS

April 26, 2022

PRESIDENT

Stephanie Ballard

WSBLEDEIScomments@soundtransit.org

emailtheboard@soundtransit.org

VICE PRESIDENT

David Kaplan

Andrew.lewis@seattle.gov

Sara.maxana@seattle.gov

TREASURER

Mary Hoverson

Re: Magnolia Community Council Comments RE: Optimizing Interbay-Ballard Segment

RECORDING SECRETARY

Alison Grevstad

Greetings,

In order for the Interbay-Ballard segment of ST3 expansion to be successful, it must be located where residents and businesses can access it, and it takes us where we need to go. A tunnel under the Ship Canal is imperative, and a Ballard tunnel station at 17th, 20th, or 22nd Ave NW makes sense.

TRUSTEES

Lisa Barnes

Carol Burton

Bruce Carter

Valerie Cooper

Pat Craft

Steve DeForest

Stephen Faciszewski

Leslie Helm

Cheryl Jacobs

Matthew Koenig

David Moehring

Jayson Morris

Amy Plantenberg

Don Schlosser

Bill Stafford

Janis Traven

In general:

Metro circulators must run at frequencies to connect with light rail schedule, and respond to demand

Minimize transfer time from transit to platform

Avoid transit plans that require pedestrian crossing of major thoroughfares

Minimize size of stations for cost saving. We don't need huge mezzanines or massive structures.

Plan for Ballard station by re-opening study of a tunnel station at 17th, 20th, or 22nd Ave NW

Consider continuation of tunnel route from Seattle Center through Smith Cove, Interbay to Ballard to avoid avoid construction, traffic, park, noise, view corridor impacts, and residential and business displacements

For Smith Cove (SIB-1):

Approach station by tunneling under Elliott

Station on West side of Elliott

Minimize size, if elevated station, over Galer flyover/Magnolia Bridge

Ensure that buses pick up and drop off on west side of Elliott - no pedestrian crossing at Elliott for bus connections

Magnolia Community Council
3213 W. Wheeler Street, No. 500
Seattle, WA 98199
www.magnoliacommunitycouncil.org

For Interbay Station (IBB-2b):

Station must be proximate to Magnolia peninsula for emergency access in event of bridge failures

Station must lead to Ship Canal Tunnel

No pedestrian crossing at Dravus for bus connections. Design so all buses and passenger car pick-up and drop off on north side of Dravus or on 17th Ave. W


Ballard station

Re-examine and complete study of Ballard 20th Avenue Tunnel-Thorndyke Portal to recalculate right of way and real estate costs, benefits transit-oriented development, and increased ridership from Ballard Urban Village

Re-examine and study of Ballard 20th Avenue Tunnel-Thorndyke Portal to assess BIRT study plans for retrofit or reconstruction of the West Dravus Street and West Emerson Street bridges

Thank you for your consideration and attention to this matter.

Sincerely,



Magnolia Community Council
Stephanie Ballard, President



April 27, 2022

WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 S. Jackson St.
Seattle, WA 98104

SUBMITTED ELECTRONICALLY

Dear Ms. Swift:

Thank you for the opportunity to provide comments on the Draft Environmental Impact Statement for the West Seattle and Ballard Link Extensions. A nonprofit organization with both local roots and international acclaim, the Museum of Pop Culture has a deep interest in this project with our location directly in the path of the proposed transit lines.

MoPOP has been a treasured Seattle institution for more than twenty years, using pop culture as a universal language through which we build connections. Our iconic Frank Gehry-designed building sits at the foot of the Space Needle on the Seattle Center campus and enriches our local community and the visitors we're privileged to welcome from around the world. Reaching nearly three-quarters of a million people each year, our accessibility is critical to our continued success.

The prospect of better access to MoPOP and the rest of the Seattle Center campus is exciting, and we are supportive of expanded transit in our area. Our aim is to support that work as we safeguard our physical space and the experience of our guests, while mitigating any effects that construction may have. To that end, we have been and will continue to work closely with organizations and other stakeholders about the future of transit around Seattle Center. We are signatories to other comment letters from groups of similarly situated organizations, and here we offer comments particular to MoPOP.

OVERALL CONCERNS

In general, the DEIS had several inadequacies in describing the impact construction may have on MoPOP.

The document details the potential impact of construction on many specific organizations but fails to include MoPOP among them in a way commensurate with our exposure. Much of the discussion examines impacts on properties surrounding stations but does not give adequate attention to those along potential boring paths, including MoPOP.

A particular concern about boring consequences arose during the construction of both the SR-99 tunnel several blocks away from the Seattle Center campus and the Climate Pledge Arena. During those projects, residents saw an increase in the rodent activity, likely related to ground vibration and excavation in the area. An increase in rodent activity around the museum presents a risk to our irreplaceable artifacts as well as the health and safety of our visitors and staff. We believe we need further assessment of this risk and that a campus wide-rodent control program be in place prior to construction and for its duration.

MoPOP.org

ADMINISTRATIVE OFFICE
120 6th Avenue N
Seattle, WA 98109

MUSEUM
325 5th Avenue N
Seattle, WA 98109

UNADDRESSED VIBRATION CONCERNS

The DEIS fails to address ground vibration and dewatering strategies along the proposed pathway for the tunnel between the South Lake Union Station and the Seattle Center Station. The proposed pathway is in remarkable proximity to our museum building and ground vibrations caused by the boring process could have devastating impacts on the structure and integrity of our building and artifacts housed within. MoPOP is largely a steel frame structure, which has great potential to amplify ground vibrations throughout the building and impact building features, such as the steel and glass paneling on the roof.

Please refer to the drawing samples of our structural blueprints at the end of this letter including Appendix A (roof overview and cladding for attachment of steel panels; Appendix B (roof glass sculpture and layout installed to the building's main beams through the exterior skin); and Appendix C (samples of main beams of the building as support structure for cladding and installation of exterior skin steel panels). Additional drawings and plans can be provided upon request.

A detailed ground vibration study is necessary to quantify potential impacts, and determine appropriate mitigation strategies to minimize ground vibrations, particularly as it relates to tunnel boring. Measurable impacts could be: potential loosening of metal screws to hold the exterior steel panels in place; stress to the seals on skylights and subsequent leaking; and potential fracturing of glass panels on the roof sculpture due to movement of the supporting steel structure.

Therefore, MoPOP requests Sound Transit furnish a ground vibration study as it relates to tunnel boring between the South Lake Union Station and the Seattle Center Station and install ground vibration monitoring devices to assess vibration impacts to the museum and surrounding area. Specific attention must be given to the steel beams, exterior steel skin, and the glass sculpture installation on the roof. Results of any vibration impacts should be shared with the MoPOP staff on a weekly schedule.

COMMENTS ON DRAFT ENVIRONMENTAL IMPACT STATEMENT FINDINGS

In addition to the general concerns above, we offer the following specific comments on the DEIS:

- **Section 2.6 Construction Approach** (page 2-83)
MoPOP is within proximity of the South Lake Union Station. As stated in the DEIS, "the typical construction for surface and elevated guideways and stations would occur on a 5- to 6-day work week and would occur primary between the hours of 7 a.m. and 10 p.m. In some locations, additional shifts, all-week, nighttime, or 24-hour construction activities with additional tunnelling work typically occurring between 20 and 24 hours per day, 6 to 7 days per week."

MoPOP's normal operating hours are from 10:00am–5:00pm, 7 days a week with additional nighttime programming and venue experiences typically running from 6:00pm–midnight more than 200 days a year. The suggested construction sequence and activities will have significant impacts on our business operations, and we urge you to take this into consideration to minimize impacts on MoPOP and the rest of the arts and culture sector in our area.

- **Section 2.6.8 Staging Areas and Construction Easements** (page 2-91)
While potential staging areas for construction are vague in the DEIS, we are concerned about the potential use of the Harrison Street roundabout at 5th Avenue N for such purposes. At the roundabout sits the museum's sole loading dock and restricted access would have operational ramifications great and small, from our ability to install and deinstall special exhibitions to curtailing

programming, catering and café services, guest ingress, and housekeeping operations. Restrictions on this roundabout could make us unable to function normally and have a devastating financial impact. For MoPOP to successfully operate during the entire construction period, it is critical that access routes remain open. Such critical streets that need to be in full operation (all travel lanes) include:

- Harrison Street Roundabout (west of 5th Avenue N)
- 5th Avenue N (from Mercer Street to Denny Way)
- Broad Street (Denny Way to 5th Avenue N)
- Mercer Street (from I-5 to Queen Avenue N)

Additionally, existing transit service (including the Monorail) to and from Seattle Center must be preserved and enhanced during the entire Sound Transit construction period.

- **Section 3.3.1.2.1 Table 3-2 “Average Weekday Vehicle Miles Traveled, Vehicle Hours Traveled, and Vehicle hours of Delay in 2042”** (page 3-10)

This table shows minimal impact on the forecasted numbers between the “No Build Alternative” and the “Build Alternative.” What is Sound Transit’s plan to further decrease vehicle hours and delays in the proposed areas of the light rail implementation? How is the “Build Alternative” justified if the impact on vehicle traffic is minimal (<1%)?

- **Section 6.2.2.2.2 Downtown Segment Table 6-6 “Projected Ridership and Key Impact Differences – Downtown Segment”** (page 6-21)

As stated in Table 6-6, “Full closure of Harrison Street between 6th Avenue North and Dexter Avenue North for 4 years during construction. Access to and from State Route 99 would remain open. Harrison Street would also be partially closed from Dexter Avenue North to 8th Avenue North for 1.5 years.”

Long-term street closures pose a tremendous challenge for our visitors navigating to our museum via surface streets or public transportation. We are concerned about the marketing strategy and resources available to communicate these challenges to the public. The DEIS did not provide details of a communication plan addressing businesses that are open during construction welcome the public to visit Seattle Center and the Uptown neighborhood. We suggest Sound Transit implement a marketing campaign similar to the SR-99 tunnel project.

In **Appendix G Environmental Justice**, we offer the following comment:

- **Table 5-4 Summary of Project Impacts and Potential Mitigation – Ballard Link Extension** (page 5-41 in Appendix G)

The column Best Management Practices and Mitigation, sub bullet 5 states: “Implement promotion and marketing measures to help affected business districts maintain their customer base, consistent with Sound Transit policies, during construction.”

We suggest Sound Transit have a marketing and advertising campaign that is frequently updated and revisited to ensure stable maintenance of customer base and patronage. We propose Sound Transit create an action plan that allows Seattle Center patrons to have full access to all venues and Seattle Center resident organizations for the duration of the construction project.

We also have comments on the **Appendix N.3 Noise and Vibration Technical Report**.

- **Section 5.1.2.3 Downtown Segment** (page 5-8 in Appendix N.3)
Paragraph three states: “This segment also includes many receivers with high vibration sensitivity (FTA Category 1 or special-use buildings). The South Lake Union neighborhood has several research institutions and biotechnology companies that have vibration-sensitive equipment. Seattle Center at 305 Harrison Street, at the northwest end of the segment, houses several performance venues and recording spaces that are sensitive to ground borne noise and vibration.”

MoPOP must be considered or recognized as an FTA Category 1 or special-use building during the construction phase of the South Lake Union Station due to the museum’s uses and proximity of construction activity. Further discussion is below regarding our absence from Table 5-1.

- **Section 5.1.2.3 Table 5-1 “Vibration-Sensitive Receivers with High-Vibration Sensitivity in the Downtown Segment”** (page 5-11 in Appendix N.3)
MoPOP was not listed in Table 5-1 among other Seattle Center residents. The museum is in close proximity to the light rail tunnel north of the museum and as an iconic structure unique to the City of Seattle, it is important to take MoPOP into consideration as a building with High-Vibration Sensitivity in the Downtown Segment. This is true for the museum at 325 5th Avenue N, but also our administrative building at 120 6th Avenue N which also contains sensitive facilities.

The museum regularly caters to live performances, artist recordings, and many other programs and experiences sensitive to noise and vibration. For example, every guest to MoPOP is familiar with the “guitar tornado” sculpture that itself is a giant, playable instrument designed by the local artist Trimpin. This kinetic sculpture is vulnerable to heavy vibration and would cost a tremendous amount of money if it needed to be recalibrated or reset. The same is true for much of the equipment in Sound Lab — our hand-on music experimentation exhibition — which is also all finely calibrated.

Additionally, the museum houses many rare and irreplaceable artifacts across pop culture genres which are sensitive to ground vibrations. MoPOP is home to everything from film props important to cinematic history to musical instruments played by iconic artists — all of which are vulnerable to vibration or other disruption.

The building itself would also be at risk. MoPOP’s extensive steel structure in its frame and outer shell will amplify ground vibrations and potentially have effects on interior components, such as interior walls, doors and passageways, elevators, etc. The building also includes a unique glass sculptural roof system with 621 pieces of laminated glass supported by a steel tree-like frame system. Vibration that could be amplified throughout the building’s steel structure may cause glass panels to break during extended periods of vibration. Replacement of fractured glass panels requires custom fabrication and installation methods that can prove costly to the organization, not to mention the risks to people on the street that fractures could pose. These architectural elements are so important that MoPOP received funding through a Washington State Heritage Capital Improvement Grant for their upkeep.

RECOMMENDATIONS

We request that Sound Transit and its partners prepare a detailed construction management plan that includes:

- Establishing a Construction Coordination Committee for north downtown comprised of South Lake Union, Uptown, and Seattle Center representatives and working with the committee to develop a plan to minimize construction impacts.

- Avoiding impacts to transit, especially fixed rail transit or bus service with no adequate detour route.
- Providing additional transit service in areas acutely impacted.
- Providing assistance to employers that encourage and facilitate transit ridership.
- Establishing requirements for maintaining access to venues and businesses in construction contract documents.
- Developing a communications plan to inform patrons, businesses, employees, and local residents of alternative route options.
- Providing real-time and advance-notice information on traffic movement, detour routes, and access. This must include the following access routes to and from MoPOP:
 - Harrison Street Roundabout (west of 5th Avenue N)
 - 5th Avenue N (from Mercer Street to Denny Way)
 - Broad Street (Denny Way to 5th Avenue N)
 - Mercer Street (from I-5 to Queen Avenue N)
- Providing mitigation measures for businesses impacted in Uptown.
- Implementing public education measures and creative marketing ideas that promote access and attractiveness of venues and businesses.
- Defining appropriate freight routes to accommodate large trucks and proactively communicating changes to street and route access.

Thank you for your consideration of these comments which outline some of our concerns about the Draft EIS. If you have questions regarding this letter, please reach out to MoPOP's Director of Facilities + Museum Operations James Vegas at JamesV@MoPOP.org or 206-262-3508.

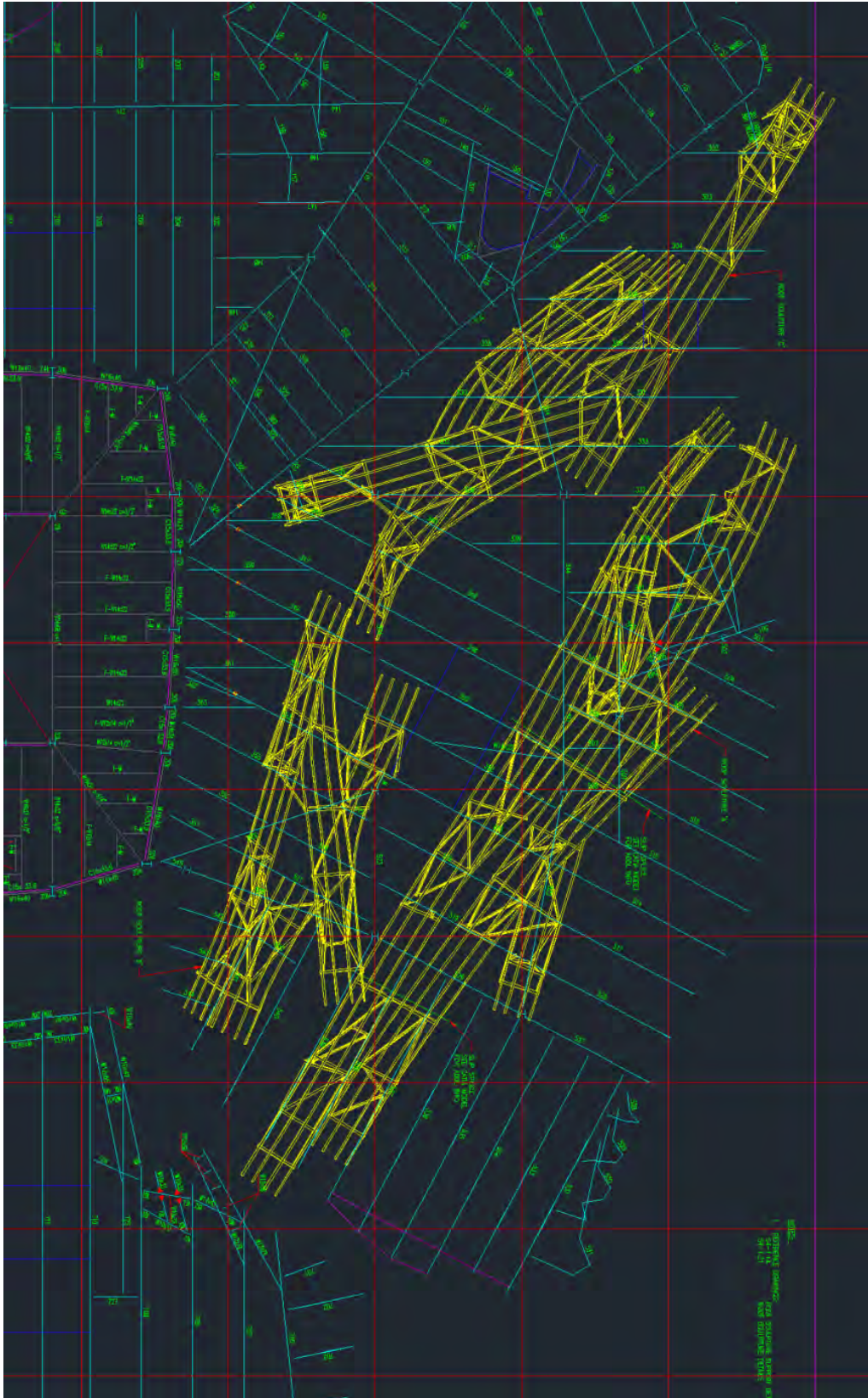
Sincerely,



Alexis Lee
MoPOP Executive Director

ATTACHMENTS: Appendixes A, B, and C

Appendix B: Roof Glass Sculpture



Appendix C: Main Support Beams



Sound Transit Projects

Details	Communication
#505078	We at the National Nordic Museum feel strongly that the only viable location for the Ballard light rail station is West of 15th Ave.
Date Recieved: 4/28/2022	Locating the station on 14th Ave would be incredibly problematic for businesses and residence alike. We join the voices of many other here in Ballard supporting a location for the light rail station West of 15th Ave.
Created by: Bryan Green	Dear Sound Transit Board and ST3 Planning Staff, As a business in central Ballard, I am requesting further study be completed on an ST3 station that serves Central Ballard.
Audience:	The proposed Ballard Station locations on 14th Ave and 15th Ave and NW Market St are located too far away from
Reach:	Central Ballard to effectively serve the majority of residents, businesses, and nightlife. The core of the Ballard urban
Participation:	village is centered between 24th and 15th Avenues NW, so 24th Avenue must be served equally as well as 15th Avenue.
Engagement:	20th Station ranked higher for Sound Transit's key performance metrics in early study work including the most
Source: Email	important metric: ridership. Construction of Ballard station will be a major disruption to the area, we need to make sure that the benefit is shared with the most residents, visitors, workers, and businesses possible.
Assigned division:	Proposed 14th and 15th Avenue NW stations mean that many businesses on Ballard Ave, Market Street, and the 24th
Category:	corridor will not share in the benefits of this infrastructure investment. Transit works best when it's convenient, and the proposed stations simply aren't close enough to Central Ballard. Sample walking times make this point clearly, most people will not choose to walk this far on a
Project Phase: Planning	regular basis to visit our businesses: ? 13 minute walk from 14th Avenue NW and Market Street to Ballard Avenue and Market Street. ? 12 minute walk from 15th Avenue NW and Market Street to Ballard Avenue and Market Street.
Project Segment: West Seattle and Ballard: Interbay/Ballard	Further, Industrial zoning and jobs must be preserved around 14th and 15th Avenues NW. Industrial zoning around 14th and 15th Avenues NW stations should not be counted as expected future Transit Oriented Development ridership potential. The case for a station around 14th or 15th is largely based on places that don't exist yet. We need Sound Transit to focus on the businesses and people that already make Ballard a great place to live, play, and do business.
Environmental phase: Draft EIS	We are requesting Sound Transit complete a full study of a 20th Avenue NW station to fully understand how best to serve the majority of Ballard's businesses, nightlife destinations, residents, and the neighborhood as a whole. We look forward to seeing Sound Transit better serve our community with a light rail station that values riders' time and increased support for small businesses. The business names listed below from Ballard's small business community request Sound Transit reopen study of a 20th Ave Station with the Draft Environmental Impact Statement's Thorndyke Tunnel Portal in Interbay. Very truly yours

April 28, 2022

Sound Transit Board
1100 2nd Avenue
Seattle, WA 98101

RE: Sound Transit 3 Draft Environmental Impact Statement (DEIS) Public Comment

Dear Sound Transit Board:

As business leaders, business owners, residents and workers in Ballard, we write you today to voice strong support for the Sound Transit West Seattle and Ballard Link Extensions (WSBLE) Draft Environmental Impact Statement (DEIS) Preferred Tunnel 15th Ave Station Option (1BB-2b).

This is the only alternative the fully meet the following shared objectives:

- **Prioritizing a tunnel** ensures our neighborhood, which already has one unreliable movable bridge, has access to consistent and predictable transit service to accommodate the significant growth the Ballard HUB Urban Village has experienced in the last decade and will continue to see in the years ahead. It also minimizes disruption to the ship canal and our maritime businesses, as well as salmon and other environmental concerns.
- **Shifting the tunnel from 14th Ave NW to 15th Ave NW (or farther west) ensures that this much-needed transit connection is closer to Ballard's urban residential and retail core.** The block from 15th Ave NW to 14th Ave NW is long, not walkable from the west side of Ballard, and presents significant pedestrian safety issues. A vast majority of residential density continues to develop west of 15th Ave NW.
- According to Sound Transit's DEIS analysis, **alternative 1BB-2b has some of the least displacement impacts compared to the current Preferred Alternative.**
 - o Residential: 21 parcels vs 94-105
 - o Businesses: 43 parcels vs 64 – 71
 - o Employee displacement: 370 vs 540 – 610
- **Construction impacts for alternative 1BB-2b are also less than the current Preferred Alternative,** as it avoids a multi-year closure of 15th Ave NW (nights / weekends), three-year closure of 14th Ave NW and long-term impacts to pedestrian and bicycle access to the Burke-Gilman Trail.
- **The current Preferred Alternative will also have extremely disruptive, if not devastating impact to the brewery and maker's spaces, as well as the new Ballard Food Bank, that are**

currently in the industrial spaces along 14th Ave NW in East Ballard. This displacement cannot be mitigated and is part of the heart and culture of our neighborhood.

Based on the DEIS data, and the overwhelming amount of unified community support, we request the Sound Transit Board to designate the Tunnel 15th Ave Station Option (1BB-2b) as the Preferred Alternative going forward.

Sincerely,



April 22nd, 2022

WSBLE Draft Environmental Impact Statement Comments

c/o Lauren Swift

Sound Transit

401 South Jackson Street

Seattle, Washington 98104

Dear Sound Transit Board and ST3 Planning Staff,

As a business in central Ballard, I am requesting further study be completed on an ST3 station that serves Central Ballard. The proposed Ballard Station locations on 14th Ave and 15th Ave and NW Market St are located too far away from Central Ballard to effectively serve the majority of residents, businesses, and nightlife. The core of the Ballard urban village is centered between 24th and 15th Avenues NW, so 24th Avenue must be served equally as well as 15th Avenue.

20th Station ranked higher for Sound Transit's key performance metrics in early study work including the most important metric: ridership. Construction of Ballard station will be a major disruption to the area, we need to make sure that the benefit is shared with the most residents, visitors, workers, and businesses possible.

Proposed 14th and 15th Avenue NW stations mean that many businesses on Ballard Ave, Market Street, and the 24th corridor will not share in the benefits of this infrastructure investment. Transit works best when it's convenient, and the proposed stations simply aren't close enough to Central Ballard. Sample walking times make this point clearly, most people will not choose to walk this far on a regular basis to visit our businesses:

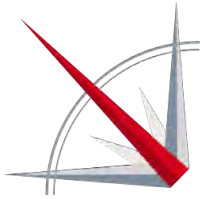
- 13 minute walk from 14th Avenue NW and Market Street to Ballard Avenue and Market Street.
- 12 minute walk from 15th Avenue NW and Market Street to Ballard Avenue and Market Street.

Further, Industrial zoning and jobs must be preserved around 14th and 15th Avenues NW. Industrial zoning around 14th and 15th Avenues NW stations should not be counted as expected future Transit Oriented Development ridership potential. The case for a station around 14th or 15th is largely based on places that don't exist yet. We need Sound Transit to focus on the businesses and people that already make Ballard a great place to live, play, and do business.

We are requesting Sound Transit complete a full study of a 20th Avenue NW station to fully understand how best to serve the majority of Ballard's businesses, nightlife destinations, residents, and the neighborhood as a whole. We look forward to seeing Sound Transit better serve our community with a light rail station that values riders' time and increased support for small businesses.

The business names listed below from Ballard's small business community request Sound Transit reopen study of a 20th Ave Station with the Draft Environmental Impact Statement's Thorndyke Tunnel Portal in Interbay.

Very truly yours,



NORTHWEST SEATTLE COALITION

For Sound Transit 3

Email: contact@nwseattlecoalition.org

April 28, 2022

TO: WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 South Jackson Street
Seattle, Washington 98104
Via WSBLEDEIScomments@soundtransit.org

CC: THE SOUND TRANSIT BOARD
SEATTLE CITY COUNCIL
Jeanne Kohl-Welles, King County Council
Sara Maxana, City of Seattle
Marshall Foster, City of Seattle

FROM: NORTHWEST SEATTLE COALITION

RE: BROAD COALITION REQUESTS LOCALLY PREFERRED ALTERNATIVE

Dear Ms. Swift,

The communities and businesses that make up the Northwest Seattle Coalition straddle the Elliott Avenue West and 15th Avenue West corridor, spanning north and south of the Ship Canal. Our communities are at the eye of the growth storm and favor aggressive delivery of reliable transit to relieve current congestion and help meet the mobility needs of future population growth.

Today, we are submitting comments on the West Seattle and Ballard Link Extensions (WSBLE) Draft Environmental Impact Statement (DEIS), specifically related to the area north of the Downtown Light Rail Tunnel portal in South Interbay. The Northwest Seattle Coalition is a broad coalition of neighborhood, business, and industrial organizations, and has been a long-time proponent of Sound Transit 3 light rail being built well, and of the benefits that light rail will bring to the northwest neighborhoods of Seattle. Thank you to Sound Transit for the hard work that was required to create the DEIS, we appreciate the opportunity to comment. Getting ST3 right is essential for our region's future. Thank you for considering our views.

Our Locally Preferred Alternatives:

Ballard

1. Tunneled 15th Avenue NW Station Option (IBB-2b) is the best option presented in the Draft EIS. The proposed Ballard Station locations at both 14th Avenue NW and 15th Avenue NW are located too far away from Central Ballard to effectively serve the majority of residents, businesses, and nightlife. The core of Ballard is centered between 24th and 15th Avenues NW, and 24th Avenue must be served equally as well as 15th Avenue.
2. Unfortunately, the 20th Avenue NW Station was not advanced beyond Level 3 pre-DEIS analysis. In hindsight, that was an error. It performed even better than the 15th Avenue NW Tunneled Station. A 20th Station ranked higher for Sound Transit's key performance metrics in the Pre-DEIS study, including: population + job density served in the year 2040; passenger transfers; access for pedestrians and persons with limited mobility; housing creation potential; and equitable housing development potential.
3. The Northwest Seattle Coalition requests that Sound Transit reopen the study of a Tunneled 20th Avenue NW Station in Ballard for consideration as the Preferred Alternative.

Interbay:

4. We oppose the consolidation of stations in Interbay and South Interbay. The stations being separate is of key importance for access to the system for all riders accessing the system south of the Ship Canal.
5. The Ballard Tunnel Options connect to an Interbay Station north of West Dravus Street, between 17th Avenue West and Thorndyke Avenue West. The ability to connect to a Tunnel to Ballard, and station location between the BNSF tracks and 15th Avenue W is preferable to the other options, which would degrade freight and bus operations, and vehicle travel on 15th Avenue W.
6. The Northwest Seattle coalition requests Sound Transit advance the Interbay/Ballard Segment - Preferred Tunnel (IBB-2b) as the Preferred Alternative in Interbay.

South Interbay

7. We oppose the consolidation of stations in Interbay and South Interbay. The stations being separate is of key importance for access to the system for riders accessing the system south of the Ship Canal.
8. Sound Transit's Preferred Galer Street Station/Central Interbay (SIB-1) is the least expensive option for the same ridership projection, which is excellent. Unfortunately, SIB-1 takes capacity from Elliott Avenue West and provides only an indirect connection to the front of the Expedia Group's campus and the Port of Seattle's cruise ship terminal. Additionally, SIB-1's platform height is quite high above bus transfers, and the mezzanines are quite large for the ridership projected at this station.
9. Northwest Seattle Coalition requests Sound Transit develop new alternatives or improve the existing alternatives in this segment to provide better connections to the major destinations and employment centers, maintain cost effectiveness, and avoid impacts on Elliott Avenue West. The Northwest Seattle Coalition requests improvement of the

South Interbay Segment alternatives prior to determining the Preferred Alternative here.

The Coalition is sending this letter on behalf of all member organizations. The Coalition continues to grow as additional organizations decide to join each of our advocacy letters or send their own separate letters.

Very truly yours,

Charley Shore, Executive Director, Queen Anne Chamber of Commerce

Eugene Wasserman, President, North Seattle Industrial Association

Stephanie Ballard, President, Magnolia Community Council

Sue Pierce, Chair, West Woodland Neighborhood Assoc.

The Northwest Seattle Coalition currently includes or has included in the past the following organizations:

Ballard Chamber of Commerce

Central Ballard Resident's Association

Crown Hill Neighborhood Association

Design and Transportation Committee, Ballard Partnership for Smart Growth

Interbay Neighborhood Association

Magnolia Chamber of Commerce

Magnolia Queen Anne District Council

Queen Anne Community Council

Uptown Alliance

Whittier Heights Neighborhood Association

Sound Transit Projects

Details	Communication
#503896	Dear Sound Transit Board of Directors,
From: Connie So	On behalf of OCA-Asian Pacific American Advocates Greater Seattle Chapter (OCA), I am submitting a public comment in regards to the West Seattle and Ballard Link Extension – Draft Environmental Impact Statement.
Date Recieved: 4/28/2022	Sound Transit describes the Chinatown International District as a “hub of cultural importance for Seattle and its Asian American communities,” but does not acknowledge the historical, systematic displacement and gentrification of the neighborhood by local government agencies. In 1886, anti-Chinese sentiment sparked the Seattle riot, during World War II hysteria fueled the government removal of Japanese and Japanese Americans from the neighborhood to incarceration camps. In the 1960s, the construction of Interstate-5 divided the neighborhood, drastically increased air pollution levels, and eliminated many businesses, homes, and churches. In 1972, after King County and the City of Seattle proposed razing Chinatown in favor of the Kingdome, Asian Americans came together to protest the elimination of our community. Now, 50 years later, King County, City of Seattle and Sound Transit is proposing to shut down 5th Avenue – displacing longtime Asian American businesses – because it does not want to disadvantage sports traffic.
Created by:	
Audience:	
Reach:	
Participation:	There is a history of Sound Transit's differential treatment between Black, Indigenous, and communities of color versus predominately white neighborhoods. For example, when the Roosevelt community pushed and advocated for a below ground alternative, Sound Transit acquiesced. In contrast, South Seattle communities were not offered an alternative that addressed their concerns around retail and residential displacement, traffic congestions, and public safety. Sound Transit's history of ignoring the concerns of communities of color continues to be seen in proposed segments for the Chinatown-International District regional station.
Engagement:	
Source: Online open house	
Assigned division: Outreach	We support the proposals set forth by the CID Coalition and Transit Equity for All, namely:
Category:	<ul style="list-style-type: none"> • Propose additional alternatives that do not involve any residential or commercial displacement. • Propose additional alternatives that include the use of Union and/or King Station. Both Union and King Street station have the existing transportation infrastructure and ADA facilities to make the proposed Chinatown-International District station a regional hub that connects the light rail to the Bellevue, Ballard/West Seattle, and the Everett/Tacoma line.
Project Phase: Planning	<ul style="list-style-type: none"> • A 120-day extension in the Draft Environmental Impact Statement public comment period, for Sound Transit to use the summer months to conduct extensive outreach and engagement that includes, but is not limited to:
Project Segment:	<ul style="list-style-type: none"> • Focus groups for those most impacted by the new segment such as elders, youth, immigrants/refugees, small businesses, workers, neighborhood non-profit organizations and clients, and unhoused members of the Chinatown-International District.
Environmental phase: Draft EIS	<ul style="list-style-type: none"> • Work with neighborhood ethnic media outlets and in-language media to promote the new proposed segment options and public comment period. • Pay community-based organizations to conduct outreach to their membership/clients, as these organizations have existing relationships of trust with those most impacted. • Create a Community-Benefits Agreement that encompasses: <ul style="list-style-type: none"> o Free Orca Cards to all Chinatown-International District small businesses, employees, and residents. o Monetary small business and residential construction impact compensation. o Increase the Chinatown-International District tree canopy. o A plan to contract Women and Minority Owned Businesses for the construction of both the proposed segment and if there is a potential for transit-oriented development (TOD). As well as working with a construction apprenticeship program that recruits local talent from Black, Indigenous, and communities of color. <p>The history of the Chinatown-International District has been marred by government agencies who displaced residents, small businesses, and communities. We are here to ensure that these “misfortunes” will not be our neighborhood’s future. After two years of a pandemic, economic instability, and anti-Asian hate, current proposed segments will only inhibit the neighborhood from equitable recovery.</p> <p>Thank you for the opportunity to provide feedback on the Chinatown-International District segment and the creation of the regional station. We look forward to your response.</p> <p>Sincerely,</p> <p>Connie So, President</p>



OneWorld Now!

Developing the next generation of global leaders.

April 23, 2022

Dear Sound Transit,

I am submitting this public comment concerning the Draft Environmental Impact Statement (DEIS) for the West Seattle and Ballard Link Extensions (WSBLE) on behalf of OneWorld Now, a youth development nonprofit located in Chinatown / International District (CID) at 610 Maynard Ave S.

The Board of Directors of OneWorld Now has voted for our organization to request that Sound Transit prioritize the 4th Avenue options as the preferred alternative through Chinatown / International District.

There are many reasons why we believe the 4th Avenue options are better than the 5th Avenue options:

- The 4th Avenue options will minimize impact to businesses, including many small businesses, in the CID. The CID is a neighborhood that is already at high risk for gentrification and displacement, and it is also a neighborhood that has historically bore the brunt of large-scale infrastructure projects (e.g. I-5, sports stadiums). Sound Transit now has an opportunity to address these racially-motivated historical harms and choose an option that will protect small businesses and cultural heritage.
- Through conversations with community partners who have much deeper roots in the neighborhood than our organization does, we have heard repeatedly that there is significant fear that the neighborhood will be irreparably harmed if one of the 5th Avenue options is chosen. We believe that the people most rooted in a community should have the most power in choosing the future of that community, and so we want to amplify the voice of other CID organizations advocating for the 4th Avenue options.
- We are already worried about our ability to recruit students for our programs in the CID after 2 years of pandemic shutdowns and the possible demolition of our next-door neighbor, Bush Garden. The 4th Avenue options will help keep traffic impacts farther away from Maynard Avenue, which in turn will make it easier for our students to get to and from our programs – and to ensure their safety while doing so.

We all know that the decisions made in the next few months will affect the CID for the next 100 years. We strongly urge Sound Transit to prioritize the current and future needs of residents of the CID by choosing one of the 4th Avenue alternatives.

Sincerely,

Jordan Goldwarg
Executive Director

April 27, 2022

Lauren Swift
Sound Transit
401 S. Jackson St
Seattle, WA 98104

Dear Ms. Swift,

This letter is submitted in response to the West Seattle and Ballard Link Extension (WSBLE) Draft Environment Impact Statement (DEIS) with specific focus on the Seattle Center/Uptown Station. We are strong supporters of greater transit access for the region and look forward to the opening of a Seattle Center / Uptown light rail station that will benefit our entire community.

The Pacific Northwest Ballet (PNB), Seattle Opera (SO), and Classical KING-FM (KING FM) represent three organizations on the Seattle Center campus with our administrative offices directly facing Mercer Street with SO and KING FM at 363 Mercer Street (Opera Center) and PNB at 301 Mercer Street (Phelps Center). PNB, SO and KING FM have participated in the WSBLE DEIS events since the kick-off Seattle Center campus charrette on November 18, 2021 through the latest workshop on April 8, 2022. We endorse and adopt the comments provided on behalf of the larger group of Seattle Center residents and clients of Don Marcy of Cairncross & Hempelmann. This letter addresses impacts at McCaw Hall. As non-profit cultural organizations, our existences are inextricably linked, directly and indirectly, to access to and success on the McCaw Hall stage.

PNB and SO represent the Resident Entities of the McCaw Hall (McCaw Hall) performance venue at 321 Mercer Street, as documented in the September 3, 2003 Facility Use Agreement between PNB, SO, and the City of Seattle (City of Seattle). As such, both SO and PNB have a long-term commitment to the City of Seattle via McCaw Hall as our primary performance venue. Combined usage of McCaw Hall by PNB and SO during a given year is approximately 71% (Appendix A). While not directly impacted by in-person attendance, KING FM's broadcasting headquarters is on the second floor of Seattle Opera's Opera Center. Thus, KING FM has a vested interest in the health of SO by virtue of its status as a tenant of the Opera Center.

Historical studies performed by both PNB and SO point to traffic and parking issues as being challenges for McCaw Hall audiences. This is demonstrated by the impact of the Mercer Corridor Construction project initiated in 2010 and completed in 2017 with the opening of the Hwy 99 Tunnel. An extensive 2015 internal PNB report concluded that the Mercer Corridor Construction played a role in ticket revenue declines below expectations. Before the Mercer Construction Project, PNB consistently met or exceeded revenue goals whereas during construction, shortfalls to goals regularly occurred (Appendix B-1). Similarly, for SO in the years before the Mercer

Corridor Construction, Seattle Opera averaged 107,000 ticket buying patrons each year. During the Mercer Corridor Construction (2010 – 2017), Seattle Opera's annual ticket sales averaged 85,300, a 20% decline (Appendix B-2) with no significant changes to SO's repertoire. By the independent conclusions of the Resident Entities of McCaw Hall, the Mercer Corridor Construction posed a significant impediment to McCaw Hall audiences, many of whom attributed their lapsed patronage to transportation issues. Rebuilding of audiences takes years and the recovery from the Mercer Construction Project was not completed before onset of the COVID-19 pandemic and the resulting shutdown. We have grave concerns that another Mercer Street traffic interruption presented in the form of a decade-long WSBLE construction project will dissuade another generation of arts patrons from traveling to Seattle Center, and, thus, PNB and SO will suffer another catastrophic reduction in audience size.

Seattle Opera conducted a survey in March 2022 of lapsed ticket buyers. Whereas COVID and health concerns were the most commonly referenced reasons for ticketing non-renewals, driving and traffic conditions were the next-most commonly cited concern (Appendix C). This audience sentiment is prevalent right now, before any announced traffic interruptions for construction of the WSBLE route and stations. With an SO audience of which 89% drive to McCaw Hall, there is a high probability that any restrictions of Mercer Street traffic below two lanes of traffic flowing in each direction along the Seattle Center north perimeter will lead to further significant reductions of McCaw Hall audiences. The COVID-19 pandemic is already an existential threat to performing arts non-profits. With audiences still far below pre-pandemic levels (currently less than 50%), we are deploying as many resources as possible to rebuild audiences to entity-sustaining levels and could not withstand another disruption as large as a decade long construction at our front door. **Mercer Street must be maintained with two lanes of traffic flowing in both directions - without impediments, detours or closures – along the Seattle Center campus route stretching from Queen Avenue North (west border) to 5th Avenue North (east border) and full access to all current traffic lanes through South Lake Union to the I-5 Interstate.**

The recently conceived Mercer "Mix and Match" alternative for the route and station at Seattle Center, while not in the DEIS, has been discussed in Sound Transit workshops for the Mercer Stakeholders (4/7/22) and Seattle Center residents (4/8/22). "Mix and Match" contemplates a route cutover from the Other Alternative (Mercer Street) to the Preferred Alternative (Republican Street) directly under McCaw Hall as well as a Seattle Center / Uptown station at Mercer and Warren Avenue North. This will almost certainly require long-term closures of Mercer Street and will subject McCaw Hall to construction and operating noise, vibrations and air quality issues. **Given that "Mix and Match" was not contemplated in the current DEIS, this significant route and station change requires a full DEIS evaluation.**

Respectfully submitted,



Ellen Walker
PNB, Executive Director



Christina Scheppelmann
Seattle Opera, General Director



Brenda Barnes
KING-FM, CEO

CC:

Dow Constantine, King County Executive
Claudia Balducci, King County Council
Joe McDermott, King County Council
Mayor Bruce Harrell, City of Seattle Opera
Seattle City Council
State Transit Board of Directors
Robert Nellams, Director Seattle Center

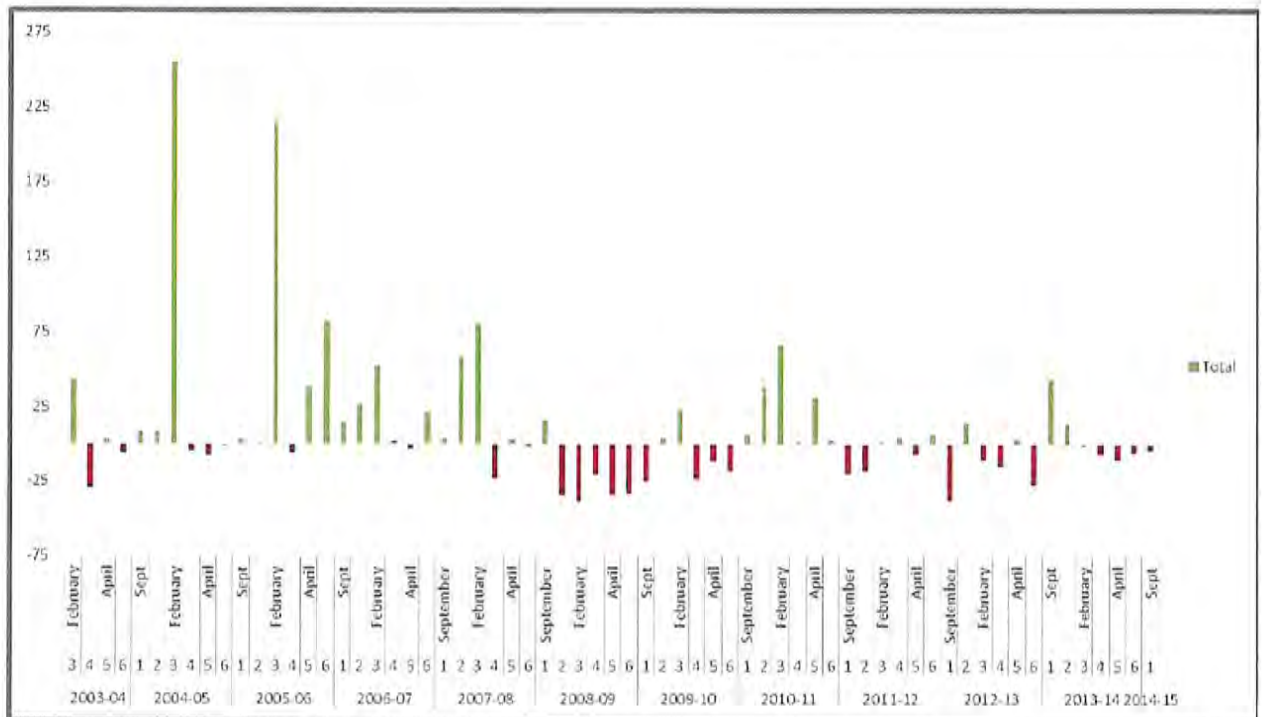
Marshall Foster, Designated Representative to Sound Transit
Kristen Simpson, Interim Director, Seattle Department of Transportation
Markham McIntyre, Director, OED
Greg Wong, Director, DON
Rico Quirindongo, Acting Director, OPCD
Royal Alley-Barnes, Acting Director, OAC
Terry White, General Manager, King County Metro
Joe Paganelli, General Manager, McCaw Hall

Appendix A

McCaw Hall 2022-2023 Season Use by PNB and SO

2022			2023		
Date	Usage	Performance	Date	Usage	Performance
7/1/2022			12/30/2022		
7/8/2022			1/6/2023		
7/15/2022			1/13/2023		
7/22/2022			1/20/2023	19	Samson & Delilah In Concert
7/29/2022			1/27/2023	20	Giselle Load-In / Rehearsal
8/5/2022	1	Elixir Load-In / Rehearsal	2/3/2023	21	
8/12/2022	2		2/10/2023	22	Giselle
8/19/2022	3	The Elixir of Love	2/17/2023	23	Suns Load-In / Rehearsal
8/26/2022			2/24/2023	24	
9/2/2022			3/3/2023	25	A Thousand Splended
9/9/2022			3/10/2023	26	Suns
9/16/2022	4	Burana Load-In / Rehearsal	3/17/2023	27	
9/23/2022	5		3/24/2023	28	Boundless
9/30/2022	6	Carmina Burana	3/31/2023		
10/7/2022	7	Tristan Load-In / Rehearsal	4/7/2023	29	Dream Load-In/Rehearsal
10/14/2022	8		4/14/2023	30	A Midsummer Night's
10/21/2022	9		4/21/2023	31	Dream
10/28/2022	10	Tristan & Isolde	4/28/2023		
11/4/2022	11		5/5/2023	32	Traviata Load-In / Rehearsal
11/11/2022	12	The Seasons' Canon	5/12/2023	33	
11/18/2022	13	Nutcracker Load-In / Rehearsal	5/19/2023	34	La Traviata
11/25/2022	14		5/26/2023	35	Worlds Load-In / Rehearsal
12/2/2022	15		6/2/2023	36	
12/9/2022	16		6/9/2023	37	Worlds to Come
12/16/2022	17		6/16/2023		
12/23/2022	18	Nutcracker	6/23/2023		
			37 / 52 weeks 71% McCaw Hall Utilization		

Appendix B-1 Pacific Northwest Ballet Ticket Sales History 2003 – 2014



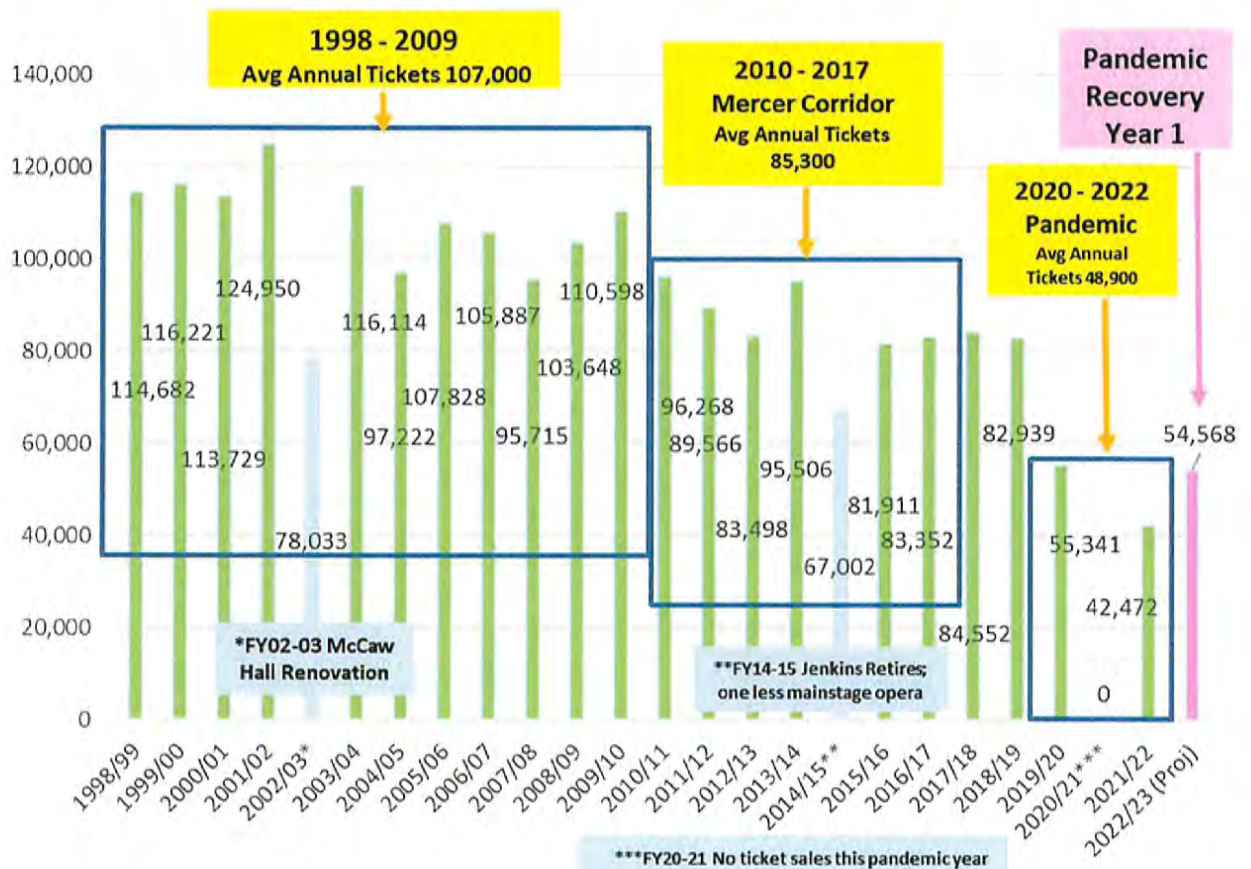
X-axis: 2003 to 2015 Seasons bi-monthly

Y-axis: Earned Revenue with zero (0) equal to 100% of goal

Above zero (**green**) = ticket sales better than budget

Below zero (**red**) = ticket sales worse than budget

Appendix B-2
Seattle Opera Total Ticket Sales
1999 – 2022 (Actual) and 2023 (Projected)



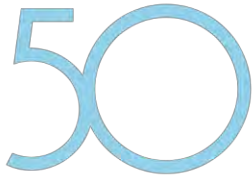
Appendix C
Seattle Opera Survey of Lapsed Ticket Buyers March 2022

WHY HAVEN'T YOU RETURNED TO SO YET?

	HEALTH CONCERNS	OPERAS IN SEASON	TICKET PRICES	DON'T TRUST SAFETY PROTOCOLS	SCHEDULING	NOT COMFORTABLE IN SEATTLE	NOT INTERESTED	AVOIDING CROWDS	BEING OUT AT NIGHT	EXPENSE	DRIVING CONCERNS (Parking, traffic, etc.)	MOVED	OTHER
Lapsed Subscriber	36.36%	20.91%	8.18%	11.82%	17.27%	18.18%	0.00%	37.27%	10.91%	10.91%	22.73%	6.36%	35.45%
Lapsed Single	31.03%	28.74%	13.79%	6.90%	14.94%	19.54%	0.00%	35.63%	6.90%	10.34%	26.44%	3.45%	31.03%

#1 – COVID Health Concerns / Avoiding Crowd are the largest concerns of lapsed ticket buyers.

#2 - Driving issues including traffic and parking are the second largest category of lapsed ticket buyer concerns.



PACIFIC NORTHWEST BALLET 50TH ANNIVERSARY SEASON

April 26, 2022

WSBLE Draft Environment Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 South Jackson Street
Seattle, WA 98104

Re: Pacific Northwest Ballet Comments on Seattle Center Station 6th and Mercer / Mercer Mix and Match Proposed Alternatives — WSBLE Draft Environmental Impact Statement

Dear Ms. Swift,

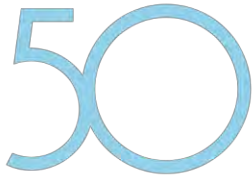
We greatly appreciate the opportunity to review and provide comment on the Draft Environmental Impact Statement (DEIS) for the West Seattle and Ballard Link extensions (WSBLE). We remain strong supporters of greater transit access for the region and look forward to the opening of a Seattle Center light rail station which will benefit our entire community.

Pacific Northwest Ballet (PNB) was founded in 1972 under the aegis of Seattle Opera, and has been a resident organization in the Phelps Center on Seattle Center's campus since 1993. We share a courtyard with Cornish Playhouse on one side and the Kreielsheimer Promenade with McCaw Hall on another; visitors on Mercer Street are welcomed at our entrance and box office, and the back of our building opens onto the green expanse leading up to the International Fountain and Fisher Plaza.

PNB is a substantial presence on campus and a valuable asset to Seattle Center activities and visitors. Our employees, volunteers, students, and audience members contribute to the local economy as well as the vitality of campus life. PNB is one of the largest arts employers in the Puget Sound region, with over 700 full- and part-time employees, and one of the top professional ballet training institutions in the country. We serve over 200,000 community members each year through mainstage performances, PNB School classes, community education programming, and more.

Over the past several years PNB has provided nearly double (and sometimes triple) its required annual tangible public benefit through thousands of free and reduced-cost tickets, tuition assistance for PNB School and Seattle Public School students, and other direct support to the community. We are also an industry leader in Inclusion, Diversity, Equity, and Accessibility (I.D.E.A.) work, which is central to our organizational values and strategic priorities. Across the organization, PNB aspires to reflect and engage citizens in our region's diverse communities and ensure that all paths in to PNB are welcoming and inclusive.

PNB has reviewed the WSBLE DEIS in a number of workshops and meetings since January, including the most recent refinements to the DEIS and alternatives presented on April 8th. We endorse and adopt the comments provided on behalf of the larger group of Seattle Center tenants and clients by Don Marcy of Cairncross & Hempelmann. This letter is intended to address comments more specifically related to PNB and its uses and facilities.



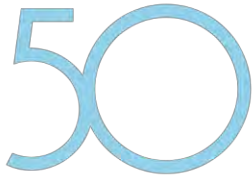
PACIFIC NORTHWEST BALLET 50TH ANNIVERSARY SEASON

Comment 1: The proposed Alternate Mercer Alignment (DT-2) will impact PNB and its performance venue McCaw Hall for at least five years and possibly as long as ten years. We know that the 18-month SDOT Mercer West project was as devastating to PNB's earned revenues as the 2008 recession (see attached research, *Bottleneck at the Ballet*, and Appendix A). In ten years of performances, PNB never had more than three productions in a row fail to achieve earned revenue goals – except during the 2008-2009 recession *and* during the Mercer West construction project. Additionally, two patron surveys in 2014 and 2015 indicated frustration with traffic congestion on Mercer Street and construction-impeded egress from Mercer Garage as reasons they were not planning to return to the ballet (Liang, 2015). A project potentially five times as long in duration as the Mercer West construction project presents an existential threat to PNB, and the following mitigation strategies must be studied and implemented should DT-2 be selected:

1. **Work Hour Restrictions:** Sound Transit must ensure that construction work impeding access to Mercer Street ceases by 5:00 pm on evening performance dates and does not take place on days when matinee performances are happening.
2. **Garage Egress Assistance:** Sound Transit must cover any expenses for additional needed traffic officers to assist with egress from Mercer Garage for the duration of this construction project.
3. **Sound Barriers:** Sound Transit must ensure that construction noise is mitigated to the fullest extent possible so that PNB business operations are not disrupted.
4. **Dedicated Liaison:** Sound Transit must assign dedicated staff to communicate with PNB and other Seattle Center campus resident organizations so that additional construction-related issues may be addressed in a timely manner.

Comment 2: DT-2 will also create a significant and lengthy reduction in Mercer Street access for our patrons, the majority of whom drive to the ballet from all over King County and beyond, paying to park in Mercer Garage and other parking locations. As we continue to recover from more than two years of Covid impacts, any barrier to accessing our venue is untenable. We know from prior construction projects that temporary easements can stay in place years longer than planned. To avoid this scenario, Sound Transit must clearly communicate any planned construction easements and take needed steps to ensure that temporary easements are truly temporary and do not create long-term impediments for patrons, staff, students, or volunteers to access PNB's studios and offices at Phelps Center or performances at McCaw Hall.

Comment 3: We request further study of – and a commitment to maintain – consistent, readily identified access to and egress from Seattle Center for cultural institutions during this long period of negative impact. Specifically, mitigation will be required for the access impacts of construction road closures on Harrison (DT-1 SLU), Mercer (DT-2 Seattle Center) and 1st Ave N. and Republican (DT-1 Seattle Center) for patrons arriving at and departing the ballet.



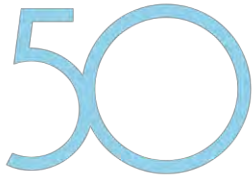
PACIFIC NORTHWEST BALLET 50TH ANNIVERSARY SEASON

Comment 4: The Mercer “Mix and Match” alternative, while not in the official DEIS, has been discussed publicly through the DEIS process and is of great concern to PNB. As both the Phelps Center and McCaw Hall are designated as sensitive receivers, we know that some noise and vibration measurements have been taken at both facilities. In particular we understand that the Phelps Center has been designated a “Special Building” as well as a “Theater” with a groundborne noise limit of 35 dBA and a vibration limit of 72 VdB. The DEIS indicates that operation of either DT-1 or DT-2 would be below the limit of 35 dBA, but we do not know what the impacts would be for the Mercer “Mix and Match,” as detailed measurements for noise and vibration have not yet been taken inside the PNB rehearsal spaces in the Phelps Center. Without further study, it is not possible to know either the construction-related noise/vibration impacts or the permanent operations-related noise/vibration impacts may be. We are concerned about impacts including, but not limited to, tunneling, hauling, construction of the underground station, surface construction, and any lasting easement requests associated with this project, which may negatively affect PNB’s daily business operations or its ability to fulfill its mission.

Comment 5: Similarly, the ongoing noise and vibration impacts of placing a tunnel below McCaw Hall as proposed in the Mercer “Mix and Match” have not been thoroughly analyzed. The McCaw Hall “Main Theater” has a lower limit for noise and vibration (25 dBA and 65 VdB), and the Mercer “Mix and Match” alternative has not yet been thoroughly studied for its impacts on the building. This route would tunnel directly below McCaw Hall where performances would be adversely affected by light rail-related noise and vibration, not just for PNB but for Seattle Opera and any visiting artists. Any impacts for either temporary construction-related noise/vibration *or* permanent operational noise/vibration will require mitigation by Sound Transit to ensure that operation noise levels remain below the limits for McCaw Hall, as well as those of PNB’s Phelps Center and Seattle Opera Center studios.

Comment 6: It is also not clear whether this option would force temporary closure of McCaw Hall during construction, which is programmed year-round. Even a temporary closure of this vital performance venue will significantly impact the financial outlook of PNB, Seattle Opera, or any organization forced to cancel or reschedule performances. The possibility for temporary closure of McCaw Hall must be studied and, if any closure is needed, will require significant mitigation for multiple stakeholders.

Comment 7: Re: the proposed Mercer “Mix and Match” refinement, we request further study of any potential noise and vibration impacts from a permanent tunnel below the Phelps Center and/or McCaw Hall, and to affirm Sound Transit’s commitment to ensure that any impacts will not impede PNB’s ability to fulfill its mission and conduct business operations at the Phelps Center, or its ability to fulfill its mission to provide the highest standard of performance quality in McCaw Hall.



PACIFIC NORTHWEST BALLET
50TH ANNIVERSARY SEASON

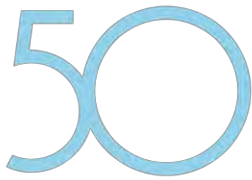
PNB is proud to be part of the vibrant culture that attracts 12 million visitors to Seattle Center each year. We look forward to partnering with Sound Transit to find a solution that will enable even more visitors to access Seattle Center, while preserving the landmark cultural institutions that have made it a destination for decades.

Sincerely,

A handwritten signature in black ink, reading 'Ellen Walker'.

Ellen Walker
Executive Director, Pacific Northwest Ballet
206.441.2428 | ellenw@pnb.org

Cc:
Robert Nellams, Seattle Center
King County Executive Dow Constantine
King County Councilmember Joe McDermott
Seattle Mayor Bruce Harrell
Seattle City Council President Debora Juarez
King County Councilmember Claudia Balducci

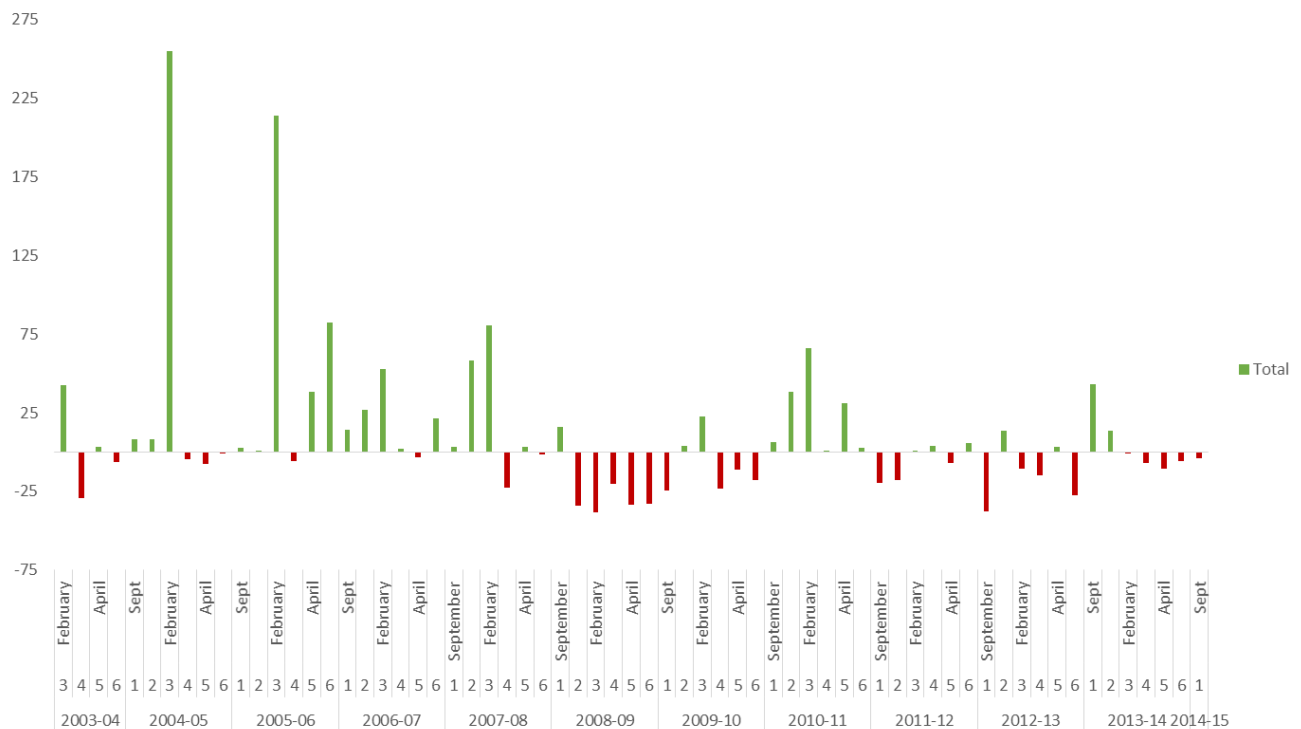


PACIFIC NORTHWEST BALLET 50TH ANNIVERSARY SEASON

Appendix A:

“PNB has ticket sales data reaching back to the 2000-01 season, making it possible to analyze for trends or patterns. Looking at just over ten years of data...from the 2003-04 season through November of the 2014-15 season, PNB achieved or exceeded revenue goals 54% of the time, and reached 92% of goal or higher 70% of the time. Based on these numbers alone, it seems plausible that PNB might have a fluke period where several productions might not meet revenue goals. Looking at the entire ten-year history by season, however, a different story emerges: there are only two events in this period where PNB did not meet revenue goals for more than three consecutive productions. Those two events are the Great Recession during the 2008-09 season, and the construction phase that impeded access to McCaw Hall on Mercer Street. It seems clear the Mercer West construction played at least some role in the decline in PNB’s ticket revenues (Liang, 2015).”

As shown below, the Y-axis represents PNB’s earned revenue goal in each of its six repertory productions, which take place in September, November, February, March, April, and June each year. The X-axis indicates whether the goal was achieved, overachieved, or underachieved. PNB’s 2008-2009 season was impacted by the 2008 recession; the Mercer Corridor project began in 2010, and the Mercer West phase began in early 2013.



BOTTLENECK AT THE BALLET

What to do when urban traffic congestion hits your organization's bottom line

In partial fulfillment of the Masters of Fine Arts, Arts Leadership degree

Seattle University

Seattle, Washington

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Acknowledgements

Special thanks to Ellen Walker, Lia Chiarelli, John Tangeman, and the entire marketing team at Pacific Northwest Ballet, whose assistance in gathering data, creating email lists, and sending surveys was invaluable to my research. Thanks also to the Seattle arts professionals who agreed to be interviewed for this project: Lexi Clements, Markus Kunz, Robert Nellams, Kristin Price, Justine Thayer, and Jenifer Ward. I am grateful to Kevin Maifeld and the Seattle University MFA program for providing me with the skills, support, and practicum opportunities that led me to this research project, and in particular to my advisor Woong Jo Chang, whose insights and feedback helped bring clarity and depth to both my research and presentation.

Finally, a sincere thanks to my family – Larry, Julia, and Mason – whose constant support has made this journey possible.

Table of Contents

Executive Summary	4
Glossary	6
Background Context Precedent	8
Barriers & Motivations	12
Methodology	13
Findings	14
Recommendations	23
Implications for Future Research	29
References	30
Bibliography	37
Appendix A	38
Appendix B	40
Appendix C	41

BOTTLENECK AT THE BALLET

Executive Summary

In April 2014, Seattle nonprofit Pacific Northwest Ballet (PNB) had a problem: the past four repertoires had failed to meet their revenue goals. This decline in ticket sales coincided with Seattle's Mercer West construction project taking place just outside the ballet's doors. Subsequent patron surveys revealed that not only was construction keeping patrons away, but some long-time subscribers had cancelled their season subscriptions as a result of repeated negative experiences with both traffic and the Mercer Garage, where the majority of PNB's patrons park.

While all urban arts organizations have to deal with occasional negative impacts of road construction, traffic congestion, and parking availability, the Mercer Corridor construction project and in particular the Mercer West phase seemed to be directly related to PNB's downturn in ticket revenues and patron experience. Through a series of surveys and interviews, as well as on-site research at Seattle Center and observations of meetings related to Mercer Corridor construction, a story emerged of best intentions bucking up against the reality of a long-term transportation project. Specific themes addressed in this study include the need for consistent dialogue between municipal departments and affected businesses, not just at the start but for the duration of any major construction undertaking, and research-based guidelines for arts organizations to maintain patron relationships strong enough to withstand the many obstacles facing today's audiences.

While the Mercer Corridor project is nearing its end, there will no doubt be other construction projects and traffic congestion in PNB's future, as Seattle and South Lake Union in particular continue to grow at breakneck speed. What then, can urban arts

BOTTLENECK AT THE BALLET

organizations learn from PNB's experience in mitigating the negative impacts of traffic congestion? Strategic communications, incentive pricing, and a robust audience engagement program – as well as the end of the Mercer West phase of construction – were key to PNB's success in overcoming the obstacles presented by the Mercer Corridor construction project. While arts organizations may lack control over construction projects and impeded access to performance venues, this study shares recommendations for engaging audiences through relational marketing and building a long-term sense of loyalty that will lead patrons to return to an arts organization time and again, no matter the obstacles.

Keywords: arts administration, arts marketing, audience engagement, motivations and barriers to arts attendance, relational marketing, transportation construction and the arts, urban traffic congestion and the arts

BOTTLENECK AT THE BALLET

Glossary of Terms

Bottleneck (noun): a section of road or highway where the traffic moves very slowly; something that slows down a process (Merriam-Webster, 2015).

Differential Sensitivity: The circumstance whereby those businesses which thrive in areas of urban density and congestion may not recognize traffic congestion as a problem (Weisbrod, Vary, & Treyz, 2003).

Earned Revenue: Nonprofit revenue obtained through a transaction such as ticket or merchandise sales (as opposed to contributed revenue, which is obtained through individual, corporate, foundation, or government donations).

Hypothetical Nature of Scenario: The circumstance whereby a business location is set in an area of urban congestion, making any imagining of different circumstances purely hypothetical (Weisbrod, Vary, & Treyz, 2003).

Interested non-attendees: Those individuals who express interest in attending exhibits or performances, but do not ultimately follow through (Blume-Kohout & Leonard, 2015).

Mercer Corridor: The two-way thoroughfare running between Elliott Avenue West and Interstate-5 in Seattle, Washington. An estimated 80,000 vehicles travel the Mercer Corridor each day, as well as uncounted pedestrians and bicyclists (City of Seattle, 2015).

Mercer West Construction Project: The phase of Seattle's Mercer Corridor construction project spanning from 5th Avenue West to Dexter Avenue North.

Pacific Northwest Ballet (PNB): The Seattle ballet company founded in 1972 as Pacific Northwest Dance Association and renamed as Pacific Northwest Ballet in 1978;

BOTTLENECK AT THE BALLET

currently the fifth largest dance company in the United States (Harlow & Heywood, 2015).

Seattle Center: A 74-acre campus in the heart of Seattle, built for the 1962 World's Fair and preserved today as a green space, community gathering space, and performing arts district for the City of Seattle.

Self-selection bias: The circumstance whereby only those organizations which survive a negative event (such as business losses due to traffic congestion) can be interviewed (Weisbrod, Vary, & Treyz, 2003).

Single-ticket buyer: In this document, "single-ticket buyer" refers to a PNB patron who purchases tickets to individual performances.

Subscriber: In this document, "subscriber" refers to a PNB patron who purchases a subscription package of four or more ballet performances in advance of the season premiere.

Traffic congestion: "In the transportation realm, congestion usually relates to an excess of vehicles on a portion of roadway at a particular time resulting in speeds that are slower—sometimes much slower—than normal or "free flow" speeds. Congestion often means stopped or stop-and-go traffic (US Department of Transportation, 2013)."

BOTTLENECK AT THE BALLET

“Love the ballet -- hate the traffic!” – PNB survey respondent

Background

In June 2014, Pacific Northwest Ballet (PNB)'s marketing team sat down to address a recent pattern: their last four productions (*The Sleeping Beauty*, the all-contemporary DIRECTOR'S CHOICE, *A Midsummer Night's Dream*, and *Giselle*), spanning February through June of 2014, had failed to meet revenue goals. This timeframe coincided with the height of the Seattle Department of Transportation (SDOT)'s Mercer West phase of its Mercer Corridor project, deemed the “Mercer Mess” since the 1970s by local media (KIRO 7 Eyewitness News, 2015). For months construction had impeded access to Marion Oliver McCaw Hall, PNB's performance venue. A survey sent the following month revealed that some patrons had declined to renew their season subscription due to traffic congestion and parking issues involved in attending the ballet. The survey report showed that

“...traffic congestion on Mercer Street and ongoing construction around Seattle Center are negatively affecting patron experience, PNB ticket sales, and the general public's opinion of and desire to visit Seattle Center[...]nearly a third of our patrons say they attend ballet performances less now with the Mercer Street construction (Jordan and Liang, 2014, p.1).”

Context

It is generally accepted that urban businesses must contend with road construction and traffic congestion; indeed, for many nonprofit and for-profit organizations alike, the benefits of an urban location outweigh any potential risks (Weisbrod, Vary, & Treyz, 2003). When a city's population rapidly increases, however,

BOTTLENECK AT THE BALLET

or a major construction project takes place, resulting negative impacts can be devastating to a business's bottom line (Denn, 2014). PNB knew it had to act quickly or risk losing more patrons. In order to connect the Mercer West construction project with its unmet revenue goals, however, PNB needed more information. It was critical to address any potential reasons why ticket revenues decreased during this period: traffic, ticket prices, artistic product, access to the performance venue, misperceptions about the art form, a combination of factors, or something not yet considered.

Precedent

It is difficult to ascertain the exact impact traffic and construction have on arts organizations' earned revenue; however, several indicators point to the correlation between ease of access to performance venues and arts attendance (Brook, 2013). Weisbrod, Vary, and Treyz (2003) address the economic impact of traffic congestion and transportation construction, while establishing the difficulty in obtaining an accurate view of just how damaging traffic congestion can be to affected businesses. They cite three main factors at play: Hypothetical Nature of Scenarios, meaning organizations are unable to imagine another scenario other than that which they are in; Self-Selection Bias, which points to the fact that only surviving organizations are interviewed; and Differential Sensitivity, in which the advantages of an urban location outweigh the disadvantages of accompanying traffic congestion and parking issues.

The United States Department of Transportation (USDOT) recognizes the impact traffic congestion can have on commuters and businesses. Its Federal Highway Administration (FHWA) publishes a quarterly Urban Congestion Report (USDOT Federal Highway Administration, 2015) tracking congestion in three ways:

BOTTLENECK AT THE BALLET

Hours of Congestion — amount of time when highways operate at less than 90 percent of free-flow speeds.

Travel Time Index (TTI) — time penalty for a trip on an average day. A TTI of 1.30 indicates a 20-minute free-flow trip takes 26 minutes (20×1.30) in the rush hours.

Planning Time Index (PTI) — time penalty for a trip to be on time for 95 percent of trips (i.e., late for work on one day per month). A PTI of 1.60 indicates a 20-minute free-flow trip takes more than 32 minutes (20×1.60) on the worst commute day of a month.

The most recent report from April 2015 demonstrates the difficulty in tracking traffic congestion: while the national average hours of congestion decreased between March 2014 and March 2015, both the travel time index and planning time index increased. A statistical reduction in hours of traffic congestion may not lead to an improved commute; traffic congestion has become so unpredictable that drivers must build in the same amount of buffer time no matter what traffic conditions may be. In Seattle, this discrepancy comes into sharp focus: while the total hours of congestion decreased by 19 minutes, the city still experiences 6.25 hours of traffic congestion every day. Additionally, while the travel time index increased by 2 points, the planning time index increased by 25 points. With data like this, one can see why Seattle drivers might choose to stay home from arts performances rather than face more time stuck in traffic.

What accounts for this increased unpredictability in traffic patterns and commute times? Seattle has seen rapid growth in its urban density, which has worsened traffic congestion and landed the city a spot in the top five worst US cities for traffic (TomTom

BOTTLENECK AT THE BALLET

International BV, 2015). The population of Washington State has increased as well (Washington State Office of Financial Management, 2014), as have total miles driven each year and the annual cost of traffic congestion, which in 2013 cost drivers and businesses \$858 million (TRIP, 2014; Peterson, 2014). However, these changes have not moved the state legislature to pass a transportation budget (Haeck, Smith, 2014), leaving decisions and their ensuing financial burdens to city and county governments and creating an atmosphere of inaction.

Development also plays a part; a drive down nearly any street in downtown Seattle reveals cranes, closed lanes, and city blocks in various states of construction; this unprecedented building boom has played a growing role in the city's congestion. At Amazon alone, employee numbers have increased more than sevenfold: while the company does not disclose Seattle employee numbers (Frank, 2013), it is possible to make estimates based on the amount of office space utilized in Seattle's South Lake Union neighborhood. In 2008, Amazon's Seattle employee count was about 4,000 (Shevory, 2008); with a planned presence of 9.2 million square feet of leased office space in South Lake Union (Fig. 1), "Amazon will have room for about 65,000 employees in Seattle, and plans to grow to at least 72,000 (Shevory, 2008)." According to Bhatt (2015), "Amazon's lease of a full city block in South Lake Union[...] puts the firm on track to eventually occupy about 10 million square feet in downtown Seattle – or one-fourth of the market's inventory of premium office space." Additional development in the neighborhoods of South Lake Union and Lower Queen Anne (where Seattle Center and Pacific Northwest Ballet are located) – and the years-long Mercer Corridor construction project – have presented a fresh set of challenges for drivers.

BOTTLENECK AT THE BALLET

It is clear the traffic is getting worse in Seattle and shows no sign of abating, and yet businesses must find ways to attract customers. Likewise, arts organizations must figure out how to keep patrons excited to attend performances. To do this, it is crucial to address the barriers arts audiences may face, as well as hold a deep understanding of their motivations for attending in order to provide the best experience and strengthen the organization/patron relationship. In Seattle, it is also paramount to understand the specific motivations and barriers of new residents flooding the South Lake Union, Queen Anne, and Belltown neighborhoods, who if optimally engaged have the potential to comprise an equally large portion of patrons.

Barriers & Motivations

My research found no evidence that traffic congestion is explicitly considered a barrier to attendance by surveying organizations. However, difficulty getting to the venue has been listed as an important factor in attending arts performances, and dance performances in particular (Blume-Kohout, M., Leonard, S., & Novak-Leonard, J., 2015; Brook, 2013). A recent National Endowment for the Arts (NEA) study (Blume-Kohout, M. et al, 2015), notable for its survey of interested non-attendees, found that 33% of respondents did not attend an arts performance which they had wanted to attend in the past twelve months because they found it too difficult to get to the venue. In Philadelphia, one major survey found that 51% of respondents cited difficulty in getting to the venue as a reason for not attending an arts or cultural event (Penn, Schoen, Berland, & Associates, 2007).

These reports point to a need for greater consideration from state and local governments when planning major traffic initiatives near a community's cultural hubs.

BOTTLENECK AT THE BALLET

However, ease of physical access to a venue is not the greatest barrier to attendance. In the 2015 NEA study cited above, the two largest reasons for not attending an arts event were lack of time and lack of money. Grant (2014) points to the struggle arts organizations must face when choosing between accessible pricing and economic priorities; Reynolds (2010) adds that the “image of venues” which are often perceived as stuffy or elitist creates a further barrier for interested potential attendees. And given that many patrons will not return to a venue if they have an unpleasant experience – regardless of what they may think of the art being presented – customer service is then as important if not more so than the performance itself (Stuart & Tax, 2004).

Methodology

Research for this project involved gathering a combination of qualitative and quantitative data through a series of patron surveys, observations, personal interviews, and statistical analysis. In the summer and fall of 2014, PNB sent three patron surveys via SurveyMonkey; these surveys were targeted to PNB subscribers and regular single-ticket buyers as a means to gauge the extent of ballet-goers’ discontent with traffic and parking congestion on Mercer Street and in the Mercer Garage. Together with my colleague Elisa Jordan, I analyzed these surveys and reported findings to PNB management, which then shared them with representatives from Seattle Center, McCaw Hall, and SDOT.

On May 12, 2015, I sent a new survey to three targeted groups of PNB patrons: lapsed subscribers (defined as patrons who have not subscribed to PNB for two years or more), subscribers who failed to renew for the 2014/15 season, and single-ticket buyers who had not purchased tickets since before January 2014. This survey sought

BOTTLENECK AT THE BALLET

to determine whether or not traffic and parking congestion had played a role in these patrons' decision to no longer attend the ballet. The surveys were sent via Wufoo, which enabled identification of each survey participant in PNB's Tessitura database. In addition to these surveys, the following stakeholders were interviewed: Robert Nellams, Seattle Center Director; Lexi Clements, Seattle Repertory Theatre Director of Patron Services; Markus Kunz, Teatro Zinzanni Executive Director; Kristin Price, former Special Events Manager for UW Arboretum Foundation; Justine Thayer, Seattle Opera Subscriber Relations Coordinator; and Jenifer Ward, former Associate and Interim Provost for Cornish College of the Arts. Finally, I attended two Mercer Corridor Stakeholder Meetings; one follow-up meeting with representatives from PNB, Seattle Opera, McCaw Hall, and Seattle Center; and a Seattle Center Resident Directors' meeting, which gave insight into the wider community impact of this project.

Survey Says...

An initial survey sent in July 2014 to PNB subscribers and regular single-ticket buyers regarding their experience with traffic and parking received 744 total responses, demonstrating patrons' desire to talk about the issue. Individual survey comments included, "This has made me much less likely to return to another show at PNB," "The traffic has made the experience so bad we didn't even use some of our tickets," and even, "We discontinued purchase of season tickets in large part due to traffic." However, congestion on Mercer Street was not the only problem; with 85% of patrons arriving by car and 78% using Mercer Garage for parking, egress from Mercer Garage after ballet performances and the condition of the garage itself were potent barriers to future attendance. (These findings would seem to corroborate Chang's 2014

BOTTLENECK AT THE BALLET

conclusions about the importance of factors other than the art being presented.) The survey found that “73% of patrons who park in the Mercer Garage state that they are unable to exit the garage in a timely manner (Jordan & Liang, 2014, p.4),” and that 72% of subscribers and single-ticket buyers rated service at Mercer Garage as fair or worse.

Over the summer of 2014, PNB worked together with Seattle Center on improving conditions in Mercer Garage, including regular cleaning and increased event staff. A follow-up survey sent in November 2014 found these efforts had paid off, at least in regard to the condition of the garage (Liang, 2014). However, 90% of survey respondents said their commute time to and from the ballet was the same or longer, pointing to traffic congestion as a continuing drain on their experience.

A Holistic Approach

This was useful information for PNB, but were their patrons’ experiences and comments indicative of a larger trend? To find out, I reached out to other arts organizations along Mercer Street to ascertain the impact Mercer West construction may have had on their patrons and budgets. Lexi Clements, Director of Patron Experience for Seattle Repertory Theatre, shared:

We were very concerned that the Mercer Project would create a revenue debacle[...]But because the project was scheduled to be completed by the beginning of our next season – it really didn’t create a terrible amount of patron concern for us. On a larger timeframe – as we look at the entire project, we see some of our highest grossing shows of the organization’s history[...] it’s hard to tell really how that Mercer project may have played a role in revenue (personal communication, May 1, 2015).

BOTTLENECK AT THE BALLET

Looking at the critically acclaimed selection of works Seattle Repertory Theatre presented during this time – *A Great Wilderness* (world premiere), *Venus in Fur*, *The Suit*, *Who's Afraid of Virginia Woolf?*, and *ONCE* – this may be a prime example of an organization producing work so compelling that patrons will find a way to attend no matter how bad the traffic. Another factor may be Seattle Repertory Theatre's performance schedule; productions in its two theaters typically offer eight performances a week over an average four-week run (Seattle Repertory Theatre, 2015). Contrast this with Seattle Opera, presenting four operas a season (during this time, *Rigoletto*, *The Consul*, and *The Tales of Hoffman*), each with a three-week run of four performances a week, or PNB, which offers six regular season ballets featuring two-week runs of five to six performances each week (Seattle Opera, Pacific Northwest Ballet, 2015). Patrons have fewer opportunities to see the opera and ballet, and those opportunities come on evenings when many other arts organizations are presenting at Seattle Center (Seattle Center, 2015). Seattle Opera and PNB are also trying to fill nearly 3,000 seats at McCaw Hall, whereas Seattle Repertory's largest theater seats 842; there are simply more patrons on the road and in the parking garage at opera and ballet performances.

These factors may help explain Seattle Opera's experience, as described by Subscriber Relations Coordinator Justine Thayer: over the past two seasons, the opera has incurred significant additional expenses related to Mercer Street traffic and Mercer Garage congestion (personal communication, May 19, 2015). A partial list of expenses includes additional traffic alert emails (\$250.00 each, plus \$150.00 in mail handling costs); traffic alert postcards (\$500.00 each plus mail handling); and traffic control officers (\$400 per hour, per officer, with a four-hour minimum requirement). These hard

BOTTLENECK AT THE BALLET

costs are in addition to staff hours required to deal with unhappy patrons, design mailers, create mailing lists, and otherwise manage an issue caused externally but requiring extensive internal resources.

Another consideration is the cost to organizations forced to move events. As the primary tenant of Intiman Theatre, Cornish Playhouse should ideally be able to use its rented space for whatever events are deemed appropriate, but on occasion the college has found it more effective to hold certain events offsite at additional cost. Jenifer Ward, former Dean of the College at Cornish College of the Arts, shared an example of this (personal communication, September 29, 2014):

I can tell you that we tried twice to do *Neddy at Cornish*-related speakers at [Seattle Center] and they were both duds – reasons given were traffic and parking. In the third year we did it at the Frye and it was well-attended (dedicated parking lot).

There is also lost revenue opportunity when patrons are unable to get to a performance venue on time, are forced to reschedule their tickets at the last minute, or opt not to attend a performance at all. Markus Kunz, executive director of Teatro Zinzanni, recalled the organization's experience during the Mercer West construction project:

We had a much higher no-show rate of people – granted, they bought their tickets – but they didn't make it to the show. And they would reschedule[...] and I have to comp them the next time, so I lose the ticket. But it's also night of show when they don't show up, that I lose revenue in the restaurant[...]what was striking was the mindset of people arriving because they spent so much time in traffic...it was just not a positive experience...we heard that a lot through

BOTTLENECK AT THE BALLET

comment cards or internal surveys, the likelihood of them returning to see us [during construction] was very minimal (personal communication, May 26, 2015).

How Did We Get Here?

According to the Downtown Seattle Association's 2014 State of Downtown Economic Report, "Seattle's thriving arts community[...]adds to the economy, as well as Downtown's vibrant urban experience (Downtown Seattle Association, 2014)." A recent ArtsFund study (Beyers & GMA, 2011) found that King County arts organizations contributed \$1.9 billion in business activity to the region (this study is conducted every 6 years; the 2015 study is currently underway). At least at the outset of the Mercer Corridor project, project leaders seem to have understood the importance of ensuring access to Seattle Center's arts organizations. A Mercer Corridor Stakeholder Committee was formed well in advance of the start of construction. Comprised of 42 community organizations and leaders, this committee provided a detailed set of recommendations in 2006 for the timing of the project phases and considerations that should be made for affected organizations. One such example was the recognized need for traffic control officers to assist in moving traffic: a key recommendation for SDOT was to "Use/modify police control before and after events to better manage event traffic (Heffron Transportation, Inc., 2006)." (It is worth noting that no recommendation was given as to who should pay for the cost of police control.) Another suggestion was for SDOT to "provide additional transit service, especially in the lower Queen Anne and Seattle Center area (Heffron Transportation, Inc., 2006)."

From these considerations one might conclude that this project began with the intent to mitigate negative impacts on area businesses, including arts and cultural

BOTTLENECK AT THE BALLET

institutions. As the project got underway, however, it seems the recommendation for additional transit service or traffic control officers was not used by SDOT. With regard to transit, a recent site walk of Seattle Center's perimeter located only eight bus stops surrounding the 74 acre campus, with none located along Mercer Street where five of Seattle's major arts institutions reside and perform. In addition, organizations like Seattle Opera have had to spend between \$1,200 and \$2,000 a performance to supply their own traffic control officers (personal communication, J. Thayer, May 19, 2015); this unexpected expense is just one of many incurred by arts organizations along Mercer Street as a result of the Mercer West project and Mercer Garage congestion.

Two other factors complicating this issue are Seattle's many siloed government departments and frequently changing city leadership. A prime example of these factors and their impact on municipal projects is the Seattle Center Master Plan. Two years after the Mercer Corridor Stakeholder Committee made its recommendations for the Mercer Corridor project, Seattle Center submitted its Final Environmental Impact Statement (FEIS) for a proposed Seattle Center Master Plan (City of Seattle, 2008). This Master Plan noted several transportation challenges, namely, "Lack of frequent evening and weekend transit service to and from the Seattle Center except from downtown Seattle," and "Lack of capacity in the street grid between the Center and I-5 (City of Seattle, 2008, Appendix A, p.3)." One important finding:

Visitors who may be able to use transit to arrive at an event find there is little or no convenient transit service available to them in the late evening when events often end. Seattle Center visitors are often unable or unwilling to use transit

BOTTLENECK AT THE BALLET

because of the lack of evening and weekend transit service and/or the need to make a transfer among transit routes (Appendix A, p.7-8).

This finding holds up today; both PNB's internal surveys and interviews of other arts organizations at Seattle Center show a vast majority of patrons arrive by car because they do not feel transit is a viable option.

In its Master Plan, Seattle Center proposed to replace parking at Mercer Garage with a new multimodal transportation center on the west side of Mercer Street. The center was "envisioned as a hub for Metro and charter buses, the Monorail, a bicycle corral and an expanded streetcar line." This Master Plan, including the transportation center, was supported by then-Mayor Greg Nickels and was passed by the Seattle City Council. Had it been enacted as written and approved by the Seattle City Council, it seems likely that many of the traffic and parking problems associated with the Mercer Corridor construction project could have been lessened or even avoided outright. Just a few months later, however, Nickels was ousted in favor of Mike McGinn, who did not share the same vision; while components of the Seattle Center Master Plan have since been enacted, the multimodal transportation center has not yet happened. As Robert Nellams, Seattle Center Director, said in a recent interview, "We had to give the new mayor a plan he can call his own (personal communication, April 8, 2015)." Nellams also emphasized, "Elections matter."

I reached out to Eric Tweit, Mercer West project manager, for his point of view on the project's impact on Seattle Center resident organizations, but did not receive a response.

BOTTLENECK AT THE BALLET

Meanwhile, Back At the Ballet

PNB has ticket sales data reaching back to the 2000-01 season, making it possible to analyze for trends or patterns. Looking at just over ten years of data (Appendix B), from the 2003-04 season through November of the 2014-15 season, PNB achieved or exceeded revenue goals 54% of the time, and reached 92% of goal or higher 70% of the time. Based on these numbers alone, it seems plausible that PNB might have a fluke period where several productions might not meet revenue goals. Looking at the entire ten-year history by season, however, a different story emerges: there are only two events in this period where PNB did not meet revenue goals for more than three consecutive productions. Those two events are the Great Recession during the 2008-09 season, and the construction phase that impeded access to McCaw Hall on Mercer Street. It seems clear the Mercer West construction played at least some role in the decline in PNB's ticket revenues.

In order to give the largest possible group of constituents an opportunity to provide feedback, a third and final round of surveys was sent in April 2015 (Appendix C). These surveys were intended to gauge the reasons why former season subscribers and single-ticket buyers were no longer attending the ballet. Survey results proved problematic: in addition to the surveys' extremely low response rate, some survey respondents had been entered into the Tessitura database more than once and so were inadvertently included. As a result some questions were skipped or entries invalidated. However, the themes that emerged from this small pool of lapsed attendees were enlightening – and in line with Blume-Kohout and Leonard's work for the NEA (2015), as ticket prices and either a lack of time or a change in life priorities comprised the bulk of barriers to attendance. The survey centered around two main questions: the first, to

BOTTLENECK AT THE BALLET

gauge the most common factors for non-attendance, and the second, to determine what these patrons prioritized most when considering a ballet ticket purchase.

As it turned out, traffic was cited as a factor in choosing to no longer attend the ballet by only 5% of former subscribers and just over 10% of former single-ticket buyers. Parking was cited as a factor by another 5% of former subscribers and no former single-ticket buyers. Strikingly, when asked about the single-most important factor when choosing to no longer subscribe or attend, less than 3% of subscribers selected parking and none chose traffic. For single-ticket buyers, the issue was nearly the reverse: a slightly higher percentage, 6.52%, cited traffic as the single-most important factor, while none chose parking. This may point to a difference in motivation for attending and the hurdles patrons are willing to overcome in their efforts to attend the ballet, or may simply illustrate that these patrons haven't attended the ballet during this construction project.

The number of respondents that selected traffic was so small that I researched individual Tessitura accounts for more information. Of the nine former subscribers who cited traffic, two lived in West Seattle while the other seven lived in Tacoma or further from Seattle. Further, all but one were in their 50s or older. One might thus infer that a potential patron who is older than 50 and living outside of Seattle will have a high rate of non-attendance when traffic is a factor.

For most survey respondents, however, traffic alone is not a strong barrier to attending the ballet. Rather, nearly 38% of former single-ticket buyers and just over 35% of former subscribers cited ticket prices as the single-most important factor in no longer attending. 27% of former subscribers stated that they prefer to buy single tickets; while these patrons may still attend the ballet, they wish to do so at their discretion

BOTTLENECK AT THE BALLET

rather than committing to a full season. Another 18% of former single-ticket buyers stated that they choose to attend performances at other arts organizations. This may be disappointing for PNB in particular but highlights the vibrancy of Seattle's arts and cultural offerings, which are so numerous (1,064 in 2014, according to Philadelphia's Cultural Data Project) that Seattle was recently named the fourth largest arts city in the United States (Forshee, 2015).

What Does It All Mean?

After comparing the 2014 survey of current patrons and the 2015 survey of lapsed or infrequent patrons, it became clear PNB's constituents face the same barriers as most arts patrons: namely, time and money. It rings true, then, that if PNB's current patrons have already overcome the barriers of price and time, problems with traffic or parking would be especially irksome.

For single-ticket buyers in particular, there is an opportunity for more audience education regarding the many affordable pricing options available to PNB's patrons. With regard to the barrier of price, PNB already has several initiatives in place: incentive pricing on weekday and matinee shows, a partnership with local nonprofit Teen Tix providing \$5.00 tickets to patrons ages thirteen to nineteen, the robust 25 and Under program which offers \$12.00 tickets to patrons ages twenty to twenty-five, and senior and student rush ticket discounts. In addition, PNB's Young Patrons Circle membership program offers discounted subscriptions and single-ticket prices for patrons ages 21-39, and PNB offers a special "Family Fairy Tales" subscription package for weekend matinee performances. Finally, area teachers in pre-kindergarten through college

BOTTLENECK AT THE BALLET

educational institutions are eligible for a 20% discount off any regular repertory season performance.

With so many opportunities to purchase discounted tickets, it may seem strange that ticket prices are still a large barrier; could PNB still do more? Perhaps. These myriad offers are noted on PNB's website but are not explicitly called out; the average visitor to the website would not necessarily know where to look or that these ticket discounts are available. Additionally, the average lowest ticket price in McCaw Hall, \$37.00 for the back of second tier, may still be out of reach for some potential patrons. There is also the issue of perception and value: second-tier seats are often viewed as the "cheap seats" and therefore undesirable. This perception may result in reduced attendance by a patron who prefers to attend less but sit in what they perceive to be "better" seats. I experienced this firsthand in the past season when friends I had brought to the ballet were visibly unimpressed by the seats I had purchased in the front row of the second tier. Although our sight lines were better than they would have been in the back of the orchestra section, they were disappointed at being "in the rafters." Another potential issue is that PNB's ticket discounts are often unavailable for the two lowest-priced seats. This may be for very logical reasons – \$37.00 is very likely the absolute lowest price PNB is able to offer without losing money – but it has the potential to create an image problem, where patrons are turned off by what they perceive as too many conditions placed on the offer.

It is telling that many former subscribers would rather purchase single tickets even though it is less expensive overall to purchase a season subscription; this speaks to a new generation of arts attendees' desire to curate their own experience (Brown &

BOTTLENECK AT THE BALLET

Novak-Leonard, 2011). Survey comments often belied a preference for either full-length story ballets or contemporary works, which may help explain why patrons might shift to single ticket purchasing patterns – in so doing they are able to pick and choose those performances which most interest them. Other local arts organizations have begun offering customized subscriptions where patrons can select four, five, six, or more performances within a fee-based structure. PNB also offers full and mini subscriptions, and it would be useful to track these subscription sales over the next few years to find out what patterns emerge. PNB's robust database is well-equipped to track ticket sales, which will enable a nimble response to whatever trends are detected.

It's All About Relationships

The area where PNB could gain the greatest benefit is in audience engagement: to look not just at removing barriers but at creating and enhancing motivations for attending, cultivating a long-lasting relationship with its patrons. Research confirms that a patron's relationship or emotional bond with an organization is a motivator to attend future events (Chang, 2014), and that subscribers are more likely to be loyal to a specific organization (Guillon, 2011). And since many people attend an arts or cultural event to socialize with friends and family (Ostrower, 2013), it seems logical to foster a sense of community within an organization's supporters. This community-centered approach is a familiar concept for PNB and one it should be able to expand with success. In 2009, the organization received a multi-year grant from The Wallace Foundation based around engaging young audiences (Harlow & Heywood, 2015); as a result of this work, the groundwork has been well laid for relational marketing and

BOTTLENECK AT THE BALLET

excellent communication with patrons. So how can PNB build on this strong foundation to keep patrons coming back no matter what the hurdle?

First, it can keep what's already working: numerous programs designed to build community within specific audience groups, such as its annual Teen Night, treating teen patrons to a special studio performance. Crafts and auxiliary activities before weekend matinees help build a connection to families with young children, while pre- and post-performance talks help audience members of all ages deepen their ties to the ballet (and wait out the traffic in Mercer Garage). PNB's Audience Education Director Doug Fullington offers free one-hour previews at Seattle Public Library prior to each performance, and the recent addition of livestreams will help reach those audience members unable to attend McCaw Hall performances.

While it is crucial to recognize the emphasis PNB places on community and the enormous effort it exerts to make ballet accessible to all, I believe there is always room for improvement. Minor initiatives could net a major positive impact and help PNB further its mission, in particular its goal to "captivate a devoted, supportive, continually growing, and diverse audience (Pacific Northwest Ballet, 2015)."

One factor to consider when contemplating audience engagement is the role tradition might play in ballet attendance. PNB's annual *Nutcracker* production is so successful that it is a separate revenue stream from all other season performances; this is in large part due to the unique behavior of *Nutcracker* ticket buyers, many for whom it will be the only ballet they see all year. If PNB were able to create a similar sense of tradition around other productions, such as its annual all-contemporary DIRECTOR'S CHOICE performances, this could increase repeat ticket sales based around a concept

BOTTLENECK AT THE BALLET

(new works, up-and-coming choreographers, or other theme) rather than specific repertory choices.

All organizations I interviewed relied on proactive communication to keep patrons in the loop when circumstances arise which may impede their commute – such as PNB’s “Know Before You Go” emails (Pacific Northwest Ballet, 2015). Seattle Repertory Theatre’s Clements mentioned her organization had carefully tracked patron feedback during construction; Thayer (Seattle Opera) and Kunz (Teatro Zinzanni) confirmed that they also send out pre-show emails detailing major traffic disruptions and other pertinent information. These communications are crucial, and offer PNB an opportunity to improve its already exemplary customer service. Survey feedback demonstrated that while patrons received “Know Before You Go” emails, they didn’t perceive the emails as containing important or urgent information. This may indicate that these emails have grown too large in scope and need to be pared back down to essential information, or it may be more effective to send a separate email explicitly calling out traffic alerts in the subject line and pre-header. Targeted messaging would also give PNB an ideal platform to conduct simple A/B tests to determine what type of subject line content leads to the highest email open rates.

Young Patrons Circle (YPC), for patrons ages 21-39, has been a less successful program but still shows signs of life: its recent sold-out Black Swan Soirée was YPC’s most successful event to date. As labor-intensive as events like the Black Swan Soirée are to organize, these events are an effective way to attract a diverse range of audience members, many of whom are new to the ballet. Further research and experimentation could determine the best strategy for executing similar, more casual events; in addition,

BOTTLENECK AT THE BALLET

once a template of sorts has been created for this and other wrap-around activities, subsequent events would become more seamless to coordinate.

PNB's Facebook page is one of the best of arts organizations not just in the Pacific Northwest, but nationwide; this is affirmed by its following of 130,000 and counting. It achieves this notable following by adding value to its followers' Facebook experience. Through videos, stunning photographs, entertaining memes, and insider information, PNB makes its followers feel special and included. This same strategy might be successfully employed in an email campaign that shares an "insider offer" such as a special discount voucher to McCaw Hall concessions or the Amusements gift shop, or an invitation to visit one of the PNB lounges at intermission. Offers like these or similar incentives would increase patrons' perceived benefit and reduce their perceived sacrifice in attending the ballet, thereby increasing customer-perceived value and in turn, the likelihood of a repeat visit (Ravald & Grönruss, 1996).

Finally, a recent patron experience survey revealed 56% of respondents would value the addition of a lobby concierge at McCaw Hall. In future seasons PNB may consider hiring a dedicated concierge who could provide more tailored assistance than is currently offered by the information desk, which is disadvantaged by its somewhat obscure location under the grand lobby – a potentially intimidating site for some patrons, if they are even aware it exists. In the end, a combination of these and other strategies may work best; similar organizations in France have successfully adopted "guiding principles" to attract audiences, such as attention-grabbing artistic programs, incentive pricing, and a festive atmosphere at the venue (Assassi, 2010).

BOTTLENECK AT THE BALLET

What comes next?

More research is needed to determine just how the City of Seattle perceives Seattle Center and its resident organizations. Are these arts and cultural institutions understood and appreciated as local businesses driving a significant portion of Seattle's economic activity, or are they seen merely as attractions or needy nonprofits? Is Seattle Center appreciated as a "third place" (Oldenburg, 1999) that celebrates our community's many varied cultures and provides a central location for many of its artists, or is it viewed as just another city department? Who is ultimately responsible when the actions of one city department such as SDOT adversely impact constituents of another city department like Seattle Center? And how does SDOT's goal of a city less reliant on cars and more on transit mesh with the reality at McCaw Hall – that opera and ballet patrons overwhelmingly prefer to drive, and that there are no convenient transit options near the hall or any bus stops for a nine-block span along Mercer and Roy Streets?

While Teachout (2010) wonders if declining audiences are simply the latest development in a technology-obsessed culture, existing literature does not appear to support this idea. Rather, our cities, and Seattle in particular, are offering more options than ever for arts and cultural events, to say nothing of other forms of entertainment; future research may consider issues of supply/demand or market saturation with regard to arts organizations. There is good news, however: Seattle's population boom provides PNB and the arts community at large a diverse pool of prospective audience members. To thrive in today's rapidly changing urban landscapes, arts organizations must engage with audiences in an authentic, mission-driven manner, and assess the most effective methods for drawing patrons back and building a relationship that is not merely transactional but has the power to be transformational.

BOTTLENECK AT THE BALLET

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Appendix A: Maps of Mercer Corridor and South Lake Union

Fig. 1

Seattle Times Infographic of Amazon Real Estate Holdings and Leases, March 2015

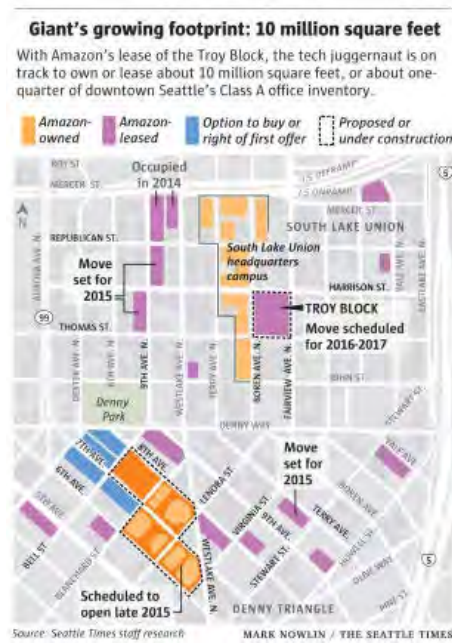


Fig. 2

Original Configuration of Mercer Corridor through South Lake Union



Fig. 3
New two-way routes on Mercer and Roy Streets through Lower Queen Anne

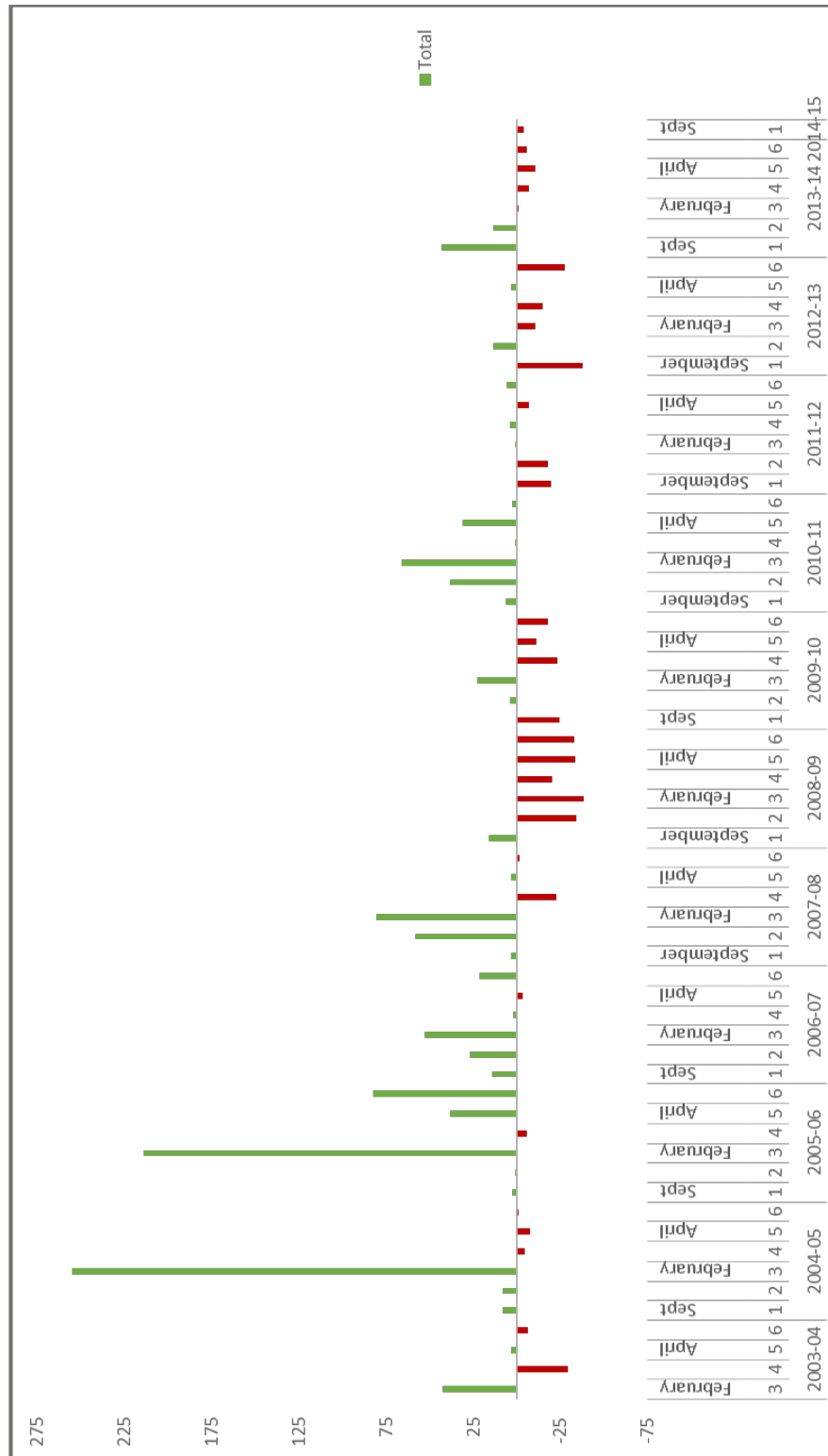


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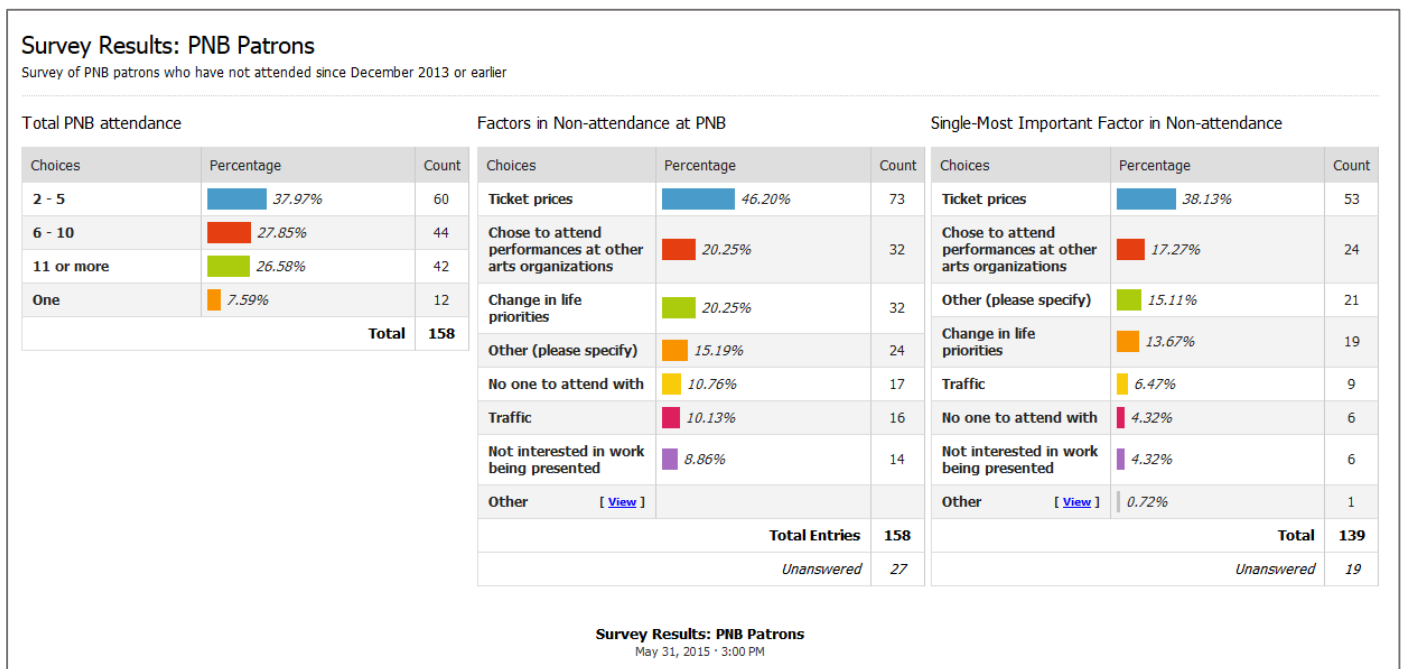
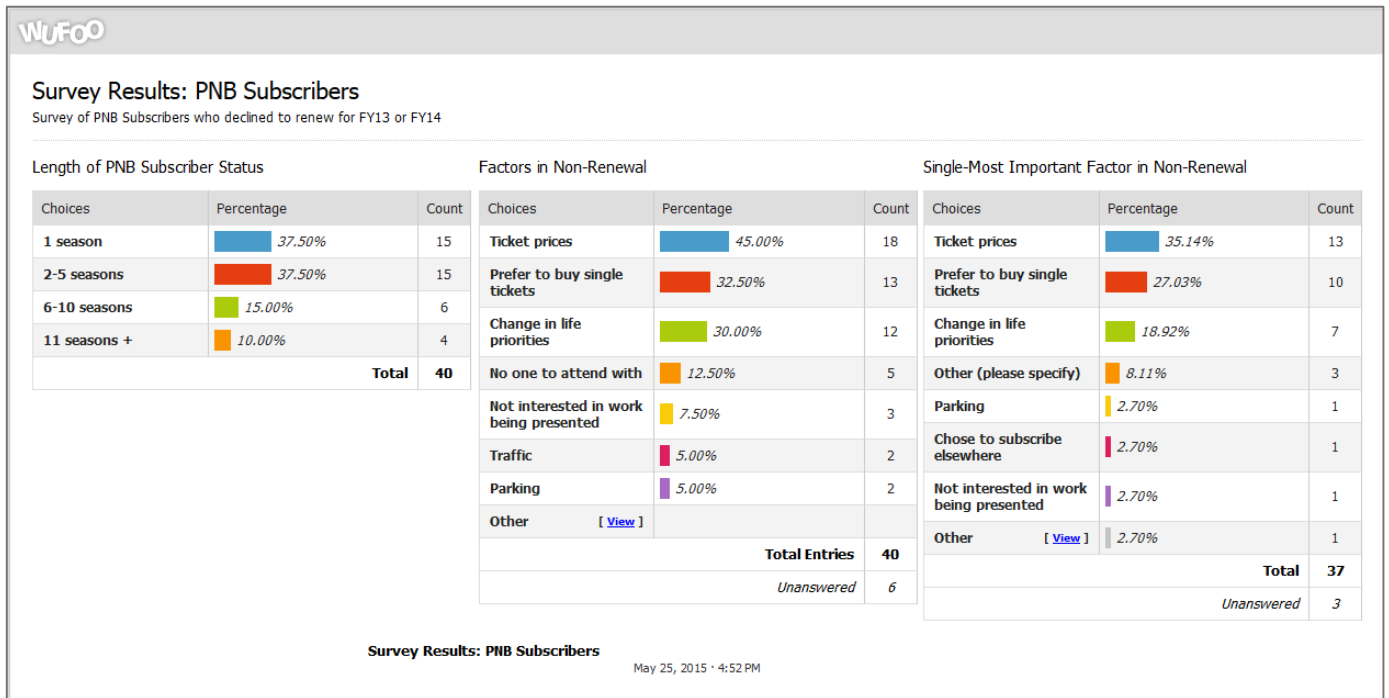
Appendix B

Pacific Northwest Ballet Ticket Sales History, January 2003 – September 2014



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Appendix C April 2015 Patron Survey Findings



Sound Transit Projects

Details	Communication
#503150	In addition to comments previously submitted, I now write on behalf of the Queen Anne Historical Society and its Preservation Committee to endorse adoption of the Mercer Street station of the DT Segment and the route consolidating the Smith Cove and Interbay stations of the SIB Segment. The plan to consolidate the two stations on the west side of 15th Ave. W. is apparently an addition to the published DEIS.
From: Michael Herschensohn	DT Segment The committee endorses locating a station on Mercer St. instead of the favored Republican St. option. The Mercer St. option eliminates the impact on Seattle Center's Northwest Court, a City of Seattle landmark, and on the Station office building (SW corner of Republican St. and 1st Ave. N.) which is listed on the National Register of Historic Places. It also protects the Inn at Queen Anne (NW corner of Republican St. and 1st Ave. N.) which is characteristic of the early 20th c. brick buildings that once defined the neighborhood. It is currently owned and successfully operated by King County as a low-income housing facility, making it an excellent example of the re-use of a historic building for community benefit. The station on Mercer St. also eliminates the construction disruptions on the operations of SIFF, KEXP, Seattle REP and the thriving small businesses along Republican Street. Additionally, the tunnel route notwithstanding, the committee also has concerns about the construction impacts of the Mercer St. option on the historic apartment buildings along W. Mercer and on W. Roy Streets.
Organization: The Coalition Magnolia, Queen Anne, and Interbay Neighborhoods Queen Anne Historical Society	SIB Segment The cost-saving measures proposed for the SIB Segment effectively protect the historic buildings in the Segment especially the 14th Ave. W. group, a city landmark which is further protected by covenants owned by Historic Seattle PDA. This option may also save for future landmark consideration the Wilson Machine Works (1038 Elliott Ave. W.) and the Art Deco Western Pacific Chemical Company building (1436 (1430 to 1436) Elliott Ave. W.). All three of the routes presented in the DEIS put these historic buildings at serious risk and compel their rejection for the cost-saving alternative.
Date Recieved: 4/28/2022	
Created by:	
Audience:	
Reach:	
Participation:	
Engagement:	
Source: Online open house	
Assigned division: Outreach	
Category:	
Project Phase: Planning	
Project Segment:	
Environmental phase: Draft EIS	



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VIA ELECTRONIC MAIL

WSBLE Draft Environmental Impact Statement Comments

c/o Lauren Swift
Sound Transit
401 S. Jackson St.
Seattle, WA 98104

RE: Comments on the DEIS for West Seattle and Ballard Link Extensions Project

Dear Ms. Swift:

The Seattle Chinatown International-District Preservation and Development Authority (SCIDpda) is a municipally-chartered public development authority created by the City of Seattle to steward the Chinatown-International District—its public spaces, its small businesses, and its residents. We are a quasi-governmental entity, and are focused on the neighborhood, not an ethnic heritage or political belief. Our board reflects the diversity and range of opinion of our stakeholders, which, like all neighborhoods and communities, cannot always agree on topics, approach, or methods.

Our neighborhood is defined between 4th Avenue to Rainier Ave, and Main Street and Dearborn Ave. We house over 400 residents and 40 neighborhood businesses, and have been doing community development work in the CID for over 47 years. It is from that perspective, expertise, and knowledge that we submit the following comments on the Draft Environmental Impact Statement (“DEIS”) for the West Seattle and Ballard Link Extensions Project (“the Project”), notice of which was issued on January 28, 2022.

We appreciate the opportunity to submit feedback on the DEIS for the project.

MORE ABOUT SCIDPDA and the CID

SCIDpda’s mission is to preserve, promote, and develop the Seattle Chinatown International District (CID) as a vibrant community and unique ethnic neighborhood. Formed by the community in 1975, SCIDpda works to revitalize and preserve the neighborhood by providing services in three areas: affordable housing and commercial property management, real estate development, and community economic development and community engagement. We have over a 45-year success record of increasing neighborhood sustainability through innovative programs and projects that balance development and preservation.

As a neighborhood-based community developer, SCIDpda engages and mobilizes community members to develop collaborative solutions to meet neighborhood priorities—because a community’s strength comes from its members taking the initiative to shape its present and future.

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The neighborhoods that comprise the CID are at an exceptionally vulnerable point in our 100+ year histories. The COVID-19 pandemic, epidemic of anti-Asian incidents, and 2020 protests against racial injustice and police violence disproportionately affected our neighborhood. Ongoing public safety concerns in Seattle and the surrounding region have historically challenged our neighborhood and continue to do so.

Throughout its history, the CID—a place in Seattle where people of color and, especially, the Asian Pacific Islander community were relegated to living—has experienced hugely disruptive public infrastructure projects that have imposed localized and persistent impacts to our community while providing regional benefits. These include:

- The construction of Interstate 5 (which bisected the neighborhood)
- Construction of the Kingdome
- The SR99 Deep Bore Tunnel
- First Hill and Center City Connector Streetcars
- Seawall, Seattle Waterfront and, demolition of the Alaskan Way Viaduct
- Utility upgrades

The CID has a long history of cycling through disruption caused by public infrastructure construction. Each time this happens, the CID works through disruptions and recovers, only for the cycle to begin again with the next infrastructure investment. As stewards of the neighborhood, SCIDpda has advocated directly to the City of Seattle, Sound Transit, and King County (along with partners) to review past outreach outcomes to understand what community members have identified in the past 20 years about our interests, needs, concerns, and priorities. The City, Sound Transit, and King County have agreed to incorporate many of these interests, needs, concerns, and priorities into future projects and plans that affect our neighborhoods—including this Project. These priorities include:

- Retain or increase community ownership of properties
- Acknowledge and address historic racism that has and continues to impact the CID
- Increasing connectivity to surrounding neighborhoods.
- Minimize cumulative harm to and displacement of existing businesses, residents, and nonprofits
- Support a thriving, place-based small business economy during the WSBL construction and beyond
- Enhance the public realm (streets, alleys, public spaces, etc.) in and around the

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station area

- Enhance public health and well-being

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It is through the combined perspectives of our mission and values, our experience and history, and these listed priorities, that we offer the following comments and perspectives about the alternatives and impacts described in the WSBL Draft EIS.

A. Impacts of Fifth Avenue Alternatives are existential for the Chinatown-International District

The DEIS describes and compares the impacts of the Fourth and Fifth Avenue alternatives. After carefully considering the DEIS analyses, we conclude that the impacts of the Fifth Avenue Alternatives would put many of the community priorities outlined above at great risk. Unless Sound Transit can substantially minimize the construction effects or identify another option that moves the construction impacts away from the cultural spine of the Chinatown-International District, we do not believe the Fifth Avenue Alternative and options are acceptable. The mitigation discussed is inadequate to address the totality of the impacts.

Construction of the Fifth Avenue Alternatives would be the most disruptive in the very heart of the Chinatown-International District. Construction would close key streets for commercial and cultural activity, including King Street and Weller, for long periods, affecting access to retail businesses for customers and suppliers. Construction would create noise, dust, truck traffic, and visual impacts that would hamper or prevent community gatherings and activity in Hing Hay Park and other outdoor spaces, and affect quality of life for residents of buildings such as Uwajimaya Village, Fujisada Condominium, Publix Building, Bush Hotel, and the Alps Apartments—many of whom are seniors or living with disabilities. Construction of this alternative would permanently displace on-street parking, which is of particular importance to the retail and small business environment in the Chinatown-International District. Fundamentally different construction plans need to be developed to vastly reduce the impacts. With the current construction plans, no amount of mitigation can reduce the impacts to tolerable levels.

While the potential opportunity for transit-oriented development (TOD) associated with the massive disruptions created by the Fifth Avenue alternative and options may be enticing, after years of bisection and displacements from transportation facilities, exposure to degraded air quality through transportation planning and zoning policies, and now recovery from renewed racialized violence and vandalism, the amount of impact imposed on the CID is difficult if not impossible to put a mitigation price tag on. Sound Transit would have to find ways to further minimize the impacts described or identify other options that move construction away from the cultural spine of the Chinatown-International District. Further minimization is required before we could even begin to value the substantial mitigation required to construct in these alternatives. The community would need assurance that community ownership would be prioritized in any TOD opportunity associated with the project. Ensuring community ownership will be critical if the project is to reduce—not exacerbate—the

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CID community's risk of gentrification and displacement. These measures *must* be in the form of explicit legal commitments; the promise of a TOD opportunity alone is not sufficient mitigation or incentive to support a Fifth Avenue alignment.

B. Impacts and benefits from Fourth Avenue alternatives are not equally addressed

The construction of either of the Fourth Avenue alternatives would result in major traffic pattern changes that would have a damaging impact on the CID community. DEIS Section 3.19.3.1 (Arterial and Local Street Operations) states that throughout the six-year closure of 4th Avenue South, a high volume of north-south traffic would be diverted through CID neighborhood streets—resulting in increased levels of traffic congestion. Understanding the disruptive impact of more than nine years of construction on local traffic is critical, but it is not the only important impact that the community needs to consider.

The DEIS assessment fails to account for the environmental health impacts that this increased traffic congestion would have on the neighborhood. These impacts include (but are not limited to): increased noise levels, increased exposure to automobile exhaust, and increased risk of pedestrian injuries and property damage caused by automobile crashes. The DEIS also fails to account for the disruptive impact that such an increase in pass-through traffic would have on the neighborhood's economic vitality, including making street parking more difficult and disrupting economically important community events that require street closures. A more thorough study of both the environmental and economic impacts of the extended closure of Fourth Avenue South is required for the community to accurately compare it with other alternatives.

The DEIS also falls short of identifying any meaningful mitigation strategies to address project impacts. Without understanding how Sound Transit intends to minimize and mitigate impacts, it is difficult to provide meaningful feedback about preferences. In addition to providing more information about the impacts we reference in this letter, Sound Transit must propose appropriate mitigation measures to address impacts associated with the Fourth Avenue alternatives so that the community can weigh the alternatives and their benefits, impacts and mitigation strategies, against our own community priorities.

The Fourth Avenue alternatives would have direct connections to both Pioneer Square and Chinatown-International District neighborhoods and would facilitate more direct connections between transit modes such as Sounder, Light Rail, Amtrak and private buses. The Jackson Hub concept plans, as well as the community priorities listed in the beginning of this letter, state both neighborhoods' advocacy for improving connections between the neighborhoods, improving the public realm, and activating the Jackson Hub area more intentionally. From our review of the information presented in the DEIS, there appear to be opportunities to realize long-held community goals and regional benefits from a Fourth Avenue alignment, but the analysis lacks the information decision makers and the public need to further understand these opportunities. For example, no formal visual quality analysis was performed for alternatives in the CID segment and there was no discussion of the

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Chinatown-International District and Pioneer Square as complete, cohesive, and interconnected neighborhoods. An actual visual quality analysis, complete with images and discussion, would allow decision makers and the public to see how station entrances and improvements along 4th Avenue South between S. Jackson Street and Seattle Boulevard would contribute to public realm goals. More visual representation of the scope and scale of proposed tunnel ventilation facilities for both Fourth Avenue and Fifth Avenue alternatives would aid in better understanding of impacts to the public realm. The proposals would have a significant disruptive impact if they are constructed according to the dimensions described in 'Appendix J Conceptual Design Drawings – Ballard Link Extension'.

A more meaningful analysis of visual impacts also should lead Sound Transit to discuss opportunities to enhance connections and cohesiveness between the two neighborhoods in the Social Resources, Community Facilities, and Neighborhood conclusions. Without a more formal analysis, beneficial impacts of the proposed project and alternatives are not explicitly disclosed and are hard for the reader to conclude.

C. The Deep Options do not support a 100-year vision for our neighborhoods

We do not see the deep options as viable. Elevator-only access and long transfer times will not be able to keep up with crowds during major events in the area (e.g., football, soccer, or baseball games or Lunar New Year). Elevators are expensive to maintain and often break down, as has been our community's experience within the Sound Transit network. Elevators will also not be viable if there is another global pandemic that makes it practically unsafe to ride in an elevator with other members of the general public. We are also deeply concerned that requiring access via elevators may deter most people from disembarking or transferring at the CID station. Foot-traffic is essential to maintaining vibrancy and economic opportunity for the CID and its businesses.

We recommend removing the deep options as alternatives going forward.

D. The adverse effects indicated in the DEIS do not reflect the true impact to our communities

While Sound Transit and the City of Seattle have publicly committed to equity in the project process and applying the Racial Equity Toolkit throughout, the Draft EIS has some glaring holes in the analysis that must be addressed.

Sound Transit performed neither an operational noise analysis nor a visual quality analysis for the Chinatown-International District neighborhood. While the methodology sections give plausible technical reasons for this approach, those rationales are inadequate. Considering the project context and the focus on race and social justice for this project, the omitted analyses are vital to inform other analysis within the EIS. Without a noise and visual quality analyses, the Environmental Justice analysts concluded "no impact" when in all reality, there was "no analysis." This lack of information served to underestimate the impacts for all the CID segment alternatives and paint a picture of impact minimization that simply is not true.

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The Environmental Justice analysis acknowledges cumulative harm caused by decades of public infrastructure projects sited and constructed without centering the voices of people of color—but then fails to account for that cumulative effect and harm in the actual analysis. The Environmental Justice conclusion of no disproportionately high and adverse impact (Appendix G, Table 5-4, pages 5-31 through 5-66) further minimizes the true effect on our community.

This is representative of the findings provided in many of the Draft EIS analyses—no analysis in a few key disciplines led to “no impact” conclusions, which we believe lends to the overall inadequacy of the Draft EIS. For specific comments about the analysis, and to see our concerns described in more detail, please refer to the accompanying attachment to this letter titled “Discipline and Issue-Specific Comments on the Draft EIS.”

Finally, there is growing concern that losing buildings within the Seattle Chinatown Historic District boundary that are considered “contributing” to the historic character of the neighborhood, will erode the very historic and cultural fabric we have struggled to maintain. Losing a contributing historic building within the historic district protected under Section 106 of the National Historic Preservation Act appears to be a serious impact—one that is potentially unmitigable. Sound Transit did not propose any mitigation for the loss of historic structures in the district, and did not suggest any strategies for minimizing impacts to the historic district resulting from construction. Mitigation strategies need to be discussed with the community and consulting parties as soon as possible, and those conversations must not be delayed until publication of the next environmental document.

E. Conclusion and Recommended Path Forward

We recognize the need to keep this project moving forward and to facilitate delivering the full ST3 program for the benefit of all regional users. We also recognize that the longer this environmental process takes, the more expensive things can get, and the longer it takes to find the additional resources needed to deliver on the promises made to voters. The environmental process will take as long as it has to in order to get the right results for these once-in-a-generation infrastructure opportunities. But it is in the spirit of continuing to advance the project while also advocating for our communities that we suggest the following path forward.

Based on our review of the information provided in the Draft EIS, the Fourth Avenue shallow alternative is the least impactful option for the CID. We recommend that Sound Transit follow the close of the DEIS comment period with advance design and study of the Fourth and Fifth Avenue shallow alternatives (CID-1a and 2a diagonal) with the goal of further minimizing the cost, the time, and area needed for construction and the impacts. Once complete, we recommend Sound Transit engage the community in discussion well before the Final EIS about the findings from this study effort. The attachment to this letter includes a list of issues and recommended directions for study, but we also encourage Sound Transit to take the initiative to find solutions in areas we have not yet commented on. We are not engineers, and we don’t claim the skills required to address the full scope of engineering challenges this

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Development Authority

project faces—but we do know that this region has the technical talent available to tackle the challenges.

By focusing time and resources only on the shallow alternatives, Sound Transit can develop the information needed by the community to support future selection of a preferred alternative. We cannot overstate the importance of Sound Transit providing the additional information requested in this comment letter prior to formal publication of the FEIS. This information will be necessary for SCIDpda and the CID community to support a project that facilitates much needed high-capacity regional transit, transit connectivity, and serves to enhance our neighborhood. The information can help frame up subsequent mitigation conversations, a topic that many in government appear anxious to advance.

Thank you for the opportunity to provide comments on the Sound Transit WSBLE DEIS. We strongly urge Sound Transit to work closely with the City of Seattle and King County to more fully explore strategies for reducing the costs and impacts associated with the three shallow alternatives before coming back to the CID community for further discussion.

Sincerely,

Mindy Au

President, Board of Directors

Veronica Wood

Interim Executive Director

P 206.624.8929
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SCIDpda
409 Maynard Ave S
Suite P2
Seattle, WA 98104

CIDpda
P.O. Box 3302
Seattle, WA 98114

SCIDpda.org



Attachment to SCIDPDA DEIS Comment Letter
April 25, 2022

Discipline and Issue-Specific Comments on the
Sound Transit West Seattle and Ballard Link Extensions Project Draft EIS

1. ***Inconsistencies between Racial Equity Toolkit and DEIS:*** The Racial Equity Toolkit commits to an outcome of limiting harmful impacts of the Project and working with impacted communities to identify opportunities to repair past harm. It acknowledges the cumulative harm caused by decades of public infrastructure projects sited and constructed without centering the voices of people of color. Yet while the Environmental Justice analysis references these impacts in the narrative, it does not include the documentation of the analysis that led to an Environmental Justice conclusion of no disproportionately high and adverse impact (Appendix G, Table 5-4, pages 5-31 through 5-66).

These cumulative impacts are a key concern for many residents and business owners in the Chinatown-International District, and they should be explicitly considered as part of the Environmental Justice analysis.

2. ***Consideration of noise impacts is insufficient:*** The Noise and Vibration Technical Report states the following: "Commercial and industrial districts are in the Chinatown-International District Segment... Although there are no nearby residential districts near the segment there are mixed use properties with residences in commercial districts, such as Uwajimaya and the Publix Hotel. Residential use properties within commercial districts are treated the same as commercial properties within the city of Seattle." (Appendix N.3, page 6-37)

While this may be acceptable by federal noise analysis standards, it is unacceptable from a racial equity standpoint. Sound Transit should conduct a complete operational noise analysis of impacts to residential properties—regardless of whether they are part of a mixed-use building—and commit to mitigation for those impacts.

3. ***Inadequate consideration of impacts of stadium events in Transportation analysis:*** The analysis did not include stadium events in the traffic or ridership analysis, despite acknowledgment that stadium events for three sports teams occur more than one third of the year and concerts and other large events occur between sports events. During scoping of the Project, partner neighborhoods in historic south downtown requested that Sound Transit explicitly include stadium events in the analysis as a baseline condition. Sound Transit should include this consideration in its analysis of baseline conditions in the Final EIS.

4. ***Underestimation of the impacts of parking losses:*** The Cumulative impacts section of the DEIS asserts that changes to the transit system would reduce the need for parking in the study area. It further states that "the project would remove some of the residential and commercial land uses that created demand for this parking." (DEIS, page 5-7)

We believe this conclusion is inappropriate without further consultation with Chinatown-International District and Pioneer Square residents and small business owners. In the Chinatown-International District, for example, feedback from community leaders indicate that short-term parking (on-street, <2 hour) is used by people making trips to the Chinatown-International District to shop, visit residents, dine in a restaurant, drive a senior resident to/from appointments, etc. Transit may not be an appropriate or reasonable alternative mode for many of these trips. We urge Sound Transit to conduct further public engagement on this topic and update its analysis in the final EIS to reflect the true impacts of parking losses—particularly on-street parking—for our communities.

5. *Mis-characterization of “offsetting benefits” in Environmental Justice analysis:* The U.S. Environmental Protection Agency and Federal Transit Administration permit agencies to consider “offsetting benefits” when drawing a conclusion about whether a project has a disproportionately high and adverse impact on environmental justice populations. To count as an offsetting benefit, however, the positive effect needs to disproportionately benefit the affected populations. According to the Environmental Justice analysis, Sound Transit considers better access to transit and job centers to be an offsetting benefit for the residents of the Chinatown-International District. We disagree.

The new light rail station in the Chinatown-International District will enhance a regional transit hub, connecting people from all four corners of the region with buses, commuter rail, and Amtrak. While residents of the Chinatown-International District will partake of this benefit along with everyone else in the region, they will not gain substantially more benefit than anyone else in the region. On the other hand, they will bear the brunt of the impacts of constructing and operating this facility. Consequently, we do not believe it is appropriate to consider access to transit and job centers to be an offsetting benefit.

6. *Inconsistency in use of high-cost and low-cost project assumptions:* The technical analyses in the DEIS do not use the same high-cost and low-cost project assumptions. For example, the Economics analysis of the DEIS (pages 4.3.3-1 through 4.3.3-13) indicates that Sound Transit used CID-2a for both the high and low-cost project value to estimate the number of job years (employment) and direct expenditures resulting from the Project. Elsewhere in the economics analysis, CID-1a is listed as the high-cost project alternative in the CID segment. This results in an apples to oranges comparison of benefits generated from employment and local revenue. Similarly, in the Air Quality analysis of the DEIS, “CID-1a” is used as the alternative evaluated for Air Quality standards (page 4.3.6-3), but on page 4.3.6-7, the “low-cost scenario includes CID-2a...” and the “high-cost scenario includes CID-1a.”. These differences result in markedly different Greenhouse Gas emissions, again resulting in an apples to oranges comparison. Sound Transit should update its analyses in the Final EIS to address these inconsistencies.

7. *Need for more clarity on construction footprint:* The DEIS discloses the approximate amount of area necessary for construction staging areas and easements, but does not show a construction footprint outline. The property impact maps provided in Appendix L.4 do not indicate how the properties would be used or the extent of the use (i.e., full or partial

acquisitions). Without more clarity on construction staging locations or the assumptions of property impacts for construction staging, decisionmakers and the public cannot adequately assess or compare the impacts of construction to the Chinatown-International District.

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April 26, 2022

WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 S. Jackson Street
Seattle, WA 98104-2826

Via email to WSBLEDEIScomments@soundtransit.org

*Re: Seattle Aquarium Society Comments on West Seattle and Ballard Link
Extension Draft Environmental Impact Statement for its Animal Care Center
located at 1563 6th Avenue South*

Dear Ms. Swift:

We have reviewed the Draft Environmental Impact Statement (“DEIS”) for the proposed West Seattle and Ballard Link Light Rail Extension (“WSBLE”) by Sound Transit. Although we strongly support this significant transit investment that will improve mobility around our City by providing fast, reliable, and sustainable transit service, we have serious concerns with the level of study performed and the alternatives identified in the DEIS for the Chinatown-International District Segment that will impact the Seattle Aquarium’s off-site Animal Care Center. The DEIS fails to identify a workable preferred alternative and to adequately disclose impacts for this segment. Sound Transit should go back to the drawing board and work with the community to identify and study additional alternatives that have less impact on existing businesses and facilities. A supplement to the DEIS should be completed to study additional alternatives and an additional public comment period completed before publication of the Final Environmental Impact Statement (“FEIS”) and any alignment decision.

I. Background

The Seattle Aquarium Society (“SEAS”) is a non-profit organization dedicated to *Inspiring conservation of our marine environment*. SEAS operates the Seattle Aquarium at Piers 59 and 60 under a long-term operating agreement with Seattle’s Parks Department who owns the facilities. The Seattle Aquarium is in the top ten for

attendance in the United States, is among the top five paid visitor attractions in the Puget Sound region and a leader in marine conservation in the five northwest states.

SEAS is more than just an Aquarium. Through conservation work, advocacy, and education, SEAS strives to embody our SALISH values, which are:

- Sustainable: adopting and promoting, internally and externally, practices that improve ocean health.
- Awe inspiring: creating captivating experience for all audiences.
- Learning & improving: fostering, evaluating and applying knowledge and discovery.
- Inclusive community: recognizing that diversity is critical to achieve our mission.
- Scientific integrity: ensuring our credibility with evidence-based practices.
- Honoring place: using our location and history as a lens for larger understanding.

SEAS has embarked on a major expansion of its facilities on the waterfront in partnership with the City of Seattle. Creation of a new 160 million dollar “Ocean Pavilion” building is underway and is anticipated to be completed in 2024. Situated at the north end of the City’s future Waterfront Park, the Ocean Pavilion will be integrated with the Overlook Walk and steps and integral to connecting the waterfront to Pike Place Market. The new 48,000+-square-foot structure will focus on conservation and education exhibits and programs and accommodate new marine exhibits for 3,500 sustainably sourced species of fish and invertebrates representing healthy ecosystems found in the Coral Triangle region, a marine biodiversity hot spot in the Indo-Pacific. The Ocean Pavilion is expected to accommodate a projected 40% increase in visitors to the Aquarium. It is jointly funded by public funds from the City of Seattle, King County, the State, the Port of Seattle and other sources, as well as private fundraising. The facility will be owned by the City of Seattle.

To ensure the successful propagation, acclimation, and care for the new species that will make the Ocean Pavilion home, SEAS has established an off-site Animal Care Center (“ACC”) located at 1563 6th Avenue South. In the short-term, the ACC is designed to provide temporary, healthy, and stable habitat for acclimation and propagation of the plants and animals for the Ocean Pavilion. After the Ocean Pavilion opens, the ACC will continue to play a pivotal role. It will be SEAS’ location for long-term animal care supporting species in both the Ocean Pavilion and the other waterfront aquarium facilities. Animal care space is a requirement of SEAS “Association of Zoos and Aquariums” accreditation, and neither the Ocean Pavilion nor the other aquarium facilities contain sufficient space for this vital function, hence, continuously maintaining the ACC will be ongoing condition of SEAS accreditation. The ACC also provides a headquarters for SEAS’ ongoing conservation efforts, including microplastics pollution research, species recovery (breeding and rearing of endangered marine species like Zebra Sharks), Pinto Abalone breeding, and Sea Turtle rehabilitation.

The ACC is sited deliberately, and it took considerable effort and expense to find and retrofit the current location. Key criteria in siting the facility was that it must be no more than 20 minutes driving distance from the Aquarium to allow for safe and reliable animal transport, and that it must be large enough to accommodate specialized equipment and tanks. After finding the current location in July 2020, SEAS spent months and has invested 8+ million dollars to retrofit the facility. Changes included: structural reinforcement, installation of a floor drain system and grinding, patching, and

repairing the warehouse floor; installation of new LED lighting and upgrading power service; additional insulation; installation of a specialized HVAC system to manage humidity and temperature; development of extensive IT infrastructure for animal and HVAC monitoring and alerts; building-wide security; and conversion of existing office space to meet program needs. The work also included installation of sea water reservoirs, circulation, and life support systems to extensive tanks and aquariums, including: an exterior raw seawater reservoir (17,400 gallons); interior treated seawater reservoir (16,000 gallons); twelve fiberglass holding tubs (1,000 to 31,000 gallons); nine dual-tank skids; a 40-tank Pinto Abalone rearing system; filtered freshwater system; and seawater, air, and effluent system piping. This facility and its specialized equipment cannot be easily relocated like a typical commercial use.

II. EIS Comments

A. Preferred Alternative

Based on the information in the DEIS, the ACC may be impacted by all of the alternatives identified for the CID Segment. The facility is on property at the northwest corner of 6th Avenue South and South Massachusetts Street and immediately abuts the existing rail tracks on its west side.

Alternative CID-1a likely has the least potential for permanent impacts on the ACC as it appears to only involve new construction of a retained cut in the area of the tracks adjacent to the facility. The other alternatives—CID-1b, 2a, and 2b—all appear to show tunnel construction directly under or across the ACC location and could displace the facility completely. It is not clear that displacement of or impacts to our specialized use has been considered at all in the DEIS—such impacts should be studied and disclosed in the FEIS as described further below.

CID Alternative 1a should be considered for the preferred alignment for the portion of the CID Segment adjacent to the ACC as it has the least potential for impact. Or, if a different alternative is selected, Sound Transit should consider alterations to that alternative or additional alternatives that would avoid impacts on the ACC like changes in the tunnel alignment and entrance locations. Impacts to the ACC should be fully considered and additional mitigation measures identified in the FEIS to ensure displacement does not undermine and jeopardize the more than 160+-million-dollar public investment in the Ocean Pavilion, the Aquarium's accreditation, or the Aquarium's other important ongoing operations and education, conservation, and research programs.

B. Information Gaps

Review of the DEIS also reveals information gaps that require further study to fulfill SEPA's requirement for adequate disclosure of significant adverse environmental impacts in the EIS. These include:

- **Noise and Vibration:** The analysis of noise and vibration impacts (both from construction and operation) does not consider impacts on the sensitive marine species at the ACC. The EIS concludes that there are no noise- and vibration-sensitive land uses near the open portions of the CID Segment, and there will be no impacts from the below-grade portions. This is improper. Marine species and laboratory equipment at the ACC are sensitive to noise and vibration and should be considered a Category 1 use for evaluation purposes. Noise

travels 5x faster in water than in air and does not dissipate at the same rate. Noise is also measured differently underwater; 25.5+36 dB must be added to an airborne dB to compare it to an underwater dB. Sudden noises can have an even larger impact than ambient noise increases on marine species. It is well-documented that sudden noise increases greater than 20 dB can cause withdrawal in sharks, a key Coral Triangle species that will be present at the ACC. Additional study of the potential for noise and vibration impacts to the ACC as a sensitive use should be completed, and additional mitigation measures for noise and vibration impacts to the ACC should be identified for all alternatives in the FEIS.

- **Traffic:** The EIS discloses partial and full street closures in the vicinity of the ACC and across downtown Seattle for WSBLE construction. Many of the street closures will last several years. Street closures include permanent closure of portions of South Massachusetts Street and temporary closure of 6th Avenue South adjacent to the ACC for extended periods, depending on the alternative selected. These closures will undoubtedly have both direct and indirect impacts on ACC operations. They could directly impact accessibility to the ACC. They could also indirectly lengthen travel times between the ACC and the Aquarium because of significant additional traffic congestion across downtown. For pre-planned animal moves, the impact of increased travel times on ACC operations could be somewhat mitigated by scheduling transfers at times outside of peak hours. However, the ACC also provides emergency animal health services for the Aquarium, and emergency situations cannot be planned for. In emergency situations, lengthened travel times between the Aquarium and the ACC may increase negative outcomes for our marine species. For the ACC to function effectively, it is vital that reliable vehicle access between the ACC and the Aquarium is maintained. The FEIS should more fully consider the cumulative impacts of street closures through downtown and describe the traffic impacts of simultaneous street closures from construction. It should quantify the additional delay on typical travel patterns that will be experienced because of the construction street closures. It should also identify additional mitigation measures to ensure 24/7 access to the ACC, and to ensure reliable travel between the ACC and the Aquarium. The ACC is less than two miles from the Aquarium. It is reasonable to expect that a vehicle would be able to make this trip in less than 20 minutes. The FEIS analysis should confirm this.
- **Electromagnetic Fields:** It is well documented that a magnetic sense is present for many marine mammals, sea turtles, and many groups of fish, including sharks, and electromagnetic sensitivity is present in sharks. The DEIS discloses electromagnetic field impacts on laboratory equipment in the Downtown and South Interbay segments, but it does not identify or disclose impacts on marine species at the ACC. This is a data gap that should be filled. The Aquarium acknowledges that the ACC is in an urban environment already in proximity to rail tracks, but the FEIS should study how additional electromagnetic currents from the potential CID alternatives could impact marine species at the ACC and identify mitigation measures.

- **Ecosystems:** The analysis states that it considered ecosystem impacts in the study area within 200 feet of the project limits and impacts on sensitive federal or state-listed species within 0.25 miles; however, the analysis does not appear to consider impacts on sensitive and endangered species at the ACC. The analysis concludes that no listed marine species would be present along the Ballard Link Extension as all alternatives remain more than 200 feet from marine waters. This is not an accurate conclusion. The ACC will care for and house listed marine species like Pinto Abalone, Zebra Sharks, and others. The FEIS should consider specifically the impacts on these listed species from the potential displacement of the ACC that would halt their care and recovery efforts, and result in “takes” under the Washington or federal Endangered Species Act as a result of WSBLE construction.
- **Community Cohesion:** The analysis recognizes that long-term neighborhood impacts could occur in the Chinatown-International District neighborhood as a result of displacement from construction of this segment. This neighborhood has a unique history and import to our Asian-American and broader community. As part of our commitment to honoring place, we firmly believe further study should be completed in partnership with the CID community to identify additional alternatives for the CID Segment and fully describe the types of long-term neighborhood impacts that could occur based on the displacement of specific small businesses, residences, and community features. The FEIS should also identify additional specific mitigation measures for neighborhood impacts informed by community input.

III. Conclusion

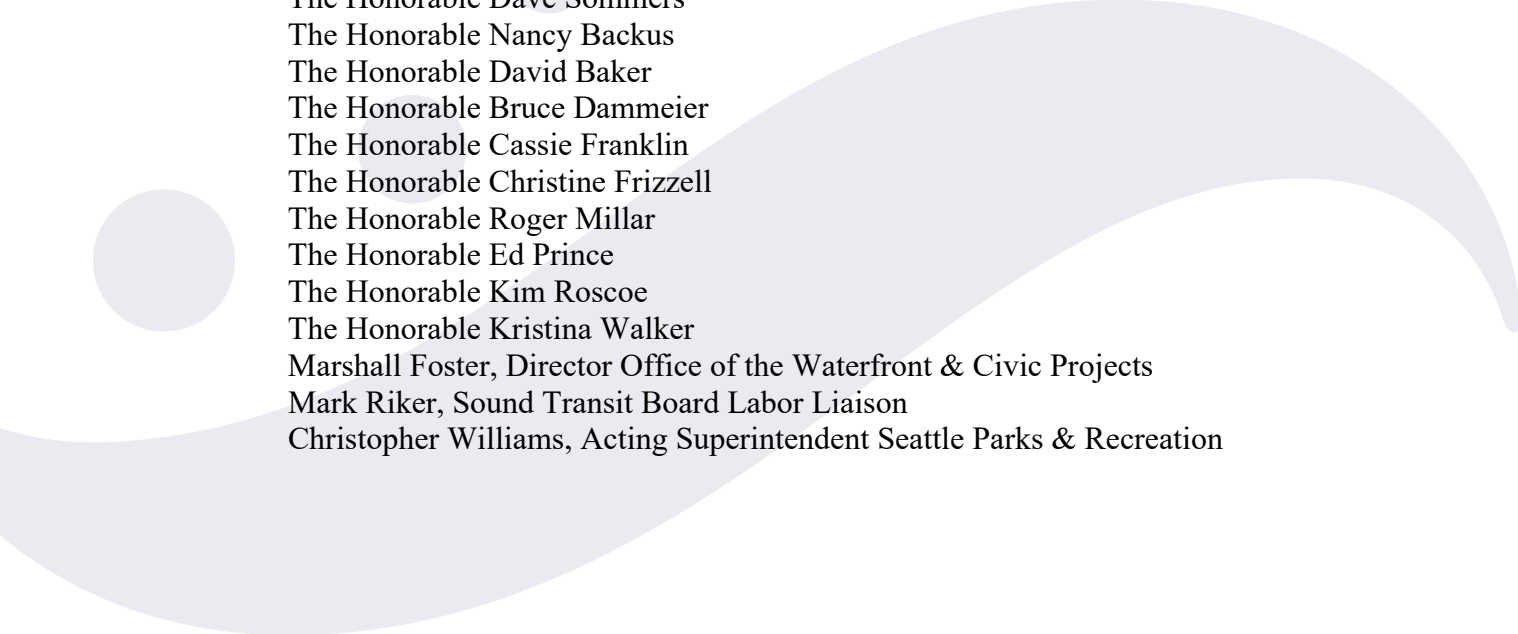
Thank you for this opportunity to comment. Please do not hesitate to reach out to me if you have any questions or would like to discuss our comments further. I would be happy to connect you with any of our professional animal care staff who complete the important work of caring for our marine species at the ACC.

We cannot emphasize strongly enough that the impacts we’ve identified to the ACC are not understated or easily mitigated. Displacement of the ACC would fundamentally threaten the success of the Ocean Pavilion and the Aquarium’s operations and programs, and we hope you will take these comments into consideration in crafting the further environmental review process for the CID Segment and the ultimate decision on WSBLE alignment. SEAS has invested millions of dollars in the ACC. Displacement would not just void this investment, it would jeopardize SEAS ability to carry out its core mission. As we said earlier, we strongly support expanded transit access, however, impacts must be fully disclosed, and alternatives and mitigation measures identified to properly inform decision-makers. The DEIS falls short of this mark.

Thank you,



Robert W. Davidson
President & CEO
Seattle Aquarium



cc: The Honorable Maria Cantwell
The Honorable Patty Murray
The Honorable Pramila Jayapal
The Honorable Dow Constantine
The Honorable Claudia Balducci
The Honorable Joe McDermott
The Honorable Dave Upthegrove
The Honorable Peter Von Reichbauer
The Honorable Bruce Harrell
The Honorable Debora Juarez
The Honorable Lisa Herbold
The Honorable Andrew J. Lewis
The Honorable Tammy J. Morales
The Honorable Teresa Mosqueda
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The Honorable Dan Strauss
The Honorable Kent Keel
The Honorable Dave Sommers
The Honorable Nancy Backus
The Honorable David Baker
The Honorable Bruce Dammeier
The Honorable Cassie Franklin
The Honorable Christine Frizzell
The Honorable Roger Millar
The Honorable Ed Prince
The Honorable Kim Roscoe
The Honorable Kristina Walker
Marshall Foster, Director Office of the Waterfront & Civic Projects
Mark Riker, Sound Transit Board Labor Liaison
Christopher Williams, Acting Superintendent Seattle Parks & Recreation



SEATTLE
ASIAN AMERICAN
FILM FESTIVAL

April 28, 2022

RE: Comments on the DEIS for West Seattle and Ballard Link Extensions Project
Via Electronic Mail

WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 S. Jackson St.
Seattle, WA 98104

Dear Ms. Swift:

We, the staff at the Seattle Asian American Film Festival (SAAFF), would like to share our concerns with Sound Transit (ST) on the West Seattle and Ballard Link Extensions Project (WSBLE) proposals for Chinatown-International District (C-ID).

ABOUT THE SEATTLE ASIAN AMERICAN FILM FESTIVAL

The Seattle Asian American Film Festival is a volunteer-run organization with the mission of sharing and uplifting Asian American histories, voices, and perspectives through independent film and arts. We have shared hundreds of films and performances from filmmakers, artists, and talents with the Greater Seattle Area.

The very first iteration of our festival started in 1985, founded by KingStreet Media, a community-based Asian American media production and advocacy group based in C-ID. Since our reboot in 2013, SAAFF has hosted free film screenings nearly every summer in Hing Hay Park, activating the space and providing entertainment for families, elders, and visitors alike. We have many current and past staff members who are current/former C-ID residents, employees, and community members. We continue to work with C-ID organizations to program and promote events and opportunities to engage with the wider Asian American arts and organizing community.

SOUND TRANSIT CAN DO BETTER

Chinatown-International District was born out of racial violence. From anti-Chinese violence to the 1928 2nd Ave South Extension, Japanese American incarceration and the 1960s construction of I-5, these are a few of the many examples of what the neighborhood now known as C-ID was born out of. It is what generations of the community has suffered through and continues to bear the consequences of.

As C-ID community members and public transportation riders who care about the preservation of a historic neighborhood, we echo the same concerns as brought up by the executive team of the Wing Luke Museum (WLM) about the DEIS for WSBLE proposals in Chinatown-International District.

(https://www.wingluke.org/wp-content/uploads/2022/04/Wing-Luke-Museum_response-to-WSBLE-DEIS_2022-04-26.pdf)

The DEIS does not provide thorough enough information, such as operational noise analysis, visual quality analysis, including stadium events in transportation analysis, lackluster environmental justice analysis, and lack of clarity on resources for businesses and community. In addition, C-ID's tumultuous history with transit building, urban planning, and public policy are scars still seen and felt today, and this is not fully reflected in the DEIS.

It is disappointing to see that a massive transit project would suffer this kind of oversight for a culturally and historically significant neighborhood. We do not want history to repeat itself and implore Sound Transit to do your due diligence in understanding the intricacies and historical context of policies and actions that created the intrinsically unique yet, as WLM Executive team aptly describes, "already fragile, strained neighborhood."

Every part of the C-ID is integral to the community's ecosystem and cohesion. We cannot lose any part of it yet again.

AT WHAT COST?

The proposals for 5th Ave Alignments (CID2-a, CID2-a diagonal, CID2-b) should not have been on the table in the first place. Those 3 plans may be faster and cheaper to build than the 4th Ave Alignments (CID1-a, CID1-b), but at what cost? Chinatown-International District would yet again lose a part of the neighborhood to transit that doesn't fully take communities of color into consideration. The WSBLE proposals for C-ID are clear examples of racism in transit planning.

The 4th Ave Alignments, though less disruptive, would still be only one street over. Where are alternatives that don't involve displacement of businesses and disruptions in our neighborhood? How much research was done in alternative plans and why was 5th Ave chosen among other options, despite the amount of impact it would have?

Lost and impacted businesses won't be the only ones affected by construction and, once finished, an even busier transit station. Hundreds of residents, workers, and business owners would suffer years of construction, noise and vibration impact, to increased traffic and less parking spaces. How will you work to restore lost revenue for impacted small businesses in the neighborhood? The 5th Ave Alignments would make it difficult for neighborhood businesses to thrive. It may drive away customers and visitors alike, especially for the businesses closest to the construction area. In addition to compensating and providing resources for displaced businesses, Sound Transit must find a way to provide compensation and resources for impacted businesses as well. It is doubly hard for immigrant, people of color, and non-English speaking business owners who make up a large part of C-ID's landscape. Livelihoods would be at stake and we want to emphasize that ST should provide sufficient resources, compensation, and assistance for *all* small businesses impacted by construction.

On 5th Ave not only is there an apartment building (The Publix) that would have a front-row seat to construction, but along every street going east along King Street up to 8th Ave, there are many mixed-use buildings with small businesses, apartments, and senior living centers. The neighborhood also includes low-income housing, low-income workers, multi-generational families, unhoused neighbors, people with disabilities, and people with vulnerable health. Were these community members not considered when plans were drawn up?

Please take the following into consideration: C-ID is a neighborhood with already poor air quality due to I-5 driving through its heart, an act that displaced many in the community when it was built in the 1960s, and continues to affect the health and life-spans of residents around it. C-ID also is one of the lowest tree canopy districts in Seattle in addition to no green spaces. Vulnerable and marginalized communities who have called C-ID their home for 150 years, have suffered and continue to suffer due to racist and inconsiderate transit and urban planning.

Having an expanded transportation hub built in the neighborhood, whether it is 4th Ave Alignments or 5th Ave Alignments, would affect the health of countless people for generations to come. And that is only after suffering through years of construction disrupting their daily lives.

COMMUNITY OUTREACH

Where has the community outreach been for C-ID? Why hasn't Sound Transit implemented a foot to pavement campaign to make a concerted effort to visit businesses and talk to residents and local workers in C-ID? We are several years deep into the WSBLE project and have yet to see Sound Transit try to meaningfully engage with the broader C-ID community, outside of a select number of neighborhood committees whose focus keeps them tuned-in to ST updates. What about all the taxpayers in the zip code who would be affected by this project? How many are there who may not even know this proposal existed and that construction could land right next to their home?

Flyers and posters are simply not enough. Even if a poster found somewhere in C-ID may have Chinese, Vietnamese, or another language, some residents may lack the resources to share their opinions, ask questions, or may even feel like they won't be heard so they don't even try. A

large part of the community in C-ID are immigrants whose first languages are not English – some may not even know much English at all. Where are the multilingual Sound Transit employees who can have these conversations with elders, business owners, and families? What kind of community engagement plans do you have to further understand the needs, questions, and concerns of the C-ID community?

If Sound Transit had done outreach with more thought and care, perhaps you would not have put so much effort, time, and money into the proposals we are speaking up against.

We want to see ST working with community partners who know C-ID and the community, who have a wealth of resources and experience with planning, and can help build connections and bring more invested interest in providing feedback on the future of public transportation. If you are not taking steps to earnestly listen and build relationships with C-ID stakeholders to make modifications to the proposals, it would mean irreparable damage to our neighborhood.

Sound Transit should be the one putting in the elbow grease to build connections, leaving the community to work so hard to demand better – and we are demanding for so much better. The C-ID community and stakeholders do care about public transportation to make for a more accessible region for future generations, but the process should not involve an overwhelmingly negative impact on a vulnerable neighborhood and community, or leave us feeling disposable and unheard.

CONCLUSION

We at SAAFF are supporters of public transportation advancement and will continue to engage with future updates, but we hope Sound Transit hears the Chinatown-International District community's outcry. It is disappointing to see a severe lack of consideration for C-ID's 150 year legacy and community in these proposals – an act that mirrors past policies and actions of systemic racism that continue to drastically affect the neighborhood and those in it. The DEIS does not provide sufficient information and the 4th Ave and 5th Ave proposals should not be the only options on the table. The 5th Ave Alignments should be off the table completely.

The expansion of public transportation will benefit future generations to come, but it shouldn't involve hurting already vulnerable communities like C-ID. Understanding the heavy but vibrant, interconnected histories of our multi-ethnic and multi-generational neighborhood should be a key part of your process, which includes engaging with institutions and organizations in the neighborhood that are eager to share their knowledge, resources, and input.

We hope Sound Transit will listen to the C-ID community and do the work to meaningfully engage with C-ID stakeholders and do further exploration of other options and refinements as you work towards modifying proposal plans.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ellison' in a cursive, flowing style.

Ellison Shieh
Festival Co-Director

A handwritten signature in black ink, appearing to read 'Victoria' in a cursive, flowing style.

Victoria Ju
Festival Co-Director

April 27, 2022

WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 South Jackson Street
Seattle, Washington 98104

Re: West Seattle Ballard Link Extension Draft Environmental Impact Statement ("DEIS")

Dear Ms. Swift:

We represent the Seattle Center Foundation and the following resident organizations at Seattle Center: KEXP, Seattle Repertory Theatre, The Vera Project, Cornish College of the Arts, Classical KING FM 98.1, MoPOP, Seattle Children's Theater, PNW Ballet, and Seattle Opera (collectively the "Clients"). Our concerns and comments are focused on the Downtown Segment and the Seattle Center Station in particular. The preferred alternative creates many significant adverse environmental impacts to our Clients, particularly KEXP and The Vera Project which, along with the Seattle International Film Festival, are located in the Northwest Rooms ("NW Rooms" and KEXP, The Vera Project, and Seattle International film Festival ("SIFF") are referred to collectively the "NWR Occupants") and the Seattle Repertory Theatre ("Seattle Rep") and Cornish College of the Arts ("Cornish") which are also adjacent to the proposed Seattle Center Station for the Preferred alternative. All of the Clients are tenants of the City of Seattle ("City").

We and the Clients have reviewed the DEIS which was issued recently by Sound Transit as lead agency under the State Environmental Policy Act ("SEPA") and the United States Department of Transportation Federal Transit Administration as lead agency under the National Environmental Policy Act ("NEPA"). Although the DEIS recognizes there will be some significant impacts to the Clients, the document does not recognize all of the significant impacts nor does it capture accurately the full effect the Seattle Center Station in the preferred location (the "Project") will have on the Clients. It appears that the construction impacts will be so severe that the NWR Occupants, Seattle Rep, and Cornish will be unable to operate in the ordinary course of business for a significant period of time. While we recognize and appreciate that Sound Transit has been working with the Clients on refinements to the Seattle Center Station, we do not address those refinements in this letter as they are not in the DEIS and have not been evaluated other than to establish that they might be feasible for Sound Transit to construct.

Initially, it may be helpful to provide you with some context regarding the Clients and their operations in the at Seattle Center:

KEXP

Besides its radio broadcasts, KEXP hosts live music and related events on site each year. 2017 was the last complete year of programming before embarking on arena mitigation construction work in late 2018. That year, there were 377 such events including 136 live music sessions that were free and open to the public. Among the many other music related events open to the public were the KEXP Record Fair, the Songbook author reading series, Mastering the Hustle workshops for artists, City of Music Career Day, monthly “Flights and Rights” partnership with ACLU, as well as civic related events such as a Mayoral Forum on Arts and the Environment, a naturalization ceremony in partnership with ARTvocacy, an ArtsFund event “Setting the Table for More Diverse Nonprofit Boards,” and more. These live sessions and events are the engine that drives many critical aspects of KEXP’s mission and business, including donations and business support. Virtually all live performances are recorded for future use by KEXP, including on YouTube, which serves KEXP’s largest audience with 2.7 million subscribers and over 1 billion views. The performances are also broadcast on KEXP’s 24-hour FM signal, broadcast stream and 14-day archive, all of which are available to the public at no cost. The in-person traffic created by the live sessions and events not only builds momentum for KEXP, but also sustains the Caffe Vita coffee shop and Light in the Attic Record Shop, KEXP’s subtenants located in the Gathering Space. If KEXP is required, on account of the Project impacts, to move or curtail these public events, then all three entities will suffer.

Seattle Children’s Theater

Seattle Children’s Theatre (SCT) offers theatre programs that center on children and youth, with great attention to the people in their lives – their families, their teachers, and their communities. Since 1975, SCT has produced 274 plays, including 117 world premiere productions, with many of these works going on to other stages. In 2019-20, Theatre for Young Audiences/USA ranked SCT #1 in the country as an influencer in developing TYA titles. SCT has served nearly six million people through our Mainstage, Drama School, and school access programs. These programs create a dynamic entry point to the arts for many children in the region, inspiring their imaginations, empowering their creativity, and instilling an appreciation for a diversity of stories and people. Providing access for ALL young people is of primary importance to SCT. We strive to be inclusive, diverse, and equitable, and to remove any and all barriers to children’s access. A school field trip to SCT is often the very first live arts experience for many of our young people. We hold proud the role we play in opening a world of imagination and possibility to the youth of our region.

Seattle Opera

Since 1963, Seattle Opera is committed to serving the people of the Pacific Northwest through music, storytelling, and programs for people of all ages, income levels and demographics. Annually, more than 80,000 attend the company’s performances and another 150,000 are served through school performances, radio broadcasts, and more. We bring opera to life in many ways, offering artistic

excellence through national and international collaborations. Seattle Opera strives to create an environment where artists, staff, behind-the-scenes workers, and members of the community feel a strong connection to the company and to the art of opera. Seattle Opera constructed and in December 2018 opened the \$62M Opera Center headquarters adjacent to the McCall Hall performance venue. The 105,000 square foot building hosts the administrative offices, rehearsal halls, stage crew workshops, hair/make-up/wardrobe work areas, community program spaces, and a glass-box performance area. The building also hosts the Classical 98.1 KING-FM radio station headquarters. Pre-pandemic, Seattle Opera had an operating budget of \$25M and annually issued 700 Form W2s to full and part-time employees, the majority of whom are represented by six collective bargaining units. Currently, Seattle Opera has 7,000 subscribers, approximately two-thirds of which are over the age of 50, and 90% of whom request parking with their annual subscriptions.

Classical KING FM 98.1

Classical KING FM 98.1 is the primary institution developing new audiences for classical music and the arts in Seattle, Bellevue, and the Puget Sound Region. In addition to creating programming that offers everyone in the region an opportunity to make classical music and the arts a part of daily life, Classical KING FM partners with arts and culture organizations of all size and scope in the region. We offer broadcast performances of local concerts as well as an opportunity for local musicians to perform on our signature Friday evening program *Northwest Focus LIVE*. Teachers and parents use Classical KING FM to introduce children to classical music, and the station has additional programs to supplement this important work. Through our popular Instrument Petting Zoos, the annual Young Artist Awards competition, and other partnerships, KING FM provides support for arts education in the region. More than 15,000 members are supporters of Classical KING FM, helping to pave the way for a bright future for the station, and bringing the richness of classical music to diverse audiences in the rapidly growing Puget Sound Region.

SIFF

For 48 years, SIFF has been creating experiences that bring people together to discover extraordinary films from around the world. In 2011, SIFF Film Center moved its main offices and classroom to Seattle Center and built a 90-seat jewel box, state-of-the-art movie theater. The Film Center at Seattle Center is one of the few independent art-house cinemas remaining in Seattle where communities can watch independent films together on the big screen, and get a direct connection to the movie's director, screenwriter, and actors. SIFF supports underrepresented communities such as showcasing Indigenous films by and about Native Americans giving a voice to storytelling from around the world through the universal themes of the environment, social justice, and the human experience. There is no other film organization in the Pacific Northwest with the depth and breadth of SIFF. SIFF also owns and operates the three-screen SIFF Uptown Cinema located just off of the Seattle Center grounds at the corner of Republican and Queen Anne Avenue.

Every year at SIFF (pre-Covid)

- Seattle International Film Festival showed (2019) over 400 films, from over 80 countries, and with over 45% women filmmakers
- Engaged over 8500 students in free education programs with filmmakers
- Distributed over 17,000 free tickets to underserved communities

Cornish College of the Arts

Founded in 1914, Cornish College of the Arts is a nationally recognized leader in the study of visual and performing arts offering undergraduate degrees in Art, Dance, Design, Film, Interior Architecture, Music, Performance Production, and Theater. The Cornish Playhouse serves as the nerve center for a wide range of internal curricular and external community base activities related to the college's mission. These facilities house classroom, office, studio, rehearsal, public meeting/conference room, gallery, and scene shop spaces. The Cornish Playhouse is used not only by the college but shared with other non-profit organizations and the general public as well. Each year 35-40 local non-profit organizations rely on the Playhouse to produce their events and shows. These are often companies that do not own their own space and, in some cases, have already been recently displaced due to other development in the city. Without the Playhouse companies like Whim W'Him Dance Company, Seattle Musical Theater, Show Tunes, and Theater Anonymous, just to note a few, who would have a nearly impossible task of finding equivalent space to produce. Even today with the venues in full operation, we have to turn down dozens of productions due to the limited space and time available. In addition to the shows, we provide space for groups to gather for meetings, tests, fundraisers, exhibitions and many more activities that support the creative economy. In the average year we see over 13,000 people engage at these facilities, not including Folklife and Bumbershoot which average an additional 10,000 audience members during their time in the Playhouse facilities. If construction activities unfold as currently proposed, Cornish is deeply concerned with its ability to continue carrying out any or all of the activities as previously described and the harm such an outcome may cause. The College currently enrolls 500 undergraduates and annually serves more than 300 youth and adult learners through extension programming. 88% of the College's undergraduates are from the State of Washington, and the majority of Cornish's alumni remain in the Puget Sound region after graduation, fueling the region's creative economy.

The Vera Project

The Vera Project is an all-ages nonprofit space dedicated to fostering personal and community transformation through collaborative, youth-driven engagement in music and art. A music venue, screen print shop, recording studio, art gallery, educational institution, and safe space for radical self-expression, VERA is a home to Seattle's creative community. As of 2022, we annually offer access and opportunity in the arts to over 35,000 young people, place youth audio engineers and production workers at every major venue and festival in King County, disburse tens of thousands of dollars in scholarships, train the next generation of youth community leaders, and feature more young, BIPOC artists on our stages than anywhere else in town.

Seattle Rep

Founded in 1963 by local citizens as an investment in a thriving city, Seattle Repertory Theatre was the very first performing arts institution to be located at Seattle Center. Nearly 60 years later, Seattle Rep anchors the NW corner of the campus in a two-theater facility that it has occupied continuously since 1983. Seattle Rep's mission is to collaborate with extraordinary artists to create productions and programs that reflect and elevate the diverse cultures, perspectives, and life experiences of the Pacific Northwest. Guided by the values of artistic vitality, sustainability, and generous and inclusive practices, Seattle Rep's vision is a world where theater sits at the heart of public life, positioning the work on its stages as a vital source for collective imagination, meaningful conversation, and healthy social debate. Seattle Rep reaches 150,000 audience members annually (pre-COVID) through its mainstage season, new play activities, arts engagement work, and Public Works programming. Each production is built onsite at Seattle Rep by an internal production team of skilled artisans and craftspeople that also supports other production needs throughout the city. Seattle Rep's resources and reputation attract theater professionals from across the country and world who are working at the top of their craft, earning Seattle Rep the 1990 Tony Award for Outstanding Regional Theater (awarded once in a theater's lifetime), and positioning Seattle Rep as a home for local artists and a national incubator and destination for great art. Over the course each season, Seattle Rep employs more than 400 individuals, including upwards of 50 carpenters, seamstresses, and painters.

PNW Ballet

Founded in 1972, Pacific Northwest Ballet (PNB) is one of the largest arts employers in the Puget Sound region and one of the top professional ballet training institutions in the country. PNB serves over 200,000 community members each year through mainstage performances, PNB School classes and productions, partnerships with Bellevue and Seattle Public Schools, dance education, community education programming, and tours. PNB is a key contributor to the artistic, economic, social, and cultural vibrancy of Puget Sound and beyond, driven by our guiding principle to inspire, engage, and educate through dance. While PNB distinguishes itself in the depth and breadth of its educational efforts, reinforcing its role as a community asset, the entire organization aspires to reflect and engage citizens in our region's diverse communities and ensure that all paths in to PNB are welcoming and inclusive.

MoPOP

Since opening in 2000, the Museum of Pop Culture has used the universal appeal of our content — be it anything from music, film, and television, to games, sports, and tattoos — to build connections and spark creativity. Having produced more than 100 exhibitions, reached more than 1 million young people through our educational programming, and stewarded more than 100,000 artifacts in our collection, we harness pop culture as a way to make creative expression a life changing force for our visitors. As a nonprofit institution in Seattle, we proudly showcase the Pacific Northwest's pop culture history and empower young people in our community — especially those with limited access to creative opportunities — to see themselves as tomorrow's visionaries and risk-takers. We are also an international destination as a gateway to American cultural heritage having reached more than 11

million people across six continents. But no matter where you're from, MoPOP offers experiences that inspire and connect.

Our comments on the DEIS are as follows:

A. Chapter 2 ALTERNATIVES CONSIDERED

2.1.2.2.3 Downtown Segment

SEPA and NEPA do not require that all reasonable alternatives be studied, but a reasonable number and range must be studied. WAC 197-11-440(5)(b)(i), (c)(vi). The DEIS provides only two alternatives for the Seattle Center Station and they are only a block apart. This is an inadequate number of alternatives given that both Seattle Center Station alternatives have significant impacts. At least one or two more alternatives including an alternative that serves Seattle center from its south side, should be included in the DEIS.

B. 2.5.1 Development of DEIS Alternatives

p. 2-79 Evaluation Criteria used for evaluating alternatives do not include consideration of sensitive receivers which should be a criterion given the large number of sensitive receptors on the north side of Seattle Center.

comment: Another important failure of the DEIS is to provide adequate information regarding Alternative DT-2. There is inadequate discussion and analysis of the impacts of this alternative, particularly regarding access impacts from street closures and noise and vibration impacts.

C. 2.6.2 Typical Construction Activities

p. 2-85 The DEIS notes that dewatering could be needed throughout the project corridor. However, there is no analysis of what impacts this might have on structures in the vicinity of the dewatering.

comment: The NW Rooms experienced cracked floors on account of the dewatering that occurred in conjunction with the Arena Renovation in 2019. Further analysis of dewatering impacts to the NW Rooms, Seattle Rep, and Cornish should be conducted.

D. Chapter 3 TRANSPORTATION

3.19.4.1 Arterial and Local Street Operations

Table 3-30 summarizes the major construction closures for the Downtown Segment. There are significant closures noted for the Seattle Center Station construction:

1. Republican Street Queen Anne Avenue North to Warren Avenue North: Full closure, 5 years (includes 15- month full closure of intersection at 1st Avenue North);
2. Mercer Street/West Mercer Street Warren Avenue North to 1st Avenue West: Partial closure, 3.5 years; and
3. Harrison Street for construction of the South Lake Union Station.

comment: These are significant impacts to the NWR Occupants, Seattle Rep, Cornish, and the organizations on the east side of the Seattle Center campus. Republican Street is a critical access point for the NW Rooms. Republican Street is used extensively by KEXP and The Vera Project for unloading and loading of equipment used by musicians who perform in their spaces. Collectively, these two organizations have approximately 600 such performances per year. Loss of this road for five years will have a significant adverse impact on their ability to fulfill important parts of their missions. Similarly, construction of the South Lake Union Station will have significant adverse impacts to the Clients on the east side of Seattle Center.

There will also be closures of August Wilson Way and portions of 2nd Avenue N. for five years or more as these streets will be used for construction and construction staging. These closures have a very significant adverse impact to Seattle Rep and Cornish as they use these streets for access and ADA parking.

Portions of 1st Avenue N. both north and south of Republican Street will also be closed for construction staging which will further exacerbate impacts to access and loading operations for the NWR Occupants. Republican and 1st Avenue N. is also where dedicated school bus parking is located so this closure will limit access to Seattle Center for groups of school children. The parenthetical reference to the closure of Seattle Republican and 1st Avenue N. intersection does not reflect the significant disruption to traffic and transit service needing to cross the construction zone.

The cumulative effect of these closures has not been adequately addressed, and the mitigation suggested for these impacts is totally insufficient. Sound Transit has not analyzed sufficiently temporary rerouting of traffic needed on account of street closures. The DEIS notes there are alternative access point to Seattle Center even though such alternatives will not provide the necessary access for the NWR Occupants, Seattle Rep, or Cornish. Although the closures are “temporary” that temporary period will last five or more years. Five years is a very long period for these non-profit arts and cultural organizations to be unable to fulfill their missions.

Besides the impacts to the Clients the DEIS does not detail viable detours that will be required for the street closures. Moreover, there is no analysis of the resulting levels of service at intersections that are part of the detour route. Traffic around Seattle Center can be problematic when all streets are

open, but when key links are closed for significant periods of time, traffic will be incredibly bad and the DEIS does nothing to evaluate this significant impact.

E. Chapter 4 AFFECTED ENVIRONMENT

4.3.3 Economics

p. 4.3.3-15 The DEIS notes with either alternative, road and lane closures around the Seattle Center Station would cause increased congestion in the area and could make access to Climate Pledge Arena and other Seattle Center venues and amenities more difficult. Project construction is not expected to notably affect attendance at larger events and performances, such as hockey games. However, there could be effects on event attendance and revenue for smaller non-profit events.

comment: The DEIS is inadequate for failing to quantify more precisely the significant financial impacts on smaller events and festivals. The impacts noted are more severe than suggested. The street closures and increased congestion will have a large and potentially devastating effect upon smaller venues and festivals that may cease to exist on account of the significant financial impact. The assumption that attendance at larger events such as hockey games will not be notably affected is also not substantiated. Large events may also suffer a decrease in attendance creating a significant adverse financial impact.

p. 4.3.3-15 The DEIS notes with Preferred Alternative DT-1, the closure of 2nd Avenue North and August Wilson Way during construction could affect access for maintenance and event vehicles in this area.

comment: The DEIS is inadequate for failing to note the closures of Republican Street, and 1st Avenue N. The cumulative effect of these street closures will have a significant impact on the Clients due to lack of access by delivery vehicles and vehicles bringing performers and their equipment to the NW Rooms, Seattle Rep, and Cornish.

p. 4.3.3-15 The DEIS notes that during construction, Sound Transit would coordinate with Seattle Center to minimize impacts to events on the campus and to permanent tenants. Impacts to freight mobility and access would be minimal and are described in Section 3.19.4.6, Freight and Mobility Access, in Chapter 3.

comment: The DEIS is inadequate for failing to recognize the significance of the impacts caused by the street closures required for Preferred Alternative DT-1. The construction impacts will have a large detrimental impact on attendance for organizations that have struggled with holding events and getting patrons to attend during the two plus years of COVID-19 pandemic.

p. 4.3.3-18 The DEIS notes that construction might cause adverse impacts on businesses due to reduced access or general construction activity. Mitigation measures presented in Chapter 3 and Section 4.3.1 and in Section 4.3.5, Visual and Aesthetics, and Section 4.3.7, Noise and Vibration, would

minimize these impacts. Construction management plans would be developed to address the needs of businesses and could include, but are not limited to, seven specified measures.

comment: The proposed mitigation measures are inadequate if vehicles, performing artists and their equipment, and viewers cannot get to the NW Rooms, Seattle Rep, and Cornish. The Clients are being surrounded by a significant construction zone for five or more years which will cause significant adverse economic impacts to the Clients.

4.3.4 Social Resources, Community Facilities, and Neighborhoods

p. 4.3.4-9 The DEIS notes that Seattle Center is a publicly owned recreational area, arts hub, and tourist destination, attracting over 12 million annual visitors. It is home to roughly 30 arts and cultural organizations and hosts thousands of events annually, including several of Seattle's largest signature community events and festivals. Seattle Center also functions as an emergency shelter when needed.

comment: The DEIS is inadequate for failing to account adequately for the significant adverse social impacts that will result from construction of a station on the Seattle Center Campus and the consequent inability of Seattle Center to accommodate the many events that depend on access to the venues and the inability of the venues to function due to construction impacts. The DEIS needs to recognize the arts, science, and sports "ecosystem" that exists at Seattle Center and how the loss of one or two organizations can cause the entire ecosystem to potentially fail.

p. 4.3.4-23 The DEIS notes that Cornish Playhouse, Seattle Repertory Theatre, The Vera Project, the Seattle International Film Festival Film Center, and KEXP radio station and recording studio facility may be affected by construction noise or vibration. Construction would also temporarily prevent access along 2nd Avenue North (now a pedestrian walkway within Seattle Center and used by Seattle Center maintenance and event vehicles) and impact access to Seattle Center in this location. Construction of Alternative DT-2 could also have vibration or ground borne noise impacts on the Seattle Repertory Theatre, Seattle Opera and KING FM, and McCaw Hall.

comment: The DEIS is inadequate for failing to consider the other significant impacts from closing Republican Street, August Wilson Way, and 1st Avenue N.; for providing inadequate disclosure of the noise and vibration impacts to the Clients; and for failing to disclose the potential loss of events and festivals for five or more years during construction, a significant adverse social impact. The impact on youth and education as field trips by school children become infeasible due to construction impacts is also ignored by the DEIS.

F. 4.3.6 Air Quality

4.3.6.6 Mitigation Measures

The DEIS states the air pollutant and greenhouse gas emissions analyses demonstrated that no substantial air quality impacts are expected to occur during the operation and construction of the project; therefore, no mitigation measures would be required.

This statement of no air quality impacts is a gross oversimplification of the facts. The NWR Occupants, Seattle Rep, and Cornish are essentially going to be existing in a construction site with station construction occurring on one side of them and construction staging occurring on Warren Avenue and 1st Avenue N. Exhaust emissions from construction equipment and dust from the excavation and construction will significantly impact air quality for these organizations. Increased dust is problematic for SIFF's projection equipment and screens, for the sound equipment at KEXP and the Vera Project, for Climate Pledge Arena's sophisticated audio-visual system, and for the throats and lungs of vocalists and dancers who perform for Seattle Opera, PNW Ballet, Seattle Rep, Cornish, and the other arts groups that utilize McCall Hall, Seattle Rep theaters, and Cornish Playhouse.

G. 4.3.7 Noise and Vibration

Table 4.3.7-2 of the DEIS notes that the Clients' buildings are Category 1 and Special Building Vibration-Sensitive Receivers.

comment: Noise and vibration impacts, particularly during construction, are significant adverse impacts to the Clients. These are all arts and cultural organizations that require a quiet environment and feature live performances with music, dance, theater, and recording sessions. They are all Category 1 and Special Building receivers. Exhibits A and B to this letter are noise and vibration analyses performed by Landau Associates for KEXP and Seattle Rep, respectively, detailing the significant noise/vibration impacts to be experienced by the NWR Occupants, Seattle Rep, and Cornish as a result of construction of the Preferred Alternative DT-1 and Alternative DT-2.

p. 4.3.7-12 The DEIS states the Preferred Alternative DT-1 would have vibration impacts at Seattle Center Category 1 special buildings including KEXP radio station, Seattle Repertory Theatre, the Seattle International Film Festival (SIFF) Film Center, and The Vera Project.

comment: The DEIS fails to include Cornish, MoPOP, and SIFF Uptown Theater among the impacted buildings. MoPOP's building is almost exclusively a steel structure, which has a high possibility of amplifying ground vibrations throughout and suffering negative impacts to the integrity of the building's features and artifacts.

4.3.7.4.1 Noise

p. 4.3.7-17 The DEIS notes the cut-and-cover construction of the Seattle Center Station for Preferred Alternative DT-1 would likely result in noise impacts at the NW 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 Seattle Center, including Seattle Rep and Cornish. Cut-and cover construction of the Seattle Center Station for Alternative DT-2 could result in noise impacts at the Seattle Repertory Theatre and Cornish Playhouse.

comment: Given the particularly significant noise impacts from the cut-and-cover method, the DEIS should evaluate alternative construction techniques such as mining to mitigate these significant adverse noise impacts.

4.3.7.4.2 Vibration

Table 4.3.7-9. Groundborne Noise and Vibration Impacts at Category 1 and Special Buildings During Construction – Ballard Link Extension Sensitive Receiver Alternatives with Impact
This table fails to include Pacific Northwest Ballet and SIFF Uptown Theater.

p. 4.3.7-21 The DEIS states, that where construction would be in close proximity to sensitive Category 1 performance or recording spaces, Sound Transit would work with the venue to coordinate periods of the loudest construction noise around their events. If the loudest work could not be scheduled around performances, Sound Transit would coordinate with the venue regarding modifications to their facility or temporary relocation.

comment: Given that the most affected Clients operate during the day and the evening, rescheduling is not likely to be feasible. This is especially so for Seattle Children's Theater and other Clients who provide events for school children during the day Monday through Friday. Similarly, modifying their facilities is not likely to be successful given the proximity of the noise and vibration, literally next to their building walls. Based on the Landau data and the FTA thresholds in the DEIS, tenants of the NW Rooms will face construction noise and vibration impacts that will likely make ordinary course operations impossible. For example, the ambient noise level in the KEXP Audio Edit 2 studio, as measured by Landau, is 24 dBA, which lines up with the applicable FTA threshold of 25 dBA for this space. The DEIS contemplates ground borne noise levels from tunneling at 42 dBA, a very perceptible 18-dBA increase over ambient levels. This increase would be perceived as approximately 3.5 times louder than ambient levels and the applicable FTA threshold. Similar impacts are anticipated from airborne noise generated from surface construction north of the building. Landau anticipates that ground borne noise impacts from Republican Street demolition and below-grade slurry wall demolition may be even higher, although the DEIS does not provide an estimate of these impacts. The DEIS statement that NW Rooms tenants "may" be required to relocate during construction should read "will likely be required to relocate."

Thus, due to the expected significant impacts from road closures and construction noise and vibration, temporary relocation will likely be required if the Preferred Alternative DT-1 Seattle Center Station location remains the preferred one. However, temporary relocation may not be possible for the Clients. These arts and cultural organizations have very specialized spaces and finding a replacement space in Seattle may not be possible. This could result in the permanent loss of those organizations.

H. 4.3.11 Geology and Soils

4.3.11.4.3 Groundwater

p. 4.3.11-8 As noted above, the DEIS notes that high groundwater levels make soils less stable during excavation and could also require dewatering during construction. Dewatering would likely be needed during construction of all Downtown Stations: Midtown, Westlake, Denny, South Lake Union, and Seattle Center. Saturated soils could flow when disturbed and increase the potential for volume loss and settlement.

comment: This was substantiated during the renovation of the Arena when KEXP experienced cracked floors. The DEIS states no mitigation is required. This is an inadequate response. The NW Rooms is a Seattle landmark, is over 60 years old, and deserves further analysis and protection from this potentially significant impact.

I. 4.3.16 Historic and Archeological Resources

Table 4.3.16-5. Effects to Built Environment Historic Properties: Downtown Segment
p. 4.3.16-30 This table states for Survey Number 1396a the International Commerce and Industry Building, which is another name for the NW Rooms, is Adversely Affected with the Preferred Alternative DT-1 due to Construction Disruption and Permanent Proximity Effects.

comment: The DEIS fails to note Cornish Playhouse is eligible for listing in the National Historic Register and the International Plaza in front to the NW Rooms is landmarked. Moreover, no mitigation is proposed for these significant adverse impacts. Evaluation of appropriate and feasible mitigation should be done.

p. 228, Appendix N.5 The DEIS notes that one historic property, the NW Rooms, would be adversely affected due to construction impacts. The north façade canopy would be removed during construction and rebuilt after construction. Overall, Preferred Alternative DT-1 would diminish the building's integrity of materials, setting, and feeling.

comment: The DEIS is inadequate for providing no explanation of the duration, nature or severity of the diminished integrity and not providing appropriate mitigation. As an important historical structure with a landmark designation, the buildings' integrity should not be diminished.

J. 4.3.17 Parks and Recreational Resources

p. 4.3.17-10 The DEIS notes Figure 4.3.17-6 shows the permanent impacts to this resource from Alternative DT-1, which would permanently impact Seattle Center for a Seattle Center Station entrance. The entrance would be on the east side of the Seattle Repertory Theatre and could remove the southern exit to the Seattle Repertory Theatre, as well as landscaping, which includes Donnelly Garden and Theater Commons. Views of the International Fountain and the Space Needle from the Seattle Repertory Theatre lobby could be blocked by the station entrance. The station would be primarily under

Republican Street but would extend to the south under the NW Rooms. Potential vibration impacts during operation are discussed in Section 4.3.7, Noise and Vibration. Alternative DT-2 could require a small area of underground easement on the northwest corner of the Seattle Repertory Theatre, but this would not affect the current use of this property.

comment: The DEIS is inadequate for failing to include removal of exceptional trees along August Wilson Way as a permanent impact, discuss the loss of approximately half an acre of open space, or mention the loss of space to accommodate the festivals at Seattle Center.

p. 4.3.17-19 The DEIS notes that Figure 4.3.17-6 shows the temporary construction impacts to this resource from the Downtown Segment alternatives. Preferred Alternative DT-1 would have temporary impacts to Seattle Center for construction of a Seattle Center Station entrance for up to 6 years, plus time for park restoration. Construction activities and staging would occur for this cut-and-cover station entrance in front of the Seattle Repertory Theatre, in a landscaped area known as Donnelly Garden and Theater Commons.

comment: The DEIS is inadequate for failing to provide any mitigation for these impacts. Alternative construction techniques such as mining to create the station should be evaluated.

p. 4.3.17-19 The DEIS notes that cut-and-cover construction would also occur on Republican Street, east of 1st Avenue North, to the north of the Northwest Rooms. The Northwest Rooms house KEXP radio station, the Vera Project, and the Seattle International Film Festival Film Center. These facilities in the NW Rooms are expected to continue to operate during construction, but temporary relocation may also be considered due to noise and vibration impacts.

comment: The DEIS is inadequate for failing to consider alternative construction techniques such as mining to construct the station. The suggestion that the residents of the NW Rooms could relocate is not sufficient mitigation as there may not be suitable space that can accommodate all the functions provided in the NW Rooms.

p. 4.3.17-19 The DEIS notes that access from Mercer Street to August Wilson Way on the east side of the Seattle Repertory Theatre (2nd Avenue North) would be closed during construction, but other access points exist to the west and east along Mercer Street. This would affect non-motorized access as well as campus maintenance and delivery access that uses this roadway. It is expected the theatre would maintain operation during construction, accessible from the main entrance off Mercer Street. Access to Seattle Center from the west along Republican Street and August Wilson Way would also be closed, but access farther south at the current Climate Pledge Arena and Thomas Street would be maintained. Seattle Center events and activities are expected to be able to continue during construction. Mature trees along August Wilson Way that are designated as Exceptional Trees by the City would be removed for construction. New landscaping would be provided after construction in coordination with the City of Seattle and Seattle Center. Public artwork at 2nd Avenue North and August Wilson Way would also be removed during construction but would be replaced following construction. Sound Transit would coordinate with Seattle Center during final design regarding construction phasing and timing for work

on and near the campus to minimize the construction impacts described above on events at the campus as well as permanent campus tenants.

comment: The DEIS is inadequate for providing inadequate mitigation for significant construction impacts. Loss of access is a significant operational impact for arts and cultural organizations who must move equipment and materials in and out of their performance spaces. Providing new landscaping is insufficient mitigation for the loss of exceptional trees. While coordination is appreciated, it is not mitigation for the significant impacts that cannot be avoided.

p. 4.3.17-20 The DEIS notes that Alternative DT-2 would require partial closure of Mercer Street for 3.5 years, between Warren Avenue North and 1st Avenue North, for construction of the Seattle Center Station, which would affect access to the north side of Seattle Center from Mercer Street. Closure of Mercer Street would affect traffic in this area and could make passenger and vehicle access to parking and event loading areas for Seattle Center more difficult. Sound Transit would coordinate with the Seattle Center for road closures during construction in order to minimize impacts on access.

comment: The DEIS is inadequate for noting the impacts but providing inadequate mitigation. Coordination will not ameliorate the impacts. In addition, the conceptual drawing of the Mercer station shown in Appendix J, Drawing B11-ASP700 shows cut-and-cover disrupting one additional block and two major intersections of Mercer (Mercer and Queen Anne, and Mercer and 1st Ave W) for a scissors cross-over. Which is accurate, the drawing, or the text of the DEIS?

K. 4.3.18 Section 4(f) Summary

Under Section 4(f) of the United States Transportation Act of 1966, 49 U.S.C. 303(c), the FTA cannot approve the “use” of a Section 4(f) resource unless it determines that:

- There is no feasible and prudent avoidance alternative to the use of land from the property; and the action includes all possible planning to minimize harm to the property resulting from such use; or
- The use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a de minimis impact on the property.

Table 4.3.18-4 In this table the DEIS states that the Preferred Alternative DT-1 will have *de minimis* impact on the Seattle Center and Alternative DT-2 will have no use/temporary occupancy of Seattle Center.

comment: There is certainly a feasible and prudent avoidance alternative and the action has not included all possible planning to minimize harm to the property, so the first finding cannot be made. The DEIS concludes, however, there is a *de minimis* impact in order to satisfy the second finding. This conclusion is clearly wrong. The impacts of constructing a light rail station in the location proposed for

Preferred Alternative DT-1 are significant. Open space will be lost permanently. Festival space will be lost permanently. The Donnelly Garde and Theater Commons as well as the beautiful mature exceptional trees along August Wilson Way will be lost permanently. Construction of the proposed station also may result in the loss of valuable arts and cultural organizations for five or more years, and they may or may not return. Such impacts are not *de minimis*. The Section 4(f) analysis is incorrect and inadequate.

L. Failure to Provide Timely Information to Decision Makers.

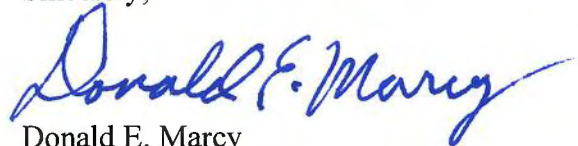
The DEIS is also inadequate because it fails to provide adequate information to decision makers by the time alignment and station locations are to be recommended by the Sound Transit Board in June of 2022. This inadequacy is all the more striking because the Sound Transit Board will be acting contrary to the requirements of WAC 197-11-070 by taking action that will limit the choice of reasonable alternatives prior to the issuance of the Final EIS.

Conclusion

The DEIS has not adequately analyzed the significant adverse environmental impacts associated with putting the Seattle Center Station at the location proposed in Preferred alternative DT-1. The significant impacts that will be created for the arts and cultural organizations in close proximity to the proposed station are enormous and cannot be mitigated without relocation of the organizations which creates other issues because adequate spaces do not exist in Seattle. Yet the organizations are put into a purgatory where they do not know whether the construction impacts can be mitigated or whether they need to relocate owing mostly to the construction methods not being finalized for a couple of years after the Sound Transit Board selects a proposed route. The DEIS does not discuss this very possible occurrence which in turn could lead to the permanent loss of valuable arts and cultural organizations. The only logical solution is to place the Seattle Center Station at a location other than that shown for Preferred Alternative DT-1.

Thank you for the opportunity to comment on the DEIS. If you have any questions regarding the foregoing comments, please contact the undersigned.

Sincerely,



Donald E. Marcy

dmarcy@cairncross.com

WSBLE Draft Environmental Impact Statement Comments

April 27, 2022

Page 16

cc: Jane Zalutsky, Executive Director Seattle Center Foundation
Brenda Barnes, CEO Classical KING FM 98.1
Raymond Tymas-Jones, President Cornish College of the Arts
Jeffrey Herrmann, Managing Director Seattle Repertory Theater
Clare Hausman, Sr. Director Strategic Initiatives, Seattle Children's Theater
Tom Mara, Executive Director KEXP
Christina Scheppelmann, General Director Seattle Opera
Ellen Walker, Executive Director Pacific Northwest Ballet
Jason Clackley, Program Manager The Vera Project
Alexis Lee, Executive Director MoPOP
David Cornfield, Board Member Seattle International Film Festival

EXHIBIT A



April 26, 2022

KEXP
472 1st Avenue N
Seattle, WA 98109

Attn: Jamie Alls

Transmitted via email to: jalls@kexp.org

**Re: Sound Transit WSBLE DEIS Review for KEXP
Seattle, Washington
Project No. 2055001.010**

Dear Jamie:

At the request of KEXP, Landau Associates, Inc. (Landau) prepared this 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).

Landau understands that KEXP has concerns regarding the proposed WSBLE project, specifically the preferred alternative Downtown-1 (DT-1) alignment that includes the Seattle Center Station. The station would be located immediately adjacent to the north of KEXP. Specific to this letter report, Landau understands that KEXP is concerned that construction and operation of DT-1 may result in noise and vibration impacts that could inhibit the use of some facilities within KEXP, such as for recording and live broadcasts.

KEXP has retained Landau noise and vibration expert consultants to review the DEIS and provide comment on the document's accuracy and completeness regarding assessment of noise and vibration impact. Further, Landau has been asked to provide additional supporting information as needed to inform this review.

This letter report summarizes Landau's assessment of the DEIS noise and vibration section and technical appendix as it relates to the potential for impact to KEXP, and includes a summary of our findings, a list of documents that were reviewed, and a detailed review of selected 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 key findings of this review include:

- City of Seattle (City) noise limits are not applied in the construction noise impact section when determining the potential for noise impacts and whether additional mitigation is warranted.
- There are missing receptors, including the Northwest Plaza, an outdoor use area between KEXP and the Climate Pledge Arena.
- The noise limit used for the KEXP Mastering Suite (now Production 1 and 2) is incorrect.
- The assessment of airborne noise impacts during construction is incomplete.
- An assessment of mitigation measures is required for expected airborne noise impacts at KEXP.
- Additional assessments of groundborne noise and vibration mitigation measures from construction are warranted to fully address impacts from preferred alternative DT-1.
- 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.
- Operational groundborne noise impacts warrant additional assessment of proposed high-resilience fasteners as mitigation for DT-1.

Landau's assessment focused on the DT-1 alignment identified in the WSBLE DEIS. Downtown-2 (DT-2) is located sufficiently far from KEXP facilities that impacts from construction and operation of DT-2 are unlikely at KEXP.

Review Documents

Landau reviewed the following documents in support of the assessment:

- Sound Transit and Federal Transit Administration's (FTA's) WSBLE DEIS, Chapter 4.2.7: Noise and Vibration (pp. 4.2.7-1 to 4.2.7-23) (USDOT et al. 2022a)
- Sound Transit and FTA's WSBLE DEIS, Appendix N.3: Noise and Vibration Technical Report (USDOT et al. 2022b)
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3A: Noise Measurement Data, Site Details, and Photographs
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3B: Vibration Measurement Site Photographs
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3C: Vibration Propagation Measurement Results
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3D: Maps of Noise Impact Assessment
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3E: Maps of Vibration Impact Assessment
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3F: Tables of Noise Predictions
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3G: Tables of Vibration Predictions

- Sound Transit and FTA’s WSBL DEIS, Attachment N.3H: Vibration Analysis of Category 1 Land Uses and Special Buildings
- FTA’s *Transit Noise and Vibration Impact Assessment Manual* (FTA Guidance Manual; FTA 2018)
- Sound Transit’s Design Criteria Manual, Revision 5, Amendment 11 (Sound Transit 2021).

Review Format

The following review of the DEIS has been organized by the chapters in DEIS Appendix N.3. The headings in the follow review therefore represent the chapter numbers in DEIS Appendix N.3.

Landau’s assessment focused on chapters in the WSBL DEIS that are relevant to the assessment of noise and vibration impacts at KEXP from DT-1. Headings that begin with “Chapter” refer to the corresponding chapter in WSBL DEIS Appendix N.3: Noise and Vibration Technical Report (USDOT et al. 2022b).

Chapter 3: Noise and Vibration Impact Criteria

The WSBL DEIS applies the noise and vibration impact criteria established for transit projects according to the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (FTA 2018). Sound Transit is a public transit authority that receives federal funding to support its projects. Landau finds the use of the FTA criteria to be appropriate for assessment of noise and vibration impacts from this project.

WSBL DEIS Appendix N.3, Chapter 3.1.3 identifies the City noise criteria, as established in Chapter 25.08 of the Seattle Municipal Code (SMC). 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 on whether construction or operation would meet FTA criteria. The assessment refers to the required compliance with City construction noise limits in WSBL DEIS Appendix N.3, Chapter 7, Construction Noise Mitigation (p. 7-16), but not when evaluating the potential for noise impacts throughout Seattle Center. Because City 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, including airborne noise from construction and groundborne noise and vibration from construction and operation, as received at KEXP. The Station Area Below Grade figure on p. 3 of the KEXP Sound Transit Construction Impact, April 26, 2022 presentation (KEXP Presentation; Attachment 1) provides an area map that shows the location of KEXP relative to the location of DT-1, including the rail alignment, station platform, and construction area extents, as well as nearby Seattle Center resident organizations and facilities.

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 compared to 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 in WSBLE DEIS Appendix N.3 are generally correct for most resident organizations within the Seattle Center. However, a required adjustment and an omission were noted for KEXP, as summarized below.

Noise and Vibration Limits – Adjustments

Landau notes that adjustments to the operational (and construction) groundborne noise and vibration limits at the Mastering Suite within KEXP are warranted following measurements by Landau staff and review of the noise- and vibration-sensitive nature of this space. That is, because the Mastering Suite (now Production 1 and Production 2) is used for audio recording, a noise limit of 30 A-weighted decibels (dBA), as provided in the DEIS, is not appropriate. An adjusted noise limit to 25 dBA aligns with the FTA criteria for a "Recording Studio."

A summary of the recommended adjustments to the groundborne noise and vibration limits, including a rationale for the adjustments, is provided in Table 1 below.

Table 1: DEIS Appendix N.3 KEXP Noise and Vibration Limit Adjustments

KEXP Space	DEIS Limits for Operation and Construction (a)		Recommended Adjustments to DEIS Limits (b)		Notes Justification for Adjusted Limits
	Noise (dBA)	Vibration (VdB)	Noise (dBA)	Vibration (VdB)	
Mastering Suite	30	72	25 dBA	65 VdB	Noise limit is appropriate as "Recording Studio" per FTA Guidance Manual, confirmed through Landau measurements.
(a) Sound Transit WSBLE DEIS Appendix N.3, Attachment N.3H, Tables 8-2 and 8-3. (b) Based on use of Mastering Suite (Production 1 and 2) as an audio recording space. dBA = A-weighted decibels VdB = vibration decibels					

Noise and Vibration – Missing Sensitive Receivers

Landau finds that WSBLE DEIS Appendix N.3 omits the 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.

The International Plaza is likely to be impacted by DT-1 construction noise and is classified as an FTA Category 1 noise-sensitive receiver. 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." A summary of the missing noise-sensitive receiver is provided in Table 2 below.

Table 2: DEIS Appendix N.3 Missing KEXP Noise and Vibration Sensitive Receiver

Omitted Facility	Suggested Noise and Vibration Limits	Summary of Use	Potential Source(s) of Noise or Vibration Impact (b)
International Plaza	FTA Category 1 Noise Limits (a)	Recreational Outdoor Use Area, Concerts	DT-1 Surface Construction
(a) 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. (b) Potential for impact may be due to activities identified in this table and may also include activities not identified here. A complete assessment is required.			

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.

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

WSBLE DEIS Appendix N.3, Chapter 6.2.1.5 summarizes surface-level construction noise that would occur in support of tunneling operations; WSBLE DEIS Appendix N.3, Chapter 6.2.1.6 summarizes 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 for DT-1 could be as near as 8 feet from KEXP. Therefore, noise from excavation of the cut-and-cover station would be near enough to result in potential impact to operations at KEXP.

WSBLE DEIS Appendix N.3, Chapter 6.2.1.5 identifies the use of excavators and backhoes for portal and shaft excavation, and of 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.”

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

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”. Further, the DEIS states that “sound levels near the tunnel portals may be over 86 dBA at 50 feet from construction activities”. DEIS Chapter 2.6.6, p 2-88 states that “fans could run for 24 hours a day and could be audible at tunnel portals, stations, or access locations.”

Given the high volume of air required to maintain fresh air for construction workers, and the proximity of KEXP to the station and potentially to the tunnel portals, 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 station, located very near KEXP, 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. KEXP operates noise-sensitive recording spaces 24 hours per day, and therefore impacts from truck hauling may impact KEXP during any hour of the day or night.

Construction Staging Areas

Noise from construction staging areas was 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.

Given the potential near proximity of KEXP to construction staging areas, an assessment of noise impact from staging areas should be completed.

Cut and Cover Construction

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 proposed for preferred alternative DT-1, which would occur immediately adjacent to KEXP. Landau finds this section to be incomplete based on predicted levels of construction noise.

Appendix N.3, Table 6-8 (p. 6-31) of the WSBLE DEIS provides 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 illustrated in DEIS Drawing B11-ASX102, construction activities could occur as near as 8 feet from KEXP. Table 3 below identifies noise levels from construction summarized in DEIS Table 6-8, and calculates sound levels at 50 feet, 15 feet, and 8 feet from construction equipment. Distance adjustments are based on noise propagation from a stationary source at +6 dBA per halving of distance to the source.

Table 3: Surface Construction Airborne Noise Equipment and Sound Levels

Construction Activity (a)	Construction Equipment (a)	Sound Level at 50 feet L _{eq} (dBA) (a)	Sound Level at 15 feet L _{eq} (dBA) (b)	Sound Level at 8 feet L _{eq} (dBA) (b)
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
(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-8.				
(b) Calculated using standard adjustment for distance from a point source: $SPL_2 = SPL_1 + 20 \cdot \log(D_1/D_2)$.				
L _{eq} = equivalent sound pressure level				

WSBLE DEIS Appendix N.3 does not include a detailed assessment of noise from tunneling and cut-and-cover construction. Rather, 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 (Seattle Rep) and Cornish Playhouse.”

As noted in Table 3, 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. The SMC 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. This limit would apply to noise received at KEXP from DT-1 construction. Predicted sound levels from construction therefore could well exceed City sound level limits at KEXP when equipment operates within approximately 50 feet of the building facade.

Noise reductions provided by the building envelope of KEXP (i.e., transmission loss, or “TL,” provided by building construction materials) are not identified in the DEIS. Therefore, measurements were made at KEXP in February 2022 by Landau staff members to document interior/exterior reductions in noise provided by the building’s north wall (i.e., TL). The findings suggest that the building provides approximately 61 dBA exterior-interior reduction in noise. Therefore, for sound levels at the exterior facade that are 104 dBA, interior levels from exterior construction equipment could be up to 43 dBA. As summarized below and in DEIS Appendix N.3, Chapter 6.3, the applicable sound level limits for noise-sensitive recording spaces within KEXP is 25 dBA. Noise from construction could reach up to 18 dBA over applicable interior sound level limits. The DEIS does not quantify the potential for impacts at interior recording spaces at KEXP; additional detail regarding mitigation measures is provided later in this report, in the section covering Chapter 6.4.2. Surface Construction Vibration Impacts.

Table 4 summarizes expected increases over ambient noise levels at rooms along the north facade of the KEXP facility. Increases are based on surface construction noise reaching 43 dBA inside the north facade of KEXP due to exterior noise levels that are up to 104 dBA; ambient noise levels are based on measurements made by Landau staff in December 2021 (see Figure 1). Reductions through the north wall facade of KEXP are based on Landau's measured exterior-interior reduction of 61 dBA.

Table 4. KEXP Surface Construction Airborne Noise Impacts (DT-1)

KEXP Room Along North Wall	Landau Ambient Noise Measurement (a)	DT-1 Construction Noise	
		Noise Level Inside North Facade of KEXP (dBA) (b)	Increase Over Existing Ambient Interior Level (dBA)
DJ 2	37	43	6
Audio Edit 2	30	43	13
Production 1	27	43	16
Production 2	27	43	16
Video Edit 2	24	43	19
Video Control Room	43	43	0

(a) Ambient measurements taken by Landau Associates staff on December 21, 2021. See Figure 1 (attached).
 (b) Based on exterior sound level of 104 dBA and reduction of 61 dBA through KEXP north facade.

The Construction Noise – Multiple Years figure on p. 6 of the KEXP Presentation (Attachment 1) shows the potential noise impact to KEXP as a “heat map,” highlighting potential impact from airborne construction noise during station construction for DT-1. As summarized in Table 4 and shown on the Construction Noise – Multiple Years figure on p. 6 of the KEXP Presentation (Attachment 1), airborne noise from construction is expected to be up to 19 dBA over existing ambient interior sound levels at KEXP along the north facade (at Video Edit 2), including up to 16 dBA over existing ambient levels at audio recording spaces, including Production 1 and Production 2. Actual increases may be higher or lower and will depend on the sound frequencies of exterior source of construction noise.

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. Note that the ranges of sound levels provided in Table 4, and estimates of impacts provided in Table 5, are based on the FTA reference sound levels for excavators, backhoes, haul trucks, loaders, and vibratory rollers. Therefore, reference sound levels in Table 4 do not represent the loudest noises that could occur from use of jackhammers and hoe rams, and actual noise impacts during the initial phases are likely to be higher than is predicted in Table 4.

Landau finds that airborne noise impacts from DT-1 station construction, including during the initial phases of demolition work and during ongoing use of heavy machinery, is likely to adversely impact the use of these spaces.

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 construction criteria. Specifically, this section notes that impact noises, such as those noises generated by jackhammers and hoe rams, will be 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.

Northwest Courtyard

In addition to the above assessment of impact at interior recording spaces within KEXP, noise impacts from airborne construction may occur within the Northwest Courtyard, located between KEXP and the Climate Pledge Arena. The Northwest Courtyard is used as a public gathering space and is also expected to be used for KEXP live performances. Noise from surface construction propagating through the breezeway between KEXP and Vera Project may result in sound levels that impact the ability of KEXP to stage a live performance at the Northwest Courtyard.

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 WSBLE project. 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.

The results in WSBLE DEIS Appendix N.3, Table 6-13 (and in WSBLE DEIS Appendix N.3, Attachment N.3H, Table 8-2) indicate that during operation of DT-1, KEXP would likely experience groundborne levels of up to 32 dBA at DJ2 and up to 35 dBA at the Mastering Suite. At DJ2 this level is a 7-dBA increase over the applicable limit; at the Mastering Suite this level is 10 dBA over the corrected limit of 25 dBA for a recording studio (see Table 1).

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

Groundborne Noise Limits

DEIS Appendix N.3, Table 6-13 (p. 6-51) and 6-14 (p. 6-53) identifies groundborne noise limits for KEXP. As indicated in these tables, a limit of 25 dBA applies to the KEXP DJ booth, and as documented

in Attachment N.3H, this limit also applies to the studio (live performance room) and audio edit room. As noted, the limit applied for the Mastering Suite (Production 1 and 2) is incorrectly listed at 30 dBA and should be 25 dBA, similar to other recording spaces and per FTA criteria.

Revised Assessment of Operational Groundborne Noise Impact

Landau conducted ambient measurements to further validate the limits established in the DEIS and evaluate further potential for operation noise impacts at spaces within KEXP (see Figure 1). Note that Landau also conducted ambient vibration measurements of these same spaces (see Figure 2). Included in Table 5 is a summary of the DEIS operational noise limits and results of measurements made within each space at KEXP. Also included for reference are measurements made in support of the DEIS, as documented in WSBLE DEIS Appendix N.3, Attachment N.3H, Table 8-1.

With the noted exception of the Mastering Suite (Production 1 and 2), the limits established in the DEIS are appropriate and highlight the need for mitigation of light rail operation. Note however that DEIS Appendix N.3, Tables 6-13 and 6-14, should include an expanded assessment to include a complete list of spaces within KEXP.

The final column of Table 5 below identifies the potential increase over existing ambient noise levels during operation of DT-1.

Table 5. KEXP Noise Limits, Ambient Noise Levels, and Operational Noise Levels

KEXP Room	Sound Level (dBA)				
	DEIS Noise Limit (a)	DEIS Ambient Measurement (b)	Landau Ambient Noise Measurement (c)	DEIS Operational Noise Level (d)	Increase over Ambient Levels (e)
DJ 1	25	-	38	26	0
DJ 2	25	33	37	32	0
Audio Edit 1	25	29	28	32	4
Audio Edit 2	25	-	30	32	2
Production A	30 (f)	-	27	35	8
Production B	30 (f)	-	27	35	8
Video Edit 1	30	-	25	32	7
Video Edit 2	30	-	24	32	8
Control Room	30	-	36	26	0
Live Room	25	28	28	26	0
Video Control Room	30	-	43	32	0

(a) Sound Transit WSBLE DEIS Appendix N.3, Attachment N.3H, Table 8-2. For DJ2, Audio Edit 1, Production 1, Video Edit 1 and 2, Control Room and Video Control Room, sound level limits are based on use of similar spaces within KEXP as defined in the DEIS.

(b) Ambient measurements summarized in Sound Transit WSBLE DEIS Appendix N.3, Attachment N.3H, Table 8-1.

(c) Ambient measurements taken by Landau staff on December 21, 2021. See Figure 1.

(d) Sound Transit WSBLE DEIS Appendix N.3, Attachment N.3H, Table 8-2. For DJ2, Audio Edit 1, Production A, Video Edit 1 and 2, Control Room and Video Control Room, predicted levels are based on impacts at spaces with similar setbacks within KEXP.

(e) Increase based on DEIS predicted noise levels over Landau-measured ambient noise levels.

(f) DEIS noise limit is incorrect for Production 1 and 2. Should be 25 dBA based on use as recording spaces.

To further illustrate the results in Table 5, the Ongoing Light Rail Operational Groundborne Noise figure on p. 8 of the KEXP Presentation (Attachment 1) provides a noise “heat map” that shows operational noise impacts by room within KEXP, based on predicted DEIS operational noise over ambient levels measured by Landau.

Train Speed

As summarized in 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 potentially errors that warrant further clarification.

For preferred alternative DT-1, the train speed through the Seattle Center campus is assumed to be 45 mph at all receivers except at KEXP, where speeds would be 55 mph and at the Seattle Rep and

Vera, where it would be 30 mph. The DEIS does not provide an explanation for the discrepancy in rail speeds. It understood that rail speeds would slow when trains were arriving at the station and would increase when trains were departing. However, at KEXP DJ2, the nearest section of rail is at the station itself, where trains would be driving at slow speeds or stopped, and would not likely be traveling 55 mph. Additional clarification and analysis is needed to ensure that train speed calculations are correct, and that resulting operational groundborne noise impacts from rail operation are correct.

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 is identified at 30 mph. Although impacts are not expected 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

WSBLE DEIS Appendix N.3, Table 6-25 (p. 6-65) summarizes vibration impacts from construction. Table 6-25 identifies a predicted supply train vibration level of 69 vibration decibels (VdB) at KEXP, with a limit of 64 VdB, an exceedance of vibration thresholds at KEXP by 4 VdB. Further, predicted vibration from operation of the supply train and cutterhead (69 VdB and 60 VdB, respectively) would exceed ambient vibration levels at each space within KEXP (see ambient vibration measurements made by Landau in Figure 2).

WSBLE DEIS Appendix N.3, Table 6-27 predicts groundborne noise impacts at KEXP during tunneling, both with the cutterhead and supply train. Predicted groundborne noise levels would reach 42 dBA with the supply train and 38 dBA during use of the cutterhead, representing increases over the 25-dBA groundborne noise limit of 17-dBA and 13-dBA, respectively.

Table 8 below summarizes predicted tunneling groundborne noise emissions at each space within KEXP and compares these predictions with existing ambient conditions, as documented by Landau through noise measurements that were made in December 2021.

Table 6. KEXP Tunneling Groundborne Noise Increases of Existing Ambient Noise Levels, DT-1

KEXP Room	Landau Ambient Noise Measurement (a)	DT-1 Tunneling – Cutterhead		DT-1 Tunneling – Supply Train	
		Noise Level (dBA) (b)	Increase Over Existing Ambient (dBA)	Noise Level (dBA) (b)	Increase Over Existing Ambient (dBA)
DJ 1	38	38	0	42	4
DJ 2	37	38	1	42	5
Audio Edit 1	28	38	10	42	14
Audio Edit 2	30	38	8	42	12
Production 1	27	38	11	42	15
Production 2	27	38	11	42	15
Video Edit 1	25	38	13	42	17
Video Edit 2	24	38	14	42	18
Control Room	36	38	2	42	6
Live Room	28	38	10	42	14
Video Control Room	43	38	0	42	0
(a) Ambient measurements taken by Landau staff on December 21, 2021. See Figure 1.					
(b) Sound Transit WSBLE DEIS Appendix N.3, Table 6-27.					

As summarized in Table 6, predicted groundborne noise levels from tunneling, including from the cutterhead and supply train, were compared to existing ambient sound levels. The results suggest high levels of impact at most spaces within KEXP for DT-1. The biggest impacts to KEXP recording spaces are at Production 1 and 2, where groundborne tunneling noise is predicted to be up to 11 dBA over ambient conditions during construction with the cutterhead, and 15 dBA over ambient conditions during use of the supply train. Similar increases would occur at Audio Edit 1. Increases at this level would be clearly audible and discernible and may inhibit use of KEXP’s audio recording facilities with low-frequency “rumbling” noise.

Mitigation is addressed later in this letter report, including the effectiveness of rubber tires on supply train vehicles. However, it is worth noting here that mitigation of supply train vehicles is strongly recommended to minimize potential for impact to KEXP. That is, that rubber tires should be required for the supply trains during tunneling given the high levels of groundborne noise anticipated at KEXP and the long duration of tunneling activity (multiple years).

To further illustrate the results in Table 6, the Tunneling Groundborne Noise figure on p. 7 of the KEXP Presentation (Attachment 1) provides a noise “heat map” that shows tunneling groundborne noise

impacts by room within KEXP, based on predicted DEIS operational noise over ambient levels measured by Landau.

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 are 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 KEXP are adjusted (i.e., lowered).

A more detailed assessment should be conducted 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., Vibration Criteria A, or V.C.-A) is greater than would be realized at KEXP for the equipment identified in this table. For example, the minimum distance for potential impact from a bulldozer under the V.C.-A curve is 125 feet, and the nearest distance to Special Buildings located near surface construction areas (i.e., KEXP) is 8 feet, as documented in 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 WSBLE DEIS Appendix N.3, Tables 6-29 and 6-30) and given the need to understand if effective mitigation of these impacts is feasible, a more detailed assessment of potential impacts and proposed mitigation should be included in a supplemental DEIS study, in lieu of requiring future assessments only 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 evaluates the potential for structural damage to the KEXP building.

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 most of northern side of the KEXP building. A profile view of the station is provided on WSBLE DEIS Appendix J, Drawing B11-ASX102. Landau understands, through ongoing workshops hosted by Sound Transit during the WSBLE DEIS review period, 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 width 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. An illustration of how this construction activity may occur is provided in figures from the KEXP Presentation [Section A – Slurry Wall Demo (p. 4) and Perspective – Slurry Wall Demo (p. 5); Attachment 1].

The WSBLE DEIS does not include a review of impacts that are specific to the breaking of the slurry wall. However, demolition of this wall would occur very near Seattle Center resident organizations, including KEXP. It is anticipated that high levels of vibration would be emitted during use of the hoe ram, and impacts from this activity were not considered or included in the DEIS. Given the likely lengthy construction schedule (up to a year or more), there is a high potential for substantial impacts to KEXP during this phase of construction.

In addition to the use of a hoe ram, excavation of materials behind the slurry wall and directly underneath KEXP may result in additional vibration and groundborne noise impacts to multiple spaces within this facility.

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 the KEXP building. As summarized above, estimated sound levels at the KEXP building could reach 104 dBA, and accounting for measured 61 dBA transmission loss through the building, could reach up to 43 dBA at interior spaces, potentially impacting recording operations within KEXP.

Mitigation measures summarized in the DEIS are effective strategies to reduce construction noise but do not specifically target the KEXP building and the potential for impacts therein.

Mitigation measures could include administrative controls, scheduling the noisiest activities during times that would be less likely to interfere with KEXP operations, including interior operations and outdoor performances within the Northwest Plaza. In addition, a noise barrier should be installed along the north wall of KEXP to provide additional shielding from construction equipment. A well-placed barrier of sufficient density (mass) and tall enough to break line-of-sight between the KEXP building and Northwest Plaza and construction equipment, could be effective at reducing noise emissions by 5 to 10 dBA or more. While this would not remove entirely the potential for impact at KEXP, it could reduce the degree of impact, especially if implemented in conjunction with other mitigation measures. Noise barriers should be required as part of the project's Construction Noise Control Plan.

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 KEXP, including adjacent to the north wall, near noise-sensitive recording spaces. Due to the low-frequency noise generated by such fans, mitigation may be required to ensure fan noise at KEXP does not result in impacts to interior recording spaces or during outdoor performances at the Northwest Plaza.

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 recording spaces within KEXP. 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 FEIS should include specific language within the Construction Noise and Vibration Control Plan regarding permitted haul routes that minimize the potential for impact to KEXP.

Staging Areas

Mitigation of staging area noise should be included in an updated noise impact assessment. Mitigation measures could include the strategic location of staging areas to minimize noise impacts, noise barriers, and other measures as defined in WSBLE DEIS Appendix N.3, Chapter 7.

Chapter 7.3: Operational Vibration Mitigation

Operational groundborne noise impacts are predicted at KEXP to be 32 dBA, 7 dBA over the limit at noise-sensitive recording spaces (see DEIS Appendix N.3, Attachment N.3H, Table 8-2, p. 8-21). 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 performances 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 2018 Design 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 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-noted Sound Transit expectation is true, groundborne noise impacts from tunnel operation would be mitigated. However, without additional predictive modeling to confirm, there is not clear evidence provided in the DEIS that supports Sound Tpreransit’s position. Quantitative assessment of proposed mitigation suggests that groundborne noise impacts would likely occur at KEXP even with high-resilience fasteners. Therefore, additional assessment is needed to confirm that operational groundborne noise impacts would not occur at KEXP with the use of high-resilience fasteners and additional mitigation provided by the tunnel structure.

Chapter 7.4: Construction Vibration Mitigation

Chapter 7.4.1: Potential Surface Construction Vibration Mitigation

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.

Construction Vibration Control Plan

As noted in Chapter 6.4.2.2 (p. 6-70) of the WSBLE DEIS Appendix N.3, “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.

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 KEXP. It is expected that both vibration and

groundborne noise impacts would occur at KEXP 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 WSBLE 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 pads between ties, and using rubber tires on supply trains. Specifically, WSBLE 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.

As noted in WSBLE DEIS Appendix N.3, Table 6-27 (p. 6-67), groundborne noise from unmitigated supply trains could result in noise levels inside KEXP that are up to 42 dBA, exceeding the 25-dBA recording studio noise limit by 17 dBA. Mitigation of noise from supply trains in the vicinity of KEXP is warranted.

Given the high level of impact that may occur due to the supply trains 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, including an assessment of impacts and mitigation effectiveness at KEXP. The assessment should evaluate whether impacts to each of the spaces within KEXP 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. A mitigation assessment of thrust jacks 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 in the Construction Vibration Control Plan.

Cutterhead

As stated in WSBLE 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 Category 1 and special use buildings (i.e., KEXP). The Construction

Vibration Control Plan should specify locations to be monitored at KEXP, including the number of monitors and duration of monitoring, as well as the established thresholds above which action is taken. Also, the Plan should include clear direction for the General Contractor to coordinate with KEXP so that noise-sensitive events can be schedule accordingly.

* * * * *

If you have you any questions or comments regarding the information provided in this letter report, please contact the undersigned.

LANDAU ASSOCIATES, INC.



Kevin Warner
Principal



Kristen Wallace
Principal

References

FTA. 2018. Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123. Federal Transit Administration. September.

https://www7.fta.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

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USDOT, FTA, and Sound Transit. 2022b. West Seattle and Ballard Link Extensions Draft Environmental Impact Statement, Appendix N.3: Noise and Vibration Technical Report. US Department of Transportation, Federal Transit Administration, and Central Puget Sound Regional Transit Authority (Sound Transit). January.

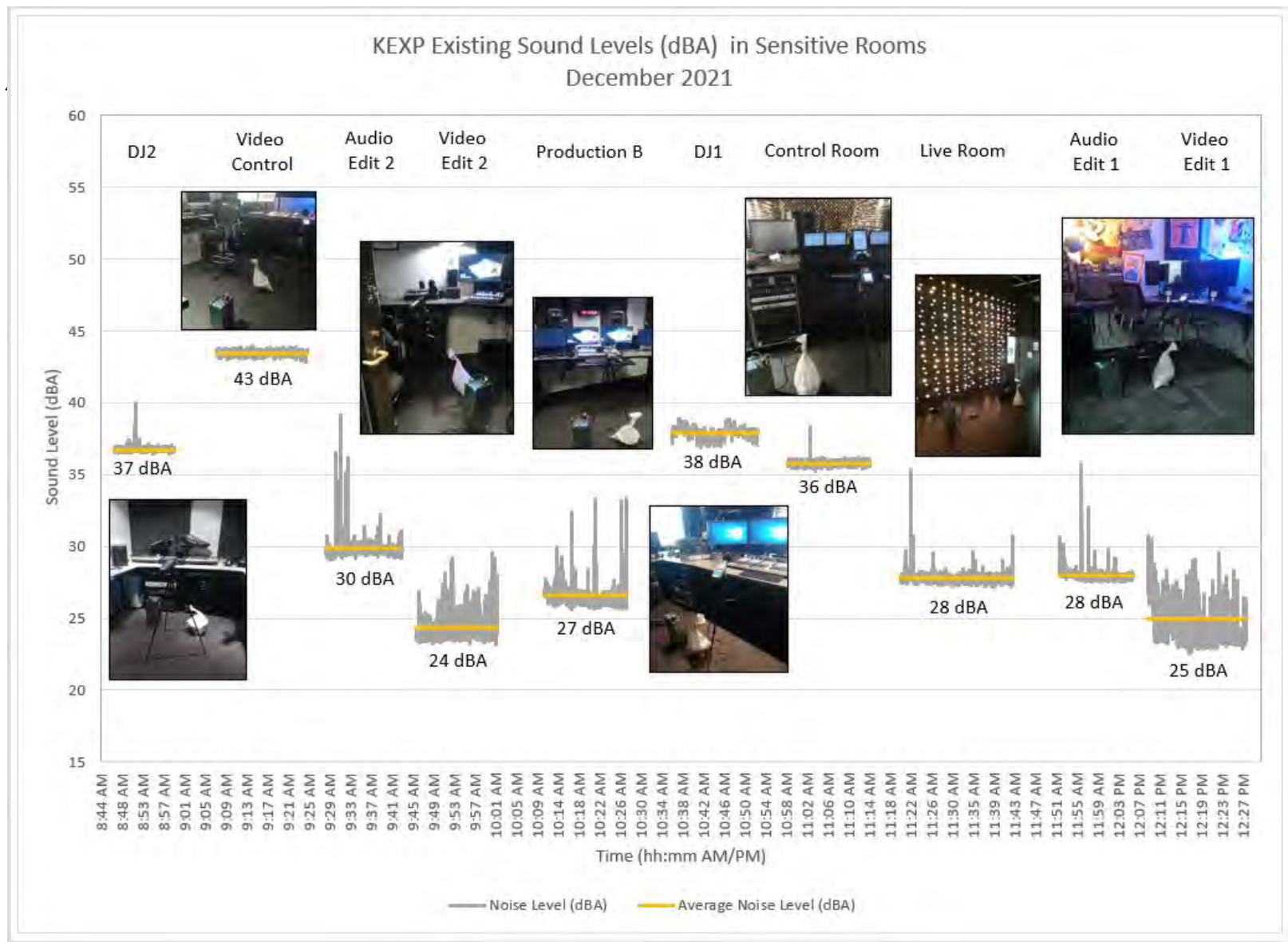
<https://www.soundtransit.org/sites/default/files/documents/16a-wsble-drafteis-noisetechreport-202201.pdf>.

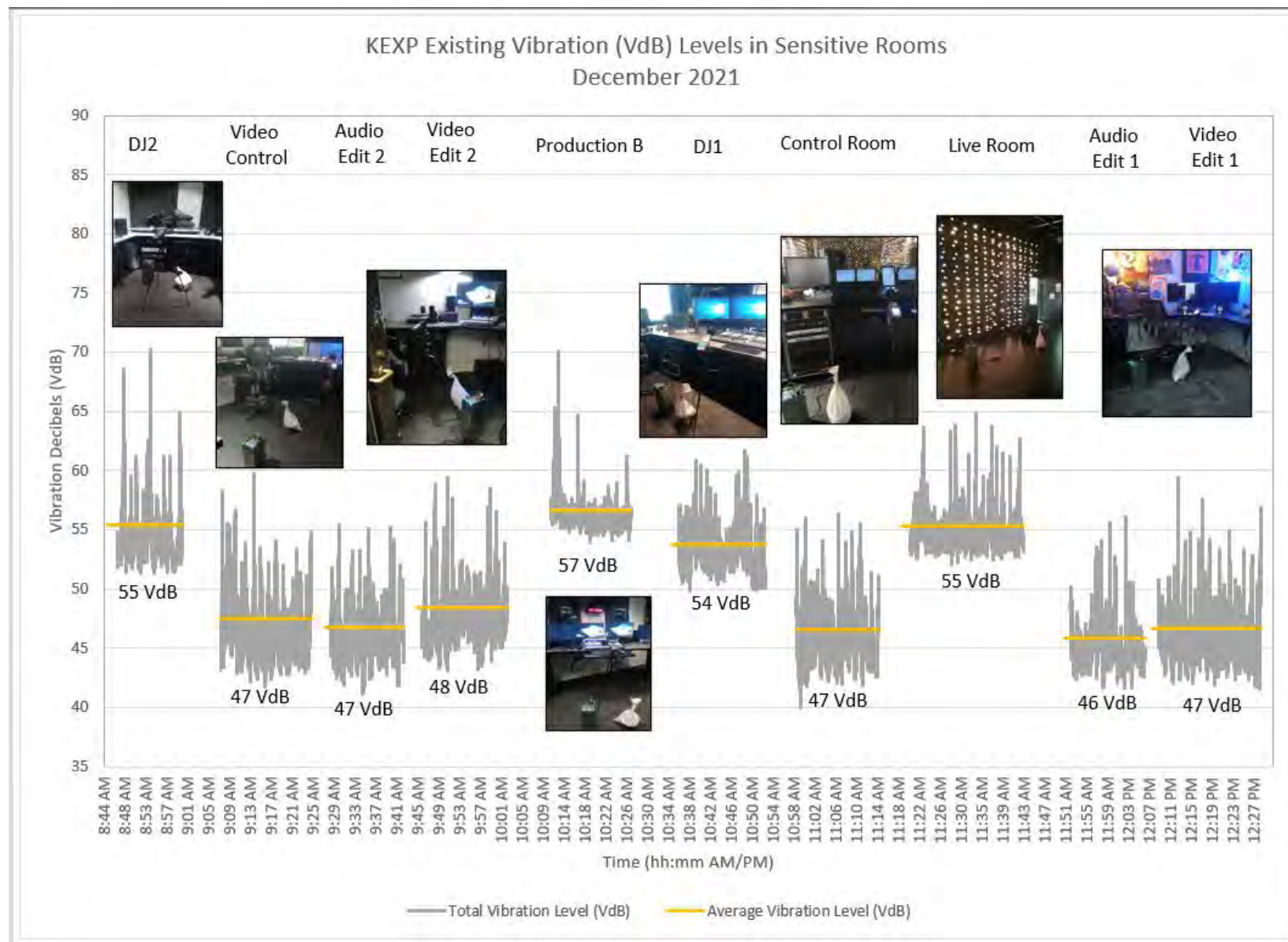
Attachments

Figure 1: Chart of Landau Ambient Noise Measurements at KEXP

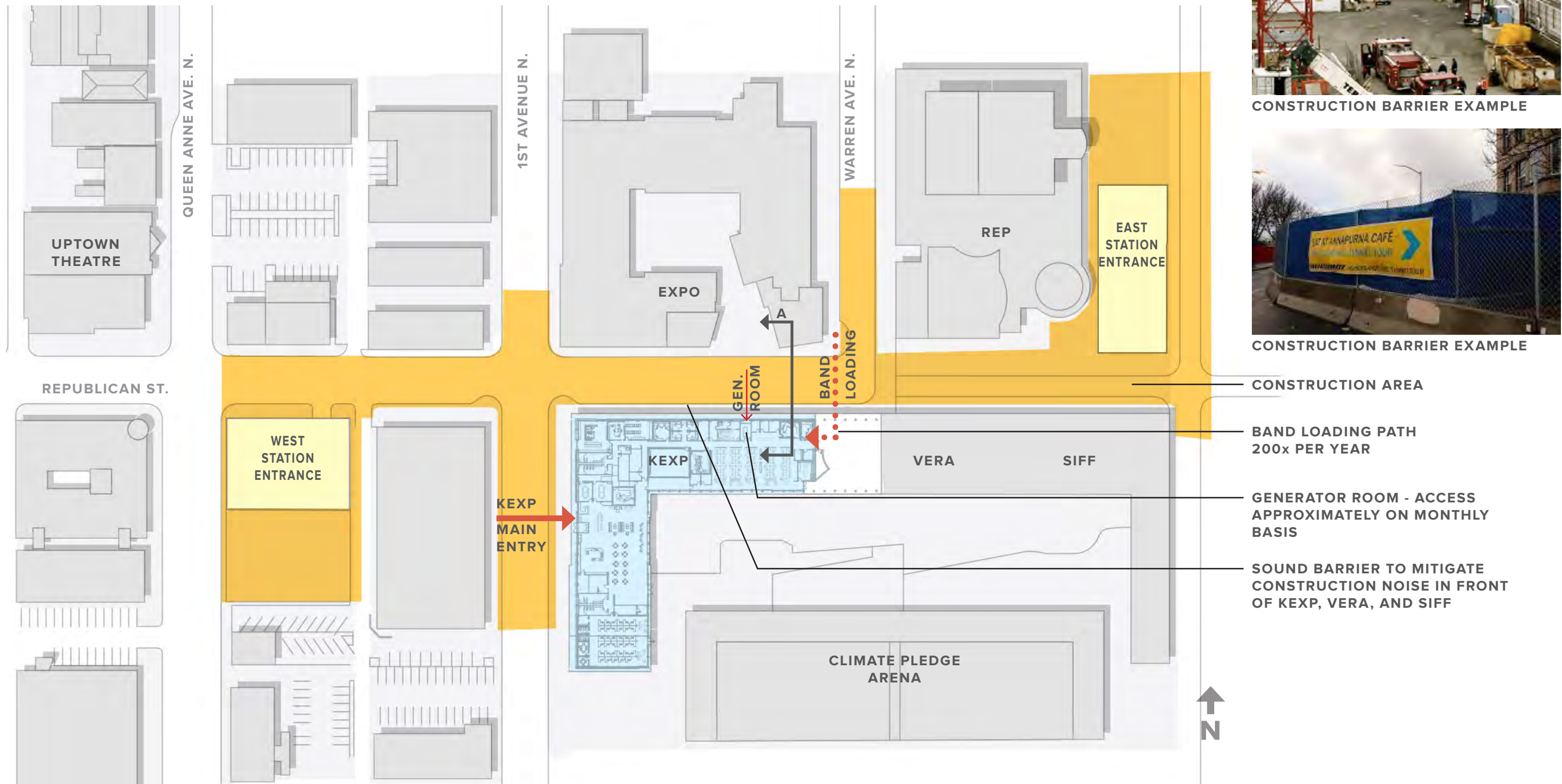
Figure 2: Chart of Landau Ambient Vibration Measurements at KEXP

Attachment 1: KEXP Sound Transit Construction Impact, April 26, 2022

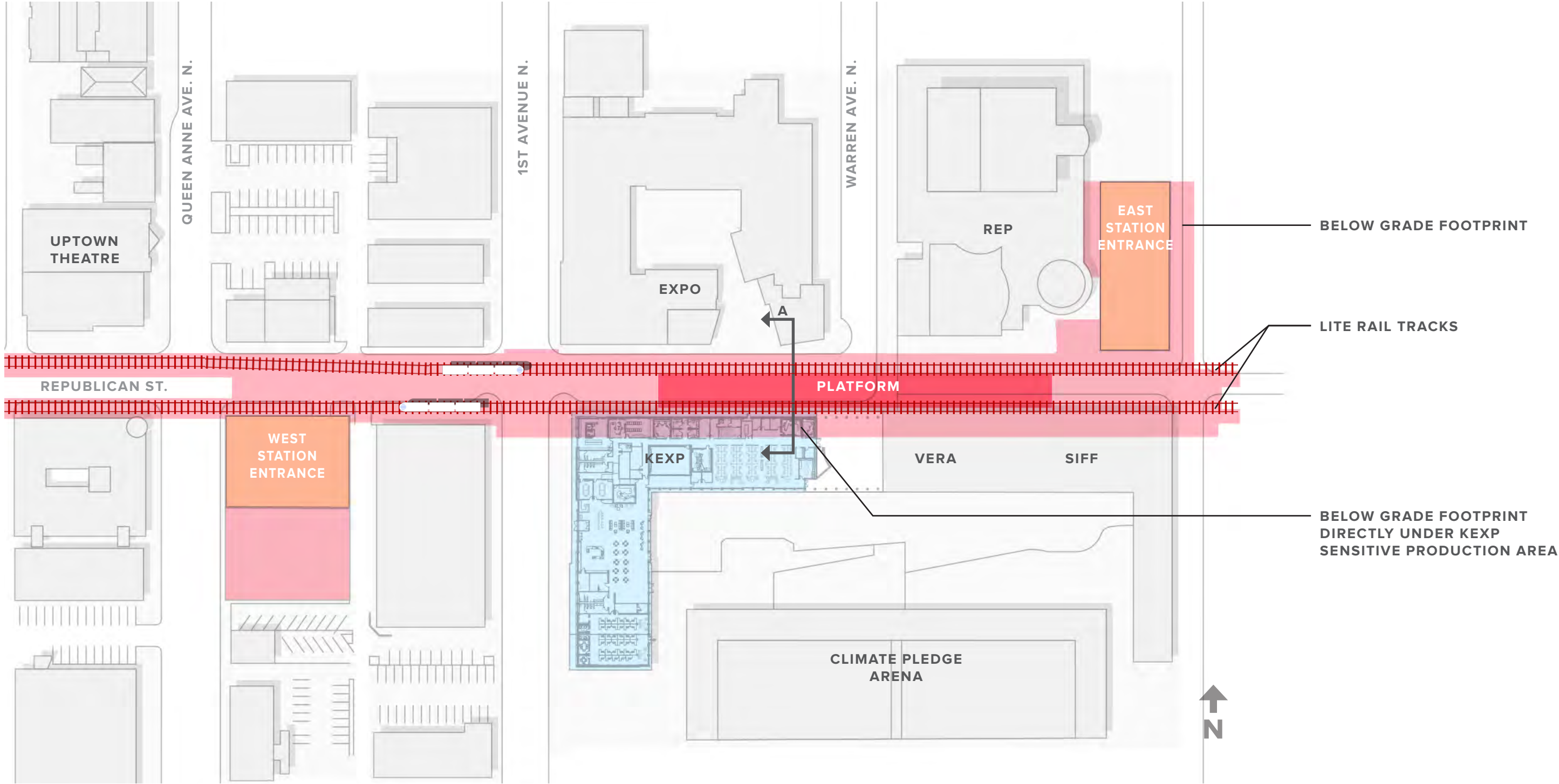




KEXP Sound Transit Construction Impact April 26, 2022



STATION AREA CONSTRUCTION AND STAGING ZONE



STATION AREA BELOW GRADE

DISRUPTION STEPS

STEPS 1-4 CONSTRUCTION OF STATION ESTIMATED 2-4 YEARS

STEP 5 TUNNELING ESTIMATED 2-2.5 YEARS



STEP 1: DEMOLITION



STEP 2: EXCAVATION



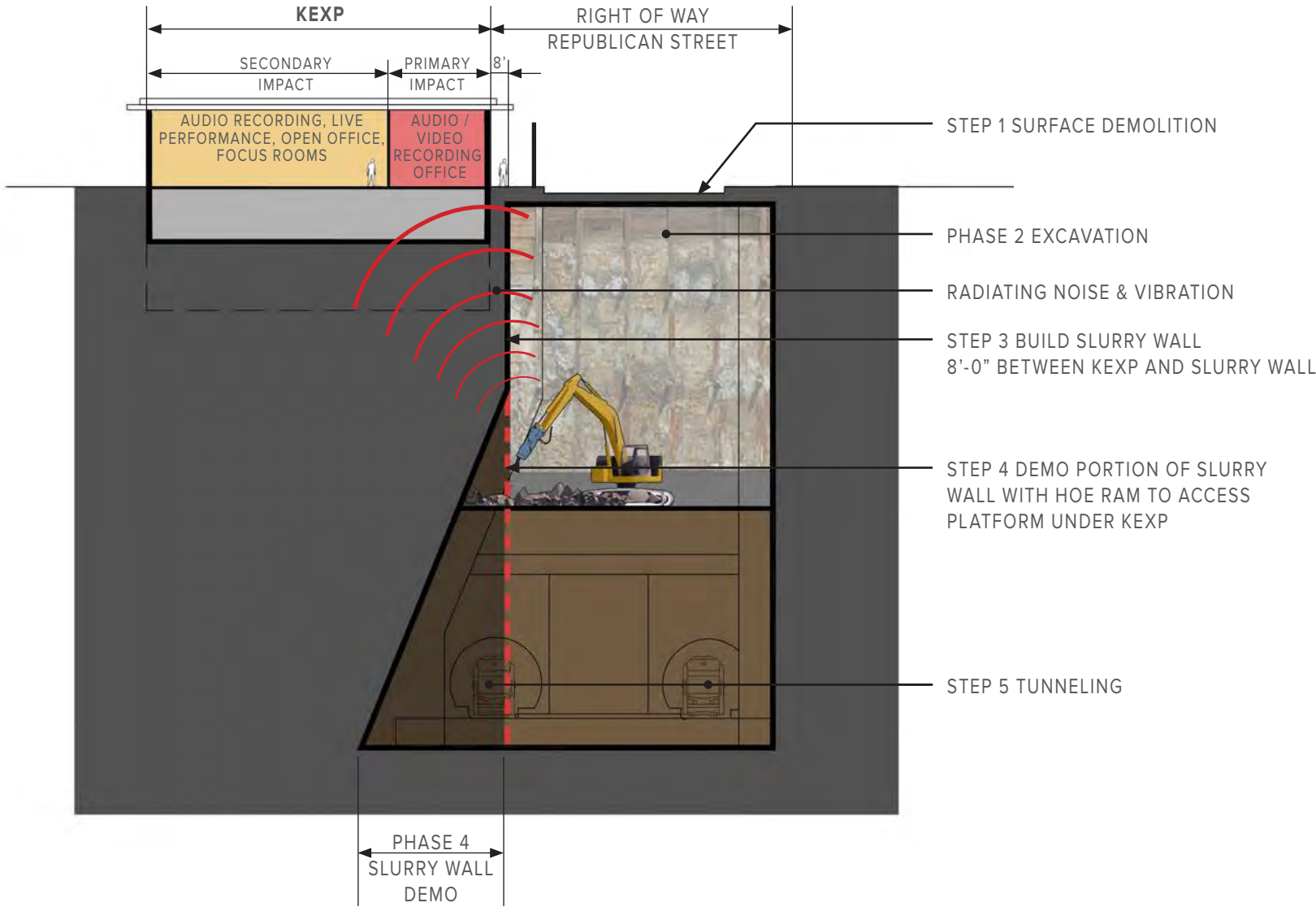
STEP 3: BUILD SLURRY WALL



STEP 4: DEMO PORTION OF SLURRY WALL BELOW KEXP



STEP 5: TUNNELING



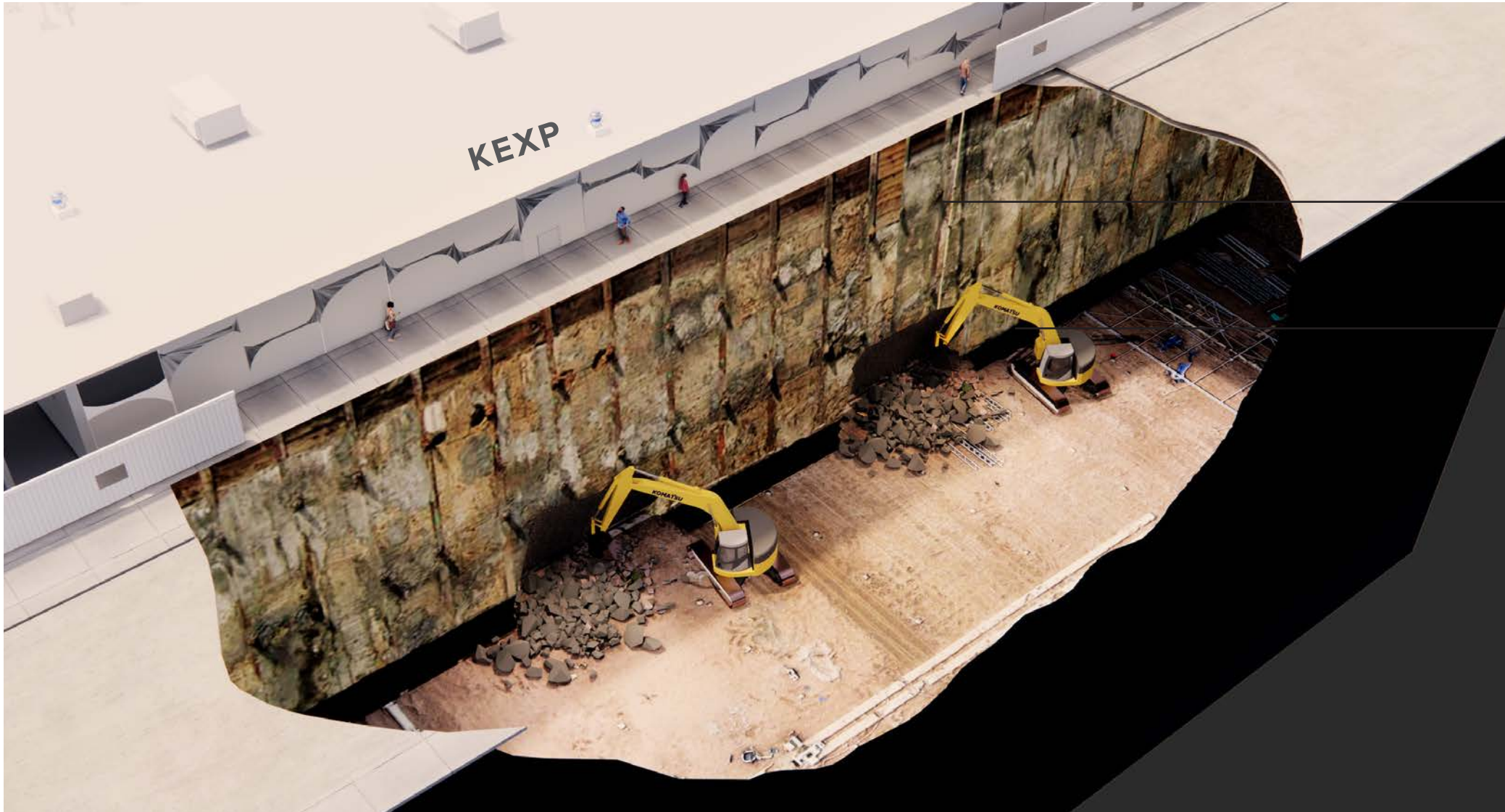
* CHAPTER 6.2.1.6 (6-33) NOTES WORST CASE NOISE LEVEL WILL BE 88 dBA AT 50' AWAY. KEXP IS 8' LOCATED FROM CONSTRUCTION AND AWAY AND ESTIMATED TO HAVE A NOISE LEVEL OF 104 dBA AT THE EXTERIOR OF KEXP.

SECTION A - SLURRY WALL DEMO



PHASE 4: DEMO PORTION OF SLURRY WALL BELOW KEXP

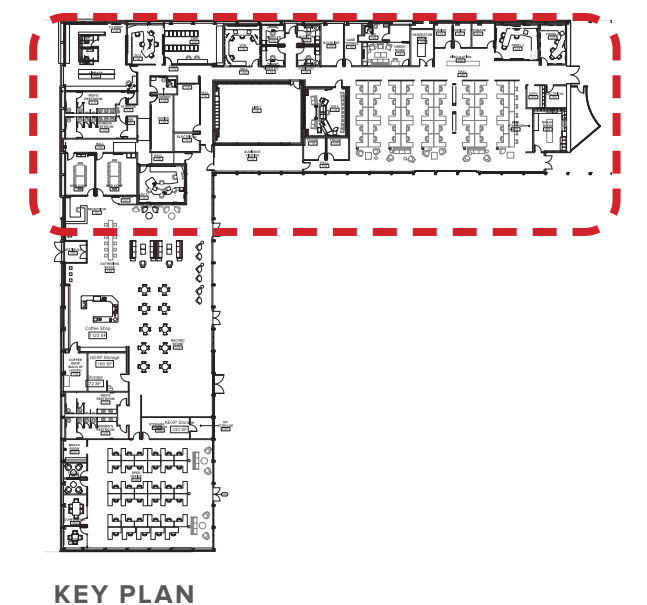
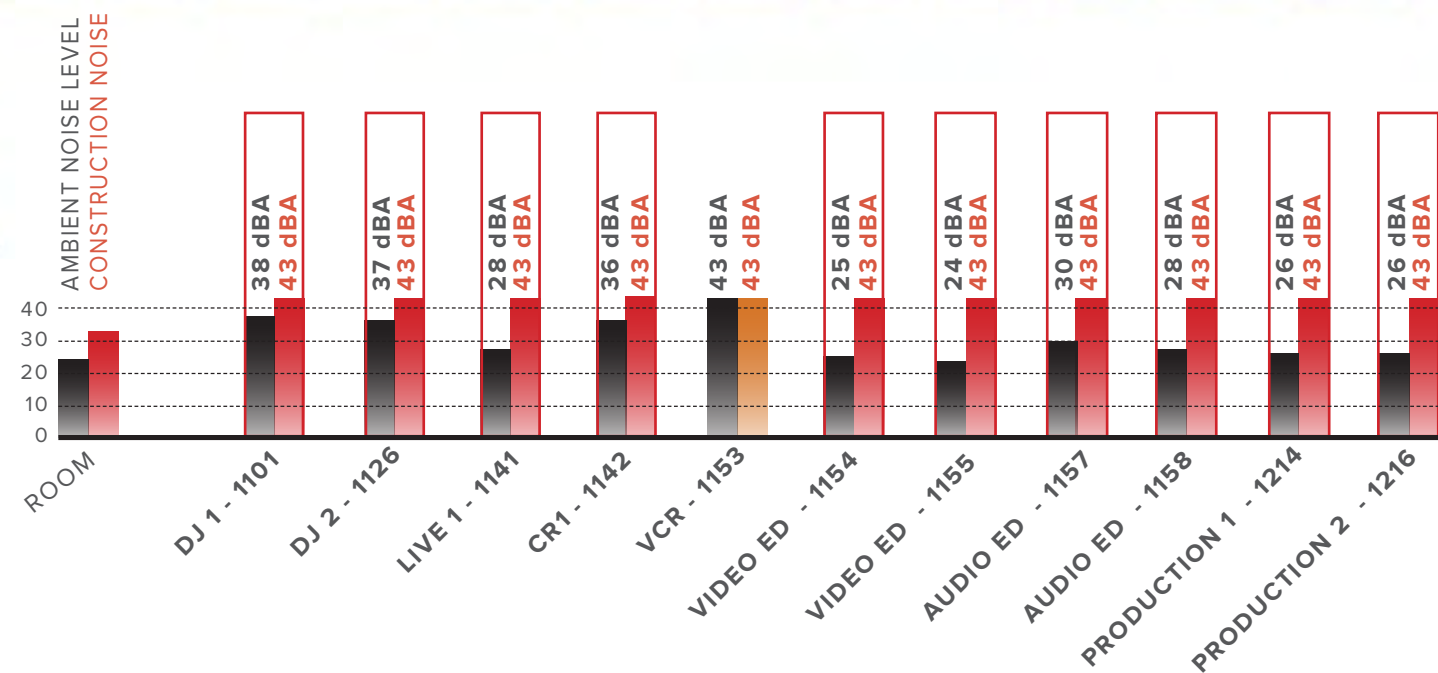
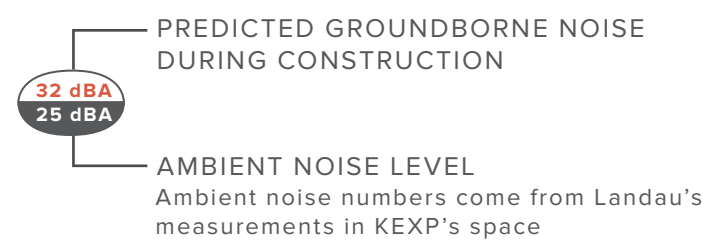
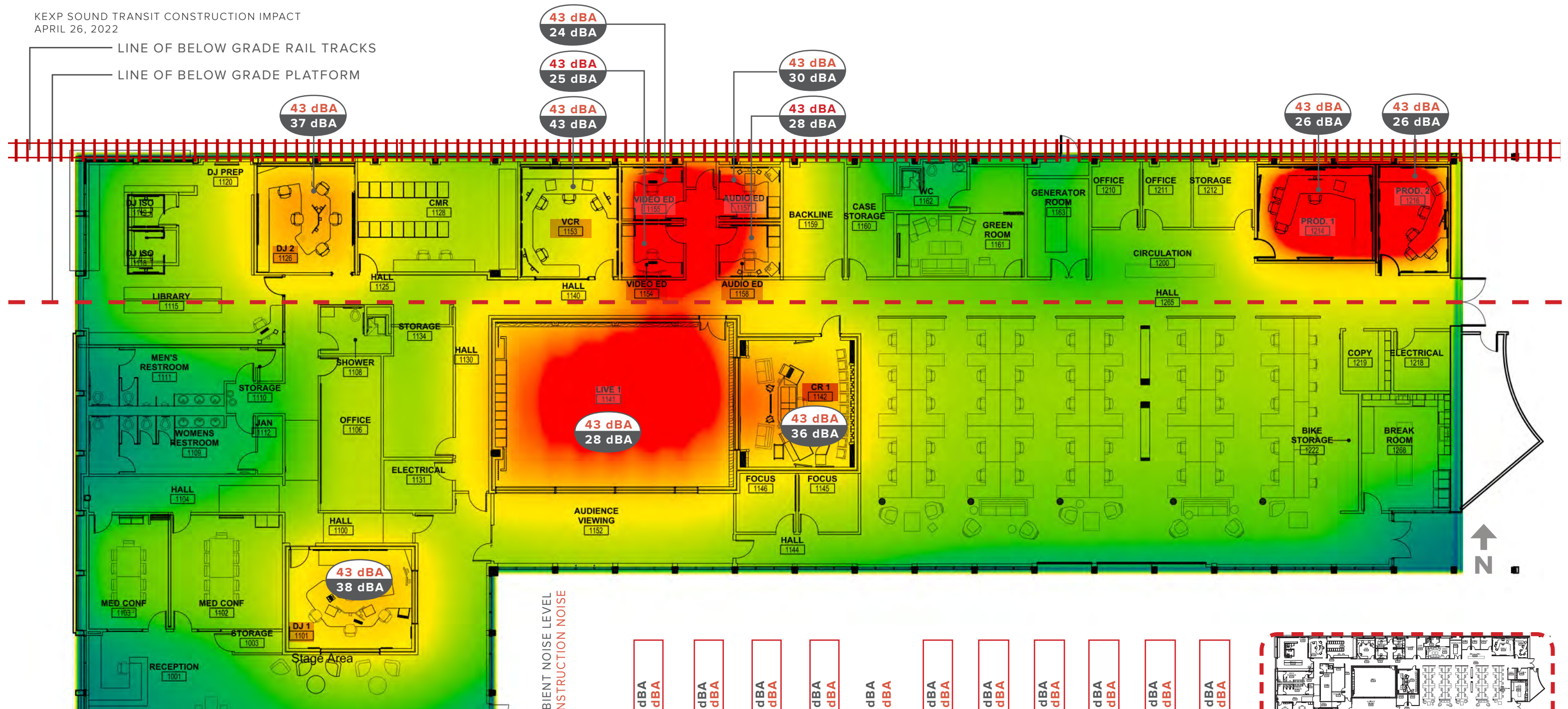
AFTER SLURRY WALL IS BUILT, DEMOLITION TO PORTION OF SLURRY WALL WILL OCCUR TO ACCESS AREA BELOW KEXP.



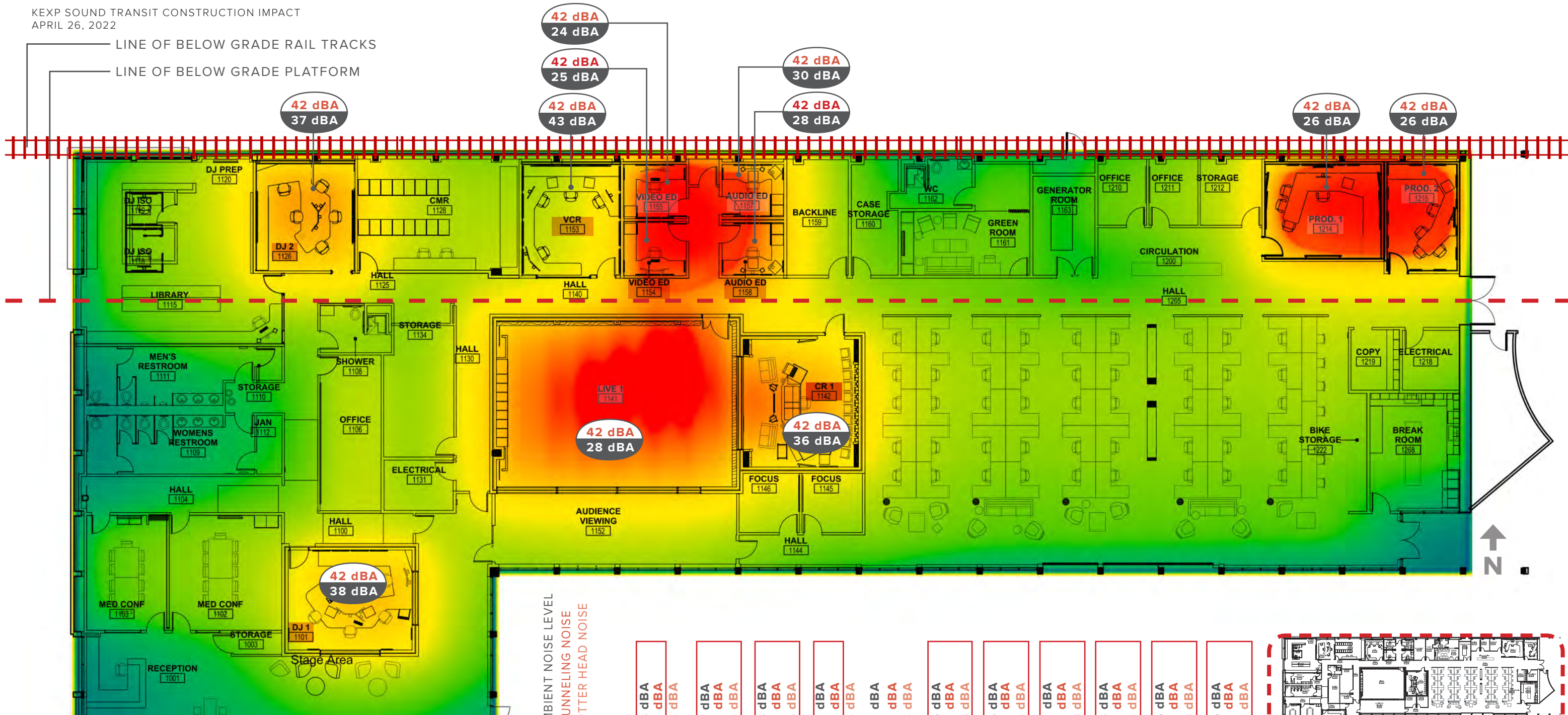
SLURRY WALL

HOE RAM BREAKING THROUGH SLURRY
EXPAND AND ACCOMMODATE WIDTH
REQUIRED FOR PLATFORM

PERSPECTIVE - SLURRY WALL DEMO



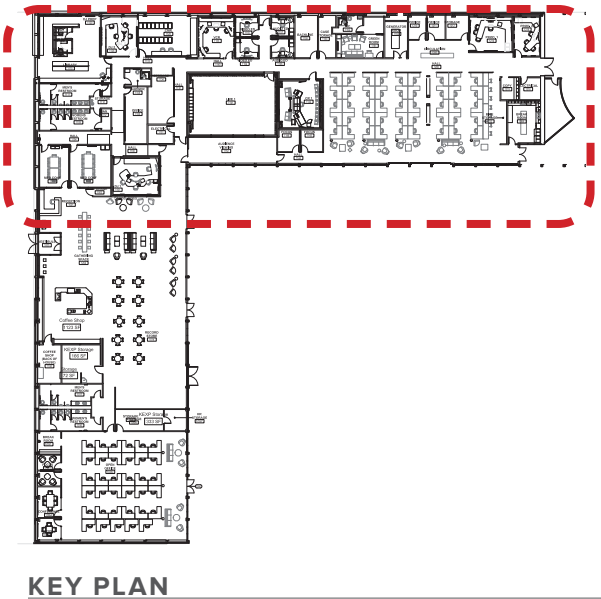
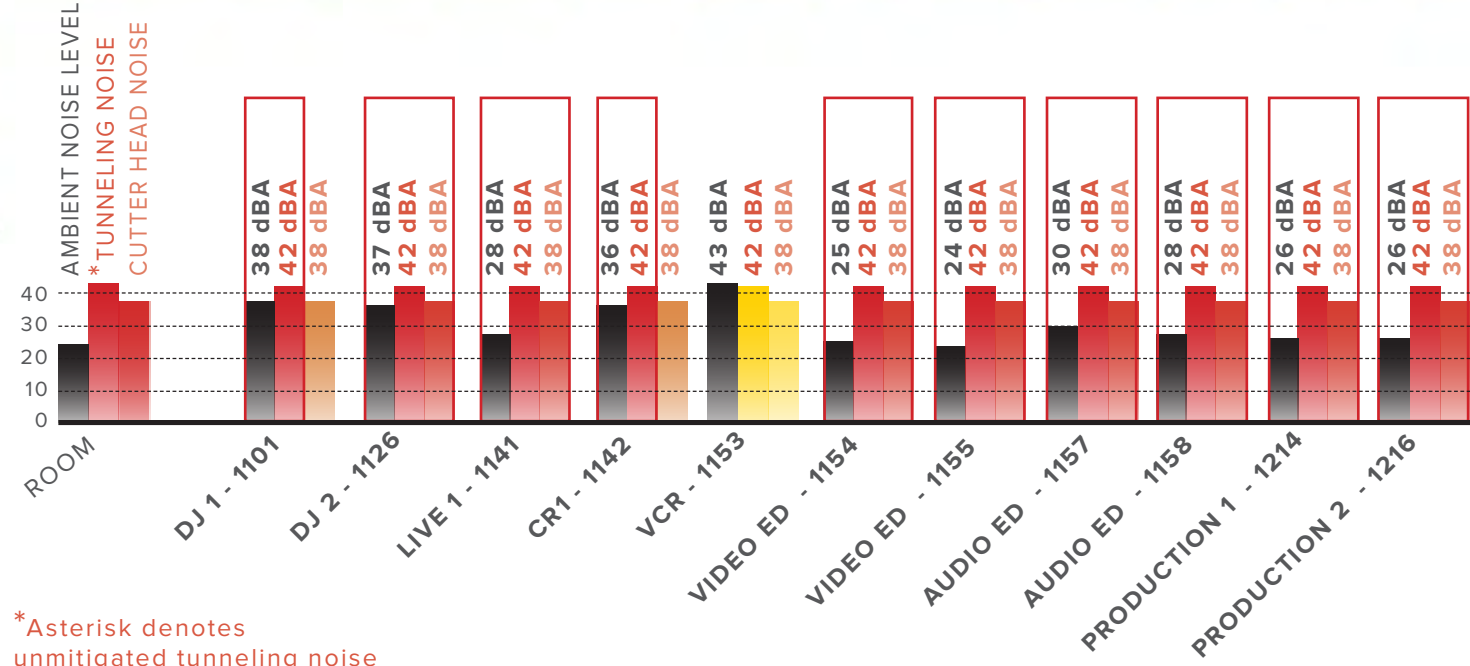
CONSTRUCTION NOISE - MULTIPLE YEARS



32 dBA
25 dBA

PREDICTED TUNNELING GROUND BORNE NOISE
(CUTTER HEAD NOISE SHOWN ON GRAPH ONLY)

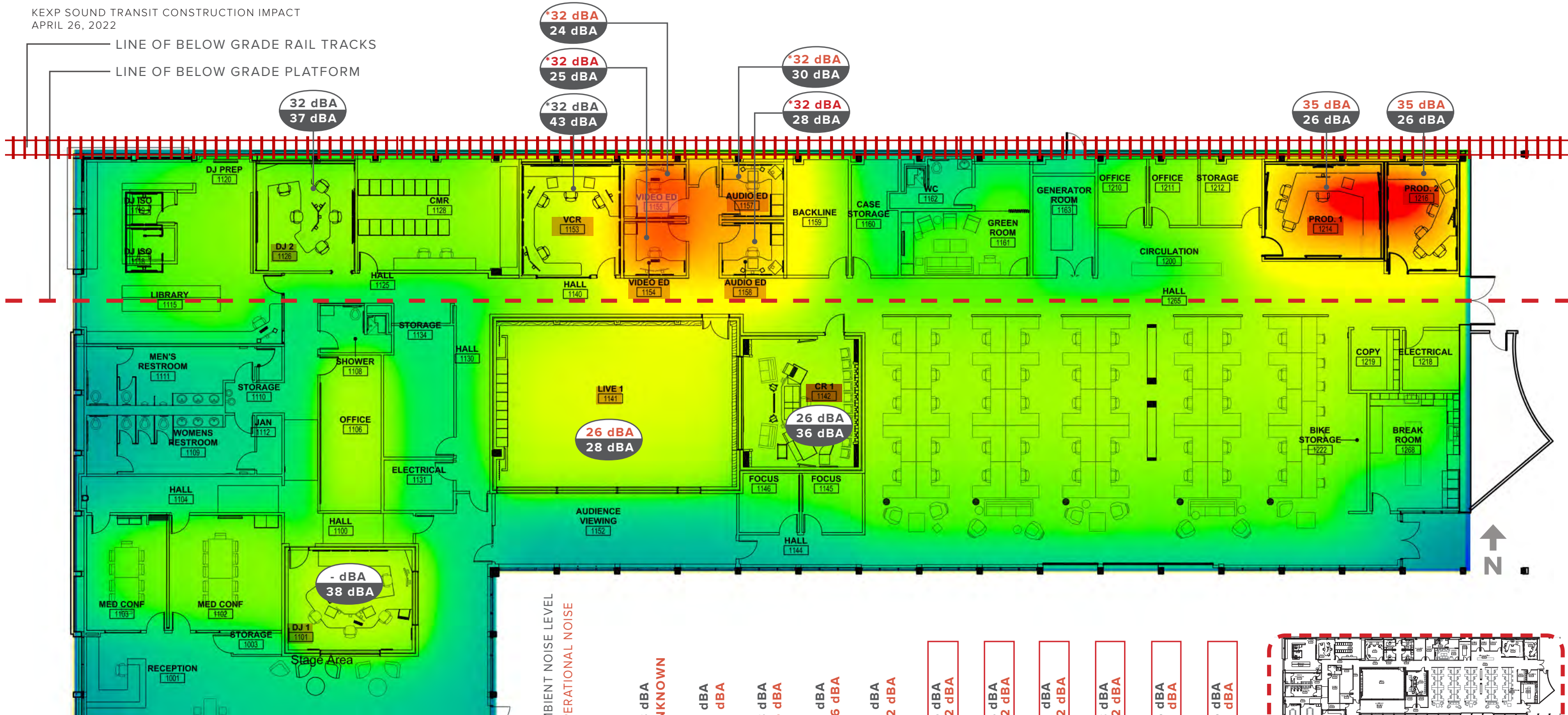
AMBIENT NOISE LEVEL
Ambient noise numbers come from Landau's
measurements in KEXP's space



LIVE 1
1141

RECTANGLE DENOTES NOISE
SENSITIVE SPACE

TUNNELING GROUND BORNE NOISE

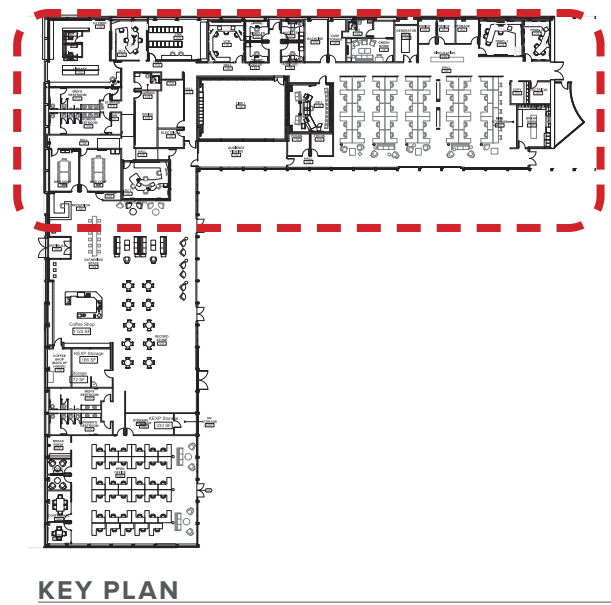
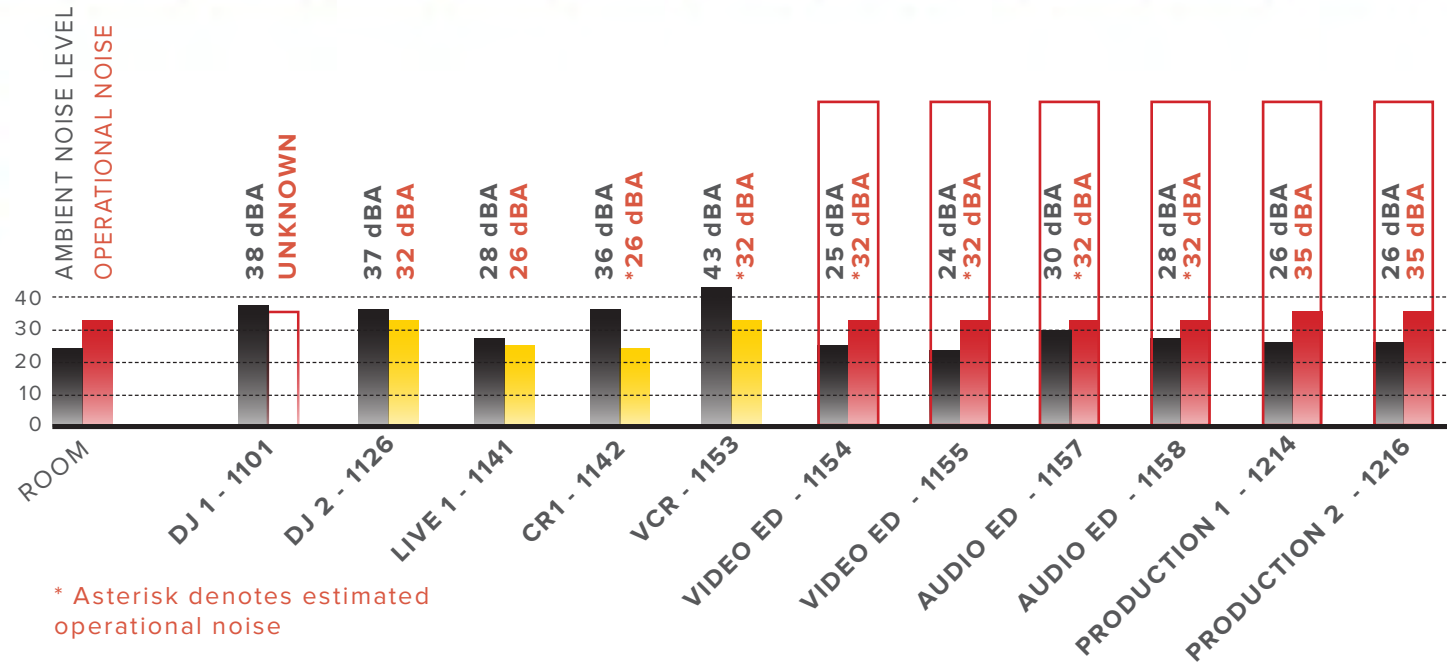


* ASTERISK WHERE OCCURS:
ASSUMED CONSTRUCTION NOISE
(INFO NOT PROVIDED BY CITY)

PREDICTED OPERATIONAL GROUNDBORNE
LIGHT RAIL NOISE

*32 dBA
25 dBA

AMBIENT NOISE LEVEL
Ambient noise numbers come from Landau's
measurements in KEXP's space



ONGOING LIGHT RAIL OPERATIONAL GROUNDBORNE NOISE

EXHIBIT B



April 26, 2022

Seattle Rep
P.O. Box 900923
155 Mercer Street
Seattle, WA 98109

Attn: Jeffrey Herrmann

Transmitted via email to: jeff.herrmann@seattlerep.org

**Re: Sound Transit WSBLE DEIS Review for Seattle Repertory Theater
Seattle, Washington
Landau Project No. 2063001.010**

Dear Jeff:

At the request of Seattle Repertory Theatre (Seattle Rep), Landau Associates, Inc. (Landau) prepared this 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 Rep is located at Seattle Center and contains two main theaters: the 696-seat Bagley Wright Theater and the 282-seat Leo Kreielsheimer (Leo K.) Theater. Seattle Rep also houses additional rehearsal spaces, including the Poncho Forum (also used for performances) and the Leo K. Theater rehearsal space, set, prop, paint, and costume shops, administrative offices, and extensive lobby areas for the general public.

Seattle Rep 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.

This letter report summarizes Landau's assessment of the WSBLE DEIS as it relates to the potential for noise and vibration impact to Seattle Rep, and includes a summary of findings, a list of documents that were reviewed, and a detailed review of selected 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 key findings of this review include:

- City of Seattle (City) noise limits are not applied in the noise impact section when determining the potential for construction noise impacts and whether additional mitigation is warranted.

- Edits to the document are required to adjust noise and vibration limits for sensitive spaces within Seattle Rep; these adjustments will result in higher levels of impact at some sensitive receivers.
- There are missing receptors, including the Leo K. Rehearsal space and the Poncho Forum, which are sensitive spaces within Seattle Rep.
- The assessment of airborne noise impacts during construction is incomplete.
- An assessment of mitigation measures is required for expected airborne noise impacts at Seattle Rep.
- Additional assessments of groundborne noise and vibration impacts from construction are warranted to fully address potential impacts from both Downtown-1 (DT-1) and DT-2.
- Additional assessments of groundborne noise and vibration mitigation measures from construction are 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; groundborne noise, vibration, and surface noise impacts from construction 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 the assessment:

- Sound Transit and Federal Transit Administration's (FTA's) WSBLE DEIS, Chapter 4.2.7: Noise and Vibration (pp. 4.2.7-1 to 4.2.7-23) (USDOT et al. 2022a)
- Sound Transit and FTA's WSBLE DEIS, Appendix N.3: Noise and Vibration Technical Report (USDOT et al. 2022b)
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3A: Noise Measurement Data, Site Details, and Photographs
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3B: Vibration Measurement Site Photographs
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3C: Vibration Propagation Measurement Results
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3D: Maps of Noise Impact Assessment
- Sound Transit and FTA's WSBLE, Attachment N.3E: Maps of Vibration Impact Assessment
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3F: Tables of Noise Predictions
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3G: Tables of Vibration Predictions
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3H: Vibration Analysis of Category 1 Land Uses and Special Buildings

- FTA's *Transit Noise and Vibration Impact Assessment Manual* (FTA Guidance Manual; FTA 2018)
- Sound Transit's Design Criteria Manual, Revision 5, Amendment 11 (Sound Transit 2021).

Review Format

Landau's assessment focused on chapters in 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 in WSBLE DEIS Appendix N.3: Noise and Vibration Technical Report (USDOT et al. 2022b).

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 that the use of the FTA criteria is appropriate for the assessment of noise and vibration impacts 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 noise criteria, as established in Chapter 25.08 of the Seattle Municipal Code (SMC). 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 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 throughout Seattle Center. Because City 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 Rep. Figure 1, a map of Seattle Rep within the Seattle Center campus, illustrates the locations of DT-1 and DT-2, including rail alignments, stations, and station entrances, as well as nearby 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 compared to the same FTA operational noise limits "because this can be a relatively long-term activity." Landau agrees with this determination and notes that the noise limits in WSBLE DEIS Appendix N.3 contain errors and omissions for spaces within Seattle Rep. Table 1 summarizes the noise and vibration limits applied for each space, highlighting the errors that require correction or further assessment. The list of noise and vibration limits for Seattle Rep sensitive spaces was compiled from WSBLE DEIS Appendix N.3, Attachment N.3H, Tables 7-2 and 7-3.

Noise and Vibration Limits – Corrections

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 Seattle Rep, the operational groundborne noise and vibration limits were expanded to consider different rooms within the facility as shown in Tables 7-2 and 7-3 in WSBLE DEIS Appendix N.3, Attachment N.3H. For example, in Table 6-13 Seattle Rep is identified as "Seattle Repertory Leo K. Theatre." In Attachment N.3H, Table 7-2, Seattle Rep spaces include the Leo K. and the Bagley Wright Theaters.

Landau notes that adjustments to some Seattle Rep noise limits, as documented in the DEIS, are warranted following measurements by Landau staff and review of the noise- and vibration-sensitive nature of selected spaces. That is, for many spaces within Seattle Rep, 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 Seattle Rep's use and audience experience. Vibration impacts, even at low levels, can affect the stability of Seattle Rep's suspended lighting systems (i.e., vibrations may cause suspending lighting systems to sway).

A summary of the recommended adjustments to the groundborne noise and vibration limits, including a justification for the adjustment, is provided below in Table 1. Additional detail is provided in the text after this table. Graphical illustrations of noise and vibration measurements made at spaces within Seattle Rep are provided on Figures 2 and 3, respectively.

Table 1: Summary of Noise and Vibration Limit Corrections

Resident Organization	Limits for Operation and Construction (a)		Corrections (Source of Adjusted Limits) (b)		Notes Justification for Adjusted Limits
	Noise (dBA)	Vibration (VdB)	Noise (dBA)	Vibration (VdB)	
Seattle Rep Bagley Wright Theater	35	72	--	65 VdB	Vibration limit is appropriate for “Concert Hall” per FTA Guidance Manual. DEIS noise limit appropriate, confirmed through DEIS and Landau measurements
Seattle Rep Leo K. Theater	35	72	25 dBA	65 VdB	Noise and vibration limits are appropriate for “Concert Hall” per FTA Guidance Manual, confirmed through Landau measurements
(a) Sound Transit WSBLE DEIS Appendix N.3, Attachment N.3H, Tables 7-2 and 7-3. (b) Based on measurements made by Landau staff for Seattle Rep in early 2022. dBA = A-weighted decibels VdB = vibration decibels					

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.” Although the measurement made for the DEIS and documented in WSBLE DEIS Appendix N.3, Attachment N.3H, Table 7-1 (p. 7-3) was 30 dBA for the Leo K. Theater (which is still 5 dBA lower than what was applied in Tables 6-13 and 6-14), the average ambient measurement by Landau was 26 dBA (see Figure 5) 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. and Bagley Wright Theaters, 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. and Bagley Wright Theaters, reducing the potential for vibration impacts and stabilizing the lighting systems on these stages.

Noise and Vibration – Missing Sensitive Receivers

WSBLE DEIS Appendix N.3 omits two noise-sensitive spaces within Seattle Rep that should be included in the assessment of impacts from the WSBLE project: the Leo K. Rehearsal Space and the Poncho Forum. The Leo K. Rehearsal Space is regularly used for rehearsals. Performers rehearsing in this space require an ambient environment that is similar to what would be experienced during a live

performance in the Leo K. Theater. That is, it is expected that ambient noise and vibration levels would be low, and that interference from sources exterior to Seattle Rep would be minimal.

The Poncho Forum is used as both a rehearsal space and performance space, with retractable seating for audiences. The room is fitted with acoustic paneling to minimize reverberation of sounds. Similar to the Leo K. Rehearsal Space, use of the Poncho Forum requires that ambient noise and vibration levels are low to minimize disturbances to performers as well as the audience (when applicable).

Table 2 below summarizes proposed noise and vibration limits for these additional spaces, based on measurements and Landau's understanding of their uses. Included on Figure 5 are graphical illustrations of average measurements made in these spaces. Note that Table 2 also includes a summary of potential sources of noise and vibration impact that are anticipated in the Leo K. Rehearsal Space and Poncho Forum from DT-1 or DT-2.

Table 2: DEIS Appendix N.3 – Missing Seattle Center Noise- and Vibration-Sensitive Receivers

Resident Organization Buildings	Suggested Noise and Vibration Limits (a)		Summary of Use	Potential Source(s) of Noise or Vibration Impact (b)
	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
(a) Suggested limits appropriate for use of space and sensitivities to noise and vibration. Based on measurements by Landau and discussions with Seattle Rep.				
(b) Potential for impact may be due to activities identified in this table and may also include activities not identified here. A complete assessment is required.				

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. WSLBE DEIS Chapter 2.6, Table 2-6, Major Construction Activities and Duration, provides estimated durations for various construction activities related to WSBLE. Cut-and-cover station construction is estimated to take 4 to 6 years to complete. Therefore, the following review of construction noise impacts applies to a construction schedule that could last up to 6 years. Landau notes that construction noise levels will vary and likely decrease as construction progresses. However, the duration of time required for each element of cut-and-cover station construction (e.g., demolition, excavation, shoring, structural, etc.) is unknown.

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

WSBLE DEIS Appendix N.3, Chapter 6.2.1.5 summarizes surface-level construction noise that would occur in support of tunneling operations; WSBLE DEIS Appendix N.3, Chapter 6.2.1.6 summarizes 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 Seattle Rep under either alternative DT-1 or DT-2. WSBLE DEIS Appendix J, Drawing L50-GSP103, provides an illustration of the DT-1 Seattle Center station and entrances. Upon review of this drawing, Landau notes that DT-1 surface construction near Seattle Rep would impact the south side of the building during cut-and-cover and station construction, the east side of the building during construction of the East Station Entrance, and the west side of the building during construction activities along Warren Avenue North just north of the DT-1 station.

WSBLE Appendix J, Drawing L50-GSP703 provides an illustration of the DT-2 Seattle Center station and entrances. Upon review of this drawing, Landau notes that DT-2 surface construction near Seattle Rep would impact the west side of the building during construction of the East Station Entrance as well as during cut-and-cover and station construction. Additional noise is likely to be received from construction activities along Warren Avenue North just south of Mercer Street.

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.”

Given Seattle Rep’s close proximity to both DT-1 and DT-2, Landau finds that the DEIS does not sufficiently evaluate the potential for noise impact to Seattle Rep from surface construction of stations or station entrances. Further, in addition to the potential for impact from the equipment identified in the DEIS, the following activities (i.e., sources of surface construction noise) were either not identified in the DEIS or additional information is required:

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 is expected when collecting and moving spoils away from the DT-1 or DT-2 stations and station entrances. The likely haul routes would include Warren Avenue North and Mercer Street, both adjacent to Seattle Rep, and could therefore represent major sources of construction noise.

As indicated in the DEIS, haul trucks may operate during daytime or nighttime hours, depending on the permitted hours of hauling. Seattle Rep hosts both afternoon and late evening performances in the Leo K. and Bagley Wright Theaters. In addition, rehearsals in the Leo K. Rehearsal Space and Poncho Forum occur most days during typical daytime hours and may also occur during late evening hours. Noise from truck hauling therefore may impact facilities within Seattle Rep during day, evening, or late evening hours.

Construction Staging Areas

Noise from construction staging areas was 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.

Seattle Rep may be located within close proximity to construction staging areas either for DT-1 or DT-2. 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 – Impacts Assessment

WSBLE DEIS Appendix N.3, Chapter 6.2 (p. 6-30) identifies construction activities that would generate the highest levels of airborne construction noise and includes tunneling and cut-and-cover station construction, both of which are proposed for preferred alternative DT-1 and alternative DT-2, both of which could occur near Seattle Rep.

Appendix N.3, Table 6-8 (p. 6-31) of the WSBLE DEIS provides 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), equipment and activities associated with cut-and-cover station construction (i.e., hydromill, caisson drilling, hoe ram, jackhammer, and bulldozer) could operate as near as 8 feet from Seattle Rep. Table 3 below identifies noise levels from the construction equipment summarized in DEIS Table 6-8, and calculates these sound levels at 8 feet, 15 feet, and 50 feet from construction equipment. Distance adjustments are based on noise propagation from a stationary source at +6 dBA per halving of distance to the source.

Table 3: Surface Construction Airborne Noise Equipment and Sound Levels

Construction Activity (a)	Construction Equipment (a)	Sound Level at 50 feet L _{eq} (dBA) (a)	Sound Level at 15 feet L _{eq} (dBA) (b)	Sound Level at 8 feet L _{eq} (dBA) (b)
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
(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-8.				
(b) 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 for cut-and-cover construction of DT-1, “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.” At Seattle Rep, facilities that are nearest Republican Street include the Leo K. Theater and the Leo K. Rehearsal Space.

As noted in Table 3, airborne noise levels from tunneling and cut-and-cover station construction could reach up to 104 dBA at a distance of 8 feet, expected at the south and east building facades of Seattle Rep. Note that the SMC 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 sound level limits at Seattle Rep when construction equipment associated with tunneling and cut-and-cover stations operates within approximately 50 feet of Seattle Rep’s south facade.

Although not included in the DEIS, and as indicated earlier in this letter, noise impacts from construction of the DT-1 East Station Entrance would occur immediately adjacent to the east side of Seattle Rep. Landau anticipates that much of the equipment identified in Table 3 for cut-and-cover stations also would be required for construction of the East Station Entrance. Therefore, the range of sound levels presented in Table 3 also would be anticipated at the east side of Seattle Rep.

Tunneling and Cut-and-Cover Construction Airborne Noise – Assessment of Impacts at Interior Spaces

Noise reductions provided by Seattle Rep’s building itself (i.e., transmission loss provided by building construction materials) are not identified in the DEIS. Although Landau did not take exterior-interior measurements at Seattle Rep, such measurements were made at a resident organization of Seattle Center’s Northwest Rooms. Results of these measurements indicate that the north facade of the

Northwest Rooms provides approximately 61 dBA in reduction to exterior noises. For the purposes of this assessment, Landau assumed a similar interior-exterior reduction applies to Seattle Rep. It should be noted that the actual level of reduction will vary depending on the effectiveness of the building to shield exterior noise and on the dominant noise frequency of the construction noise source.

Assuming an exterior-interior reduction of 61 dBA, Landau expects that, for construction noise received at Seattle Rep's south or east facade at 104 dBA (the highest predicted noise level for cut-and-cover construction, as received 8 feet from the noise source), interior noise levels would be 43 dBA (i.e., 104 dBA – 61 dBA = 43 dBA).

Using 43 dBA as an interior reference level 8 feet from construction activity, Landau estimated interior sound levels at each of the sensitive spaces within Seattle Rep. Estimates of sound levels at interior spaces were completed by estimating distances from the nearest areas of construction (i.e., the south or east facades of Seattle Rep) to each interior space and then applying a 6-dBA reduction per doubling of distance from the noise source, with 43 dBA at 8 feet as reference. The assessment assumes an additional reduction of 10 dBA is provided by interior walls to the Poncho Forum and the Bagley Wright Theater. The results of this assessment are summarized below in Table 4 for each noise-sensitive interior space at Seattle Rep.

Table 4: Surface Construction Interior Airborne Noise Impacts (DT-1)

Seattle Rep Noise Sensitive Space	Distance from Nearest Exterior Construction Activity to Interior Space (feet)	Impact Assessment Result			
		Ambient Noise Level (dBA) (c)	Reference Sound Level Inside Building Facade	Interior Construction Noise Level (dBA) (d)	Increase Over Ambient Noise Level (dBA)
Leo K. Theater	8 (a)	26	43	43	17
Leo K. Rehearsal Space	8 (a)	36		43	7
Poncho Forum	75 (b)	30		14 (e)	0
Bagley Wright Theater	45 (b)	32		18 (e)	0

(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-30, p. 6-70 applies to most sensitive spaces within Seattle Rep.

(b) Estimated by Landau.

(c) Sound level measurements by Landau, January and March 2022.

(d) Calculated using standard adjustment for distance from a point source: $SPL2 = SPL1 + 20*\text{Log}(D1/D2)$.

(e) Includes an assumed 10-dBA reduction provide by interior walls.

The impact to the Leo K. Theater and the Leo K. Rehearsal Space is shown on Figure 2, which illustrates impacts as a “heat map,” highlighting the spaces within Seattle Rep that would be impacted by airborne construction noise during tunneling and construction of the East Station Entrance for DT-1.

As summarized above in Table 4 and as shown on Figure 2, airborne construction noise could exceed existing conditions in the Leo K. Theater and Leo K. Rehearsal Space by up to 17 dBA and 7 dBA,

respectively for a period of up to 6 years (i.e., the estimated duration of cut-and-cover station construction, as identified in WSBLE DEIS Chapter 2.6, Table 2-6). Note that a 10-dBA increase in noise is perceived as a doubling of sound “loudness.” So, an increase of 17 dBA, as predicted at the Leo K. Theater, would be perceived as more than twice as loud as ambient conditions, a clearly perceptible increase in ambient noise. Actual increases in noise may be higher depending on exterior-interior noise reductions provided by the building (i.e., if less than the estimated 61-dBA reduction). The results of this assessment indicate that mitigation will be required during surface construction related to tunneling and the cut-and-cover station. Increases over ambient conditions up to 17 dBA will very likely result in significant impacts to the Leo K. Theater, affecting performances and the audience experience.

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. Note that the ranges of sound levels provided in Table 3 and estimates of impacts provided in Table 4 are based on the FTA reference sound levels for excavators, backhoes, haul trucks, loaders, and vibratory rollers. Therefore, reference sound levels in Table 3 do not represent the loudest noises that could occur from use of jackhammers and hoe rams and actual noise impacts may, during the initial phases, be higher than is predicted in Table 4.

For DT-2, WSBLE DEIS Appendix N.3, Table 6-30 indicates that surface construction also could be as near as 8 feet from Seattle Rep. Landau estimates that construction of the DT-2 East Station Entrance would occur as near as approximately 60 feet to the west of Seattle Rep, and the location of the cut-and-cover excavation area for DT-2 would be approximately 130 feet from Seattle Rep. Landau estimates that impacts from DT-2 would be lower than is predicted for DT-1 during cut-and-cover and East Entrance Station construction. However, should Warren Avenue North be used as a staging area or include active construction that is near Seattle Rep, impacts to interior spaces from airborne noise may occur.

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 construction criteria. Specifically, this section notes that impact noises, such as those noises generated by jackhammers and hoe rams, will be 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.

The results in WSBLE DEIS Appendix N.3, Table 6-13 (and in WSBLE DEIS Appendix N.3, Attachment N.3H, Table 7-3) indicate that the Leo K. Theater would likely experience groundborne levels of up to 48 dBA during operation of DT-1, a 13-dBA exceedance of the DEIS-applied limit of 35 dBA. Table 6-14 indicates that the Leo K. Theater would likely experience groundborne noise levels of up to 28 dBA during operation of DT-2, below the DEIS-applied limit of 35 dBA.

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

Groundborne Noise Limits

Leo K. Theater

As summarized in Table 1, the groundborne noise limit for Seattle Rep's Leo K. Theater is not sufficiently protective 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).

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 during operation of DT-2. The assessment of impact at the Bagley Wright Theater should be confirmed and likely corrected to accurately identify whether impacts are predicted for this space under DT-2.

Leo K. Rehearsal Space

The Leo K. Rehearsal Space was not included in the DEIS. However, as previously mentioned, this space is used for noise- and vibration-sensitive rehearsals and should be included when considering the potential for groundborne noise and vibration impacts from WSBLE operation. This space is located at the southwest corner of Seattle Rep and near the cut-and-cover area for DT-1; the space is also adjacent to the proposed construction area defined in the DEIS, located east of Seattle Rep within the right-of-way of Warren Avenue North. As suggested in Table 2, the proposed noise limit for this space

is 30 dBA. The suggested noise limit is 6 dBA lower than was measured by Landau (see Figure 5; the measured level at Leo K. Rehearsal Space is 36 dBA); however, groundborne noise is a different character of sound than is present in the Leo K. Rehearsal Space ambient environment. A limit of 30 dBA would ensure that the noise environment of the Leo K. Rehearsal Space is protected.

Poncho Forum

Similar to the Leo K. Rehearsal Space, the Poncho Forum was not included in the DEIS. However, as previously indicated, this space is used for noise- and vibration-sensitive performances and rehearsals and should be included when considering the potential for groundborne noise and vibration impacts from WSBLE operation. As suggested in Table 2, the suggested noise limit for this space is 30 dBA, which agrees with results of ambient measurements made by Landau (see Figure 5).

Revised Assessment of Operational Groundborne Noise Impacts

Assessment of Exceedance of Sound Level Limits

For this assessment, Landau compared predicted operational groundborne noise levels to the corrected limits for the Leo K. Theater as well as new limits for spaces not included in the DEIS (i.e., the Leo K. Rehearsal Space and Poncho Forum). The results were compared with the operational groundborne noise assessment results that are summarized in WSBLE DEIS Appendix N.3, Table 6-13. The results of this comparison for DT-1 are summarized below in Table 5.

Table 5: Assessment of Groundborne Noise Exceedance of Limits, DT-1

Seattle Rep Noise Sensitive Space	DT-1 Operational Noise Level (a)	Groundborne Noise Limit		Exceedance	
		DEIS (a)	Adjusted and New Limits (d)	Compared to DEIS (b)	Compared to Adjusted and New Limits
Leo K. Theater	48	35	25 (d)	13	23
Leo K. Rehearsal Space	48 (b)	-	30 (d)	-	18
Poncho Forum	43 (c)	-	30 (d)	-	13
Bagley Wright Theater	37	35	35	2	2

(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-13 and Attachment N.3H, Table 7-2.
 (b) Impact assumed identical to Leo K. Theater due to similar distance from DT-1.
 (c) Impact assumed approximately equal to average of predicted impact to Leo K. Theater and Bagley Wright Theater.
 (d) Based on sound level measurements by Landau in 2022 and sensitivities of each space.

As summarized in Table 5, applying adjustments to the noise limit at the Leo K. Theater and including an assessment of the Leo K. Rehearsal Space and Poncho Forum results in high levels of noise impact at most spaces within Seattle Rep. Specifically, at the Leo K. Theater, DEIS-predicted groundborne noise levels would exceed the adjusted limit by 23 dBA. Similarly, at the Leo K. Rehearsal Space DEIS-predicted groundborne noise levels would exceed the assumed limit by 18 dBA. Exceedances of up to 13 dBA are predicted at the Poncho Forum.

For DT-2, as summarized in WSBLE DEIS Appendix N.3, Attachment N.3H, Table 7-3, predicted groundborne noise impacts would be below applicable limits at the Bagley Wright Theater. Adjusting the Leo K. Theater limit to 25 dBA would result in an exceedance of 3 dBA for DT-2. However, as noted previously, Landau finds that the predicted impacts under DT-2 do not appear correct and should be re-evaluated before a thorough review and conclusion can be made.

Assessment of Impact

In addition to the assessment of exceedance of groundborne noise limits, Landau evaluated the potential for impacts based on increases over existing ambient conditions (i.e., a comparison to actual ambient levels, not limits). The assessment was completed to highlight the degree of impact that may occur at Seattle Rep with the DT-1 alignment. Because Landau is not confident that the DEIS has accurately estimated groundborne noise for DT-2, the following assessment focuses only on DT-1.

Table 6 summarizes predicted operational groundborne noise emissions at each space within Seattle Rep and compares these predictions with existing ambient conditions, as documented by Landau through noise measurements made in early 2022. The increase in sound levels over ambient conditions is provided in the far right column of this table.

Table 6: Assessment of Operational Groundborne Noise Impacts, DT-1

Seattle Rep Noise Sensitive Space	DT-1 Operational Noise Level (dBA) (a)	Existing Ambient Noise Level (dBA) (d)	DT-1 Operational Noise Increase Over Ambient Noise (dBA)
Leo K. Theater	48	26	22
Leo K. Rehearsal Space	48 (b)	36	12
Poncho Forum	43 (c)	30	13
Bagley Wright Theater	37	32	5

(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-13 and Attachment N.3H Table 7-2.
 (b) Impact assumed identical to Leo K. Theater due to similar distance from DT-1.
 (c) Impact assumed approximately equal to average of predicted impact to Leo K. Theater and Bagley Wright Theater.
 (d) Based on sound level measurements by Landau in 2022.

As summarized in Table 6, a comparison of predicted groundborne noise levels from operation with existing ambient sound levels suggests high levels of impact at Seattle Rep for DT-1. Noise levels at the Leo K. Theater would exceed ambient conditions by up to 22 dBA, a clearly audible and discernible impact that could inhibit use of this facility. That is, as noted earlier, a 10-dBA increase in noise is perceived as a doubling of sound “loudness.” So, an increase of 22 dBA, as predicted at the Leo K. Theater for operational groundborne noise impact, would be perceived as more than four times as loud as ambient conditions, a clearly perceptible increase in ambient noise. Increases in noise at the Leo K. Rehearsal Space and Poncho Forum would be up to 12 dBA and 13 dBA over ambient conditions, respectively, also clearly perceptible as more than twice as loud as ambient conditions. At the Bagley Wright Theater, the impact would be less, but a 5-dBA increase over ambient conditions,

especially from a noise source that is primarily a low-frequency rumble (i.e., groundborne noise), is expected to negatively affect the usability of this theater.

Included on Figure 4 is a heat map that highlights impacts that would occur from increases over ambient conditions from DT-1 operational groundborne noise.

Train Speed

As summarized in WSBLE DEIS Appendix N.3, Tables 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. Landau finds 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 most noise-sensitive receivers, including the Seattle International Film Festival (SIFF) Film Center, which is located immediately southeast of Seattle Rep. But at Seattle Rep and the Vera Project, rail speeds are predicted to be 30 mph. Landau anticipates that rail speeds between Seattle Rep and SIFF would be identical and not differ by 15 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 suggest that there may be calculation errors related to the speed of trains along the rail alignment.

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). As indicated earlier, WSLBE DEIS Chapter 2.6, Table 2-6 provides estimated durations for various construction activities related to WSBLE. Tunneling for the Downtown Segment is estimated to take 2.5 to 3 years and cut-and-cover station construction is estimated to take 4 to 6 years to complete.

Chapter 6.4.1: Tunneling Vibration Impacts

During tunneling, the DEIS predicts that vibration impacts would not occur at Seattle Rep. The following summarizes adjustments in vibration and groundborne noise limits, as previously identified (see Table 1), as well as limits for spaces that should be included in the assessment (see Table 2) that would result in additional or greater impacts to sensitive spaces within Seattle Rep.

As summarized in Table 1, Landau recommends adjusting the vibration limit for Seattle Rep to 65 VdB from 72 VdB for both the Leo K. and Bagley Wright Theaters. WSBLE DEIS Appendix N.3, Chapter 6.4.1, Table 6-25 identifies a predicted supply train level of 67 VdB at 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 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 1). 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 discernible and disruptive.

Table 7 summarizes predicted tunneling groundborne noise emissions at each space within Seattle Rep and compares these predictions with existing ambient conditions, as documented by Landau through noise measurements made in early 2022. The increase in sound levels over ambient conditions is provided in the far right column of this table.

Table 7: Assessment of Tunneling Groundborne Noise Impacts, DT-1

Seattle Rep Noise Sensitive Space	DT-1 Tunneling Noise Level (dBA) (a)	Existing Ambient Noise Level (dBA) (d)	DT-1 Operational Noise Increase Over Ambient Noise (dBA)
Leo K. Theater	40	26	14
Leo K. Rehearsal Space	40 (b)	36	4
Poncho Forum	35 (c)	30	5
Bagley Wright Theater	29	32	0

(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-27.
 (b) Impact assumed identical to Leo K. Theater due to similar distance from DT-1.
 (c) Impact assumed approximately equal to average of predicted impact to Leo K. Theater and Bagley Wright Theater.
 (d) Based on sound level measurements by Landau in 2022.

As summarized in Table 7, a comparison of predicted groundborne noise levels from tunneling with existing ambient sound levels suggests high levels of impact at Seattle Rep for DT-1. Noise levels at the Leo K. Theater would exceed ambient conditions by up to 14 dBA, a clearly audible and discernible impact that would be perceived as more than twice as loud as ambient conditions and could inhibit use of this facility for up to 3 years (the estimated duration of tunneling for the Downtown Segment). Impacts to the Leo K. Rehearsal Space and Poncho Forum would be much less, but very likely perceptible and possibly disruptive during use of these spaces.

Included on Figure 3 is a heat map that highlights impacts that would occur from increases over ambient conditions from DT-1 tunneling groundborne noise.

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 are 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 are adjusted (i.e., lowered).

A more detailed assessment should be conducted 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., Vibration Criteria A, or V.C.-A) is greater than would be realized at Seattle Rep for the equipment identified in this table. For example, the minimum distance for potential impact from a bulldozer under the V.C.-A curve is 125 feet, and the nearest distance to Special Buildings located near surface construction areas (Seattle Rep) 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 of 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, an additional assessment should be completed that evaluates the potential for structural damage to Seattle Rep.

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 the SIFF Film Center, Vera Project, and KEXP. A profile view of the station is provided on 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 are specific to the breaking of the slurry wall. However, demolition of this wall would occur very near and to the south of 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 and the likely lengthy construction schedule, there is a high potential for substantial impacts to Seattle Rep during this phase of construction.

Station Entrances

The WSBLE DEIS provides very minimal information on the potential for noise and vibration impacts from construction of the station entrances. Specifically, for DT-1 the proposed East Station Entrance would be located directly adjacent to Seattle Rep. 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 Seattle Rep.

Adjusting the vibration limits for the Leo K. and Bagley Wright Theaters to 65 VdB from 72 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 Seattle Rep 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, an assessment of station entrance construction should be completed to evaluate the potential for impacts. In addition, an assessment should be completed of the potential for structural damage to Seattle Rep's building.

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 Seattle Rep. As summarized in Table 3, estimated sound levels could reach 104 dBA at the exterior facade of the Seattle Rep and could reach up to 43 dBA at interior spaces, potentially impacting noise-sensitive performance and rehearsal spaces (see Table 4).

Mitigation measures summarized in the WSBLE DEIS are effective strategies to reduce airborne construction noise but do not specifically target the potential for noise 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 continued coordination with Seattle Rep.

Noise barriers could be installed at locations where airborne noise impacts are predicted or anticipated, and where there 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 south, east, and west walls of Seattle Rep, shielding them from station and East Entrance construction noise impacts.

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 locations of the fans are not yet defined but could be located very near to Seattle Rep. Due to the low-frequency noise generated by such fans, mitigation may be required to ensure that 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 FEIS should include specific language within the Construction Noise Control Plan regarding exhaust fan noise.

Haul Trucks

Noise from idling and the 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 FEIS 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 DT2. If so, there is a possibility that additional noise impacts may occur at Seattle Rep. A study should be completed to identify the number of trucks in use per hour during various construction phases, what the predicted impacts may be to Seattle Rep, and what mitigation measures may be 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 the strategic location of staging areas to minimize impacts from noise

emissions related to staging areas, noise barriers, and other measures as defined in 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 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.

Table 6-11 (p. 140) of the FTA Guidance Manual 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-noted Sound Transit expectation is true, groundborne noise impacts from DT-1 operation would not be mitigated for Seattle Rep. As noted in this review, Landau recommends that for Seattle Rep, groundborne noise limits be adjusted to a lower level that is more protective of the uses within these spaces, including the Leo K. Theater (see Table 1). The result would be DT-1 operational groundborne noise that exceeds the limits at Seattle Rep by 23 dBA. Accounting for an assumed 5-dBA reduction from high-resilience fasteners and an additional 5-dBA reduction from the structure itself, the Leo K. Theater would likely experience increases of 13 dBA above the limit. 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 and thicker tunnel materials.

For DT-2, WSBLE DEIS Appendix N.3, Attachment N.3H, Table 7-3 indicates that impacts may occur at the Leo K. Theater when applying the adjusted groundborne noise limit identified in Table 1 (i.e., predicted level is 28 dBA; the proposed limit is 25 dBA). Further, as previously noted, there are apparent errors in the calculation of impacts 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) of the WSBLE DEIS Appendix N.3, “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 Seattle Rep.

Chapter 7.4.2 Potential Tunneling Vibration Mitigation

WSDBLE 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 summarizes key elements of this review:

Supply Train

Details provided in WSBLE 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 pads between ties, and using rubber tires on supply trains.

As noted, WSBLE 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 at Seattle Rep that are up to 40 dBA and exceed the unadjusted noise limit by 5 dBA (and exceed the adjusted noise limit by 15 dBA). In addition to the mitigating effects of the measures identified above, Chapter 7.4.2 (p. 7-32) of the WSBLE DEIS Appendix N.3 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 trains at Seattle Rep 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 Seattle Rep are effectively mitigated to below applicable noise limits and ambient levels.

Thrust Jack

As indicated, mitigation of vibration from thrust jacks may be warranted through slower retraction of the jacks. An evaluation 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 in the Construction Vibration Control Plan.

Cutterhead

As stated in WSBLE 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 Seattle Rep. The FEIS and Construction Vibration Control Plan should specify locations/receivers to be monitored at Seattle Rep, 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 Seattle Rep to provide sufficient advance notice to allow noise-sensitive events to be scheduled accordingly.

* * * * *

If you have any questions or comments regarding the information provided in this letter report, please contact the undersigned.

LANDAU ASSOCIATES, INC.



Kevin Warner
Principal



Kristen Wallace
Principal

References

- FTA. 2018. Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123. Federal Transit Administration. September.
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- Sound Transit. 2021. Design Criteria Manual. Amendment 11 Revision 5. May.
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- USDOT, FTA, and Sound Transit. 2022a. West Seattle and Ballard Link Extensions Draft Environmental Impact Statement. US Department of Transportation, Federal Transit Administration, and Central Puget Sound Regional Transit Authority (Sound Transit). January.
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- USDOT, FTA, and Sound Transit. 2022b. West Seattle and Ballard Link Extensions Draft Environmental Impact Statement, Appendix N.3: Noise and Vibration Technical Report. US Department of Transportation, Federal Transit Administration, and Central Puget Sound Regional Transit Authority (Sound Transit). January.
<https://www.soundtransit.org/sites/default/files/documents/16a-wsble-drafteis-noisetechreport-202201.pdf>.

Attachments

Figure 1: Overview Map

Figure 2: Landau Ambient Noise Measurements at Seattle Rep

Figure 3: Landau Ambient Vibration Measurements at Seattle Rep

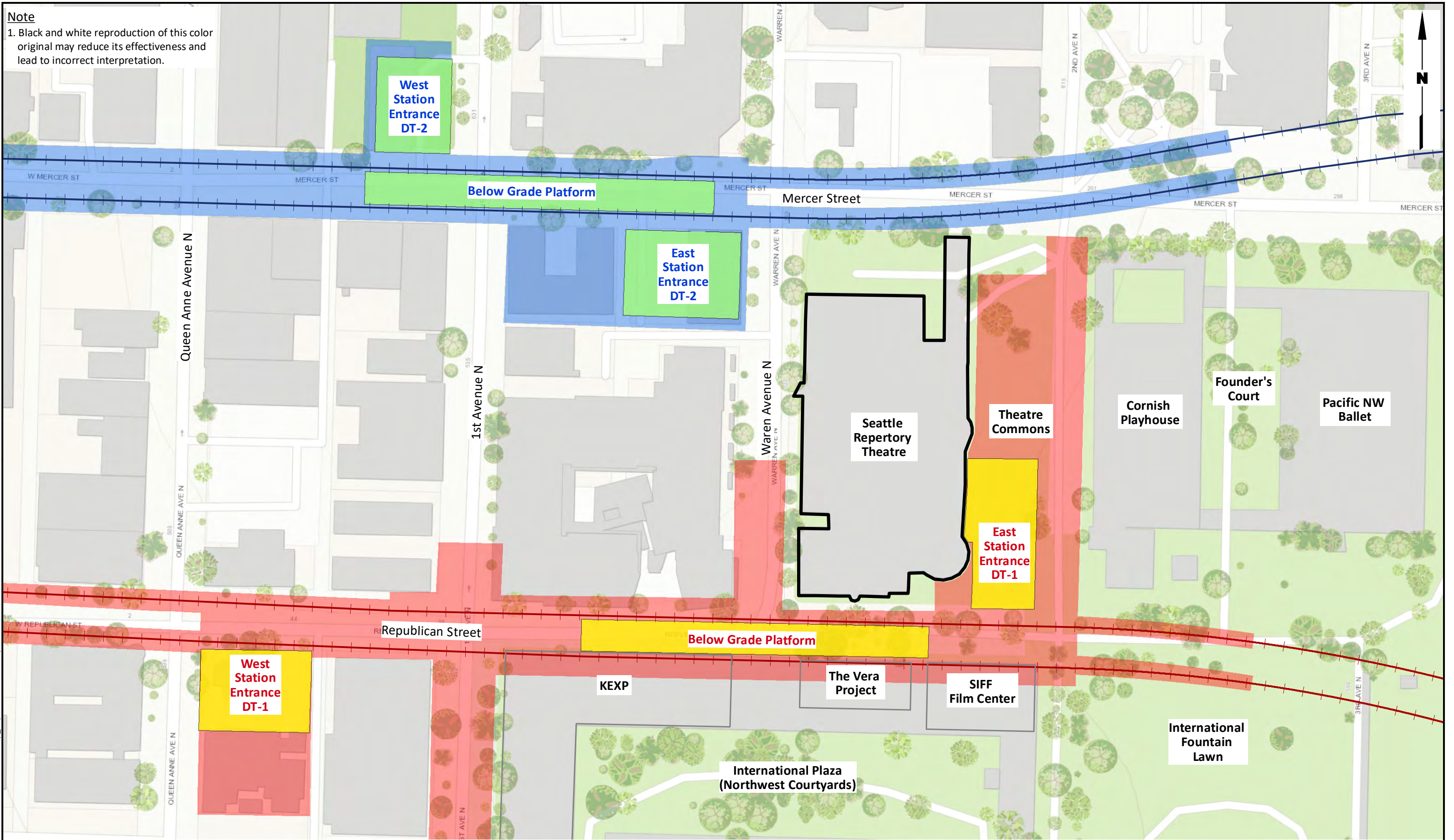
Figure 4: Surface Construction Noise Impact, DT-1

Figure 5: Tunneling Noise Impact, DT-1

Figure 6: Operational Noise Impact, DT-1

Note

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



Legend

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

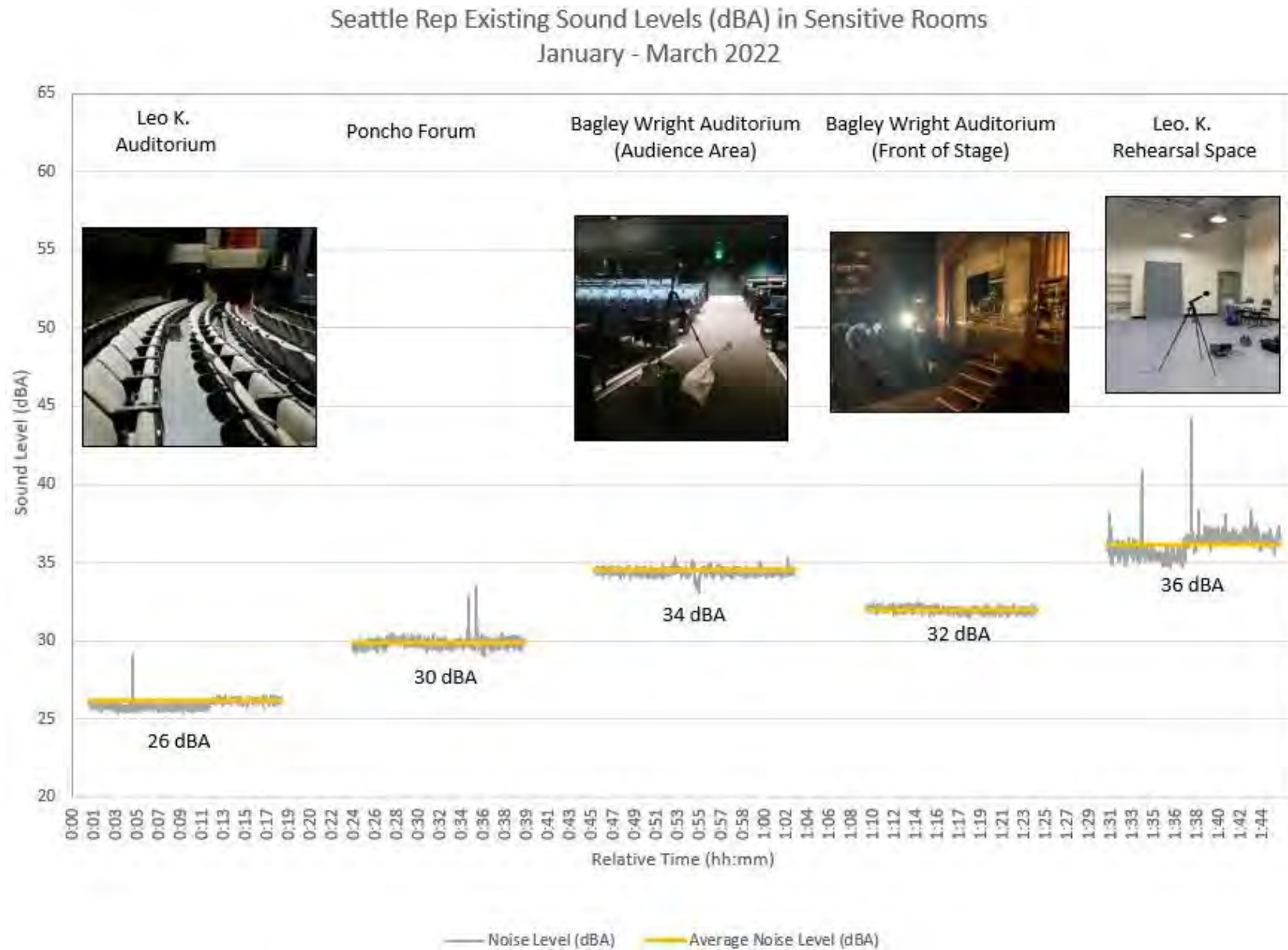


Basemap source: Esri, 2022. Sound Transit. HTNB.

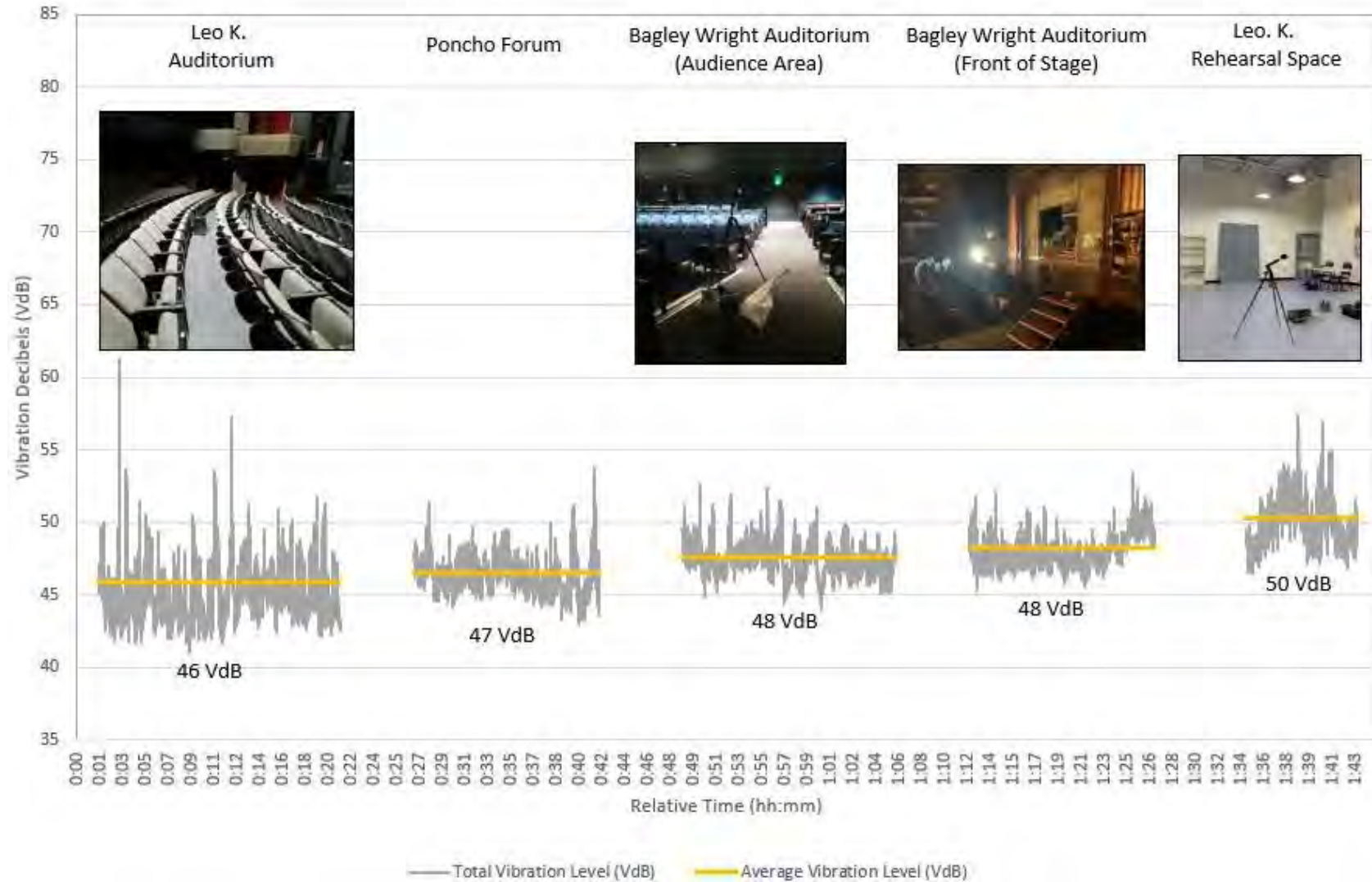
Sound Transit WSBL DEIS
Seattle Rep
Seattle, Washington

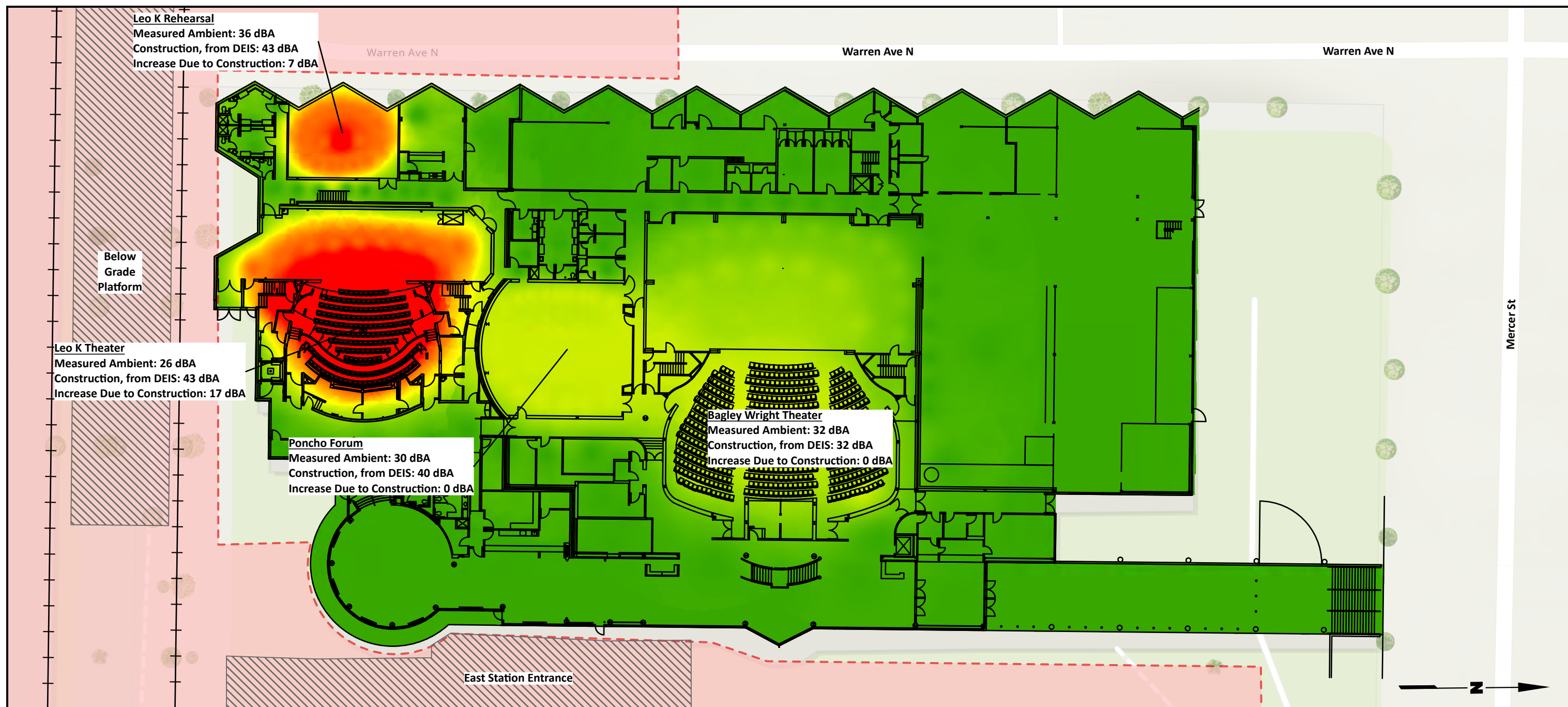
Overview Map

Figure
1



Seattle Rep Existing Vibration Levels (VdB) in Sensitive Rooms January - March 2022





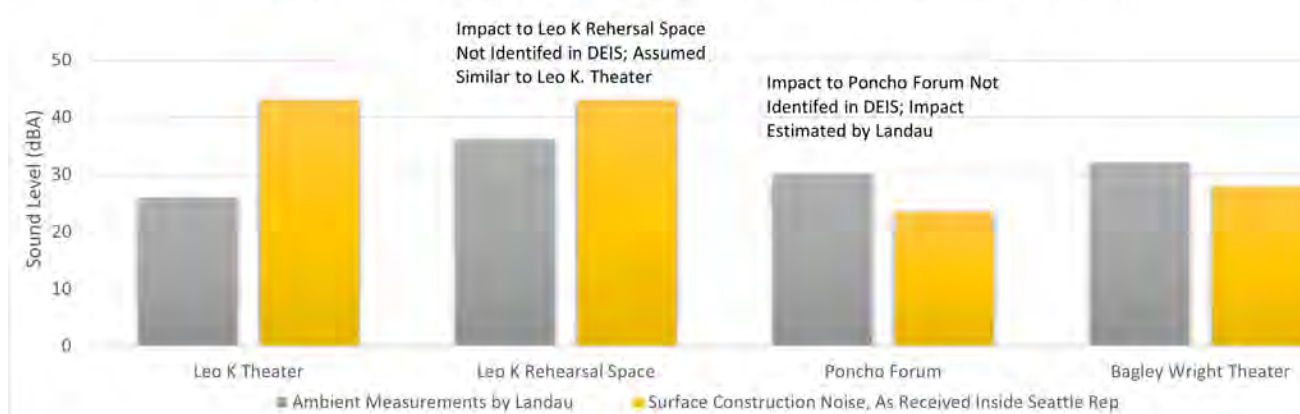
Note

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

Legend

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

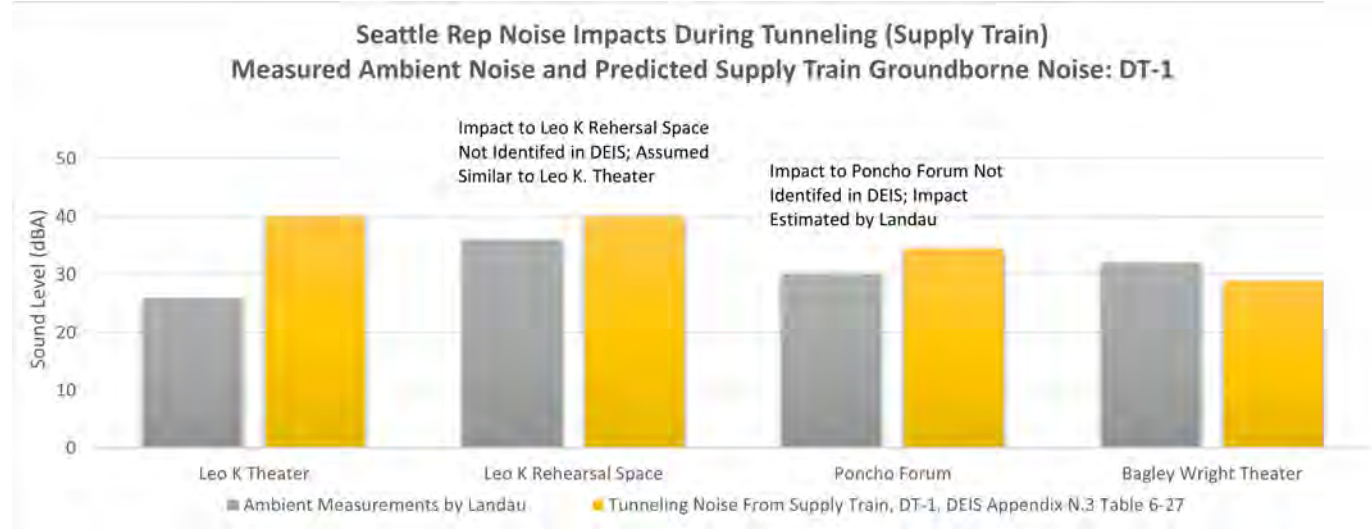
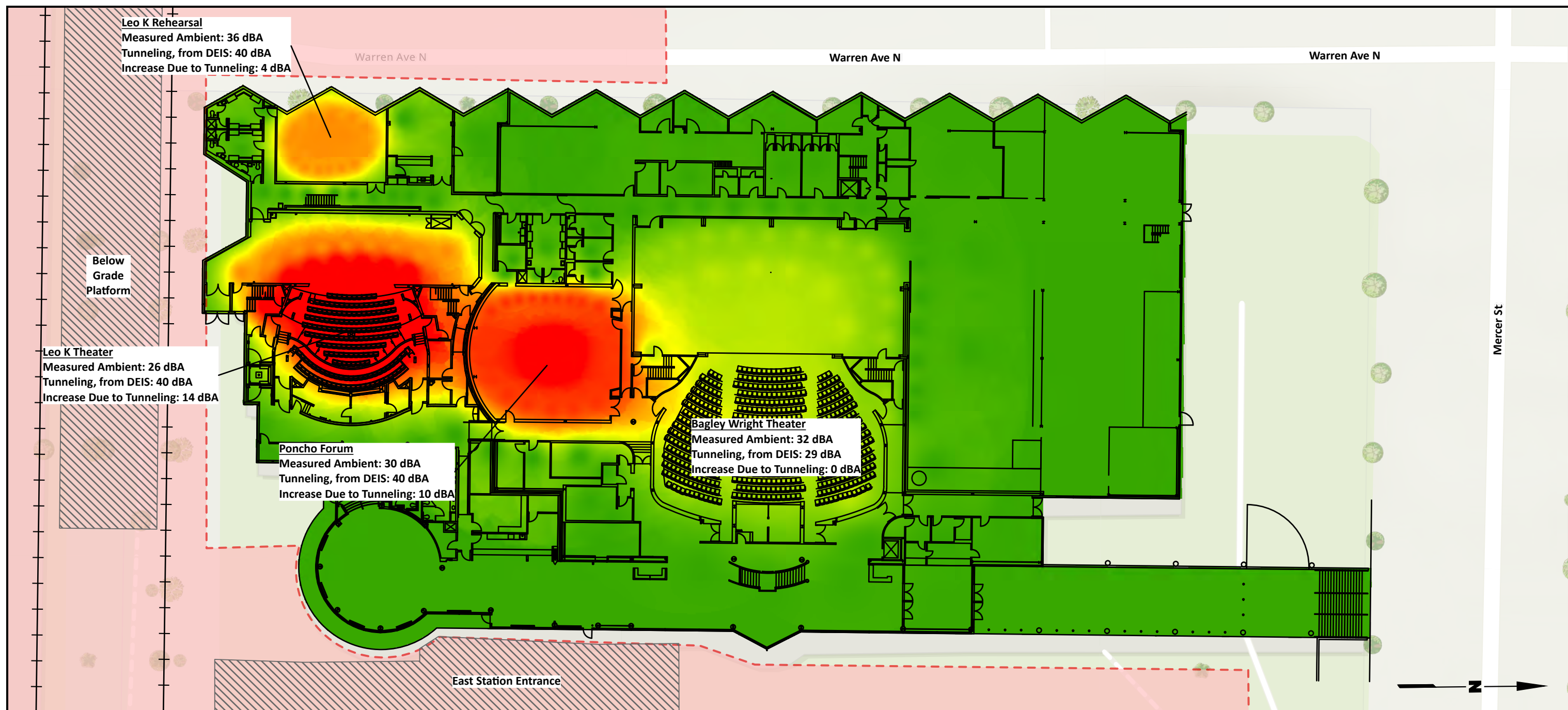
Seattle Rep Noise Impacts During Surface Construction
Measured Ambient Noise and Predicted Surface Construction Noise: DT-1



Sound Transit WSBL DEIS
Seattle Rep
Seattle, Washington

Surface Construction
Noise Impact, DT-1

Figure
4

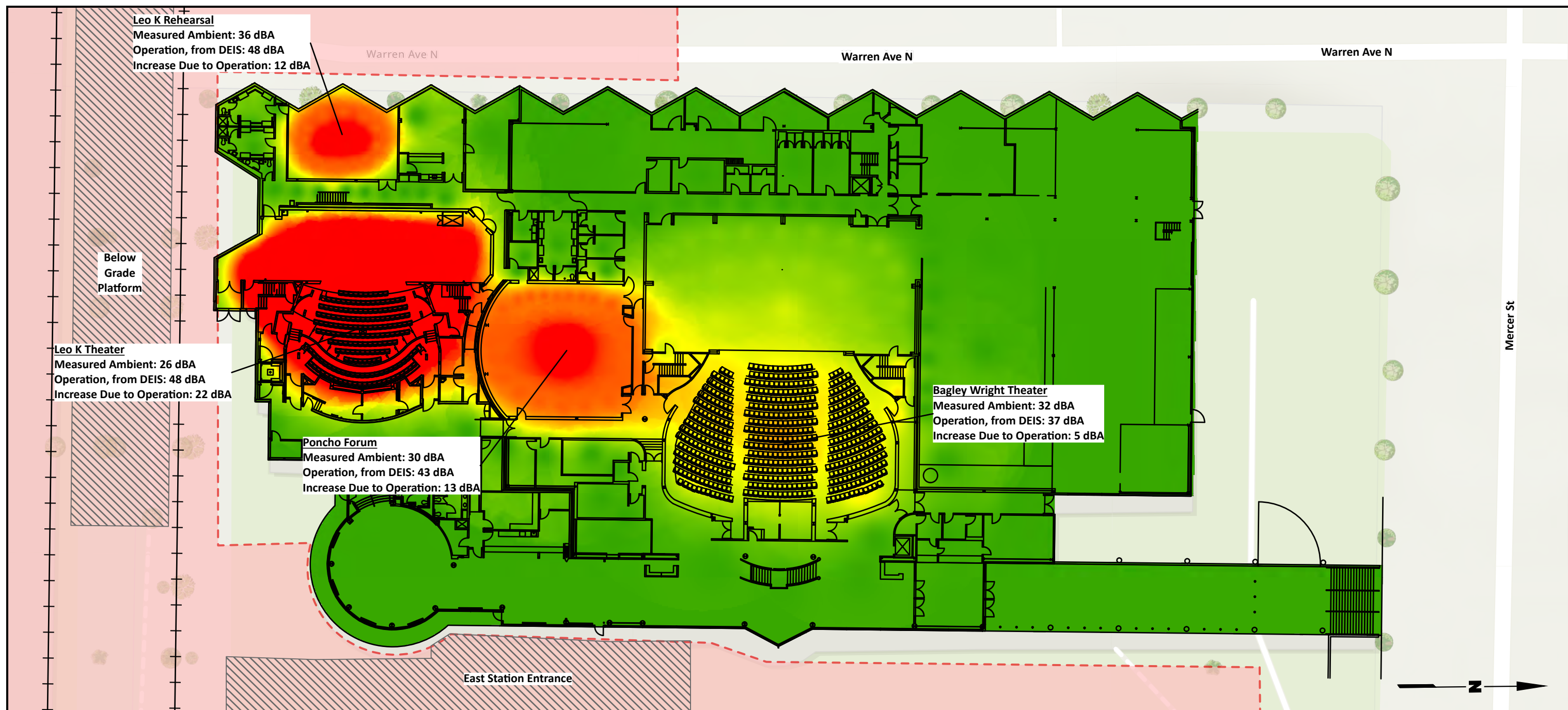


Note

- *Predictions of groundborne noise from tunneling at Bagley Wright Theater not provided in DEIS, estimate based on difference in operational groundborne noise estimates between Leo K Theater and Bagley Wright Theater.
- Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- DT-1 Tracks
- ▨ DT-1 Platform and Stations
- ▨ DT-1 Construction Areas



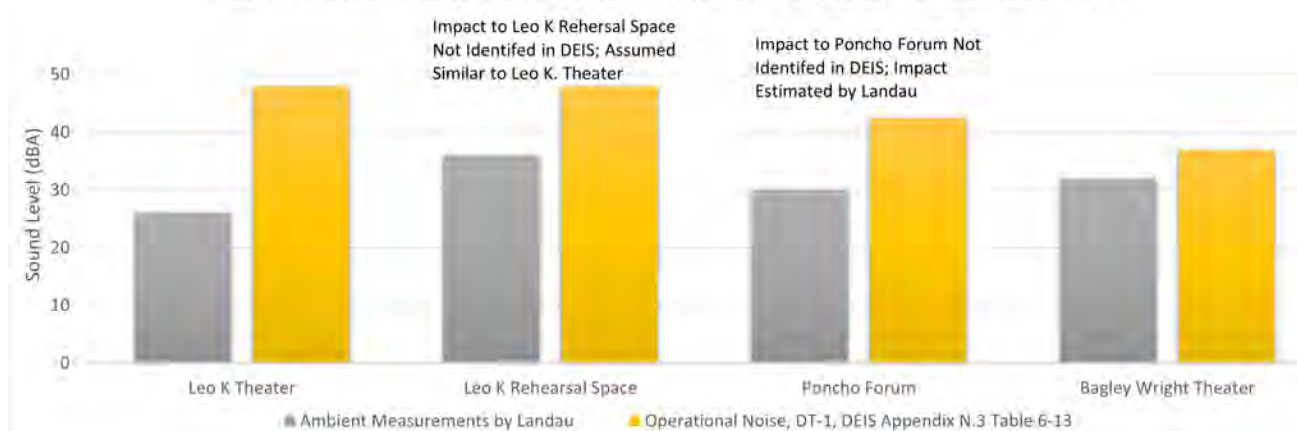
Note

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

Legend

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

Seattle Rep Noise Impacts During Surface Construction
Measured Ambient Noise and Predicted Operational Groundborne Noise: DT-1



Sound Transit WSBL DEIS
Seattle Rep
Seattle, Washington

Operational Noise Impact, DT-1

Figure
6

Sound Transit Projects

Details	Communication
#499489 Date Recieved: 3/22/2022 Created by: Nasra Mohamed Audience: General Public Reach: Participation: Engagement: 1 Source: Open house/public meeting Assigned division: Outreach Category: Project Phase: Planning Project Segment: Environmental phase: Draft EIS	<p>Thank you. Good evening. My name is Donald Marcy. I'm a land use lawyer at Cairncross & Hempelmann in Seattle. We represent the Seattle Center Foundation and many of its resident organizations, including KEXP, the Seattle Repertory Theater, The Vera Project, and Cornish College of the Arts. Seattle Center is an unusual and wonderful place for its aggregation of so many arts and cultural organizations and as a valuable resource for the region. The Seattle Center Foundation and the resident organizations are eager to welcome light rail and a Sound Transit station that serves Seattle Center, but they want to be served in a manner that does not make it difficult for them to exist. We will be submitting a detailed comment letter on the draft EIS on behalf of our clients, but some of our important concerns are as follows. First, the preferred location for the Seattle Center station is perhaps the worst place to put the station. KEXP, The Vera Project, Seattle International Film Festival, Seattle Rep, and Cornish College of the Arts are all sensitive receptors, and all are located in buildings adjacent to the preferred location for Sound Transit's Seattle Center station. The draft EIS is inadequate for failing to include more alternatives for the station location. Both the preferred location and the alternative location at Mercer have significant issues during construction. Construction activities are not permanent, but these construction activities will last for five years, maybe longer. That is a long time for nonprofit arts and cultural organization to shut down or have their operations limited. They are dependent on the revenue generated through their performances and the donations of their supporters. The construction impacts of building the Seattle Center station in the preferred location has not been adequately disclosed and analyzed in the draft EIS. Although the draft EIS notes that there are sensitive receptors next to the station, the vibration and noise impacts to those receptors are not disclosed. The draft EIS notes that the organizations in the Northwest Room, such as KEXP, The Vera Project, and SIFF may have to move during construction, but we will not know that until a contractor is hired and further information is developed.</p>



SEATTLE
CHILDREN'S
THEATRE

Sent Via Email

April 28, 2022

WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 South Jackson Street
Seattle, WA 98104

RE: West Seattle Ballard Link Extension Draft Environmental Impact Statement

Dear Ms. Swift:

Thank you for the opportunity to respond to the draft Environmental Impact Statement (DEIS) for the Sound Transit West Seattle and Ballard Link Extension. Seattle Children's Theatre (SCT) appreciates the chance to detail how our mission and our operation will be impacted by the construction of the Seattle Center station in particular, as well as by the disruption of the greater downtown traffic and activity.

While we are thrilled at the prospect of a light rail station bringing patrons and visitors to Seattle Center which will ultimately lead to increased access to the Center for all, the DEIS fails to fully identify the probable, significant adverse impacts of the construction and operation of the Sound Transit light rail connection of West Seattle to Ballard on the Seattle Children's Theatre.

This letter outlines some of our very significant concerns about the impact of Sound Transit's construction on SCT – which, without exaggeration, could negatively impact and even devastate our business and ability to conduct family-oriented live theatre if not fully considered and addressed. The DEIS does not sufficiently explain how Sound Transit will protect our ability to operate and safeguard us from severe financial loss. We look forward to working with you as you more fully identify the project impacts and develop effective mitigation measures.

History

Seattle Children's Theatre has a long history of artistic innovation and excellence. In our 47-year history, we have produced 274 plays, including 117 world premiere productions, all crafted to communicate with young audiences. Our plays provide an entry point to the arts for the children we serve, and we believe that they deserve to see hopeful stories with meaningful themes of compassion, friendship, courage, and joy. And, we believe that they are enriched by opportunities to use their imaginations and ask their questions, embraced by a creative, responsive community. Our audiences deserve the best quality SCT can provide—innovative original plays; high production values; and excellent teaching methods.

As we opened our doors in February 2022 to audiences for the first time since March of 2020 and the beginning of the COVID – 19 pandemic, we are buoyed by the response of our audience and patrons.

The SCT Board of Trustees is made up of 31 volunteers from the community and is led by President Anh Nguyen. Governance of SCT is organized through a system of standing committees that allow SCT to effectively engage the professional expertise of these dedicated volunteers.

SCT employs up to 250 individuals each year. On a typical day during the season, we employ 47 full-time staff, plus numerous performers and stage managers and members of the local IATSE union. We also employ as many as 50 part-time staff, including teaching artists, actors and theatre professionals. Our performance and production staff are entirely composed of members of 4 separate unions, who are guaranteed a certain number of hours of work under their contracts with SCT.

Access

While we hold a 47-year-old reputation as an artistic pillar within the city, it is mission-critical that we engage new families and households. That is, we must both keep existing patrons and welcome new families as youth and families age out of our programming over time.

SCT makes great effort in all our programs to ensure that our message of access and inclusiveness reaches diverse audiences wherever they are. As we've emerged from the pandemic related shutdown, we have streamlined the experience of audiences accessing affordable tickets to our public performances. Our newest program, **SCT for All**, allows any patron to call in and name their own price. No code needed, no proof of need, or proof of belonging to a specific constituency. We believe theatre should be for everyone.

To address financial barriers for school fieldtrips, we have made the standard discount transparent to educators, so that they know what discounts they are eligible at their time of booking. In addition, we are piloting a program to underwrite 100% of the expense for some schools. We have launched **one&five**, which provides completely free tickets for Seattle Public Schools First and Fifth Grade classes.

Mainstage Productions in SCT's Two Theatres

SCT has two separate resident theatre spaces: The Charlotte Martin Theatre seats 480 and the Eve Alvord Theatre seats 275. At times, two plays are being performed at the same time for different ages of audience. Thus, our audience on a given weekday matinee or weekend evening performance can easily reach 700 or more. At our busiest, SCT performs 14 shows a week, and eight of those shows are during the school day, Tuesday-Friday of the school year. We also have public performances on Friday evening, and twice each day on Saturdays and Sundays.

Our annual audience is nearly 130,000 patrons. In a typical year, more than 60,000 patrons attend public performances. The remainder, approximately 55,000 young people and their educators attended a school performance. They arrive in buses from throughout the region. Notably, a field trip to SCT is often the first live arts experience for a Seattle area young person.

For the most part, those children and teachers arrives to the school performances in yellow school busses, which pull up on Second Avenue North, unload their precious cargo, then travel along Thomas

Street to First Avenue or Queen Anne Avenue, where they wait until the performance is finished. Then, the busses retrace their routes to pick up the children in front of SCT.

Comments on the DEIS

SCT joins many of the Seattle Center Resident Organizations in our request for further exploration of alternate station sites as well as deeper research and data around traffic and congestion during the many years of disruption. SCT incorporates by reference here the DEIS comments submitted by Seattle Center Resident Organizations on Sound Transit's proposal and expands upon them in these comments. For the reasons discussed below, SCT believes that the DEIS is insufficient and that impacts need further analysis and mitigation proposals.

Land Use

The Theatre believes that the construction impacts—including day-time noise, street closures, loss of parking, increased traffic, massive dust, and increased of construction-related litter that attracts rats and other pests - will severely, which could so negatively impact our operations to result in potential permanent closure of SCT. The DEIS lacks any quantitative analysis of the size and scope of the impact, but it is clear that the construction activities are more than an inconvenience to SCT.

Under the proposed DEIS, SCT believes it will be difficult to deliver on its mission and service to the community. The proposed disruptions will limit access to SCT's theatre and education spaces and could threaten the short-term and long-term financial health of the organization. The Theatre has a budget of approximately \$7 million annually, with about \$4 million from earned income in ticket sales to public performances, any loss of revenue puts SCT's financial health at risk. In addition, SCT uses its facility for fundraising activities, which helps raise contributed income which comprises the balance of SCT's revenue. Decreased access to the facility also puts these fundraising activities at risk. As a nonprofit theatre, any detrimental effect on earned income, and/or contributed income, could lead to SCT's demise.

Seattle Children's Theatre is concerned that if families have difficulty moving through the area and parking near the theatre, they could choose not to purchase tickets and cease their regular participation in our work. Additionally, stakeholders and contributors might choose not to attend SCT's annual gala fundraiser, held at the theatre, due to concerns about construction and parking. This construction (and operation) significantly threatens SCT's mission and business. The DEIS fails to consider the probable significant adverse impact on our theater's ability to thrive under such circumstances.

We request, as a proposed mitigation measure, a "robust" marketing plan to ensure the public knows that the Seattle Center and its residents are open and we would hope to be significantly involved in the development and roll-out of the marketing plan.

SCT recommends that the financial assistance mitigation measure be expanded to include compensation to existing businesses for anticipated or actual economic impacts during construction including parking stipends and direct financial compensation (and into the operations period).

Transportation

SCT is concerned about the impact on the transportation of the children, families, schools, administrative staff, and theater professionals who all come to the Seattle Center daily. Seattle Children's Theatre on average performs 10 shows per week, and at times eight of those shows are performed Tuesday-Friday during the school year. These school shows are in addition to our public shows on Friday evening and twice each day on Saturdays and Sundays. In addition, each year approximately 2,500 students in grades K-12 are served by SCT Drama School's nearly 300 courses, which take place on campus. Those classes are held during the summer and throughout the school year.

Given the proposed construction plans, we see no ability plans for school bus queuing and limited access for patron and bus drop off for SCT's 110,000 visitors.

Failure to include these critical SCT drop-off points in the transportation analysis means the current transportation flows and the effects of project construction on SCT and other Seattle Center occupants must be corrected.

Further transportation analysis must be done, and it must be done with the children's safety as the utmost goal. There are no mitigation measures in place that appear to address these serious safety concerns.

SCT is very concerned about the construction and post-construction availability. Under the typical attendance scenario, there will be limited parking, additional cars circulating and looking for parking, and the need to park further away. This situation is exacerbated on weekdays and Saturday evenings when SCT has performances that are likely to draw visitors at the same time as Climate Pledge Arena events. SCT visitors include families with small children and multiple children. Walking longer distances is difficult for families bringing multiple children, as well as diaper bags, strollers, and various paraphernalia associated with family outings. SCT is concerned that difficult parking will make many guests late to performances and could deter families from attending future performances. The proposed mitigation measures appear to be harmful to SCT since they involve significant changes to the streets adjacent to SCT's entrance and potential use as bus layover, pedestrian access and bicycle lanes during the construction period.

We do not believe the DEIS addresses the price of parking which has already increased with higher demand and limited supply. The higher cost of parking will have an impact on SCT that was never considered in the DEIS. SCT's patrons are likely to be much more price sensitive than those attending an Arena Event. That is, a patron who pays \$25 for a ticket to an SCT performance will not be willing to pay as much for parking as an Arena patron with season tickets to a sports team or a \$125 concert ticket. Already, the metered parking and parking lot prices on streets adjacent to SCT are significantly higher on nights with a Climate Pledge Arena event, and this will only get worse.

Safety

The DEIS fails to identify the significant adverse impact on SCT, and on its patrons, of the increased dust caused by construction. Children and families will be highly sensitive to dust and pollutants, and SCT requests that the DEIS address mitigation of those substances.

The DEIS proposes to feasible solution to insulate nearby businesses from harmful noise, which, in itself could dissuade parents and children from walking through Seattle Center and interrupt or interfere with our ability to conduct live theater.

Conclusion

In summary, SCT is not only a national and international treasure but also a landmark institution in Seattle's cultural and recreational milieu. Seattle is an entrepreneurial city, and the entrepreneurial brain is fueled by creative endeavors. Studies show that children who are exposed to art, when their minds are malleable, are more likely to have higher reading and academic skills, social skills, and emotional control. Those are all skills that Seattle needs in its children and its citizens. The leaders of tomorrow are shaped by the arts of today, and SCT has played a leading role in the education of children throughout the region. It is vital that this work continue, and grow.

Sound Transit must to better at looking critically at the environmental impacts associated with the Sound Transit light rail connection of West Seattle to Ballard project, and that the DEIS accurately reflects the significant adverse environmental impacts associated with the project.

For the reasons discussed above, SCT believes that its mission and operation will be severely impacted during construction of the Seattle Center station as currently envisioned and that the impacts have been significantly underestimated in the DEIS. Seattle Children's Theatre requests that Sound Transit work with SCT and Seattle Center to collaboratively develop and analyze mitigation measures that effectively minimize the potentially devastating effect of this project on SCT, and on the community it serves.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Kevin Malgesini', with a long horizontal stroke extending to the right.

Kevin Malgesini
Managing Director

Sound Transit Projects

Details	Communication
<div>#499498</div> <div>Date Recieved: 3/22/2022</div> <div>Created by: Nasra Mohamed</div> <div>Audience: General Public</div> <div>Reach:</div> <div>Participation:</div> <div>Engagement: 1</div> <div>Source: Open house/public meeting</div> <div>Assigned division: Outreach</div> <div>Category:</div> <div>Project Phase: Planning</div> <div>Project Segment:</div> <div>Environmental phase: Draft EIS</div>	<p>Hi. Thank you, and thank you for all of your efforts this evening and throughout this process. I share our collective excitement about the Sound Transit's planned extension through the city from West Seattle to Ballard. I'm a member of the board of directors of the Seattle Children's Theater. While it's extremely important to increase access and ease the traveling to the city and Seattle Center, we have grave concerns, which you've heard about from my other neighboring partners. It's extremely important to increase access and the ease of traveling. At the same time, we have grave concerns about the proposed station on the preferred alternative extension line. The location on Republican potentially presents a crisis for some of the organizations housed at the Seattle Center. The impacts of five to seven or ten years of construction will have a serious impact on our ability to serve the 12 million annual visitors who enjoy the arts and culture and science organizations that bring them to the center. We're the heart and soul of much of our innovation and cultural entertainment in the city, and we provide really important access and inclusive ways for children and families across our region to enjoy these centers and come together to honor our cultural entertainment sectors. I support the organizations who are housed at the center who are concerned. We play an important role in the city. I believe we have to do whatever it takes to mitigate the impact of construction and access to ensure that our leading cultural organizations survive the development and construction period. Thank you very much. We're very excited about the prospects of light rail coming to the center. We want to do everything we can to maximize the benefit while retaining our cultural organizations. Thank you very much.</p>

Sound Transit Projects

Details	Communication
#498791 Date Recieved: 3/23/2022 Created by: Cecelia Gunn Audience: General Public Reach: Participation: Engagement: 1 Source: Assigned division: Outreach Category: Project Phase: Planning Project Segment: Environmental phase: Draft EIS	<p>Thank you for soliciting comments regarding the proposed location of the Seattle Center Link Light Rail Station. Seattle Children's Theatre shares the concerns of our peers and fellow resident organizations about the proposed location of the Seattle Center Link Light Rail station. That location potentially presents a very real challenge for many organizations housed at the Seattle Center.</p> <p>As we dig into the details of a potential 5-7 years of construction, it is clear to see that this will serious impact on the ability of the Seattle Center's 12 million annual visitors to enjoy the arts, culture, science, and sports that bring them to the Center.</p> <p>Housed on the Seattle Center campus since the mid-nineties, SCT sits in the shadow of the Space Needle and presents world-class theatre to the region's young people. A field trip to Seattle Center and an SCT production is often the first arts experience for many of our youth. Our schools and busses will be challenged to make this important experience happen with the disruption proposed by the light-rail location.</p> <p>SCT gives its full support of light rail coming to the Seattle Center, we simply ask for more consideration of the station location to allow Seattle Center organizations to survive the disruption.</p> <p>Clare Hausmann Weiand (she/her)</p> <p>Senior Director of Strategic Initiatives</p> <p><u>Seattle Children's Theatre</u> Phone206-859-4008 Emailclareh@sct.org**</p> <p>Web**sct.org</p>



April 27, 2022

WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 S. Jackson St.
Seattle, WA 98104

Re: WSBLE DEIS Comments

Dear Ms. Swift:

Thank you for the opportunity to comment on the West Seattle and Ballard Link Extensions (WSBLE) Draft Environmental Impact Statement (DEIS). We endorse and adopt the comments provided on behalf of the larger group of Seattle Center tenants and clients by Don Marcy of Cairncross & Hempelmann along with the comments provided by Uptown Alliance. This letter is intended to address comments more specifically related to SIFF and its uses and facilities.

Seattle International Film Festival (SIFF) is the Northwest's leading year-round film organization, bringing the best in international and independent film to the Puget Sound region. Founded in 1976, its mission is to create experiences that bring people together to discover extraordinary films from around the world. It is through the art of cinema that we foster a community that is more informed, aware, and alive. SIFF fulfills its mission through year-round screenings with annual attendance exceeding 175,000 attendees, its education programs connecting over 8,500 students to filmmakers and supplying space to create, and its annual international film festival that features 400 films from over 85 countries. SIFF is committed to be a long-term member of the Seattle Center Arts Community at the Seattle Center. SIFF is also committed to maintaining an operating cinema in the Uptown neighborhood.

Four of SIFF's five year-round screens are in the Uptown neighborhood – one at the Seattle Film Center (SFC) on the Seattle Center campus in the Northwest Rooms and three at the Cinema Uptown at the corner of Queen Anne Avenue North and Republican Street. SIFF is a seven-day-a-week operation with these two venues making up over half (57%) of SIFF's overall cinema ticketing capacity, which is SIFF's primary year-round revenue generating activity.

In the operational phase, frequent, intermittent ground-borne noise and vibration from underground rail traffic is not compatible with a quality cinematic/theatrical experience. Further, the anticipated higher-intensity disruptions from a prolonged 5- to 8-year construction period (intense noise and vibration, dust, vehicular and pedestrian access limitations, etc.) could significantly impair or completely prevent SIFF's operation resulting in complete and extended shutdowns or loss of revenue/attendance that would threaten the financial viability of this treasured not-for-profit arts organization.

SIFF's mission is to create experiences that bring people together to discover extraordinary films from around the world. It is through the art of cinema that we foster a community that is more informed, aware, and alive.

The presentation of artistic cinematic programs requires a quiet, distraction-free theatrical experience.

This requirement is fundamental to SIFF's existence so SIFF engaged specialists at Landau Associates to determine threshold levels that cannot be exceeded for our screens to continue to show films, uninterrupted, throughout the construction and operational phases of the project, which is something we did not experience during the construction of Climate Pledge Arena. Conditions that exceed these levels must be mitigated to ensure SIFF's ability to continue operation. The result of Landau Associates' work is attached to this comment letter for Sound Transit's review along with a summary of our specific comments to the DEIS.

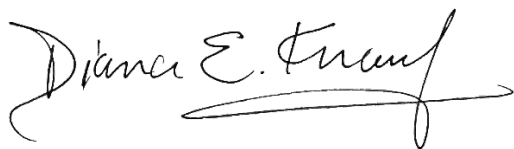
Uninterrupted, universal access to our screens and administrative offices, compliance with best practices for fire & life safety issues along with noise and vibration issues during construction and operational phases are of paramount concern to SIFF. The DEIS does not adequately address noise and vibration levels to give SIFF confidence that Sound Transit understands SIFF's facilities or its operations.

SIFF supports the WSBLE project and eagerly awaits the arrival of the Link light rail in the Uptown Urban Center. SIFF is excited by the opportunities created by eventual proximity of its SFC and Uptown Cinema venues to a light-rail station on the ST3 Ballard Link Extension. Audiences will be able to reach these venues quickly, easily, and inexpensively from a wide geographic area. Further, youth audiences will be able to reach our venues from neighborhoods that would otherwise be inaccessible without a car and driver. However, this opportunity comes with significant concerns.

SIFF does not support the DEIS DT-1 Preferred Alternative (Republican Street) station location because the impacts during the construction and operational phases and necessary mitigation for each of those phases is not adequately addressed in the DEIS. SIFF is not confident it will be able to operate during an extraordinarily long and disruptive construction phase, which could result in the closing of SIFF after five decades in Seattle, unless the construction and operational impacts are adequately mitigated. SIFF believes Sound Transit should move this station to the Alternative Alignment DT-2 location on Mercer.

We look forward to you incorporating our comments into further analysis before your final decision on the best location for the Seattle Center/Uptown station, the station design, and the integration of the station into the fabric of the community. We appreciate your commitment to this important endeavor and look forward to working together to deliver the West Seattle and Ballard Link Extensions.

Sincerely,

A handwritten signature in black ink, reading "Diana E. Knauf". The signature is fluid and cursive, with a long horizontal flourish extending from the end of the name.

Diana Knauf, President
SIFF Board of Directors

CC: Kent Keel, Sound Transit Board Chair
Dow Constantine, Sound Transit Board Vice Chair
Dave Somers, Sound Transit Board Vice Chair
Mayor Bruce Harrell, City of Seattle
Council President Debora Juarez, City of Seattle
Councilmember Andrew Lewis, City of Seattle
Robert Nellams, Seattle Center Director
Marshall Foster, Office of the Waterfront & Civic Projects
Rico Quirindongo, Office of Planning & Community Development Acting Director
Kristen Simpson, Seattle Department of Transportation Interim Director

Attachment: SIFF's Summary of DEIS comments
Landau Associates letter dated April 26, 2022

DEIS COMMENTS

SIFF appreciates the extensive research conducted by Sound Transit, the City of Seattle, King County Metro, and other partner agencies as part of the WSBLE DEIS. However, more information is necessary to understand the true impacts of WSBLE construction.

RECOMMENDATIONS: Overall

Select the Alternate Alignment (Mercer)

- **ST should move this station to the Alternative Alignment DT-2 location on Mercer.** Selecting the Alternative Alignment (moving the station North) would avoid all of the noise and vibration issues that are potentially fatal for the surrounding (sensitive receiver) Arts Organizations. The DT2 Station Entrance locations would not need modification, however, alternative Construction Techniques must be considered to eliminate significant and prolonged lane restrictions on Mercer Street such as:
 - o Sequential Mining Techniques
 - o Acquiring Property and constructing temporary detour lanes to maintain land capacity on Mercer
 - o Rapid Lidding of cut-and-cover to minimize duration of lane closures
 - o Reducing extent of disruption by relocating scissors cross-over
 - o Etc.
- **ST should evaluate using a mining technique for Station Construction for both the Preferred and Alternative Alignments.** ST is already proposing the use of a mining technique underneath the NW Rooms at a depth of 25-115 feet directly underneath the foundations of the NW Rooms in the Preferred Alternative station location. Sound Transit considers mining for other WSBLE stations in the DEIS that are only 15 – 20 feet deeper than the SC-DT1 Republican or SC-DT2 Mercer station locations. Given the severe traffic, transit, and noise and vibration concerns in this area, mining methods should be seriously considered.
- **ST should pay special attention to *operational* Noise and Vibration for the Uptown area.** The area has a very high concentration of sensitive receiver artistic presentation and production venues, including Classical KING-FM, Seattle Opera, McCaw Hall and Nesholm Family Lecture Hall, PNW Ballet, Cornish Playhouse, Rep, SIFF Film Center, Vera Project, KEXP, SIFF-Uptown Cinema.

The design of the tunnel, rail and railbed (continuous rails, isolated rail ballast, floating slab, gentle curves, etc.) and operational rules (approach/exit speeds, braking, etc.) should err on the side of quiet. Should operational ground-borne noise and vibration turn out to adversely affect the cinematic, theatrical, or musical experiences of quiet auditorium conditions, the costs of retrofitting once the line is in operation will be prohibitive or impossible.

Final EIS Design Process

- **Sound Transit should involve stakeholders more directly in the design process for the Final EIS.**

It seems clear that Sound Transit did not have a deep understanding of the complex issues surrounding the Seattle Center/Uptown station location during the production of the DEIS. Local stakeholders with detailed knowledge are eager to work with Sound Transit to bring a light rail to the district as rapidly as possible while preserving the important businesses, institutions and residences in the neighborhood.

RECOMMENDATIONS: Specific Refinement Suggestions for Further Study

ST Preferred Alignment DT-1

- Mining Technique for station construction
 - o Expected noise and vibration may be within limits for sensitive receivers
 - o Already using a mining technique 20 – 115 feet below NW Room Foundations
 - o Eliminates need for 15-month full closure of 1st Ave N at Republican
 - o Preserves Tree Canopy on August Wilson Way and access to Rep and Cornish
- Shift Station Entrance to the former Postal Building
 - o Eliminates 115 ft cut and cover construction in between 3 unique sensitive receivers (SIFF, Rep, Cornish)
 - o Already partially excavated
 - o Building is vacant at present
 - o Excellent TOD opportunity
 - o Excellent connection to northbound bus connections
 - o One-half to one block away from southbound transit connections

ST Alternative Alignment DT-2

- Review Construction Methods to preserve major arterial and freight corridor flows on Mercer
 - o Mining Techniques
 - o Cut-and-Cover with lane shift south onto demolished properties until temporary cover is installed.
- Move scissors crossover to elevated section near (minimal project end-of-line) at Smith Cove
- Noise and Vibration Mitigations (floating slab, etc.) will be needed in vicinity of McCaw Hall sensitive receiver.
- Great TOD opportunities
- Great opportunity to enhance pedestrian access to Seattle Center along Warren Ave
- Improved Kiss-and-ride drop-off/pickup for Queen Anne Hill residents

REQUEST: Construction Management Planning

Construction of the ST3 network in downtown Seattle will be the largest infrastructure project in Seattle's history. More work is needed to ensure that we maximize this opportunity to connect our region while minimizing the undue harm to communities, businesses, and our transportation network during the 11+ years of WSBLE construction. While construction activities may be temporary, their impacts may cause lasting harm. We believe we can build one of the largest light rail expansion projects in the country while preserving the health and vibrancy of downtown Seattle, but more work is needed before finalizing the alignment and construction plans.

We request that Sound Transit and its partners prepare a detailed construction management plan that includes:

- Establishing a Construction Coordination Committee for north downtown comprised of South Lake Union, Uptown, and Seattle Center representatives and working with the committee to develop a plan to minimize construction impacts.
- Avoiding impacts to transit, especially fixed rail transit or bus service with no adequate detour route. Providing additional transit service in areas acutely impacted.
- Providing assistance to employers that encourages and facilitates transit ridership.
- Establishing requirements for maintaining access to venues and businesses in construction contract documents.
- Developing a communications plan to inform patrons, businesses, employees, and local residents of alternative route options. Providing real-time and advance-notice information on traffic movement, detour routes, and access.
- Providing mitigation measures for business impacted in Uptown.
- Implementing public education measures and creative marketing ideas that promote access and attractiveness of venues and businesses.
- Defining appropriate freight routes to accommodate large trucks and proactively communicating changes to street and route access.

CONCLUSIONS:

DEIS

- Fails to identify and include the historic SIFF Uptown Theater as a sensitive receiver
- Insufficient consideration or analysis of Special Event and Surge Load Analysis unique to this station.
- Inadequate consideration of construction impacts to sensitive Arts and Culture organizations and their unique performance, presentation and production facilities that surround the DT-1 station location.
- Inadequate consideration of Transportation and Transit Effects of a 15-month full closure of 1st Ave N and Republican (or arterial N/S crossings of Mercer at 1st N, Queen Anne and 1st W).

Preferred Alignment SC-DT-1

- **The proposed cut-and-cover construction methodology in this location is unacceptable.** Noise and vibration impacts over a 5–8-year period on such a concentrated area of specialized Arts Performance and Production space sensitive receivers cannot be successfully mitigated. The current proposal would jeopardize the survival of 5 significant community arts organizations and destroy the Seattle Center arts and cultural community that the station is intended to serve.
- **Use of a mining technique for station construction** could significantly reduce the noise and vibration impacts to 7/24 sensitive receivers like KEXP and eliminate the substantial traffic and Transit impacts in a geographically constrained location.
 - o Note however: cut-and-cover excavation for the proposed East Entrance location would still impact the SIFF Film Center, likely requiring a 5–8-year relocation of SIFF Business Offices, and the location of the East Entrance building would negatively impact the ambiance of the Seattle Center Grounds.

Alternative Alignment SC-DT-2

- **The proposed cut-and-cover construction methodology in this location is problematic.** The proposed traffic impacts on Mercer Street are untenable. (High volume, No alternative route, Passenger and Freight Mobility, Transit Routes)
- **The inclusion of a track-crossover adjacent to the station invalidates simple comparison of alternatives.** Using Cut-and-Cover for the track cross-over adds two blocks of disruption to major Mercer intersections and with primary, non-redundant North-South arterials, exacerbating the already unacceptable traffic impacts of cut-and-cover station-box construction on Mercer Street.

DEIS INADEQUACIES – Overarching Comments

- **Comment 1 - Road Closures & Detours:** The DEIS provides some information pertaining to road closures, but the analysis leaves out information about most closures less than one year (See Section 3, Table 3-30). In addition, detour routes are suggested for some closures, but not others. The full network of road closures, detours, and durations must be analyzed. It is improper to ignore closures of shorter durations and study each segment in a silo. The DEIS also does not analyze the full traffic volumes and patterns that must be mitigated as part of the decade-long construction window, nor does it analyze capacity and impacts during surge events. This information is necessary to understand the full impacts during construction and to prepare plans for mitigation.
- **Comment 2 - Construction Methodology:** The DEIS proposes only one construction technique (cut-and-cover) for each station in north downtown. It is unclear how specific methodologies were selected and why, or if other less impactful construction means may be possible. Sound Transit should study the possibility of constructing the Denny, South Lake Union, and Seattle Center/Uptown stations via means other than cut-and-cover and weigh the trade-offs with alternative approaches. This may include consideration of mined stations and other creative approaches.
- **Comment 3 - Pedestrian Impacts:** The DEIS analysis for pedestrian impacts is lacking across all segments. Pg. 6-47 of the DEIS Transportation Technical Report notes that “the Ballard Link Extension Build Alternatives could close sidewalks or reduce the sidewalk width within the construction areas along the impacted roadways...,” however, the DEIS does not contain any detailed information about the location or duration of sidewalk closures. This analysis must be included in the Final Environmental Impact Statement. Information about sidewalk closures is critical to evaluate the impacts of different alternatives and provides critical data necessary to inform the analysis of anticipated business displacements. SIFF makes significant use of sidewalk spaces for audience holding lines, particularly during the 25-day Festival period.
- **Comment 4 - Construction Sequencing:** The DEIS identifies an 11-year construction window, but it does not specify the timing for each station or concurrent construction activities. Before finalizing the alignment, Sound Transit should study and disclose the estimated construction sequencing to better understand the impacts of WSBLE construction.
- **Comment 5 - Cumulative Impacts:** The DEIS appears to study construction impacts and road closures in isolation from one another. These construction plans must be studied as concurrent actions to understand the cumulative impacts of construction and mitigate appropriately.

DEIS INADEQUACIES – Specific Comments

Chapter 2 Alternatives Considered

- **Comment 6 - Page 2-10, Section 2.1.1.2**

A Mined Tunnel Center Platform design is shown but the DEIS does not indicate when or how Sound Transit selects this option so the reader cannot determine if Sound Transit has adequately analyzed the significant adverse impacts cut and cover construction will have on the sensitive receivers around the SC DT-1 station site.

- **Comment 7 - Page 2-54, Section 2.1.2.2.2**

CID-1b “allow the station to be mined rather than constructed using cut-and-cover methods *and would reduce surface disturbance during construction*”. There is no mention of time or cost differences between mining and cut-and-cover. This is another instance where the DEIS does not show adequate analysis of the significant adverse impacts of the WSBLE project or make the case for why the different method are selected. There is no analysis of cost differences between mined and a cut-and-cover construction of the SC DT-1 station in relation to the mitigation costs and operational risks for the six unique sensitive-receiver Arts Performance and Production Spaces adjacent to the station and tunnel.

- **Comment 8 - Page 2-82, Section 2.5.3.2**

Table 2-5 only shows 2 alternatives carried forward. Options for an alignment to the south (on Harrison or Thomas) to avoid sensitive receivers was not carried forward but considering the significant number of sensitive receives adjacent to and near the Republican Street station and along Mercer Street, a southern alignment should be reconsidered.

- **Comment 9 - Page 2-83, Section 2.6**

"Concurrent work at multiple construction areas would be required to complete the project in this timeframe". We have not found a meta-analysis of combined traffic impacts to mobility throughout the city. A clearer understanding of these external costs might increase the value of using mining techniques for station construction in more locations throughout the Downtown Segment. The DEIS has not adequately analyzed the significant, adverse, combined traffic impacts to mobility throughout the city.

- **Comment 10 - Page 2-84, Section 2.6.1**

"Civil Construction would take between.....4 to 7 years along tunnel areas". The duration of construction to complete the SC-DT1 Republican Street Station will put SIFF Film Center out of business if access, noise, and vibration cannot be adequately mitigated.

- **Comment 11 - Page 2-84, Section 2.6.1**

"Work Specific Construction Plan would be confirmed during final design" - up to 5 years from now. How can SIFF be assured that appropriate mitigation exists that would allow continued operation since this is not addressed in the DEIS?

- **Comment 12 - Page 2-84, Section 2.6.1**

"Typical construction for surface and elevated guideways and stations.... 5-6 days between 7am and 10pm and tunneling work would typically occur between 20 and 24 hours per day, 6 to 7 days per week" but there is no discussion of cut-and-cover excavated station construction hours. Yet, Sound Transit is recommending cut-and-cover for the Republican Street Station without any discussion of the impacts in the DEIS, which is another example where the DEIS has not provided adequate analysis of the significant adverse environmental impacts associated with putting the DT-1 Preferred Alternative station in the Republican Street ROW.

- **Comment 13 - Page 2-88, Section 2.6.6**

Discussion of cut-and cover, and sequential excavation mining. Seattle Center is assigned C&C, but SEM is suggested for CID1b, CID2b, Midtown and Westlake "because station depths make cut-and cover impractical", but no discussion of whether/if C&C is 'practical' considering the concentration of sensitive receivers near the Seattle Center station location. The SC DT-1 station at Republican is only 10 – 20 feet shallower than these other stations, and the DEIS proposes high-vibration mining techniques in addition to cut-and-cover from 20 to 120 feet below the foundations of the historic NW Rooms. This is one more instance where the DEIS had not provided adequate analysis of significant adverse impacts and alternatives.

Chapter 3 Transportation

- **Comment 14 - Page 3-6, Section 3.3.1**
"Major Arterials include 4th Ave, 5th Ave, 6th Ave, Westlake Ave.... 15th Ave, Leary Way, NW Market" but 1st Ave N is not included or studied, yet it is a major arterial and has a 15-month full closure. Once again, another example where adequate analysis has not been demonstrated.
- **Comment 15 - Page 3-78, Section 3.12.1.1**
Although RapidRide D-line is mentioned, the DEIS does not mention the many bus routes that serve Queen Anne and Magnolia that travel north on 1st N, and south on Queen Anne Ave that will be cut off during the 15-month closure of the 1st & Republican intersection.
- **Comment 16 - Page 3-85, Section 3.12.3.4**
Passenger Drop-off and Pick-up facilities should be carefully designed to serve local neighborhood access. For example, kiss-and-ride operations for residents of upper Queen Anne, etc... that are topographically difficult for pedestrian and bike access.
- **Comment 17 - Page 3-101, Section 3.13.4**
Mitigation for Operational (traffic) Impacts - Why not emphasize designing *efficient* pickup/drop-off station infrastructure?
- **Comment 18 - Page 3-110, Section 3.15.3.4**
The assertion that "DT2 would require event attendees crossing at least one roadway" is a bit of a reach. There is very little traffic on Warren, and that is the only street that would need to be crossed, and an underpass could be constructed to allow an exit on the east side of Warren. Further, the SC-DT1 Republican station location will require two street crossings for intermodal bus and light-rail passenger transfers.
- **Comment 19 - Page 3-116, Section 3.16.3.4**
"The Project is not expected to affect the number of people going to these events..." Easy Light Rail access to the Seattle Center will make attending events (bumbershoot, folk life, SIFF, etc.) much more accessible for people in a wide (multi-county) geographic area who can't or otherwise wouldn't drive in heavy congestion and hunt for expensive parking. It is a fine conservative (low) assumption for ridership revenue calculation, but this seems to be a very bad assumption for design and planning of infrastructure itself.
- **Comment 20 - Page 3-126, Section 3.19.1.1.2**
"For Long-term (over 1 year on key arterial streets) closures, an assessment of the traffic impacts was performed" However, we have not found an assessment of 1st Ave N and Republican - possibly because "Republican" is not a "key arterial", but 1st Ave is a major arterial. Another example where adequate analysis has not been demonstrated.
- **Comment 21 - Page 3-127, Section 3.19.1.2.1**
"Similar to the streetcar system, the Metro bus system would be potentially impacted by construction activities.... modifications could occur in CID, DT and IBB segments", but no details or discussion is provided. The unique topography and one-way traffic patterns of Uptown and of Queen Anne significantly limit re-routing opportunities. There may be no practical way to mitigate these closures. Specific work identifying the traffic and transit mitigations must be studied, proposed, and get public and property-owner input before making this decision. Another example where adequate analysis has not been demonstrated.

• **Comment 22 – General Transit Integration Comment**

Construction: The DEIS does not address the transit issues that result from full closures of arterial intersections during construction in a topographically challenged area with non-redundant arterials and limited options for re-routing buses.

Station Comparison: The SC/Uptown DT-1 (Republican) station location is several blocks away from existing bus-stop locations. The DT-2 (Mercer) location has superior connections to the Metro bus system.

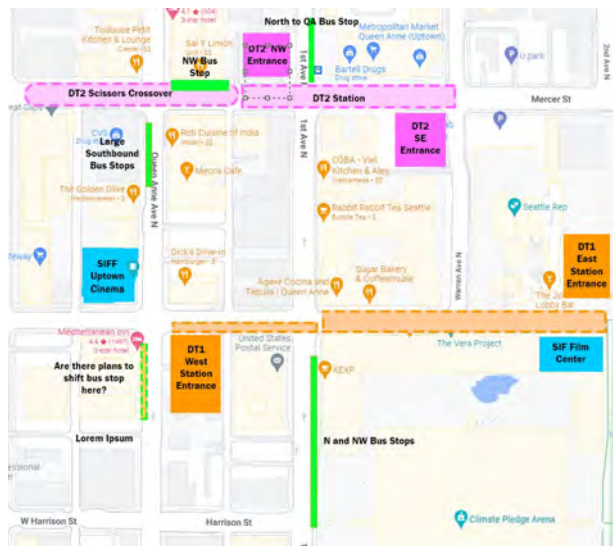
DT1 - Republican

- Northbound Busses:
 - o East Station Entrance – two-block walk.
 - o West Station Entrance – one-half to one-block walk plus street crossing
- Southbound Busses:
 - o West Station Entrance - two street Crossings, and a one long block walk
 - Unless large bus stop is shifted a block south
- Future East/West Mercer Busses
 - o One long block away uphill

DT2 – Mercer

- Northbound Queen Anne Busses – adjacent to station, one street crossing
 - o Northwest Busses – adjacent to station, no crossings
- Southbound Busses
 - o SE Entrance – two block walk, one street crossing
 - o NW Entrance– half block, two street crossings
- Future East/West Mercer Busses
 - o Adjacent to station, no street crossings needed

Impacts of potential changes: If bus stops are relocated south to be nearer SC/U DT-1 station entrance on Queen Anne, the specifics of the location could adversely impact sidewalk use for and access for audience holding areas.



Station Entrance Connections to Metro Bus Stops (green)

Chapter 4 Environmental Consequences

Appendix L4.1 Acquisitions, Displacements, and Relocations

- **Comment 23 - Page L4.1-54 & Page L4.1-55/L4.1.2 Relocation Opportunities/L4.1.2.1 Commercial and Industrial/Figure L4.1-28j, Alternative DT-1, Affected Parcels, Table L4.1-13**

The sections above and the data in Table L4.1-13 misrepresent the ease or difficulty in relocating businesses, non-profits, tenants, etc. impacted by the WSBLE project. The macro-level data used is misleading and does not provide the necessary information to adequately assess the ability of any office, industrial, retail or hotel tenants to be relocated, let alone the unique and specialized Arts Production and Performance spaces adjacent to SC EDT-1 Republican station location.

SIFF occupies approx. 5200 sq ft in the Northwest Rooms. In addition to a theater, SIFF's business offices are located in the Northwest Rooms. Non-profit Arts Tenants of the NW Rooms at the Seattle Center may have a rental rate that is offset by the public benefits they provide. There kind of in-kind arrangement is unlikely to be found through a commercial land-lord, for office space, increasing the organization's baseline costs during a relocation.

The overall vacancy rate and total amount of vacant space in a sector of the market mean nothing to any one of the relocated parties on an individual basis because every relocation requirement is unique to the relocated party. For example, for a relocated office tenant that needs 50,000 SF of space, it doesn't matter if there is 5.5MM SF of vacant office space available if the largest contiguous space is only 15,000 SF. What this means to the office tenant is that there is zero space available for it to be relocated. The DEIS does not recognize that there is no realistic inventory of unused specialized arts performance and production spaces that could substitute for the facilities clustered around the SC-DT-1 Republican station location.

Lastly, the idea of vacant land and new development sites as another viable relocation solution for relocated tenant is an oversimplification of this as a possible solution. It ignores 1) the limits zoning codes put on the types of uses that can occupy land, 2) the limits site geography and development regulations put on the ability to develop a site for a desired use, and 3) the extraordinarily long, protracted, and uncertain land use and construction entitlement and permitting processes that are undertaking in the City of Seattle before new construction can occur. Further, if a new specialized arts performance and production venues were constructed, it is unlikely that a non-profit organization would subsequently incur the costs and disruptions to return to the Seattle Center Campus a decade later when ST3 construction is completed.

Given the examples above, SIFF is left with zero confidence that Sound Transit understands or has adequately:

1. assessed the significant impacts of relocating any of the parties, on a temporary or permanent basis, that will be displaced or disrupted by this project or
2. accounted for the degree of mitigation needed to address the significant impacts caused by relocation.

- **Comment 24 - Page L4.1-54 & Page L4.1-55/L4.1.2 Relocation Opportunities/L4.1.2.1 Commercial and Industrial/Figure L4.1-28j, Alternative DT-1, Affected Parcels, Table L4.1-13**

SIFF Cinema Uptown at the NW corner of Republican Street and Queen Anne Avenue North is not identified as an Affected Parcel on Figure L4.1-28j. It should be noted that SIFF's building at the corner is constructed with unreinforced masonry, is a building eligible for the National Register, the building houses three of SIFF's five screens, and SIFF is a "sensitive receiver". This property will absolutely be an Affected Parcel as it will experience significant impacts from the boring of the tunnel adjacent to and/or under its building, the construction of the west portal of the Republican Street station diagonally across the intersection from SIFF's building, and the operation of the system with a station entrance near the cinema building as a sensitive receiver.

The noise and vibration issues during construction and operational phases must be mitigated to eliminate the impacts to allow SIFF to stay open and offer regular screenings throughout the day, 52 weeks a year. Universal access to and from the cinema building by all modes of transportation must be maintained throughout the duration of construction of the tunnel and station. As noted above, relocation is not as simple as stating there is enough vacant space in a specific sector of the market to easily facilitate relocation for generic space, let alone relocation for a special use tenant, which is the category of tenant SIFF falls into, and why many special use tenants must build their own space to meet their unique space/operational needs.

West Seattle Ballard Link Extensions Draft Section 4(f) Evaluation January 2022

- **Comment 25 - Page ix | AE 0036-17**

SIFF does not understand how a Republican Street Station could be considered a viable alternative, let alone a Preferred Alternative, in the Uptown/Seattle Center neighborhood for the WSBLE project. There are:

- a. alternatives that avoid using the Seattle Center campus,
- b. all possible planning to minimize harm to the Seattle Center campus and its buildings has not been satisfactorily demonstrated in the DEIS analysis, and
- c. the impacts are significant, not di minimis, to i) the fulltime, non-profit, arts organizations that reside on the campus, ii) the festival organizations that program the campus year-around with culturally significant events for the public to participate in and enjoy, and iii) the public who come to the Seattle Center campus to enjoy it as a park with open space, contemplative space, and green space.

- **Comment 26 - Page 4-41 | AE 0036-17 | Draft Section 4(f) Evaluation and Figure 4-4. Seattle Center Impacts, Ballard Link Extension – Downtown Segment**

The drafting of this section is deceptively misleading and completely inaccurate. First, by discussing the Republican Street ROW separately from the Seattle Center campus, both of which are owned and controlled by the City of Seattle, gives the reader the impression they are separate but related areas. However, the reality is that the Republican Street ROW (August Wilson Way, aka AWW) is imbedded within the Seattle Center Campus. AWW is lined on the north and south sides of the ROW with 50+ year old London Plane trees, which can live for hundreds of years and we imagine were selected for that reason, that are integral to the campus master plan planting plan. The trees are a gateway to the campus. The removal of the London Plane trees along AWW during construction would absolutely, adversely impact this experience

and is a significant, permanent impact without options to mitigate except to not locate the station in the Republican Street ROW.

Second, the expectation that SIFF, or any of the tenants in the Northwest Rooms, will continue to operate during construction is a statement not based on nor supported by facts. The significant impact from noise and vibration that these sensitive receivers will experience for a construction duration that is expected to last more than 5 years will not allow them to operate and will require them to be relocated, which will not be easy since all the tenants are “special use” tenants and a relocation will not allow them to continue the symbiotic relationship they enjoy with each other and the other resident organizations on the Seattle Center campus.

Third, the north wall of the SIFF’s space includes fire exits that will not be useable during the construction duration of the Republican Street station, which is another significant impact that would need to be mitigated or SIFF could not operate during construction. This is not acknowledged or addressed in the DEIS.

Fourth, the idea that there will be no impact to the greens is not an accurate statement. The construction of the west portal to the station in an area currently occupied by a garden will permanently remove this green space and event space from the campus. Additionally, the scale of the west portal will permanently remove open space and view corridors that contribute to a park-like setting with an openness and expansiveness currently enjoyed in this part of the campus.

Fifth, the queuing issue at the west portal to the station is another impact SIFF is concerned about. The current station design doesn’t appear to accommodate surge volumes that are a regular condition at Seattle Center given the opening of Climate Pledge Arena (CPA) and there isn’t sufficient distant between the west portal and CPA to allow for reasonable crowd dispersal without significantly impacting the ability to access and enter SIFF. If changes aren’t made to the station design to allow for surge volumes to be accommodated within the station and conveyance system, SIFF will be forever significantly impacted by surge volumes.

Based on the five items mentioned above, SIFF does not agree with Sound Transit’s conclusion that, “Based on the above discussion, Preferred Alternative DT-1 would not adversely affect the recreational amenities of this resource either permanently or temporarily during construction; therefore, impacts to Seattle Center under Preferred Alternative DT-1 are proposed to be de minimis....”

- **Comment 27: - Figure 4-1h, Section 4(f) Resources, Seattle Center Vicinity, Ballard Link Extension – Downtown Segment and Page 4-24 & Page 4-25 | AE 0036-17 | Draft Section 4(f) Evaluation**

There are several buildings that are on or eligible for the National Register, including two buildings housing four of SIFF’s five screens. Given the number of buildings with this status that are directly adjacent to or near the DT-1 Preferred Alternative Republication Street Station and the Section 4(f) resource status of the Seattle Center, SIFF does not understand how this station location could be included as a viable alternative, especially a Preferred Alternative, for the WSBLE project.

POSSIBLE REFINEMENTS to the DEIS:

SIFF is eager to work more closely with Sound Transit during the drafting of the Final EIS to ensure that these concerns are successfully addressed so that the project can proceed without delay.

The following subsections cover various refinements that have originated from within Sound Transit, or the affected organizations during the DEIS review process. The list is not comprehensive. We are sure creative solutions can be found if we work together.

What is Sound Transit's design process, and where are the opportunities for community input prior to the release of the Final EIS?

Select the SC-DT2 (Mercer) Station Location

There are many benefits to choosing the Alternate DT2 Mercer Station Location

- Minimizes pedestrian street crossing of Mercer with N and S side entrances
- Serves Seattle Center and CP Arena by a pedestrian-improved Warren Street
- Improved connections to Metro Bus Routes
- Serves Uptown directly
- Provides significant TOD opportunities at under-built south-side of Mercer properties.

However, a less disruptive construction method needs to be seriously considered for this location.

Mining Method for Station

The intense and prolonged disruptions caused by cut-and-cover methods for the Mercer location in the Uptown district are unacceptable to QA and Uptown residents and businesses, as well as through-traffic to Ballard, Magnolia and NW Seattle.

Cut and Cover at the DT-2 station location (Mercer) would adversely impact significant freight and passenger vehicular traffic and will be unacceptable to the surrounding neighborhoods. Maintaining Mercer traffic flow is essential.

Other Methods of maintaining Traffic Flow on Mercer

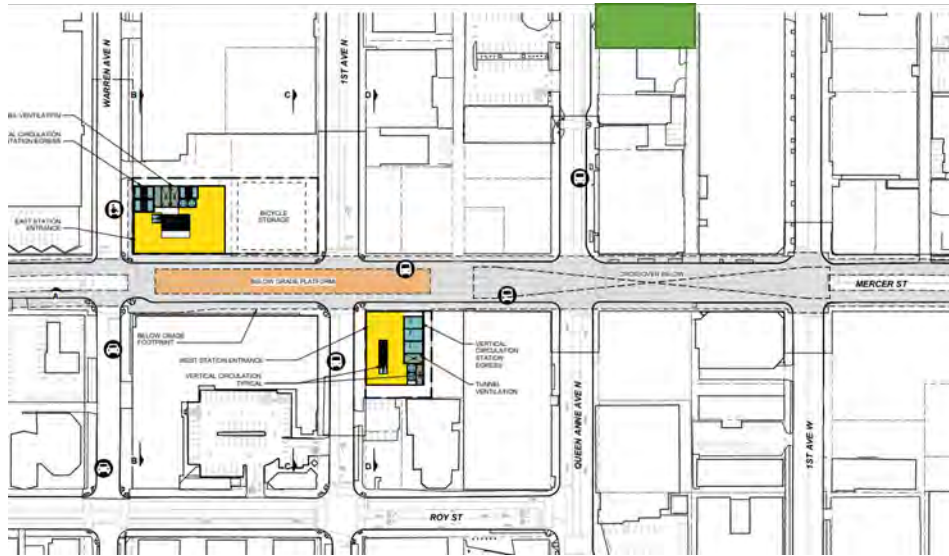
Studying the possibility of constructing bypass-lanes and sequencing excavation of the South East Station Entrance until after cut-and-cover is lidded over are examples of possible creative solutions to the Mercer Traffic Flow issue.

Relocate Scissors Crossing

The DEIS shows no Scissors-crossing associated with the SC DT1 Republican Station Location but there is a crossing shown at SC-DT2.

The DEIS does not provide any information explaining why a cross-over is necessary at the SC-DT2 Mercer Station Location, but not at SC-DT1 Republican Station Location.

Locating a scissors crossing immediately west of the Mercer Station Box significantly exacerbates the traffic impact on non-redundant arterials and intersections (like Queen Anne Ave and Mercer) if a cut-and-cover method is used.



Scissors Cross-over adjacent to west of SC-DT2

Shifting DT-1 Station West

Sound Transit has shown a possible refinement shifting the DT1 Republican station westward.

This would have significant adverse impacts on the SIFF Uptown Cinema, likely resulting in SIFF's inability to viably operate that venue during construction. This is addressed specifically in the Noise and Vibration report from Landau Associates (attached).

SIFF'S OPERATIONAL CONSIDERATIONS:

This section is provided to help inform Sound Transit of the operational details of SIFF's specialized, sensitive receiver venues as design and mitigation plans are refined. Noise and vibration constraints for these venues are discussed in the attached engineering report from Landau Associates.

SIFF Cinema Uptown

Typical Hours of Operation:

Year-Round

- Mon - Thurs 1400 - 0000
- Fri - Sun 1200 - 0000

Festival

- 7 Days a week 1000 - 0100

Access

Fire Safety

The Uptown Cinema has an Exit Door on the south side of the building on Republican. If the station was moved two blocks west, it is possible that the sound barrier wall would restrict emergency fire egress from one of the theaters for 5-8 years and could result in the loss of its occupancy permit for the duration of construction.

Audience Access and Queueing

SIFF uses sidewalks on the South and East sides of the building (green arrows) for audience holding lines, particularly during the festival which is typically 25 days long. Loss of this audience holding area would significantly impact SIFF Festival operations at this venue.



Air Quality and Dust

SIFF Operates both mechanical film projectors and high-resolution Digital Projectors. Similarly, the projection screens are large and need to be kept clean to function properly. Professionally cleaning these specialized pieces of equipment is expensive and time consuming and can impact the availability of the cinema for revenue generating activities.

Further, the amount of external air mixed into the HAVAC system has been increased as a COVID mitigation measure. An increase in construction dust will shorten the cleaning and replacement intervals for our HVAC Filtration equipment and may even necessitate the addition of additional (finer) filtering systems to protect projectors and screens.

Finally, an increase in exhaust emissions from diesel and gasoline powered construction equipment is likely during the 5- to 8-year construction period, affecting the comfort, enjoyment and safety of our audiences.

Seattle Film Center

Typical Hours of Operation:

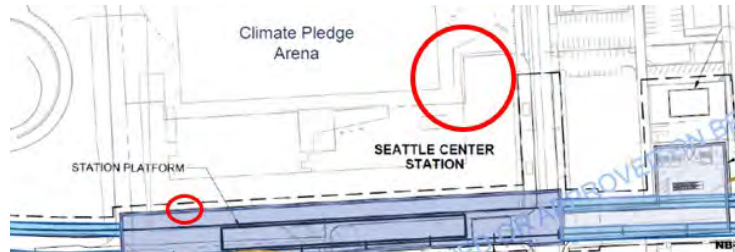
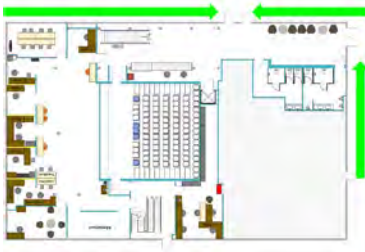
Year-Round

- Mon - Thu 0800 - 1800
- Fri 0800 - 2300
- Sat, Sun 1200 - 0000

Festival

- Mon, Tues 0800 - 1800
- Wed, Thu 0800 - 0000
- Fri 0800 - 0100
- Sat, Sun 1000 - 0100

Access



Fire Safety

The SFC has an Exit Door on the north side of the NW Rooms (small red circle) that serves as an essential second stairway and fire egress. Loss of this exit for 5-8 years could result in the loss of occupancy permit and require relocation of SIFF Offices

Neighborhood Connections for Audience and Staff

Preferred Alternative DT-1 would eliminate direct access from the Uptown Neighborhood (transit, parking, restaurants) via August Wilson Way, Republican, Warren and 2nd Ave N during the 5- to 8- year construction period.

The only remaining access will be through a narrow corridor (large red circle) between CPA and NW Rooms. Wayfinding and discovery of SFC along this route will be a challenge for our audiences, and free and easy access through this space would be significantly impaired during surge events at the Arena.

Air Quality and Dust

SIFF Operates both mechanical film projectors and high-resolution Digital Projectors. Similarly, the projection screen is large and need to be kept clean to function properly. Professionally cleaning these specialized pieces of equipment is expensive and time consuming and can impact the availability of the cinema for revenue generating activities.

Further, the amount of external air mixed into the HAVAC system has been increased as a COVID mitigation measure. An increase in construction dust will shorten the cleaning and replacement intervals for our HVAC Filtration equipment and may even necessitate the addition of additional (finer) filtering systems to protect projectors and screens.

Finally, an increase in exhaust emissions from diesel and gasoline powered construction equipment is likely during the 5- to 8-year construction period, affecting the comfort, enjoyment, and safety of our audiences.

April 26, 2022

Seattle International Film Festival
305 Harrison Street
Seattle, WA 98109

Attn: David Cornfield

Transmitted via email to: davidco3@farstar.com

**Re: Sound Transit WSBLE DEIS Review for Seattle International Film Festival
Seattle, Washington
Landau Project No. 2062001.010**

Dear David:

At the request of the Seattle International Film Festival (SIFF), Landau Associates, Inc. (Landau) prepared this 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).

SIFF operates two facilities within the vicinity of the WSBLE alignment: the SIFF Film Center, located in the Northwest Rooms at Seattle Center, and the SIFF Cinema Uptown, located at the northwest corner of Queen Anne Avenue and Republican Street. The SIFF Film Center is a multi-use facility that houses a 90-seat multi-use theater, multi-media classroom, exhibition spaces, archives, and offices for SIFF and its Film School. The SIFF Film Center is bordered by August Wilson Way to the north, the Dupen Fountain courtyard to the south, the International Fountain Lawn to the east, and the Vera Project to the west.

SIFF Cinema Uptown is a historical three-screen theater building bordered by adjacent commercial businesses to the north, Republican Street to the south, Queen Anne Avenue to the east, and a multi-use building to the west that houses residential apartments and a grocery store. Seating capacities for the three theaters at the SIFF Cinema Uptown are: 450 seats at Theater 1, 200 seats at Theater 2, and 150 seats at Theater 3.

SIFF 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. This letter report summarizes Landau's assessment of the WSBLE DEIS as it relates to the potential for noise and vibration impact to the SIFF Film Center and SIFF Cinema Uptown, and includes a summary of findings, a list of documents that were reviewed, and a detailed review of selected 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 key findings of this review include:

- City of Seattle (City) noise limits are not applied in the noise impact section when determining the potential for noise impacts and whether additional mitigation is warranted.
- There are missing receptors, including the SIFF Cinema Uptown.
- The assessment of airborne noise impacts during construction is incomplete.
- An assessment of mitigation measures is required for expected airborne noise impacts at the SIFF Film Center.
- Additional assessments of groundborne noise and vibration impacts from construction are warranted to fully address potential impacts from DT-1.
- Additional assessments of groundborne noise and vibration mitigation measures from construction are warranted to fully address impacts from Downtown-1 (DT-1).
- 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.
- Groundborne noise, vibration, and surface noise impacts from construction of the DT-1 East Station Entrance were not fully evaluated for impact to SIFF Film Center.
- Operational groundborne noise impacts warrant additional mitigation for DT-1 beyond high-resilience fasteners and beyond the linear extents identified in the DEIS.
- Station Refinement for DT-1, including moving DT-1 station farther west, would result in significant noise impacts to SIFF Cinema Uptown.

Landau's assessment focused on the DT-1 alignment identified in the WSBLE DEIS. DT-2 is located sufficiently far from SIFF facilities that impacts from construction and operation of DT-2 are unlikely at the SIFF Film Center or SIFF Cinema Uptown.

Review Documents

Landau reviewed the following documents in support of the assessment:

- Sound Transit and Federal Transit Administration's (FTA's) WSBLE DEIS, Chapter 4.2.7: Noise and Vibration (pp. 4.2.7-1 to 4.2.7-23) (USDOT et al. 2022a)
- Sound Transit and FTA's WSBLE DEIS, Appendix N.3: Noise and Vibration Technical Report (USDOT et al. 2022b)
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3A: Noise Measurement Data, Site Details, and Photographs

- Sound Transit and FTA’s WSBLE DEIS, Attachment N.3B: Vibration Measurement Site Photographs
- Sound Transit and FTA’s WSBLE DEIS, Attachment N.3C: Vibration Propagation Measurement Results
- Sound Transit and FTA’s WSBLE DEIS, Attachment N.3D: Maps of Noise Impact Assessment
- Sound Transit and FTA’s WSBLE DEIS, Attachment N.3E: Maps of Vibration Impact Assessment
- Sound Transit and FTA’s WSBLE DEIS, Attachment N.3F: Tables of Noise Predictions
- Sound Transit and FTA’s WSBLE DEIS, Attachment N.3G: Tables of Vibration Predictions
- Sound Transit and FTA’s WSBLE DEIS, Attachment N.3H: Vibration Analysis of Category 1 Land Uses and Special Buildings
- FTA’s *Transit Noise and Vibration Impact Assessment Manual* (FTA Guidance Manual; FTA 2018)
- Sound Transit’s Design Criteria Manual, Revision 5, Amendment 11 (Sound Transit 2021).

Review Format

Landau’s assessment focused on chapters in the WSBLE DEIS that are relevant to the assessment of noise and vibration impacts at SIFF facilities from DT-1. Headings that begin with “Chapter” refer to the corresponding chapter in WSBLE DEIS Appendix N.3: Noise and Vibration Technical Report (USDOT et al. 2022b).

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 that the use of the FTA criteria is appropriate for the assessment of noise and vibration impacts from this project. However, as detailed below, the FTA noise and vibration limits that were applied to the sensitive receiving space within the Film Center was incorrect.

WSBLE DEIS Appendix N.3, Chapter 3.1.3 identifies the City noise criteria, as established in Chapter 25.08 of the Seattle Municipal Code (SMC). 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 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. Because City 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 SIFF facilities. Figure 1 is an area map that shows the locations of the SIFF Film Center and SIFF Cinema Uptown, relative to the location of DT-1, including rail alignments, stations, and station entrances, as well as nearby 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 compared to 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 in WSBLE DEIS Appendix N.3 are generally correct for most resident organizations within the Seattle Center. However, regarding SIFF facilities, discrepancies and omissions were noted. Table 2 summarizes the noise and vibration limits applied for the SIFF Film Center, highlighting discrepancies that require correction or further assessment. Noise and vibration levels in this table are compiled from DEIS Appendix N.3, Attachment N.3H, Tables 8-2 and 8-3. If a different noise or vibration limit was identified in another table in WSBLE DEIS Appendix N.3, it is noted in the center columns of Table 2.

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. 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 compared to the same FTA criteria. However, in reviewing the groundborne noise limits in the tables identified above, Landau finds that there is a discrepancy regarding groundborne noise limits at the SIFF Film Center. That is, a different groundborne noise limit was applied for construction and operation. Landau notes that operational groundborne noise in Table 6-13 and Table 6-14 are correct (although an adjustment to this limit is recommended, see Table 2), and the different limit in Table 6-27 (construction groundborne noise) is incorrect. This discrepancy is summarized below in Table 1.

Table 1: Summary of DEIS Discrepancies, Noise and Vibration Limits: SIFF Film Center

Resident Organization	DEIS Limits for Operation		DEIS Limits for Construction		Explanation of Discrepancy	
	Noise (dBA)	Vibration (VdB)	Noise (dBA)	Vibration (VdB)	Noise	Vibration
SIFF Film Center Theater	35(a)	72 (a)	40 (b)	--	Construction limit is 5 dBA above operation limit	N/A
(a) Sound Transit WSBLE DEIS Appendix N.3, Tables 6-13 and 6-14 (b) Sound Transit WSBLE DEIS Appendix N.3, Tables 6-27 dBA = A-weighted decibels VdB = vibration decibels N/A = not applicable						

Correcting the groundborne noise limit for the SIFF Film Center to 35 dBA (as identified for light rail operation in Tables 6-13 and 6-14) would result in a predicted groundborne noise impact due to supply train operation during tunneling (see DEIS Appendix N.3, Table 6-27). That is, a 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 rationale to adjust this limit to 30 dBA.

Noise and Vibration Limits – Adjustments

Landau notes that an adjustment to the operational (and construction) groundborne noise and vibration limits at the SIFF Film Center is warranted following measurements by Landau staff and review of the noise- and vibration-sensitive nature of this facility. That is, for the SIFF Film Center, a quiet environment is essential to its use. Noise intrusion, such as low-frequency groundborne noise “rumbling” from nearby surface construction, tunneling, and rail operations, may negatively affect the audience experience at the SIFF Film Center. Vibration impacts, even at low levels, can affect the theater film projector.

A summary of the recommended adjustments to the groundborne noise and vibration limits, including a rationale for the adjustment, is provided in Table 2. Additional detail is provided in the text following this table.

Table 2: Summary of Noise and Vibration Limit Corrections

SIFF Facility	DEIS Limits for Operation and Construction (a)		Recommended Adjustments to DEIS Limits (b)		Notes Justification for Adjusted Limits
	Noise (dBA)	Vibration (VdB)	Noise (dBA)	Vibration (VdB)	
SIFF Film Center Theater	35	72	30 dBA	65 VdB	Noise limit is appropriate per Landau and DEIS measurements. Vibration limit is appropriate for “Auditorium” per FTA Guidance Manual, confirmed through Landau measurements.
(a) Sound Transit WSBLE DEIS Appendix N.3, Attachment N.3H, Tables 8-2 and 8-3.					
(b) Based on measurements made by Landau staff for SIFF in early 2022. See Figure 2 (noise) and Figure 3 (vibration).					

At the SIFF Film Center theater, the noise level measured by Landau staff is 31 dBA (see Figure 2). This is 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 levels of vibration measured by Landau at the SIFF Film Center were well below 65 VdB, which support 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 (using the FTA criteria for an “Auditorium”) is not appropriate given the sensitivities of this space; 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.

Noise and Vibration – Missing Sensitive Receivers

Landau finds that WSBLE DEIS Appendix N.3 omits the SIFF Cinema Uptown in the assessment noise and vibration impacts. Table 3 summarizes recommended noise and vibration limits for the SIFF Cinema Uptown, and the potential sources of impact to the SIFF Cinema Uptown from Preferred Alternative DT-1.

Table 3: DEIS Appendix N.3 Missing SIFF Noise and Vibration Sensitive Receivers

Omitted SIFF Facilities	Suggested Noise and Vibration Limits (a)		Summary of Use	Potential Source(s) of Noise or Vibration Impact (b)
	Noise (dBA)	Vibration (VdB)		
SIFF Cinema Uptown, Theaters 1, 2, and 3	30	65	Three-Screen Cinema	DT-1 tunneling; DT-1 operation
(a) Suggested limits based on use of space and sensitivities to noise and vibration. (b) Potential for impact may be due to activities identified in this table and may also include activities not identified here. A complete assessment is required.				

As identified in Table 3, the SIFF Cinema Uptown is a three-screen cinema that may be impacted by groundborne noise and vibration from DT-1 tunneling and rail operations. Landau estimates that the SIFF Cinema Uptown would be located approximately 100 feet, in a steep slant direction, to the nearest light rail tunnel. This estimated distance follows review of the WSBLE DEIS Appendix J, Drawing L50-GSP103.

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 summarizes surface-level construction noise that would occur in support of tunneling operations; WSBLE DEIS Appendix N.3, Chapter 6.2.1.6 summarizes 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 for DT-1 could be as near as 8 feet from the SIFF Film Center. Therefore, noise from excavation of the cut-and-cover station, and potentially also from the DT-1 East Station Entrance, would be near enough to result in potential impact to operations at the SIFF Film Center.

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.”

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:

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 station and station entrance areas, located very near the SIFF Film Center, 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. The SIFF Film Center operates during both daytime and late evening hours; SIFF Cinema Uptown operates during afternoon and late evening hours. Therefore, impacts from truck hauling may impact these facilities during most hours of the day or late evening.

Specifically, if Republican Street is used as a haul route, additional impacts from hauling should be evaluated at the SIFF Cinema Uptown located at northwest corner of Republican Street and Queen Anne Avenue. Increased truck traffic along Republican Street may impact usage of SIFF Cinema Uptown during afternoon or evening hours.

Construction Staging Areas

Noise from construction staging areas was 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.

Both the SIFF Film Center and SIFF Cinema Uptown may be within proximity of DT-1 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 proposed for preferred alternative DT-1, which would occur immediately adjacent to the SIFF Film Center.

Appendix N.3, Table 6-8 (p. 6-31) of the WSBLE DEIS provides 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 SIFF Film Center. Table 4 below identifies noise levels from construction summarized in DEIS Table 6-8, and calculates sound levels at 8 feet, 15 feet, and 50 feet from construction equipment. Distance adjustments are 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 (a)	Construction Equipment (a)	Sound Level at 50 feet L _{eq} (dBA) (a)	Sound Level at 15 feet L _{eq} (dBA) (b)	Sound Level at 8 feet L _{eq} (dBA) (b)
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
(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-8. (b) Calculated using standard adjustment for distance from a point source: $SPL_2 = SPL_1 + 20 \cdot \log(D_1/D_2)$. L _{eq} = equivalent sound pressure level				

WSBLE DEIS Appendix N.3 does not include a detailed assessment of noise from tunneling and cut-and-cover construction. Rather, 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 the 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 (Seattle Rep) and Cornish Playhouse.”

As noted in Table 4, 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 the SIFF Film Center. The SMC 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. This limit would apply to noise received at the SIFF Film Center from DT-1 construction. Predicted sound levels from construction therefore could well exceed City sound level limits at the SIFF Film Center when equipment operates within approximately 50 feet of these building facades.

Noise reductions provided by the building envelope of the SIFF Film Center (i.e., transmission loss provided by building construction materials) are not identified in the DEIS. Exterior-interior noise measurements made at an adjacent tenant space of the Northwest Rooms by Landau staff indicate that the north facade of this building may provide approximately 61 dBA in reduction of exterior noise. It is reasonable to assume a similar reduction at the SIFF Film Center, also a tenant of the Northwest Rooms; however, interior design elements and construction materials within the SIFF Film

Center may result in higher or lower reductions. Assuming an exterior-interior noise reduction of 61 dBA, construction noise received at the exterior facade at a level of 104 dBA (see Table 4) could be received inside the SIFF Film Center at 43 dBA. Noise-sensitive spaces located inside and along the north wall of the SIFF Film Center that could be exposed to noise levels of 43 dBA include offices for the SIFF Film School and SIFF Artistic Director. Accounting for distance to the SIFF Film Center theater (approximately 18 feet from the north wall of the SIFF Film Center), construction noise levels could reach 33 dBA inside the theater. Levels may vary when accounting for intervening wall materials.

Table 5 summarizes expected increases over ambient noise levels and established limits, based on surface construction noise reaching 43 dBA inside the north facade of the SIFF Film Center.

Table 5: Surface Construction Airborne Noise Impacts at SIFF Film Center (DT-1)

Noise-Sensitive Location Inside SIFF Film Center North Wall	Distance from Nearest Exterior Construction Activity to Interior Space (feet)	Impact Assessment Result			
		Ambient Noise Level (dBA)	Sound Level Inside Building Facade from Construction	Construction Noise Level at Sensitive Space (dBA)	Increase Over Ambient Noise Level (dBA)
Theater	26(a)	31 (b)	43	33 (c)	2
(a) Distance measured by Landau (8 feet to north facade from nearest equipment + 18 feet to theater wall from north facade = 26 feet).					
(b) Sound level measurement by Landau staff, early 2022. See Figure 2.					
(c) Calculated using standard adjustment for distance from a point source: $SPL2 = SPL1 + 20 \cdot \log(D1/D2)$.					

Figure 4 shows potential noise impact to the SIFF Film Center theater as a “heat map,” highlighting potential impact from airborne construction noise during station construction for DT-1. As summarized in Table 5 and shown on Figure 4, airborne noise from construction is expected to be up to 2 dBA over applicable interior sound level limits at the SIFF Film Center theater. However, actual increases may be higher or lower and will depend on the exterior-interior noise reductions provided by the building envelope and on intervening structures between the north facade wall and the theater space.

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. Note that the ranges of sound levels provided in Table 4, and estimates of impacts provided in Table 5, are based on the FTA reference sound levels for excavators, backhoes, haul trucks, loaders, and vibratory rollers. Therefore, reference sound levels in Table 4 do not represent the loudest noises that could occur from use of jackhammers and hoe rams and actual noise impacts during the initial phases are likely to be higher than is predicted in Table 5.

SIFF Film Center offices are located immediately adjacent to the north wall of this facility. The existing ambient noise environment at these offices is typical of office environments where quiet is germane to use. Airborne noise impacts from DT-1 station construction, especially during the initial phases of demolition work, is likely to adversely impact the use of these offices.

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 construction criteria. Specifically, this section notes that impact noises, such as those noises generated by jackhammers and hoe rams, will be 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.

The results in WSBLE DEIS Appendix N.3, Table 6-13 (and in WSBLE DEIS Appendix N.3, Attachment N.3H, Table 8-2) indicate that the SIFF Film Center is predicted to experience groundborne levels of up to 45 dBA during operation of DT-1, a 10-dBA exceedance of the DEIS-applied limit of 35 dBA (15 dBA higher than the recommended adjusted limit of 30 dBA) and a 14-dBA increase over existing ambient conditions, as documented in the DEIS and confirmed by Landau measurements.

Landau finds that additional information and/or corrections are required to evaluate completely the potential for operational vibration and groundborne noise impacts to the SIFF Film Center and the SIFF Cinema Uptown. The following summarizes these findings.

Groundborne Noise Limits

SIFF Film Center

As summarized in Table 2, the groundborne noise limit for the SIFF Film Center should be 30 dBA, not 35 dBA, consistent with ambient noise measurements taken at this space by Landau (see Figure 2) and as reported in WSBLE DEIS Appendix N.3, Attachment N.3H, Table 8-1. This limit would be similar to an “Auditorium” per FTA definition (see WSBLE DEIS Appendix N.3, Table 3-8, p. 3-10). Further, the limit would mitigate the potential for low-frequency groundborne noise “rumbling” from rail operation impacts during film screenings, including the patron experience and potentially the stability of the film projector.

SIFF Cinema Uptown

As summarized in Table 3 and previously described, the SIFF Cinema Uptown was not included in the assessment of noise and vibration impacts from the construction or operation of the WSBLE project. SIFF Cinema Uptown would be located approximately 100 feet from the nearest tunnel at a steep slant angle. Existing ambient noise levels at the nearest two SIFF Cinema Uptown theaters to the DT-1 alignment, Theaters 2 and 3, are 25 dBA and 27 dBA, respectively (see Figure 2). An appropriate sound level limit that would be protective of these theaters is 30 dBA, similar to the groundborne noise limit for an “Auditorium” per FTA definition (see WSBLE DEIS Appendix N.3, Table 3-8). Landau notes that FTA includes a groundborne noise limit of 35 dBA for “Theaters” but finds that for SIFF Cinema Uptown, this limit would not be sufficient to be protective of the quiet ambient noise environment. An ambient limit of 30 dBA would mitigate the potential for low-frequency groundborne noise “rumbling” from rail operation that would likely impact film screenings, including the patron experience and potentially the stability of the film projector.

Revised Assessment of Operational Groundborne Noise Impact

Assessment of Exceedance of Sound Level Limits

For this assessment, Landau compared predicted operational groundborne noise levels to the corrected or new limits for SIFF facilities. Predicted DT-1 operational noise levels at the SIFF Film Center are summarized in WSBLE DEIS Appendix N.3, Table 6-13. For the SIFF Cinema Uptown, a facility that was not included in the DEIS, estimates of operational groundborne levels are based on a review of impacts identified in WSBLE DEIS Appendix N.3, Table 6-13 for various noise-sensitive facilities that are similar distances from the proposed DT-1 alignment. Landau acknowledges that predictive modeling of impacts to the SIFF Cinema Uptown may result in groundborne noise levels that are higher or lower than estimated for this review; however, assumptions made for this assessment are considered reasonable for this review. The results of the revised assessment of DT-1 operational groundborne noise impacts, as received at the SIFF Film Center and SIFF Cinema Uptown, are summarized in Table 6 below.

Table 6: Groundborne Noise Exceedance of Limits, DT-1

SIFF Noise-Sensitive Space	DT-1 Operational Noise Level	Groundborne Noise Limit		Exceedance	
		DEIS (a)	Adjusted and New Limits (c)	DEIS (b)	Compared to Adjusted and New Limits
SIFF Film Center Theater	45 (a)	35	30 (c)	10	15
SIFF Cinema Uptown, Theater 1	30(b)	--	30 (c)	--	0
SIFF Cinema Uptown, Theater 2	40 (b)	--	30 (c)	--	10
SIFF Cinema Uptown, Theater 3	40 (b)	--	30 (c)	--	10
(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-13 and Attachment N.3H, Table 7-2. (b) Estimated by Landau based on operational noise impacts identified in WSBLE DEIS Appendix N.3, Table 6-13 for listed noise-sensitive spaces. (c) Sound Transit WSBLE DEIS Appendix N.3, Table 6-13.					

As summarized in Table 6, applying adjustments to the noise limit at the SIFF Film Center and applying new noise limits to the SIFF Cinema Uptown theaters would result in noise impact at all spaces except SIFF Cinema Uptown Theater 1. At the SIFF Film Center, groundborne noise from operation is predicted to be 45 dBA, 15 dBA over the 30-dBA limit, considered a significant impact. At the SIFF Cinema Uptown Theaters 2 and 3, applied limits of 30 dBA would result in groundborne noise levels exceeding limits by 10 dBA.

Assessment of Impact

In addition to the assessment of exceedance of groundborne noise limits, Landau evaluated the potential for impacts based on increases over existing ambient conditions (i.e., a comparison to actual ambient levels, not limits), based on measurements made by Landau staff (see Figure 2). The assessment was completed to highlight the degree of impact that may occur at the SIFF Film Center and SIFF Cinema Uptown during operation of the DT-1 alignment.

Similar to Table 6, Table 7 summarizes DEIS-predicted operational groundborne noise levels at the SIFF Film Center as well as estimates of the groundborne noise levels at the SIFF Cinema Uptown theaters. Groundborne noise levels from DT-1 were compared with existing ambient conditions, as documented by Landau through noise measurements made in early 2022. The increases in sound levels over ambient conditions are provided in the far right column of this table.

Table 7: Operational Groundborne Noise Impacts, DT-1

SIFF Noise-Sensitive Space	DT-1 Operational Noise Level (dBA)	Existing Ambient Noise Level (dBA) (c)	DT-1 Operational Noise Increase Over Ambient Noise (dBA)
SIFF Film Center Theater	45 (a)	31	14
SIFF Cinema Uptown, Theater 1	30 (b)	34	0
SIFF Cinema Uptown, Theater 2	40 (b)	25	15
SIFF Cinema Uptown, Theater 3	40 (b)	27	13
<p>(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-13 and Attachment N.3H, Table 7-2.</p> <p>(b) Estimated by Landau based on operational noise impacts identified in WSBLE DEIS Appendix N.3, Table 6-13 for various noise-sensitive spaces; Landau does not have access to data collected for the DEIS to make equivalent groundborne noise calculations.</p> <p>(c) Sound Transit WSBLE DEIS Appendix N.3, Table 6-13.</p>			

As summarized in Table 7, noise levels at the SIFF Film Center would likely exceed ambient conditions by 14 dBA. At SIFF Cinema Uptown, Theaters 2 and 3 could experience increases of 15 dBA and 13 dBA, respectively, over ambient conditions. SIFF Cinema Uptown Theater 1 is not expected to be impacted by DT-1 operations.

Operational noise impacts to the SIFF Film Center and SIFF Cinema Uptown Theaters 2 and 3 would be clearly audible and discernible and may inhibit use of these facilities by impacting the audience experience, especially from a noise source that would be received primarily as a low-frequency rumble (i.e., groundborne noise).

Included on Figures 5 and 6 are heat maps that highlight DT-1 operational groundborne noise impacts at the SIFF Film Center and SIFF Cinema Uptown, respectively.

Train Speed

As summarized in WSBLE DEIS Appendix N.3, Tables 6-13 and 6-14, light rail train speeds were assessed as part of the calculation of groundborne noise and vibration. Landau finds 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 most noise-sensitive receivers, including the SIFF Film Center. At Seattle Rep and Vera Project, rail speeds are predicted to be 30 mph. These facilities are located adjacent to the northwest and to the west of the SIFF Film Center, respectively. It is reasonable to expect that rail speeds between SIFF and Seattle Rep would be identical and not differ by 15 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 suggest that there may be calculation errors related to the speed of trains along the rail alignment.

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 not occur at the SIFF Film Center. The following summarizes adjustments and corrections to vibration and groundborne noise limits, as previously identified (see Tables 1 and 2) that would result in additional or greater impacts to the SIFF Film Center and SIFF Cinema Uptown.

WSBLE DEIS Appendix N.3, Chapter 6.4.1, Table 6-25 identifies a predicted supply train vibration 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 previously recommended) 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 impacts to its main screening room projector due to vibration from nearby construction.

Landau recommends adjusting the groundborne noise limit at the SIFF Film Center to 30 dBA from 35 dBA (see p. 6 and Table 2). This would result in groundborne noise impacts from both cutterhead and supply train operation; currently WSBLE DEIS Appendix N.3, Chapter 6.4.2, Table 6-27 predicts no impacts at the SIFF Film Center during tunneling using an incorrect limit of 40 dBA (see Table 1 for a summary of the required correction to DEIS Table 6-27). Adjusting the groundborne noise limit would warrant a review of mitigation measures to shield the SIFF Film Center from groundborne noise impacts.

At the SIFF Cinema Uptown, Landau recommends a 30-dBA noise limits for all three theaters. For this review, Landau estimated groundborne noise impact levels from DT-1 tunneling for each of the SIFF Cinema Uptown theaters based on a comparison with groundborne noise predictions at facilities identified in WSBLE DEIS Appendix N.3, Chapter 6.4.2, Table 6-27. The estimates for SIFF Cinema Uptown are 40 dBA for Theaters 2 and 3, and 30 dBA for Theater 1. At Theaters 2 and 3, the estimated groundborne noise levels from tunneling would exceed the noise limits by 10 dBA; at Theater 1 groundborne noise from tunneling would meet the limit of 30 dBA.

Table 8 summarizes predicted tunneling groundborne noise emissions at each space within the SIFF facilities and compares these predictions with existing ambient conditions, as documented by Landau through noise measurements made in early 2022. The increase in sound levels over ambient conditions is provided in the far right column of this table.

Table 8: Tunneling Groundborne Noise Impacts, DT-1

SIFF Noise-Sensitive Space	DT-1 Tunneling Noise Level (dBA)	Existing Ambient Noise Level (dBA) (c)	DT-1 Operational Noise Increase Over Ambient Noise (dBA)
SIFF Film Center Theater	37 (a)	31	6
SIFF Cinema Uptown, Theater 1	30 (b)	34	0
SIFF Cinema Uptown, Theater 2	40 (b)	25	15
SIFF Cinema Uptown, Theater 3	40 (b)	27	13
(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-27. (b) Estimated by Landau based on tunneling noise impacts identified in WSBLE DEIS Appendix N.3, Table 6-27 for listed noise-sensitive spaces. (c) Based on sound level measurements by Landau staff in 2022.			

As summarized in Table 8, predicted groundborne noise levels from tunneling were compared to existing ambient sound levels. The results suggest high levels of impact at SIFF Cinema Uptown Theaters 2 and 3 for DT-1, and moderate impacts to the SIFF Film Center for DT-1. Groundborne tunneling noise during use of the supply train would exceed ambient noise levels at SIFF Cinema Uptown Theaters 2 and 3 by 15 dBA and 14 dBA, respectively. Increases in noise at this level would be clearly audible and discernible and may inhibit use of these facilities by impacting the audience experience with low-frequency “rumbling” noise.

At the SIFF Film Center, the estimated increase over ambient noise levels due to tunneling is 6 dBA. Tunneling noise received at the SIFF Film Center may also be audible as a low “rumble” that could inhibit use of this space and impact the audience experience.

Included on Figures 7 and 8 are heat maps for the SIFF Film Center and SIFF Cinema Uptown, respectively, highlighting impacts that would occur from groundborne noise increases over ambient conditions due to tunneling of DT-1.

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 are 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 the SIFF Film Center are adjusted (i.e., lowered). The potential for groundborne noise impacts also exists at the SIFF Cinema Uptown Theaters 2 and 3.

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

Direction of Tunneling Progression

The WSBLE DEIS does not address the direction of progression during tunneling for DT-1. However, for the SIFF Cinema Uptown, it is worth noting that should tunneling progress from east to west it may result in a higher duration of exposure to vibration from the removal of spoils. That is, the distance from SIFF Cinema Uptown to the 5th Avenue West tunnel portal (5th and Republican) is three times the distance between the SIFF Cinema Uptown and the Seattle Center station. Therefore, spoils removal while tunneling westward to the 5th Avenue West portal station would result in a greater number of passes near SIFF Cinema Uptown to remove spoils at the Seattle Center station cut-and-cover opening than would occur if tunneling progressed eastward and spoils were removed at the 5th Avenue West portal.

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., Vibration Criteria A, or V.C.-A) is greater than would be realized at the SIFF Film Center and SIFF Cinema Uptown for the equipment identified in this table. For example, the minimum distance for potential impact from a bulldozer under the V.C.-A curve is 125 feet, and the nearest distance to Special Buildings located near surface construction areas (i.e., SIFF Film Center) 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 WSBLE DEIS Appendix N.3, Tables 6-29 and 6-30) and given the need to understand if effective mitigation of these impacts is feasible, a more detailed assessment of 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 evaluates the potential for structural damage to the SIFF Film Center building.

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 the western limits of the SIFF Film Center. A profile view of the station is provided on WSBLE DEIS Appendix J, Drawing B11-ASX102. Landau understands, through ongoing workshops hosted by Sound Transit during the WSBLE DEIS review period, 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 width 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 are specific to the breaking of the slurry wall. However, demolition of this wall would occur very near Seattle Center resident organizations including the SIFF Film Center. It is anticipated that high levels of vibration would be emitted during use of the hoe ram and impacts from this activity were not considered or included in the DEIS. Given the likely lengthy construction schedule (up to a year or more), there is a high potential for substantial impacts to the SIFF Film Center 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 SIFF Film Center may result in additional vibration and groundborne noise impacts to this facility.

Station Entrances

The WSBLE DEIS provides very minimal information on the potential for noise and vibration impacts from construction of the station entrances. Specifically, for DT-1 the proposed East Station Entrance would be located directly north of the SIFF Film Center (see Figure 1). 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 may be experienced at the SIFF Film Center.

Given the very close proximity of the DT-1 East Station Entrance to the SIFF Film Center, as well as the recommended adjustments of groundborne noise and vibration limits for the SIFF Film Center, an assessment of station entrance construction should be completed to determine the potential for impacts.

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 within the cut-and-cover construction area could operate as near as 8 feet from the SIFF Film Center. As summarized in Table 4, estimated sound levels could reach 104 dBA at the SIFF Film Center exterior facade, resulting in interior levels that are 43 dBA (or higher), potentially impacting the theater and offices inside the SIFF Film Center (see Table 5).

Mitigation measures summarized in the WSBLE DEIS are effective strategies to reduce airborne construction noise but do not specifically target the potential for noise 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 continued coordination with the SIFF Film Center.

Noise barriers could be installed at locations where airborne noise impacts are predicted or anticipated, and where there 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 SIFF Film Center, shielding noise from DT-1 station and East Station Entrance construction activities.

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 locations of the fans are not yet defined but could be located very near to the SIFF Film Center. Due to the low-frequency noise generated by such fans, mitigation may be required to ensure that fan noise does not result in impacts to the SIFF Film Center theater.

Potential mitigation measures could include quieter fan models, strategic placement of fans, silencers, barriers, or other measures. Further, there should be specific language in 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 construction areas. 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, there should be specific language in the Construction Noise and Vibration Control Plan regarding permitted haul routes that minimize the potential for impact.

If Republican Street is used as a haul route, additional impacts from hauling should be evaluated at the SIFF Cinema Uptown located at Republican Street and Queen Anne Avenue. The haul route assessment should identify the number of trucks per hour during various construction phases, what

the predicted impacts may be to the SIFF Cinema Uptown, and what mitigation measures may be 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 the strategic location of staging areas to minimize noise impacts, noise barriers, and other measures as defined in 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 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.

Table 6-11 (p. 140) of the FTA Guidance Manual 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-noted Sound Transit expectation is true, groundborne noise impacts from DT-1 operation would not be sufficiently mitigated for the SIFF Film Center where operational groundborne noise may be 15 dBA over the adjusted limit of 30 dBA (see Table 6) and 14 dBA over ambient noise levels (see Table 7). 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 would likely experience increases of 5 dBA above the adjusted limits, and 4 dBA above ambient noise levels. 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 and/or thicker tunnel materials.

At the SIFF Cinema Uptown, operational groundborne noise impacts are estimated to be 40 dBA at Theaters 2 and 3, representing increases over ambient noise levels of 15 dBA and 14 dBA, respectively, and 10 dBA over the recommended limit of 30 dBA for both theaters. Landau notes that the DEIS-proposed mitigation of high-resilience fasteners does not extend west to the vicinity of the SIFF Cinema Uptown. That is, there is no proposed mitigation to reduce the potential for groundborne noise impact from DT-1 operation at the SIFF Cinema Uptown. Landau recommends that Sound Transit consider mitigation of the DT-1 alignment near the SIFF Cinema Uptown, extending the mitigation measures identified above (i.e., a floating slab and/or thicker tunnel materials) west to construction alignment station 93+00.

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) of the WSBLE DEIS Appendix N.3, “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 the SIFF Film Center.

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 the SIFF Film Center as a result of the slurry wall demolition and, therefore, mitigation measures or alternative construction methods should be 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 summarizes key elements of this review:

Supply Train

Details provided in WSBLE 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 pads between ties, and using rubber tires on supply trains. Specifically, WSBLE 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.

As noted in WSBLE DEIS Appendix N.3, Table 6-27 (p. 6-67), groundborne noise from unmitigated supply trains could result in noise levels inside the SIFF Film Center that are up to 37 dBA, exceeding the adjusted noise limit by 7 dBA. At the SIFF Cinema Uptown, the Landau estimate of supply train groundborne noise level at Theaters 2 and 3 is 40 dBA (based on review of DEIS results of other facilities, not predictive calculations). Supply train noise of 40 dBA would exceed the proposed limits at SIFF Cinema Uptown by 10 dBA and would exceed existing ambient noise levels by up to 15 dBA. Mitigation of noise from supply trains in the vicinity of SIFF Cinema Uptown is warranted.

Given the high level of impact that may occur due to the supply trains 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, including an assessment of impacts and mitigation effectiveness at the SIFF Cinema Uptown. The assessment should evaluate whether 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. A mitigation assessment of thrust jacks 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 in the Construction Vibration Control Plan.

Cutterhead

As stated in WSBLE 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 the SIFF Film Center and SIFF Cinema Uptown. The FEIS and Construction Vibration Control Plan should specify locations/receivers to be monitored at these SIFF facilities, 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 the SIFF Film Center and SIFF Cinema Uptown to provide sufficient advance notice to allow noise-sensitive events such as film screenings 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 selected slides from Sound Transit's April 2022 presentation are included with this letter report. The refinements include an alternative double-canted concept design for the DT-1 station, a refinement that moves the DT-1 station farther 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 as they pertain to the potential impact or benefit to SIFF facilities:

DT-1 Station Double-Canted Concept

The double-canted design would negate the need to demolish a slurry wall underneath the Northwest Rooms, including underneath the SIFF Film Center, by constructing the station walls with canted 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.

While this station design eliminates the need for demolishing a slurry wall, the potential for groundborne noise impacts remains, albeit likely at lower levels.

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 (including impact noise from shaking augers) would be required to fully evaluate whether additional mitigation measures are warranted for this alternative station design.

Moving Station DT-1 to the West

Under this alternative, the location of the DT-1 station would be located under Republican Street between approximately Queen Anne Avenue and just west of 1st Avenue North (i.e., adjacent to the SIFF Cinema Uptown). Moving the station away from the Seattle Center, including the noise-sensitive spaces within the Northwest Rooms that include the SIFF Film Center, would reduce the potential for impacts to the SIFF Film Center.

However, under this alternative, noise and vibration impacts from station construction would occur in the immediate vicinity of SIFF Cinema Uptown. In Sound Transit's preliminary plan for this alternative design, the proposed alternative DT-1 cut-and-cover station footprint would be very near the SIFF Cinema Uptown building (e.g., 10 feet or less). At such a close proximity, there is an elevated risk of airborne noise impacts to SIFF Cinema Uptown Theaters 2 and 3, in addition to elevated groundborne noise and vibration impacts. Landau has reviewed the potential for airborne noise impacts using an estimate of the exterior-interior noise reductions through the south wall of SIFF Cinema Uptown (an assumed 50 dB-reduction), and an estimated 30-dB reduction between Theaters 2 and 1 (i.e., noise transmission loss through the walls between the theaters). The results are presented in Table 9 below.

Table 9: Surface Construction Airborne Noise Impacts (DT-1 Refinement Location, Farther West)

Noise-Sensitive Locations Inside SIFF Film Center North Wall	Distance from Nearest Exterior Construction Activity to Interior Space (feet)	Impact Assessment Result		
		Ambient Noise Level (dBA) (b)	Construction Noise Level at Sensitive Space (dBA)	Increase Over Ambient Noise Level (dBA)
SIFF Cinema Uptown, Theater 1	70 (a)	34	5 (c)	0
SIFF Cinema Uptown, Theater 2	8 (a)	25	54 (d)	29
SIFF Cinema Uptown, Theater 3	8 (a)	27	54 (d)	27

(a) Distance estimated by Landau is approximate only.
(b) Sound level measurement by Landau staff, early 2022.
(c) Calculated using standard adjustment for distance from a point source: $SPL2 = SPL1 + 20 \cdot \log(D1/D2)$. Assumes reduction through south wall of SIFF Cinema Uptown of 50 dBA. Accounts for additional distance to Theater 1 from location of cut-and-cover area. Assumes additional 30-dBA reduction provided by wall between Theater 2 and Theater 1.
(d) Calculated using standard adjustment for distance from a point source: $SPL2 = SPL1 + 20 \cdot \log(D1/D2)$. Assumes reduction through south wall of SIFF Cinema Uptown of 50 dBA.

As indicated in Table 9, noise impacts to the SIFF Cinema Uptown from construction of a relocated DT-1 station would be very significant and would likely make these theaters unusable. That is, an interior noise level of 54 dBA from intruding construction noise is unsuitable for screening films. Actual noise levels inside Theaters 2 or 3 may be lower depending on the actual transmission loss provided by the south wall; however, it is unlikely that noise levels would be sufficiently reduced to levels tolerable by SIFF.

Included on Figure 9 is a heat map of the SIFF Cinema Uptown highlighting the potential impacts that could occur from airborne noise increases over ambient conditions due to the DT-1 station relocation considered above.

In addition to airborne noise, groundborne noise impacts from surface vibration are expected to impact the SIFF Cinema Uptown. Further, given the proximity of the refined location of the DT-1 station to the SIFF Cinema Uptown building, there is a potential for structural damage to occur at the building itself.

A detailed assessment of groundborne noise, vibration, and airborne noise would be required to fully evaluate this alternative design; however, it is unlikely that noise and vibration mitigation measures would maintain an environment within the SIFF Cinema Uptown that is suitable for screening films.

* * * * *

If you have any questions or comments regarding the information provided in this letter report, please contact the undersigned.

LANDAU ASSOCIATES, INC.



Kevin Warner
Principal



Kristen Wallace
Principal

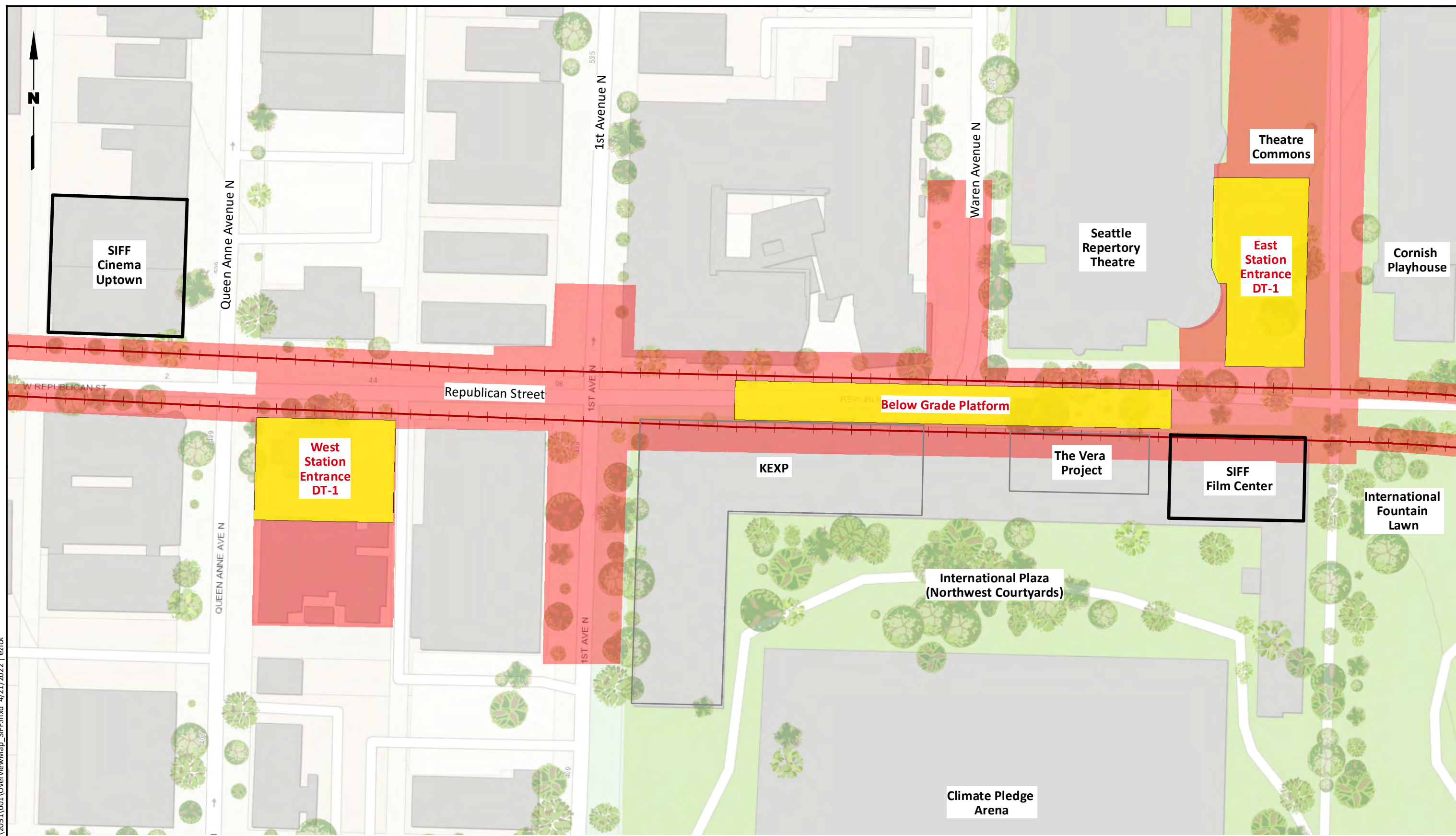
References

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<https://www.soundtransit.org/sites/default/files/documents/16a-wsble-drafteis-noisetechreport-202201.pdf>.

Attachments

- Figure 1: Overview Map
- Figure 2: Landau Ambient Noise Measurements at SIFF Facilities
- Figure 3: Landau Ambient Vibration Measurements at SIFF Facilities
- Figure 4: Surface Construction Noise Impact, SIFF Film Center
- Figure 5: Operational Noise Impact, SIFF Film Center
- Figure 6: Operational Noise Impact, SIFF Cinema Uptown
- Figure 7: Tunneling Noise Impact, SIFF Film Center
- Figure 8: Tunneling Noise Impact, SIFF Cinema Uptown
- Figure 9: Surface Construction Noise Impact, SIFF Cinema Uptown

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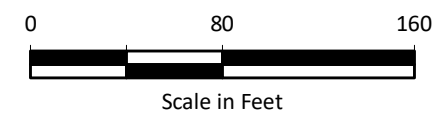


Legend

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

Note

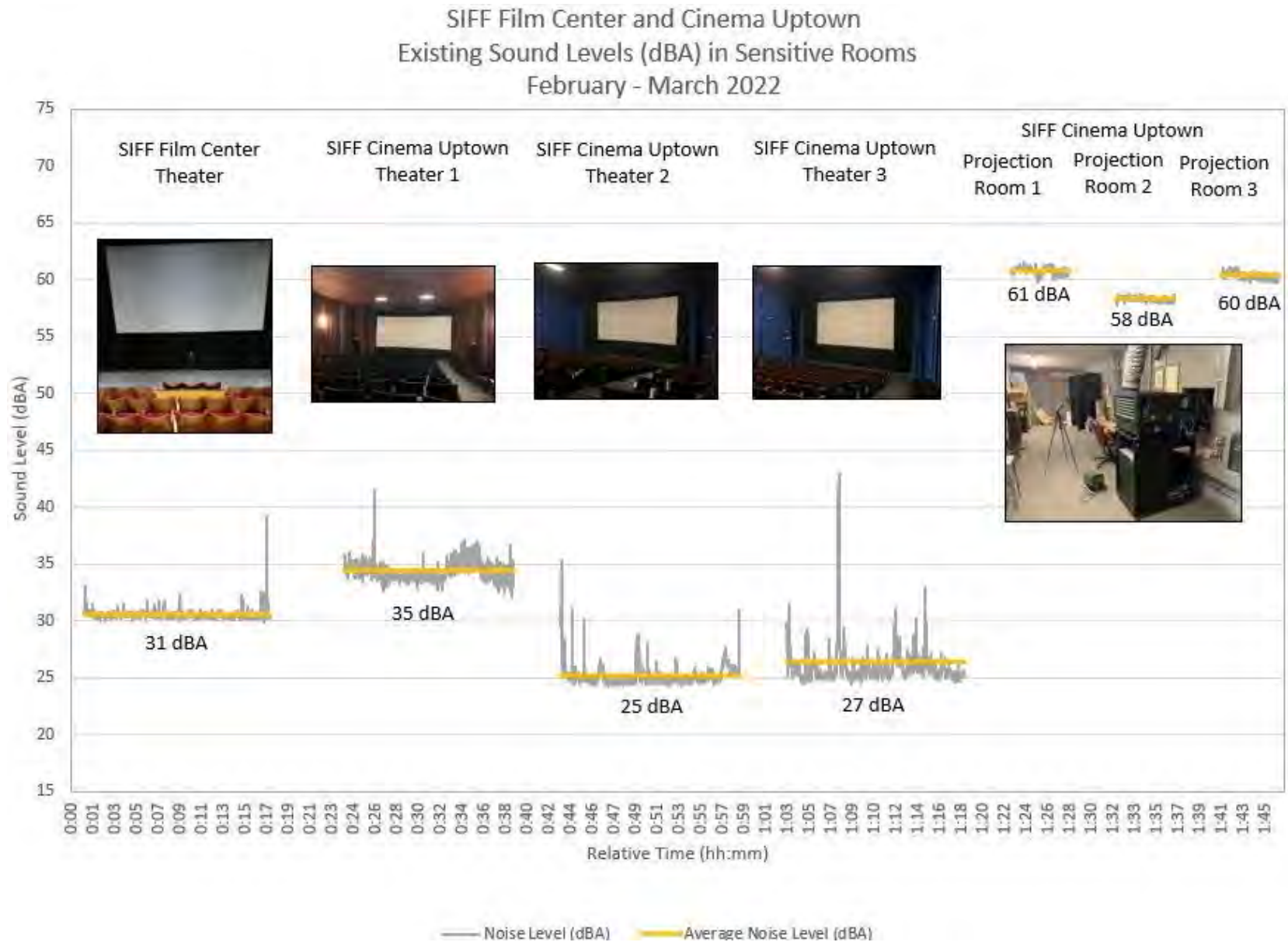
1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.



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

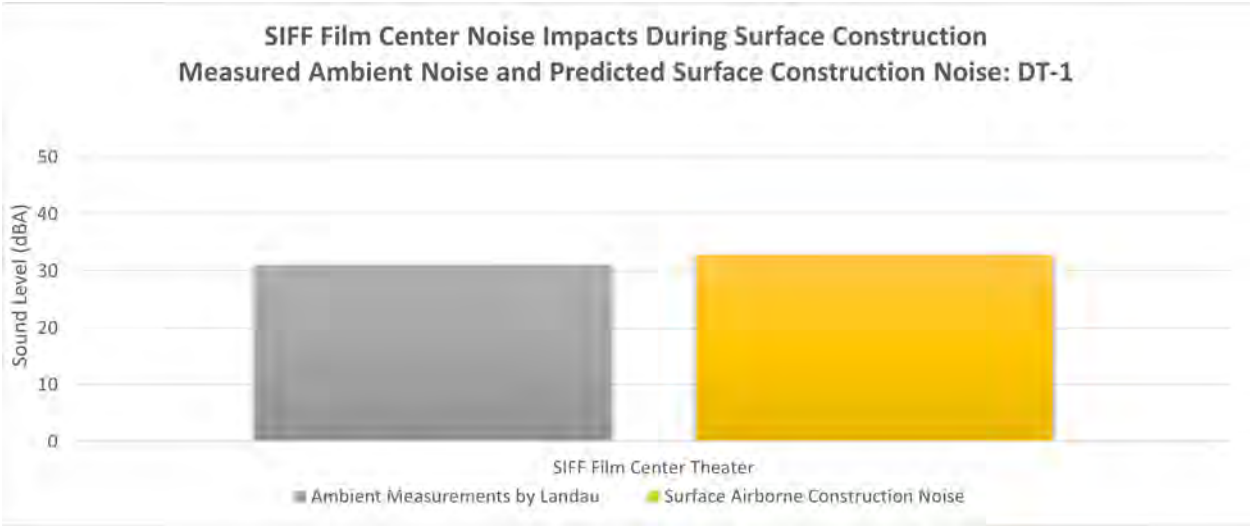
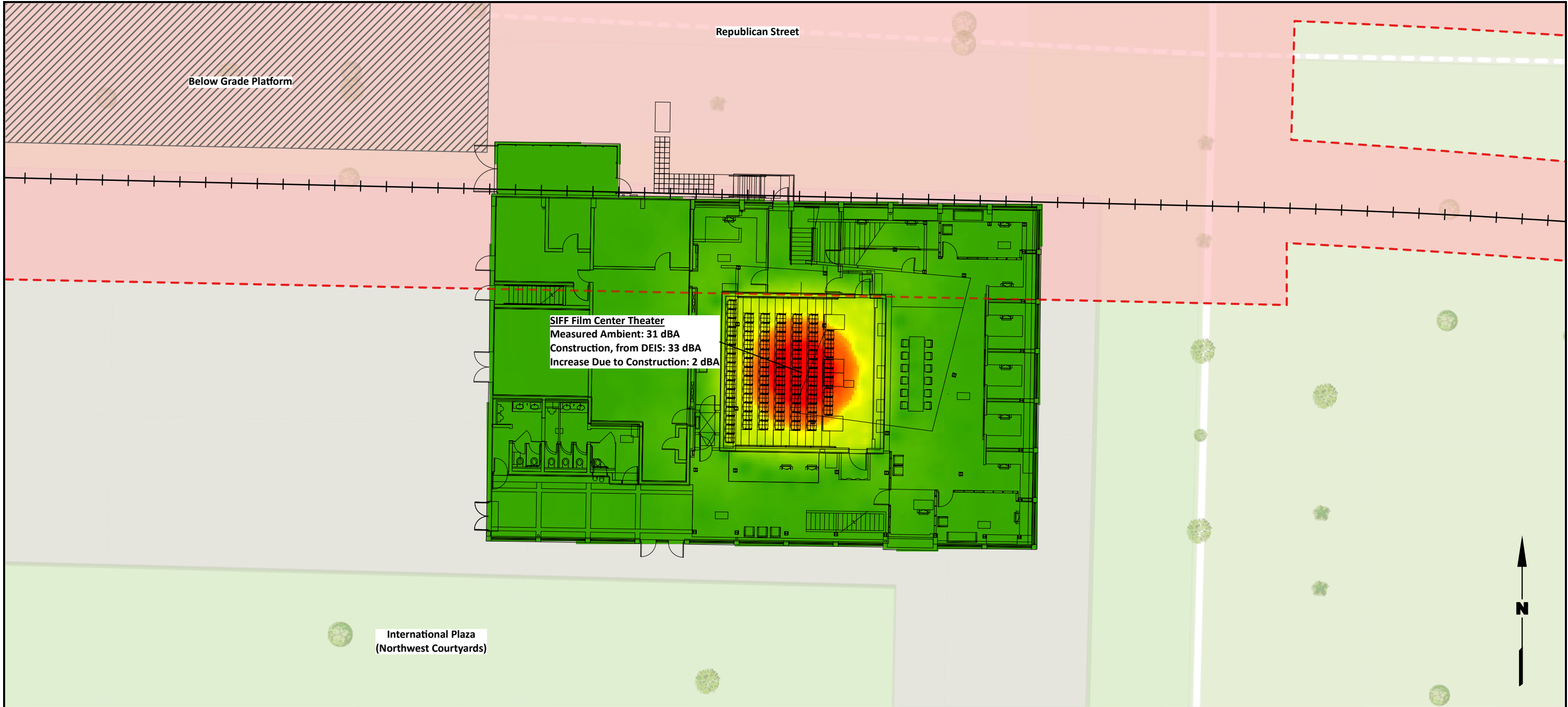


Sound Transit WSBL DEIS SIFF Seattle, Washington	Overview Map	Figure 1
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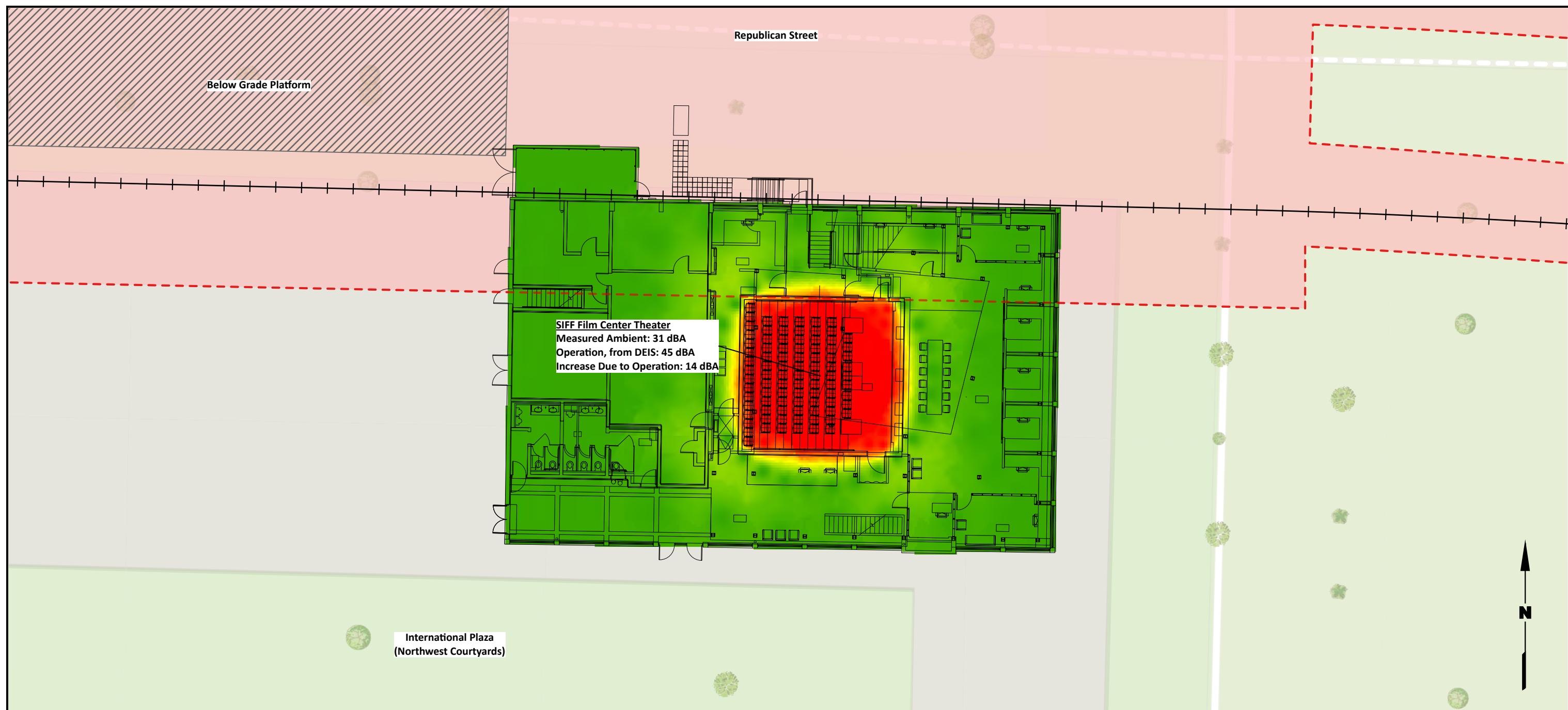
SIFF Film Center and Cinema Uptown Existing Vibration (VdB) Levels in Sensitive Rooms February - March 2022





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

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

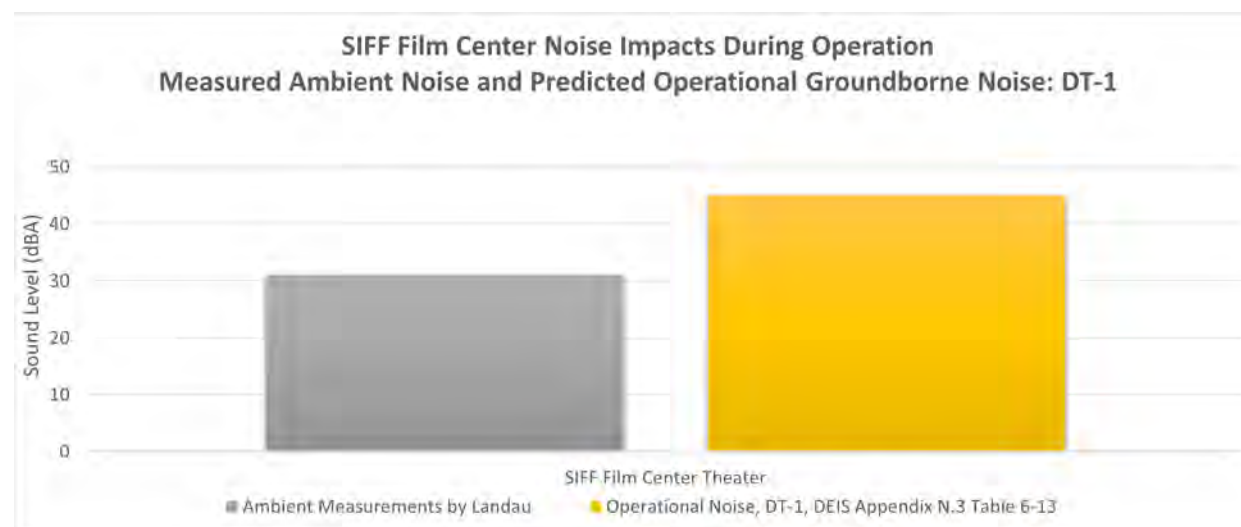


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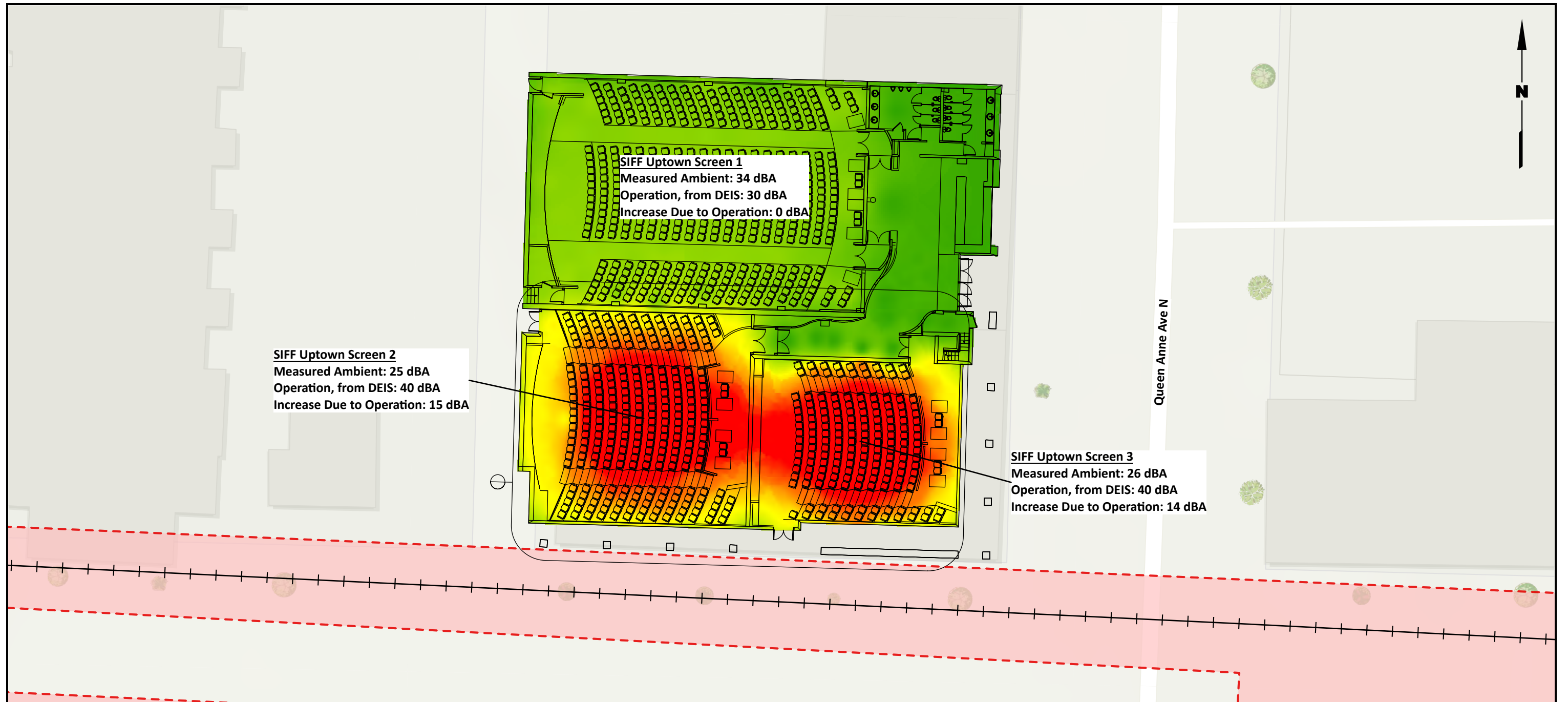
- DT-1 Tracks
- DT-1 Platform and Stations
- DT-1 Construction Areas



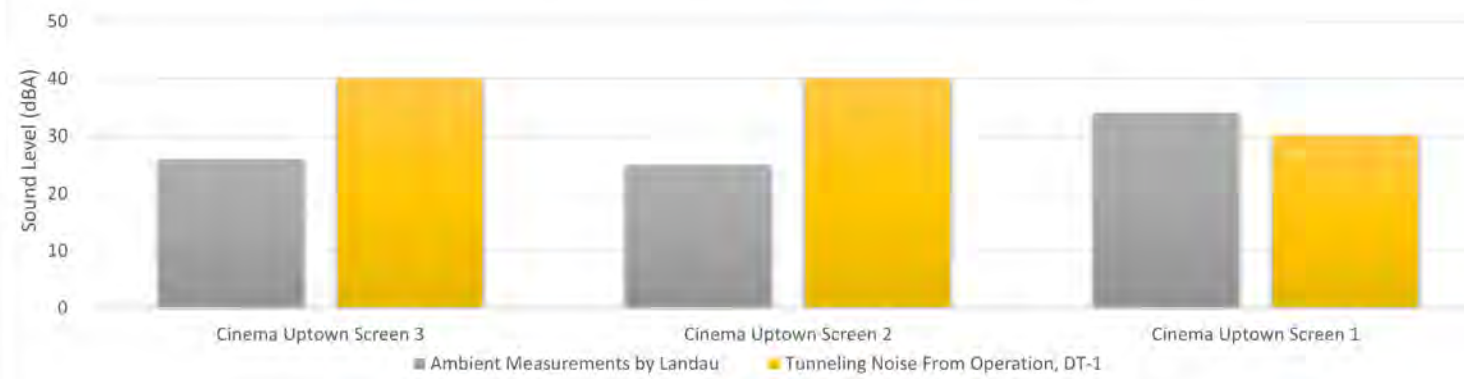
Sound Transit WSBL DEIS
SIFF Film Center
Seattle, Washington

Operational Noise Impact, DT-1

Figure
5



SIFF Cinema Uptown Noise Impacts During Operation
 Measured Ambient Noise and Estimated Operational Groundborne Noise: DT

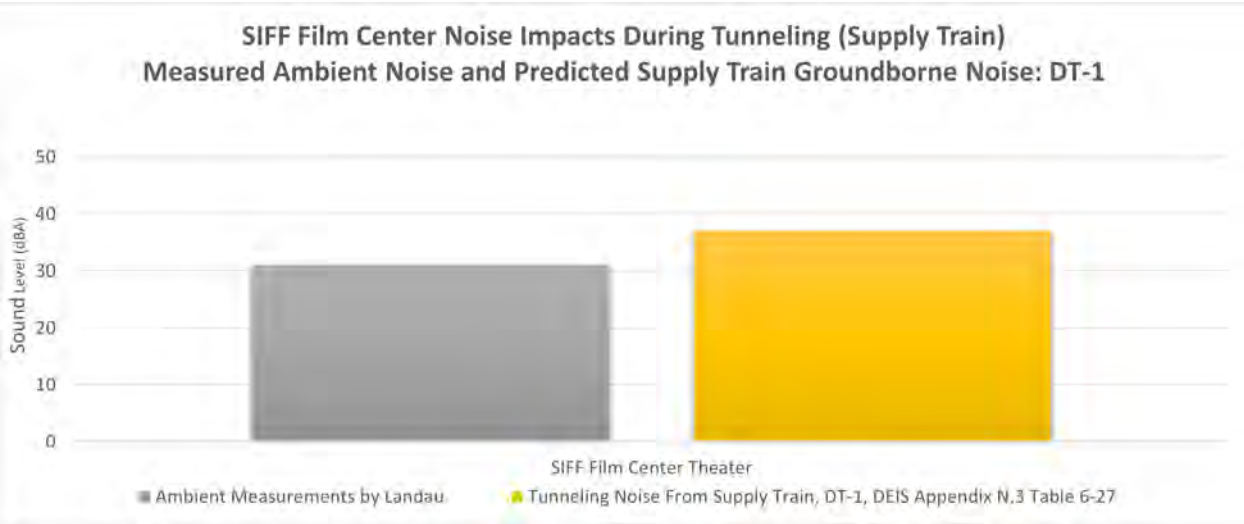
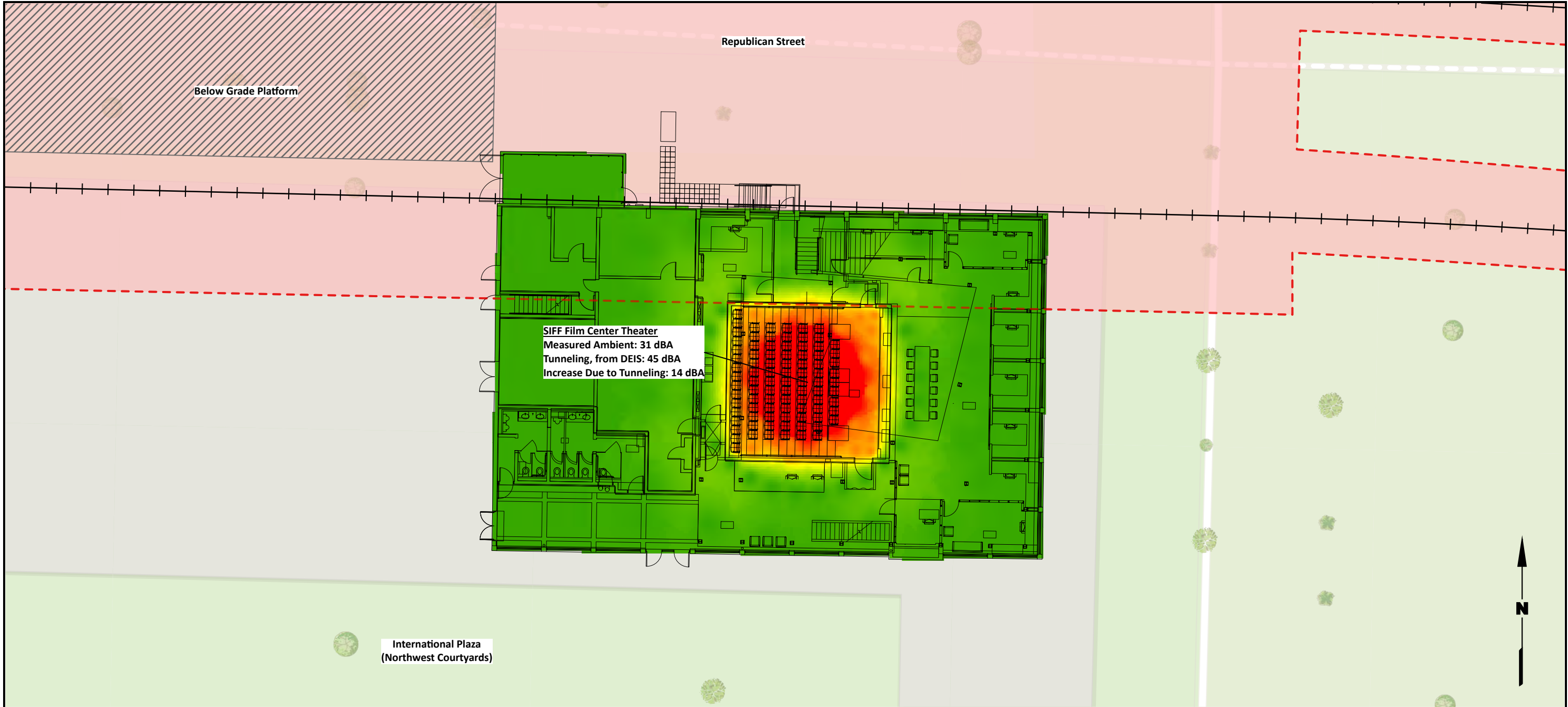


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- +— DT-1 Tracks
- DT-1 Construction Areas

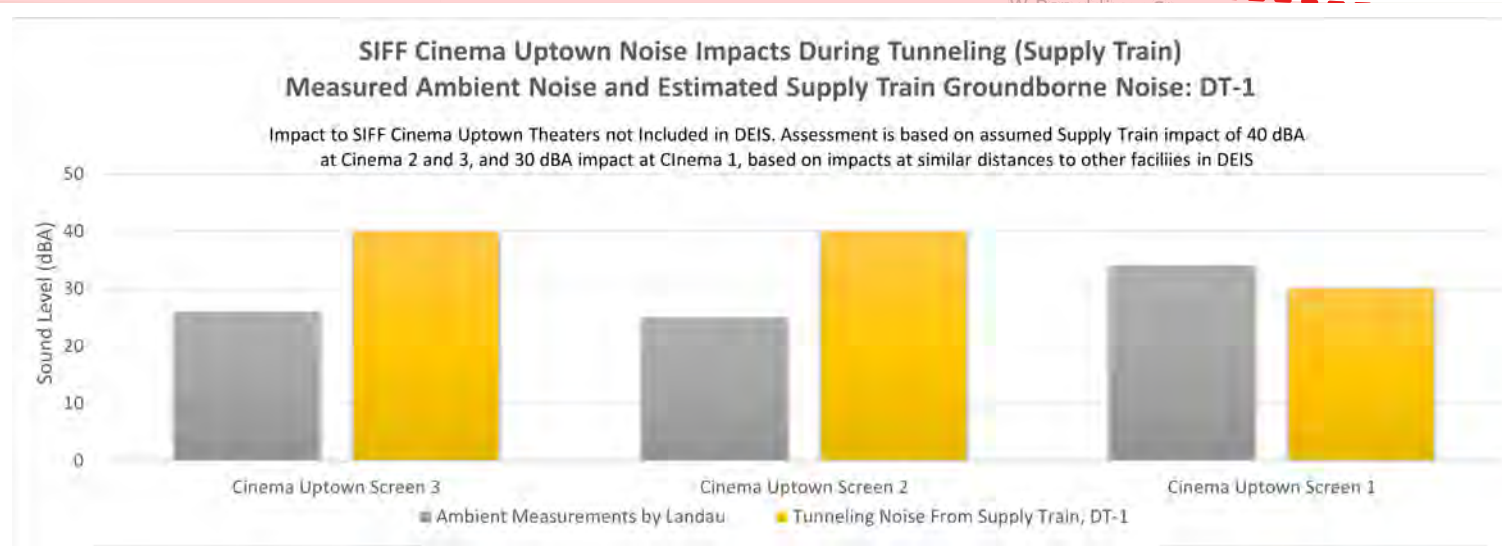
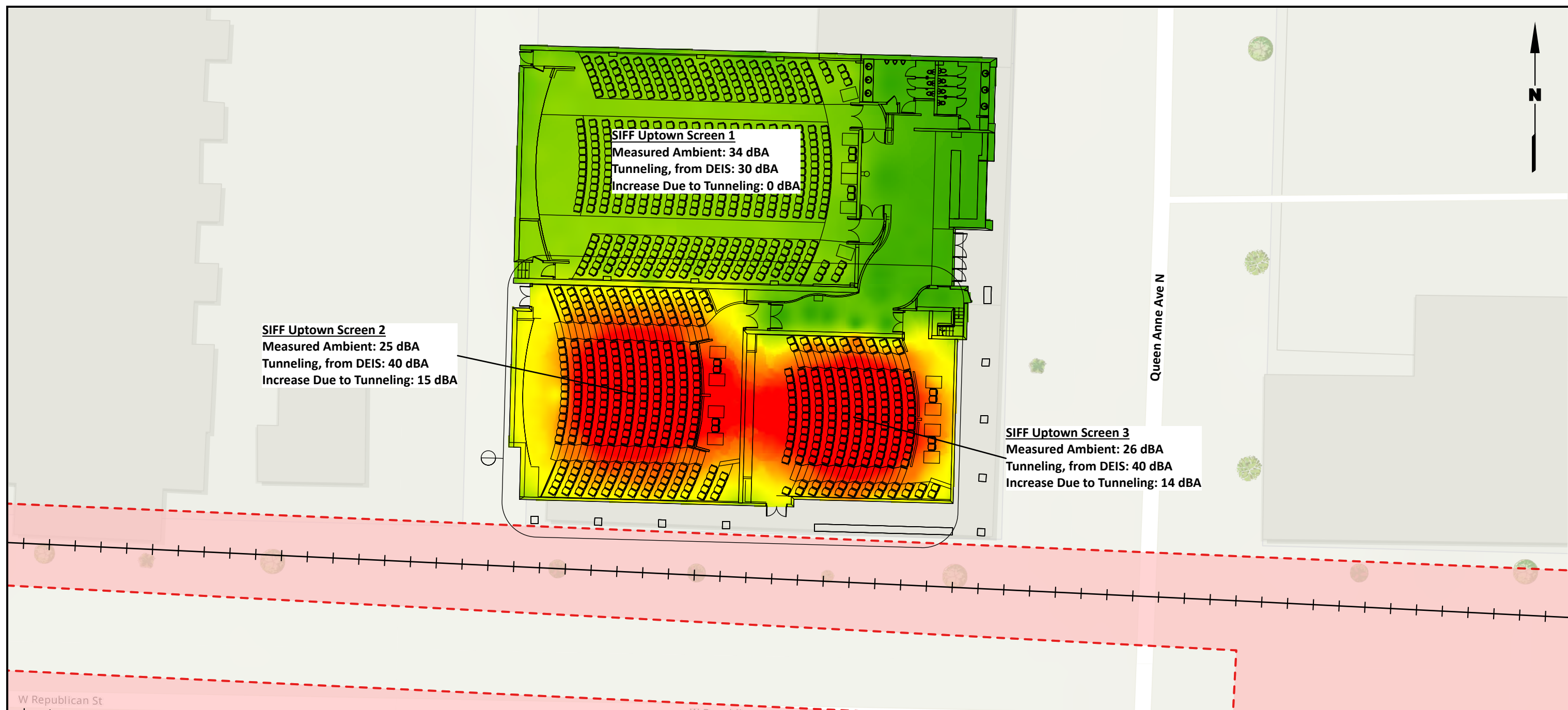


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- ▨ DT-1 Platform and Stations

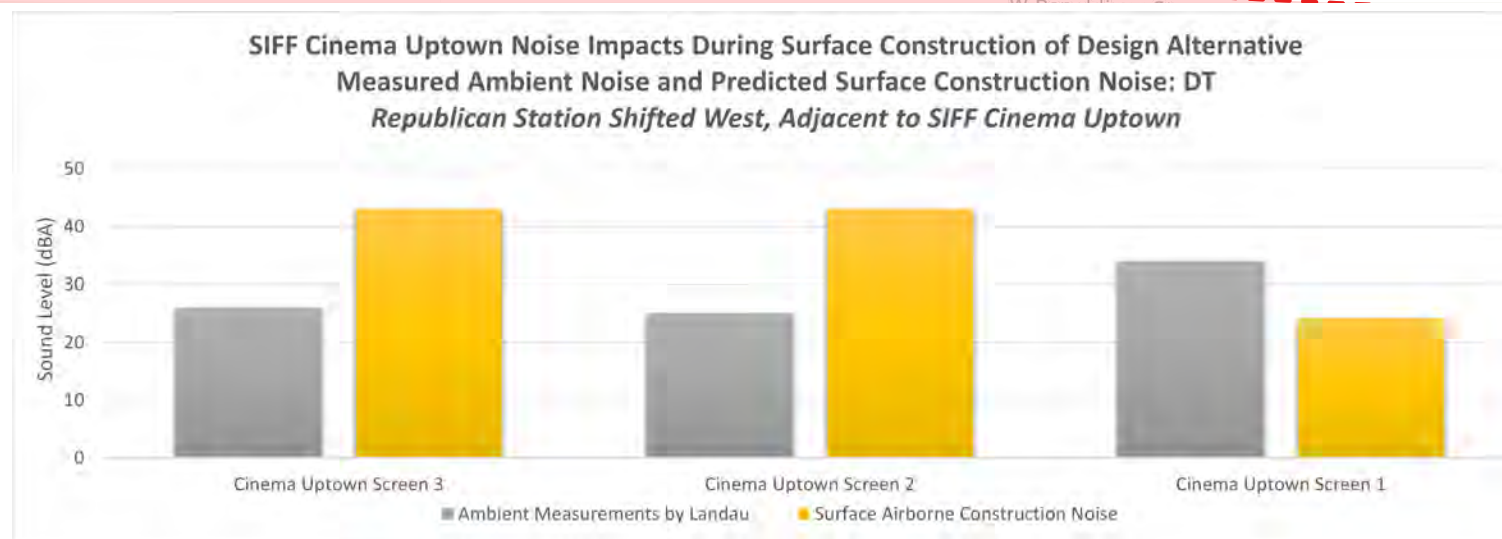
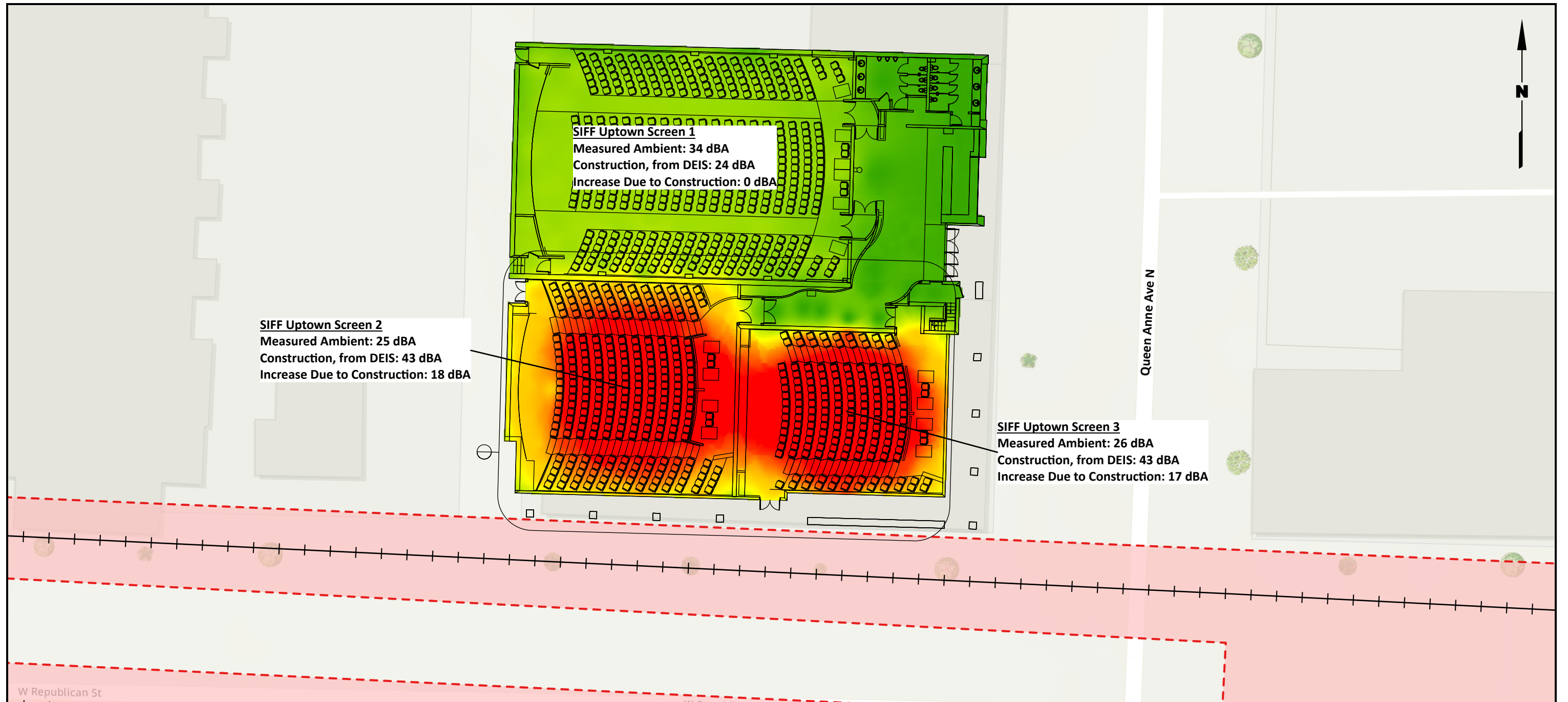


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- — — DT-1 Construction Areas



Note

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- +— DT-1 Tracks
- DT-1 Construction Areas

Sound Transit WSBL DEIS
 SIFF Cinema Uptown
 Seattle, Washington

**Surface Construction
 Noise Impact, DT-1**

Figure
9

Sound Transit Projects

Details	Communication
#499409 Date Recieved: 3/22/2022 Created by: Nasra Mohamed Audience: General Public Reach: Participation: Engagement: 1 Source: Open house/public meeting Assigned division: Outreach Category: Project Phase: Planning Project Segment: Environmental phase: Draft EIS	<p>Thank you.</p> <p>Hi. My name is Jessica Stehlin. I am the communications director for the Seattle International Film Festival. Two of SIFF's three venues, the Film Center at Seattle Center and the Uptown Cinema on Queen Anne Avenue North, comprising four of SIFF's five year-round screens, will be directly impacted by the five to seven of years of construction of the Republican Street station location. And SIFF may not survive as an organization unless mitigation measures are undertaken to ensure SIFF can remain accessible to the public, keep its doors open, and screen films without distracting noise and vibration. The comments and concerns expressed by other resident organizations at the Seattle Center are also endorsed by SIFF, so I will not spend my time echoing those comments or concerns. Instead, I will focus on the comments and concerns specific to the Uptown Cinema venue based on our review of the DEIS to date. Our review is not complete, but several notable omissions leave SIFF concerned that a thorough analysis of the impacts and possible mitigation measures for both the construction and operation phases have not been addressed in the DEIS. In Appendix L to Chapter 4, Figure L4.1-28j, the graphic shows the preferred alternative line encroaching on SIFF's Uptown Cinema property at the northwest corner of Queen Anne Ave. North and Republican Street. Additionally, the west entrance to the station is shown as being located at the southeast corner of the same intersection. Despite these two things being represented in the figure, the SIFF Uptown Cinema has not been identified as a sensitive receptor requiring mitigation even though there are three theaters in the Uptown Cinema venue that will be negatively impacted by noise and vibration levels. In Chapter 3, Section 3.11, it says major arterials including Fourth Ave., Fifth Ave., Sixth Ave., and Westlake Ave., et cetera; however, First Ave. North is not listed as a major arterial closure, though a footnote on the closure of Republican Street indicates this intersection will have a 15-month full closure. This closure will impact access to the Uptown Cinema.</p>



April 27, 2022

WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 S. Jackson Street
Seattle, WA 98104

Dear Ms. Swift:

Braden Abraham
Artistic Director

Jeffrey Herrmann
Managing Director

We thank you and Sound Transit for this opportunity to provide comments on the West Seattle Ballard Link Extensions (WSBLE) during the Draft Environmental Impact Statement (DEIS) period. Seattle Repertory Theatre (Seattle Rep) and our community strongly supports the WSBLE project. We are eager for our entire region to benefit from the access, equity, and sustainability benefits that light rail will bring to Seattle Center. However, as you will read in our comments below, we have significant concerns about Seattle Rep's ability to continue to operate if the Seattle Center/Uptown station is sited at the preferred location at Republican Street and August Wilson Way (DT-1), directly adjacent to our facility. Meanwhile, there is insufficient information included in the DEIS to evaluate the impact of the alternative station location at Mercer and Warren Streets (DT-2) on Seattle Rep.

Being a part of the Seattle Center campus is central to Seattle Rep's identity. Founded in 1963 by local citizens as an investment in a thriving city, Seattle Rep was the very first performing arts institution to be located at Seattle Center. Nearly 60 years later, we anchor the NW corner of the campus in a two-theater facility that we have occupied continuously since 1983. Our mission is to collaborate with extraordinary artists to create productions and programs that reflect and elevate the diverse cultures, perspectives, and life experiences of the Pacific Northwest. Guided by the values of artistic vitality, sustainability, and generous and inclusive practices, our vision is a world where theater sits at the heart of public life, positioning the work on our stages as a vital source for collective imagination, meaningful conversation, and healthy social debate.

Under the leadership of Artistic Director Braden Abraham and Managing Director Jeffrey Herrmann, Seattle Rep reaches 150,000 audience members annually (pre-COVID) through our mainstage season, new play activities, community engagement work, and Public Works programming. Each production is built onsite at Seattle Rep by an internal production team of skilled artisans and craftspeople that also supports other production needs across the city. Our resources and reputation attract theater professionals from across the country and world who are working at the top of their craft, earning Seattle Rep the 1990 Tony Award for Outstanding Regional Theater (awarded once in a theater's lifetime), and

155 Mercer St.
PO Box 900923
Seattle, WA 98109

seattlerep.org

positioning Seattle Rep as a home for local artists and a nationally prominent incubator and destination for great art.

Seattle Rep contributes more than \$20M to the local economy each year through wages and benefits to staff, artists, and technicians; payments to vendors; and audience spending on food and beverage, transportation, shopping, and lodging. This includes an estimated \$1.4M in spending by visitors from outside King County.

Beyond this economic impact is our even more crucial social impact. We have intentionally built a diverse community of patrons, participants, volunteers, and supporters, with a particular focus on youth, People of Color, LGBTQ people, immigrant communities, and other minorities. Our staffing is equally inclusive, bringing union/non-union, administrative/artistic, and white collar/blue collar workers together under one roof in a culture of camaraderie, teamwork, and mutual support. Over the course of an entire season, we employ more than 400 individuals, including 50 carpenters, seamstresses, painters, etc.

Recently, Sound Transit released the DEIS report for the WSBLE, which includes a Seattle Center/Uptown station. Below you'll find our specific comments on the DEIS, developed over the past year at numerous well-attended meetings with fellow Seattle Center resident organizations and community groups, and through internal discussions with our staff and Trustees. We greatly appreciated the presence of Sound Transit staff at many of these gatherings to provide helpful background information and answer questions.

Seattle Rep adopts all the specific details of the inadequacies of the DEIS expressed in the April 27, 2022 letter, entitled "Re: West Seattle Ballard Link Extension Draft Environmental Impact Statement" authored Don Marcy on behalf of the Seattle Center Foundation. We also adopt all the specific details of the inadequacies of the DEIS expressed in the April 26, 2022 letter, entitled "Sound Transit WSBLE DEIS Review for Seattle Repertory Theater," by Landau Associates (attached). We request specific and detailed responses on all these issues, including the multiple additional analyses that are requested.

The preferred alternative at Republican Street and August Wilson Way sits immediately adjacent to Seattle Rep and will produce significant impacts on our operations because of the lengthy construction period and the even longer-term operations of trains and a station. We believe this will make it nearly impossible for Seattle Rep to maintain its operations. It is for this reason that we request different station locations off the Seattle Center campus be identified. The alternative location at Mercer and Warren Streets may be a possibility; but because of the minimal noise and vibration analysis of this location included in the DEIS, we cannot properly evaluate it at this time.

To help Sound Transit understand why the inadequacies of the DEIS are so problematic, we would like to share more about the operations of our theaters. On most days, there is activity at Seattle Rep happening 14 to 16 hours a day. This includes work in our offices and in our set, props, paint, and costume shops during standard Monday through Friday

working hours; but also numerous live theater performances at night, as well as on Wednesday, Saturday, and Sunday afternoons. Meanwhile, rehearsals take place six days a week throughout the year; and we maintain a dense schedule of public events, rentals, and other community uses year-round. In short, Seattle Rep is not a 9am to 5pm weekday operation. The DEIS does not recognize this reality and thus the DEIS is flawed and inadequate. To further frustrate our assessment of construction impacts, the DEIS has confusing provisions regarding hours of construction though, at one point, the DEIS states that construction will take place between 7am and 10pm. During those hours, ALL Seattle Rep rehearsals and ALL Seattle Rep performances would be significantly impacted.

Actors must rehearse and perform in the personalities of their characters. This requires a focus, concentration, and transformation that is unique to acting. Whether it is in rehearsals or performances, acting requires the ability to concentrate and transform into character without interruption from unusual noise or vibration that can ‘break the spell.’ Actors are trained to ignore usual noise (e.g., coughs in the audience), but rehearsals and performances are easily disrupted by unusual noises and perceptible vibration. This is true for both actors and audiences. Like the performers, the audience enters ‘the spell’ of the performance and the beauty of theater is that it can transport the audience to the same places the actors are taking them. Thus, noise and vibration from the proposed construction and operations adjacent to Seattle Rep will be extremely disruptive to our programming. This is obvious from even the inadequate analyses provided for DT-1 and DT-2, which do not begin to evaluate properly the impacts of construction and operation on Seattle Rep. Without considerably more, correct, and detailed analyses, and thus further evaluation of impacts, and proposals for much more mitigation, the proposals will likely force temporary and/or permanent relocation of Seattle Rep and significant financial losses for the organization. Beyond the obvious elimination of programming and other community services this would entail, it is uncertain whether the organization itself could survive such a displacement from its current locale.

The DEIS is also flawed in not including Seattle Rep’s rehearsal spaces in its analysis. As noted above, rehearsals are critical for the actors. The DEIS is deficient for failing to characterize and assess Seattle Rep performance and rehearsal spaces as FTA “Special Building” spaces, subject to concert hall limits. In addition, the DEIS analysis for impacts to Seattle Rep are for the Leo K. Theater only. While the Leo K. Theater is the closest to DT-1—indeed, it is immediately adjacent to DT-1—the DEIS does not evaluate impacts of DT-2 on Rep’s Main Stage, the Bagley Wright Theater (which is the closest to DT-2).

The DEIS additionally fails to consider the impact of the proposed construction on Seattle Rep’s building. The Bagley Wright Theater, the Leo K. Theater, and all the attendant rehearsal, shop, and offices spaces were not designed or built to withstand construction and operation of a major light rail station immediately adjacent or across the street. Unlike some theaters, Seattle Rep’s venues were not constructed as a ‘box within a box,’ with the goal of mitigating the impact of external noise and vibration. Instead, Seattle Rep was designed and constructed with slabs on grade and steel frames on spread footings. Thus, Seattle Rep’s building structures are extremely vulnerable to

adjacent excavation and construction. Seattle Rep floors and walls will transmit impossibly disruptive noise and vibration into its rehearsal, office, shop, and performances spaces from both construction and operations.

As noted above, the DEIS neglects to put the impacts of construction and operation into the proper context. A “significant” adverse impact is an impact that is “more than moderate.” But “significance” requires context. Given the necessary quiet described above for both rehearsals and performances, the thresholds for noise and vibration impacts at Seattle Rep are lower than assumed by the DEIS. The attached noise and vibration analyses from Landau Associates provide numerous and specific illustrations of the inadequacies in the DEIS regarding noise and vibration impacts from both construction and operation.

The DEIS overlooks the long-term nature of the construction period. The construction of either DT-1 or DT-2 will not be a short-term endeavor. Construction immediately adjacent to Seattle Rep for DT-1, or construction very close to Seattle Rep for DT-2, is projected to take 5 years or more. Moreover, muck and supply trains will be running adjacent to Seattle Rep for many additional years to support the extension of the rail line to Smith Cove and Ballard. The continuing long-term nature of the construction impacts on Seattle Rep have not been evaluated in the DEIS. Even the short-term construction impacts from the more distant Climate Pledge Arena (CPA) were damaging to Seattle Rep. Groundborne vibration disrupted performances at Seattle Rep with stage lights swaying and rumbling heard and felt by audience members in response to the digging and pounding work happening at CPA.

DT-1 includes an East Station entrance that is immediately adjacent to the Rotunda of the Seattle Rep, which is the inside entrance to the Leo K. Theater. Operation of this station entrance will cause impacts to Seattle Rep that have not been analyzed in the DEIS.

Since DT-1 is the Preferred Alternative, there is necessarily less analysis in the DEIS of mitigation of impacts for DT-2. Seattle Rep cannot effectively evaluate DT-2 under these circumstances. Regardless, both proposals in the DEIS would place the Seattle Center/Uptown station very close to Seattle Rep and so the DEIS is further inadequate for not evaluating an alternative further away from the Rep. The DEIS should also have evaluated a “mined” approach (i.e., tunnelling) to avoid the risks and obvious major long-term impacts of the “cut and cover” construction method that cannot be fully mitigated.

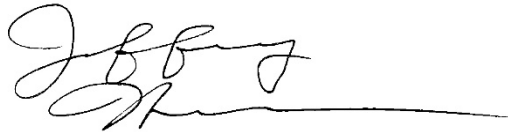
Many specific probable adverse impacts on Seattle Rep are also not analyzed in the DEIS at all. Truck haul routes and the noise from heavy trucks running adjacent to Seattle Rep for many years have not been analyzed. Noise from construction staging areas adjacent to Seattle Rep on Warren Avenue and 2nd Avenues have not been analyzed. Noise from ventilation fans adjacent to Seattle Rep have not been analyzed. Adverse impacts to air quality from adjacent long-term construction have not been analyzed. The DEIS fails to assess the loss of the many exceptional trees that now line

August Wilson Way and neglects to assess the loss of access to Seattle Rep from August Wilson Way. In context, these are more than moderate adverse impacts.

Finally, given the failure of the DEIS to analyze multiple significant adverse impacts of construction and operation on Seattle Rep, it also fails to identify adequate mitigation measures. Neither mitigation of specific impacts nor short-term and long-term economic impacts are adequately addressed. The DEIS fails to analyze this outcome and is thus further deficient. Without additional analyses of alternatives and impacts, and more mitigation of impacts, the future of Seattle Rep is at risk.

Thank you for accepting our feedback and we look forward to continuing our conversation and partnership with Sound Transit to further focus and refine the design vision for a successful Seattle Center/Uptown station that will enable us to leverage this unprecedented opportunity to welcome the world to our doorstep. If you have any questions about Seattle Rep or any of the details contained in this letter, please don't hesitate to reach out to me at (206) 443-2218 or via email at jeff.herrmann@seattlerep.org.

Most Sincerely,

A handwritten signature in black ink, appearing to read 'Jeff Herrmann', with a long horizontal line extending to the right.

Jeffrey Herrmann
Managing Director

cc: Sound Transit Board

Kent Keel, Board Chair
Dow Constantine, Vice-Chair
Dave Somers, Vice-Chair
Nancy Backus
David Baker
Claudia Balducci
Bruce Dammeier
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Peter Von Reichbauer
Kristina Walker
Mark Riker, Sound Transit's Labor Liaison

cc: Sound Transit Staff

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Cathal Ridge, Executive Corridor Director

cc: Seattle City Council Members

Lisa Herbold, District 1
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cc: City of Seattle

Bruce Harrell, Mayor
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Marshall Foster, Director, Office of the Waterfront and Civic Projects
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Sara Maxana, Acting Sound Transit Program Director
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Rico Quirindongo, Acting Director of OPCD
Kristen Simpson, Interim Director of SDOT
Greg Wong, DON Director

cc: Other

Terry White, General Manager, King County Metro
Jeanne Kohl-Welles, King County Council

April 26, 2022

Seattle Rep
P.O. Box 900923
155 Mercer Street
Seattle, WA 98109

Attn: Jeffrey Herrmann

Transmitted via email to: jeff.herrmann@seattlerep.org

**Re: Sound Transit WSBLE DEIS Review for Seattle Repertory Theater
Seattle, Washington
Landau Project No. 2063001.010**

Dear Jeff:

At the request of Seattle Repertory Theatre (Seattle Rep), Landau Associates, Inc. (Landau) prepared this 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 Rep is located at Seattle Center and contains two main theaters: the 696-seat Bagley Wright Theater and the 282-seat Leo Kreielsheimer (Leo K.) Theater. Seattle Rep also houses additional rehearsal spaces, including the Poncho Forum (also used for performances) and the Leo K. Theater rehearsal space, set, prop, paint, and costume shops, administrative offices, and extensive lobby areas for the general public.

Seattle Rep 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.

This letter report summarizes Landau's assessment of the WSBLE DEIS as it relates to the potential for noise and vibration impact to Seattle Rep, and includes a summary of findings, a list of documents that were reviewed, and a detailed review of selected 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 key findings of this review include:

- City of Seattle (City) noise limits are not applied in the noise impact section when determining the potential for construction noise impacts and whether additional mitigation is warranted.

- Edits to the document are required to adjust noise and vibration limits for sensitive spaces within Seattle Rep; these adjustments will result in higher levels of impact at some sensitive receivers.
- There are missing receptors, including the Leo K. Rehearsal space and the Poncho Forum, which are sensitive spaces within Seattle Rep.
- The assessment of airborne noise impacts during construction is incomplete.
- An assessment of mitigation measures is required for expected airborne noise impacts at Seattle Rep.
- Additional assessments of groundborne noise and vibration impacts from construction are warranted to fully address potential impacts from both Downtown-1 (DT-1) and DT-2.
- Additional assessments of groundborne noise and vibration mitigation measures from construction are 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; groundborne noise, vibration, and surface noise impacts from construction 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 the assessment:

- Sound Transit and Federal Transit Administration's (FTA's) WSBLE DEIS, Chapter 4.2.7: Noise and Vibration (pp. 4.2.7-1 to 4.2.7-23) (USDOT et al. 2022a)
- Sound Transit and FTA's WSBLE DEIS, Appendix N.3: Noise and Vibration Technical Report (USDOT et al. 2022b)
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3A: Noise Measurement Data, Site Details, and Photographs
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3B: Vibration Measurement Site Photographs
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3C: Vibration Propagation Measurement Results
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3D: Maps of Noise Impact Assessment
- Sound Transit and FTA's WSBLE, Attachment N.3E: Maps of Vibration Impact Assessment
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3F: Tables of Noise Predictions
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3G: Tables of Vibration Predictions
- Sound Transit and FTA's WSBLE DEIS, Attachment N.3H: Vibration Analysis of Category 1 Land Uses and Special Buildings

- FTA's *Transit Noise and Vibration Impact Assessment Manual* (FTA Guidance Manual; FTA 2018)
- Sound Transit's Design Criteria Manual, Revision 5, Amendment 11 (Sound Transit 2021).

Review Format

Landau's assessment focused on chapters in 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 in WSBLE DEIS Appendix N.3: Noise and Vibration Technical Report (USDOT et al. 2022b).

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 that the use of the FTA criteria is appropriate for the assessment of noise and vibration impacts 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 noise criteria, as established in Chapter 25.08 of the Seattle Municipal Code (SMC). 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 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 throughout Seattle Center. Because City 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 Rep. Figure 1, a map of Seattle Rep within the Seattle Center campus, illustrates the locations of DT-1 and DT-2, including rail alignments, stations, and station entrances, as well as nearby 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 compared to the same FTA operational noise limits "because this can be a relatively long-term activity." Landau agrees with this determination and notes that the noise limits in WSBLE DEIS Appendix N.3 contain errors and omissions for spaces within Seattle Rep. Table 1 summarizes the noise and vibration limits applied for each space, highlighting the errors that require correction or further assessment. The list of noise and vibration limits for Seattle Rep sensitive spaces was compiled from WSBLE DEIS Appendix N.3, Attachment N.3H, Tables 7-2 and 7-3.

Noise and Vibration Limits – Corrections

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 Seattle Rep, the operational groundborne noise and vibration limits were expanded to consider different rooms within the facility as shown in Tables 7-2 and 7-3 in WSBLE DEIS Appendix N.3, Attachment N.3H. For example, in Table 6-13 Seattle Rep is identified as "Seattle Repertory Leo K. Theatre." In Attachment N.3H, Table 7-2, Seattle Rep spaces include the Leo K. and the Bagley Wright Theaters.

Landau notes that adjustments to some Seattle Rep noise limits, as documented in the DEIS, are warranted following measurements by Landau staff and review of the noise- and vibration-sensitive nature of selected spaces. That is, for many spaces within Seattle Rep, 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 Seattle Rep's use and audience experience. Vibration impacts, even at low levels, can affect the stability of Seattle Rep's suspended lighting systems (i.e., vibrations may cause suspending lighting systems to sway).

A summary of the recommended adjustments to the groundborne noise and vibration limits, including a justification for the adjustment, is provided below in Table 1. Additional detail is provided in the text after this table. Graphical illustrations of noise and vibration measurements made at spaces within Seattle Rep are provided on Figures 2 and 3, respectively.

Table 1: Summary of Noise and Vibration Limit Corrections

Resident Organization	Limits for Operation and Construction (a)		Corrections (Source of Adjusted Limits) (b)		Notes Justification for Adjusted Limits
	Noise (dBA)	Vibration (VdB)	Noise (dBA)	Vibration (VdB)	
Seattle Rep Bagley Wright Theater	35	72	--	65 VdB	Vibration limit is appropriate for “Concert Hall” per FTA Guidance Manual. DEIS noise limit appropriate, confirmed through DEIS and Landau measurements
Seattle Rep Leo K. Theater	35	72	25 dBA	65 VdB	Noise and vibration limits are appropriate for “Concert Hall” per FTA Guidance Manual, confirmed through Landau measurements
(a) Sound Transit WSBLE DEIS Appendix N.3, Attachment N.3H, Tables 7-2 and 7-3. (b) Based on measurements made by Landau staff for Seattle Rep in early 2022. dBA = A-weighted decibels VdB = vibration decibels					

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.” Although the measurement made for the DEIS and documented in WSBLE DEIS Appendix N.3, Attachment N.3H, Table 7-1 (p. 7-3) was 30 dBA for the Leo K. Theater (which is still 5 dBA lower than what was applied in Tables 6-13 and 6-14), the average ambient measurement by Landau was 26 dBA (see Figure 5) 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. and Bagley Wright Theaters, 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. and Bagley Wright Theaters, reducing the potential for vibration impacts and stabilizing the lighting systems on these stages.

Noise and Vibration – Missing Sensitive Receivers

WSBLE DEIS Appendix N.3 omits two noise-sensitive spaces within Seattle Rep that should be included in the assessment of impacts from the WSBLE project: the Leo K. Rehearsal Space and the Poncho Forum. The Leo K. Rehearsal Space is regularly used for rehearsals. Performers rehearsing in this space require an ambient environment that is similar to what would be experienced during a live

performance in the Leo K. Theater. That is, it is expected that ambient noise and vibration levels would be low, and that interference from sources exterior to Seattle Rep would be minimal.

The Poncho Forum is used as both a rehearsal space and performance space, with retractable seating for audiences. The room is fitted with acoustic paneling to minimize reverberation of sounds. Similar to the Leo K. Rehearsal Space, use of the Poncho Forum requires that ambient noise and vibration levels are low to minimize disturbances to performers as well as the audience (when applicable).

Table 2 below summarizes proposed noise and vibration limits for these additional spaces, based on measurements and Landau's understanding of their uses. Included on Figure 5 are graphical illustrations of average measurements made in these spaces. Note that Table 2 also includes a summary of potential sources of noise and vibration impact that are anticipated in the Leo K. Rehearsal Space and Poncho Forum from DT-1 or DT-2.

Table 2: DEIS Appendix N.3 – Missing Seattle Center Noise- and Vibration-Sensitive Receivers

Resident Organization Buildings	Suggested Noise and Vibration Limits (a)		Summary of Use	Potential Source(s) of Noise or Vibration Impact (b)
	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
(a) Suggested limits appropriate for use of space and sensitivities to noise and vibration. Based on measurements by Landau and discussions with Seattle Rep.				
(b) Potential for impact may be due to activities identified in this table and may also include activities not identified here. A complete assessment is required.				

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. WSLBE DEIS Chapter 2.6, Table 2-6, Major Construction Activities and Duration, provides estimated durations for various construction activities related to WSBLE. Cut-and-cover station construction is estimated to take 4 to 6 years to complete. Therefore, the following review of construction noise impacts applies to a construction schedule that could last up to 6 years. Landau notes that construction noise levels will vary and likely decrease as construction progresses. However, the duration of time required for each element of cut-and-cover station construction (e.g., demolition, excavation, shoring, structural, etc.) is unknown.

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

WSBLE DEIS Appendix N.3, Chapter 6.2.1.5 summarizes surface-level construction noise that would occur in support of tunneling operations; WSBLE DEIS Appendix N.3, Chapter 6.2.1.6 summarizes 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 Seattle Rep under either alternative DT-1 or DT-2. WSBLE DEIS Appendix J, Drawing L50-GSP103, provides an illustration of the DT-1 Seattle Center station and entrances. Upon review of this drawing, Landau notes that DT-1 surface construction near Seattle Rep would impact the south side of the building during cut-and-cover and station construction, the east side of the building during construction of the East Station Entrance, and the west side of the building during construction activities along Warren Avenue North just north of the DT-1 station.

WSBLE Appendix J, Drawing L50-GSP703 provides an illustration of the DT-2 Seattle Center station and entrances. Upon review of this drawing, Landau notes that DT-2 surface construction near Seattle Rep would impact the west side of the building during construction of the East Station Entrance as well as during cut-and-cover and station construction. Additional noise is likely to be received from construction activities along Warren Avenue North just south of Mercer Street.

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.”

Given Seattle Rep’s close proximity to both DT-1 and DT-2, Landau finds that the DEIS does not sufficiently evaluate the potential for noise impact to Seattle Rep from surface construction of stations or station entrances. Further, in addition to the potential for impact from the equipment identified in the DEIS, the following activities (i.e., sources of surface construction noise) were either not identified in the DEIS or additional information is required:

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 is expected when collecting and moving spoils away from the DT-1 or DT-2 stations and station entrances. The likely haul routes would include Warren Avenue North and Mercer Street, both adjacent to Seattle Rep, and could therefore represent major sources of construction noise.

As indicated in the DEIS, haul trucks may operate during daytime or nighttime hours, depending on the permitted hours of hauling. Seattle Rep hosts both afternoon and late evening performances in the Leo K. and Bagley Wright Theaters. In addition, rehearsals in the Leo K. Rehearsal Space and Poncho Forum occur most days during typical daytime hours and may also occur during late evening hours. Noise from truck hauling therefore may impact facilities within Seattle Rep during day, evening, or late evening hours.

Construction Staging Areas

Noise from construction staging areas was 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.

Seattle Rep may be located within close proximity to construction staging areas either for DT-1 or DT-2. 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 – Impacts Assessment

WSBLE DEIS Appendix N.3, Chapter 6.2 (p. 6-30) identifies construction activities that would generate the highest levels of airborne construction noise and includes tunneling and cut-and-cover station construction, both of which are proposed for preferred alternative DT-1 and alternative DT-2, both of which could occur near Seattle Rep.

Appendix N.3, Table 6-8 (p. 6-31) of the WSBLE DEIS provides 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), equipment and activities associated with cut-and-cover station construction (i.e., hydromill, caisson drilling, hoe ram, jackhammer, and bulldozer) could operate as near as 8 feet from Seattle Rep. Table 3 below identifies noise levels from the construction equipment summarized in DEIS Table 6-8, and calculates these sound levels at 8 feet, 15 feet, and 50 feet from construction equipment. Distance adjustments are based on noise propagation from a stationary source at +6 dBA per halving of distance to the source.

Table 3: Surface Construction Airborne Noise Equipment and Sound Levels

Construction Activity (a)	Construction Equipment (a)	Sound Level at 50 feet L _{eq} (dBA) (a)	Sound Level at 15 feet L _{eq} (dBA) (b)	Sound Level at 8 feet L _{eq} (dBA) (b)
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
(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-8.				
(b) 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 for cut-and-cover construction of DT-1, “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.” At Seattle Rep, facilities that are nearest Republican Street include the Leo K. Theater and the Leo K. Rehearsal Space.

As noted in Table 3, airborne noise levels from tunneling and cut-and-cover station construction could reach up to 104 dBA at a distance of 8 feet, expected at the south and east building facades of Seattle Rep. Note that the SMC 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 sound level limits at Seattle Rep when construction equipment associated with tunneling and cut-and-cover stations operates within approximately 50 feet of Seattle Rep’s south facade.

Although not included in the DEIS, and as indicated earlier in this letter, noise impacts from construction of the DT-1 East Station Entrance would occur immediately adjacent to the east side of Seattle Rep. Landau anticipates that much of the equipment identified in Table 3 for cut-and-cover stations also would be required for construction of the East Station Entrance. Therefore, the range of sound levels presented in Table 3 also would be anticipated at the east side of Seattle Rep.

Tunneling and Cut-and-Cover Construction Airborne Noise – Assessment of Impacts at Interior Spaces

Noise reductions provided by Seattle Rep’s building itself (i.e., transmission loss provided by building construction materials) are not identified in the DEIS. Although Landau did not take exterior-interior measurements at Seattle Rep, such measurements were made at a resident organization of Seattle Center’s Northwest Rooms. Results of these measurements indicate that the north facade of the

Northwest Rooms provides approximately 61 dBA in reduction to exterior noises. For the purposes of this assessment, Landau assumed a similar interior-exterior reduction applies to Seattle Rep. It should be noted that the actual level of reduction will vary depending on the effectiveness of the building to shield exterior noise and on the dominant noise frequency of the construction noise source.

Assuming an exterior-interior reduction of 61 dBA, Landau expects that, for construction noise received at Seattle Rep's south or east facade at 104 dBA (the highest predicted noise level for cut-and-cover construction, as received 8 feet from the noise source), interior noise levels would be 43 dBA (i.e., 104 dBA – 61 dBA = 43 dBA).

Using 43 dBA as an interior reference level 8 feet from construction activity, Landau estimated interior sound levels at each of the sensitive spaces within Seattle Rep. Estimates of sound levels at interior spaces were completed by estimating distances from the nearest areas of construction (i.e., the south or east facades of Seattle Rep) to each interior space and then applying a 6-dBA reduction per doubling of distance from the noise source, with 43 dBA at 8 feet as reference. The assessment assumes an additional reduction of 10 dBA is provided by interior walls to the Poncho Forum and the Bagley Wright Theater. The results of this assessment are summarized below in Table 4 for each noise-sensitive interior space at Seattle Rep.

Table 4: Surface Construction Interior Airborne Noise Impacts (DT-1)

Seattle Rep Noise Sensitive Space	Distance from Nearest Exterior Construction Activity to Interior Space (feet)	Impact Assessment Result			
		Ambient Noise Level (dBA) (c)	Reference Sound Level Inside Building Facade	Interior Construction Noise Level (dBA) (d)	Increase Over Ambient Noise Level (dBA)
Leo K. Theater	8 (a)	26	43	43	17
Leo K. Rehearsal Space	8 (a)	36		43	7
Poncho Forum	75 (b)	30		14 (e)	0
Bagley Wright Theater	45 (b)	32		18 (e)	0

(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-30, p. 6-70 applies to most sensitive spaces within Seattle Rep.

(b) Estimated by Landau.

(c) Sound level measurements by Landau, January and March 2022.

(d) Calculated using standard adjustment for distance from a point source: $SPL2 = SPL1 + 20*\text{Log}(D1/D2)$.

(e) Includes an assumed 10-dBA reduction provide by interior walls.

The impact to the Leo K. Theater and the Leo K. Rehearsal Space is shown on Figure 2, which illustrates impacts as a “heat map,” highlighting the spaces within Seattle Rep that would be impacted by airborne construction noise during tunneling and construction of the East Station Entrance for DT-1.

As summarized above in Table 4 and as shown on Figure 2, airborne construction noise could exceed existing conditions in the Leo K. Theater and Leo K. Rehearsal Space by up to 17 dBA and 7 dBA,

respectively for a period of up to 6 years (i.e., the estimated duration of cut-and-cover station construction, as identified in WSBLE DEIS Chapter 2.6, Table 2-6). Note that a 10-dBA increase in noise is perceived as a doubling of sound “loudness.” So, an increase of 17 dBA, as predicted at the Leo K. Theater, would be perceived as more than twice as loud as ambient conditions, a clearly perceptible increase in ambient noise. Actual increases in noise may be higher depending on exterior-interior noise reductions provided by the building (i.e., if less than the estimated 61-dBA reduction). The results of this assessment indicate that mitigation will be required during surface construction related to tunneling and the cut-and-cover station. Increases over ambient conditions up to 17 dBA will very likely result in significant impacts to the Leo K. Theater, affecting performances and the audience experience.

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. Note that the ranges of sound levels provided in Table 3 and estimates of impacts provided in Table 4 are based on the FTA reference sound levels for excavators, backhoes, haul trucks, loaders, and vibratory rollers. Therefore, reference sound levels in Table 3 do not represent the loudest noises that could occur from use of jackhammers and hoe rams and actual noise impacts may, during the initial phases, be higher than is predicted in Table 4.

For DT-2, WSBLE DEIS Appendix N.3, Table 6-30 indicates that surface construction also could be as near as 8 feet from Seattle Rep. Landau estimates that construction of the DT-2 East Station Entrance would occur as near as approximately 60 feet to the west of Seattle Rep, and the location of the cut-and-cover excavation area for DT-2 would be approximately 130 feet from Seattle Rep. Landau estimates that impacts from DT-2 would be lower than is predicted for DT-1 during cut-and-cover and East Entrance Station construction. However, should Warren Avenue North be used as a staging area or include active construction that is near Seattle Rep, impacts to interior spaces from airborne noise may occur.

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 construction criteria. Specifically, this section notes that impact noises, such as those noises generated by jackhammers and hoe rams, will be 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.

The results in WSBLE DEIS Appendix N.3, Table 6-13 (and in WSBLE DEIS Appendix N.3, Attachment N.3H, Table 7-3) indicate that the Leo K. Theater would likely experience groundborne levels of up to 48 dBA during operation of DT-1, a 13-dBA exceedance of the DEIS-applied limit of 35 dBA. Table 6-14 indicates that the Leo K. Theater would likely experience groundborne noise levels of up to 28 dBA during operation of DT-2, below the DEIS-applied limit of 35 dBA.

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

Groundborne Noise Limits

Leo K. Theater

As summarized in Table 1, the groundborne noise limit for Seattle Rep's Leo K. Theater is not sufficiently protective 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).

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 during operation of DT-2. The assessment of impact at the Bagley Wright Theater should be confirmed and likely corrected to accurately identify whether impacts are predicted for this space under DT-2.

Leo K. Rehearsal Space

The Leo K. Rehearsal Space was not included in the DEIS. However, as previously mentioned, this space is used for noise- and vibration-sensitive rehearsals and should be included when considering the potential for groundborne noise and vibration impacts from WSBLE operation. This space is located at the southwest corner of Seattle Rep and near the cut-and-cover area for DT-1; the space is also adjacent to the proposed construction area defined in the DEIS, located east of Seattle Rep within the right-of-way of Warren Avenue North. As suggested in Table 2, the proposed noise limit for this space

is 30 dBA. The suggested noise limit is 6 dBA lower than was measured by Landau (see Figure 5; the measured level at Leo K. Rehearsal Space is 36 dBA); however, groundborne noise is a different character of sound than is present in the Leo K. Rehearsal Space ambient environment. A limit of 30 dBA would ensure that the noise environment of the Leo K. Rehearsal Space is protected.

Poncho Forum

Similar to the Leo K. Rehearsal Space, the Poncho Forum was not included in the DEIS. However, as previously indicated, this space is used for noise- and vibration-sensitive performances and rehearsals and should be included when considering the potential for groundborne noise and vibration impacts from WSBLE operation. As suggested in Table 2, the suggested noise limit for this space is 30 dBA, which agrees with results of ambient measurements made by Landau (see Figure 5).

Revised Assessment of Operational Groundborne Noise Impacts

Assessment of Exceedance of Sound Level Limits

For this assessment, Landau compared predicted operational groundborne noise levels to the corrected limits for the Leo K. Theater as well as new limits for spaces not included in the DEIS (i.e., the Leo K. Rehearsal Space and Poncho Forum). The results were compared with the operational groundborne noise assessment results that are summarized in WSBLE DEIS Appendix N.3, Table 6-13. The results of this comparison for DT-1 are summarized below in Table 5.

Table 5: Assessment of Groundborne Noise Exceedance of Limits, DT-1

Seattle Rep Noise Sensitive Space	DT-1 Operational Noise Level (a)	Groundborne Noise Limit		Exceedance	
		DEIS (a)	Adjusted and New Limits (d)	Compared to DEIS (b)	Compared to Adjusted and New Limits
Leo K. Theater	48	35	25 (d)	13	23
Leo K. Rehearsal Space	48 (b)	-	30 (d)	-	18
Poncho Forum	43 (c)	-	30 (d)	-	13
Bagley Wright Theater	37	35	35	2	2

(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-13 and Attachment N.3H, Table 7-2.
 (b) Impact assumed identical to Leo K. Theater due to similar distance from DT-1.
 (c) Impact assumed approximately equal to average of predicted impact to Leo K. Theater and Bagley Wright Theater.
 (d) Based on sound level measurements by Landau in 2022 and sensitivities of each space.

As summarized in Table 5, applying adjustments to the noise limit at the Leo K. Theater and including an assessment of the Leo K. Rehearsal Space and Poncho Forum results in high levels of noise impact at most spaces within Seattle Rep. Specifically, at the Leo K. Theater, DEIS-predicted groundborne noise levels would exceed the adjusted limit by 23 dBA. Similarly, at the Leo K. Rehearsal Space DEIS-predicted groundborne noise levels would exceed the assumed limit by 18 dBA. Exceedances of up to 13 dBA are predicted at the Poncho Forum.

For DT-2, as summarized in WSBLE DEIS Appendix N.3, Attachment N.3H, Table 7-3, predicted groundborne noise impacts would be below applicable limits at the Bagley Wright Theater. Adjusting the Leo K. Theater limit to 25 dBA would result in an exceedance of 3 dBA for DT-2. However, as noted previously, Landau finds that the predicted impacts under DT-2 do not appear correct and should be re-evaluated before a thorough review and conclusion can be made.

Assessment of Impact

In addition to the assessment of exceedance of groundborne noise limits, Landau evaluated the potential for impacts based on increases over existing ambient conditions (i.e., a comparison to actual ambient levels, not limits). The assessment was completed to highlight the degree of impact that may occur at Seattle Rep with the DT-1 alignment. Because Landau is not confident that the DEIS has accurately estimated groundborne noise for DT-2, the following assessment focuses only on DT-1.

Table 6 summarizes predicted operational groundborne noise emissions at each space within Seattle Rep and compares these predictions with existing ambient conditions, as documented by Landau through noise measurements made in early 2022. The increase in sound levels over ambient conditions is provided in the far right column of this table.

Table 6: Assessment of Operational Groundborne Noise Impacts, DT-1

Seattle Rep Noise Sensitive Space	DT-1 Operational Noise Level (dBA) (a)	Existing Ambient Noise Level (dBA) (d)	DT-1 Operational Noise Increase Over Ambient Noise (dBA)
Leo K. Theater	48	26	22
Leo K. Rehearsal Space	48 (b)	36	12
Poncho Forum	43 (c)	30	13
Bagley Wright Theater	37	32	5
(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-13 and Attachment N.3H Table 7-2. (b) Impact assumed identical to Leo K. Theater due to similar distance from DT-1. (c) Impact assumed approximately equal to average of predicted impact to Leo K. Theater and Bagley Wright Theater. (d) Based on sound level measurements by Landau in 2022.			

As summarized in Table 6, a comparison of predicted groundborne noise levels from operation with existing ambient sound levels suggests high levels of impact at Seattle Rep for DT-1. Noise levels at the Leo K. Theater would exceed ambient conditions by up to 22 dBA, a clearly audible and discernible impact that could inhibit use of this facility. That is, as noted earlier, a 10-dBA increase in noise is perceived as a doubling of sound “loudness.” So, an increase of 22 dBA, as predicted at the Leo K. Theater for operational groundborne noise impact, would be perceived as more than four times as loud as ambient conditions, a clearly perceptible increase in ambient noise. Increases in noise at the Leo K. Rehearsal Space and Poncho Forum would be up to 12 dBA and 13 dBA over ambient conditions, respectively, also clearly perceptible as more than twice as loud as ambient conditions. At the Bagley Wright Theater, the impact would be less, but a 5-dBA increase over ambient conditions,

especially from a noise source that is primarily a low-frequency rumble (i.e., groundborne noise), is expected to negatively affect the usability of this theater.

Included on Figure 4 is a heat map that highlights impacts that would occur from increases over ambient conditions from DT-1 operational groundborne noise.

Train Speed

As summarized in WSBLE DEIS Appendix N.3, Tables 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. Landau finds 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 most noise-sensitive receivers, including the Seattle International Film Festival (SIFF) Film Center, which is located immediately southeast of Seattle Rep. But at Seattle Rep and the Vera Project, rail speeds are predicted to be 30 mph. Landau anticipates that rail speeds between Seattle Rep and SIFF would be identical and not differ by 15 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 suggest that there may be calculation errors related to the speed of trains along the rail alignment.

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). As indicated earlier, WSLBE DEIS Chapter 2.6, Table 2-6 provides estimated durations for various construction activities related to WSBLE. Tunneling for the Downtown Segment is estimated to take 2.5 to 3 years and cut-and-cover station construction is estimated to take 4 to 6 years to complete.

Chapter 6.4.1: Tunneling Vibration Impacts

During tunneling, the DEIS predicts that vibration impacts would not occur at Seattle Rep. The following summarizes adjustments in vibration and groundborne noise limits, as previously identified (see Table 1), as well as limits for spaces that should be included in the assessment (see Table 2) that would result in additional or greater impacts to sensitive spaces within Seattle Rep.

As summarized in Table 1, Landau recommends adjusting the vibration limit for Seattle Rep to 65 VdB from 72 VdB for both the Leo K. and Bagley Wright Theaters. WSBLE DEIS Appendix N.3, Chapter 6.4.1, Table 6-25 identifies a predicted supply train level of 67 VdB at 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 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 1). 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 discernible and disruptive.

Table 7 summarizes predicted tunneling groundborne noise emissions at each space within Seattle Rep and compares these predictions with existing ambient conditions, as documented by Landau through noise measurements made in early 2022. The increase in sound levels over ambient conditions is provided in the far right column of this table.

Table 7: Assessment of Tunneling Groundborne Noise Impacts, DT-1

Seattle Rep Noise Sensitive Space	DT-1 Tunneling Noise Level (dBA) (a)	Existing Ambient Noise Level (dBA) (d)	DT-1 Operational Noise Increase Over Ambient Noise (dBA)
Leo K. Theater	40	26	14
Leo K. Rehearsal Space	40 (b)	36	4
Poncho Forum	35 (c)	30	5
Bagley Wright Theater	29	32	0

(a) Sound Transit WSBLE DEIS Appendix N.3, Table 6-27.
 (b) Impact assumed identical to Leo K. Theater due to similar distance from DT-1.
 (c) Impact assumed approximately equal to average of predicted impact to Leo K. Theater and Bagley Wright Theater.
 (d) Based on sound level measurements by Landau in 2022.

As summarized in Table 7, a comparison of predicted groundborne noise levels from tunneling with existing ambient sound levels suggests high levels of impact at Seattle Rep for DT-1. Noise levels at the Leo K. Theater would exceed ambient conditions by up to 14 dBA, a clearly audible and discernible impact that would be perceived as more than twice as loud as ambient conditions and could inhibit use of this facility for up to 3 years (the estimated duration of tunneling for the Downtown Segment). Impacts to the Leo K. Rehearsal Space and Poncho Forum would be much less, but very likely perceptible and possibly disruptive during use of these spaces.

Included on Figure 3 is a heat map that highlights impacts that would occur from increases over ambient conditions from DT-1 tunneling groundborne noise.

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 are 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 are adjusted (i.e., lowered).

A more detailed assessment should be conducted 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., Vibration Criteria A, or V.C.-A) is greater than would be realized at Seattle Rep for the equipment identified in this table. For example, the minimum distance for potential impact from a bulldozer under the V.C.-A curve is 125 feet, and the nearest distance to Special Buildings located near surface construction areas (Seattle Rep) 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 of 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, an additional assessment should be completed that evaluates the potential for structural damage to Seattle Rep.

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 the SIFF Film Center, Vera Project, and KEXP. A profile view of the station is provided on 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 are specific to the breaking of the slurry wall. However, demolition of this wall would occur very near and to the south of 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 and the likely lengthy construction schedule, there is a high potential for substantial impacts to Seattle Rep during this phase of construction.

Station Entrances

The WSBLE DEIS provides very minimal information on the potential for noise and vibration impacts from construction of the station entrances. Specifically, for DT-1 the proposed East Station Entrance would be located directly adjacent to Seattle Rep. 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 Seattle Rep.

Adjusting the vibration limits for the Leo K. and Bagley Wright Theaters to 65 VdB from 72 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 Seattle Rep 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, an assessment of station entrance construction should be completed to evaluate the potential for impacts. In addition, an assessment should be completed of the potential for structural damage to Seattle Rep's building.

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 Seattle Rep. As summarized in Table 3, estimated sound levels could reach 104 dBA at the exterior facade of the Seattle Rep and could reach up to 43 dBA at interior spaces, potentially impacting noise-sensitive performance and rehearsal spaces (see Table 4).

Mitigation measures summarized in the WSBLE DEIS are effective strategies to reduce airborne construction noise but do not specifically target the potential for noise 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 continued coordination with Seattle Rep.

Noise barriers could be installed at locations where airborne noise impacts are predicted or anticipated, and where there 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 south, east, and west walls of Seattle Rep, shielding them from station and East Entrance construction noise impacts.

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 locations of the fans are not yet defined but could be located very near to Seattle Rep. Due to the low-frequency noise generated by such fans, mitigation may be required to ensure that 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 FEIS should include specific language within the Construction Noise Control Plan regarding exhaust fan noise.

Haul Trucks

Noise from idling and the 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 FEIS 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 DT2. If so, there is a possibility that additional noise impacts may occur at Seattle Rep. A study should be completed to identify the number of trucks in use per hour during various construction phases, what the predicted impacts may be to Seattle Rep, and what mitigation measures may be 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 the strategic location of staging areas to minimize impacts from noise

emissions related to staging areas, noise barriers, and other measures as defined in 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 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.

Table 6-11 (p. 140) of the FTA Guidance Manual 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-noted Sound Transit expectation is true, groundborne noise impacts from DT-1 operation would not be mitigated for Seattle Rep. As noted in this review, Landau recommends that for Seattle Rep, groundborne noise limits be adjusted to a lower level that is more protective of the uses within these spaces, including the Leo K. Theater (see Table 1). The result would be DT-1 operational groundborne noise that exceeds the limits at Seattle Rep by 23 dBA. Accounting for an assumed 5-dBA reduction from high-resilience fasteners and an additional 5-dBA reduction from the structure itself, the Leo K. Theater would likely experience increases of 13 dBA above the limit. 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 and thicker tunnel materials.

For DT-2, WSBLE DEIS Appendix N.3, Attachment N.3H, Table 7-3 indicates that impacts may occur at the Leo K. Theater when applying the adjusted groundborne noise limit identified in Table 1 (i.e., predicted level is 28 dBA; the proposed limit is 25 dBA). Further, as previously noted, there are apparent errors in the calculation of impacts 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) of the WSBLE DEIS Appendix N.3, “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 Seattle Rep.

Chapter 7.4.2 Potential Tunneling Vibration Mitigation

WSDBLE 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 summarizes key elements of this review:

Supply Train

Details provided in WSBLE 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 pads between ties, and using rubber tires on supply trains.

As noted, WSBLE 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 at Seattle Rep that are up to 40 dBA and exceed the unadjusted noise limit by 5 dBA (and exceed the adjusted noise limit by 15 dBA). In addition to the mitigating effects of the measures identified above, Chapter 7.4.2 (p. 7-32) of the WSBLE DEIS Appendix N.3 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 trains at Seattle Rep 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 Seattle Rep are effectively mitigated to below applicable noise limits and ambient levels.

Thrust Jack

As indicated, mitigation of vibration from thrust jacks may be warranted through slower retraction of the jacks. An evaluation 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 in the Construction Vibration Control Plan.

Cutterhead

As stated in WSBLE 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 Seattle Rep. The FEIS and Construction Vibration Control Plan should specify locations/receivers to be monitored at Seattle Rep, 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 Seattle Rep to provide sufficient advance notice to allow noise-sensitive events to be scheduled accordingly.

* * * * *

If you have any questions or comments regarding the information provided in this letter report, please contact the undersigned.

LANDAU ASSOCIATES, INC.



Kevin Warner
Principal



Kristen Wallace
Principal

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Attachments

Figure 1: Overview Map

Figure 2: Landau Ambient Noise Measurements at Seattle Rep

Figure 3: Landau Ambient Vibration Measurements at Seattle Rep

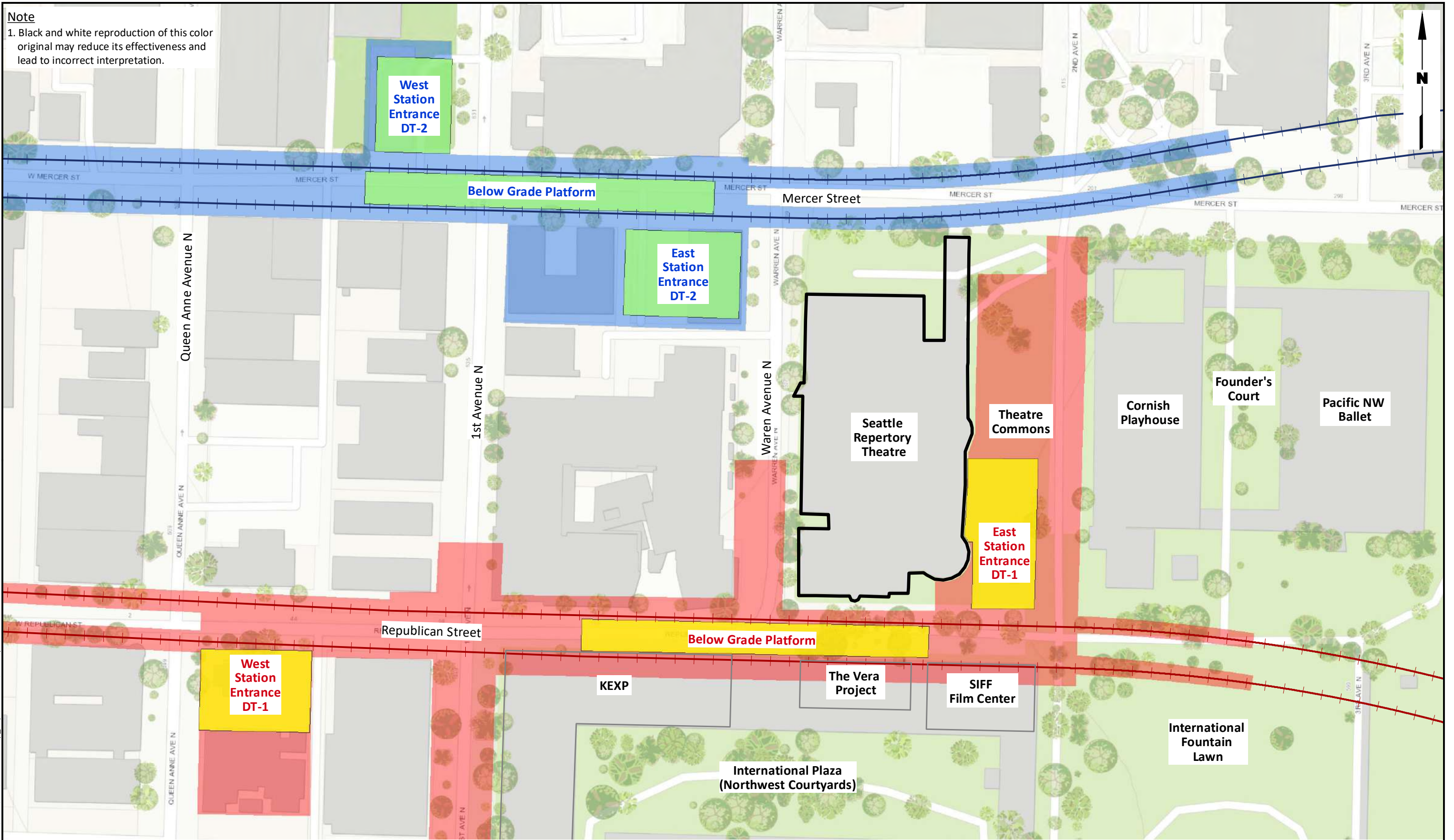
Figure 4: Surface Construction Noise Impact, DT-1

Figure 5: Tunneling Noise Impact, DT-1

Figure 6: Operational Noise Impact, DT-1

Note

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



Legend

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

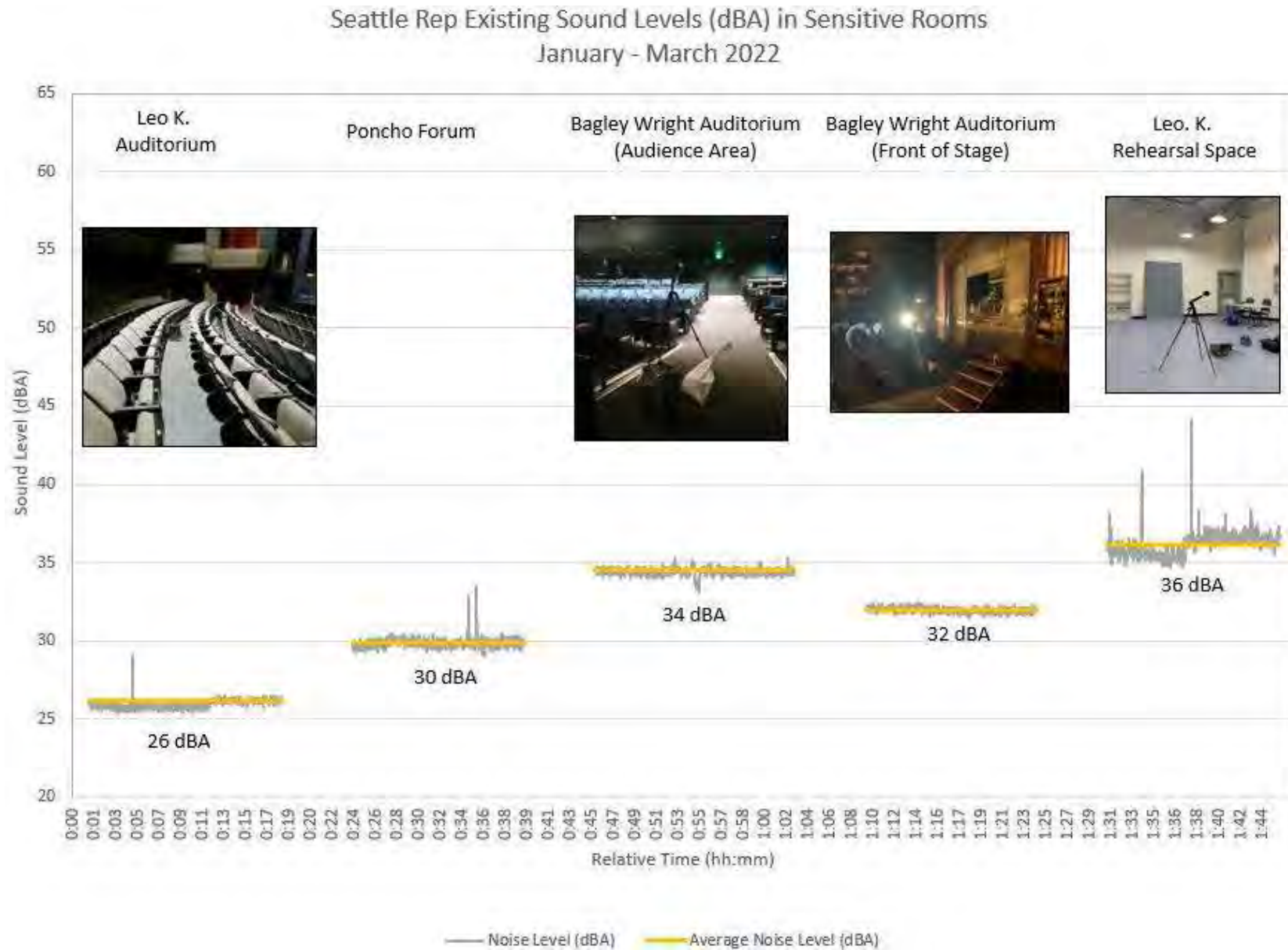


Basemap source: Esri, 2022. Sound Transit. HTNB.

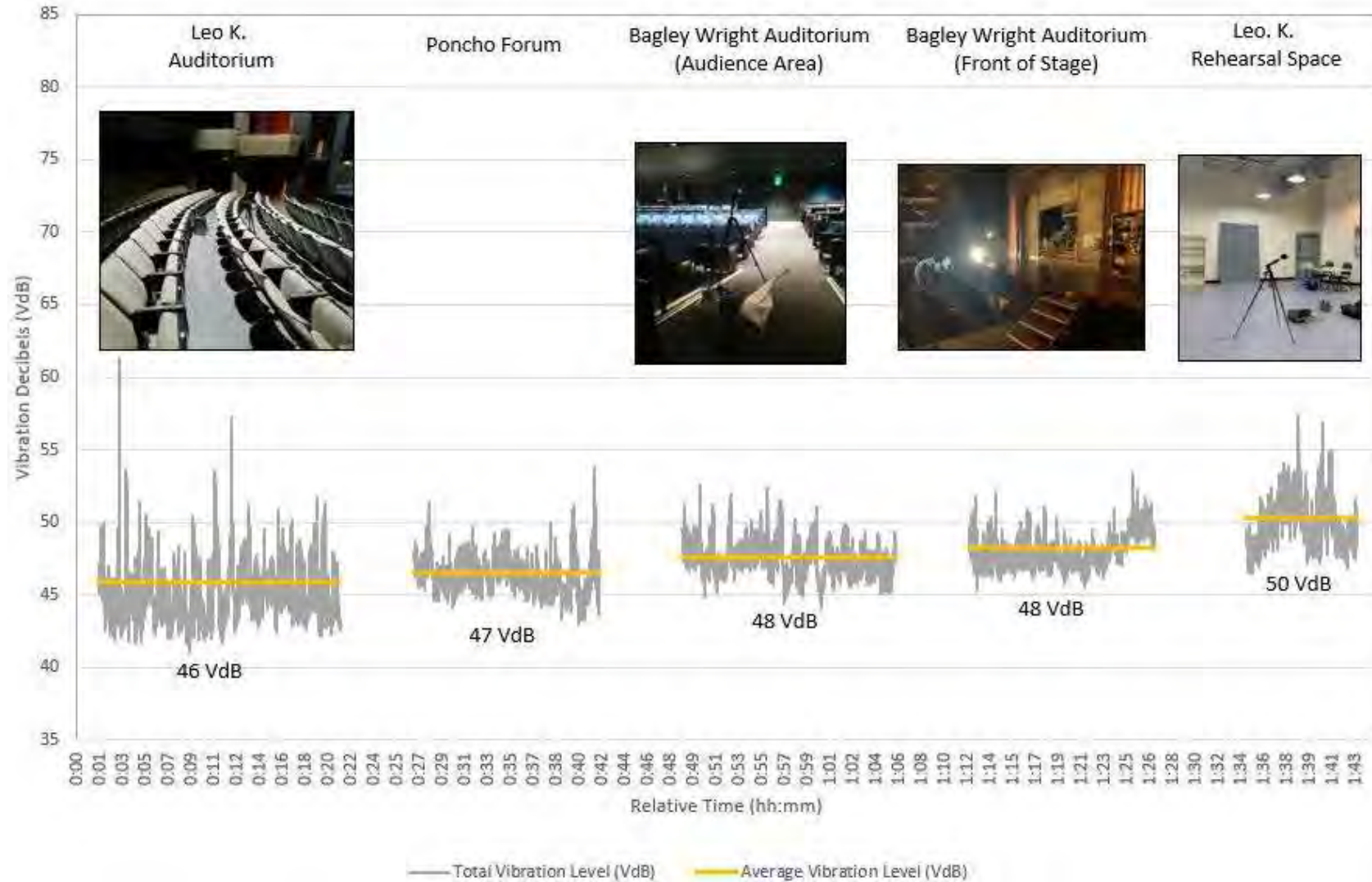
Sound Transit WSBL DEIS
Seattle Rep
Seattle, Washington

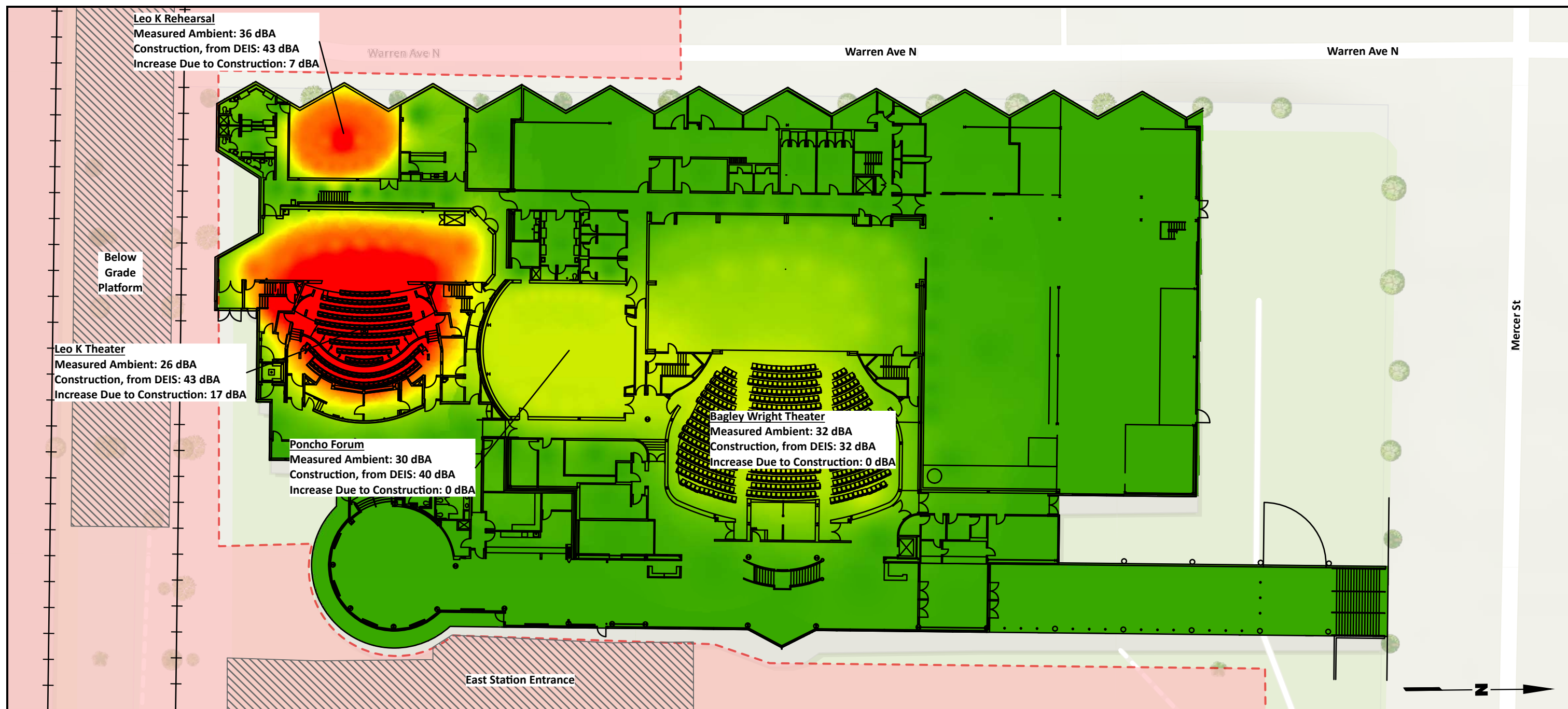
Overview Map

Figure
1



Seattle Rep Existing Vibration Levels (VdB) in Sensitive Rooms January - March 2022



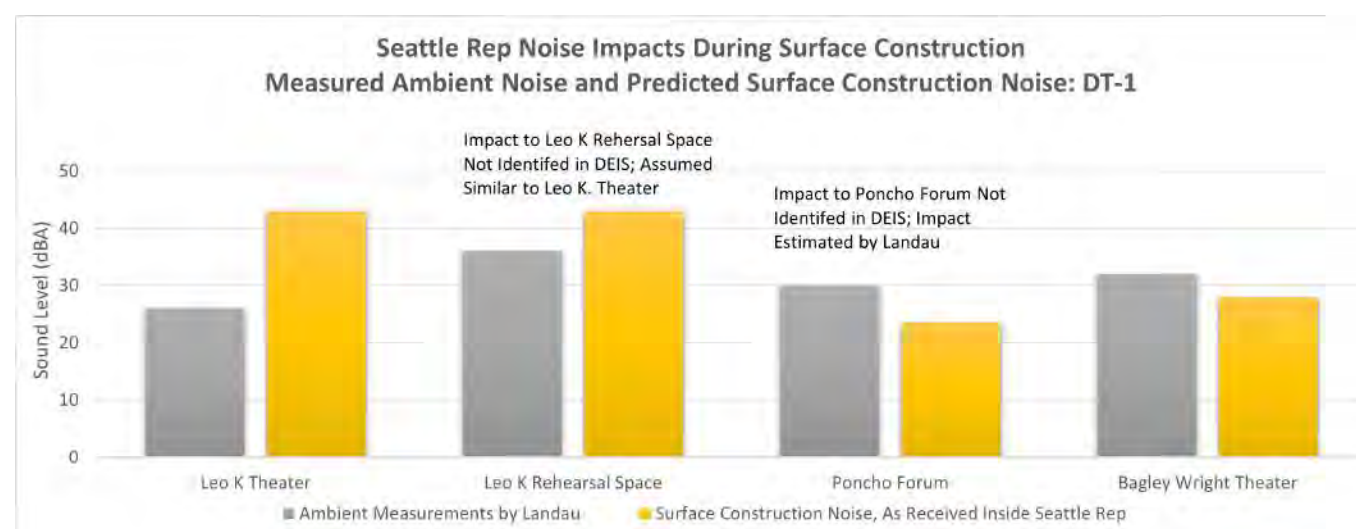


Note

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

Legend

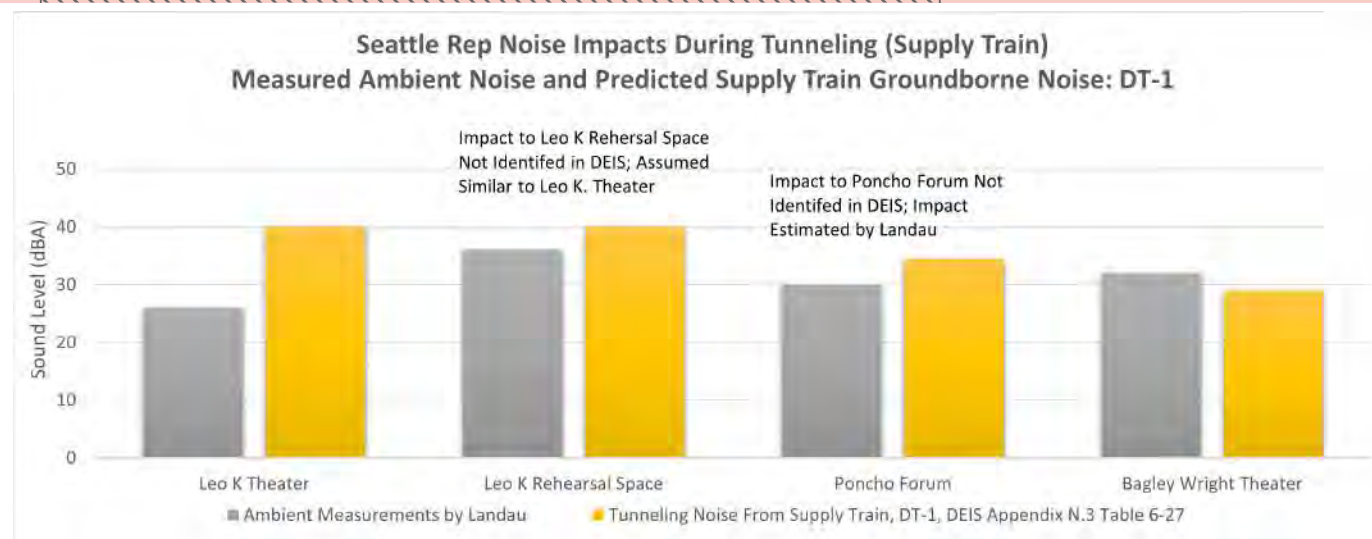
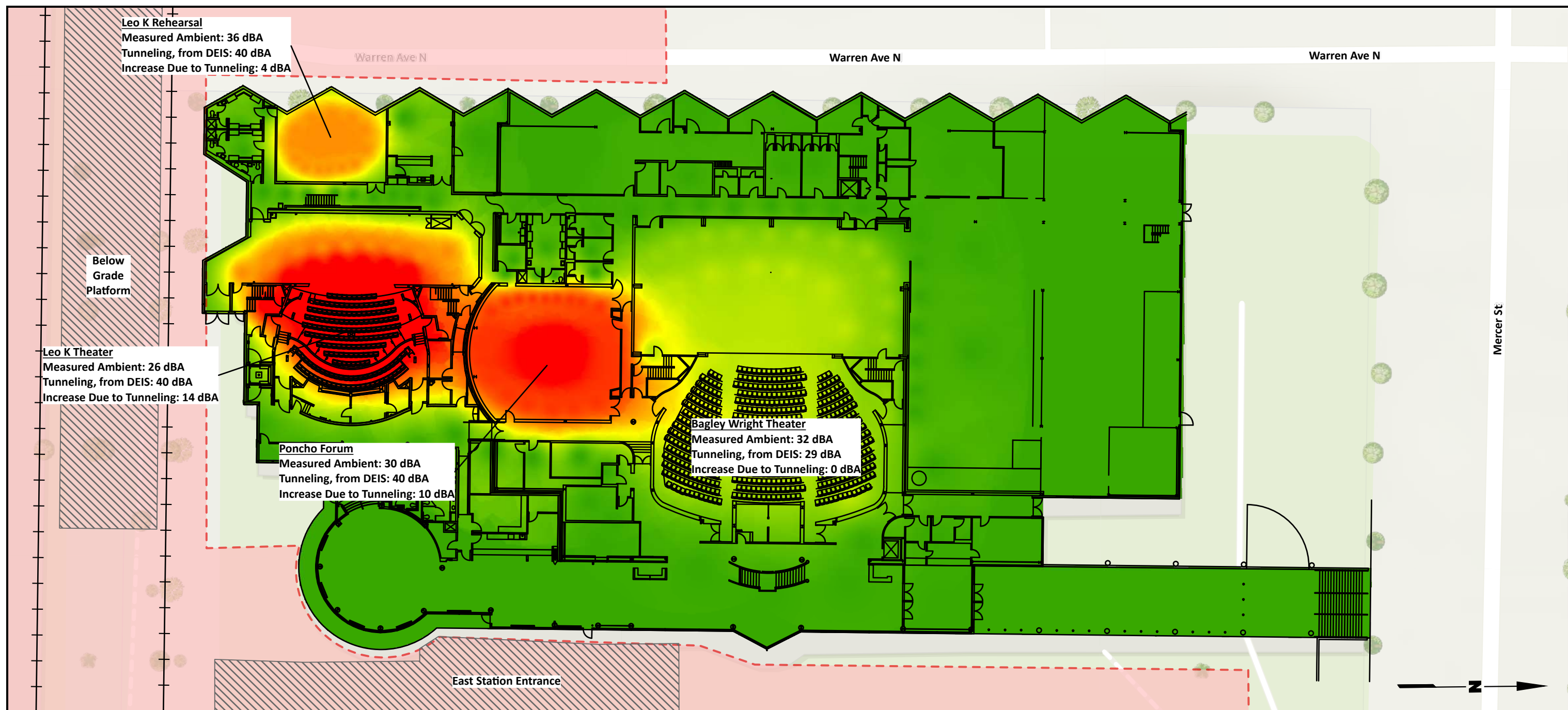
- DT-1 Tracks
- DT-1 Platform and Stations
- DT-1 Construction Areas



Sound Transit WSBL DEIS
Seattle Rep
Seattle, Washington

**Surface Construction
Noise Impact, DT-1**

Figure
4

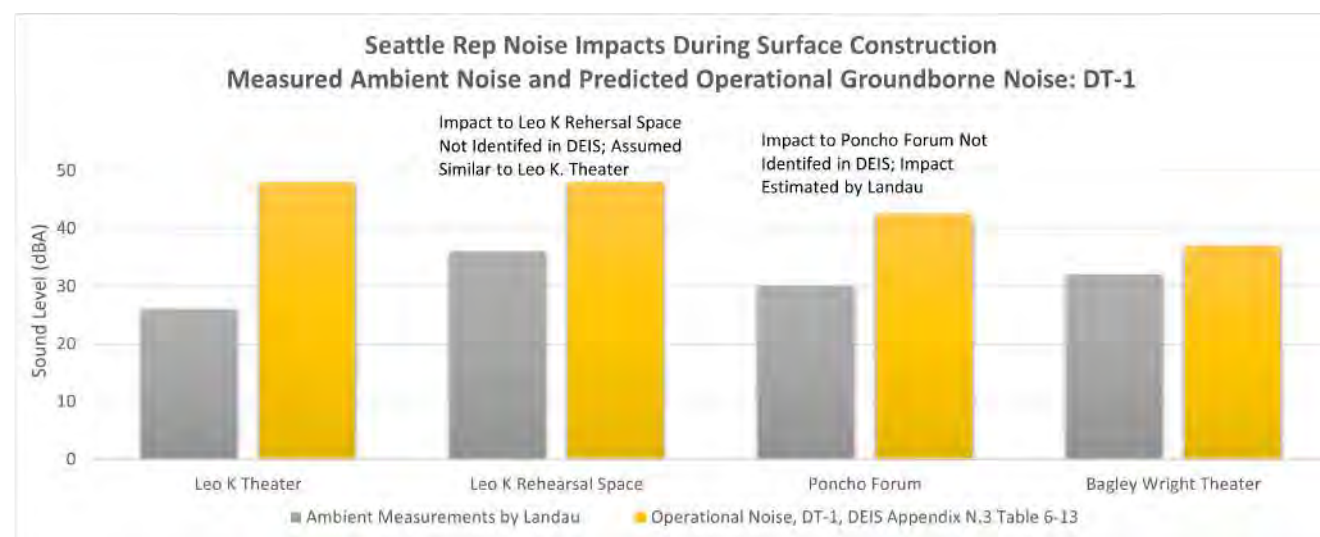
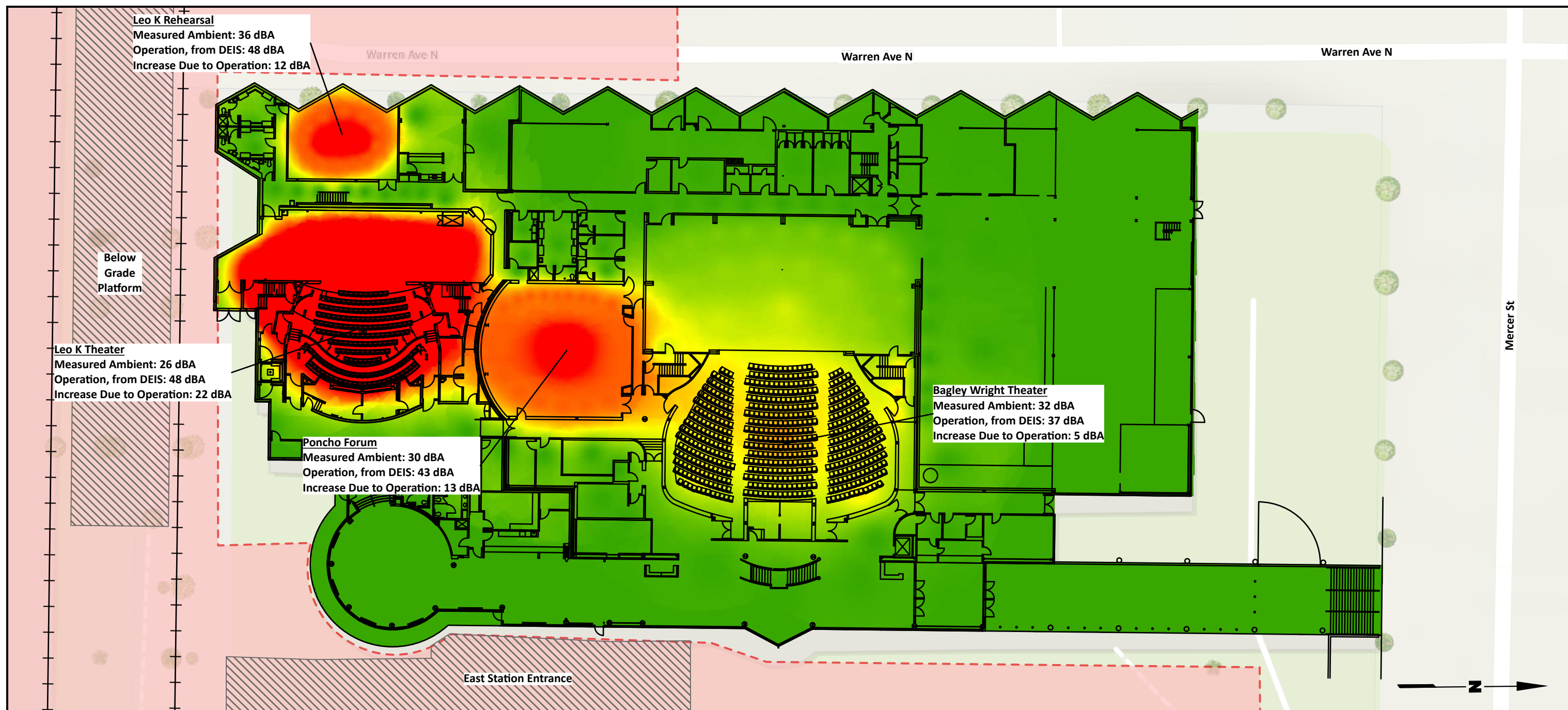


Note

- *Predictions of groundborne noise from tunneling at Bagley Wright Theater not provided in DEIS, estimate based on difference in operational groundborne noise estimates between Leo K Theater and Bagley Wright Theater.
- Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- DT-1 Tracks
- ▨ DT-1 Platform and Stations
- ▨ DT-1 Construction Areas



Note

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

Legend

- +— DT-1 Tracks
- ▨ DT-1 Platform and Stations
- ▨ DT-1 Construction Areas

Sound Transit WSBL DEIS
Seattle Rep
Seattle, Washington

Operational Noise Impact, DT-1

Figure
6

Sound Transit Projects

Details	Communication
#499487 Date Recieved: 3/22/2022 Created by: Nasra Mohamed Audience: General Public Reach: Participation: Engagement: 1 Source: Open house/public meeting Assigned division: Outreach Category: Project Phase: Planning Project Segment: Environmental phase: Draft EIS	<p>Hi there. Can you hear me? Great. My name's Jeffrey Herrmann. I am the managing director at Seattle Rep. Seattle Rep was founded in the 1963 at Seattle Center and for the last 60 years has served our region and community with nationally recognized artistic programming for the entire community, including youth, seniors, low-income residents, LGBTQ people, and BIPOC communities. The Rep is immediately proximate to both the preferred and alternative proposed locations for the Seattle Center light rail station as included in the DEIS. We are very excited about the prospect of bringing the light rail to the Seattle Center and the Rep's doorstep. It's going to improve access to the campus for everyone in our community and region, but the museums, performing arts, and science orgs. and festivals that call Seattle Center home, we've already experienced so much disruption of late including three years of construction on Climate Pledge Arena and two years of a pandemic. We are very concerned about the Rep's and our many colleague organizations' ability to maintain operations and the public's ability to access our organization during an estimated eight to ten years of light rail construction on campus. I ask that Sound Transit please continue to work with the Rep and other Seattle Center orgs. to create viable solutions to the impacts that construction's going to have on these treasured spaces. Success has to mean both that we bring light rail access to the Seattle Center and that the many organizations that make up the Seattle Center community and contribute to its status as a cultural gem in our region thrive throughout this period of construction. Many thanks to you all for taking the time to listen.</p>

Sound Transit Projects

Details	Communication
#499491 Date Recieved: 3/22/2022 Created by: Nasra Mohamed Audience: General Public Reach: Participation: Engagement: 1 Source: Open house/public meeting Assigned division: Outreach Category: Project Phase: Planning Project Segment: Environmental phase: Draft EIS	<p>Hi, everybody. I am Bernie Griffin, and I'm the managing director of The 5th Avenue Theatre in downtown Seattle. The 5th supports the light rail and a stop that brings employees and patrons into downtown Seattle. The 5th has serious concerns about the preferred alternative route along Fifth Avenue. The potential for four to seven years or more of construction and road closures downtown and around our theater will discourage audience members from coming downtown to see a performance at the 5th, and this is on the heels of being closed for two years and it taking multiple years to rebuild our audiences. In addition to full and partial road closures, we are concerned about noise and vibration and other construction impacts. The DEIS does not include clear mitigation measures during construction, and to the extent that they are timing-based, they will be more detrimental to our organization since performances are on the evenings and the weekends. We are concerned about the significant cumulative economic impact of, one, The 5th Avenue Theatre; two, the entire arts and cultural sector that are being impacted throughout the city, such as the Seattle Rep, KEXP, the opera and the ballet, as well as downtown Seattle. Let's do this project right by maximizing the benefits of light rail to downtown but not at the cost of sacrificing downtown for five to seven years or else there will be nothing for the light rail to link to. Thank you.</p>

Sound Transit Projects

Details	Communication
#499663 Date Recieved: 3/24/2022 Created by: Nasra Mohamed Audience: General Public Reach: Participation: Engagement: 1 Source: Open house/public meeting Assigned division: Outreach Category: Project Phase: Planning Project Segment: Environmental phase: Draft EIS	<p>Oh. My name is Betty Lau from Transit Equity For All, TEA. And I have read the Appendix G on the environmental justice and Chapter 4, and I have not seen anything about community metrics; for example, impacts to community programs, the presence of over 1,200 elderly, non-English-speaking immigrants. And I just don't see those specific impacts in there. So I would like to recommend the community programs for elderly, the language schools, the gung fu -- well, not gung fu -- martial arts schools, art schools. There's also faith-based organizations. There's no mention of any of those, so that would be my recommendation. I don't see a timer here, but that's just what I wanted to have added to the DEIS, those kinds of impacts on human beings, low-wage workers, the teachers in the programs. Thank you. So let me just wrap it up. Thank you so much for having this session tonight. I'm really amazed at the interpretation that has been provided and the extension to really try to reach people where they are. Thank you.</p>

Sound Transit Projects

Details	Communication
<div>#503130</div> <div>Date Recieved: 4/27/2022</div> <div>Created by: Nasra Mohamed</div> <div>Audience: General Public</div> <div>Reach:</div> <div>Participation:</div> <div>Engagement: 1</div> <div>Source: Email</div> <div>Assigned division: Outreach</div> <div>Category:</div> <div>Project Phase: Planning</div> <div>Project Segment:</div> <div>Environmental phase: Draft EIS</div>	<div>Move Forward on 4th!</div>

Move Forward on 4th Petition Signees

Name	City	State	Postal Code	Country	Signed On
Han Eckelberg	Seattle	WA	98118	US	3/17/2022
Matthew Chow	Seattle	WA	98105	US	3/17/2022
Brien Chow	Renton	WA	98055	US	3/17/2022
Frank Chin	Los Angeles	CA	90026	US	3/17/2022
Steven Yee	Bellevue	WA	98008	US	3/17/2022
Wendee Ong	Seattle	WA	98118	US	3/17/2022
Yea-Jae Wang	Bellevue	WA	98008	US	3/17/2022
Marcia Chow	Renton	WA	98058	US	3/17/2022
Paula Chinn	Bellevue	WA	98007	US	3/17/2022
Shelly Chinn	Bellevue	WA	98007	US	3/17/2022
Chang-Chi Hwang	Redmond	WA	98052	US	3/17/2022
Pollyanna Wang	Bellevue	WA	98008	US	3/17/2022
Betty Lau	Seattle	WA	98118	US	3/17/2022
Amie Recker	Costa Mesa	CA	92627	US	3/17/2022
elleri sienna	Seattle	WA	98105	US	3/17/2022
Nina Chow	Seattle	WA	98144	US	3/17/2022
Paul Maniscalco	Arlington		22207	US	3/17/2022
Margaret Lock	Seattle	WA	98118	US	3/17/2022
Eddie Lau	El Dorado Hills	CA	95762	US	3/17/2022
April Mattin	Denver	CO	80206	US	3/17/2022
Liang Chen	Kent	WA	98032	US	3/17/2022
Walt Watanabe	La Habra	CA	90631	US	3/17/2022
Brad Perry	Woodinville	WA	98072	US	3/17/2022
John Woo	New York	NY	10027	US	3/17/2022
Chauncy St cyr	Ocala		32113	US	3/17/2022
Sue-May Eng	Seattle	WA	98178	US	3/18/2022
solange theodule	MIAMI		33177	US	3/18/2022
Mei-Jui Lin	Mercer Island	WA	98040	US	3/18/2022
Kevin Lee	Seattle	WA	98146	US	3/18/2022
Alexander Tran	Renton	WA	98055	US	3/18/2022
Leori Blancher	Holyoke	MA	1040	US	3/19/2022
Alicya Campbell	Arlington		76010	US	3/19/2022
Jean Yang	Chicago	IL	60091	US	3/19/2022
Dale Beasley	Dinuba	CA	93618	US	3/19/2022
Royal Tan	Kent	WA	98030	US	3/20/2022
Kathy Dao	Seattle	WA	98118	US	3/20/2022
rosamond au	Seattle	WA	98118	US	3/20/2022
Ethan Lee	Honolulu	HI	96821	US	3/20/2022
Kahrissa Marin	seattle	WA	98118	US	3/20/2022
Tasia Tran	Burien	WA	98146	US	3/20/2022
Tiauna Mari Tran	Burien	WA	98146	US	3/20/2022
Nicole Wang	Seattle	WA	98115	US	3/20/2022
Zay Melendez				US	3/20/2022
June Wong	Mercer Island	WA	98040	US	3/20/2022
Bryant Le	Seattle	WA	98118	US	3/20/2022
Maggie Duan	Seattle	WA	98155	US	3/20/2022

Move Forward on 4th Petition Signees

Francisco Irigon	Newcastle	WA	98059 US	3/20/2022
Wenyi Tsai	Seattle	WA	98168 US	3/20/2022
Jessica Ta	Seattle	WA	98118 US	3/20/2022
Nyla Nakano	Seattle	WA	98118 US	3/20/2022
Johnny Nguyen	Seattle	WA	98118 US	3/20/2022
Raymond Phu	Seattle	WA	98118 US	3/20/2022
Samantha Rivera	Seattle	WA	98188 US	3/20/2022
Brittany Bussa	Jacksonville		28546 US	3/20/2022
Betty Ragudos	Seattle	WA	98118 US	3/20/2022
Lai Ping Kimura	Seattle	WA	98178 US	3/20/2022
Jack To	Seattle	WA	98168 US	3/20/2022
Catherine Lee	Mercer Island	WA	98040 US	3/20/2022
Chunman Gissing	Bothell	WA	98012 US	3/20/2022
Bettie Luke	Seattle	WA	98118 US	3/20/2022
Aaron Smuckler	Pittsburgh	PA	15217 US	3/20/2022
Carolyn Mar	Seattle	WA	98126 US	3/20/2022
Sandra Wong	Kenmore	WA	98028 US	3/21/2022
Linda Kan	Seattle	WA	98117 US	3/21/2022
Alan Lai	Bellevue	WA	98006 US	3/21/2022
Jeannie Yee	Seattle	WA	98118 US	3/21/2022
Forrest Wu	Seattle	WA	98122 US	3/21/2022
Karman Cheung	Issaquah	WA	98029 US	3/21/2022
Cyndi Tam	Braintree	MA	2184 US	3/21/2022
Tina Young	Seattle	WA	98144 US	3/21/2022
Jean Lee	Mercer Island	WA	98040 US	3/21/2022
Maile Anderson	Seattle	WA	98199 US	3/21/2022
Bill Chen	Houston	TX	77079 US	3/21/2022
K Chang	Seattle	WA	98125 US	3/21/2022
Girum Tadesse	Washington		20009 US	3/21/2022
Cynthia Mejia-Giudici	Seattle	WA	98105 US	3/21/2022
Yuan Yi Lozano	Seattle	WA	98118 US	3/21/2022
John Michael Vasquez	Alice		78332 US	3/21/2022
THOMAS Cheong	Renton	WA	98058 US	3/21/2022
Billy Potts	Wanchai District		Hong Kong	3/21/2022
Jean Chen	Seattle	WA	98109 US	3/21/2022
Dennis Lee	Mercer Island	WA	98040 US	3/21/2022
Elizabeth Caldwell	Bellingham		98226 US	3/21/2022
Betty Lock	Seattle	WA	98102 US	3/21/2022
Mary Ann Kofler	Seattle	WA	98119 US	3/21/2022
Cristina Krisologo	Seattle	WA	98118 US	3/21/2022
CHI MAY PRASEUTH	Seattle	WA	98118 US	3/21/2022
Kyrlia Young	Seattle	WA	98144 US	3/21/2022
cameron christen	Chicago		60622 US	3/21/2022
Wen Chiu	Seattle		98166 US	3/21/2022
Mark Chow	Seattle	WA	98117 US	3/21/2022
Jessie Chiu	Sammamish	WA	98074 US	3/21/2022
Ming-Ming Tung-Edelman	Seattle	WA	98107 US	3/21/2022

Move Forward on 4th Petition Signees

Robin Momii	Seattle	WA	98117 US	3/21/2022
Bif Brigman	Seattle	WA	98104 US	3/21/2022
Ash Sadler	Seattle	MA	98122 US	3/21/2022
Michael Miller	Seattle	WA	98112 US	3/21/2022
Rebekah Gardea	Seattle	WA	98115 US	3/22/2022
Brian Hashisaki	Seattle	WA	98146 US	3/22/2022
Kait Early	Seattle	WA	98122 US	3/22/2022
Alex Graber	Mercer Island	WA	98040 US	3/22/2022
Stanford Chiang	Newcastle	WA	98059 US	3/22/2022
Jordan Grande	Los Angeles	CA	90713 US	3/22/2022
Michael Shan	Seattle	WA	98126 US	3/22/2022
Anastasia Greeley	Decatur	GA	30033 US	3/22/2022
Paul Murakami	Seattle	WA	98108 US	3/22/2022
Sara Eagan	Seattle	WA	98103 US	3/22/2022
Stephanie Lau	Mercer Island	WA	98040 US	3/22/2022
Peyton Bell	Seattle	WA	98117 US	3/22/2022
SY Nakamura	Seattle	WA	98118 US	3/22/2022
Loufel Velasco	Seattle	WA	98104 US	3/22/2022
Laura Zanzig	Seattle	WA	98122 US	3/22/2022
Vince Thomas	Orlando		32808 US	3/22/2022
Saul Tilden	Yakima	WA	98908 US	3/22/2022
April Lorenzo	Seattle	WA	98118 US	3/22/2022
Celia McTigue	Seattle	WA	98144 US	3/22/2022
Ashley Brown	Seattle	WA	98116 US	3/22/2022
Ian Davis	Seattle	WA	98112 US	3/22/2022
Jessie Shelton	Seattle	WA	98105 US	3/22/2022
Lindsay Chinn	Aiea	HI	96701 US	3/22/2022
EJ Deocampo	Seattle	WA	98126 US	3/22/2022
Annalea Overa	Seattle	WA	98103 US	3/22/2022
Sydney Santiago	Seattle	WA	98109 US	3/22/2022
Angus Kiehle	Silverdale	WA	98383 US	3/22/2022
Maddy Foreman	Edgewood	WA	98372 US	3/22/2022
Emma Bryans	Renton	WA	98059 US	3/22/2022
Charles Caspar	Hamilton	NY	13346 US	3/22/2022
Lily Mabbott	Seattle	WA	98125 US	3/22/2022
Tesa Lau	Las Vegas	NV	89103 US	3/22/2022
Mikala Grozier		WA	US	3/22/2022
Helen Yee	Seattle	WA	98126 US	3/22/2022
Priya Mahanti	Seattle	WA	98117 US	3/22/2022
Joshua Thomas	Seattle	WA	98115 US	3/22/2022
Maria Oyama Leininger	Seattle	WA	98102 US	3/22/2022
Steffen Stroup	Seattle	WA	98117 US	3/22/2022
Dorrienne Chinn	Seattle	WA	98178 US	3/22/2022
Ashley Bauder	Bremerton	WA	98311 US	3/22/2022
Naomi Rosenberg	Seattle	WA	98118 US	3/22/2022
gabrielle astrid	Seattle	WA	98106 US	3/22/2022
Rae Wong	Mercer Island	WA	98040 US	3/22/2022

Move Forward on 4th Petition Signees

sani kato	Bellingham	WA	98225 US	3/22/2022
Sue Kay	Seattle	WA	98122 US	3/22/2022
Jessica Cafferty	Seattle	WA	98198 US	3/22/2022
jane pastores	Seattle	WA	98144 US	3/22/2022
Mer Kato	Mercer Island	WA	98040 US	3/22/2022
Haley Piper	Seattle	WA	98122 US	3/22/2022
Matthew Wurdeman	Seattle	WA	98115 US	3/22/2022
Rebecca Rabb	Chicago	IL	60614 US	3/22/2022
Nina Tomita-Kato	Mercer Island	WA	98040 US	3/22/2022
Spencer Ward	Seattle	WA	98103 US	3/22/2022
Rudy Caluza	Mercer Island	WA	98040 US	3/22/2022
Dev K	Seattle	WA	98106 US	3/22/2022
Chris Murakami	Seattle	WA	98108 US	3/22/2022
Leigh Momii	Seattle	WA	98103 US	3/22/2022
Michelle Auster	Seattle	WA	98115 US	3/22/2022
Woody Jacobson	Seattle	WA	98122 US	3/22/2022
Larry Wong	Bellevue	WA	98006 US	3/22/2022
Stephanie Leighton	Bellevue	WA	98006 US	3/22/2022
Eric Tomita	Mercer Island	WA	98040 US	3/22/2022
Samantha Wong	Seattle	WA	98177 US	3/22/2022
Vincent Prais	Ellensburg	WA	98926 US	3/22/2022
Whitney Blackstone	Kirkland	WA	98034 US	3/22/2022
Jake Blackstone	Kirkland	WA	98034 US	3/22/2022
Diane Tomita	Seattle	WA	98102 US	3/22/2022
Keegan Tomita	Mercer Island	WA	98040 US	3/22/2022
Benjamin Langhans	Bellevue	WA	98004 US	3/22/2022
Mary Wong	Seattle	WA	98107 US	3/22/2022
Ana Erikson	Seattle	WA	98118 US	3/22/2022
Claire VanFossen	Seattle	WA	98144 US	3/22/2022
Kikuchi James	Elmhurst	IL	60126 US	3/22/2022
Sue Mar	Seattle	WA	98118 US	3/22/2022
Clifford Eng	Seattle	WA	98101 US	3/22/2022
Adam Kaluba	Burleson		76028 US	3/22/2022
Ian Zhang	Seattle	WA	98103 US	3/22/2022
Rudy Pantoja	Seattle	WA	98117 US	3/22/2022
Amanda Holberg	Seattle	WA	98122 US	3/22/2022
Key Donn	Kent	WA	98042 US	3/22/2022
Katie Burgess	Seattle	WA	98112 US	3/22/2022
Xiaoling Mo	Seattle	WA	98109 US	3/22/2022
Marina Cathers	Seattle	WA	98133 US	3/22/2022
Luca M	Grand Ledge		48837 US	3/22/2022
Russell Chiong	Victoria	V8P	Canada	3/22/2022
Trevor Murakami	Seattle	WA	98102 US	3/23/2022
May Chang	Scarborough, Canada	M1N3P3	Canada	3/23/2022
Ruth Rosenberg	Seattle	WA	98118 US	3/23/2022
Liangyu Chen	Mercer Island	WA	98040 US	3/23/2022
Chun Lee	Edmonds	WA	98026 US	3/23/2022

Move Forward on 4th Petition Signees

Peggy Lui	Edmonds	WA	98026 US	3/23/2022
Jennifer Estroff	Ellensburg	WA	98926 US	3/23/2022
Susan Woo	Seattle	WA	98108 US	3/23/2022
Alex Hang	Seattle	WA	98104 US	3/23/2022
Aya Bisbee	Seattle	WA	98102 US	3/23/2022
Benton Ong	Seattle	WA	98118 US	3/23/2022
Darryl Hue	Bellevue	WA	98006 US	3/23/2022
harry chinn	Gaithersburg	MD	20878 US	3/23/2022
Jack Fan	Seattle	WA	98125 US	3/23/2022
Jay Lin	Tacoma	WA	98446 US	3/23/2022
Kathy Kalish	Henderson	CO	80640 US	3/23/2022
pamela brookes	Tacoma	WA	98446 US	3/23/2022
Kirby Chung	Bellevue	WA	98004 US	3/23/2022
Serena Louie	Seattle	WA	98118 US	3/23/2022
Marilyn Yamamoto	Bellevue	WA	98006 US	3/23/2022
Anni Woo	Seattle	WA	98104 US	3/23/2022
Janny Woo	Bellevue	WA	98004 US	3/23/2022
Diane Le	Seattle	WA	98104 US	3/23/2022
s ma	seattle	WA	98101 US	3/23/2022
Ryder Stroud	Seattle	WA	98122 US	3/23/2022
Maylee Luc	Seattle	WA	98146 US	3/23/2022
Shuk Kam	Phoenix	AZ	85013 US	3/23/2022
Nathan Yuen	New Haven	CT	6511 US	3/23/2022
Alex Lau	Kent	WA	98031 US	3/23/2022
Adrien Lo	Redmond	WA	98052 US	3/23/2022
Ann Wong	Seattle	WA	98122 US	3/23/2022
Anne Shaughnessy	San Jose	CA	95127 US	3/23/2022
Walker Stroud	New York	NY	10036 US	3/23/2022
Janine Wong	Milton	MA	2186 US	3/23/2022
Penny Nguyen	Seattle	WA	98108 US	3/23/2022
Skip Littlefield	Ellensburg	WA	98926 US	3/23/2022
Emmy Leung	N Chesterfield	VA	23235 US	3/23/2022
Sheryl Chinn	Kent	WA	98030 US	3/23/2022
Arline Won	Bellevue	WA	98006 US	3/23/2022
kathy lau	Kent	WA	98031 US	3/23/2022
Dennis Lee	Seattle		98144 Portugal	3/23/2022
Sherwin Eng	Seattle	WA	98118 US	3/23/2022
Stephanie Ngo	Seattle	WA	98126 US	3/23/2022
Alison Yount	Seattle	WA	98188 US	3/24/2022
Joni Nakagawa	Mercer Island	WA	98040 US	3/24/2022
Dawn Ogden	Sammamish	WA	98074 US	3/24/2022
Lori Hamasaki	Seattle	WA	98168 US	3/24/2022
Helen Mitchell	Seattle	WA	98118 US	3/24/2022
Shiao-Yen Wu	Seattle	WA	98115 US	3/24/2022
Alyssa Saelee	Kent	WA	98030 US	3/24/2022
Sharon Kitashima	Seattle	WA	98118 US	3/24/2022
Kevin MacDonald	Seattle	WA	98168 US	3/24/2022

Move Forward on 4th Petition Signees

Joshua Kim	Renton	WA	98058 US	3/24/2022
Carlene Palsson	Seattle	WA	98118 US	3/24/2022
Scott Randall	Seattle	WA	98198 US	3/24/2022
David Barber	Maple Valley	WA	98038 US	3/24/2022
Ariel Liu	Vancouver	WA	98685 US	3/24/2022
Eduardo Pina	Federal Way	WA	98003 US	3/24/2022
RON ANDERSON	Puyallup	WA	98375 US	3/24/2022
Ming Parng	Vancouver	WA	98664 US	3/24/2022
MARGARET CHOW	Renton	WA	98059 US	3/24/2022
Meisa Wong	Seattle	WA	98108 US	3/24/2022
Terry Tanaka	KIRKLAND	WA	98034 233 US	3/24/2022
Taylor Chow	Seattle	WA	98101 US	3/24/2022
Ginny Eng	Seattle	WA	98115 US	3/24/2022
Jenifer Reyes	Bellevue	WA	98007 US	3/24/2022
David D	Seattle	WA	98122 US	3/24/2022
Samson Ley	Auburn	WA	98002 US	3/24/2022
Erika-Jayne Sison	Seattle	WA	98121 US	3/24/2022
Carol Chow	Seattle	WA	98139 US	3/24/2022
Chun Chan	Seattle	WA	98118 US	3/24/2022
hao sun	Seattle	WA	98052 US	3/24/2022
Cynthia Chu Mori	Seattle	WA	98144 US	3/24/2022
KENDRA ZAPATA	Bellevue	WA	98006 US	3/24/2022
Bernard Wright	Issaquah	WA	98027 US	3/24/2022
Krizten Breidenich	Seattle	WA	98144 US	3/24/2022
Mandy Kwan	Seattle	WA	98106 US	3/24/2022
Pam Pehan	Seattle	WA	98122 US	3/24/2022
Elizabeth Lang	Seattle	WA	98108 US	3/24/2022
Tuck Eng	SEATTLE	WA	98118-3344 US	3/24/2022
Pierre Fontecha	Seattle	WA	98144 US	3/24/2022
Daniel Fisher	Seattle	WA	98104 US	3/24/2022
Jen O	Seattle	WA	98144 US	3/24/2022
Erin Abbey	Seattle	WA	98103 US	3/24/2022
Diana Nguyen	Seattle	WA	98108 US	3/24/2022
Dyllan Hackett	Seattle	WA	98133 US	3/24/2022
Michael Bury	Edmonds	WA	98026 US	3/24/2022
Kristina Mon	AUBURN	WA	98002 US	3/24/2022
Diana Chan	Seattle	WA	98144 US	3/24/2022
Beau Scherer	San Antonio		78238 US	3/24/2022
Marika Yaplee	Seattle	WA	98144 US	3/24/2022
Hannah Handsheiw	Seattle	WA	98107 US	3/24/2022
Jennifer Victorino	Bremerton	WA	98311 US	3/24/2022
Airis Kemp	Tucson	AZ	85747 US	3/24/2022
Michele Granera	Seattle	WA	98105 US	3/24/2022
Annie Richter	Glendale	AZ	85306 US	3/24/2022
Cynthia Ramirez	Seattle	WA	98109 US	3/24/2022
Stephanie Lock	Seattle	WA	98118 US	3/24/2022
Lindsey Mattson	Bothell	WA	98021 US	3/24/2022

Move Forward on 4th Petition Signees

Keely Martin	Chicago	IL	60602 US	3/24/2022
Richard Rangel	Seattle	WA	98102 US	3/24/2022
Angela Vongphakdy	Portland	OR	97215 US	3/24/2022
Nicole Ilcewicz	Seattle	WA	98122 US	3/24/2022
Gavin Mackay	Meieki		451-0045 Japan	3/24/2022
Kaylor Leung	Federal Way	WA	98023 US	3/24/2022
Rachael Chang	Rowland Heights	CA	91748 US	3/24/2022
Vincent So	Seattle	WA	98108 US	3/24/2022
Lindsey Fujino	Renton	WA	98057 US	3/24/2022
cara miles	frisco	TX	75024 US	3/24/2022
Elizabeth Chow	Pittsburgh	PA	15217 US	3/24/2022
Francisco Bautista	London	WA	US	3/24/2022
David Hudson	Renton	WA	98058 US	3/24/2022
Trisha Mar-Loop	Eastsound	WA	98245 US	3/24/2022
yin yin ma	Seattle	WA	98102 US	3/24/2022
Gabriel Tam	Renton	WA	98055 US	3/25/2022
Tyler Todd	Renton	WA	98059 US	3/25/2022
Joseph Wong	Lynnwood	WA	98087 US	3/25/2022
Mary Anne Eng	Mercer Island	WA	98040 US	3/25/2022
Joyce Lee	Arcadia	CA	91007 US	3/25/2022
jonathan ly	Seattle	WA	98118 US	3/25/2022
Shari Fujino	Renton	WA	98059 US	3/25/2022
Jesse Tam	Newcastle	WA	98056 US	3/25/2022
Kimberly Louis	Seattle	WA	98106 US	3/25/2022
David Wilkinson	Issaquah	WA	98027 US	3/25/2022
Audrey Yaplee	Renton	WA	98059-8828 US	3/25/2022
Linda Shimizu	Bellevue	WA	98006 US	3/25/2022
Laretha Todd	Renton	WA	98059 US	3/25/2022
Angela Lee	Seattle	WA	98108 US	3/25/2022
Claire Hildebrand	Brookfield		53045 US	3/25/2022
Son Nguyen	Renton	WA	98055 US	3/25/2022
Rose Richards	Seattle	WA	98178 US	3/25/2022
Michelle Vuong	Renton	WA	98056 US	3/25/2022
Harmer Jennifer	Seattle	WA	98118 US	3/25/2022
Mandy Chow	Renton	WA	98058 US	3/25/2022
Mya Mccay	Seattle	WA	98108 US	3/25/2022
Regina Walker	Seattle	WA	98126 US	3/25/2022
Albert Yuen	Renton	WA	98059 US	3/25/2022
Adina Sounthala	Seattle	WA	98106 US	3/25/2022
Kimsour Phann	Seattle	WA	98178 US	3/25/2022
Seth Trowbridge	Seattle	WA	98118 US	3/25/2022
Terrance Yaplee	Renton	WA	98059 US	3/25/2022
Kennedy Khun	Seattle	WA	98118 US	3/25/2022
Natalie Thao	Woodinville	WA	98072 US	3/25/2022
Deedee Tran	Denver	CO	80219 US	3/25/2022
Lee Dalton	Yadkinville		27055 US	3/25/2022
Christine Quan	Seattle	WA	98125 US	3/25/2022

Move Forward on 4th Petition Signees

Jing Ma	Bellevue	WA	98007 US	3/25/2022
John Tran	Seattle	WA	98118 US	3/25/2022
Alvin Tran	Renton	WA	98055 US	3/25/2022
Kathleen Bennett	Seattle	WA	98118 US	3/25/2022
Joyce Eng	Seattle	WA	98125 US	3/25/2022
Nancy Yee	Seattle	WA	98134 US	3/25/2022
Debbie Behrens	Bothell	WA	98021 US	3/25/2022
April Torres	Shelton		6484 US	3/25/2022
Stacey Lee	Lynnwood	WA	98087 US	3/25/2022
Frances Blauvelt	Lynnwood	WA	98087 US	3/25/2022
Kyle Chow	Kent	WA	98031 US	3/25/2022
Vatsana Banouvong	Seattle	WA	98108 US	3/25/2022
Chris Masters	Auburn	WA	98002 US	3/25/2022
Ian Todhunter	Seattle	WA	98102 US	3/25/2022
Christian Davis	Baltimore	MD	21093 US	3/25/2022
Lisa Yu	Seattle	WA	98108 US	3/25/2022
Rodolfo Castro	Seattle	WA	98101 US	3/25/2022
Jeff Surek	Lake Stevens	WA	98258 US	3/25/2022
John Mundie	Bothell	WA	98011 US	3/25/2022
Christopher Zamanillo	Redmond	WA	98052 US	3/25/2022
Greg Dolny	Providence	UT	84332 US	3/25/2022
Collin Ikeda	SEATTLE	WA	98122 US	3/25/2022
Troy Fagan	Seattle	WA	98106 US	3/25/2022
Lewis Wong	Seattle	WA	98111 US	3/25/2022
Jennifer Kwong	Edmonds	WA	98026 US	3/25/2022
Connie Chen	Seattle	WA	98108 US	3/25/2022
Tam Nguyen	Issaquah	WA	98027 US	3/25/2022
Alex Kong	Seattle	WA	98116 US	3/25/2022
David Yoshizumi	Seattle	WA	98104 US	3/25/2022
Dale Ha	Bellevue	WA	98007 US	3/25/2022
Jayna Umeda	Bellevue	WA	98004 US	3/25/2022
Deena Eng Chikamura	Bellevue	WA	98005 US	3/25/2022
Amy Carnahan-Nakata	Issaquah	WA	98029 US	3/25/2022
Loraine Macapinlac	Seattle	WA	98109 US	3/25/2022
Hamar Megan	Seattle	WA	98126 US	3/25/2022
Pamela Woo	Bellevue	WA	98006 US	3/25/2022
Betty Etquibal	Seattle	WA	98117 US	3/25/2022
Willon Lew	Seattle	WA	98122 US	3/25/2022
Lin Trinh	Seattle	WA	98118 US	3/25/2022
Jennifer Wu	Renton	WA	98058 US	3/25/2022
Sean Resendez	Los Angeles		90022 US	3/25/2022
Masanori Takee	Lynnwood	WA	98037 US	3/26/2022
Tony Nguyen's	Portland	OR	97266 US	3/26/2022
Mojica Bjornstrom	Seattle	WA	98125 US	3/26/2022
Jan Gokami	Oakland	CA	94621 US	3/26/2022
Susana Tenorio Cho	Marysville	WA	98270 US	3/26/2022
Anna Wong	Seattle	WA	98144 US	3/26/2022

Move Forward on 4th Petition Signees

Sara Broadhurst	Carnation	WA	98014 US	3/26/2022
Carol Ann Eaton	Seattle	WA	98126 US	3/26/2022
Mollie Caka	Seattle	WA	98108 US	3/26/2022
Ashley Caldejon	seattle	WA	98108 US	3/26/2022
Lillian Woo	Issaquah	WA	98027 US	3/26/2022
Van Nguyen	Seattle	WA	98118 US	3/26/2022
Kyle Kremlacek	Omaha		68116 US	3/26/2022
Lily Heferle	Buffalo		14214 US	3/26/2022
mia j	Colorado Springs		80902 US	3/26/2022
Phyllis Locke	Seattle	WA	98118 US	3/26/2022
Antonia Blume	Seattle	WA	98118 US	3/26/2022
Kyle Tunney	Seattle	WA	98166 US	3/26/2022
Sharon Tunney	Seattle	WA	98146 US	3/26/2022
Bobbie Washington	Seattle	WA	98168 US	3/26/2022
Dustin Dacuan	Seattle	WA	98116 US	3/26/2022
Katharine Miyata	Seattle	WA	98002 US	3/26/2022
Erika Doan	Everett	WA	98204 US	3/27/2022
Charlene DiMeglio	Kirkland	WA	98033 US	3/27/2022
Zach Robinson	Kirkland	WA	98033 US	3/27/2022
Shirley Louie	Kent	WA	98030 US	3/27/2022
Taryn Lee	Bellevue	WA	98005 US	3/27/2022
S LOUIE	Renton	WA	98030 US	3/27/2022
Alexander Kim	Seattle	WA	98118 US	3/27/2022
Jialuo Liu			US	3/27/2022
Patsy Sawa	Seattle	WA	98105 US	3/27/2022
Alvin Wong	Redmond	WA	98052 US	3/27/2022
Ang Zhou	san gabriel	CA	91776 US	3/27/2022
Sylvia Lock-Kirihara	Kent	WA	98031 US	3/28/2022
Linh Nguyen	Seattle	WA	98106 US	3/28/2022
Catherine Pang	Seattle	WA	98121 US	3/28/2022
Rick Wong	Seattle	WA	98118 US	3/28/2022
Natalie Walker	Seattle	WA	98118 US	3/28/2022
Lois Jones	Seattle	WA	98103 US	3/28/2022
Tracy Mills	Kent	WA	98030 US	3/28/2022
Hanh Diep	Seattle	WA	98168 US	3/28/2022
Shane Kimura	Kent	WA	98042 US	3/29/2022
Mark Nolasco	Kent	WA	98032 US	3/29/2022
Lisa Phillips	Houston		77042 US	3/29/2022
Monyee Chau	Seattle	WA	US	3/29/2022
Roldy Aguero Ablao	Seattle	WA	98104 US	3/29/2022
Vivian Chan	Seattle	WA	98118 US	3/29/2022
So'le Celestial	Bonney Lake	WA	98391 US	3/29/2022
Naomie Zandt	Seattle	WA	98118 US	3/29/2022
Jun bin Ma	Kirkland	WA	98034 US	3/30/2022
Tonia Ferguson	Longview	WA	98632 US	3/30/2022
Stefanie Wong	Seattle	WA	98107 US	3/30/2022
Ron Choi	Bellevue	WA	98004 US	3/30/2022

Move Forward on 4th Petition Signees

Sally Penney	Middleboro	MA	2346 US	3/30/2022
Christopher Kaku	Seattle	WA	98118 US	3/30/2022
Melinda Kent	Edgewood	WA	98371 US	3/30/2022
Mega Mind	Tracy		95391 US	3/31/2022
Frank Denman	Seattle	WA	98118 US	3/31/2022
Matthew Chicoine	Tacoma	WA	98405 US	3/31/2022
Verdi Maynard	Tacoma	WA	98409 US	3/31/2022
XueXin Xu	Seattle	WA	98118 US	3/31/2022
Christine Wynder	Olympia	WA	98502 US	3/31/2022
margarett channell	Double Springs		35553-4818 US	3/31/2022
Davaria Tucker	Auburn	WA	98002 US	3/31/2022
Stevwn Aspiras	Seattle	WA	98122 US	3/31/2022
Jessica Gutierrez	London		US	4/1/2022
Jess Priest	Lebanon		17046 US	4/1/2022
Braeden Van Deynze	Seattle	WA	98118 US	4/1/2022
Maggie Stpierre	New Bedford		2740 US	4/2/2022
Tomiko Zumoto	Seattle	WA	98108 US	4/2/2022
Lara Peterson	Bellevue	WA	98007 US	4/3/2022
Erica Johnson	Lynnwood	WA	98087 US	4/3/2022
KC Chang	Bellevue	WA	98006 US	4/3/2022
Sheila Trangchui	Renton	WA	98056 US	4/4/2022
Eva Chuc			US	4/4/2022
Jeanette Nguyen	Seattle	WA	98102 US	4/4/2022
I don't even go here I use to tho-	Chicago		60623 US	4/5/2022
yarm wmsna	brunswick		31525 US	4/5/2022
Yongkang Zhou	Seattle	WA	98118 US	4/5/2022
stewart wong	Seattle	WA	98122 US	4/5/2022
Sarah Kendall	Seattle	WA	98134 US	4/5/2022
Richard Mok	Brea		92821 US	4/6/2022
Irene Luong	Seattle	WA	98108 US	4/6/2022
Kathy Nguyễn	Seattle	WA	98199 US	4/6/2022
Kyle Richmond	Memphis		38128 US	4/6/2022
Lindsay Mar-DeYoe	Renton	WA	98059 US	4/6/2022
Cynthia Fong	Seattle	WA	98102 US	4/6/2022
Myles Mawa	Seattle	WA	98115 US	4/6/2022
Bonnie Ho	Bothell	WA	98021 US	4/6/2022
Alex Rutherford	Seattle	WA	98107 US	4/6/2022
Joshua Whalen	Seattle	WA	98107 US	4/6/2022
Jacky Chen	Redmond	WA	98052 US	4/6/2022
Trinity Higgins	Seattle	WA	98126 US	4/6/2022
Christopher Burfeind	Seattle	WA	98118 US	4/6/2022
Kerri Torres	Bronx		10454 US	4/6/2022
Marley Raunig	seattle	WA	98118 US	4/6/2022
Zach [REDACTED]	Chicago		60629 US	4/6/2022
Maleka Breeze	Houston		77018 US	4/6/2022
Stacy Huang	Renton	WA	98059 US	4/6/2022
Lorynn Tate	Bremerton	WA	98312 US	4/6/2022

Move Forward on 4th Petition Signees

Tim Mar	Seattle	WA	98119 US	4/7/2022
Cassie Kang	Seattle	WA	98122 US	4/7/2022
Audrey Ann Minter	Rocky Point		11778 US	4/7/2022
Kimberly Dross	San Antonio	TX	78201 US	4/8/2022
Hannah Howzdy	Sherman Oaks		91401 US	4/8/2022
Janelle Guldahl	Seattle		98107 US	4/8/2022
Kevin Ono	Seattle	WA	98108 US	4/8/2022
Jonaven Garcia	Los Angeles		90065 US	4/9/2022
Chelsie Alderette	Albuquerque		87105 US	4/10/2022
Shanon Williams	Indian Trail		28079 US	4/11/2022
Jakob Helleis	Los Angeles		90022 US	4/11/2022
Kimberly Tripodi Photo	Bremerton	WA	98310 US	4/11/2022
Harvey Sadis	Seattle	AL	98122 US	4/11/2022
Angelina Beecham	Bellingham	WA	98225 US	4/12/2022
Julie Guarino	Olympia	WA	98501 US	4/13/2022
shery corpuz	Antioch		94531 US	4/13/2022
Dylan Sedlitsky	Washington		15301 US	4/13/2022
Alicia Williams	Austin		78724 US	4/13/2022
Sea Chan	Seattle	WA	98101 US	4/13/2022
Kaitlin Madriaga	Seattle	WA	98115 US	4/13/2022
Casey Roth	Seattle	WA	98122 US	4/13/2022
Yilin Chan	Renton	WA	98058 US	4/13/2022
Sara Jones	Puyallup	WA	98375 US	4/13/2022
Eva Lee	Seattle	WA	98122 US	4/14/2022
Kellsey Huizenga	Fairbanks		99709 US	4/14/2022
Jennifer Simpson	Seattle	WA	98102 US	4/14/2022
Shantel Smith	Salt Lake City		84107 US	4/14/2022
Erika Irwin	Seattle	WA	98118 US	4/14/2022
Lamel Harris	Antioch		94509 US	4/14/2022
Craig Thompson	Seattle	WA	98122 US	4/14/2022
Elaine Moy	Seattle	WA	98136 US	4/15/2022
Sofia Simonton Siegel	Seattle	WA	98105 US	4/15/2022
Tuyen Than	Seattle	WA	98104 US	4/15/2022
Toni Thomas	Seattle	WA	98109 US	4/15/2022
Christa Thomas	Seattle	WA	98104 US	4/15/2022
Marisa Chan	Seattle	WA	98104-2420 US	4/15/2022
Edie Simpson	Asheville		28805 US	4/15/2022
Arlene Antonio	Seattle	WA	98108 US	4/15/2022
Hety Lee	Seattle	WA	98118 US	4/15/2022
Kaman Kong	Bellevue	WA	98006 US	4/15/2022
Frances Nguyen	Seattle	WA	98118 US	4/15/2022
Krizten Breidenich	Seattle	WA	98144 US	4/15/2022
Andrea Chin	Seattle	WA	98126 US	4/15/2022
Maricel Mueller	Seattle	WA	98188 US	4/15/2022
Adam Mueller	Seattle	WA	98188 US	4/15/2022
Beth Scott	Seattle	WA	98118 US	4/15/2022
Gen Saechao	Renton	WA	98056 US	4/15/2022

Move Forward on 4th Petition Signees

Anita Chhun	Seattle	WA	98119 US	4/15/2022
Max Payton	Seattle	WA	98122 US	4/15/2022
Joanie Leung	Seattle	WA	98106 US	4/15/2022
Kulla Jatani	Seattle	WA	98118 US	4/15/2022
Khyree Smith	Seattle	WA	98106 US	4/15/2022
Wendnara Phok	Burlingame	CA	94010 US	4/15/2022
Khrishar Williams	Seattle	WA	98118 US	4/15/2022
Cielle Carlton	New York	NY	10038 US	4/15/2022
Stephanie Osias	Kent	WA	98031 US	4/15/2022
Jen Phan	Renton	WA	98059 US	4/15/2022
Cailey Nickerson	Seattle	WA	98108 US	4/15/2022
Ashley Topacio	Seattle	WA	98106 US	4/15/2022
Terrance Nicholas	Seattle	WA	98104 US	4/15/2022
Sovedan Hat	Puyallup	WA	98371 US	4/15/2022
Jackie Hoang	Renton	WA	98056 US	4/15/2022
Joanne Li	Lynnwood	WA	98036 US	4/16/2022
Briseida Zuniga	Harlingen		78550 US	4/16/2022
Kevin Sae	Seattle	WA	98108 US	4/16/2022
Sivilay Tracy	Seattle	WA	98118 US	4/16/2022
Tyler Moriguchi	Seattle	WA	98144 US	4/16/2022
Stephen Hoffmann	Seattle	WA	98126 US	4/16/2022
Alexander Tsai	Seattle	WA	98101 US	4/16/2022
Martha Tran	Seattle	WA	98101 US	4/16/2022
Jeff Hou	Seattle	WA	98115 US	4/16/2022
Lindsey Speights	Seattle	WA	98108 US	4/16/2022
Connie So	Seattle	WA	98118 US	4/17/2022
Jeremy Mac	Seattle	WA	98122 US	4/17/2022
Jared Delo	Seattle	WA	98126 US	4/17/2022
Wing Wong	Seattle	WA	98198 US	4/17/2022
Andrea Gonzales	Seattle	WA	98101 US	4/17/2022
Hyeongeun Park	Seattle	WA	98122 US	4/17/2022
Blake agrade	Seattle	WA	98122 US	4/17/2022
Wilson Chin	Seattle	WA	98122 US	4/18/2022
Osmir Diaz	Falls Church	VA	22042 US	4/18/2022
Austin Anderson			US	4/18/2022
Aimee Germany	Bothell	WA	98012 US	4/18/2022
Cindy Garrison	Kent	WA	98032 US	4/18/2022
olivia dippel	marion		52302 US	4/18/2022
Ruby Wilson	Seattle	WA	98194 US	4/18/2022
Lydia Wilson	Seattle	WA	98136 US	4/18/2022
TJ McDonald	Seattle	WA	98103 US	4/18/2022
Stephanie Shek	Seattle	WA	98104 US	4/18/2022
Diana Bang	Edmonds	WA	98020 US	4/19/2022
Yurika Bang	Bothell	WA	98011 US	4/19/2022
Arian Flores			US	4/19/2022
Eric Cai	Kent	WA	98031 US	4/19/2022
Maxim Rivera	Seattle	WA	98160 US	4/19/2022

Move Forward on 4th Petition Signees

Ryan r	Seattle	WA	98118 US	4/19/2022
Kieu Bang-ha	Seattle	WA	98168 US	4/19/2022
Belinda Nghiem	Kent	WA	98031 US	4/19/2022
Kevin Quitoriano	seattle	WA	98104 US	4/19/2022
Sybil Meyer	Seattle	WA	98104 US	4/19/2022
Ellison Shieh	Seattle	WA	98122 US	4/19/2022
Emily Yang	Seattle	WA	98133 US	4/19/2022
Vanessa Ko	Seattle	WA	98178 US	4/19/2022
Kaitlin Uemura	Seattle	WA	98103 US	4/20/2022
diane huggins	brooklyn	NY	11207 US	4/21/2022
Alvin Lai	Renton	WA	98056 US	4/21/2022
Josh Standiford	Lake Zurich		60047 US	4/21/2022
Betty Kong	Mercer Island	WA	98040 US	4/22/2022
Benny Kanner	Bronx		10463 US	4/22/2022
John Malcomson	Seattle	WA	98199 US	4/22/2022
stacy zanfardino	Willow Spring		27592 US	4/22/2022
Isaiah Ticeson- Smith	Seattle	WA	98116 US	4/22/2022
Crystal Tam	Seattle	WA	98008 US	4/22/2022
Yen Ma	Seattle	WA	98115 US	4/22/2022
TK Le	Seattle	WA	98104 US	4/22/2022
Sean Guild	Seattle	WA	98105 US	4/22/2022
Hannah Blacksmith	Seattle	WA	98105 US	4/22/2022
Q Chen	Seattle	WA	98104 US	4/22/2022
Alex Wynne	Seattle	WA	98198 US	4/22/2022
Nicholas Van Roekel	Seattle	WA	98126 US	4/22/2022
Silas Morrow	Kent	WA	98032 US	4/22/2022
Agnieszka Morrow	Tacoma	WA	98424 US	4/22/2022
Christopher Morrow	Kent	WA	98032 US	4/22/2022
Simon Short	Seattle	WA	98199 US	4/22/2022
Tess Majerus		WA	US	4/22/2022
Jackie Mills			US	4/22/2022
Lisa Devine	Seattle	WA	98115 US	4/22/2022
William Ogden	Sammamish	WA	98074 US	4/22/2022
Jenny Chung	Seattle	WA	98122 US	4/22/2022
Kally Sperry	Everett	WA	98204 US	4/22/2022
Michelle Chang	Seattle	WA	98118 US	4/22/2022
Eva Linh	Bellevue	WA	98004 US	4/22/2022
Lily Nguyen	Dallas	TX	75218 US	4/22/2022
Stephanie Nguyen	Honolulu	HI	96817 US	4/22/2022
JUNKO ISHII	Seattle	WA	98118 US	4/22/2022
Megan Takushi	Honolulu	HI	96814 US	4/22/2022
Raymond Chan	Seattle	WA	98122 US	4/22/2022
Hannah Moon	Seattle	WA	98122 US	4/22/2022
Cheuk-Ning Li	Bellevue	WA	98006 US	4/22/2022
Bonnie Fan	Sacramento	CA	95815 US	4/22/2022
Aaron Mew	Seattle	WA	98102 US	4/22/2022
Billy Ta	Bothell	WA	98012 US	4/22/2022

Move Forward on 4th Petition Signees

Jasmine Hui	Seattle	WA	98121 US	4/22/2022
Theresa Le	Seattle		98144 US	4/22/2022
Paul Kunkel	Lynnwood		98046 Guatemala	4/22/2022
Gina Chaleunphonh	LeÃ³n		24005 Spain	4/22/2022
Jordan Bush	Seattle	WA	98112 US	4/22/2022
Deborah Jacober	Olympia	WA	98501 US	4/22/2022
Kevin Dofredo	Kent	WA	98032 US	4/22/2022
iris silan	seattle	WA	98105 US	4/22/2022
Angela Ma	Bellevue	WA	98004 US	4/22/2022
Kai Chung	Seattle	WA	98117 US	4/22/2022
Aleisha Silan	Bellingham	WA	98226 US	4/22/2022
Olivia Lyons	Seattle	WA	98087 US	4/23/2022
Sarah Jordan	Shoreline	WA	98177 US	4/23/2022
Lucas Galarneau	Seattle	WA	98122 US	4/23/2022
May Chin	Seattle	WA	98178 US	4/23/2022
Mei Chin	Renton	WA	98056 US	4/23/2022
Caitlin Grainger	Seattle	WA	98101 US	4/23/2022
Lemuel Day	Placentia	CA	92870 US	4/23/2022
Micah Clark	Seattle	WA	98109 US	4/23/2022
Kayley Ka	Seattle	WA	98168 US	4/23/2022
Abby Larson	Seattle	WA	98104 US	4/23/2022
Marina Moncada	Seattle	WA	98101 US	4/23/2022
Theodore Gandall	seattle	WA	98104 US	4/23/2022
Xiahni Xolotl	Oakland	CA	94603 US	4/23/2022
Son Wang	Federal Way	WA	98003 US	4/23/2022
Janelle Barlow	Seattle	WA	98106 US	4/23/2022
Erin Shigaki	Seattle	WA	98144 US	4/23/2022
Marci Leong	Bellevue	WA	98006 US	4/23/2022
diana robbins	Seattle	WA	98118 US	4/23/2022
Meital Smith	Seattle	WA	98115 US	4/23/2022
Garret Dong	Kent	WA	98031 US	4/23/2022
Zhen Zhang	Kirkland	WA	98052 US	4/23/2022
Minh Nguyen-Ba	Seattle	WA	98166 US	4/23/2022
Harley Rose	Renton	WA	98056 US	4/23/2022
Vivian Katagiri	Sammamish	WA	98004 US	4/23/2022
karen kim	Seattle	WA	98118 US	4/23/2022
Nurhaliza Mohamath	Seattle	WA	98122 US	4/23/2022
Ted Hung	Bellevue	WA	98008 US	4/23/2022
Sarah Nguyen	Seattle	WA	98126 US	4/23/2022
Grace Borich	Seattle	CA	98133 US	4/23/2022
Milton Lew	Seattle	WA	98136 US	4/23/2022
bert cehovet	Rust	TX	77002 US	4/23/2022
Paul Chan	Sammamish	WA	98075 US	4/23/2022
james cheung	Seattle	WA	98160 US	4/23/2022
Michael T-B	Seattle	WA	98136 US	4/23/2022
Andrew Moore	Stillwater	OK	74075 US	4/23/2022
jim zhang	Seattle	WA	98160 US	4/23/2022

Move Forward on 4th Petition Signees

Katie Luu	Seattle	WA	98168 US	4/24/2022
Lexi Landry	Seattle	WA	98144 US	4/24/2022
Jaria Sulayman	Seattle	WA	98118 US	4/24/2022
Grace Nguyen	Seattle	WA	98122 US	4/24/2022
cool dude232			US	4/24/2022
Nancy Muramoto	Seattle	WA	98144 US	4/24/2022
David Zhang	San Jose	CA	95134 US	4/24/2022
Lilyan Leong	Seattle	WA	98118 US	4/24/2022
Gulshan Berlin	Seattle	WA	98122 US	4/24/2022
Alyn V.	Seattle	WA	98118 US	4/24/2022
Beatriz Hernandez	Richland		99352 US	4/24/2022
Mustaqima Waday	Seattle	WA	98108 US	4/24/2022
Peter Galarosa	Seattle	WA	98122 US	4/24/2022
Jesse Lindquist	Seattle	WA	98146 US	4/24/2022
Kristina Kern	Mill Creek	WA	98012 US	4/24/2022
Yong Qu	Seattle	WA	98126 US	4/24/2022
Kai Longmeier	Seattle	WA	98116 US	4/24/2022
Molly Rooney	Seattle	WA	98103 US	4/24/2022
Michelle Wu	Seattle	WA	98122 US	4/24/2022
Grace Yang	Seattle	WA	98105 US	4/24/2022
Vannie Pham	Tacoma	WA	98424 US	4/24/2022
riley T	irvine		92620 US	4/24/2022
Marie Tietje	Seattle	WA	98102 US	4/25/2022
Nancy. 馬月娥 Lee	Renton	WA	98059 US	4/25/2022
Cheng Guo	Bellevue	WA	98005 US	4/25/2022
Claudia Mateo	Seattle	WA	98168 US	4/25/2022
Yoram Yi	Seattle	WA	98104 US	4/25/2022
Ansuya Somashekar	Seattle	WA	98144 US	4/25/2022
Stephanie Floyd	Seattle	WA	98168 US	4/25/2022
Jasmine Trinh	Sammamish	WA	98074 US	4/25/2022
Carmen Tsuboi Chan	Newcastle	WA	98059 US	4/25/2022
Patti Shimomura	Seattle	WA	98122 US	4/25/2022
sharon wong	Lynnwood	WA	98036 US	4/25/2022
Andrew Horne	Seattle	WA	98109 US	4/25/2022
Beverly Kashino	Seattle	WA	98108 US	4/25/2022
Summer King	Seattle	WA	98118 US	4/25/2022
Jane Tsuboi	Seattle	WA	98108 US	4/25/2022
Madison Woo	Seattle	WA	98144 US	4/25/2022
Norma Tsuboi	Seattle	WA	98116 US	4/25/2022
Jaximus Park	Queens	NY	11361 US	4/25/2022
Tessa Argosino	Seattle	WA	98105 US	4/25/2022
Julie Suda	Bellevue	WA	98004 US	4/25/2022
Anna Riley	Seattle	WA	98105 US	4/25/2022
Kiana Johnson	Seattle	WA	98136 US	4/25/2022
Alexandra Bove	Seattle	WA	98122 US	4/25/2022
Sierra Benko	Olympia	WA	98105 US	4/25/2022
Debbie Kashino	Seattle	WA	98118 US	4/25/2022

Move Forward on 4th Petition Signees

Gail Nomura	Seattle	WA	98125 US	4/26/2022
Lauren Ephriam	Seattle	WA	98122 US	4/26/2022
Daniel Bascom	Seattle	WA	98144 US	4/26/2022
Robert Lohmann	Seattle	WA	98109 US	4/26/2022
Nellie Fujii Anderson	Seattle	WA	98178 US	4/26/2022
Caroline Fuentes	Seattle	WA	98103 US	4/26/2022
Wendy Lum	Renton	WA	98057 US	4/26/2022
Maggie Moran	Seattle	WA	98117 US	4/26/2022
Tim Vallancourt	Seattle	WA	98104 US	4/26/2022
DIANE WONG	Tacoma	WA	98404 US	4/26/2022
yimin yu	Sammamish	WA	98029 US	4/26/2022
Vida Behar	Seattle	WA	98119 US	4/26/2022
Hannah Deleon	Seattle	WA	98122 US	4/26/2022



Neighborhood
with a Sense
of Community

April 26, 2022

Inclusive
and diverse

Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 S. Jackson Street
Seattle, WA 98104

Thriving
Arts District

Dear Ms. Swift:

Home to
Seattle Center

Great local
businesses

Walk, Bike,
Bus, Monorail,
(and drive)

Diverse and
affordable
housing

Historic buildings
with character

Open space for
healthy living

Distinguished
cultural and
philanthropic
organizations

We are submitting the comments below on behalf of Uptown Alliance, a civic organization broadly representing residents and businesses who live, work and play in Uptown. Uptown is one of 6 designated Urban Centers and a recognized Arts & Culture District in Seattle, located on the northwest boundary of the City of Seattle's Center City, includes Seattle Center, and is a regional destination for sports, culture, tourism and public gathering. Our community embraces, supports and helps guide new development that is helping grow Uptown into a vibrant, inclusive, active and exciting place to live, work and visit. We embrace and support increased public investment for pedestrians, bicyclists and transit. We are very excited about Sound Transit's West Seattle Ballard Link Extension Project ("WSBLE"), which will expand Light Rail and realize the vision of better connecting our communities and region. We care deeply about this unique neighborhood both as a regional destination and a fast growing residential and employment center.

Uptown Alliance worked with Sound Transit 3 years ago in early efforts to consider possible alignment locations. We greatly appreciate the additional studies conducted over the last 3 years, now contained and studied in the DEIS documents. We have revisited our earlier assumptions, learned much more about both the construction impacts and opportunities through the DEIS review which have enabled us to more clearly understand the master plan.

These comments were developed and informed by many Uptown Alliance organized community meetings, the input of its Land Use and Transportation subcommittees, and meetings with Sound Transit and City of Seattle agency staff and our very important neighbor Seattle Center. We are very fortunate to have had many volunteers, both business and residents, involved with the drafting of these comments including individuals with a professional background in transportation planning, land use development, and land use law.

With that background in mind, we submit the following comments to the WSBLE Draft Environmental Impact Statement ("DEIS"). The comments are categorized according to:

- (1) Important general community considerations that should guide project decisions and
- (2) Requests for specific actions.

General Community Considerations to Guide Agency Decision-making

- Uptown Must Continue to Function as a Vibrant Neighborhood and Important Regional Center. Uptown is a designated Urban Center with residents, workers, eventgoers, tourists, with significant “to and through” traffic from visitors and commerce from across the region on a year-round basis. Our neighborhood population has doubled over the last 10 years, and we expect it to continue to grow. As the impact of COVID recedes, we expect to return to previous levels of visitors which exceeded 12 million annual visitors to our neighborhood to visit Seattle Center. This past year has seen sellout crowds at the recently completed Climate Pledge Arena with capacity crowds 3-4 nights a week. Given the unique economic attributes of this community and its importance and impact to the overall region and city, special effort must be given to ensure the decision around its preferred station location and construction are managed in such a way to ensure the project does not “swallow” and paralyze the very community it was intended to help. Uptown consists of many residential units and small businesses in addition to the plethora of visitors to Seattle Center events. This balance of needs must be dealt with in a thoughtful manner.
- Uptown Businesses Must Continue to Operate and Thrive. Uptown has a vibrant commercial district comprised of mostly small businesses operated by independent owners. These small businesses just survived the disruptions associated with the construction of Climate Pledge Arena and the Pandemic. Given their sensitivity to further shutdowns and loss of business, it is critical that the project coordinate with Sound Transit and City of Seattle to ensure they remain open during construction and customer access to these establishments is maintained, while also providing relief and assistance so that further business closure and loss is avoided.
- Transit Connections and Pedestrian Movement are Critical. We expect the Seattle Center/Uptown station will be one of the busiest and most well utilized light rail stations outside of downtown Seattle given the number of residents, employers and year-round 12+ million visitors coming annually to Seattle Center. Against this backdrop, we believe it will be important to ensure Sound Transit designs, constructs and operates a station to effectively serve a highly diverse set of users and the intensive pedestrian environment in which such a station will be located.
- Leverage and Effectively Coordinate Light Rail with other Transit Systems serving Seattle Center and Uptown. Uptown is served by King County Metro Transit, the Seattle Streetcar and the Seattle Monorail. Sound Transit must

ensure the design, construction and operations of the new light rail line will effectively leverage and coordinate with these other systems as well as the new bicycle and pedestrian infrastructure in development, so they are all complimentary to each other and serve the people who need to access the neighborhood.

- Coordination and Linkage to City of Seattle Projects. The City of Seattle will be developing other major capital projects in this vicinity during the time of Sound Transit's project such as redevelopment of Memorial Stadium, Thomas Street Corridor improvements, and Seattle Monorail station improvements. The latter two transportation projects must be finished prior to start of construction of the WSBL line so that those routes can provide accessibility to Uptown and Seattle Center as ST3 construction temporarily closes other routes. We request Sound Transit's plans include this in their additional analysis and schedules are coordinated.
- Consider Leveraging Transit Oriented Development Opportunities. The agency should explore during its early planning and design phase where there are opportunities to partner or build the light rail station and line in conjunction with other development occurring in the neighborhood and maximize community development opportunity. The Uptown Alliance stands ready to assist the agency in exploring such an approach or identify potential development partners. Our Land Use Committee should play a big role in working with Sound Transit and the City on this.

Requests for Specific Actions

- Station Name. Given the station will serve both Seattle Center and the large Uptown Urban Center, the station name should accurately reflect this and be named Seattle Center/Uptown. This is consistent with other station names such as Alaska Junction, Avalon, SODO, CID, SLU, Interbay and Ballard as well as City Council Resolution 32001 and has the support of Seattle Center.
- Signage and Wayfinding. We request Sound Transit work with Uptown Alliance and the Uptown Arts & Culture Coalition to develop artwork & design appearance specific to this neighborhood Arts & Culture District. Additionally, wayfinding will be a critical part of the design as combined ridership serves both millions of visitors as well as residents and businesses. Careful consideration and design of Wayfinding needs to be coordinated with Seattle Center and the Uptown Alliance.
- Project Construction Impacts. The DEIS lacks critical information on how the project and proposed station location construction will impact access and circulation within the neighborhood and Seattle Center, with its dense mixed-use developments as well as key cultural venues located on the north and west

sides of Seattle Center campus. This information is critically necessary to inform the community's choice for a preferred station location given such construction impacts could result in the permanent displacement of existing performance venues and businesses. Given what is at stake, we ask Sound Transit to conduct studies now and provide this information to the public because we believe such information will be important for both the public and Sound Transit in making decisions about the station route, station entry locations and the project in this segment area.

- Construction Management Plan. We join Mercer Stakeholders and our other north downtown communities in requesting the establishment of a Construction Coordination Committee with agency representatives from Sound Transit and City of Seattle to develop a plan to minimize construction impacts. Such a construction management plan should include:
 - Avoiding impacts to transit, especially fixed rail transit or bus service with no adequate detour route. Providing additional transit service in areas acutely impacted.
 - Providing assistance to employers that encourages and facilitates transit ridership.
 - Establishing requirements for maintaining access to venues and businesses in construction contract documents.
 - Developing a communications plan to inform patrons, businesses, employees, and local residents of alternative route options. Providing real-time and advance-notice information on traffic movement, detour routes, and access.
 - Implementing public education measures and creative marketing ideas that promote access and attractiveness of venues and businesses.
 - Defining appropriate freight routes to accommodate large trucks and proactively communicating changes to street and route access.
 - Local businesses – please provide a clear analysis of parking impacts during construction to allow unfettered access for customers that frequent private businesses and proposed mitigation measures for customer access to businesses.
 - There are numerous concerns about the stability of the hillside at Kinnear Park as the rail line exits the hillside that or travels under the hillside, that need to be studied further to ensure the geotechnical requirements are understood by the neighborhood and residential projects that could be impacted.
- Alternatives. The DEIS lacks critical information in its study and comparison of possible alternatives. More information is needed on concepts such as the “mix and match” of alignments connecting an alternative Harrison station and

Mercer station. More study is needed on whether moving station location possibly west on Republican may enable one entrance to better serve the area or if moving the station entrance to the north side of the street presents any possible reduced impacts or opportunities. This study needs to include more comprehensive analysis of the proposed stations at the borders between South Lake Union and the eastern edge of Uptown/Seattle Center.

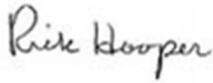
- Keeping traffic moving along Mercer during construction. The DEIS lacks critical information in its study of transportation impacts for an alternative Mercer station. To maintain access and reasonable traffic circulation during construction, Sound Transit needs to develop a multi-modal, Transportation Mitigation plan with SDOT to assess if a Mercer station location is a viable alternate for the community. The study should consider if moving traffic to the south side of Mercer will increase temporary capacity. The current plan in the DEIS will cause massive delays to a very critical east-west transportation corridor, will impact visitors, commuters, and the neighborhood in a negative way. Special and thorough studies of how Sound Transit will keep traffic flowing is critical.
- Event Surge Impacts. The DEIS lacks critical information about how it will serve as an event station at Seattle Center. Sound Transit staff indicated at a recent public meeting upon questioning that light rail service, including station operations, as a standard and normal practice, do not consider surge events when there is a significant spike in demand for transit service or station usage. We believe this is a significant deficiency and must be considered during the planning and design for a location such as Seattle Center/Uptown station. A passenger flow/crowd management plan that identifies how crowds will disperse after large events throughout the campus and neighborhood to reach station entrances should be developed in conjunction with Seattle Center and SDOT to determine what pedestrian improvements are necessary for adequate queuing and safety so that the demands for crowd events can be met. Additionally, analysis is needed to determine the train movements to establish the capacity to load surge crowds.
- Cut and Cover Construction Approach. The DEIS lacks critical information about the impacts of Cut and Cover Construction and potential alternative methods. Given the significant noise and vibration impacts to transportation and transit from the cut-and-cover method, the DEIS should evaluate alternative construction techniques such as mining to mitigate these significant adverse impacts.
- Tunnel Portal Issues. The DEIS is deficient in its comparison of the impacts and opportunities between exiting tunnel portal plan entry/exit locations for the preferred or alternate alignment that connects to the Elliott Ave flyover or any

other options. Better analysis is needed to evaluate the comparison of impacts from the tunnel portals including displacement of residential units and businesses, as well visual and noise impacts to adjacent residents and businesses. Please provide a side-by-side analysis of the impacts of the tunnel portals in the preferred route and alternate routes.

- Cumulative Impacts Should be Better Understood and Addressed. The DEIS lacks critical information around project cumulative impacts for the Uptown community resulting from construction impacts and road closures, which are presented in isolation from one another. The project and its construction plans should be carefully analyzed in a more holistic fashion for the public and decisionmakers to better understand the cumulative impacts of such a project, particularly in segment communities such as Uptown, where disruptions could have significant region and citywide implications. An example of this is the concurrent construction of the selected station east of the Seattle Center/Uptown station.
- Transit Oriented Development Opportunities.
 - Please provide a side-by-side analysis and visual depiction between Uptown alternatives showing the land that is anticipated to be required by Sound Transit that could be available for disposition after the project is completed.
 - Uptown strongly encourages TOD housing that supports Uptown's Guiding Principles for development of a diverse range of housing types and affordability levels to meet the growing demands of families and singles, workers and retirees, local arts and culture workforce.
 - Please provide graphics to show opportunities to create public plazas and pedestrian corridors to serve the neighborhood with festival streets & community gathering spaces.
 - Please provide information and opportunities to incorporate public art at the station and in the neighborhood, particularly as Uptown is a designated Arts & Culture District.
- Displacements of Residents and Businesses. The DEIS lacks critical information about cumulative impacts for the displacement of residential units and businesses in Uptown. Further analysis and visuals of Appendix L 4.1 are needed for the community to easily compare the impacts between alignments.
- Historic Buildings. The DEIS lacks critical information about impacts on historic buildings and especially the well-loved Unreinforced Masonry (URM) brick buildings in Uptown. Better analysis from Sound Transit is needed to ensure the protection and preservation of these buildings during construction.

It is clear that the DEIS represents a great deal of effort and thought and we appreciate the work Sound Transit has committed to this important endeavor. But, because of the complexity of the challenges and the significance of the impact on the Uptown Arts & Culture District, we trust you can understand our concerns. The residents and businesses of Uptown Arts & Culture District look forward to further engagement and collaboration in the delivery of the WSBLE and the Seattle Center/Uptown station.

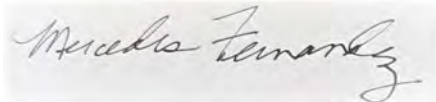
Sincerely,
Uptown Alliance



Rick Hooper, Uptown Alliance Chair



Maria Barrientos, Co-Chair Land Use and Sound Transit Review Committees



Mercedes Fernandez, Co-Chair Land Use and Sound Transit Review Committees

Uptown Alliance Members:

Zac Cooper, Executive Committee and business owner
Pinky Estell, Executive Committee and Uptown Arts & Culture Coalition, Chair
Deborah Frausto, Executive Committee and business owner
Lisa Power, Executive Committee, Tidy Uptown, Chair and business owner
Nancy Silberg, Executive Committee and Schools Committee, Chair
Cyrus Despres, Land Use Committee member
Melanie Corey-Ferrini, Land Use Committee member
Donald Kunz, Land Use Committee member
Michele O'Connell, Tidy Uptown Committee member
Linda Rozanski, Tidy Uptown Committee member
Shannon West, Tidy Uptown Committee member and business owner

Additional Organizational Supporters:

Essex Queen Anne LLC (EXPO Apartments)
Diana Knauf, SIFF President, Board of Directors
Paula Mueller, Queen Anne Community Council Board of Trustees, Chair
Nancy Weinbeck, Bayview Retirement Community, CEO
Jane Zalutsky, Seattle Center Foundation, Executive Director

Uptown Alliance DEIS Response

April 26, 2022

7 | Page

cc: Sound Transit
Peter Rogoff, CEO
Kent Keel; Board Chair
Dow Constantine; Vice-Chair
Dave Somers; Vice-Chair
Board Members:
Nancy Backus
David Baker
Claudia Balducci
Bruce Dammeier
Cassie Franklin
Christine Frizzell
Bruce Harrell
Debora Juarez
Joe McDermott
Roger Millar
Ed Prince
Kim Roscoe
Dave Upthegrove
Peter Von Reichbauer
Kristina Walker
Mark Riker, Sound Transit's Labor Liaison

cc: Seattle City Council Members
Lisa Herbold; District 1
Tammy J. Morales; District 2
Kshama Sawant; District 3
Alex Pedersen; District 4
Debora Juarez; District 5
Dan Strauss; District 6
Andrew J. Lewis; District 7
Teresa Mosqueda; Position 8
Sara Nelson; Position 9

cc: City of Seattle
Bruce Harrell, Mayor
Marshall Foster, Director, Seattle Office of the Waterfront and Civic Projects
Julia Levitt, Strategic Advisor, Seattle Center Redevelopment
Sara Maxana, Acting Sound Transit Program Director
Markham McIntyre, OED Director
Robert Nellams, Director of Seattle Center
Rico Quirindongo, Acting Director of OPCD
Kristen Simpson, Interim SDOT Director
Greg Wong, DON Director

cc: Terry White, General Manager, King County Metro

WING LUKE MUSEUM

VIA ELECTRONIC MAIL

WSBLE Draft Environmental Impact Statement Comments
c/o Lauren Swift
Sound Transit
401 S. Jackson St.
Seattle, WA 98104

RE: Comments on the DEIS for West Seattle and Ballard Link Extensions Project

Dear Ms. Swift:

We, the staff of the Wing Luke Museum of the Asian Pacific American Experience (WLM), are pleased to provide these comments on the Draft Environmental Impact Statement (DEIS) for the West Seattle and Ballard Link Extensions (WSBLE) Project, notice of which was issued on January 28, 2022.

ABOUT THE WING LUKE MUSEUM

The mission of the Wing Luke Museum of the Asian Pacific American Experience (WLM) is to connect everyone to the dynamic history, cultures, and art of Asian Pacific Americans through vivid storytelling and inspiring experiences to advance racial and social equity. Founded in 1966 as a tribute to community hero Wing Luke, an immigrant and first person of color elected to Seattle's City Council in 1962, WLM has served as a community anchor within Seattle's historic Chinatown-International District (CID) for over 50 years. Deeply rooted in our community, our exhibition, gallery and neighborhood tours, public programs and events, and permanent collections are reflective of the widely ranged interests and concerns of the many who call the CID home. Programs are designed to encourage active participation in preserving and promoting Asian American, Native Hawaiian, and Pacific Islander (AANHPI) heritage and culture that have impacted and continue to shape the neighborhood's, city's, and region's cultural landscape.

Our 2008 move into the rehabilitated 1910 East Kong Yick Building/Freeman Hotel enabled us to expand our primary activities including neighborhood revitalization efforts. The Museum now stands as the second largest economic driver for the CID, partnering with 65+ small businesses, and attracting patrons to the family-owned businesses and restaurants. WLM gives voice to traditionally underrepresented populations and directly engages everyday community members through our refined Community Advisory Committees (CACs) approach. This programming development process facilitates community members to tell their own stories, outreach within their networks, and produce ongoing exhibitions and programs, resulting in generational community ownership and stewardship, for our Museum and for our neighborhood. Nationally recognized, this method has been effective in growing a diverse visitorship, inspiring participation, and furthering civic engagement.

WLM is a Smithsonian Institution affiliate and was designated a National Park Service Affiliated Area in 2012. This designation resulted from an Obama administration initiative to transform the federal inventory of cultural resources to more completely reflect the whole American cultures, rather than the 94% Euro-American character of current federal resources. The NPS affiliation includes the Museum within the pantheon of national treasures like Mt. Rainier and Gettysburg Battlefield. The recent NPS

Asian American and Pacific Islander Heritage Theme Study (2019) reflects the importance of preserving AANHPI places and stories; WLM led its Pacific Northwest launch and continues to advance its priorities. WLM was named an American Cultural Treasure in 2020 by the Ford Foundation, one of 20 arts organizations of color nationwide to be awarded as recognition of our role in America's cultural landscape and a boost for survival through the pandemic years.

WLM remains the nation's only museum that shares the pan-AANHPI experience encompassing over 26 ethnic groups, and comprising 18% of King County population, 14% of Snohomish County, and 8% of Pierce County, the largest community of color in the region. Our primary audience is 46% AANHPI and 47% white, 4% Latino, 3% African American; 10% of visitors also identified as mixed/other. Of the 75,000 annual visitors pre-pandemic, we reached 20,000 students onsite each year and provided free tours for students who qualify for federal free/reduced lunch. Our free out-of-school programs for middle and high school students, TeensWay and YouthCAN, serve refugee, immigrant and/or low-income AANHPI youth, help build arts and leadership skills as well as strong intergenerational relationships, and cultivate the next generation of leaders within the CID.

Following in the footsteps of past Civil Rights Movement organizers and carrying out our mission to advance racial and social equity, WLM has extended our relationships to other communities of color, working to build solidarity and dismantle structural racism. The Museum has served over the past seven years as a founding member of a collaboration of three communities of color in Seattle, all in neighborhoods significantly threatened by displacement, and dedicated to developing neighborhood assets to build community, through knowledge sharing, shared policy analysis, and joint advocacy. This Race and Social Equity Taskforce (RSET) unified African American and AANHPI communities to support each other. RSET's participation in developing Seattle's 10-year comprehensive growth/investment plan (2016) resulted in producing an Equity Analysis, Equitable Development Implementation (EDI) Plan, and a funded financing plan with specified community-owned projects for implementation.

As such, we hold EDI values, including centering communities most impacted by displacement; community-driven strategies led by community self-determination, influence, and leadership; recognition of the complexity of community needs such as economic development, affordable housing, cultural development, education, healthcare, and food sovereignty; acknowledging historic injustices to address systemic racism and institutional barriers; strong, accountable, accessible, transparent, and culturally appropriate solutions; and valuing of existing community and cultural assets. We also affirm Sound Transit and the City of Seattle's commitment through their Racial Equity Toolkit (RET) process to: limit harmful impacts of the WSBLE Project and work with impacted communities to identify opportunities to repair past harm; maximize connections for all users; and ensure that community shapes the decisions that impact them, through self-determination and with a 100-year vision for future generations.

SUMMARY CONCLUSIONS COMMON TO ALL ALTERNATIVES

Upon review of the DEIS, participation in many Sound Transit workshops, and in light of our experience and expertise, we have reached the following conclusions common to all alternatives for the Chinatown-International District Segment:

- The DEIS does not adequately encompass the historic reality of past public policies and actions, the everyday lived legacy of those actions to the present-day, and the subsequent real threats to future survival. As such, any conclusions made fall short of depth and breadth of the cumulative impacts from the WSBLE Project.

- The DEIS relies on limited information to evaluate historic and archaeological resources as a result of inequitable practices within the preservation field. Further information needs to be gathered and considered to make a better determination of impacts.
- The DEIS does not adequately recognize the uniqueness of the CID nor takes into consideration emergent threats to its neighborhood cohesion, all the more made evident during the pandemic.
- The Final EIS requires greater clarification on multiple fronts to better assess construction impacts.

DETAIL OF CALL FOR FURTHER EXPLORATIONS

Chapter 5: Cumulative Impacts: Look to the past to understand the present and lead the future

The DEIS does not adequately encompass the historic reality of past public policies and actions, the everyday lived legacy of those actions to the present-day, and the subsequent real threats to future survival. As such, any conclusions made fall short of depth and breadth of the cumulative impacts from the WSBLE Project.

While Section 5.2.2 accounts for some of the past public infrastructure projects impacting the CID, it needs to go further acknowledging the overarching context of race-based Exclusion, which was made manifest in federal and state laws and executive orders, such as the 1886 Chinese Exclusion Act, 1864/1921 Alien Land Laws, and 1942 EO9066 forced removal of Japanese Americans, alongside local ordinances, be it zoning which limited the growth of families by restricting the CID to commercial/industrial and prohibiting single-family home construction or fire code legislation leading to the abandonment of upper-story historic hotels and apartments, destabilizing the neighborhood, and resulting in the CID having the highest concentration of vacant buildings in the city. This same section fails to acknowledge the cumulative impact of past public infrastructure projects, decade after decade, from the 1949 Charles Street Maintenance Facility, to the 1960s I-5 Freeway, to the 1972 Kingdome, to the 1999 baseball stadium, to the 2002 football stadium, to the 2015 Streetcar main and spur line.

The City of Seattle's Equitable Development Initiative acknowledges that historic policies and practices of housing exclusion (aka redlining) has led to present-day access to opportunity and risk of displacement. Indeed, as stated in the City of Seattle's 2016 Equitable Development Implementation Plan, in regard to the CID, *"the cultural anchors of this neighborhood are subject to displacement pressures from re-development as well as through the loss of existing buildings due to building failure whether catastrophic or through long-term disintegration."* This document rates the neighborhood as *"very high risk of displacement, scoring 31.0 out of a citywide risk range of 8 – 32.7."* (City of Seattle 2016 Equitable Development Implementation Plan, page 49). The conclusion made in Section 5.4.2 that the "adverse cumulative impact from property acquisition is not expected" is inherently faulty because it fails to take into account the existing present-day conditions of high displacement within the CID and the cascading effect additional displacement can have on an already fragile, strained neighborhood.

Similarly, although Section 5.4.5.1 recounts past development and policies that have resulted in the displacement of CID communities, it fails to adequately quantify those losses and describe their ongoing impacts. The Final Environmental Impact Statement should include more specific information, including whenever possible, numbers of people, businesses, organizations displaced/impacted, and wherever possible, maps and photographs showing the location, type, and scale of the properties. Descriptions of the ongoing losses/impacts as a result of these past actions should be included. By doing so, Sound Transit and communities will have fuller information to evaluate strategies and base decisions.

Chapter 5: Cumulative Impacts: Apply better practices to evaluate historic and archaeological resources

The DEIS relies on limited information to evaluate historic and archaeological resources as a result of inequitable practices within the preservation field. Further information needs to be gathered and considered to make a better determination of impacts.

When it comes to historic and archaeological resources, sources for the DEIS refer only to the National Historic Register listing and the Washington State WISAARD database, sources that the National Park Service and Washington State Department of Archaeology and Historic Preservation (DAHP) would both acknowledge have their limitations, especially when it comes to communities of color. Indeed, in May 2018, the National Park Service itself published “Finding a Path Forward,” a theme study from the National Historic Landmarks Program centering on Asian American and Pacific Islander sites and stories, as a step to address its shortfalls. DAHP has been actively seeking support to further its work through the National Park Service Underrepresented Community Grants program, including a 2020 award to conduct a Filipino American Statewide Context and Survey and a 2022 award focused on Chinese American Exclusion in Washington State.

Leaders in preservation also point out the need to acknowledge both tangible and intangible cultural heritage, broadening preservation practices beyond the architecture, and taking into account the lived experiences and stories of the people. Witness, the National Park Service’s own focus on “Tangible and Intangible Cultural Heritage” as integral to its mission (<https://www.nps.gov/articles/tangible-cultural-heritage.htm>); the National Trust for Historic Preservation’s National Impact Agenda for the Preservation Movement also calls for the updating and addition of “new preservation tools and practices so more people can recognize, interpret, protect, and activate a larger and more diverse set of historic places and landscapes” (<https://savingplaces.org/goal-expanded-tools#.YmRrjtrMJPY>).

While we agree that all alternatives would have an adverse effect on historic properties, the identification of what is “historic” and concurrently, what is not, is faulty because of this flawed data. Summary Tables within 4.3.16 are too narrow in scope and consideration. The determination that individual historic properties are not adversely affected just because they are not directly demolished by the WSBLE Project also fails to take into consideration the interconnectedness of these historic properties to tell a fuller story and create an immersive experience. The absence of consideration for two heritage trails created in partnership with the National Park Service, including the Japanese American Remembrance Trail and the Redlining Heritage Trail, further reflects shortcomings in the DEIS.

For WLM ourselves, while we occupy the 1910 East Kong Yick Building/Freeman Hotel, we regard the CID as our “largest exhibit,” have been working to preserve and activate historic properties beyond our walls including Canton and Maynard Alleys, Chiyo’s Garden and Nihonmachi Alley, United States Immigrant Station and Assay Office – Seattle, and the William Eng Residence, and bring visitors, families, and school groups on neighborhood tours year-round, with many sites and businesses slated for demolition or directly impacted by construction under the current WSBLE Project alternatives. Previous WLM visitor surveys indicate that the experience of the CID overall as an authentic, immersive cultural destination is of primary importance to our visitors, where they noted planning a trip to the CID first and folding in a visit to the Museum second as part of that overall experience. Any disintegration of the cultural, historic fabric of our neighborhood, which is already suffering dissolution, will have direct impacts to our own visitorship, revenue, and sustainability over the long-term.

Chapter 4: Neighborhood Cohesion and Social Resources: Protect the treasure that we have
The DEIS does not adequately recognize the uniqueness of the CID nor takes into consideration emergent threats to its neighborhood cohesion, all the more made evident during the pandemic.

We concur with Section 4.3.4.1.1 that concludes that the CID has high neighborhood cohesion but disagree with the conclusion in Section 4.3.4.3.3 that the WSBLE Project would not directly impact neighborhood cohesion. Reasons for this include: 1) the geographic size and density of the CID indicates that any disruption to it will have a higher impact on the neighborhood overall; 2) residential spaces, businesses, cultural spaces, and community organizations are interwoven into a tight-knit interdependent network, a legacy of our historic roots as an “ethnic enclave,” and any disruption to that network will have ripple effects throughout the system; and 3) since the CID has been a place of respite and belonging in the face of racism, discrimination, and exclusion, harm to any part of the CID (all the more amplified by the perpetuation of past harms) threatens the sense of belonging within the neighborhood overall.

Tragically, the sense of belonging for AANHPIs within the U.S., our region, our city, and even our neighborhood has been broken by the rise in anti-Asian American violence during the pandemic. Where we once considered a safe beacon is now conflated with verbal threats and physical assault; continued boarded up storefronts serve as stark reminders of disregard for and disinvestment in the CID.

Attention to caring for and cultivating this sense of belonging needs to be better attended to throughout the DEIS. For example, Section 4.3.17.3.2 concludes that none of the CID Segment alternatives would have long-term impacts to parks and recreational resources, but if elders and youth no longer feel a sense of belonging in the CID then parks such as Hing Hay Park and the Donnie Chin International Children’s Park will lose the people that make them the special places that they are. Similarly, enhancements to the public realm, including directly at the station as well as along routes to it, should foster a sense of belonging, integrating community driven public art designed by community artists, especially those connected to the CID.

Construction Impacts: Clarification needed on multiple fronts

The Final EIS requires greater clarification on multiple fronts to better assess construction impacts. As they relate to the WLM (and concurrently to the CID overall), they include:

- **Insufficient information and inadequate consideration of re-routing of traffic and buses through the CID in Transportation analysis.** This will impact pedestrian safety and neighborhood access for our visitors and school groups, who travel to WLM by public transportation as well as private vehicles, as well as our neighborhood tours who walk throughout the district.
- **Insufficient consideration of vibration impacts in Noise and Vibrations analysis.** With the potential re-routing of buses through the CID, we are especially concerned about vibration impacts to our building, especially related to our areaways.
- **Inadequate consideration of impacts of stadium events in Transportation analysis.** WLM experiences direct impacts due to stadium event traffic. The Transportation analysis needs to take this into account as well.
- **Underestimation of the impacts of parking losses.** Parking in the CID has long been an issue and is a top consideration for our visitors (especially families with young toddlers) and community volunteers coming to the Museum. We have witnessed increased concern related to parking with current safety challenges in the CID.

- **Insufficient Visual and Noise Impact analysis.** Our neighborhood tours are all about sharing the sights and sounds of the CID, whether taking in the view up and down King Street from our 1910 hotel to the Chinatown Gate to King Street Station, standing in the middle of Hing Hay Park to take in its Dragon Mural, Grand Pavilion, Celebrate Happiness Lantern, and Artistic Gateway, or reflecting on the experience of new arrivals or forced removal of others while standing outside King Street and Union Stations. Each tour site also includes guides verbally sharing about the history, as well as asking participants to discuss with the group and introducing them to our neighborhood businessowners.

CONCLUSION


Thank you for this opportunity to respond to the DEIS. As we have set forth, without deeper exploration of past actions and their impacts on the present to establish a more accurate context for assessing the future, conclusions within the DEIS that claim most cumulative impacts would occur only during project construction rather than project operation or that the project would not directly impact neighborhood cohesion are inherently flawed.

Due to the overwhelming cumulative impacts and threats to neighborhood cohesion, built up over 150 years and amplified by the WSBLE Project, furthering and cascading historical, institutional racism, we are concluding our response with a call for exploration of options for refinements to the proposed alternatives beyond what typically occurs from a DEIS to Final EIS that will not result in displacement within the CID. As our response indicates, without exploration of these refinements, the harm to cultural resources and social cohesiveness is far too great to risk the survival of the CID, a treasured place of belonging and an authentic historic cultural district like no other in the nation. Additionally, due to the direct proximity of the 5th Avenue South alternatives within the CID and along its King Street core, we find the 5th Avenue South alternatives unacceptable and call for the options for refinements to move away from the cultural, economic heartline of the CID.

We also call for additional study by external consultants, working with community partners, to address the numerous requests for additional information or exploration, whether related to historic and archaeological resources or the multiple fronts for construction impacts. Racial equity values are incumbent on centering communities most impacted and putting them in decision-making roles with clear accountability.

CID stakeholders, including us as the Wing Luke Museum, have long been pulling up our sleeves to do the hard work to ensure that the CID is the treasure we have all come to love. We have a wealth of planning resources and experience to draw from, whether the 2016 South Jackson Street Connections report, 2019 Jackson Hub concept plans, 2019 Historic South Downtown Community Priorities list, or the forthcoming 2022-2032 CID Neighborhood Strategic Plan. We are eager to continue work on refinements to the WSBLE Project that do not lead to our community's displacement and strategies that mitigate impacts, build on our cultural assets, and elevate the CID, all integral to our 100-year vision for future generations.

Sincerely,



Joël Barraquiel Tan
Executive Director



4/26/2022
Cassie Chinn
Deputy Executive Director