



Operations and Maintenance Facility South

NEPA Draft/SEPA
Supplemental Draft EIS
Comment Summary Report

April 2024

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Acronyms and Abbreviations

| | |
|-----------------|---|
| Belmor | Belmor Mobile Home Park |
| Board | Sound Transit Board of Directors |
| EIS | Environmental Impact Statement |
| EPA | U.S. Environmental Protection Agency |
| FHWA | Federal Highway Administration |
| FTA | Federal Transit Administration |
| NEPA | National Environmental Policy Act |
| OMF | operations and maintenance facility |
| OMF South | Operations and Maintenance Facility South |
| SEPA | State Environmental Policy Act |
| Sound Transit | Central Puget Sound Regional Transit Authority |
| Sound Transit 3 | Sound Transit 3: The Regional Transit System Plan for Central Puget Sound |
| WSDOT | Washington State Department of Transportation |

1 INTRODUCTION

The Central Puget Sound Regional Transit Authority (Sound Transit) is proposing to build an operations and maintenance facility (OMF) in the South Corridor to support Sound Transit's Link light rail system expansion. This expansion and the related increase in the light rail vehicle fleet and daily operations is identified in Sound Transit 3: The Regional Transit System Plan for Central Puget Sound (Sound Transit 3). Under Sound Transit 3, the Link light rail system in central Puget Sound would grow to 116 miles with over 80 stations. Light rail would expand north to Everett; south to Federal Way and Tacoma; east to Redmond, south Kirkland, and Issaquah; and west to West Seattle and Ballard, as shown in Figure 1-1. To support the system expansion, new operation and maintenance facilities are needed in the North and South Corridors in addition to the existing OMF Central and recently constructed OMF East.

1.1 Project History

In March 2021, Sound Transit published a State Environmental Policy Act (SEPA) Draft Environmental Impact Statement (EIS) and requested public comments during a 45-day comment period from March 5 through April 19, 2021. The SEPA Draft EIS evaluated the potential impacts of OMF South to the natural and built environment at three alternative locations: the Midway Landfill Alternative, the South 336th Street Alternative, and the South 344th Street Alternative (Figure 1-2).

Following the SEPA Draft EIS comment period, Sound Transit published a Draft EIS Comment Summary Report in November 2021, which is available to the public on Sound Transit's website: <https://www.soundtransit.org/sites/default/files/documents/operations-and-maintenance-facility-south-deis-comment-summary-report-20211110.pdf>. The report summarized the comments received from Tribes, agencies, jurisdictions, and the public. In December 2021, the Sound Transit Board of Directors (Board) identified the South 336th Street Alternative as the Preferred Alternative.

1.2 Purpose of this Report

As the project design and environmental review advanced, Sound Transit and the Federal Transit Administration (FTA) determined the need for an EIS under the National Environmental Policy Act (NEPA) to support federal funding and approvals. FTA and Sound Transit published the OMF South NEPA Draft/SEPA Supplemental Draft EIS on September 22, 2023 (2023 Draft EIS) and requested public comments during a 45-day comment period that ended November 6, 2023. This report describes the NEPA Draft/SEPA Supplemental Draft EIS comment period process and summarizes the comments received from Tribes, agencies, and the public during the comment period. Appendix A contains comment letters from Tribes and agencies. Appendix B contains comment letters and communications from businesses and community groups. Appendix C contains comment letters, communications, and transcripts of comments from the public.



Figure 1-1 Link System Future Expansion and OMF Site Locations

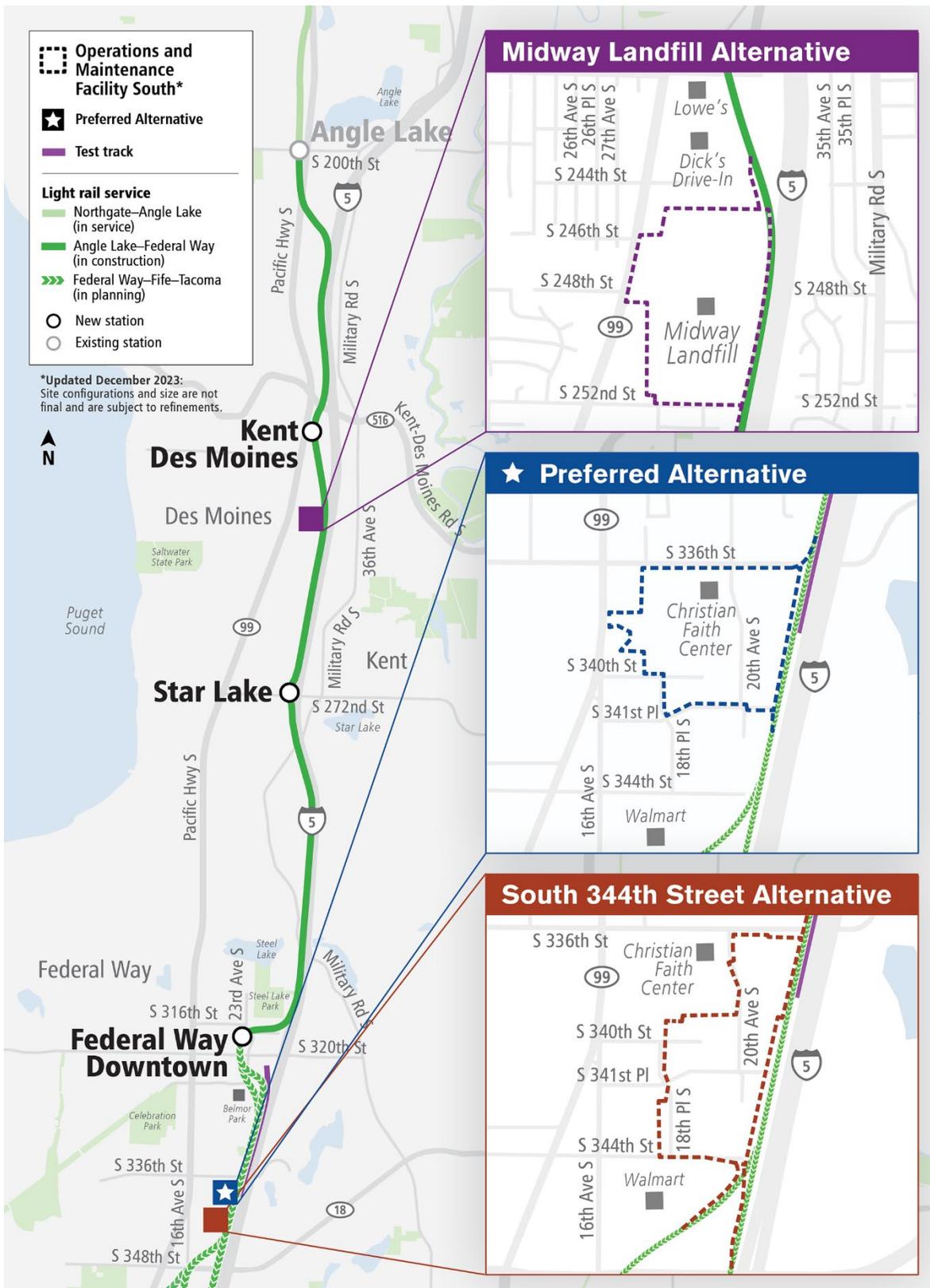


Figure 1-2 OMF South Alternatives

2 COMMENT PERIOD OUTREACH

2.1 Comment Opportunities

The 45-day comment period for the 2023 Draft EIS was from September 22 to November 6, 2023. The following commenting methods were available:

- Online: OMFSouth.participate.online
- Email: OMFSouthDEIS@soundtransit.org
- Phone: (206) 257-2135
- Mail: OMF South Project, c/o Erin Green
Sound Transit
401 S Jackson Street
Seattle, WA 98104
- Verbally: Informational meetings/public hearings (virtual and in person)

2.2 Outreach for the 2023 Draft EIS Comment Period

Near the time of publication of the 2023 Draft EIS, Sound Transit met with representatives from the cities of Federal Way and Kent, local business and community groups, and potentially impacted residents and community members to share information about the project, the 2023 Draft EIS, review the analysis, and answer questions. Sound Transit used several methods to engage agencies and the public during the 2023 Draft EIS comment period. The methods included briefings with the potentially affected cities, two online informational meetings, and an online open house, which was available for the duration of the comment period.

Table 2-1 lists the participants and date of stakeholder meetings, briefings, and listening sessions.

Table 2-1 Stakeholder Meetings, Briefings, and Listening Sessions

| Group | Meeting Date |
|-------------------------|---|
| Kent City Staff | August 31, 2023 |
| Federal Way City Staff | October 5, 2023 October 26, 2023 November 2, 2023 |
| Interagency Group | September 19, 2023 |
| GarageTown | October 16, 2023 |
| Belmor Mobile Home Park | November 1, 2023 |

2.2.1 Informational Meetings and Public Hearings

Sound Transit held two informational meetings/public hearings:

- Online: Thursday, October 19, 2023, 11:30 a.m. – 1:30 p.m.
- In person: Tuesday, October 24, 2023, 5:30 p.m. – 7:30 p.m.
Federal Way Performing Arts Center
31510 Pete von Reichbauer Way S
Federal Way, WA 98003

The meetings were held using different platforms (online and in person), a week apart on different days of the week and at different times of day to accommodate varying stakeholders' ability to attend and participate.

The online public meeting was held on Zoom on Thursday, October 19, from 11:30 a.m. to 1:30 p.m. More than 20 people attended the meeting. The first portion of the virtual meeting was a presentation and a live question-and-answer segment. The presentation provided an overview of the OMF South project and the 2023 Draft EIS comment period. The Q&A segment offered the public the opportunity to submit written questions and have them answered by a panel of Sound Transit staff who represented different disciplines on the project team, including engineering and design, environmental, and property acquisition and relocation. The second portion of the online meeting consisted of a public hearing with a representative of Sound Transit listening to attendees who provided a public comment. Public hearing comments were captured by a court reporter.

The in-person meeting was held at the Federal Way Performance Arts & Events Center on Tuesday, October 24, from 5:30 to 7:30 p.m. More than 25 people attended the meeting. The in-person meeting included an open house, where members of the public browsed displays with information on the environmental review process and 2023 Draft EIS findings. Sound Transit subject-matter experts were available to answer questions from the public. The event also included an overview presentation on the OMF South project and 2023 Draft EIS comment period. Following the presentation, members of the public had the option to return to the open house or participate in the public hearing, where a representative from Sound Transit listened to attendees who provided public comments. Public hearing comments were captured by a court reporter, and attendees had the option to fill out a written comment form at the meeting.

Both meetings used standard accessibility features. The online meeting featured live captioning (in English) and was screen-reader accessible. Sound Transit offered simultaneous interpretation in American Sign Language, Spanish, Korean, and Russian at the online and in-person meetings. The in-person meeting also included translated materials in Spanish, Korean, and Russian. Sound Transit staff communicated the languages and accessibility features throughout the public meetings and hearings to ensure all attendees could fully participate. Languages available for interpretation were based on the demographic data of the study area.

2.2.2 Online Open House

An online open house was available at <https://omfsouth.participate.online/> for the duration of the comment period to inform the public about the project and provide an opportunity to receive feedback using social media tools.

Between September 22 and November 6, 2023, over 1,300 visitors accessed the online open house. Visitors were given the opportunity to comment on the OMF South Draft EIS findings using an embedded electronic comment form. Approximately 23 people submitted comments via the online open house.

2.2.3 Outreach to Minority, Low-Income, and Limited-English-Proficiency Populations

Sound Transit made an intentional effort to provide information and communicate with minority and low-income populations, and those with limited proficiency in English. This effort included the following:

Materials:

- The online open house was fully translated in English, Spanish, Korean, and Russian, which were identified as key languages in the project area. The website was also screen-reader accessible.
- The project mailer that announced the publication of the Draft EIS included information in English, Spanish, Korean, and Russian.
- A toolkit with draft email, newsletter, and social media content was distributed to local organizations and governments to share through their communication channels.
- A Draft EIS handout summarizing key findings was available in print and online. The handout was fully translated in English, Spanish, Korean, and Russian.

Publications:

- Advertisements promoting the Draft EIS comment period were distributed in the Federal Way Mirror, Kent Reporter, International Examiner, El Siete Dias, Korean Times Seattle, and Russian Town Seattle. Geo-targeted Facebook advertisements in English, Russian, and Spanish also ran through the duration of the comment period.

Events and briefings:

- Simultaneous interpretation in American Sign Language, Spanish, Korean, and Russian were available for the virtual public meeting and hearing, and captions in English were available in addition to screen-reader accessibility.
- Interpreters for American Sign Language, Spanish, Korean, and Russian were available at the in-person public meeting and hearing.
- Briefings were offered to social service organizations and community groups in the project area.
- Outreach and engagement with property owners continued after the publication of the 2023 NEPA Draft/SEPA Supplemental Draft EIS in September 2023. Property owners have had the opportunity to request briefings with members of the project through an online scheduling tool. Briefings with property owners included project updates and information on the property acquisition and relocation process.

2.3 Summary of Public Participation and Outreach Activities

During the extended comment period:

- Legal notices were published in the Seattle Times, Tacoma News Tribune, and Daily Journal of Commerce and provided information about the availability of the Draft EIS and public hearings on September 22, September 29, and October 6, 2023.
- 47 people attended the public hearings held on October 19 (virtual, 22 participants) and October 24 (in person, 25 participants).
- More than 1,300 people participated in the online open house, available in English, Spanish, Korean, and Russian. The Spanish site received approximately 5 percent of total visits, the Korean site received approximately 2 percent of total visits, and the Russian site received approximately 2 percent of total visits. In-language site participation correlated with demographic data in the project area: approximately 18 percent of the population speaks Spanish; approximately 4 percent of the population speaks Russian; and approximately 3 percent of the population speaks Korean.
- Several posts were published on Sound Transit’s Facebook page, and more than 350 social media user clicks and engagements were recorded on Sound Transit’s Facebook advertisements.
- Nearly 5,200 mailers were sent to homes, apartments, and businesses in Kent and Federal Way within 0.5 mile of the alternatives. The mailer included translations in Spanish, Korean, and Russian.
- One news release and three update notices were sent to an email list with approximately 4,800 subscribers.
- One email notice was sent to those that commented on the 2021 Draft EIS.
- Posters were distributed to eight community gathering spaces and other areas where the public is likely to congregate in Federal Way and Kent.
- Display advertisements were placed in six local online and print publications, and promoted posts were placed on Facebook for zip codes in the project area, reaching more than 15,400 users.
- Two briefings were provided to potentially impacted property owners, community groups, and other organizations in the project area, as listed in Table 2-1.
- Sound Transit conducted an informational meeting and responded to questions from residents of Belmor, as listed in Table 2-1. The community engagement team also provided individual resident briefings and sent information mailers with a “frequently asked questions” insert responding to common concerns about the project process and relocation, along with notifications regarding a potential early acquisition of a portion of Belmor.

3 COMMENT SUMMARY

Sound Transit received 58 communications during the OMF South Draft EIS comment period. A communication is defined as either a letter, email, voice mail, transcribed oral comment, or electronic comment form, and there are often multiple individual comments within each communication. Most of these communications were from the general public, including potentially affected businesses and community groups. The rest were from Tribes, agencies, and local jurisdictions (Table 3-1). Communications are summarized below according to their sources.

Table 3-1 Communications Received by Commenter Type

| Commenter Type | Number |
|-----------------------------|-----------|
| Tribe | 1 |
| Federal Agency | 2 |
| State Agency | 1 |
| Local Jurisdiction | 1 |
| Business or Community Group | 1 |
| Individual | 52 |
| Total | 58 |

3.1 Summary of Comments from Tribes, Agencies, and Jurisdictions

Sound Transit received five communications from the following Tribes, federal and state agencies, and local jurisdictions (see Appendix A):

- Suquamish Indian Tribe of the Port Madison Reservation (Suquamish Tribe)
- U.S. Environmental Protection Agency (EPA)
- Federal Highway Administration (FHWA)
- Washington State Department of Transportation (WSDOT)
- City of Federal Way

3.1.1 Tribes

Suquamish Tribe

The Suquamish Tribe confirmed receipt of the NEPA Draft/SEPA Supplemental Draft EIS and stated that they had no comments or concerns regarding cultural resources based on the analysis in the Historical and Archaeological Resources Technical Report (Appendix G4) and its associated attachments.

3.1.2 Federal and State Agencies

Environmental Protection Agency

EPA's comments focused on environmental justice. EPA believes OMF South has "the potential to disproportionately impact communities with environmental justice concerns, including tribal, minority, and low-income communities."

EPA asks that the Final EIS further evaluate and identify communities with environmental justice concerns and suggests specific tools for that evaluation, including EPA's EJScreen and the Washington State Department of Health Environmental Health Disparities Map. The agency also asks for a more complete description of efforts to meaningfully engage with communities with environmental justice concerns and describe how those engagement efforts were used to develop the proposed project.

Additional comments from EPA suggest the Final EIS include more information on several elements of the environment, including the following:

- Detail about current air quality conditions and anticipated emissions in the Air Quality and Greenhouse Gas Emissions analysis to address potential impacts on environmental justice communities.
- Detail about current surface water quality and a discussion of the recent EPA-approved Water Quality Standards.
- Status of permitting efforts.
- A summary of coordination efforts with other agencies on specific topics, including the EPA Region 10 Superfund Program regarding the Midway Landfill Alternative and the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and Washington Department of Fish and Wildlife regarding potential impacts to biological resources.
- A summary of coordination with Tribes and how issues have been addressed.
- Details on monitoring during construction and operation of the project and the development of an adaptive management plan so that any necessary adjustments can be made to meet environmental objectives.
- An analysis of the social cost of greenhouse gas emissions.

Federal Highway Administration

FHWA's comments focused on the language accessibility of public outreach and impacts concerning ecosystem and water resources, environmental justice, noise, acquisitions, displacements, relocations, and transportation.

FHWA asked that the discussion on 6PPD-quinone be expanded to include more recent research on salmonid mortality. There were also comments asking for clarification in the Water Resources analysis concerning pollutant-generating impervious surfaces.

To make the noise analysis more understandable to the reader, FHWA suggested specifying that there would be fewer noise impacts from the mainline because property acquisitions would increase the distance between sensitive receptors and the track. Additionally, several comments were made on the Acquisitions, Displacements, and Relocation analysis, mostly relating to definition of terms.

Washington State Department of Transportation

WSDOT provided comments on stormwater, ecosystem resources, community impacts, and hazardous materials. WSDOT asked Sound Transit and FTA to inventory WSDOT-owned and managed facilities that could be affected by the project to ensure adequate mitigation is provided. WSDOT recommended that fish passage barriers be identified with Washington Department of Fish and Wildlife identification numbers and ownership and provided a link to WSDOT's current 2030 fish passage delivery plans.

3.1.3 Regional and Local Jurisdictions

City of Federal Way

Federal Way resubmitted comments made on the 2021 SEPA Draft EIS and incorporated them by reference. They also provided comments on the 2023 NEPA Draft/SEPA Supplemental Draft EIS. Federal Way supports the selection of the Midway Landfill Alternative.

The city provided comments on transportation impacts, social, community facilities and neighborhoods, economic and fiscal impacts, land use impacts, visual and aesthetic resources, noise and vibration, ecosystems resources, and cumulative effects. Their comments focused mainly on transportation and land use. Under transportation, Federal Way believes that the analysis does not adequately analyze the Preferred and South 344th Street alternatives because not all proposed driveways and intersections were included in the analysis and some incorrect driveways were included. Federal Way notes that the city controls all intersections in the study area for the alternatives, including those along state routes, so the analysis should list volume/capacity ratios for all intersections. The city also expressed concern over the safety impacts of the project, noting that the South 344th Street Alternative does not replace the current bicycle and pedestrian path that is present at the site.

Federal Way believes there is insufficient information to be able to make an informed decision regarding changes to existing land uses and vacating streets and that a supplemental trip generation analysis and volume figures should be provided. Federal Way also asks for an updated parking analysis for the Federal Way/S 320th Street Park & Ride.

Federal Way had several comments concerning Appendix H2, the Land Use Technical Appendix, disagreeing with the accuracy of some of the conclusions regarding zoning and comprehensive plan consistency.

3.2 Summary of Comments from Businesses and Community Groups

Sound Transit received one communication from a potentially affected business and community group, the GarageTown Condominium Association (see Appendix B). The GarageTown Condominium Association continues to support development of the Midway Landfill for OMF South and strongly oppose the South 344th Street Alternative. They commented on the proposed extension of 21st Avenue S with the Preferred Alternative. They stated that they are concerned that it would intrude onto the southeast corner of the GarageTown property, reducing the width of GarageTown's eastern driveway and an emergency secondary access for fire equipment. The association also states that retaining the cul-de-sac at the eastern end of S 344th Street is unnecessary and undesirable, as it is a known site for illicit activity.

The GarageTown Condominium Association is strongly opposed to replacing the culvert under S 344th Street with a fish passable structure due to concern of potential damage to buildings if the existing culvert is excavated. They suggest rerouting the stream instead.

3.3 Summary of Public Comments

During the OMF South Draft EIS comment period, Sound Transit received 52 communications (letters, emails, oral comments at public hearings, and online comment forms) from the general public (see Appendix C). Within the 52 communications, there were approximately 140 individual comments, which are summarized in the following subsections. General or

project-wide comment topics are described first, followed by comments about specific OMF South alternatives.

3.3.1 General or Project-Wide Comments

The most common general themes in the public comments, outside of statements for or against a particular alternative, concerned impacts to the community or neighborhood due to displacements of residents, businesses, and employees as well as impacts to natural resources such as streams, wetlands, and habitat. Thirty-seven commenters expressed support for a particular site, including alternative sites in Fife, and 22 commenters expressed opposition to a particular site.

Several individuals submitted comments through a form letter that expresses opposition to both alternatives in Federal Way and asks Sound Transit to reconsider other sites, particularly in Fife. The letter cites concerns over ecosystem and land use impacts as reasons why the Federal Way sites should not be chosen. A few comments were submitted regarding impacts to residents of Belmor, which express concerns about the displacement and relocation process, noise and visual impacts along the proposed mainline, and traffic.

3.3.2 Preferred Alternative

Of the 37 commenters who expressed support for a particular site, 10 supported the Preferred Alternative (one supported both the Preferred or South 344th Street alternative), citing the alternative's proximity to SR 99 and the belief that the current uses on the site could be relocated in the area. Of the 22 commenters that expressed opposition to a particular site, 17 opposed the selection of the Preferred Alternative (nine expressed opposition to both the Preferred and South 344th Street alternatives). Most of these commenters feel that Federal Way has been disproportionately affected by Sound Transit projects.

3.3.3 South 344th Street Alternative

Of the 37 commenters who expressed support for a particular site, two supported the South 344th Street Alternative (one supported either the Preferred or South 344th Street alternative) because of its proximity to I-5. Of the 22 commenters who expressed opposition to a particular site, 11 opposed the selection of the South 344th Street Alternative, citing impacts to businesses and employment (nine expressed opposition to both the Preferred and South 344th Street alternatives).

3.3.4 Midway Landfill Alternative

Of the 37 commenters who expressed support for a particular site, 22 supported the Midway Landfill Alternative. Supporters cited the relative lack of impacts to businesses and natural resources. Of the 22 commenters who expressed opposition to a particular site, three opposed the selection of the Midway Landfill Alternative: one with no reason cited, the others expressing concern over construction at a Superfund site and the uncertainties around cost and schedule.

4 NEXT STEPS

- **Joint NEPA/SEPA Final EIS:** FTA and Sound Transit will prepare a Final EIS that will document and respond to substantive comments received on the 2021 SEPA Draft EIS and the 2023 NEPA Draft/SEPA Supplemental Draft EIS.
- **Project Decision:** After the Final EIS is published, the Sound Transit Board will consider the public comments received and the EIS analysis and select the project to be built.
- **Federal Approval:** FTA will issue a Record of Decision that states FTA's decision on the project, identifies the alternatives considered, and lists environmental commitments. The issuance of the Record of Decision is required before federal funding and approvals.



APPENDIX A

Comments from Tribes, Agencies, and Jurisdictions

COMMENTS FROM TRIBES, AGENCIES, AND JURISDICTIONS

Tribes

- Suquamish Tribe

Federal Agencies

- U.S. Environmental Protection Agency
- Federal Highway Administration

State Agencies

- Washington State Department of Transportation

Local Jurisdictions

- City of Federal Way

From: Stephanie Trudel <strudel@Suquamish.nsn.us>

Sent: Wednesday, October 11, 2023 1:32 PM

To: OMFSouthDEIS <OMFSouthDEIS@soundtransit.org>

Subject: NEPA Draft/SEPA Supplemental Draft EIS for the Operations and Maintenance Facility (OMF) South project

Thank you for the opportunity to review and comment on the NEPA Draft/SEPA Supplemental Draft EIS for the Operations and Maintenance Facility (OMF) South project. I have reviewed the Historical and Archaeological Resources Technical Report and attachments and have no comments or concerns regarding cultural resources at this time.

Sincerely,
Stephanie

*Stephanie Trudel
Tribal Historic Preservation Officer
Suquamish Tribe
PO Box 498
Suquamish, WA 98392-0498
360-394-8533
strudel@suquamish.nsn.us*



REGION 10

SEATTLE, WA 98101

November 6, 2023

Justin Zweifel, Environmental Protection Specialist
Federal Transit Administration
915 2nd Ave, Suite 3192
Seattle, Washington 98174

Erin Green, South Corridor Environmental Manager
Sound Transit
401 S Jackson Street
Seattle, Washington 98194

Dear Justin Zweifel and Erin Green:

The U.S. Environmental Protection Agency has reviewed Federal Transit Administration's Draft Environmental Impact Statement for the Operations and Maintenance Facility South Project (CEQ number 20230122, EPA Project Number 23-0027-FTA). EPA has conducted its review pursuant to the National Environmental Policy Act and our review authority under Section 309 of the Clean Air Act. The CAA Section 309 role is unique to EPA and requires EPA to review and comment publicly on any proposed federal action subject to NEPA's environmental impact statement requirement. EPA is one of the cooperating agencies on the project and offered its scoping comments and recommendations in August 2023.

The DEIS evaluates the potential environmental impacts with the construction and operation of a light rail facility in south King County. The proposed facility will be used for light rail vehicle storage, inspection, maintenance and repair, cleaning, and testing and commissioning of new light rail vehicles. The DEIS includes a No-Build Alternative and three build alternatives: the South 336th Street Alternative (Preferred Alternative), South 344th Street Alternative, and Midway Landfill (a Superfund site) Alternative. The Preferred Alternative is also identified as the Preferred Alternative in the 2021 State Environmental Policy Act DEIS for this project.

EPA supports the project's plan to expand mobility in the region for transit dependent people, low-income populations, and communities of color. EPA supports the goals to provide regional transit in a manner that preserves and promotes a healthy environment and economy by minimizing adverse impacts on the environment and people through sustainable practices. Regional public transit has an

important role in reducing vehicle miles traveled and vehicle emissions in an area with heavy traffic congestion.

In reviewing the DEIS, EPA identified that the proposed action has the potential to disproportionately impact communities with environmental justice concerns, including tribal, minority, and low-income communities, and provides recommendations to address these impacts in the Final EIS, including:

- Consistent with Executive Orders 14096 and 12898, further evaluate and identify communities with EJ concerns who may be impacted by the proposed project. Consider utilizing EPA's EJScreen tool, as well as Washington State Department of Health Environmental Health Disparities map to determine environmental risks to the communities with EJ concerns and implications for the proposed project.
- Continue to meaningfully engage with communities with EJ concerns who may be disproportionately impacted by the project, including adjacent neighborhoods, tribes, and statewide and local organizations.
- Describe the efforts to meaningfully engage these communities when analyzing for disproportionate impacts; developing ways to avoid, mitigate and minimize those impacts; and the outcome of the engagement efforts on the proposed project.
- Mechanisms to assess and address potential air quality impacts from the proposed project on communities with EJ concerns.

The enclosed Detailed Comments provide greater detail of these and other concerns, as well as recommendations for the Final EIS.

Thank you for the opportunity to review the DEIS for this project. If you have questions about this review, please contact Theogene Mbabaliye of my staff at (206) 553-6322 and mbabaliye.theogene@epa.gov, or me, at (206) 553-1774 or at chu.rebecca@epa.gov.

Sincerely,

Rebecca Chu, Chief
Policy and Environmental Review Branch

Enclosure

**U.S. EPA Detailed Comments on the
Operations and Maintenance Facility South Project DEIS
King County, Washington
November 2023**

Environmental Justice (EJ)

EPA has concerns about the conclusions made in the DEIS regarding EJ impacts and recommends the FEIS identify, analyze, and address disproportionate impacts in accordance with Executive Order 14096, *Revitalizing Our Nation’s Commitment to Environmental Justice for All* and the *Guidance from the Council on Environmental Quality on Environmental Justice and the National Policy Act* (CEQ EJ Guidance).¹

EO 14096 directs federal agencies, as appropriate and consistent with applicable law, to identify, analyze, and address disproportionate and adverse human health and environmental effects (including risks) and hazards of Federal activities, including those related to climate change and cumulative impacts of environmental and other burdens on communities with environmental justice concerns. It builds upon Executive Order 12898 *Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations*. EO 14096 further states that EPA will carry out responsibilities under Section 309 of the Clean Air Act, 42 U.S.C. 7609, to assess whether each agency analyzes and avoids or mitigates disproportionate human health and environmental effects on communities with EJ concerns.

EPA recommends the EJ topic be analyzed further in Chapter 3 of the Final EIS as its own section, rather than in Appendix E, to highlight the importance of EJ as a part of the affected environment. EPA also offers the following recommendations to fully identify, analyze, and address disproportionate impacts from the proposed project to communities with EJ concerns.

Potential Disproportionate Impacts on Communities with EJ Concerns

The DEIS concludes that “[a]fter considering the project’s potential effects, mitigation, and avoidance measures and anticipated benefits to minority and low-income populations, FTA has made a preliminary determination that the OMF South would not result in disproportionately adverse effects on minority and low-income populations.”² EPA has concerns that the project may have disproportionate impacts and recommends the Final EIS further analyze impacts to communities.

Assessing EPA’s Environmental Justice Screening and Mapping Tool (EJScreen) information is a useful first step in understanding or highlighting locations that may be candidates for further review or outreach.³ EPA considers a project to be in an area of potential EJ concern when an EJScreen for the impacted area shows one or more of the EJ Indexes at or above the 80th percentile in the nation and/or state. We note the DEIS only includes a 0.5-mile radius around the project site to identify communities with EJ concerns. At a minimum, EPA recommends an EJScreen analysis consider EJScreen

¹ https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf. Accessed 9/25/2023.

² DEIS page 3.6-12.

³ <https://ejscreen.epa.gov/mapper/>. Accessed 10/24/2023.

information for the block groups which contains the proposed action and a one-mile radius around those areas.

EPA ran EJScreen with a 1-mi buffer around the project area and found that 10 out of the 12, and 11 out of the 12 EJ Indexes exceeded the 80th percentile when compared to the state, for the preferred alternative location and the midway landfill location, respectively. Exceeded EJ indexes include indicators relating to air quality, including diesel particulate matter at the 98th percentile at the preferred location and the 97th percentile for the Midway Landfill location.

EPA also recommends considering the Washington State Department of Health Environmental Health Disparities map.⁴ This map depicts cumulative health impact as a ranking from 1 to 10, with 10 indicating the highest impact. These rankings reflect the risk each community faces from multiple environmental hazards and the degree to which a community is more vulnerable to those hazards because of certain sociodemographic factors. Rankings for this map can be interpreted as a way to measure relative environmental risk factors in communities. The project area for all alternatives and the surrounding census tracts all rank at 10.

These screening tools indicate that the proposed project is located within an area with potential EJ concerns and that these communities face significant environmental disparities. EPA has concerns that the cumulative impacts of this project and the historically over-burdened nature of the area could have significant potential disproportionate adverse impacts on communities with EJ concerns.

EPA recommends the Final EIS include a more robust analysis of the project's potential impacts to communities with EJ concerns including but not limited to community cohesion, affordable housing, public health impacts, and public safety. EPA is concerned that the project development will further exacerbate a historically over-burdened community.

Mitigation

The DEIS states that disproportionate impacts will not occur due to identified mitigation measures and community benefits. It is unclear in the DEIS if identified mitigation measures will fully offset the disproportionate impacts from the project, especially considering the prior recommendations related to fully identifying where EJ concerns may occur and be impacted by the proposed project. In addition, the benefits identified are not specific to the impacted communities. Finally, it is unclear if mitigation measures and benefits were identified through robust community involvement (e.g., informed by meaningful engagement with the impacted community).

The CEQ EJ Guidance identifies important ways to consider mitigation for EJ under NEPA, including:

- “Mitigation measures identified as part of . . . an environmental impact statement (EIS), or a record of decision (ROD), should, whenever feasible, address significant and adverse environmental effects of proposed federal actions on minority populations, low-income populations, and Indian tribes.”

⁴ <https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/washington-environmental-health-disparities-map>. Accessed 10/24/2023.

- “Each Federal agency must provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices.”

The DEIS indicates that one of the key benefits to the community would be the generation of 11,200 to 20,000 jobs in the region.⁵ EPA recommends the FEIS provide clarification on this benefit to communities with EJ concerns that are impacted by the project, specifically:

- If job training will be provided to communities most impacted,
- Will additional measures to be taken to hire within the impacted communities for these 11,200 to 20,000 jobs, and
- The types of jobs available to the impacted community (e.g., permanent or temporary; professional or nonprofessional).

If there are no additional tailored mitigation measures to be implemented, provide clarification that the benefit received will be regional job opportunities and are not tailored to the communities with EJ concerns impacted by the proposed project.

EPA recommends developing specific mitigation measures to address the potential disproportionate EJ impacts. In developing mitigation measures, consider mechanisms to minimize impacts of the proposed project to communities. It is important to shape mitigation efforts through engagement with each uniquely impacted group.

An example of a mitigation measure EPA has seen applied in other federal projects to address impacts on communities with EJ concerns is the development of a community benefits agreement (CBA). CBAs have been used to mitigate impacts to displaced communities and those with disrupted community cohesion from displacement of community gathering places like churches. Developing a CBA involves robust community involvement and meaningful engagement to ensure mitigation measures benefit the most impacted communities. Consider neighborhood plans and goals when identifying mitigation measures to help inform mitigation to offset disproportionate impacts. Community benefits may vary from community to community depending on their unique attributes. Consider reviewing previous strategies to develop a CBA such as FHWA's South End Park neighborhood redevelopment project in which community members helped inform innovative mitigation measures.⁶

EPA notes that CEQ's EJ Guidance states that “agencies should recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action. These factors should include the physical sensitivity of the community or population to particular impacts; the effect of any disruptions on the community structure associated with the proposed action; and the nature and degree of the impact on the physical and social structure of the community.”⁷

⁵ DEIS page E-25.

⁶ https://www.fhwa.dot.gov/environment/environmental_justice/resources/ej_and_nepa/case_studies/case08.cfm.

Accessed 10/24/2023.

⁷ CEQ EJ Guidance, page 9.

To address these interrelated factors that may amplify the natural and physical environmental effects of the proposed agency action, EPA further recommends the Final EIS include specific information and measures related to compensation and relocation assistance for low-income and minority residences and minority-owned businesses that could be acquired, displaced, and relocated by the project. Include in the Final EIS additional information and measures to address the temporary or long-term loss of services to low-income and minority communities provided by community organizations, such as the Christian Faith Center that has daycare services, that will either be relocated by the project or affected during construction of the project. It will also be important for FTA to discuss in the Final EIS plans to resolve conflicts that could arise from businesses and residents that might refuse easement offers.

Meaningful Public Engagement

In addition to fully characterizing the communities with EJ concerns who may be impacted by the proposed project, EPA recommends conducting meaningful engagement to ensure community feedback is reflected in the decision-making process. EPA appreciates FTA's efforts to inform the public and has recommendations to involve the public more meaningfully to help identify mitigation measures to disproportionate impacts on communities with EJ concerns.

EPA recommends mitigation efforts be guided by meaningful public engagement with impacted communities. CEQ guidance states that "agencies should elicit the views of the affected populations on measures to mitigate a disproportionately high and adverse human health or environmental effect...and should carefully consider community views in developing mitigation strategies."⁸

EO 14096 states [federal agencies are] to "provide opportunities for the meaningful engagement of persons and communities with environmental justice concerns who are potentially affected by Federal activities including by providing timely opportunities for members of the public to share information or concerns and participate in decision-making processes, fully considering public input provided as part of decision-making processes, and providing notice of and engaging in outreach to communities or groups of people who are potentially affected and who are not regular participants in Federal decision-making."

Given the above, EPA recommends:

- Designing robust community engagement practices to maximize participation opportunities for communities that would be affected by the project, such as community-based workshops to facilitate discussion and issue resolution.
- Creating community advisory committees with representatives from impacted communities to help facilitate guidance and feedback from community members.
- Hosting focus group discussions to have robust conversations around mitigation that is appropriate to each impacted community.

EPA has concerns that while efforts have been made to inform the public, the public's feedback has not been fully incorporated into the decision-making process and/or addressed in the NEPA process. EPA recommends the Final EIS include more details on how input from impacted communities is considered

⁸ CEQ EJ Guidance, page 16.

in this process, including the selection of the preferred alternative, and ensure that public input is fully considered and responded too in the decision-making process.

The CEQ EJ Guidance specifies that “[u]nder NEPA, the identification of a disproportionately high and adverse human health or environmental effect on a low-income population, minority population, or Indian tribe does not preclude a proposed agency action from going forward, nor does it necessarily compel a conclusion that a proposed action is environmental unsatisfactory. Rather, the identification of such an effect should heighten agency attention to alternatives (including alternative sites), mitigation strategies, monitoring needs, and preferences expressed by the affected community or population.”⁹

Potential Impacts to Air Quality

The DEIS states that, “[a]lthough portions of the Puget Sound region are in maintenance areas for PM_{2.5} and PM₁₀, none of the build alternatives are located within nonattainment or maintenance areas.” While this may be true, it is also possible that local air quality may still be impacted due to cumulative impacts from surrounding activities such as road construction and site operations, traffic on unpaved roads and others, including use of woodstoves, agriculture, fire, and air traffic. EJScreen indicates EJ indexes above the 90th percentile for diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index at all alternative locations, and above the 80th percentile for particulate matter at the preferred alternative location. This is consistent with the WA Health Disparities Map which ranks diesel exhaust PM_{2.5} emissions at a 9 out of 10 for all locations. Changes in climate may also result in increased air pollution from future wildfires.¹⁰ In our scoping comments for the project in August, EPA had also indicated that evaluation of cumulative impacts on air quality will be important because of this project sites proximity to the Tacoma PM_{2.5} maintenance area.

Because of this project’s potential air quality impacts, EPA recommends the Final EIS:

- Estimate air emissions from all sources (e.g., stationary and mobile sources) for the analysis area; discuss the timeframe for release of these emissions; and determine whether the emissions will exceed National Ambient Air Quality Standards (NAAQS). For accurate air emission estimates, use the latest version of EPA’s Motor Vehicle Emission Simulator (MOVES3).¹¹ The DEIS does not currently provide baseline data on air quality to help determine the extent to which the project will impact air quality in the project area and vicinity. EPA recommends an assessment of baseline conditions be conducted and disclosed in the Final EIS, including a summary of representative background concentration of criteria air pollutants and any relevant information regarding local air toxics, if available.
- Expand the fugitive dust plan for the alternative project sites, particularly to identify nearby sensitive receptors and measures to protect these from dust impacts. Describe in the plan how the nearby public will be kept informed of the project and be provided contact methods to report fugitive dust impacts.

⁹ Council on Environmental Quality. Environmental Justice Guidance Under the National Environmental Policy Act, pg. 10. https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf. Accessed 10/25/2023.

¹⁰ <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-wa.pdf>. Accessed 10/26/2023.

¹¹ <https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves>. Accessed 10/29/2023.

- Include a summary of the project-related Mobile Source Air Toxics analysis results using the most recent EPA model for analysis of these emissions and related health risks.¹² If there will be significant air toxics emissions, consider giving preference to contractors using highest engine Tier available (Tier 3 or 4) machinery to reduce air toxics emissions during implementation of the project. During project site preparation, the DEIS indicates there will be up to 564 truck trips per day traveling to and from the project site. As this number does not account for the project construction and overall cumulative traffic in the area, it is possible that mobile source air toxics emissions from the project and other surrounding sources could be significant and warrant further analysis.
- Ensure the above analyses include off-site mobile source air emissions of vehicles and trucks along likely corridors to and from the facility from both the construction and operations of the project with respect to criteria air pollutants and air toxics, including diesel particulate matter emissions. Consider sensitive receptors and vulnerable populations such as communities with EJ concerns, park/recreational users, schools, daycares, seniors/nursing homes, hospitals, and other healthcare facilities. The air quality analysis does not currently include health-related risks associated with diesel exhaust emissions. Providing a diesel exhaust emissions analysis of the long-term increased truck traffic and its impact on the surrounding community will be helpful.
- Identify appropriate mitigation measures and best management practices to reduce emissions and comply with federal and state air quality regulations.
- Discuss plans to monitor air quality in the project area and take corrective action if the NAAQS are not met. This is important because there are sensitive receptors in the project area and motor vehicle traffic may increase in the area, particularly during project construction. Localized air quality conditions can be substantial (e.g., during wildfire burns), even though area-wide and/or long-term emissions monitoring may show compliance with NAAQS. Consideration of the cumulative health impacts caused by the project (construction, operation, and maintenance phases) and other sources to communities with EJ concerns will also be important, as well as coordination with public health agencies and industry, which often have data on human health and environmental hazards.
- Clarify whether the project analysis area is adjacent to the maintenance area for PM_{2.5} and discuss when the maintenance period will end or be renewed. If the site is adjacent to this maintenance area and a conformity determination analysis is conducted, then, provide results of such analysis in the Final EIS. It may also be prudent to monitor air locally and take corrective action if NAAQS are exceeded, even if temporarily.
- Provide information on coordination with other entities in the area, such as the State of Washington Departments of Ecology and Social and Health Services and local air organizations, to ensure emissions due to the proposed project are reduced and effectively mitigated throughout the proposed project lifespan.

Potential Impacts to Surface Water Quality and Beneficial Uses

As construction and operation activities may impact water resources, resulting in alterations of local hydrology and long-term impacts to water quality parameters and designated beneficial uses due to

¹² <https://www.epa.gov/AirToxScreen>. Accessed 10/29/2023.

increased turbidity and sedimentation of these pollutant receiving waters, EPA recommend that the Final EIS:

- Include information on the most recent EPA-approved Water Quality Standards (WQS) for the State of Washington and implications for water quality protection within waterbodies in the analysis area and vicinity. It would be important for the public to know the State WQS to determine the extent to which the proposed action would impact water quality. The DEIS indicates that Build Alternatives will likely impact two already impaired tributaries on current Washington State's 303(d) list due to exceedances of copper, lead, polycyclic aromatic hydrocarbons (PAHs), pH, and zinc WQS within the West Fork Hylebos tributary; and bacteria, dissolved oxygen in McSorley Creek. Under the Preferred Alternative, there will also be a loss of riparian vegetation which may contribute to long-term impacts to water resources in the project area and downstream areas, including increased stream temperatures; decreased runoff interception and pollutant filtration functions; reduced groundwater recharge; increased erosion and sedimentation; and loss of stream channel stabilization.¹³
- Discuss the project impacts analyses and conclusions based on the most recent WQS information. Where WQS are exceeded, it will be important for the FEIS to discuss how these impaired waterbodies will be restored.
- Provide the most current information regarding the status of the Clean Water Act § 401 certification and § 404 permit application processes, as well as conditions to protect water quality and wetlands.
- Include up-to-date information on the anticipated Pollutant Discharge Elimination System (NPDES) permit application process including measures to protect water quality and development of Storm Water Pollution Prevention Plans, reporting, and monitoring. The DEIS indicates that project construction will disturb more than 1 acre of land (up to 68 acres), which will subject the project to NPDES permitting requirements for discharges to waters of the United States and related Stormwater Pollution Prevention Plan and construction best management practices.
- Consider implementation of low impact development techniques, which have the potential to further reduce stormwater volumes and thus mimic natural conditions as closely as possible. The techniques also lessen impacts of stormwater runoff from impervious surfaces such as paved roads, parking lots, and roofs and can provide energy and other utility savings.
- Describe plans to coordinate with the Washington State Department of Ecology and all affected tribes to assure that state and tribal water resources are protected from impacts associated with the proposed project's construction, operation, and maintenance activities.

The DEIS indicates that water quality may be adversely affected if the project construction activities (excavation, digging, bulldozing, surface pavement, earthwork and grading, stream relocation, etc.) alter the hydrology of springs and surface runoff such that erosion carries sediment to surface waters and pollutants to local drainages and the underlying aquifer. In addition, land disturbance, material storage, waste disposal, inadvertent chemical or hazardous liquid spills, and compaction produced by vehicular traffic can all affect recharge to the local aquifer and groundwater quality. The Build

¹³ DEIS, p. 3.11-12.

Alternatives may also result in unavoidable permanent direct, indirect, and temporary impacts to wetlands and their buffers.

Potential Impacts on Contaminated Sites and Monitoring

If the FTA and Sound Transit reconsider the Midway Landfill Alternative, EPA recommends FTA coordinate with EPA R10 Superfund Program as the project is implemented so that project activities are consistent with agreed upon remedies for the Midway Landfill Superfund site. The EPA Remedial Program Manager is Ashley Grompe, and she may be reached at (206) 553-1284 or grompe.ashley@epa.gov. It will also be helpful to coordinate with Washington State Department of Ecology so that the FEIS identifies all the contaminated sites in the planning area and vicinity and discusses measures to take to minimize project impacts and meet state requirements.

The DEIS identifies several existing contaminated sites in the project area (up to 64 sites), and the possibility that more contaminated sites could be discovered during construction and operation of the project. Identification of the sites was also limited to a 1/8-mile radius, which is less than the suggested 1-mile radius used for identification of contaminated sites.¹⁴

Potential Impacts to Biological Resources

We recommend that the Final EIS include information on working with the U.S. Fish and Wildlife Service and National Marine Fisheries Service, and, as appropriate, with the Washington Department of Fish and Wildlife, including recommended measures to reduce risks and protect biota and habitat. The DEIS indicates the proposed project activities may impact federally and state protected species occurring in the project area and vicinity, such as the threatened Puget Sound Chinook salmon, Puget Sound steelhead, and bull trout. Because of their potential to support fish use, the East and West Fork Hylebos tributaries in the project area are also designated as essential fish habitat for Pacific salmon.

The impacts to biological resources will be due to the anticipated loss and degradation of suitable habitats and cover; increased sediment delivery to streams, resulting in increased turbidity; and higher than optimal noise levels during project construction activities that will involve use of excavators and other heavy equipment or machinery. EPA also encourages the FTA to include in the FEIS information on the outcomes of consultations with the Services and coordination with the state agency.

Coordination with Tribes

EPA encourages FTA to incorporate feedback from Tribes when making decisions regarding the project and recommends the FEIS describe the issues raised during government-to-government consultations and how those issues were addressed.

Monitoring of the Project and Adaptive Management

EPA recommends the FEIS include a monitoring program designed to assess both impacts from activities and effectiveness of mitigation measures for the impacts and indicate how the program will use an effective feedback mechanism, such as adaptive management, so that any needed adjustments can be made to the activities to meet environmental objectives during project implementation. For example, there could be a plan to monitor noise impacts during project construction and take corrective action if noise complaints or damage claims exceed existing levels.

¹⁴ <https://wsdot.wa.gov/sites/default/files/2021-10/Env-HazMat-ERSECSGuidance.pdf>. Accessed 10/30/2023.

Social Cost of Greenhouse Gases

EPA acknowledges the DEIS quantifies the greenhouse gas emissions for operations, maintenance, and construction, including haul truck emissions, for the proposed alternatives. EPA continues to recommend the FEIS estimate the social cost of GHG emissions (SC-GHG) for each alternative to facilitate decisionmakers' and the public's evaluation of the proposed alternatives by monetizing the calculated GHG emissions. This is in alignment with CEQ's January 9, 2023 interim guidance to assist federal agencies in assessing and disclosing climate change impacts during environmental reviews.¹⁵ This guidance was in response to EO 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*.¹⁶ Alternatively, if choosing to not include SC-GHG in the analysis, provide a basis for that decision.

¹⁵ <https://www.federalregister.gov/documents/2023/01/09/2023-00158/national-environmental-policy-act-guidance-on-consideration-of-greenhouse-gas-emissions-and-climate>. Accessed 11/3/2023.

¹⁶ <https://www.federalregister.gov/documents/2023/01/09/2023-00158/national-environmental-policy-act-guidance-on-consideration-of-greenhouse-gas-emissions-and-climate>. Accessed 11/3/2023.

From: Handel, Lindsey (FHWA) <lindsey.handel@dot.gov>

Sent: Monday, October 30, 2023 9:13 AM

To: Green, Erin <erin.green@soundtransit.org>

Cc: Zweifel, Justin (FTA) <justin.zweifel@dot.gov>; Chris Moelter <cmoelter@anchoragea.com>; Borbe, Elma <elma.borbe@soundtransit.org>; Hawkins, Curvie <Curvie.Hawkins@soundtransit.org>; Neilson, Austin <Austin.Neilson@soundtransit.org>; Ramachandra, Sagar <sagar.ramachandra@soundtransit.org>; Maggioncalda, Daniel <daniel.maggioncalda@soundtransit.org>; Eskenazi, Zachary <Zachary.Eskenazi@soundtransit.org>; Love, Sharon (FHWA) <sharon.love@dot.gov>; Albury, Elisa (FHWA) <elisa.albury@dot.gov>; Young, Autumn (FHWA) <autumn.young@dot.gov>; Barnett, Joel (FHWA) <joel.barnett@dot.gov>; McKeon, Dianna (FHWA) <dianna.mckeon@dot.gov>; Callahan, Cindy (FHWA) <Cindy.Callahan@dot.gov>; Bridgers, Mystery (FHWA) <Mystery.Bridgers@dot.gov>; Rizzo, Ralph J (FHWA) <Ralph.J.Rizzo@dot.gov>; Roberson, Melinda (FHWA) <melinda.roberson@dot.gov>; Martindale, Gary (FHWA) <Gary.Martindale@dot.gov>

Subject: RE: Notice of Availability - Operations and Maintenance Facility South Draft EIS

Good Morning Erin,

Attached are the FHWA comments on the OMF South Draft EIS. We are also including two reference documents for a review comment on the Ecosystems section.

Let us know if you have any questions or need to meet to resolve our comments.

Thank you,

Lindsey L. Handel, P.E., Senior Level III FAC-P/PM
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Federal Highway Administration
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FHWA Comments on OMF-South Draft EIS October 2023

| Page | Section | Location | Table Row | Table Column | Comment |
|---------|---------|----------------------------------|-----------|--------------|---|
| B-9 | 3.1 | Appendix B | | | Are project updates via listserv provided in languages other than English? Is there an option for individuals to request updates in languages other than English? If so, which languages? |
| B-9 | 3.2 | Appendix B | | | How are language access services provided during open house and drop-in sessions? Are multi-lingual staff present? |
| B-10 | 3.3 | Appendix B | | | Were language services provided for virtual public hearings? If so, how were they provided? (Break-out sessions in multiple languages, etc.?) Was a sign language interpreter present? |
| B-11 | 3.6 | Appendix B, 8th Bullet | | | Simple typo creates significant difference: Title VI (6), instead of Title IV (4) |
| B-11 | 3.6 | Appendix B | | | <p>The project web page provides a Google translate feature at the bottom right hand corner of the home page where it blends with the rest of the page. It isn't highlighted or easily identified by bold color or font. This means LEP individuals must scan the entire, English-only, page before locating the translate option. Additionally, the "Select Language" drop-down feature is displayed exclusively in English, which means an LEP individual would have to be able to read English in order to identify that this feature offers translated languages. This is also the case for the "civil rights and complaints" link.</p> <p>How are LEP folks provided meaningful access to language services if they must navigate English-only language in order to identify where these services exist? Placing the "View in other languages" option at the top of the home page, in languages represented in the project area, would provide more meaningful LEP access. On the Title VI page, multiple languages are provided in the top right corner to guide LEP folks to information about the Title VI complaint process. How do LEP folks locate complaint information, in-language, on the home page?</p> |
| | | Title VI Equity Analysis | | | <p>This appears to be exclusively a EJ analysis and not a Title VI analysis, It does not include all Title VI protected classes or analyze them individually. The analysis aggregates minority populations and includes low-income populations.</p> <p>EJ addresses distribution of high and adverse impacts on minority and low-income populations. EJ analytical standards also recommend aggregating minority populations.</p> <p>Title VI ensures nondiscrimination in programs and activities on the basis of race, color, and national origin (all races, all colors, all national origins) and does not consider low-income. Title VI analytical standards recommend each population be analyzed individually.</p> <p>The Minority Population Distribution maps look at the density of the aggregated minority population but does not evaluate if there is a specific community (race, color, national origin) present that may be disparately impacted.</p> |
| 4-1 | 4.1 | General Outreach, last paragraph | | | Indicates "translation assistance" was available during online hearings. Was this oral interpretation or written translation services? If it was translation (written) how was this accommodated in the virtual space? Were there break-out rooms offering translated captioning? |
| 4-2 | 4.2 | Targeted Outreach, 1st bullet | | | Were in-language lunch groups provided oral-interpretation services or written translation services? May want to make a distinction between what type of services were provided. |
| 4-2 | 4.2 | Targeted Outreach, 2nd bullet | | | Were translation (written) or interpretation (oral) services provided for open houses? |
| G1-69 | 4.2.1.1 | TTR | | | No information was provided regarding increases in freight traffic. If this is captured in the passenger car equivalents, please document that in the text. |
| | | TTR | | | No discussion of heavy vehicle traffic increases and impacts. |
| G1-44 | 3.7 | | | | I recommend using fatal and serious crash rates rather than collision rates. Regardless of the pandemic, K and A crashes have increased while total reported crashes have decreased. This assessment should assess what risks are being elevated due to the increases in traffic, both in aggregate and by type. |
| G1-44 | 3.7 | | | | The traffic safety changes experienced in 2020-2022 are realistic and should not be excluded. Exposure is accounted for by normalizing by VMT and EV. Traffic behavior has changed since 2018 and should be accounted for in decision-making. |
| | | Ecosystems | | | Essential Fish Habitat should be capitalized throughout. |
| | | Ecosystems | | | 2 nd paragraph where study area extent defined, the 300' extent for pollutants isn't really consistent with conclusions in second paragraph of 3.10-13 where downstream adverse effects are acknowledged. |
| 3.10-13 | | Ecosystems | | | For the discussion on GPPD-quinone where coho pre-spawn mortality is mentioned, consider expanding to include more recent science on mortality to other salmonids and trout including steelhead, Chinook salmon and rainbow trout (scientific sources provided). |

FHWA Comments on OMF-South Draft EIS October 2023

| Page | Section | Location | Table Row | Table Column | Comment |
|---------|---------|------------------------------|-----------|--------------|---|
| 3.11-17 | | Water Resources | | | Pg. 3.11-17: States that enhanced treatment for all post-project GIS will be provided. Does this include existing and replaced PGIS? |
| | | Water Resources | | | Table 3.11-10 shows either a net reduction or no increase in PGIS for the Preferred Alternative but later in the section (3.11.2.2) it states that OMF S. would add PGIS and non-PGIS. |
| | 3.11.3 | Water Resources | | | The Potential Mitigation (3.11.3) section states that no temporary or long-term adverse impacts on water resources are expected after treatment BMPs are constructed, however in the Ecosystems section, adverse effects downstream are acknowledged. I think it is valid to state that no further mitigation is likely to be required and explain that some adverse effects may occur due to the very low concentrations of some pollutants that are still deemed toxic to some fish species and the fact that even "effective" treatment won't prevent some discharges from the BMPs that may be above those thresholds. |
| ES-v | | Fact Sheet | | | There are two separate approval actions for FHWA and they should be called out separately on this list. There is an NEPA Record of Decision, Federal Highway Administration and the Air Space Lease for Use of Interstate Right of Way, Federal Highway Administration. |
| ES-v | | Fact Sheet | | | FHWA wants to confirm there are no anticipated design approvals or modifications to Interstate 5 with this project, which would require FHWA approval. |
| 3.6.3.1 | | Environmental Justice | | | The last paragraph in 3.6.3.1 indicates that EJ populations would accrue benefits through "the addition of new jobs to build the project." Given the way contractors are selected, there is no way to definitively say the jobs will be given to people in the vicinity of the project. Even with more lenient local hiring rules now, there is no guarantee and we would be more comfortable if this statement was left out—or include a caveat to the statement to explain that it is not a guarantee. Even though it should be obvious given the context, there should be an explanation that the benefits in the last paragraph of this section are all temporary benefits that would occur during construction. If there would be any kind of increased staffing in the area because of the maintenance facility, that could be added as a more permanent benefit related to the economic factors mentioned in this paragraph. |
| | | Environmental Justice | | | Please include the following (adding FTA if you deem appropriate): "An Executive Order (E.O.) 14096—Revitalizing Our Nation's Commitment to Environmental Justice for All has been recently enacted (April 21, 2023). The new E.O. 14096 on environmental justice does not rescind EO 12898, which FHWA is implementing through the current DOT and FHWA EJ Orders (DOT 5610.2C and FHWA 6640.23A) until further guidance is provided regarding the implementation of the new E.O. on environmental justice." |
| | Ch 2 | | | | It is difficult from any figure to see where the alternatives would intersect the interstate ROW and cross the access line. Does there need to be a figure with that? |
| 31 | 3.9.1 | | | | It was not stated in the noise analysis specifically but it may be helpful to the reader and existing residents that the reason why there are so few noise impacts from the new mainline extension and test track to the north is because properties will be acquired for the facility, thus there will be some distance between sensitive receptors and the track. This is not exactly clear as there is no map in the technical report that includes model receptor locations. |
| 37 | 3.9.2.2 | Table 3.9-2 and 3.9-3 | | | It is confusing to the reader that existing noise levels in both tables (specifically S 324th Street to Burning Tree Blvd) do not match. Checking this against tables G2.6-10 and G2.6-11 it looks like the difference is between NB and SB locations. Consider adding the track side column to Table 3.9-2 and 3.9-3. |
| 44 | 3.9.3.1 | First paragraph | | | "Sound Transit would replace noise walls and berms that would be removed as part of the Preferred And South 344th Street alternatives." State that this would specifically occur on I-5. |
| | Ch 2 | | | | It is difficult from any figure to see where the alternatives would intersect the interstate ROW and cross the access line. Does there need to be a figure with that? |
| 31 | 3.9.1 | Noise | | | It was not stated in the noise analysis specifically but it may be helpful to the reader and existing residents that the reason why there are so few noise impacts from the new mainline extension and test track to the north is because properties will be acquired for the facility, thus there will be some distance between sensitive receptors and the track. This is not exactly clear as there is no map in the technical report that includes model receptor locations. |
| 37 | 3.9.2.2 | Noise/ Table 3.9-2 and 3.9-3 | | | It is confusing to the reader that existing noise levels in both tables (specifically S 324th Street to Burning Tree Blvd) do not match. Checking this against tables G2.6-10 and G2.6-11 it looks like the difference is between NB and SB locations. Consider adding the track side column to Table 3.9-2 and 3.9-3. |

FHWA Comments on OMF-South Draft EIS October 2023

| Page | Section | Location | Table Row | Table Column | Comment |
|---|---------|-------------------------|-------------------------------------|--------------|---|
| 44 | 3.9.3.1 | (Noise) First paragraph | | | "Sound Transit would replace noise walls and berms that would be removed as part of the Preferred And South 344th Street alternatives." State that this would specifically occur on I-5. |
| 3.3 Acquisitions, Displacements, and Relocations | | | | | |
| 3.3 | General | General | | | Missing discussion that relocation resources are available to all people being relocated without discrimination in compliance with Sound Transit's Limited English Proficiency Plan. |
| 3.3-1 | 3.3 | Title | | | Displacement and relocation really mean the same thing. Displaced person is defined as any person who moves from the real property or moves his or her personal property from the real property. Relocation is provided to displaced persons. This section should really be titled Property Acquisitions and Displacements. |
| 3.3-1 | 3.3 | Entire Section | Includes Notes section under tables | | This is really an FTA call however, if this were a WSDOT project, according to WSDOT's ROW manual, environmental reports at this level should not include parcel specific information such as names and possible addresses of potential displacements. This information, if collected, should be kept in a separate project file. The statements should be more general. Instead of calling out Belmor Mobile Home Park, just say mobile home park, GarageTown to storage units, etc.. |
| 3.3-5 | 3.3.3 | Title | | | I wouldn't refer to this section as "Relocation Opportunities". The section is really talking about property availability for displacements so I would suggest using that title. |
| 3.3-5 | 3.3.3 | 1st paragraph | | | Suggest changing "relocation opportunities" to "available properties". |
| 3.3-6 | 3.3.3 | Table 3.3-3 | Notes (2) | | Since CoStar does not collect data on availability for potential replacement sites for religious facilities, what other data collection did you explore, e.g. real estate broker in the local market? |
| 3.3-6 | 3.3.3 | 3.3.3.1 | | | This section states that finding properties that have specific needs may be more difficult to find. Missing a discussion of the actions proposed to remedy insufficient replacement sites. |
| 3.3-6 | 3.3.3 | 3.3.3.2 - Title | | | Title of section is "Single-Family Residential" and according to the Table 3.3-1 under notes residential displacements include individual apartment/condo units and mobile homes. Based on this "Multi-Family should be added to the title. |
| 3.3-6 | 3.3.3 | 3.3.3.2 | | | Suggest changing the sentence from saying displaced residents may have to find a location in a different neighborhood to "a similar neighborhood". A comp from either the same neighborhood or similar neighborhood considered in the same market must be provided to the displaced person before the agency can require them to relocate. Also, mobile home displacements can be challenging as inventory is at an all time low. This section is missing a discussion of the actions proposed to remedy insufficient replacement sites, including housing of last resort. |
| 3.3-6 | 3.3.3 | 3.3.3.3 | | | The first sentence is contradictory as prior sections stated that finding properties with unique characteristics, such has a religious facility, could be more challenging. Also, in the case of the Church on 25 acres, it can be difficult to relocate due to its size. Missing a discussion of the actions proposed to remedy insufficient replacement sites. |
| 3.3-7 | 3.3.4 | 1st paragraph | | | Suggest changing "relocation opportunities" to "available properties". |
| 3.3-7 | 3.3.4 | 2nd paragraph | | | Not sure if Sound Transit's procedures allow for the use of a waiver valuation but, if they are going to use a waiver valuation for the TCEs or any other right that fits the criteria then they will want to add waiver valuation discussion to this section. |
| 3.3-7 | 3.3.4 | 3rd paragraph | | | 2nd sentence needs to be changed as it states in addition to compensating owners which can provide the appearance that the additional compensation is only for owners. Since this sentence deals with relocation expenses it should be revised to state other forms of compensation for displacements could include..... Would also suggest changing "support services" to "advisory services" |
| 3.3-7 | 3.3.4 | 4th paragraph | | | Typically the property owner will approach the agency to request a hardship acquisition and that has a defined process. An agency can also acquire early when they have the legal right to do so. You might revise to state Sound Transit, with FTA's approval is considering early acquisition of the four parcels associated with the church parcel, and it could potentially be acquired as a hardship acquisition if the church makes the request and provides the necessary documentation. |
| 3.3-8 | 3.3.4 | 1st paragraph | | | This statement is incorrect and should be revised to include all displacements. I would suggest removing "Businesses and tenants" to "Displaced persons" since all (business, farm, NPO, PPO, and residential) are included as defined. |
| 3.3-9 | 3.3.5 | 1st paragraph | | | Advisory services are applicable to more than just property owners. Sentence should be revised - suggest just removing "to property owners". |
| 3.4 Land Use | | | | | |

FHWA Comments on OMF-South Draft EIS October 2023

| Page | Section | Location | Table Row | Table Column | Comment |
|--|---------|---------------------------------------|-----------|--------------|--|
| 3.4.1 | 3.4 | Entire Section | | | This is really an FTA call however, if this were a WSDOT project, according to WSDOT's ROW manual, environmental reports at this level should not include parcel specific information such as names and possible addresses of potential displacements. This information, if collected, should be kept in a separate project file. The statements should be more general. Instead of calling out Belmor Mobile Home Park, just say mobile home park, GarageTown to storage units, etc.. |
| 3.5 Economics | | | | | |
| 3.5-1 | 3.5 | Entire Section | | | This is really an FTA call however, if this were a WSDOT project, according to WSDOT's ROW manual, environmental reports at this level should not include parcel specific information such as names and possible addresses of potential displacements. This information, if collected, should be kept in a separate project file. The statements should be more general. Instead of calling out Belmor Mobile Home Park, just say mobile home park, GarageTown to storage units, etc.. |
| 3.5-7 | 3.5.2.2 | Last paragraph | | | Suggest changing "substitute" to "suitable" to be consistent with the other areas you reference suitable for business sites. |
| 3.6 Social Resources, Community Facilities, and Neighborhoods | | | | | |
| 3.6-8 | 3.6 | Entire Section | | | This is really an FTA call however, if this were a WSDOT project, according to WSDOT's ROW manual, environmental reports at this level should not include parcel specific information such as names and possible addresses of potential displacements. This information, if collected, should be kept in a separate project file. The statements should be more general. Instead of calling out Belmor Mobile Home Park, just say mobile home park, GarageTown to storage units, etc.. |
| 3.6-8 | 3.6 | Preferred Alternative - 2nd paragraph | | | Suggest referring reader to the Acquisition and Displacements section for discussion on the difficulties associated with relocating a church. |

Acute Toxicity of the Tire Rubber-Derived Chemical 6PPD-quinone to Four Fishes of Commercial, Cultural, and Ecological Importance

Markus Brinkmann, David Montgomery, Summer Selinger, Justin G. P. Miller, Eric Stock, Alper James Alcaraz, Jonathan K. Challis, Lynn Weber, David Janz, Markus Hecker,* and Steve Wiseman



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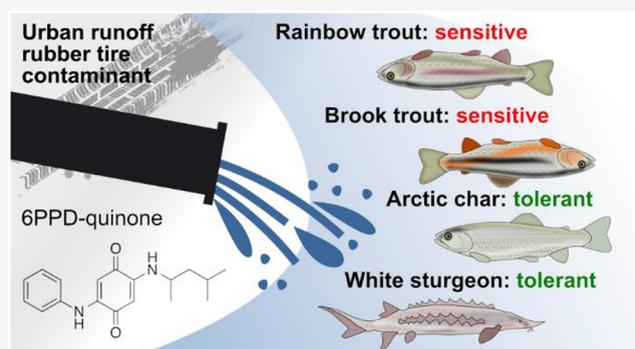


Article Recommendations



Supporting Information

ABSTRACT: *N*-(1,3-Dimethylbutyl)-*N'*-phenyl-*p*-phenylenediamine-quinone (6PPD-quinone), a transformation product of the rubber tire antioxidant 6PPD, has recently been identified as the chemical responsible for urban runoff mortality syndrome in coho salmon, with a median lethal concentration (LC₅₀) of <0.1 μg/L. Subsequent studies have failed to confirm comparable sensitivity in other fish species. Here, we investigated the acute toxicity of 6PPD-quinone to rainbow trout, brook trout, Arctic char, and white sturgeon. Fish were exposed under static renewal conditions, and exposure concentrations were verified analytically. Mortalities in brook trout occurred between 1.2 and 20 h, while mortalities began after 7 h and spanned 60 h in rainbow trout. The LC₅₀s in brook trout (24 h) and rainbow trout (72 h) were 0.59 and 1.00 μg/L, respectively. Both species showed characteristic symptoms (increased ventilation, gasping, spiraling, and loss of equilibrium) shortly before death. No mortalities were observed after exposure of either char or sturgeon for 96 h at measured concentrations as high as 14.2 μg/L. This is the first study to demonstrate the acute toxicity of 6PPD-quinone to other fishes of commercial, cultural, and ecological importance at environmentally relevant concentrations and provides urgently needed information for environmental risk assessments of this contaminant of emerging concern.



INTRODUCTION

Stormwater runoff from urban landscapes has long been a cause for environmental concern due to its chemical complexity, toxicity to aquatic organisms, and temporal and spatial dynamics.¹ In addition to road salt, organic contaminants from vehicle emissions and leakage, and toxic metals from brake pad abrasion,² tire wear particles (TWPs) have recently become the focus of scientific and public interest.³ Earlier research into the causes of fish kills following rainfall events along the west coast of the United States, termed coho salmon (*Oncorhynchus kisutch*) urban runoff mortality syndrome (URMS), suggested that rubber tire-derived chemicals might be responsible for this effect because they co-occurred with these mortality events.⁴ In a landmark study, Tian et al.⁵ applied a combination of fractionation, chemical analysis, and biological testing to pinpoint the causative chemical. The authors found that *N*-(1,3-dimethylbutyl)-*N'*-phenyl-*p*-phenylenediamine-quinone (6PPD-quinone) was generated through the environmental oxidation of the common rubber tire antidegradant 6PPD and can cause lethality in coho salmon at a median lethal concentration (LC₅₀) of <0.8 μg/L. Using a commercial standard, a revised LC₅₀ in coho salmon of <0.10 μg/L was reported in a follow-up study.⁶ Tian et al.^{5,6} and subsequent studies have

demonstrated the widespread occurrence of 6PPD-quinone in stormwater runoff and surface waters at concentrations of ≤19 μg/L,^{7,8} indicating that 6PPD-quinone exposure poses an immediate risk to coho salmon populations. However, it was unknown whether exposure to this pollutant would also affect other aquatic species.

Two follow-up studies have determined the acute toxicity of 6PPD-quinone to a variety of species, including fish (zebrafish, *Danio rerio*; Japanese medaka, *Oryzias latipes*) and invertebrates (*Daphnia magna* and *Hyalella azteca*).^{9,10} All tested species were significantly less sensitive than coho salmon: exposure to 6PPD-quinone did not cause lethality in any of the four species studied by Hiki et al.¹⁰ up to concentrations as high as the maximum water solubility, which the authors estimated to range between 34 and 54 μg/L. Varshney et al.⁹ observed an LC₅₀ of 309 μg/L for zebrafish larvae when ethanol was used as the solvent vehicle. Because of the

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alarmingly high sensitivity of coho salmon to 6PPD-quinone, environmental risk assessors urgently require data on the acute toxicity of 6PPD-quinone across a greater diversity of fish species, with an emphasis on additional salmonid species.

This study investigated the acute toxicity of 6PPD-quinone across four species of commercial, cultural, and ecological importance to North America: rainbow trout (*Oncorhynchus mykiss*), brook trout (*Salvelinus fontinalis*), Arctic char (*Salvelinus alpinus*), and white sturgeon (*Acipenser transmontanus*). Additionally, rainbow trout are an important model fish species used in chemical risk assessment across many jurisdictions.^{11,12} This research provides important information for the environmental risk assessment of urban runoff and has the potential to inform regulatory controls of the use of 6PPD in rubber tires.

MATERIALS AND METHODS

Chemicals and Reagents. Native and mass-labeled (d_3) 6PPD-quinone were purchased from Toronto Research Chemicals (Toronto, ON). Stock solutions for exposure of fish to 6PPD-quinone were prepared using dimethyl sulfoxide (DMSO) to achieve a final solvent concentration of 0.01% (v/v) during exposures. Analytical standard solutions of native and mass-labeled 6PPD-quinone were prepared in HPLC-grade methanol.

Fish Source and Culture. Brook trout were from Allison Creek Trout Hatchery (Coleman, AB), were ~ 1 year old, were 17.1 ± 1.1 cm in length, and weighed 52.8 ± 7.6 g. Fish were housed in the Aquatic Research Facility (ARF) at the University of Lethbridge and acclimated in 150 L inert glass-fiber Krescel tanks (four fish per tank, 30% daily water renewal) for 2 weeks prior to exposures. Fish were fed a commercial salmonid feed at a daily rate of 1% of body weight during acclimation. Studies were approved by the University of Lethbridge Animal Welfare Committee (Protocol 2111).

Rainbow trout (from Lyndon Hatcheries, New Dundee, ON), Arctic char (from Miracle Springs Inc., North Vancouver, BC), and white sturgeon (wild fish spawned at the Nechako White Sturgeon Conservation Centre, Vanderhoof, BC) were from in-house cultures raised from embryos in the Aquatic Toxicology Research Facility (ATRF) at the University of Saskatchewan. Fish were cultured under flow-through conditions in facility water until they reached the juvenile stage (rainbow trout, ~ 2 years, 19.6 ± 1.9 cm, 97.5 ± 28.9 g; Arctic char, ~ 3 years, 13.8 ± 1.7 cm, 28.3 ± 9.8 g; white sturgeon, ~ 4.5 years, 42.4 ± 4.5 cm, 462.3 ± 159.3 g) and fed with a commercial fish feed at a daily rate of 1% of body weight during acclimation. Even though fish were somewhat larger than recommended according to various guidelines for acute toxicity tests, all fish were sub-adult and the larger size was selected due to availability considerations and to provide sufficient tissues for downstream analyses. Experiments were approved by the University of Saskatchewan Animal Care Committee (Protocol 20070049). A Species at Risk Act (SARA) permit for culture of and experimentation with white sturgeon was obtained from the Department of Fisheries and Oceans Canada (Permit 20-PPAC-00026).

Exposure Experiments. Pilot studies were conducted for each species to establish upper concentration bounds for acute lethality studies. For brook trout, fish were fasted for 24 h, moved to aerated 45 L rectangular glass tanks (two fish per tank) at 10 °C, and exposed for 24 h to nominal concentrations of 0, 0.02, 0.2, 2, or 20 $\mu\text{g/L}$ 6PPD-quinone

under static conditions (10 fish total). For the other species, two fish per species were each exposed under static conditions in individual tanks at either 6 or 20 $\mu\text{g/L}$ (two fish total per species). Brook trout and rainbow trout became moribund at 2 and 6 $\mu\text{g/L}$, respectively, within 4 h of the onset of exposure. Arctic char and white sturgeon did not show any response to concentrations as high as 20 $\mu\text{g/L}$ within 96 h.

Accordingly, in the main experiment, brook trout and rainbow trout were exposed to nominal concentrations of 6PPD-quinone ranging from 0.1 to 6 $\mu\text{g/L}$ (see Table S1 for details). Tanks were cleaned with a series of detergents, disinfectants, and/or ethanol, carefully rinsed, and left to dry before experiments. Due to their lower sensitivity, Arctic char and white sturgeon were exposed to only one nominal concentration (20 $\mu\text{g/L}$) that could be achieved using the limited amount of chemical available and that was nearing water solubility, while still being environmentally relevant.^{5,7,8}

Exposures of brook trout were performed in 150 L inert glass-fiber Krescel tanks at 10 ± 1 °C for 24 h (two replicate tanks with four fish each; two controls at five concentrations, 56 fish total). A shorter exposure period was chosen for brook trout due to a much faster onset of symptoms compared to rainbow trout. Test solutions were continuously aerated, recirculated, and temperature controlled. Rainbow trout, white sturgeon, and Arctic char were exposed in 700 L glass-fiber Min-o-Cool tanks containing 500, 500, and 300 L of test solution, respectively, at 12 ± 1 °C for 96 h under static renewal conditions. Water was exchanged at 40–60% (white sturgeon) or 75% (rainbow trout and Arctic char) daily (two replicate tanks and one extra control replicate with five fish each for rainbow trout, 65 fish total; two replicate tanks with five fish each for Arctic char, 20 fish total; three replicate tanks with two fish each for white sturgeon, 12 fish total). Control tanks were dosed with the DMSO solvent vehicle at the same level as all other tanks [0.01% (v/v)]. Average (\pm SD) water quality parameters were as follows for brook trout: temperature, 10.3 ± 0.7 °C; pH, 6.74 ± 0.13 ; DO, $99.8 \pm 11.5\%$; ammonia, 0.13 ± 0.11 mg/L; hardness, 131 ± 2.33 mg/L. Average (\pm SD) water quality parameters were as follows for other species: temperature, 12.8 ± 0.8 °C; pH, 8.35 ± 0.45 ; DO, $92.8 \pm 13.2\%$; ammonia, 0.14 ± 0.15 mg/L; hardness, 132 ± 6.80 mg/L. Water samples were collected for analytical confirmation of concentrations of 6PPD-quinone ~ 1 h after the initial dosing of tanks, which occurred after acclimation of fish for 48–96 h. For rainbow trout, Arctic char, and white sturgeon, a water sample was also taken every 24 h prior to water changes or after most fish in a tank became moribund. Samples were immediately spiked at 50 $\mu\text{g/L}$ with 6PPD-quinone- d_3 and stored at -20 °C until they were analyzed. Fish were observed during most of the exposure duration, immediately removed once they became moribund, and humanely euthanized using >250 mg/L buffered MS-222. Characteristic signs of 6PPD-quinone exposure leading to brook trout and rainbow trout becoming moribund (increased ventilation rate, gasping on the water surface, permanent loss of equilibrium, and spiraling motion) were observed during regular tank inspections and noted and would have resulted in death within 0.5 h if fish were not euthanized.

Biological Sampling. The fork length (millimeters) and weight (grams) of each fish were determined after euthanasia. Blood samples were obtained from the caudal vein using heparinized syringes, and blood glucose concentrations determined using hand-held meters (brook trout, OneTouch

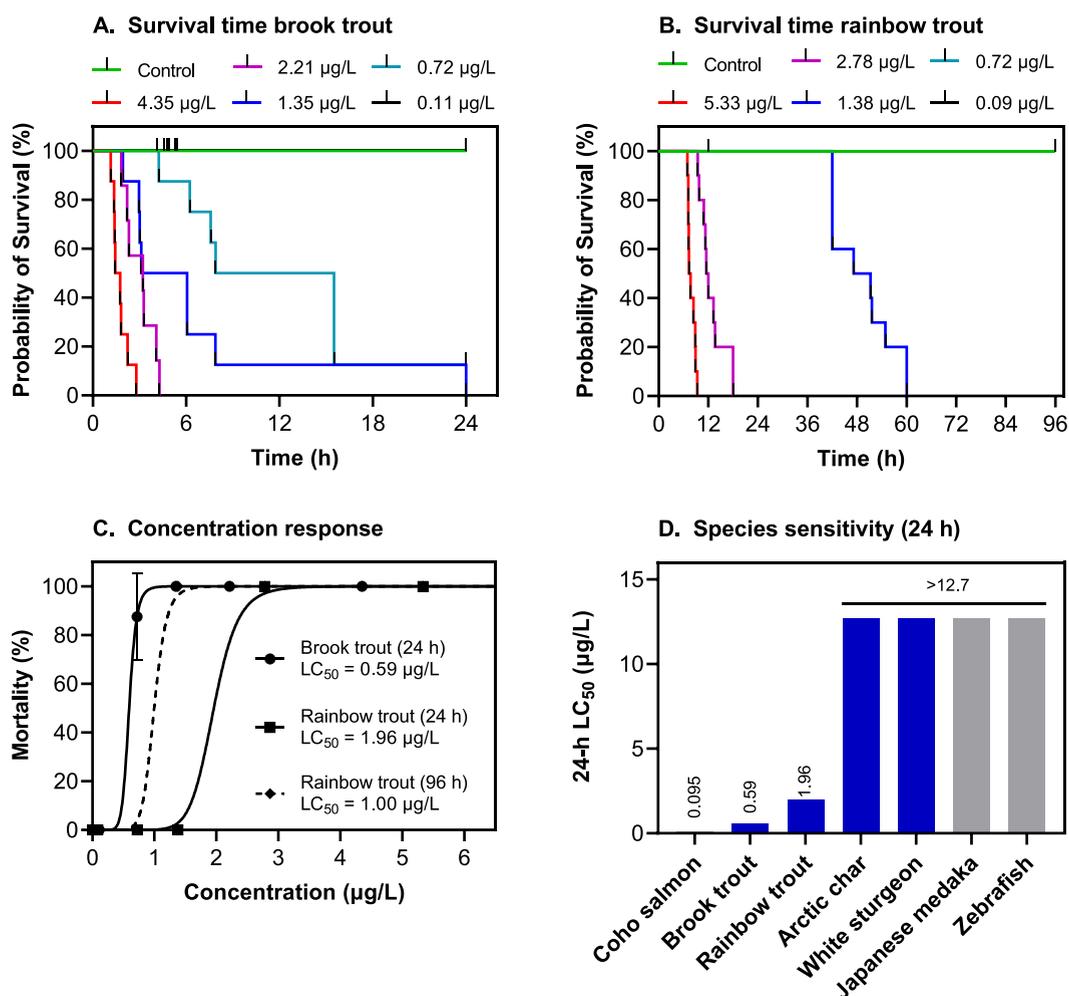


Figure 1. Relationships among exposure time, exposure concentration, and survival in (A) brook trout and (B) rainbow trout over exposure durations of 24 and 96 h, respectively. Median lethal concentrations at 24 and 96 h of exposure were interpolated for both species using (C) two-parameter logistic regression and (D) compared with those of other previously studied species. All concentrations are based on measured concentrations.^{6,9,10} Blue bars in panel D are from this study, while values for coho salmon, Japanese medaka, and zebrafish have been previously published.

Ultra 2 m, LifeScan, Malvern, PA; all other species, Contour Next meter, Ascensia, Basel, Switzerland). The percent hematocrit was determined in brook trout using a StatSpin CritSpin microhematocrit centrifuge (StatSpin, Norwood, MA).

Analytical Chemistry. Instrumental verification of exposure concentrations of 6PPD-quinone followed the method outlined by Challis et al.⁷ with modifications. Briefly, samples were analyzed on a Vanquish UHPLC instrument coupled with a Q-Exactive HF Quadrupole-Orbitrap hybrid mass spectrometer (Thermo-Fisher). An isotope dilution strategy using 6PPD-quinone- d_5 was applied for quantification. Average measured exposure concentrations were calculated and used for subsequent data analysis instead of nominal exposure concentrations. A detailed description of the analytical methods is provided in the [Supporting Information](#).

Data Analysis and Statistics. The percent mortality for each concentration and replicate was calculated at 24 h for brook trout and at 24 and 96 h for rainbow trout to account for differences in time to death between both species. LC_{50} s were interpolated for each time point using logistic regression of the percent mortality versus average measured exposure concentrations. Blood glucose measurements were analyzed for

normality and heteroscedasticity using Kolmogorov–Smirnov’s test and Levene’s test, respectively. Because the data sets violated the assumptions for one-way analysis of variance (ANOVA), a nonparametric Kruskal–Wallis’s test with Dunn’s post hoc test was performed. A p value of ≤ 0.05 was considered indicative of statistically significant differences. All plots were created and statistically analyzed using Prism 9 (GraphPad, La Jolla, CA).

RESULTS AND DISCUSSION

Analytical Verification of Exposure Concentrations.

Average concentrations of 6PPD-quinone measured over the exposure periods deviated $<16\%$ from nominal values across all species with the exception of the low-treatment groups for brook trout and rainbow trout (Table S1). There was an average loss of 14% (1.7% and 32% in the high- and low-treatment groups, respectively) of the test chemical over the 24 h window between water changes, suggesting exposure levels were stable throughout the experiments. Losses were slightly greater at the higher exposure concentrations used for Arctic char and white sturgeon. Hiki et al.¹⁰ reported a 17–73% decrease in 6PPD-quinone concentrations over 48 h between water changes for zebrafish and medaka, confirming the

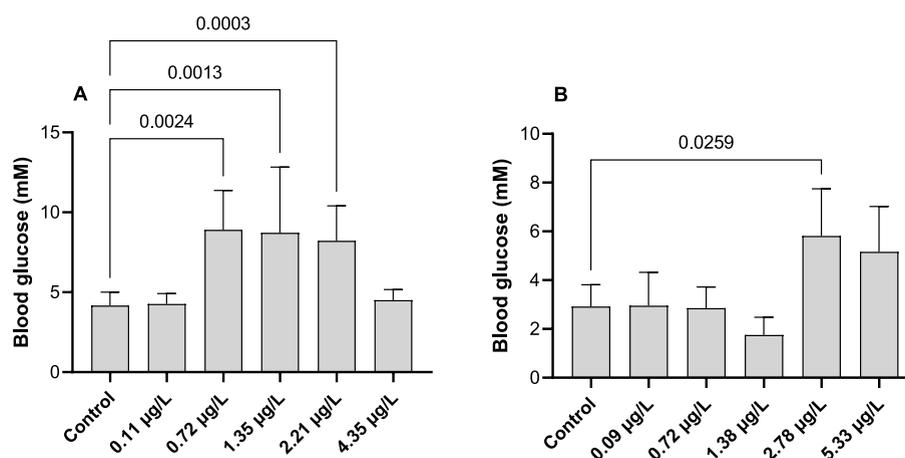


Figure 2. Blood glucose concentrations in (A) brook trout and (B) rainbow trout in moribund animals and those that survived until termination of the experiment following exposure to graded nominal concentrations of 6PPD-quinone. Bars depict the mean, and error bars the standard deviation of 4–15 fish per treatment and species, rather than tank replicates. Because control fish taken down at different sampling times did not differ significantly, individuals were pooled in a single control group for this analysis. Concentrations are based on measured exposure concentrations. Numbers above the brackets indicate the *p* value of statistical comparisons of blood glucose concentrations in 6PPD-quinone-exposed fish with those of the control group (Kruskal–Wallis ANOVA on ranks with Dunn’s post hoc test).

relative stability of this chemical under static renewal conditions.

Acute Toxicity of 6PPD-quinone in Fish. Exposure to 6PPD-quinone resulted in significant acute effects in two of the four tested species, which varied as a function of chemical concentration, exposure time, and species (Figure 1). Brook trout were most sensitive with 100% of mortalities in the high-treatment group occurring within 3 h of exposure and a 24 h LC_{50} of 0.59 $\mu\text{g/L}$ [95% confidence interval (CI) of 0.48–0.63 $\mu\text{g/L}$], which is similar to previous observations in coho salmon.⁵ A slightly greater LC_{50} of 1.00 $\mu\text{g/L}$ (95% CI of 0.95–1.05 $\mu\text{g/L}$) was recorded for rainbow trout after 72–96 h (1.96 $\mu\text{g/L}$ after 24 h, 95% CI of 1.86–2.06 $\mu\text{g/L}$), while no mortalities were observed for either Arctic char or white sturgeon at measured concentrations as high as 14.2 and 12.7 $\mu\text{g/L}$ after 96 h. Interestingly, in rainbow trout, the first signs of morbidity did not manifest until 7 h after commencing exposures and maximum mortalities occurred at 60 h, which was significantly longer than the times for brook trout and coho salmon.⁵ The LC_{50} values reported here for brook trout (0.59 $\mu\text{g/L}$) and rainbow trout (1.00 $\mu\text{g/L}$) were ~6–10-fold greater than that of coho salmon (0.10 $\mu\text{g/L}$) and are well within ranges of environmental concentrations of 6PPD-quinone previously reported in Canadian and U.S. surface waters after stormwater runoff events.^{5–8} While no mortality of endangered white sturgeon or Arctic char was observed after exposure to 6PPD-quinone, potential subchronic or chronic impacts have not been fully studied and cannot be excluded at this time.

These results support earlier reports that identified marked differences in the sensitivity of fishes to exposure with 6PPD-quinone and TWP leachates.^{3,5,10} Previous studies have hypothesized that sensitivity to 6PPD-quinone may be unique to salmonids.⁹ These authors, who assessed the acute toxicity of this chemical to Japanese medaka and zebrafish, did not observe any significant mortalities up to the limit of the water solubility of 6PPD-quinone, which was estimated to range between 34 and 54 $\mu\text{g/L}$. While this is in accordance with the lack of effects reported in white sturgeon in this study, our results for Arctic char as well as those reported for TWP

leachates by McIntyre et al.^{3,5} for chum salmon (*Oncorhynchus keta*) clearly demonstrate the tolerance of these two salmonid species. Thus, we can conclude that sensitivity to acute exposure with 6PPD-quinone is highly variable among fishes in general, and salmonids specifically, even among species from the same genus such as brook trout and Arctic char representing the genus *Salvelinus*, and rainbow trout, chum salmon, and coho salmon representing the genus *Oncorhynchus*.

In cases in which mortalities occurred, both brook trout and rainbow trout exhibited behaviors consistent with those observed in coho salmon,^{3,5} including hovering close to the water surface, accelerated opercular movements, gasping, and spiraling motion. This is in accordance with the hypothesis by McIntyre et al.³ and Varshney et al.⁹ that these types of behavior are suggestive of 6PPD-quinone causing cardio-respiratory distress. A significant increase in blood glucose concentrations observed at 0.72–2.21 $\mu\text{g/L}$ in brook trout and 2.78 $\mu\text{g/L}$ in rainbow trout (Figure 2) indicates that 6PPD-quinone impacted energy metabolism, although the underlying mechanisms for this increase are currently unclear. Additionally, hematocrit of brook trout exposed to 0.72–4.35 $\mu\text{g/L}$ 6PPD-quinone significantly increased from an average of 42% in the control group to 68% at 4.35 $\mu\text{g/L}$ (Figure S4). This agrees with observations by Blair et al.,¹³ who found even more pronounced increases in hematocrit in coho salmon following exposure to urban runoff. The authors also provided evidence of the disruption of the blood–brain barrier in exposed fish, which might be one of the reasons for the observed increases in hematocrit. However, it is currently unclear if this is the key event ultimately responsible for causing death or if other processes are involved.

Environmental Implications and Risk Assessment. Salmonids are of significant ecological, commercial, and recreational importance in many countries around the world, and this study highlights that the acute toxicity of 6PPD-quinone previously reported for coho salmon^{3,5} is also of significant concern for other key receptors, including rainbow trout and brook trout. While there have only been a limited number of studies that characterized the presence of 6PPD-

quinone in surface waters and urban runoff,^{7,8} available reports clearly highlight that commonly found concentrations of this emerging contaminant exceed toxicity thresholds reported here and by Tian et al.⁵ Hence, 6PPD-quinone appears to pose a significant and widespread ecological risk to these species, and potentially other salmonids, especially downstream of urban areas and in smaller water bodies receiving roadway runoff.^{5,7,8} However, other ecologically relevant genera and families of fishes have not been studied to date, which represents an important uncertainty at this point.

The observed differences in the temporal dynamics of time to death among the three species for which acute effects of 6PPD-quinone have been observed to date are interesting. While in coho salmon⁵ and brook trout morbidities at the greatest concentrations were observed as early as 1–2 h after initiation of exposure, in rainbow trout the first mortalities did not occur until ~7 h at comparable concentrations. As exposure conditions were comparable among experiments in terms of temperature (10–13 °C), pH (6.7–8.3), and DO (>90% saturation), it is unlikely that these parameters would have been a driving factor. Despite the similar LC₅₀ values observed for all three species, these differences may have significant implications for ecological risk assessment of urban runoff events. The shorter time to death for coho salmon and brook trout may increase their risk of mortality prior to dilution of stormwater in receiving water bodies over time after rain events.

Future Research Needs. For more comprehensive future risk assessments of 6PPD-quinone in aquatic ecosystems, it is imperative to study its acute and sublethal effects in a broad range of fish species. More research into the potential respiratory or cardiovascular mechanisms of action is needed to conclusively and comprehensively elucidate the specific mechanism by which 6PPD-quinone triggers URMS in select salmonids and possibly other fishes. Most importantly, drivers of species differences in sensitivity need to be studied; i.e., why are some salmonids more sensitive than others? Several native salmonid fish species (e.g., cutthroat trout, *Oncorhynchus clarkii*; bull trout, *Salvelinus confluentus*)^{14–16} are at risk of extinction in parts of their native range, and the contribution of 6PPD-quinone to their stock status needs to be urgently investigated.

■ ASSOCIATED CONTENT

SI Supporting Information

The Supporting Information is available free of charge at <https://pubs.acs.org/doi/10.1021/acs.estlett.2c00050>.

Additional details of the chemical analytical methods (Text S1) and results (Table S1 and Figures S1 and S2) and results of hematocrit measurements in brook trout (Figure S3) (PDF)

Video of characteristic symptoms of brook trout exposed to 6PPD-quinone, here loss of equilibrium and spiraling (MOV)

Video of characteristic symptoms of rainbow trout exposed to 6PPD-quinone, here gasping (MOV)

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<https://pubs.acs.org/10.1021/acs.estlett.2c00050>

Notes

The authors declare no competing financial interest.

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Urban Roadway Runoff Is Lethal to Juvenile Coho, Steelhead, and Chinook Salmonids, But Not Congeneric Sockeye

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ABSTRACT: We compared the sensitivity of closely related Pacific salmon and steelhead (*Oncorhynchus* spp.) to untreated urban stormwater runoff across three storm events. Juvenile coho, sockeye, steelhead, and Chinook were exposed for 24 h to untreated urban runoff and then transferred to clean water for 48 h. As anticipated from previous studies, coho were highly susceptible to runoff toxicity, with cumulative mortality rates ranging from 92%–100% across the three storms. By contrast, juvenile sockeye were unaffected (100% survival), and cumulative mortality rates were intermediate for steelhead (4%–42%) and Chinook (0%–13%). Furthermore, coho died rapidly following the onset of stormwater exposure (generally <4 h), whereas mortality in Chinook and steelhead was delayed by 1–2 days. Similar to previous findings for coho, steelhead and Chinook did not recover when transferred to clean water. Lastly, significant mortality occurred in coho even when roadway runoff was diluted by 95% in clean water. Our findings extend the urban runoff mortality syndrome in salmonids and point to a near-term need for sublethal studies in steelhead and Chinook to more precisely understand stormwater risks to threatened species recovery efforts in the western United States.

KEYWORDS: urbanization, stormwater, endangered species, *Oncorhynchus*, microplastics, 6PPD-quinone, urban runoff mortality syndrome, tire wear particles



INTRODUCTION

Recent advances in analytical methods have made it increasingly possible to fractionate urban stormwater runoff into individual and identifiable toxic components. These efforts have yielded several chemicals of emerging concern (CECs) that are derived primarily from vehicle tires and therefore ubiquitous in roadway runoff.^{1,2} Many are essentially unknown to ecotoxicology despite an apparent prevalence in the environment^{3,4} and rapid mobilization in stormwater runoff.^{5–7} One such CEC is *N*-(1,3-dimethylbutyl)-*N*'-phenyl-*p*-phenylenediamine (6PPD), an antiozonant added during the manufacture of tires to help prevent tread degradation. Ozone abiotically converts 6PPD into 6PPD-quinone, as well as other transformation products.⁸

For the past two decades, researchers in the Pacific Northwest of the United States (U.S.) have been studying a severe urban runoff mortality syndrome in coho salmon (*Oncorhynchus kisutch*). This forensic investigation eventually led to the discovery of 6PPD-quinone (6PPD-q) as the primary causal agent in the urban runoff mortality phenomenon.⁴ Recurring, stormwater-driven dieoffs pose a significant threat to the near-term and long-term conservation of wild coho populations,⁹ several of which are currently managed under the U.S. Endangered Species Act (ESA). The

conservation implications for ESA-listed salmon are considerable, given high rates of premature death (up to 90% or more) among adult coho returning to spawn in urban watersheds, as documented in field surveys across multiple years in Puget Sound and elsewhere.^{10,11}

At present, uncertainty around the extent to which roadway runoff toxicants, including 6PPD-q and other tire antioxidant/antiozonant transformation products, impact aquatic taxa beyond coho is spurring a global effort in ecotoxicology.^{3,12,20} Although environmental health data are limited, there appears to be variation in vulnerability to roadway runoff even among closely related species of Pacific salmon belonging to the genus *Oncorhynchus*. This is evident from recent studies, wherein adult coho and chum (*O. keta*) were exposed to urban runoff or tire leachate, with high mortality observed in coho but not chum.^{13,14} These differences in survival were consistent with observations from field surveys that previously documented

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high rates of premature spawner mortality in coho but not chum in restored urban catchments.¹⁰ However, the vulnerability of other Pacific salmonids to urban roadway runoff, including sockeye (*O. nerka*), Chinook (*O. tshawytscha*), and steelhead (ocean-going rainbow trout; *O. mykiss*), has not been determined. In the context of the ESA, this represents a major information gap, particularly for stream-type Chinook and steelhead that spend proportionately more time in freshwater habitats as juveniles, where they are more likely to be exposed to runoff from the transportation grid. Moreover, relative to coho, ESA-listed Chinook and steelhead populations encompass a much wider range of river basins in the western U.S., particularly in California (see www.fisheries.noaa.gov/species-directory/threatened-endangered for current ESA range designations).

It was recently shown that juvenile coho, in addition to spawning adults, are highly susceptible to the mortality syndrome.¹⁵ Salmonids other than coho, including *O. mykiss*, also appear vulnerable.¹² In the present study, we extended these earlier observations by coexposing juvenile coho, sockeye, Chinook, and steelhead to runoff collected during multiple rain events. We focused on small subyearlings (coho, sockeye, Chinook) as well as larger age 1+ juveniles (coho, steelhead), and used coho as a positive control for the baseline toxicity of untreated stormwater (i.e., as confirmation of the mortality syndrome). Our study had three primary objectives: (1) determine whether ESA-listed species other than coho are vulnerable to acutely lethal stormwater toxicity, (2) evaluate the time course for mortality across species and whether affected fish recover in clean water, and (3) assess the role of dilution as a factor influencing survival, using juvenile coho as an indicator species.

MATERIALS AND METHODS

Urban Roadway Runoff Collection and Transport.

Urban stormwater was collected from downspouts draining a short section of elevated urban arterial (west-bound onramp to State Route 520 from Montlake Boulevard in Seattle, Washington). Runoff from six storms was collected at different times of the year in 2018 (August 26, October 25, and December 17) and 2019 (March 12, March 25, and April 4). During each storm event, runoff was filtered through a fiberglass window screen to remove coarse debris and collected in 900 L or 1325 L stainless steel collection totes (Custom Metalcraft Inc., Springfield MO) for subsequent transport at ambient temperature to the Washington State University Research and Extension Center in Puyallup (WSU-P). Juvenile salmonid exposures were initiated within 24 h of each storm event. Note that 6PPD-q levels in runoff from this location have been previously measured across nine storms in 2017–2019,^{4,19} including the October and December collection events used here in 2018; all storms contained 6PPD-q at concentrations expected to be lethal to juvenile coho (Table S3).

Juvenile Salmon and Steelhead. Juvenile coho, sockeye, and Chinook salmon as well as an ocean-migrating stock of *O. mykiss* (hereafter referred to as steelhead) were obtained from local hatcheries, held in a recirculating freshwater system at WSU-P on a 12:12 h dark:light cycle, and fed daily with commercial fish food (BioVita, Bio-Oregon). Fish rearing water consisted of municipal water treated with reverse osmosis and adjusted to pH 7.6 and a conductivity of 1500 $\mu\text{S}/\text{cm}$, then passed through a bead filter, UV reactor,

bioreactor, and chiller. Sockeye prefer cooler waters (8 °C optimum), and thus exposure temperatures were maintained at 5.0–10.3 °C for the cross-species vulnerability experiments involving sockeye and the three other salmonids. For the dilution experiments (coho only), temperatures ranged from 10.0 to 12.1 °C. Fish sizes and water quality measurements for all experiments are described in the Supporting Information (Tables S3 and S4); experimental protocols were approved by Washington State University's Institutional Animal Care and Use Committee.

Stormwater Exposures to Assess Species-Specific Sensitivity. For the multispecies comparisons, replicate groups of juvenile salmonids were exposed to undiluted roadway runoff (100% stormwater) for 24 h following each of the three 2019 storm events and then transferred to clean (rearing) water for an additional 48 h (Table S1). Coho served as positive controls for the urban mortality syndrome in side-by-side exposures using subyearlings (coho, sockeye, and Chinook) and larger age 1+ salmonids (coho and steelhead). We selected an ocean-migrating stock of *O. mykiss* to differentiate the steelhead life history from domesticated, freshwater-resident strains of rainbow trout.

Static exposures were carried out in 35 L glass aquaria containing either 30 L of clean water or 100% stormwater. For the smaller fish (subyearling coho, Chinook, and sockeye), 9–10 fish were placed in each of the three replicate exposure tanks. For the larger (age 1+) coho and steelhead, $n = 6$ fish were placed in each of four replicate exposure tanks. A few fish escaped into the surrounding water bath and were excluded (Table S1).

Exposure tanks were supplied with air stones for oxygenation (>10 mg/L) and placed in flow-through water baths with chillers to maintain temperatures. Across all three storms, mortality was monitored throughout exposure periods at regular intervals (2, 4, 8, and 24 h). Final reported mortality counts included moribund fish that did not react to gentle prodding and were removed and euthanized with MS-222 (400 mg/L) followed by severing the spinal cord.

All fish surviving the 24 h exposure were transferred to larger (57 L) tanks containing clean water for a 48 h depuration. For the smaller fish (subyearling coho, Chinook, and sockeye), individuals were removed from the three replicate exposure tanks and grouped into a single depuration tank with a maximum number of 30 fish per tank. For the larger age 1+ coho and steelhead, fish from individual exposure tanks were divided evenly into two depuration tanks ($n = 12$ maximum per tank, to adjust for larger fish). Moribund and dead fish were monitored and removed midway through depuration (48 h) and at the end of depuration (72 h).

Stormwater Exposures to Assess the Influence of Dilution on the Mortality Syndrome. To evaluate dilution, juvenile coho were exposed to a graded stormwater concentration series for 24 h following three storms in 2018 (Table S2). Juvenile coho (age 1+; Table S4) were placed in static exposure chambers as described above. Glass aquaria (35 L) were filled with either 30 L of clean water or urban stormwater diluted to 25%, 11.2%, 5%, 2.2%, or 1% with clean water. For the August and December storms, individual fish ($n = 8$, adjusted for size) were placed in each of three replicate tanks per concentration. For the October storm, a mechanical failure (chiller) necessitated a shift in experimental design, whereby $n = 10$ fish were exposed in each of the two replicate

tanks per dilution. Mortality was enumerated as described above.

Statistical Analyses. Statistical analyses were developed using R (<https://www.r-project.org/>) and RStudio (<https://www.rstudio.com>). Mortality was calculated in proportion to the total number of individuals across all tanks within a given treatment (e.g., exposure, species, time, and/or dilution; see data in Tables S1 and S2). For each observed proportion, the 95% confidence interval was calculated using the BinomCI function from the DescTools R package with the “modified Wilson” method to account for proportions near 0 and 1 (presented as percentages in Figure 1). Differences among treatments were determined by comparing confidence intervals around the observed proportions.

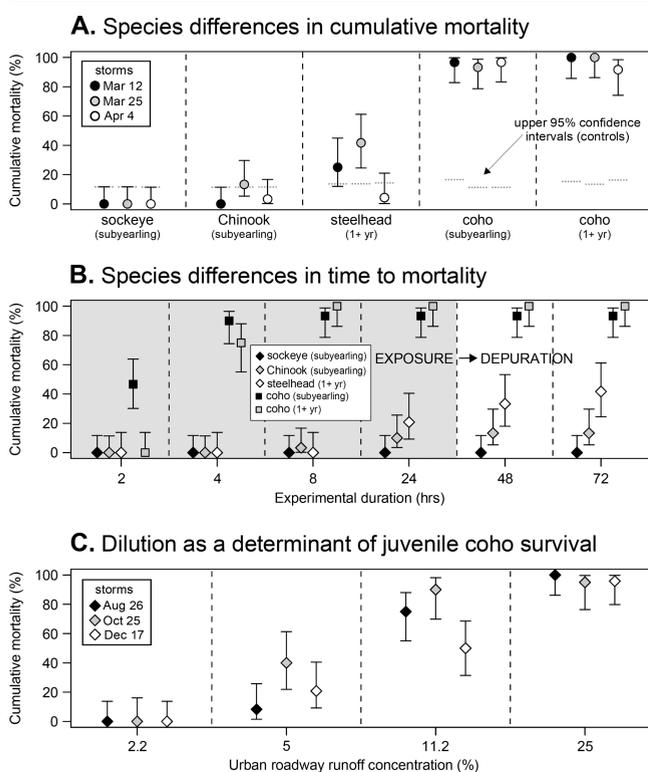


Figure 1. Cumulative mortality (% and 95% confidence interval) of juvenile Pacific salmonids exposed to urban roadway runoff. (A) Species differences across three storms following 24 h exposure and 48 h depuration. Upper 95% confidence intervals of controls are shown as dotted lines. (B) Species differences in mortality over time for a single storm (March 25) after 24 h exposure (gray shaded area) and 48 h depuration (unshaded area). (C) Mortality in coho (1+ yr) exposed for 24 h to different dilutions of roadway runoff over three storms. No mortality was observed in controls. (A–C) Data from all control and exposed fish are shown in Tables S1 and S2. Fish age is noted as subyearlings or 1+ yrs.

RESULTS AND DISCUSSION

Varying Mortality in Response to Untreated Stormwater Across Salmonid Species. Juvenile sockeye, Chinook, and steelhead, as well as two size classes of juvenile coho (positive controls), were exposed to untreated roadway runoff from three separate storm events (Figure 1A). As anticipated from earlier studies,^{4,15,16} subyearling and larger (age 1+) coho were highly susceptible to toxic runoff, as evidenced by >90% cumulative mortality (Figure 1A; right-

most panels) across all three 2019 storms. Conversely, all juvenile sockeye survived 24 h exposures to runoff, irrespective of the storm, similar to previous observations of 100% survival for chum.^{13,14} The response of juvenile Chinook was less consistent, with only modest mortality in response to the second (March 25) storm. Steelhead were intermediate between sockeye (no deaths) and coho (almost no survivors), with proportionately higher mortality for the first and second storms (Figure 1A).

Species-Specific Timelines for the Mortality Syndrome. Among Pacific salmonids, the stormwater mortality phenomenon has primarily been studied in coho, where the progression of the syndrome—from asymptomatic fish to visible distress (disorientation, loss of equilibrium) to death—occurs over a span of a few hours in fish exposed to 100% stormwater. In accord with earlier published results,¹⁵ juvenile coho began dying soon during exposure (2–4 h), with near-maximal cumulative mortality within 8 h (Figure 1B; stormwater exposure window in shaded panels at left). Relative to coho (positive controls), the progressions of symptoms in Chinook and steelhead were qualitatively the same (surface swimming and gaping, loss of equilibrium) albeit with a delayed onset and a longer window for mortality thereafter, with fish generally dying toward the end of the 24 h exposure or after subsequent transfer to clean water. Hence, similar to coho,¹⁵ the distress syndrome in Chinook and steelhead appears irreversible.

Influence of Dilution on Coho Survival. Our sourcing of stormwater from an urban arterial with high traffic volume (relatively concentrated runoff) is well suited for studies of green infrastructure effectiveness^{16,17} but is less representative of exposure conditions in salmon habitats where stormwater is diluted by receiving waters. To evaluate the influence of dilution on survival, juvenile coho were exposed to runoff from three separate storm events for 24 h, at concentrations ranging from 1% to 25%. Mixtures containing 5% or more stormwater were generally lethal to juvenile coho (Figure 1C). Note that the upper end of the exposure range (25% runoff diluted in clean water) was chosen based on maximal coho lethality in pilot experiments; untreated surface runoff is likely to represent more than 25% of receiving surface water volumes in many urban watersheds.

Implications. In the U.S. Pacific Northwest, the urban runoff mortality phenomenon has been studied intensively for the past two decades, with a primary focus on adult coho returning from the ocean to spawn in urbanized Puget Sound watersheds.^{10,18} Wild coho populations are unlikely to withstand the high rates of dying spawners previously and consistently documented in urban stream reach surveys.⁹ The mortality syndrome was subsequently extended to juvenile coho,¹⁵ which enabled relatively high-throughput testing of stormwater fractions and set the stage for the eventual discovery of 6PPD-q as the causative agent.⁴ Because the parent compound (6PPD) and other chemicals similar in structure and function are ubiquitous in motor vehicle tires worldwide, there has been an expanding effort to identify other fish species at risk from exposure to untreated roadway runoff. Our current findings extend the urban runoff mortality phenomenon to steelhead and Chinook but with phenotypic nuances in severity (less) and time course (longer) relative to coho. Nevertheless, the characteristics of the syndrome in coho exposed to roadway runoff (e.g., the present study; Chow et al.¹⁵) or 6PPD-q alone (e.g., Tian et al.⁴) are the same,

implying a common underlying mechanism. The discussion that follows therefore hypothesizes that the coho, steelhead, and Chinook toxicity observed here was caused by 6PPD-q across the different stormwater collections, an assumption further supported by recent findings for *O. mykiss*.¹² For context, coho are exceptionally sensitive to 6PPD-q toxicity, with lethality (LC50) in response to exposure concentrations less than 0.1 parts per billion.¹⁹ In the present study, 6PPD-q levels were likely to have exceeded this acute lethality threshold for coho across all storms by an order of magnitude. This is supported by published 6PPD-q measurements in runoff from the same source (SR520 elevated bridge) across nine separate rain events in 2017–2019,^{4,19} including the October and December stormwaters collected for the dilution experiments in Figure 1C (Table S3).

Our current findings are the first demonstration of urban runoff-driven mortality in Chinook, and our sockeye results reinforce what are apparently stark differences in vulnerability across closely related salmonids. For example, whereas coho (*O. kisutch*) are highly sensitive,¹⁹ several field and laboratory studies have shown that congeneric chum salmon (*O. keta*) are not.^{10,13} Similar to chum, zebrafish (*Danio rerio*) and medaka (*Oryzias latipes*) appear relatively insensitive to 6PPD-q,^{20,21} along with Arctic char (*Salvelinus alpinus*) and white sturgeon (*Acipenser transmontanus*).¹² Conversely, Brinkmann et al.¹² recently showed that brook trout (*Salvelinus fontinalis*), like coho, are also highly sensitive to the acutely lethal toxicity of 6PPD-q. Intriguingly, in the same study, the time to death for rainbow trout (*O. mykiss*) was intermediate, with mortality occurring over a more protracted timeline of a few days. On the basis of these initial findings, the Salmonidae appear to sort into roughly three categories of vulnerability to 6PPD-q acute toxicity: high (coho salmon and brook trout), low (chum and sockeye salmon, Arctic char), and intermediate (steelhead/rainbow trout, Chinook salmon).

In the context of threatened species management, the recent *O. mykiss* results are particularly noteworthy. In addition to being a model test organism in aquatic toxicology, rainbow trout are an important aquaculture species for recreational fishing.²² In the western United States, several distinct population segments (or evolutionarily significant units) of ocean-migrating *O. mykiss* (steelhead) are currently listed for protection under the U.S. Endangered Species Act (ESA). Accordingly, freshwater and estuarine habitats critical for steelhead conservation and recovery have been designated across major metropolitan areas in the coastal and interior regions of California, Oregon, and Washington. The overlap between these recovery domains and the expanding transportation grid, at the watershed and basin scales, is extensive. The ESA requires that federal natural resource managers consider the impacts of federal actions on listed species, and stormwater contaminants (e.g., 6PPD-q) represent a habitat factor that was largely unknown to science when steelhead were listed.

For *O. mykiss*, the initial evidence suggests that life history plasticity (i.e., freshwater residence vs ocean migration) is not a determinant of susceptibility, albeit premised on two important assumptions: (1) Variation in genetics or husbandry/culture practices between the *O. mykiss* stocks used here and those sourced for Brinkmann et al.¹² did not influence observed toxicity, and (2) 6PPD-q was the causative agent for *O. mykiss* deaths here, thus facilitating a direct comparison of mortality across the two studies. Irrespective, more work is needed—

particularly experimental designs that consider phenotypic and genetic differences across wild steelhead stocks. The intermediate and delayed nature of the mortality syndrome in steelhead and Chinook (relative to coho) also raises the potential significance of sublethal toxicity. The recent discovery of 6PPD-q should expedite functional studies of neurobehavioral and cardiorespiratory dysregulation, to match the consistently dominant features of the distress phenotype (e.g., surface swimming and gaping, loss of orientation and equilibrium).

Our findings also directly address the potential role of dilution in receiving waters, as a conventional management strategy for reducing toxic impacts to aquatic communities. Recent laboratory study designs^{14–17} have used urban runoff from a relatively intensively trafficked arterial, in part as a strategy to establish a clear baseline of toxicity in fish and invertebrates prior to green infrastructure treatments to evaluate pollutant removal and improved organismal health. While this approach was useful for challenging bioinfiltration soil systems,^{16,17} exposures to undiluted arterial roadway runoff are not necessarily representative of receiving water quality conditions in large rivers or lakes or in habitats downstream from a site-specific stormwater discharge. Field surveys have consistently demonstrated high rates of coho spawner mortality across all urban watersheds where the phenomenon has been studied closely.¹¹ Therefore, a protective role for dilution has (to date) seemed unlikely, given these indirect lines of evidence.^{10,11} Consistent with this, arterial runoff was acutely lethal to juvenile coho salmon, even when diluted in 95% clean water. Additional factors working against “dilution as the solution” to the urban runoff mortality syndrome include the ubiquitous and diffuse nature of stormwater inputs to salmon habitats (e.g., serial and repeated discharges along migration corridors), ongoing climate change (i.e., reduced receiving water volumes), and the possibility of sublethal toxicity at the lower end of the dilution exposure range examined here. To address these factors, future studies can focus on a few related chemicals (antiozonants and associated transformation products, as opposed to whole urban runoff), using an extensive and established set of tools for studying cardiorespiratory and neurobehavioral toxicity in fish (e.g., Blair et al.²³). These studies are needed to more precisely define sublethal toxicity thresholds in ESA-listed steelhead and Chinook and to better understand what appear to be striking sensitivity differences across closely related species of salmon, trout, and char.

■ ASSOCIATED CONTENT

Supporting Information

The Supporting Information is available free of charge at <https://pubs.acs.org/doi/10.1021/acs.estlett.2c00467>.

Table S1: All data for the species comparison exposure studies. Table S2: All data collected for the exposure studies evaluating dilution effect. Table S3: Storm information and water quality measurements. Table S4: Information related to the fish such as age, size, and hatchery of origin. (XLSX)

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Notes

The authors declare no competing financial interest.

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Recommended by ACS

Bifenthrin, a Ubiquitous Contaminant, Impairs the Development and Behavior of the Threatened Longfin Smelt during Early Life Stages

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JUNE 23, 2023

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November 6th, 2023

Sound Transit, OMF South Project
c/o Erin Green, South Corridor Environmental Manager
401 S Jackson St., Seattle, WA 98104

RE: Operations & Maintenance Facility South, Draft EIS review

The Washington State Department of Transportation (WSDOT) is pleased to provide comments on the Draft Environmental Impact Statement (DEIS) for the Operations and Maintenance South (OMF South) Project.

Some key priorities from the attached Excel comment sheet are listed below:

1. Take inventory of WSDOT owned and managed facilities (i.e., noise walls, utilities, ITS) so we can work together to create avoidance and/or minimization and mitigation plans.
 - a. Please also note the comments focused on maintenance access and plans. We anticipate these will be resolved through an Operations and Maintenance agreement.
2. The South 344th Street alternative shows impacts to a WSDOT BMP. Please coordinate with WSDOT to define any potential impacts and mitigation measures.
3. The WSDOT Triangle Project is mentioned multiple times. Please be aware that this project was recently shelved. Refer to the [project website](#) for more information.
4. Fish passage barriers are noted throughout the document. We recommend adding [WDFW](#) ID numbers and ownership when feasible to help differentiate between locations.
 - a. Additionally, please utilize [this link](#) to access WSDOT's current 2030 fish passage delivery plan.
5. The [2019 Memorandum Of Understanding](#) between Sound Transit and the Department of Ecology explains a difference between projects constructed by 2024 and projects constructed between 2030-2041. How will this apply to OMF South if complete by 2029?

Please contact Jessica Giblin, WSDOT Regional Transit Coordination Division (RTCD) environmental liaison, with any questions regarding this letter or the attached comment sheet.

WSDOT appreciates the opportunity to review and looks forward to continuing our collaboration with Sound Transit.

Sincerely,

A handwritten signature in black ink that reads 'Cordy Crockett'.

Cordy Crockett WSDOT RTCD Director
crocketc@wsdot.wa.gov

cc: Jessica Giblin, WSDOT RTCD Environmental Liaison GiblinJ@WSDOT.WA.GOV

Sound Transit's Operations & Maintenance Facility South Project - Comments from WSDOT's Review of the Draft EIS
Comments Due 11/6/23. Contact Jessica Giblin with questions (giblinj@wsdot.wa.gov)

| # | DEIS Chapter | Page | Comment | Reviewer | Response |
|----|--------------|-------------|--|------------------------|----------|
| 1 | 3.11 | 3.11-8 | If the project sites include any WSDOT-managed stormwater facilities, please identify the WSDOT stormwater facilities by creating a summary table if necessary. | K. Shin | |
| 2 | 3.11 | 3.11-17 | Please verify if the WSDOT Highway Runoff Manual should be included to consider LID Design. | K. Shin | |
| 3 | 3.10.1.1 | 3.10-1 | The statement "Based on the anticipated high level of interest from Tribes...biologists conducted formal delineations of the OHWM of tributaries to Hylebos Creek" could be corrected. OHWM delineations are done because of state and federal regulatory requirements, not because of a project's public profile. Is this trying to say delineations were done outside of the study area? If so, suggest clarifying and explain the reasoning. | E. Pizzichemi | |
| 4 | 3.10.1.1 | Figure 3.10 | How are mature forest and native mature forest classified? Ex: Based on dbh of trees? Please help clarify by defining how these are measured. | E. Pizzichemi | |
| 5 | 3.10.1.1 | 3.10-5 | Consider adding "... biologists evaluated the accessibility of the streams in the study area to salmonids ..." or something similar for clarity. | A. Atkinson | |
| 6 | 3.10.1.3 | 3.10-8 | Similar to comment 3, wetland delineations are not done to alleviate concern, they are done to satisfy federal and state regulatory requirements. The sentence about doing formal delineations because of co-manager concern is not necessary. | E. Pizzichemi | |
| 7 | 3.10.1.3 | 3.10-8 | "The Corps is expected to issue a new rule that will revise the definitions of waters of the US in fall 2023." - Will this paragraph be updated based on this change? | A. Atkinson | |
| 8 | 3.10.2.3 | 3.10-30 | Regarding the classification of impact types - Typically, temporary impacts would need to be less than a year. Saying that forested/woody vegetated wetlands would recover in decades doesn't seem to fit the definition of temporary or long-term temporary. | E. Pizzichemi | |
| 9 | 3.10.3 | 3.10-32 | Please work with the Puyallup Tribe if you're considering mitigation in the Hylebos watershed as the PTOI appreciate large-scale restoration. | E. Pizzichemi | |
| 10 | 3.10.3 | 3.10-33 | Recommend re-checking availability at the Upper Clear Creek mitigation bank again. It may not have space by the time this project gets to permitting. I know the Rule prefer ILF and Banks. | E. Pizzichemi | |
| 11 | 3.8 | | AQ, GHG Emissions: Include social cost of carbon per the CEQ's 2023 NEPA GHG. | L. Taylor | |
| 12 | 3.2 | 3.2-22 | S 344th Street access appears to be through WSDOT's BMP. How will WSDOT's facility be impacted and then mitigated for? The capacity/function of the WSDOT pond at S.344th St. needs to be maintained. (also in Executive Summary page ES-11). | K. Hall, C. Winningham | |
| 13 | 2 | 2-8 | Because vulnerable communities have been historically impacted by transportation-related projects, recommend providing a concise explanation about how you will "identify potential impacts to neighborhood/community cohesion." The report currently makes some generalizations, but it would be helpful to have more information. | D. Karolczyk | |
| 14 | 2 | 2-8 | Recommend that the report explain how vulnerable communities (e.g., community of color, retirees, Limited English proficient persons), and low-income residing in South 344th Street Preferred Alternative would be impacted. This would give reassurance that protected groups under Title VI of the Civil Rights of 1964 are protected. For example, will this project adhere to the Right-of Way Uniform Act Relocation Assistance? How would this project carry out the relocation assistance advisory program to satisfy FHWA's requirements of Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.)? | D. Karolczyk | |
| 15 | 3.1-3.6 | 3.6.11 | Hazardous chemical exposure has been linked to many diseases (cancer, respiratory and heart diseases, among others). The Midway Landfill site is located in the middle of a residential area. If this alternative is chosen, how will the surrounding residents be protected during the cleaning of the site? Additionally, is there any information available to tell the reader what Midway's impact has been on the nearby residents and also the environment? | D. Karolczyk | |

| # | DEIS Chapter | Page | Comment | Reviewer | Response |
|----|--------------------------|---------------------------|--|------------------------|----------|
| 16 | 2.5 | 2.32 | In the cost comparison section, it might be worth mentioning that there is a test track in two alternatives, but not in the Midway Landfill option. | C. Crockett, D. Haight | |
| 17 | Executive Summary | v | The table lists Temporary Construction Easement (SR 99, I-5). Since there probably won't be a lease on SR 99 for the OMF-S project, SR 99 can be removed from the parenthesis. Also, it is called a Temporary Construction Airspace Lease (TCAL) in this situation. | C. Crockett | |
| 18 | 3.15 | 85 | No WSDOT utilities are listed here. Please check this area to confirm there are no stormwater facilities and/or ITS systems that belong to WSDOT. | C. Crockett | |
| 19 | | | What would be the impacts to light rail service of building the midway option? | C. Crockett | |
| 20 | 3.7.2.4 | 21 | 5th bullet - Luminaires (light (lumen) in the air) is spelled incorrectly. Luminaries refers to people. | C. Winningham | |
| 21 | Overall | | Should state that WSDOT is a willing property seller for the at-grade portions and also a willing leaser for aerial sections, based on a successfully approved Compatibility Report. | D. Haight | |
| 22 | Overall | | If the OMF-S project is adding the work at S 324th then that area should be covered in the environmental document. | D. Haight | |
| 23 | 4.4.8 | 4-12 | This does not discuss if there will be impacts to existing WSDOT noise walls. If so, Sound Transit must mitigate to the satisfaction of the City and replace removed WSDOT noise walls as necessary. | D. Haight | |
| 24 | Executive Summary | ES-23 | Acquisitions, Land Use, and Economics – “However, if the Midway Landfill Alternative were selected to be built, the residential displacements from mainline would still occur as a result of TDLE, subject to environmental review. Therefore, these displacements <i>could</i> ultimately occur regardless of which OMF S alternative is selected.” Should this ‘could’ be changed to ‘would’? | J. Giblin | |
| 25 | Executive Summary | ES-26 | Cumulative Impacts – “In addition, the COFW CCA Project and WSDOT Triangle Project are proposed adjacent to the Preferred and S 344th St alternatives. Both projects are in the early design phase, and neither have guaranteed (<i>construction</i>) funding.” Suggest adding in construction. | J. Giblin | |
| 26 | Executive Summary | ES-29 | Preferred and South 344th St Alternatives – “If the Board were to select <i>the</i> either the Preferred Alternative or South 344th St Alternative...” Suggest removing extra ‘the’. | J. Giblin | |
| 27 | Throughout | | The document states that OMF S will likely open in 2032. The public website ‘timeline and milestones’ page still states 2029. Suggest aligning. https://www.soundtransit.org/system-expansion/operations-maintenance-facility-south/timeline-milestones | J. Giblin | |
| 28 | 1 | 1-3 | Infill stations are mentioned under ‘central corridor’. What is an infill station? Consider defining. | J. Giblin | |
| 29 | 1 and 2 purpose and need | | Midway Landfill Alternative: Mentions that public comments showed a heavy desire for this alternative. However, it seems that the landfill alternative doesn’t meet the purpose/need of the project. Was this communicated to the public that desired the Midway alternative? Can it be clarified in this document/will it be clarified in a future document why the Midway alternative is not an appropriate fit? This document explains that the Midway alternative has no impacts to homes, businesses, and low impacts to ecological resources, where the other alternatives have higher impacts to each of those resources. It would be helpful to include an explanation behind the reasoning for not going with the Midway Alternative. | J. Giblin, D. Haight | |
| 30 | 3.10 | figures 3.10-1 and others | Wetlands and streams are shown in detail, so we suggest showing fish passage barriers with their WDFW IDs. | J. Giblin | |
| 31 | 3.10 | 3.10-16 | Paragraph about a barrier but no number to define it. Could also state the owner. | J. Giblin | |
| 32 | 3.10 | 3.10-5 | Mentions Federal Way City code stream type – suggest a table to show the code and the different corresponding categories. | J. Giblin | |
| 33 | 3.10 | Table 3.10-1 | Show buffers and consider adding which code is being followed (COFW, Kent, or state?). | J. Giblin | |
| 34 | 3.10 | 3.10-5 | Mentions WSDOT developing plans to correct barriers. The Triangle Project (which was going to include these barriers) is now shelved, so this could be rephrased. | J. Giblin | |



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November 6, 2023

By Email

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RE: Sound Transit Operations and Maintenance Facility – South NEPA/SEPA Supplemental DEIS City of Federal Way Technical Review Comments

Dear Ms. Fletcher and Mr. Weinberg,

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement (DEIS) for the Operations and Maintenance Facility South (OMF South). As you are aware, two of three sites that Sound Transit is considering are within the City of Federal Way. We have appreciated the collaborative nature of the relationship Sound Transit staff looks to have with the City.

The City has taken an official position on the OMF South in the previous SEPA DEIS and in a previously provided letter signed by the Mayor and full City Council dated April 6, 2021, and technical comment letter dated April 19, 2021. Both letters and supplemental comments are attached with this letter and are still valid and incorporated by reference.

Alternatives Considered

Page 2-16

- How can environmental impacts from TDLE be considered part of the "no-build" alternative if TDLE does not have an approved environmental document?

Transportation Impacts

The Following Comments are related to the main EIS document and pertain to transportation impacts.

Page 3.2-8

- 20th Avenue S is listed incorrectly as 20th Avenue E. Please address.

Page 3.2-12

- Historical collision data was collected between January 2016 to December 2018. This should be updated with more current data.
- Intersections with a collision rate above 1.0 per MEV will need to be discussed in greater detail as to potential contributing factors.
- Additionally, the societal cost per MEV must be provided in the collision summary tables and discussed.

Page 3.2-13

- It is noted that the annual growth rate is based on the growth rate used for TDLE traffic studies, but please specify what the basis for the assumed TDLE annual growth rate was. Typically, a higher annual growth rate closer to 1.25 percent has been used in the City of Federal Way.
- Was this signal timing optimization vetted with WSDOT and/or City of Federal Way? Are there other external factors outside of the study area that would impact the ability to optimize the signal timings?

Page 3.2-14

- Routes 177 and 577 would still be faster than light rail for several years, so there will be opposition to discontinuing those routes.

Page 3.2-16

- A more comprehensive trip generation section needs to be provided in this report. The appendices do not include detailed calculations and the methodology outlined here does not match with the methodology outlined in the appendices (i.e. trip generation does not appear to account for delivery-related trips or other non-employee trips).
- Given that this is a long-range analysis, and that the evaluated alternatives result in major changes to the roadway network, it is not appropriate to base trip distribution assumptions on existing travel patterns alone. Trip distribution patterns should be based on the regional travel model and adjusted as needed based on changes to the roadway network.

Page 3.2-17

- It cannot be definitely stated that no new safety issues would be introduced and no existing safety issues would be exacerbated. Particularly given the elimination of north-south connectivity for non-motorized traffic in the South 344th Street Alternative.
- The City of Federal Way's street vacation process should be referenced as it relates to the currently proposed roadway network and potential ongoing coordination.

Page 3.2-18

- The description of the new 18th Avenue S intersection is not consistent with the provided site plan. The description and if applicable, the associated analysis, should be updated.
- Parking study needs to be updated from the FWLE EIS to be consistent with ability to remove stalls without replacement.
Does this include stalls removed for S324th culvert and roadway grade construction?

Page 3.2-19 – Table 3.2-6

- v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

- Intersection 10 (SR 99/Driveway) is no longer proposed as part of the preferred alternative.
- Additional new intersections and site access points are not included in the analysis and are not summarized in Table 3.2-6. All new site driveways and new intersections resulting from roadway extensions must be provided in this table.

Page 3.2-20 – Table 3.2-7

- v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.
- 55 seconds of delay would typically indicate LOS E conditions. Without Synchro worksheets provided, it cannot be definitely confirmed that there are no impacts at this intersection. Please clarify.
- Intersection 10 (SR 99/Driveway) is no longer proposed as part of the preferred alternative.
- Additional new intersections and site access points are not included in the analysis and are not summarized in Table 3.2-7. All new site driveways and new intersections resulting from roadway extensions must be provided in this table.

Page 3.2-21 and page 3.2-25 - Figure 3.2-7 and Figure 3.2-8

- This figure should indicate the new roadway extensions that are part of the preferred alternative. Additionally, new intersections and site driveways must be included in the analysis and shown on the figure.

Page 3.2-22

- The City of Federal Way's street vacation process should be referenced as it relates to the currently proposed roadway network and potential ongoing coordination.

Page 3.2-23 and page 3.2-24 - Table 3.2-8 and Table 3.2-9

- v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

- If volume projections are included for intersection 10 (as shown on the previous figures), then the traffic operations results should be shown in this table.

Page 3.2-26

- This would have a significant impact as a north-south bicycle connection would not be possible and the majority of injury-related crashes involved ped and cyclists along SR 99.

Page 3.2-32 – Table 3.2-13

- S 330th St is inappropriate for a haul route, as it is narrow, has a small traffic circle at 20th Ave S, and traverse's residential areas with some areas of high parking utilization.

Page 3.2-13

- In addition to the impacts of truck activity, the impacts of trips related to workers traveling to and from the site should be quantified and discussed.
- Please clarify how many workers would be traveling to and from the site and if there would be sufficient parking on-site for all workers to park.

Page 3.2-35

- S 330th St is not an acceptable haul route.

Page 3.2-42

- Consistent with the executive summary, the City's street vacation process should be referenced as an ongoing coordination effort related to the reconfiguration of the street network for both Federal Way alternatives.

The following comments are related to Appendix C

Page 1

- Additional support information is needed related to access for the proposed driveways for the midway landfill alternative. Support information for the proposed driveway widths and geometry is needed. Channelization and median improvements are needed on Pacific Hwy to support the new accesses.

Page 11

- The location of the track over/across the parking lot may impact the existing parking lot illumination. Evaluation and potential mitigation are needed as necessary.

Page 12

- The location of the track over/across the parking lot may impact the existing parking lot illumination. Evaluation and potential mitigation are needed as necessary.
- Location of track over/across S 322nd St may impact driver visibility of existing traffic signal at S 322nd St/23rd Ave S intersection. Evaluate and mitigate, if needed.
- Location of track over/across 23rd Ave S may impact driver visibility of traffic signal at S 322nd St/23rd Ave S intersection. Evaluate and mitigate, if needed.

Page 15

- Set gate further from 24th Ave S so that access ST maintenance vehicles can pull completely out of the roadway when opening the gate.
- Clarity is needed for a section of asphalt shown on the plans along 24th Avenue S near S 333rd St.

Page 16

- A proposed column is shown within the intersection of Winged Foot Way and Burning Tree Blvd. A revised location shall be provided.

Page 17 and Page 19

- Adjustment to the location of the proposed sidewalk, curb, and landscape strip for 24th Ave S is required.

Page 22

- Adjustment is needed for the access to the WSDOT stormwater facility at 21st Ave S and S 344th St. Update design to represent the intended roadway curve. Revise the access to driveway standards.

Page 25

- A 10-foot clear zone is required from roadway edge to face of proposed retaining walls.

Page 27

- On-street parking is shown along the proposed 18th Place S. On-street parking is allowed provided that it is outside the prescriptive sight triangle of the intersection and does not result in impacts to adjacent critical areas.
- S 341st Place is incorrectly shown as S 340th St. Please correct.

Page 34

- The location of the track over/across the parking lot may impact the existing parking lot illumination. Evaluation and potential mitigation are needed as necessary.

Page 37

- More evaluation is needed for access needs for existing properties adjacent to the proposed S 344th St Site alternative.
- Additional sidewalk connectivity is needed for a portion of the removed S 341st Place.

The following comments are related to Appendix G1

Overall Comments:

The analysis provided does not adequately analyze the preferred and 344th Street alternatives as not all new driveways/intersections are included and/or incorrect driveways are included. Additionally, v/c must be recorded for all intersections including those along State Routes as the City of Federal Way controls these intersections.

There is insufficient information provided related to the existing land uses removed and traffic rerouted as a result of vacated streets. Supplemental trip generation analysis and volume figures should be provided to illustrate how these conditions impact the future volumes.

Without this information it is not possible to validate the future volumes provided. Additional attachments must be provided including detailed trip generation information for the OMF South site and existing land uses; traffic counts; and Synchro worksheets.

An updated parking analysis for the WSDOT 320th/23rd Ave park and ride needs to be completed to support removal of parking spaces consistent with the FWLE EIS that assumed use of this park and ride for LINK/Regional Transit riders.

Page G1-i

- The summary states that impacts may occur if the delay in an LOS F condition is worsened by more than 10 seconds. Please clarify the basis for this standard as it is not specified in Attachment A. Additionally, the City of Federal Way standards should be referenced here since they are based on v/c rather than LOS/delay.

Page G1-3 – Figure G1.1-2

- The extension of 18th Place S is described as intersection S 336th Street as the fourth (NB) leg of the 18th Ave S/S 336th St intersection, but the conceptual site plan does not depict it in this way due to the creek. It is assumed that a four-leg intersection is not feasible here and therefore the description/analysis should be revised accordingly.

Page G1-20

- In section 3.2.3 Traffic Volumes, please clarify what "as applicable" means for the adjusted 2022 traffic volumes. For instance, was volume balancing between intersections a key factor?

Page G1-21 – Figure G1.3-7

- During the AM peak hour, existing volumes at intersections 6 and 9 have decreased as compared to the 2021 DEIS resulting in greater volume imbalances between intersections in some cases. Please explain the change from the 2021 DEIS to the 2023 ADEIS.

Page G1-29, G1-31, G1-58, and G1-60 – Table G1.3-9, Table G1.3-11, Table G1.4-1, and Table G1.4-3

- v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

Page G1-44

- Under section 3.7 Safety, while it is acceptable to use collision data from 2016 to 2018 because collision data during the pandemic was atypical, many studies have found that collision rates were higher during the pandemic. Therefore, it may not be accurate to say that 2016 to 2018 collision data is more conservative.

Page G1-55

- Intersections with a collision rate above 1.0 per MEV will need to be discussed in greater detail as to potential contributing factors.

Additionally, the societal cost per MEV must be provided in the collision summary tables and discussed.

Page G1-54

- Under section 4.1.1.2 Traffic Volumes, it is noted that the annual growth rate is based on the growth rate used for TDLE traffic studies, but please specify what the basis for the assumed TDLE annual growth rate was. Typically, a higher annual growth rate closer to 1.25 percent has been used in the City of Federal Way.

Page G1-55

- In the 2042 PM analysis there is a mention of a decrease in delay due to signal optimization. Was this signal timing optimization vetted with WSDOT and/or City of Federal Way? Are there other external factors outside of the study area that would impact the ability to optimize the signal timings? Additionally, you cannot look at one SR-99 intersection in a vacuum as the entire corridor is coordinated.

Page G1-68

- Given that this is a long-range analysis, and that the evaluated alternatives result in major changes to the roadway network, it is not appropriate to base trip distribution assumptions on existing travel patterns along. Trip distribution patterns should be based on the regional travel model and adjusted as needed based on changes to the roadway network.

Page G1-69

- A more comprehensive trip generation sections needs to be provided in this report. The appendices do not include detailed calculations and the methodology outlined here does not match with the methodology outlined in the appendices (i.e. trip generation does not appear to account for delivery-related trips or other non-employee trips).

Page G1-70

- Under section 4.2.1.5 Parking, please specify the approximate number of parking spaces this represents for each alternative.

Page G1-71

- Under section 4.2.1.6 Safety, this section should address the intersections with a collision rate over 1.0 collisions per MEV and discuss how the project may impact these locations. Additionally, if north-south non-motorized facilities would not be feasible as part of the 344th Street Alternative, safety would not improve for non-motorized users and could in fact worsen. Please elaborate.

Page G1-72

- The City of Federal Way's street vacation process should be referenced for both City of Federal Way alternatives as it relates to the currently proposed roadway network and potential ongoing coordination.
- In section 4.2.2.1 regarding the extension of 18th Place S there is a section indicating that it would convert the existing S 336th St/18th Avenue S intersection into a four-legged intersection. This is not consistent with the provided site plan. The description and if applicable, the associated analysis should be updated.
- Information regarding existing land uses to be removed and associated trip generation projections for those uses need to be provided in section 4.2.2.2 Traffic Volumes.

Page G1-73 – Figure G1.4-7

- In addition to trip assignment, trip distribution figures should be included. Alternatively, trip distribution percentages could be illustrated on this figure (Figure G1.4-7).
- This figure should indicate new roadway extensions that are part of the preferred alternative.
- This figure shows intersection 10 as a new intersection, but intersection 10 no longer exists as part of the preferred alternative site plan based on Figure G1.1-2 and the roadway network description. If this driveway no longer exists, the volumes going through this intersection would need to be routed to other site access points and other study area intersections.

Additionally, this figure does not show intersection 11 (18th Place S Extension/S 336th Street), but intersection is included in the LOS tables. Finally, the intersections of 21st Avenue S/S 341st Place and 21st Avenue S Extension/S 344th Street should be included in the analysis as well as future volume figures.

Overall, the analysis provided does not sufficiently analyze the operational impacts of the preferred alternative.

Page G1-74 – Figure G1.4-8

- This figure should indicate new roadway extensions that are part of the preferred alternative.
- This figure shows intersection 10 as a new intersection, but intersection 10 no longer exists as part of the preferred alternative site plan based on Figure G1.1-2 and the roadway network description. If this driveway no longer exists, the volumes going through this intersection would need to be routed to other site access points and other study area intersections.

Additionally, this figure does not show intersection 11 (18th Place S Extension/S 336th Street), but intersection is included in the LOS tables. Finally, the intersections of 21st Avenue S/S 341st Place and 21st Avenue S Extension/S 344th Street should be included in the analysis as well as future volume figures.

It is also not clear how the rerouted vehicles from roadway closures are accounted for. For example, the no-build conditions show 85 vehicles exiting 20th Avenue S during the PM peak hour. However, there are only 15 additional right turns at intersection 1 and no additional left turns beyond project trips. While volumes for intersection 11 are not shown, based on the future volumes at intersection 1, it does not appear that additional trips are routed to intersection 11. If these trips would no longer exist due to land uses being removed, it is not clear from this analysis as no trip generation for existing land uses to be removed is provided. A figure showing how existing traffic was removed and rerouted should be included.

Overall, the analysis provided does not sufficiently analyze the operational impacts of the preferred alternative.

Page G1-75 – Table G1.4-10

- Intersection 10 (SR 99/Driveway) is longer proposed as part of the preferred alternative.
- v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

- Additional new intersections and site access points are not included in the analysis and are not summarized in Table G1.4-10. All new site driveways and new intersections resulting from roadway extensions must be provided in this table.

Page G1-76 and G1-78 – Figure G1.4-9 and Figure G1.4-10

- This figure should indicate the new roadway extensions that are part of the preferred alternative. Additionally, new intersections and site driveways must be shown on the figure.

Page G1-77 – Table G1.4-11

- 55 seconds of delay would typically indicate LOS E conditions. Without Synchro worksheets provided, it cannot be definitely confirmed that there are no impacts at this intersection. Please clarify.
- Intersection 10 (SR 99/Driveway) is longer proposed as part of the preferred alternative.
- v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.
- Additional new intersections and site access points are not included in the analysis and are not summarized in Table G1.4-10. All new site driveways and new intersections resulting from roadway extensions must be provided in this table.

Page G1-79

- In section 4.2.2.6 Nonmotorized Facilities, it should be more clearly defined where and what bicycle and pedestrian improvements are proposed as part of the preferred alternative.
- In section 4.2.2.8 Safety, the safety section should address if the project would impact intersections that already have a crash rate greater than 1.0 collisions per MEV.

Page G1-80

- In section 4.2.3.2 Traffic Volumes, information regarding existing land uses to be removed and associated trip generation projections for those uses need to be provided in this section.

Page G1-81 – Figure G1.4-11

- In addition to trip assignment, trip distribution figures should be included. Alternatively, trip distribution percentages could be illustrated on this figure (Figure G1.4-11).

Page G1-82 – Figure G1.4-12

- Intersection 10 is mislabeled for both AM and PM peak hours.
- If Intersection 1 is only providing access to the Christian Faith Church under build conditions, and little to no project trips are projected it is unlikely that this intersection would observe as much traffic as it does today. This analysis does not sufficiently account for (or sufficiently document) traffic that would be rerouted from 20th Avenue S due to the closure. As such, this analysis may not adequately consider additional impacts along SR 99 or 16th Street as a result. More broadly, a figure showing how existing traffic was removed and rerouted should be included.

Page G1-83 and G1-85 – Table G1.4-12 and Table G1.4-13

- If volume projections are included for intersection 10 (as shown on the previous figures), then the traffic operations results should be shown in this table.
- v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

Page G1-84 – Figure G1.4-13

- If volume projections are included for intersection 10 (as shown on the previous figures), then the traffic operations results should be shown on this figure (Figure G1.4-13).

Page G1-86 – Figure G1.4-14

- If volume projections are included for intersection 10 (as shown on the previous figures), then the traffic operations results should be shown on this figure (Figure G1.4-14).

Page G1-87

- In section 4.2.3.6 Nonmotorized Facilities, if the alternative eliminates the greenway between S 336th Street and S 344th Street this would have a significant impact as a north-south bicycle connection would not be possible and the majority of injury-related crashes involved pedestrians and cyclists along SR 99.

Page G1-88

- In section 4.2.3.8 Safety, the safety section should address if the project would impact intersections that already have a crash rate greater than 1.0 collisions per MEV. Additionally, this section should address non-motorized safety impacts associated with eliminating a north-south non-motorized connection.

Page G1-99

- In section 4.3.11 Estimation of Construction Truck Traffic, in addition to the impacts of truck activity, the impacts of trips related to workers traveling to and from the site should be quantified and discussed.

Page G1-104

- In section 4.3.1.6 Impacts to Nonmotorized Facilities, please clarify how long north-south connectivity would be impacted as pedestrians and cyclists would shift to SR 99 under this scenario.

Page G1-105

- In Section 4.3.1.7 Impacts to Parking, please clarify how many workers would be traveling to and from the site and if there would be sufficient parking on-site for all workers to park.

Page G1-122

- In section 4.7 Long Term Mitigation Measures, consistent with the executive summary, the City's street vacation process should be referenced as an ongoing coordination effort related to the reconfiguration of the street network.

Social Resources, Community Facilities, and Neighborhoods

Page 3.6-8

- Belmor is a manufactured home community, zoned multifamily residential.
- Clarification is needed on the expected displaced residences. Provide methodology for calculating impacted residents and provide addresses.
- What analysis went in to this conclusion? Airtime Aviation, Inc. is located in a custom-designed building for the use. The impact to this business and others like it is inadequately evaluated.

Page 3.6-11

- In the environmental justice summary; country of origin and immigration status should also be considered.

Economic and Fiscal Impacts

Page 3.5-1

- Clarification is required if the entire dataset in Section 3.5 “Economics” was calculated using King County level datasets or specific South King County Data Sets. South King County is defined as: Renton, Tukwila, SeaTac, Burien, Des Moines, Normandy Park, Kent, Auburn, and Federal Way.
- Using King County macro level data is not representative of the economic landscape of South King County as it relates to wages, demographics, type & size of industry, etc.

Land Use Impacts

There appear to be unaccounted for impacts from the preferred and S 344th St Alternatives related to affected parking, impacted businesses, and number of employees displaced. These need to be addressed.

The use of the OMF site is inconsistent with the City's urbanizing vision. Address the lack of planning for a smaller footprint for the facility or planning for mixed use by either placing parking in structures thereby allowing for other use of a portion of the property or the use by others of air rights above any of the planned facilities. The possibility of such a project could offset the economic impact of prohibiting the development of 60 acres of strategically located commercial land to its highest and best use.

Specific comments include:

Page ES-11 Figure ES-4

- Apparent unaccounted for impact from the Preferred Alternative to the parking/loading in the northeast corner of the Spectrum Business Park. The EIS should determine if the required parking for the uses at the Spectrum Business Park will be impacted, reduced, or result in any non-conformance.

Page ES-19

- How was this calculated? What are the exact businesses that are being displaced? Is there a spreadsheet of this information? According to Washington State Department of

Revenue there are significantly more 6 active business licenses that will be impacted. This misrepresentation also applies to the South 344th Street Alternative.

- Provide methodology for how the number of employees impacted was calculated. These numbers do not accurately reflect the true number of active businesses that may be impacted and the actual number of impacted employees are likely underrepresented.

The following comments are related to Appendix C

Page 23

- Activation Zone parking spaces are not shown on this map, but shown in others. Plans should be consistent.
- This is the only time in the entire DEIS that the Activation Zone is mentioned, but does not include square footage, uses, benefits, impacts, etc. Additional information for the activation zone is required.
- Any impacts to existing uses shall be addressed including parking stall or loading zone displacement. The OMFS site shall not create any nonconformities.
- Maps should be consistent and the impacts to adjacent uses must be measured. It appears Spectrum Business Park parking is being displaced here. Provide more information on how these impacts will be mitigated and the creation of any nonconformities will be avoided.

Page 27

- The activation zone should serve multi-modal travelers, including those arriving via vehicle. There must be parking available for the activation zone.

The Following comments are related to Appendix H2

Page H2-2

- The reference information for the Federal Way Revised Code and Federal Way Comprehensive Plan are inaccurate and should be updated to reflect the current standards.

Page H2-3

- The preferred and South 344th St alternatives reference some smaller areas within the City Center Core land use designation. This is inaccurate and needs to be updated.

Page H2-4

- The section concerning the Tacoma Dome Link Extension is outdated and needs revision. Not mentioned here is the South Station Subarea Plan and the Countywide Growth Center Candidate Designation which should be included.

Page H2-5 – Table H2-1

- Please provide basis for calculation of 17 acres in the CC-C zone due to OMF impacts.
- For the section concerning City of Federal Way Zone (RM-2400 and RM-3600: Multi-Family), it is not accurate to consider only a portion of the site as zoned multi-family. The preferred alternative is a majority zoned multi-family residential. Additionally, it is not appropriate to consider the OMF use as a Government Facility. Light rail or commuter rail transit facility require a Process IV review in the CC-C & CE zones.

Page H2-6 – Table H2-1

- For the BC: Community Business and CE: Commercial Enterprise zones, the permitting use for the OMFS would be Public Transportation Facilities, per FWRC 19.240.135. Considering the OMF a “Government facility” is not accurate.

Page H2-12 – Table H2-5

- Under Policy LUP 9, the statement that the OMFS site supports light rail operation which would support mixed use development is misleading and inaccurate. The light rail stations support light rail operations. Having the OMF site in the City of Federal Way does not support mixed-use development any more than the OMF site being located at Midway Landfill does.

Page H2-13 – Table H2-5

- Under Topic 2.7 Land Use Designations (Single Family). For Policy LUP14, the mitigation steps should not only be used to support aesthetic compatibility between uses, and should extend to include additional impacts like noise/sound, light, vibration, etc.
- Under Topic 2.7 Land Use Designations (Multi-Family). It is inaccurate to state that this project helps broaden transit options for multi-family households in the Federal Way area. The light rail stations support light rail operations. Having the OMF site in the City of Federal Way does not help broaden transit options for MF in the Federal Way area.

Page H2-15 – Table H2-5

- The response provided for consistency with comprehensive Plan Policy LU40 is inappropriate. The policy is about the range of retail and supportive uses.

Visual and Aesthetic Resources

Page 3.7-7

- The I5 and Pac Hwy corridor in Federal Way consists of significant asphalt surfacing, removing trees within this area will have an increasingly negative impact on the City's urban heat index and citywide tree canopy coverage. Impacts to the urban heat index and the citywide tree canopy coverage should be evaluated between alternatives. Tree planting to meet the average Citywide canopy (35%) should be a target for this facility, if located in Federal Way.

Page 3.7-11 – Figure 3.7-6

- The image shows redirected power lines. Confirm if this was intentional? Will they be redirected?

Page 3.7-16 – Figure 3.7-12

- The photo for the existing condition and simulation of proposed conditions appear to be the same. Confirm that no visual change is expected.

Page 3.7-17 – Figure 3.7-14

- A cell tower appears to be removed in the simulation of proposed conditions. Confirm this removal and provide mitigation method for tower if removal is expected.

Noise and Vibration

Page 3.9-7

- Confirm the methodology and noise sources used in the noise analysis. Were the maintenance activity and testing of horns noise generators included in the projections?
- The evaluation of noise impacts shall measure and account for any increase in ambient Interstate 5 noise resulting from tree removal and sound barrier as part of the track construction for both the preferred and S 344th alternatives.

Ecosystems and Resources

Page 3.10-26

- Language indicates that ‘frontage improvements along S 336th Street to meet city standards may necessitate the installation of a replacement structure where West Fork Hylebos Tributary is crossed by the road.’ This should be changed to ‘must replace the culvert.’

Page 3.11-12

- Any impacts to wetlands related to the extension of 18th Place S shall be eliminated or demonstrated to the City that impacts have been minimized and mitigated.
- Language indicates that ‘frontage improvements along S 336th Street to meet city standards may necessitate the installation of a replacement structure where West Fork Hylebos Tributary is crossed by the road.’ This should be changed to ‘must replace the culvert.’

Page 3.11-19

- Any impacts to wetlands related to the extension of 18th Place S shall be eliminated or demonstrated to the City that impacts have been minimized and mitigated.

Cumulative Effects

Page 4-3

- There is a large tree canopy with mature trees that will be heavily impacted by the proposed 18th Place S extension as part of the preferred alternative. Currently as proposed neither OMFS sites in Federal Way will meet Tree retention requirements. Please address.

Page 4-8

- Within section 4.1 under transportation, the City Center Access Project for Federal Way is described as unfunded. This is incorrect, the construction phase is currently unfunded however the design and right of way is funded. Please adjust.



City Hall
33325 8th Avenue South
Federal Way, WA 98003-6325
253-835-7000
www.cityoffederalway.com
Jim Ferrell, Mayor

Please reach out to either of us or Kent Smith if you have any questions regarding the comments in this letter.

Sincerely,

EJ Walsh, P.E.
Public Works Director

Keith Niven, AICP, CECd
Community Development Director

cc: Jim Ferrell, Mayor
Federal Way City Council
Kent Smith, Sound Transit Liaison

Attachment: Supplemental Appendix A1 comments
OMF South Draft Environmental Impact Statement – FW Mayor and City Council
Comments
OMF South FW Technical Review Letter final
Supplemental Appendix G1 comments
Sound Transit OMF Site Opportunity Cost Impact Assessment



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Jim Ferrell, Mayor

Attachment

Supplemental Appendix A1 comments

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Jim Ferrell, Mayor

Attachment

Supplemental Appendix G1 comments

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Jim Ferrell, Mayor

Attachment

OMF South Draft Environmental Impact Statement – FW Mayor and City Council Comments

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Jim Ferrell, Mayor

Attachment

Sound Transit OMF Site Opportunity Cost Impact Assessment

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Jim Ferrell, Mayor

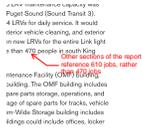
Attachment

OMF South Federal Way Technical Review Letter Final

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00-OMFS NEPA SEPA DEIS Executive Summary.aspx.pdf Markup Summary

marisfry (1)



Subject: Callout
Page Label: 6
Author: marisfry
Date: 10/23/2023 6:34:48 AM
Status:
Color: ■
Layer:
Space:

Other sections of the report reference 610 jobs, rather than 470 jobs

Desiree Winkler (1)



Subject: Text Box
Page Label: 39
Author: Desiree Winkler
Date: 10/20/2023 1:44:08 PM
Status:
Color: ■
Layer:
Space:

City center access received funding for phase 1 design and ROW. I believe the Triangle Project also has current design funding.

Chaney (4)



Subject: Cloud+
Page Label: 6
Author: Chaney
Date: 10/31/2023 4:01:11 PM
Status:
Color: ■
Layer:
Space:

Why does the OMF site need to accommodate all of these LRVs when another OMF site is being planned for in the north. How is the OMF capacity being balanced across sites. A reduction in the minimum LRV capacity at OMFS should be able to reduce the land take, preserve more trees, reduce stream and wetland impact, and reduce impacts to neighboring residential uses.

A small thumbnail image of a table. The table has multiple columns and rows. There are red annotations, including a red arrow pointing to a specific cell and a red box highlighting a section of the table.

Subject: Cloud+
Page Label: 32
Author: Chaney
Date: 10/31/2023 3:57:08 PM
Status:
Color: ■
Layer:
Space:

Why is preferred option most land intensive? 6 acres more than 344th St.



Subject: Text Box
Page Label: 36
Author: Chaney
Date: 10/31/2023 3:54:02 PM
Status:
Color: ■
Layer:
Space:

Although S 344th alternative has more facilities impacted, CFC is huge and this analysis does not access or account for the cumulative number of community members impacted.



Subject: Cloud+
Page Label: 36
Author: Chaney
Date: 10/31/2023 3:55:06 PM
Status:
Color: ■
Layer:
Space:

Provide methodology for calculating business displacement and provide list of those counted business. These number are under counting the true impacts

C Mullen (1)



Subject: Text Box
Page Label: 30
Author: C Mullen
Date: 10/16/2023 8:45:42 AM
Status:
Color: ■
Layer:
Space:

Any changes to schedule beyond a standard 5 day, 8 hr daytime schedule will require approval by the City. Nighttime work may not be allowed due to proximity to residential properties.

01-OMFS NEPA SEPA Draft Environmental Impact Statement.pdf Markup Summary

Rick Perez (5)

are four designated freight routes in the Midway Landfill area as a T-1 route, and SR 99, S 259th Place, and S 170th. SR 99 is also a designated truck/freight route by a Transit S, not E
County Metro Transit (Metro), Sound Transit, and Pierce in the study areas, with regional and local bus fixed-route bus, and local stops. Bus stops are primarily on SR 99, S 259th, S 230th Street, and 16th Avenue S. Neither is any provided. Existing transit routes are shown on Figure 10-10 and South 344th Street Alternatives Study Area

Subject: Callout
Page Label: 107
Author: Rick Perez
Date: 10/27/2023 1:30:49 PM
Status:
Color: ■
Layer:
Space:

S, not E

Routes 177 and 577 would still be faster than light rail for several years, so there will be opposition to discontinuing those routes.

Subject: Callout
Page Label: 113
Author: Rick Perez
Date: 10/27/2023 1:35:42 PM
Status:
Color: ■
Layer:
Space:

Routes 177 and 577 would still be faster than light rail for several years, so there will be opposition to discontinuing those routes.

S 330th St is inappropriate for a haul route, as it is narrow, has a small traffic circle at 20th Ave S, and traverses residential areas with some areas of high parking utilization.

Subject: Callout
Page Label: 131
Author: Rick Perez
Date: 10/27/2023 1:46:24 PM
Status:
Color: ■
Layer:
Space:

S 330th St is inappropriate for a haul route, as it is narrow, has a small traffic circle at 20th Ave S, and traverses residential areas with some areas of high parking utilization.

S 330th St is not an acceptable haul route.

Subject: Callout
Page Label: 134
Author: Rick Perez
Date: 10/27/2023 1:49:48 PM
Status:
Color: ■
Layer:
Space:

S 330th St is not an acceptable haul route.

for construction. Design and R/W is funded.

Subject: Callout
Page Label: 365
Author: Rick Perez
Date: 10/27/2023 2:04:51 PM
Status:
Color: ■
Layer:
Space:

for construction. Design and R/W is funded.

marisfry (26)

Intersections with a collision rate above 1.0 per MEV should be discussed in greater detail as to potential contributing factors.

Subject: Callout
Page Label: 111
Author: marisfry
Date: 10/25/2023 2:46:41 PM
Status:
Color: ■
Layer:
Space:

Intersections with a collision rate above 1.0 per MEV should be discussed in greater detail as to potential contributing factors.

Additionally, the societal cost per MEV must be provided in the collision summary tables and discussed.



Subject: Callout
Page Label: 112
Author: marisfry
Date: 10/25/2023 2:36:45 PM
Status:
Color: ■
Layer:
Space:

It is noted that the annual growth rate is based on the growth rate used for TDLE traffic studies, but please specify what the basis for the assumed TDLE annual growth rate was. Typically, a higher annual growth rate closer to 1.25 percent has been used in the City of Federal Way.



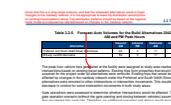
Subject: Callout
Page Label: 112
Author: marisfry
Date: 10/25/2023 2:37:05 PM
Status:
Color: ■
Layer:
Space:

Was this signal timing optimization vetted with WSDOT and/or City of Federal Way? Are there other external factors outside of the study area that would impact the ability to optimize the signal timings?



Subject: Callout
Page Label: 114
Author: marisfry
Date: 10/25/2023 2:47:48 PM
Status:
Color: ■
Layer:
Space:

A more comprehensive trip generation sections needs to be provided in this report. The appendices do not include detailed calculations and the methodology outlined here does not match with the methodology outlined in the appendices (i.e. trip generation does not appear to account for delivery-related trips or other non-employee trips)



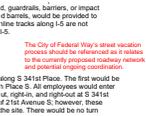
Subject: Callout
Page Label: 115
Author: marisfry
Date: 10/25/2023 2:37:59 PM
Status:
Color: ■
Layer:
Space:

Given that this is a long-range analysis, and that the evaluated alternatives result in major changes to the roadway network, it is not appropriate to base trip distribution assumptions on existing travel patterns along. Trip distribution patterns should be based on the regional travel model and adjusted as needed based on changes to the roadway network.



Subject: Callout
Page Label: 116
Author: marisfry
Date: 10/25/2023 2:39:15 PM
Status:
Color: ■
Layer:
Space:

It cannot be definitely stated that no new safety issues would be introduced and no existing safety issues would be exacerbated. Particularly given the elimination of north-south connectivity for non-motorized traffic in the South 344th Street Alternative.



Subject: Text Box
Page Label: 116
Author: marisfry
Date: 10/25/2023 2:48:33 PM
Status:
Color: ■
Layer:
Space:

The City of Federal Way's street vacation process should be referenced as it relates to the currently proposed roadway network and potential ongoing coordination.



Subject: Cloud+
Page Label: 117
Author: marisfry
Date: 10/25/2023 2:49:22 PM
Status:
Color: ■
Layer:
Space:

This is not consistent with the provided site plan. The description and if applicable, the associated analysis should be updated.

as noted in paragraph 11 of the memorandum, including those along State Routes 99 and 101. The City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

Table 3.2-6 Preferred Alternative

| Intersection | Control | Agency | Control |
|----------------|---------|--------|---------|
| SR 99/Driveway | Signal | City | Signal |

Subject: Text Box
Page Label: 118
Author: marisfry
Date: 10/25/2023 2:39:41 PM
Status:
Color: ■
Layer:
Space:

v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

| Intersection | Control | Agency | Control |
|----------------|---------|--------|---------|
| SR 99/Driveway | Signal | City | Signal |

Subject: Callout
Page Label: 118
Author: marisfry
Date: 10/25/2023 2:52:58 PM
Status:
Color: ■
Layer:
Space:

Intersection 10 (SR 99/Driveway) is longer proposed as part of the preferred alternative.

as noted in paragraph 11 of the memorandum, including those along State Routes 99 and 101. The City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

Additional new intersections and site access points are not included in the analysis and are not summarized in Table 3.2-6. All new site driveways and new intersections resulting from roadway extensions must be provided in this table.

Subject: Text Box
Page Label: 118
Author: marisfry
Date: 10/25/2023 2:53:18 PM
Status:
Color: ■
Layer:
Space:

Additional new intersections and site access points are not included in the analysis and are not summarized in Table 3.2-6. All new site driveways and new intersections resulting from roadway extensions must be provided in this table.

as noted in paragraph 11 of the memorandum, including those along State Routes 99 and 101. The City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

Table 3.2-7 Preferred Alternative

| Intersection | Control | Agency | Control |
|----------------|---------|--------|---------|
| SR 99/Driveway | Signal | City | Signal |

Subject: Text Box
Page Label: 119
Author: marisfry
Date: 10/25/2023 2:39:48 PM
Status:
Color: ■
Layer:
Space:

v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

as noted in paragraph 11 of the memorandum, including those along State Routes 99 and 101. The City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

Table 3.2-8 Preferred Alternative

| Intersection | Control | Agency | Control |
|----------------|---------|--------|---------|
| SR 99/Driveway | Signal | City | Signal |

Subject: Callout
Page Label: 119
Author: marisfry
Date: 10/25/2023 2:51:17 PM
Status:
Color: ■
Layer:
Space:

55 seconds of delay would typically indicate LOS E conditions. Without Synchro worksheets provided, it cannot be definitely confirmed that there are no impacts at this intersection. Please clarify.

Subject: Callout
Page Label: 119
Author: marisfry
Date: 10/25/2023 2:51:47 PM
Status:
Color: ■
Layer:
Space:

Intersection 10 (SR 99/Driveway) is longer proposed as part of the preferred alternative.

where applicable. Actual intersection operations may have been determined on other basis. To register and/or register intersection, contact your local traffic engineer.

Additional new intersections and site access points are not included in the project and are not summarized in Table 3.2. All new site driveways and new intersections resulting from roadway extensions must be provided in this table.

Subject: Text Box
Page Label: 119
Author: marisfry
Date: 10/25/2023 2:52:10 PM
Status:
Color: ■
Layer:
Space:

Additional new intersections and site access points are not included in the analysis and are not summarized in Table 3.2-7. All new site driveways and new intersections resulting from roadway extensions must be provided in this table.



Subject: Text Box
Page Label: 120
Author: marisfry
Date: 10/25/2023 2:50:41 PM
Status:
Color: ■
Layer:
Space:

This figure should indicate the new roadway extensions that are part of the preferred alternative.

Additionally, new intersections and site driveways must be included in the analysis and shown on the figure.

3.2 Transportation

The City of Federal Way's street vacation process should be referenced as it relates to the currently proposed roadway network and potential ongoing coordination.

Access points: The first access point at intersection of S 344th Street/18th Place S, S 344th Street. All employees should enter the site at 20th Avenue S, south of S 336th Street, S 326th Street. However, it would not be for daily 18th Place S/S 341st Place, the south and east.

Subject: Text Box
Page Label: 121
Author: marisfry
Date: 10/25/2023 2:54:24 PM
Status:
Color: ■
Layer:
Space:

The City of Federal Way's street vacation process should be referenced as it relates to the currently proposed roadway network and potential ongoing coordination.

is being included for all intersections, including those along the route. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

Table 3.2-8 South 34th Street Access

| Access Point | Access Point | Access Point | Access Point |
|--------------|--------------|--------------|--------------|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |

Subject: Text Box
Page Label: 122
Author: marisfry
Date: 10/25/2023 2:40:02 PM
Status:
Color: ■
Layer:
Space:

v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

Page 3.2-21: OSP South 34th Street Access Point

| Access Point | Access Point | Access Point | Access Point |
|--------------|--------------|--------------|--------------|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |

Subject: Text Box
Page Label: 122
Author: marisfry
Date: 10/25/2023 2:54:43 PM
Status:
Color: ■
Layer:
Space:

If volume projections are included for intersection 10 (as shown on the previous figures), then the traffic operations results should be shown in this table.

Table 2-1-8 South 348th Street ADA

| Intersection | Proposed | Existing | ADA |
|--------------|----------|----------|-----|
| SR 99 | 1 | 1 | 1 |

Subject: Text Box
Page Label: 123
Author: marisfry
Date: 10/25/2023 2:40:05 PM
Status:
Color: ■
Layer:
Space:

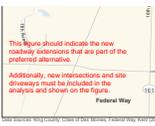
v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

Page 2.2-101 CDP South 348th Street Environmental Impact Statement

| Intersection | Proposed | Existing | ADA |
|--------------|----------|----------|-----|
| SR 99 | 1 | 1 | 1 |

Subject: Text Box
Page Label: 123
Author: marisfry
Date: 10/25/2023 2:55:42 PM
Status:
Color: ■
Layer:
Space:

If volume projections are included for intersection 10 (as shown on the previous figures), then the traffic operations results should be shown in this table.



Subject: Text Box
Page Label: 124
Author: marisfry
Date: 10/25/2023 2:55:26 PM
Status:
Color: ■
Layer:
Space:

This figure should indicate the new roadway extensions that are part of the preferred alternative. Additionally, new intersections and site driveways must be included in the analysis and shown on the figure.

Table 2-1-10

| Intersection | Proposed | Existing | ADA |
|--------------|----------|----------|-----|
| SR 99 | 1 | 1 | 1 |

Subject: Callout
Page Label: 125
Author: marisfry
Date: 10/25/2023 2:40:54 PM
Status:
Color: ■
Layer:
Space:

This would have a significant impact as a north-south bicycle connection would not be possible and the majority of injury-related crashes involved ped and cyclists along SR 99

Table 2-1-13 Estimated Hourly Truck Activity Compared with Existing

| Intersection/Route | Existing | Proposed | Change |
|--------------------|----------|----------|--------|
| SR 99 | 1 | 1 | 0 |

Subject: Text Box
Page Label: 132
Author: marisfry
Date: 10/25/2023 2:56:51 PM
Status:
Color: ■
Layer:
Space:

In addition to the impacts of truck activity, the impacts of trips related to workers traveling to and from the site should be quantified and discussed.

Table 2-1-14

| Intersection | Proposed | Existing | ADA |
|--------------|----------|----------|-----|
| SR 99 | 1 | 1 | 1 |

Subject: Text Box
Page Label: 132
Author: marisfry
Date: 10/25/2023 2:57:35 PM
Status:
Color: ■
Layer:
Space:

Please clarify how many workers would be traveling to and from the site and if there would be sufficient parking on-site for all workers to park.

Review comments (10/27/2023) and replies
The following comments were received from the public during the public review period for the Draft Environmental Impact Statement (EIS) for the proposed project. The project is located in the City of San Francisco, California. The project is a proposed development of a new building at the intersection of [redacted] and [redacted]. The project is a proposed development of a new building at the intersection of [redacted] and [redacted].

Subject: Text Box
Page Label: 141
Author: marisfry
Date: 10/25/2023 2:58:05 PM
Status:
Color: ■
Layer:
Space:

Consistent with the executive summary, the City's street vacation process should be referenced as an ongoing coordination effort related to the reconfiguration of the street network.

Desiree Winkler (14)

Review comments (10/27/2023) and replies
The following comments were received from the public during the public review period for the Draft Environmental Impact Statement (EIS) for the proposed project. The project is located in the City of San Francisco, California. The project is a proposed development of a new building at the intersection of [redacted] and [redacted]. The project is a proposed development of a new building at the intersection of [redacted] and [redacted].

Subject: Text Box
Page Label: 76
Author: Desiree Winkler
Date: 10/20/2023 4:33:20 PM
Status:
Color: ■
Layer:
Space:

this last sentence seems out of context with the paragraph. What 1,000 SF building?

For the proposed project, the proposed street layout is shown in the attached drawing. The proposed street layout is shown in the attached drawing. The proposed street layout is shown in the attached drawing. The proposed street layout is shown in the attached drawing.

Subject: Rectangle
Page Label: 76
Author: Desiree Winkler
Date: 10/20/2023 4:32:56 PM
Status:
Color: ■
Layer:
Space:

street to just south of S 338th Street. The street layout is shown in the attached drawing. The street layout is shown in the attached drawing. The street layout is shown in the attached drawing. The street layout is shown in the attached drawing.

Subject: Rectangle
Page Label: 76
Author: Desiree Winkler
Date: 10/20/2023 4:33:13 PM
Status:
Color: ■
Layer:
Space:

TDLE are considered part of the project. The project is located in the City of San Francisco, California. The project is a proposed development of a new building at the intersection of [redacted] and [redacted]. The project is a proposed development of a new building at the intersection of [redacted] and [redacted].

Subject: Text Box
Page Label: 77
Author: Desiree Winkler
Date: 10/20/2023 4:39:07 PM
Status:
Color: ■
Layer:
Space:

How can environmental impacts from TDLE be considered part of the "no-build" alternative if TDLE does not have an approved environmental document?

3.2 Transportation
should this 3-year time period be updated to more current?
period from January 2016 to resulted in property damage. The project is located in the City of San Francisco, California. The project is a proposed development of a new building at the intersection of [redacted] and [redacted]. The project is a proposed development of a new building at the intersection of [redacted] and [redacted].

Subject: Text Box
Page Label: 111
Author: Desiree Winkler
Date: 10/23/2023 12:01:25 PM
Status:
Color: ■
Layer:
Space:

should this 3-year time period be updated to more current?

Table Summary

Table with 4 columns: Alternative, Scenario, Impacts, and Mitigation. The table contains several rows of data, with some cells highlighted in red.

Subject: Cloud+
Page Label: 33
Author: Chaney
Date: 11/2/2023 4:44:06 PM
Status:
Color: ■
Layer:
Space:

Provide more information regarding how this conclusion was arrived to. Are there no sensitive receptors?

bed users in the study area, of with existing roadways, is would be elevated over of to meet or exceed all local use desired.

Belmor is a manufactured home community, zoned multifamily residential.

arge multi-family residential of about 100 units, which is likely to adversely affect social cohesion in the impacts from the 55 mph action under this alternative, and Vibration, for more details.

Subject: Callout
Page Label: 189
Author: Chaney
Date: 10/24/2023 8:21:50 AM
Status:
Color: ■
Layer:
Space:

Belmor is a manufactured home community, zoned multifamily residential.

Table with 4 columns: Alternative, Scenario, Impacts, and Mitigation. The table contains several rows of data, with some cells highlighted in red.

Subject: Callout
Page Label: 189
Author: Chaney
Date: 10/31/2023 4:08:22 PM
Status:
Color: ■
Layer:
Space:

This is 14, what is the remaining 1 unit? Provide methodology for calculating impacted residents and provide addresses.

Table with 4 columns: Alternative, Scenario, Impacts, and Mitigation. The table contains several rows of data, with some cells highlighted in red.

Subject: Cloud+
Page Label: 189
Author: Chaney
Date: 10/31/2023 4:09:20 PM
Status:
Color: ■
Layer:
Space:

What analysis went in to this conclusion? Airtime Aviation, Inc. is located in a custom designed building for the use. The impact to this business and others like it is inadequately evaluated.

Table with 4 columns: Alternative, Scenario, Impacts, and Mitigation. The table contains several rows of data, with some cells highlighted in red.

Subject: Text Box
Page Label: 192
Author: Chaney
Date: 10/25/2023 11:00:27 AM
Status:
Color: ■
Layer:
Space:

County of origin, immigration status should also be considered.

Table with 4 columns: Alternative, Scenario, Impacts, and Mitigation. The table contains several rows of data, with some cells highlighted in red.

Subject: Text Box
Page Label: 200
Author: Chaney
Date: 10/31/2023 4:12:04 PM
Status:
Color: ■
Layer:
Space:

There is already a lot of asphalt and concrete between the i5 and Pac Hwy corridor in Federal Way, Removing trees within this area will have an increasingly negative impact on the City's urban heat index and citywide tree canopy coverage. Impacts to the urban heat index and the citywide tree canopy coverage should be evaluated between alternatives.

Screening noise, view or search screen to be elevated mainline and test tracks at for high-sensitivity viewers west screening of the mainline in this



Subject: Callout
Page Label: 204
Author: Chaney
Date: 10/31/2023 4:13:01 PM
Status:
Color: ■
Layer:
Space:

Image shows redirected power lines. Confirm if this was intentional? Will they be redirected?



Subject: Cloud+
Page Label: 230
Author: Chaney
Date: 10/31/2023 4:18:13 PM
Status:
Color: ■
Layer:
Space:

The evaluation of noise impact should measure and account for any increase in ambient I5 noise caused from tree removal and sound barrier as part of the track construction.

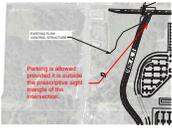


Subject: Callout
Page Label: 360
Author: Chaney
Date: 10/31/2023 4:19:16 PM
Status:
Color: ■
Layer:
Space:

There is a large tree canopy with mature trees that will be heavily impacted by the proposed 18th Place S Extension as part of the Preferred alternative. Currently as proposed neither OMF sites in Federal Way will meet Tree Retention requirements.

04-OMFS NEPA SEPA DEIS Appendix C Conceptual Design Drawings and Engineering Information.pdf Markup Summary

K Smith (1)



Subject: Callout
Page Label: 31
Author: K Smith
Date: 11/3/2023 9:53:18 AM
Status:
Color: ■
Layer:
Space:

Parking is allowed provided it is outside the prescriptive sight triangle of the intersection.

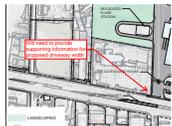
Chris Cavallo (85)



Subject: Cloud
Page Label: 5
Author: Chris Cavallo
Date: 10/23/2023 3:06:41 PM
Status:
Color: ■
Layer:
Space:



Subject: Cloud
Page Label: 5
Author: Chris Cavallo
Date: 10/23/2023 3:06:50 PM
Status:
Color: ■
Layer:
Space:



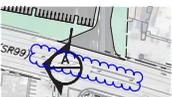
Subject: Text Box
Page Label: 5
Author: Chris Cavallo
Date: 10/23/2023 3:07:25 PM
Status:
Color: ■
Layer:
Space:

Will need to provide supporting information for proposed driveway width



Subject: Text Box
Page Label: 5
Author: Chris Cavallo
Date: 10/23/2023 3:07:51 PM
Status:
Color: ■
Layer:
Space:

Will need to provide supporting information for proposed driveway width and geometry



Subject: Cloud
Page Label: 5
Author: Chris Cavallo
Date: 10/23/2023 3:08:14 PM
Status:
Color: ■
Layer:
Space:



Subject: Text Box
Page Label: 5
Author: Chris Cavallo
Date: 10/23/2023 4:35:05 PM
Status:
Color: ■
Layer:
Space:

Chan improvements needed on Pacific Hwy to support new access



Subject: Cloud
Page Label: 5
Author: Chris Cavallo
Date: 10/23/2023 3:09:10 PM
Status:
Color: ■
Layer:
Space:



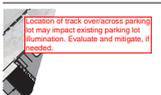
Subject: Text Box
Page Label: 5
Author: Chris Cavallo
Date: 10/23/2023 3:12:10 PM
Status:
Color: ■
Layer:
Space:

Chan/median improvements needed on Pacific Hwy to support new access



Subject: Text Box
Page Label: 15
Author: Chris Cavallo
Date: 10/20/2023 3:52:31 PM
Status:
Color: ■
Layer:
Space:

Location of track over/ across parking lot may impact existing parking lot illumination. Evaluate and mitigate, if needed.



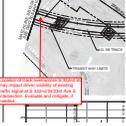
Subject: Text Box
Page Label: 16
Author: Chris Cavallo
Date: 10/23/2023 4:35:26 PM
Status:
Color: ■
Layer:
Space:

Location of track over/ across parking lot may impact existing parking lot illumination. Evaluate and mitigate, if needed.



Subject: Text Box
Page Label: 16
Author: Chris Cavallo
Date: 10/20/2023 3:55:34 PM
Status:
Color: ■
Layer:
Space:

Location of track over/ across 23rd Ave S may impact driver visibility of traffic signal at S 322nd St/23rd Ave S intersection. Evaluate and mitigate, if needed.



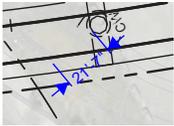
Subject: Text Box
Page Label: 16
Author: Chris Cavallo
Date: 10/23/2023 4:35:34 PM
Status:
Color: ■
Layer:
Space:

Location of track over/across S 322nd St may impact driver visibility of existing traffic signal at S 322nd St/23rd Ave S intersection. Evaluate and mitigate, if needed.



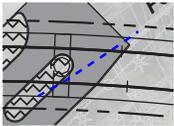
Subject: Length Measurement
Page Label: 16
Author: Chris Cavallo
Date: 10/20/2023 4:03:37 PM
Status:
Color: ■
Layer:
Space:

18'-1 1/2"

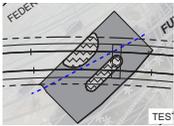


Subject: Length Measurement
Page Label: 16
Author: Chris Cavallo
Date: 10/20/2023 4:03:45 PM
Status:
Color: ■
Layer:
Space:

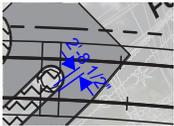
21'-7"



Subject: PolyLine
Page Label: 16
Author: Chris Cavallo
Date: 10/20/2023 4:05:04 PM
Status:
Color: ■
Layer:
Space:

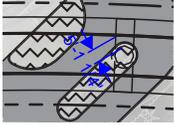


Subject: PolyLine
Page Label: 16
Author: Chris Cavallo
Date: 10/20/2023 4:05:04 PM
Status:
Color: ■
Layer:
Space:



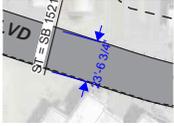
Subject: Length Measurement
Page Label: 16
Author: Chris Cavallo
Date: 10/20/2023 4:03:09 PM
Status:
Color: ■
Layer:
Space:

2'-8 1/2"



Subject: Length Measurement
Page Label: 16
Author: Chris Cavallo
Date: 10/20/2023 4:03:14 PM
Status:
Color: ■
Layer:
Space:

5'-1 1/4"



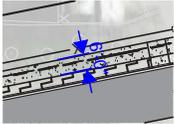
Subject: Length Measurement
Page Label: 17
Author: Chris Cavallo
Date: 10/20/2023 4:09:11 PM
Status:
Color: ■
Layer:
Space:

23'-6 3/4"



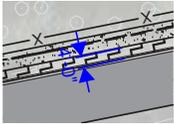
Subject: Text Box
Page Label: 19
Author: Chris Cavallo
Date: 10/20/2023 4:13:07 PM
Status:
Color: ■
Layer:
Space:

Set gate further from 24th Ave S so that access ST maintenance vehicles can pull completely out of the roadway when opening the gate



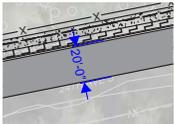
Subject: Length Measurement
Page Label: 19
Author: Chris Cavallo
Date: 10/20/2023 4:20:14 PM
Status:
Color: ■
Layer:
Space:

6'-0"



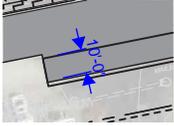
Subject: Length Measurement
Page Label: 19
Author: Chris Cavallo
Date: 10/20/2023 4:14:09 PM
Status:
Color: ■
Layer:
Space:

4'-0"



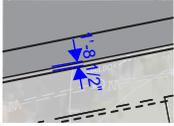
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Page Label: 19
Author: Chris Cavallo
Date: 10/20/2023 4:20:07 PM
Status:
Color: ■
Layer:
Space:

20'-0"



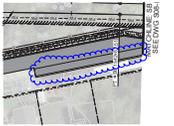
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Page Label: 19
Author: Chris Cavallo
Date: 10/20/2023 4:23:36 PM
Status:
Color: ■
Layer:
Space:

10'-0"

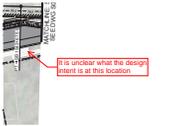


Subject: Length Measurement
Page Label: 19
Author: Chris Cavallo
Date: 10/20/2023 4:24:07 PM
Status:
Color: ■
Layer:
Space:

1'-8 1/2"

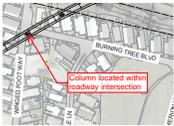


Subject: Cloud
Page Label: 19
Author: Chris Cavallo
Date: 10/20/2023 4:24:33 PM
Status:
Color: ■
Layer:
Space:



Subject: Text Box
Page Label: 19
Author: Chris Cavallo
Date: 10/20/2023 4:24:57 PM
Status:
Color: ■
Layer:
Space:

It is unclear what the design intent is at this location



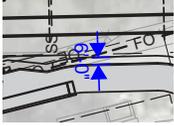
Subject: Text Box
Page Label: 20
Author: Chris Cavallo
Date: 10/20/2023 4:22:19 PM
Status:
Color: ■
Layer:
Space:

Column located within roadway intersection



Subject: Length Measurement
Page Label: 21
Author: Chris Cavallo
Date: 10/20/2023 4:26:16 PM
Status:
Color: ■
Layer:
Space:

24'-0"

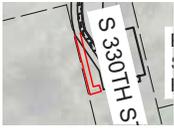


Subject: Length Measurement
Page Label: 21
Author: Chris Cavallo
Date: 10/20/2023 4:26:55 PM
Status:
Color: ■
Layer:
Space:

6'-0"



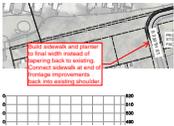
Subject: Line
Page Label: 21
Author: Chris Cavallo
Date: 10/20/2023 4:30:05 PM
Status:
Color: ■
Layer:
Space:



Subject: PolyLine
Page Label: 21
Author: Chris Cavallo
Date: 10/20/2023 4:34:20 PM
Status:
Color: ■
Layer:
Space:



Subject: PolyLine
Page Label: 21
Author: Chris Cavallo
Date: 10/20/2023 4:34:07 PM
Status:
Color: ■
Layer:
Space:



Subject: Text Box
Page Label: 21
Author: Chris Cavallo
Date: 10/20/2023 4:35:26 PM
Status:
Color: ■
Layer:
Space:

Build sidewalk and planter to final width instead of tapering back to existing. Connect sidewalk at end of frontage improvements back into existing shoulder.



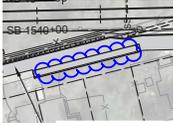
Subject: Text Box
Page Label: 21
Author: Chris Cavallo
Date: 10/20/2023 4:31:27 PM
Status:
Color: ■
Layer:
Space:

Match face of curb location to built out sections of S 333rd St



Subject: Text Box
Page Label: 21
Author: Chris Cavallo
Date: 10/20/2023 4:38:55 PM
Status:
Color: ■
Layer:
Space:

It is unclear what the design intent is at this location



Subject: Cloud
Page Label: 21
Author: Chris Cavallo
Date: 10/20/2023 4:38:50 PM
Status:
Color: ■
Layer:
Space:



Subject: Text Box
Page Label: 21
Author: Chris Cavallo
Date: 10/20/2023 4:40:15 PM
Status:
Color: ■
Layer:
Space:

See additional related comments on sheet S08B-KAP105



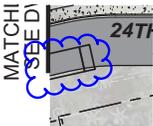
Subject: Text Box
Page Label: 21
Author: Chris Cavallo
Date: 10/23/2023 4:36:54 PM
Status:
Color: ■
Layer:
Space:

Locate sidewalk on the other side of 24th Ave S where residences are located per previous discussions with City



Subject: Text Box
Page Label: 23
Author: Chris Cavallo
Date: 10/20/2023 4:38:08 PM
Status:
Color: ■
Layer:
Space:

It is unclear what the design intent is at this location

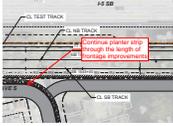


Subject: Cloud
Page Label: 23
Author: Chris Cavallo
Date: 10/20/2023 4:38:01 PM
Status:
Color: ■
Layer:
Space:



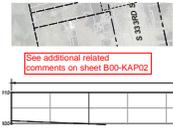
Subject: Text Box
Page Label: 23
Author: Chris Cavallo
Date: 10/20/2023 4:38:23 PM
Status:
Color: ■
Layer:
Space:

Extend sidewalk to end of roadway improvements



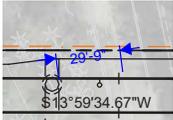
Subject: Text Box
Page Label: 23
Author: Chris Cavallo
Date: 10/20/2023 4:38:16 PM
Status:
Color: ■
Layer:
Space:

Continue planter strip through the length of frontage improvements



Subject: Text Box
Page Label: 23
Author: Chris Cavallo
Date: 10/20/2023 4:40:45 PM
Status:
Color: ■
Layer:
Space:

See additional related comments on sheet B00-KAP02



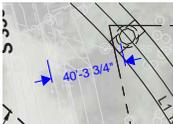
Subject: Length Measurement
Page Label: 24
Author: Chris Cavallo
Date: 10/20/2023 4:44:37 PM
Status:
Color: ■
Layer:
Space:

29'-9"



Subject: Length Measurement
Page Label: 24
Author: Chris Cavallo
Date: 10/20/2023 4:44:46 PM
Status:
Color: ■
Layer:
Space:

42'-11 3/4"



Subject: Length Measurement
Page Label: 24
Author: Chris Cavallo
Date: 10/20/2023 4:46:42 PM
Status:
Color: ■
Layer:
Space:

40'-3 3/4"



Subject: PolyLine
Page Label: 26
Author: Chris Cavallo
Date: 10/20/2023 4:50:11 PM
Status:
Color: ■
Layer:
Space:



Subject: PolyLine
Page Label: 26
Author: Chris Cavallo
Date: 10/20/2023 4:50:56 PM
Status:
Color: ■
Layer:
Space:



Subject: PolyLine
Page Label: 26
Author: Chris Cavallo
Date: 10/20/2023 4:51:05 PM
Status:
Color: ■
Layer:
Space:



Subject: PolyLine
Page Label: 26
Author: Chris Cavallo
Date: 10/20/2023 4:51:14 PM
Status:
Color: ■
Layer:
Space:



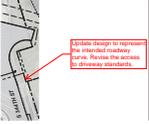
Subject: PolyLine
Page Label: 26
Author: Chris Cavallo
Date: 10/20/2023 4:51:35 PM
Status:
Color: ■
Layer:
Space:



Subject: PolyLine
Page Label: 26
Author: Chris Cavallo
Date: 10/20/2023 4:51:40 PM
Status:
Color: ■
Layer:
Space:

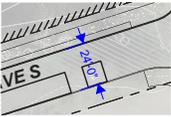


Subject: Cloud
Page Label: 26
Author: Chris Cavallo
Date: 10/20/2023 4:52:06 PM
Status:
Color: ■
Layer:
Space:



Subject: Text Box
Page Label: 26
Author: Chris Cavallo
Date: 10/23/2023 4:38:39 PM
Status:
Color: ■
Layer:
Space:

Update design to represent the intended roadway curve. Revise the access to driveway standards.



Subject: Length Measurement
Page Label: 26
Author: Chris Cavallo
Date: 10/20/2023 4:54:25 PM
Status:
Color: ■
Layer:
Space:

24'-0"



Subject: Length Measurement
Page Label: 26
Author: Chris Cavallo
Date: 10/20/2023 4:54:37 PM
Status:
Color: ■
Layer:
Space:

6'-0"



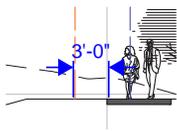
Subject: Length Measurement
Page Label: 26
Author: Chris Cavallo
Date: 10/20/2023 4:54:48 PM
Status:
Color: ■
Layer:
Space:

4'-0"



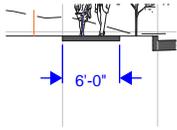
Subject: Text Box
Page Label: 26
Author: Chris Cavallo
Date: 10/23/2023 4:38:21 PM
Status:
Color: ■
Layer:
Space:

Per previous discussions with City due to potential environmental impacts, the City will allow for a street modification to 21st Ave S to allow for a 24' wide roadway section



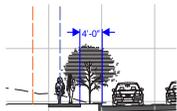
Subject: Length Measurement
Page Label: 29
Author: Chris Cavallo
Date: 10/20/2023 5:27:45 PM
Status:
Color: ■
Layer:
Space:

3'-0"



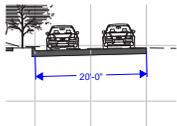
Subject: Length Measurement
Page Label: 29
Author: Chris Cavallo
Date: 10/20/2023 5:28:07 PM
Status:
Color: ■
Layer:
Space:

6'-0"



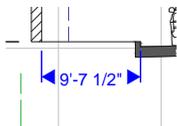
Subject: Length Measurement
Page Label: 29
Author: Chris Cavallo
Date: 10/20/2023 5:28:05 PM
Status:
Color: ■
Layer:
Space:

4'-0"



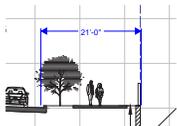
Subject: Length Measurement
Page Label: 29
Author: Chris Cavallo
Date: 10/20/2023 5:28:01 PM
Status:
Color: ■
Layer:
Space:

20'-0"



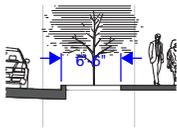
Subject: Length Measurement
Page Label: 29
Author: Chris Cavallo
Date: 10/20/2023 5:29:04 PM
Status:
Color: ■
Layer:
Space:

9'-7 1/2"



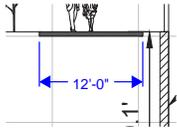
Subject: Length Measurement
Page Label: 29
Author: Chris Cavallo
Date: 10/20/2023 5:29:35 PM
Status:
Color: ■
Layer:
Space:

21'-0"



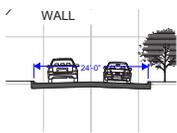
Subject: Length Measurement
Page Label: 29
Author: Chris Cavallo
Date: 10/20/2023 5:29:24 PM
Status:
Color: ■
Layer:
Space:

6'-6"



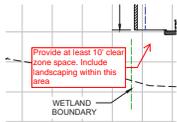
Subject: Length Measurement
Page Label: 29
Author: Chris Cavallo
Date: 10/20/2023 5:29:31 PM
Status:
Color: ■
Layer:
Space:

12'-0"



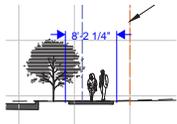
Subject: Length Measurement
Page Label: 29
Author: Chris Cavallo
Date: 10/20/2023 5:29:43 PM
Status:
Color: ■
Layer:
Space:

24'-0"



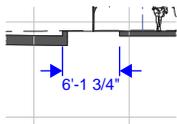
Subject: Text Box
Page Label: 29
Author: Chris Cavallo
Date: 10/23/2023 4:26:50 PM
Status:
Color: ■
Layer:
Space:

Provide at least 10' clear zone space. Include landscaping within this area



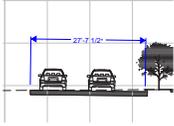
Subject: Length Measurement
Page Label: 30
Author: Chris Cavallo
Date: 10/20/2023 5:24:38 PM
Status:
Color: ■
Layer:
Space:

8'-2 1/4"



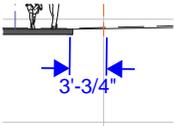
Subject: Length Measurement
Page Label: 30
Author: Chris Cavallo
Date: 10/20/2023 5:24:15 PM
Status:
Color: ■
Layer:
Space:

6'-1 3/4"



Subject: Length Measurement
Page Label: 30
Author: Chris Cavallo
Date: 10/20/2023 5:24:34 PM
Status:
Color: ■
Layer:
Space:

27'-7 1/2"



Subject: Length Measurement
Page Label: 30
Author: Chris Cavallo
Date: 10/20/2023 5:26:00 PM
Status:
Color: ■
Layer:
Space:

3'-3/4"



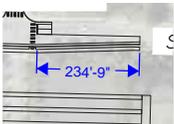
Subject: Text Box
Page Label: 31
Author: Chris Cavallo
Date: 10/20/2023 5:09:31 PM
Status:
Color: ■
Layer:
Space:

S 341st PI



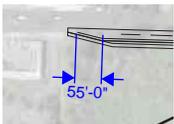
Subject: Length Measurement
Page Label: 31
Author: Chris Cavallo
Date: 10/20/2023 5:16:20 PM
Status:
Color: ■
Layer:
Space:

11'-2 1/2"



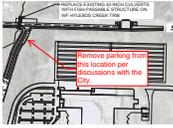
Subject: Length Measurement
Page Label: 31
Author: Chris Cavallo
Date: 10/20/2023 5:17:09 PM
Status:
Color: ■
Layer:
Space:

234'-9"



Subject: Length Measurement
Page Label: 31
Author: Chris Cavallo
Date: 10/20/2023 5:17:38 PM
Status:
Color: ■
Layer:
Space:

55'-0"



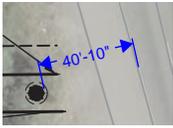
Subject: Text Box
Page Label: 31
Author: Chris Cavallo
Date: 10/23/2023 4:28:16 PM
Status:
Color: ■
Layer:
Space:

Remove parking from this location per discussions with the City.



Subject: Text Box
Page Label: 38
Author: Chris Cavallo
Date: 10/20/2023 5:05:59 PM
Status:
Color: ■
Layer:
Space:

Location of track over/ across parking lot may impact existing parking lot illumination. Evaluate and mitigate, if needed.



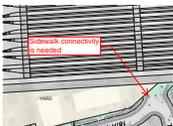
Subject: Length Measurement
Page Label: 40
Author: Chris Cavallo
Date: 10/20/2023 5:04:53 PM
Status:
Color: ■
Layer:
Space:

40'-10"



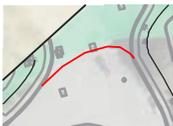
Subject: Text Box
Page Label: 41
Author: Chris Cavallo
Date: 10/23/2023 3:26:29 PM
Status:
Color: ■
Layer:
Space:

Need to evaluate access needs for property



Subject: Text Box
Page Label: 41
Author: Chris Cavallo
Date: 10/23/2023 3:29:44 PM
Status:
Color: ■
Layer:
Space:

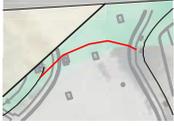
Sidewalk connectivity is needed



Subject: PolyLine
Page Label: 41
Author: Chris Cavallo
Date: 10/23/2023 3:28:46 PM
Status:
Color: ■
Layer:
Space:



Subject: PolyLine
Page Label: 41
Author: Chris Cavallo
Date: 10/23/2023 3:29:18 PM
Status:
Color: ■
Layer:
Space:



Subject: PolyLine
Page Label: 41
Author: Chris Cavallo
Date: 10/23/2023 3:29:08 PM
Status:
Color: ■
Layer:
Space:

Chaney (5)



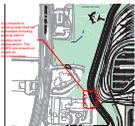
Subject: Cloud+
Page Label: 27
Author: Chaney
Date: 10/31/2023 4:19:51 PM
Status:
Color: ■
Layer:
Space:

This is the only time in the entire DEIS that the Activation Zone is mentioned, but does not include square footage, uses, benefits, impacts etc.



Subject: Cloud+
Page Label: 27
Author: Chaney
Date: 10/26/2023 3:37:04 PM
Status:
Color: ■
Layer:
Space:

Activation Zone parking spaces are not shown on this map, but shown in others. Plans should be consistent.



Subject: Cloud+
Page Label: 27
Author: Chaney
Date: 10/31/2023 4:22:24 PM
Status:
Color: ■
Layer:
Space:

Any impacts to existing uses shall be addressed including parking stall or loading zone displacement. The OMFS site should not create an nonconformities.



Subject: Cloud+
Page Label: 27
Author: Chaney
Date: 10/31/2023 4:24:30 PM
Status:
Color: ■
Layer:
Space:

Maps should be consistent and the impacts to adjacent uses must be measured. It appears Spectrum Business Park parking is being displaced here. Provide more information on how these impact will be mitigated and the creation of any nonconformities will be avoided.

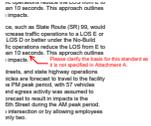


Subject: Callout
Page Label: 31
Author: Chaney
Date: 11/2/2023 8:56:28 AM
Status:
Color: ■
Layer:
Space:

Activation zone should serve multi modal travelers, those arriving via vehicle. There must be parking available for the activation zone.

08-OMFS NEPA SEPA DEIS Appendix G.1 Transportation Tech Report.pdf Markup Summary

marisfry (54)



Subject: Callout
Page Label: 2
Author: marisfry
Date: 10/23/2023 6:47:06 AM
Status:
Color: ■
Layer:
Space:

Please clarify the basis for this standard as it is not specified in Attachment A.



Subject: Callout
Page Label: 2
Author: marisfry
Date: 10/24/2023 6:45:21 AM
Status:
Color: ■
Layer:
Space:

Please clarify the basis for this standard as it is not specified in Attachment A. Additionally, the City of Federal Way standards should be referenced here since they are based on v/c rather than LOS/delay.



Subject: Text Box
Page Label: 8
Author: marisfry
Date: 10/24/2023 6:56:54 AM
Status:
Color: ■
Layer:
Space:

Overall Comments:

- The analysis provided does not adequately analyze the preferred and 344th Street alternatives as not all new driveways/intersections are included and/or incorrect driveways are included. Additionally, v/c must be recorded for all intersections including those along State Routes as the City of Federal Way controls these intersections.

- There is insufficient information provided related to the existing land uses removed and traffic rerouted as a result of vacated streets. Supplemental trip generation analysis and volume figures should be provided to illustrate how these conditions impact the future volumes. Without this information it is not possible to validate the future volumes provided.

- Additional attachments must be provided including detailed trip generation information for the OMF South site and existing land uses; traffic counts; and Synchro worksheets.



Subject: Cloud+
Page Label: 12
Author: marisfry
Date: 10/24/2023 6:46:27 AM
Status:
Color: ■
Layer:
Space:

The extension of 18th Place S is described as intersection S 336th Street as the fourth (NB) leg of the 18th Ave S/S 336th St intersection, but the conceptual site plan does not depict it in this way due to the creek. It is assumed that a four-leg intersection is not feasible here and therefore the description/analysis should be revised accordingly.



Subject: Callout
Page Label: 29
Author: marisfry
Date: 10/23/2023 7:09:14 AM
Status:
Color: ■
Layer:
Space:

Please clarify what "as applicable" means. For instance, was volume balancing between intersections a key factor?



Subject: Text Box
Page Label: 30
Author: marisfry
Date: 10/24/2023 6:46:55 AM
Status:
Color: ■
Layer:
Space:

During the AM peak hour, existing volumes at intersections 6 and 9 have decreased as compared to the 2021 DEIS resulting in greater volume imbalances between intersections in some cases. Please explain the change from the 2021 DEIS to the 2023 ADEIS.

| Category | 2021 DEIS | 2023 ADEIS |
|------------------|-----------|------------|
| Volume | 100 | 100 |
| Speed | 35 | 35 |
| Level of Service | C | C |
| Delay | 15 | 15 |

Subject: Text Box
Page Label: 38
Author: marisfry
Date: 10/24/2023 6:48:20 AM
Status:
Color: ■
Layer:
Space:

v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

| Category | 2021 DEIS | 2023 ADEIS |
|------------------|-----------|------------|
| Volume | 100 | 100 |
| Speed | 35 | 35 |
| Level of Service | C | C |
| Delay | 15 | 15 |

Subject: Text Box
Page Label: 40
Author: marisfry
Date: 10/24/2023 6:48:35 AM
Status:
Color: ■
Layer:
Space:

v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.



Subject: Callout
Page Label: 53
Author: marisfry
Date: 10/23/2023 7:13:47 AM
Status:
Color: ■
Layer:
Space:

While it is acceptable to use collision data from 2016 to 2018 because collision data during the pandemic was atypical, many studies have found that collision rates were higher during the pandemic. Therefore it may not be accurate to say that 2016 to 2018 collision data is more conservative.



Subject: Callout
Page Label: 60
Author: marisfry
Date: 10/24/2023 7:02:00 AM
Status:
Color: ■
Layer:
Space:

Intersections with a collision rate above 1.0 per MEV should be discussed in greater detail as to potential contributing factors.

Additionally, the societal cost per MEV must be provided in the collision summary tables and discussed.



Subject: Callout
Page Label: 63
Author: marisfry
Date: 10/24/2023 7:02:53 AM
Status:
Color: ■
Layer:
Space:

It is noted that the annual growth rate is based on the growth rate used for TDLE traffic studies, but please specify what the basis for the assumed TDLE annual growth rate was. Typically, a higher annual growth rate closer to 1.25 percent has been used in the City of Federal Way.



Subject: Callout
Page Label: 64
Author: marisfry
Date: 10/25/2023 2:35:52 PM
Status:
Color: ■
Layer:
Space:

Was this signal timing optimization vetted with WSDOT and/or City of Federal Way? Are there other external factors outside of the study area that would impact the ability to optimize the signal timings?

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
| | | | | | |

Subject: Text Box
Page Label: 67
Author: marisfry
Date: 10/24/2023 6:49:04 AM
Status:
Color: ■
Layer:
Space:

v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
| | | | | | |

Subject: Text Box
Page Label: 69
Author: marisfry
Date: 10/24/2023 6:49:14 AM
Status:
Color: ■
Layer:
Space:

v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.



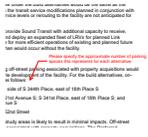
Subject: Callout
Page Label: 77
Author: marisfry
Date: 10/23/2023 7:39:14 AM
Status:
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Given that this is a long-range analysis, and that the evaluated alternatives result in major changes to the roadway network, it is not appropriate to base trip distribution assumptions on existing travel patterns along. Trip distribution patterns should be based on the regional travel model and adjusted as needed based on changes to the roadway network.

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
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Subject: Callout
Page Label: 78
Author: marisfry
Date: 10/23/2023 8:24:15 AM
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A more comprehensive trip generation sections needs to be provided in this report. The appendices do not include detailed calculations and the methodology outlined here does not match with the methodology outlined in the appendices (i.e. trip generation does not appear to account for delivery-related trips or other non-employee trips)



Subject: Callout
Page Label: 79
Author: marisfry
Date: 10/23/2023 8:06:05 AM
Status:
Color: ■
Layer:
Space:

Please specify the approximate number of parking spaces this represents for each alternative.



Subject: Callout
Page Label: 80
Author: marisfry
Date: 10/23/2023 4:02:45 PM
Status:
Color: ■
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This section should address the intersections with a collision rate over 1.0 collisions per MEV and discuss how the project may impact these locations.

Additionally, if north-south non-motorized facilities would not be feasible as part of the 344th Street Alternative, safety would not improve for non-motorized users and could in fact worsen. Please elaborate.



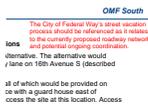
Subject: Callout
Page Label: 81
Author: marisfry
Date: 10/24/2023 7:05:55 AM
Status:
Color: ■
Layer:
Space:

Information regarding existing land uses to be removed and associated trip generation projections for those uses need to be provided in this section.



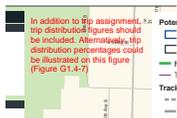
Subject: Cloud+
Page Label: 81
Author: marisfry
Date: 10/24/2023 7:05:51 AM
Status:
Color: ■
Layer:
Space:

This is not consistent with the provided site plan. The description and if applicable, the associated analysis should be updated.



Subject: Text Box
Page Label: 81
Author: marisfry
Date: 10/24/2023 7:08:12 AM
Status:
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Layer:
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The City of Federal Way's street vacation process should be referenced as it relates to the currently proposed roadway network and potential ongoing coordination.



Subject: Text Box
Page Label: 82
Author: marisfry
Date: 10/23/2023 8:28:10 AM
Status:
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In addition to trip assignment, trip distribution figures should be included. Alternatively, trip distribution percentages could be illustrated on this figure (Figure G1.4-7)



Subject: Text Box
Page Label: 82
Author: marisfry
Date: 10/23/2023 8:28:27 AM
Status:
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Space:

This figure should indicate new roadway extensions that are part of the preferred alternative.



Subject: Text Box
Page Label: 82
Author: marisfry
Date: 10/23/2023 8:28:43 AM
Status:
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Layer:
Space:

This figure shows intersection 10 as a new intersection, but intersection 10 no longer exists as part of the preferred alternative site plan based on Figure G1.1-2 and the roadway network description. If this driveway no longer exists, the volumes going through this intersection would need to be routed to other site access points and other study area intersections.

Additionally, this figure does not show intersection 11 (18th Place S Extension/S 336th Street), but intersection is included in the LOS tables. Finally, the intersections of 21st Avenue S/S 341st Place and 21st Avenue S Extension/S 344th Street should be included in the analysis as well as future volume figures.

Overall, the analysis provided does not sufficiently analyze the operational impacts of the preferred alternative.



Subject: Text Box
Page Label: 83
Author: marisfry
Date: 10/23/2023 8:29:36 AM
Status:
Color: ■
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This figure should indicate new roadway extensions that are part of the preferred alternative.



Subject: Text Box
Page Label: 83
Author: marisfry
Date: 10/24/2023 7:11:00 AM
Status:
Color: ■
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Space:

This figure shows intersection 10 as a new intersection, but intersection 10 no longer exists as part of the preferred alternative site plan based on Figure G1.1-2 and the roadway network description. If this driveway no longer exists, the volumes going through this intersection would need to be routed to other site access points and other study area intersections.

Additionally, this figure does not show intersection 11 (18th Place S Extension/S 336th Street), but intersection is included in the LOS tables. Finally, the intersections of 21st Avenue S/S 341st Place and 21st Avenue S Extension/S 344th Street should be included in the analysis as well as future volume figures.

It is also not clear how the rerouted vehicles from roadway closures are accounted for. For example, the no-build conditions show 85 vehicles exiting 20th Avenue S during the PM peak hour. However, there are only 15 additional right turns at intersection 1 and no additional left turns beyond project trips. While volumes for intersection 11 are not shown, based on the future volumes at intersection 1, it does not appear that additional trips are routed to intersection 11. If these trips would no longer exist due to land uses being removed, it is not clear from this analysis as no trip generation fore existing land uses to be removed is provided. A figure showing how existing traffic was removed and rerouted should be included.

Overall, the analysis provided does not sufficiently analyze the operational impacts of the preferred alternative.

| Intersection | Proposed | Existing | Notes |
|--------------|----------|----------|-------|
| 10 | Proposed | None | |
| 11 | Proposed | None | |
| 12 | Proposed | None | |
| 13 | Proposed | None | |
| 14 | Proposed | None | |
| 15 | Proposed | None | |
| 16 | Proposed | None | |
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| 21 | Proposed | None | |
| 22 | Proposed | None | |
| 23 | Proposed | None | |
| 24 | Proposed | None | |
| 25 | Proposed | None | |
| 26 | Proposed | None | |
| 27 | Proposed | None | |
| 28 | Proposed | None | |
| 29 | Proposed | None | |
| 30 | Proposed | None | |
| 31 | Proposed | None | |
| 32 | Proposed | None | |
| 33 | Proposed | None | |
| 34 | Proposed | None | |
| 35 | Proposed | None | |
| 36 | Proposed | None | |
| 37 | Proposed | None | |
| 38 | Proposed | None | |
| 39 | Proposed | None | |
| 40 | Proposed | None | |
| 41 | Proposed | None | |
| 42 | Proposed | None | |
| 43 | Proposed | None | |
| 44 | Proposed | None | |
| 45 | Proposed | None | |
| 46 | Proposed | None | |
| 47 | Proposed | None | |
| 48 | Proposed | None | |
| 49 | Proposed | None | |
| 50 | Proposed | None | |
| 51 | Proposed | None | |
| 52 | Proposed | None | |
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| 55 | Proposed | None | |
| 56 | Proposed | None | |
| 57 | Proposed | None | |
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| 88 | Proposed | None | |
| 89 | Proposed | None | |
| 90 | Proposed | None | |
| 91 | Proposed | None | |
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| 98 | Proposed | None | |
| 99 | Proposed | None | |
| 100 | Proposed | None | |

Subject: Callout
Page Label: 84
Author: marisfry
Date: 10/25/2023 2:52:37 PM
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Intersection 10 (SR 99/Driveway) is longer proposed as part of the preferred alternative.

PROJECT SPHERE PLAN FOR LABORATORY FACILITIES

Additional new intersections and site access points are not included in the analysis and are not summarized in Table G1.4-10. All new site driveways and new intersections resulting from roadway extensions must be provided in this table.

| Intersection | Proposed | Existing | Notes |
|--------------|----------|----------|-------|
| 10 | Proposed | None | |
| 11 | Proposed | None | |
| 12 | Proposed | None | |
| 13 | Proposed | None | |
| 14 | Proposed | None | |
| 15 | Proposed | None | |
| 16 | Proposed | None | |
| 17 | Proposed | None | |
| 18 | Proposed | None | |
| 19 | Proposed | None | |
| 20 | Proposed | None | |
| 21 | Proposed | None | |
| 22 | Proposed | None | |
| 23 | Proposed | None | |
| 24 | Proposed | None | |
| 25 | Proposed | None | |
| 26 | Proposed | None | |
| 27 | Proposed | None | |
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| 30 | Proposed | None | |
| 31 | Proposed | None | |
| 32 | Proposed | None | |
| 33 | Proposed | None | |
| 34 | Proposed | None | |
| 35 | Proposed | None | |
| 36 | Proposed | None | |
| 37 | Proposed | None | |
| 38 | Proposed | None | |
| 39 | Proposed | None | |
| 40 | Proposed | None | |
| 41 | Proposed | None | |
| 42 | Proposed | None | |
| 43 | Proposed | None | |
| 44 | Proposed | None | |
| 45 | Proposed | None | |
| 46 | Proposed | None | |
| 47 | Proposed | None | |
| 48 | Proposed | None | |
| 49 | Proposed | None | |
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| 53 | Proposed | None | |
| 54 | Proposed | None | |
| 55 | Proposed | None | |
| 56 | Proposed | None | |
| 57 | Proposed | None | |
| 58 | Proposed | None | |
| 59 | Proposed | None | |
| 60 | Proposed | None | |
| 61 | Proposed | None | |
| 62 | Proposed | None | |
| 63 | Proposed | None | |
| 64 | Proposed | None | |
| 65 | Proposed | None | |
| 66 | Proposed | None | |
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| 88 | Proposed | None | |
| 89 | Proposed | None | |
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| 99 | Proposed | None | |
| 100 | Proposed | None | |

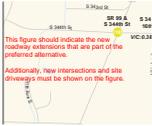
Subject: Text Box
Page Label: 84
Author: marisfry
Date: 10/23/2023 8:32:55 AM
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Additional new intersections and site access points are not included in the analysis and are not summarized in Table G1.4-10. All new site driveways and new intersections resulting from roadway extensions must be provided in this table.

| Intersection | Proposed | Existing | Notes |
|--------------|----------|----------|-------|
| 10 | Proposed | None | |
| 11 | Proposed | None | |
| 12 | Proposed | None | |
| 13 | Proposed | None | |
| 14 | Proposed | None | |
| 15 | Proposed | None | |
| 16 | Proposed | None | |
| 17 | Proposed | None | |
| 18 | Proposed | None | |
| 19 | Proposed | None | |
| 20 | Proposed | None | |
| 21 | Proposed | None | |
| 22 | Proposed | None | |
| 23 | Proposed | None | |
| 24 | Proposed | None | |
| 25 | Proposed | None | |
| 26 | Proposed | None | |
| 27 | Proposed | None | |
| 28 | Proposed | None | |
| 29 | Proposed | None | |
| 30 | Proposed | None | |
| 31 | Proposed | None | |
| 32 | Proposed | None | |
| 33 | Proposed | None | |
| 34 | Proposed | None | |
| 35 | Proposed | None | |
| 36 | Proposed | None | |
| 37 | Proposed | None | |
| 38 | Proposed | None | |
| 39 | Proposed | None | |
| 40 | Proposed | None | |
| 41 | Proposed | None | |
| 42 | Proposed | None | |
| 43 | Proposed | None | |
| 44 | Proposed | None | |
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| 46 | Proposed | None | |
| 47 | Proposed | None | |
| 48 | Proposed | None | |
| 49 | Proposed | None | |
| 50 | Proposed | None | |
| 51 | Proposed | None | |
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| 54 | Proposed | None | |
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| 57 | Proposed | None | |
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| 59 | Proposed | None | |
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| 65 | Proposed | None | |
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| 70 | Proposed | None | |
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| 72 | Proposed | None | |
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| 76 | Proposed | None | |
| 77 | Proposed | None | |
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| 79 | Proposed | None | |
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| 81 | Proposed | None | |
| 82 | Proposed | None | |
| 83 | Proposed | None | |
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| 88 | Proposed | None | |
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| 92 | Proposed | None | |
| 93 | Proposed | None | |
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| 100 | Proposed | None | |

Subject: Text Box
Page Label: 84
Author: marisfry
Date: 10/24/2023 6:49:44 AM
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v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.



Subject: Text Box
Page Label: 85
Author: marisfry
Date: 10/23/2023 8:33:54 AM
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This figure should indicate the new roadway extensions that are part of the preferred alternative.

Additionally, new intersections and site driveways must be shown on the figure.

2023 PM Peak Hour Traffic Operations

| Intersection | Approach | Volume | Control | Level of Service | Delay (s) |
|----------------|------------|--------|---------|------------------|-----------|
| SR 99/Driveway | Northbound | 100 | Signal | A | 15 |
| SR 99/Driveway | Southbound | 100 | Signal | A | 15 |
| SR 99/Driveway | Eastbound | 100 | Signal | A | 15 |
| SR 99/Driveway | Westbound | 100 | Signal | A | 15 |

Subject: Callout
Page Label: 86
Author: marisfry
Date: 10/25/2023 2:50:59 PM
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55 seconds of delay would typically indicate LOS E conditions. Without Synchro worksheets provided, it cannot be definitely confirmed that there are no impacts at this intersection. Please clarify.

Intersection 10 (SR 99/Driveway) is longer proposed as part of the preferred alternative.

| Intersection | Approach | Volume | Control | Level of Service | Delay (s) |
|----------------|------------|--------|---------|------------------|-----------|
| SR 99/Driveway | Northbound | 100 | Signal | A | 15 |
| SR 99/Driveway | Southbound | 100 | Signal | A | 15 |
| SR 99/Driveway | Eastbound | 100 | Signal | A | 15 |
| SR 99/Driveway | Westbound | 100 | Signal | A | 15 |

Subject: Callout
Page Label: 86
Author: marisfry
Date: 10/23/2023 8:35:24 AM
Status:
Color: ■
Layer:
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Intersection 10 (SR 99/Driveway) is longer proposed as part of the preferred alternative.

Additional new intersections and site access points are not included in the analysis and are not summarized in Table G1.4-10. All new site driveways and new intersections resulting from roadway extensions must be provided in this table.

| Intersection | Approach | Volume | Control | Level of Service | Delay (s) |
|----------------|------------|--------|---------|------------------|-----------|
| SR 99/Driveway | Northbound | 100 | Signal | A | 15 |
| SR 99/Driveway | Southbound | 100 | Signal | A | 15 |
| SR 99/Driveway | Eastbound | 100 | Signal | A | 15 |
| SR 99/Driveway | Westbound | 100 | Signal | A | 15 |

Subject: Text Box
Page Label: 86
Author: marisfry
Date: 10/23/2023 8:35:33 AM
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Color: ■
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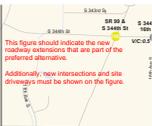
Additional new intersections and site access points are not included in the analysis and are not summarized in Table G1.4-10. All new site driveways and new intersections resulting from roadway extensions must be provided in this table.

v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.

| Intersection | Approach | Volume | Control | Level of Service | Delay (s) |
|----------------|------------|--------|---------|------------------|-----------|
| SR 99/Driveway | Northbound | 100 | Signal | A | 15 |
| SR 99/Driveway | Southbound | 100 | Signal | A | 15 |
| SR 99/Driveway | Eastbound | 100 | Signal | A | 15 |
| SR 99/Driveway | Westbound | 100 | Signal | A | 15 |

Subject: Text Box
Page Label: 86
Author: marisfry
Date: 10/24/2023 6:49:50 AM
Status:
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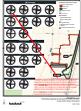
v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.



Subject: Text Box
Page Label: 87
Author: marisfry
Date: 10/23/2023 8:37:04 AM
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This figure should indicate the new roadway extensions that are part of the preferred alternative.

Additionally, new intersections and site driveways must be shown on the figure.



Subject: Callout
Page Label: 91
Author: marisfry
Date: 10/24/2023 7:12:14 AM
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If Intersection 1 is only providing access to the Christian Faith Church under build conditions, and little to no project trips are projected it is unlikely that this intersection would observe as much traffic as it does today. This analysis does not sufficiently account for (or sufficiently document) traffic that would be rerouted from 20th Avenue S due to the closure. As such, this analysis may not adequately take into account additional impacts along SR 99 or 16th Street as a result.

More broadly, a figure showing how existing traffic was removed and rerouted should be included.



Page 81 (8) Appendix 01: Transportation Technical Report

Subject: Text Box
Page Label: 92
Author: marisfry
Date: 10/23/2023 8:45:44 AM
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If volume projections are included for intersection 10 (as shown on the previous figures), then the traffic operations results should be shown in this table.



Page 81 (8) Appendix 01: Transportation Technical Report

Subject: Text Box
Page Label: 92
Author: marisfry
Date: 10/24/2023 6:49:58 AM
Status:
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v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.



Page 81 (8) Appendix 01: Transportation Technical Report

Subject: Text Box
Page Label: 93
Author: marisfry
Date: 10/23/2023 8:47:30 AM
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If volume projections are included for intersection 10 (as shown on the previous figures), then the traffic operations results should be shown on this figure (Figure G1.4-13)



Page 81 (8) Appendix 01: Transportation Technical Report

Subject: Text Box
Page Label: 94
Author: marisfry
Date: 10/23/2023 8:47:45 AM
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If volume projections are included for intersection 10 (as shown on the previous figures), then the traffic operations results should be shown in this table.



Page 81 (8) Appendix 01: Transportation Technical Report

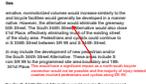
Subject: Text Box
Page Label: 94
Author: marisfry
Date: 10/24/2023 6:50:03 AM
Status:
Color: ■
Layer:
Space:

v/c must be recorded for all intersections, including those along State Routes. City of Federal Way is in control of these intersections and therefore the v/c standard applies to them.



Subject: Text Box
Page Label: 95
Author: marisfry
Date: 10/23/2023 8:47:58 AM
Status:
Color: ■
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Space:

If volume projections are included for intersection 10 (as shown on the previous figures), then the traffic operations results should be shown on this figure (Figure G1.4-14)



Subject: Callout
Page Label: 96
Author: marisfry
Date: 10/24/2023 7:12:42 AM
Status:
Color: ■
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Space:

This would have a significant impact as a north-south bicycle connection would not be possible and the majority of injury-related crashes involved pedestrians and cyclists along SR 99.



Subject: Text Box
Page Label: 97
Author: marisfry
Date: 10/23/2023 8:49:56 AM
Status:
Color: ■
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Space:

The safety section should address if the project would impact intersections that already have a crash rate greater than 1.0 collisions per MEV.

Additionally, this section should address non-motorized safety impacts associated with eliminating a north-south non motorized connection.



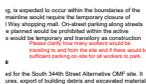
Subject: Text Box
Page Label: 108
Author: marisfry
Date: 10/24/2023 7:13:57 AM
Status:
Color: ■
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In addition to the impacts of truck activity, the impacts of trips related to workers traveling to and from the site should be quantified and discussed.



Subject: Callout
Page Label: 113
Author: marisfry
Date: 10/23/2023 8:53:55 AM
Status:
Color: ■
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Space:

Please clarify how long north-south connectivity would be impacted as pedestrians and cyclists would shift to SR 99 under this scenario.



Subject: Text Box
Page Label: 114
Author: marisfry
Date: 10/23/2023 8:54:40 AM
Status:
Color: ■
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Space:

Please clarify how many workers would be traveling to and from the site and if there would be sufficient parking on-site for all workers to park.

Small text snippet from a document, possibly a table of contents or index, with some red highlights.

Subject: Text Box
Page Label: 131
Author: marisfry
Date: 10/24/2023 7:16:43 AM
Status:
Color: ■
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Consistent with the executive summary, the City's street vacation process should be referenced as an ongoing coordination effort related to the reconfiguration of the street network.

Desiree Winkler (2)

Small text snippet from a document, possibly a table of contents or index, with some red highlights.

Subject: Text Box
Page Label: 8
Author: Desiree Winkler
Date: 10/27/2023 11:37:46 AM
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-an updated parking analysis for the WSDOT 320th/23rd Ave park and ride needs to be completed to support removal of parking spaces consistent with the FWLE EIS that assumed use of this park and ride for LINK/Regional Transit riders.

Small text snippet from a document, possibly a table of contents or index, with some red highlights.

Subject: Text Box
Page Label: 64
Author: Desiree Winkler
Date: 10/27/2023 4:49:43 PM
Status:
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cannot look at one SR99 intersection in a vacuum as the entire corridor is coordinated.

12-OMFS NEPA SEPA DEIS Appendix H Supporting Info for Tech Analyses.pdf Markup Summary

Chaney (17)



Subject: Cloud+
Page Label: 17
Author: Chaney
Date: 10/31/2023 3:06:06 PM
Status:
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Space:

Inaccurate and should be updated.



Subject: Cloud+
Page Label: 17
Author: Chaney
Date: 10/31/2023 3:06:13 PM
Status:
Color: ■
Layer:
Space:

Not accurate and should be updated



Subject: Cloud+
Page Label: 18
Author: Chaney
Date: 10/31/2023 3:10:01 PM
Status:
Color: ■
Layer:
Space:

Inaccurate, needs to be updated.

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Subject: Line
Page Label: 18
Author: Chaney
Date: 10/31/2023 3:11:08 PM
Status:
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Subject: Text Box
Page Label: 18
Author: Chaney
Date: 10/31/2023 3:11:16 PM
Status:
Color: ■
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The OMF site
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Subject: Callout
Page Label: 18
Author: Chaney
Date: 10/31/2023 3:12:22 PM
Status:
Color: ■
Layer:
Space:

The OMF site alternatives are not within the City Center



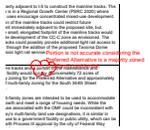
Subject: Cloud+
Page Label: 19
Author: Chaney
Date: 10/25/2023 12:18:27 PM
Status:
Color: ■
Layer:
Space:

this is outdated. Not mentioned here is the South Station Subarea Plan and the Countywide Growth Center Candidate Designation



Subject: Cloud+
Page Label: 20
Author: Chaney
Date: 10/31/2023 2:57:24 PM
Status:
Color: ■
Layer:
Space:

Provide basis for calculation of 17 acres in the CC-C zone due to OMF impacts.



Subject: Cloud+
Page Label: 20
Author: Chaney
Date: 10/31/2023 3:00:14 PM
Status:
Color: ■
Layer:
Space:

Portion is not accurate considering the Preferred Alternative is a majority zoned multifamily residential.



Subject: Cloud+
Page Label: 20
Author: Chaney
Date: 11/2/2023 4:41:16 PM
Status:
Color: ■
Layer:
Space:

Considering the OMF a "Government facility" is not accurate. This statement is incorrect.

Light rail or commuter rail transit facility require a Process IV review in the CC-C & CE zones



Subject: Cloud+
Page Label: 20
Author: Chaney
Date: 11/2/2023 4:38:34 PM
Status:
Color: ■
Layer:
Space:

Not appropriate to consider the OMF use as a Government Facility.



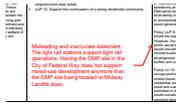
Subject: Cloud+
Page Label: 21
Author: Chaney
Date: 10/31/2023 3:03:13 PM
Status:
Color: ■
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Considering the OMF a "Government facility" is not accurate.



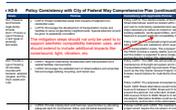
Subject: Cloud+
Page Label: 21
Author: Chaney
Date: 10/25/2023 12:34:59 PM
Status:
Color: ■
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Incorrect, the permitting use for the OMFS would be Public Transportation Facilities, per FWRC 19.240.135.



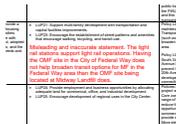
Subject: Callout
Page Label: 27
Author: Chaney
Date: 10/31/2023 3:38:41 PM
Status:
Color: ■
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Misleading and inaccurate statement. The light rail stations support light rail operations. Having the OMF site in the City of Federal Way does not support mixed-use development anymore than the OMF site being located at Midway Landfill does.



Subject: Callout
Page Label: 28
Author: Chaney
Date: 10/31/2023 3:37:22 PM
Status:
Color: ■
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The mitigation steps should not only be used to support aesthetic compatibility between uses, and should extend to include additional impacts like noise/sound, light, vibration, etc



Subject: Text Box
Page Label: 28
Author: Chaney
Date: 10/31/2023 3:39:40 PM
Status:
Color: ■
Layer:
Space:

Misleading and inaccurate statement. The light rail stations support light rail operations. Having the OMF site in the City of Federal Way does not help broaden transit options for MF in the Federal Way area than the OMF site being located at Midway Landfill does.



Subject: Cloud+
Page Label: 30
Author: Chaney
Date: 11/2/2023 4:36:12 PM
Status:
Color: ■
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Response provided for Policy LU40 is inappropriate. The policy is about the range of retail and supportive uses.



APPENDIX B

Comments from Businesses and Community Groups

COMMENTS FROM BUSINESSES AND COMMUNITY GROUPS

Businesses:

- GarageTown Federal Way Condominium Association

GarageTown Federal Way Condominium Association

2010 S 344th St
Federal Way WA 98003
425 503 2000
mill425@comcast.net

November 4, 2023

OMF South
% Elma Borbe, Sr. Environmental Planner
Sound Transit
401 S Jackson Street
Seattle, WA 98104

To Sound Transit,

The GarageTown Federal Way Condominium Association is responsible for maintenance of the GarageTown Federal Way property at 2010 S 344th St in Federal Way. In this capacity we have the following comments on the NEPA Draft/ Supplemental SEPA Draft:

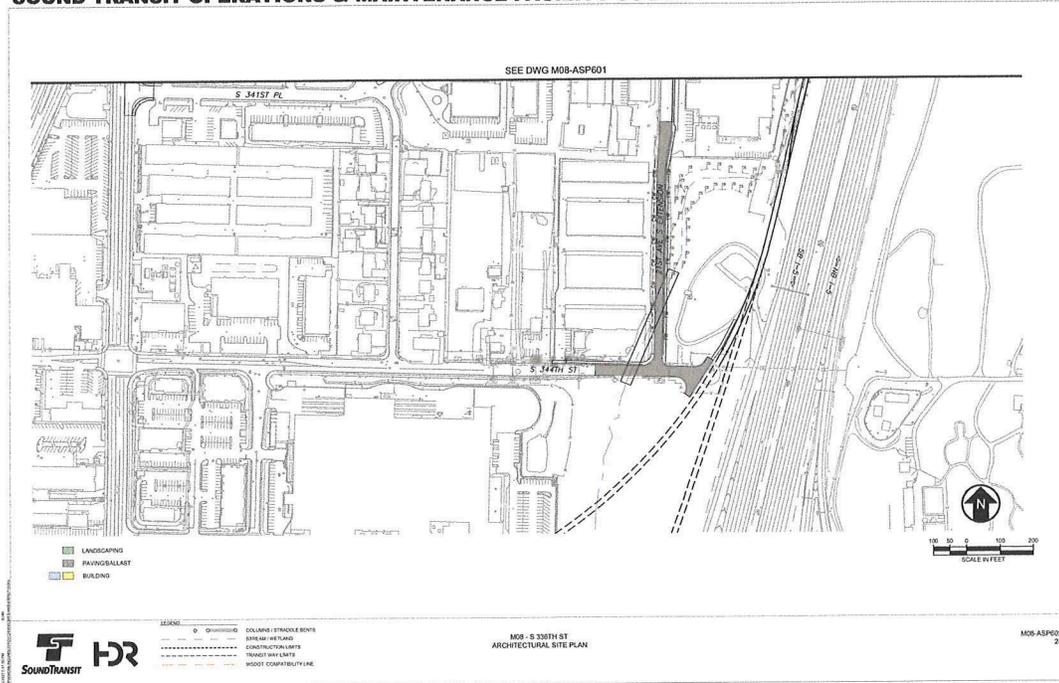
1) The GarageTown Federal Way Condominium Association continues to advocate for the Midway Landfill site, Full Excavation option. The technical and cost issues, clearly summarized in the Draft, are within the capabilities of Sound Transit to overcome, and are worth undertaking to avoid the substantial impact to private property of the other two alternatives.

The Preferred Alternative is the better choice of the remaining alternatives.

The GarageTown Federal Way Condominium Association remains **strongly opposed to the S 344th alternative** - it has the most impact on private property and appears to be the least desirable of the options from a design standpoint.

2) The revised design of the Preferred Alternative indicates an extension of 21st Ave S, connecting S 341st Pl with S344th St.

SOUND TRANSIT OPERATIONS & MAINTENANCE FACILITY SOUTH



Preferred Alternative - proposed 21st Ave S extension

The GarageTown Federal Way Condominium Association has a number of concerns about this planned extension:

A. intrusion onto property outside of easement

The existing fence line at the eastern GarageTown Federal Way property border is located approximately 16 feet west of the actual property border, following an easement on the property for future road construction. The GarageTown Federal Way Condominium Association **strongly opposes** incursion onto the property outside of the existing easement. Such incursion would necessarily reduce the width of the eastern driveway of the property. The eastern driveway at its current width is essential for operations to allow for circulation of large vehicles, including tractor-trailers and fire engines. Changing this access pattern would be extremely detrimental to the use of GarageTown Federal by its occupants.

B. fire road access too near the intersection of 21st Ave S and S 344th

The SE corner of the property supports an emergency secondary access to the property for fire equipment. The driveway for this entrance currently terminates at S 344th St, immediately adjacent to the proposed new intersection. This may present a concern to the City of Federal Way in that it would be too close to the proposed intersection as designed.

As an alternative, the intersection could be designed as a curve connecting the two streets, with the fire access in the approximate center of the curve. Such a design would necessarily intrude on the SE corner of the GarageTown Federal Way property corner. This corner is not vital to operations at GarageTown Federal Way, such that the GarageTown Federal Way Condominium is **not opposed** to routing the 21st Ave S extension in a curve over the SE property corner.

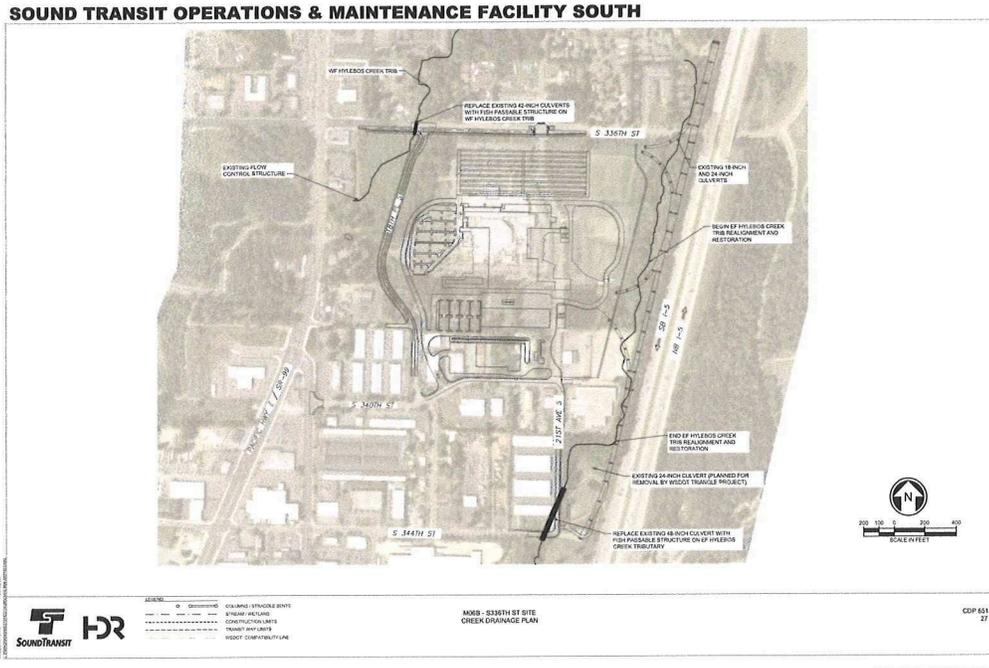
A secondary emergency property access gate is located at the NE property corner. Although currently unused, this gate could be re-purposed for an emergency fire entrance if the SE corner entrance is deemed to be unusable from the new street extension. The NE corner is very near the elevation of the existing road to the north, and would require little modification to serve as a secondary emergency entrance. The GarageTown Federal Way Condominium Association is **not opposed** to such a modification, should it become necessary.

Locating other property entrances at the eastern property border is undesirable due to the likely change in elevation from the existing property driveway and the proposed new 21st Ave S extension, which will be several feet below.

C. retention of cul-de-sac - unnecessary and undesirable

The proposed design shows that the cul-de-sac at the eastern terminus of S 344th St would be retained, although redesigned. Such a turn-around would no longer be necessary since vehicles could exit through the new 21st Ave S extension rather than having to execute a u-turn as they do now. In addition, this isolated cul-de-sac is well-known to the Federal Way Police as a site for illicit activity, illegal dumping, and vagrancy. Removing this nuisance would be a net benefit to the area, and the Garage Town Federal Way Condominium Association **strongly advocates** removing this cul-de-sac should the 21st Ave S extension be constructed.

3) Proposed revisions to the path of the east fork of Hylebos Creek in the S 344th St Alternative impose significant risk to the GarageTown Federal Way property. As proposed in Appendix C, page 15, the existing culvert will be replaced with a fish-passable structure.



Preferred Alternative - Hylebos Creek plan

Page G3-81 | Appendix G3: Ecosystem Resources Technical Report

“...the stream would be conveyed under the 21st Avenue S extension and S 344th Street in a new structure that would replace the existing, approximately 315-foot-long culvert. “

The GarageTown Federal Way Condominium Association is **strongly opposed** to this feature. The culvert passes through the GarageTown property near the SE corner of a concrete building. The culvert is buried approximately 15 feet, requiring substantial excavation on the property, imposing risk of damage to the adjacent building through settling or vibration. As an alternative, the creek could be re-routed to the east of the intersection with the new 21st Ave S extension and S 344th St. Such a re-route would remove the requirement to excavate the existing culvert and would benefit the stream

hydraulics through additional daylighting of the stream path through the area. This option is suggested in the same appendix as part of the S344th Alternative:

Page G3-83 | Appendix G3: Ecosystem Resources Technical Report

“...approximately 420 linear feet of East Fork Hylebos Tributary immediately north of S 344th Street would be removed from an existing culvert and restored to approximately 570 linear feet of surface-flowing channel. Daylighting this segment would increase the amount of functioning aquatic and riparian habitat available in the stream system.”

The GarageTown Federal Condominium Association **strongly advocates** consideration of this design change since it both benefits the stream and removes a substantial risk to the GarageTown Federal Way property.

The GarageTown Federal Way Condominium Association respectfully requests that this information be considered when making decisions regarding the location of OMF South so that the significant impact of those decisions on affected property owners can be properly evaluated.

Sincerely yours,

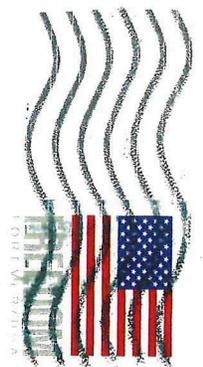
A handwritten signature in cursive script that reads "Edward Miller".

Edward Miller

President, GarageTown Federal Way Condominium Association

Miller
5766 173rd Ave SE
Bellevue WA 98006

SEATTLE WA 980
4 NOV 2023 PM 6 L



7/4

DMF South
40 Elma Bonhe, Sr. Environmental Planner
Sound Transit
401 S. Jackson Street
Seattle, WA 98104

98104-282601





APPENDIX C

Public Comments

Sound Transit Projects - Communications (52 Total)

Communication ID: 537037 - OMF South NEPA DEIS voicemail: In favor of South 344th Street alternative

Communication (9/28/2023)

OMF South NEPA DEIS voicemail: In favor of South 344th Street alternative

"Hi this is Barry Turnbull at 33355 20th Avenue, South Federal Way, Washington 98003. I live right across the street from Casey Treats building and I'm affected by the new ruling that you're going to make and I'm in favor of the South 344th Street Alternative and the reason why is the the preferred alternative is kinda crowded in to one different area but the 344th goes down the freeway and it has more towards the freeway whereas the other one is all on the land. It's crowded in there it's spread out on 344thth. I'm sorry if I got you confused but 344th is the one I wanna go for. Thank you very much. I left my address and let me know. Thank you. Bye bye."

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|-----------------------|------------|-------------------|-------|
| <u>1100127</u> | <u>Barry Turnbull</u> | Individual | +1 (253) 344-1518 | |

Communication ID: 537189 - OMF South NEPA email: Wrong streets listed?

Communication (9/27/2023)

OMF South NEPA email: Wrong streets listed?

From: Glenn Sawyer <ramjet2001@comcast.net>
Sent: Wednesday, September 27, 2023 12:25 PM
To: OMFSouthDEIS <OMFSouthDEIS@soundtransit.org>
Subject: Wrong streets listed?

On your website for the south operational proposals, you list 18th Avenue Southwest.
It is nowhere near this project. It should say 18th Avenue South.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|---------------------|------------|--------|-------------------------------|
| <u>889904</u> | <u>Glenn Sawyer</u> | Individual | | <u>ramjet2001@comcast.net</u> |

Communication ID: 537204 - OMF South NEPA DEIS OOH Comment 1

Communication (9/22/2023)

OMF South NEPA DEIS OOH Comment 1

To put it simply, the preferred alternative is the only way to go here. The sight should be selected and it should get up and running as soon as possible to support Link operations.

Communication ID: 537207 - OMF South NEPA DEIS OOH Comment 2

Communication (9/22/2023)

OMF South NEPA DEIS OOH Comment 2

The shrub scrub wetlands and forested wetland to the west of the new proposed road in the preferred alternative really should be maintained and improved as mitigation for the projects rather than turned to landscaping and buying into a mitigation bank elsewhere or attempting mitigation elsewhere. Impacts to the hylebos watershes should also be mitigated within the watershed to improve water storage and fish passage especially since this project has so many impacts within the watershed. Additional flood storage should be planned for for the likely beaver deonfliction that will arise in the future along that section of the stream in the project site as well. Since this project has also disproportionately impacted so many low income and protected people in the South sound particularly compared to the north and east extensions, special consideration should be given to the people sound transit continues to displace from their homes and value assessments from 3rd party assessors should be made more accessible as should the process to counter the valuations provided by sound transits assessors. Furthermore, in the interest of sound transit being better stewards of tax payer funds, additional consideration to staying within budget, and measures for staying within budget when unforeseen project challenges arise should be implemented into the project contracts.

Communication ID: 537209 - OMF South NEPA DEIS OOH Comment 3

Communication (9/22/2023)

OMF South NEPA DEIS OOH Comment 3

Hi. I live at 1830 S. 336th St in federal way. I'm Really concerned about this project effecting traffic and and damage to our natural areas. We have creeks and West lands. I'm also concerned that the noise from the facility will be horrible and affect my quality of life. The traffic and dust from semi is also a concern. It seems mid way would be the best option as it affects the least amount of people. I'm concerned my property value will go down, I won't be able to sell if i wanted. What will sound transit to to mitigate the affects of our property. The noise during construction and after, traffic property values. I'm very concerned that the facility will be noise 24 7 and have a negative affect on our quality of life. I would ask for more trees to be planted around facility and along 336th as well as requesting a noise study. Being we would be directly across for the facility we may need to upgrade our windows and insulation to ensure our homes are unchanged as far ad noise. .

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|-----------------------|------------|--------|-----------------------------|
| <u>1101008</u> | <u>Jacob Davidson</u> | Individual | | <u>Jacobd37@comcast.net</u> |

Communication ID: 537210 - OMF South NEPA DEIS OOH Comment 4

Communication (9/23/2023)

OMF South NEPA DEIS OOH Comment 4

Please put the OMF on the Midway landfill site. This is exactly the type of government project that is worth spending the additional time and dollars for. Look at how many business, residences are not displased, and how many streams and wetlands are not impacted. This site would probably never be used for private business and will remain under utilized and an eyesore for decades to come. The alternative sites could make a bigger impact to mass transit by being rezoned for MFH, with quick access to mass transit/light rail access. Thank you.

Communication ID: 537211 - OMF South NEPA DEIS OOH Comment 5

Communication (9/23/2023)

OMF South NEPA DEIS OOH Comment 5

Please reconsider the Midway site for your primary site. The environmental, residential, and business impact is minimal compared to the other sites. This is how we want government to spend funds, utilizing sites that the public sector won't. Who is going to buy that eyesore? You don't have to tear down any trees or take away any wetlands. I know there is other considerations but I really think it is a better utilization of space for both communities

Communication ID: 537212 - OMF South NEPA DEIS OOH Comment 6

Communication (9/26/2023)

OMF South NEPA DEIS OOH Comment 6

Amphibian populations are declining worldwide, and amphibians are experiencing high extinction rates due to habitat loss, chytrid fungus, pollutants, pesticides, and climate change. Amphibians are the most threatened class of vertebrates and merit special attention in the Sound Transit Operations and Maintenance Facility South Project Environmental Impact Statement (EIS). The EIS should identify amphibian habitat and potential impacts to amphibians. Where possible, the project should minimize impacts to wetland, stream, and forest habitats. The project's proposed detention and treatment of stormwater runoff appears to be a good practice to protect water quality and reduce impacts to amphibians. References: Catenazzi, A. 2015. State of the World's Amphibians. Annual Review of Environment and Resources, 40, 911-119 Collins, J.P., and M.L. Crump. 2009. Extinction in Our Times: Global Amphibian Decline. New York, NY: Oxford University Press. Kolbert, E. 2014. The Sixth Extinction, an Unnatural History, Chapter 1. New York, NY: Bloomsbury. McCallum, M.L. 2007. Amphibian Decline or Extinction? Current Declines Dwarf Background Extinction Rate. Journal of Herpetology, Volume 41, Number 3, pp. 483-491.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|---------------------|------------|--------|---------------------------|
| <u>1101009</u> | <u>Eric Johnson</u> | Individual | | <u>Eric01nm@yahoo.com</u> |
| <u>1101010</u> | <u>Eric Johnson</u> | Individual | | <u>Eric01nm@yahoo.com</u> |

Communication ID: 537213 - OMF South NEPA DEIS OOH Comment 7

Communication (9/26/2023)

OMF South NEPA DEIS OOH Comment 7

Vote for preferred alternative at 336th St.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|--------------------|------------|--------|------------------------------|
| <u>889663</u> | <u>Sue Cornell</u> | Individual | | <u>saltair57@hotmail.com</u> |

Communication ID: 537214 - OMF South NEPA DEIS OOH Comment 8

Communication (9/27/2023)

OMF South NEPA DEIS OOH Comment 8

I would prefer the "Preferred Alternative" site. The city of Federal Way has already lost 53 acres of property tax revenue from the Christian Faith Center. Please do not chose the South 344th Alternative since it will take additional property tax revenue and take jobs and businesses away.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|---------------------|------------|--------|-------------------------------|
| <u>889904</u> | <u>Glenn Sawyer</u> | Individual | | <u>ramjet2001@comcast.net</u> |

Communication ID: 537215 - OMF South NEPA DEIS OOH Comment 9

Communication (9/27/2023)

OMF South NEPA DEIS OOH Comment 9

The City of Federal Way Public Works Department often creates roadblocks to allowing projects within the City to complete quickly and efficiently which results in increased impacts to the traveling public and also increased environmental impacts due to longer project durations. These additional City requirements also result in added costs to taxpayers. What is ST doing to preemptively avoid this as part of the EIS and pre-project planning?

Communication ID: 537217 - OMF South NEPA DEIS OOH Comment 10

Communication (9/27/2023)

OMF South NEPA DEIS OOH Comment 10

I recognize that the Christian Faith Center site is preferred for a variety of good reasons ... not the least of which is cost. But I drive/walk by the abandoned Midway Landfill nearly every day and it is hard not to want to see it put to use. I think that is why you can't escape it remaining on the list. So, I have a suggestion. Instead of pouring over a billion dollars into that site, why don't you find a way to spend a million and turn it into a simple public park. Maybe there is an easy way to make it a useful space which would change it's image from "abandoned and vacant lot" to "community asset." Our community benefits and you save millions of dollars and get to move on from this issue.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|---------------------|------------|--------|-------------------------------|
| <u>880423</u> | <u>Dusty Wilson</u> | Individual | | <u>dustywwilson@gmail.com</u> |

Communication ID: 537218 - OMF South NEPA DEIS OOH Comment 11

Communication (10/1/2023)

OMF South NEPA DEIS OOH Comment 11

Midway landfill would be the smartest site, with less disruption of people and business. It is important to respect the citizens of the community you will disturb. Federal Way, is a large community of older residence, and the light rail will be a huge disruption enough, without a repair facility, too. Midway Landfill would be best! Thank You!

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|--------------------|------------|--------|---------------------------------|
| <u>879867</u> | <u>Kay Vallejo</u> | Individual | | <u>kaycsunshine@hotmail.com</u> |

Communication ID: 537672 - OMF South NEPA DEIS OOH Comment 12

Communication (10/2/2023)

OMF South NEPA DEIS OOH Comment 12

Regardless of location i do agree on the preferred location! And Conection to pac highway..

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|----------------------|------------|--------|---------------------------------|
| <u>1101179</u> | <u>Eduardo Munoz</u> | Individual | | <u>friaseduardo74@yahoo.com</u> |

Communication ID: 537673 - OMF South NEPA DEIS OOH Comment 13

Communication (10/4/2023)

OMF South NEPA DEIS OOH Comment 13

I believe the preferred site is still be far the best choice. The property configuration, location and development options are the best. In addition, the current uses in that selection could have a much better chance to relocate in close proximity to existing locations. Overall less impact on business, homes and community. Thank You,

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|-------------------|---------------------|-------------|---------------|----------------------------|
| <u>1072201</u> | <u>Rick Barnett</u> | Individual | | <u>rerickb@outlook.com</u> |

Communication ID: 537687 - OMF South NEPA DEIS email comment #1: NOT on the Midway Landfill

Communication (10/9/2023)

OMF South NEPA DEIS email comment #1: NOT on the Midway Landfill

From: Fran Je <memoimwen@gmail.com>

Sent: Sunday, October 8, 2023 7:10 PM

To: OMFSouthDEIS <OMFSouthDEIS@soundtransit.org>

Subject: NOT on the Midway Landfill

To whom it may concern,
I live in the Federal Way High School neighborhood and I want to remind you that it would be hazardous to build on the Midway Landfill. Wherever you choose to build, DO NOT BUILD ON THE MIDWAY LANDFILL!

Sincerely,
Francois J. Ryf

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|---------------------|------------|--------|----------------------------|
| <u>1101182</u> | <u>Francois Ryf</u> | Individual | | <u>memoimwen@gmail.com</u> |

Communication ID: 537872 - OMF South NEPA DEIS voicemail: Opposition to S 336th Street site alternative

Communication (10/10/2023)

OMF South NEPA DEIS voicemail: Opposition to S 336th Street site alternative

"This is Leona Miller at 32653 9th Place South Federal Way Washington. I wanted to leave my comment regarding the facility for the Link around 336th. I'm just in Federal way now since 1973 so it's been 50 years and I really feel like this spot down here would not be a good spot because Federal Way has not become a wonderful city because of all the homelessness and I feel like this facility would make it actually a worse city and we don't need any more noise or any more industry, large industry things down here in the city. I believe up in Des Moines would be a better site and you can give me a call if you want to speak to me 253-350-3056. Like I said I've been a citizen down here in Federal Way for 50 years I'm 78 years old, raise my children here and I feel like it would hinder the city. Thank you and goodbye."

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|-------------------------|-------------------------------|------------|-------------------|-------|
| 1101251 | Leotta Miller | Individual | +1 (253) 350-3056 | |

Communication ID: 538026 - OMF South NEPA DEIS OOH Comment 13

Communication (10/14/2023)

OMF South NEPA DEIS OOH Comment 13

Best location for this is where you now have it. It is going to affect the least amount of people. Just get the review process done as inexpensive as possible because its going to happen just so much red tape increases the costs which increase our taxes.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|------------------------|------------------------------|------------|--------|--|
| 880460 | Karl Hallesy | Individual | | hallesy@msn.com |

Communication ID: 538156 - OMF South NEPA DEIS email comment #2: proposed light rail maintenance facility

Communication (10/16/2023)

OMF South NEPA DEIS email comment #2: proposed light rail maintenance facility

From: Patricia Clayton <cpatric428@aol.com>

Sent: Monday, October 16, 2023 5:40 PM

To: OMFSouthDEIS <OMFSouthDEIS@soundtransit.org>

Subject: proposed light rail maintenance facility

I suggest the preferred alternative in brochure or the south 344thNOT the Midway Landfill.

Thank you.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|-------------------------|------------|--------|---------------------------|
| <u>1101352</u> | <u>Patricia Clayton</u> | Individual | | <u>cpatric428@aol.com</u> |

Communication ID: 538473 - OMF South NEPA DEIS OOH Comment 14

Communication (10/16/2023)

OMF South NEPA DEIS OOH Comment 14

The Midway landfill location is best because it will be improving land that has been damaged. Both sites further south would have significant impact to habitat, wildlife and mature trees and forests.

Please help preserve our great Evergreen State!

Communication ID: 538475 - OMF South NEPA DEIS OOH Comment 15

Communication (10/19/2023)

OMF South NEPA DEIS OOH Comment 15

Stepping back from any one of the three OMFS alternatives and considering them overall. It appears the driving force behind building any one of them is support of operations from Federal Way on south. Which is predominately Pierce County. Given that Pierce County residents voted 'NO' on ST3, by what authority Legal - Constitutional (United States and Washington) - Moral - other is Sound Transit able to disregard the vote of Pierce County residents ?

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|------------------------|-------------------------------|------------|--------------|---|
| 879312 | Bill Pugnetti | Individual | 253-941-5793 | pugnetti@aol.com - bppmail@aol.com |

Communication ID: 538479 - OMF South NEPA DEIS Public Hearing Comment 1

Communication (10/19/2023)

OMF South NEPA DEIS Public Hearing Comment 1

Following the presentation today, I see the comment on impacts on businesses and residences and persons of different backgrounds, and it appears that the non minority person carries more weight than the majority person. Excuse me. It appears that the minority person carries more weight in considerations than a majority person. That seems like a level of discrimination and unbalanced consideration between the parties, so I'd like to call you out on that matter. That's an unbalanced approach. It's not individual by individual, but it's racial or other grounds that some persons are worth more than others in considering the handling of the project, so I see an unbalanced approach and a level of discrimination there. Thank you.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|------------------------|-------------------------------|------------|--------------|---|
| 879312 | Bill Pugnetti | Individual | 253-941-5793 | pugnetti@aol.com - bppmail@aol.com |

Communication ID: 538480 - OMF South NEPA DEIS Public Hearing Comment 2

Communication (10/19/2023)

OMF South NEPA DEIS Public Hearing Comment 2

This is Patricia Pugnetti. In previous discussions on this subject, I, well, I'm wondering. You did not state how many people would be put out of jobs that were in existing companies that were in the 324th area like Garage Town, and there's small electronic companies there. Could you fill me in on that, please?

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|-------------------|--------------------------|-------------|---------------|-------------------------|
| <u>921662</u> | <u>Patricia Pugnetti</u> | Individual | | <u>pugnetti@aol.com</u> |

Communication ID: 539015 - OMF South NEPA DEIS email comment: Operations & Maintenance & Facility location

Communication (11/5/2023)

OMF South NEPA DEIS email comment: Operations & Maintenance & Facility location

From: Susan Strong <s.strong@comcast.net>
Sent: Sunday, November 5, 2023 8:01 PM
To: OMF South <OMFsouth@soundtransit.org>
Subject: Operations & Maintenance & Facility location

CAUTION: This email originated from a contact outside Sound Transit. Remember, do not click any links or open any attachments unless you recognize the sender and know the content is safe. Report any suspicious email by clicking the "fish" button in Outlook. Thank you! ST Information Security

Your first choice to locate the O&M Facility is on the property currently being used by the Christian Faith Center, So 336th St and So 344th St, Federal Way. This is the wrong location for such an operation. As the Washington State Tribes stated in 2021: Tens of millions of dollars were spent on property acquisition, habitat, restoration, contaminant, cleanup sites, and stream enhancements located downstream below the 336th – 344th sites. Pipelines and underground drainage conveyances offer no means of water treatment or groundwater recharge whatsoever, and are therefore viewed as incompatible with fish recovery. Many reaches of the Hylebos Creek that were formally whetted year-round are now EPHEMERAL. Reduced flow conditions are more susceptible to thermal inputs and rapid heating which puts additional stress on fish populations. Any further loss of water treatment opportunities and recharge are not an acceptable option for the tribes.

Your last choice to locate the Facility is the Midway Landfill. The cities of Kent, Des Moines and Federal Way stand in unison and approve the Midway landfill location.

I believe that the Midway Landfill is the best location for this Facility. The contaminated soil needs to be completely removed. This would be similar to the Superfund site in Tacoma where the Asarco smelter left a toxic legacy in the soil, groundwater, and sediments in Puget Sound. The cleanup began in 1983 and continues to this day. The Midway contaminated soil needs to be completely removed, not covered over.

In conclusion, the wetlands of the Hylebos Creek need to be protected, and the Midway landfill needs to be completely removed and put to better use. One better use would be your Facility.

Sincerely, Susan Strong

FW Resident since 1975, Born in Seattle

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|---------------------|------------|--------|-----------------------------|
| <u>1101900</u> | <u>Susan Strong</u> | Individual | | <u>s.strong@comcast.net</u> |

Communication ID: 539016 - OMF South NEPA DEIS letter 2: NO OMF Facilities in Federal Way.

Communication (11/6/2023)

OMF South NEPA DEIS letter 2: NO OMF Facilities in Federal Way

From: Kerry Lesinski <shamrockkerry1@yahoo.com>

Sent: Sunday, November 5, 2023 7:18 PM

To: OMF South <OMFsouth@soundtransit.org>

Subject: Attn: Erin Green

Please see my attached letter for NO OMF facilities here in Federal Way.

Thank you,
Kerry Lesinski

November 6, 2023

To: OMF South @ Erin Green

Sound Transit

401 Jackson Street

Seattle, WA 98104

I am writing to you today in full opposition to both potential OMF sites (S. 336th St. & S. 344th St.) here in the city of Federal Way.

The Puyallup Tribe has emphatically stated that pipelines and underground drainage conveyances offer NO means of water treatment or ground water recharge whatsoever and therefore are viewed as incompatible with fish recovery. Regardless of whether fish travel up to this area, it is the microbenthic vertebrae (food) that must travel via rocks, trees, and water to reach the lower reaches of the Hylebos East branch that must sustain healthy salmonoids. The tribes have spent tens of millions of dollars on property acquisitions, restoration plans, habitat restoration, stream enhancements and contaminant cleanup sites on lands that sit below the S. 336th St. and S. 344th St. sites. Loss of water treatment opportunities and recharge are NOT an acceptable option for the tribe. As stewards of these lands since time memorial, I support the Puyallup Tribes Sovereignty for preservation.

We are a small city of only 22 Square miles. Sound Transit has recently taken over and built their transit light rail station at our cities core at S. 320th. Expected build out of another transit transfer station and parking garage is planned for our south end (location to be determined) resulting in more considerable business and traffic impacts. Now the citizens of Federal Way are expected to sacrifice not one but two possible locations in our midtown. It is unacceptable to expect that our city is to accommodate all of Sound Transits needs.

These two sites were studied by Sound Transit as having a higher percentage of low-income and minority persons than the Sound Transit service district and King County. Displacement of community facilities, daycares and housing would further exploit and fortify their economic struggle. To assume that an industrial build such as the proposed 67-acre OMF facility would offset the impacts to the minority population because they would benefit from riding the train is absurd. They would still have to travel outside of their area to utilize a transfer station. Causing them time and money. There are sufficient bus line options already in place.

There simply is no M2 or M3 (heavy industries that generate noise, traffic, or pollutants) zoning here in the city of Federal Way. This unseemingly and inconsistent development would have devastating/catastrophic effects on businesses like Ellanos Yogurt, N.W. Equipment Sales/Rentals, Garage Town, Voice of Hope Church, Family Life Community Church, Christian Faith Church and associated schools, Redwood Church of God, and Tabernacle Temple of Praise Church.

Assumptions are being made by Sound Transit that our Comprehensive Plan policies of converting our only light industrial zone in Federal Way (S. 344th St.), vacating public roads and modifications of development standards will be permitted. The Transportation Technical report is riddled with needed corrections and clarification, as well as disregarding emergency vehicles the ability to use S. 20th Ave. The suggested solution to bulldoze a road through a critical class 5 wetland is not an acceptable option as our water district operates within this area, serves as an aquifer recharge area and is home to numerous wildlife species.

The S. 336th St. option runs with a never-ending Concomitant Agreement, that is not negotiable, and as Christian Faith owners stated in their 2021 letter, "we have commitments to stormwater management, site access, mitigation, and recreational areas. A reminder that this land is a part of the iconic Weyerhaeuser Campus, in which visual impacts were NOT adequately addressed in previous Draft statements. The Christian Faith land WAS already mitigated in 1994 and it was the citizens who fought for four long years to preserve the functionality of the Hylebos Creek, surrounding tributaries and wetlands. It should not be allowed to be mitigated again. This is a Corporate Park zoning with highly sensitive areas, that do not warrant a Heavy Industrial Equipment zoning. Noise and vibration impacts will be considerably undesirable and unhealthy for residents and wildlife, as the open spaces, creek and native forests provide food, water, and shelter as it is a part of the International Flight Pathway. 150 migrating species depend on these resources.

Sound Transit, King County and the city of Federal Way must consider the cumulative impacts of future developments within the Hylebos Watershed. Hylebos Watershed and Lower Puget Sound Plan must be included and thoughtfully considered. Numerous large developments such as the two warehouses built recently on the Weyerhaeuser Campus has already negated a head water tributary, that fed not only the Hylebos, but the Duwamish/Green River Watersheds. Any further demolition of the Hylebos East Branch Creek will surely lead to its demise.

The cities of Kent, Des Moines and Auburn are in favor of the Midway landfill as The Preferred OMF site. They stand in opposition with the city of Federal Way for the construction of the OMF South at either of these locations. The landfill is a most doable site, if the Federal government or the state would be invited to assist in the funding. Sound Transit should exhaust every available option before it forever displaces our citizens, businesses, environment, aquifer, and high quality of life here in Federal Way.

The Executive Summary consistently refers to the S. 336th Site as THE PREFERRED site which feels like a deliberate attempt to persuade the reader/voting public. I do not feel this is a fair representation of the three options before us.

I urge Sound Transit to reconsider the two previous site options in Fife, as the zoning would permit a heavy industrial equipment build. These two options were dismissed too quickly, due to a lag of a mere 22 seconds in train journey travel in regards to reaching its set destinations. Surely this can be managed by the experts of Sound Transit, and should be a priority task moving forward.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|-------------------------|--------------------------------|------------|--------|--|
| 1026534 | Kerry Lesinski | Individual | | shamrockkerry1@yahoo.com |

Communication ID: 539020 - OMF South NEPA DEIS written comment: Belmor Park briefing comment 1

Communication (11/1/2023)

OMF South NEPA DEIS written comment: Belmor Park briefing comment 1

Can we see more details on 55 mph option?

- o We live in Unit 208 and online appears to be above our home. Can we get more photos/plans, etc.?

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|-------------------------|-------------------------------|------------|---------------------|--|
| 806364 | Miguel Torres | Individual | 902-617-7834 (Home) | migtorreswa@gmail.com |
| 1101901 | Olivia Torres | Individual | | livtorreswa@gmail.com |

Communication ID: 539021 - OMF South NEPA DEIS written comment: Belmor Park briefing comment 2

Communication (11/1/2023)

OMF South NEPA DEIS written comment: Belmor Park briefing comment 2

I live in Belmor Park. I have lived 4 years there. I would not be affected but I am deeply concerned about the traffic effect, noise as to daytime, I understand people are being removed and Belmor isn't cooperating as I know many have asked to have the mobiles moved elsewhere in the park, but were told no open spots to move them plus some of the older people can't afford to move and increase their debt I hope that Sound Transit pay them and not make them homeless.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|-------------------------|-----------------------------|------------|-------------------|--|
| 1101903 | Helen Price | Individual | +1 (206) 304-4803 | roccosmom7@gmail.com |

Communication ID: 539023 - OMF South NEPA DEIS written comment: Belmor Park briefing comment 3

Communication (11/1/2023)

OMF South NEPA DEIS written comment: Belmor Park briefing comment 3

A wall should be more than 4' if I look at my window and can wave at everyone.

The rail likes like it's going over homes in the park. Is this the case?

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|-------------------------|-------------------------------|------------|-------------------|--|
| 1101904 | Tilena Cooper | Individual | +1 (206) 909-2615 | tilenasalvatore@hotmail.com |

Communication ID: 539026 - OMF South NEPA DEIS written comment: Belmor Park briefing comment 4

Communication (11/1/2023)

OMF South NEPA DEIS written comment: Belmor Park briefing comment 4

Now can you feel it is fair to dislocate SENIOR CITIZENS from their homes? There has to be a better route that wouldn't affect so many people. I think you felt the frustration in the room tonight. This is a terrible situation! These people felt they were in their "forever home" only to be forced out without any say in the matter. That's shameful! This is a beautiful place and you are going to destroy our peace and tranquility - for what!! I know I am just one person and I can't influence Sound Transit at all. I just needed to let you know how you are affecting my family and many others. I think it's disgraceful!

Communication ID: 539033 - OMF South NEPA DEIS written comment 1

Communication (10/24/2023)

OMF South NEPA DEIS written comment 1

My name is Patricia M. Pugnetti -- Born in Tacoma almost 75 years ago. I remember my father reading the paper every night. We discussed what would happen to the landfill area. I remember him saying that the city "fathers" were going to hold onto the "land" fill area for some special use that would benefit the citizens in the years to come. That was in the late 50's + 60's. We've waited all those years. Why not use it now! That we are not displacing homeowners or businesses. Yes I realize it cost more, but our representative seems to find push what they want thought despite what voters want. Why not use this property now.

Live my whole life in Tacoma, Federal Way area. Now your [sic] going to take away my property. In "Garage Town". I feel like I am being cheated out of part of my life that I worked hard for. As a retired Boeing/Nasa employee of over 30 years, I can't think that you have been tough to learn to your history before you try to change the present.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|--------------------------|------------|--------|-------------------------|
| <u>921662</u> | <u>Patricia Pugnetti</u> | Individual | | <u>pugnetti@aol.com</u> |

Communication ID: 539034 - OMF South NEPA DEIS written comment 2

Communication (10/24/2023)

OMF South NEPA DEIS written comment 2

After listening to the OMF presentation I have the following comments/observations and/or questions:

1. The cost estimates of the 3 options aren't that much different, especially when considering impact to people, streams, environment. The Midway/Kent option would take longer (perhaps) but impact the least people--- is the schedule really that important, given the delays already encountered?
2. What is the input from the Federal Way City Council and mayor?

Thanks.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|-------------------|------------|--------|-----------------------------|
| <u>1025388</u> | <u>Bob Strong</u> | Individual | | <u>b.strong@comcast.net</u> |

Communication ID: 539042 - OMF South NEPA DEIS Public Hearing Comment 3

Communication (10/24/2023)

OMF South NEPA DEIS Public Hearing Comment 3

Hello, my name is Vickie Chynoweth, and I guess I think about people more than I do about money. I think that the Midway Landfill would be the best alternative even though it's your lowest alternative here. When you start looking at the displacement for residential impact, it's zero on the Midway Landfill. If you look at the business displacement, there's only four, the community and social resource impacts, zero, estimated employee displacement, 43. You look at the other two, and it's all here. I don't need to read it, but this light rail system has been set back, set back, set back, and now you're saying it will take seven to eight years for us to build on the Midway Landfill. Well, let's get started now because it's been we were supposed to be done with Federal Way light rail in 2023. Then it was 2024. Then it was 2025. If we start now with the Midway Landfill, you could probably be done in seven or eight years, and we might be done with the Federal Way light rail. We're not going to be moving onto 356th or Tacoma for several years, so there's no need for the rush to displace all of these lives and businesses. Thank you.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|-------------------------|------------|--------|-----------------------|
| <u>1101626</u> | <u>Vickie Chynoweth</u> | Individual | | <u>vickiec@kw.com</u> |

Communication ID: 539043 - OMF South NEPA DEIS Public Hearing Comment 4

Communication (10/24/2023)

OMF South NEPA DEIS Public Hearing Comment 4

Good evening, my name is Michael Hoag. I'm a Federal Way resident, and my biggest concern with the Midway Landfill is the uncertainties around everything I've read or heard about that, that we just don't know how much that's going to cost over time and how long it will take because of those costs over time.

I'm a big fan of really Option 1. I think that seems to have the most credence to me. Given the people who will have to be moved, that's part of really getting moving forward with this big project that we've been working on now for however many years and many years ahead of us still, so I'm a fan of Option 1.

I think that that makes a lot of sense, and I'm really looking forward to having the benefits of all the jobs of a maintenance facility supporting our community. Thank you.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|---------------------|------------|--------|-------|
| <u>1101943</u> | <u>Michael Hoag</u> | Individual | | |

Notes

| Note | From | Posted |
|-----------------------------------|-------------|-------------|
| Attached to Custom Item OMF South | Nyles Green | 21 days ago |

Communication ID: 539044 - OMF South NEPA DEIS Public Hearing Comment 5

Communication (10/24/2023)

OMF South NEPA DEIS Public Hearing Comment 5

Hello, Bill Pugnetti, Auburn, Washington, and I certainly agree with the first commenter. That's very good. I'm looking at your figures you had for the residential and business displacements in the preferred location in South 344th. Residential on the preferred show a figure of 15, and on 344th you show a figure of 20. Now, 344th includes Garage Town, and what you're not reflecting in your figures is that Garage Town is an extension of households. Those are garages and not all, but many of the folks have an extension of their home there. They park their motorhome, their boat, extra cars, storage of just family items that they can't accommodate at home and a mix of those, hobby equipment, whatever it is. You do not reflect the impact that that is having on households by giving a figure of 20. It's not where they live, but it's their household operation, their lifestyle, and their planning to do appropriately. Also, there's our businesses in Garage Town. You don't reflect the impact on those businesses. An ice cream company has three to five locations in there, and I know the restaurant in Tacoma, they work out of there with their supplies and extra furniture. Your figures are lacking in the impact on households and businesses for South 344th. They do not reflect real impact.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|----------------------|------------|--------------|--|
| <u>879312</u> | <u>Bill Pugnetti</u> | Individual | 253-941-5793 | <u>pugnetti@aol.com</u> - <u>bppmail@aol.com</u> |

Communication ID: 539045 - OMF South NEPA DEIS Public Hearing Comment 6

Communication (10/24/2023)

OMF South NEPA DEIS Public Hearing Comment 6

My name is Karen Brugato. I wanted to comment about the Midway Landfill. It was a logical choice for me. Down in Federal Way, we don't get just one. We get two light rail stations, and we get the OMF. That's three big chunks of land. I noticed Bellevue only has one station and a 25 acre OMF. Down in the central part of Seattle they have an OMF. It's 25 acres. The one in Federal Way is 66 acres. How can something be over twice as big? Maybe we should be called Sound Transit Way instead of Federal Way. I'm not quite sure, but if you notice, our representative on the Sound Transit board, Pete von Reichbauer, voted that it should be the OMF should be at the Midway Landfill. I think it should be there too. Please don't let money stand in the way. Don't let time stand in the way. In this day and age, grants are available. The administration is up for new things. Please have it be at the Midway Landfill for the OMF, thanks.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|----------------------|------------|-------------------|-------------------------------|
| <u>890550</u> | <u>Karen Brugato</u> | Individual | +1 (253) 661-0286 | <u>karenbrugato@gmail.com</u> |

Communication ID: 539046 - OMF South NEPA DEIS Public Hearing Comment 7

Communication (10/24/2023)

OMF South NEPA DEIS Public Hearing Comment 7

Lots of things to say. I'm quite concerned with the fact that this site was brought up late in the game. They've been working on this since 2015 of where your OMF would go, and this site was never considered. I do believe it is a conflict of interest with Mr. Pete von Reichbauer, who presented this to Sound Transit. He is on the board, and he is personal friends with the owner of the church, so that seems rather convenient, and the timing was rather interesting. The citizens of Federal Way fought for four years for environmental protections and mitigations when the church was built, and I just don't understand how we are able to go back and take that same 20 percent 20 years later. That's not usually something that is done. The land belongs with a concomitant agreement that runs forever along with the Weyerhaeuser campus. There are recreational restrictions. There is storm water management restrictions and requirements and a few others that need to be considered. I am concerned about the petroleum pipeline that runs along South 336th. It was one of the reasons we were able to stop a toxic fish warehouse on the campus because of the heavy loads traversing over that road, so that is a great concern of when we were hauling. I'm a huge advocate for the Hylebos watershed, and it is my belief that the east branch, which actually feeds two watersheds, the Green River and the Hylebos, will be extinguished. You got comments from the Tribe. That's just a few of the things I'm concerned about. You've already bulldozed the land and done great harm at this point. Thank you so much.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|-------------------|----------------------|-------------|---------------------|----------------------------|
| <u>783396</u> | <u>Suzanne Vargo</u> | Individual | 253-835-3499 (Home) | <u>zanyban@hotmail.com</u> |

Communication ID: 539047 - OMF South NEPA DEIS Public Hearing Comment 8

Communication (10/24/2023)

OMF South NEPA DEIS Public Hearing Comment 8

Hello, my name is Francine Martin. I am not a resident of any of these areas. My father in law and my mother in law are. They have been residents at Belmor Park for almost 25 years. This Christmas day will be 24 years. I agreed with the first commenter. That was actually a very good statement that it should be the landfill because it's less impact to people like them. Mom is 75. Dad just turned 79. They've been there for, like I said, quite a while. It's their retirement home, and it's just too much of a personal impact for people like this. Actually, our daughter Marielle is with mom right now, and she's been going to that home to spend time with them since her birth. That's all she knows as far as where her grandparents live, and if that landfill is an option that won't disrupt their lives, that is something we definitely agree with.

We'd like for you folks to really consider the things, the place that will not impact families like ours. The Martins have been a stronghold in this community for quite a while, and we'd like to stay that way. Thank you.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|------------------------|------------|--------|-----------------------------|
| <u>1101630</u> | <u>Francine Martin</u> | Individual | | <u>grmartin71@yahoo.com</u> |

Communication ID: 539048 - OMF South NEPA DEIS Public Hearing Comment 9

Communication (10/24/2023)

OMF South NEPA DEIS Public Hearing Comment 9

My name is Lawson Bronson, and I've been a resident of Federal Way since 1973. I would like to again or I'd like to question why we're not looking at the Midway Landfill. I don't really understand why you're having so many problems with it. We were able to take the Asarco site, which had all sorts of terrible contamination, and we've now built four sets of condominiums over the top of that, and we can't put a work facility on the top of that landfill? It just doesn't make sense to me, and I'm an engineer by profession.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|-----------------------|------------|--------|----------------------------|
| <u>835749</u> | <u>Lawson Bronson</u> | Individual | | <u>lebronson@gmail.com</u> |

Communication ID: 539049 - OMF South NEPA DEIS Public Hearing Comment 10

Communication (10/24/2023)

OMF South NEPA DEIS Public Hearing Comment 10

Hi, I'm Susan strong. I moved here in 1975. I grew up in Seattle, and I remember going to the Midway dump with my dad. It was really exiting. The previous gentleman had a good point about the Asarco mess in Tacoma. They managed to clean that up. I think it was a Superfund or something, got a lot of money to help clean that up. They cleaned it up and built those million dollar condos over there. I wouldn't live over there, but those people are happy. The Midway Landfill can be cleaned up and used for this project. Thank you.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|---------------------|------------|--------|-----------------------------|
| <u>1101900</u> | <u>Susan Strong</u> | Individual | | <u>s.strong@comcast.net</u> |

Communication ID: 539051 - OMF South NEPA DEIS OOH Comment 16

Communication (10/31/2023)

OMF South NEPA DEIS OOH Comment 16

The midway landfill in my opinion is the only way to go! It puts way less people out of employment and affects way less small business! It also does not affect the wetlands as much as the other 2 options!

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|---------------------------|------------|--------|------------------------------------|
| <u>1101944</u> | <u>Eugene Onishchenko</u> | Individual | | <u>eugeneonishchenko@yahoo.com</u> |

Communication ID: 539052 - OMF South NEPA DEIS OOH Comment 17

Communication (10/31/2023)

OMF South NEPA DEIS OOH Comment 17

If you take my property located at 2011 So 341st pl Northwest Equipment Sales and rentals ! It would have catastrophic impact on our business as well as hundreds of our customers!

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|---------------------|------------|--------|-------------------------|
| <u>875545</u> | <u>Russ Hibbard</u> | Individual | | <u>Russ@nwequip.net</u> |

Communication ID: 539053 - OMF South NEPA DEIS OOH Comment 18

Communication (10/31/2023)

OMF South NEPA DEIS OOH Comment 18

I think the preferred alternative is the superior option. The greatest need for the light rail system is expansion, the other options take longer for construction to complete. Not only does construction have a greater impact on the environment it is also difficult to anticipate the necessary closures and needs for different routes for residents in the area.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|-------------------------|------------|----------------|-------------------------------------|
| <u>877271</u> | <u>William Terrance</u> | Individual | (480) 626-3212 | <u>william.t.terrance@gmail.com</u> |

Communication ID: 539054 - OMF South NEPA DEIS OOH Comment 19

Communication (10/31/2023)

OMF South NEPA DEIS OOH Comment 19

If you use one of the two Federal Way sites, you don't need a test track because all of the track from 320th to 344th is not revenue service track. You can use that track as test track. Save the tax payers a couple of bucks and knock the test track off the plan until you actually extend the line and put it into service. You can also use mainline for testing trains. Just use signals and switches or off peak times. Stop wasting money

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|--------------------------|------------|--------|-----------------------------|
| <u>880976</u> | <u>Bruce Tecklenburg</u> | Individual | | <u>bruce.teck@gmail.com</u> |

Communication ID: 539055 - OMF South NEPA DEIS OOH Comment 20

Communication (10/31/2023)

OMF South NEPA DEIS OOH Comment 20

I think that they are good alternatives, but I would like to see a bigger OMF that can address capacity issues that we currently see in the future. I would also like to ask if the midway landfill option would be dependent or independent on TDLE, meaning that if there are delays to TDLE that the midway landfill could open up sooner.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|---------------|------------|--------|-----------------------------------|
| <u>1089354</u> | <u>Finn S</u> | Individual | | <u>finns29@lakesideschool.org</u> |

Communication ID: 539056 - OMF South NEPA DEIS OOH Comment 21

Communication (11/2/2023)

OMF South NEPA DEIS OOH Comment 21

Hello, I live at 1830 S. 336th street in Federal way. I have serious concerns about the budling and living next to a OMF directly across the street from my home. I worry about the noise while building and after when it is up and running. I have concerns of the noise affecting quality of life for me and my community. I worry that my homes value will plumet and I think I will have a hard time selling, especially during construction. Looking at the environmental impacts. The preferred site directly across the street from my condo complex will affect 2.7 acres of wetlands, 1500 feet of streams and 11 acres of mature native Forrest. As a native Pacific Northwest resident the rate at which our beautiful evergreen trees are disappearing is alarming. They recently took down several acres of trees to the north of my condos to build 94 townhomes. I can now hear I-5 in my bedroom and I worry that it will get even worse if Sound Transit takes out 11 more acres of Forrest. I work at a local hospital as an monitor tech, I watch patient's hearts and alert nurses of changes and lethal cardiac events. Would you want a person monitoring your heart or a families members heart who can not sleep because of freeway noise and construction noise, not to mention it will be a 24/7 facility. I would move now but everything is so expensive and once the construction is announced I fear I will owe more than I will be able to get for my condo. I understand that the midway station will cost more but what else can be done with that area? To me using the midway landfill is the preferred area and best for the environment. We must try to reduce our carbon footprint and chopping down 11 acres of Forrest, reducing wetlands and affecting a stream will not do our planet any favors. I feel midway is the best option and the name says it all, "mid - way" between Seattle and Tacoma, it uses land otherwise useless and would save 11 acres of trees, homes for animals and a sound / pollution buffer for Interstate 5. Please do not build OMF next to my home. Sincerely, Jacob Davison

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|-----------------------|------------|--------|-----------------------------|
| <u>1101008</u> | <u>Jacob Davidson</u> | Individual | | <u>Jacobd37@comcast.net</u> |

Communication ID: 539057 - OMF South NEPA DEIS OOH Comment 22

Communication (11/6/2023)

OMF South NEPA DEIS OOH Comment 22

I am writing to you today in full opposition to both potential OMF sites (S. 336th St. & S. 344th St.) here in the city of Federal Way. The Puyallup Tribe has emphatically stated that pipelines and underground drainage conveyances offer NO means of water treatment or ground water recharge whatsoever and therefore are viewed as incompatible with fish recovery. Regardless of whether fish travel up to this area, it is the microbenthic vertebrae (food) that must travel via rocks, trees, and water to reach the lower reaches of the Hylebos East branch that must sustain healthy salmonoids. The tribes have spent tens of millions of dollars on property acquisitions, restoration plans, habitat restoration, stream enhancements and contaminant cleanup sites on lands that sit below the S. 336th St. and S. 344th St. sites. Loss of water treatment opportunities and recharge are NOT an acceptable option for the tribe. As stewards of these lands since time memorial, I support the Puyallup Tribes Sovereignty for preservation. We are a small city of only 22 Square miles. Sound Transit has recently taken over and built their transit light rail station at our cities core at S. 320th. Expected build out of another transit transfer station and parking garage is planned for our south end, resulting in more considerable business and traffic impacts. Now the citizens of Federal Way are expected to sacrifice not one but two possible locations in our midtown. It is outrageous to expect that our city is to accommodate all of Sound Transits needs, especially one that is industrialized and goes against city developmental policies. These two sites were studied by Sound Transit as having a higher percentage of low-income and minority persons than the Sound Transit service district and King County. Displacement of housing, community facilities, daycares would further exploit our community members and fortify their economic struggle. To assume that an industrial build such as the proposed 67-acre OMF facility would offset the impacts to the minority population because they would benefit from riding the train is absurd. They would still have to travel outside of their area to utilize a transfer station. Causing them time and money. There are current bus line options already in place. There simply is no M2 or M3 (heavy industries that generate noise, traffic, or pollutants) zoning here in the city of Federal Way. This unseeming and inconsistent development would have devastating/catastrophic effects on businesses like Ellanos Yogurt, N.W. Equipment Sales/Rentals, Garage Town, Voice of Hope Church, Family Life Community Church, Christian Faith Church and associated schools, Redwood Church of God, and Tabernacle Temple of Praise Church. Assumptions are being made by Sound Transit that our city's Comprehensive Plan policies of converting our only light industrial zone in Federal Way (S. 344th St.), vacating public roads and modifications of development standards will be permitted. There is a distinction between "working with the city" and expecting the city to disregard their policies. The Transportation Technical report needs to be corrected and clarified on numerous issues. This includes eliminating 20th Ave. S., as this is the only access for emergency vehicles. Any delay in response time can have serious negative health impacts to our community members. The suggested solution to bulldoze a road through a critical wetland is also not an acceptable option. Mitigations took place in 1994, our water district operates within this area, it serves as an aquifer recharge area and is home to numerous wildlife species. The S. 336th St. option runs with a never-ending Concomitant Agreement, that is not negotiable, and as Christian Faith owners stated in their 2021 letter, "we have commitments to stormwater management, site access, mitigation, and

recreational areas." A reminder that this land is a part of the iconic Weyerhaeuser Campus, in which visual impacts were NOT adequately addressed in previous Draft statements. The Christian Faith land WAS already mitigated in 1994 and it was the citizens who fought for four long years to preserve the functionality of the Hylebos Creek, surrounding tributaries and wetlands. It should not be allowed to be mitigated again. This is a Corporate Park zoning with highly sensitive areas, that do not warrant a Heavy Industrial Equipment zoning. Noise and vibration impacts will be considerably undesirable and unhealthy for residents and wildlife. The open spaces, creek and native forests provide food, water, and shelter as it is a part of the International Flight Pathway. 150 migrating species depend on these resources. Sound Transit, King County and the city of Federal Way must consider the cumulative impacts of future developments within the Hylebos Watershed. Hylebos Watershed and Lower Puget Sound Plan must be included and thoughtfully considered. Numerous large developments such as the two warehouses built recently on the Weyerhaeuser Campus has already negated portions of the East Branch of the Hylebos, a head water tributary, that fed not only the Hylebos, but the Duwamish/Green River Watersheds. Any further demolition of the Hylebos East Branch Creek will surely lead to its demise. The cities of Kent, Des Moines and Auburn are in favor of the Midway landfill as The Preferred OMF site. They stand in opposition with the city of Federal Way for the construction of the OMF South at either of these locations. The landfill is a most doable site. if the Federal government or the state would be invited to assist in the funding, according to public conversations posted, between Sound Transit planners and engineers. Sound Transit should exhaust every available option before it forever displaces our citizens, businesses, environment, aquifer, and high quality of life here in Federal Way. I urge Sound Transit to reconsider the two previous site options in Fife, as the zoning would permit a heavy industrial equipment build. These two options were dismissed to quickly, due to a lag of a mere 22 seconds in train journey travel in regards to reaching its set destinations. Surely this can be managed by the experts of Sound Transit, and should be a priority task moving forward. Respectfully submitted by Lani Akers resident Federal Way, WA Lanij@lycos.com

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|-------------------|------------|--------|------------------------|
| <u>886064</u> | <u>Lani Akers</u> | Individual | | <u>lanij@lycos.com</u> |

Communication ID: 539061 - OMF South NEPA DEIS letter 1: NO OMF facilities here in Federal Way.

Communication (11/5/2023)

OMF South NEPA DEIS letter 1: NO OMF facilities here in Federal Way.

From: Suzanne Vargo <zanyban@hotmail.com>

Sent: Sunday, November 5, 2023 2:32 PM

To: OMF South <OMFsouth@soundtransit.org>

Subject: Attn: Erin Green

Please see my attached letter for NO OMF facilities here in Federal Way.

Thank You
Suzanne Vargo

November 6, 2023

To: OMF South @ Erin Green
Sound Transit
401 Jackson Street
Seattle, WA 98104

I am writing to you today in full opposition to both potential OMF sites (S. 336th St. & S. 344th St.) here in the city of Federal Way.

The Puyallup Tribe has emphatically stated that pipelines and underground drainage conveyances offer NO means of water treatment or ground water recharge whatsoever and therefore are viewed as incompatible with fish recovery. Regardless of whether fish travel up to this area, it is the microbenthic vertebrae (food) that must travel via rocks, trees, and water to reach the lower reaches of the Hylebos East branch that must sustain healthy salmonoids. The tribes have spent tens of millions of dollars on property acquisitions, restoration plans, habitat restoration, stream enhancements and contaminant cleanup sites on lands that sit below the S. 336th St. and S. 344th St. sites. Loss of water treatment opportunities and recharge are NOT an acceptable option for the tribe. As stewards of these lands since time memorial, I support the Puyallup Tribes Sovereignty for preservation.

We are a small city of only 22 Square miles. Sound Transit has recently taken over and built their transit light rail station at our cities core at S. 320th. Expected build out of another transit transfer station and parking garage is planned for our south end (location to be determined) resulting in more considerable business and traffic impacts. Now the citizens of Federal Way are expected to sacrifice not one but two possible locations in our midtown. It is unacceptable to expect that our city is to accommodate all of Sound Transits needs.

These two sites were studied by Sound Transit as having a higher percentage of low-income and minority persons than the Sound Transit service district and King County. Displacement of community facilities, daycares and housing would further exploit and fortify their economic struggle. To assume that an industrial build such as the proposed 67-acre OMF facility would offset the impacts to the minority population because they would benefit from riding the train is absurd. They would still have to travel outside of their area to utilize a transfer station. Causing them time and money. There are sufficient bus line options already in place.

There simply is no M2 or M3 (heavy industries that generate noise, traffic, or pollutants) zoning here in the city of Federal Way. This unseemingly and inconsistent development would have devastating/catastrophic effects on businesses like Ellanos Yogurt, N.W. Equipment Sales/Rentals, Garage Town, Voice of Hope Church, Family Life Community Church, Christian Faith Church and associated schools, Redwood Church of God, and Tabernacle Temple of Praise Church. Assumptions are being made by Sound Transit that our Comprehensive Plan policies of converting our only light industrial zone in Federal Way (S. 344th St.), vacating public roads and modifications of development standards will be permitted. The Transportation Technical report is riddled with needed corrections and clarification, as well as disregarding emergency vehicles the ability to use S. 20th Ave. The suggested solution to bulldoze a road through a critical class 5 wetland is not an acceptable option as our water district operates within this area, serves as an aquifer recharge area and is home to numerous wildlife species.

The S. 336th St. option runs with a never-ending Concomitant Agreement, that is not negotiable, and as Christian Faith owners stated in their 2021 letter, "we have commitments to stormwater management, site access, mitigation, and recreational areas. A reminder that this land is a part of the iconic Weyerhaeuser Campus, in which visual impacts were NOT adequately addressed in previous Draft statements. The Christian Faith land WAS already mitigated in 1994 and it was the citizens who fought for four long years to preserve the functionality of the Hylebos Creek, surrounding tributaries and wetlands. It should not be allowed to be mitigated again. This is a Corporate Park zoning with highly sensitive areas, that do not warrant a Heavy Industrial Equipment zoning. Noise and vibration impacts will be considerably undesirable and unhealthy for residents and wildlife, as the open spaces, creek and native forests provide food, water, and shelter as it is a part of the International Flight Pathway. 150 migrating species depend on these resources.

Sound Transit, King County and the city of Federal Way must consider the cumulative impacts of future developments within the Hylebos Watershed. Hylebos Watershed and Lower Puget Sound Plan must be included and thoughtfully considered. Numerous large developments such as the two warehouses built recently on the Weyerhaeuser Campus has already negated a head water tributary, that fed not only the Hylebos, but the Duwamish/Green River Watersheds. Any further demolition of the Hylebos East Branch Creek will surely lead to its demise.

The cities of Kent, Des Moines and Auburn are in favor of the Midway landfill as The Preferred OMF site. They stand in opposition with the city of Federal Way for the construction of the OMF South at either of these locations. The landfill is a most doable site, if the Federal government or the state would be invited to assist in the funding. Sound Transit should exhaust every available option before it forever displaces our citizens, businesses, environment, aquifer, and high quality of life here in Federal Way.

The Executive Summary consistently refers to the S. 336th Site as **The Preferred** site which feels like a deliberate attempt to persuade the reader/voting public. I do not feel this is a fair representation of the three options before us.

I urge Sound Transit to reconsider the two previous site options in Fife, as the zoning would permit a heavy industrial equipment build. These two options were dismissed too quickly, due to a lag of a mere 22 seconds in train journey travel in regards to reaching its set destinations. Surely this can be managed by the experts of Sound Transit, and should be a priority task moving forward.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|---------------|----------------------|------------|---------------------|---|
| <u>783396</u> | <u>Suzanne Vargo</u> | Individual | 253-835-3499 (Home) | <u>zanyban@hotmail.com</u> |

Communication ID: 539062 - OMF South NEPA DEIS letter 3: NO OMF facilities here in Federal Way.

Communication (11/6/2023)

OMF South NEPA DEIS letter 3: NO OMF facilities here in Federal Way.

From: Dave Lesinski <jeeperdave03@yahoo.com>

Sent: Sunday, November 5, 2023 7:01 PM

To: OMF South <OMFsouth@soundtransit.org>

Subject: Attn: Erin Green

Please see my attached letter for NO OMF facilities here in Federal Way.

Thank You
David Lesinski

November 6, 2023

To: OMF South @ Erin Green

Sound Transit

401 Jackson Street

Seattle, WA 98104

I am writing to you today in full opposition to both potential OMF sites (S. 336th St. & S. 344th St.) here in the city of Federal Way.

The Puyallup Tribe has emphatically stated that pipelines and underground drainage conveyances offer NO means of water treatment or ground water recharge whatsoever and therefore are viewed as incompatible with fish recovery. Regardless of whether fish travel up to this area, it is the microbenthic vertebrae (food) that must travel via rocks, trees, and water to reach the lower reaches of the Hylebos East branch that must sustain healthy salmonoids. The tribes have spent tens of millions of dollars on property acquisitions, restoration plans, habitat restoration, stream enhancements and contaminant cleanup sites on lands that sit below the S. 336th St. and S. 344th St. sites. Loss of water treatment opportunities and recharge are NOT an acceptable option for the tribe. As stewards of these lands since time memorial, I support the Puyallup Tribes Sovereignty for preservation.

We are a small city of only 22 Square miles. Sound Transit has recently taken over and built their transit light rail station at our cities core at S. 320th. Expected build out of another transit transfer station and parking garage is planned for our south end (location to be determined) resulting in more considerable business and traffic impacts. Now the citizens of Federal Way are expected to

sacrifice not one but two possible locations in our midtown. It is unacceptable to expect that our city is to accommodate all of Sound Transits needs.

These two sites were studied by Sound Transit as having a higher percentage of low-income and minority persons than the Sound Transit service district and King County. Displacement of community facilities, daycares and housing would further exploit and fortify their economic struggle. To assume that an industrial build such as the proposed 67-acre OMF facility would offset the impacts to the minority population because they would benefit from riding the train is absurd. They would still have to travel outside of their area to utilize a transfer station. Causing them time and money. There are sufficient bus line options already in place.

There simply is no M2 or M3 (heavy industries that generate noise, traffic, or pollutants) zoning here in the city of Federal Way. This unseeming and inconsistent development would have devastating/catastrophic effects on businesses like Ellanos Yogurt, N.W. Equipment Sales/Rentals, Garage Town, Voice of Hope Church, Family Life Community Church, Christian Faith Church and associated schools, Redwood Church of God, and Tabernacle Temple of Praise Church.

Assumptions are being made by Sound Transit that our Comprehensive Plan policies of converting our only light industrial zone in Federal Way (S. 344th St.), vacating public roads and modifications of development standards will be permitted. The Transportation Technical report is riddled with needed corrections and clarification, as well as disregarding emergency vehicles the ability to use S. 20th Ave. The suggested solution to bulldoze a road through a critical class 5 wetland is not an acceptable option as our water district operates within this area, serves as an aquifer recharge area and is home to numerous wildlife species.

The S. 336th St. option runs with a never-ending Concomitant Agreement, that is not negotiable, and as Christian Faith owners stated in their 2021 letter, "we have commitments to stormwater management, site access, mitigation, and recreational areas. A reminder that this land is a part of the iconic Weyerhaeuser Campus, in which visual impacts were NOT adequately addressed in previous Draft statements. The Christian Faith land WAS already mitigated in 1994 and it was the citizens who fought for four long years to preserve the functionality of the Hylebos Creek, surrounding tributaries and wetlands. It should not be allowed to be mitigated again. This is a Corporate Park zoning with highly sensitive areas, that do not warrant a Heavy Industrial Equipment zoning. Noise and vibration impacts will be considerably undesirable and unhealthy for residents and wildlife, as the open spaces, creek and native forests provide food, water, and shelter as it is a part of the International Flight Pathway. 150 migrating species depend on these resources.

Sound Transit, King County and the city of Federal Way must consider the cumulative impacts of future developments within the Hyebos Watershed. Hylebos Watershed and Lower Puget Sound Plan must be included and thoughtfully considered. Numerous large developments such as the two warehouses built recently on the Weyerhaeuser Campus has already negated a head water tributary, that fed not only the Hylebos, but the Duwamish/Green River Watersheds. Any further demolition of the Hylebos East Branch Creek will surely lead to its demise.

The cities of Kent, Des Moines and Auburn are in favor of the Midway landfill as The Preferred OMF site. They stand in opposition with the city of Federal Way for the construction of the OMFSouth at either of these locations. The landfill is a most doable site, if the Federal government or the state would be invited to assist in the funding. Sound Transit should exhaust every available

option before it forever displaces our citizens, businesses, environment, aquifer, and high quality of life here in Federal Way.

The Executive Summary consistently refers to the S. 336th Site as THE PREFERRED site which feels like a deliberate attempt to persuade the reader/voting public. I do not feel this is a fair representation of the three options before us.

I urge Sound Transit to reconsider the two previous site options in Fife, as the zoning would permit a heavy industrial equipment build. These two options were dismissed to quickly, due to a lag of a mere 22 seconds in train journey travel in regards to reaching its set destinations. Surely this can be managed by the experts of Sound Transit, and should be a priority task moving forward.

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|----------------------|------------|--------|-----------------------------|
| <u>1026532</u> | <u>Dave Lesinski</u> | Individual | | <u>jeepdave03@yahoo.com</u> |

Communication ID: 539063 - OMF South NEPA DEIS email comment: Operations & Maintenance & Facility Location

Communication (11/6/2023)

OMF South NEPA DEIS email comment: Operations & Maintenance & Facility Location

From: Bob Strong <b.strong@comcast.net>
Sent: Monday, November 6, 2023 3:33 PM
To: OMF South <OMFsouth@soundtransit.org>
Subject: Operations & Maintenance & Facility Location
Importance: High

The following are comments regarding the proposed location of the Sound Transit OMF South Facility at the current location of a major church (Christian Faith) and school in Federal Way:

I recall that the down selection process for site location for this facility was interesting. One location was removed from consideration due to a Dick's Burgers being on the site. It's interesting how priorities (burgers over religion and education) and politics determine the location of infrastructure in this county/state.

The site with the least impact on people and the environment is the Midway Landfill site (full excavation option). The only logical and sensible solution for that land is to finally clean it up and use it for a practical purpose, such as OMF South. King County and /or the state of Washington should share in covering the cost of the cleanup of the site, then Sound Transit should build the facility on the cleaned up land after removal of the contaminated soil. There would be no displacement of churches, businesses, burger restaurants, schools, or impact to a sensitive environmental area (eg stream impacts, wetland impact or forest impact) (page ES-24 in the executive summary)

The cities of Federal Way, Kent and Des Moines have provided input that the Midway landfill site is the best location for OMF South. Please listen to their input.

The proposed site at the Christian Faith Center property would impact the Hylebos Creek and wetlands, without proper mitigation. The Washington State Tribes have pointed out that much money has been spent on this property for habitat restoration, containment , cleanup and stream enhancements located downstream below the 336th-344th sites. Pipelines and underground drainage offer no means of water treatment or groundwater recharge and are viewed as incompatible with fish recovery. Any further loss of water treatment opportunities and recharge are not an acceptable option for the tribes.

The Midway landfill site will not incur any real estate costs (which don't appear to be in the S. 336th st alternative estimate)

The Midway Landfill site is the obvious location for OMF South.

Thanks for your time.

Robert (Bob) Strong

Federal Way resident since 1981

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|-------------------|------------|--------|-----------------------------|
| <u>1025388</u> | <u>Bob Strong</u> | Individual | | <u>b.strong@comcast.net</u> |

Communication ID: 539077 - OMF South NEPA DEIS letter comment: Opposition letter

Communication (11/6/2023)

OMF South NEPA DEIS letter comment: Opposition letter

From: Julie Seitz <julieseitz.js@gmail.com>
Sent: Monday, November 6, 2023 3:36 PM
To: OMFSouthDEIS <OMFSouthDEIS@soundtransit.org>
Subject: OPPOSITION LETTER, due 11/6/2023

November 6, 2023

OMF South Project
c/o Erin Green
Sound Transit
401 Jackson Street
Seattle, WA 98104

RE: OPPOSITION LETTER, due 11/6/2023

I am writing to you today in full opposition to both potential OMF sites (S. 336th St. & S. 344th St.) here in the City of Federal Way.

The Puyallup Tribe has emphatically stated that pipelines and underground drainage conveyances offer NO means of water treatment or ground water recharge whatsoever and therefore are viewed as incompatible with fish recovery. Regardless of whether fish travel up to this area, it is the microbenthic invertebrates that must travel via rocks, trees, and water to reach the lower reaches of the Hylebos East branch that must sustain healthy salmonids. The tribes have spent tens of millions of dollars on property acquisitions, restoration plans, habitat restoration, stream enhancements and contaminant cleanup sites on lands that sit below the S. 336th St. and S. 344th St. sites. Loss of water treatment opportunities and recharge are NOT an acceptable option for the tribe. As stewards of these lands since time memorial, I support the Puyallup Tribes Sovereignty for preservation.

We are a small city of only 22 Square miles. Sound Transit has recently taken over and built their transit light rail station at our city's core at S. 320th. Expected build out of another transit transfer station and parking garage is planned for our south end (location to be determined) resulting in more considerable business and traffic impacts. Now the citizens of Federal Way are expected to sacrifice not one but two possible locations in our midtown. It is unacceptable to expect that our city is to accommodate all of Sound Transit's needs.

These two sites were studied by Sound Transit as having a higher percentage of low-income and minority persons than the Sound Transit service district and King County. Displacement of community facilities, daycares and housing would further exploit and fortify their economic struggle. To assume that an industrial build such as the proposed 67-acre OMF facility would offset the impacts to the minority population because they would benefit from riding the train is absurd. They

would still have to travel outside of their area to utilize a transfer station. Causing them time and money. There are sufficient bus line options already in place.

There simply is no M2 or M3 (heavy industries that generate noise, traffic, or pollutants) zoning here in the City of Federal Way. This unseemingly and inconsistent development would have devastating/catastrophic effects on businesses like Ellenos Yogurt, N.W. Equipment Sales/Rentals, Garage Town, Voice of Hope Church, Family Life Community Church, Christian Faith Church and associated schools, Redwood Church of God, and Tabernacle Temple of Praise Church.

Assumptions are being made by Sound Transit that our Comprehensive Plan policies of converting our only light industrial zone in Federal Way (S. 344th St.), vacating public roads and modifications of development standards will be permitted. The Transportation Technical report is riddled with needed corrections and clarification, as well as disregarding emergency vehicles the ability to use S. 20th Ave. The suggested solution to bulldoze a road through a critical class 5 wetland is not an acceptable option as our water district operates within this area, serves as an aquifer recharge area and is home to numerous wildlife species.

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I urge Sound Transit to reconsider the two previous site options in Fife, as the zoning would permit a heavy industrial equipment build. These two options were dismissed too quickly, due to a lag of a mere 22 seconds in train journey travel in regard to reaching its set destinations. Surely this can be managed by qualified personnel at Sound Transit, and should be a priority task moving forward.

Sincerely,

Julie Seitz
310 S 328th Ln
Federal Way, WA 98003

Citizen of Federal Way since 1986

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|--------------------|------------|--------|--------------------------------|
| <u>1101955</u> | <u>Julie Seitz</u> | Individual | | <u>julieseitz.js@gmail.com</u> |

Communication ID: 539081 - OMF South NEPA DEIS email comment: OMF concerns

Communication (11/2/2023)

OMF South NEPA DEIS email comment: OMF concerns

From: JACOB DAVISON <jacobd37@comcast.net>
Sent: Thursday, November 2, 2023 10:18 PM
To: OMFSouthDEIS <OMFSouthDEIS@soundtransit.org>
Subject: OMF concerns

Hello, I live at 1830 S. 336th street in Federal way. I have serious concerns about the budling and living next to a OMF directly across the street from my home. I worry about the noise while building and after when it is up and running. I have concerns of the noise affecting quality of life for me and my community. I worry that my homes value will plumet and I think I will have a hard time selling, especially during construction. Looking at the environmental impacts. The preferred site directly across the street from my condo complex will affect 2.7 acres of wetlands, 1500 feet of streams and 11 acres of mature native Forrest. As a native Pacific Northwest resident the rate at which our beautiful evergreen trees are disappearing is alarming. They recently took down several acres of trees to the north of my condos to build 94 townhomes. I can now hear I-5 in my bedroom and I worry that it will get even worse if Sound Transit takes out 11 more acres of Forrest. I work at a local hospital as an monitor tech, I watch patient's hearts and alert nurses of changes and lethal cardiac events. Would you want a person monitoring your heart or a families members heart who can not sleep because of freeway noise and construction noise, not to mention it will be a 24/7 facility. I would move now but everything is so expensive and once the construction is announced I fear I will owe more than I will be able to get for my condo. I understand that the midway station will cost more but what else can be done with that area? To me using the midway landfill is the preferred area and best for the environment. We must try to reduce our carbon footprint and chopping down 11 acres of Forrest, reducing wetlands and affecting a stream will not do our planet any favors. I feel midway is the best option and the name says it all, "mid - way" between Seattle and Tacoma, it uses land otherwise useless and would save 11 acres of trees, homes for animals and a sound / pollution buffer for Interstate 5. Please do not build OMF next to my home.

Sincerely,
Jacob Davison
jacobd37@comcast.net
206-779-1611

Owner(s):

| Contact ID | Name | Type | Phones | Email |
|----------------|-----------------------|------------|--------|-----------------------------|
| <u>1101008</u> | <u>Jacob Davidson</u> | Individual | | <u>Jacobd37@comcast.net</u> |

Communication ID: 539987 - OMF South NEPA DEIS letter: OMF SITES ~ FEDERAL WAY

Communication (11/6/2023)

OMF South NEPA DEIS letter: OMF SITES ~ FEDERAL WAY

From: Roger Flygare <rgflygare@gmail.com>
Sent: Monday, November 6, 2023 3:49 PM
To: OMF South <OMFsouth@soundtransit.org>
Cc: Roger Flygare <rgflygare@gmail.com>
Subject: OMF SITES ~ FEDERAL WAY

November 6, 2023

To: OMF South @ Erin Green
Sound Transit
401 Jackson Street
Seattle, WA 98104

I am writing to you today in full opposition to both potential OMF sites (S. 336th St. & S. 344th St.) here in the city of Federal Way.

The Puyallup Tribe has emphatically stated that pipelines and underground drainage conveyances offer NO means of water treatment or ground water recharge whatsoever and therefore are viewed as incompatible with fish recovery. Regardless of whether fish travel up to this area, it is the microbenthic vertebrae (food) that must travel via rocks, trees, and water to reach the lower reaches of the Hylebos East branch that must sustain healthy salmonoids.

The tribes have spent tens of millions of dollars on property acquisitions, restoration plans, habitat restoration, stream enhancements and contaminant cleanup sites on lands that sit below the S. 336th St. and S. 344th St. sites. Loss of water treatment opportunities and recharge are NOT an acceptable option for the tribe. As stewards of these lands since time memorial, I support the Puyallup Tribes Sovereignty for preservation.

We are a small city of only 22 Square miles. Sound Transit has recently taken over and built their transit light rail station at our cities core at S. 320th. Expected build out of another transit transfer station and parking garage is planned for our south end, resulting in more considerable business and traffic impacts.

Now the citizens of Federal Way are expected to sacrifice not one but two possible locations in our midtown. It is outrageous to expect that our city is to accommodate all of Sound Transits needs, especially one that is industrialized and goes against city developmental policies.

These two sites were studied by Sound Transit as having a higher percentage of low-income and minority persons than the Sound Transit service district and King County. Displacement of housing, community facilities, daycares would further exploit our community members and fortify their economic struggle.

To assume that an industrial build such as the proposed 67-acre OMF facility would offset the impacts to the minority population because they would benefit from riding the train is absurd. They

would still have to travel outside of their area to utilize a transfer station. Causing them time and money. There are current bus line options already in place.

There simply is no M2 or M3 (heavy industries that generate noise, traffic, or pollutants) zoning here in the city of Federal Way.

This unseemingly and inconsistent development would have devastating/catastrophic effects on businesses like Ellanos Yogurt, N.W. Equipment Sales/Rentals, Garage Town, Voice of Hope Church, Family Life Community Church, Christian Faith Church and associated schools, Redwood Church of God, and Tabernacle Temple of Praise Church.

Assumptions are being made by Sound Transit that our city's Comprehensive Plan policies of converting our only light industrial zone in Federal Way (S. 344th St.), vacating public roads and modifications of development standards will be permitted.

There is a distinction between "working with the city" and expecting the city to disregard their policies. The Transportation Technical report needs to be corrected and clarified on numerous issues.

This includes eliminating 20th Ave. S., as this is the only access for emergency vehicles. Any delay in response time can have serious negative health impacts to our community members.

The suggested solution to bulldoze a road through a critical wetland is also not an acceptable option. Mitigations took place in 1994, our water district operates within this area, it serves as an aquifer recharge area and is home to numerous wildlife species.

The S. 336th St. option runs with a never-ending Concomitant Agreement, that is not negotiable, and as Christian Faith owners stated in their 2021 letter, "we have commitments to stormwater management, site access, mitigation, and recreational areas." A reminder that this land is a part of the iconic Weyerhaeuser Campus, in which visual impacts were NOT adequately addressed in previous Draft statements. The Christian Faith land WAS already mitigated in 1994 and it was the citizens who fought for four long years to preserve the functionality of the Hylebos Creek, surrounding tributaries and wetlands. It should not be allowed to be mitigated again. This is a Corporate Park zoning with highly sensitive areas, that do not warrant a Heavy Industrial Equipment zoning. Noise and vibration impacts will be considerably undesirable and unhealthy for residents and wildlife. The open spaces, creek and native forests provide food, water, and shelter as it is a part of the International Flight Pathway. 150 migrating species depend on these resources.

Sound Transit, King County and the city of Federal Way must consider the cumulative impacts of future developments within the Hylebos Watershed. Hylebos Watershed and Lower Puget Sound Plan must be included and thoughtfully considered. Numerous large developments such as the two warehouses built recently on the Weyerhaeuser Campus has already negated portions of the East Branch of the Hylebos, a head water tributary, that fed not only the Hylebos, but the Duwamish/Green River Watersheds. Any further demolition of the Hylebos East Branch Creek will surely lead to its demise.

The cities of Kent, Des Moines and Auburn are in favor of the Midway landfill as The Preferred OMF site. They stand in opposition with the city of Federal Way for the construction of the OMF South at either of these locations. The landfill is a most doable site. If the Federal government or the state would be invited to assist in the funding, according to public conversations posted,

between Sound Transit planners and engineers. Sound Transit should exhaust every available option before it forever displaces our citizens, businesses, environment, aquifer, and high quality of life here in Federal Way.

I urge Sound Transit to reconsider the two previous site options in Fife, as the zoning would permit a heavy industrial equipment build. These two options were dismissed too quickly, due to a lag of a mere 22 seconds in train journey travel in regards to reaching its set destinations. Surely this can be managed by the experts of Sound Transit, and should be a priority task moving forward.

Respectfully submitted,

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